Sample Date:

12/5/22 Concrete Grade: S2M, 3500HP

Dates Test F	Represents:	12/0/2022	through	12/12/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1520	9.30	2.62	49.8
26A	71-47	Presque Isle	305	1.87	2.62	10.0
2NS	75-051	Mid Michigan	1230	7.41	2.66	40.3

Contractor:

MDOT No.:



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

	Total Wt	3055	18.57		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	6A	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"	100.0	10	0.0	100.0	100.0	0.0	0.0
3/4"	83.5	10	0.0	100.0	91.8	8.2	8.2
1/2"	35.2	94	1.0	100.0	67.2	24.6	32.8
3/8"	15.1	79).7	100.0	55.7	11.4	44.3
#4	1.8	19	9.1	98.6	42.5	13.2	57.5
#8	1.5	6	.6	84.0	35.2	7.3	64.8
#16	1.4	4	.0	68.6	28.7	6.5	71.3
#30	1.4	3	.3	51.0	21.6	7.2	78.4
#50	1.4	3	.0	23.2	10.3	11.2	89.7
#100	1.4	2	.8	4.8	2.9	7.4	97.1
LBW	1.3	2	.5	0.8	1.2	1.7	98.8

75, 28

75

80

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

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

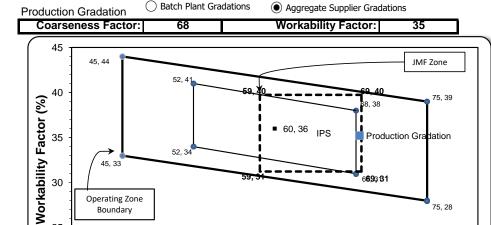
nom. max., #100 and #200 sieves.

*% 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.



55

50

Coarseness Factor (%) 65

Initial Production Sample (IPS)

Coarseness Factor:		64	
Work	ability Factor:	35	
Siovo	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	93.9	6.1	6.1
1/2"	71.4	22.5	28.6
3/8"	59.0	12.4	41.0
#4	45.1	13.9	54.9
#8	35.5	9.6	64.5
#16	28.3	7.2	71.7
#30	21.3	6.9	78.7
#50	11.0	10.3	89.0
#100	3.4	7.6	96.6
LBW	1.1	2.3	98.9

PREPARED BY: SM, LLC Technical Service

Boundary

ActionLimits Boundary = - - - -

Approved By:

PREPARED BY:

SM, LLC Technical Service

Sample Date:

12/5/22 Concrete Grade: S2M, 3500HP 12/12/2022

Dates Test F	Represents:	12/6/2022	through	12/12/2022		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1550	9.23	2.69	50.0
26A	58-003	Stoneco	350	2.09	2.69	11.3
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7
		Total Wt	3100	18.58		100.0

Contractor:

MDOT No.:

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

	i otai vyt	3100	16.56		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	100	0.0	100.0	100.0	0.0	0.0
1"	100.0	100	0.0	100.0	100.0	0.0	0.0
3/4"	83.2	100	0.0	100.0	91.6	8.4	8.4
1/2"	44.2	99	.8	100.0	72.1	19.5	27.9
3/8"	19.0	88	.2	100.0	58.2	13.9	41.8
#4	3.0	10	.3	97.5	40.4	17.8	59.6
#8	2.0	3.	9	83.1	33.6	6.8	66.4
#16	2.2	3.	5	67.2	27.5	6.1	72.5
#30	2.1	3.	2	49.8	20.7	6.8	79.3
#50	1.9	3.	0	25.0	11.0	9.7	89.0
#100	1.8	2.	9	7.1	4.0	7.0	96.0
LBW	1.3	2.	6	1.7	1.6	2.4	98.4

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

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

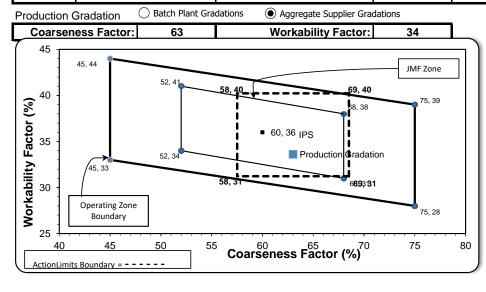
nom. max., #100 and #200 sieves.

*% 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)

Coarseness Factor:		63	
Workability Factor:		36	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.5	11.8	40.5
#4	43.8	15.7	56.2
#8	35.7	8.1	64.3
#16	27.0	8.7	73.0
#30	18.6	8.4	81.4
#50	6.8	11.8	93.2
#100	1.4	5.4	98.6
LBW	0.6	0.8	99.4

Approved By:

Sample Date:

12/5/22 Concrete Grade: S2M, 3500HP

Dates Test Represents: 12/6/2022 12/12/2022 through

Contractor:

MDOT No.:

Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1550	9.23	2.69	50.0
26A	58-003	Stoneco	350	2.09	2.69	11.3
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7
		Total Wt	3100	18.58		100.0

---- Verif

fy this n	umber is 100%	MATERIALS
ained	Cumulative % Retained	
0	0.0	Suite 500
0	0.0	Farmington Hills, MI 48336

Cumulative 6AA 26A 2NS % Reta Sieve % Passing 2" 100.0 100.0 100.0 100.0 0.0 1.5" 100.0 100.0 100.0 100.0 0.0 100.0 100.0 100.0 100.0 0.0 0.0 3/4" 83.2 100.0 100.0 91.6 8.4 8.4 1/2' 44.2 99.8 100.0 72.1 19.5 27.9 3/8' 19.0 88.2 100.0 58.2 13.9 41.8 #4 3.0 10.3 97.5 40.4 17.8 59.6 #8 2.0 3.9 83.1 33.6 6.8 66.4 #16 2.2 3.5 67.2 27.5 6.1 72.5 #30 2.1 3.2 49.8 20.7 6.8 79.3 #50 1.9 3.0 25.0 11.0 9.7 89.0 #100 1.8 2.9 7.1 4.0 7.0 96.0 LBW 1.6 2.4

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

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

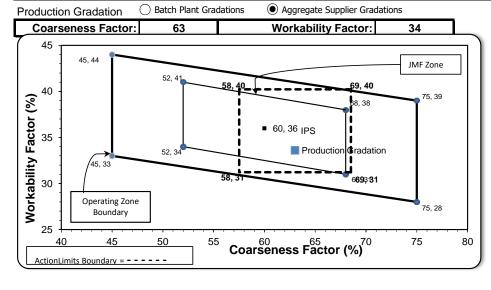
nom. max., #100 and #200 sieves.

*% 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)

Coarseness Factor:		63	
Workability Factor:		36	
Siovo	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.5	11.8	40.5
#4	43.8	15.7	56.2
#8	35.7	8.1	64.3
#16	27.0	8.7	73.0
#30	18.6	8.4	81.4
#50	6.8	11.8	93.2
#100	1.4	5.4	98.6
LBW	0.6	0.8	99.4

PREPARED BY: SM, LLC Technical Service Approved BY:

12/6/2022

Source

Stoneco

Stoneco

Schlegel

1210

PLANT #: P-14

Pit#

58-003

58-003

19-55

Sample Date:

Agg. Class

6AA

26A

2NS

Dates Test Represents:

12/5/22 Concrete Grade: S2M, 3500HP

7.26

through	12/12/2022		
Weight (SSD)	ft ³	Specific Gravity	% Contribution
1480	8.82	2.69	47.6
420	2.50	2.69	13.5

2.67

38.9

Contractor:

MDOT No.:



Builders Redi-Mix

30701 W. 10 Mile Rd. Suite 500

Farmington Hills, MI 48336

į		Comogo	1210		2.01	00.0		
Total Wt		3110	18.58		100.0	< Verify this n	umber is 100%	
Sieve	•	6AA	26	6A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	1	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	1	100.0	10	0.0	100.0	100.0	0.0	0.0
1"	1	100.0	10	0.0	100.0	100.0	0.0	0.0
3/4"		83.2	10	0.0	100.0	92.0	8.0	8.0
1/2"	•	44.2	99	99.8		73.4	18.6	26.6
3/8"		19.0	88	3.2	100.0	59.9	13.6	40.1
#4		3.0	10	10.3		41.7	18.1	58.3
#8		2.0	3	.9	90.8	36.8	4.9	63.2 r
#16		2.2	3	.5	71.2	29.2	7.6	70.8
#30		2.1	3	3.2		20.1	9.1	79.9 r
#50		1.9	3.0		16.9	7.9	12.3	92.1
#100		1.8	2	.9	3.2	2.5	5.4	97.5 a
LBW		1.3	2	.6	0.3	1.1	1.4	98.9

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

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

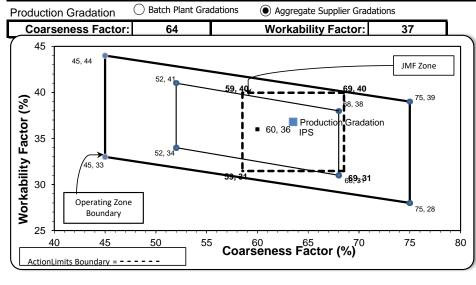
nom. max., #100 and #200 sieves.

*% 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.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Workability Factor:		36	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.2	12.1	40.8
#4	41.5	17.7	58.5
#8	35.7	5.8	64.3
#16	27.9	7.9	72.1
#30	18.3	9.5	81.7
#50	7.3	11.0	92.7
#100	2.0	5.3	98.0
LBW	0.9	1.1	99.1

PLANT #: 11

6AA

100.0

100.0

96.7

74.4

31.9

14.7

2.5

1.9

1.7

1.5

1.4

1.3

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

LBW

12/5/22

Contractor:

Concrete Grade: S2M, 3500HP MDOT No.:

Dates Test F	represents:	12/6/2022	tnrougn	12/12/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1470	8.99	2.62	48.2
26A	71-47	Presque Isle	350	2.14	2.62	11.5
2NS	95-013	Smelter Bay	1230	7 44	2 65	40.3

gg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1470	8.99	2.62	48.2
26A	71-47	Presque Isle	350	2.14	2.62	11.5
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
		Total Wt	3050	18.57		100.0

26A

100.0

100.0

100.0

100.0

97.2

82.0

10.3

2.7

1.4

1.1

1.0

0.9

2NS

100.0

100.0

100.0

100.0

100.0

100.0

96.0

83.6

67.9

49.2

24.0

6.6

20.7

10.5

3.4

1.0

---- Verify this number is 100%

SUPERIOR	
MATERIALS	,

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

Cumulative % Passing	% Retained	Cumulative % Retained	
100.0	0.0	0.0	
100.0	0.0	0.0	
98.4	1.6	1.6	
87.7	10.7	12.3	
66.9	20.8	33.1	
56.8	10.0	43.2	*N
41.1	15.7	58.9	*A
34.9	6.2	65.1	non
28.4	6.6	71.6	*%

7.7

10.2

7.1

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

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

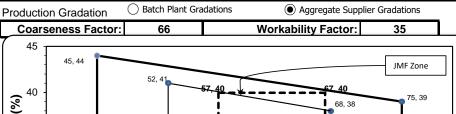
m. max., #100 and #200 sieves.

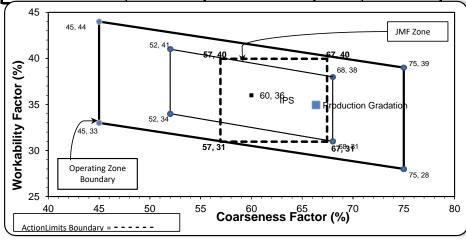
*% Retained must be at least 4% for each sieve except max.,

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)

79.3

89.5

96.6

99.0

Coars	Coarseness Factor:		
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

Sample Date:

12/5/22 Concrete Grade: **S2M**, **3500HP**

Dates Test Represents:		12/6/2022	through	12/12/2022			
	Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
	6AA	71-47	Presque Isle	1470	8.99	2.62	48.2
	26A	71-47	Presque Isle	350	2.14	2.62	11.5
	2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
			Total Wt	3050	18.57		100.0

Contractor:

MDOT No.:



---- Verify this number is 100%

Cumulative % Retained	
0.0	Suite 500
0.0	Farmington Hills, MI 48336

Cumulative 6AA 26A % Retained 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 96.7 100.0 100.0 98.4 1.6 1.6 3/4" 74.4 100.0 100.0 87.7 10.7 12.3 1/2' 31.9 97.2 100.0 66.9 20.8 33.1 3/8' 82.0 100.0 10.0 43.2 14.7 56.8 #4 2.5 10.3 96.0 41.1 15.7 58.9 #8 1.9 2.7 83.6 34.9 6.2 65.1 #16 1.7 1.4 67.9 28.4 6.6 71.6 #30 49.2 20.7 79.3 1.5 1.1 7.7 #50 1.4 1.0 24.0 10.5 10.2 89.5 #100 1.3 0.9 6.6 3.4 7.1 96.6 LBW 1.0 2.4

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

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

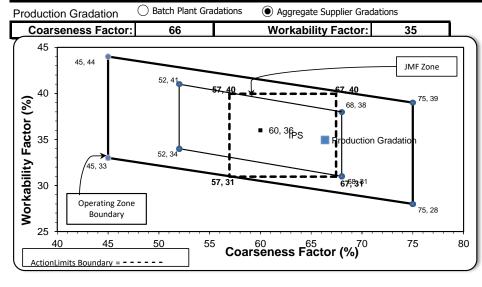
nom. max., #100 and #200 sieves.

 $^{*}\%$ 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	eness Factor:	62	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY: SM, LLC Technical Service Approved By

Pleasant Lake

1.8

Total Wt

1200

3100

PLANT #: P-35

Pit#

58-003

58-003

81-019

Sample Date:

Agg. Class

6AA

26A

2NS

#100

LBW

Dates Test Represents:

12/5/22 Concrete Grade: **S2M**, **3500HP**

12/6/2022 12/12/2022 through Specific ft³ Source Weight (SSD) Gravity Contribution Stoneco 1550 9.23 2.69 50.0 Stoneco 350 2.09 2.69 11.3

7.26

18.58

2.65

7.1

38.7

Cumulative

4.0

1.6

Contractor:

MDOT No.:



<---- Verify this number is 100%

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

Farmington Hills, MI 48336

Sieve	6AA	26A	2NS	% Passing	% Retained	% Retained	
2"	100.0	100.0	100.0	100.0	0.0	0.0	l
1.5"	100.0	100.0	100.0	100.0	0.0	0.0	ı
1"	100.0	100.0	100.0	100.0	0.0	0.0	ı
3/4"	83.2	100.0	100.0	91.6	8.4	8.4	ı
1/2"	44.2	99.8	100.0	72.1	19.5	27.9	ı
3/8"	19.0	88.2	100.0	58.2	13.9	41.8	ı
#4	3.0	10.3	97.5	40.4	17.8	59.6	ı
#8	2.0	3.9	83.1	33.6	6.8	66.4	n
#16	2.2	3.5	67.2	27.5	6.1	72.5	ı
#30	2.1	3.2	49.8	20.7	6.8	79.3	n
#50	1.9	3.0	25.0	11.0	9.7	89.0	ı

2.9

2.6

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

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

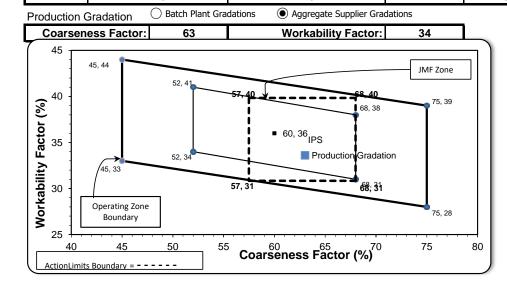
nom. max., #100 and #200 sieves.

*% 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)

96.0

98.4

7.0

Coarseness Factor:		63	
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"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.4	11.9	40.6
#4	43.0	16.5	57.0
#8	35.3	7.6	64.7
#16	28.2	7.1	71.8
#30	21.6	6.6	78.4
#50	9.1	12.5	90.9
#100	1.7	7.4	98.3
LBW	1.1	0.6	98.9

Sample Date:

12/5/22 Concrete Grade: **S2M**, **3500HP**

Dates Test Represents:		12/6/2022	through	12/12/2022			
	Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
	6AA	71-47	Presque Isle	1500	9.17	2.62	49.2
	26A	71-47	Presque Isle	350	2.14	2.62	11.5
	2NS	63-92	Grange Hall	1200	7.26	2.65	39.3

Contractor:

MDOT No.:



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

	Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	6A	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"	95.1	10	0.0	100.0	97.6	2.4	2.4
3/4"	71.4	10	0.0	100.0	85.9	11.7	14.1
1/2"	32.0	97	7.2	100.0	66.2	19.7	33.8
3/8"	13.5	82	2.0	100.0	55.4	10.8	44.6
#4	2.7	1().3	96.8	40.6	14.8	59.4
#8	1.8	2	.7	81.3	33.2	7.4	66.8
#16	1.4	1	.4	65.5	26.6	6.6	73.4
#30	1.3	1	.1	45.3	18.6	8.0	81.4
#50	1.2	1	.0	18.1	7.8	10.8	92.2
#100	1.2	0	.9	2.7	1.8	6.1	98.2
LBW	0.9	0	.7	0.7	0.8	1.0	99.2

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

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

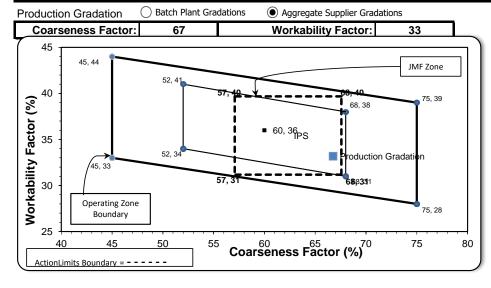
nom. max., #100 and #200 sieves.

 $^{\star}\%$ 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:		62	
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"	99.1	0.9	0.9
3/4"	90.5	8.6	9.5
1/2"	69.8	20.7	30.2
3/8"	59.8	10.0	40.2
#4	42.2	17.6	57.8
#8	35.4	6.7	64.6
#16	28.8	6.7	71.2
#30	21.4	7.4	78.6
#50	8.8	12.6	91.2
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3

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6AA

100.0

100.0

100.0

83.5

35.2

15.1

1.8

1.5

1.4

1.4

1.4

1.4

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

12/5/22 Concrete Grade: S2M, 3500HP

Dates Test Represents:		12/6/2022	through	12/12/2022			
	Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
	6AA	71-47	Presque Isle	1500	9.17	2.62	49.2
	264	71-47	Presque Isle	300	1 83	2.62	9.8

26A

100.0

100.0

100.0

100.0

94.0

79.7

19.1

6.6

4.0

3.3

3.0

2.8

11.3

14.1

7.9

6.5

6.5

10.3

6.3

3.4

Cumulative

% Passing

100.0

100.0

100.0

91.9

67.5

56.2

42.2

34.3

27.8

21.3

10.9

4.7

2NS

100.0

100.0

100.0

100.0

100.0

100.0

96.2

80.4

65.2

49.4

24.3

9.0

Contractor:

MDOT No.:

Ag 2NS 44-051 Krake Willis Rd 1250 7.56 2.65 41.0 Total Wt 3050 18.57

<---- Verify this number is 100%

· · · · · · · · · · · · · · · · · · ·					
	% Retained	Cumulative % Retained			
	0.0	0.0			
	0.0	0.0			
	0.0	0.0			
	8.1	8.1			
	24.3	32.5			

43.8

57.8

65.7

72.2

78.7

89.1

95.3

98.8



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.,

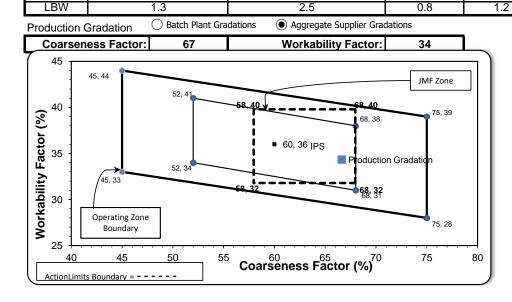
nom. max., #100 and #200 sieves.

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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:		63	
Workability Factor:		36	
Siovo	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	89.8	10.2	10.2
1/2"	70.7	19.1	29.3
3/8"	59.6	11.1	40.4
#4	43.2	16.4	56.8
#8	35.8	7.4	64.2
#16	29.2	6.6	70.8
#30	21.4	7.8	78.6
#50	9.8	11.6	90.2
#100	3.7	6.1	96.3
LBW	1.2	2.5	98.8

Sample Date:

12/5/22 Concrete Grade: S2M, 3500HP 12/12/2022

Dates Test Represents:		12/6/2022	through	12/12/2022			
	Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
	6AA	71-47	Presque Isle	1520	9.30	2.62	49.8
	26A	71-47	Presque Isle	300	1.83	2.62	9.8
	2NS	63-115	Ray Rd	1230	7.44	2.65	40.3

Contractor:

MDOT No.:



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

	Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	6 A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
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1"	95.1	10	0.0	100.0	97.6	2.4	2.4
3/4"	71.4	10	0.0	100.0	85.7	11.8	14.3
1/2"	32.0	97	7.2	100.0	65.8	19.9	34.2
3/8"	13.5	82	2.0	100.0	55.1	10.7	44.9
#4	2.7	10).3	96.8	41.4	13.7	58.6
#8	1.8	2	.7	79.5	33.2	8.2	66.8
#16	1.4	1	.4	63.7	26.5	6.7	73.5
#30	1.3	1	.1	48.4	20.3	6.2	79.7
#50	1.2	1	.0	25.8	11.1	9.2	88.9
#100	1.2	0	.9	4.3	2.4	8.7	97.6
LBW	0.9	0	.7	0.6	0.8	1.7	99.2

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

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

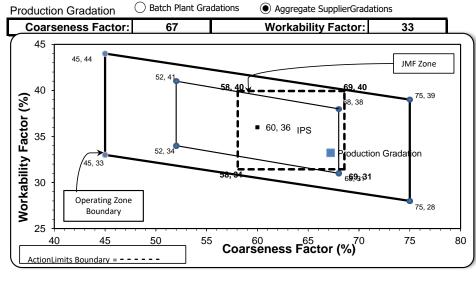
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Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.6	4.4	4.4
1/2"	73.1	22.6	26.9
3/8"	59.3	13.8	40.7
#4	42.8	16.5	57.2
#8	35.7	7.1	64.3
#16	28.9	6.8	71.1
#30	20.7	8.2	79.3
#50	9.9	10.8	90.1
#100	2.1	7.8	97.9
LBW	0.9	1.2	99.1

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