

**AMENDMENTS TO THE 2006 STANDARD SPECIFICATIONS
FOR HIGHWAY CONSTRUCTION**

THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION ARE AMENDED AND LISTED IN DATE ORDER.

ALL TEXT CHANGES OR ADDED TEXT SINCE THE 2006 EDITION ARE UNDERLINED

INCLUDED IN DATE ORDER ARE AMENDMENTS TO THE DRAWINGS FOR THE 2006 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

REVISED/DELETED	SECTION	SECTION TITLE
October 22, 2007	Section 145	General Requirements for Highway, Bridge and Marine Construction
December 14, 2006	Section 200	Clearing and Grubbing
December 14, 2006	Section 201	Roadway Drainage and Excavation
December 14, 2006	Section 202	Granular Base and Sub-Bases
December 14, 2006	Section 204	Rock Cuts
February 1, 2007	Section 303	Culverts
September 7, 2007	SP303-06	Subdrain
February 1, 2007	Section 317	P.E. Plastic Drainage Pipe
February 1, 2007	Section 320	Corrugated Steel Pipe
December 14, 2006	Section 321	Traffic Paint
December 21, 2007	Section 501	Hot Mix Asphalt Pavement
January 21, 2008	Section 502	Asphalt Pavement Construction (EPS)
December 20, 2007	Section 515	End Product Specification for Hot-In-Place Recycled Asphalt Pavement Construction
July 3, 2007	SP582-01.02	Mountable Curb and Gutter
February 1, 2007	Section 635	Electrical and Signing
January 11, 2006	SP941-01.01	No Post Barrier Anchoring Hardware

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SECTION 145: GENERAL REQUIREMENTS FOR HIGHWAY, BRIDGE AND MARINE CONSTRUCTION

Issued Date: October 22, 2007

SS 145.15 Materials Supplied by the Contractor is amended in its entirety to read as:

SS 145.15 – Materials:

SS 145.15.01 - Supply of Materials: The Contractor shall supply all Materials necessary for the completion of the Work with the exception of the Materials supplied by the Ministry as listed in the Special Provisions.

All Materials supplied under the Contract shall be deemed to be the property of the Ministry held by the Contractor for the due completion of the Work.

SS 145.15.02 - Acceptance of Materials: All Materials supplied under the contract:

- a) Shall be new,
- b) Shall conform to the requirements of the Contract,
- c) Shall be inspected by the Ministry
- d) Shall be approved by the Ministry for incorporation in the Work.

SS 145.15.03 - Inspection of Materials: includes material certificates review, fabrication inspection, sampling and testing of Materials.

The Contractor shall provide to the Ministry, material or mill certificates two weeks prior to shipping of the Materials supplied by the Contractor. Such material or mill certificates shall include the material properties that demonstrate the Materials compliance with the requirements of the Contract.

The Contractor shall notify the Ministry Representative of the sources of Materials supplied by the Contractor, and obtain the right for the Ministry to enter upon the premises of the material supplier or fabricator and carry out such inspection. Such notification shall be given sufficient far in advance of Materials delivery dates to enable the Ministry Representative to make inspection of the Materials at the source.

The Ministry will not be responsible for any delays to the Contractor's operations where the Contractor fails to give sufficiently advance notification to the Ministry Representative to enable the Ministry to carry out the inspection before the scheduled shipping dates.

The Contractor will be charged for all travel time, board and lodging costs incurred by the Ministry or its designate, required to inspect Materials components if the source of the material is outside the Province.

As requested, the Contractor shall submit representative samples of Materials to the Ministry Representative at no charge to the Ministry.

SS 145.15.04 - Approval of Materials: Any rejected Materials shall be removed from the site and replaced at the Contractor's expense immediately after notification. All costs incurred for inspection, sampling and testing that established Materials rejection shall be charged to the Contractor.

Approval of any Materials shall not preclude later rejection of the same Materials prior to acceptance of the complete work.

SS 145.15.05 - Alternative Materials: Brands, species and manufacturer's names specified are approved for use in the performance of the Work. No alternative Materials will be considered unless approved in advance by the Ministry Representative in writing.

Savings as a result of using alternate Materials will be evaluated using SS 125 Value Engineering.

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SS 145.15.06 - Recognized Products List: The Ministry has reviewed a number of products for use in highway applications and publishes a “Recognized Products List”, indicating which products are considered generally acceptable for particular purposes. Contractors are encouraged to review the list to aid in determining which products they will supply, but are cautioned that the products listed, although generally acceptable, may not meet Contract-specific specifications.

The Categories “Proven, “Tentative” or “Approved” in the Recognized Products List are an indication of the product’s record of use and purpose. Products in any category are “recognized” and may be used as long as the product meets Contract specific specifications.

Unless so specified in the Contract, Materials provided are not required to be amongst those on the Recognized Products List.

The Recognized Products list is available on-line at:

www.th.gov.bc.ca/publications/eng_publications/geotech/Recognized_Products_Book.pdf

SS 145.15.07 - Storage and Use of Materials: The Contractor shall provide a secure storage acceptable to the Ministry Representative for all Materials. The Contractor shall, in advance of receipt of the shipment of the Materials notify the Ministry Representative of the storage facilities locations for their inspection and acceptance.

The Materials shall be kept in the designated storage immediately upon receipt of the Materials. The Contractor shall not remove any Materials from the storage locations, except for incorporation in the Work, without the written authorization from the Ministry Representative.

The Contractor shall be responsible at no cost to the Ministry for:

- a) acceptance of all Materials including careful unloading and handling, prompt turn around of tank or shipping cars, trucks or delivery containers, hauling and delivery from delivery point to job site, storage, stockpiling and reloading of Materials;
- b) prompt payment of all demurrage or rental charges on cars, (except as provided in SS 501) freight, handling, delivery, storage or any other charges arising after the initial receipt of material at the delivery point;
- c) ensuring that proper accounting is kept of all Materials.

The Contractor shall not unload or take delivery of any material without presence of the Ministry Representative. The Contractor shall notify the Ministry Representative of Materials delivery schedule and allow sufficient time for the Ministry Representative to check quantity and quality before any Materials are delivered.

The Contractor shall be solely responsible for recovery of any loss, damage, or improper use (including incorporating in the rejected Work) of any Materials.

Upon completion of the Work, all Materials supplied by the Contractor in excess of the amount used to complete the Work shall become the property of the Contractor and shall be charged to the Contractor at the supplied cost (including freight and all other costs incurred to supply the Materials) plus applicable overheads.

Empty Materials packaging that are not required for their original purpose shall become the property of the Contractor and shall be disposed of by the Contractor.

SS 145.15.08 - Materials Supplied by the Ministry: are Materials arranged and paid by the Ministry by purchase orders for delivery by the Purchasing Commission on instructions from the Contractor notifying the Ministry Representative.

Separate purchase orders will be issued for each class of material.

Materials ordered for a specific Site shall not be transferred to any other Site without the written consent of

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the Ministry Representative.

Ministry supplied Materials will be used only for Ministry Work. Further requirements for asphalt Materials supplied by the Ministry are contained in SS 501 and SS 951.

SS 145.15.08.01 - Delivery Points: Each purchase order will specify points of delivery. If the Contractor makes a request for a change of delivery points specified by the Purchasing Commission, the additional cost for this delivery shall be charged to the Contractor.

SS 145.15.08.02 - Delivery of Materials: When the Ministry Representative advises the Contractor of the name of the supplier(s), the Contractor shall be responsible for determining requirements and ordering far enough in advance that work is not delayed.

The Contractor shall report to the Ministry Representative any Materials damage or discrepancies between the quantities received and the quantities shown on the bills of lading immediately upon Materials arrive at the delivery point. If damage or deficiencies are not so reported, it will be assumed that the Materials arrived in good order.

If asphalt materials are hauled directly from the delivery point for immediate application to the roadway, the material will be measured by mass or volumetrically by the Ministry Representative at the time of delivery. The Contractor shall ensure that an acceptable means of measurement is available.

SS 145.15.08.03 - Distribution of Materials: To control distribution of Ministry supplied Materials (except asphalt materials as provided in SS 501 and SS 951) and to facilitate accounting:

a) the Contractor shall arrange for delivery of the Materials only after applying for and receiving authority to do so on "Authority to Arrange for Delivery of Construction Materials" form (H0313). The requirements of the Contractor shall be indicated on Part "A" of the form. Approval from the Ministry Representative shall be indicated on Part "B" of the form. The Contractor may then arrange for delivery from the supplier. As delivery will be made only on receipt of the purchase order number and the serial number of the "Authority" form, the Contractor shall arrange with the Ministry Representative to immediately distribute appropriate copies of the "Authority" form.

Material suppliers will be required to notify both the Ministry Representative and the Contractor when Materials are shipped, giving sufficient information to identify each and every shipment against an appropriate "Authority" form serial number and purchase order number.

b) The use of "Authority" form shall not in any way relieve the Contractor of any responsibility imposed under SS 145.15.08.02

c) If the Ministry Representative refuses to authorize the delivery of Materials to the job, the Ministry Representative will send the refusal, with reasons in writing, to the Contractor.

