

Aggregate Optimization Chart

PLANT #: P-32

Sample Date: 2/20/23

Dates Test Represents: 2/21/2023 through 2/27/2023

Concrete Grade: DM, 4500HP

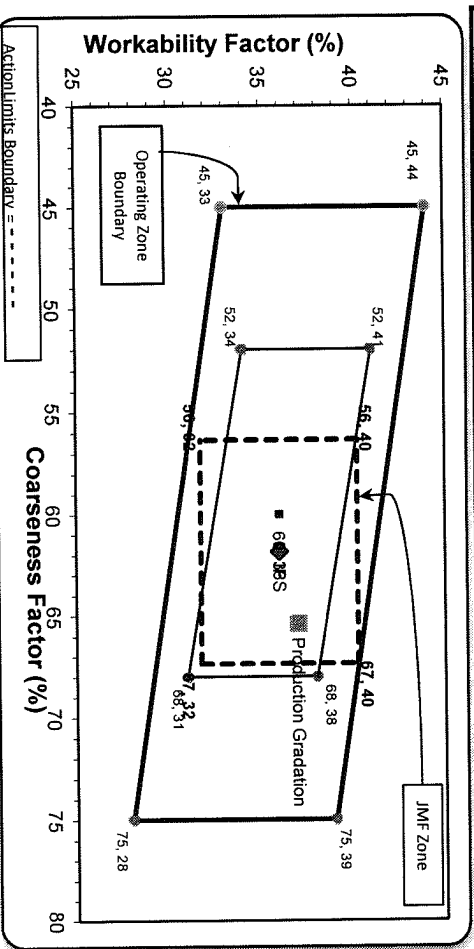
Contractor: _____
MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1405	8.59	2.62	48.4
26A	71-47	Presque Isle	350	2.14	2.62	12.0
2NS	95-013	Smelter Bay	1150	6.95	2.65	39.6
Total Wt			2905	17.69		100.0

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	98.6	100.0	100.0	99.3	0.7	0.7
3/4"	72.8	100.0	100.0	86.8	12.5	13.2
1/2"	35.7	96.8	100.0	68.5	18.3	31.5
3/8"	15.1	85.2	100.0	57.2	11.4	42.8
#4	2.9	19.1	95.5	41.5	15.6	58.5
#8	2.0	5.9	82.9	34.5	7.0	65.5
#16	1.9	3.1	67.8	28.1	6.4	71.9
#30	1.8	2.5	49.1	20.6	7.5	79.4
#50	1.8	2.2	23.6	10.5	10.1	89.5
#100	1.7	2.0	6.5	3.6	6.8	96.4
LBW	1.4	1.7	1.1	1.3	2.3	98.7

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 65 Workability Factor: 34 Adjusted WF: 37.0



Sieve	Initial Production Sample (IPS)	Coarseness Factor:	Workability Factor:	Adjusted WF
2"	100.0	62	36	37.0
1.5"	100.0	0.0	0.0	
1"	100.0	0.0	0.0	
3/4"	95.0	5.0	5.0	
1/2"	72.3	22.8	27.7	
3/8"	60.4	11.8	39.6	
#4	42.6	17.8	57.4	
#8	36.0	6.6	64.0	
#16	29.5	6.5	70.5	
#30	20.3	9.2	79.7	
#50	9.5	10.8	90.5	
#100	3.4	6.1	96.6	
LBW	1.3	2.1	98.7	



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*Maximum % Retained must be above the 3/8" sieve.
*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.
*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.
*% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.

Approved By: _____

Edw. C. Levy Co.

JMT
 8911 W. Jefferson
 Detroit, 48209
 (313) 429-2429

Plant 958-JMT

Product 1054-6AA LS PI

Period: 02/19/2023 - 02/25/2023

Name/Title Doug Storey / QC Technician

Report Date 02/24/2023

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	98.6	%	95-100
	3/4" (19mm)	72.8	%	
	1/2" (12.5mm)	35.7	%	30-60
	3/8" (9.5mm)	18.1	%	
	#4 (4.75mm)	2.9	%	0-8
	#8 (2.36mm)	2.0	%	
	#16 (1.18mm)	1.9	%	
	#30 (.6mm)	1.8	%	
	#50 (.3mm)	1.8	%	
	#100 (.15mm)	1.7	%	
	#200 (75µm)	1.5	%	
	Wash Loss (#200/75um)	1.4	%	0-2
	Total Moisture	2.3	%	

Plant 958-JMT
 Product 1067-26A Mod LS
 Period: 02/19/2023 - 02/25/2023

Name/Title Doug Storey / QC Technician
 Report Date 02/24/2023

Procedure	Sieve/Test	Result	Unit	26A Mod LS Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	
	1" (25mm)	100.0	%	
	3/4" (19mm)	100.0	%	100-100
	1/2" (12.5mm)	96.8	%	95-100
	3/8" (9.5mm)	85.2	%	60-95
	#4 (4.75mm)	19.1	%	5-30
	#8 (2.36mm)	5.9	%	0-12
	#16 (1.18mm)	3.1	%	
	#30 (.6mm)	2.5	%	
	#50 (.3mm)	2.2	%	
	#100 (.15mm)	2.0	%	
	#200 (75µm)	1.8	%	
	Wash Loss (#200/75um)	1.7	%	0-3
	Total Moisture	2.6	%	

Plant 958-JMT

Product 1022-2NS GR - Smelter Bay

Name/Title Doug Storey / QC Technician

Period: 02/19/2023 - 02/25/2023

Report Date 02/24/2023

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	95.5	%	95-100
	#8 (2.36mm)	82.9	%	65-95
	#16 (1.18mm)	67.8	%	35-75
	#30 (.6mm)	49.1	%	20-55
	#50 (.3mm)	23.6	%	10-30
	#100 (.15mm)	6.5	%	0-10
	#200 (75µm)	1.5	%	
	FM	2.74		2.6-3
	Wash Loss (#200/75um)	1.1	%	0-3
	Total Moisture	2.9	%	