SM 282 E 12/02

PSN _____ BORNUM DNB-10

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 420.1373, NAD 88
DEPTH TO WATER 49.6

COORDINATES (Lat) 43.090844°N (Long) 75.757016°W
DATE START 12/7/2016 **DATE FINISH** 12/21/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING O. D. 3-1/2 in I. D. 3 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in **HAMMER TYPE** Automatic

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	0.0									Dark gray asphalt pavement to 1.5 feet.	-
		SS1	6	6	7	7	9.3%	20		Moist brownish gray gravelly (SAND-SILT-CLAY) fill with 15 to 40% gravel, little sand, trace to little clay, stiff, massive soil structure, (ML-CL).	M - LPL
	5.0										-
		SS2	4	4	4	4	7.2%	12		Same as 3.0-5.0'	M - LPL
	10.0										-
		SS3	5	5	8	5	10.0%	16		Same as 3.0-5.0'	M - LPL
	15.0										-
		SS4	13	15	11	8	13.7%	22		Brown gravelly (SAND-SILT-CLAY) fill with 15 to 30 % gravel and flat sided stone fragments, little sand, trace to little clay, very stiff, massive soil structure, (ML-CL).	M - LPL
	20.0										-
		SS5	8	9	4	4	23.4%	18		23.0-24.0' Same as 18.0-20.0' 24.0-25.0' Dark brown (CLAYEY-SILT) with 0 to 3% gravel, some clay, trace sand and organic matter, stiff, weakly thinly laminated, (CL).	M - PL
	25.0										

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DRILL RIG OPERATOR Andrew Kempisty
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5512790
STRUCTURE NAME N. Main Street/Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

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CASING O. D. 3-1/2 in I. D. 3 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in **HAMMER TYPE** Automatic

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	25.0										-
		SS6	4	6	7	7	28.6%	24		28.0-29.5' Faintly mottled brownish gray to gray (CLAYEY-SILT) with some clay, trace sand, stiff, thinly laminated with an occasional thin organic (SANDY-SILT) interbed, (CL) with an occasional thin (ML) interbed.	M - PL
	30.0									29.5-30.0' Brown (SAND-SILT-CLAY) with little mostly very fine to fine size sand and clay, stiff, weakly thinly laminated, (ML-CL).	-
		SS7	2	3	3	3	30.1%	24		Brown (SILTY-CLAY) firm, thinly laminated with very thin silt lenses, (CL).	W - PL
	35.0										-
		SS8	WH	1	1	2	31.7%	24		Brown (SILTY-CLAY) very soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	40.0										-
		SS9	WR	WR	1	2	35.1%	24		Alternating reddish brown and brownish gray (SILTY-CLAY) very soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	45.0										-
		SS10	WR	WR	WH	WH	35.3%	24		Same as 43.0-45.0'	W - PL
	50.0										

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SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5512790
STRUCTURE NAME N. Main Street/Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

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CASING **O. D.** 3-1/2 in **I. D.** 3 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Automatic

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	50.0									-	
		SS11	WR	WR	WH	WH	35.9%	24		Same as 43.0-45.0'	W - PL
	55.0									-	
		SS12	WR	WR	WH	WH	32.9%	24		Same as 43.0-45.0'	W - PL
	60.0									Note: Drilled augers below road surface at 60.5 feet, covered with metal plate, and cold patch December 07, 2016 at 12:45pm to leave over weekend.	-
		SS13	WR	3	7	6	25.7%	24		63.0-64.0' Same as 43.0-45.0' 64.0-65.0' Grayish brown (SILTY-SAND) with little silt, mostly very fine size sand, compact, thinly bedded, (SM).	S - NPL
	65.0									Note: Switched boring method to 3" ID Flush Joint Casing with 2 15/16" roller bit to advance bore hole, due to possible running sands.	-
		SS14	12	6	4	2	10.7%	10		Brown gravelly (SILTY-SAND) with 10 to 20% gravel, some silt, very fine to very coarse size sand, loose, weakly stratified, (SM).	S - NPL
	70.0									-	
		SS15	10	12	10	9	10.9%	12		Same as 68.0-70.0'	S - NPL
	75.0										

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SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR Joe Dorety (Fisher)
BIN 5512790
STRUCTURE NAME N. Main Street/Thruway

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SAMPLER O. D. 2 in I. D. 1-3/8 in **HAMMER TYPE** Automatic

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	75.0										-
		SS16	9	10	12	15	17.8%	12		Brown (SAND) mostly fine size, trace silt, compact, thinly bedded, (SM).	S - NPL
	80.0									Note: Casing pounded much harder below 82.0 feet.	-
		SS17	18	24	29	29	7.3%	14		Brown gravelly (SAND) with 10 to 20% gravel, mostly very fine to fine size, trace silt, very dense, weakly stratified to massive soil structure, (SM).	S - NPL
	85.0										-
		SS18	45	66	44	33	7.4%	16		Brown gravelly (SILTY-SAND) with 10 to 20% gravel and flat sided stone framgents, trace to little silt, mostly very fine to fine size sand, very dense, weakly stratified to massive soil structure, (SM).	S - NPL
	90.0										-
		SS19	51	26	14	17	11.1%	8		Brown (SILTY-SAND) with 3 to 7% gravel, little to some silt, trace clay, mostly very fine to fine size sand, dense, weakly thinly bedded to massive soil structure, (SM).	S - NPL
	95.0										-
		SS20	55	67	50/4		-%	0		No Recovery.	-
	100.0										

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BIN 5512790
STRUCTURE NAME N. Main Street/Thruway

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CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	100.0										-
		SS21	31	25	29	22	6.0%	16		Grayish brown very gravelly (SILTY-SAND) with 30 to 50% gravel, little to some silt, very dense, massive soil structure, (SM),(GM).	S - NPL
	105.0										-
		SS22	59	31	24	49	5.6%	14		Same as 103.0-105.0'	S - NPL
	110.0										-
		SS23	20	50/5			14.5%	6		Brown (SILTY-SAND) with 5 to 15% gravel, trace to little silt, mostly very fine to fine size sand, very dense, weakly stratified, (SM).	S - NPL
										BOTTOM OF HOLE AT 113.90 ft	

Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with 5.0-foot interval sampling to 65.0 feet. Continued below with 3" flush joint casing and 2 15/16" roller bit with 5.0-foot interval sampling to end of boring at 113.9 feet. Bore hole was backfilled with cuttings to 0.8 feet and concrete patch installed.

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
07-Dec-16	12:45	60.50	58.00	NONE	NO	No
19-Dec-16	09:45	60.50	58.00	49.60	NO	No
19-Dec-16	11:00	65.00	63.00	39.90	NO	No
20-Dec-16	08:20	75.00	73.00	5.60	NO	No
21-Dec-16	08:50	113.90	112.00	20.20	NO	No

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SURF. ELEV. 420.1299, NAD 88
DEPTH TO WATER 18.0

COORDINATES (Lat) 43.090315°N (Long) 75.756687°W
DATE START 12/6/2016 **DATE FINISH** 12/19/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING O. D. 4-1/2 in I. D. 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	0.0										-
		SS1	9	10	7	8	26.1%	14		3.0-4.0' Reddish brown gravelly (SILTY-SAND) fill with 15 to 40% gravel, mostly very fine to fine size sand, trace to little silt, compact, massive soil structure, (SM). 4.0-5.0' Dark brown (CLAYEY-SILT) fill with little to some clay, trace sand, very stiff, massive soil structure, (CL).	W - NPL
	5.0										-
		SS2	1	3	3	4	77.3%	13		Dark brown (SANDY-SILT) with little mostly very fine to fine size sand, trace to little organic matter, trace wood fiber and clay, compact, massive soil structure, (ML).	M - NPL
	10.0										-
		SS3	6	8	9	8	23.5%	18		Reddish brown (SILTY-CLAY) very stiff, thinly laminated with very thin silt lenses, (CL).	M - PL
	15.0										-
		SS4	1	2	2	2	31.7%	17		Reddish brown (SILTY-CLAY) soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	20.0										-
		SS5	WH	WH	WH	1	40.7%	24		Reddish brown to brown (SILTY-CLAY) very soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	25.0										

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

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CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	25.0										-
		SS6	WH	WH	WH	1	38.9%	24		Same as 23.0-25.0'	W - PL
	30.0										-
		SS7	WH	WH	WH	WH	37.1%	24		Same as 23.0-25.0'	W - PL
	35.0										-
		SS8	WH	WH	1	1	34.8%	24		Same as 23.0-25.0'	W - PL
	40.0										-
		SS9	3	5	4	5	23.5%	20		Light brown to brown (SILT) with trace mostly very fine to fine size sand, loose, thinly bedded, (ML).	W - NPL
	45.0										-
		SS10	3	11	16	18	16.5%	19		Dark gray (SILTY-SAND) with 3 to 7% gravel, trace silt, dense, stratified, (SW).	W - NPL
	50.0										

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	50.0										-
		SS11	3	5	4	9	12.1%	12		Reddish brown (SILTY-SAND) with 5 to 15% gravel, mostly very fine to fine size sand, trace to little silt, trace clay, loose, stratified, (SM).	W - NPL
	55.0										-
		SS12	4	5	5	5	10.6%	8		Same as 53.0-55.0'	W - NPL
	60.0										-
		SS13	7	15	40	53	12.3%	18		Dark gray (SILTY-SAND) with 3 to 7% gravel, mostly very fine to fine size sand, trace silt, very dense, stratified, (SW).	W - NPL
	65.0										-
		SS14	17	43	97	100/3	5.3%	6		Gray to dark gray gravelly (SILTY-SAND) with 15 to 40% gravel, trace silt, very dense, (SW).	W - NPL
	70.0										-
		SS15	19	34	40	43	7.9%	8		Same as 68.0-70.0'	W - NPL
	75.0										

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	75.0									Note: Switched to 3 7/8" tricone roller bit with fluid rotary methods at 75.0 feet.	-
		SS16	31	13	14	20	3.6%	6		Brownish gray to reddish brown very gravelly (SILTY-SAND) with 40 to 60% gravel, trace silt, compact, stratified, (SW).	W - NPL
	80.0									Note: Tried to sample 83.0-85.0' and could not, because the open hole collapsed. Pulled augers and drove 4" flush joint casing to 85.0 feet. Continued sampling through 4" flush joint casing.	-
		SS17	17	25	23	17	5.1%	9		Same as 78.0-80.0'	W - NPL
	85.0									Note: Only able to drive casing to 87.5 due to a hard obstruction. Possible boulder. Sample 18 is 89.0-91.0'	-
	90.0	SS18	17	29	72	97	6.6%	12		Reddish brown (SAND-SILT-CLAY) with 15 to 25% gravel, little sand and clay, hard, massive soil structure, (ML-CL).	M - LPL
		SS19	100/5				10.2%	4		Reddish brown (SILTY-SAND) with 15 to 25% gravel, mostly very fine to fine size sand, trace to little silt, very dense, massive soil structure, (SM).	W - NPL
	95.0										-
		SS20	84	100/1			6.2%	3		Reddish brown (SANDY-SILT) with 5 to 15% gravel, little sand, trace clay, very dense, massive soil structure, (ML).	M - LPL
	100.0										

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

SM 282 E 12/02

PSN _____ BORNUM DNB-11

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 420.1299, NAD 88
DEPTH TO WATER 18.0

COORDINATES (Lat) 43.090315°N (Long) 75.756687°W
DATE START 12/6/2016 **DATE FINISH** 12/19/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
	100.0									Note: Advanced bore hole without split spoon sampling to 103.0 feet. Onsite inspector halted boring at 103.0 feet. -

BOTTOM OF HOLE AT 103.00 ft

Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing to 85.0 feet with 5.0-foot interval sampling. Pulled augers and installed 85.0 feet of 4" flush joint casing. Continued below with 3 7/8" tricone roller bit and 4" flush joint casing to 87.5 feet. Continued open hole with 3 7/8" tricone roller bit with fluid rotary methods and 5.0-foot interval sampling to boring completion at 103.0 feet.

DATE	TIME	DEPTH (ft.) HOLE	DEPTH (ft.) CASING	DEPTH (ft.) WATER	ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
06-Dec-16	10:00	20.00	18.00	18.00	NO	No
06-Dec-16	15:30	75.00	73.00	2.00	NO	No
07-Dec-16	07:45	75.00	73.00	0.00	NO	No
07-Dec-16	16:00	91.00	87.50	0.00	NO	No
19-Dec-16	08:30	91.00	87.50	5.00	NO	No
19-Dec-16	15:00	103.00	87.50	4.00	NO	No

DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W
DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	0.0									Dark gray asphalt pavement to 1.5 feet.	-
	5.0	SS1	11	6	7	10	11.6%	12		Reddish brown gravelly (SANDY-SILT) fill with 15 to 40% gravel, little sand, trace clay, compact, massive soil structure, (ML).	M - LPL
	10.0	SS2	6	3	10	5	8.2%	16		Gray to dark gray very gravelly (SANDY-SILT) fill with 40 to 60% gravel, little sand, trace clay, compact, massive soil structure, (ML).	M - LPL
	15.0	SS3	6	10	7	9	8.4%	18		Same as 9.0-11.0'	M - LPL
	20.0	SS4	11	8	7	9	9.6%	17		Gray very gravelly (SAND-SILT-CLAY) fill with 40 to 60% gravel, little sand, trace to little clay, compact, massive soil structure, (ML-CL) tending toward (ML).	W - LPL
	25.0	SS5	9	9			11.2%	19		Same as 19.0-21.0'	W - LPL

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W
DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	25.0				7	8					
	30.0	SS6	3	7	12	17	40.3%	16		Brownish gray (SILTY-CLAY) with trace to little organic matter, peat layer from 30.8-31.0 feet, very stiff, thinly laminated with very thin silt lenses, (CL).	W - PL
	35.0	SS7	3	5	8	9	22.9%	20		Reddish brown (SILTY-CLAY) stiff, thinly laminated with very thin silt lenses, (CL).	W - PL
	40.0	SS8	WR	WH	WH	4	31.5%	24		Reddish brown (SILTY-CLAY) very soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	45.0	SS9	WR	WH	3	3	34.5%	24		Same as 39.0-41.0'	W - PL
	50.0	SS10	WR	WR			36.1%	24		Same as 39.0-41.0'	W - PL

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

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HOLE DN-B
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DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W
DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	50.0				WH	WH					
	55.0	SS11	WR	WR	WR	WR	34.6%	24		Same as 39.0-41.0'	W - PL
	60.0	SS12	WR	WR	2	2	31.3%	24		Grayish brown to reddish brown (SILTY-CLAY) very soft, thinly laminated with very thin silt lenses, (CL).	W - PL
	65.0	SS13	WR	WR	1	1	31.6%	24		Same as 59.0-61.0'	W - PL
										Note: Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing to 70.0 feet. Due to running sands, pulled and installed 4" flush joint casing.	-
	70.0	SS14	WR	WR	WR	WR	28.4%	24		Gray (SILT) very loose, weakly thinly bedded, (ML).	W - NPL
	75.0	SS15	37	20			7.3%	4		Grayish brown (SILTY-SAND) with 15 to 25% gravel, mostly very fine to fine size sand, little silt, dense, weakly	W - NPL

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W
DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	75.0				13	10				stratified, (SM).	
	80.0	SS16	16	10	10	10	13.8%	10		Same as 74.0-76.0'	W - NPL
	85.0	SS17	16	12	7	18	22.2%	14		Dark gray (SILTY-SAND) with 0 to 3% gravel, mostly very fine to fine size sand, trace to little silt, compact, weakly thinly bedded, (SM).	W - NPL
	90.0	SS18	12	14	14	16	19.5%	13		Brownish gray (SILTY-SAND) with 0 to 3% gravel, mostly very fine to fine size sand, trace silt, compact, (SP).	W - NPL
	95.0	SS19	9	24	20	12	14.7%	14		Same as 89.0-91.0'	W - NPL
	100.0	SS20	23	22			12.5%	8		Same as 89.0-91.0'	W - NPL

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
STA _____
OFFSET ft

DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W
DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING O. D. 4-1/2 in I. D. 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6	6/12	12/18	18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK	
	100.0				27	26					
	105.0	SS21	19	21	15	16	17.4%	9		Grayish brown (SILTY-SAND) with mostly very fine to fine size sand, trace silt, dense, (SP).	W - NPL
	110.0	SS22	12	17	18	19	18.6%	15		Same as 104.0-106.'	W - NPL
	115.0	SS23	17	18	14	15	15.4%	14		Grayish brown (SILTY-SAND) with 5 to 15% gravel, mostly very fine to fine size sand, trace to little silt, dense, weakly stratified, (SM).	W - NPL
										BOTTOM OF HOLE AT 116.00 ft	

Note:
Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing to 70.0 feet with 5.0-foot interval sampling. Continued below with 4" flush joint casing and 3 7/8" roller bit using fluid rotary methods and 5.0-foot interval sampling to end of boring at 116.0 feet. Bore hole was backfilled with cuttings and ground surface repaired with concrete patch.

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DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

SM 282 E 12/02

PSN _____ BORNUM DNB-12

NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION

SUBSURFACE EXPLORATION LOG

HOLE DN-B
LINE _____
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DIVISION Syracuse
COUNTY Madison
PIN S52886
ROUTE Thruway Mainline
MILEPOST 262.01
PROJECT Syracuse Division 2017 Design-Build Bridge Replacements

SURF. ELEV. 400.8815, NAD 88
DEPTH TO WATER 19.0

COORDINATES (Lat) 43.090561°N (Long) 75.756978°W

DATE START 12/20/2016 **DATE FINISH** 12/22/2016

AUGER 4 1/4" I.D. HOLLOW STEM FLIGHT AUGER **WT OF HAMMER-CASING** 140 lb **HAMMER FALL-CASING** 30 in
CASING **O. D.** 4-1/2 in **I. D.** 4 in **WT OF HAMMER-SAMPLER** 140 lb **HAMMER FALL-SAMPLER** 30 in
SAMPLER **O. D.** 2 in **I. D.** 1-3/8 in **HAMMER TYPE** Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.) 0/6 6/12 12/18 18/24	MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
20-Dec-16	09:00	21.00	19.00	19.00	NO	No
20-Dec-16	14:35	71.00	69.00	40.00	NO	No
21-Dec-16	08:00	75.00	75.00	32.00	NO	No
21-Dec-16	14:00	100.00	100.00	25.00	NO	No
22-Dec-16	09:30	100.00	100.00	27.00	NO	No
22-Dec-16	14:30	116.00	116.00	28.00	NO	No

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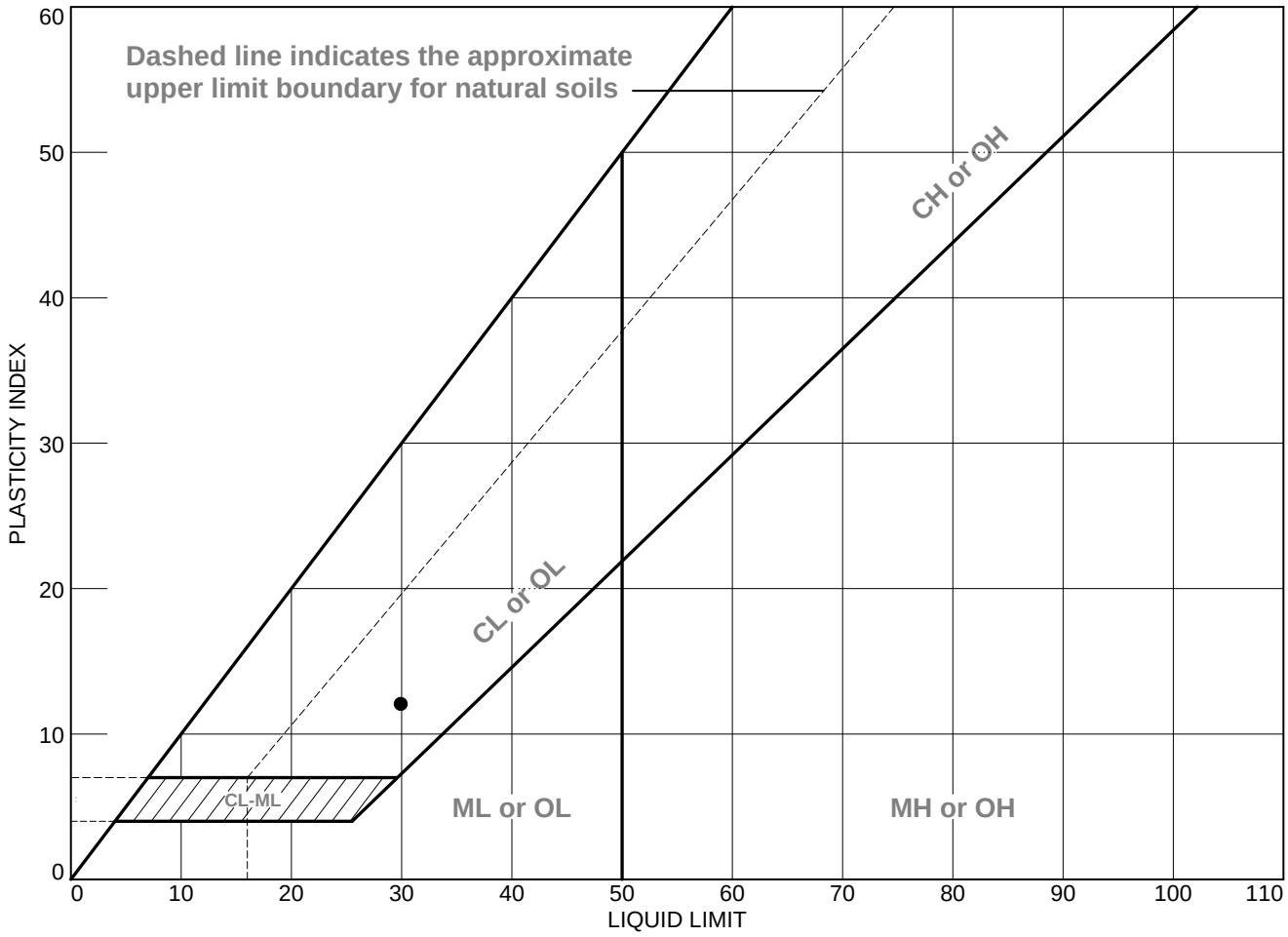
DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Brandon Mikolin
INSPECTOR Matthew Conley (Stantec)
BIN 5512790
STRUCTURE NAME N. Main St./Thruway

CONTRACT D214386 **CONTRACTOR** Earth Dimensions, Inc.

TWY-CAN SUBSURF EXPLORATION 7K16_BIN-5512790-DRAFTS.GPJ TWYSE1TMPL_V05.GDT 3/31/17

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	FHB-10, SS8			18	30	12	

3rd Rock, LLC

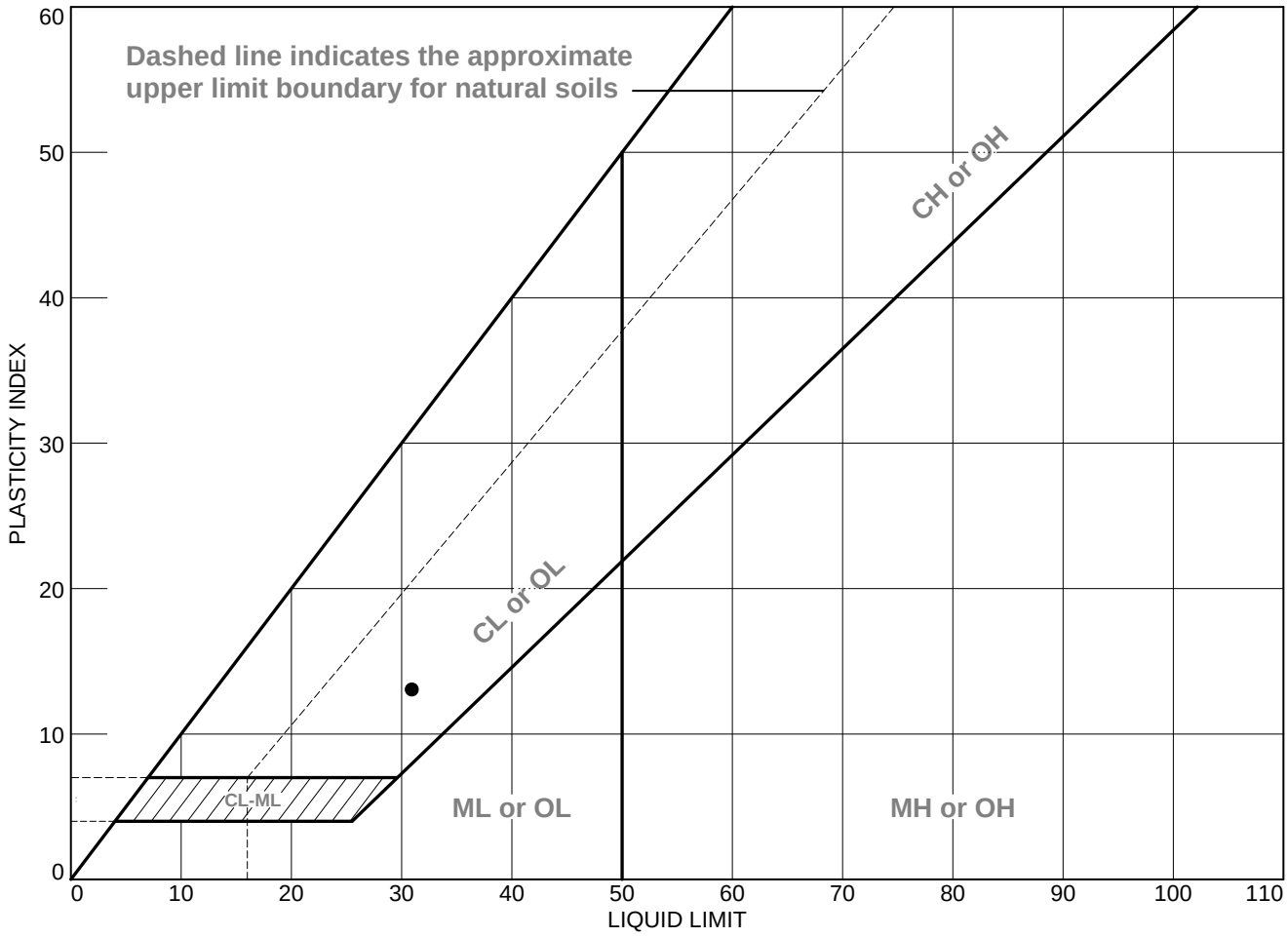
East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/16/17 **Checked By:** LM

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	FHB-10, SS11			18	31	13	

3rd Rock, LLC

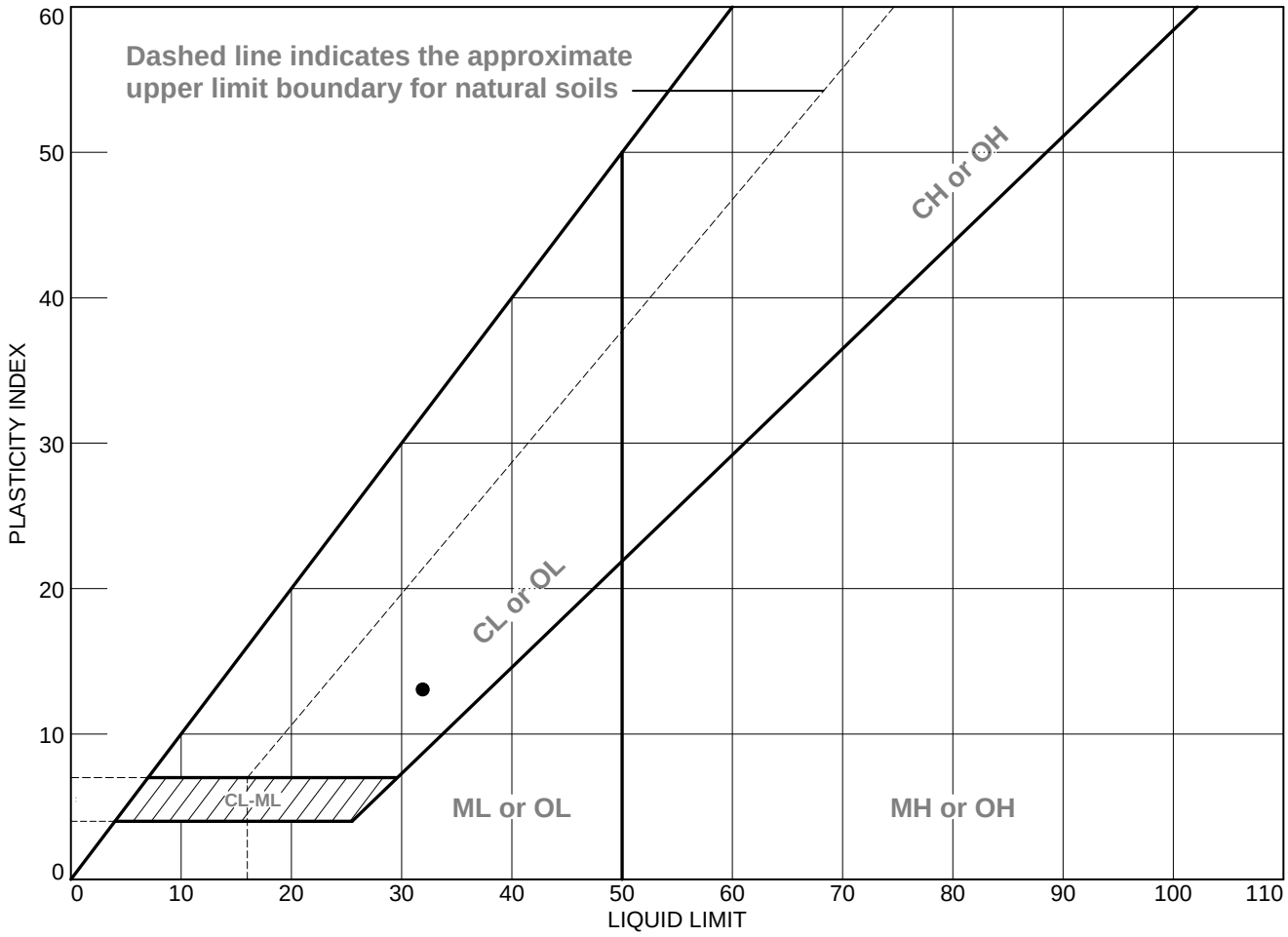
East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/17/17 **Checked By:** ETC

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	FHB-11, SS4			19	32	13	

3rd Rock, LLC

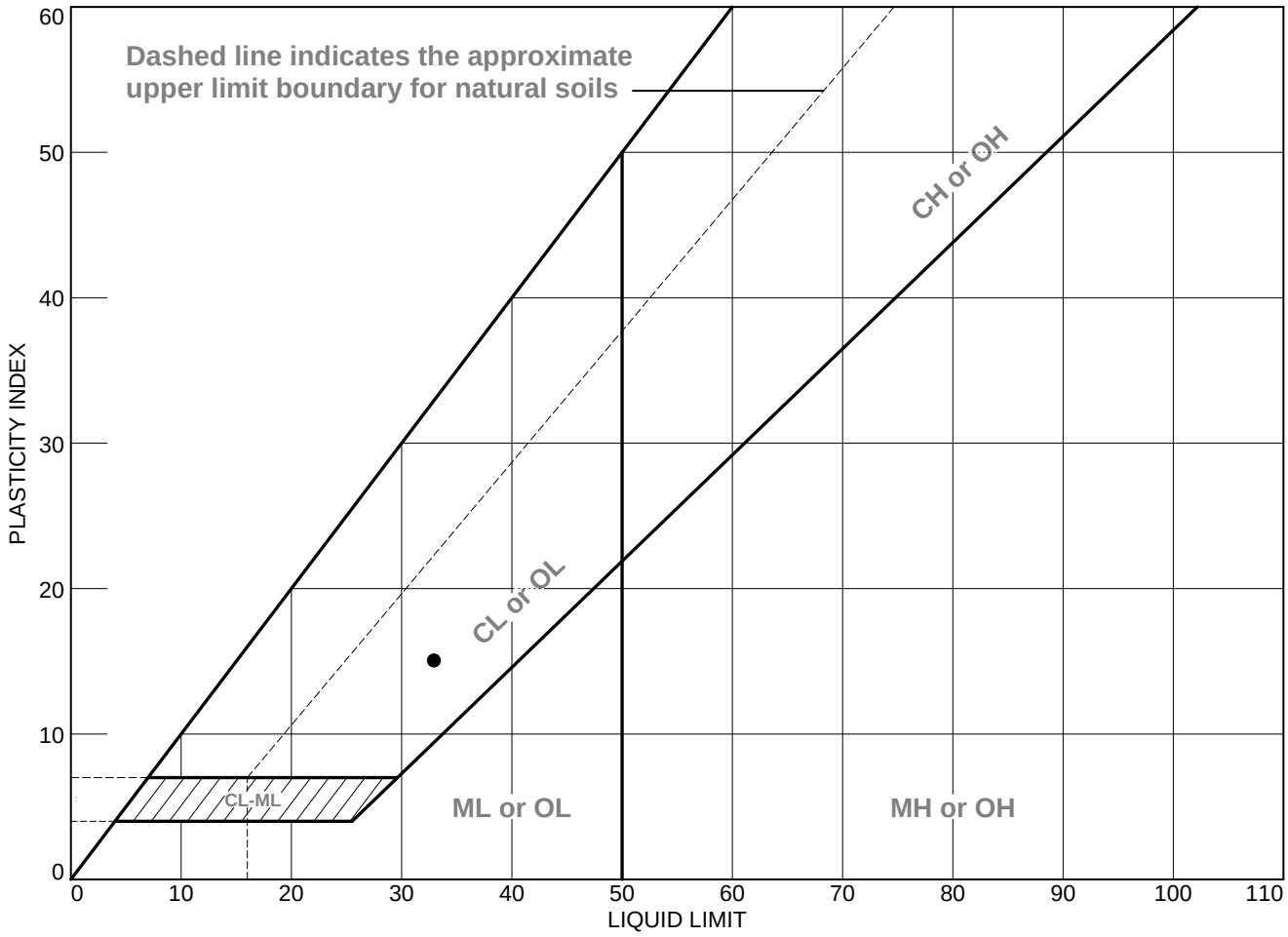
East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/16/17 **Checked By:** LM

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	FHB-11, SS7			18	33	15	

3rd Rock, LLC

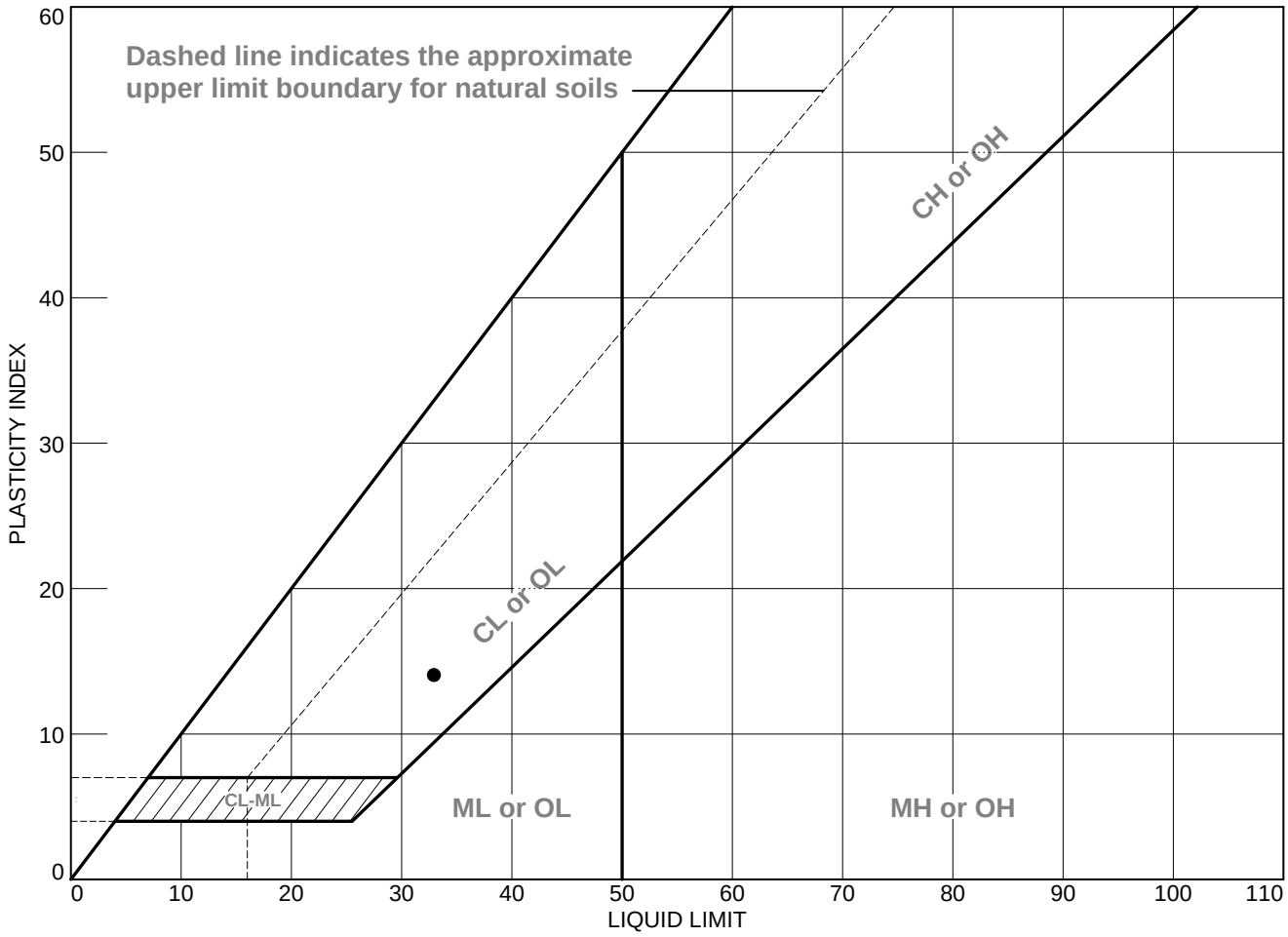
East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/22/17 **Checked By:** ETC

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	DNB-12, SS8			19	33	14	

3rd Rock, LLC

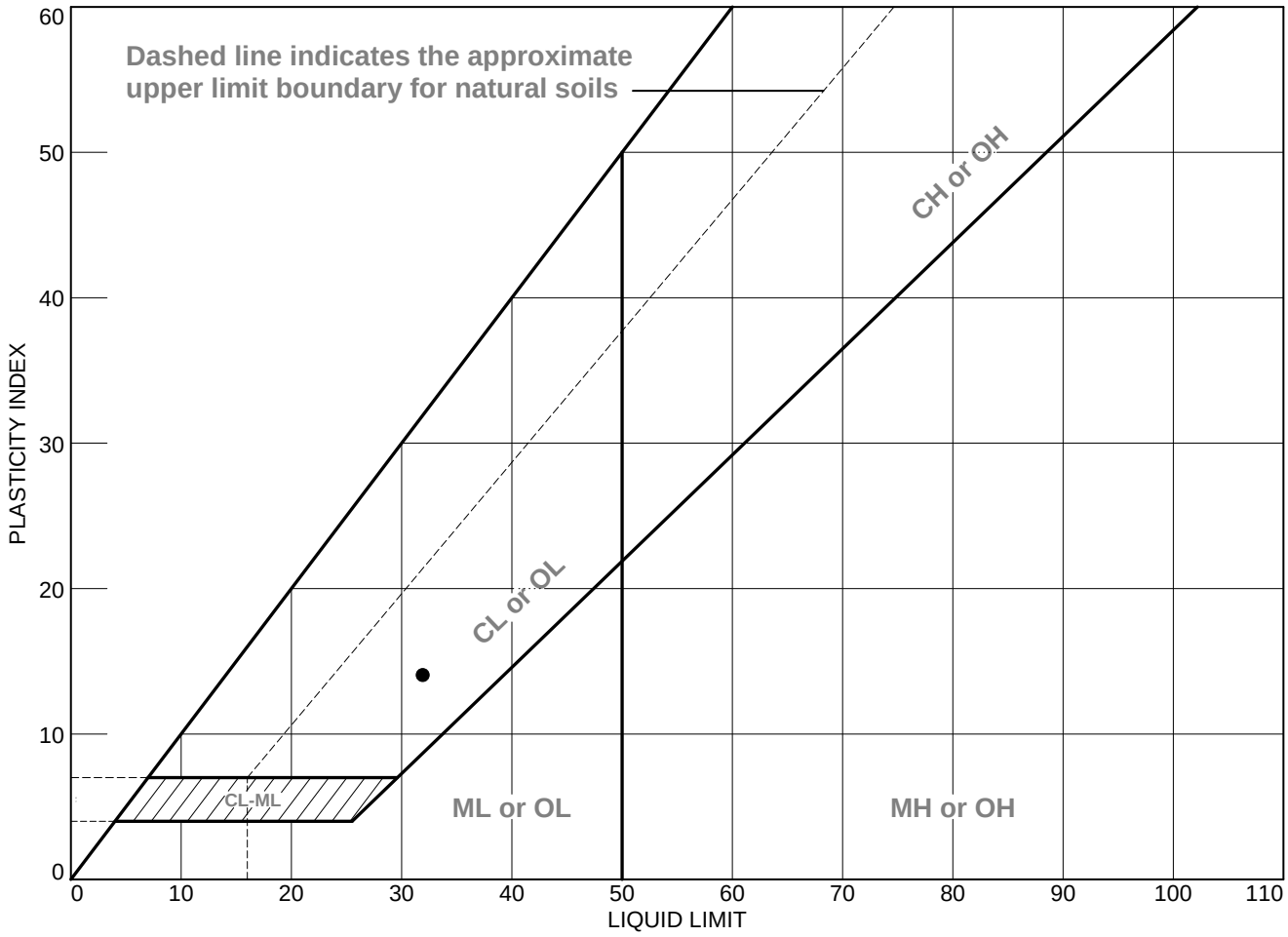
East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/22/17 **Checked By:** ETC

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	7K16	DNB-12, SS12			18	32	14	

3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No.: 17-002 **Figure**

Tested By: JMA 2/22/17 **Checked By:** ETC

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.0	17.3	8.3	33.5	12.8	21.1	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
.75	93.0		
.5	90.9		
.375	84.9		
.25	79.7		
#4	75.7		
#10	67.4		
#20	59.1		
#40	33.9		
#60	27.3		
#100	24.1		
#140	22.5		
#200	21.1		

* (no specification provided)

Material Description

ID#17-045

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 11.9817 D_{85}= 9.5868 D_{60}= 0.8787
D_{50}= 0.6583 D_{30}= 0.3477 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 2/9/17 **Date Tested:** 3/1/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: FHB-10, SS14

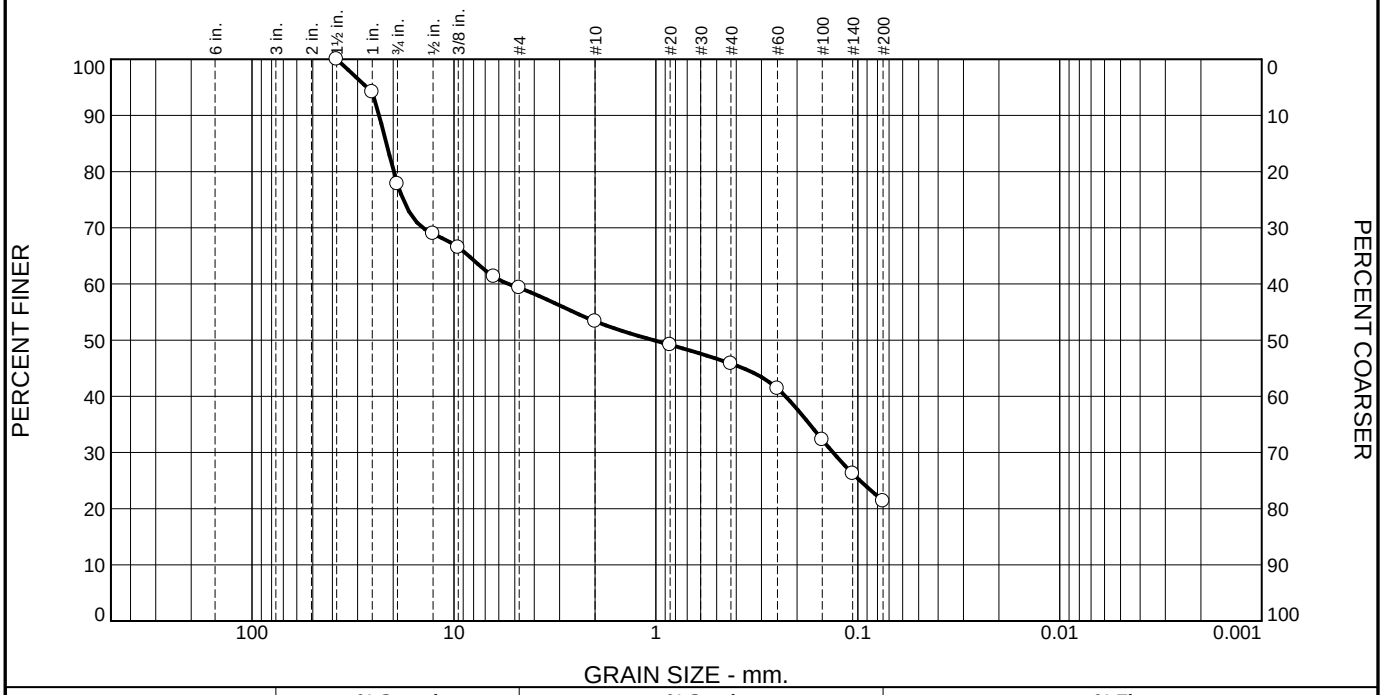
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	22.2	18.5	5.9	7.6	24.4	21.4	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1	94.2		
.75	77.8		
.5	68.9		
.375	66.5		
.25	61.3		
#4	59.3		
#10	53.4		
#20	49.2		
#40	45.8		
#60	41.4		
#100	32.3		
#140	26.2		
#200	21.4		

* (no specification provided)

Material Description

ID#17-046

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 23.4527 D_{85}= 21.5990 D_{60}= 5.3660
D_{50}= 1.0284 D_{30}= 0.1327 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 2/9/17 **Date Tested:** 3/2/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: FHB-10, SS18

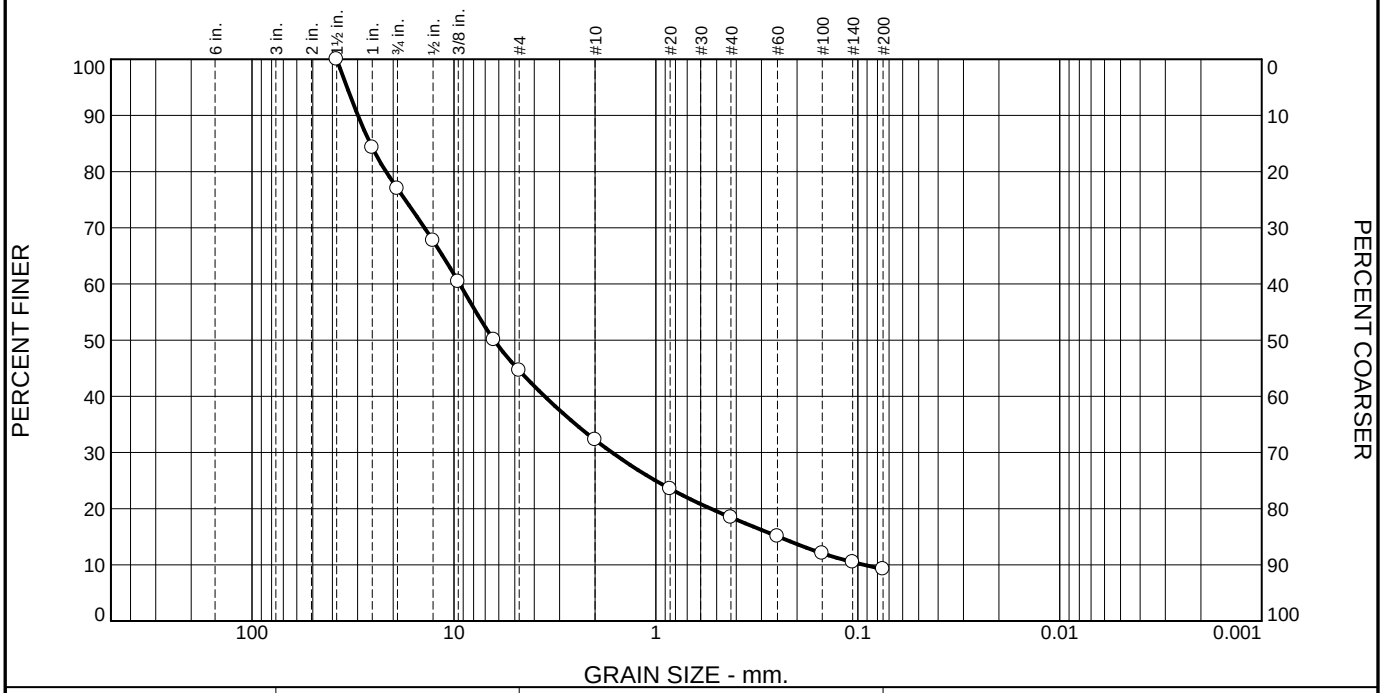
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	23.0	32.4	12.4	13.8	9.2	9.2	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1	84.3		
.75	77.0		
.5	67.7		
.375	60.4		
.25	50.1		
#4	44.6		
#10	32.2		
#20	23.5		
#40	18.4		
#60	15.1		
#100	12.1		
#140	10.5		
#200	9.2		

* (no specification provided)

Material Description

ID#17-047

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 29.8852 D_{85}= 25.9680 D_{60}= 9.3744
D_{50}= 6.3311 D_{30}= 1.6486 D_{15}= 0.2468
D_{10}= 0.0931 C_u= 100.69 C_c= 3.11

Remarks

Date Received: 2/9/17 **Date Tested:** 3/2/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: FHB-10, SS21

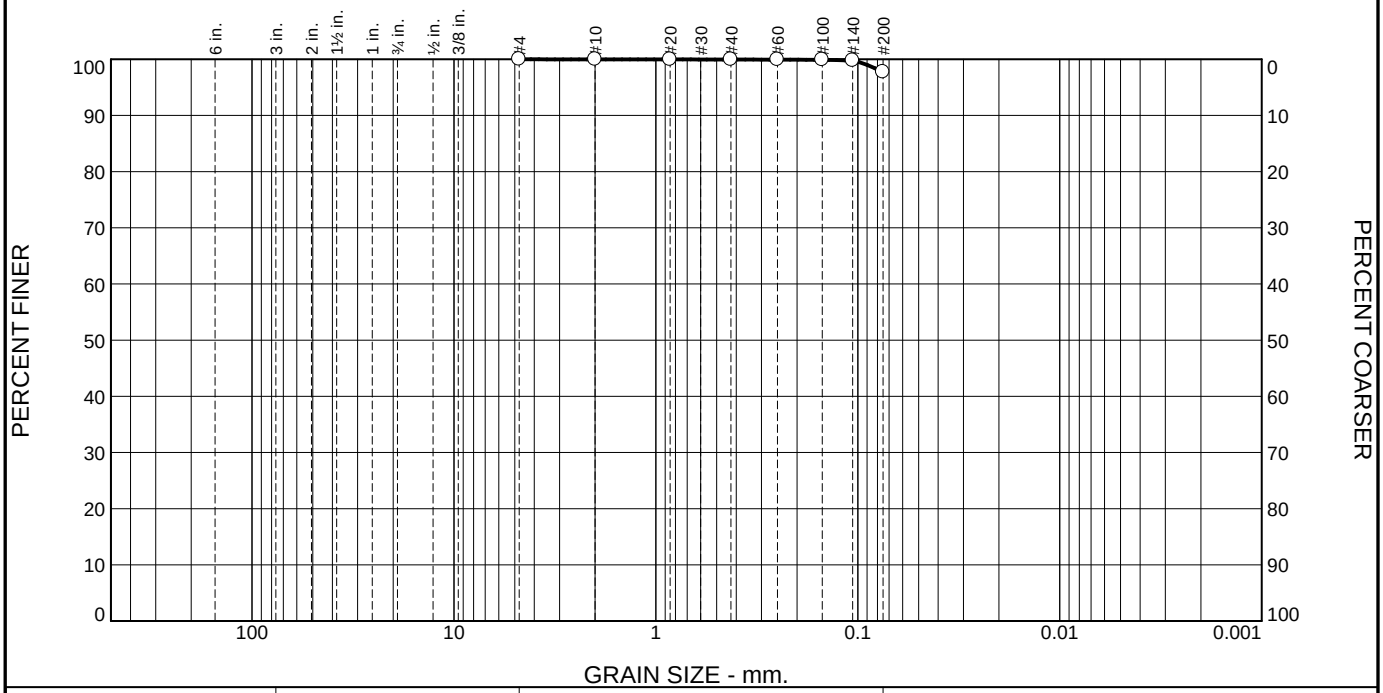
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	2.3	97.7	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
#4	100.0		
#10	100.0		
#20	100.0		
#40	100.0		
#60	99.9		
#100	99.9		
#140	99.8		
#200	97.7		

* (no specification provided)

Material Description

ID#17-048

Atterberg Limits (ASTM D 4318)

PL= LL= PI=

Classification

USCS (D 2487)= AASHTO (M 145)=

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 2/9/17 **Date Tested:** 3/1/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-11, SS9

3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	14.3	6.5	9.8	37.1	32.3	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75"	100.0		
.5	95.5		
.375	91.8		
.25	88.6		
#4	85.7		
#10	79.2		
#20	74.2		
#40	69.4		
#60	63.9		
#100	46.2		
#140	38.0		
#200	32.3		

* (no specification provided)

Material Description

ID#17-049

Atterberg Limits (ASTM D 4318)

PL= LL= PI=

Classification

USCS (D 2487)= AASHTO (M 145)=

Coefficients

D_{90}= 7.6463 D_{85}= 4.4074 D_{60}= 0.2194
D_{50}= 0.1676 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 2/9/17 **Date Tested:** 3/3/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-11, SS11

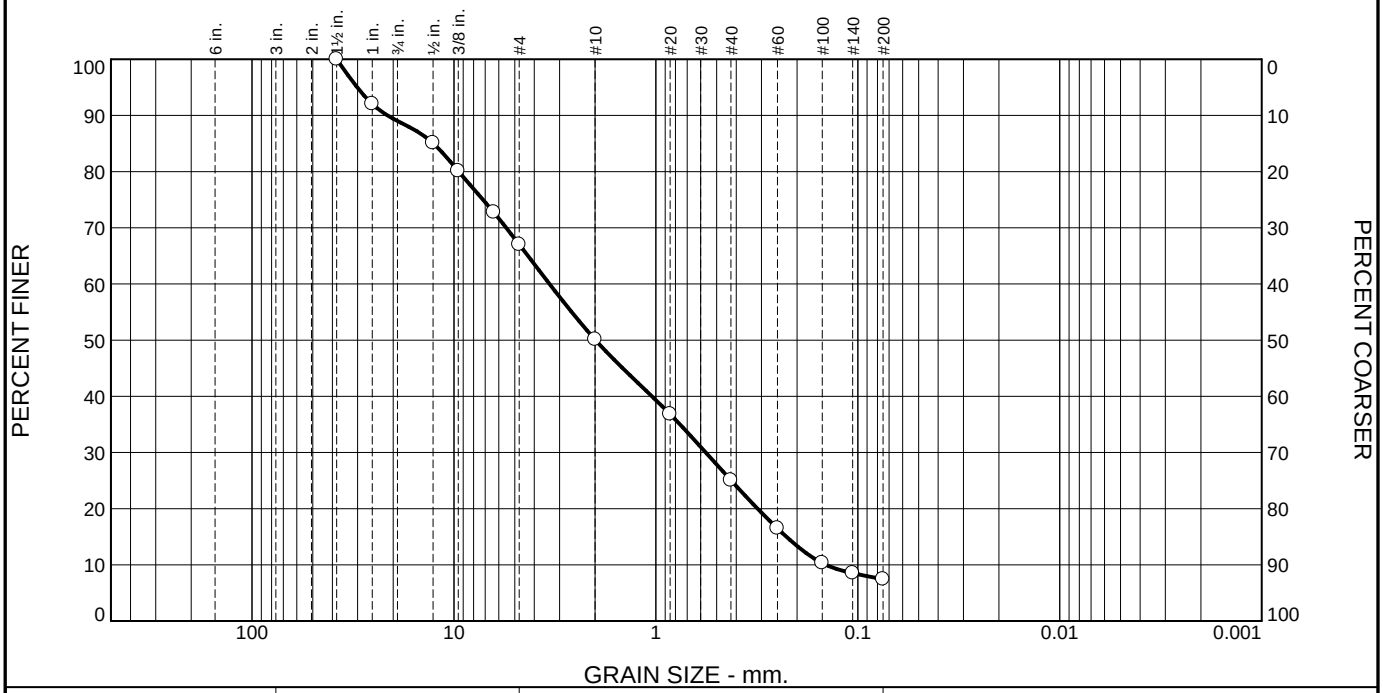
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	11.0	22.0	16.9	25.0	17.7	7.4	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1	92.0		
.5	85.1		
.375	80.1		
.25	72.7		
#4	67.0		
#10	50.1		
#20	36.8		
#40	25.1		
#60	16.5		
#100	10.3		
#140	8.5		
#200	7.4		

* (no specification provided)

Material Description

ID#17-050

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 21.3446 D_{85}= 12.6217 D_{60}= 3.3642
D_{50}= 1.9890 D_{30}= 0.5660 D_{15}= 0.2258
D_{10}= 0.1438 C_u= 23.39 C_c= 0.66

Remarks

Date Received: 2/9/17 **Date Tested:** 2/23/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-11, SS14&15

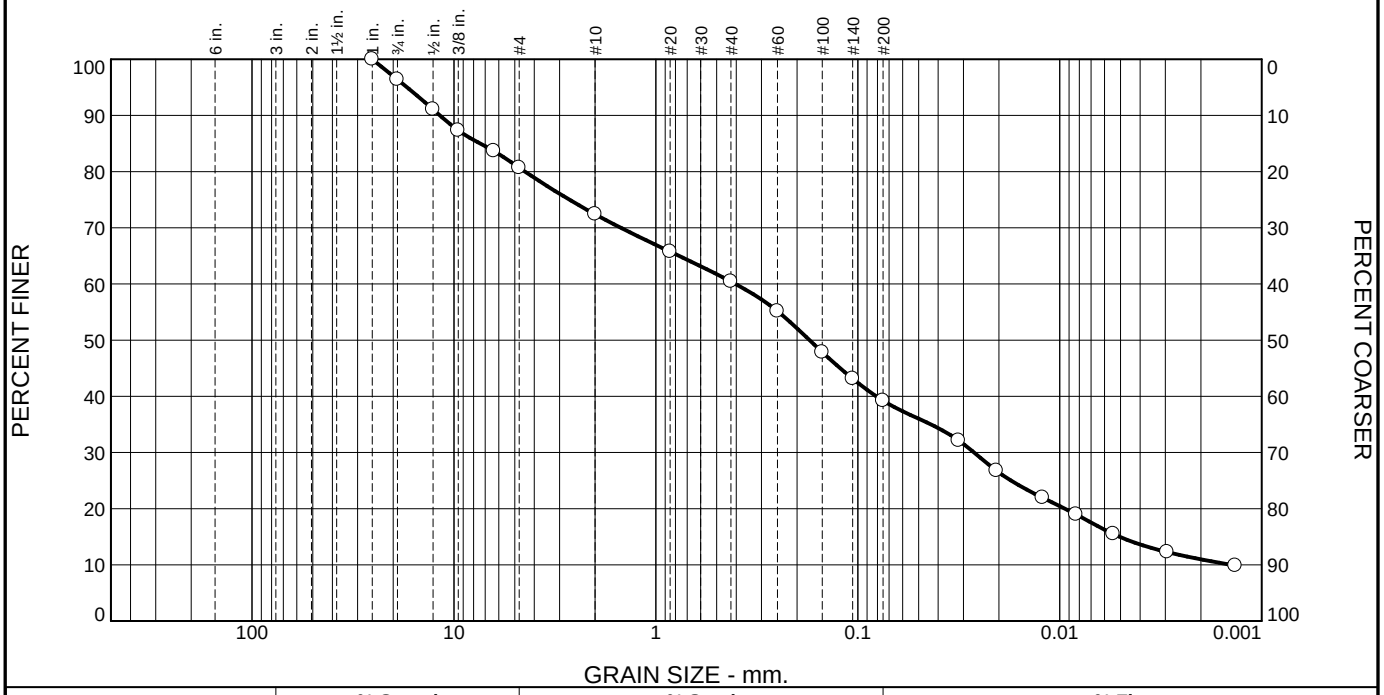
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.6	15.7	8.3	12.0	21.2	24.3	14.9

TEST RESULTS (D422)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
.75	96.4		
.5	91.1		
.375	87.3		
.25	83.7		
#4	80.7		
#10	72.4		
#20	65.7		
#40	60.4		
#60	55.2		
#100	47.9		
#140	43.1		
#200	39.2		
0.0317 mm.	32.1		
0.0206 mm.	26.8		
0.0121 mm.	21.9		
0.0083 mm.	19.0		
0.0054 mm.	15.5		
0.0029 mm.	12.3		
0.0014 mm.	9.9		

* (no specification provided)

Material Description

ID#17-062

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 11.7304 D_{85}= 7.4077 D_{60}= 0.4035
D_{50}= 0.1735 D_{30}= 0.0266 D_{15}= 0.0051
D_{10}= 0.0014 C_u= 284.49 C_c= 1.23

Remarks

Date Received: 2/9/17 **Date Tested:** 2/27/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-11, SS18

3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.0	2.3	0.9	3.8	63.5	17.5	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1"	88.7		
.25	86.1		
#4	85.7		
#10	84.8		
#20	83.8		
#40	81.0		
#60	70.5		
#100	33.7		
#140	22.4		
#200	17.5		

* (no specification provided)

Material Description

ID#17-051

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 26.9638 D_{85}= 2.9151 D_{60}= 0.2137
D_{50}= 0.1883 D_{30}= 0.1392 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 2/9/17 **Date Tested:** 3/3/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-12, SS20

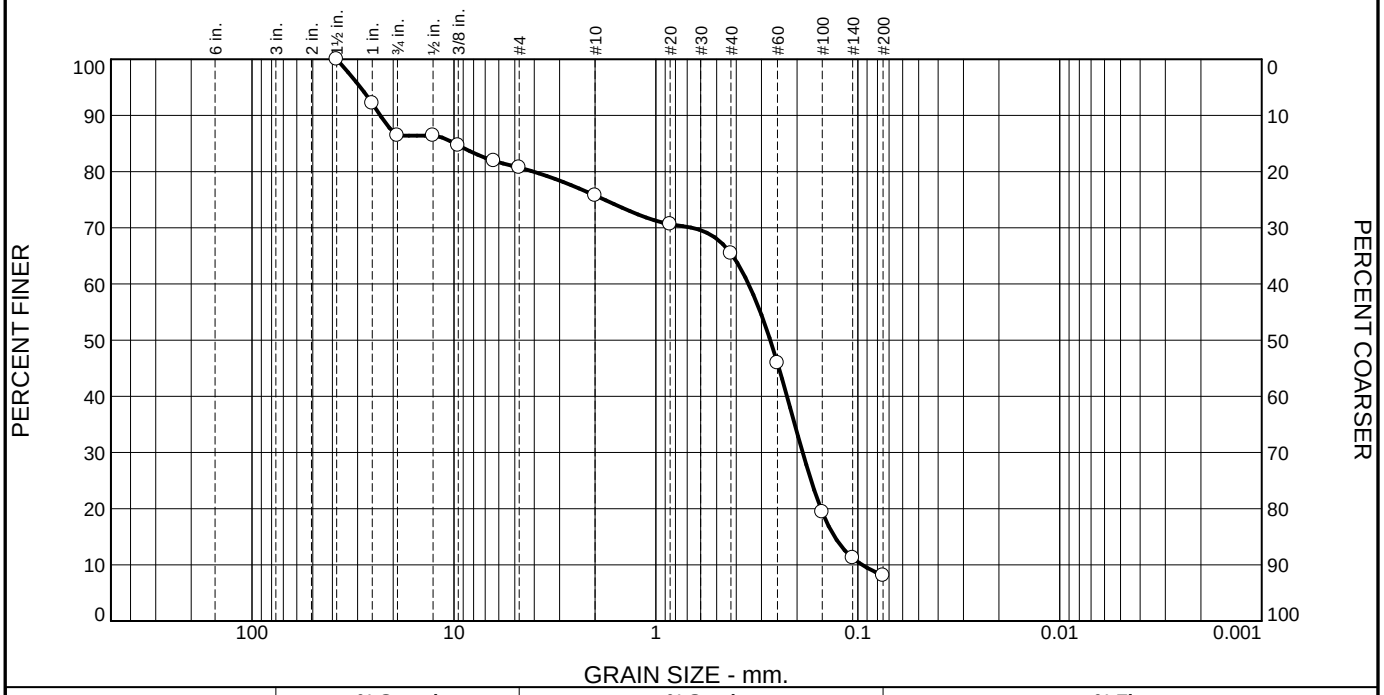
3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.6	5.7	4.9	10.4	57.3	8.1	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1"	92.2		
.75	86.4		
.5	86.4		
.375	84.7		
.25	81.9		
#4	80.7		
#10	75.8		
#20	70.6		
#40	65.4		
#60	45.9		
#100	19.4		
#140	11.2		
#200	8.1		

* (no specification provided)

Material Description

ID#17-052

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 23.1495 D_{85}= 9.8970 D_{60}= 0.3476
D_{50}= 0.2714 D_{30}= 0.1875 D_{15}= 0.1304
D_{10}= 0.0953 C_u= 3.65 C_c= 1.06

Remarks

Date Received: 2/9/17 **Date Tested:** 3/3/17

Tested By: ETC

Checked By: JMA

Title: LM

Source of Sample: 6K16 & 7K16 **Date Sampled:**
Sample Number: DNB-12, SS23

3rd Rock, LLC

East Aurora, NY

Client: Earth Dimensions, Inc.
Project: 6K16; 7K16

Project No: 17-002 **Figure**

Water Content Test Results by ASTM D2216

Project: New York State Thruway **Project No:** 16-008
EDI Project No.: 7K16 **Date:** 12/15/16
Client: Earth Dimensions, Inc.

Borehole No.	Sample Nos.	Depth, fbg	Lab ID No.	Natural Water Content, %
DN-B-10	S-1	3-5	16-538	9.3
	S-2	8-10	16-538	7.2
	S-3	13-15	16-538	10.0
	S-4	18-20	16-538	13.7
	S-5	23-25	16-538	23.4
	S-6	28-30	16-538	28.6
	S-7	33-35	16-538	30.1
	S-8	38-40	16-538	31.7
	S-9	43-45	16-538	35.1
	S-10	48-50	16-538	35.3
	S-11	53-55	16-538	35.9
	S-12	58-60	16-538	32.9
DN-B-11	S-1	3-5	16-539	26.1
	S-2	8-10	16-539	77.3
	S-3	13-15	16-539	23.5
	S-4	18-20	16-539	31.7
	S-5	23-25	16-539	40.7
	S-6	28-30	16-539	38.9
	S-7	33-35	16-539	37.1
	S-8	38-40	16-539	34.8
	S-9	43-45	16-539	23.5
	S-10	48-50	16-539	16.5
	S-11	53-55	16-539	12.1
	S-12	58-60	16-539	10.6
	S-13	63-65	16-539	12.3
	S-14	68-70	16-539	5.3
	S-15	73-75	16-539	7.9
	S-16	78-80	16-539	3.6
	S-17	83-85	16-539	5.1
	S-18	89-91	16-539	6.6

3rd Rock, LLC
580 Olean Road
East Aurora, NY 14052
(716)655-4933
(716)655-8638 fax

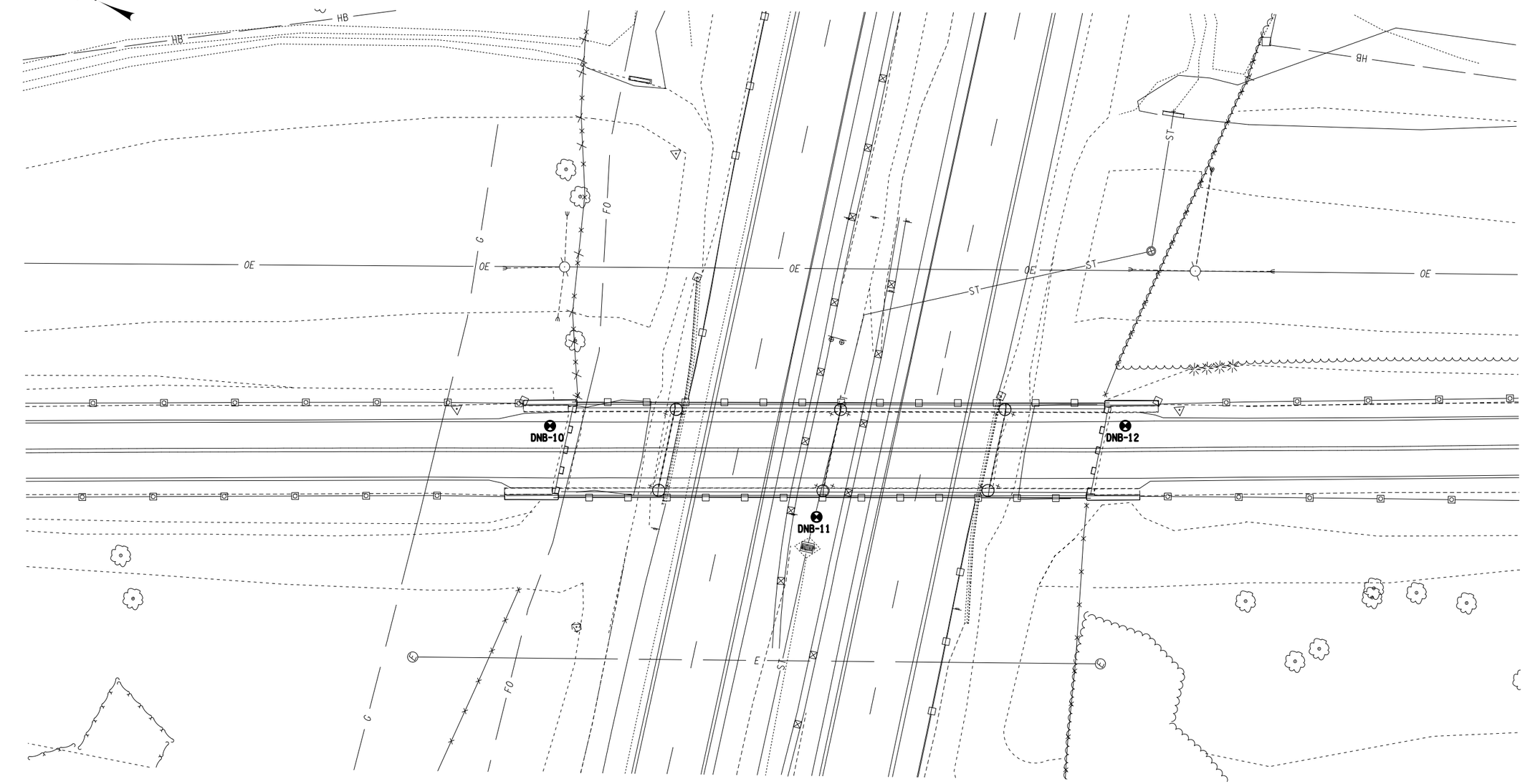
Water Content Test Results by ASTM D2216

Project: New York State Thruway **Project No:** 16-008
EDI Project No.: 7K16 **Date:** 01/04/17
Client: Earth Dimensions, Inc.

Borehole No.	Sample Nos.	Depth, fbg	Lab ID No.	Natural Water Content, %
DN-B-10	S-13	63-65	16-547	25.7
	S-14	68-70	16-547	10.7
	S-15	73-75	16-547	10.9
	S-16	78-80	16-547	17.8
	S-17	83-85	16-547	7.3
	S-18	88-90	16-547	7.4
	S-19	93-95	16-547	11.1
	S-20	98-100	16-547	No Recovery
	S-21	103-105	16-547	6.0
	S-22	108-110	16-547	5.6
	S-23	113-113.9	16-547	14.5
DN-B-11	S-19	93-95	16-548	10.2
	S-20	98-98.6	16-548	6.2
DN-B-12	S-1	4-6	16-549	11.6
	S-2	9-11	16-549	8.2
	S-3	14-16	16-549	8.4
	S-4	19-21	16-549	9.6
	S-5	24-26	16-549	11.2
	S-6	29-31	16-549	40.3
	S-7	34-36	16-549	22.9
	S-8	39-41	16-549	31.5
	S-9	44-46	16-549	34.5
	S-10	49-51	16-549	36.1
	S-11	54-56	16-549	34.6
	S-12	59-61	16-549	31.3
	S-13	64-66	16-549	31.6
	S-14	69-71	16-549	28.4
	S-15	74-76	16-549	7.3
	S-16	79-81	16-549	13.8
	S-17	84-86	16-549	22.2
	S-18	89-91	16-549	19.5
	S-19	94-96	16-549	14.7
	S-20	99-101	16-549	12.5
	S-21	104-106	16-549	17.4
	S-22	109-111	16-549	18.6
	S-23	114-116	16-549	15.4

3rd Rock, LLC
580 Olean Road
East Aurora, NY 14052
(716)655-4933

DRAFTED BY:
CHECKED BY:
DESIGNED BY:
DESIGN SUPERVISOR:



ALTERED ON:	AFFIXED ON:
SIGNATURE: STAMP:	SIGNATURE: STAMP:

SOIL BORING LOCATION

BORING	LATITUDE	LONGITUDE
DNB-10	43.090844 N	-75.757016 E
DNB-11	43.090561 N	-75.756978 E
DNB-12	43.090315 N	-75.756687 E

0 40 80
SCALE IN FEET

REVISIONS

DATE	DESCRIPTION	BY	SYM.

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

Stantec

TITLE OF PROJECT
BIN 5512790 REPLACEMENT
MP 262.01 – N. MAIN ST. OVER I-90

LOCATION OF PROJECT
ALBANY DIVISION
MP 262.01

TITLE OF DRAWING
BORING LOCATION PLAN

CONTRACT NUMBER: TAA 17-XX
DATE: 04/2017
DRAWING NUMBER: BP-05