

**REVISIONS TO MATERIALS SAMPLING GUIDE**  
**January 1, 2014 Edition**

Section 2, Asphaltic Materials			
Page 2-1, Material 1) Asphaltic Oils			
		Field Personnel	
			Removed – two
			Added – one
			Removed – s
Page 2-2, Material 2) Asphalt, Emulsified Anionic and Cationic			
		Field Personnel	
			Added – Field-
			Added – Supplier-Diluted and Supplier-
Page 2-3, Material 3) Performance Graded Binder			
		Field Personnel	
			Removed – parts
			Added – final portion
			Added – each
			Added – type
			Removed – A minimum of two two-quart samples per project.
			Removed – submitted
			Added – received
			Added – from sampling
			Removed – to
			Added – in
			Added – type
			Added – of asphaltic concrete
Section 3, Asphaltic Concrete			
Page 3-1, Material 3) Asphaltic Concrete Types OGFCCRM, OGFC, GGCRM, LC, RLC, SLX			
		Material	
			Added – SLX
Section 10, Compaction – Subgrade (Cohesive Soils)			
Page 10-2, Material 2) Fly Ash			

		Field Personnel	
			Removed – Refer to the Approved Products List. Fly Ash is sampled at the fly ash mill and is accepted for use with a manufacturer’s certification. A one-gallon sample is required when requested by the Materials and Research Division, the inspector questions the material or the material has been in storage for 90 days or more. Sample to be submitted to the central laboratory.
			Added – Project personnel will supply one one-pound sample for each 1,000 tons (minimum of three samples per project) of material used to perform the testing shown under the central laboratory column.
		Central Lab	
			Removed – One-gallon sample when submitted from fly ash plant or field.
			Added – One one-pound sample for each 1,000 tons (minimum of three samples per project) of material used for acceptance testing
	Page 10-2, Material 3) Subgrade Soil and Fly Ash for Mix Design		
		Material	
			Added – Subgrade Soil and Fly Ash for Mix Design
		Type of Test	
			Added – Quality
		Q.C. Sampling and Testing by Contractor	
			Added – -----
		Field Personnel	
			Added – Project personnel will supply one 150-pound sample of subgrade soil and a 15-pound sample of fly ash to perform the testing shown under the central laboratory column.  Samples required 21 days prior to construction.
		Branch Lab	
			Added – -----
		Central Lab	
			Added – One 150-pound sample of subgrade soil and one 15-pound sample of fly ash for verification testing and mix design.
		Location of Additional Information	
			Added – -----
	Page 10-3, Material 5) Subgrade Soil and Hydrated Lime or Pebble Quicklime for Mix Design		
		Field Personnel	
			Removed – 60
			Added – 100

		Central Lab	
			Removed – 60
			Added – 100
Section 14, Portland Cement/Interground-Blended Cement/Silica Fume			
	Page 14-1, Material 2) Interground/Blended Cement		
		Field Personnel	
			Added – Refer to the Approved Products List. Portland cement can be used on the project when accompanied with a manufacturer’s certification.
		Central Lab	
			Removed – cement mill or
	Page 14-2, Material 3) Pozzolans (Fly Ash or Calcined Natural Pozzolan)		
			Removed – Pozzolans (Fly Ash or Calcined Natural Pozzolan)
	Page 14-2, Material 4) Slag Cement		
			Removed – Slag Cement
Section 15, Portland Cement Concrete for Pavement, Base Course, Pavement Patching			
	Page 15-1, Material 1) Class E and F Aggregates		
		Material	
			Removed – Coarse Aggregates
			Added – Class E and F Aggregates
	Page 15-1, Material 2) Class A, B, and C Aggregates		
		Material	
			Removed – Fine Aggregates
			Added – Class A, B and C Aggregates
	Page 15-1, Material 3) Class R Aggregate		
		Material	
			Added – Class R Aggregate
		Type of Test	
			Added – Gradation & Quality
	Q.C. Sampling and Testing by Contractor		
			Added – One gradation test for each 1,000 ton of aggregate or fraction thereof, for acceptance either at the plant or on the project.
			Minimum of one gradation test for each project.

			The number of samples taken from the plant is determined by plant volume supplied to state and federal projects, not per project.
		Field Personnel	
			Added – Verification and quality testing sample size and frequency will be determined by mix design approval.
		Branch Lab	
			Added – -----
		Central Lab	
			Added – One contractor’s split verification sample for each 3,000 ton or fraction thereof.
		Location of Additional Information	
			Added – Section 27, Note 1, Note 4
Section 16, Portland Cement Concrete for Structures, Culverts and Miscellaneous Construction			
Page 16-1, Material 1) Class E and F Aggregates			
		Material	
			Removed – Coarse Aggregates
			Added – Class E and F Aggregates
Page 16-1, Material 2) Class A, B, and C Aggregates			
		Material	
			Removed – Fine Aggregates
			Added – Class A, B and C Aggregates
Page 16-1, Material 3) Class R Aggregate			
		Material	
			Added – Class R Aggregate
		Type of Test	
			Added – Gradation & Quality
Q.C. Sampling and Testing by Contractor			
			Added – One gradation test for each 1,000 ton of aggregate or fraction thereof, for acceptance either at the plant or on the project.
			Minimum of one gradation test for each project.
			The number of samples taken from the plant is determined by plant volume supplied to state and federal projects, not per project.

		Field Personnel	
			Added – Verification and quality testing sample size and frequency will be determined by mix design approval.
		Branch Lab	
			Added – -----
		Central Lab	
			Added – One contractor’s split verification sample for each 3,000 ton or fraction thereof.
		Location of Additional Information	
			Added – Section 27, Note 1, Note 4
<b>Section 27, Notes</b>			
	Page 27-2, Note 2, Asphaltic Oils, Performance Graded Binders, and Emulsified Asphalt		
			Removed – the number of
			Added – tons or
			Removed – The suppliers who
			Added – Only certified suppliers
			Added – Certified suppliers
			Removed – his
			Added – the
			Removed – The certificate of compliance must meet the requirements of the Special Provisions as stated in the contract.
			Added – at 60°F
	Page 27-3, Note 2, Asphaltic Oils, Performance Graded Binders, and Emulsified Asphalt		
			Removed – b) Mixing and compaction temperatures for Performance Graded Binders
			Removed – for that grade.
			Removed – No penalties on Emulsified Asphalt can be assessed if more than 14 days have elapsed between sampling and completion of testing.
<b>Policy 4, Acceptance Policy for Portland Cement and Interground/Blended Cements</b>			
	Page 29-9, Certified Mill Analysis		
			Added – following:
			Removed – location of the mill, brand name, type of cement, grinding period, and the results of the physical and chemical tests determined according to ASTM C-150 (Standard Specification for Portland Cement) or C-595 (Standard Specification for Blended Hydraulic Cements).
			Added –

			<ul style="list-style-type: none"> <li>• Mill location,</li> <li>• Type of Portland and interground/blended cements,</li> <li>• Grinding period,</li> <li>• Associated manufacturer product name,</li> <li>• Portland cement shall conform to ASTM C 150,</li> <li>• Interground/blended cements shall conform to ASTM C 595.</li> </ul>
Page 29-9, Approved Products List			
			Added – APL
			Added – APL
			Removed – Approved Products List
			Removed – Each sample will be collected
			Added – Manufacturer shall
			Added – collect samples in separate grinds or blends
			Removed – 1, A. Any change in the source of the pozzolan material (coal fly ash and raw or calcined natural) or slag cement, ten consecutive passing mill samples will be required.
			Added – 2, B, i. Report the type of each supplemental cementitious materials (SCMs) and slag cement used for final product.
			Added – 2, B, ii. Report the total cementitious replacement per ASTM C 595.
			Added – 2, B, ii, 1. Refer to subsection 1004.02, para 2.
			Added – 2, B, iii. ASTM C 1567 at 28 days
			Added – 2, B, iii, 1. Refer to subsection 1004.04, para 3 of the Nebraska Standard Specification for Acceptance Requirements
			Removed – Interground/blended cement shall be tested according to the provisions of ASTM C 1567. The mortar bars shall be composed of the Type 1PF/1PN cement and sand/gravel from a Platte River Valley source approved by NDR M&R Division. The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days. To accommodate precision within multi-laboratory testing, expansion up to and including 0.13% will be accepted for use. If the expansion exceeds 0.13%, the material will be noncompliant. If tolerance problems are not corrected within 30 days following notification, the cement in question will be removed from the NDOR Approved Products List.
			Removed – With the approval of the Portland Cement Concrete Engineer, conditions for acceptance may also be met by furnishing test data from another state highway department provided the test were conducted within one year of application date.
			Added – 3. If there is a change to SCM source, the manufacturer shall notify the PCC Engineer of the change and follow para 1.

	Page 29-10, Sampling Procedure at Mill		
			Removed – Mill
			Added – at Mill
			Added – Portland
			Removed – s
	Page 29-10, Sample Shipping		
			Removed – Mill
			Removed – one of
			Removed – es
			Added – listed
			Removed – producer
			Added – manufacturer
			Removed – When using the U.S Post Service: Portland Cement Concrete Laboratory Nebraska Department of Roads Materials and Research Division P.O Box 94759 Lincoln, Nebraska 68509-4759
			Removed – UPS
			Added – Ground Shipping
	Page 29-10, Certificates of Compliance		
			Removed – Brand
			Added – Manufacturer
			Added – Portland or interground/blended
			Added – Portland or interground/blended
			Added – Portland or interground/blended
	Page 29-11, Quality Control of Portland Cement		
			Removed and Interground/Blended
			Removed – s
			Removed – acceptance policy
			Added – quality control
			Removed – and interground/blended
			Removed Flowchart – Quality Control of Products on the Approved Product List
			Added Flowchart – Quality Control of Portland Cement Products on the Approved Products List

	Page 29-12, Quality Assurance of Interground/Blended Cement:	
		Removed Flowchart – Acceptance of Integround/Blended Cements
		Added Flowchart – Quality Control of Integround/Blended Cements on the Approved Products List
Policy 5, Acceptance Policy for Pozzolans (Fly Ash or Calcined Natural Pozzolan)		
	Page 29-13, Acceptance Policy for Pozzolans (Fly Ash or Calcined Natural Pozzolan)	
		Removed Policy 5
Policy 6, Acceptance Policy for Slag Cement for Use in Concrete		
	Page 29-14, Acceptance Policy for Slag Cement for Use in Concrete	
		Removed Policy 6
Policy 7, Policy for Certification of Ready Mix Plants		
	Page 29-15, Policy for Certification of Ready Mix Plants	
	ASTM C 94	
		Added – (wet batch)
	Note 1, a.	
		Removed – upon
		Added – when
		Removed – 's
		Added – is
		Removed – relocation
		Added – relocated
	Note 1, c.	
		Removed – Trucks are to be certified every two years.
	Page 29-16, ASTM C 94 Requirements for Central Mixer Batch Plants	
	3.	
		Removed – project manager/QA
		Added – engineer
	7.	
		Removed – at the mixer
		Removed – the mix time is
		Added – batching has been
	8.	
		Removed – will be a need for



			Added – shall be
			Removed – one
			Removed – sample
			Added – concrete
		10.	
			Added – In accordance with ASTM C 94, Table A1.1., Requirements for Uniformity of Concrete,
			Removed – As
			Added – at
			Removed – mixer
			Added – plant
	Page 29-17, Table A1.1 Requirements for Uniformity of Concrete (According to ASTM C94- Page 56-Annual Book of ASTM Standards. Vol. 05.02)		
			Removed – Table A1.1 Requirements for Uniformity of Concrete (According to ASTM C 94 - Page 56 - Annual Book of ASTM Standards. Vol. 05.02)
Policy 9, Policy Concerning Concrete and Precast Pipe Plant Certification Including Testing, Inspection and Approval of Reinforced Concrete Culvert and Sewer Pipe and Concrete Flared-End Sections			
	Page 29-19, Policy Concerning Concrete and Precast Pipe Plant Certification Including Testing, Inspection and Approval of Reinforced Concrete Culvert and Sewer Pipe and Concrete Flared-End Sections		
			Added – and Precast
		General	
			Added – /precast
			Added – /precast
	Page 29-20, Disqualification of a Concrete Pipe/Precast Manufacturer		
			Added – /Precast
			Added – /precast
		Manufacturer Responsibilities:	
			Added – ,
			Removed – and
			Added – , and precast units
			Added – /precast