ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/17/07	1650	1	1	Group A sheet #92	100+	2.5	141.6	144.2	6" lift
05/17/07	1730	2	2	Group A sheet #91	100+	3.4	141.6	143.4	6" lift
05/17/07	1800	3	3	Group A sheet #89	100	3.8	141.6	144.7	6" lift
05/17/07	1830	4	4	Group A sheet #99	100	2.9	141.6	141.3	6" lift
05/17/07	2035	5	4	Group B sheet #111	100	3.4	141.6	141.1	6" lift

*Compaction requirement= 100%
*General Location= N. Clinton Ave., Segment 1
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT oversight= Stacy Chervincky
*Backfill= Type 4 DGA, Tilcon Clinton Point

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NY Metropolitan Regional Office / Corporate Headquarters
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www.materials-testing.com

Client: ENTACT ENVIRONMENTAL

Report #:
Date: 5-17-07
Technician:

Project: ME1886 (KEYSPAN)
Test: In-Place Density Test
Method: ASTM D2922

☒ **Street** ☐ **Sidewalk** ☐ **Other**

General Location: N. CLINTON SEGMENT 1

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	1ST LIFT 6"	15' SOUTH OF WEST CURBLINE	2.5	144.2	141.6	100+
2	2 " 6"	55'	3.4	143.9		100+
3	3 " 6"	10'	3.8	144.7		100+
4	4 " 6"	30'	2.9	141.3		100
5	5 " 6"	75'	3.4	141.1		100

Remarks:

Material Type: DGA (ROAD SUB-BASE)
Item # 4

Reported To: --

Min. Compaction Req. 100%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-010
Date: 05/17/07
Technician: Robert Villavicencio

[X] **Street** [ ] **Sidewalk** [ ] **Other**

General Location: North Clinton Ave. & Union Blvd.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@ 6" Below Grade	15' South of West Curb Line 1st Lift	2.5	144.2	141.6	100+
2	@ 6" Below Grade	15' South of West Curb Line 2nd Lift	3.4	143.4	141.6	100+
3	@ 6" Below Grade	10' South of West Curb Line 3rd Lift	3.8	144.7	141.6	100+
4	@ 6" Below Grade	30' South of West Curb Line 4th Lift	2.9	141.3	141.6	99.8
5	@ 6" Below Grade	75' South of West Curb Line 4th Lift	3.4	141.1	141.6	99.6

Remarks: OK 99.6 & 99.8

Material Type: DGA (Road Sub-base)
Item #

Min. Compaction Req. 99.6%
Complies: Yes

Reported To:

Submitted By: Materials Testing Lab, Inc.

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MT Group
MATERIALS TESTING

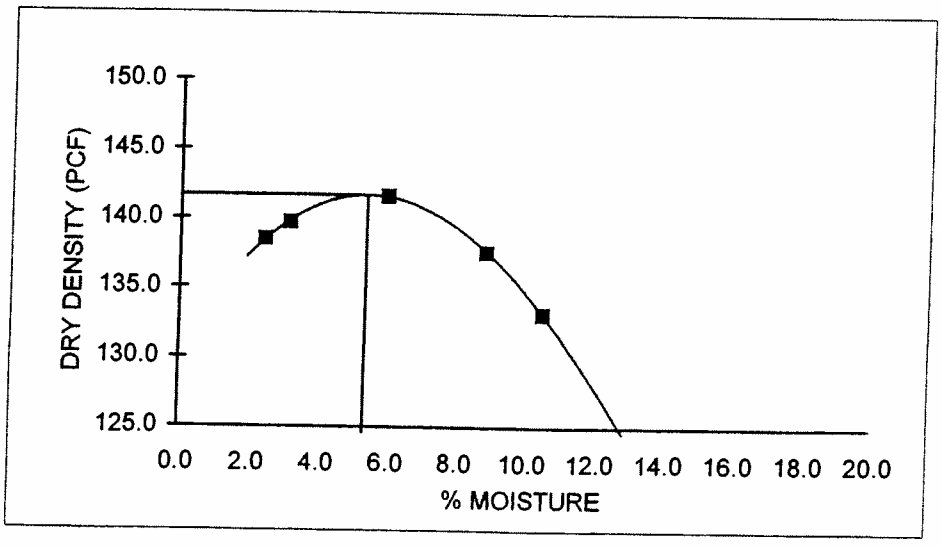
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-DGA-001
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

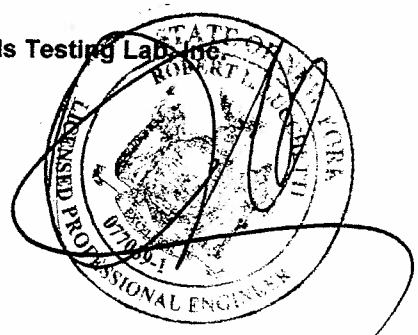
% MOISTURE	DRY DENSITY
2.4	138.5
3.1	139.7
5.9	141.6
8.8	137.6
10.5	133.2

OPTIMUM MOISTURE 5.3 % @ **MAXIMUM DRY DENSITY** 141.6 LBS./CU. FT.



Reported To:-

Submitted By: Materials Testing Lab Inc.



ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/18/07	0800	6	5	Group A sheet #93	100+	4.0	141.6	140.9	6" lift
05/18/07	0845	7	6	Group B sheet #117	100	4.8	141.6	141.0	6" lift
05/18/07	0915	8	6	Group A sheet #105	100+	3.2	141.6	142.6	4" lift
05/18/07	1130	9	7	Group A sheet #99	100	4.1	141.6	141.3	4" lift
05/18/07	1300	10	8	Group B sheet #112	100	3.0	141.6	141.3	6" lift
05/18/07	1430	11	8	Group A sheet #97	100	3.1	141.6	140.9	6" lift
05/18/07	1715	12	9	Group B sheet # 116	100	3.3	141.6	141.3	6" lift

*Compaction requirement= 100%
*General Location= N. Clinton Ave., segment 1
*Sheet Pile references are estimated.
*Please Refer to Elevation Table for group locations.
*ENTACT oversight= Stacy Chervincky
*Backfill= Type 4 DGA, Tilcon Clinton Point

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MT Group
MATERIALS TESTING

Client: ENTACT

Report #:
Date: 5-18-06
Technician: ROBERT VILLAVICENCIO

Project: HB1886
Test: In-Place Density Test
Method: ASTM D2922

☑ **Street** ☐ **Sidewalk** ☐ **Other** _____

General Location: N. CLINTON & UNION BLVD

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
6	5 LIFE 6"	18' SOUTH OF WEST CURBLINE	4.0	140.9	141.6	100T
7	6 " 6"	65'	4.8	141.0		100
8	6 " 4"	42'	3.2	142.6		100T
9	7 " 4"	30"	4.1	141.3		100
10	8 " 6"	55"	3.0	141.3		100
11	8 " 6"	25"	3.1	140.9		100
12	9 " 6"	61"	3.3	141.3		100

Remarks:

Material Type:
Item #

Reported To: --

Min. Compaction Req. 100
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ME1884
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-009
Date: 05/18/07
Technician: Robert Villavicencio

[X] **Street** [ ] **Sidewalk** [ ] **Other**

General Location: **North Clinton Ave. & Union Blvd.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
6	@ 6" Below Grade	18" South of West Curb Line 5th Lift	4.0	140.9	141.6	99.5
7	@ 6" Below Grade	65" South of West Curb Line 6th Lift	4.8	141.0	141.6	99.6
8	@ 4" Below Grade	42" South of West Curb Line 6th Lift	3.2	142.6	141.6	100+
9	@ 4" Below Grade	30" South of West Curb Line 7th Lift	4.1	141.3	141.6	99.8
10	@ 6" Below Grade	55" South of West Curb Line 8th Lift	3.0	141.3	141.6	99.8
11	@ 6" Below Grade	25"South of West Curb Line 8th Lift	3.1	140.9	141.6	99.5
12	@ 6" Below Grade	51" South of West Curb Line 9th Lift	3.3	141.3	141.6	99.5

Remarks: **OK with site inspector 99.5**

Material Type:
Item #

Min. Compaction Req. 99.5%
Complies: Yes

Reported To: Stacy Cherylucky

Submitted By: Materials Testing Lab. Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

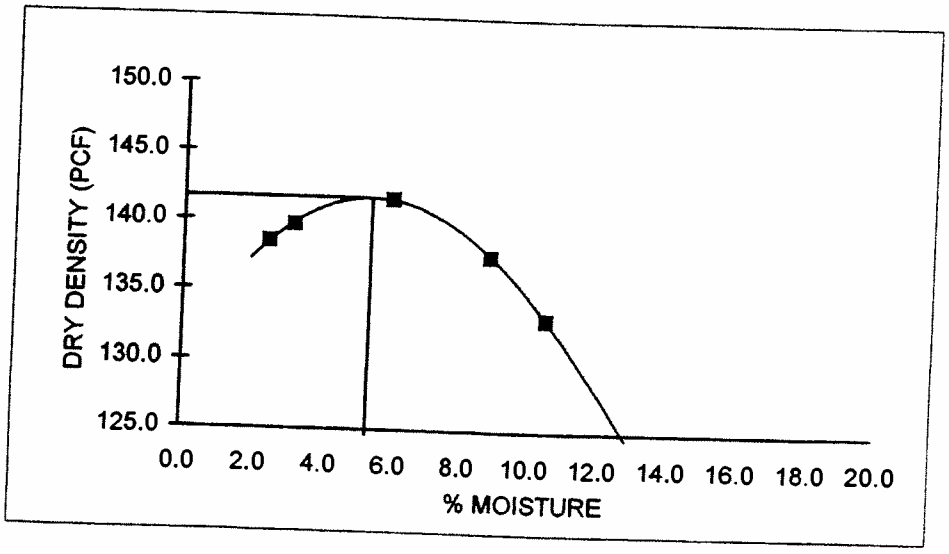
Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-DGA-001
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

% MOISTURE	DRY DENSITY
2.4	138.5
3.1	139.7
5.9	141.6
8.8	137.6
10.5	133.2

OPTIMUM MOISTURE
5.3 % @

MAXIMUM DRY DENSITY
141.6 LBS./CU. FT.



Reported To:-

Submitted By: Materials Testing Lab Inc.

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/19/08	--	1	1	Group N sheet #207	99.0	9.2	124.1	122.8	1ft lift (5ft bgs), lift 1
05/19/08	--	2	1	Group O sheet #179	98.3	9.3	124.1	121.9	1ft lift (5ft bgs), lift 1
05/19/08	--	3	2	Group N sheet #213	96.9	8.4	124.1	120.2	1ft lift (4ft bgs), lift 2
05/19/08	--	4	2	Group O sheet #189	97.8	8.1	124.1	121.3	1ft lift (4ft bgs), lift 2
05/19/08	--	5	3	Group N sheet #197	96.8	8.0	124.1	120.1	1ft lift (3ft bgs), lift 3
05/19/08	--	6	3	Group O sheet #202	98.1	8.3	124.1	121.7	1ft lift (3ft bgs), lift 3

*Compaction requirement= 90%
*General Location= Segment 3
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= Import Fill from Stony Creek, Kings Park

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Client: ENTACT

Report #:
Date: 05-19-08
Technician: OD

Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ **Sidewalk** ☒ **Other** TRENCH

General Location: South Side of Site along UNION BLVD.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	5' Below grade	Group N Sheet # 138	9.2	122.8	124.1	99.0
2	↓	Group O Sheet # 172	9.3	121.9		98.3
3	4'	Group N Sheet # 142	8.4	120.2		96.9
4	↓	Group C Sheet # 167	8.1	121.3		97.8
5	3'	Group N Sheet # 149	8.0	120.1		96.8
6	↓	Group C Sheet # 161	8.3	121.7		98.1

