

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P11**

Contractor: _____

Sample Date: **6/17/24**

Concrete Grade: **P1M, 3500HP**

Dates Test Represents: **6/18/2024** through **6/24/2024**

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	Contribution %
CA	71-47	Presque Isle	820	5.02	2.62	26.7
IA	71-47	Presque Isle	1050	6.42	2.62	34.2
NNS	63-115	Ray Rd	1200	7.26	2.65	39.1
Total Wt			3070	18.70		100.0

Sieve	CA	IA	NNS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	98.3	100.0	100.0	99.5	0.5	0.5
1"	24.3	100.0	100.0	79.8	19.8	20.2
3/4"	6.7	97.6	100.0	74.3	5.5	25.7
1/2"	2.1	71.8	100.0	64.2	10.1	35.8
3/8"	2.1	48.9	100.0	56.4	7.8	43.6
#4	1.9	10.7	96.1	41.7	14.6	58.3
#8	1.8	4.8	84.5	35.2	6.6	64.8
#16	1.7	3.7	69.7	29.0	6.2	71.0
#30	1.6	3.5	50.0	21.2	7.8	78.8
#50	1.6	3.3	23.6	10.8	10.4	89.2
#100	1.5	3.1	6.8	4.1	6.7	95.9
LBW	1.1	2.7	1.4	1.8	2.4	98.2



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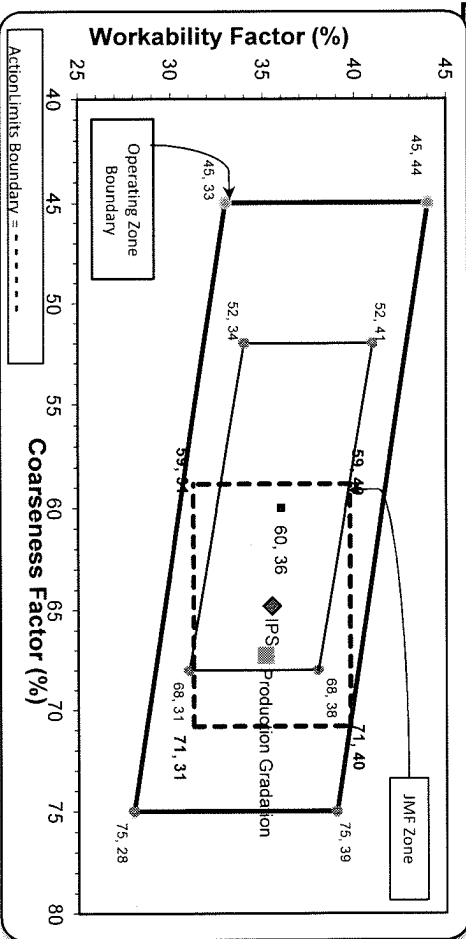
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 **Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 ***Retained must be at least 8% for the 1" sieve when a 2" max. size (nom.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

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Initial Production Sample (IPS)

Coarseness Factor:	67	Workability Factor:	35
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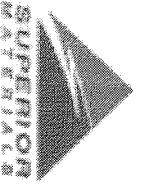
Coarseness Factor:	65	Workability Factor:	36
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Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	99.0	0.6	0.6
1"	84.0	15.3	16.0
3/4"	73.5	10.5	26.5
1/2"	65.2	8.2	34.8
3/8"	58.2	7.1	41.8
#4	44.1	14.1	55.9
#8	35.5	8.6	64.5
#16	29.1	6.4	70.9
#30	21.9	7.3	78.1
#50	9.6	12.2	90.4
#100	2.6	7.1	97.4
LBW	1.0	1.6	99.0

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Tuesday, June 18, 2024

Sample Id	Plant	Product	Specification	Sample Type	Time	2" (50mm)	1 1/2" (37.5mm)	1" (25mm)	3/4" (19mm)	1/2" (12.5mm)	3/8" (9.5mm)	#4 (4.75mm)	#8 (2.36mm)	#16 (1.18mm)	#30 (.6mm)	#50 (.3mm)	#100 (.15mm)	#200 (75µm)	Pan	FM	Wash Loss (#200/75µm)	Total Moisture
674890435	S11	7919 COARSE AGG P1M LS	Coarse Agg P1M LS Target	QA	07:15	100.0	98.3	24.3	6.7	2.1	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.3	0.0		1.1	0.47
-110122887	S11	7920 INTERMED AGG P1M LS	Intermed Agg P1M LS Target	QA	07:15	100.0	100.0	100.0	97.6	71.8	48.9	10.7	4.8	3.7	3.5	3.3	3.1	2.9	0.0		2.7	1.63
-422764123	S11	1051 6AA LS	6AA LS	QA	07:20	100.0	100.0	95.3	77.0	40.9	24.1	4.4	2.5	2.1	2.0	1.9	1.8	1.66	0.00		1.6	2.91
-1989629670	S11	1022 2NS GR	2NS GR Spec	QA	07:40	100.0	96.1	84.5	69.7	50.0	23.6	6.8	1.7	0.0						2.69	1.4	4.24
-1989656313	S11	1067 26A Mod LS	26A Mod LS Spec	QA	07:50	100.0	100.0	100.0	100.0	89.7	74.5	14.4	5.2	3.5	3.0	2.6	2.4	2.2	0.0		2.1	2.51