

APPENDIX B Mix Designs Developed under 5598-05 for Odessa District



Mix Design & Performance Testing Summary Form

Mix Type	TOM	Date	10/12/2014
District	Odessa	Road	
Optimum AC	7.30%	Asphalt	Alon - PG 76-22
Rice (g/cc)	2.294	Spec. No.	

Gradation						
Sieve Sizes	Cumulative % Passing					
	Hoban Gr 6 72%	Turner 28%	Combined Turner	Yates 28%	Combined Yates	Spec
1/2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
3/8	97.5%	100.0%	98.2%	100.0%	98.2%	85-100%
#4	25.4%	97.5%	45.4%	99.2%	46.1%	60-60%
#8	2.8%	83.1%	25.3%	75.8%	23.2%	17-27%
#16	0.7%	55.7%	16.1%	53.5%	15.5%	5-27%
#30	0.5%	42.3%	12.2%	39.3%	11.4%	5-27%
#50	0.4%	32.5%	9.4%	29.9%	8.7%	5-27%
#200	0.3%	18.3%	5.3%	18.2%	5.3%	5-9%

Hamburg Results						
Sample ID	Air Voids	Rut Depth (mm) at Cycle				Failure Cycle
		5000	10000	15000	20000	
T-H-1	5.8%	3.96	4.91	5.68	6.60	-
T-H-2	6.0%					
Y-H-1	9.3%	4.35	5.81	7.23	8.54	-
Y-H-2	9.6%					

Overlay Results						
Sample ID	Cycles	Peak Load (lbs)	Last Cycle (lbs)	Load Drop (%)	Air Voids	Comment
T-1	530	738.7	51.7	93.0	6.3%	
T-2	411	828.2	57.9	93.0	6.7%	
Y-1	327	655.7	45.6	93.0	9.4%	
Y-2	666	573.7	40.2	93.0	9.1%	

Notes
0.3% Fibers were used in both mixes



Mix Design & Performance Testing Summary Form

Mix Type	UT	Date	5/4/2015
District	Odessa	Road	
Optimum AC	7.70%	Asphalt	Alon 76-22
Rice (g/cc)	2.249	Anti-Strip	None

Gradation				
Sieve Sizes	Cumulative % Passing			
	100% Hoban Gr. 2			Combined
3/4	100			100.0%
1/2	100			100.0%
3/8	100			100.0%
#4	85.1			85.1%
#8	59.6			59.6%
#16	39.1			39.1%
#30	26			26.0%
#50	15.7			15.7%
#200	4.8			4.8%

Hamburg Results						
Sample ID	% Air Voids	Rut Depth (mm) at Cycle				Failure Cycle
		5000	10000	15000	20000	
1	8.2%	3.65	4.88	6.88	11.17	-
2	8.0%					

Overlay Results						
Sample ID	Cycles	Peak Load (lbs)	Last Cycle (lbs)	Load Drop (%)	Density	Comment
1	769	669.0	46.7	93.0		
2	680	679.0	47.1	93.1		
3	401	823.0	57.4	93.0		