# Winnipeg

# PUBLIC WORKS DEPARTMENT • SERVICE DES TRAVAUX PUBLICS

Engineering Division • Division de l'ingénierie

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# **REVISION INFORMATION**

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#### **Revised Standard Details**

SD-200, SD-210A, SD-210B, SD-211A, SD-211B, SD-212, SD-214B, SD-220B, SD-220C, SD-227B, SD-228A, SD-228B, SD-228C, SD-229A, SD-229B, SD-229C, SD-229D, SD-229E, SD-232.

# **Approved Products for Surface Works**

# **Approved Concrete Mix Designs**

Concrete Suppliers approved for 2006

#### **DIVISION 4 – SURFACE WORKS**

#### STANDARD CONSTRUCTION SPECIFICATIONS

# **EXPLANATION OF THE REVISION SUMMARY**

(All revisions are highlighted yellow in Specifications)

# **Revised Specifications**

# CW 3110-R8 - Sub-Grade, Sub-Base and Base Course Construction

Section 2.1 Replaced last paragraph and defined content percentages for crushed pavement subbase material.

#### CW 3230-R5 - Full-Depth Patching of Existing Pavement Slabs and Joints

Clause 13.1 Removed "plain" in reference to Items of Work and revised to, "\*\*Specify either Reinforced or Plain-Dowelled".

#### CW 3235-R6 - Renewal of Existing Miscellaneous Concrete Slabs

- Section 3.2.5 Revised section to, "... as required to a maximum thickness of 50 millimetres... "
- Section 3.2.8 Added section, "Install bullnose in accordance with SD 227C"

Renumbered remaining sections.

#### CW 3240-R6 – Renewal of Existing Curbs

Section 3.3.10	Revised "ramp curbs" to "curb ramps".
Section 3.4.4	Revised clause to, " as required as a levelling course to a maximum thickness of
	50 millimetres"
Section 4.1	Revised Item of Work, "v.) Ramp Curb" to "v.) Curb Ramp"
Section 4.2	Revised Item of Work, "vii.) Ramp Curb" to "vii.) Curb Ramp*"
Section 4.3	Revised Item of Work, "vii.) Ramp Curb" to "vii.) Curb Ramp*"

#### CW 3310-R10 - Portland Cement Concrete Pavement Works

Removed Section 2.2; "Plain Concrete Pavement"

Renumbered the remaining sections

Section 5.3.2 Revised "Type 10 Normal Portland Cement" to, "Type GU General Use Hydraulic cement".

Revised in 1<sup>st</sup> and 2<sup>nd</sup> paragraph reference "CSA A5" to "CSA A3001".

Section 5.3.3 Revised 1<sup>st</sup> sentence reference "CSA –A23.5" to "CSA A3001"

Revised 1st sentence "Class C" to "Class CI".

Revised 1<sup>st</sup> sentence "three (3%)" to "three (3) percent"

Section 6.1.1 Removed "change of materials" in 2<sup>nd</sup> sentence and revised to, "The cover letter will clearly outline the purpose of the submission in the first paragraph (i.e., initial, annual, revised)."

#### **DIVISION 4 – SURFACE WORKS**

#### STANDARD CONSTRUCTION SPECIFICATIONS

Explanation of the Revision Summary - Cont'd.

# Section 6.1.2 Replaced the 8<sup>th</sup> bullet with:

- "A minimum of five (5) sets of concrete compressive strength tests for the hand placement paving (Type 1) mix with and without fly ash and the sidewalk (Type 2) mix with and without fly ash to demonstrate the concrete mix will achieve the required strength level. The strength test data may be obtained from either Quality Control testing during production or trial batches."
- Section 6.1.3 Added "current scale calibrations" to the information that must be submitted with the annual submission.
- Section 6.1.4 Replaced the 3<sup>rd</sup> bullet with:
  - "A minimum of five (5) sets of concrete compressive strength tests for the hand placement paving (Type 1) mix with fly ash to demonstrate the concrete mix will achieve the required strength level. The strength test data may be obtained from either Quality Control testing during production or trial batches."
- Section 6.2 Revised section a) Type 1 for spelling, "v. Slump = 70 ± 20 mm (for hand placement)"
- Section 6.3 Revised "Class C" to "Class CI".
- Section 6.4 Removed sentence, "Only Type 10 Portland cement is approved for use in concrete required for early opening of pavement".

Removed Section 9.2.2; "Plain Concrete Pavement"

Renumbered the remaining sections.

- Section 9.8 Revised reference "Clause 9.10 to "Clause 9.9".
- Section 13.1 Removed "plain" in reference to Items of Work and revised to, "Specify either Reinforced or Plain-Dowelled".
- Section 13.2 Removed "plain" in reference to Items of Work and revised to, "Specify either Reinforced or Plain-Dowelled".
- Section 13.4 Revised Item of Work,"Construction of Ramp Curb" to "Construction of Curb Ramp".

#### **CW 3410-R7 - Asphaltic Concrete Pavement Works**

- Section 5.5 Revised numbering of section to "5.5 Incidental Materials".
- Section 5.5.4 Added Section, "Reclaimed Asphalt Pavement".
- Section 6.6 Added Section, "Reclaimed Asphalt Pavement Content".

#### CW 3450-R4 - Planing of Pavement

- Section 3.1.9 Replaced section with "Dispose of material in accordance with Section 3.4 of CW 1130."
- Section 3.1.11 Removed section.

#### **DIVISION 4 – SURFACE WORKS**

#### STANDARD CONSTRUCTION SPECIFICATIONS

Explanation of the Revision Summary - Cont'd.

#### **Revised Standard Details**

#### SD-200 Curb and Gutter

- Added details for Construction Joints
- Revised Note 2. to "Transverse saw cut every 3000 or at pavement joints."

#### SD-209 Keyway for Portland Cement Concrete Pavement

Removed this detail from Division 4 – Standard Details – Surface Works.

#### SD-210A Longitudinal Joint for Concrete Pavement

 Removed the keyway in the <u>Formed Longitudinal Joint</u> detail and revised the detail and note to show a butt joint.

# SD-210B Tie Bar Installation for Lane-at-a-Time Paving Where Bending of Tie Bars is Required.

· Removed all keyway references.

#### SD-211A Construction Joint and Contraction Joint for Reinforced Concrete Pavement

• Removed the keyway in the <u>Construction Joint</u> detail and revised the detail and note to show a butt joint.

#### SD-211B Construction Joint and Contraction Joint for Plain-Dowelled Pavements

- Removed "Plain Concrete and" from the title.
- Removed the keyway in the <u>Construction Joint</u> detail and revised the detail and note to show a butt joint.

# SD-212 Sawn Joint, Keyed Joint and Butt Joint for Reinforced, Plain Concrete and Plain-Dowelled Pavements

- Removed, "Plain Concrete" and "Keyed Joint" from the title.
- Revised the <u>Sawn Joint</u> detail note for cut depth for Transverse Joints from "D/4" to "D/3".
- Added "t" to the Sawn Joint detail.
- · Removed the Keyed Joint detail.

#### SD-214B Longitudinal Joint Repair Details Lane-At-A-Time Patch

 Replaced Keyed Joint with Butt Joint in <u>Section A-A</u> and in <u>Section A-A</u> reference note.

#### **DIVISION 4 – SURFACE WORKS**

#### STANDARD CONSTRUCTION SPECIFICATIONS

Explanation of the Revision Summary - Cont'd.

#### SD-220B Manhole Isolation Detail in Existing Pavements

- Revised the <u>Isolation for Restoration of M.H.</u> to refer to Detail "A" and to "Butt Joint Ref. SD-212".
- Removed minimum cut dimensions in the Isolation for Restoration of M.H.
- Removed Detail "A" and revised Detail "B" to be the new Detail "A".
- Revised the new Detail "A" to show a riser ring and 50mm asphalt over a minimum 150 concrete in the isolation area.
- Revised the new Detail "A" to show a typical isolation from the stack as 150mm.

#### SD-220C Curb and Gutter Inlet Isolation Detail

 Replaced 50 with 150 in the isolation clearance on the front of the curb and gutter inlet.

#### SD-227B Concrete Splash Strip

- Revised the alignment of the base course under the splash strip in both detail drawings.
- Revised the thickness at the back of the splash strip from 100 to 150mm
- Revised the thickness of base course to "as required".

#### SD-228A Concrete Walk

- Revised the saw cut width in Section B B from "5" mm to "3" mm.
- Revised Section A A from "Crossfall = 2%(Preferred) to 4%(Max.)" to "Cross Slope: 2%Minimum 5%Maximum".
- Revised the note of the <u>Plan</u>; "Transverse joints at 1500 O.C., Minimum = 1250, Maximum = 1750".

#### SD-228B Monolithic Curb and Sidewalk

- Revised longitudinal saw cut to 1500mm from back of sidewalk.
- Revised detail from, "Monolithic Curb & Concrete Sidewalk 2-4%" to "Cross Slope: 2% Minimum 4% Maximum".
- Replaced the base course depth of 50 with "as required".
- Revised Note 1. to "Transverse joints to match pavement joints, Minimum = 1250, Maximum = 1750.

### SD-228C Miscellaneous Isolations

- Revised spelling "Mediuns" to "Medians".
- Removed, "Note 2. "Transverse saw cut every 6000 or at pavement joints".
- Added to the Pole, Concrete Pile or Hydrant detail and the Screw-in Base detail notes: Saw Cut "at center of isolation Ref. SD-228A".

#### SD-229A Curb Ramp Layout Intersections

- Revised "Ramp Curb" to "Curb Ramp".
- Revised Alternate Layout Detail and added Note 1. Depressed Curb Ramp to line up with the back of sidewalk.
- Added "Depressed Curb" to the Standard Layout and Alternate Layout Details.

#### **DIVISION 4 – SURFACE WORKS**

#### STANDARD CONSTRUCTION SPECIFICATIONS

Explanation of the Revision Summary - Cont'd.

#### SD-229B Curb Ramp Layout Medians and Approaches

- Revised Ramp Curb to Curb Ramp
- Revised Modified Barrier Curbs on both sides of the <u>Commercial or Lane Approach</u> with <u>Barrier Curb</u> detail to include a 900 transition to <u>Barrier Curbs</u> and added "Ref. <u>SD-203B"</u>
- Revised "gradient" to "Ramp Slope = 2% 5%".
- Revised the "Level Rest Area" from "1200" to "1400".
- Added "Depressed Curb (typical)" to <u>Commercial or Lane Approach with Barrier Curb</u> and <u>Median Sidewalk Crossing Details</u>.

# SD-229C Curb Ramp for Concrete Pavement

- Revised "Ramp Curb" to "Curb Ramp"
- Revised "Gradient = 6%" to "Ramp Slope = 2% 5%".
- Revised "Detail A Ref. SD-229E" to "Ref. SD-229E".
- Revised "Note 2. Ref. SD 229E" to "Note 1.".

### SD-229D Curb Ramp for Asphalt Overlay

- Revised "Ramp Curb" to "Curb Ramp".
- Revised "Gradient = 6%" to "Ramp Slope = 2% 5%.
- Revised "Detail A Ref. SD-229E" to "Ref. SD-229E".
- Revised "Note 2. Ref. SD 229E" to "Note 1.".

#### SD-229E Curb Ramp Construction Detail

- Revised "Ramp Curb" to "Curb Ramp".
- Revised "Gradient = 6%" to "Ramp Slope = 2% 5%.
- Revised Title, "Curb Ramp, Depressed Curb".
- Added Dimension "150".
- Revised "Detail A" to "Depressed Curb".

#### SD-232 Private Approach on Regional Streets (With Barrier Curb)

- Replace "Crossfall" with "Cross Slope" for the sidewalk area of the approach.
- Replaced "Crossfall" with "Slope" for the grade of the approach.
- Revised Modified Barrier Curb on both sides of the approach detail to include a 0.9m transition to barrier curb, added Ref. SD-203B and an ER to mark the start of the transition.

# Approved Products for Surface Works

- Section 2.3 Removed "Plain Concrete".
- Section 4.4 Revised table heading "Manufacturer/Supplier" to "Supplier" and revised the table to only supplier names.
- Section 5.4 Revised table heading "Manufacturer/Supplier" to "Supplier" and revised the table to only supplier names.

# **Approved Concrete Mix Designs**

For Approved Concrete Mix Designs refer to "Concrete Mix Design Approval" for each supplier.