

Chapter 7 – Schedule of Minimum Requirements for Sampling Materials for Test

This schedule prescribes the minimum requirements for sampling onstruction materials for acceptance testing and should be adhered to unless expressly directed by the contract specifications governing the specific work.

A request for test (MAT-100) for all materials used in construction and maintenance activities must accompany all samples, Certified Test Reports and/or Materials Certificates, and products listed on the Departments' Qualified Porducts List, that are submitted to the Division of Materials Testing.

General Notes:

- 1.) **Elastomeric Bearing Pads:** For Structures with less than fifty pads, one test pad shall be furnished. For structures with more than 50 pads, one extra test pad shall be furnished for each additional 50 pads or portion thereof. If there are two or more types of pads used with a structure, and the total is less than 50, the most prevelant type shall be furnished.
- 2.) **Unsuitable Material:** Material to be inspected by the Engineer when excavation is initiated and periodically thereafter. Samples are to be submitted to the DMT when composition of the material changes as determined by the Engineer.
- 3.) **Illumination:** Materials Certificate and Request for Test, to include catalog number and other pertinent nomenclature needed to identify material as per approved catalog cut.
- 4.) **Precast Concrete Items:**
 - a. Barrier, Pipe, Catch Basins and other drainage items, handholes, light standards, boundary markers, and traffic foundations must be supplied by an approved fabricator. Acceptance shall be based on the certification of each shipment by the fabricator, and inspection by project personnel of each individual unit delivered to the project site. Project personnel are responsible for submitting a MAT-100 listing the cast dates of the units received, together with a copy of the manufacturers FORM MAT-314. "Certification of Precast Concrete Products" (PC-1). Upon receipt of these items, the DMT will generally recommend acceptance of the items.
 - b. For Culverts, project personnel must include piece mark and cast date on MAT-100.
- 5.) **Extensive Testing Period:** (#) Samples so designated require up to 2 weeks of extra time for testing. Samples should be submitted as soon as possible before use. Project personnel should contact the DMT to determine a more acurate test schedule and when results will be available.

- 6.) Reclaimed Waste:** This material is defined as debris from the demolition of buildings, structures, and pavements, residue from incineration, and recycled glass. Acceptable reclaimed waste includes concrete, bituminous concrete, glass, ceramics, brick, pavement subbase and base courses, and clinker from resource-recovery plants.
- i. Metal would be acceptable only when it is contained within large fragments of concrete. Reclaimed waste brought in from beyond the limits of a project must be accompanied by a Materials Certificate and Certified Test Report showing compliance with Article 1.06.07 and the Department of Environmental Protections' remediation standard regulations, unless the source of the material is a Department project and is acceptable to the Engineer. Sampling shall be at 2500 cubic yard intervals. Random assurance samples will be selected and tested to verify compliance with certification program.
- 7.) Reclaimed Miscellaneous Aggregate:** This material is defined as Glass-free and clinker-free reclaimed waste, which has been crushed, graded and blended, as specified with natural crushed stone or gravel. The provisions of paragraph 6 (i) also apply.
- 8.) Reclaimed Concrete Aggregate:** This material is defined as crushed and graded concrete removed from pavements or structures. The provisions of paragraph 6 (i) also apply.
- 9.) Bituminous Concrete Density:** For projects tested by Department personnel that require only one assurance test 1,000 to 39,999 tons a year (900 to 18,000 mtons) , each gauge operator is required to run assurance tests twice a year with DMT personnel. This will provide blanket coverage for all projects that require only one assurance test and will eliminate the need to provide individual assurance testing for these projects. All State owned density gauges are to be calibrated annually at the DMT and whenever the results are suspect.
- 10.) Aggregate Field Samples:** Field sample sizes listed for fine and coarse aggregates or blends may vary from sample size listed. Refer to AASHTO T-2 for exact sample sizes depending on nominal maximum size of aggregate.

Legend for "Sampled By"

