



Ontario Provincial Standards Unit
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REVISION INFORMATION SHEET

ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORKS

VOLUME 7 MUNICIPAL-ORIENTED OPS GENERAL CONDITIONS OF CONTRACT AND GENERAL AND CONSTRUCTION SPECIFICATIONS

MANUAL REVISION #14

NOVEMBER 2017

UPDATING ONTARIO PROVINCIAL STANDARDS FOR YOUR USE

Each roads and public works owner (Owner) is responsible for determining implementation dates and directions for use of Ontario Provincial Standards; therefore, manual holders are cautioned about immediately discarding superseded and cancelled standards.

ACCESSING AND OBTAINING ONTARIO PROVINCIAL STANDARDS

The Ontario Provincial Standards for Roads and Public Works (OPS) manuals and the latest published updates for each of the eight OPS manuals are available as follows:

- Available electronically on the OPS/MTO website. Online access to the current, updated, and archived standards; indexes; OPS User Notes; and publication Revision Information Sheets are available free of charge at the site.
(<http://www.raqs.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage>)
- The eight OPS manuals of standards are also available for free as well in a single PDF format on the website.

A link to the Ontario Provincial Standards on the MTO Library website is available on the OPS website (www.ops.on.ca). Also on this site under News and Activities are notices for updates and changes in OPS.

Questions should be directed by email to Ontario.Prov.Standards@ontario.ca

WAITING TO HEAR FROM YOU

If you have a suggestion to revise a standard or you have a standard that works in your ministry, municipality, or area, send it to the Head, OPS Administration, for review and possible inclusion into the Ontario Provincial Standards.

THIS MANUAL IS REVISED AS FOLLOWS:

Index Pages Volume 7

Remove the entire index and replace with the revised index.

Standard Specifications Volume 7

Superseded/Cancelled (Remove)		Revised/New (Insert)		Remarks
OPSS.MUNI	Dated	OPSS.MUNI	Dated	
127	Apr 2017			“SCHEDULE OF RENTAL RATES FOR CONSTRUCTION EQUIPMENT, INCLUDING MODEL AND SPECIFICATION REFERENCE” The MUNI published in April 2017 has been cancelled and replaced by OPSS PROV 127, August 2017 due to a legislative change. There will only be a 127 PROV, no MUNI.
		307	Nov 2017	“CONSTRUCTION SPECIFICATION FOR STOCKPIILING OF PATCHING MATERIALS AND PATCHING OF ASPHALT PAVEMENT” The MUNI published in November 2017 replaces OPSS 307 COMMON, April 2012 with no technical content changes.
		310	Nov 2017	“CONSTRUCTION SPECIFICATION FOR HOT MIX ASPHALT ” See Summary of Revisions.
		337	Nov 2017	“CONSTRUCTION SPECIFICATION FOR SLURRY SEAL” Section 337.02, References, Updates to current.

		404	Nov 2017	“CONSTRUCTION SPECIFICATION FOR SUPPORT SYSTEMS” The MUNI implemented in Nov 2017 replaces OPSS 404 COMMON, November 2010 with no technical content changes.
		405	Nov 2017	“CONSTRUCTION SPECIFICATION FOR PIPE SUBDRAINS” The MUNI implemented in Nov 2017 replaces OPSS 405 COMMON, November 2008 with no technical content changes.
		409	Nov 2017	“CONSTRUCTION SPECIFICATION FOR CLOSED-CIRCUIT TELEVISION (CCTV) INSPECTION OF PIPELINES” See Summary of Revisions.
		491	Nov 2017	“CONSTRUCTION SPECIFICATION FOR PRESERVATION, PROTECTION, AND RECONSTRUCTION OF EXISTING FACILITIES” The MUNI implemented in Nov 2017 replaces OPSS 491 COMMON, November 2010 with no technical content changes.
501	Nov 2014	501	Nov 2017	“CONSTRUCTION SPECIFICATION FOR COMPACTING” See Summary of Revisions.
		506	Nov 2017	“CONSTRUCTION SPECIFICATION FOR DUST SUPPRESSANTS” The MUNI implemented in Nov 2017 replaces OPSS 506 COMMON, November 2013 with no technical content changes.

510	Nov 2014	510	Nov 2017	“CONSTRUCTION SPECIFICATION FOR REMOVAL” See Summary of Revisions.
512	Nov 2014	512	Nov 2017	“CONSTRUCTION SPECIFICATION FOR INSTALLATION OF GABIONS” See Summary of Revisions.
		602	Nov 2017	“CONSTRUCTION SPECIFICATION FOR INSTALLATION OF ELECTRICAL CHAMBERS” See Summary of Revisions.
		603	Nov 2017	“CONSTRUCTION SPECIFICATION FOR INSTALLATION OF DUCTS” The MUNI implemented in Nov 2017 replaces OPSS 603 COMMON, November 2015 with no technical content changes.
		604	Nov 2017	“CONSTRUCTION SPECIFICATION FOR INSTALLATION OF CABLE” See Summary of Revisions.
615	Apr 2017	615	Nov 2017	“CONSTRUCTION SPECIFICATION FOR INSTALLATION OF POLES” See Summary of Revisions.
		733	Nov 2017	“CONSTRUCTION SPECIFICATION FOR STEEL BEAM TERMINAL SYSTEM” This is a NEW specification.
		772	Nov 2017	“CONSTRUCTION SPECIFICATION FOR CHAIN-LINK FENCE” The MUNI implemented in Nov 2017 replaces OPSS 772 COMMON, November 2012 with no technical content changes.