Upon completion of the Work, the Contractor will deliver all unused Materials supplied by the Ministry, to a location as specified by the Ministry Representative. No payment will be made for this portion of the Work.

SS 145.15.09 - Payment: The Ministry will offset any material costs charged to the Contractor from any payments made to the Contractor.

SS 145.16 - Not Used

SECTION 200: CLEARING AND GRUBBING

Issued Date: December 14, 2006

SS 200.01 Clearing, first sentence of the last paragraph is amended to read:

The area to be cleared shall include those areas required for the highway right-of-way, Ministry-provided borrow pits and quarry sites, Ministry or Crown gravel pits and access roads thereto, if ordered by the Ministry Representative; off-take ditches or other drainage ditches and channels for stream diversions either

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within or without the right-of-way; clearing of debris in streams as indicated on the Drawings, or as directed by the Ministry Representative within the Site; foundations for structures and the right-of-way as shown on the Drawings, or as directed by the Ministry Representative, for intersecting public and private road approaches or diversions of same outside the main highway right-of-way.

SECTION 201: ROADWAY DRAINAGE AND EXCAVATION

Issued Date: December 14, 2006

SS 201.01 General is amended to read:

Roadway and Drainage Excavation shall include all excavation and the construction of all embankments required for the formation of the roadbed, parking areas and look-outs; excavation for any drainage ditch, off-take ditch or channel for stream diversion within or outside the right-of-way; removal of surcharge material, topsoil and organic waste material from the roadway, and of topsoil and unsuitable overburden from any Ministry-provided borrow pit or any Ministry or Crown gravel pit, and disposal of same, as may be directed by the Ministry Representative; excavation of materials below grade; excavation of borrow pits; the grading necessary to construct any frontage road, gravel pit access road, borrow pit access road or any other access road, public or private, either within or outside the right-of-way, only to Ministry-provided sources, as may be ordered by the Ministry Representative; the grading of connections to intersecting roads, public or private, either within or outside the right-of-way; the hauling and disposal of all excavated material, and the trimming and shaping of all excavations and embankments.

SS 201.44 Borrow, first paragraph is amended to read:

Borrow shall consist of the excavation and disposal, as directed by the Ministry Representative, of suitable and satisfactory material obtained from borrow pits, approved and measured by the Ministry Representative, for the construction of embankments, subgrade or shoulders. The widening of roadway cuts and ditches or other material sources within the Site will not be considered as borrow.

The following subsections are added:

SS 201.44.01 - Ministry-Provided Borrow Sources: Borrow pits may only be opened at sites approved by the Ministry Representative. The Ministry will formally arrange for securing the sites and the right-of-way thereto and will pay the cost of compensation, royalties and fencing, where required, borrow pit development, and all other expenses in connection therewith except the cost of maintenance of access roads. This, however, shall not be interpreted as relieving the Contractor of any responsibility for damage to person and property.

Borrow pits shall be so excavated that they will drain to the nearest natural outlet, or to an outlet designated by the Ministry Representative. Side slopes of borrow pits in all cases shall be dressed to such slopes as the Ministry Representative may direct.

SS 201.44.02 - Contractor-Provided Borrow Sources: The Contractor shall be responsible for providing one or more sources of materials, meeting applicable Contract specifications, and for the development, permitting, royalties, access road construction and maintenance, haul, and all other things associated with provision and use of such Contractor-provided borrow sources.”

SS 201.81 Borrow is amended by adding the following last sentence:

For Contractor-provided borrow sources, the survey will be conducted after source development, including removal of stripping and overburden, is complete.

SS 201.92 Excavation is amended by adding the following last paragraph:

Payment for access road construction will be made, only to Ministry pits or quarries where explicitly specified in the Special Provisions, at the Unit Price per cubic metre for the various types of materials excavated. In any other case, access road construction is incidental to the Work and will not be paid separately.

