

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
500								
CONCRETE STRUCTURES	Portland Cement	Air Content <i>T137</i>	DOT-175	10 lbs.	QPL-3	One per Quarter, per Source, per District	Stock	
		Fineness <i>M85</i>						
		Autoclave <i>M85</i>						
		Compressive Strength <i>M85</i>						
		Vicat <i>T131</i>						
		Chemical <i>M85</i>						
	Portland Pozzolan Cement	Air Content <i>T137</i>	DOT-175	10 lbs.	QPL-3	One per Quarter, per Source, per District	Stock	
		Fineness <i>M240</i>						
		Autoclave <i>M240</i>						
		Compressive Strength <i>M240</i>						
		Vicat <i>T131</i>						
		Chemical <i>M240</i>						
	Portland Slag Cement	Air Content <i>T137</i>	DOT-175	10 lbs.	QPL-3	One per Quarter, per Source, per District	Stock	
		Fineness <i>M240</i>						
	Blended Hydraulic Cement	Air Content <i>T137</i>	DOT-175	20 lbs.	QPL-3	One per Quarter, per Source, per District	Stock	
		Fineness <i>M240</i>						
		Autoclave <i>M240</i>						
		Compressive Strength <i>M240</i>						
		Vicat <i>T131</i>						
		Chemical <i>M240</i>						
		Physical & Chemical <i>ASTM C311</i>						
	Fly Ash	Fineness <i>M295</i>	DOT-175	10 lbs.	QPL-30	One per Quarter, per Source, per District	Stock	
		Activity <i>M295</i>						
Soundness <i>M295</i>								
Density <i>M295</i>								
Chemical <i>M295</i>								
Slag	Fineness <i>M302</i>	DOT-175	10 lbs.	QPL-30	One per Quarter, per Source, per District	Stock		
	Activity <i>M302</i>							
	Soundness <i>M302</i>							
	Density <i>M302</i>							

	Chemical M302						
Coarse Aggregate	Wash 200 T11 Gradation T27	DOT-658	35 lbs.	One per month, per active plant.		Stock or Conveyor Belt	
Fine Aggregate	Gradation T27 Sand Equivalent GDT-63	DOT-658	20 lbs.	One per month per active plant.		Stock or Conveyor Belt	
Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.*	One per unpotable Source, per month		Enough in advance so that results are known before use	*non-metal container
Air Entrainment Admixtures	Air-Entraining Admixtures for Concrete M154	DOT-168	1 qt.	QPL-13	One per 6 months, per Source, per District	Ready Mix Plant Stock	
Chemical Admixtures	Chemical Admixtures for Concrete M194	DOT-168	1 qt.	QPL-14	One per 6 months, per Source, per District	Ready Mix Plant Stock	
Steel Bars for Reinforcement	Number M31M Weight M31M Dimensions M31M Deformation Spacing M31M Height & Gap M31M Tensile Strength T244 Yield Strength T244 Elongation T244 Bend Test T285 Chemical M31M	DOT-166	1 pc @ 24" per size	QPL-12 & QPL-61 w/Certified Mill Test Reports.	Random sampling at Fabricator	Supplier, Fabricator or Jobsite storage	
Steel Wire for Reinforcement	Size M32M Diameter M32M Area M32M Tensile Strength T244 Yield Strength T244 Area Reduction T244 Bend Test M32M	Certification	1 pc @ 24" per size/dia.	Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
Welded Steel Wire Fabric for Reinforcement	Size M55M Diameter M55M Area M55M Tensile Strength T244	Certification	2' X 2'	QPL-55 w/Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	

Welded Steel Wire Fabric for Reinforcement	Yield Strength T244 Area Reduction T244						
	Width M55M						
	Length M55M						
	Spacing M55M						
Permanent Steel Bridge Deck Forms	ASTM A446 & ASTM A525	Certification		Certified Mill Test Report			
Prestress Stay-In-Place Panels (SIPS)		OMR-122		QPL-9, OMR-122 & Plant Stamp			
Dowel Bars	Number M31M	DOT-166A	3 bars in basket assembly	QPL-43 w/Certified Mill Test Report			*N/A for Plain Dowel Bars
	Weight M31M						
	Dimensions M31M						
	Deformation Spacing M31M*						
	Height & Gap M31M*						
	Tensile Strength T244						
	Yield Strength T244						
	Elongation T244						
	Bend Test T285						
	Chemical M31M						
	Coating 853.08						
Damp proofing or Waterproofing Membrane	Specification Requirements M115, M118 or M121	Certification	1 qt.	One per Type, per Source		Before application	
Curing Agent	Specification for Liquid Membrane Curing M148	DOT-168		QPL-16		Stock	
Concrete	Compression Strength GDT-35 & T22	DOT-319	2 cylinders	See NOTE 1			
	NOTE 1: One set per each 50 yd ³ of each Class of Concrete placed daily for each structure, except for Concrete used in Bridge Curb, Handrail or Wall Coping. Two Concrete cylinders shall be fabricated for each cumulative 50 yd ³ or fraction thereof, of Concrete placed per week in each structure. Cylinders shall not be fabricated at one structure to represent Concrete placed in another structure.						
	Air Content GDT-26 or GDT-32	DOT-319	See NOTE 2	When cylinders are made		Placement site	Additional Slump test will be required when Water is added on Project
	Slump GDT-27						

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS						
					ACCEPTANCE	QUALITY ASSURANCE								
		Mix Temperature GDT-122												
		NOTE 2: Air, Slump & Mix Temperature tests are all required when cylinders are made & as judged necessary to insure adequate controls. Additional tests are recommended at least every third load on bridge deck placement.												
	Bridge Deck Thickness	Thickness Measurement GDT-131		One ¾ inch boring	One per 5 spans		After all phases of bridge deck slab construction are completed							
	Concrete for Pipe Head-Walls, Spillways, Slope Drains, Highway Signs Guardrails, Misc. Drainage Structures, Highway Light, Fence, see Note 4	Air Content GDT-26 & GDT-35	DOT-319	See NOTE 3			During pouring operation							
		Slump GDT-27												
		NOTE 3: Acceptance of Concrete for these items is based upon results of Slump, Air & Mix Temp. tests & the properly documented DOT-319. No cylinders are required. Air & Slump tests are performed as judged necessary to insure adequate control.												
		NOTE 4: For items listed and not listed, refer to the Pay Item for additional acceptance requirements.												
	Concrete used in mow strips under cable barrier	Note: Acceptance of Concrete for this item is based upon results of Slump, Air, Mix Temp. & cylinders documented on DOT-319. Cylinders are required at a frequency of 1 set per 350 cubic yards or one set per week per plant.												
	Silicone Sealant	Tensile Stress ASTM D412	Misc. DOT-168 Certification		QPL-66									
		Durometer ASTM D2240												
Bond GDT-106														
Tack Free Time GDT-106														
Extrusion GDT-106														
Non-Volatile GDT-106														
Specific Gravity ASTM D792														
Adhesion GDT-106														
Resistance ASTM C793														
Epoxy Adhesive	Pot Life GDT-58	Misc. DOT-168 Certification	1 kit	QPL-15 or 1 sample, per batch, per Type		Stock								
	Elongation GDT-58													
	Bond GDT-58													
	Hardness ASTM 2240													

		SAG Test AASHTO T237						
		Wet Bond Test AASHTO T 237 Section 37						
		Shelf Life						
	Graffiti-Proof Coating		Certification		QPL-42			
501								
STEEL STRUCTURES		Charpy ASTM E23	Certification	6" X 18" per heat number (6" length is in direction of roll; main members only)	Certified Mill Test Report, pre-inspected by Office of Materials & GDT stamped		Fabrication shop	Sampling in Accordance with SOP-8 & Supplemental Specifications 501.01
		Thickness						
		Yield Strength ASTM A370						
		Tensile Strength ASTM A370						
		Elongation ASTM A370						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
		Reduction of Area ASTM A370						
		Hardness ASTM A370						
		Chemical ASTM A709						
	Cold Finished Carbon Shafting	Chemical M169	Certification		Certified Mill Test Report			
		Certification						
	Steel Castings	Chemical M103	Certification		Certified Mill Test Report			
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Reduction of Area T244						
		Dimensions						
		Certification						
	Paints	Pigment ASTM D2371	Certification		QPL-73 w/Certifications			
		Non-Volatile Vehicle						
		Grind						
		Viscosity ASTM D562						

		Dry Time ASTM D711						
		Percent Volatile						
		Weight per Gallon ASTM D1475						
		Color						
		Certification						
	Steel Bolts, Nuts & Washers	ASTM A307	Certification	3 bolts	Certified Mill Test Report		Stock	Independent Assurance: sample occasionally
		Chemical ASTM F568						
		Yield Strength ASTM F606						
		Tensile Strength ASTM F606						
		Elongation ASTM F606						
		Reduction of Area ASTM F606						
		Hardness ASTM F606						
		Length						
		Diameter						
		Thread Class						
		Galvanization ASTM A90 or ASTM E376						
	High Tensile Strength Bolts,	ASTM F3125	Certification	3 bolt assemblies	Certified Mill Test Report		Fabricator or Supplier	Sample for each Project
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
	Nuts & Washers	Chemical ASTM F568		(bolt, washers, nut), per Rotational Capacity Lot Number (RCT)				
		Yield Strength ASTM F606						
		Tensile Strength ASTM F606						
		Elongation ASTM F606						
	Anchor Bolts	Reduction of Area ASTM F606	Certification	1 bolt per diameter, per Heat Number, per Project	Certified Mill Test Report		Fabricator or Supplier	
		Hardness ASTM F606						
		Rotation ASTM A325						
		Diameter						
		Thread Dimension						
		Galvanization ASTM A90 or ASTM E376						

		Grade <i>As Specified on Plans</i>					
		Yield Strength <i>T244</i>					
		Tensile Strength <i>T244</i>					
		Elongation <i>T244</i>					
		Reduction of Area <i>T244</i>					
		Thread Dimensions					
		Size					
		Diameter					
		Length					
		Chemical					
Shear Connectors		Charpy <i>ASTM E23</i>	Certification		QPL-6 w/Certified Mill Test Report		
		Thickness					
		Yield Strength <i>ASTM A370</i>					
		Tensile Strength <i>ASTM A370</i>					
		Elongation <i>ASTM A370</i>					
		Reduction of Area <i>ASTM A370</i>					
		Hardness <i>ASTM A370</i>					
		Chemical <i>ASTM A709</i>					
		Length					
Elastomeric Bearing Pads		Hardness <i>ASTM D2240</i>	Certification	1 pad per Lot Number, per size, per Project	Pre-inspected & GDT stamped by Office of Materials	Supplier	Independent Assurance: sample occasionally
		Tensile Strength <i>ASTM D412</i>					
		Elongation <i>ASTM D412</i>					
		Heat Resistance <i>ASTM D573</i>					
		Compression Set <i>ASTM D395</i>					
		Brittleness <i>ASTM D746</i>					
		Dimensions					
		Laminate Thickness					
		Tensile Strength <i>M183</i>					
		Yield Strength <i>M183</i>					

		Elongation M183						
	Plain Cotton Duck	Certification	Certification		Certified Mill Test Report			
	Rubber Impregnated Cotton Duck		Certification		Certified Mill Test Report			
	Galvanizing	ASTM A90 or ASTM E376						
	Self-Lubricating Bronze Bearing & Expansion Plates & Bushings		Certification		Certified Mill Test Report			
502								
TIMBER STRUCTURES	Treated Timber	Retention of Preservative AWWA C14	Certification		QPL-50, pre-inspected by Authorized Agency & AWW stamped			Independent Assurance: sample occasionally
	Untreated Timber	Certification	Certification		Certification of Inspection from Vendor & Visual Inspection; Grade Stamp required			
	Lumber & Timber	Certification	Certification		QPL-50, pre-inspected by Authorized Agency & AWW stamped			
	Preservative Treatment	Certification	Certification		QPL-50, pre-inspected by Authorized Agency & AWW stamped			
	Paints	Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials			
		Non-Volatile Vehicle						
		Grind						
		Viscosity ASTM D562						
		Dry Time ASTM D711						
		Percent Volatile						
		Weight per Gallon ASTM D1475						
		Color						

	Misc. Bridge Hardware (Galvanized Items)	Chemical ASTM F568	Certification		Certified Mill Test Report			Independent Assurance: sample occasionally
	Structural Steel	Yield Strength ASTM F606 Tensile Strength ASTM F606 Elongation ASTM F606 Reduction of Area ASTM F606 Hardness ASTM F606 Length Diameter Thread Class Galvanization ASTM A90 or ASTM E376 Charpy ASTM E23 Thickness Yield Strength ASTM A370 Tensile Strength ASTM A370 Elongation ASTM A370 Reduction of Area ASTM A370 Hardness ASTM A370 Chemical ASTM A709	Certification		Certified Mill Test Report, pre-inspected by Office of Materials & GDT stamped		Stock, Fabricator or Supplier	
					GUIDE FREQUENCY			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPOR SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
	Plain Cotton Duck	Certification	Certification		Certified Mill Test Report			

	Misc. Steel	Grade <i>As Specified</i>	Certification		Certified Mill Test Report			
		Yield Strength <i>T244</i>						
		Tensile Strength <i>T244</i>						
		Size Elongation <i>T244</i>						
		Reduction of Area <i>T244</i>						
		Thread Dimensions						
		Diameter						
		Length						
		Chemical						
		Rotation <i>ASTM A325</i>						
		Galvanization <i>ASTM A90</i> or <i>ASTM E376</i>						
503								
STEEL GRID FLOORING	Steel Grid	Grade <i>As Specified</i>	Certification		Certified Mill Test Report, pre-inspected & GDT stamped		Fabricator or Supplier	
		Galvanization <i>ASTM A123</i>						
	Paint	Specification Requirement <i>Section 870.01</i>	Certification		QPL-73 w/Certifications			Independent Assurance: sample occasionally
	Concrete	Cylinders GDT-35 & T22	DOT-319	One set per 50 yds ³ of each Class of Concrete placed daily for each structure, except for Concrete used in Bridge Curb or Wall Coping. Two Concrete cylinders shall be fabricated for each cumulative 50 yds ³ or fraction thereof, of Concrete placed per week in each structure. Cylinders shall not be fabricated at one structure to represent Concrete placed in another structure.				
504								
TWENTY-FOUR HOUR ACCELERATED STRENGTH CONCRETE	Concrete Compressive Strength	Cylinders <i>GDT-35 & T22</i>	DOT-319		One set of 4 for each placement date. (2 for 1 day, 2 for 3 day) Air, Slump & Mix Temperature tests are required when cylinders are made & as judged necessary to insure adequate controls			In accordance with Section 504 of the Specifications
		Air Content <i>GDT-26 & GDT-35</i>						
		Slump <i>GDT-27</i>						
		Mix Temperature <i>GDT-122</i>						

	Portland Cement	Air Content T137	DOT-175				
		Fineness M85					
		Fineness M240					
		Autoclave M240					
		Compressive Strength M240					
		Vicat T131					
		Chemical M240					
		Autoclave M85					
		Compressive Strength M85					
		Vicat T131					
		Chemical M85					
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per month per active plant.	Stock or Conveyor Belt	
		Wash 200 T11					
		Sand Equivalent GDT-63					
	Coarse Aggregate	Wash 200 T11	DOT-658	35 lbs.	One per month per active plant.	Stock or Conveyor Belt	
		Gradation T27					
	Calcium Chloride	Specification M144	DOT-319				
	Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.*	One per unpotable Source, per month	Enough in advance so that results are known before use	*non-metal container
505							
	Corrugated Steel Plank for Bridges	ASTM A123 or ASTM A525	Certification		Certified Mill Test Report		Independent Assurance: sample occasionally
		Yield Strength T244					
		Tensile Strength T244					
		Width					
		Thickness					
		Depth & Spacing of Corrugations					
		Chemical ASTM A570					

		Galvanization ASTM A90 or ASTM E376						
	Paints	Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials			
		Non-Volatile Vehicle						
		Grind						
		Viscosity ASTM D562						
		Dry Time ASTM D711						
		Percent Volatile						
		Weight per Gallon ASTM D1475						
		Color						
		Certification						
506								
EXPANDED MORTAR	Portland Cement	Air Content T137	DOT-175	Sampled & tested in conjunction with other Concrete construction on Project. No additional sample required under normal circumstances.				
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						
	Blended Hydraulic Cement	Fineness M85	DOT-175		QPL-3			
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						
		Chemical M240						
	Coarse Aggregate	Wash 200 T11	DOT-658	35 lbs.	One per month per active plant.		Stock or Conveyor Belt	
		Gradation T27						
	Fine Aggregate Aluminum Powder	Gradation T27	DOT-658	20 lbs.	One per month per active plant.		Stock or Conveyor Belt	
		Sand Equivalent GDT-63						
Wash 200 T11								
		Fineness ASTM D480	Certification	50 g	Acceptance based on label stating material is Aluminum		Stock	

					Powder of Unpolished Type or 1 sample per Project		
	Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.*	One per unpotable Source, per month	Enough in advance so that results are known before use	*non-metal container
507							
PRESTRESSED CONCRETE BRIDGE MEMBERS	Concrete Bridge Members		OMR-122 (Shipping Report)		QPL-9, OMR-122, GDOT stamp & Plant Stamp		
	Plain Steel Bars – Threaded Ends	Chemical ASTM A370	DOT-166				
		Tensile Strength T244					
		Yield Strength T244					
		Elongation T244					
	Anchor Bolts	Reduction of Area T244	Certification	1 each: Bolt, Nut & Washer	Certified Mill Test Report	Stock	
		Thread Dimensions					
		Hardness ASTM A370					
		Grade As Specified on Plans					
		Yield Strength T244					
		Tensile Strength T244					
		Elongation T244					
		Reduction of Area T244					
		Thread Dimensions					
		Size					
		Diameter					
		Length					
		Chemical					
	Bushings, Bearings & Expansion Plates	Certification	Certification		Certified Mill Test Report	Stock	
	Structural Steel Elastomeric Bearing Pads	Charpy ASTM E23	Certification Certification	1 pad per Lot Number,	Certified Mill Test Report, pre-inspected by Office of Materials & GDT stamped	Fabricator or Supplier	
		Thickness					
		Yield strength ASTM A370					

