

REVISIONS TO MATERIALS SAMPLING GUIDE July 1, 2017 Edition

Materials Sampling Guide			
	Throughout		
		Updated references to Department of Transportation	
			Removed – Supplier
Section 3, Asphaltic Concrete			
	Page 3-2, Material – Asphaltic Concrete Pavement		
		Field Personnel	
			Removed – shall
			Added – may
Section 15, Portland Cement Concrete for Pavement, Base Course, and Pavement Patching			
	Page 15-3. Material – PCC Pavement		
		Field Personnel	
			Removed – shall
			Added – may
Section 18, Fence, Handrail, and Barrier Rail Materials			
	Page 18-1, Material – Tubular, ‘H’, and ‘C’ Sections for Post Braces, Top Rail, etc.		
		Manufacturer Certified Tests Required	
			Removed – No
			Added – Yes
Section 27, Notes			
	Page 27-1, Note 1 – Sampling and Testing Small Quantities of Non-critical Materials		
			Removed – submitting a DR Form 181, Letter of Certification by Project Manager, to the Materials & Research Division,
			Added – notification of Materials & Research and documenting the waiver of Sampling/Testing in SiteManager
			Removed – documented as provided in paragraph 19s) and/or (b) and paragraph 2 of DR Form 181
			Added – recorded on the affected line item, consistent with materials acceptance documentation of the department.
	Page 27-4, Note 9, Reinforcing Steel, Bars, and Fabric		
			Removed – Generally reinforcing steel, supplied by Nebraska manufacturers or fabricators, is sampled and tested by the central laboratory, which maintains a stock record of tested material at these plants. A

			<p>‘Report of Shipment of Steel for Concrete Reinforcement’ is issued by the Materials & Research Division to cover each shipment to a project.</p> <p>Reinforcing steel may occasionally be furnished directly to the project from a manufacturer without being previously tested by the central laboratory. In this case, samples and certificates should be submitted to the central laboratory as prescribed by the materials sampling guide. Reinforcing steel furnished under these circumstances should not be used until tests are completed and approved.</p>
			<p>Added – Generally, reinforcing steel supplied by Nebraska manufacturers or fabricators is sampled and tested by the central laboratory, which maintains a stock record of tested material at these plants. This pre-approved stock material may be sent by the supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p> <p>Reinforcing steel may occasionally be furnished directly to the project from a manufacturer without being previously tested by the central laboratory. In this case, certificates should be documented into SiteManager and OnBase and samples forwarded to the central laboratory as prescribed by the materials sampling guide. Reinforcing steel furnished under these circumstances should not be used until tests are completed and authorized by Materials & Research.</p>
Page 27-4, Note 10, Beam and Cable Guard Rail and Fittings			
			<p>Removed – Beam and cable guardrail and associated hardware furnished by each supplier is tested once each year to check their respective stock of material. Any material shipped from the tested stock of these suppliers to state projects will not require any additional sampling, testing, or certification. Shipping reports showing the material shipped will be distributed by the Materials & Research Division to the project manager and others concerned.</p> <p>When the supplier’s tested stock is exhausted, he may continue to ship additional material to state projects, however, this material must be covered by the type of certification shown in this sampling guide for the particular item involved. The certifications and supplier’s shipping report will be sent to Materials & Research Division for approval and distribution to the project manager and others concerned.</p> <p>Occasionally, guardrail material may be sampled on the project for a supplier’s stock. In this case, the project manager will be notified by the Materials & Research Division concerning the samples required.</p> <p>When steel posts (end posts, special posts, mounting brackets, etc.) used with beam guard rail are shipped to a project on the basis of certificates of compliance, they will be field checked by the project manager for correct dimensions and for the amount of zinc coating or paint thickness. A report showing the number of posts, the measurements, and coating thickness will be sent to the Materials & Research Division for distribution.</p>
			<p>Added – Beam and cable guardrail and associated hardware furnished by each supplier is subject to random testing by Materials & Research. Any material shipped from these approved guardrail suppliers to state projects will not require any additional sampling, testing, or certification. Pre-approved material may be sent by the supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent</p>

			directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.
Page 27-4, Note 11, Metal Culvert Pipe Field Inspection and Reporting			
			<p>Removed – The random sampling procedure at the pipe fabricators plant requires the supplier to send a copy of his shipping report with the truck delivering the materials. The report will be addressed to ‘Project Manager’. If the project manager or his inspector is not present when the material is unloaded, the report will be left with the contractor, if he is present, for transmittal to the project manager. Should the material be stockpiled at a site where neither the contractor nor his inspector is present, the truck driver will return the report to his office and it will be mailed to the project manager.</p> <p>The shipping report may be either a Form MT-750 or a fabricator’s bill of lading and will show the following information for the culvert pipe in the shipment: quantity (linear feet), size, heat number, thickness of sheets for each size of pipe, brand, and the fabricator’s certification of compliance. The pipe may be approved for use as soon as the project manager verifies that the material received is as described on the shipping report, and that the pipe has not been damaged in shipment or handling. Any corrections or notes should be made on the project manager’s copy of the shipping report that should then be sent to the Materials & Research Division. A copy of the project report covering the shipment will be sent to the project manager by the Materials & Research Division.</p>
			<p>Added – Metal culvert pipe and associated hardware furnished by each supplier is subject to random testing at the suppliers’ facility by Materials & Research. Any material shipped from these approved metal culvert suppliers’ stock will not require any additional sampling, testing, or certification. Pre-approved stock material may be sent by the supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p> <p>The pipe may be approved for use as soon as the project manager verifies that the material received is as described on the shipping report and the pipe has not been damaged in shipment or handling. Any corrections or notes should be made on the project manager’s copy of the shipping report.</p>
Page 27-5, Note 12, Bolts, Nuts and Washers, and Structural Fasteners			
			<p>Removed – Tested and approved stock will be tagged with a Department of Roads’ white inspection tag (TL-5401) inside or outside of the container. Shipments so tagged may be used immediately. Shipment reports referencing to the stock test will be issued by Materials & Research Division.</p>
			<p>Added – Bolts supplied to Nebraska projects are sampled and tested by the central laboratory and/or the NDOT Bridge Fabrication Inspection Unit. The NDOT central laboratory maintains a stock record of tested material at various fabricators and suppliers. This pre-approved stock material may be sent by the fabricator/supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the shipment. This completed shipping report, signed by the supplier, is sent directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p>

	Page 27-5, Note 14, Steel Bearing Piling, Steel Sheet Piling and Steel Shells for Cast-in-Place Piling		
			Added – stamped
			Removed – He
			Added – The project manager
			Removed – forward the mill test
			Added – document said
			Removed – to the
			Added – in SiteManager and OnBase for review by the
	Page 27-5, Note 15, Structural Steel for Superstructure, Substructure, and Handrail		
			Removed – He
			Added – The inspector
			Removed – He
			Added – The inspector
			Added – inspector
			Removed – him
			Added – the department inspector
			Added – /she
			Removed – approved
			Added – reviewed
			Removed – from Materials & Research Division, or approval to use this material
			Added – reports
			Added – The department inspector is responsible for entering all mill tests, certificates, and other reports in SiteManager and OnBase.
	Page 27-6, Note 16, Combination Mast Arm Signal and Lighting Poles, Mast Arm Signal Poles, Span Wire Poles, Pedestal Traffic Signal Poles and Light Poles		
			Removed – shall
			Removed – certified mill tests
			Added – certificates of compliance for
			Added – to the Materials & Research Division
	Page 27-6, Note 18, Gray Iron Castings (Cast Iron Grates, Frames, Pull Box Frames and Covers, Junction Boxes, etc.)		
			Removed – When these items are furnished from the Lincoln or Omaha area, they will probably be supplied from a tested pour representing stock at the foundry. Shipments to projects from these stocks will be reported to the Materials & Research Division by the foundries. Castings will usually be identified by a letter or symbol representing the foundry, followed by numbers representing the date the casting was poured. The Materials & Research Division will issue a 'Report of Shipment of Gray Iron Castings' which will include a list of the items shipped to the project, the quantity, identification and references to the stock tests. This report constitutes approval of the tensile strength of the iron used in these castings. Since the finished castings are not inspected prior to shipment, acceptance should be based on field

			<p>inspection showing good workmanship and compliance with the dimensional and weight requirements specified in the contract documents.</p> <p>Cast iron materials furnished from other sources may not be supplied from tested stocks. In this case, the project manager shall obtain the manufacturer's certificate of compliance for this material from the contractor prior to installation.</p>
			<p>Added – Gray iron castings may be sent directly to the project provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p> <p>Cast iron materials are not supplied from tested stock, therefore, the project manager shall obtain the manufacturer's certificate of compliance for this material from the contractor prior to installation. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p> <p>Finished castings are not inspected prior to shipment, therefore, acceptance should be based on field inspection showing good workmanship and compliance with the dimensional and weight requirements specified in the contract documents.</p>
Page 27-7, Note 22, Reflectors and Fasteners			
			<p>Removed – When shipment is made from approved stock, inspection tags will be attached to or placed within the container. Units can be used upon delivery to the project on the basis of the inspection tag. The Materials & Research Division will issue an acceptance report upon shipment of the units. The brand of reflector used must be entered in SiteManager.</p>
			<p>Added – Pre-approved reflectors and fasteners may be sent by the supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent directly to the project manager with a copy provided for the contractor. The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase.</p> <p>The brand of reflector used and the shipping report should be documented and authorized in SiteManager and OnBase.</p>
Page 27-7, Note 23, Delineator Posts			
			<p>Removed – When delineator posts are delivered to a project from a tested and approved stock, the bundles will be tagged with a Department of Roads' white inspection tag (TL-5401). The project manager does not need to notify the Materials & Research Division and can use this material upon delivery to the project. A shipment report will be issued by the Materials & Research Division which will refer to the stock test report numbers covering the posts and show the sizes and quantities represented.</p> <p>Posts delivered to a project which are not supplied from a previously tested and approved stock should not be used until they have been tested and approved by the Materials & Research Division.</p>
			<p>Added – Pre-approved delineator posts may be sent by the supplier directly to the project, provided the supplier sends an approved NDOT shipping report along with the load. This completed shipping report, signed by the supplier, is sent directly to the project manager, with a copy provided for the contractor.</p>

			<p>The project manager is responsible for documenting and authorizing this shipping report in SiteManager and OnBase. NDOT inspection tags will also be included with the shipment.</p> <p>Posts delivered to a project which are not supplied from a previously tested and approved stock, must be sampled by field personnel and submitted to Materials & Research for testing and approval.</p>
	<p>Page 27-8, Note 25, Treated and Untreated Timber Piling, Treated Timber Sheet Piling, Fence Posts, Treated and Untreated Lumber, Treated and Untreated Timber, Wood Guard Rail Posts, Offset Blocks, Treated Poles and Sign Posts</p>		
			<p>Removed – These materials are normally accepted on the basis of Certificates of Compliance from the producer and treater or Certificates of Inspection and Treatment from a commercial testing laboratory arranged for by the supplier and approved by the Materials & Research Division.</p> <p>Materials accepted on the basis of Certificates of Compliance from the producer and treater will usually not have any identifying hammer mark on the end.</p> <p>Materials accepted on the basis of Certificate of Inspection and Treatment from a commercial testing laboratory will have a hammer mark on the end of each piece.</p> <p>Wood materials may be used upon delivery to the project provided they have not been damaged and the proper identifying hammer mark is on the end of each piece and the report covering the inspection is on hand or the project manager has received approved Certificates of Compliance from the Materials & Research Division the for the materials delivered.</p> <p>If material is delivered to the project prior to receipt of the test reports or Certificate of Compliance, the project manager shall notify the Materials & Research Division promptly, giving all pertinent data such as project number, name of jobber or supplier, the mill or treating plant, car number, hammer mark, number of pieces, and any other information available. Action can then be started to obtain the test report of Certificate of Compliance in the event it has not been received at the laboratory.</p> <p>Wood items are sometimes tested and placed in stock at jobber's plants. The Materials & Research Division has the test reports supplied by the commercial testing agency or the Certificates of Compliance from the producer and treater for any material which they have inspected and approved for the department. When the jobber makes a shipment to a state project, he submits a shipment report (Form TL-5162) to the Materials & Research Division showing the project number and other pertinent information. If the material shown on the shipment report is as specified for the project and reports covering the inspection and approval of the material are on file at the Materials & Research Division, the report is signed by Materials & Research Division and sent to the project manager.</p>
			<p>Added – These materials are normally accepted on the basis of certificates of compliance from the producer and treater or certificates of inspection and treatment from a commercial testing laboratory arranged for by the supplier and approved by the Materials & Research Division.</p> <p>Materials accepted on the basis of certificates of compliance from the producer and treater will usually not have any identifying hammer mark on the end.</p> <p>Materials accepted on the basis of certificate of inspection and treatment from a commercial testing laboratory will have a hammer mark on the end of each piece.</p> <p>Wood materials may be used upon delivery to the project provided they have not been damaged and the proper identifying hammer mark is on the end of each piece and the report covering the inspection is on</p>

			hand or the project manager has received approved certificates of compliance for entry into SiteManager and OnBase.
Section 28, Quality Assurance Program for Construction Materials			
	Page 28-A-2, Appendix A, Sampling and Testing Personnel Qualification Program		
	A4. – Qualification Procedure, A4.2.1.		
			Removed – NDOR employees
			Added – project inspection staff
			Removed – employee
			Added – inspection personnel
			Removed – An employee
			Added – Project inspection staff
	Page 28-A-7, Table A1 – Test Methods for Qualification of Sampling and Testing Personnel		
	Concrete Field Inspector/General Handling of Concrete		
			Added – Certification will be completed online. Please see instructional quick reference guide here.
			Removed – Certification will be completed online. This enrollment requires an NHI User ID and password. Follow these steps to sign up for and register completion of a session.
			<ol style="list-style-type: none"> 1. Log in to the individual NHI user account. 2. Use the course search engine to locate course number FHWA-NHI-131122, Portland Cement Concrete Paving Inspection – Web-Based. 3. To enroll, select ‘Add to Cart’. 4. When all course selections have been made, select ‘Checkout’. 5. Follow the checkout steps. Once the registration is completed, confirmation will be transmitted via email. <ol style="list-style-type: none"> a. If enrolled in web-based training, access is immediately available via ‘My Training’. b. A Certificate of Completion will be presented, in .pdf format, when ALL COURSE MODULES have been fulfilled. c. Forward the certificate to SiteManager Dor.SiteManagerMaterials@nebraska.gov
	Page 28-A-10, Table A1 – Test Methods for Qualification of Sampling and Testing Personnel		
	Earthwork Technician I		
			Removed – Prerequisite: Radiological Safety/Hazardous Material
			Added – NA
	Page 28-A-13, Table A1 – Test Methods for Qualification of Sampling and Testing Personnel		
	Laboratory and Field Technician Certifications - Provisional		
			Removed – employees only
			Added – project inspection staff

		Concrete Field Inspector/General Handling of Concrete Provisional Certification
		Removed – NDOR New Hires/Temporary
		Added – Project inspection staff conducting sampling and testing without full certification
		Soil Aggregate Technician Provisional Certification
		Removed – NDOR New Hires/Temporary
		Added – Project inspection staff conducting sampling and testing without full certification
		Asphaltic Technician Provisional Certification
		Removed – NDOR New Hires/Temporary
		Added – Project inspection staff conducting sampling and testing without full certification
	Page 28-F-1, Appendix F, Nebraska Department of Transportation Annual Report to FHWA On System Wide Approach of Independent Assurance Testing National Highway System – Annual FHWA IA Program Report	
		Assessment of Lab Qualifications for Federally Funded Projects
		Removed – Asphalt footnote designation
		Removed – Concrete footnote designation
		Removed – Soil footnote designation
	Page 28-F-2, Appendix F, Nebraska Department of Transportation Annual Report to FHWA On System Wide Approach of Independent Assurance Testing National Highway System – Annual FHWA IA Program Report	
		Assessment of Technician Certification Status
		Removed – footnote designation
	Page 28-F-3, Appendix F, Nebraska Department of Transportation Annual Report to FHWA On System Wide Approach of Independent Assurance Testing National Highway System – Annual FHWA IA Program Report	
		Assessment of Technician Certification Status
		Removed – footnote designation
	Page 28-F-3, Appendix F, Nebraska Department of Transportation Annual Report to FHWA On System Wide Approach of Independent Assurance Testing National Highway System – Annual FHWA IA Program Report	
		Removed – Footnote I – City of Lincoln does not use contractor QC tests in their acceptance decision.
		Removed – Footnote II – City of Lincoln does not use contractor QC tests in their acceptance decision.
		Removed – Footnote III – City of Lincoln does not use contractor QC tests in their acceptance decision.
		Removed – Footnote IV – If a technician is both certified and provisionally certified, the certification will be recorded in column B.
		Removed – Footnote V – Provisional certifications are not acceptable for consultants or LPA employees.
		Removed – Footnote VI – LPA and consultant technicians are reported here.
Section 29, Policies		
	Page 29-14, Policy 6, Acceptance Policy for Slag Cement fir Use in Concrete	
		Removed -- This policy was removed effective January 1, 2014.
		Added – Policy 6, Acceptance Policy for Slag Cement fir Use in Concrete
	Page 29-22, 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	

			Removed – Federal 'Buy American Act' provisions
			Added – federal Buy America requirements