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SECTION 202: GRANULAR SURFACING, BASE AND SUB-BASES

Issued Date: December 14, 2006

Table 202-C Aggregate Gradations is amended to read:

TABLE 202-C - AGGREGATE GRADATIONS

SIEVE SIZE	Percent Passing (%) Sieve Size							
	Surfacing Aggregates	25 mm Base Course			Sub-Base Aggregates			Bridge End Fill
(mm)	HFSA	WGB	IGB	OGB	SGSB	IGSB	OGSB	BEF
75	---	---	---	---	100	100	100	100
50	---	---	---	---	---	55 – 100	70 – 100	30 – 100
37.5	---	---	---	---	---	40 – 80	50 – 85	---
25	100	100	100	100	---	---	---	---
19	85 – 100	80 – 100	65 – 100	75 – 100	15 – 100	17 – 40	15 – 55	20 – 100
9.5	60 – 85	50 – 85	<u>30 – 70</u>	30 – 65	0 – 100	---	---	---
6.3	---	---	---	---	---	---	0 – 20	---
4.75	40 – 70	35 – 70	<u>15 – 40</u>	<u>5 – 30</u>	---	---	---	10 – 60
2.36	---	25 – 50	<u>10 – 30</u>	<u>0 – 10</u>	---	10 – 25	0 – 10	---
1.18	20 – 50	15 – 35	---	---	---	---	---	6 – 32
0.600	---	---	---	---	0 – 100	---	---	---
0.300	10 – 30	5 – 20	5 – 15	0 – 8	0 – 15	4 – 15	0 – 8	4 – 15
0.075	5 – 15	0 – 5	0 – 5	0 – 5	0 – 5	0 – 5	0 – 5	0 – 5

SS 202.07 Source of Supply, second paragraph is amended to read:

The Ministry will provide those gravel pits or quarries and the right-of-way to those pits or quarries and will pay the cost of royalties and fencing. The cost of constructing and maintaining access roads shall be considered as part of the cost of producing the construction aggregates and shall be payable by the Contractor. The Ministry will exercise its best judgement in the selection of the pit or quarry sites; however, the failure of the pit or quarry to yield materials of uniform quality shall not constitute grounds for a claim by the Contractor against the Ministry.

SS 202.32.01 is amended to read:

Unless explicitly stated otherwise in the Special Provisions, no separate payment will be made for clearing, grubbing, disposal or relocation of stockpiles, debris or contaminated materials, or for any other costs of site preparation, pit development, or access, or for any delay or other cost arising from the use of Ministry-provided pits or quarries by the Contractor, and all costs thereof shall be covered in the prices for the Items under which payment is provided for the applicable materials.

SS 202.32.02 is deleted.

SECTION 204: ROCK CUTS

Issued Date: December 14, 2006

SS 204.82 Excavation Backslope (Smooth Wall) is amended to read:

The excavation backslope will be measured by the SQUARE METRE only where the height of the cut exceeds 2 m, and shall be measured over the entire height of such cuts. Measurement will apply to the condition of the slope prior to scaling. Measurement for payment, including measurement of smooth wall surface area, hole deviation and slope deviation, will be conducted by the Ministry.

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SS 204.92 Excavation Backslope (Smooth Wall) is amended by adding the following last paragraph:

Where there is no Excavation Backslope (Smooth Wall) Item in Schedule 7, the Excavation Backslope (Smooth Wall) Work shall be performed incidental to Type A Excavation.

SECTION 303: CULVERTS

Issued Date: February 01, 2006

Section 303 is amended in its entirety and is attached to these Special Provisions.

Issued Date: September 07, 2007

SECTION 303: CULVERTS

SP303-06 Subdrain

Issued Date: September, 2007

is amended to read as:

NOTES:

1. FILTER FABRIC SPECIFICATIONS
 - a) Minimum grab tensile strength 0.4kN (ASTMD4632)
 - b) Minimum Permittivity 2.1sec^{-1} (ASTMD4491)
 - c) Non Woven Construction

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SECTION 317: P.E. PLASTIC DRAINAGE PIPE

Issued Date: February 01, 2006

Section 317 is amended in its entirety and is attached to these Special Provisions.

SECTION 320: CORRUGATED STEEL PIPE

Issued Date: February 01, 2006

is amended in its entirety and is attached to these Special Provisions.

SECTION 321: TRAFFIC PAINT

Issued Date: December 14, 2006

SS 321.04 (f) (ii) Colour is amended to read:

- ii) Yellow paint shall conform to the a-b colour box for traffic paint using the L*a*b* colour coordinate system.

SECTION 501: HOT MIXED ASPHALT PAVEMENT

Issued Date: December 20, 2007

Section 501 is deleted in its entirety. Any reference to SS 501 – Hot Mixed Asphalt Pavement in the 2006 Standard Specifications for Highway Construction and these Special Provisions where applicable shall mean the SS 502 – Asphalt Pavement Construction (EPS).

SECTION 502: END PRODUCT SPECIFICATION FOR ASPHALT PAVEMENT CONSTRUCTION

Issued Date: December 20, 2007:

Section 502 is renamed to read as “SECTION 502 - ASPHALT PAVEMENT CONSTRUCTION (EPS)”.

is amended in its entirety and is attached to these Special Provisions.

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SECTION 515: END PRODUCT SPECIFICATION FOR HOT-IN-PLACE RECYCLED ASPHALT PAVEMENT CONSTRUCTION

Issued Date: December 20, 2007

Table 515-D is amended to read as:

TABLE 515-D – LOT ASSESSMENT AND PAYMENT ADJUSTMENTS FOR SMOOTHNESS

For the final surface course only, the following payment adjustments shall apply to each Lot.

Lot IRI (m/km)	Payment Adjustment
<u>≤1.00</u>	<u>+\$2,000</u>
<u>>1.00 and ≤1.10</u>	<u>+\$1,000</u>
<u>>1.10 and ≤1.20</u>	<u>+\$500</u>
<u>>1.20 and ≤1.30</u>	<u>+\$250</u>
<u>>1.30 and ≤1.40</u>	<u>0</u>
<u>>1.40 and ≤1.60</u>	<u>-\$300</u>
<u>>1.60 and ≤1.80</u>	<u>-\$750</u>
<u>>1.80 and ≤1.90</u>	<u>-\$1,500</u>
<u>>1.90 and ≤2.00</u>	<u>-\$2,500</u>
<u>>2.00</u>	<u>REJECT</u>

SECTION 582: CONCRETE CURB AND GUTTER AND STORM DRAINAGE

SP582-01.02 Mountable Curb and Gutter

Issued Date: July 3, 2007

is amended

new details added for Roundabout Truck Apron Mountable Curb

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SECTION 635: ELECTRICAL AND SIGNING

Issued Date: February 01, 2007

SS 635.25 Overhead Signs, first paragraph **a)** is amended to read:

- a) small overhead sheet aluminium or plywood signs are 1200 mm x 900 mm or smaller;

The sixth paragraph, "All horizontal supports and signs shall be level and vertical supports plumb." is deleted.

SS 635.26 Breakaway Sign Structures, eighth paragraph is amended in its entirety to read:

Plywood signs shall be installed with wood battens on the breakaway sign columns to support the signs. Wood battens shall be 4" x 6" Douglas Fir/Larch, No. 1 Grade, and pressure treated, surfaced four sides, in complete lengths without splices. Battens shall be straight and free of cracks.

The ninth paragraph is amended to read:

All pressure treated wood battens shall be pressure treated in accordance with CSA Standard O80.2 "Preservative Treatment of Lumber, Timber, Bridge Ties, and Mine Ties by Pressure Processes".

The tenth paragraph, "Signs shall not be installed until the paint on the battens has completely dried." is deleted.

SS 635.27 Wood Post Sign Structures, first sentence in the fourth paragraph is amended to read:

Wood posts shall be Douglas Fir/Larch, No. 1 Grade and pressure treated, surfaced four sides, and shall be supplied in complete lengths without splices.

The fifth paragraph is amended to read:

All pressure treated wood posts and battens shall be pressure treated in accordance with CSA Standard O80.2 "Preservative Treatment of Lumber, Timber, Bridge Ties, and Mine Ties by Pressure Processes".

The sixth and tenth paragraphs are deleted.

The third sentence in the thirteenth paragraph is amended to read:

Wood battens shall be Douglas Fir/Larch, No. 1 Grade and pressure treated, surfaced four sides, and shall be supplied in complete lengths without splices.

The fourteenth paragraph is deleted.

SS 635.28 Perforated Square Steel Sign Post Structures, second paragraph is amended to read:

Sign posts shall be perforated square steel tubing. The perforated square steel tubing will be required in different outside dimensions as noted on the Drawings. The perforated square steel tubing shall be formed from 12 gauge hot rolled steel, conforming to ASTM Specification A-1011 Grade 50. The tubing shall be hot dipped galvanized conforming to ASTM Specification A-653, Designation G-90, or CSA Specification G164.

SS 635.29 Round Steel Sign Post Structures, first two sentences of the third paragraph are amended to read:

Posts and pipe sleeves shall be round Schedule 40 steel pipe conforming to ASTM Specification A 53, Grade A or B, Type E or S. The pipe shall be hot dipped galvanized in accordance with CSA Specification G164.

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SECTION 941: PRECAST REINFORCED CONCRETE BARRIERS

Issued Date: January 11, 2006

SP 941-04.01.01 No Post Barrier Anchoring Hardware,

Note 2 is amended to read:

Prior to delivery, exposed surfaces of connections shall be prepared for and given a heavy application of corrosion resistant coating.