PLANT #: P-102

Sample Date:

6/24/24 Concrete Grade: S2M, 3500HP

Dates Test Represents:		6/25/2024	through	7/1/2024		
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	63-114	Highland	1200	7.26	2.65	38.7

Contractor:

MDOT No.:



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

	i otai wt	3100	18.58		100.0	< Verify this n	umber is 100%
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"	99.9	100.0		100.0	100.0	0.0	0.0
3/4"	83.7	100.0		100.0	91.9	8.1	8.2
1/2"	42.5	99.2		100.0	71.2	20.7	28.8
3/8"	17.4	84.8		100.0	57.0	14.2	43.0
#4	1.8	7.1		98.8	39.9	17.0	60.1
#8	0.9	1.8		85.3	33.7	6.3	66.3
#16	0.9	1.5		69.3	27.4	6.2	72.6
#30	0.8	1.3		50.7	20.2	7.3	79.8
#50	0.8	1.3		19.5	8.1	12.1	91.9
#100	0.8	1.2		2.7	1.6	6.5	98.4
LBW	0.7	1.1		0.4	0.6	1.0	99.4

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

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

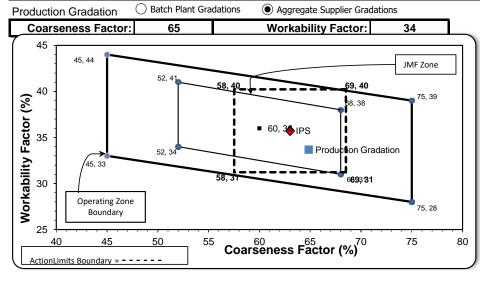
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	63	
Work	ability Factor:	36	
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"	59.5	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:

Total Wt

PLANT #: P-103

Sample Date:

6/24/24 Concrete Grade: **S2M**, **3500HP**

18.58

Dates Test F	represents:	6/25/2024	tnrougn	7/1/2024		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific	%
00			• ,		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	63-114	Highland	1200	7.26	2.65	38.7

3100

Contractor:

MDOT No.:

100.0

<---- Verify this number is 100%

SUPE	ERI RIA	OR

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

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0	100.0	100.0	100.0	0.0	0.0	ĺ
1.5"	100.0	100.0	100.0	100.0	0.0	0.0	ĺ
1"	99.9	100.0	100.0	100.0	0.0	0.0	ĺ
3/4"	83.7	100.0	100.0	91.9	8.1	8.2	i
1/2"	42.5	99.2	100.0	71.2	20.7	28.8	ĺ
3/8"	17.4	84.8	100.0	57.0	14.2	43.0	*
#4	1.8	7.1	98.8	39.9	17.0	60.1	*
#8	0.9	1.8	85.3	33.7	6.3	66.3	nc
#16	0.9	1.5	69.3	27.4	6.2	72.6	*
#30	0.8	1.3	50.7	20.2	7.3	79.8	nc
#50	0.8	1.3	19.5	8.1	12.1	91.9	*
#100	0.8	1.2	2.7	1.6	6.5	98.4	а
LBW	0.7	1.1	0.4	0.6	1.0	99.4	ĺ

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

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

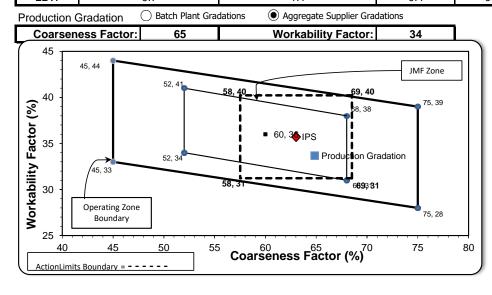
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	63	
Work	ability Factor:	36	
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"	59.5	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:

PLANT #: 12

Sample Date:

6/24/24

Concrete Grade: S2M, 3500HP

Dates Test F	Represents:	6/25/2024	through	7/1/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1570	9.60	2.62	51.5
26A	71-47	Presque Isle	250	1.53	2.62	8.2
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
		Total Wt	3050	18 57		100.0

MDOT No.:

Contractor:

	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"	95.9	10	0.0	100.0	97.9	2.1	2.1
3/4"	74.7	10	0.0	100.0	87.0	10.9	13.0
1/2"	28.6	96	6.0	100.0	62.9	24.1	37.1
3/8"	14.4	86	6.0	100.0	54.8	8.1	45.2
#4	3.2	20	0.8	95.9	42.0	12.8	58.0
#8	2.1	4	.3	80.4	33.9	8.2	66.1
#16	1.8	2	.2	65.1	27.4	6.5	72.6
#30	1.8	1	.8	49.4	21.0	6.4	79.0
#50	1.8	1	.7	25.9	11.5	9.5	88.5
#100	1.7	1	.6	5.6	3.3	8.2	96.7
LBW	1.4	1	.6	0.8	1.2	2.1	98.8

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

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

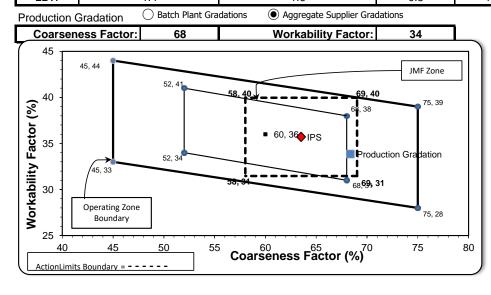
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	64	
Work	ability Factor:	36	
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"	59.2	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

Approved By: PREPARED BY: SM, LLC Technical Service

PLANT #: p11

Sample Date:

6/24/24 Concrete Grade: **S2M**, **3500HP**

Dates Test Represents:		6/25/2024 through 7/1/2024				
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	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"	95.3	100.0	100.0	97.7	2.3	2.3
3/4"	77.0	100.0	100.0	88.5	9.1	11.5
1/2"	40.9	96.0	100.0	70.2	18.4	29.8
3/8"	24.1	86.0	100.0	60.8	9.4	39.2
#4	4.4	20.8	95.9	42.9	17.9	57.1
#8	2.5	4.3	80.4	34.1	8.8	65.9 r
#16	2.1	2.2	65.1	27.5	6.6	72.5
#30	2.0	1.8	49.4	21.1	6.4	78.9 r
#50	1.9	1.7	25.9	11.6	9.5	88.4
#100	1.8	1.6	5.6	3.3	8.2	96.7 a
LBW	1.6	1.6	0.8	1.3	2.0	98.7

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

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

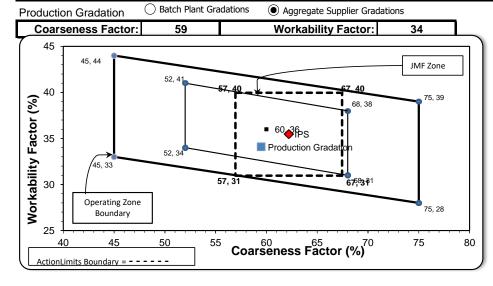
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	62	
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"	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:

PLANT #: P-35

6AA

0.8

0.8

Sample Date:

Sieve

#50

#100

6/24/24 Concrete Grade: S2M, 3500HP

Dates Test F	Represents:	6/25/2024	through	7/1/2024		
Agg. Class	Pit#	# Source Weight (SSD) ft ³		Specific	%	
Agg. Class	rit#	Source	weight (SSD)	11	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

26A

1.3

1.2

Contractor:

MDOT No.:

Cumulative

8.2

1.7

2NS

19.7

3.0



---- Verify this number is 100%

% Retained	Cumulative % Retained	Suberior
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		30701 W. :
0.0	0.0	Suite 500

Materials, LLC 10 Mile Rd. Farmington Hills, MI 48336

				% Passing		% 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"	99.9	100.0	100.0	100.0	0.0	0.0
3/4"	83.7	100.0	100.0	91.9	8.1	8.2
1/2"	42.5	99.2	100.0	71.2	20.7	28.8
3/8"	17.4	84.8	100.0	57.0	14.2	43.0
#4	1.8	7.1	98.5	39.8	17.2	60.2
#8	0.9	1.8	86.4	34.1	5.7	65.9
#16	0.9	1.5	64.6	25.6	8.5	74.4
#30	0.8	1.3	42.6	17.0	8.6	83.0

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

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

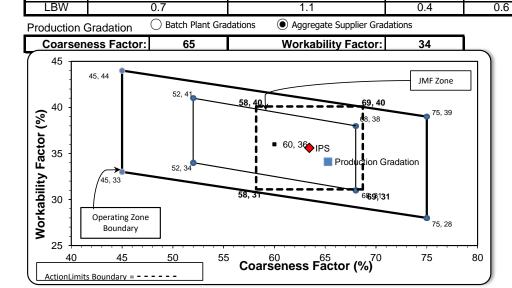
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

91.8

98.3

99.4

8.9

6.5

Coars	seness Factor:	63	
Worl	kability 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"	93.1	6.9	6.9
1/2"	70.0	23.1	30.0
3/8"	59.1	10.9	40.9
#4	46.0	13.1	54.0
#8	35.6	10.4	64.4
#16	27.2	8.4	72.8
#30	#30 19.8		80.2
#50	#50 10.1		89.9
#100	2.5	7.6	97.5
LBW	0.9	1.6	99.1

PREPARED BY: SM, LLC Technical Service

PLANT #: P-38

86.4

64.6

42.6

19.7

3.0

34.1

25.6

17.0

8.2

1.7

Sample Date: 6/24/24 Concrete Grade: S2M, 3500HP Dates Test Represents: 6/25/2024 7/1/2024 through

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

1.8

1.5

1.3

1.3

1.2

Contractor:

MDOT No.:



---- Verify this number is 100%

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0	100.0	100.0	100.0	0.0	0.0	İ
1.5"	100.0	100.0	100.0	100.0	0.0	0.0	İ
1"	99.9	100.0	100.0	100.0	0.0	0.0	İ
3/4"	83.7	100.0	100.0	91.9	8.1	8.2	İ
1/2"	42.5	99.2	100.0	71.2	20.7	28.8	İ
3/8"	17.4	84.8	100.0	57.0	14.2	43.0	*M
#4	1.8	7.1	98.5	39.8	17.2	60.2	*A

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.,

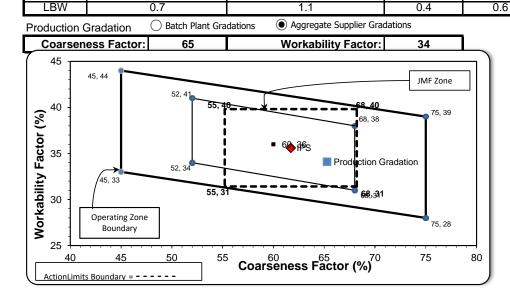
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

65.9

74.4

83.0

91.8

98.3

99.4

5.7

8.5

8.6

8.9

6.5

Coars	eness Factor:	62	
Work	ability Factor:	36	
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"	91.1	8.1	8.9
1/2"	72.0	19.1	28.0
3/8"	60.3	11.7	39.7
#4	43.4	16.9	56.6
#8	35.6	7.8	64.4
#16	28.4	7.2	71.6
#30	21.8	6.7	78.2
#50	9.1	12.6	90.9
#100	1.7	7.4	98.3
LBW	1.1	0.6	98.9

PREPARED BY: SM, LLC Technical Service

0.9

0.9

0.8

0.8

0.8

#8

#16

#30

#50

#100

6/24/24

6/25/2024

6AA

100.0

100.0

95.9

74.7

28.6

14.4

3.2

2.1

1.8

1.8

1.8

PLANT #: P-02

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

Dates Test Represents:

Concrete Grade: S2M, 3500HP

2NS

100.0

100.0

100.0

100.0

100.0

100.0

95.9

80.4

65.1

49.4

25.9

Cumulative

% Passing

100.0

100.0

97.9

87.0

62.9

54.8

42.0

33.9

27.4

21.0

11.5

20100 10011	100.000	0,-0,-0-	un o a g	., .,=== .		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1570	9.60	2.62	51.5
26A	71-47	Presque Isle	250	1.53	2.62	8.2
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
		Total Wt	3050	18.57		100.0

26A

100.0

100.0

100.0

100.0

96.0

86.0

20.8

4.3

2.2

1.8

1.7

through

7/1/2024

MDOT No.:

Cumulative

% Retained

0.0

0.0

2.1

13.0

37.1

45.2

58.0

66.1

72.6

79.0

88.5

96.7

98.8

---- Verify this number is 100%

Contractor:

% Retained

0.0

0.0

2.1

10.9

24.1

8.1

12.8

8.2

6.5

6.4

9.5

8.2

	UPER	IOP
MA	TERI	ALS

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

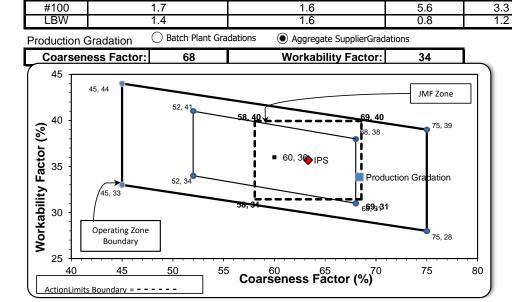
*Any two adjacent sieves must equal 10% except max.,

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 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") 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"	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

PREPARED BY: SM, LLC Technical Service