Remarks: 12" LIFTS

Material Type: SAND
Item #

Reported To: --ENTACT

Min. Compaction Req. ~~95%~~ 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Work Order #: 122237

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 08EEC-002
Date: 05/19/08
Technician: Todd Brummer

[ ] **Street** [ ] **Sidewalk** [X] **Other** Trench

General Location: South side of site along Union Blvd.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@ 5' Below Grade	Group " N" Sheet #138	9.2	122.8	124.1	99.0
2	@ 5' Below Grade	Group "O" Sheet #172	9.3	121.9	124.1	98.3
3	@ 4' Below Grade	Group "N" Sheet #142	8.4	120.2	124.1	96.9
4	@ 4' Below Grade	Group "O" Sheet #167	8.1	121.3	124.1	97.8
5	@ 3' Below Grade	Group "N" Sheet #149	8.0	120.1	124.1	96.8
6	@ 3' Below Grade	Group "O" Sheet #161	8.3	121.7	124.1	98.1

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 95%
Complies: Y

Reported To: Stacy Chervinecky

Submitted By: Materials Testing Lab, Inc.

Stony Creek Sandy Soil
1st 5000

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-004
Date: 8/22/2007
Lab# : 8344

Project: NE7037
Sample: NE7037-SAND-03
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 8/21/2007 **DELIVERED BY:** Client

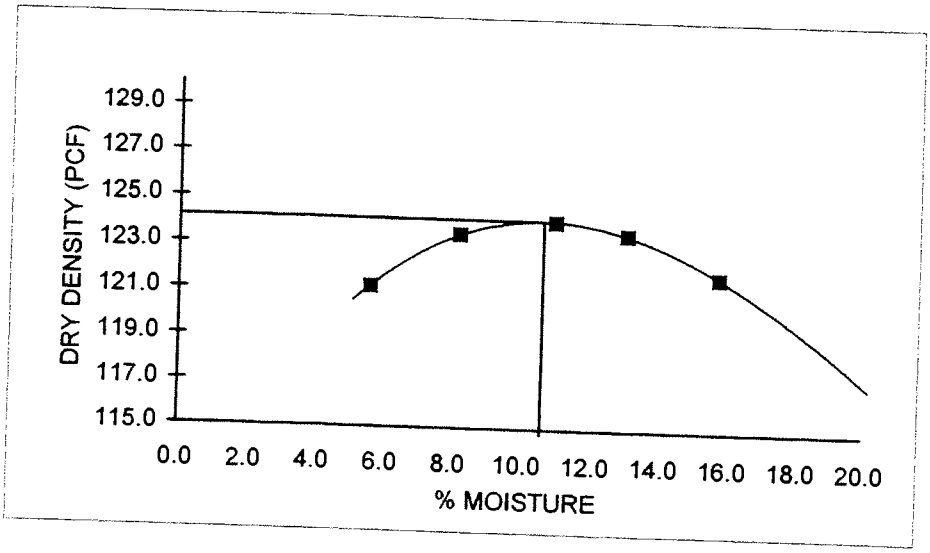
% MOISTURE	DRY DENSITY
5.6	121.2
8.2	123.5
11.0	124.1
13.1	123.6
15.8	121.8

OPTIMUM MOISTURE

10.7 % @

MAXIMUM DRY DENSITY

124.1 LBS./CU. FT.



Reported To:–

Submitted By: Materials Testing Lab, Inc.

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/20/08	--	1	4	Group N sheet #139	96.3	6.8	124.1	119.5	1ft lift (2ft bgs), lift 4
05/20/08	--	2	4	Group O sheet #163	97.4	6.9	124.1	120.8	1ft lift (2ft bgs), lift 4
05/20/08	--	3	5	Group N sheet #158	95.0	9.6	124.1	117.8	1ft lift (1ft bgs), lift 5
05/20/08	--	4	5	Group O sheet #173	95.5	9.8	124.1	118.5	1ft lift (1ft bgs), lift 5

*Compaction requirement= 90%
*General Location= Segment 3
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= Import Fill from Stony Creek, Kings Park

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Client: ENTACT

Report #:
Date: 05-20-08
Technician: TOD B

Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ **Sidewalk** ☒ **Other** TRENCH

General Location: SOUTH END OF S.I.C ALONG UNION BLVD.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	2' Below Grade	GROUP N Sheet # 139	6.8	119.5	124.1	96.3
2	↓	Group O Sheet # 163	6.9	120.5	↓	97.4
3	1' Below Grade	Group N Sheet # 158	9.6	117.5	↓	95.0
4	↓	Group O Sheet # 173	9.8	118.5	↓	95.5

Remarks:

Material Type: SAND
Item #

Reported To: -- STACY

Min. Compaction Req. ~~95%~~ 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Work Order #: 122436

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 08EEC-001
Date: 05/20/08
Technician: Todd Brummer

☐ Street ☐ Sidewalk ☒ Other Trench

General Location: **South end of site along Union Blvd.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@ 2' Below Grade	Group "N" Sheet #139	6.8	119.5	124.1	96.3
2	@ 2' Below Grade	Group "O" Sheet #163	6.9	120.8	124.1	97.4
3	@ 1' Below Grade	Group "N" Sheet #158	9.6	117.8	124.1	95.0
4	@ 1' Below Grade	Group "O" Sheet #173	9.8	118.5	124.1	95.5

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 95%
Complies: Y

Reported To: Stacy Cherveneky

Submitted By: Materials Testing Lab Inc.

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MT Group
MATERIALS TESTING

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

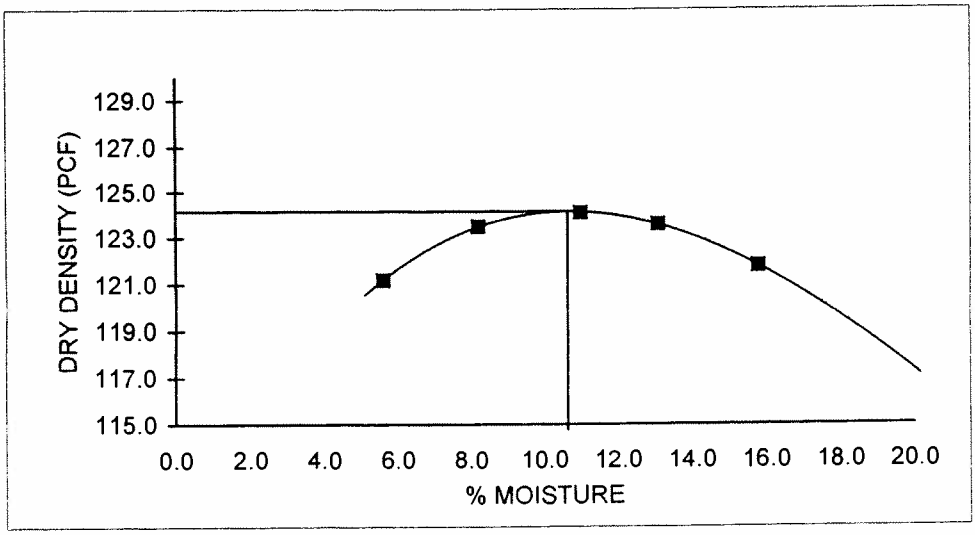
Report #: 07EE-004
Date: 8/22/2007
Lab# : 8344
Work Order #: 108298

Project: NE7037
Sample: NE7037-SAND-03
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 8/21/2007 **DELIVERED BY:** Client

% MOISTURE	DRY DENSITY
5.6	121.2
8.2	123.5
11.0	124.1
13.1	123.6
15.8	121.8

OPTIMUM MOISTURE **MAXIMUM DRY DENSITY**

10.7 % @ 124.1 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/21/07	0800	13	1	Group C sheet #80	95.6	4.3	141.6	135.4	6" lift
05/21/07	0805	14	2	Group C sheet #84	97.2	4.0	141.6	137.6	6" lift
05/21/07	0815	15	3	Group C sheet #83	94.3	3.4	141.6	133.5	6" lift
05/21/07	0825	16	4	Group C sheet #84	93.5	3.0	141.6	129.6	6" lift
05/21/07	0831	17	5	Group C sheet #79	93.1	5.2	141.6	131.8	6" lift
05/21/07	0840	18	6	Group C sheet #77	92.3	3.0	141.6	130.6	6" lift
05/21/07	0900	19	7	Group C sheet #84	90.9	3.1	141.6	128.7	6" lift
05/21/07	0940	20	8	Group C sheet #80	93.5	3.1	141.6	132.4	6" lift

*Compaction requirement= 90%
*General Location= outside N. Clinton Ave., Segment 1
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT oversight= Stacy Chervincky
*Backfill= Type 4 DGA, Tilcon Clinton Point

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MT Group
MATERIALS TESTING

Client: ENTACT

Report #:
Date: 5-21-07
Technician: ROBERT VILLAVICENCIO

Project: ME 1881
Test: In-Place Density Test
Method: ASTM D2922

☑ Street ☐ Sidewalk ☐ Other

General Location: N. CLINTON & UNION BLVD.

Test #	Elev/Depth of Test		Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp.
13	LIFE	6"	SHEET # 80	4.3	135.4	141.6	95.6
14	2 "	6"	84	4.0	137.6		97.2
15	3 "	6	83	3.4	133.5		94.3
16	4 "	6	84	3.0	129.6		93.5
17	5 "	6	79	5.2	131.8		93.1
18	6 "	6	77	3.0	130.6		92.3
19	7 "	6	84	3.1	128.7		90.9
20	8 "	6	80	3.1	132.4		93.5

Remarks:

Material Type:
Item #

Reported To: --

Min. Compaction Req. 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1881
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-012
Date: 05/21/07
Technician: Robert Villavicencio

[X] **Street** [ ] **Sidewalk** [ ] **Other**

General Location: North Clinton Ave. & Union Blvd.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
13	@ 6" Below Grade	Sheet #80 1st Lift	4.3	135.4	141.6	95.6
14	@ 6" Below Grade	Sheet #84 2nd Lift	4.0	137.6	141.6	97.2
15	@ 6" Below Grade	Sheet #83 3rd Lift	3.4	133.5	141.6	94.3
16	@ 6" Below Grade	Sheet #84 4th Lift	3.0	129.6	141.6	93.5
17	@ 6" Below Grade	Sheet #79 5th Lift	5.2	131.8	141.6	93.1
18	@ 6" Below Grade	Sheet #77 6th Lift	3.0	130.6	141.6	92.3
19	@ 6" Below Grade	Sheet #84 7th Lift	3.1	128.7	141.6	90.9
20	@ 6" Below Grade	Sheet #80 8th Lift	3.1	132.4	141.6	93.5
1	@ 1' Below Grade	Cell 1 - Northwest corner 1st Lift	7.6	124.6	134.5	92.6
2	@ 1' Below Grade	Cell 2 - Middle	8.2	123.3	134.5	91.6

Remarks:

Material Type:
Item #

Min. Compaction Req. 90%
Complies: Yes

Reported To: Stacy Cherylucky

Submitted By: Materials Testing Lab. Inc.

