

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS	
					ACCEPTANCE	QUALITY ASSURANCE			
163									
MISCELLANEOUS EROSION CONTROL	Lumber & Timber				Visual Inspection by Project Engineer				
	Concrete	Compression Strength GDT-35 & T22	DOT-319	2 cylinders	See NOTE 1		During pouring	Cylinders to be broken in Branch or Central Lab	
	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								
	Slump GDT-27*	DOT-168	See NOTE 2	When cylinders are made		Placement site	*Additional Slump test will be required when Water is added on Project		
	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.								
	Bituminous Treated Roving	Weight	DOT-168		QPL-24				
		Certification							
	Bituminous Material	Viscosity T59		1 gal.	QPL-7		Before application		
Erosion Control Mats									
Straw	Width								
	Weight	DOT-168		QPL-62					
	Thickness								
	Mesh Size								
	Stitch Pattern								
Excelsior	Width								
	Weight	DOT-168		QPL-62					
	Thickness								
	Mesh Size								
	Stitch Pattern								
Coconut Fiber	Width								
	Weight	DOT-168		QPL-62					
	Thickness								
	Mesh Size								
	Stitch Pattern								
Wood Fiber	Width	DOT-168		QPL-62					

	Weight					
	Mesh Size					
Jute Mesh	Width	DOT-168	Contractor Certification & Visual Inspection			
	Weight					
	Thread Count					

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
	Silt Fence Wood Post	Spacing	DOT-168			One section per Project		
		Length						
		Area						
	Steel Post	Spacing	DOT-168			One section per Project		
		Shape						
		Weight						
	Woven Wire	Height	DOT-168			One section per Project		
		Vertical & Horizontal Spacing						
		Diameter						
		Number of Wires						
	Fasteners	Dimensions	DOT-168			One per Project		
		Spacing						
	Silt Fence Fabric	Tensile Strength ASTM D4632	DOT-168		QPL-36	One per Project		
		Elongation ASTM D4632						
		AOS ASTM D4751						
		Flowrate GDT-87						
		Bursting Strength ASTM D3786						
Width								
C-System	Condition of Fabric	DOT-168		QPL-36	One per Project			
	Physical Properties							
171								
TEMPORARY SILT FENCE	Wood Post	Spacing	DOT-168		Visual Inspection	One per Project		
		Length						
		Area						
	Steel Post	Spacing	DOT-168		Visual Inspection	One per Project		

Woven Wire	Shape					
	Weight					
	Galvanization ASTM A123					
	Height	DOT-168	Visual Inspection	One per Project		
	Vertical & Horizontal Spacing					
	Diameter					
	Number of Wires					
Galvanization ASTM A123						
Fasteners	Dimensions	DOT-168	Visual Inspection	One per Project		
	Spacing					
Silt Fence Fabric	Tensile Strength ASTM D4632	DOT-168	QPL-36	One per Project		

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS	
					ACCEPTANCE	QUALITY ASSURANCE			
		Elongation ASTM D4632							
		AOS ASTM D4751							
		Flowrate GDT-87							
		Bursting Strength ASTM D3786							
		Width							
		Condition of Fabric							
	C-System	Physical Properties	DOT-168		QPL-36	One per Project			
205									
ROADWAY EXCAVATION	Embankments (to within 1 ft of top)	Theoretical Density GDT-7 or GDT-67	DOT-408 /DOT-97	30 lbs.	One per major soil Type		Roadway (before Compacting)	Volume Change tests may be omitted on acceptance 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	DOT-553		One per 5,000 yd ³	Completed Lift				
	Rock	Gradation Visual	DOT-658		QPL-2				Requires approval by Pit & Quarry if not from QPL-2 Source
		Abrasion T96							
Soundness T104									

		Petrographic Analysis <i>ASTM C295</i>						
	Pond Sand	Gradation <i>T27</i>	DOT-408 / DOT-97					Requires approval by Pit & Quarry
		Volume Change <i>GDT-6</i>						
		Density <i>GDT-7 or GDT-67</i>						

206

BORROW EXCAVATION	Soil	Gradation <i>GDT-4</i>	DOT-408 / DOT-97		Class II, B-3 or better unless otherwise stated in the plans or the Contract			
		Percent Clay <i>GDT-4</i>						
		Volume Change <i>GDT-6</i>						
		Density <i>GDT-7 or GDT-67</i>						
		Classification <i>Section 810</i>						

207

EXCAVATION & BACKFILL FOR MINOR STRUCTURES	Type I – Class I & II Soils	Gradation <i>GDT-4</i>	DOT-408 / DOT-97	30 lbs.		One per major soil Type	Before Compacting	Volume Change tests may be omitted on acceptance samples, except the first sample & each fifth sample thereafter, which shall be
		Percent Clay <i>GDT-4</i>						
		Theoretical Density <i>GDT-7 or GDT-67</i>						