		Tensile Strength ASTM A370		per size, per Project	Pre-inspected & GDT stamped		
		Elongation ASTM A370					
		Reduction of Area ASTM A370					
		Hardness ASTM A370					
		Chemical ASTM A709					
		Hardness ASTM D2240					
		Tensile Strength ASTM D412					
		Elongation ASTM D412					
		Heat Resistance ASTM D573					
		Compression Set ASTM D395					
		Brittleness ASTM D746					
		Dimensions					
		Laminate Thickness					
		Yield Strength M183					
		Elongation M183					
	Plain Cotton Duck	Weight	Certification	1 yd ²	One per shipment	Stock	
	Rubber Impregnated Cotton Duck	Weight					
		Compressive Strength					
	Paints	Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials & Testing		
		Non-Volatile Vehicle					
		Grind					
		Viscosity ASTM D562					
		Dry Time ASTM D711					
		Percent Volatile					
		Weight per Gallon ASTM D1475					
		Color					
		Certification					
508							
ASPHALT PLANK BRIDGE FLOOR	Pre-molded Asphalt Plank	Dimensions		1 yd ²	One per Lot		
		Weight of Surface Absorption					

		Brittleness					
		Hardness M46					
	Cutback Asphalt	Viscosity T201	DOT-325	1 qt.	QPL-7	Stock	
	Asphalt Cement	Dynamic Shear TP-5	DOT-504	1 qt.	QPL-7	Before application	
509							
PRESTRESSING CONCRETE BY POST TENSIONING	Ducts Anchorage Assembly	Dimensions		48" piece Complete Assembly	One per size		60 calendar days prior to installation
	Steel Bars for Reinforcement	Number M31M	DOT-166	1 pc @ 24" per size	QPL-12 & QPL-61 w/Certified Mill Test Reports.	Random sampling at Fabricator Supplier, Fabricator or Jobsite storage	60 calendar days prior to installation
		Weight M31M					
		Dimensions M31M					
		Deformation Spacing M31M					
		Height & Gap M31M					
		Tensile Strength T244					
		Yield Strength T244					
		Elongation T244					
		Bend Test T285					
		Chemical M31M					
	Post- tensioning Steel Wire Strand	ASTM A 416		3 - 53" long pieces	One set per Heat Number and Certified Mill Test Report		60 calendar days prior to installation
	Post- tensioning Steel Wire	ASTM A 421		3 - 53" long pieces	One set per Heat Number and Certified Mill Test Report		60 calendar days prior to installation
	Post- tensioning Steel Bars	ASTM A 722		3 - 53" long pieces	One set per Heat Number and Certified Mill Test Report		60 calendar days prior to installation
	Pre-Package Grout				Certified Mill Test Report		Prior to use
	Portland Cement	Air Content T137	DOT-175	10 lbs.	QPL-3	Prior to use	
		Fineness M85					
		Autoclave M85					
		Compressive Strength M85					
		Vicat T131					

	Blended Hydraulic Cement	Chemical M85 Air Content T137 Fineness M240 Autoclave M240 Compressive Strength M240 Vicat T131 Chemical M85	DOT-175	20 lbs.	QPL-3	One per Quarter, per Source, per District Stock	
	Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.*	One per unpotable Source, per month	Enough in advance so that results are known before use	*non-metal container
511							
REINFORCEMENT STEEL	Steel Bars for Reinforcement	Number M31M	DOT-166	1 pc @ 24" per size	QPL-12 & QPL-61 w/Certified Mill Test Reports.	Random sampling at Fabricator Supplier, Fabricator or Jobsite storage	
		Weight M31M					
		Dimensions M31M					
		Deformation Spacing M31M					
		Height & Gap M31M					
		Tensile Strength T244					
		Yield Strength T244					
		Elongation T244					
		Bend Test T285					
		Chemical M31M					
	<u>Wire Bar Supports</u> Galvanized	Shape	Certification				
		Height					
		Wire Size					
		Galvanization ASTM A123					
	Stainless	Shape	Certification				
		Height					
		Wire Size					
		Chemical					
		Tensile Strength T244					
	Bright	Shape	Certification				
		Height					
		Wire Size					
	Plastic Covered	Shape	Certification				
		Height					
		Wire size					
		Tensile Strength T244					

	Epoxy Coated	Hardness ASTM D2240	Certification				
		Shape					
		Height					
		Wire Size					
		Thickness					
	Plastic	Condition					
		Shape	Certification				
		Height					
		Wire Size					
		Compressive Strength T22					
Water Absorption ASTM D570							

512								
SHEAR CONNECTORS	Stud	Charpy ASTM E23	Certification		QPL-6 & Certified Mill Test Report			
		Yield Strength ASTM A370						
		Tensile Strength ASTM A370						
		Elongation ASTM A370						
		Reduction of Area ASTM A370						
		Hardness ASTM A370						
		Chemical ASTM A709						
		Length						
	Channel	Certification			QPL-6 & Certified Mill Test Report			

513								
PRECAST REINFORCED CONCRETE BOX CULVERT BARREL SECTIONS & END SECTIONS	Complete Units	Certification	DOT-164A / DOT-619		QPL-4 with CPT stamp or pre-inspected by Office of Materials Personnel & GDT stamped			
	Portland Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						
		Chemical M85						
	Portland	Air Content T137	DOT-175		QPL-3			

	Pozzolan Cement	Fineness M240	DOT-175	20 lbs.	QPL-3	One per Quarter, per Source, per District	Stock														
		Autoclave M240																			
		Compressive Strength M240																			
		Vicat T131																			
		Chemical M240																			
	Blended Hydraulic Cement	Air Content T137							DOT-658	20 lbs.	One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.									
		Fineness M240																			
		Autoclave M240																			
		Compressive Strength M240																			
		Vicat T131																			
	Fine Aggregate	Gradation T27													DOT-658	20 lbs.	One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.			
																					Sand Equivalent GDT-63
																					Washed No. 200 T11
	TYPE CONSTRUCTION	MATERIAL													TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
	Coarse Aggregate	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.															
		Gradation T27																			
	Steel Bars for Reinforcement	Number M31M	DOT-166	1 pc @ 24" per size	QPL-12 & QPL-61 w/Certified Mill Test Reports.	Random sampling at Fabricator	Supplier, Fabricator or Jobsite storage														
		Weight M31M																			
		Dimensions M31M																			
		Deformation Spacing M31M																			
		Height & Gap M31M																			
		Tensile Strength T244																			

	Yield Strength T244					
	Elongation T244					
	Bend Test T285					
	Chemical M31M					
Steel Wire for Reinforcement	Size M32M	Certification	1 pc @ 24" per size/dia.	Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock
	Diameter M32M					
	Area M32M					
	Tensile Strength T244					
	Yield Strength T244					
	Area Reduction T244					
	Bend Test M32M					
Welded Steel Wire Fabric for Reinforcement	Size M55M	Certification	2' X 2'	QPL-55 w/Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock
	Diameter M55M					
	Area M55M					
	Tensile Strength T244					
	Yield Strength T244					
	Area Reduction T244					
	Bend Test M55M					
	Weld Shear Strength M55M					
	Width M55M					
	Length M55M					
	Spacing M55M					
Cylinders	Compressive Strength T22	DOT-319	3 ea.			
Steel Bolts, Nuts & Washers	Chemical ASTM F568	Certification		Certified Mill Test Report		
	Yield Strength ASTM F606					
	Tensile Strength ASTM F606					
	Elongation ASTM F606					
	Reduction of Area ASTM F606					
	Hardness ASTM F606					
	Length					
	Diameter					
	Thread Class					
	Galvanization ASTM A90 or ASTM E376					

	Anchor Bolts	Grade As Specified	Certification		Certified Mill Test Report			
		Yield Strength T244						
		Tensile Strength T244						
		Elongation T244						
		Reduction of Area T244						
		Thread Dimensions						
		Size						
		Diameter						
		Length						
		Chemical						
	Corrugated Steel Pipe	Diameter	Certification		Certified Mill Test Report			
		Depth & Spacing of Corrugations M36						
		Thickness						
	Corrugated Plastic Pipe	Diameter	Certification		Certified Mill Test Report			
		Depth & Spacing of Corrugations M252						
		Thickness						
		Stiffness ASTM D2412						
		Flattening M252						
		Elongation M252						
		Brittleness M252						
		Flexibility M252						
		Couplings M252						
		Strength M252						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
	Backfill: Type I – Class I & II Soil	Gradation GDT-4	DOT-97 DOT-408	30 lbs.	One per soil type			
		Percent Clay GDT-4						
		Volume Change GDT-6						
		Density GDT-7 or GDT-67						
		Classification Section 810						
	Type II – Backfill Aggregate	Gradation T27	DOT-658	45 lbs.	One per 20, 000 tons.	As required by Project Engineer		
	Type III –	Density GDT-7	DOT-408 / DOT-		Notify Central Lab			

	Soil/Organic	Condition of Mixture	97					
EPOXY COATED STEEL REINFORCEMENT	Steel Bars for Reinforcement	Number M31M	DOT-166A	1 pc @ 24" per size	QPL-43 w/Certified Mill Test Reports.	Random sampling at Fabricator	Supplier, Fabricator or Jobsite storage	
		Weight M31M						
		Dimensions M31M						
		Deformation Spacing M31M						
		Height & Gap M31M						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Bend Test T285						
		Chemical M31M						
	Epoxy Coating	Thickness ASTM G12	QPL-38					
		Adhesion M284						
HANDRAIL - FERROUS METAL & PIPE	Anchor Bolts	Specification Requirements	Certification		Accepted by Project Personnel based on Visual Inspection & Certified Mill Test Report			
	Handrail & Misc. Steel Items	Galvanization ASTM A123	Certification & DOT-619 or Project Inspection Report		Field Welded: Finished handrail required to be inspected by Office of Materials personnel by contacting the Inspection Services Branch. Shop Welded: QPL-59 and pre-inspected by Office of Materials & GDT Stamped			
	Structural Steel	Charpy ASTM E23	Certification		Certified Mill Test Report			
Thickness								
Yield Strength ASTM A370								
Tensile Strength ASTM A370								
Elongation ASTM A370								
Reduction of Area ASTM A370								
Hardness ASTM A370								
Chemical ASTM A709								
Malleable Iron Castings	Chemical ASTM A27	Certification	1"	Certified Mill Test Report				
	Tensile Strength T244							
	Yield Strength T244							
	Elongation T244							
	Reduction of Area T244							
Steel Castings	Chemical M103	Certification		Certified Mill Test				

		Tensile Strength T244			Report		
		Yield Strength T244					
		Elongation T244					
		Reduction of Area T244					
		Dimensions					
		Certification					
Steel Pipe		Chemical ASTM A53	Certification		Certified Mill Test Report		
		Yield Strength T244					
		Tensile Strength T244					
		Elongation T244					
		Bending ASTM A53					
		Flattening ASTM A53					
		Non-Destructive Electric Test ASTM A53					
		Weight					
		Diameter					
		Thickness					
		Finish					
		Appearance					
Steel Bolts, Nuts & Washers		Chemical ASTM F568	Certification		Certified Mill Test Report		
		Yield Strength ASTM F606					
		Tensile Strength ASTM F606					
		Elongation ASTM F606					
		Reduction of Area ASTM F606					
		Hardness ASTM F606					
		Length					
		Diameter					
		Thread Class					
		Galvanization ASTM A90 or ASTM E376					
Paints		Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials & Testing		
		Non-Volatile Vehicle					
		Grind					
		Viscosity ASTM D562					

		Dry Time ASTM D711							
		Percent Volatile							
		Weight per Gallon ASTM D1475							
		Color							
		Certification							
	Plain Steel Bars	Chemical ASTM A370	Certification		Certified Mill Test Report				
		Tensile Strength T244							
		Yield Strength T244							
		Elongation T244							
		Reduction of Area T244							
Thread Dimensions									
Hardness ASTM A370									
ALUMINUM HANDRAIL	Aluminum Alloy Materials	Chemical	Certification		Certified Mill Test Report				
		Thickness							
		Dimensions							
		Tensile Strength T244							
		Yield Strength T244							
		Elongation T244							
		Bend Diameter Factor ASTM B209							
		Hardness ASTM B241							
		Shear Strength ASTM B565							
	Caulking Compound	Certification	Certification	Manufacturer's Certification					
	Plain Steel Bars	Chemical ASTM A370	Certification		Certified Mill Test Report				
		Tensile Strength T244							
		Yield Strength T244							
		Elongation T244							
		Reduction of Area T244							
		Thread Dimensions							
	TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
		Steel Nuts, Bolts &	Hardness ASTM A370	Certification		Certified Mill Test Report			
Chemical ASTM F568									
Yield Strength ASTM									

BRIDGE DECK
OVERLAY

Washers	F606						
	Tensile Strength ASTM F606						
	Elongation ASTM F606						
	Reduction of Area ASTM F606						
	Hardness ASTM F606						
Elastomeric Bearing Pads	Hardness ASTM D2240	Certification		Certified Mill Test Report			
	Tensile Strength ASTM D412						
	Elongation ASTM D412						
	Heat Resistance ASTM D573						
	Compression Set ASTM D395						
	Brittleness ASTM D746						
	Dimensions						
	Laminate Thickness						
	Tensile Strength M183						
	Yield Strength M183						
	Elongation M183						
Galvanizing	ASTM A90 or ASTM E376	Certification		Certified Mill Test Report			
Concrete	Cylinders GDT-35 & T22	DOT-319	2 cylinders	See NOTE 1			
	Air Content GDT-26 or GDT-32		See NOTE 2	When cylinders are made		Placement site	
	Slump GDT-27						
	Mix Temperature GDT-122						
Portland Cement	Air Content T137	DOT-175	10 lbs.	QPL-3	One per Quarter, per Source, per District		
	Fineness M85						
	Autoclave M85						

		Compressive Strength M85						
		Vicat T131						
		Chemical M85						
	Blended Hydraulic Cement	Air Content T137	DOT-175		QPL-3	Source, per District		
		Fineness M240						
		Autoclave M240						
		Compressive Strength M240						
		Vicat T131						
		Chemical M240						
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per month per active plant.			
		Sand Equivalent GDT-63						
		Wash 200 T11						
	Coarse Aggregate	Wash 200 T11	DOT-658	40 lbs	One per month per active plant.			
		Gradation T27						
	Fly Ash	Fineness M295	DOT-175	10 lbs.	QPL-30	One per Quarter, per Source, per District		
		Activity M295						
		Soundness M295						
		Density M295						
		Chemical M295						
	Slag Cement	Fineness M302	DOT-175	10 lbs.	QPL-30	One per 2,000 tons, per Source	Jobsite storage	
		Activity M302						
		Air Content M302						
		Density M302						
		Chemical M302						
	Air Entrainment Admixtures	Air-Entraining Admixture for Concrete M154	DOT-168 Certification	1 qt.	QPL-13	One per 6 months, per Source, per District		
					GUIDE FREQUENCY			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS

	Chemical Admixtures	Chemical Admixtures for Concrete M194	DOT-168 Certification	1 qt.	QPL-14	One per 6 months, per Source, per District		
	Curing Agent	Specification for Liquid Membrane Curing M148	DOT-168 Certification	1 qt.	QPL-16			
	Water	Quality of Water for Concrete T26	DOT-168 Ga168 GACERT	1 qt.*		One per unpotable Source, per month		*non-metal container
520								
PILING	Prestressed Concrete		OMR-122 (Shipping Report)		QPL-9, OMR-122 & Plant Stamp			
	Treated Timber Piles	Retention of Preservative AWWA C14	Certification		QPL-50, preinspected by Authorized Agency & AWW Stamp			
	Preservative Treatment	Certification	Certification		QPL-50 & Preinspected by Authorized Agency			
	Aluminum Powder	Fineness ASTM D480	Certification					
	Self-lubricating Bronze Bearing & Expansion Plates & Bushings	Certification	Certification		Certified Mill Test Report			
	Paint	Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials			
		Non-Volatile Vehicle						
		Grind						
		Viscosity ASTM D562						
		Dry Time ASTM D711						
		Percent Volatile						

		Weight per Gallon ASTM D1475						
		Color						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
		Certification						
	Welded & Seamless Steel Pile	Thickness	Certification		QPL-44 w/Certified Mill Test Report			
		Chemical ASTM A252						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Diameter						
		Weight						
		Certification						
	Fluted Steel Shell Pile	Thickness	Certification		QPL-44 & Certified Mill Test Report			
		Diameter						
		Yield Strength T244						
		Certification						
	Steel H-Pile	Charpy ASTM E23	Certification		QPL-44 & Certified Mill Test Report			
		Thickness						
		Yield Strength ASTM A370						
		Tensile Strength ASTM A370						
		Elongation ASTM A370						
		Reduction of Area ASTM A370						
		Hardness ASTM A370						
		Chemical ASTM A709						
		Certification						
	Steel Bolts, Nuts & Washers	Chemical ASTM F568	Certification		Certified Mill Test Report			
		Yield Strength ASTM F606						
		Tensile Strength ASTM F606						
		Elongation ASTM F606						

		Reduction of Area ASTM F606						
		Hardness ASTM F606						
		Length						
		Diameter						
		Thread Class						
		Galvanization ASTM A90 or ASTM E376						
	Aluminum Alloy Sheet & Plate	Chemical	Certification		Certified Mill Test Report			
		Thickness						
		Dimensions						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Bend Diameter Factor ASTM B209						
		Hardness ASTM B241						
		Shear Strength ASTM B565						
529								
NAVIGATION LIGHTING	Electrical Materials	As Specified	Certification		Approved by the Underwriter's Laboratory or Certified Mill Report & approved Catalog Cuts		Stock	
	Anchor Bolts	Grade As Specified						
		Yield Strength T244						
		Tensile Strength T244						
		Elongation T244						
		Reduction of Area T244						
		Thread Dimensions	Certification		Certified Mill Test Report			
		Size						
		Diameter						
		Length						
		Chemical						

	Paint	Pigment ASTM D2371	Certification	1 qt.	Approved by Office of Materials			
		Non-Volatile Vehicle						
		Grind						
		Viscosity ASTM D562						
		Dry Time ASTM D711						
		Percent Volatile						
		Weight per Gallon ASTM D1475						
		Color						
		Certification						
	Lighting Standards	Certification	Certification		QPL-52, pre-inspected by Office of Materials Personnel & GDT stamped			
	Luminaries & Ballasts	Certification	Certification		Approved Catalog Cuts			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
	Circuit Breakers	Certification	Certification		Approved Catalog Cuts			
	Cable	Certification	Certification		Approved Catalog Cuts			
530								
WATERPROOFING FABRICS	Waterproofing Membrane Material for Retaining Walls	Thickness	Certification		QPL-22			
		Tensile Strength ASTM D412						
		Elongation ASTM D412						
		Permeance ASTM E96						
		Puncture Resistance ASTM E154						
		Pliability ASTM D146						
		Cycling Over Crack Section 888.03						
		Certification						
531								

DAMPPROOFING	Bituminous Material for Waterproofing or Damp proofing	Specification Requirements M115, M118 or M121	Certification	1 qt.	One per Type, per Source		Before application	
533								
BRIDGE DECK WATERPROOFING MEMBRANE	Hot Mix Asphaltic Asphalt Cement	Concrete Dynamic Shear TP-315	DOT-504	Two 1 qt. cans	QPL-7	As per GSP-21	Storage Tank	
	Coarse Aggregate for Asphaltic Concrete	Wash 200 T11	DOT-658	45 lbs.	QPL-2	As necessary	Stockpile	
		Gradation T27						
	Fine Aggregate for Asphaltic Concrete	Gradation T11 & T27	DOT-658	20 lbs.	QPL-1	As necessary	Stockpile	
		Clay Lumps T1121						
		Sand Equivalent GDT-63						
		Mica Content ASTM C 295						
	Mineral Filler	Gradation T11 & T27	DOT-168 Certification	10 lbs.	QPL-81	One per 500 tons, per Type, per Source	Stockpile	
	In-Place Material	Thickness Measurement GDT42	DOT-176		One per 1,000 ft, per 2 lanes		Completed Course	
	Hydrated Lime	Physical & Chemical Analysis M216-84	Certification	1 qt.*	QPL-41	One per Quarter	Silo or Tanker	*Air-tight container
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Complete Mixture	Gradation T219						As required by SOP-17
		Chemical T219						AASHTO T308 (Method A)
		Asphalt Binder Content: GDT-125, GDT-83, or T-308 Gradation: T-27 or GDT-38	DOT-159	Varies per Mix Type	Asphalt Producer will test 1 per 500 tons	GDOT will test Two QA samples per 5 days production or 5 lots; 1 comparison sample per 10 days	Truck or Roadway	
		Stripping Test GDT-56	DOT-159	300 g	One per Extraction		Same as Extraction	For OGFC and PEM mixes only.
		Detection of Amine based Liquid Anti-Stripping Additive (LASA) GDT-139						As required by GSP-21
		Compaction GDT-39, or GDT-59	DOT-150	Core	Five per Lot*		After Compaction	Quantities less than 500 tons will be tested at 1 per 100 tons.

	Bituminous Tack Coat Asphalt Cement	Dynamic Shear T-315 GDT-57		Two 1- quart cans 6-inch core	Once per week per distributor		Distributor	As required
	Emulsified Asphalt	Viscosity T59 Sieve T59 Residue T59 (at Bituminous Branch's discretion) GDT 57		Two 1 gal containers 6-inch core	Once per week per distributor		Distributor	Nonmetal container As required
	Sand For Blast Cleaning	Gradation GDT-3 TCLP EPA SWD 846-1311 Certification	Certification		Visual Inspection		Stock	Independent Assurance: sample occasionally
	Waterproofing Membrane Material for Bridge Decks	Bond GDT-69 Permeability GDT-69 Heat Resistance GDT-69 Penetration GDT-69 Freeze-Thaw GDT-69 Chemical Resistance GDT-69 Shear Resistance GDT-69 Effectiveness GDT-69 Certification	Certification		QPL-22			
					GUIDE FREQUENCY			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
535								
PAINTING STRUCTURES	Paint	Specification Requirements Section 870.01	Certification		QPL-73 w/Certifications			Independent Assurance: sample occasionally
	Paint – Completed Coat	Anchor Pattern	DOT-168A Certification		QPL-73 w/Certifications			
		Steel Temperature						
		Ambient Temperature						
		Humidity						
		Dew Point						
		Adhesion						
		MEK Rub GDT-110						

		Final Paint Thickness										
	Lead Paint Residue	TCLP EPA SWD 846-1311	TCLP Report									
		Disposal Manifest										
543												
CONSTRUCTION OF BRIDGE COMPLETE	<u>Earthwork</u> Embankments (to within 1 ft of top)	Theoretical Density GDT-7 or GDT-67	DOT-553	30 lbs.	One per major soil Type One per 5,000 yd³		Roadway (before Compacting) Completed Lift	Volume Change tests may be omitted on accepted samples, except the first sample & each fifth sample thereafter, which shall be submitted to the Branch or Central Lab for testing, unless provisions are made for testing on the Project. Percent Moisture is part of Density test procedure.				
		Gradation GDT-4										
		Volume Change GDT-6										
		Classification Section 810										
		In-Place Density GDT-20, GDT21, & GDT-59										
Rock		Gradation Visual	DOT-658		QPL-2			Requires approval by Pit & Quarry if not from QPL-2 Source				
		Abrasion T96										
		Soundness T104										
		Petrographic Analysis ASTM C295										
				GUIDE FREQUENCY								
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS				
	Pond Sand	Gradation Visual	DOT-408 / DOT-97					Requires approval by Pit & Quarry				
		Volume Change GDT-6										
		Density GDT-7 or GDT-67										
	Piling Treated Timber Piles	Retention of Preservative AWWA C14	Certification			QPL-50, pre-inspected by Authorized Agency & AWW stamp						
	Fluted Steel Shell Pile	Thickness	Certification							QPL-44 & Certified Mill Test Report		
		Diameter										
		Yield Strength T244										
		Certification										
	Steel H-Pile	Charpy ASTM E23	Certification		QPL-44 & Certified							

		Thickness			Mill Test Report			
		Yield Strength						
	Lumber & Timber	Certification	Certification		QPL-50, pre-inspected by Authorized Agency & AWW stamp			
Expanded Mortar Portland Cement & Blended Hydraulic Cement Sampled & tested in conjunction with other Concrete construction on Project. No additional sample required under normal circumstances.								
	Coarse Aggregate	Wash 200 T11	DOT-658	35 lbs.	One per month per active plant.		Stock or Conveyor Belt	
		Gradation T27						
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per month per active plant.		Stock or Conveyor Belt	
		Sand Equivalent GDT-63						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
		Wash 200 T11						
	Aluminum Powder	Fineness ASTM D480	Certification	50 g	Acceptance based on label stating material is Aluminum Powder of Unpolished Type or 1 sample per Project		Stock	
	Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.*	One per unpotable Source, per month		Enough in advance so that results are known before use	*non-metal container
	Steel Bars for Reinforcement	Number M31M	DOT-166	1 pc @ 24" per size	QPL-12 & QPL-61 w/Certified Mill Test Reports.	Random sampling at Fabricator	Supplier, Fabricator or Jobsite storage	One sample per size, per Project by Independent Assurance Personnel
		Weight M31M						
		Dimensions M31M						
		Deformation Spacing M31M						
		Height & Gap M31M						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Bend Test T285						
		Chemical M31M						

	Misc. Bridge Hardware		Certification	One of ea. item	Certified Mill Test Report		Stock	
	Joint Material	Durometer ASTM D2240	Certification		QPL-66		Stock	
	Silicone Sealant	Bond GDT-106						
		Tack Free Time GDT-106						
		Extrusion GDT-106						
		Non-Volatile GDT-106						
		Specific Gravity ASTM D792						
		Adhesion GDT-106						
		Resistance ASTM C793						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Epoxy Adhesive	Pot Life GDT-58	Certification		QPL-15 <u>or</u> 1 sample per batch, per Type		Stock	
		Bond Strength GDT-58						
		Shelf Life						
		Elongation GDT-58						
		Hardness ASTM D2240						
		Sag T237						
		Wet Bond T137						
	Bond Breakers –Rods	Density ASTM D1622	Certification	5 ft	One per Project & Certified Mill Test Report		Stock	
		Tensile Strength ASTM D1623						
		Water Absorption ASTM C1016						
	Bond Breakers - Tape	Thickness	Certification	5 ft	One per Project & Certified Mill Test Report		Stock	
	Creosote & Pitch				Accepted by Project Personnel based on Visual Inspection			
	Roofing Felt				Accepted by Project Personnel based on Visual Inspection		Stock	Independent Assurance: sample occasionally

	Sheet Packing				Accepted by Project Personnel based on Visual Inspection			
	Tie Bolt Assembly		Certification		Certified Mill Test Report & Visual Inspection			
	Paint	Specification Requirements Section 870.01	Certification		QPL-73 w/Certifications			Independent Assurance: sample occasionally
	Completed Units				QPL-9			
544								
DECK DRAIN SYSTEMS	Clips, Brackets, Bars, etc.	Certification	Certification	1 ea.	Certified Mill Test Report		Stock	Independent Assurance: sample occasionally
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY ACCEPTANCEQUALITY ASSURANCE		LOCATION OR TIME OF SAMPLING	REMARKS
	Galvanized Repair Compound	Certification	Certification	1 qt.	Approved by Office of Materials			
	Hardware	Certification	Certification		Certified Mill Test Report			
550								
STORM DRAIN PIPE, PIPE-ARCH CULVERTS & SIDE DRAINPIPE	Reinforced Concrete Pipe Physical Properties of Pipe	Diameter M170	DOT-164		QPL-4 with CPT Stamp <u>or</u> pre-inspected by Office of Materials with GDT Stamp			
		Thickness M170						
		Reinforcement Design M170						
		External Load Strength T280	OMR-INSP86					
	Portland Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						
		Chemical M85						
	Blended Hydraulic Cement	Air Content T137 Fineness M240 Autoclave M240 Compressive Strength M240 Vicat T131 Chemical M240	DOT-175		QPL-3			

Fly Ash	Fineness M295	DOT-175		QPL-30			
	Activity M295						
	Soundness M295						
	Density M295						
	Chemical M295						
Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
	Wash 200 T11						
	Sand Equivalent GDT-63						
Coarse Aggregate	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
	Gradation T27						
Steel Wire for Reinforcement	Size M32M	Certification	1 pc @ 24" per size/dia.	Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
	Diameter M32M						
	Area M32M						
	Tensile Strength T244						
	Yield Strength T244						
	Area Reduction T244						
	Bend Test M32M						
Welded Steel Wire Fabric for Reinforcement	Size M55M	Certification	2' X 2'	QPL-55 w/Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
	Diameter M55M						
	Area M55M						
	Tensile Strength T244						
	Yield Strength T244						
	Area Reduction T244						
	Bend Test M55M						

		Weld Shear Strength M55M						
		Width M55M						
		Length M55M						
		Spacing M55M						
	Cylinders	Compressive Strength T22	Certification DOT -T152	3 ea.				
	Non-Reinforced Physical Properties of Pipe	Concrete Pipe	DOT-164 OMR-INSP-86		QPL-4 with CPT Stamp or pre-inspected by Office of Materials with GDT Stamp			
		Diameter M86						
		Thickness M86						
		Absorption M86						
		Permeability M86						
		External Load Strength T280						
	Portland Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
				ACCEPTANCE	QUALITY ASSURANCE			
		Vicat T131						
		Chemical M85						
	Blended Hydraulic Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M240						
		Autoclave M240						
		Compressive Strength M240						
		Vicat T131						
		Chemical M240						
	Fly Ash	Fineness M295	top		QPL-30			
		Activity M295						
		Soundness M295						
		Density M295						
		Chemical M295						
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 500 tons based upon QPL-1,	QPL-1 Sources, 1 per month, per active		
		Wash –200 T11						

		Sand Equivalent GDT-63			except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
	Coarse Aggregate	Wash 200 T11 Gradation T27	DOT-658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
	Corrugated Steel Plain Zinc Coated Pipe	Diameter M36M Depth & Spacing of Corrugations M36M Thickness M36M Galvanization M218M	DOT-291		QPL-56 w/CMPT inspection tags			
	Corrugated Steel Aluminized Coated Type 2 Pipe	M274 & M36	DOT-291		QPL-56 w/CMPT inspection tags			
	Corrugated	Diameter M196M	DOT-291		QPL-56 w/CMPT inspection tags			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Aluminum Alloy Pipe	Depth & Spacing of Corrugations M196M Thickness M196M Arch Dimensions M196M Chemical M197M Tensile Strength T244 Yield Strength T244 Elongation T244	DOT-291		QPL-56 w/CMPT inspection tags			

	Smooth Lined Corrugated Polyethylene (HDPE) Culvert Pipe	M294M	OMR-INSP- 89		QPL-51 w/PPT stamp or sticker.			
	Polyvinyl Chloride (PVC) Profile Wall DrainPipe	M304	OMR-INSP- 89		QPL-51 w/PPT stamp or sticker.			
	PVC Corrugated Smooth Interior Pipe	ASTM F949	OMR-INSP-89		QPL-51 w/ PPT stamp or sticker.			
	Ductile Iron Pipe	Certification	Certification		Certified Mill Test Report			
	Mortar Cement	Specification Requirements M150	DOT-175	1 gal.	Enough to insure consistency & quality		Stock	
	Mortar Sand	Gradation T27	DOT-658	20 lbs.	QPL-1, Sections A, B & C			
	Backfill Type I – Soil, Class I & II		DOT-408	30 lbs.		One per major soil Type	Before Compacting	
Percent Clay GDT-4								
Volume Change GDT-6								
Density GDT-7 or GDT-67								
Classification Section 810								
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
	Type II – Backfill Aggregate	Gradation T27	DOT-658	45 lbs.	One per 20, 000 tons.	As required by Project Engineer		
	Type III – Soil/Organic	Density GDT-7	DOT-408		Notify Central Lab			
		Condition of Mixture						
	Bituminous Plastic Cement	Specification Requirements		1 qt.	QPL-21 <u>or</u> sample representing each Lot of shipment		Stock	
	Pre-Coated Galvanized Steel Culverts	Diameter M245M	Certification		Certified Mill Test Report			
		Depth & Spacing of Corrugations M245M						
		Thickness M245M						

		Galvanize M218M						
		Coating Thickness M245M						
		Arch Dimensions M245M						
	Galvanized Repair Compound	Certification	Certification	1 qt.	Approved by Office of Materials			
	Gaskets	Certification	Certification		QPL-21 & Certified Mill Test Report			
Post Installation Inspection								
	All Pipe	GDT 136	Certified Test Report		Certified Test Report meeting requirements of Section 550 and GDT 136			
555								
TUNNEL LINER	Liner Plates	Size As Specified	Certification		Certified Mill Test Report			
		Thickness As Specified						
		Sectional Modulus as Specified						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
		Bend Test ASTM A569						
		Galvanization M167M						
					GUIDE FREQUENCY			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
	Grout Ingredients	As Specified			Enough to insure consistency & quality			
	Bricks	Size	Certification	10 Bricks	One set per 50,000 bricks, per Source			
Absorption T32								
Compressive Strength T32								
560								
STRUCTURAL PLATE PIPE, PIPEARCH & ARCH CULVERTS	Backfill Type I – Class I & II Soils	Gradation GDT-4	DOT-408			One per major soil Type		
		Percent Clay GDT-4						
		Volume Change GDT-6						
		Density GDT-7 or GDT-67						
		Classification Section 810						
	Type II – Backfill	Gradation T27	DOT-658		One per 20, 000 tons.	As required by Project Engineer		

	Aggregate	Density GDT-7	DOT-408		Notify Central Lab			
	Type III – Soil/Organic	Condition of Mixture						
	Steel Structural Plate for Pipe, Pipe-Arches, & Arches	Diameter M167M	Certification		QPL-56			
		Depth & Spacing of Corrugations M167M						
		Thickness M167M						
		Chemical M167M						
		Yield strength T244						
		Tensile Strength T244						
		Elongation T244						
		Galvanization M167M						
	Galvanized Repair Compound	Certification	Certification	1 qt.	Approved by Office of Materials			
	Corrugated Aluminum Alloy Structural Plate for Pipe, Pipe Arches & Arches	Diameter M219M	Certification		QPL-56			
		Depth & Spacing of Corrugations M219M						
		Thickness M219M						
		Arch Dimensions M219M						
Chemical ASTM B209								
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY ACCEPTANCE QUALITY ASSURANCE		LOCATION OR TIME OF SAMPLING	REMARKS
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
561								
RENOVATING PIPE (Helically Corrugated)	Corrugated Steel Pipe	Diameter M36M	DOT-291		QPL-56 w/ CMPT inspection tag			
		Depth & Spacing of Corrugations M36M						
		Thickness M36M						
		Galvanization M218M						
	Portland Cement	Air Content T137	DOT-175					
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						

