Sample Date:

Concrete Grade: P1M, 3500HP 7/4/22

Dates Test F	Represents:	1/5/2022	tnrougn	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1070	6.54	2.62	34.9
IA	71-47	Presque Isle	800	4.89	2.62	26.1
2NS	75-051	Mid Michigan	1200	7.23	2.66	39.1

Contractor:

MDOT No.:

Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

	Total Wt	3070	18.67		100.0	< Verify this n	umber is 100%
Sieve	CA	1/	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	98.1	100	0.0	100.0	99.3	0.7	0.7
1"	45.6	100	0.0	100.0	81.0	18.3	19.0
3/4"	11.8	98	3.7	100.0	68.9	12.1	31.1
1/2"	2.5	84	.5	100.0	62.0	6.9	38.0
3/8"	1.9	65	5.4	100.0	56.8	5.2	43.2
#4	1.7	16	5.1	99.0	43.5	13.3	56.5
#8	1.5	4.	.8	83.6	34.5	9.0	65.5
#16	1.4	3.	.0	68.3	28.0	6.5	72.0
#30	1.3	2.	.6	52.6	21.7	6.3	78.3
#50	1.2	2.	4	27.5	11.8	9.9	88.2
#100	1.2	2.	2	7.5	3.9	7.9	96.1
LBW	1.0	1.	.9	0.9	1.2	2.7	98.8

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

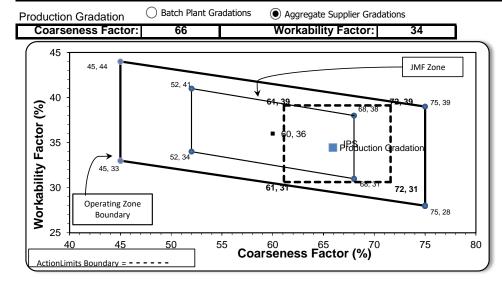
nom. max., #100 and #200 sieves.

\*% 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.



Initial Production Sample (IPS)

Coars	eness Factor:	66	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	84.3	15.3	15.7
3/4"	74.8	9.6	25.2
1/2"	64.3	10.4	35.7
3/8"	56.8	7.5	43.2
#4	43.0	13.8	57.0
#8	34.9	8.1	65.1
#16	26.4	8.5	73.6
#30	19.9	6.5	80.1
#50	10.4	9.5	89.6
#100	3.4	7.0	96.6
LBW	1.2	2.2	98.8

PREPARED BY: SM, LLC Technical Service Approved By:

Sample Date:

7/4/22 Concrete Grade: P1M, 3500HP

Dates Test F	represents:	1/5/2022	tnrougn	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	58-003	Stoneco	1370	8.16	2.69	43.9
IA	58-003	Stoneco	550	3.28	2.69	17.6
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5

Contractor:

MDOT No.:



Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

Total Wt		3120	18.70		100.0	< Verify this number is 100%		
Sieve	CA	IA		2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0	10	0.0	100.0	100.0	0.0	0.0	
1.5"	100.0	10	0.0	100.0	100.0	0.0	0.0	
1"	65.5	10	0.0	100.0	84.9	15.1	15.1	
3/4"	37.0	10	0.0	100.0	72.3	12.5	27.7	
1/2"	13.8	93	3.5	100.0	61.0	11.3	39.0	
3/8"	8.3	77	7.9	100.0	55.8	5.2	44.2	
#4	3.4	26	6.9	98.8	44.2	11.6	55.8	
#8	1.8	5	.7	83.8	34.0	10.2	66.0	
#16	1.4	2	.0	66.2	26.4	7.6	73.6	
#30	1.3	1	.3	48.5	19.5	7.0	80.5	
#50	1.2	1	.2	24.4	10.1	9.3	89.9	
#100	1.2	1.1		7.4	3.6	6.6	96.4	
LBW	1.0	1	.2	1.3	1.2	2.4	98.8	

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

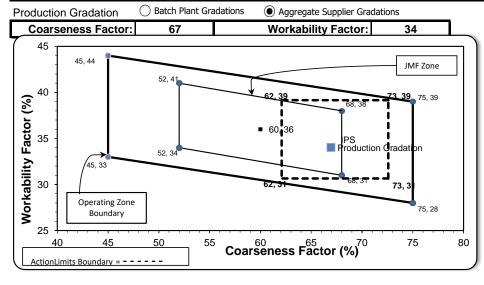
nom. max., #100 and #200 sieves.

 $\ensuremath{^{*}\%}$  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.



Intial Production Sample (IPS)

Coars	eness Factor:	67	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

PREPARED BY: SM, LLC Technical Service Approved By

Sample Date:

7/4/22 Concrete Grade: P1M, 3500HP

Dates Test I	Represents:	1/3/2022	through	7/11/2022		
Agg. Class	Pit#	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	58-003	Stoneco	1370	8.16	2.69	43.9
IA	58-003	Stoneco	550	3.28	2.69	17.6
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5

\_\_\_\_\_

MDOT No.:

Contractor:



Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

Total Wt		3120	18.70	100.0 < Verify this number			umber is 100%
Sieve	CA	L	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	10	0.0	100.0	100.0	0.0	0.0
1"	65.5	10	0.0	100.0	84.9	15.1	15.1
3/4"	37.0	10	0.0	100.0	72.3	12.5	27.7
1/2"	13.8	93	3.5	100.0	61.0	11.3	39.0
3/8"	8.3	77	<b>'</b> .9	100.0	55.8	5.2	44.2
#4	3.4	26	5.9	98.8	44.2	11.6	55.8
#8	1.8	5	.7	83.8	34.0	10.2	66.0
#16	1.4	2	.0	66.2	26.4	7.6	73.6
#30	1.3	1	.3	48.5	19.5	7.0	80.5
#50	1.2	1	.2	24.4	10.1	9.3	89.9
#100	1.2	1	.1	7.4	3.6	6.6	96.4
LBW	1.0	1	.2	1.3	1.2	2.4	98.8

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

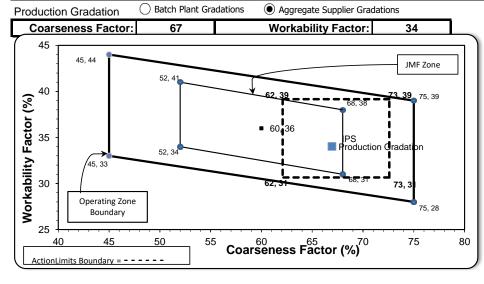
nom. max., #100 and #200 sieves.

 $^{*}\%$  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.



Intial Production Sample (IPS)

Coars	eness Factor:	67	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

PREPARED BY: SM, LLC Technical Service Approved BY:

PREPARED BY:

Sample Date:

7/4/22 Concrete Grade: P1M, 3500HP

Agg. Class Pit # Source Weight (SSD) ft <sup>3</sup> Specific 9 Gravity Contri	
	-
CA 71-47 Presque Isle 970 5.93 2.62 31	.6
IA 71-47 Presque Isle 850 5.20 2.62 27	7.7
2NS 63-115 Ray Rd 1250 7.56 2.65 40	.7

Contractor:

MDOT No.:

	Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%
Sieve	CA	1,	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	95.6	10	0.0	100.0	98.6	1.4	1.4
1"	45.2	10	0.0	100.0	82.7	15.9	17.3
3/4"	10.3	97.4		100.0	70.9	11.7	29.1
1/2"	2.1	71	.5	100.0	61.2	9.8	38.8
3/8"	1.8	45	5.0	100.0	53.7	7.4	46.3
#4	1.5	8	.6	96.8	42.3	11.5	57.7
#8	1.4	4	.0	78.9	33.7	8.6	66.3 r
#16	1.4	2	.6	61.3	26.1	7.6	73.9
#30	1.4	2	.1	44.8	19.3	6.9	80.7 r
#50	1.4	1.	.8	24.5	10.9	8.3	89.1
#100	1.2	1.6		4.8	2.8	8.1	97.2 a
LBW	0.8	1.	.0	0.6	0.8	2.0	99.2



**Superior Materials, LLC** 30701 W. 10 Mile Rd. Suite 500 Farmington Hills, MI 48336

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

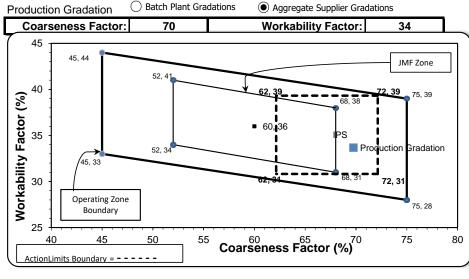
nom. max., #100 and #200 sieves.