		831	Nov 2017	“CONSTRUCTION SPECIFICATION FOR LOCAL VEGETATION BLOCKS” This is a NEW specification.
905	Nov 2014	905	Nov 2017	“CONSTRUCTION SPECIFICATION FOR STEEL REINFORCEMENT FOR CONCRETE” See Summary of Revisions.
		913	Nov 2017	“CONSTRUCTION SPECIFICATION FOR EMBEDDED WORK IN STRUCTURES FOR ELECTRICAL SYSYEMS” The MUNI implemented in Nov 2017 replaces OPSS 913 COMMON, November 2014 with no technical content changes.
		929	Nov 2017	“CONSTRUCTION SPECIFICATION FOR ABRASIVE BLAST CLEANING – CONCRETE CONSTRUCTION” The MUNI implemented in Nov 2017 replaces OPSS 929 COMMON, April 2012 with no technical content changes.
		950	Nov 2017	“CONSTRUCTION SPECIFICATION FOR GLASS FIBRE REINFORCED POLYMER REINFORCING” This is a NEW specification.

SUMMARY OF REVISIONS TO OPSS.MUNI 310

CONSTRUCTION SPECIFICATION FOR HOT MIX ASPHALT

- Converted the specification from COMMON to MUNI.
- Section 310.02, REFERENCES, All ASTM and AASHTO references updated to latest versions.
- Section 310.02, REFERENCES, AASHTO T40 and M323 no longer needed, and therefore have been removed.
- Section 310.03, DEFINITIONS, Anti-Stripping and Binder Course definitions updated to match PROV 310.
- Section 310.05.02, Track Coat Material, SS-1HH added as per MTO recommendation.
- Section 310.07.02.01, Granular Grade, Wording added from MTO SP 313 to deal with distortion.
- Section 310.07.05.01.01, Asphalt Cement / General, AASHTO T40 replaced with OPSS 1101.
- Section 310.07.06.01, Placing Hot Mix Asphalt / General, Minimum ramp distance replaced with a ratio.
- Section 310.07.06.02, Operational Constraints, Temperature updated from 50C to 60C, per MTO feedback.
- NEW Section 310.07.11.04, Paving on Bridge Decks, Adopted from PROV 313.
- Section 310.07.14, Surface Appearance, Wording added to give authorizations to the CA in maintaining quality – adopted from PROV 313.
- Section 310.08, Quality Assurance / General, For item (b) reference to AASHTO M323 removed, per MTO feedback.

SUMMARY OF REVISIONS TO OPSS.MUNI 409

CONSTRUCTION SPECIFICATION FOR CLOSED-CIRCUIT TELEVISION (CCTV) INSPECTION OF PIPELINES

- All instances of “Survey Vehicle” replaced with “Inspection Vehicle” as per industry feedback.
- All instance of “Survey” replaced with “Inspection”
- All instances of “Inspection Firm” replaced with “Contractor”
- Section 409.02, Reference, PACP added.
- Section 409.03, Definitions, Pipeline’s definition updated.
- Section 409.04.01, Submission Requirements, Minor adjustments to content.
- Section 409.05.01, General, Minor adjustments to content.
- Section 409.05.01.01, Photographs, JPEG references added.
- Section 409.06.04.02, Monitor, Limitation of 21” monitor removed.
- Section 409.06.04.03, Digital Video Recorder, Data bit rate added.
- Section 409.07.03, Coding Accuracy, Reworded.
- Section 409.07.04, CCTV Inspection, Reworded.
- Section 409.07.05.01, Inspection Reporting, Reworded.
- Designer Action/Considerations, Updated.