		Chemical M85						
	Blended Hydraulic Cement	Air Content T137 Fineness M240 Autoclave M240 Compressive Strength M240 Vicat T131 Chemical M240	DOT-175		QPL-3			
	Mineral Filler		Certification		QPL-81			
	Fine Aggregate	Gradation T27 Sand Equivalent GDT-63	DOT-658		One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
	Fly Ash	Fineness M295 Activity M295 Soundness M295 Density M295 Chemical M295	DOT-175		QPL-30	One per Quarter, per Source, per District		
	Water	Quality of Water to be Used in Concrete T26	DOT-088	1 qt.	One per unpotable Source, per month		Enough in advance so that results are known before use	
	Grout Mixture	Slump GDT-84			One per day or enough to control work			
	Smooth Lined Corrugated Polyethylene	Diameter M294M Depth & Spacing of Perforations M294M	OMR-INSP-89		QPL-51 w/PPT stamp or sticker.			
					GUIDE FREQUENCY			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
	Culvert Pipe	Thickness M294M Stiffness M294M Flattening M294M Cracking M294M Brittleness M294M Fittings M294M						
570								

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	Fly Ash	Chemical M240	DOT-175		QPL-30			
		Fineness M295						
		Activity M295						
		Soundness M295						
		Density M295						
	Chemical M295							
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 500 tons based upon QPL-	QPL-1 Sources, 1 per month, per active plant,		
		Wash 200 T11			1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
		Sand Equivalent GDT-63						
	Coarse Aggregate	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
		Gradation T27						
	Steel Wire for Reinforcement	Size M32M	Certification	1 pc @ 24" per size/dia.	Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
		Diameter M32M						
		Area M32M						
		Tensile Strength T244						
		Yield Strength T244						
		Area Reduction T244						
	Bend Test M32M							
	Welded Steel Wire Fabric for Reinforcement	Size M55M	Certification	2' X 2'	QPL-55 w/Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
		Diameter M55M						
		Area M55M						
Tensile Strength T244								
Yield Strength T244								
Area Reduction T244								
Bend Test M55M								
			REPORT SM		GUIDE FREQUENCY			

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
		Weld Shear Strength <i>M55M</i>						
		Width <i>M55M</i>						
		Length <i>M55M</i>						
		Spacing <i>M55M</i>						
	Cylinders	Compressive Strength <i>T22</i>	Certification	3 ea.				
	Non- Reinforced Physical Properties of Pipe	Concrete Pipe Diameter <i>M86</i>	DOT-164		QPL-4 with CPT Stamp or pre-inspected by Office of Materials with GDT Stamp			
		Thickness <i>M86</i>						
		Absorption <i>M86</i>						
		Permeability <i>M86</i>						
		External Load Strength <i>T280</i>	OMR-INSP86					
	Portland Cement	Air Content <i>T137</i>	DOT-175		QPL-3			
		Fineness <i>M85</i>						
		Autoclave <i>M85</i>						
		Compressive Strength <i>M85</i>						
		Vicat <i>T131</i>						
		Chemical <i>M85</i>						
	Blended Hydraulic Cement	Air Content <i>T137</i>	DOT-175		QPL-3			
		Fineness <i>M240</i>						
		Autoclave <i>M240</i>						
		Compressive Strength <i>M240</i>						
		Vicat <i>T131</i>						
		Chemical <i>M240</i>						
	Fly Ash	Fineness <i>M295</i>	DOT-175		QPL-30			
		Activity <i>M295</i>						
		Soundness <i>M295</i>						
		Density <i>M295</i>						
		Chemical <i>M295</i>						
	Fine Aggregate	Gradation <i>T27</i>	DOT-658	20 lbs.	One per 500 tons based upon QPL-1,	QPL-1 Sources, 1 per month, per active plant,		
Wash –200 <i>T11</i>								

	Sand Equivalent GDT-63			except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
Coarse	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons	QPL-2 Sources, 1		
Aggregate	Gradation T27			based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
Corrugated Aluminum Alloy Underdrain Pipe	Diameter M196M	DOT-291		QPL-56 w/CMPT inspection tag			
	Depth & Spacing of Corrugations M196M						
	Thickness M197M						
	Arch Dimensions M196M						
	Chemical M197M						
	Tensile Strength T244						
	Yield Strength T244						
Corrugated Steel Underdrain Pipe	Elongation T244	DOT-291		QPL-56 w/CMPT inspection tag			
	Diameter M36M						
	Depth & Spacing of Corrugations M36M						
	Thickness M36M						
Corrugated Polyethylene Underdrain Pipe	Galvanization M218M	OMR-INSP-89		QPL-51			
	Diameter M252M						
	Depth & Spacing of Corrugations M252M						
	Thickness M252M						
	Stiffness ASTM D2412						
	Flattening M252M						
	Elongation M252M						
	Brittleness M252M						
	Flexibility M252M						

		Couplings M252M						
		Strength M252M						
	Smooth Lined Corrugated Polyethylene Culvert Pipe	Diameter M294M	OMR-INSP89		QPL-51 w/PPT stamp or sticker			
		Depth & Spacing of Perforations M294M						
		Thickness M294M						
		Stiffness M294M						
		Flattening M294M						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
		Cracking M294M						
		Brittleness M294M						
		Fittings M294M						
574								
EDGE DRAINS	Corrugated Aluminum Alloy Slope Drain Pipe	Diameter M196M	DOT-291		QPL-56 w/CMPT inspection tag			
		Depth & Spacing of Corrugations M196M						
		Thickness M197M						
		Arch Dimensions M196M						
		Chemical M197M						
		Tensile Strength T244						
		Yield Strength T244						
		Elongation T244						
	Reinforce Concrete Pipe				QPL-4 with CPT Stamp or pre-inspected by Office of Materials with GDT Stamp			
	Physical	Diameter M170						
	Properties of Pipe	Thickness M170	DOT-164					
		Reinforcement Design M170						
		External Load Strength T280	OMR-INSP86					
Portland Cement	Air Content T137	DOT-175		QPL-3				
	Fineness M85							
	Autoclave M85							
	Compressive Strength M85							

		Vicat T131						
		Chemical M85						
	Blended Hydraulic Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M240						
		Autoclave M240						
		Compressive Strength M240						
		Vicat T131						
		Chemical M240						
	Fly Ash	Fineness M295	DOT-175		QPL-30			
		Activity M295						
		Soundness M295						
		Density M295						
		Chemical M295						
	Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
		Wash 200 T11						
		Sand Equivalent GDT-63						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Coarse Aggregate	Wash 200 T11	DOT-658 Ga658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
		Gradation T27						
	Steel Wire for Reinforcement	Size M32M	Certification	1 pc @ 24" per size/dia.	Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
		Diameter M32M						
		Area M32M						
		Tensile Strength T244						
		Yield Strength T244						
		Area Reduction T244						

	Welded Steel Wire Fabric for Reinforcement	Bend Test M32M	Certification	2' X 2'	QPL-55 w/Certified Mill Test Report	Random sampling	Jobsite storage and/or producer stock	
		Size M55M						
		Diameter M55M						
		Area M55M						
		Tensile Strength T244						
		Yield Strength T244						
		Area Reduction T244						
		Bend Test M55M						
		Weld Shear Strength M55M						
		Width M55M						
		Length M55M						
		Spacing M55M						
	Cylinders	Compressive Strength T22	Certification	3 ea.				
	Non-Reinforced Physical Properties of Pipe	Concrete Pipe Diameter M86	DOT-164		QPL-4 with CPT Stamp or pre-inspected by Office of Materials with GDT Stamp			
		Thickness M86	OMR-INSP86					
		Absorption M86						
		Permeability M86						
		External Load Strength T280						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Portland Cement	Air Content T137	DOT-175		QPL-3			
		Fineness M85						
		Autoclave M85						
		Compressive Strength M85						
		Vicat T131						
		Chemical M85						
	Blended Hydraulic	Air Content T137	DOT-175		QPL-3			
		Fineness M240						

Cement	Autoclave M240					
	Compressive Strength M240					
	Vicat T131					
	Chemical M240					
Fly Ash	Fineness M295	DOT-175		QPL-30		
	Activity M295					
	Soundness M295					
	Density M295					
	Chemical M295					
Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.	
	Wash –200 T11					
	Sand Equivalent GDT-63					
Coarse Aggregate	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per month, per active plant, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.	
	Gradation T27					
Fine Aggregate	Gradation T27	DOT-658	20 lbs.	One per 1,500 tons based upon QPL-1, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-1 Sources, 1 per 20,000 tons, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.	
	Sand Equivalent GDT-63 Minus No. 200 T11					
Coarse	Wash 200 T11	DOT-658	45 lbs.	One per 1,500 tons	QPL-2 Sources, 1	

Aggregate	Gradation T27			based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	per 20,000 tons, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.		
Fly Ash	Fineness M295	DOT-175		QPL-30			
	Activity M295						
	Soundness M295						
	Density M295						
	Chemical M295						
Portland Cement	Air Content T137	DOT-175		QPL-3			
	Fineness M85						
	Autoclave M85						
	Compressive Strength M85						
	Vicat T131						
Blended Hydraulic Cement	Chemical M85	DOT-175		QPL-3			
	Air Content T137						
	Fineness M240						
	Autoclave M240						
	Compressive Strength M240						
Corrugated Polyethylene Underdrain Pipe	Vicat T131	OMR-INSP-89		QPL-51			
	Chemical M240						
	Diameter M252M						
	Depth & Spacing of Corrugations M252M						
	Thickness M252M						
	Stiffness ASTM D2412						
	Flattening M252M						
	Elongation M252M						
	Brittleness M252M						
	Flexibility M252M						
Drainage Aggregate	Couplings M252M	DOT-658		1 per 20, 000 tons			
	Strength M252M						
	Gradation T27						
	Target Density GDT-59	DOT-553	Average of 5 tests	One per Source		Completed Course	

				from 100 ft control strip				
		Compaction GDT-59			One per mile			
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & <i>Number</i>	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Hot Mix Asphaltic Concrete	Compaction GDT-59	DOT-553		One per mile		Completed Course	
	Asphalt Cement	Dynamic Shear TP-315		Two 1- quart cans	QPL-7	As per GSP-21	Storage Tank	
	Coarse Aggregate for Asphaltic Concrete	Wash 200 T11	DOT-658	45 lbs.	QPL-2	As necessary	Stockpile	
		Gradation T27						
	Fine Aggregate for Asphaltic Concrete	Gradation T11 & T27	DOT-658	20 lbs.	QPL-1	As necessary	Stockpile	
		Clay Lumps T112						
		Sand Equivalent GDT-63						
		Mica Content ASTM C 295						
	Mineral Filler	Gradation T11 & T27	DOT-168	10 lbs.	QPL-81	One per 500 tons, per Type, per Source	Silo	
	Hydrated Lime	Physical & Chemical Analysis M216-84	Certification	1 gallon.*	QPL-41	One per Quarter	Silo or Tanker	*Air-tight container As required by SOP- 17
		Gradation T219						
		Chemical T219						
	Complete Mixture	Asphalt Binder Content: GDT-125, GDT-38, or T- 308	DOT 159	Varies Per Mix Type	Asphalt Producer will test 1 per 500 tons	GDOT will test two QA samples per 5 days production or 5 lots. 1 comparison sample per 10 days production.	Truck or Roadway	
		Stripping Test: GDT-59	DOT 159	300g	One per extraction		Same as extraction	For OGFC and PEM mixes only.
		Compaction: GDT-39, or GDT-56	DOT 150	Core	Five per lot*		In-place after compaction	Quantities less than 500 tons will be tested at 1 per 100 tons. *Each test consists of 3 readings when Nuclear Gauge is used to determine density.
	Bituminous Tack Coat Asphalt Cement	Dynamic Shear: T-315		Two 1- quart cans	Once per week per distributor		Distributor	

	Plastic Filter Fabric - Non-Woven	Puncture Resistance ASTM D4833	Certification		QPL-28			
		Grab Tensile Strength ASTM D4632						
		Grab Elongation ASTM D4632						
		Flow Rate GDT-87						
576								
SLOPE DRAIN			DOT-291		QPL-56 w/CMPT inspection tag			
				DOT-291		QPL-56 w/CMPT inspection tag		
			OMR-INSP-89		QPL-51 w/ PPT stamp or sticker			
		OMR-INSP-		QPL-51 w/ PPT stamp or sticker				

	Chloride (PVC) Profile Wall Drain Pipe	Depth & Spacing of Corrugation M304 Thickness M304 Stiffness M304 Flattening M304 Elongation M304 Brittleness M304 Flexibility M304 Couplings M304 Strength M304	89					
577								
METAL DRAIN INLETS	Asphaltic Concrete Asphalt Cement	Dynamic Shear T-315	DOT-504	two 1- quart cans	QPL-7	As per GSP-21	Storage Tank	
	Coarse Aggregate for Asphaltic Concrete	Wash 200 T11	DOT-658	45 lbs.	QPL-2	As necessary	Stockpile	
		Gradation T27						
	Fine Aggregate for Asphaltic Concrete	Gradation T11 & T27	DOT-658	20 lbs.	QPL-1	As necessary	Stockpile	
		Clay Lumps T1121						
		Sand Equivalent GDT-63						
		Mica Content						
TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Mineral Filler	Gradation T11 & T27	DOT-168 Certification	10 lbs.	QPL-81	One per 500 tons, per Type, per Source	Silo	
	In-Place Material	Thickness Measurement GDT42	DOT-176		One per 1,000 ft, per 2 lanes	Observe 1 per 3 miles, per 2 lanes	Completed Course	
	Hydrated Lime	Physical & Chemical Analysis M216-84	Certification	1 gallon*	QPL-41	One per Quarter	Silo or Tanker	*Airtight container
		Gradation T219						As required by SOP- 17
		Chemical T219						
	Complete Mixture	Asphalt Binder Content: GDT-125, GDT-38, or T- 308	DOT-159	Varies per Mix Type	Asphalt producer will test 1 per 500 tons	GDOT will test two QA samples per 5 days production or 5 lots. 1 comparison sample per 10 days production.	Truck or Roadway	AASHTO T308 (Method A)

	Stripping Test GDT-56		300 g	One per Extraction (Open-Graded Mixes only)		Same as Extraction	For OGFC and PEM mixes only.
	Compaction GDT-39, or GDT-59	DOT-150	Core	Five per Lot*		After Compaction	Quantities less than 500 tons will be tested at 1 per 100 tons. *Each test consists of 3 readings when Nuclear Gauge is used to determine Density.
Concrete Fly Ash	Fineness M295	DOT-175		QPL-30			
	Activity M295						
	Soundness M295						
	Density M295						
	Chemical M295						
Portland Cement	Air Content T137	DOT-175		QPL-3			
	Fineness M85						
	Autoclave M85						
	Compressive Strength M85						
	Vicat T131						
Portland Pozzolan Cement	Chemical M85	DOT-175		QPL-3			
	Air Content T137						
	Fineness M240						
	Autoclave M240						
	Compressive Strength M240						
Sand-Cement Bag Rip Rap	Vicat T131	Certification	45 lbs.	Laboratory Mix Design			
	Chemical M240						
	Compressive Strength T22						
Slope DrainPipe Corrugated Aluminum Alloy Pipe	Moisture Content T134	DOT-291		QPL-56 w/ CMPT inspection tag			
	Bag Material & Size						
	Diameter M196M						
	Depth & Spacing of Corrugations M196M						
	Thickness M197M						

	Arch Dimensions M196M						
	Chemical M197M						
	Tensile Strength T244						
	Yield Strength T244						
	Elongation T244						
Corrugated Steel Pipe	Diameter M26M	DOT-291		QPL-56 w/ CMPT inspection tag			
	Depth & Spacing of Corrugations M36M						
	Thickness M36M						
	Galvanization M218M						
Smooth Lined Corrugated Polyethylene Pipe	Diameter M294M	OMR-INSP-89		QPL-51 w/ PPT stamp or sticker			
	Depth & Spacing of Perforations M294M						
	Thickness M294M						
	Stiffness M294M						
	Flattening M294M						
	Cracking M294M						
	Brittleness M294M						
	Fittings M294M						
Asphaltic Concrete Curb							
When placed in conjunction with the Pay Item in Section 400, and ingredients are sampled under that Item, no additional samples of AC, CA, FA, or Mineral Filler required.							
Tack Coat	Dynamic Shear: <i>T-315</i>		two 1-quart cans	One per week per distributor.	One per Project	distributor	
Asphalt Cement	Dynamic Shear <i>T-315</i>		Two 1-quart cans	Once per week	One per Project	storage tank	
Mineral Filler	Gradation T11 & T27	Certification	10 lbs.	QPL-81	One per 1,000 tons, per Type, per Source	Stock	
Completed Mix	Asphalt Binder Content: <i>GDT-125, GDT-38, or T-308</i>	Dot-159	varies per mix type	Asphalt producer will test 1 per 500 tons	GDOT will test two QA samples per 5 days production or 5 lots. 1 comparison per 10 days	Truck or Roadway	*Job Mix Formula may not be required.
Fine Aggregate	Gradation T27	DOT-658		QPL-2	As necessary		
	Wash 200 T11						
	Sand Equivalent GDT-63						
Coarse Aggregate	Wash 200 T11	DOT-658		QPL-2	As necessary		
	Gradation T27						

