

HOW TO USE THE FIELD TESTED MATERIALS ACCEPTANCE GUIDE

This guide summarizes the testing requirements for various materials used in the construction of ODOT projects. It indicates what tests must be performed, who must perform them, and how frequently they must be performed. It includes materials which are sampled and tested in the field and materials which are field sampled but sent elsewhere for testing. When a contract requires Quality Control (QC) by the Contractor, samples that must be sent elsewhere for testing are delivered to the Project Manager along with the Sample Data Sheet (Form 734-4000). Examples of this and other test report forms are in Section 3 of this manual.

Materials in this guide are listed in the numerical order of the Standard Specifications and the project special provisions. To find the testing requirements for a particular material, first determine what it will be used for and then refer to the appropriate Specifications Section for that product. For example, to look up testing requirements for aggregate to be used in asphalt concrete paving, refer to Section 00745.

Definitions

SOURCE REVIEW/PRODUCT COMPLIANCE TESTING – Refer to Section 4(A) for additional explanation. Certain QC tests on aggregates fall into this category. They are identified in this section by the words “Product Compliance.”

SAMPLE SIZES – Refer to Section 4(C) for guidance on material sample sizes, containers, and labeling. Although designed for the ODOT Central Materials Laboratory (ODOT-CML), it is a good guide for samples being sent to any laboratory.

ASPHALT CONCRETE MIX DESIGNS – If the ODOT-CML is preparing the AC mix design, submit samples of the materials shown in Section 4(C) of this manual.

TYPES OF TESTS

The following types of tests will be performed by the Contractor or Engineer on materials and products required for contract work:

1. **Source Review** – This test type is addressed in Section 4(A) of this Manual.

The Engineer will test unprocessed material from an aggregate source, if requested by the Contractor, to provide information about the quality of material. Tests will involve degradation, soundness, and abrasion, but may involve other tests. Favorable test results do not imply that processed material from the source will comply with specifications after it is processed as required for the project.

2. **Product Compliance** – This test type is addressed in Section 4(A) of this Manual. The Engineer will test processed material if process control testing indicates that the processed material meets the contract quality requirements. Tests will involve degradation, soundness, abrasion, and lightweight pieces, but may involve other tests. The material shall not be incorporated into the project unless Product Compliance tests show favorable results.

3. **Quality Control** – The Contractor will perform quality control testing as described in Section 2 and specified in 4(D) of this Manual or as modified by the Special Provisions or Supplemental Standard Specifications.

4. **Verification** – The Engineer will perform Verification testing as described in Section 2 and specified in Section 4(D) of this Manual. **Note: The required 10% testing of Quality Control by the Region QA is considered a minimum frequency and testing may be increased when deemed necessary by the engineer.** These tests provide the basis for the Engineer's decision on acceptance of materials and products. If Independent Assurance is to be done on a material, a split of the Verification sample will be given to the Contractor for testing.

5. **Independent Assurance** – Where Independent Assurance involves testing, the Engineer will evaluate test results from split samples to assure that Contractor test results meet required parameters.

6. **Visual** – Visual Inspection: Examination and assessment of construction materials, by **OBSERVATION**, to determine if the materials appear to meet the contract requirements and are acceptable for incorporation into ODOT construction projects. Visual inspection, when stated in the contract, is a method generally used by the Project Inspector in lieu of normal sampling and testing of field tested materials as defined in section 00165.00 of the Standard Specifications to document quality. Supporting documentation for visual acceptance is, at a minimum, a field inspection report. Consult the construction contract for other acceptance document requirements.

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Independent Assurance/Verification Materials Laboratory		
SECTION 00330 - EARTHWORK											
Establishing Maximum Density (for Compaction)	Density Curve			T 99	3468	1/Soil type					
	Bulk Specific Gravity			T 85	3468						
	Family of Curves			T 272	3468FC						
	Deflection Testing	TM 158			1793S	1 test per 3 ft. in depth				1/Project	
Compaction	Nuclear Gauge			T 310	1793S	See Table 00330-1 Below					10 % of Required QC
	Coarse Particle Correction			T 99	1793S						
	Deflection Testing	TM 158			1793S						
TABLE 00330-1 Frequency of Quality Control Testing (English)											
Individual Areas											
Under 3500 yd² or yd³											
Existing Ground Surface											
Embankments											
Excavations and Finished Subgrade											
Over 3500 yd² or yd³											
Existing Ground Surface											
Embankments											
Excavations and Finished Subgrade											
Stone Embankment Material (See Sec. 330.16(a))	Gradation									Visual See Section 00330.16(b)	
Compaction	Deflection Testing	TM 158			1793S	1 per Layer					
Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.											
Imported Topsoil (See Section 01040.14(b))	Compliance				4000	See Section 4C 1/Source & 1/Type of Soil				Submit to Lab	

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE			Materials Laboratory			
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Independent Assurance/Verification				
SECTION 00331 - SUBGRADE STABILIZATION Aggregate backfill	<i>Material must meet the requirements of Section 00331.10</i>												
						Visual							
Water	<i>Material must meet the requirements of Section 00340</i>												
						Visual							
Compaction	<i>Material must meet the requirements of Section 00331</i>												
SECTION 00332 - SURFACING STABILIZATION Aggregate Base	<i>Material must meet the requirements of Section 00332.10</i>												
						Visual							
Compaction	<i>Material must meet the requirements of Section 00332</i>												
						Visual							
SECTION 00333 - AGGREGATE DITCH LINING Aggregate	Sampling Reducing Sieve Analysis												
							1/Project or 1/Source						

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00344 - TREATED SUBGRADE									
Granular Quicklime	Sieve Analysis Calcium Hydroxide Content in lime			T 27 T 219	4000 4000	1/Project or 1/Source	Submit to Lab		1/Project or 1/Source
Hydrated Lime Calcium Chloride Sodium Chloride	Materials must meet the requirements of Section 00344.10 and Test Results Certificate provided according to Section 00165.35(a)								
Portland Cement	Material must meet the requirements of Section 02010								
Water	Material must meet the requirements of Section 00340								
Establishing Maximum Density (for Compaction)	Density Curve Maximum Specific Gravity			T 99	3468	See Table 00344-1 Below for Testing Frequency			1/Project and 10% of Required QC
	Deflection Testing	TM 158			1793S				
Compaction	Deflection Testing Nuclear Gauge	TM 158		T 310 T 99	1793S				
	Coarse Particle Correction								
TABLE 00344-1 Frequency of Quality Control Testing									
Individual Areas					Under 3500 yd²		Over 3500 yd²		
Finished Subgrade					1 test per 1000 yd ²		1 test per 3000 yd ²		

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00360 - Drainage Blankets											
Granular Drainage Blanket	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11	1792	A subplot equals 1000 Tons					
Sand Drainage Blanket	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11	1792	1/subplot minimum 1/Source per Project					
Establishing Maximum Density (for Compaction)	Density Curve			T 99	3468	1/Source and Type					
Compaction	Bulk Specific Gravity			T 85	3468	1/Project					
	Deflection Testing		TM 158		1793S	1 test per 3 ft. in depth					
	Deflection Testing Nuclear Gauge Coarse Particle Correction		TM 158	T 310 T 99	1793S 1793S	See Table 00360-1 Below					
TABLE 00360-1 Frequency of Quality Control Testing											
		Individual Areas		Under 3500 yd²		Over 3500 yd²					
		Existing Ground Surface		1 test per 1000 yd ²		1 test per 3000 yd ²					
		Finished Surfaces		1 test per 1000 yd ²		1 test per 3000 yd ²					

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			Materials Laboratory	
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance		
SECTION 00390 - RIPRAP PROTECTION										
Fill Material & Riprap	Gradation See 00390.11(c-1)						Visual			
	Degradation Soundness Apparent Specific Gravity & Absorption	TM 208		T 104 T 85	4000 1825	Submit to Lab			See Section 4(A)	See Section 4(A)
Filter Blanket	Gradation See 00390.13					Visual				
Grouted Riprap Sand	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11	1792			1/Project		
				T 104 T 113						
Portland Cement	Material must meet the requirements of Section 02010									

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00396 -SHOTCRETE SLOPE STABILIZATION									
Aggregate Production and Mixture									
(1) QAE may waive after 5 sublots/shifts	Sampling Reducing				T 2				
	(2)(3) Sieve Analysis				T 248				
(2) Coarse Aggregate (See Section 02690.20)	(3) Fineness Modulus				T 277/T 11				
	(1)(2) Wood Particles	TM 225			T 277/T 11				
(3) Fine Aggregate (See Section 02690.30)	(3) Sand Equivalent				T 176				
	Soundness				T 104				
	Abrasion				T 96				
	Degradation	TM 208			T 113				
	Lightweight Pieces Organics				T 21				
Portland Cement Admixtures	(2) Dry Rodded Unit Weight				T 19				
	(2)(3) Bulk Specific Gravity & Absorption				T 84 & T 85				
		Material must meet the requirements of Section 02010							
Mixing Water		Material must meet the requirements of Section 02040							
		Material must meet the requirements of Section 02020							
Production Testing (See Section 00396.14)	(5) Test Panel								
(5) 3 Cores minimum per Panel	Strength				T 22				
Compression Test Cores									

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance
SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL								
TRENCH FOUNDATION - Excavation below grade only								
Selected general backfill							Visual	
Selected granular backfill							Visual	
Selected stone backfill							Visual	
Other approved material							Visual	
Establishing Maximum Density	Density Curve			T 99	3468		1/Soil Type or Aggregate Gradation	
	Bulk Specific Gravity			T 85	3468			
	Family of Curves			T 272	3468FC			
	Nuclear Gauge Coarse Particle Correction			T 310 T 99	1793S		1test per 300 ft. of Trench	
Compaction								
<p>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</p>								

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL (CONTINUED)										
Bedding										
3/8" - 0 PCC fine aggregate (See Section 02690.30(h))	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11				1/Source or Aggregate Gradation		
Commercial 3/4" - 0 Aggregate					1792				Visual	
No. 10 - 0 Sand drainage blanket material (See Section 00360.10) Reasonably well graded sand, maximum 3/8" to dust	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11				1/Source or Aggregate Gradation		
Commercial available 3/8"-0 or No.10 - 0 sand									Visual	
Continuous cradle of Commercial Grade Concrete									Visual	
	<i>Material must meet the requirements of Section 00440</i>								Visual	

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
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SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL (CONTINUED)										
Pipe Zone Material										
Flexible Pipe		Use the Listed Material requirements under Bedding								
Rigid Pipe: Aggregate Base 1" - 0 or 3/4" - 0 Aggregate (See Section 02630.10)	Sampling Reducing Sieve Analysis				T 2 T 248 T 27					
					1792					
Rigid Pipe: Commercial 1" - 0 or 3/4" - 0 Aggregate	Density Curve				T 99					
					T 85 T 99			Visual		
Establishing Maximum Density	Bulk Specific Gravity Coarse Particle Correction				3468					
					3468			1/Source or Aggregate Gradation		
Compaction	Nuclear Gauge				T 310					
					1793B			1 test per 300 ft. of Trench and every 1.5 ft. of Fill		
<p>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</p>										

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SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL (CONTINUED)														
Trench Backfill														
	Class A Backfill - Native or common Material	Material must meet the requirements of Section 00330.43												
	Class B Backfill - 1"-0 or 3/4"-0 Granular Material	Material must meet the requirements of Section 00641												
	Class C Backfill - Clean sand with 100% minus 1/4" material										Visual			
	Class D Backfill - Pit run or bar run material with 3" maximum dimension and well graded from coarse to fine										Visual			
	Class E Backfill - Controlled Low Strength Material (CLSM)	Material must meet the requirements of Section 00442												
Establishing Maximum Density	(1) Method "A" & ODOT TM 223 for Dense Graded Base Aggregate	Density Curve				(1) T 99	3468	1/Soil Type or Aggregate Gradation						
		Bulk Specific Gravity				T 85	3468							
		Family of Curves				T 272	3468FC							
Compaction	(C) Density testing is based on cumulative lineal feet of pipe placement.	Nuclear Gauge Coarse Particle Correction			T 310 T 99	1793S or 1793B		(C) 1 test per 300 ft. of Trench and every 1.5 ft. of Fill						
Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.														

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00430 - SUBSURFACE DRAINS										
Granular Drain Backfill Material	Sampling Reducing Sieve Analysis			T 2 T 248 T 27	1792	1/Sublot (Minimum 1/ Project)	A Sublot equals 1000 Tons			
	Abrasion Degradation	TM 208		T 96	4000	See Section 4A	Submit To Lab			See Section 4A
Special Filter Material See Section 00430.46(a)	Compaction									
SECTION 00440 - COMMERCIAL GRADE CONCRETE										
Mixture	Sampling		TM 2							
	Air Content									
	Density (Unit Weight) Yield Slump Concrete Temperature			T 152 T 121 T 121 T 119 T 309	3573WS or 4000 C	(S) 1 per each set of cylinders				
Modifiers	Material must meet the requirements of Section 02030									
Admixtures	Material must meet the requirements of Section 02040									
Portland Cement	Material must meet the requirements of Section 02010									
Structural Items	Strength			T 22 & T 23	4000C	(M)(S) 1 Set / Day Minimum				
	Strength			T 22 & T 23	4000C	(M) (S) 1 Set/20 yd ³ Cumulative (Maximum 1 Set/day)				
(S) 1 Set Represents a minimum of 3 Cylinders										
(M) Per Mix Design & Source										

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00442 - CONTROLLED LOW STRENGTH MATERIALS (CLSM)										
CLSM Mixture	Mix Proportions Trial Batch Strength					1/Project or Source				
				T 22 & T 23						
						4000C				
Modifiers										
Admixtures										
Portland Cement										
SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE - INCLUDED WITH SECTION 00405										
Trench Work										
Excavation, bedding, pipe zone and trench backfill										
Excavation, bedding, pipe zone and trench backfill										
Concrete Blocks										

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00450 - STRUCTURAL PLATE SHAPED STRUCTURES									
Commercial Grade Concrete in appurtenances		<i>Material must meet the requirements of Section 00440</i>							
Trench Work									
Excavation and Backfill		<i>Operations must meet the requirements of Section 00510</i>							
Trenches in Unstable Areas									
Granular Structural Backfill		<i>Material must meet the requirements of Section 00510</i>							
<i>Establishing Maximum Density</i>									
⁽¹⁾ Method "A"	Density Curve			(¹) T 99					
	Bulk Specific Gravity Coarse Particle Correction	TM 223		T 85			1/Aggregate Gradation and Source		
	Nuclear Gauge			T 310			1 Test per 100 ft. and 1 ft. of fill		
Compaction									
Structure Backfill (Section 00450.46)		<i>Material and Operation must meet the requirements of Section 00510.48(d)</i>							
SECTION 00459 - CAST IN PLACE CONCRETE									
Concrete		<i>Material must meet the requirements of Section 00540, with acceptance in accordance with Section 00540.17</i>							
Backfill Material		<i>Material must meet the requirements of Section 00405.14 and be incorporated into the project in accordance with Section 00405.46</i>							

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00460 - PAVED CULVERT END SLOPES									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
SECTION 00470 - MANHOLES, CATCH BASINS AND INLETS									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
Base Drain Backfill		<i>Material must meet the requirements of Section 00470.17</i>							
Excavation, Backfill and Foundation Stabilization		<i>Material must meet the requirements of Section 00405</i>							
SECTION 00480 - DRAINAGE CURBS									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
Dense Graded HMA C Mixture Level 2, (1/2")		<i>Material must meet the requirements of Section 00744</i>							

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance
SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES								
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>						
High Early Strength Concrete		<i>Material must meet the requirements of Section 00440, but cement contents adjusted according to 00490.11</i>						
Backfill Operations		<i>Backfill Excavations according to section 405</i>						
Filling Abandoned Pipes, Manholes and Catch Basins (See section 00490.44)								
Backfill Operations (Roadway)		<i>Material must meet the requirements of Section 2630</i>						
Establishing Maximum Density (¹) Method "A"	Density Curve				(¹) T 99			
	Bulk Specific Gravity Coarse Particle Correction	TM 223			T 85		1/Aggregate Gradation and Source	3468 B
Compaction	Nuclear Gauge				T 310		1 Test per 100 ft. and every 1.5' of Fill	1793B
Backfill Operations Landscaped or Unimproved Roadways		<i>Material must meet the requirements of Section 00330.13</i>						
Top 1.0' of Backfill Region		<i>Material must meet the requirements of Section 00330.11</i>						
SECTION 00495 - TRENCH RESURFACING								
Resurfacing Materials		<i>See Section 00495.40 for Material Requirements</i>						

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory					
SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL														
Soils, Soil/Aggregate Mixtures and Graded Aggregates														
Granular Structure Backfill (See Section 02630.10) (1) Perform a minimum of 3 tests QL's required	Sampling Reducing (1) Sieve Analysis Fracture (Method 1) Sand Equivalent	TM 208		T 2 T 248 T 27 T 335 T 176	1792	1/Sublot (Minimum 1/P/Project)	Submit to Lab		Minimum 1/Project or 1/Source					
										Product Compliance	Abrasion Degradation	4000	See Section 4C 1/Source	
(2) Method "A" & ODOT TM 223 for Dense Graded Base Aggregate	Bulk Specific Gravity		T 85											
									Compaction	Coarse Particle Correction	3468		T 99	
	Nuclear Gauge		T 310	1793B	1/100 yd ³ minimum 1/project									
									Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.					

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL (CONTINUED)											
Soils, Soil/Aggregate Mixtures and Graded Aggregates											
Granular Wall Backfill (See Section 02630.11)	Sampling Reducing (1) Sieve Analysis Fracture (Method 2)	T 2 T 248 T 27 T 335			1792	1/Sublot (Minimum 1/Project)					
Product Compliance	Abrasion Degradation	T 96		TM 208	4000	See Section 4C 1/Source		Submit to Lab			Minimum 1/Project or 1/Source
(2) Compaction	(2) Deflection Testing			TM 158	1793B	1/Sublot (Minimum 1/Project)					
Note: Compaction must meet the requirements of section 00330.43c Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.											

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00512 - DRILLED SHAFTS											
Aggregate Production	Sampling Reducing (2)(3)(4) Sieve Analysis (4) Fineness Modulus (1)(3) Wood Particles (4) Sand Equivalent			T 2 T 248 T 27/T 11 T 27/T 11	1792	1/Sublot & Start of Production					
(1) QAE may waive after 5 sublots/shifts				T 176	1792			10 % of Required QC			
(2) Perform a minimum of 3 tests, QL's required		TM 225		T 104 T 96	4000						See Section 4(A)
(3) Coarse Aggregate (See Section 02690.20)	Soundness Abrasion			T 113 T 21	4000		Submit to Lab				
(4) Fine Aggregate (See Section 02690.30)	Degradation Lightweight Pieces Organics	TM 208		T 19	1825 1825C	See Section 4A					
	(3) Dry Rodded Unit Weight			T 84 & T 85	1825	Start of production and when changes in aggregate occurs					
Portland Cement Modifiers Admixtures		Materials must meet the requirements of Section 02001.10									
Drilling Slurry		Slurry material must meet the requirements of Section 00512.14 & 00512.43(g)									
Grout		Material must meet the requirements of Section 02080									
Mixing Water		Material must meet the requirements of Section 02020									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00512 - DRILLED SHAFTS (CONTINUED)									
Portland Cement Concrete	Sampling Slump Concrete Temperature Density (Unit Weight) Yield Water/Cement Ratio Strength		TM 2	T 119 T 309 T 121 T 121 T 121	3573WS or 4000C	(M) (S) 1 per Shaft and Test at minimum frequencies according to table 00512-1. Review specs.		QA Testing	
(S) 1 Set Represents a minimum of 3 Cylinders					4000C			Projects under 100 yd ³ all classes 1/Project representing all classes of PCC	
(M) Per Mix Design & Source								Projects over 100 yd ³ all classes 1/500 yd ³ per class minimum 1/class	
TABLE 00512-1 Frequency of Quality Control Testing									
Minimum frequencies per Class of concrete based on daily production records.									
Production Frequencies									
0 to 100 yd ³ on a single day									
1 Set each day									
Quantity Over 100 yd³									
100 to 600 yd ³ on a single day									
1 Set per each 100 yd ³ or portion thereof									
over 600 yd ³ on a single day									
1 Set per each 200 yd ³ or portion thereof after reaching 600 yd ³									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE			(Revised October 2015)			Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00540 - STRUCTURAL CONCRETE										
Aggregate Production	Sampling Reducing (2)(3)(4) Sieve Analysis (4) Fineness Modulus (1)(3) Wood Particles (4) Sand Equivalent			T 2 T 248 T 27/T 11 T 27/T 11	1792	1/Sublot & Start of Production				
(1) QAE may waive after 5 sublots/shifts				T 176	1792			10 % of Required QC		
(2) Perform a minimum of 3 tests, QL's required		TM 225								
(3) Coarse Aggregate (See Section 02690.20)	Soundness Abrasion Degradation Lightweight Pieces Organics			T 104 T 96	4000		Submit To Lab			See Section 4A
(4) Fine Aggregate (See Section 02690.30)		TM 208		T 113 T 21	4000					
	(3) Dry Rodded Unit Weight			T 19	1825 1825C					
	(3)(4) Bulk Specific Gravity & Absorption			T 84 & T 85	1825	Start of production and when changes in aggregate occur/s				
Portland Cement Modifiers Admixtures		Materials must meet the requirements of Section 02001.10								
Mixing Water		Material must meet the requirements of Section 02020								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00540 - STRUCTURAL CONCRETE (CONTINUED)									
Portland Cement Concrete	Sampling Air Content Slump Concrete Temperature Density (Unit Weight) Yield Water/Cement Ratio Strength		TM 2	T 152 T 119 T 309 T 121 T 121 T 121	3573WS or 4000C	(M) (S) Test at minimum frequencies according to table 00540-1. Review specs.	QA Testing		
(S) 1 Set Represents a minimum of 3 Cylinders					4000C				
(M) Per Mix Design & Source							TABLE 00540-1 Frequency of Quality Control Testing <u>Minimum frequencies per Class of concrete based on daily production records.</u> <u>Production</u> 0 to 100 yd ³ on a single day 1 Set each day <u>Quantity Over 100 yd³</u> 100 to 600 yd ³ on a single day 1 Set per each 100 yd ³ or portion thereof over 600 yd ³ on a single day 1 Set per each 200 yd ³ or portion thereof after reaching 600 yd ³		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)							
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE									
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory						
SECTION 00556 - MULTI-LAYER POLYMER CONCRETE OVERLAY															
Aggregate Production	Sampling Reducing Sieve Analysis				T 2 T 248 T 27	1792	1/Project or 1/Source								
												Moisture Content	T 255/265	1792	Material must meet the requirements of section 00556.10
Polymer Resin	Material must meet the requirements of section 00556.10														

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00559 - SILICA FUME AND LATEX MODIFIED CONCRETE OVERLAYS											
Aggregate Production											
(1) QAE may waive after 5 sublots/shifts	Sampling Reducing				T 2 T 248 T 27/T 11						
(2) Perform a minimum of 3 tests, QL's required	(2)(3)(4) Sieve Analysis (4) Fineness Modulus (4) Sand Equivalent				1792 T 27/T 11 T 176						
(3) Coarse Aggregate (See Section 02690.20 & 00559.10)	(1)(3) Elongated Pieces (1)(3) Wood Particles	TM 229 TM 225			1792						
(4) Fine Aggregate (See Section 02690.30 & 00559.10)	Abrasion Degradation Soundness Lightweight Pieces Organics	TM 208			4000						
	(3) Dry Rodded Unit Weight				1825 1825C 1825						
	(3)(4) Bulk Specific Gravity & Absorption										
Portland Cement Modifiers Admixtures	Materials must meet the requirements of Section 02001.10										
Mixing Water	Material must meet the requirements of Section 02020										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00559 - SILICA FUME AND LATEX MODIFIED CONCRETE OVERLAYS (CONTINUED)											
SFC AND LMC	Sampling Air Content Slump Concrete Temperature Density (Unit Weight) Yield W/C Ratio	TM 2	T 152 T 119 T 309 T 121 T 121 T 121	3573WS or 4000 C	A subplot equals 1 set of tests per 50 yd3						10 % of Required QC
Latex Modified Concrete	Fine Aggregate Moisture		T 255/T 265	1792	See Section 00559.10						
^(M) Per Mix Design & Source	Mixer Calibration				See Section 00559.22						
SFC and LMC	Strength		T 22 & T 23	4000C	^(M) ^(S) 1 Set Cylinders per 50yd ³ Minimum 1 set/shift						10 % of Required QC
^(S) 1 Set Represents a minimum of 3 Cylinders											

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 0A596 - MECHANICALLY STABILIZED EARTH RETAINING WALLS											
Aggregate Production											
Gravel Leveling Pads Backfill (See Section 02630.10)	Abrasion Degradation	TM 208			4000	See Section 4A	Submit to Lab	See Section 4A	See Section 4A		
				T 96							
				T 27 T 176							
				T 335							
Minimum Backfill (Product Compliance)	Soundness Abrasion Degradation Lightweight Pieces Organics pH Resistivity	TM 208			4000	See Section 4C & 02690	Submit To Lab	See Section 4C			
				T 104 T 96							
				T 113 T 21 T 289 T 288							
Minimum Backfill (¹) QAE may waive after 5 sublots/shifts (²) Perform a minimum of 3 tests, QL's required	Sampling Reducing ⁽²⁾ Sieve Analysis ⁽¹⁾ Wood Particles Fracture (Method 2) Elongated Pieces	TM 225 TM 229			1792	1/Sublot					
				T 2 T 248 T 27/T 11							
				T 335							
Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion Degradation Sieve Analysis	TM 208			4000	See Section 4C	Submit To Lab	See Section 4C			
				T 96							
				T 27							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE						
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory			
SECTION 0A596 - MECHANICALLY STABILIZED EARTH RETAINING WALLS												
Aggregate Production												
Gabion Basket Fill (Product Compliance)	Degradation Soundness Apparent Specific Gravity & Absorption Gradation	TM 208		T 104 T 85	4000 1825	See Section 4C	Submit to Lab	See Section 4C	Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project		See Section 4C	
											Visual	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)					
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE							
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory				
SECTION 0A596 - MSE RETAINING WALLS													
Aggregate Production													
MSE Granular Wall Backfill (Product Compliance) (Also reference 02630.10)	Abrasion Degradation Sieve Analysis Plasticity Index pH Resistivity Organic Content	TM 208		T96 T 27/11 T 90 T 289 T 288 T 267	4000	See Section 4C	Submit to Central Lab		Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project		See Section 4C		
MSE Granular Wall Backfill													
⁽¹⁾ Perform a minimum of 3 tests, QL's required	Sampling Reducing ⁽¹⁾ Sieve Analysis Fracture (Method 1)			T 2 T 248 T 27 T 335	1792	1/Sublot		A Sublot Equals 2,000 Tons					
Placement													
Establishing Maximum Density ⁽¹⁾ Method A	Density Curve Bulk Specific Gravity Coarse Particle Correction Nuclear Gauge Deflection Testing	TM 223 TM 158		⁽¹⁾ T 99 T 85 T 310	3468	1/Aggregate Gradation/Per Source							
Compaction					1793B	1/ 100 yd3 (Minimum 1/day)							
Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.													

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)					
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE							
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory				
SECTION 0B596 - PREFABRICATED MODULAR RETAINING WALLS													
Aggregate Production													
Gravel Leveling Pads Backfill (See Section 02630.10)	Abrasion Degradation	TM 208			4000								
Soundness Abrasion Degradation Lightweight Pieces Organics	Fracture (Method 1)	TM 208	T 27	T 176	4000								
			T 335										
Pipe Drain Backfill (Product Compliance)	Sampling Reducing (2) Sieve Analysis (1) Wood Particles Fracture (Method 2) Elongated Pieces	TM 225 TM 229	T 2	T 248 T 27/T 11	4000								
				T 335									
Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion Degradation	TM 208			4000								

(2) Perform a minimum of 3 tests, QL's required

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 0B596 - PREFABRICATED MODULAR RETAINING WALLS											
Aggregate Production											
Gabion Basket Fill (Product Compliance)	Degradation Soundness Apparent Specific Gravity & Absorption Gradation	TM 208		T 104 T 85	4000 1825	See Section 4C	Submit to Lab	Visual	Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project		See Section 4C

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE							
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory				
SECTION 0B596 - PREFABRICATED MODULAR RETAINING WALLS													
Aggregate Production													
Granular Structure Backfill (Product Compliance) (Also reference 02630.10)	Abrasion Degradation Sieve Analysis Plasticity Index	TM 208	T96 T 27/11 T 90		4000	See Section 4C	Submit to Central Lab			Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project	See Section 4C		
Granular Structure Backfill													
⁽¹⁾ Perform a minimum of 3 tests, QL's required	Sampling Reducing ⁽¹⁾ Sieve Analysis Fracture (Method 1)		T 2 T 248 T 27 T 335		1792 1792	1/Sublot				A Sublot Equals 2,000 Tons			
Placement													
Establishing Maximum Density ⁽¹⁾ Method A	Density Curve Bulk Specific Gravity Coarse Particle Correction	TM 223	⁽¹⁾ T 99 T 85		3468 3468	1/Aggregate Gradation/Per Source							
Compaction	Nuclear Gauge Deflection Testing	TM 158	T 310		1793B	1/ 100 yd3 (Minimum 1/day)							
<p>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</p>													

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)					
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			Materials Laboratory				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance		Independent Assurance/Verification			
SECTION 0C596 - CAST-IN-PLACE CONCRETE RETAINING WALLS													
Aggregate Production													
Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion Degradation	TM 208		T 96	4000	See Section 4C	Submit To Lab			See Section 4C			
					4000						1/Sublot		
Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project													
Granular Structure Backfill	Abrasion Degradation Sieve Analysis Plasticity Index	TM 208		T 96 T 27/11 T 90	4000	See Section 4C	Submit to Central Lab			See Section 4C			
Granular Structure Backfill (Product Compliance) (Also reference 02630.10)					4000								
A Sublot Equals 2,000 Tons													
Granular Structure Backfill (¹) Perform a minimum of 3 tests, QL's required	Sampling Reducing (¹) Sieve Analysis Fracture (Method 1)			T 2 T 248 T 27 T 335		1/Sublot							
					1792								
					1792						1/5 Sublots		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
SECTION 0C596 - CAST-IN-PLACE CONCRETE RETAINING WALLS							
Placement							
Granular Structure Backfill							
Establishing Maximum Density ⁽¹⁾ Method A	Density Curve			(¹) T 99	3468		
	Bulk Specific Gravity			T 85	3468	1/Aggregate Gradation/Per Source	
Compaction	Coarse Particle Correction	TM 223					
	Nuclear Gauge Deflection Testing	TM 158		T 310	1793B	1/ 100 yd3 (Minimum 1/day)	
<p>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</p>							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00635 - GRID-ROLLED AGGREGATE SUBBASE											
Aggregate Subbase Grading (See 00635.10)	Abrasion Sampling Reducing Sieve Analysis Sand Equivalent				T 96 T 2 T 248 T 27 T 176	4000	1/Source		Submit To Central Lab		See Section 4(A)
						1/Sublot & Start of Production					
										1792	
<i>A Sublot equals 1000 Tons</i>											

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS											
Aggregate Production	Abrasion			T 96	4000	See Sec. 4A	Submit To Central Lab				See Section 4(A)
Aggregate Subbase Grading (See 00641.10(b))	Sampling Reducing Sieve Analysis Sand Equivalent			T 2 T 248 T 27 T 176	1792	1/Project or 1/Source	Visual				
Aggregate Base and Shoulders	Abrasion Degradation	TM 208		T 96	4000	See Section 4A	Submit to Lab				See Section 4A
Grading					A Sublot equals 2000 Tons						
Aggregate Base (See 02630)	Sampling Reducing			T 2 T 248		1/Sublot & Start of Production					
Aggregate Shoulder (See 02640)	(1) Sieve Analysis			T 27	1792						10 % of Required QC
Open Graded Aggregate Base (See 02630.11)	(2) Sand Equivalent			T 176							
(1) Perform at least 3 tests	Fracture (Method 1)			T 335	1792	1/5 Sublots					
(2) May be waived by QAE											
Placement											
Aggregate Base					A Sublot equals 2000 Tons						
Plant Mix Applications Only											
Aggregate (Mixture)	Sampling Reducing Moisture			T 2 T 248 T 255 & T 265		1/Sublot or minimum 1/Day					10 % of Required QC
Establishing Maximum Density & Optimum Moisture (Mix Design)	Density Curve Coarse Particle Correction	TM 223		(3) T 99	3468 B	Each Size per Source					1/Project
(3) Method A	Bulk Specific Gravity			T 85	3468 B						
Compaction	Deflection Testing	TM 158			1793B	1 per Sublot					
(D) (Individual tests must meet Specification)	Nuclear Gauge			T 310	1793B	(D) 5 Tests Per Sublot					10 % of Required QC

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS (Continued)									
Placement									
Aggregate Subbase									
Compaction	Deflection Testing	TM 158			1793 B	1 per Layer	Visual		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00680 - STOCKPILED AGGREGATES											
Aggregate Base and Shoulders (See Section 00641)											
	Abrasion Degradation	TM 208			T 96					Submit to Lab	See Section 4A
⁽¹⁾ Perform at least 3 tests, QL's required	Sampling Reducing				T 248						
	⁽¹⁾ Sieve Analysis				T 27						
⁽²⁾ May be waived by QAE	⁽²⁾ Sand Equivalent				T 176						10 % of Required QC
	Fracture (Method 1)				T 335						
Aggregate (Sanding Aggregate)											
⁽¹⁾ May be waived by QAE	Sampling Reducing				T 2						
	Sieve Analysis				T 248						
	⁽¹⁾ Cleaness Value	TM 227			T 27						10 % of Required QC
	Abrasion Degradation				T 96						
	Lightweight Pieces	TM 208			T 113					Submit to Lab	See Section 4A
	Fracture (Method 1)				T 335						
	Elongated Pieces	TM 229									
	Wood Particles	TM 225									10 % of Required QC

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)											
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE													
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory										
SECTION 00680 - STOCKPILED AGGREGATES (CONTINUED)																			
Emulsified AC Aggregate Aggregate Production (See Sections 00705, 00706, 00710, 00711, 00712 and 00715) (1) QAE may waive after 5 sublots/shifts (2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated (3) May be waived by QAE (4) Not required for Dry Key Material (5) 1/5 Sublots & Start of Production	Abrasion Degradation Soundness Lightweight Pieces Sampling Reducing (5) Fracture (Method 1) (1) Wood Particles (1)(4) Elongated Pieces (2) Sieve Analysis (3) Cleanness Value Dry Rodded Unit Weight	TM 208 TM 225 TM 229 TM 227	T 96 T 104 T 113 T 2 T 248 T 335 T27/T 11 T 19	4000 4000 1792 1792 1825 1825C	A sublot equals 500 Tons or a minimum 1 per shift, whichever results in the greatest sampling frequency See Section 4A Submit to Lab 1/Sublot & Start of Production Start of production and when changes in aggregate occurs	See Section 4A Submit to Lab 10 % of Required QC	See Section 4A												
								Aggregate (Other)											
								Use sampling and testing frequencies required for proposed end product use											

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00705 - EMULSIFIED ASPHALT PRIME COAT and EMULSIFIED ASPHALT FOG COAT										
Aggregate Cover Material										
Aggregate Production	Sampling Reducing Sieve Analysis			T 2 T 248 T 27	1792	1/Sublot & Start of Production		10 % of Required QC		
Asphalt Prime and Fog Coat	Compliance			R 66	4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
SECTION 00706 - EMULSIFIED ASPHALT SLURRY SEAL SURFACING										
Aggregate Production	Sampling Reducing (1) Sieve Analysis			T 2 T 248 T 27/T 11	1792	1/Sublot & Start of Production				
(1) Perform at least 3 tests, QL's required										
Emulsified Asphalt Cement Emulsified Asphalt Polymer Modified Emulsion	Compliance				4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
Additives Mineral Filler	Material must meet the requirements of Section 00706.13									
Mixture	Material must meet the requirements of Section 00706.16									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00710 - SINGLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT										
Aggregate Production										
	Abrasion Degradation Soundness Lightweight Pieces	TM 208		T 96 T 104 T 113	4000	See Section 4A	Submit to Central Lab			See Section 4A
	Sampling Reducing			T 2 T 248 T 335						
	⁽¹⁾ QAE may waive after 5 sublots/shifts									
	⁽²⁾ Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated	TM 225 TM 229		T 27/T 11	1792	1/Sublot & Start of Production			10 % of Required QC	
	⁽³⁾ May be waived by QAE	TM 227			1792					
	⁽⁴⁾ Not required for Dry Key Material									
	⁽⁵⁾ 1/5 Sublots & Start of Production			T 19	1825 1825C	Start of production and when changes in aggregate occurs				
	Asphalt Cement (Emulsion)			R 66	4000	1/50 Tons Submit All	Submit to Lab			1/5 QC Samples (Random)
Preproduced Aggregate										
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:										
<ol style="list-style-type: none"> Continuing production records meeting the above requirements of Section 00710.10 and 710.15, Aggregate Production. Furnish records of testing for the entire stockpile according to Section 00710.10 and 710.15 Aggregate Production except change the sampling frequency to the following: <ol style="list-style-type: none"> One Per 5 sublots means "One Set of Tests Per 2500 Tons". One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. Provide one stockpile sample for each set of tests required above. 										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00711 - PRE-COATED AGGREGATE ASPHALT SURFACE TREATMENT										
Aggregate Production										
<p>(1) QAE may waive after 5 sublots/shifts</p> <p>(2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated</p> <p>(3) May be waived by QAE</p> <p>(4) Not required for Dry Key Material</p> <p>(5) 1/5 Sublots & Start of Production</p> <p>Asphalt Cement</p>	Abrasion Degradation Soundness Lightweight Pieces	TM 208	T 96 T 104 T 113	4000	See Section 4A	Submit to Central Lab	See Section 4A	<p>A sublot equals 500 Tons or a minimum 1 per shift whichever results in the greatest sampling frequency</p>	10 % of Required QC	1/5 QC Samples (Random)
	Sampling Reducing		T 2 T 248 T 335							
	(5) Fracture (Method 1)			1792	1/5 Sublot & Start of Production					
	(1) Wood Particles	TM 225								
	(1)(4) Elongated Pieces	TM 229	T27/T 11	1792						
	(2) Sieve Analysis									
	(3) Cleaness Value	TM 227								
	Dry Rodded Unit Weight		T 19	1825 1825C	Start of production and when changes in aggregate occurs					
	Compliance		R 66	4000	1/50 Tons Submit All	Submit to Lab				
	Preproduced Aggregate									
<p>Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:</p> <ol style="list-style-type: none"> Continuing production records meeting the above requirements of Section 00711.10 and 711.15, Aggregate Production. Furnish records of testing for the entire stockpile according to Section 00711.10 and 711.15 Aggregate Production except change the sampling frequency to the following: <ul style="list-style-type: none"> a. One Per 5 sublots means "One Set of Tests Per 2500 Tons". b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. c. Provide one stockpile sample for each set of tests required above. 										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		

SECTION 00711 - PRE-COATED AGGREGATE ASPHALT SURFACE TREATMENT (CONTINUED)

Mixture Acceptance		A sublot equals 500 Tons or a minimum 1 per shift, whichever results in the greatest sampling frequency													
Meter Method	Readings backed by Tank Measure & Production Records Daily	TM 321 (1) TM 322													
(1) Required at start of production and if meters fail to meet specification	Cold Feed Moisture		T 255/265												
Plant Discharge Moisture	Asphalt Mix Moist.		T 329												
Asphalt Cement	Compliance		R 66												
															1/5 QC Samples (Random)

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00712 - DRY KEY EMULSIFIED ASPHALT SURFACE TREATMENT										
Aggregate Production										
<p>(1) QAE may waive after 5 sublots/shifts</p> <p>(2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated</p> <p>(3) May be waived by QAE</p> <p>(4) Not required for Dry Key Material</p> <p>(5) 1/5 Sublots & Start of Production</p> <p>Asphalt Cement (Emulsion)</p>	Abrasion	TM 208	T 96	4000	See Section 4A	Submit to Central Lab	10 % of Required QC	See Section 4A	A sublot equals 500 Tons or a minimum 1 per shift, whichever results in the greatest sampling frequency	
	Degradation		T 104	4000						
	Soundness		T 113							
	Lightweight Pieces		T 2							
	Sampling		T 248							
	Reducing		T 335	1792						
	(5) Fracture (Method 1)									
	(1) Wood Particles	TM 225								
	(1)(4) Elongated Pieces	TM 229								
	(2) Sieve Analysis		T27/T 11	1792						
(3) Cleanness Value	TM 227									
Dry Rodded Unit Weight		T 19	1825 1825C		Start of production and when changes in aggregate occurs					
Compliance		R 66	4000	1/50 Tons Submit All	Submit to Lab		1/5 QC Samples (Random)			
Preproduced Aggregate										
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:										
<ol style="list-style-type: none"> 1. Continuing production records meeting the above requirements of Section 00712.10 and 712.15, Aggregate Production. 2. Furnish records of testing for the entire stockpile according to Section 00712.10 and 712.15 Aggregate Production except change the sampling frequency to the following: <ol style="list-style-type: none"> a. One Per 5 sublots means "One Set of Tests Per 2500 Tons". b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. c. Provide one stockpile sample for each set of tests required above. 										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)										
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE										
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory							
SECTION 00715 - MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT																
Aggregate Production (2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated (3) May be waived by QAE (4) Not required for Dry Key Material (5) 1/5 Sublots & Start of Production Asphalt Cement (Emulsion)	Abrasion Degradation Soundness Lightweight Pieces (5) Fracture (Method 1) (1) Wood Particles (1)(4) Elongated Pieces (2) Sieve Analysis (3) Cleaness Value Dry Rodded Unit Weight Compliance	TM 208 TM 225 TM 229 TM 227	T 96 T 104 T 113 T 335 T27/T 11 T 19 R 66	4000 4000 1792 1792 1825 1825C 4000	A subplot equals 500 Tons or a minimum 1 per shift, whichever results in the greatest sampling frequency					See Section 4A 10 % of Required QC Start of production and when changes in aggregate occurs 1/50 Tons Submit All Submit to Lab	See Section 4A 1/5 QC Samples (Random)					
					Preproduced Aggregate											
					Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:											
					1. Continuing production records meeting the above requirements of Section 00715.10 and 715.15, Aggregate Production.											
					2. Furnish records of testing for the entire stockpile according to Section 00715.10 and 715.15 Aggregate Production except change the sampling frequency to the following:											
					a. One Per 5 sublots means "One Set of Tests Per 2500 Tons".											
					b. One Per subplot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project.											
					c. Provide one stockpile sample for each set of tests required above.											

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00720 - COLD IN-PLACE RECYCLED ASPHALT CONCRETE PAVEMENT (CIR)										
SECTION 00721 - COLD RECYCLED EMULSIFIED ASPHALT CONCRETE PAVEMENT (CRP)										
Asphalt Cement (Emulsified Recycling Agent)	Compliance			R 66	4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
Water	Compliance				4000	See Sec.00340.10				
Aggregate Production Choke Aggregate (See 00705)	Sampling Reducing Sieve Analysis			T 2 T 248 T 27	1792	1/Sublot & Start of Production		Minimum 1/Project		
SECTION 00725 - HOT IN-PLACE RECYCLED (HIR) ASPHALT CONCRETE PAVEMENT										
<i>The type of recycling agent will be listed in the Special Provisions</i>										
Recycling Agent (See 00745.11)	Compliance			R 66	4000	See Section 4C	Submit to Lab			1/5 QC Samples (Random)
Recycling Agent	Compliance			R 66	4000	1/50 Tons	Submit to Lab			
Asphalt Concrete Mixture										
SECTION 00730 - ASPHALT TACK COAT										
Tack	Compliance			R 66	4000	See Section 4C 1/50 Tons	Submit to Lab			1/50 Tons or All QC Samples

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory		
SECTION 00735 - EMULSIFIED ASPHALT CONCRETE PAVEMENT											
Aggregate production											
(1) Perform at least 3 tests, QL's required	Abrasion Degradation Soundness Lightweight Pieces	TM 208		T 96 T 104 T 113	4000	See Section 4A	Submit to Lab				See Section 4A
					4000						
					A Sublot equals 1000 Tons or a minimum one per shift, whichever results in the greatest sampling frequency. (For preproduced aggregates, 1 shift shall mean 1000 Tons)						
(2) May be waived by QAE	Sampling Reducing (1) Sieve Analysis (2) Cleaness Value Fracture (Method 1 & 2)	TM 227		T 2 T 248 T 277/ T 11	1792	1/ Sublot & Start of Production					10 % of Required QC
					1792						
					1792						
(3) QAE may waive after 5 sublots/shifts	(3) Elongated Pieces (3) Wood Particles	TM 229 TM 225		T 27	1792	1/ Sublot				1/ Project	
Choke Aggregate											
	Sieve Analysis				1792	1/ Sublot					1/ Project

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)								
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE										
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory							
SECTION 00735 - EMULSIFIED ASPHALT CONCRETE PAVEMENT (CONTINUED)																
Mixture Acceptance											A Sublot equals 1000 Tons of Mixture					
% Emulsified Asphalt (¹) Required at start of production and if meters fail to meet specification	Sampling Reducing Sieve Analysis Moisture Content			T 2 T 248 T 27/T 11 T 255	2277 2277	1/Sublot	10 % of Required QC									
														TM 321 (¹) TM 322	1/Project (Contact QAC for assistance)	
Emulsified Asphalt Cement	Compliance			R 66	4000	See Section 4C 1/Sublot (Submit All)	Submit to Lab									
SECTION 00740 - COMMERCIAL ASPHALT CONCRETE PAVEMENT (CACP)																
See Specifications when Testing is Required by Agency																

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE								
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory					
SECTION 00743 - POROUS ASPHALT CONCRETE (PAC)														
Aggregate Production														
	Soundness Abrasion Degradation Lightweight Pieces Plasticity Index	TM 208		T 104 T 96 T 113 T 90	4000	See Section 4A	Submit to Lab					See Section 4A		
(1) QAE may waive after 5 sublots/shifts						A Sublot equals 1000 Tons or a minimum one per shift whichever results in the greatest sampling frequency								
(2) Not required for ATPB Mix	Sampling Reducing			T 2 T 248 T 27/T 11 T 176		1/Sublot & Start of Production								
(3) Coarse Agg (+ No. 4)	(3)(4) Sieve Analysis				1792									
(4) Fine Agg (- No. 4)	(1)(4) Sand Equivalent													
	(1)(2)(3) Elongated Pieces TM 229 (3)(4) Fracture (Method 2) (1)(2)(3) Wood Particles TM 225			T 335	1792	1/5 Sublots & Start of Production								
Preproduced Aggregate														
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:														
1. Continuing production records meeting the above requirements of Section 00743.10 Aggregate Production.														
2. Furnish records of testing for the entire stockpile according to Section 00743.10 Aggregate Production except change the sampling frequency to the following:														
a. One Per 5 sublots means "One Set of Tests Per 5000 Tons".														
b. One Per sublot means "One Set of Tests Per 1000 Tons" with a minimum of 3 sets of Sieve Analysis tests per project.														
c. Provide one stockpile sample for each set of tests required above.														

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)										
Mixture Acceptance - PAC with RAP										
Gradation										
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	1/JMF & Each Calendar Year.			
Ignition method	Sampling Reducing			T 168 R 47		1/Sublot or Min. 1/Day	10 % of Required QC			
(Residual aggregate from AASHTO T 308)	Sieve analysis			T 30	2277	1/Sublot or Min. 1/day	10 % of Required QC			
Asphalt Content										
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	1/JMF & Each Calendar Year.			
Ignition Method	Sampling Reducing			T 168 R 47		1/Sublot or Min. 1/day	10 % of Required QC			
Meter Method	Asphalt Content			T 308	2277					
	Readings backed by Tank measure & Production Records Daily	TM 321 (2) TM 322			2277	1/Sublot or Min. 1/day	10 % of Required QC			
(2) Required at start of production and if meters fail to meet specification					2043 and 2401	Daily Production	1/Project (Contact QAC for assistance)			
<u>Meter Method is required for PAC even when acceptance is by Ignition Method</u>										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE								
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory					
SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)														
Mixture Acceptance - PAC without RAP														
Gradation											A Sublot equals 1000 Tons			
Cold Feed Method	Sampling Reducing Sieve Analysis			T 2 T 248 T 27/T 11				1/Sublot or Min. 1/Day			10 % of Required QC			
													2277	
Ignition method	Calibrate Incinerator		(1) TM 323				1/JMF & Each Calendar Year.			1/JMF & Each Calendar Year.				
													2327IC	
Ignition method	Sampling Reducing			T 168 R 47			1/Sublot or Min. 1/Day			10 % of Required QC				
													2277	
(Residual aggregate from AASHTO T 308)	Sieve analysis			T 30			1/Sublot or Min. 1/day			10 % of Required QC				
													2277	
Asphalt Content											A Sublot equals 1000 Tons			
Ignition Method	Calibrate Incinerator		TM 323				1/JMF & Each Calendar Year.			1/JMF & Each Calendar Year.				
													2327IC	
Ignition Method	Sampling Reducing			T 168 R 47			1/Sublot or Min. 1/day			10 % of Required QC				
													2277	
(2) Required at start of production and if meters fail to meet specification	Asphalt Content			T 308			1/Sublot or Min. 1/day			10 % of Required QC				
													2277	
Meter Method	Readings backed by Tank measure & Production Records Daily		TM 321 (2) TM 322				1/Sublot or Min. 1/day			10 % of Required QC				
													2043 and 2401	
Meter Method is required for PAC even when acceptance is by Ignition Method											1/Project (Contact QAC for assistance)			

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)										
Mixture Acceptance - PAC with and without RAP										
Mix Design Verification Testing										
						A Sublot equals 1000 Tons				
	Cold Feed Moisture		T255/T265		2277	1/Sublot or Min. 1/Day		10 % of Required QC		
	Asphalt Mix Moist.		T 329		2277	1/Sublot or Min. 1/Day				
	(1) RAP Moisture		T 329		2277	1/Sublot or Min. 1/Day		10 % of Required QC		
	Readings backed by Tank measure & Production Records Daily			TM321 (2) TM 322	2401 & 2043	Daily Production	1/Project (Contact QAC for assistance)			
	Asphalt Cement	Compliance	R 66		4000	1/Sublot - See section 4C	Submit to Lab	10% of Required QC		1/5 QC Samples (Random)
	(2) Required at start of production and if meters fail to meet specification									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00744 - ASPHALT CONCRETE PAVEMENT										
Aggregate Production										
Mixture Acceptance										
Gradation										
Ignition method	Calibrate Incinerator	TM 323			2327IC				1/JMF & Each Calendar Year.	A Sublot equals 1000 Tons
Ignition method	Sampling Reducing			T 168 R 47					1/Sublot or Min. 1/Day	
(Residual aggregate from AASHTO T 308)	Sieve analysis			T 30	2277				1/Sublot or Min. 1/Day	
Asphalt Content										
Ignition Method	Calibrate Incinerator	TM 323			2327IC				1/JMF & Each Calendar Year.	A Sublot equals 1000 Tons
Ignition Method	Sampling Reducing Asphalt Content			T 168 R 47 T 308					1/Sublot or Min. 1/day	
Mix Design Verification Testing										
Plant Discharge Moisture	Asphalt Mix Moist.			T 329	2277				1/Sublot	
Maximum Density Test G_{mm}	Max. Specific Gravity MAMD	TM 305		T 209	2050				1st Sublot Daily or Min. 1/Day	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00744 - ASPHALT CONCRETE PAVEMENT (CONTINUED)									
Compaction	Nuclear Density								
				T 355	1793A	(D) Average 10 tests per Sublot or Min. 10/Day, See Section 00744.49			

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE										
Aggregate Production (1) QAE may waive after 5 sublots/shifts (2) Perform a minimum of 3 tests QL's required (3) Coarse Agg (+ No. 4) (4) Fine Agg (- No. 4) Note: Sample Aggregate before Lime Treatment	Soundness	T 104			4000					
	Abrasion	T 96								See Section 4A
	Degradation	T 113							Submit to Lab	
	Lightweight Pieces Plasticity Index	T 90			4000					
RAS Production (Reclaimed Asphalt Shingles)	Sampling Reducing	T 2								
	(2)(3)(4) Sieve Analysis	T 248								
	(1)(4) Sand Equivalent	T 27/T 11			1792					
	(1)(3) Elongated Pieces (3)(4) Fracture (Method 2) (1)(3) Wood Particles	T 176								
Preproduced Aggregate	Sieve Analysis Deleterious Materials	T 335			1792					
	Sampling Reducing	T 27								
	Sieve Analysis Deleterious Materials	T 2								
	Sampling Reducing Sieve Analysis Deleterious Materials	T 248 T 27								
Preproduced Aggregate										
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:										
1. Continuing production records meeting the above requirements of Section 00745.10 Aggregate Production.										
2. Furnish records of testing for the entire stockpile according to Section 00745.10 Aggregate Production except change the sampling frequency to the following:										
a. One Per 5 sublots means "One Set of Tests Per 5000 Tons".										
b. One Per sublot means "One Set of Tests Per 1000 Tons" with a minimum of 3 sets of Sieve Analysis tests per project.										
c. Provide one stockpile sample for each set of tests required above.										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)					Same Frequency for all Tests (Minimums)					
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE			Materials Laboratory					
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Assurance						
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)															
Mixture Acceptance - ACP Without RAP											A Sublot equals 1000 Tons				
Gradation															
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.		1/JMF & Each Calendar Year.							
Ignition method	Sampling Reducing			T 168 R 47		1/Sublot		10 % of Required QC							
(Residual aggregate from AASHTO T 308)	Sieve analysis			T 30	2277	1/Sublot		10 % of Required QC							
Asphalt Content											A Sublot equals 1000 Tons				
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.		1/JMF & Each Calendar Year.							
Ignition Method	Sampling Reducing Asphalt Content			T 168 R 47 T 308	2277	1/Sublot or Min. 1/day		10 % of Required QC							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE						
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory			
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)												
Mixture Acceptance - ACP Without RAP											A Sublot equals 1000 Tons	
Mix Design Verification Testing												
Fabrication Maximum Density Test	Gyratory Specimen Max. Specific Gravity	TM 326	T 209	2050GV 2050 *2550 *2560 *2584	1/Sublot & according to Section 00745.16 (b)-1-d	10% of Required QC						
Determination of G_{mb}	Bulk Specific Gravity		T 166									
Stripping Susceptibility	Tensile Strength Ratio		T 283		1/JMF See Section 00745.16 (b)-1-f							
*Cat-II complete & submit as required, See Section 745.16 (b)				2050tsr								
Plant Discharge Moisture	Asphalt Mix Moist.		T 329	2277	1/Sublot							
Maximum Density Test G_{mm}	Max. Specific Gravity MAMD	TM 305	T 209	2050	1st Sublot Daily or Min. 1/Day							
Performing Control Strip	Control Strip	TM 306	T 355	2084 *2584 1793A	Develop Rolling Pattern See Specs. (D) Average 5 tests per Sublot or Min. 1/Day, See Section 00745.49 (b)-2	10% of Required QC						
Compaction	Nuclear Density											
Asphalt Cement	Compliance		R 66	4000	1/Sublot See Section 4C	10% of Required QC						1/5 QC Samples (Random)
(D) See T 355 Yellow Sheet for Density Test Locations												

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)									
Mixture Acceptance - ACP Without RAP									
Mix Design Verification Testing									
	Meter Method					A Sublot equals 1000 Tons			
	Readings backed by Tank Measure & Production Records Daily	TM 321 (2) TM 322			2277	1/Sublot or Min. 1/Day			10% of Required QC
	(2) Required at start of production and if meters fail to meet specification	Cold Feed Moisture	T 255/265		2043 and 2401	Daily Production	1/Project (Contact QAC for assistance)		
					2277	1/Sublot or Min. 1/Day		10% of Required QC	
	Lime	Material must meet the requirements of Section 2090							
	Latex	See Special Provisions for Latex Requirements							
	Lime or Latex Treatment of Aggregate (Stockpile OR Mixture Production)	TM 321 (2) TM 322			2277	1/Sublot			10% of Required QC
					2277				
	(3) See JMF for Details	Readings backed by Tank Measure & Production Records Daily			2043 and 2401	Daily Production	1/Project (Contact QAC for assistance)		
	Smoothness	Certification of Profiler Equipment Determining Profile Index Determining International Roughness Index	TM 769 TM 770 TM 772			See Special Provisions			
							Meter Method is required for ACP even when acceptance is by Ignition Method		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE						
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory			
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)												
Mixture Acceptance - ACP With RAP											A Sublot equals 1000 Tons	
Gradation												
Ignition method	Calibrate Incinerator	TM 323			23271C			1/JMF & Each Calendar Year.			1/JMF & Each Calendar Year.	
Ignition method	Sampling Reducing Sieve analysis		T 168 R 47 T 30					1/Sublot			10 % of Required QC	
(Residual aggregate from AASHTO T 308)					2277							
Asphalt Content											A Sublot equals 1000 Tons	
Ignition Method	Calibrate Incinerator	TM 323			23271C			1/JMF & Each Calendar Year.			1/JMF & Each Calendar Year.	
Ignition Method	Sampling Reducing Asphalt Content		T 168 R 47 T 308					1/Sublot or Min. 1/day			10 % of Required QC	
RAP Percentage	Meter Method	TM 321 (1) TM 322			2277			1/Sublot or Minimum 1/Day			10% of Required QC	
(1) Required at start of production and if meters fail to meet specification	RAP Moisture Cold Feed Moisture		T 329 T255/T265		2277							
<u>Meter Method is required for ACP even when acceptance is by Ignition Method</u>	Readings backed by Tank measure & Production Records Daily	TM 321 (1) TM 322			2401 & 2043			Daily Production			1/Project (Contact QAC for Assistance)	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			Materials Laboratory	
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance		
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)										
Mixture Acceptance - ACP With RAP										
Mix Design Verification Testing										
Fabrication	Gyratory Specimen Max. Specific Gravity	TM 326			2050GV	1/Sublot & according to Section 00745.16 (b)-1-d			10% of Required QC	
Maximum Density Test					2050					
Determination of G_{mb}	Bulk Specific Gravity				*2550					
					*2560					
Stripping Susceptibility	Tensile Strength Ratio				*2584	1/JMF See Section 00745.16 (b)-1-f				
*Cat-II complete & submit as required, See Section 745.16 (b)					2050tsr					
Plant Discharge Moisture	Asphalt Mix Moist.					1/Sublot				
Maximum Density Test G_{mm}	Max. Specific Gravity MAMD	TM 305			2050	1st Sublot Daily or Min. 1/Day				
Performing Control Strip	Control Strip				2084	Develop Rolling Pattern See Specs.				
					*2584					
Compaction	Nuclear Density				1793A	(D) Average 5 tests per Sublot or Min. 1/Day, See Section 00745.49 (b)-2			10 % of Required QC	
Asphalt Cement	Compliance				4000	1/Sublot See Section 4C	Submit to Lab		10% of Required QC	1/5 QC Samples (Random)
(D) See T 355 Yellow Sheet for Density Test Locations										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC			AASHTO	Independent Project Manager	Region Quality Assurance
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)								
Mixture Acceptance - ACP With RAP								
Mix Design Verification Testing								
Lime						A Sublot equals 1000 Tons		
Latex								
Lime or Latex Treatment of Aggregate (Stockpile OR Mixture Production)								10% of Required QC
⁽²⁾ Required at start of production and if meters fail to meet specification								
⁽³⁾ See JMF for Details								
Smoothness								
Certification of Profiler Equipment							1/Project (Contact QAC for assistance)	
Determining Profile Index								
Determining International Roughness Index							Daily Production	
							See Special Provisions	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR										
SECTION 00755 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT										
SECTION 00756 - PLAIN CONCRETE PAVEMENT										
SECTION 00758 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR										
Aggregate Production										
(1) QAE may waive after 5 sublots/shifts	Sampling Reducing (2)(3)(4) Sieve Analysis (4) Fineness Modulus (4) Sand Equivalent	T 2 T 248 T 27/T 11	T 176	1792	1792	1/5 Sublot & Start of Production	10 % of Required QC	Submit to Central Lab	See Section 4A	
(2) Perform a minimum of 3 tests, QL's required	(1)(3) Wood Particles (3) Fracture (Method 2) (1)(3) Elongated Pieces TM 225 TM 229	T 335	T 96	1792	1792	1/5 Sublots & Start of Production		Submit to Central Lab	See Section 4A and 02690	
(4) Fine Aggregate (See Section 02690.30)	Abrasion Degradation Soundness Lightweight Pieces Organics	TM 208	T 19 T 104 T 113 T 21	4000	4000			Submit to Central Lab	See Section 4A and 02690	
	(3) Dry Rodded Unit Weight (3)(4) Bulk Specific Gravity & Absorption	T 19 T 84 & T 85		1825 1825C	1825	Start of production and when changes in aggregate occurs				

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory
		ODOT	WAQTC	AASHTO								
SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR												
SECTION 00755 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT												
SECTION 00756 - PLAIN CONCRETE PAVEMENT												
SECTION 00758 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR (CONTINUED)												
Mixture												A Sublot equals 1000 lane feet of slip formed pavement or 100 yd ³ of non-slip formed PCC
Portland Cement Modifiers Admixtures	Materials must meet the requirements of Section 02001.10											
Curing Compounds	Material must meet the requirements of Section 02050											
Mixing Water	Material must meet the requirements of Section 02020											
Mixture	Sampling Air Content Slump Density (Unit Weight) Yield Concrete Temperature Water/Cement Ratio Batching Strength	TM 2	T 152 T 119 T 121 T 121 T 309 T 121	3573WS or 4000C	1/ sublot							10 % of Required QC
(^S) 1 Set Represents a minimum of 3 Cylinders												(^M) (^S)1 Set of Cylinders per sublot
(^M) Per Mix Design & Source												10 % of Required QC
Smoothness	Certification of Profiler Equipment Determining Profile Index											
		TM 769 TM 770										See Special Provisions
Thickness of Pavement	Sticking Measure	TM 775										See Specs

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory
SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS									
Placement Evaluation "Retroreflectivity"									
In-Place Procedure evaluates Durable and High Performance Pavement Markings	Evaluation of Retroreflectivity Using Hand-Operated Instrument	TM 777			4101 thru 4105	See Special Provisions and Test Procedure for Testing Frequency			

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised October 2015)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00921 - MAJOR SIGN SUPPORT DRILLED SHAFTS										
Aggregate Production										
(1) QAE may waive after 5 sublots/shifts	Sampling Reducing									
	(2)(3)(4) Sieve Analysis			T 2 T 248 T 27/T 11 T 27/T 11	1792					
(2) Perform a minimum of 3 tests, QL's required	(4) Fineness Modulus									
	(1)(3) Wood Particles			TM 225	1792					
(3) Coarse Aggregate (See Section 02690.20)	(4) Sand Equivalent									
	Soundness			T 104 T 96	4000					
(4) Fine Aggregate (See Section 02690.30)	Abrasion									
	Degradation Lightweight Pieces Organics			TM 208	4000					
Portland Cement Modifiers Admixtures	(3) Dry Rodded Unit Weight									
	(3)(4) Bulk Specific Gravity & Absorption									
				T 19 T 84 & T 85	1825 1825C 1825					
Materials must meet the requirements of Section 02001.10										
Slurry material must meet the requirements of Section 00921.14 & 00921.43(g)										
Grout										
Material must meet the requirements of Section 02080										
Mixing Water										
Material must meet the requirements of Section 02020										
A Sublot equals 1,000 Tons										
1/Sublot & Start of Production										
10 % of Required QC										
Submit to Lab										
See Section 4A										
Start of production and when changes in aggregate occurs										
See Section 4(A)										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised October 2015)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO			Independent Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00921 - MAJOR SIGN SUPPORT DRILLED SHAFTS										
Portland Cement Concrete										
	Sampling Slump	TM 2								QA Testing
	Concrete Temperature					(M) (S) 1 per Shaft and Test at minimum frequencies according to table 00512-1. Review specs.				<u>Projects under 100 yd³ all classes</u> 1/Project representing all classes of PCC
	Density (Unit Weight) Yield									
	Water/Cement Ratio									<u>Projects over 100 yd³ all classes</u> 1/500 yd ³ per class minimum 1/class
	Strength									
TABLE 00512-1 Frequency of Quality Control Testing										
Minimum frequencies per Class of concrete based on daily production records.										
Production Frequencies										
0 to 100 yd ³ on a single day 1 Set each day										
Quantity Over 100 yd³										
100 to 600 yd ³ on a single day 1 Set per each 100 yd ³ or portion thereof										
over 600 yd ³ on a single day 1 Set per each 200 yd ³ or portion thereof after reaching 600 yd ³										
(S) 1 Set Represents a minimum of 3 Cylinders										
(M) Per Mix Design & Source										