1.4

1.3

1.2

PLANT #: P-102

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

11/18/24 Concrete Grade: P1M, 3500HP 11/25/2024

19.6

10.0

2.7

Dates Test F	Represents:	11/19/2024	through	11/25/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1470	8.76	2.69	47.1
IA	58-003	Stoneco	450	2.68	2.69	14.4
2NS	63-114	Highland	1200	7.26	2.65	38.5
		Total Wt	3120	18.70		100.0

1.7

1.4

1.2

MDOT No.:

---- Verify this number is 100%

Contractor:

SUPERIOR MATERIALS

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

CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
100.0	100.0	100.0	100.0	0.0	0.0	i
100.0	100.0	100.0	100.0	0.0	0.0	
60.0	100.0	100.0	81.2	18.8	18.8	
32.0	100.0	100.0	68.0	13.2	32.0	l
13.0	91.8	100.0	57.8	10.1	42.2	
8.7	72.7	100.0	53.0	4.8	47.0	*N
2.5	17.8	99.1	41.9	11.2	58.1	*/
1.6	5.0	85.6	34.4	7.5	65.6	nor
1.5	2.6	68.0	27.2	7.2	72.8	*9

48.5

23.8

5.1

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

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

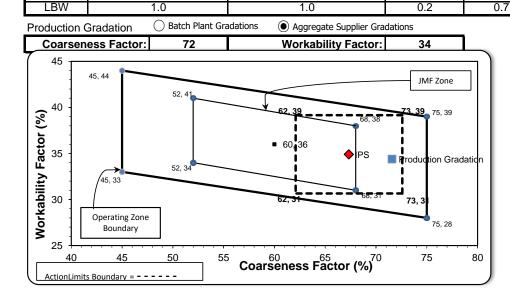
om. max., #100 and #200 sieves.

'% 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)

80.4

90.0

97.3

99.3

7.7

9.6

7.3

2.0

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

PLANT #: P-103

CA

100.0

100.0

60.0

32.0

13.0

8.7

2.5

1.6

1.5

1.4

1.3

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

11/18/24 Concrete Grade: P1M, 3500HP

Dates Test Represents:		11/19/2024	tnrougn	11/25/2024		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1470	8.76	2.69	47.1
IA	58-003	Stoneco	450	2.68	2.69	14.4
2NS	63-114	Highland	1200	7.26	2.65	38.5
		Total Wt	3120	18.70		100.0

IΑ

100.0

100.0

100.0

100.0

91.8

72.7

17.8

5.0

2.6

1.7

1.4

Contractor:

18.8

32.0

42.2

47.0

58.1

65.6

72.8

80.4

90.0

97.3

99.3

MDOT No.:

% Retained

0.0

0.0

18.8

13.2

10.1

4.8

11.2

7.5

7.2

7.7

9.6

7.3

2.0

Cumulative

% Passing

100.0

100.0

81.2

68.0

57.8

53.0

41.9

34.4

27.2

19.6

10.0

2NS

100.0

100.0

100.0

100.0

100.0

100.0

99.1

85.6

68.0

48.5

23.8



---- Verify this number is 100%

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

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

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

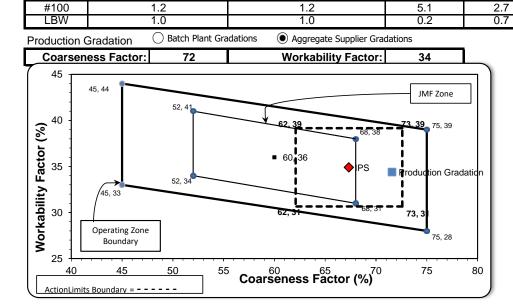
nom. max., #100 and #200 sieves.

*% 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	
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:

PLANT #:

Sample Date:

#100

11/18/24 Concrete Grade: P1M, 3500HP

Dates Test F	Represents:	11/19/2024	through	11/25/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	870	5.32	2.62	28.3
IA	71-47	Presque Isle	1000	6.12	2.62	32.6
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1
		Total Wt	3070	18.70		100.0

MDOT No.:

Contractor:

	Total Wt	3070	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	IA	\	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	96.8	100	0.0	100.0	99.1	0.9	0.9
1"	28.0	100	0.0	100.0	79.6	19.5	20.4
3/4"	4.6	98	.7	100.0	72.5	7.1	27.5
1/2"	1.3	76	.1	100.0	64.2	8.3	35.8
3/8"	1.3	48	.1	100.0	55.1	9.1	44.9
#4	1.2	6.	1	97.8	40.6	14.6	59.4
#8	1.2	2.	2	79.5	32.1	8.4	67.9
#16	1.2	1.	7	63.0	25.5	6.6	74.5
#30	1.2	1.	5	48.1	19.6	5.9	80.4
#50	1.2	1.	5	26.5	11.2	8.4	88.8

6.0

3.1

1.4



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.,

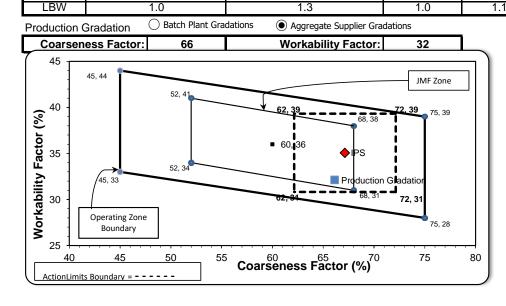
nom. max., #100 and #200 sieves.

*% 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)

96.9

98.9

8.1

2.0

Coars	eness Factor:	67	
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"	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

PREPARED BY: SM, LLC Technical Service

1.1

Approved By:

Total Wt

PLANT #: P11

Sample Date:

11/18/24 Concrete Grade: **P1M, 3500HP**

18.70

Dates Test Represents:		11/19/2024	through	11/25/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	870	5.32	2.62	28.3
IA	71-47	Presque Isle	1000	6.12	2.62	32.6
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1

3070

Contractor:

MDOT No.:



<---- Verify this number is 100%

ained	Cumulative % Retained	
0	0.0	Suite 500
9	0.9	Farmington Hills, MI 48336

			••	. 0 0 . 0		arribor 10 10070
Sieve	CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	96.8	100.0	100.0	99.1	0.9	0.9
1"	28.0	100.0	100.0	79.6	19.5	20.4
3/4"	4.6	98.7	100.0	72.5	7.1	27.5
1/2"	1.3	76.1	100.0	64.2	8.3	35.8
3/8"	1.3	48.1	100.0	55.1	9.1	44.9
#4	1.2	6.1	97.8	40.6	14.6	59.4
#8	1.2	2.2	79.5	32.1	8.4	67.9
#16	1.2	1.7	63.0	25.5	6.6	74.5
#30	1.2	1.5	48.1	19.6	5.9	80.4
#50	1.2	1.5	26.5	11.2	8.4	88.8
#100	1.1	1.4	6.0	3.1	8.1	96.9
LBW	1.0	1.3	1.0	1.1	2.0	98.9

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

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

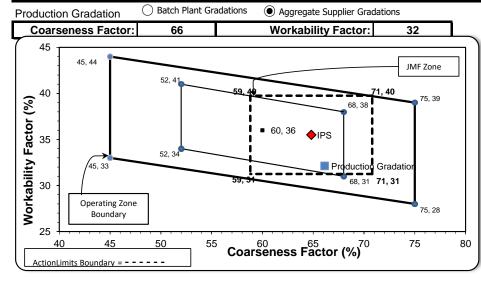
nom. max., #100 and #200 sieves.

 $\ensuremath{^{*}\%}$ 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:	65	
Work	Workability Factor:		
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

Total Wt

PLANT #: P-O2

Sample Date:

11/18/24 Concrete Grade: **P1M**, **3500HP**

Dates Test Represents:		11/19/2024	through	11/25/2024			
	Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
	CA	71-47	Presque Isle	870	5.32	2.62	28.3
	IA	71-47	Presque Isle	1000	6.12	2.62	32.6
	2NS	63-115	Ray Rd	1200	7.26	2.65	39.1

Contractor:

MDOT No.:



<---- Verify this number is 100%

ined	Cumulative % Retained	Superior Materials, LLC
	0.0	Suite 500
	0.9	Farmington Hills, MI 48336

						· voilly allow	abo. 10 10070
Sieve	CA	1/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	96.8	100	0.0	100.0	99.1	0.9	0.9
1"	28.0	100	0.0	100.0	79.6	19.5	20.4
3/4"	4.6	98	.7	100.0	72.5	7.1	27.5
1/2"	1.3	76	5.1	100.0	64.2	8.3	35.8
3/8"	1.3	48	.1	100.0	55.1	9.1	44.9
#4	1.2	6.	1	97.8	40.6	14.6	59.4
#8	1.2	2.	2	79.5	32.1	8.4	67.9
#16	1.2	1.	7	63.0	25.5	6.6	74.5
#30	1.2	1.	5	48.1	19.6	5.9	80.4
#50	1.2	1.	5	26.5	11.2	8.4	88.8
#100	1.1	1.	4	6.0	3.1	8.1	96.9
LBW	1.0	1.	3	1.0	1.1	2.0	98.9

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

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

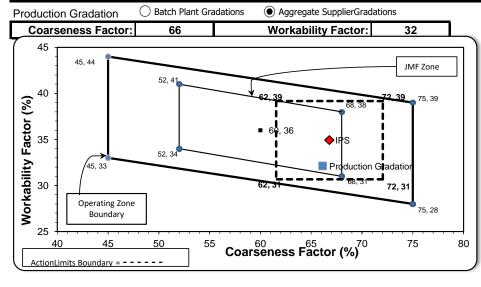
nom. max., #100 and #200 sieves.

 $\ensuremath{^{\star}\%}$ 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:		67	
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"	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: