MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
FOR PROJECTS OR SEPARATE LOCATIONS WITHIN A PROJECT, REQUIRING LESS THAN 250 TONS, THE JMF, MATERIALS, AND PLANT AND PAVING OPERATIONS SHALL BE SATISFACTORY TO THE ENGINEER.										
ADDITIVES	Anti Stripping	Prel. Source Approval	Dist. Lab S 612	Mat. Lab	1 / batch or storage tank	1 pt friction top can	----		10 days	(AML)
		Accept.	Proj. Engr S 601	Mat. Lab	1 / batch or storage tank	1 pt friction top can	CD 1&7		10 Days	(AML) *Sample when questionable.
	Fibers (Mineral or Cellulose)	Accept	Proj. Engr. S 601	Mat. Lab	1 / shipment*	1 qt friction container	CC		10 Days	(Producer / Supplier List) *Sample if questionable.
	Waste Tire Rubber Additive	Accept.	Dist. Lab S 601	Mat. Lab	1 / shipment*	1 pt friction top can	CC 7 & 10	-----	-----	(Producer / Supplier List) *Visual inspection. Sample only if questionable.
	Mineral Filler	Accept.	Proj. Engr. S 102	Dist. Lab	1/500 tons*	1 gal friction top can	-----	-----	-----	(AML) *Sampling not required for Portland cement or hydrated lime when accompanied by CD.
	Hydrated Lime	Accpt	Proj. Engr. S 102		1 / shipment*	1 gal friction top can	CA 1&7	-----	10 days	(AML) *Sample if questionable
AGGREGATES	Moisture Content*	Quality Control	Contractor S 101	Contractor	1 / day / stockpile	1 gal / suitable container	----		----	*For plant control.
	All Aggregate	Design	Contractor S 101	Contractor/ Supplier	1/project	1 full sample sack	CA		5 days	(AML) Properties in Table 501-2
	All Aggregates	Verification	Dist Lab S 101	Dist. Lab	1/year/ stockpile	1 full sample sack/size	----		5 days	(AML) Annual stockpile sampling for Bulk Specific Gravity, absorption, and consensus properties
	Natural Sand	Design	Dist Lab S 101	Dist. Lab		1 full sample sack	---		5 days	Sand equivalent testing.
	Reclaimed Asphaltic Pavement (RAP)	Verification	Dist Lab S 101	Dist. Lab	1/6 months/ stockpile	3 full sample sacks	---		---	% AC, % crushed and gradation, Bulk Specific Gravity, % moisture, Gmm, Effective Specific Gravity Gse.
ASPHALT MIX RELEASE AGENT		Accept*	----	Proj. Engr.		----	----		----	(AML) *Visual inspection for performance by Proj. Engr. / Inspector

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
Asphalt Concrete (Plant)	Job Mix Formula (JMF)	Design	-----	Contractor	1/mix type	-----	-----		7 Days	Submit to the Dist. Lab Engr. the proposed job mix formula with supporting design data. Approval is required prior to starting work.
		Valid.	Contractor/ Dist. Lab/ Proj. Engr. S 203 / S 605	Contractor/ Dist. Lab/ Proj. Engr.	1/sublot* 1 total for LWT	Suitable sampling container	-----		2 Days	*Validate on the first lot (1200 tons, 3-400 ton sublots) of production for G_{mm}, air voids @ Ndes, percent AC, gradation, and draindown (coarse mix and OGFC only).
		Valid.	Contractor/ Dist. Lab S 203	Dist. Lab	1 set / JMF*	-----	-----		10 Days	One set of 4 LWT specimens from 1st production lot after conditional validation.
		Valid.	Contractor/ Dist. Lab S 203	Mat. Lab	1 / JMF*	1 qt. friction top can (liquid) / suitable container (mix)	-----		10 Days	Provide approximately 20 grams of - No.4 / + No.8 asphalt-coated aggregate from validation loose mix and 1 quart of AC for GPC
	Anti Strip Additive, %	Quality Control	Contractor	Dist. Lab	*	----	----		----	*% AS from meter @ beginning of operation period and as needed to controll process- includes liquid anti-strip, mineral filler, lime, and/or fibers. ADI to check records during visit.
	Asphalt Cement, %	Quality Control	Contractor	Dist. Lab	*	----	-----		-----	*% AC from meter @ beginning of operation period and as needed to controll process. ADI to check records during visit.
	Loose Mixture (Gradation, %AC, Gmm, % crushed, Dust to Asphalt Ratio, Draindown)	Quality Control	Contractor S 203	Contractor	1/sublot *	Suitable sampling container	----		----	Contractor to test Gmm, % AC, gradation, % crushed, dust to asphalt ratio (dense mix only), temperature, and draindown (coarse mix and OGFC only). * Minimum 1 sample daily if production is over 100 tons, tested jointly by contractor and DOTD inspector.
		Accept.*	Dist Lab S 203 / S 605	Dist. Lab	1/sublot	Suitable sampling container				*tested at plant laboratory - Gmm, gradation, temperature, and draindown (when required).
	Loose Mixture	Verif.	Dist Lab S 203	Dist. Lab	1 / 9600 tons *	Suitable sampling container	-----		-----	* Minimum one per project, every 9600 tons thereafter per project. Tests performed at District Lab Loose mix - Gmm, %AC, gradation, % crushed (OGFC) gyratory prepared at Ndes. - Voids, %VMA, %VFA
	Gyratory Specimens (Air Voids*)	Quality Control	Contractor S 203	Contractor	1/sublot *	----	----		----	*OGFC air voids determined with physical method * Minimum 1 sample daily if production is over 100 tons, tested jointly by contractor and DOTD inspector.
	Gyratory Specimens (LWT)	Quality Control	Contractor S 203	Contractor	1/10,000 tons	----	----		----	
		Verif.	Dist Lab S 203	Dist. Lab.	1/10,000 tons	----	----		----	
	Loose Mixture* (Temp.)	Quality Control	Contractor S 605	Contractor	1/sublot **	----	----		----	*Temperature of mixture in truck at plant, documented on truck ticket. ** Minimum 1 sample daily if production is over 100 tons
		Verif.	Dist Lab S 605	Dist Lab	1/sublot	----	----		----	*Temperature of mixture in truck at plant.

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT CONCRETE (In-Place)	Longitudinal Surface Tolerance	Quality Control	Contractor TR 644	Contractor						*perform as needed
		Accept.	Contractor observed by Proj. Engr.	Contractor / Observed by Proj. Engr.	2 / project*	----	----		2 days	*perform once prior placement and once after placement. Applies to travel lanes, shoulders, parking lots, airport runways and taxiways.
	Loose Mixture* (Temp.)	Accept.	Proj. Engr.	Proj. Engr.		----	----		----	*At paver hopper or on roadway
	Yield	Quality Control	Contractor	Contractor	1/sublot	----	----		----	
		Verif.	Proj. Engr.	Proj. Engr.	1/sublot	----	----		----	
ASPHALT MATERIAL	Tack Coat	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/supplier tank	1 gal plastic bottle	CA 7		5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank or as directed by the Mat. Lab	1 gal plastic bottle	CA 7		2 hours during working hours	(AML) Self Certified *Supplier shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 QT sample for veirifcation testing.
		Accept.	Dist. Lab	Mat. Lab	1/shipment*	1 gal plastic bottle**	CD 1 & 8		-----	(AML) *Visual inspection by Proj. Engr. Sample only if questionable. ** quart can for hot-applied non-tracking tack
		Verif. *	Dist. Lab / Proj. Engr.	Dist. Lab/Mat. Lab if failing or non-verif. material	1 / project	2 – 1gal plastic bottles**	CD 1 & 8		5 Days or 10 days if failing or non-verif. material	* Send 1 gal to Mat. Lab for failing or non-verifying materials. **Two one-gallon plastic bottles.
		Monitor	Dist. Lab	Mat. Lab	1 / project	1 gal plastic bottle*				Send sample directly to Materials Lab for system monitoring (not part of project verification) * quart can for hot-applied non-tracking tack
	Tack Coat Rate of Application	Accept.	Proj. Engr.	Proj. Engr.	1/lot	------	----		-----	*Undiluted emulsion (or NTHAP) gallons, based on meter readings on distributor or spray paver by proj. Engr., divided by sq. yd covered Or using measuring stick per 1000'
	Asphalt Cement	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/supplier tank	1 qt. friction top can	CA 7		5 days	(AML) Non Self Certified. Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified. DOTD results use for approval.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank or as directed by the Mat. Lab	1 qt. friction top can	CA 7		2 hrs during working hours	(AML) Self Certified *Supplier shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification t4esting. Supplier results used for approval.
		Accept.	Dist. Lab.	Mat. Lab	1 / shipment*		CD 1 & 8			(AML) *Visual inspection by Proj. Engr. Sample only if questionable. Collect CDs to record quantities in SiteManager.
		Verif.	Dist. Lab S 201	Dist. Lab	1/plant working tank/day of production	1 qt. friction top can	----		5 days	(AML) Send to District Lab for rotational viscosity testing to verify binder grade. If sample does not meet criteria, the plant will be investigated and Dist. Lab will notify the Proj. Engr. and the HMA producer and the Mat. Lab
		Monitor	Dist. Lab S 201	Mat. Lab	1 transport/ project/ grade	1 qt. friction top can	----		10 days	(AML) Send directly to Materials Lab for comparison to refinery sample.

