Sample Date:

9/19/22 Concrete Grade: P1M, 3500HP

[	Dates Test F	Represents:	9/20/2022	through	9/26/2022		
	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
Γ	2NS	75-051	Mid Michigan	1200	7.23	2.66	39.1

Contractor:

MDOT No.:



MATERIALS
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	IA	1	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	.0	100.0	100.0	0.0	0.0
1.5"	98.7	100	.0	100.0	99.5	0.5	0.5
1"	47.5	100	.0	100.0	81.7	17.8	18.3
3/4"	12.4	98.	5	100.0	69.1	12.6	30.9
1/2"	3.0	83.	2	100.0	61.8	7.3	38.2
3/8"	2.0	63.	7	100.0	56.4	5.4	43.6
#4	1.6	17.	3	99.1	43.8	12.6	56.2
#8	1.4	4.	5	86.7	35.5	8.3	64.5
#16	1.4	2.	7	71.8	29.3	6.3	70.7
#30	1.3	2.3	3	53.6	22.0	7.3	78.0
#50	1.2	2.	1	22.9	9.9	12.1	90.1
#100	1.1	1.9	9	5.2	2.9	7.0	97.1
LBW	0.9	1.7	7	1.0	1.1	1.8	98.9
#30 #50 #100	1.3 1.2 1.1	2.3 2.7 1.9	3 1 9	53.6 22.9 5.2	22.0 9.9 2.9	7.3 12.1 7.0	78.0 90. 97.

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

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

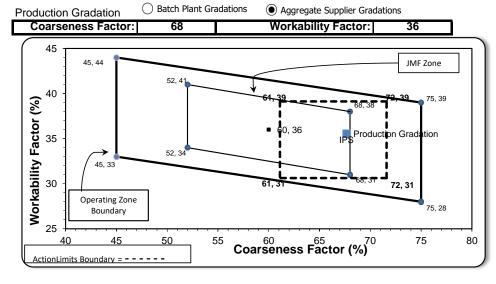
nom. max., #100 and #200 sieves.

\*% 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

Pleasant Lake

CA

100.0

100.0

66.0

39.1

14.1

6.3

2.3

1.8

1.6

1.5

1.4

1.4

Total Wt

1200

3120

IΑ

100.0

100.0

100.0

100.0

95.3

81.3

26.2

7.4

3.5

2.4

2.2

2.1

PLANT #: P-102

Pit#

58-003

58-003

81-019

Sample Date:

Agg. Class CA

IΑ

2NS

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

Dates Test Represents:

9/19/22 Concrete Grade: P1M, 3500HP

	9/20/2022	through	9/26/2022		
Ī	Source	Weight (SSD)	ft <sup>3</sup>	Specific	%
l				Gravity	Contribution
I	Stoneco	1370	8.16	2.69	43.9
I	Stoneco	550	3.28	2.69	17.6

7.26

18.70

2.65

2NS

100.0

100.0

100.0

100.0

100.0

100.0

99.1

84.2

66.5

46.6

22.0

8.6

38.5

Cumulative

% Passing

100.0

100.0

85.1

73.3

61.5

55.6

43.7

34.5

26.9

19.0

9.5

4.3

Contractor:

Cumulative

% Retained

0.0

0.0

14.9

26.7

38.5

44.4

56.3

65.5

73.1

81.0

90.5

95.7

MDOT No.:

% Retained

0.0

0.0

14.9

11.8

11.8

5.9

11.8

9.3

7.6

7.9

9.5

5.2

3.0



---- Verify this number is 100%

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.,

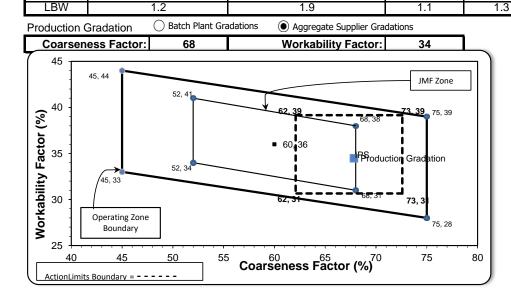
nom. max., #100 and #200 sieves.

