

Project Name: I-696 (I-275 to Lahser)  
 Contractor Name: Daytona Redi Mix  
 MDOT Project #: 63101-131589  
 Maximum Aggregate Size (inches): 1.5

Representative Date: 06/11/24 through 06/18/24  
 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-Missisauga	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 <sup>3</sup>	% Vol.
Cement	458	3.1	2.37	
GGBFS	153	2.91	0.84	
Coarse	1425	2.69	8.49	46.58
Intermediate 1	400	2.68	2.39	13.12
Fine	1210	2.64	7.35	40.30
Water	238	1	3.81	
Air, %	6.5		1.76	
			27.01	

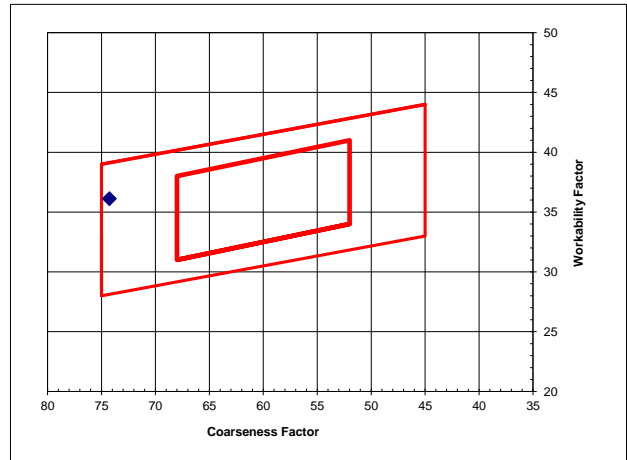
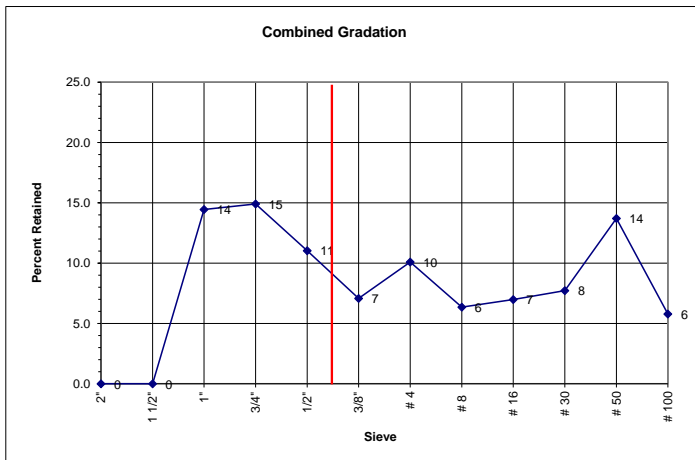
Total Cementitious:	611 lbs. or 6.5 bag
Water/Cement Ratio:	0.39
Percent Cementitious Replacement:	25%

	GRADATIONS											
	Coarse		Intermediate 1		Fine		Fine					
	SSD wt., lbs	1425	400	0	1210	Gradation Date: <u>6/11/2024</u>						
Abs. Volume	8.49	2.39	0.00	7.35								
Aggregate % Vol.	46.6	13.1	0.0	40.3								
Sieves	% Pass	% Mix	% Pass	% Mix	% Pass	% Mix	% Pass	% Mix	Total % Passing	% Cumm. Retained	Retained Sieve, %	Retained Spec. %
2"	100.0	46.6	100.0	13.1	0.0	100.0	40.3	100.0	0.0	0.0		
1 1/2"	100.0	46.6	100.0	13.1	0.0	100.0	40.3	100.0	0.0	0.0		
1"	69.0	32.1	100.0	13.1	0.0	100.0	40.3	85.6	14.4	14.4		
3/4"	37.0	17.2	100.0	13.1	0.0	100.0	40.3	70.7	29.3	14.9		
1/2"	15.0	7.0	94.0	12.3	0.0	100.0	40.3	59.6	40.4	11.0		
3/8"	8.0	3.7	65.0	8.5	0.0	100.0	40.3	52.6	47.4	7.1		
# 4	3.0	1.4	12.0	1.6	0.0	98.0	39.5	42.5	57.5	10.1		
# 8	2.0	0.9	4.0	0.5	0.0	86.0	34.7	36.1	63.9	6.4		
# 16	2.0	0.9	3.0	0.4	0.0	69.0	27.8	29.1	70.9	7.0		
# 30	1.0	0.5	3.0	0.4	0.0	51.0	20.6	21.4	78.6	7.7		
# 50	1.0	0.5	3.0	0.4	0.0	17.0	6.9	7.7	92.3	13.7		
# 100	1.0	0.5	2.0	0.3	0.0	3.0	1.2	1.9	98.1	5.8		
# 200	1.4	0.7	2.3	0.3	0.0	1	0.4	1.4	98.6	0.5		

Fine Aggregate Fineness Modulus: 2.76 FM

Coarseness Factor (x-axis): 74.3  
((cumm. Ret 3/8 / cumm. Ret #8) x 100)

Workability Factor (y-axis): 36.1  
(Pass #8 + Adjustment Factor)



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