- DL – District Laboratory
- CL – Central Laboratory (Rocky Hill)
- PP – Project personnel
- P-D – District Lab personnel upon notification by project
- P-C – Central Lab personnel upon notification by project
- AL – Department's Qualified Products List.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
ANCHORAGES: Precast Cast-in-Place Metal Bridge Rail	PP PP	see remarks see remarks	project project	1/size/shipment 1/shipment		Submit request for test and MAT-314 (PC-1) See Note 4(a) See: CONC. FOR STRUCTURES, CONCRETE PLACEMENT Submit request for test with Materials Certificate.
ANCHORING CEMENT	PP	1/bag	project	each brand		Submit sample and request for test.
BAGGED STONE: (1) Bag (2) Stone	PP PP	see remarks 50 lbs. (25 kg)	project project	1/project 1/project		No testing required/Field personnel must verify compliance to specification. Submit sample and request for test.
BAR-MAT REINFORCEMENT:	PP	1 sy. (1 m ²)	project	1/mile /pvt. (1/2 km/pvmt)		Submit sample and request for test. (See Note 5-3 days)
#BAR REINFORCEMENT: Deformed Uncoated or Epoxy Coated (All sizes)	PP	5 ft. (1.5 m)	project	1/size/ manufacturer/ each 200 tons (180t)		Submit samples & Certified Test Reports for coated bars with request for test. (See Note 5 - 3 days).
BARRICADES: Construction	PP	1/project	project			Submit request for test with a Materials Certificate.
BARRICADE: Warning Lights	PP	1/project	project			Submit request for test with a Materials Certificate.
BARWAYS: Fittings Wood Post Wood Rails	PP PP PP	1/type /project 1/project 1/project	project project project			Submit request for test with a Materials Certificate. Submit request for test with a Materials Certificate. Submit request for test with a Materials Certificate.
BEARING PADS: Laminated Elastomeric Bearing Pads Plain Elastomeric Bearing Pads Prefabricated Bearing Pads Molded Pads (Metal Bridge Rail)	PP PP PP PP	1 pad see remarks see remarks see remarks	project project project project	see Note 1		Submit sample & Certified Test Report with request for test. Submit request for test with a Materials Certificate and Certified Test Report. Submit request for test with a Materials Certificate. Submit request for test with a Materials Certificate.
BEDDING MATERIAL:	PP	25 lbs. (12kg)	project	1/2500 cy (1/1900m ³)		Submit sample and request for test.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
BITUMINIOUS SURFACE TREATMENT: Bituminous Material	PP	2 qts. (2L)	project	1/10,000 gal.(1/38kl)		Submit request for test and Certified Test Report.
Stone – Sand Cover	PP	25 lbs.(12kg)	project	each new source and each 1000 cy.(765m ³)		Submit sample and request for test.
BLOCKS: (Masonry) (for C.B., M.H., D.I., etc.) (Paver Blocks)	*DL	6 each	producer	annually		*Submit request for test unless sample is requested by DMT.
BOLTS: #Anchor	PP	see remarks	project	1/size/heat #/each shipment		Submit request for test, with sample, Certified Test Report and Materials Certificate. (See Note 5-3 days)
High Strength	PP	see remarks	project	see remarks		Submit request for test, with sample, Certified Test Report and Materials Certificate. Notify DMT. for further instructions prior to sampling.
BORROW: Lab. Density test	PP	80 lbs.	project	each soil type/each 50,000 cy. * (38,000m ³)		Submit sample and request for density test. * Density test is for information only not acceptance. If reclaimed see Note 6 for additional requirements.
Field Density test	PP *P-C		project	each soil type/each 5,000 cy. (3800m ³)	* each 50,000 cy (38,000 m ³)	*Assurance test to be witnessed or performed by DMT personnel.
#BRICK: Masonry (for CB, MH & DI)	*DL	6 bricks	producer	annually		*Submit request for test unless sample is requested by DMT.
Clay (for sewer, sidewalk, etc.)	PP	6 bricks	project	6 each/10,000 or less		Submit samples and request for test. (See Note 5 - 2 days).
CASTINGS: (Metal)	PP	2 test bars	project	1/heat or cast date		Submit request for test cast date and/or heat number with sample bars.
CALCIUM CHLORIDE FOR DUST CONTROL	PP	1 qt	project	1/shipment		Submit sample in airtight container and request for test.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
CATCH BASINS, DROP INLETS, MANHOLES: #Brick for CB, MH, or DI	*DL	6 each	producer	annually		*Submit request for test unless sample is requested by DMT.
#Cement – Portland - Bagged	PP	1 bag	project	1/project/ brand/type		Submit samples and request for test. (See Note 5 - 7 days).
Portland – Bulk	CL					See: CEMENT (PORTLAND) - Bulk
Concrete Building Blocks For CB, MH, DI	*DL	6 each	producer	annually		*Submit MAT-100 unless sample is requested by DMT.
Lime, Hydrated (mortar)	PP	1 bag	project	1/project/ each brand/ type		Submit sample and request for test.
Manhole Castings	PP	2 test bars	project	1/heat or cast date		Submit request for test with heat number or cast date with sample bars.
Manhole Steps	PP	see remarks	project	1/ type project		Submit request for test with a Materials Certificate.
Frames & Grates for CB & Drop Inlets	CL			shipment		Inspected by DMT personnel at manufacturer.
Pervious Material Gradation test	PP	80 lbs.	project	gradation test: each new source & each 5000 cy. (3800m ³)		Submit sample and request for test. If reclaimed see Note 7 for additional requirements. See pervious structure backfill for density testing.
CATCH BASINS, DROP INLETS, MANHOLES (cont) Precast Concrete Units	PP		project	1/size/shipment		Submit request for test and MAT-314 (PC-1). (See Note 4(a)).
#Reinforcing Bars: (Bar Reinforcement: Deformed Uncoated or Epoxy Coated) (All sizes).	PP	5 ft. (1.5m)	project	1/size/manufacturer/ each 200 tons(180 t)		Submit sample & Certified Test Report for coated bars and request for test. (See Note 5 – 3 days).
Sand (Mortar/Drain. Struct.)	PP	25 lbs. (12kg)	project	each new source & each 50 cy. (38m ³)		Submit sample and request for test.
#CEMENT: (PORTLAND — BAGGED)	PP	See remarks	project			Project personnel must verify that the cement bag is labeled AASHTO M-85 compliant. Do not submit request for test.
CEMENT: (PORTLAND) — BULK	CL		plant		**	Acceptance based on certification from prequalified sources. **Select & test random samples of cement supplied to verify compliance w/ certification program.
CHAIN:	PP	10 ft. (3 m)	project	1/shipment		Tested in accordance with ASTM A413. Submit sample and request for test.
CHAIN-LINK FENCE: #Fabric	PP	3 lf. (1m)	project	1/each 100 rolls		Submit full-height sample and request for test. (See Note 5 - 2 days).
#Fittings	PP	1 each	project	1/size/project		Submit sample and request for test. (See Note 5 - 2 days).
Gate	PP	1 each	project	1/shipment		Submit request for test with a Materials Certificate.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
CHAIN-LINK FENCE (cont.) #Post, Top Rail Post, Top Rail (AASHTO M181)	PP PP	1 each see remarks	project project	1/type/ project 1/size/ project		Submit sample and request for test. (See Note 5 - 2 days). Submit request for test with a Materials Certificate for 1/ shipment.
#Tension Wire	PP	3 lf. (1 m)	project	1/type/ project		Submit sample and request for test. (See Note 5 - 2 days).
CHEMICAL ANCHORS	AL	see remarks	project	each type		Submit request for test. Refer to approved products list.
COMPACTED GRAVEL FILL: Gradation test	PP	80 lbs. (40 kg)	project	each new source & each 5000 cy. (3800m ³)		Submit sample and request for test. If reclaimed see Note 7 for additional requirements.
Laboratory density test	PP	80 lbs. (40 kg)	project	each new source & each 20,000 cy. (15,000 m ³)		Submit sample and request for test. * density test is for information only - not acceptance. Separate requests required for gradation and Density.
Field Density	PP		project	1 each 3 lifts; min. 3 each structure		
CONCRETE: (Standard Mix Designs)	CL		producers	yearly/ each agg. source		Obtain required mix design from District office.
CONCRETE: (Special Mix Designs)	CL		producers	see remarks		Submit to lab for each project.
CONCRETE BASE:				see remarks		See: CONCRETE PAVEMENT
CONCRETE FOR HEADERS:				see remarks		See: CONCRETE FOR STRUCTURES.
CONCRETE PAVEMENT: #Bar-Mat Reinforcement	PP	1 sy. (1 m ²)	project	1/mile pvmt. (1/1.6 km)		Submit sample and request for test. (See Note 5 - 3 days).
#Cement (Portland) Bagged	PP	1 bag	project	1/shipment		Submit sample and request for test. (See Note 5 - 7 days)
Cement (Portland) Bulk	CL					See: CEMENT (PORTLAND) – Bulk
#Concrete Cores	P-C	4" core (100mm)	project	1/500 ft. (1/150 m)		Submit MAT-1. Cores taken by Laboratory personnel. (See Note 5 - 4 days). (Not required for fixed form.)
Concrete, Compressive Strength Cylinders	PP	cylinder	project	each 75 cy; min of one set each day. See remarks (60m ³)		Samples used to fabricate test specimens shall be obtained in accordance with AASHTO T 141 unless an alternative procedure has been approved by the Engineer. Submit Form MAT-308 for compressive strength. (Minimum of 4 cylinders per set)
	*P-D					* Assurance test & molding of cylinders to be witnessed or performed by DMT personnel. 1 per 50 sets of cylinders/ with min. 2 per yr. per project
Concrete Placement Curing				see remarks		See: CONCRETE PAVEMENT PLACEMENT See: CURING MATERIALS
Expansion Contraction Joint Load Transfer Unit	PP	see remarks	project	1/ shipment		Submit request for test and a Materials Certificate from load transfer unit manufacturer.
#Joint Filler (Preformed)	PP	1 sqft. (0.1m ²)	project	1/size/ shipment		Submit request for test with a Materials Certificate unless Lab requests samples. (See Note 5 - 2 days).
Joint Sealer	PP	*50 lbs. (25kg)	project	1/batch		*Submit request indicating Batch No. and Certified Test Report. Submit sample if requested by Lab.
Sand	P-D	25 lbs. (12kg)	concrete batch plant	bi-weekly	Every 10 tests as matl. is required (CP).	Submit request for test .