\*% 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.



Intial Production Sample (IPS)

Coars	eness Factor:	67	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.0	9.8	26.0
1/2"	63.7	10.3	36.3
3/8"	56.4	7.3	43.6
#4	43.0	13.4	57.0
#8	35.1	7.9	64.9
#16	29.0	6.1	71.0
#30	20.9	8.0	79.1
#50	8.1	12.8	91.9
#100	1.6	6.5	98.4
LBW	0.9	0.8	99.1

Approved By: SM, LLC Technical Service

Sample Date:

Concrete Grade: P1M, 3500HP 7/4/22 7/11/2022

Dates Test F	Represents:	7/5/2022	through	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	900	5.50	2.62	29.3
IA	71-47	Presque Isle	920	5.63	2.62	30.0
2NS	95-013	Smelter Bay	1250	7.56	2.65	40.7

Contractor:

MDOT No.:



Supe	rior Materials, LLC
30702	I W. 10 Mile Rd.
Suite	500
Farmi	ngton Hills, MI 48336

	Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%
Sieve	CA	1/	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	95.6	100	0.0	100.0	98.7	1.3	1.3
1"	45.2	100	0.0	100.0	83.9	14.8	16.1
3/4"	10.3	97	.4	100.0	72.9	11.0	27.1
1/2"	2.1	71	.5	100.0	62.8	10.2	37.2
3/8"	1.8	45	.0	100.0	54.7	8.0	45.3
#4	1.5	8.	6	96.2	42.2	12.5	57.8
#8	1.4	4.	0	84.1	35.9	6.3	64.1
#16	1.4	2.	6	69.6	29.5	6.3	70.5
#30	1.4	2.	1	51.2	21.9	7.6	78.1
#50	1.4	1.	8	26.6	11.8	10.1	88.2
#100	1.2	1.	6	8.7	4.4	7.4	95.6
LBW	0.8	1.	0	1.6	1.2	3.2	98.8

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

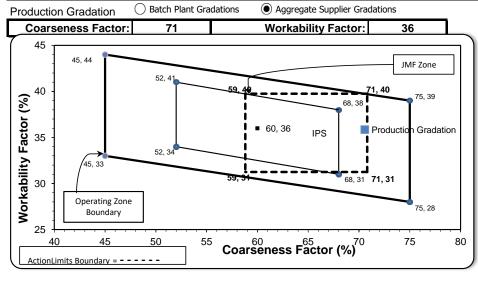
nom. max., #100 and #200 sieves.

\*% 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.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Worl	ability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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:

Pleasant Lake

PLANT #: P-35

81-019

Sample Date:

2NS

7/4/22 Concrete Grade: P1M, 3500HP

7.26

2.65

38.5

Dates Test F	Represents:	7/5/2022	through	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	58-003	Stoneco	1370	8.16	2.69	43.9
IA	58-003	Stoneco	550	3.28	2.69	17.6

1200

Contractor:

MDOT No.:



----- Verify this number is 100%

ined	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
)	0.0	Suite 500
)	0.0	Farmington Hills, MI 48336

Total Wt 3120 18.70 Cumulative CA IΑ % Retail Sieve 2NS % Passing 2" 100.0 100.0 100.0 100.0 0.0 1.5" 100.0 100.0 100.0 100.0 0.0 0.0 65.5 100.0 100.0 84.9 15.1 15.1 3/4" 37.0 100.0 100.0 72.3 12.5 27.7 1/2' 13.8 93.5 100.0 61.0 11.3 39.0 3/8' 77.9 100.0 5.2 44.2 8.3 55.8 #4 3.4 26.9 98.8 44.2 11.6 55.8 #8 1.8 5.7 83.8 34.0 10.2 66.0 #16 1.4 2.0 66.2 26.4 7.6 73.6 #30 19.5 80.5 1.3 1.3 48.5 7.0 #50 1.2 1.2 24.4 10.1 9.3 89.9 #100 1.2 1.1 7.4 3.6 6.6 96.4 LBW 2.4

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

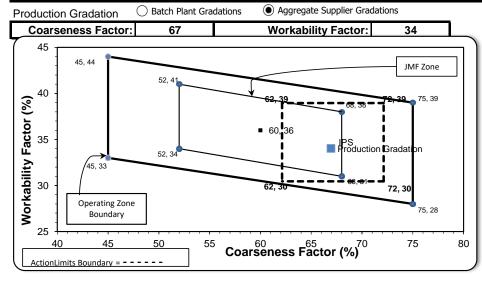
nom. max., #100 and #200 sieves.

\*% 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



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	86.9	13.1	13.1
3/4"	76.1	10.8	23.9
1/2"	63.7	12.4	36.3
3/8"	56.2	7.5	43.8
#4	43.2	13.0	56.8
#8	34.7	8.5	65.3
#16	27.5	7.2	72.5
#30	20.6	7.0	79.4
#50	9.0	11.6	91.0
#100	2.1	6.9	97.9
LBW	1.0	1.1	99.0

PREPARED BY: SM, LLC Technical Service

CA

100.0

95.6

45.2

10.3

2.1

1.8

1.5

1.4

1.4

1.4

1.4

1.2

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

7/4/22 Concrete Grade: P1M, 3500HP

Dates Test F	Represents:	7/5/2022	through	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	900	5.50	2.62	29.3
IA	71-47	Presque Isle	970	5.93	2.62	31.6
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
		Total Wt	3070	18.70		100.0

IΑ

100.0

100.0

100.0

97.4

71.5

45.0

8.6

4.0

2.6

2.1

1.8

1.6

MDOT No.:

6.7

6.0

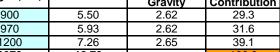
7.4

11.5

7.6

1.6

Contractor:



2NS

100.0

100.0

100.0

100.0

100.0

100.0

98.0

84.6

70.5

52.1

22.8

3.6

34.7

28.8

21.4

9.9

2.3

---- Verify this number is 100%

Cumulative % Passing	% Retained	Cumulative % Retained	
100.0	0.0	0.0	
98.7	1.3	1.3	
83.9	14.8	16.1	
72.9	11.1	27.1	
62.3	10.6	37.7	
53.8	8.5	46.2	*Maximum
41.5	12.4	58.5	*Any two ac

65.3

71.2

78.6

90.1

97.7

99.3



Superior Materials, LLC 30701 W. 10 Mile Rd. Suite 500 Farmington Hills, MI 48336

% Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

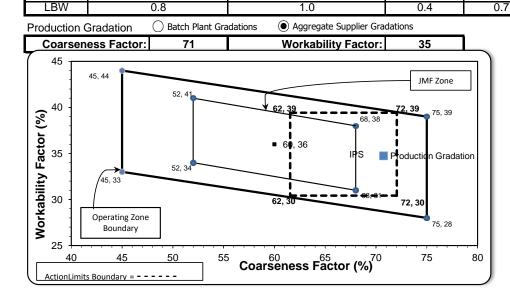
nom. max., #100 and #200 sieves.

\*% 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.



Intial Production Sample (IPS)

Coarseness Factor:		67	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.0	15.0	15.0
3/4"	72.1	12.9	27.9
1/2"	64.5	7.6	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

PREPARED BY: SM, LLC Technical Service

Sample Date:

#100

LBW

7/4/22 Concrete Grade: P1M, 3500HP

Dates Test F	Represents:	7/5/2022	through	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1020	6.24	2.62	33.2
IA	71-47	Presque Isle	800	4.89	2.62	26.1
2NS	44-051	Krake Willis Rd	1250	7.56	2.65	40.7
		Total Wt	3070	18.69		100.0

Contractor:

MDOT No.:



--- Verify this number is 100%

ned	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
	0.0	Suite 500

Farmington Hills, MI 48336

Sieve	CA	IA	2NS	% Passing	% Retained	% Retained	
2"	100.0	100.0	100.0	100.0	0.0	0.0	ĺ
1.5"	98.1	100.0	100.0	99.4	0.6	0.6	ĺ
1"	45.6	100.0	100.0	81.9	17.4	18.1	ĺ
3/4"	11.8	98.7	100.0	70.4	11.6	29.6	ĺ
1/2"	2.5	84.5	100.0	63.6	6.8	36.4	ĺ
3/8"	1.9	65.4	100.0	58.4	5.2	41.6	ĺ
#4	1.7	16.1	96.6	44.1	14.3	55.9	ĺ
#8	1.5	4.8	81.9	35.1	9.0	64.9	n
#16	1.4	3.0	68.5	29.1	6.0	70.9	ĺ
#30	1.3	2.6	53.4	22.9	6.3	77.1	n
#50	1.2	2.4	28.6	12.7	10.2	87.3	ĺ

9.1

1.6

4.7

1.5

2.2

1.9

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

nom. max., #100 and #200 sieves.

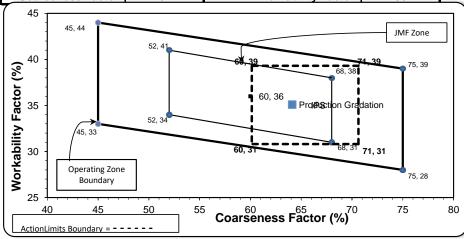
\*% Retained must be at least 4% for each sieve except max.,

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.

 Batch Plant Gradations Aggregate SupplierGradations **Production Gradation Coarseness Factor:** 64 **Workability Factor:** 35



Intial Production Sample (IPS)

3.2

95.3

98.5

Coarseness Factor:		65	
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.1	9.8	25.9
1/2"	64.3	9.7	35.7
3/8"	57.5	6.8	42.5
#4	44.5	13.1	55.5
#8	35.1	9.4	64.9
#16	27.9	7.2	72.1
#30	21.7	6.2	78.3
#50	12.6	9.1	87.4
#100	3.5	9.1	96.5
LBW	1.2	2.4	98.8

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1.2

Sample Date:

7/4/22 Concrete Grade: **P1M**, **3500HP** 

Jales Test F	represents:	1/5/2022	through	7/11/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	950	5.81	2.62	30.9
IA	71-47	Presque Isle	870	5.32	2.62	28.3
2NS	63-115	Ray Rd	1250	7.56	2.65	40.7
		Total Wt	3070	18.69		100.0

Contractor:

MDOT No.:



---- Verify this number is 100%

e d	Superior Materials, LLC
	30701 W. 10 Mile Rd.
	Suite 500
	F!

Farmington Hills, MI 48336

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

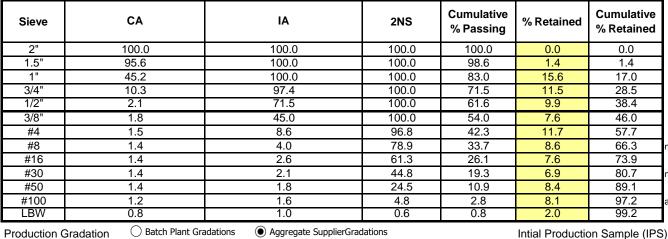
nom. max., #100 and #200 sieves.

 $^{*}\%$  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.



Coarseness Factor:	69	Workability Factor: 34
45 45, 44		JMF Zone
(%) 40 E	52, 41	62, 39 75, 39
Morkability Factor (%) 35 - 45, 33 Operating Zone Boundary	52, 34	■ 69, 36  IPS  ■ Production Gradation
45, 33 45, 33	02,01	62, 31 72, 31
		75, 28
25 + 40 45	50 55	5 Coarseness Factor (%) 70 75 80
ActionLimits Boundary =		Obarseriess Factor (70)

Coarseness Factor:		67	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.0	15.0	15.0
3/4"	72.3	12.7	27.7
1/2"	64.5	7.8	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

PREPARED BY: SM, LLC Technical Service Approved By: