Sample Date:

11/8/21 Concrete Grade: Contractor:

Dates Test F	Represents:	11/9/2021	through	11/15/2021		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	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
2NS	75-051	Mid-Michigan	1200	7.23	2.66	39.1

MDOT No.:

P1M

SUPERIOR MATERIALS

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

Farmington Hills, MI 48336

	Total Wt	3070 18.67		100.0	< Verify this no	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"	97.1	100.0	100.0	99.0	1.0	1.0
1"	43.9	100.0	100.0	80.4	18.5	19.6
3/4"	12.1	98.9	100.0	69.1	11.4	30.9
1/2"	3.0	86.2	100.0	62.6	6.5	37.4
3/8"	2.5	65.2	100.0	56.9	5.6	43.1
#4	2.2	14.7	99.0	43.3	13.7	56.7
#8	2.0	4.5	82.3	34.0	9.3	66.0 r
#16	1.9	2.6	65.4	26.9	7.1	73.1
#30	1.9	2.2	48.8	20.3	6.6	79.7 r
#50	1.8	2.1	24.8	10.9	9.4	89.1
#100	1.8	1.9	6.8	3.8	7.1	96.2 a
LBW	1.7	1.8	0.9	1.4	2.4	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.

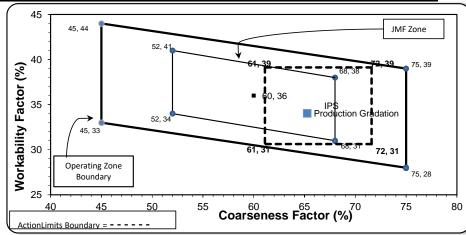
*% Retained must be at least 4% for each sieve except max.,

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.

 Batch Plant Gradations Aggregate Supplier Gradations **Production Gradation** Coarseness Factor: 65 Workability Factor: 34



Initial Production Sample (IPS)

Coarseness Factor:		66	
Worl	kability 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

PREPARED BY: SM, LLC Technical Service

Sample Date:

11/8/21 P1M Concrete Grade:

Contractor	

Dates Test Represents: 11/9/2021 11/15/2021 through

Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1420	8.46	2.69	45.5
IA	58-003	Stoneco	500	2.98	2.69	16.0
2NS	63-114	Highland	1200	7.26	2.65	38.5
	·	T . (. I M/c	0400	40 =0		400.0

MDOT No.:

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

	Total Wt	3120	18.70		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"	100.0	100	0.0	100.0	100.0	0.0	0.0
1"	69.4	100	0.0	100.0	86.1	13.9	13.9
3/4"	49.6	100	0.0	100.0	77.1	9.0	22.9
1/2"	14.8	93	3.8	100.0	60.2	16.8	39.8
3/8"	5.8	79.5		100.0	53.8	6.4	46.2
#4	2.7	15.9		99.7	42.1	11.7	57.9
#8	1.7	7.	.8	87.7	35.8	6.4	64.2
#16	1.4	2.	8	69.1	27.7	8.1	72.3
#30	1.2	1.	.6	48.1	19.3	8.4	80.7
#50	1.1	1.	2	17.8	7.5	11.8	92.5
#100	1.0	1.	.1	2.8	1.7	5.8	98.3
LBW	0.8	0.	.7	0.6	0.7	1.0	99.3

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

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

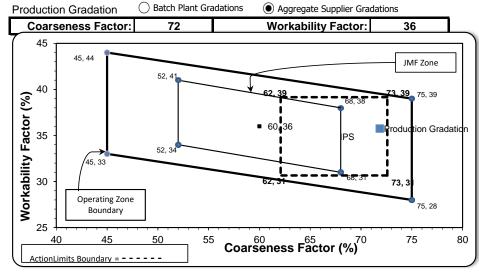
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
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"	85.5	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:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

11/8/21

CA

100.0

96.0

32.7

5.1

2.1

1.8

1.6

1.5

1.4

1.4

1.4

1.3

P₁M Concrete Grade:

2NS

100.0

100.0

100.0

100.0

100.0

100.0

95.8

78.4

62.3

46.2

26.2

6.8

Cumulative

% Passing

100.0

98.7

77.6

68.2

63.3

58.0

44.4

34.3

26.9

20.1

11.9

3.9

Contractor:

Cumulative

% Retained

0.0

1.3 22.4

31.8

36.7

42.0

55.6

65.7

73.1

79.9

88.1

96.1

MDOT No.:

% Retained

0.0

1.3

21.0

9.5

4.9

5.3

13.6

10.0

7.5

6.8

8.2

8.0

2.6

Dates Test I	Represents:	11/9/2021	through	11/15/2021		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1020	6.24	2.62	33.2
IA	71-47	Presque Isle	800	4.89	2.62	26.1
2NS	63-115	Ray Rd	1250	7.56	2.65	40.7
		Total Wt	2070	19.60		100.0

it#	Source	Weight (SSD)	ft ³	Gravity	Contribution
-47	Presque Isle	1020	6.24	2.62	33.2
-47	Presque Isle	800	4.89	2.62	26.1
-115	Ray Rd	1250	7.56	2.65	40.7
	Total Wt	3070	18.69		100.0

IΑ

100.0

100.0

100.0

98.8

83.9

64.1

18.6

7.4

4.0

3.2

2.8

2.5

---- Verify this number is 100%

SUPERIOR MATERIALS

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.,

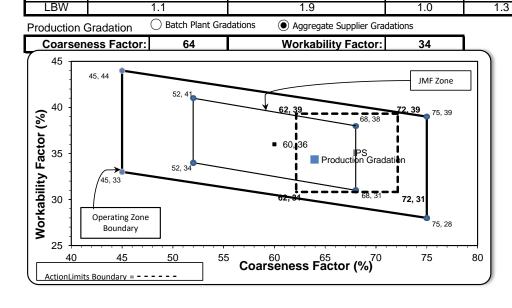
nom. max., #100 and #200 sieves.

*% 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	
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

Sample Date:

2NS

11/8/21 P₁M Concrete Grade:

Contractor:

Dates Test Represents:		11/9/2021	through	11/15/2021			
	Agg. Class	Pit #	Source	Weight (SSD)	ft ³	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	95-013	Smelter Bay	1250	7 56	2 65	40.7

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	I.	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	96.0	10	0.0	100.0	98.8	1.2	1.2
1"	32.7	10	0.0	100.0	79.2	19.6	20.8
3/4"	5.1	98.8		100.0	70.3	8.9	29.7
1/2"	2.1	83	3.9	100.0	65.1	5.2	34.9
3/8"	1.8	64	l.1	100.0	59.4	5.7	40.6
#4	1.6	18	3.6	95.0	44.4	15.0	55.6
#8	1.5	7.	.4	81.4	35.7	8.7	64.3
#16	1.4	4.	.0	65.3	28.2	7.5	71.8
#30	1.4	3.2		48.0	20.9	7.3	79.1
#50	1.4	2.8		23.3	10.7	10.2	89.3
#100	1.3	2.5		6.6	3.8	6.9	96.2
LBW	1.1	1.	.9	0.3	1.0	2.8	99.0

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

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

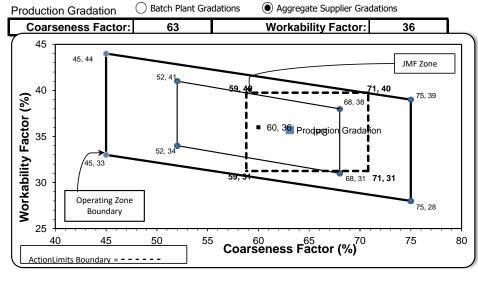
nom. max., #100 and #200 sieves.

*% 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:	65	
Work	ability Factor:	36	
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

Sample Date:

11/8/21 P1M Concrete Grade: 11/9/2021 11/15/2021

MDOT	No.:

Contractor:

Dates Test F	Represents:	11/9/2021	through	11/15/2021		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	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	81-093	Burmeister	1200	7.26	2.65	38.5
		Total Wt	3120	18.70		100.0

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

CA	1/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
100.0	100	0.0	100.0	100.0	0.0	0.0
100.0	100	0.0	100.0	100.0	0.0	0.0
69.4	100	0.0	100.0	86.6	13.4	13.4
49.6	100	0.0	100.0	77.9	8.7	22.1
14.8	93	5.8	100.0	61.5	16.4	38.5
5.8	79	.5	100.0	55.0	6.5	45.0
2.7	15	.9	99.0	42.1	13.0	57.9
1.7	7.	8	87.0	35.6	6.5	64.4
1.4	2.	8	72.3	28.9	6.7	71.1
1.2	1.	6	54.4	21.7	7.2	78.3
1.1	1.	2	21.3	8.9	12.8	91.1
1.0	1.	1	3.2	1.9	7.0	98.1
0.8	0.	7	0.9	0.8	1.0	99.2
	100.0 100.0 69.4 49.6 14.8 5.8 2.7 1.7 1.4 1.2 1.1	100.0 100 100.0 100 69.4 100 49.6 100 14.8 93 5.8 79 2.7 15 1.7 7. 1.4 2. 1.2 1.1 1.0 1.0	100.0 100.0 100.0 100.0 69.4 100.0 49.6 100.0 14.8 93.8 5.8 79.5 2.7 15.9 1.7 7.8 1.4 2.8 1.2 1.6 1.1 1.2 1.0 1.1 0.8 0.7	100.0 100.0 100.0 100.0 100.0 100.0 69.4 100.0 100.0 49.6 100.0 100.0 14.8 93.8 100.0 5.8 79.5 100.0 2.7 15.9 99.0 1.7 7.8 87.0 1.4 2.8 72.3 1.2 1.6 54.4 1.1 1.2 21.3 1.0 1.1 3.2 0.8 0.7 0.9	CA IA 2NS % Passing 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 69.4 100.0 100.0 86.6 49.6 100.0 100.0 77.9 14.8 93.8 100.0 61.5 5.8 79.5 100.0 55.0 2.7 15.9 99.0 42.1 1.7 7.8 87.0 35.6 1.4 2.8 72.3 28.9 1.2 1.6 54.4 21.7 1.1 1.2 21.3 8.9 1.0 1.1 3.2 1.9 0.8 0.7 0.9 0.8	CA IA 2NS % Passing % Retained 100.0 100.0 100.0 100.0 0.0 100.0 100.0 100.0 100.0 0.0 69.4 100.0 100.0 86.6 13.4 49.6 100.0 100.0 77.9 8.7 14.8 93.8 100.0 61.5 16.4 5.8 79.5 100.0 55.0 6.5 2.7 15.9 99.0 42.1 13.0 1.7 7.8 87.0 35.6 6.5 1.4 2.8 72.3 28.9 6.7 1.2 1.6 54.4 21.7 7.2 1.1 1.2 21.3 8.9 12.8 1.0 0.7 0.9 0.8 1.0

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

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

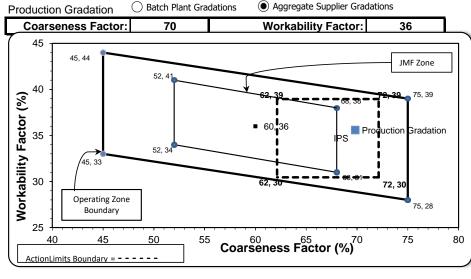
nom. max., #100 and #200 sieves.

*% 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	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"	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:

11/8/21 P₁M Concrete Grade: 11/9/2021 11/15/2021 through

MDOT	NI.	

Contractor:

Dates Test F	Represents:	11/9/2021	through	11/15/2021		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	920	5.63	2.62	30.0
IA	71-47	Presque Isle	950	5.81	2.62	30.9
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
		Total Wt	3070	18 70		100.0

MDOT No.:

SUPERIOR MATERIALS	

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

	Total Wt	3070	18.70		100.0	< Verify this n	umber is 100%
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"	96.0	100	0.0	100.0	98.8	1.2	1.2
1"	32.7	100	0.0	100.0	79.8	19.0	20.2
3/4"	5.1	98	3.8	100.0	71.2	8.6	28.8
1/2"	2.1	83	3.9	100.0	65.7	5.5	34.3
3/8"	1.8	64	.1	100.0	59.5	6.2	40.5
#4	1.6	18	3.6	97.1	44.2	15.3	55.8
#8	1.5	7.	4	83.0	35.2	9.0	64.8
#16	1.4	4.	.0	68.5	28.4	6.7	71.6
#30	1.4	3.	2	51.8	21.7	6.8	78.3
#50	1.4	2.	.8	26.0	11.4	10.2	88.6
#100	1.3	2.	5	4.0	2.7	8.7	97.3
LBW	1.1	1.	9	0.3	1.0	1.7	99.0

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

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

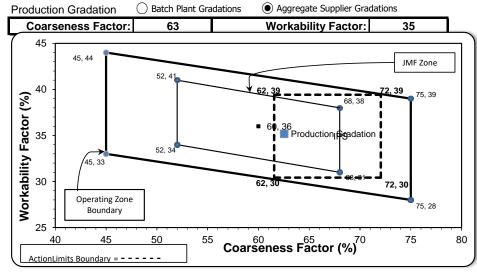
nom. max., #100 and #200 sieves.

*% 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	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"	85.0	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

PLANT #: P-39 Sample Date:

Dates Test Represents:

11/8/21 Concrete Grade: 11/9/2021 11/15/2021

Contractor:

MDOT No.:

P1M

Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1070	6.54	2.62	34.9
IA	71-47	Presque Isle	750	4.59	2.62	24.4
2NS	44-051	Krake Willis Rd	1250	7.56	2.65	40.7
		Total Wt	3070	18.69		100.0

through

. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	1070	6.54	2.62	34.9
IA	71-47	Presque Isle	750	4.59	2.62	24.4
2NS	44-051	Krake Willis Rd	1250	7.56	2.65	40.7
	•	Total Wt	3070	18.69	·	100.0

SUPER	RIOR

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	I.	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	97.1	10	0.0	100.0	99.0	1.0	1.0
1"	43.9	10	0.0	100.0	80.4	18.5	19.6
3/4"	12.1	98	3.9	100.0	69.1	11.4	30.9
1/2"	3.0	86	5.2	100.0	62.8	6.3	37.2
3/8"	2.5	65	5.2	100.0	57.5	5.3	42.5
#4	2.2	14	l.7	96.8	43.8	13.7	56.2
#8	2.0	4.	.5	80.1	34.4	9.4	65.6 r
#16	1.9	2	.6	64.5	27.6	6.9	72.4
#30	1.9	2	.2	48.5	20.9	6.6	79.1 r
#50	1.8	2	.1	25.4	11.5	9.5	88.5
#100	1.8	1.	.9	7.8	4.3	7.2	95.7 a
LBW	1.7	1.	.8	1.2	1.5	2.7	98.5

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

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

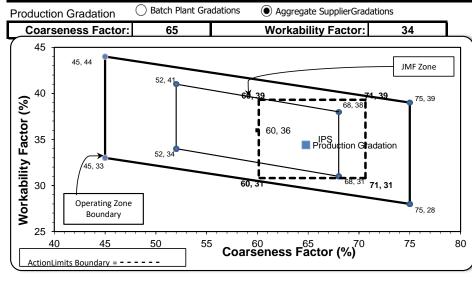
nom. max., #100 and #200 sieves.

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

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

*% Retained must be at least 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

PREPARED BY: SM, LLC Technical Service

Source

Presque Isle

Presque Isle

Ray Rd

PLANT #: P-02 Sample Date: 11/8/21

Pit#

71-47

71-47

63-115

Dates Test Represents:

Agg. Class

CA

IΑ

2NS

P₁M Concrete Grade:

2.65

Contractor:

11/9/2021 11/15/2021 through Weight (SSD)

950

870

1250

pecific	%
Gravity	Contribution
2.62	30.9
2.62	28.3

MDOT No.:

28.3 40.7

SUPERIOR	
MATERIALS	

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

Farmington Hills, MI 48336

į	oo i io i itay ita	.200	7.00	2.00	10.1			
	Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	
Sieve	CA	I.	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0	10	0.0	100.0	100.0	0.0	0.0	
1.5"	96.0	10	0.0	100.0	98.8	1.2	1.2	
1"	32.7	10	0.0	100.0	79.2	19.6	20.8	
3/4"	5.1	98	3.8	100.0	70.3	8.9	29.7	
1/2"	2.1	83	3.9	100.0	65.1	5.2	34.9	
3/8"	1.8	64	1.1	100.0	59.4	5.7	40.6	
#4	1.6	18	3.6	95.8	44.8	14.7	55.2	
#8	1.5	7	.4	78.4	34.5	10.3	65.5	n
#16	1.4	4	.0	62.3	26.9	7.5	73.1	
#30	1.4	3	.2	46.2	20.2	6.8	79.8	n
#50	1.4	2	.8	26.2	11.9	8.3	88.1	
#100	1.3	2	.5	6.8	3.9	8.0	96.1	а
LBW	1.1	1	.9	1.0	1.3	2.6	98.7	

ft³

5.81

5.32

7.56

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

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

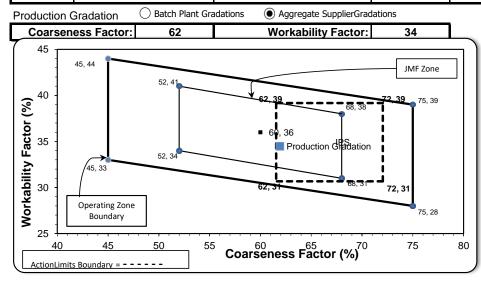
nom. max., #100 and #200 sieves.

*% 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"	85.0	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