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
CONCRETE PAVEMENT: (Cont) Stone	P-D	50 lbs. (25kg)	concrete batch plant	bi-weekly	Every 10 tests as matl. is required (CP).	Submit request for test . If reclaimed see Note 8 for additional requirements.
Water	DL	1 qt. (1L)	concrete batch plant	1/each source supply/year		Tested during annual plant inspection. Submit request for test yearly.
#Welded Wire Steel Fabric	See Reinforcing Steel (Welded Wire Steel Fabric)					
CONCRETE PAVEMENT PLACEMENT: Slump test & Air Content See remarks (a), (b)	PP	as needed	project	ea. 50 cy.(40 m ³) w/ min. of 1 each day pvmt. is being placed. See remarks(a), (b)	1 per 50 sets of cylinders with a min. of two per year per project	(a) Frequency of testing may be increased at the discretion of the Engineer.
CONCRETE FOR SIDEWALKS and END ANCHORS (Concrete for sidewalks that are part of a bridge deck or other structure shall be tested as concrete for structures)	*P-D					(b) Initial slump and air content test shall be made on batches at start of daily concrete operations and in accordance with required frequency thereafter.
	PP	Cylinder	project	each 75 cy (60 m ³); See remarks.		Samples used to fabricate test specimens shall be obtained in accordance with AASHTO T 141 unless an alternative procedure has been approved by the Engineer. Submit Form MAT-308 for compressive strength. (Minimum of 4 cylinders per set).
CONCRETE FOR STRUCTURES: Bar Reinforcement: Deformed Uncoated or Epoxy Coated (All sizes)	PP	5 ft.	Project	1/size/manufacturer/ each 200 tons (180t)		Submit sample for test and Certified Test Report for coated bars and epoxy powder with request for test. (See Note 5 - 3 days).
Cement (Portland) — Bulk Concrete, Compressive Strength Cylinders	CL PP	Cylinder	project	each 75 cy ; (60 m ³) min of one set each day. See remarks.		See: CEMENT (PORTLAND) - Bulk Samples used to fabricate test specimens shall be obtained in accordance with AASHTO T 141 unless an alternative procedure has been approved by the Engineer. Submit Form MAT-308 for compressive strength. (Minimum of 4 cylinders per set).
Concrete Placement	*P-D					1 per 50 sets of cyls. with minimum 2 per year per project. *Assurance test & molding of cylinders to be witnessed or performed by DMT personnel See: CONCRETE FOR STRUCTURES PLACEMENT
Curing				see remarks		See: CURING MATERIALS
Joint Sealer (Structural Concrete)	PP	*	project	1/shipment		*See Special Provisions.
Sand	P-D	25 lbs. (12kg)	concrete batch plant	Bi-weekly as matl. Req.	Every 10 tests as matl. is required. (CP)	Submit request for test.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
CONCRETE FOR STRUCTURES: (Cont) Stone	P-D	50 lbs. (25kg)	concrete batch plant	Bi-weekly as matl. Req.	Every 10 tests as matl. is required. (CP)	Submit request for test. If reclaimed see Note 8 for additional requirements.
Water	DL	1 qt.	concrete batch plant	1/each source supply		Tested during annual plant inspection. Submit request for test yearly.
CONCRETE FOR STRUCTURES PLACEMENT: Slump test, Air Content See remarks (a), (b)	PP	as needed	project	Each 50 cy. (40 m ³) w/ min. 1 each pour per class concrete.	1 per 50 sets of cylinders/with a min. of two per yr. per project.	(a) Frequency of testing may be increased at the discretion of the Engineer.
	*P-D	as needed	project			b) Initial slump and air content test shall be made on batches at start of daily concrete operations and in accordance with required frequency thereafter.
CURBING: *Concrete Curbing	PP	see remarks				*See: CONCRETE FOR STRUCTURES
Precast Concrete Curbing	PP	see remarks	project	1/shipment		Submit request for test & MAT-314 (PC-1). (See Note 4A).
Granite Slope Curbing, Granite Curbing & Granite Stone Curbing for Bridge	PP	see remarks	project	1/shipment to project		Submit request for test with signed field inspection statement indicating conformance to standard specifications. Submit sample if requested by DMT. Submit sample and request for test. (See Note 5 - 3 days).
#Metal Anchors - Curbing	PP	1 each	project	1/shipment		
Stone Curbing	PP	see remarks	project	1/ shipment		Submit request for test with signed field inspection statement indicating conformance to standard specifications. Submit sample if requested by DMT.
CURING MATERIALS: Liquid Membrane-Forming Compound	PP	1 qt. (1 L)	project	1/batch		Submit request for test with batch number.
Polyethylene Sheeting	PP	see remarks	project	1/shipment		No testing required/Field personnel must verify compliance to specification.
DAMPPROOFING: Primer and/or Seal Coat	PP	*2 qts. (2 L)	project	each batch or lot		*Submit request for test with a Materials Certificate unless DMT requests a sample.
DELINEATOR:	PP	see remarks	project	1/project		Submit request and request for test with a Materials Certificate.
Steel Post	PP	1 each shipment	project	1/project		Submit sample and request for test. (See Note 5 - 3 days).
Other Post	PP	1 each shipment	project	1/project		Submit request for test with a Materials Certificate.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
EARTH EMBANKMENT: Laboratory Density test	PP	80 lbs. (40 kg)	project	each soil type & each 50,000 cy* (38,000m ³)		Submit sample and request for density test. *Density test is for information only - not acceptance.
Field Density test	PP		project	each soil type & each 5,000 cy. (3800m ³)		
	*P-C				each 50,000 cy (38,000 m ³)	*Assurance test to be witnessed or performed by DMT personnel.
ELASTOMERIC COMPRESSION SEAL:	PP	see remarks	project	each size/ length/shpmt.		Submit request for test with a Materials Certificate.
ELASTOMERIC EXPANSION DEVICE:	*PP					*See Special Provisions.
EPOXY BONDING COMPOUND:	PP	see remarks	project	1/shipment w/required certification		Submit request for test.
EPOXY PAVEMENT MARKINGS:	PP	1 qt. (1L)	project	each batch		Submit sample & all certification required by Special Provisions with request for test.
EROSION CONTROL MATERIAL:	AL	see remarks	project	each type or brand		Submit request for test. Refer to approved products list, under erosion control matting.
FERTILIZER:	PP	see remarks	project	1/shipment		Submit request for test with required affidavit.
FREE-DRAINING MATERIAL:						
Gradation	PP	80 lbs.(40kg)	project	each type and each 6000 cy (4500m ²)		Submit sample and request for test. If reclaimed See note 7 for additional requirements.
Lab Density Test	PP	80 lbs.(40kg)	project	each soil type and each 30,000 cy. (23,000m ³)		Submit sample and request for test. * Density test is for information only not acceptance. Separate requests required for Gradation and density.
Field Density Test	PP		project	each soil type and each 3,000 cy. (2300m ³)		
GEOTEXTILE:	AL	see remarks	project	each type or brand		Submit request for test. Refer to approved products list, under geotextile.
GLASS SPHERES FOR REFLECTANCE:	*DL	original container	project	1 each batch		*Submit request for test with batch number unless sample is requested by DMT.
GRANULAR FILL: — Gradation	PP	80 lbs.(40kg)	project	each new source & each 5000 cy. for gradation.(4500m ³)		Submit sample and request for test. If reclaimed see Note 7 for additional requirements.
#GROUT (NONSHRINK):	PP	see remarks	project	1/ shipment		Submit request for test and Certified Test Report unless otherwise directed. (See Note 5 - 7 days).

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
HANDHOLE: Cast-in-place	*PP					*See :CONCRETE FOR STRUCTURES
Precast	PP	see remarks	project	1/shipment		Submit request for test with a MAT-314 (PC-1). (See Note 4 (a)).
Plastic	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate unless otherwise directed.
HANDHOLE COVERS:	CL			shipment		Inspected by DMT at manufacturer.
HOT MIX ASPHALT MIXTURES: Gradation – All Classes	P-C	see remarks	batch/drum plants	gradation: Min. 3/day for 300 tons or more/day, or based on plant performance and tonnage. (3 per day for 275 t)	Minimum of one per inspector per month & one per plant per month for plants producing over 4,000 tons/month (3600t)	Advise Division of Materials Testing the proceeding workday.
Marshall Molds Class 1	P-C	1250 gms (1250 gms)	batch/drum plants	Minimum 1 mold 3 times per day for projects using 300 tons or more on any given day (275 t)	Minimum of one per inspector per month & one per plant per month for plants producing over 4,000 tons/month (3600t)	
Other Classes (& C1 1 under 300 tons/day)	P-C	1250 gms ea. Mold (1250gms)	batch/drum plants	Minimum 1 set daily		

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
Hot Mix Asphalt (continued) Hot Mix Asphalt Density Classes 1, 2, and 4	PP *P-C	lot	project	See Standard Specifications Section 4.06 Tables 4 and 5.	*1 test per 20,000 tons (18,000 t) or 1 per, project per year for projects with 1,000 to 20,000 tons per year. (900 to 18,000 t)	Advise DMT in advance for scheduling (assurance test to be witnessed or performed by DMT personnel). *See Note 9
Superpave Mixtures* * See contract specific special provisions.						
Tack Coat						See: TACK COAT
ILLUMINATION (HIGHWAY):						
# Anchor Bolts: Light Standard Base, Pedestal & Controller Foundation, Span Pole & Mast Arm Foundation	PP	1 bolt w/hardware	project	1/size/heat #/shipment		Submit Request for Test with a sample, Certified Test Report, and Materials Certificate. (See Note 5, 3 days)
Ballast: Mercury Vapor Lamp Sign Luminaire Underbridge Luminaire	PP	See remarks	project	1/shipment		Submit Request for Test with a Materials Certificate. (See Note 3)
Bare Copper Grounding Conductor	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Cast-Iron Junction Box	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate to include identification for threaded hubs & bosses. For surface mounted boxes, include stainless steel cap screws. (See Note 3).
Ground Rod	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Light Standards	PP	see remarks	project	1/shipment		Submit request for test with Certified Test Reports for base, shaft, bracket arm, hardware, galvanizing and deflection test.
Light Standard Foundation (Precast)	PP	see remarks	project	1/shipment		Submit request for test with MAT 314 (PC-1). (See Note 4(a)).
Luminaire: Mercury Vapor, Underbridge, Sign	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate. (See Note 3).
Navigation Lights	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate. (See Note 3).
Nonmetallic Sheathed Cable	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Pedestals (Aluminum or Steel)	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Photoelectric Control	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
ILLUMINATION (HIGHWAY): (cont) Rigid Metal Conduit	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate. (See Note 3). For Rigid Metal Conduit in Structure, identification is also necessary for fittings, expansion fittings, outlet boxes & concrete conduit hanger inserts.
Rock Anchors	PP	1 anchor assembly	project	1/size/shipment		Submit sample and request for test.
Service Entrance & Cabinet	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate. (See Note 3).
Single Conductor in Conduit	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
INERTIAL BARRIER MODULES:	PP	see remarks	project	1/shipment		Submit request for test with verification of product identification.
Salt for Modules	PP	25 lbs. (12kg)	project	1/shipment		Submit sample and request for test. Do <u>not</u> combine salt and sand samples.
Sand for Modules	PP	25 lbs. (12kg)	project	1/shipment		Submit sample and request for test.
#JOINT FILLER: (Preformed)	PP	1 sq. ft. (0.1m ³)	project	1/size/shipment		Submit request for test with a material certificate unless Laboratory requests a sample. (See Note 5-2 days)
JOINT SEALER: Concrete and Bituminous Pavement (Hot Poured)	PP	see remarks	project	1/batch		Submit request indicating Batch No. and Certified Test Report. Submit sample if requested by DMT.
Structural Concrete (Caulked)	*PP	see remarks	project			*See Special Provisions.
LONGITUDINAL JOINT SUPPORT	PP	unit	project	6 unit/mile of pavement (4 units/km)		Submit sample and request for test.
#LONGITUDINAL JOINT SUPPORT BARS:	PP	30 in.(760 mm)	project	6 unit/mile of pavement (4 units/km)		Submit sample and request for test. (See Note 5 - 3 Days).
MEMBRANE WATERPROOFING (HOT SYSTEM): Fabric	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate unless Laboratory requests a sample.
Asphalt Primer	PP	see remarks	project	each batch		Submit request for test with a Materials Certificate unless Laboratory requests a sample.
Waterproofing Asphalt	PP	see remarks	project	each batch		Submit request or test with a Materials Certificate unless Laboratory requests a sample.
Asphalt Flashing Cement	PP	see remarks	project	each batch		Submit request for test with a Materials Certificate unless Laboratory requests a sample.
MEMBRANE WATERPROOFING SYSTEM:	PP	see remarks	project	1/shipment		*See Special Provisions

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
METAL BEAM RAIL: #Backing Plate	PP	1 unit	project	1/shipment		Submit request for test with Material Certificate.
Miscellaneous Hardware	PP	1 each kind	project	1/shipment		Submit request for test with Material Certificate.
Rail Element, Rub Rail & Terminal Sections	PP	see remarks	project	1/shipment		Submit request for test w/following data: manufacturer's name, identification no., thickness type, coating class; AASHTO Spec. M180. Submit sample if requested by DMT.
Offset Bracket Steel	PP	see remarks	project	1/shipment		Submit request for test with Material Certificate.
Wood	PP	see remarks	project	1/shipment		Submit Material Certificate and certificate of treatment with request for test.
Plastic	PP	see remarks	project	1/shipment		Submit Material Certificate and Certified Test Report with request for test. Must have FHWA approval.
Backup Channel	P-D	see remarks	project	1/shipment		Submit request for test with Material Certificate.
Steel Posts	PP	1 each type	project	1/shipment		Submit request for test with Material Certificate.
METAL BEAM RAIL ANCHORAGE: #Anchor Rods & Accessories	PP	1 each type	project	1/shipment		Submit request for test with Material Certificate.
Concrete Anchorages (Precast)	P-C	see remarks	producer	each type shipment		Notify DMT of source prior to fabrication. Submit request for test for completed item with MAT-314 (PC-1). *See: CONCRETE FOR STRUCTURES Concrete Placement
*Concrete Anchorages (Cast in Place)						
Connector Bolts & Plates	PP	1 each	project	1/project		Submit request for test with Material Certificate.
Hardware	PP	1 each	project	1/type/project		Submit request for test with Material Certificate.
#Rebars for Anchors	PP	5 ft.	project	1/size/manufacturer/ each 200 tons		(See Note 5 - 3 days). See: BAR REINFORCEMENT.
METAL BIN-TYPE RETAINING WALL:	P-D	see remarks	project	each unit		Submit request for test to District Lab. For Field Inspection. Also submit random sample of any wall unit & hardware from each shipment if requested by DMT.
METAL BRIDGE RAIL:	P-C	see remarks	producer	each type/ project		Notify Lab. of source prior to fabrication. Submit request for test for completed item.
Preset Anchorage	PP	see remarks	project	1/shipment		Submit request for test with Materials Certificate.
MULCH: Fiber	PP	1 gal. (4L)	project	1/source		Submit sample and request for test in moisture-proof container.
Hay	PP	see remarks	project	1/shipment		Submit request for test with signed field inspection statement indicating conformance to Specifications.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
MULCH: (cont) Wood Chip	PP	see remarks	project	1/each new source		Submit request for test with signed field inspection statement indicating conformance to Specifications.
NAILS:	PP	6 each	project	1/shipment		Submit sample and request for test.
OBJECT MARKERS: Aluminum Sign Blanks, Reflective Sheeting, Silk Screening	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Steel Posts	PP	see remarks	project	1/project		Submit sample and request for test.
PAINT: Bridge Paints (Primers & Finish coat)	PP	see remarks	project	1/batch		Submit request for test with a Certified Test Report.
Special Coatings (Paints for Special work)	PP	see remarks	project	1/batch		Submit request for test with a Certified Test Report.
Traffic Paints	PP	see remarks	project	1/batch		Call DMT to confirm batch numbers prior to request for test submission.
Temporary Traffic Paint	PP	see remarks	project	1/shipment		Submit request for test with sample or Certified Test report.
PARTIAL AND FULL-DEPTH PATCH :						
Deformed Uncoated or Epoxy Coated Rebar (All Sizes)	PP	5 ft..(1.5 m)	project	1/size/manufacturer/ each 200 tons		Submit sample and request for test with Certified Test Report for coated bars.
#Cement (Gypsum-Portland)	PP	1 bag	project	1/project/brand		Submit sample and request for test, unless Special Provisions call for certification. (See Note 5 - 7 Days).
Compressive Strength Cylinders	PP	1 set of four 6"x12" molded cylinders	project	each 75 cy; minimum one set each day. See remarks		Submit cylinders to DMT for test. Contact to arrange for testing outside of normal hours. CYLINDERS MUST BE STRIPPED PRIOR TO SUBMITTAL.
Epoxy Bonding Compound	PP	see remarks	project	1/shipment		Submit request for test with required certification.
Epoxy Resin	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Sand	PP	25 lbs. (12kg)	project	biweekly as patch being placed		Submit sample and request for test.
Stone	PP	50 lbs.	project	biweekly as patch being placed		Submit sample and request for test. If reclaimed see Note 8.
Water	PP	1 qt. (1L)	project	1/source/project		Submit sample and request for test.
PEAT:	PP	1 bale	project	1/shipment		Submit sample and request for test.
PERVIOUS STRUCTURAL BACKFILL: Gradation	PP	80 lbs. (40kg)	project	gradation test: each new source & each 5000 cy. (3800m ³)		Submit sample and request for test. If reclaimed see note 7 for additional requirements.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
PERVIOUS STRUCTURAL BACKFILL: (cont) Laboratory Density test	PP	80 lbs. (40 kg)	project	Lab. density test: each new source & each 20,000 cy.* (15,000m ³)		Submit sample and request for test. *Lab. density test is for information only - not acceptance. Separate requests required for gradation and lab. density.
Field Density test	PP		project	field density test: each 5 ft. (1.5m) vertical; 3 per structure, minimum.		
PENETRATING SEALER PROTECTIVE COMPOUND	AL	see remarks	project	each source		Submit request for test. Refer to approved products list.
PILES:						
*Cast-in-Place Piles	*PP		project			*See: CONCRETE FOR STRUCTURES
Cast-in-Place Pile Shells	P-D	see remarks	project	1/shipment		Submit request for test to appropriate District Laboratory for field inspection of each shipment. Submit sample and request for test.
Cast-in-Place Reinforcement	PP	5 ft. (1.5m)	project	1/size/manufacturer/ each 200 tons(180t)		Submit request for test with Materials Certificate.
Pile Point Reinforcement	PP	see remarks	project	1/size/shipment		Submit sample and request for test.
Pile Splice Plates or Prefabricated Pile Splice	PP	1 each	project	1/size/shipment		Notify Lab of source prior to fabrication. Submit request for test of completed item.
Precast Concrete Piles	PP	see remarks	project	each batch		Notify DMT of source prior to fabrication. Submit request for test identifying completed item.
Prestressed Concrete Piles	PP	see remarks	project	each batch		Notify Central lab prior to sampling. Submit request for test, Materials Certificate, and Certified Test Report with sample.
Steel Sheet Piling, Steel Piles	*PP	2 ft. min.	project			Submit request for test. Indicate species, dimensions & certificate of treatment, if applicable, with a Materials Certificate from supplier.
Timber Piles	PP	see remarks	project	1/shipment		Submit request for test with Materials Certificate from supplier.
Temporary Piling (Steel and wood)	PP	see remarks	project	1/type		Submit request for test with Materials Certificate from supplier.
PIPE:						
Cast Iron – Culvert	PP	see remarks	project	1/size/shipment		Submit request for test with a Materials Certificate.
Cast Iron – Sanitary or Water	*PP	see remarks	project			*See Special Provisions.
Coated Corrugated or Helical Rib Culvert Pipe, Underdrain, Arch, Culvert End, Elbows, Tees, & Slotted Pipe	P-D	see remarks	project	each size/shipment		Submit request for test with manufacturers and/or fabricators Certified Test Reports and material certifications, and contact appropriate District Laboratory for field inspection of each shipment.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
PIPE: (cont)						
Corrugated or Helical Rib Aluminium Alloy Culvert Pipe, Underdrain, Arch, Culvert End, Elbows and Tees	P-D	see remarks	project	each size/shipment		Submit request for test with manufacturer's and/or fabricators Certified Test Reports and Materials Certifications, and contact appropriate District Laboratory for field inspection of each shipment.
Corrugated Structural Plate Pipe	P-D	see remarks	project	1/shipment		Submit request for test with manufacturers and/or fabricators Certified Test Reports and Materials Certifications, and contact appropriate District Laboratory for field inspection of each shipment.
Copper Pipe	PP	see remarks	project	1/size/shipment		Submit request for test and Materials Certificate.
Ductile Iron – Sanitary or Water	PP	see remarks	project	1/size/shipment		Submit request for test and Materials Certificate.
Fiberglass	PP	see remarks	project			*See Special Provisions.
Perforated & Plain Concrete Drain Pipe	PP	see remarks	project	each size/shipment		Submit request for test with a MAT-314 (PC-1). See Note 4(a).
Polyethylene Corrugated Tubing	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate unless DMT requests a sample.
Polyethylene Water Pipe	PP	see remarks				See Special Provisions.
Polyvinyl Chloride Pipe	PP	see remarks	project	1/size/shipment		Submit request for test with a Material Certificate..
Reinforced Concrete, Elliptical, Slotted, Culvert Ends, Ditch Liners	PP	see remarks	project	each size/shipment		Submit request for test with a MAT-314 (PC-1). See Note 4(a).
Steel Pipe Sleeve	PP	see remarks	project	1/shipment		See Special Provisions, regarding method of test.
PIPE INSTALLATION MATERIALS:						
Gaskets:						
Preformed Plastic	PP	see remarks	project	1/size/shipment		Submit request for test with a Materials Certificate.
Rubber O-Ring	PP	see remarks	project	1/size/shipment		Submit request for test with a Materials Certificate.
Pipe Joint Sealer:						
Cold-Applied Bituminous Sealer	PP	see remarks	project	1/batch		Submit request for test indicating Batch No. Submit sample if requested by Laboratory
Mortar :						
Cement	PP	See remarks	project			Project personnel must verify that the cement bag is labeled AASHTO M-85 compliant. Do not submit request for test.
Sand	PP	25 lbs. (12kg)	project	1/50 cy. (38m ³)		Submit sample and request for test.
PLASTIC PAVEMENT MARKING:						
Permanent	PP	see remarks	project	1/shipment		Submit request for test with Certified Test Report.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
PLASTIC PAVEMENT MARKING: (cont) Temporary	PP	see remarks	project	1/shipment		Submit request for test with signed field inspection statement indicating conformance to Specifications.
PRECAST CONCRETE BARRIER CURB: New	PP	see remarks	project	1/shipment		See Note 4(a).
Used (Temporary)	PP	see remarks	project	1/shipment		No testing required. Project personnel are responsible for determining acceptability for use on the project.
PRECAST CONCRETE BOX CULVERT	PP	see remarks	project	1/shipment		See note 4(b).
PRECAST CONCRETE UNITS FOR DRAINAGE STRUCTURES	PP	see remarks	project	each type/shipment		Submit request for test with MAT-314 (PC-1). See note 4(a)
PRESTRESSED CONCRETE MEMBERS:	P-C	see remarks	manufacturer	1/shipment		Notify DMT of source prior to fabrication. Submit request for test for completed item with Cast Date, D.O.T. Stencil if evident, (Note if none), Piecemark, Sequence, and Quantity.
PROCESSED AGGREGATE BASE: Gradation	PP *P-D	80 lbs. (40 kg)	project	each new source & each 5000 tons (4500t) for gradation	 *each 30,000 tons, (18,000t) 1/project for gradation minimum.	Submit sample and request for test. If reclaimed see Note 7 for additional requirements. Sampling of assurance test to be witnessed by DMT personnel.
Laboratory Density test	PP	80 lbs.	project	each new source & each 20,000 tons (18,000t) for Lab. density test*		Submit sample and request for test. *Lab. Density test is for information only – not acceptance. Separate requests required for gradation and Lab. Density.
Field Density test	PP *P-C		project project	each soil type/each 3,000 tons (2700t)	 *1/30,000 tons (1/27000t) minimum 1/project	
PROTECTIVE COMPOUND:	AL	see remarks	project	each source		Submit request for test. Refer to approved products list.
#REINFORCING STEEL: Bar-Mat Reinforcement	PP	1 sy. (1m ²)	project	1/mile(1.6 km) /pavement		Submit sample and request for test (See Note 5 - 3 days).
Deformed Uncoated or Epoxy Coated Rebar (All sizes)	PP	5 ft. (1.5m)	project	1/size/manufacturer/ each 200 tons(180t)		Submit samples, request for test, and Certified Test Report for coated bars and epoxy powder, as per Special Provisions.
Welded Wire Steel Fabric: (Structures) & (Pavement)	PP	1 sy. (1m ²)	project	1/8000yd2 (6700m ²)		Submit samples and request for test.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
#REINFORCING STEEL: (Cont) (Sidewalk)	PP	see remarks	project	1/supplier/project		Submit request for test with signed field inspection statement indicating conformance to specifications.
RIPRAP: Intermediate-Modified-Standard	PP	see remarks	project	each type/shipment		Submit request for test with signed field inspection statement indicating conformance to Standard Specifications M.12.02
Special	PP	50 lbs.(25 kg)	project	5000 cy (3800m ³)		Submit sample and request for test.
ROLLED BANK GRAVEL SURFACE:	PP	80 lbs. (40kg)	project	each new source & each 5000 cy (3800m ³) min. 1/project.		Submit sample and request for test.
ROLLED GRANULAR BASE:	PP	80 lbs. (40kg)	project	each new source & each 5000 cy.(3800m ³) min. 1/project		Submit sample and request for test. If reclaimed see Note 7 for additional requirements.
SAND FOR: Bituminous Cover	PP	25 lbs. (12kg)	project	each new source & each 2500 cy.(1900m ³)	Every 10 tests, as matl. is required.	Submit sample and request for test.
Concrete Pavement or Concrete Structures	*P-D	25 lbs. (12kg)	batch plant	bi-weekly as pavement is being placed.		*Submit request for test. (See Concrete Pavement or Concrete for Structures)
Filter	PP	25 lbs. (12kg)	project	each new source & each 1000 cy. (765m ³)		Submit sample and request for test.
Mortar	PP	25 lbs. (12kg)	project	each new source, min. 1/project.		Submit sample and request for test.
Partial & Full-Depth Patch	PP	25 lbs. (12kg)	project	bi-weekly as patch being placed		Submit sample and request for test.
Trenching & Backfilling	PP	25 lbs. (12kg)	project	each new source & each 2500 cy. . (1900m ³)		Submit sample and request for test.
Underdrain	PP	25 lbs. (12kg)	project	each new source & each 2500 cy. (1900m ³)		Submit sample and request for test.
SEDIMENTATION CONTROL: Hay Bales	PP	see remarks	project	each source		Submit request for test with signed field inspection statement indicating conformance to specifications.
Silt Fence	PP	see remarks	project	each type or brand		See :GEOTEXTILE

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
SEED:	PP	See remarks	project	1/shipment		Submit request for test with required certification & original grass seed label from bag.
SHEAR CONNECTORS:	*PP/ AL	1 each size	project	1/shipment		*If from approved source, submit MAT-100 w/sample and copy of in-plant control test report for material supplied.
SHOTCRETE:						
Fine Aggregate	PP	25 lbs. (12kg)	project	each new source & 500 cy (380m ³)		Submit sample and request for test.
Portland Cement - Bagged	PP	1 bag	project	1 each shipment		Submit sample and request for test.
Portland Cement - Bulk	CL					See: CEMENT (PORTLAND) – Bulk
Reinforcing Steel	PP	see remarks	project	each shipment		See: REINFORCING STEEL for sample size.
Water	PP	1 qt.	project	1/source/project		Submit sample and request for test.
SIGNALS, TRAFFIC:						
#Anchor bolts for Span Pole (Steel)	PP	1 bolt w/hardware	project	1/sizeshipment/project		Submit sample and request for test with a Materials Certificate and Certified Test Report. (See Note 5 – 3 Days)
Control Cable	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate
Controllers	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Detectors:						
Pressure-Sensitive Vehicle	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Loop Vehicle						
Magnetic Vehicle						
Saw-Cut						
Mast Arm Assembly	PP	see remarks	project	each shipment		Submit request for test with Certified Test Reports for shaft, arm, shoe base, transformer base & hardware.
#Messenger	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Pedestals	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Pedestrian Push-Button	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Pedestrian Signal	PP	see remarks	project	each shipment		Submit request for test with a Materials Certificate.
Polyvinyl Chloride Conduit	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Precast Traffic Control Foundation	PP	see remarks	project	1/shipment		Submit request for test with a MAT-314 (PC-1). (See Note 4(a)).

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
SIGNALS, TRAFFIC: (Cont)	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Radio Receiver-Decoder	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Signals (Traffic)	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Span Pole (Steel)	PP	see remarks	project	1/shipment		Submit request for test with Certified Test Reports (shaft, hardware & galvanizing).
Span Pole (Wood):	PP	see remarks	project	1/shipment		Submit request for test with signed statement including field inspection data for dimensions, surface characteristics & identification in accordance with D.O.T. Standard Specification for item.
Span Pole (Wood) Anchors: Anchor Plate	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Anchor Rod	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate
Anchor Guy Strand Wire	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Guy Wire Protector	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Span Wire	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
SIGNING:						
Construction Signs & Posts	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Delineators (Reflectors)	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Metal Posts or Bridge Rail Mounting Brackets	PP	1/each w/hardware	project	1/shipment		Submit sample and request for test with a Materials Certificate.
Demountable Copy	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
Foundation for Side-Mounted Sign Support (Class A Concrete)		see remarks				*See: CONCRETE FOR STRUCTURES
#Bar Reinforcement: Deformed Uncoated or Epoxy Coated (All sizes)	PP	5 ft. (1.5m)	project	1 size/manufacturer/each 200 tons (180t)		Submit sample and request for test & Certified Test Report for coated bars and epoxy powder.
#Metal Sign Posts	PP	1/each w/hardware	project	1/size/project		Submit sample and request for test. (See Note 5 – 3 days).
Overhead Sign Supports:	P-C	see remarks	producer	each type		Notify DMT of source prior to fabrication. Submit request for test for completed item.
#Anchor Bolts	PP	see remarks	project	1/size/heat #/each shipment		Submit sample and request for test, Certified Test Report and Materials Certificate. (See Note 5 – 3 days)
#Nonshrink, Nonstaining Grout	PP	see remarks	project	1/shipment		Submit request for test and Certified Test Report unless otherwise directed. (See Note 5 - 7 days).

