Version: V03.40

Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S3 (PG 64-22 OK) Mat'l. Code: asco009
(Material Full Name and Material Code)

Binder ID: B1
(Design Type and Design Type ID)

Glover & Associates Inc. P/S # m00745
(Producer/Supplier Name and Producer/Supplier Code)

S3c00931701100
(Mix ID)

Glover & Assoc. Asphalt Co.- (Hulbert, OK) PLANT ID # m00745-02
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
3/4" Chips	Kemp Stone (Hulbert, OK) P/S # m007101106	25
3/8" Chips	Kemp Stone (Hulbert, OK) P/S # m007101106	20
Scrns.	Kemp Stone (Hulbert, OK) P/S # m007101106	20
Man. Sand	Kemp Stone (Hulbert, OK) P/S # m007101106	20
Sand	Muskogee Sand - West Plant (Muskogee, OK) P/S # m007067309	15

Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Lion Oil Co. (Muskogee, OK), m00511
(Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)

Requires Form 93-E0 signed by the Department for production use.
-Oklahoma D.O.T. Materials-

Producer/Supplier:	Kemp Stone (Hulbert, OK) P/S # m007101106	Kemp Stone (Hulbert, OK) P/S # m007101106	Kemp Stone (Hulbert, OK) P/S # m007101106	Kemp Stone (Hulbert, OK) P/S # m007101106	Muskogee Sand - West Plant (Muskogee, OK) P/S # m007067309								
Sieve Size	3/4" Chips	3/8" Chips	Scrns.	Man. Sand	Sand				Comb. Agg.	JMF	Min.	Max.	% Tol. (±)
1 in (25 mm)	100	100	100	100	100				100	100	100	100	0
3/4 in (19 mm)	93	100	100	100	100				98	98	91	100	7
1/2 in (12.5 mm)	61	100	100	100	100				90	90	83	97	7
3/8 in (9.5 mm)	38	94	100	100	100				83	83	76	90	7
#4 (4.75 mm)	7	14	91	98	98				57	57	50	64	7
#8 (2.36 mm)	2	2	63	70	93				41	41	36	46	5
#16 (1.18 mm)	2	2	46	45	80				31	31	27	35	4
#30 (.600 mm)	2	2	34	27	61				22	22	18	26	4
#50 (.300 mm)	2	1	24	14	31				13	13	9	17	4
#100 (.150 mm)	1	1	18	8	5				6	6	3	9	3
#200 (.075 mm)	1.1	1.1	13.8	5.1	1.0				4.4	4.4	2.4	6.4	2
AC Content %									4.4	4.4	4.0	4.8	0.4

	°F (°C)	Required
Mix temperature @ discharge from mixer:	305 (152)	± 20 °F (± 10 °C)
Optimum roadway compaction temperature:	290 (143)	
Laboratory mixing temperature:	325 (163)	
Laboratory compaction temperature:	300 (149)	

Tests on Asphalt Cement	Found
Specific Gravity @ 77 °F	1.0100

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-Oklahoma D.O.T. Materials-

Tests on Compressed Mixtures (@ Design AC)	# Gyr.	% Density of Gmm	% Density Required
Nini	6	88.9	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates		Required		Units
Durability Index	68	40	min.	%
F.A.A. %U		N/A		%
Flat and Elongated	0	10	max.	%
Fractured Faces	100/100	85/80	min.	%
Insoluble Residue		N/A		%
LA Abrasion	27	40	max.	%
Micro-Deval	20.7	N/A		%
Permeability	1.7	12.5	max.	10^{-5}cm/s
Sand Equivalent	77	40	min.	%
IOC	0.60			%
Gse	2.670			
Gsb	2.642			
Specimen Weight	4860			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA	% VFA Required
4.3	2.387	2.494	95.7	Design / Field	13.5	Design / Field	68.1	
4.8	2.401	2.475	97.0	96.0 / 94.5 - 97.4	13.5	13.5 / 13.0	77.8	70 - 75
5.3	2.414	2.456	98.3		13.5		87.4	

Dust Prop.
1.1
1.0
0.9

Dust Prop. Req. 0.6 - 1.6

ITS (PSI) 130.2 N/A min.
TSR 0.80 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 109.5 @ 4.4 % Asphalt Cement

Hamburg Rut Test Depth (mm) 2.46 12.50 max. @ 10,000 cycles

MEETS SPECIFICATION REQUIREMENTS PER SPECIAL PROVISION 708-26(a-f) 09

Comments: Similar to S3pv0261500600 (Plant ID Change)

Last Modified By: Williams, Bobby Ray bwilli01
(User Name and User ID)

Date: 5/24/2017
(mm/dd/yyyy)