\*% 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"	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

Sample Date:

9/19/22 Concrete Grade: **P1M**, **3500HP** 

Dates Test F	represents:	9/20/2022	tnrougn	9/26/2022		
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
		Total Wt	3120	18.70		100.0

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

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 66.0 100.0 100.0 85.1 14.9 14.9 3/4" 39.1 100.0 100.0 73.3 11.8 26.7 1/2' 14.1 95.3 100.0 61.5 11.8 38.5 3/8' 81.3 100.0 44.4 6.3 55.6 5.9 #4 2.3 26.2 99.1 43.7 11.8 56.3 #8 1.8 7.4 84.2 34.5 9.3 65.5 #16 1.6 3.5 66.5 26.9 7.6 73.1 #30 19.0 7.9 1.5 2.4 46.6 81.0 #50 1.4 2.2 22.0 9.5 9.5 90.5 #100 1.4 2.1 8.6 4.3 5.2 95.7 LBW 3.0

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

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

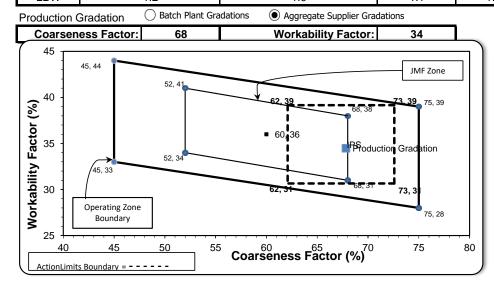
nom. max., #100 and #200 sieves.

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

Sample Date:

9/19/22 Concrete Grade: P1M, 3500HP

Dates Test F	Represents:	9/20/2022	through	9/26/2022		
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	19-55	Schlegel	1200	7.20	2.67	38.5
-	-	Total Wt	3120	18.64		100.0

Contractor:

MDOT No.:



**Builders Redi-Mix** 30701 W. 10 Mile Rd.

Suite 500 Farmington Hills, MI 48336

	Total Wt	3120	18.64		100.0	< Verify this n	umber is 100%
Sieve	CA	l.	A	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"	66.0	10	0.0	100.0	85.1	14.9	14.9
3/4"	39.1	10	0.0	100.0	73.3	11.8	26.7
1/2"	14.1	95	5.3	100.0	61.5	11.8	38.5
3/8"	6.3	81	1.3	100.0	55.6	5.9	44.4
#4	2.3	26	6.2	100.0	44.1	11.5	55.9
#8	1.8	7	.4	90.4	36.9	7.2	63.1
#16	1.6	3	.5	68.8	27.8	9.1	72.2
#30	1.5	2	.4	44.3	18.1	9.7	81.9
#50	1.4	2	.2	14.4	6.5	11.6	93.5
#100	1.4	2	.1	2.7	2.0	4.5	98.0
LBW	1.2	1	.9	0.3	1.0	1.0	99.0

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

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

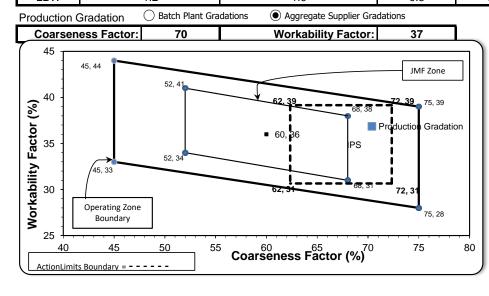
nom. max., #100 and #200 sieves.

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

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

\*% Retained must be at least 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	Workability Factor:		
Sieve	Cumulative	%	Cumulative
	% 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

Approved By:

Sample Date:

Concrete Grade: P1M, 3500HP 9/19/22

Dates Test Represents:		9/20/2022	through	9/26/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	970	5.93	2.62	31.6
IA	71-47	Presque Isle	850	5.20	2.62	27.7
2NS	63-115	Ray Rd	1250	7.56	2.65	40.7

Contractor:

MDOT No.:



<b>Superior Materials, LLC</b>
30701 W. 10 Mile Rd.
Suite 500
Farmington 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"	95.4	100	0.0	100.0	98.5	1.5	1.5
1"	36.1	100	0.0	100.0	79.8	18.7	20.2
3/4"	12.5	99	0.8	100.0	72.3	7.5	27.7
1/2"	4.0	81	.0	100.0	64.4	7.9	35.6
3/8"	3.0	55	5.4	100.0	57.0	7.4	43.0
#4	2.6	9.	.6	97.0	43.0	14.0	57.0
#8	2.5	2.	9	79.6	34.0	9.0	66.0
#16	2.4	2.	.1	62.7	26.9	7.1	73.1
#30	2.3	2.	.0	45.6	19.8	7.0	80.2
#50	2.2	1.	.8	23.5	10.8	9.1	89.2
#100	2.1	1.	.8	5.7	3.5	7.3	96.5
LBW	1.6	1.	.4	1.2	1.4	2.1	98.6

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

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

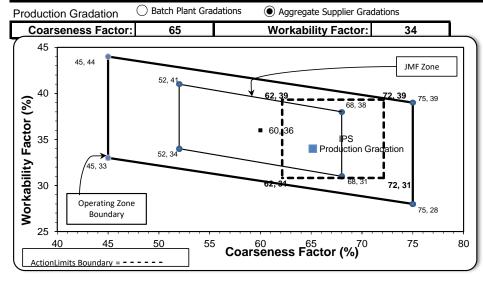
nom. max., #100 and #200 sieves.

\*% 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)

Coars	eness Factor:	67	
Work	Workability Factor:		
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

PREPARED BY: SM, LLC Technical Service

Sample Date:

Concrete Grade: P1M, 3500HP 9/19/22 0/26/2022

Dates Test Represents:		9/20/2022	through	9/26/2022		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	920	5.63	2.62	30.0
IA	71-47	Presque Isle	900	5.50	2.62	29.3
2NS	95-013	Smelter Bay	1250	7.56	2.65	40.7

Contractor:

MDOT No.:



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

	Total Wt	3070	18.69		100.0	< Verify this n	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"	95.4	10	0.0	100.0	98.6	1.4	1.4
1"	36.1	10	0.0	100.0	80.9	17.8	19.1
3/4"	12.5	99	9.8	100.0	73.7	7.1	26.3
1/2"	4.0	81	.0	100.0	65.7	8.1	34.3
3/8"	3.0	55	5.4	100.0	57.9	7.8	42.1
#4	2.6	9	.6	96.5	42.9	15.0	57.1
#8	2.5	2	.9	84.6	36.0	6.8	64.0
#16	2.4	2	.1	69.7	29.7	6.3	70.3
#30	2.3	2	.0	50.5	21.8	7.9	78.2
#50	2.2	1	.8	23.8	10.9	11.0	89.1
#100	2.1	1	.8	6.7	3.9	7.0	96.1
LBW	1.6	1	.4	1.1	1.3	2.5	98.7

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

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

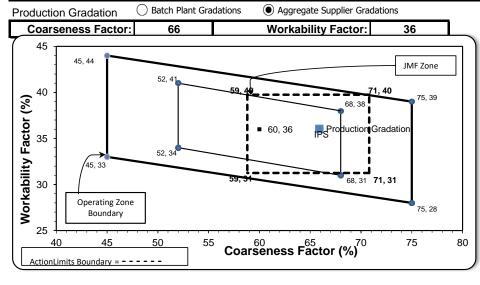
nom. max., #100 and #200 sieves.

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

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

\*% Retained must be at least 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	ability Factor:	36	
Sieve	Cumulative	%	Cumulative
	% 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

Pleasant Lake

**Total Wt** 

1200

3120

PLANT #: P-35

Pit#

58-003

58-003

81-019

Sample Date:

Agg. Class

CA

IΑ

2NS

**Dates Test Represents:** 

9/19/22 Concrete Grade: **P1M, 3500HP** 

9/20/2022	through	9/26/2022		
Source	Weight (SSD)	ft <sup>3</sup>	Specific	%
Source	weight (SSD)	π.	Gravity	Contribution
Stoneco	1370	8.16	2.69	43.9
Stoneco	550	3 28	2 69	17.6

7.26

18.70

2.65

38.5

100.0

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

Sieve	CA	IA	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"	66.0	100.0	100.0	85.1	14.9	14.9
3/4"	39.1	100.0	100.0	73.3	11.8	26.7
1/2"	14.1	95.3	100.0	61.5	11.8	38.5
3/8"	6.3	81.3	100.0	55.6	5.9	44.4
#4	2.3	26.2	99.1	43.7	11.8	56.3
#8	1.8	7.4	84.2	34.5	9.3	65.5
#16	1.6	3.5	66.5	26.9	7.6	73.1
#30	1.5	2.4	46.6	19.0	7.9	81.0
#50	1.4	2.2	22.0	9.5	9.5	90.5
#100	1.4	2.1	8.6	4.3	5.2	95.7
LBW	1.2	1.9	1.1	1.3	3.0	98.7

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

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

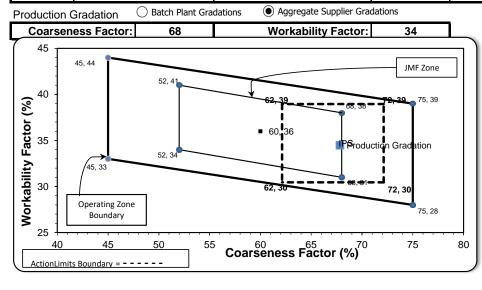
nom. max., #100 and #200 sieves.

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

Sample Date:

9/19/22 Concrete Grade: P1M, 3500HP

Dates Test Represents:		9/20/2022	through	9/26/2022		
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	920	5.63	2.62	30.0
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
Total Wt			3070	18.70		100.0

Contractor:

MDOT No.:



---- Verify this number is 100%

**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.

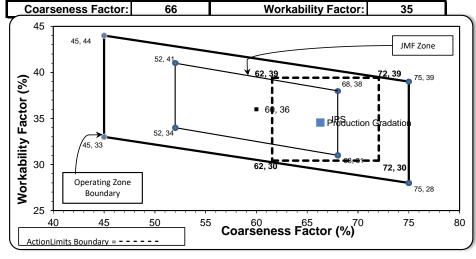
\*% Retained must be at least 4% for each sieve except max.,

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.

					· · · · · · · · · · · · · · · · · · ·	u
Sieve	CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	95.4	100.0	100.0	98.6	1.4	1.4
1"	36.1	100.0	100.0	80.2	18.4	19.8
3/4"	12.5	99.8	100.0	72.9	7.4	27.1
1/2"	4.0	81.0	100.0	64.6	8.3	35.4
3/8"	3.0	55.4	100.0	56.6	8.0	43.4
#4	2.6	9.6	97.6	41.8	14.8	58.2
#8	2.5	2.9	84.2	34.6	7.3	65.4
#16	2.4	2.1	70.8	29.0	5.5	71.0
#30	2.3	2.0	52.7	21.9	7.1	78.1
#50	2.2	1.8	22.8	10.1	11.8	89.9
#100	2.1	1.8	5.1	3.2	6.9	96.8
LBW	1.6	1.4	2.0	1.7	1.5	98.3
Production Gra	dation O Batch Plant Grad	dations	radations	-	Intial Production	on Sample (



ıntıaı 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"	72.1	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:

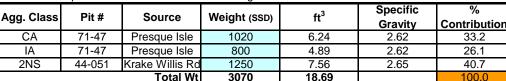
**Dates Test Represents:** 

Concrete Grade: P1M, 3500HP 9/19/22

:	9/20/2022	through	9/26/2022		
	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
	Presque Isle	1020	6.24	2.62	33.2
	Prosquo Islo	800	4 90	2.62	26.1

Contractor:

MDOT No.:



SUPERIO	)R L S

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

	l otal 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"	98.7	100	0.0	100.0	99.6	0.4	0.4
1"	47.5	100	0.0	100.0	82.6	17.0	17.4
3/4"	12.4	98	3.5	100.0	70.5	12.1	29.5
1/2"	3.0	83	3.2	100.0	63.4	7.1	36.6
3/8"	2.0	63	3.7	100.0	58.0	5.4	42.0
#4	1.6	17	<b>'</b> .3	96.2	44.2	13.8	55.8
#8	1.4	4.	.5	80.6	34.5	9.8	65.5
#16	1.4	2.	.7	65.9	28.0	6.5	72.0
#30	1.3	2.	.3	50.9	21.8	6.2	78.2
#50	1.2	2.	.1	27.6	12.2	9.6	87.8
#100	1.1	1.	9	8.4	4.3	7.9	95.7
LBW	0.9	1.	.7	1.6	1.4	2.9	98.6

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

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

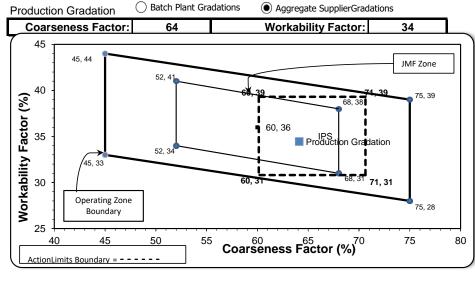
nom. max., #100 and #200 sieves.

\*% 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)

Coars	eness Factor:	65	
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"	74.1	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

Sample Date:

9/19/22 Concrete Grade: P1M, 3500HP

presents:	9/20/2022	through	9/26/2022		
Pit#	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
71-47	Presque Isle	950	5.81	2.62	30.9
71-47	Presque Isle	870	5.32	2 62	28.3

Contractor:

MDOT No.:

Dates Test F	Represents:	9/20/2022	through	9/26/2022		
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

SUPERIOR MATERIALS

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

	Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%
Sieve	CA	IA		2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	.0	100.0	100.0	0.0	0.0
1.5"	95.4	100	.0	100.0	98.6	1.4	1.4
1"	36.1	100	.0	100.0	80.2	18.4	19.8
3/4"	12.5	99.	8	100.0	72.9	7.4	27.1
1/2"	4.0	81.	0	100.0	64.9	8.0	35.1
3/8"	3.0	55.	4	100.0	57.3	7.6	42.7
#4	2.6	9.6	6	97.0	43.0	14.3	57.0
#8	2.5	2.9	9	79.6	34.0	9.0	66.0
#16	2.4	2.1		62.7	26.9	7.1	73.1
#30	2.3	2.0	)	45.6	19.8	7.0	80.2
#50	2.2	1.8	3	23.5	10.8	9.1	89.2
#100	2.1	1.8	3	5.7	3.5	7.3	96.5
LBW	1.6	1.4	1	1.2	1.4	2.1	98.6

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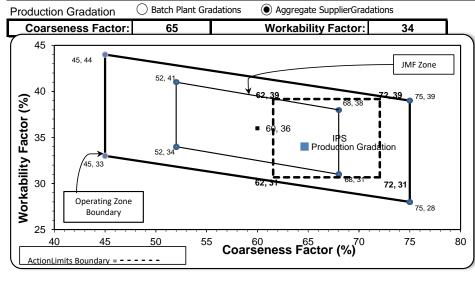
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Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
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3/8"	56.5	8.0	43.5
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#8	34.9	7.8	65.1
#16	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