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
		Volume Change <i>GDT-6</i>						submitted to the Branch or Central Lab for testing, unless provisions are made for testing on the Project.
		In-Place Density <i>GDT-20, GDT21, GDT-59</i>	DOT-553			One per 2800 cubic feet or one per 500 yd3	Completed Course	
	Type II – Backfill Aggregate	Gradation <i>T27</i>	DOT-658	45 lbs.	One per 500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	As required by Project Engineer		
	Type III – Soil/Organic				Notify Central Lab			

208

EMBANKMENT	Embankments (to within 1 ft of top)	Theoretical Density GDT-7 or GDT-67	DOT-408 / DOT-97	30 lbs.	One per major soil Type		Roadway (before Compacting)	Volume Change tests may be omitted on acceptance 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	DOT-553		One per 5,000 yd ³		Completed Lift				
	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								
	Pond Sand	Gradation T27	DOT-408 / DOT-97							Requires approval by Pit & Quarry
Volume Change GDT-6										
Density GDT-7 or GDT-67										

209

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
SUBGRADE & SUBGRADE STABILIZATION	Subgrade (See NOTE)	Theoretical Density GDT-7 or GDT-67	DOT-408 DOT-495 DOT-97	35 lbs.	One per 1,500 ft, per 2 lanes, per Lift Sidewalks 1 per mile.		Roadway (before Compacting)	Remainder of the material, along with tests results, should be submitted to the Central Lab for soil supports & study
		Gradation GDT-4						
		Volume Change GDT-6						
		Classification Section 810						
NOTE: Sample required on County Projects <i>only</i> if selected materials used <u>or</u> if classification is required to determine that selected material is needed. Required on ALL State & Federal Projects.								

Select Material	Theoretical Density GDT-7 or GDT-67	DOT-408 DOT-97	45 lbs.	One per 1,500 ft, per two lanes, per Lift		Completed Lift	
	Gradation GDT-4						
	Volume Change GDT-6						
	Classification Section 810						
Stabilizer Aggregate – Types I & III	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.	As required by Project Engineer	Stockpile or Roadway	
In-Place Material	In-Place Density GDT-20, GDT21, GDT-59	DOT-553	45 lbs.	One per 1,500 ft, per 2 lanes		Completed Course	
Type II – Aggregate	Gradation T27	DOT-658	45 lbs.	One per 500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	As required by Project Engineer	Stockpile or Roadway	
	Sand Equivalent GDT-63						
Soil	Gradation GDT-4	DOT-408 / DOT-97		Class II, B-3 or better unless stated otherwise in plans or Contract. Check section 209 and 810.0.01.A.1			
	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
					ACCEPTANCE	QUALITY ASSURANCE		
	Type IV – Sand	Gradation T27	DOT-658		Notify Central Lab			Requires approval by Pit & Quarry
		Sand Equivalent GDT-63						
211								
EXCAVATION & BACKFILL FOR BRIDGE FOUNDATIONS	Type I – Class I & II Soils	Gradation GDT-4	DOT-408 / DOT-97	30 lbs.	One per 3 structures or 1 per Project		Before Compacting	Volume Change tests may be omitted on acceptance samples, except the first sample & each fifth sample
		Percent Clay GDT-4						
		Volume Change GDT-6						

		Density <i>GDT-7 or GDT-67</i>						thereafter, which shall be submitted to the Branch or Central Lab made for testing on the Project.
		Classification <i>Section 810</i>						
		In-Place Density <i>GDT-20, GDT21, GDT-55 & GDT-59</i>	DOT-553		One per 10 ft of backfill depth, per end bent		Completed Course	
	Type II - Aggregate	Gradation <i>T27</i>	DOT-658	45 lbs.	One per 500 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	As required by Project Engineer	Stockpile	

212

GRANULAR EMBANKMENT	Soil	Gradation <i>GDT-4</i>	DOT-408 / DOT-97		One per major Soil Type, Class I, A-2			
		Percent Clay <i>GDT-4</i>						
		Volume Change <i>GDT-6</i>						
		Density <i>GDT-7 or GDT-67</i>						
		Classification <i>Section 810</i>						
		In-Place Density <i>GDT-20, GDT21, GDT-59</i>	DOT-553		One per 5,000 yd ³			

216

UNPAVED SHOULDERS	Select Material & Impervious Material	Theoretical Density <i>GDT-7, GDT-24, GDT-48, GDT-49 & GDT-67</i>	DOT-408 / DOT-97	30 lbs.	One per mile, per shoulder		In-Place Material (before Compacting)	Volume Change tests may be omitted on acceptance samples, except the first sample & each fifth sample thereafter, which shall be submitted to the Branch or Central Lab made for testing on the Project.
		Gradation <i>GDT-4</i>						
		Volume Change <i>GDT-6</i>						
		Classification <i>Section 810</i>						

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		
		In-Place Density (Ungrassed) <i>GDT-20, GDT-21 or GDT-59</i>	DOT-553		One per mile, per shoulder		Completed Course	Ungrassed shoulders only

	Soil	Gradation GDT-4	DOT-408 / DOT-97		Class II, B-3 or better unless stated otherwise in plans or Contract. Check section 209 and 810.0.01.A.1			
		Percent Clay GDT-4						
		Volume Change GDT-6						
		Density GDT-7 or GDT-67						
		Classification Section 810						

218

BLANKET FOR FILL SLOPES	Plant Topsoil	Gradation GDT-4	DOT-658 DOT-408 DOT-97	30 lbs.	Approved by Office of Materials & Research	One sample per proposed Source		
		Organic Content						
		Classification Section 810						

219

CRUSHED AGGREGATE SUBGRADE	Graded Aggregate	GDT-49	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 20,000 tons, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Sources.	Roadway	
		Gradation T27						
		Sand Equivalent GDT-63						
	In-Place Material	Thickness Measurement GDT42	DOT-176			One per 1,500 ft, per 2 lanes		Completed Course
		In-Place Density GDT-21 or GDT-59	DOT-553					
		Bituminous Prime			QPL-7			

221

SPECIAL SUBGRADE COMPACTION & TEST ROLLING	Subgrade & Subgrade Stabilization		DOT-408 / DOT-97	35 lbs.	One per 1,500 ft, per 2 lanes, per Lift		Roadway (before Compacting)	Remainder of the material, along with tests results, should be submitted to the Central Lab for soil supports & study
	Subgrade (See NOTE)	Theoretical Density GDT-7 or GDT-67						
	Gradation GDT-4							
		Volume Change GDT-6						

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	Report	SIZE OF SAMPLE	ACCEPTANCE	QUALITY ASSURANCE	LOCATION OR TIME OF SAMPLING	REMARKS
		Classification Section 810						
NOTE: Sample required on County Projects <i>only</i> if selected materials used <u>or</u> if classification is required to determine that selected material is needed. Required on ALL State & Federal Projects.								
Select Material		Theoretical Density GDT-7 or GDT-67	DOT-408 / DOT-97	45 lbs.	One per 1,500 ft, per two lanes, per Lift		Completed Lift	
		Gradation GDT-4						
		Volume Change GDT-6						
		Classification Section 810						
Stabilizer Aggregate – Types I & III		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.	As required by Project Engineer	Stockpile or Roadway	
In-Place Material		In-Place Density GDT-20, GDT21, GDT-55 & GDT-59	DOT-553	45 lbs.	One per 1,500 ft, per 2 lanes		Completed Course	
Type II – Aggregate		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.	As required by Project Engineer	Stockpile or Roadway	
		Sand Equivalent GDT-63						
Soil		Gradation GDT-4	DOT-408 / DOT-97		Class II, B-3 or better unless stated otherwise in plans or Contract. Check section 209 and 810.0.01.A.1			
		Percent Clay GDT-4						
		Volume Change GDT-6						
		Density GDT-7 or GDT-67						
		Classification Section 810						
Type IV – Sand		Gradation T27	DOT-658		Notify Central Lab			Requires approval by Pit & Quarry
		Sand Equivalent GDT-63						

222

TYPE CONSTRUCTION	MATERIAL	TEST PROCEDURES Name & Number	REPORT SM Report	SIZE OF SAMPLE	GUIDE FREQUENCY		LOCATION OR TIME OF SAMPLING	REMARKS
					ACCEPTANCE	QUALITY ASSURANCE		

AGGREGATE DRAINAGE COURSES	All Types of Aggregate for Drainage	Gradation T27	DOT-658	45 lbs.	One per 1,000 tons based upon QPL-2, except for Section D, Stockpile Basis Sources; material from Section D must be sampled.	QPL-2 Sources, 1 per 20,000 tons, except for Section D, Stockpile Basis Sources; GDOT will perform acceptance tests on materials delivered from Section D Source.	Roadway	
		Thickness Measurement GDT42	DOT-176		One per 1,500 ft, per 2 lanes		Completed Course	When required

225

SOIL LIME CONSTRUCTION	Soil	Gradation GDT-4	DOT-408 / DOT-97	30 lbs.	Plant Mix Base: 1 per 1,000 yd ³ Road Mix Base: 1 per 2,000 ft Non-Base: 1 per Soil Type		Before Lime is added	
		Percent Clay GDT-4						
		Volume Change GDT-6						
		Density GDT-7 or GDT-67						
		CBR T193						
	Hydrated Lime	Physical & Chemical Analysis M216-84	Misc. DOT 168	1 qt.*	QPL-41	One per 2,000 tons, per Source	Stock	*air-tight container
	Water	Physical & Chemical Analysis T26	DOT- 088	1 qt.*	One per unpotable Source		Enough in advance so that results are known before use	*non-metal container
	In-Place Material	Theoretical Density GDT-19 (Lime in lieu of Cement)	DOT-553	30 lbs.	One per Soil Type <u>or</u> 1 per compaction*		In-Place Material (before Compacting)	*Check if GDT-67 is used
		In-Place Density GDT-20, GDT21 or GDT-59						
		Thickness Measurement GDT42						