

SCHEDULE OF LABORATORY SERVICES

Effective September 15, 2010

	AASHTO	ASTM
SOILS		
▶ Moisture Density Curve < 3/4 " material	T 99	D 698
▶ Moisture Density Curve > 3/4 " material	T 99	D 698
▶ Moisture Density Curve < 3/4 " material	T 180	D 1557
▶ Moisture Density Curve > 3/4 " material	T 180	D 1557
▶ Moisture Density of Soil-Cement Mixtures	T 134	D 558
 In-Place Densities		
▶ Nuclear	T 310	D 6938*
Balloon	T 205	D 2167
▶ Sand Cone	T 191	D 1556
 Soil Constants		
▶ Liquid Limit & Plasticity Index	T 89 & T 90	D 4318
▶ Liquid Limit & Plasticity Index, Linear & Volumetric Shrinkage	T 89, T 90 T 92	D 4318 D 427
▶ Unconfined Compressive Strength of Cohesive Soils	T 208	D 2166
▶ Dry Prep for Particle Size Analysis	T 87	D 421
Particle Size Analysis of Soils	T 88	D 422
▶ Amount of Material in Soils Finer than 200	T 146	D 1140
California Bearing Ratio	T 193	D 1883
California Bearing Ratio Moisture Density not Required	T 193	D 1883
Permeability of Soils	T 215	D 2434 D 5084

- ▶ Indicates AASHTO/AMRL Certified
*Formerly D 2922/D3017



AGGREGATES

	AASHTO	ASTM
▶ Sieve Analysis - 1/2" Max.	T 11, T 27	C 117 C 136
▶ Sieve Analysis - 1/2" with Classification	M 145	D 3282 D 2487
▶ Sieve Analysis - 3/4" & Larger	T 11, T 27	C 117 C 136
▶ Sieve Analysis - 3/4" & Larger with Classification	M 145	D 3282 D 2487
▶ Amount of Material Finer than 75 μm Coarse Aggregate	T 11	C 117
▶ Amount of Material Finer than 75 μm Fine Aggregate	T 11	C 117
▶ Sieve Analysis for Mineral Filler Sampling	T 37	D 546
▶ Specific Gravity & Absorption	T 84, T85	C 127 C 128
▶ Moisture Content	T 255, T 265	C 566 D 2216
▶ Bulk Density/Unit Weight of Voids in Aggregate	T 19	C 29
▶ Organic Impurities	T 21	C 40
▶ Lightweight Pieces in Aggregate	T 113	C 123
▶ Clay Lumps & Friable Particles	T 112	C 142
▶ Flat or Elongated Particles		D 4791
▶ Fractured Faces	NMDOT FF - 1	D 5821
▶ Los Angeles Abrasion (Small-Sized Coarse Aggregate)	T 96	C 131
▶ Los Angeles Abrasion (Large-Sized Coarse Aggregate) Crushing	T 96	C 535

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AGGREGATES (cont'd)

	AASHTO	ASTM
▶ Sulfate Soundness (5 cycles)	T 104	C 88
▶ Sulfate Soundness (5 cycles) Caliche Additional cycles	T 104	C 88
▶ Sand Equivalent	T 176	D 2419
▶ Uncompacted Void Content	T 304	C 1252

CONCRETE

Mix Designs*

*Mix Designs **do not** include aggregate confirmation testing or confirmation beams.

Trial Batch ea.		ACI 211.1
NMDOT Concrete Design	NMDOT	
Retype of Concrete Mix Design (Design must be less than 1 year old)		
Length Change of Hardened Concrete - 28 Day Duration	T 160	C 157 C 490
Mortar Design		C 270
Grout Design		C 476

	AASHTO	ASTM
CONCRETE (cont'd)		
Concrete Cylinders**		
<i>**We furnish all molds.</i>		
▶ Making, Curing, & Testing	T 141, T 22, T 23, T 231	C 172, C 31, C 39, C 617
▶ Cure & Test Cylinders, delivery to Lab	T 231, T 22	C 617, C 39
▶ Cutting Concrete Cylinders	T 231, T 22	C 617, C 39
▶ Air Test (taken with cylinders)	T 152	C 231
▶ Air Test (taken with cylinders)	T 196	C 173
▶ Slump Test (taken with cylinders)	T 119	C 143
▶ Unit Weight (taken with cylinders)	T 121	C 138
▶ Air, Slump, Unit Weight	T 141, T 152, T 196, T 119, T 121	C 172, C 231, C 173, C 143, C 138, C 1064

"Hold" cylinders will be charged at regular rates.

MORTAR

Making, Curing, & Testing	C 109
Curing, & Testing	C 109

GROUT

Making, Curing & Testing	C 1019, C 617, C 39
Curing & Testing	C 617, C 39

CONCRETE BEAMS

	AASHTO	ASTM
Making, Curing & Testing	T 23, T 97	C 31, C 78
Curing & Testing	T 98	C 79
▶ Air Test (taken with beams)	T 152	C 231
▶ Slump Test	T 119	C 143
▶ Unit Weight	T 121	C 138

ASPHALT

NOTE: Designs **do not** include aggregate confirmation testing.

Maximum of 5 material sizes excluding asphalt.
Additional material will be charged at a rate of:

Marshall Design		MS-2
Marshall Design Including Retained Stability	NMDOT	
Superpave Design Including Retained Stability		MS-2
NMDOT Superpave Design Includes Retained Stability & Aggregate Testing	NMDOT	
Compressive Strength	T 167	D 1074
Effect of Moisture (TSR)	T 283	D 4867
Effect of Water on Compressive Strength	T 165	D 1075
Both Compressive & Effect of Water	T 165, T 167	D 1074 D 1075
Immersion Compression	COE MIL-STD-620A	
▶ Extraction Gradation Method A	T 164, T 30	D 2172 D 5444
▶ Extraction Gradation Method B	T 164, T 30	D 2172 D 5444

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	AASHTO	ASTM
ASPHALT (cont'd)		
<i>NOTE: Designs do not include aggregate confirmation testing.</i>		
▶ Amount of Mineral Matter in Extract	T 164	D 2172
Moisture or Volatile Distillates	T 110	D 1461
▶ Asphalt Content by Ignition Method	T 308 T 30	D 6307 D 5444
▶ Maximum Specific Gravity	T 209	D 2041
▶ Molding & Testing Marshall Briquettes	T 245	D 1559
▶ Molding & Testing Gyratory Briquettes	T 312	
▶ Bulk Specific Gravity	T 166	D 2726
▶ Bulk Specific Gravity	T 275	D 1188
In-Place Densities		D 2950

CORE DRILLINGS

Concrete Cores	T 24	D 5361, C 42
Asphalt Cores		D 5361
Mortar/Grout Cores	T 24	D 5361, C 42
Geotechnical		
Social Exploration		
Observation Inspection		
Project Management		
Project Quality Control		

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