

Project Name: I-96 (Kent Lake to 275)
 Contractor Name: Daytona Redi Mix
 MDOT Project #: 63022-124103
 Maximum Aggregate Size (inches): 1.5

Representative Date: 07/09/24 through 07/16/24
 CT Project #: 230408
 Mix ID #: BW-007 (Slipform)

MATERIALS				
Type	Source	Class	Spec. Grav.	F/T Dialation
Coarse	Stoneco-Ottawa Lake (58-0003CA)	CA	2.69	0.010
Intermediate 1	Stoneco-Ottawa Lake (58-0003CA)	IA	2.68	0.010
			1.00	
Fine	Mid Michigan-Vella (81-0101SG)	Fine	2.64	
Cement	Ash Grove-Missisauaga	Type IL	3.10	
GGBFS	Ash Grove-Detroit	Grade 100	2.91	

ADMIXTURES		
Type	Supplier	Dosage (oz/cwt)
Mapair SA	MAPEI	3.5
Mapetard R	MAPEI	3

PROPORTIONS (SSD)				
Type	Wt. lbs.	Sp. Grav.	Vol. ft ³	% Vol.
Cement	458	3.1	2.37	
GGBFS	153	2.91	0.84	
Coarse	1340	2.69	7.98	43.81
Intermediate 1	500	2.68	2.99	16.41
		1.00	0.00	0.00
Fine	1194	2.64	7.25	39.78
27.00				
Water	238	1	3.81	
Air, %	6.5		1.76	

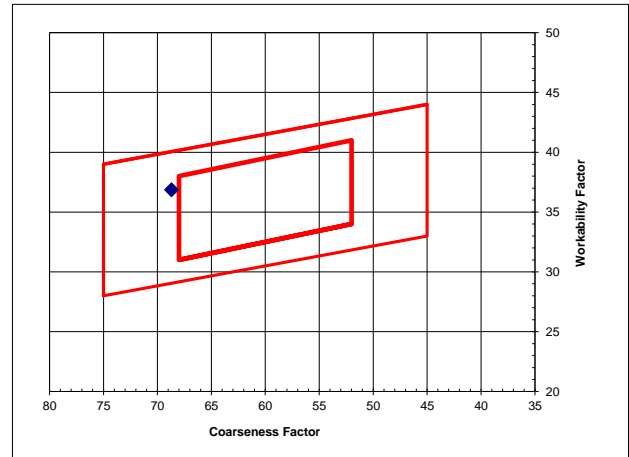
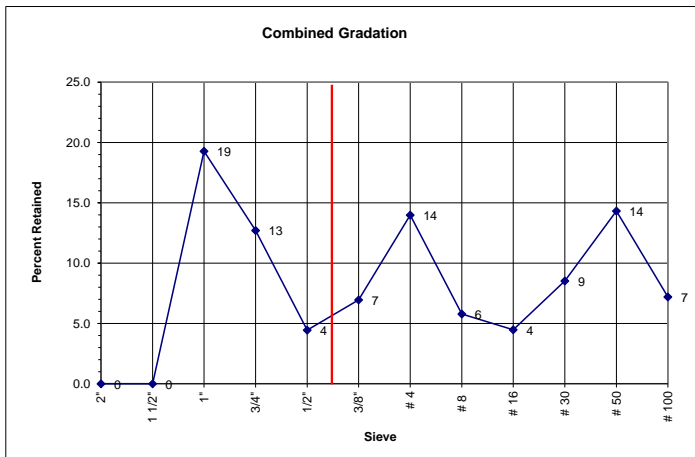
Total Cementitious:	611 lbs. or 6.5 bag
Water/Cement Ratio:	0.39
Percent Cementitious Replacement:	25%

	GRADATIONS								Gradation Date: <u>7/9/2024</u>			
	Coarse		Intermediate 1		Fine		Fine					
	SSD wt., lbs	1340	500	0	1194							
Abs. Volume	7.98	2.99	0.00	7.25								
Aggregate % Vol.	43.8	16.4	0.0	39.8								
Sieves	% Pass	% Mix	% Pass	% Mix	% Pass	% Mix	% Pass	% Mix	Total % Passing	% Cumm. Retained	Retained Sieve, %	Retained Spec. %
2"	100.0	43.8	100.0	16.4	0.0	100.0	39.8	100.0	0.0	0.0		
1 1/2"	100.0	43.8	100.0	16.4	0.0	100.0	39.8	100.0	0.0	0.0		
1"	56.0	24.5	100.0	16.4	0.0	100.0	39.8	80.7	19.3	19.3		
3/4"	27.0	11.8	100.0	16.4	0.0	100.0	39.8	68.0	32.0	12.7		
1/2"	18.0	7.9	97.0	15.9	0.0	100.0	39.8	63.6	36.4	4.4		
3/8"	10.0	4.4	76.0	12.5	0.0	100.0	39.8	56.6	43.4	7.0		
# 4	2.0	0.9	17.0	2.8	0.0	98.0	39.0	42.6	57.4	14.0		
# 8	2.0	0.9	6.0	1.0	0.0	88.0	35.0	36.9	63.1	5.8		
# 16	2.0	0.9	3.0	0.5	0.0	78.0	31.0	32.4	67.6	4.5		
# 30	2.0	0.9	2.0	0.3	0.0	57.0	22.7	23.9	76.1	8.5		
# 50	2.0	0.9	2.0	0.3	0.0	21.0	8.4	9.6	90.4	14.3		
# 100	1.0	0.4	2.0	0.3	0.0	4.0	1.6	2.4	97.6	7.2		
# 200	1.5	0.7	1.5	0.2	0.0	1	0.5	1.4	98.6	1.0		

Fine Aggregate Fineness Modulus: 2.54 FM

Coarseness Factor (x-axis): 68.7
((cumm. Ret 3/8 / cumm. Ret #8) x 100)

Workability Factor (y-axis): 36.9
(Pass #8 + Adjustment Factor)



Approved By: James A. Plohng
 Signature: James A. Plohng