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
SIGNING: (Cont)						
Panel Bolt & Post Clip Assemblies	PP	see remarks	projects	1/shipment		Submit request for test with a Certified Test Report unless directed otherwise.
Reflective Sheeting	PP	see remarks	project	1/shipment		Submit request for test with a Certified Test Reports.
Safety Signs & Accessories	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate and Schedule A of project agreement.
Sheet Aluminum Sign Face	PP	see remarks	project	1/shipment		Submit request for test with Certified Test Reports.
Side-Mounted Sign Supports	P-C	see remarks	producer	each type		Notify Lab. of source prior to fabrication. Submit request for test for completed item.
Sign Panels (Extruded Aluminum)	PP	see remarks	project	1/shipment		Submit request for test with a Certified Test Reports.
Stub Post	PP	see remarks	producer	each type		Notify Lab. of source prior to fabrication. Submit request for test for completed item.
SLOPE PAVING:						
Concrete		see remarks				*See: CONCRETE FOR PAVEMENT
RipRap	PP	see remarks	project	5000 cy(3800m ³)		Submit request for test with signed field inspection statement indicating conformance to Standard Specifications M.12.03.
Paver Blocks (see Blocks)						
SOD:	PP	see remarks	producer	1/shipment		Submit request for test to DMT for inspection by Office of Design Landscape Personnel prior to delivery.
STONE FOR:						
Masonry Facing	PP	1 each	project	1/size/each shipment		Submit sample and request for test unless otherwise directed by Lab.
Masonry Rubble	PP	see remarks	project	1/shipment		Submit request for test with signed field inspection including results by project inspectors.
Noise Barriers	PP	50 lbs. (25kg)	project	5000 cy. (3800m ³)		Submit sample and request for test.
Partial & Full-Depth Patch	PP	50 lbs. (25kg)	project	bi-weekly as patch being placed		Submit sample and request for test.
Slope Protection	PP	50 lbs. (25kg)	project	1/5000 tons (4500t)		Submit sample and request for test.
Underdrain	PP	50 lbs. (25kg)	project	1/2500 tons (2250t)		Submit sample and request for test.
STRUCTURAL STEEL:	P-C	see remarks	source			Notify Lab. of source prior to fabrication. Submit request for test for completed item.
STRUCTURAL STEEL SHAPES:	P-C	see remarks	source	1 each type & size/ shipment		Notify DMT. of source prior to fabrication. Submit request for test for completed item.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
SUBBASE:						
Gradation	PP	80 lbs.	project	each new Source & each 5000 cy (3800m ³) for gradation	*each 50,000 cy, (38000m ³) 1per project minimum	Submit sample and request for test. If reclaimed see Note 7 for additional requirements.
Laboratory Density test	PP	80 lbs.	project	each new source & each 20,000 cy (15,000m ³) for Lab density test*		Submit sample and request for test. * Lab. Density test is for information only – not acceptance. Separate requests required for gradation and Lab. Density.
Field Density test	PP *P-C		project	each soil type each 3,000 cy (2300m ³)	*1/30,000 cy. (23,000m ³) Minimum 1/ project	
SWISS HAMMER TEST:	P-D	see remarks	project			Submit request for test and notify District Lab. *Test for information only-not acceptance.
TACK COAT:	PP	2 qts.(2L)	project	1/10,000 gal.(38kl)		Submit sample and request for test.
TEMPORARY ITEMS	Temporary items that are not scheduled to be permanently incorporated into the work and are not safety-related will be accepted based on field inspection/evaluation by project personel. Therefore, project personnel should not submit a request for test to the DMT for these items. Temporary items that may be permanatly incorporated into the work or are safety related such as pavements and impact attenuators should have a request for test submitted following an acceptable field inspection/evaluation by project personel					
TEMPORARY PLASTIC PAVEMENT MARKING TAPE:	PP	see remarks	project	each source		Submit request for test with a signed field inspection statement indicating conformance to standard specification.
THERMOPLASTIC PAVEMENT MARKING MATERIAL:	*PP	see remarks	project	each batch		*See Special Provisions.
THREE-CABLE GUIDE RAIL:						
Anchorages, Precast	*PP	see remarks	project	1/shipment		*Notify DMT of source prior to fabrication. Submit request for test for completed item with MAT-314 (PC-1). *See: CONC. FOR STRUCTURES, CONCRETE PLACEMENT.
Anchorages, Cast-in-Place	*PP					
#Bar Reinforcement: Deformed Uncoated or Epoxy Coated (All Sizes)	PP	5 ft. (1.5m)	project	1/size/manufacturer/ each 200 tons (180 t)		Submit sample and request for test with Certified Test Report for coated bars. (See Note 5 – 3 days).
Fittings	PP	1 each	project	1 each type on project		Submit request for test with Materials Certificate.
Offset Brackets	PP	1 each	project	1/shipment		Submit request for test with Materials Certificate.
Single Cable Compensating Device	PP	1 each	project	1/shipment		Submit request for test with Materials Certificate.
#Steel Posts & Channel Anchors	PP	1 each	project	1 each size		Submit request for test with Materials Certificate.
Reflective Sheeting	PP	see remarks				Submit request for test with Materials Certificate.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
THREE-CABLE GUIDE RAIL: (cont) #Wire Rope	PP	See remarks	project	1/shipment		Submit request for test with a Materials Certificate.
TIMBER BARRIER: Delineators	PP	1 each	project	1/project		Submit sample and request for test with a Materials Certificate.
Hardware	PP	1 each type	project	1 each type/project		Submit sample and request for test.
Timber	PP	see remarks	project	1/project		Submit request for test indicating dimensions and species.
TOPSOIL: Seeding	PP	80 lbs. (40kg)	stockpile	1/1000 cy (765m ³) min. 1/project		Submit sample and request for test.
Planting	PP	80 lbs. (40kg)	stockpile	1/1000 cy (765m ³) min. 1/project		Submit sample and request for test.
TRAFFIC-BOUND GRAVEL SURFACE:	PP	80 lbs. (40kg)	project	each new source & each 2500 cy (1900m ³) for gradation		Submit sample and request for test.
TRAFFIC CONES: Standard	PP	see remarks	project	1/shipment		Submit request for test with signed field inspection statement indicating conformance to specification.
42 inch Traffic Cone	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate and Certified Test Report.
TRAFFIC DRUMS:	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate.
UNSUITABLE MATERIAL:	PP		project			*See Note 2.
WALL FENCE: (Stone & Farm)	PP	see remarks	project			Submit request for test with signed statement including results of inspection by project inspector.
WATER: For Concrete	DL	1 qt. (1L)	batch plant	1 each source of supply yearly		Sampled during annual plant inspection.
For Mortar	PP	1 qt. (1L)	project	1/source/project see remarks		Submit sample and request for test if not from a potable water source.

Material	Sampled By	Sample Size	Sampling Location	Frequency for Acceptance	Frequency for Ind. Assurance	Remarks
WATERPROOFING FABRIC:	PP	see remarks	project			See: MEMBRANE WATERPROOFING.
#WELDER CERTIFICATE SAMPLES	*PC	as needed	project	as required		Notify DMT to schedule weld test.
#WELDED WIRE STEEL FABRIC	See Reinforcing Steel					
WELDING ELECTRODES:	PP	1 each	project	each size & lot		Submit sample and request for test with Certified Test Reports.
WINDSOR PROBE TEST:	P-D	see remarks	project			Submit request for test and notify District Lab. *Test for information only-not acceptance.
WIRE FENCE:						
Steel Post & Braces	PP	see remarks	project	each type, 1/shipment		Submit request for test with signed field inspection statement indicating conformance to specifications.
Wood Post Treated	PP	see remarks	project	1/shipment		Submit request for test with a Materials Certificate and certificate of treatment.
Untreated	PP	see remarks	project	1/shipment/project		Submit request for test with signed field inspection statement indicating conformance to specifications and dimensions.
Woven Wire Fencing	PP	see remarks.	project	1/ shipment		Submit request for test with signed field inspection statement indicating conformance to specifications and dimensions.
WOOD POSTS:						
Treated	PP	see remarks	project	1/ shipment		Submit request for test with a Materials Certificate and certification of treatment.
Untreated	PP	see remarks	project	1/ shipment		Submit request for test with signed field inspection statement indicating conformance to specifications and dimensions.