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
FOR PROJECTS, OR SEPARATE LOCATIONS WITHIN A PROJECT, REQUIRING LESS THAN 250 TONS, THE JMF, MATERIALS, AND PLANT AND PAVING OPERATIONS SHALL BE SATISFACTORY TO ENGINEER. SEE SUBSECTION 502.14 FOR FURTHER DETAILS.										
ADDITIVES	Anti-Stripping	Prelim Source Approval	Dist. Lab S 612	Mat. Lab	1/batch or storage tank	1 pt friction top can	-----	-----	10 days	(AML)
		Accept.	Dist Lab S 601	Mat. Lab	1/shipment/ plant*	1 pt friction top can	CD 7 &10	-----	10 days	(AML) Shipment must be accompanied with a CD Sample only if questionable.
	Hydrated Lime	Prelim. Source Approval	Mfr. S 102	Mat. Lab	1/quarter	-----	-----	-----	-----	-----
		Accept.	Dist. Lab. S 102	Mat. Lab	1/shipment*	-----	CD 7 &10	-----	10 days	(AML) Shipment must be accompanied with a CD Sample only if questionable.
	Waste Tire Crumb Rubber	Accept.	Dist. Lab. S 102	Mat. Lab	1/shipment*	-----	CC 7 &10	-----	-----	(Producer / Supplier List) *Visual inspection. Sample only if questionable.
	Latex Additive	Accept.	Dist. Lab. S 601	Mat. Lab	1/shipment*	-----	CC 7 &10	-----	-----	(Producer / Supplier List) *Visual inspection. Sample only if questionable.
	Fibers (Mineral or Cellulose)	Accept.	Dist. Lab. S 102	Mat. Lab	1/shipment*	-----	CC 7 &10	-----	-----	(Producer / Supplier List) *Visual inspection. Sample only if questionable.
	Warm Mix Additives	Accept.	Dist Lab S 601	Mat. Lab	1/shipment/ plant*	1 pt friction top can	CA 7 &10	-----	10 days	(AML) Shipment must be accompanied with a CA Sample only if questionable.
AGGREGATES	Combined Aggregates (Moisture Content)*	Quality Control	Contractor S 101	Contractor	1 / day / stockpile	1 gal / suitable container	----		----	*For plant control.
	All Aggregates (except RAP)	Quality Control	Contractor S 101	Contractor	1/ 12 months / stockpile	3 full sample sacks	-----	-----	-----	(AML) Annual stockpile sampling for Bulk Specific Gravity and consensus properties
		Verification	Dist Lab S 101	Dist. Lab	1/ 12 months / stockpile	1 full sample sack/size	----		5 days	(AML) Annual stockpile sampling for Bulk Specific Gravity, absorption, and consensus properties
	Reclaimed Asphaltic Pavement (RAP)	Quality Control	Contractor S 101	Contractor	1/ 6months / stockpile	-----	-----	-----	-----	% AC, % crushed and gradation, Bulk Specific Gravity, % moisture, Gmm, Effective Specific Gravity G_{se}.
		Verification	Dist Lab S 101	Dist. Lab	1/6 months/ stockpile	3 full sample sacks	---		---	% AC, % crushed and gradation, Bulk Specific Gravity, % moisture, Gmm, Effective Specific Gravity Gse.

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT MIX RELEASE AGENT		Accept.*	-----	Proj. Engr.	-----	-----	-----	-----	-----	(AML) *Visual inspection for performance by Proj. Engr.
ASPHALT CONCRETE (PLANT)	Job Mix Formula (JMF)	Design	-----	Contractor	1/mix type	-----	-----	-----	-----	Contractor shall design and submit to the Dist. Lab Engr. the proposed job mix formula with supporting design data in accordance with the HMAC QA manual.
		Design	Dist. Lab	Dist Lab	1/mix type	4 briquettes for LWT, 4 briquettes for SCB *	-----	-----	7 days	Approval is required prior to starting work. * LWT & SCB verification at option of Dist. Lab. Engr.
	Anti-Strip Additive, %	Quality Control	Contractor S 605	Dist Lab	*	-----	-----	-----	-----	*% AS from meter @ beginning of operation period and as needed to controll process- includes liquid anti-strip, mineral filler, lime, and/or fibers. ADI to check records during visit.
	Asphalt Cement, %	Quality Control	Contractor S 605	Contractor	*	-----	-----	-----	-----	*% AC from meter @ beginning of operation period and as needed to controll process. ADI to check records during visit.
	Gyratory Specimens Moisture Sensitivity LWT	Valid.	Dist. Lab S 203	Dist. Lab./ Contractor	1/JMF	4 briquettes/ set	-----	-----	3 days	Sample and test during validation.
		Quality Control	Contractor S 203	Contractor	1 set / 20,000 tons	4 briquettes/ set	-----	-----	-----	
		Verif	Dist. Lab S 203	Dist Lab *	1 set / 20,000 tons	4 briquettes/ set				Only if needed. Plant Quality Report on file at District Lab *Using contractor's equipment at plant or performed at District Lab
		IA	Dist. Lab S 203	Dist. Lab	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					
	Gyratory Specimens (Volumetric)	Quality Control	Contractor S 203	Contractor	1/sublot *	-----	-----	-----	-----	% Gmm @Nini & Ndes, Voids, VMA, VFA, and %Gmm @ Nmax (1/lot) * Minimum 1 sample daily if production is over 100 tons for mainline or 250 tons for minor mix, tested jointly by contractor and DOTD inspector.
		Valid.	Dist. Lab S 203	Dist. Lab./ Contractor	1/sublot	6 briquettes/ JMF	-----	-----	2 days	5 at Ndes, 1 at Nmax
		Verif	Dist. Lab S 203	Dist Lab *	1/visit	briquettes				% Gmm @Nini & Ndes, Voids, VMA, VFA. Plant Quality Report on file at District Lab *Using contractor's equipment
		IA	Contractor S 203	Dist. Lab	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					
	Loose Mixture	Quality Control	Contractor S 203 & S 605	Contractor	1/sublot *	suitable sampling bucket	-----	-----	-----	Gmm, Gradation, %AC, % Crushed, % Moisture * Minimum 1 sample daily if production is over 100 tons for mainline or 250 tons for minor mix, tested jointly by contractor and DOTD inspector.
		Valid.	Dist. Lab S 203	Mat Lab	1/JMF*	suitable sampling container				Send sample of loose mix and asphalt cement to Materials Lab for forensic analysis during validation or when a new asphalt cement source is used.
		Verif	Dist. Lab S 203	Dist Lab *	1/visit	suitable sampling container				Gmm, Gradation, %AC, % Crushed *Using contractor's equipment
		IA	Contractor S 203	Dist. Lab	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					
	Loose Mixture* (Temperature)	Quality Control	Contractor S 605	Contractor	1/sublot **	-----	-----	-----	-----	*Temperature of mixture in truck at plant, documented on truck ticket. ** Minimum 1 sample daily if production is over 100 tons for mainline or 250 tons for minor mix

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT CONCRETE (PLANT) (Con't)	Minor Mix without density	Quality Control	Contractor S 203	Contractor	1 / sublot	-----	-----	-----	-----	Must meet 70 PWL on % voids. Department to verify prior to payment
		Accept.	Proj. Engr./ Dist. Lab S 605	Dist. Lab	1 / sublot	*	-----	-----	-----	* Accepted on contractor's plant testing QC data
ASPHALTIC CONCRETE (In-Place)	Loose Mixture* (Temperature)	Accept.	Proj. Engr. S 605	Proj. Engr.	2/sublot	-----	-----	-----	-----	*At paver hopper or on roadway.
	Roadway Density (Mainline Roadway Mixes)	Quality Control	Contractor S 605	Contractor	1/sublot	Nuclear or Non-destructive density reading	-----	-----	-----	as needed to control density
		Quality Control	Contractor S 203 & S 606	Contractor	2/sublot	6 in. diameter core	-----	-----	-----	Taken approximately 12 inches in the direction of travel from acceptance core.
		Accept.	Contractor/ Proj. Engr. S 203 & S 605	Dist. Lab	2/sublot	6 in. diameter core	-----	-----	3 days *	* Completed within 3 calendar days and reported after the quality control core is reported.
		Quality Control	Contractor	Contractor	1/lot	6 in. diameter core	-----	-----	-----	One acceptance core selected at random for G_{mm} verification. If Gmm is outside of tolerance, 1 additonal core is taken from each of the remaining sublots, results averaged for comparison to the reported lot Gmm.
		Verif.	Contractor / Proj. Engr.	Dist. Lab	1/lot	6 in. diameter core	-----	-----	-----	One acceptance core selected at random for G_{mm} verification. If Gmm is outside of tolerance, 1 additonal core is taken from each of the remaining sublots, results averaged for comparison to the reported lot Gmm.
		Verif.	Dist. Lab S 203	Mat Lab	1 / 20,000 tons / JMF	suitable sampling container				Send sample taken from broken down core from Gmm verification to Materials Lab for forensic analysis.
		IA	Dist. Lab S 203	Dist. Lab	**SEE INDEPENDENT ASSURANCE PROGRAM S 701.**					
	Roadway Density (Minor Mixes)	Tested in accordance with mainline roadway mixes								
	Minor Mixes without Density	Accept.	Proj. Engr.	Proj. Engr.	-----	-----	-----	-----	-----	To the satisfaction of the Engineer.

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT CONCRETE (In-Place) (Cont'd)	Transverse Surface Tolerance, Cross Slope and Grade	Quality Control	Contractor S 605	Contractor	2/day*	-----	-----	-----	-----	*As needed to control project within spec. requirements.
		Accept.	Proj. Engr. S 605	Proj. Engr.	1/day*	-----	-----	-----	1 day	*Test at selected locations for conformance to specs.
	Thickness & Width	Accept.	Dist. Lab TR 602	502.12 Dist. Lab	*	-----	-----	300 lin ft per location	3 days	Applies to mixtures specified for payment on a cubic yard or square yard basis.
ASPHALT MATERIAL	Asphalt Cement	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/supplier tank	1 qt friction top can	CA 7	-----	5 days	(AML) Non Self Certified. Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified. DOTD results use for approval.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank or as directed by the Mat. Lab	1 qt friction top can	CA 7	-----	2 hrs during working hours	(AML) Self Certified. Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified, and supply CA to Mat. Lab along with 1 qt sample for verification testing, or as directed by the Mat. Lab. Supplier results used for approval.
		Accept.	Dist. Lab.	Dist. Lab.	1 / shipment*		CD 1 & 8			(AML) *Visual inspection of records by ADI during visit. Collect CDs to record quantities in SiteManager.
		Verif.	Dist. Lab S 201	Mat. Lab	*	2 - 1 qt friction top cans	-----	-----	5 days	(AML) * If questionable, send sample to Mat Lab for analysis. If sample does not meet criteria, the plant will be investigated and the Dist. Lab will notify the Proj. Engr., the HMA producer and the Mat. Lab.
		Monitor	Dist. Lab S 201	Distr. Lab / Mat. Lab	1 transport and working tank/ grade/ visit *	1 qt friction top can (each)	-----	-----	10 days	(AML) 1 per month, send directly to Materials Lab for analysis. Additional samples, send to District Lab. * Transport samples only as requested by Mat Lab.
	Curing Membrane	**SEE SECTION 506 OF THIS MANUAL**								
	Prime Coat	**SEE SECTION 505 OF THIS MANUAL**								
	Tack Coat	**SEE SECTION 504 OF THIS MANUAL.**								
ASPHALT MATERIAL (Surface Tolerance)	Longitudinal Surface Tolerance	Quality Control	Contractor	Contractor	each wheelpath	-----	-----	-----	-----	Tested within 7 calendar days of placement. Per Table 502-5.
		Accept.	Contractor, Observed by Proj. Engr.	Contractor observed by Proj. Engr.	each lane for length of project *	-----	-----	-----	2 days	Applies to mainline courses. * Report average IRI of mainline lanes prorated for entire project.
		Accept.	Contractor, Observed by Proj. Engr.	Contractor observed by Proj. Engr.	1/project	-----	-----	-----	1 days	Applies to minor mixes for shoulders, bike paths, detour roads, and parking lots.

SECTION 504 ASPHALT TACK COAT

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
THIS SECTION IS TO BE USED AS A GUIDE FOR OTHER ITEM NUMBERS WHEN REFERENCE IS MADE TO SECTION 504 OF THIS MANUAL. THERE ARE NO PAY ITEMS UNDER SECTION 504.										
ASPHALT TACK COAT	Emulsified Asphalt or Hot-Applied	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/storage tank	1 gal plastic bottle **	CA 7	-----	5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified. ** quart can for hot-applied non-tracking tack
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to tank or modified*	1 gal plastic bottle **	CA 7	-----	2 hrs during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing. ** quart can for hot-applied non-tracking tack
		Accept.	-----	Mat. Lab	1/shipment	1 gal plastic bottle **	CD 1 & 7	No CD required if less than 250 gal.	-----	(AML) Visual inspection by Proj. Engr. Sample only if questionable. ** quart can for hot-applied non-tracking tack
	Rate of Application	Accept.	Proj. Engr.	Proj. Engr.	1/day	-----	-----	-----	-----	-----

SECTION 505 ASPHALT PRIME COAT

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
THIS SECTION IS TO BE USED AS A GUIDE FOR OTHER ITEM NUMBERS WHEN REFERENCE IS MADE TO SECTION 505 OF THIS MANUAL. THERE ARE NO PAY ITEMS UNDER SECTION 505.										
ASPHALT PRIME COAT	Cutback	Prelim. Source	Refinery S 201	Mat. Lab	1/storage tank	1 qt screw top can	CA 7	-----	5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to tank or modified*	1 qt screw top can	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.	-----	Proj. Engr.	1/shipment*	1 qt screw top can	CD 1 & 7	500 gal	-----	(AML) *Visual inspection by Proj. Engr. Sample only if questionable.
	Emulsified Asphalt	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/storage tank	1 gal plastic bottle	CA 7	-----	5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to tank or modified*	1 gal plastic bottle	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.	-----		1/shipment*	1 gal plastic bottle	CD 1 & 7	500 gal	-----	(AML) *Visual inspection by Proj. Engr. Sample only if questionable.
	Rate of Application	Accept.	Proj. Engr.	Proj. Engr.	1/day	-----	-----	-----	-----	-----

SECTION 506 ASPHALTIC CURING MEMBRANE

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
THIS SECTION IS TO BE USED AS A GUIDE FOR OTHER ITEM NUMBERS WHEN REFERENCE IS MADE TO SECTION 506 OF THIS MANUAL. THERE ARE NO PAY ITEMS UNDER SECTION 506.										
ASPHALT CURING MEMBRANE	Emulsified Asphalt	Prelim. Source	Refinery S 201	Mat. Lab	1/storage tank	1 gal plastic bottle	CA 7	-----	5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to tank or modified*	1 gal plastic bottle	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.	-----	Proj. Engr.	1/shipment*	1 gal plastic bottle	CD 1 & 7	250 gal	-----	(AML) *Visual inspection by Proj. Engr. Sample only if questionable.
	Emulsified Petroleum Resin	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/storage tank	1gal plastic bottle	CA 7	-----	5days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to tank or modified*	1 gal plastic bottle	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.	-----	Mat. Lab	1/shipment*	1 gal plastic bottle	CD 1 & 7	250 gal	-----	(AML) *Visual inspection by Proj. Engr. Sample only if questionable.
	Rate of Application	Accept.	Proj. Engr.	Proj. Engr.	1 day	-----	-----	-----	-----	-----
	Water	Accept.	Proj. Engr. S 301	Proj. Engr.	1/source	1 qt plastic bottle	-----	250 gal	11 days	Drinkable water need not be sampled.

SECTION 507 ASPHALTIC SURFACE TREATMENT

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
AGGREGATES	Rate of Application	Quality Control	Contractor	Contractor	Prior to first pass of aggregate spreader*	-----	-----	-----	-----	*Must check sufficient to ensure materials being applied meet specification requirements.
		Accept.	Proj. Engr.	Proj. Engr.	First pass of aggregate spreader*	-----	-----	-----	1 day	*Must check sufficient to ensure materials being applied meet specification requirements.
	Size 1,2,3 (for cold application)	Accept.	Proj. Engr. S 101	Dist. Lab	1/1000yd^3/ size	1 full sample sack	CA 1	2,000 yd^2	5 days	(AML)
	Size 1,2,3 (for hot application or interlayers)	Accept.	Proj. Engr. S 101	Dist. Lab	1 / 1000yd^3 / size *	1 full sample sack	CA 1	2,000 yd^2	-----	(AML) Certification from supplier for asphalt coating & gradation. * Min. 1 per project if less than 1000 cubic yards

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT MATERIAL	Emulsified Asphalt	Prelim. Source	Refinery S 201	Mat. Lab	1/storage tank	1 gal plastic bottle	CA 7	-----	5 days	(AML) Non Self Certified Must have tank approved by Mat. Lab prior to shipping whenever asphalt
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to a tank or modified*	2-1 gal plastic bottles	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.*	Proj. Engr. S 201	Dist. Lab / Mat. Lab if failing or non-verif. Material	1/transport or storage tank	2 gal plastic bottle**	CD 1 & 8	-----	5 days or 10 days if failing or non-verif. material	(AML) *Send 1 gal to Mat. Lab for failing or nonverifying material. **Two one-gallon plastic bottles.
		Accept.	*	Mat. Lab	1 / type / project**	1 gal plastic bottle	-----	2,000 yd^2	10 days	(AML) For complete analysis. *Shall be selected at random by the Dist. Lab from the acceptance samples submitted by the Proj. Engr. **Not required if sampled under another item.
	Rate of Application	Accept.	Proj. Engr. 507.06(a)	Proj. Engr.	1/each pass of distributor	-----	-----	-----	1 day	-----
	Asphalt Cement	Prelim. Source Approval	Refinery S 201	Mat. Lab	1/supplier tank	1 qt friction top can	CA 7	-----	5 days	(AML) Non Self Certified. Must have tank approved by Mat. Lab prior to shipping whenever asphalt cement is added or modified. DOTD results use for approval.
		Prelim. Source Approval	Refinery S 201	Refinery	1/supplier tank whenever asphalt is added to a tank or modified*	1 qt friction top can	CA 7	-----	2 hrs. during working hours	(AML) Self Certified *Supplier, shall sample and test each tank in accordance with quality control plan whenever asphalt cement is added or modified and supply CA to Mat. Lab along with 1 qt sample for verification testing.
		Accept.*	Proj. Engr. S 201	Dist. Lab/ Mat. Lab if failing or non-verif. material	1/transport or storage tank	2-1qt friction top can	CD 1 & 8	-----	5 days or 10 days if failing or non-verif. material	(AML) *Send 1qt. to Mat. Lab for failing or nonverifying material.
		Accept.	*	Mat. Lab	1/type/ project**	1 qt friction top can	-----	2,000 yd^2	10 days	(AML) For complete analysis. *Shall be selected at random by the Dist. Lab from the acceptance samples submitted by the Proj. Engr. **Not required if sampled under another item.
	Rate of Application	Accept.	Proj. Engr. 507.06(a)	Proj. Engr.	1/each pass of distributor	-----	-----	-----	1 day	-----

SECTION 509 COLD PLANING ASPHALTIC PAVEMENT

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
COLD PLANED SURFACE	Longitudinal Surface Tolerance* (for single lift overlays only)	Quality Control	Contractor TR 644	Contractor	each wheelpath segment	-----	-----	2,000 yd^2	-----	*When a single lift is to be placed over the cold planed surface it must meet the requirements of binder course in Section 502 of this Manual. See table 502-8.
	Transverse Surface Tolerance, Cross Slope and Grade*	Quality Control	Contractor	Contractor	2/day*	-----	-----	-----	-----	*As needed to meet requirements of binder course. See table 502-5
TEMPORARY PAVEMENT MARKING	**SEE SECTION 713 OF THIS MANUAL.**									

SECTION 510 ASPHALT CONCRETE PAVEMENT PATCHING, WIDENING AND JOINT REPAIR

MATERIAL		PURP.	SAMPLED BY / METHOD	TESTED BY	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
ASPHALT CONCRETE				**For details on Additives, Aggregates, Asphalt Cements, Asphaltic Concrete, Asphaltic Tack Coat, Asphalt Mix Release Agent and Mineral Filler, See Section 502 of this Manual.**						
	Density	Accept.	Proj. Engr. S 203	Proj. Engr.	3 / sublot	4 or 6 in. diameter core		-----	1 day	Top 6 inches of finished section.