6/17/24

PLANT #: P-102

Sample Date:

Concrete Grade: S2M, 3500HP

Dates Test Represents: 6/18/2024 6/24/2024 through Specific ft³ Agg. Class Pit# Source Weight (SSD) 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 Total Wt 3100 18.58 100.0

Contractor:

MDOT No.:



<---- Verify this number is 100%

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
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	82.0	100.0	100.0	91.0	9.0	9.0
1/2"	37.4	98.9	100.0	68.6	22.4	31.4
3/8"	17.2	79.4	100.0	56.3	12.3	43.7
#4	3.9	6.0	98.8	40.9	15.4	59.1
#8	1.8	1.5	84.9	33.9	6.9	66.1
#16	1.3	1.2	67.5	26.9	7.0	73.1
#30	1.1	1.1	48.2	19.3	7.6	80.7
#50	1.0	1.1	16.5	7.0	12.3	93.0
#100	1.0	1.1	2.3	1.5	5.5	98.5
LBW	0.8	0.9	0.2	0.6	0.9	99.4

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

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

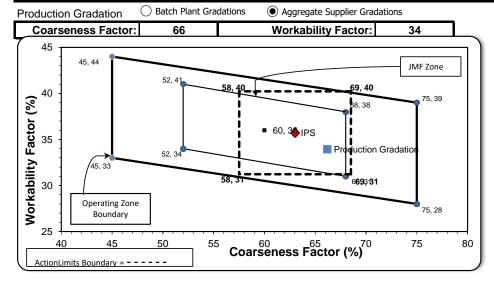
nom. max., #100 and #200 sieves.

*% 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	Coarseness Factor:		
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:

6/18/2024

6AA

100.0

100.0

100.0

82.0

37.4

17.2

3.9

1.8

1.3

1.1

1.0

1.0

0.8

PLANT #: P-103

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

LBW

Dates Test Represents:

6/17/24 Concrete Grade: S2M, 3500HP

6/24/2024

2NS

100.0

100.0

100.0

100.0

100.0

100.0

98.8

84.9

67.5

48.2

16.5

2.3

Cumulative

% Passing

100.0

100.0

100.0

91.0

68.6

56.3

40.9

33.9

26.9

19.3

7.0

1.5

0.6

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	63-114	Highland	1200	7.26	2.65	38.7
		Total Wt	3100	18.58		100.0

26A

100.0

100.0

100.0

100.0

98.9

79.4

6.0

1.5

1.2

1.1

1.1

1.1

0.9

through

---- Verify this number is 100%

SUPERIOR MATERIALS

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

Cumulative % Retained % Retained 0.0 0.0 0.0 0.0 0.0 0.0 9.0 9.0 22.4 31.4 12.3 43.7 15.4 59.1 6.9 66.1

73.1

80.7

93.0

98.5

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

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

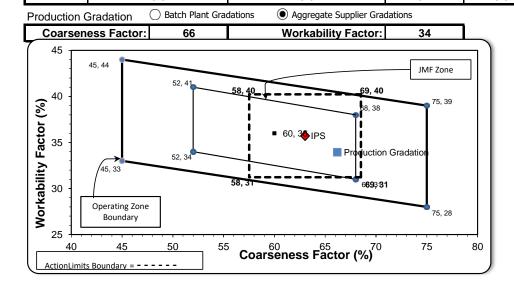
nom. max., #100 and #200 sieves.

*% 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)

7.0

7.6

12.3

5.5

Coars	Coarseness Factor:		
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 #:

Pit#

71-47

71-47

63-115

Sample Date:

Agg. Class

6AA

26A

2NS

Dates Test Represents:

6/17/24

Contractor:

Concrete Grade: S2M, 3500HP

6/18/2024	through	6/24/2024		
Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
Presque Isle	1570	9.60	2.62	51.5
Presque Isle	250	1.53	2.62	8.2
Ray Rd	1230	7.44	2.65	40.3

MDOT No.:

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

	l otal Wt	3050	18.57		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"	95.5	100	0.0	100.0	97.7	2.3	2.3
3/4"	73.2	100	0.0	100.0	86.2	11.5	13.8
1/2"	31.4	93	.5	100.0	64.2	22.0	35.8
3/8"	17.0	81	.6	100.0	55.8	8.4	44.2
#4	4.0	16	.6	95.6	42.0	13.8	58.0
#8	2.5	4.	2	79.7	33.8	8.2	66.2
#16	2.2	2.	4	64.1	27.2	6.6	72.8
#30	2.1	2.	0	48.6	20.8	6.3	79.2
#50	2.1	1.	8	25.8	11.6	9.2	88.4
#100	1.9	1.	7	6.1	3.6	8.1	96.4
LBW	1.5	1.	4	1.0	1.3	2.3	98.7

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

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

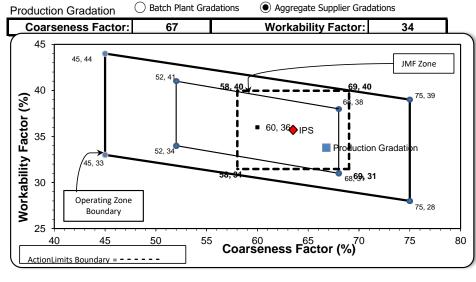
nom. max., #100 and #200 sieves.

*% 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)

Coarseness 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

PREPARED BY: SM, LLC Technical Service Approved By:

PLANT #: p11

Sample Date:

LBW

6/17/24 Concrete Grade: S2M, 3500HP

Dates Test F	Represents:	6/18/2024	through	6/19/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1450	8.87	2.62	47.5
264	71-47	Presque Isle	370	2.26	2.62	12.1

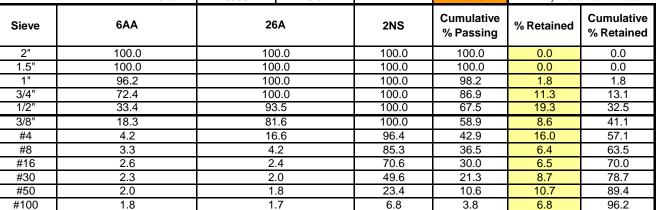
MDOT No.:

Contractor:

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1450	8.87	2.62	47.5
26A	71-47	Presque Isle	370	2.26	2.62	12.1
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
		Total Wt	3050	18.57		100.0

---- Verify this number is 100%

		The state of the s
ained	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
0	0.0	Suite 500
0	0.0	Farmington Hills, MI 48336
8	1.8	



1.3

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

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

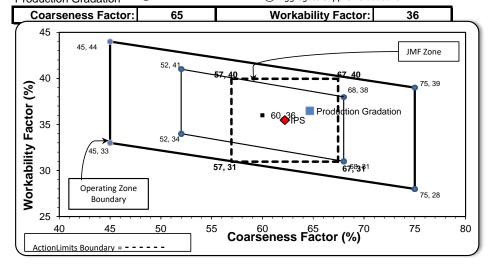
nom. max., #100 and #200 sieves.

*% 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.

			-
Production Gradation	Batch Plant Gradations	Aggregate Supplier Gradations	



Intial Production Sample (IPS)

2.4

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

6/17/24

PLANT #: P-35

Sample Date:

Concrete Grade: S2M, 3500HP

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

Contractor:

MDOT No.:



--- Verify this number is 100%

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
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	82.0	100.0	100.0	91.0	9.0	9.0
1/2"	37.4	98.9	100.0	68.6	22.4	31.4
3/8"	17.2	79.4	100.0	56.3	12.3	43.7
#4	3.9	6.0	98.4	40.7	15.6	59.3
#8	1.8	1.5	85.2	34.1	6.7	66.0
#16	1.3	1.2	64.4	25.7	8.3	74.3
#30	1.1	1.1	42.2	17.0	8.7	83.0
#50	1.0	1.1	18.2	7.7	9.3	92.3
#100	1.0	1.1	2.6	1.6	6.0	98.4
I RW/	0.8	N Q	0.6	0.7	0.0	90 3

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

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

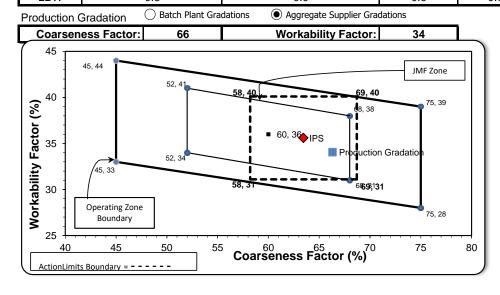
nom. max., #100 and #200 sieves.

*% 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	Workability Factor:		
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"	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	19.8	7.4	80.2
#50	10.1	9.7	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

Sample Date:

6/17/24 Concrete Grade: S2M, 3500HP

2.22	0.000	
11.	Gravity	Contribution
£ 43	Specific	%
6/24/2024		

MDOT No.:

Dates Test Represents: 6/18/2024 through Agg. Class Pit# Source Weight (SSD) Stoneco 6AA 58-003 1550 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

<---- Verify this number is 100%

Contractor:

SUPERIOR MATERIALS

Superior Materials, LLC 30701 W. 10 Mile Rd. Suite 500

Farmington Hills, MI 48336

1010.111					· voiny and named to 10070	
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"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	82.0	100.0	100.0	91.0	9.0	9.0
1/2"	37.4	98.9	100.0	68.6	22.4	31.4
3/8"	17.2	79.4	100.0	56.3	12.3	43.7
#4	3.9	6.0	98.4	40.7	15.6	59.3
#8	1.8	1.5	85.2	34.1	6.7	66.0
#16	1.3	1.2	64.4	25.7	8.3	74.3
#30	1.1	1.1	42.2	17.0	8.7	83.0
#50	1.0	1.1	18.2	7.7	9.3	92.3
#100	1.0	1.1	2.6	1.6	6.0	98.4
LBW	0.8	0.9	0.6	0.7	0.9	99.3

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

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

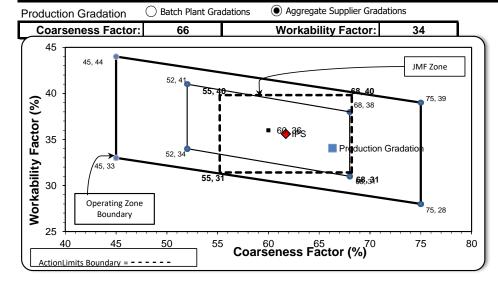
nom. max., #100 and #200 sieves.

*% 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	Workability Factor:		
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

PLANT #: P-O2

Sample Date:

6/17/24 Concrete Grade: **S2M, 3500HP**

Dates Test F	Represents:	6/18/2024	through	6/24/2024		
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.

MDOT No.:

Contractor:

<---- Verify this number is 100%

SUPER	

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"	98.1	100.0	100.0	99.0	1.0	1.0	ĺ
3/4"	74.2	100.0	100.0	86.7	12.3	13.3	ĺ
1/2"	33.6	93.5	100.0	65.3	21.4	34.7	ĺ
3/8"	18.0	81.6	100.0	56.3	9.0	43.7	ĺ
#4	3.0	16.6	95.6	41.5	14.8	58.5	ı
#8	2.4	4.2	79.7	33.7	7.7	66.3	n
#16	2.1	2.4	64.1	27.1	6.6	72.9	ı
#30	2.1	2.0	48.6	20.8	6.3	79.2	n
#50	2.0	1.8	25.8	11.6	9.3	88.4	ĺ
#100	2.0	1.7	6.1	3.6	8.0	96.4	а
LBW	1.7	1.4	1.0	1.4	2.2	98.6	ĺ

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

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

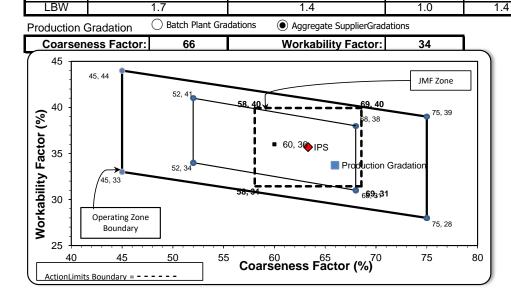
nom. max., #100 and #200 sieves.

*% 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)

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

Approved By: