

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-39**

Sample Date: **4/20/20**

Dates Test Represents: **4/21/2020** through **4/27/2020**

Concrete Grade: **DM**

Contractor: _____

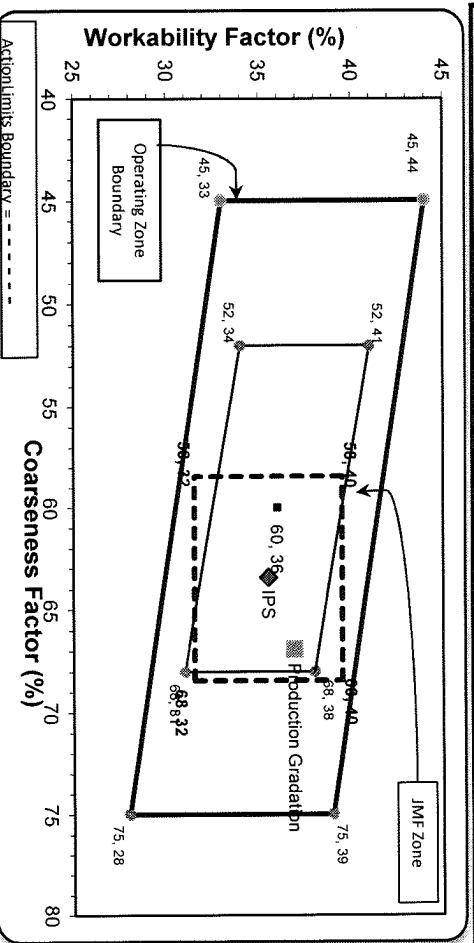
MIDOT No.: _____

Aggr. Class	Pit #	Source	Weight (ssn)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1605	9.82	2.62	55.2
26A	71-47	Presque Isle	200	1.22	2.62	6.9
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
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"	98.5	100.0	100.0	99.2	0.8	0.8
3/4"	83.7	100.0	100.0	91.0	8.2	9.0
1/2"	40.3	97.9	100.0	66.9	24.1	33.1
3/8"	22.5	84.6	100.0	56.1	10.8	43.9
#4	5.1	26.7	97.6	41.6	14.5	58.4
#8	3.2	8.4	84.7	34.4	7.2	65.6
#16	2.7	4.3	70.0	28.3	6.1	71.7
#30	2.5	3.6	50.2	20.6	7.7	79.4
#50	2.4	3.3	21.4	9.7	11.0	90.3
#100	2.2	3.0	3.9	2.9	6.8	97.1
LBW	1.5	2.6	0.8	1.3	1.6	98.7

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **67** Workability Factor: **34** Adjusted WF: **36.9**



Sieve	Initial Production Sample (IPS)	Coarseness Factor:	Workability Factor:	Adjusted WF
2"	100.0	63	36	36.9
1.5"	100.0			
1"	100.0			
3/4"	89.7			
1/2"	70.3			
3/8"	59.1			
#4	42.8			
#8	35.5			
#16	29.0			
#30	21.2			
#50	9.8			
#100	3.7			
LBW	1.2			

*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.



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PREPARED BY:
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Approved By: _____



Plant S39-Superior Sterling Heights

Product 1051-6AA LS

Name/Title Doug Storey / QC Technician

Period: 04/19/2020 - 04/25/2020

Report Date 04/24/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	98.5	%	95-100
	3/4" (19mm)	83.7	%	
	1/2" (12.5mm)	40.3	%	30-60
	3/8" (9.5mm)	22.5	%	
	#4 (4.75mm)	5.1	%	0-8
	#8 (2.36mm)	3.2	%	
	#16 (1.18mm)	2.7	%	
	#30 (.6mm)	2.5	%	
	#50 (.3mm)	2.4	%	
	#100 (.15mm)	2.2	%	
	#200 (75µm)	1.60	%	
	Wash Loss (#200/75µm)	1.5	%	0-2
	Total Moisture	3.06	%	



Plant S39-Superior Sterling Heights

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 04/19/2020 - 04/25/2020

Report Date 04/24/2020

Procedure	Sieve/Test	Result	Unit	26A 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)	97.9	%	95-100
	3/8" (9.5mm)	84.6	%	60-95
	#4 (4.75mm)	26.7	%	5-30
	#8 (2.36mm)	8.4	%	0-12
	#16 (1.18mm)	4.3	%	
	#30 (.6mm)	3.6	%	
	#50 (.3mm)	3.3	%	
	#100 (.15mm)	3.0	%	
	#200 (75µm)	2.6	%	
	Wash Loss (#200/75µm)	2.6	%	0-3
	Total Moisture	4.29	%	



Plant S39-Superior Sterling Heights

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 04/19/2020 - 04/25/2020

Report Date 04/24/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.6	%	95-100
	#8 (2.36mm)	84.7	%	65-95
	#16 (1.18mm)	70.0	%	35-75
	#30 (.6mm)	50.2	%	20-55
	#50 (.3mm)	21.4	%	10-30
	#100 (.15mm)	3.9	%	0-10
	#200 (75µm)	0.9	%	
	FM	2.72		2.6-3
	Wash Loss (#200/75um)	0.8	%	0-3
	Total Moisture	3.79	%	