SUMMARY OF REVISIONS TO OPSS.MUNI 501

CONSTRUCTION SPECIFICATION FOR COMPACTING

- Section 501.02, References, deletion of OPSS 506 and MTO Form PH-CC-009.
- Subsection 501.05.02, Water, paragraph modified.
- Subsection 501.07.01, General, addition of second sentence in 1st paragraph.
- Clause 501.07.04.02, Method A, completely rewritten.
- Clause 501.07.04.03.04, Submission of Test Data, 2nd paragraph modified.
- Clause 501.07.04.03.02, Target Density, 6th, 7th, 8th, 10th, 11th, 12th, 13th and 14th paragraphs modified.
- Clause 501.07.04.03.02, Control Strip, 2nd, 3rd, 4th, 5th, 6th, 11th paragraphs modified.
- Clause 501.07.04.03.02, Lot Testing, 12th paragraph 1st sentence modified, 13th paragraph 1st sentence modified and addition of 14th paragraph.
- Clause 501.07.04.03.02, Quality Index, 1st sentence modified.
- Subsection 501.08.02, Method A, 3rd paragraph modified.
- Table 1, Compaction Lot Size, Part III and IV “sewer” replaced with Utility.
- Appendix 501-A, addition of 4th paragraph and deletion of 7th paragraph.
- Appendix 501-B, redesigned and modified.

SUMMARY OF REVISIONS TO OPSS.MUNI 510

CONSTRUCTION SPECIFICATION FOR REMOVAL

- Section 510.02, References, OPSS 310, Hot Mix Asphalt, added.
- Clause 510.07.01.04, paragraph modified with removal of “in layers not exceeding 300mm”
- Clause 510.07.06.04, the existing 6th paragraph removed and addition of 6th and 7th paragraph.
- Clause 510.07.06.04.01, addition of clause Temporary Ramping
- Clause 510.07.06.04.01.01, addition of clause Temporary Transverse Ramping
- Clause 510.07.06.04.02, addition of clause Temporary Longitudinal Ramping
- Subsection 510.10.01, addition of last paragraph.
- Appendix 510-A, Designer Action/Considerations, 2nd, and 16th paragraph added.

SUMMARY OF REVISIONS TO OPSS.MUNI 512

CONSTRUCTION SPECIFICATION FOR INSTALLATION OF GABIONS

- Section 512.02, REFERENCES, Added ASTM 7014-10.
- Section 512.07.05, Assembly of Gabions, Updated the section and also include details on Gabion Stones.
- Section 512.07.06, Placing of Internal Connecting Wires, Added reference to ASTM 7014-10.
- Section 512.07.07, Securing Lids, Added reference to ASTM 7014-10.

SUMMARY OF REVISIONS TO OPSS.MUNI 602

CONSTRUCTION SPECIFICATION FOR INSTALLATION OF ELECTRICAL CHAMBERS

- Section 602.02 References; CSA C22.2 No. 42, CSA C83, and ASTM A 48/A 48M updated.
- Subsection 602.07.13 Grounding, 3rd paragraph; grounding requirements for handhole and maintenance hole covers revised.
- Appendix 602-A, Related Ontario Provincial Standard Drawings; OPSD 2110.010, 2110.050, 2110.060, and 2110.070 deleted.

SUMMARY OF REVISIONS TO OPSS.MUNI 604

CONSTRUCTION SPECIFICATION FOR INSTALLATION OF CABLE

- Section 604.02 References; CSA C22.2 No. 38, CSA C22.2 No. 129, CSA C22.2 No. 197, CSA C22.2 No. 239, CSA C22.3 No. 1, CSA C57, CSA C83, and CSA G12 updated.
- Subsection 604.07.13 Splices and Terminations; 4th, 6th, 7th, and 10th paragraphs revised; existing 5th and 8th paragraphs deleted; and new last paragraph added.

SUMMARY OF REVISIONS TO OPSS.MUNI 615

CONSTRUCTION SPECIFICATION FOR INSTALLATION OF POLES

- Section 615.02 References; OPSS 1440 added, OPSS 1442 deleted, and CSA C83 and CSA G12 updated.
- Subsection 615.05.02 Steel Reinforcement, type of steel reinforcement revised.
- Clause 615.07.07.01, new second paragraph added.
- Appendix 615, Related Ontario Provincial Standard Drawings; OPSD 2414.010 added and OPSDs 2420.01 and 2421.010 deleted.

SUMMARY OF REVISIONS TO OPSS.MUNI 905

CONSTRUCTION SPECIFICATION FOR STEEL REINFORCEMENT FOR CONCRETE

It is recommended that users read the entire specification to become familiar with the differences. Below is a summary of the revisions:

- Section 905.02, References, rewritten.
- Section 905.03, Definitions, rewritten, added, or deleted.
- Section 905.04, Design and Submission Requirements, rewritten.
- Section 905.05, Materials, rewritten.
- Section 905.07, Production, rewritten.
- Section 905.08, Quality Assurance, rewritten.
- Section 905.09, Measurement for Payment, rewritten.
- Section 905.10, Basis of Payment, rewritten.
- Existing Table 1, deleted.
- Existing Table 2, deleted.
- Existing Table 3, renamed to Table 1, Note 2 applies to Steel Reinforcement. Prestressing steel row added. Note 2, 2nd paragraph is existing Note 3 and addition of 3rd paragraph. Addition of new Note 3 and existing Note 4 deleted.
- Appendix A, rewritten.