Materials Testing Lab Inc.
NY Metropolitan Regional Office / Corporate Headquarters
145 Sherwood Avenue, Farmingdale, New York 11735
Phone (631) 815-1900 • Fax (631) 815-1901 • www.materials-testing.com

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-DGA-001
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

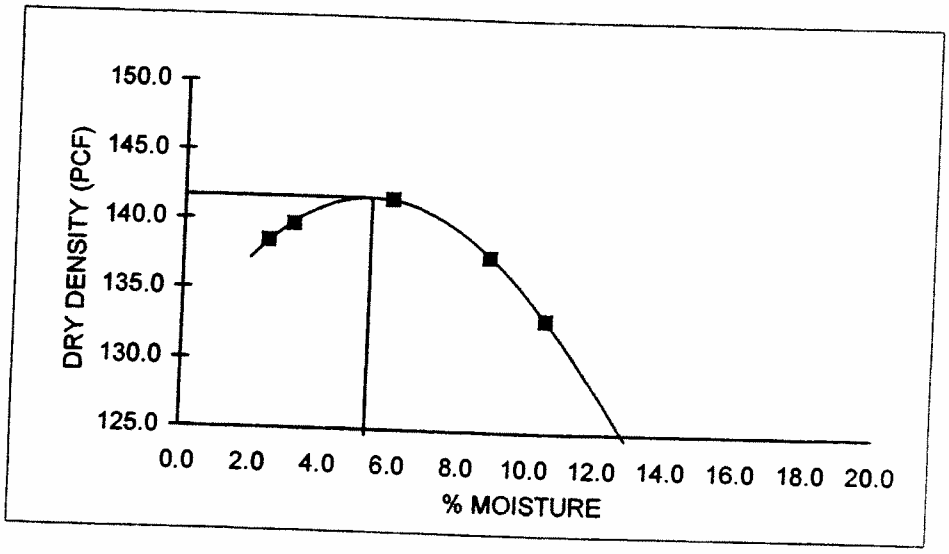
% MOISTURE	DRY DENSITY
2.4	138.5
3.1	139.7
5.9	141.6
8.8	137.6
10.5	133.2

OPTIMUM MOISTURE

5.3 % @

MAXIMUM DRY DENSITY

141.6 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab Inc.

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/22/07	0818	SCE01	1	Cell 2 (see diagram)	90.7	2.6	128.7	116.7	1ft lift (4ft bgs)
05/22/07	0930	SCE02	1	Cell 1 (see diagram)	91.5	3.8	128.7	117.8	1ft lift (4ft bgs)
05/22/07	1007	SCE03	2	Cell 1 (see diagram)	90.0	2.7	128.7	115.8	1ft lift (3ft bgs)
05/22/07	1025	SCE04	2	Cell 2 (see diagram)	91.2	3.3	128.7	117.4	1ft lift (3ft bgs)
05/22/07	1058	SCE05	3	Cell 1 (see diagram)	91.4	3.3	128.7	117.6	1ft lift (2ft bgs)
05/22/07	1116	SCE06	3	Cell 2 (see diagram)	93.1	3.9	128.7	119.8	1ft lift (2ft bgs)

*Compaction requirement= 90%
*General Location= Southern Cell
*Please Refer to diagram for locations
*ENTACT oversight= Jay Carvalho
*Backfill= Sandy Soil from Watral Brothers, Bay Shore

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MT Group
MATERIALS TESTING

Client: ENTACT

Report #:
Date: 5-22-07
Technician: ROBERT VILLAVICENCIO

Project: NE1881
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ **Sidewalk** ☐ **Other** _____

General Location: N. CLINTON & UNION BLVD

	Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp.
SCE01	1	1 LIFT	CELL 1 middle North	2.6	116.7	128.7	90.7
SCE02	2	1	CELL 1 Scattcenter	3.8	117.8	↓	91.5
SCE03	3	2	CELL 1 North East Region	2.7	115.8	↓	90.0
SCE04	4	2	CELL 2 West middle	3.3	117.4	↓	91.2
SCE05	5	3	CELL 1 West middle	3.3	117.6	↓	91.4
SCE06	6	3 ↓	CELL 2 South East	3.9	119.8	↓	93.1
SCE07	7						
SCE08	8						

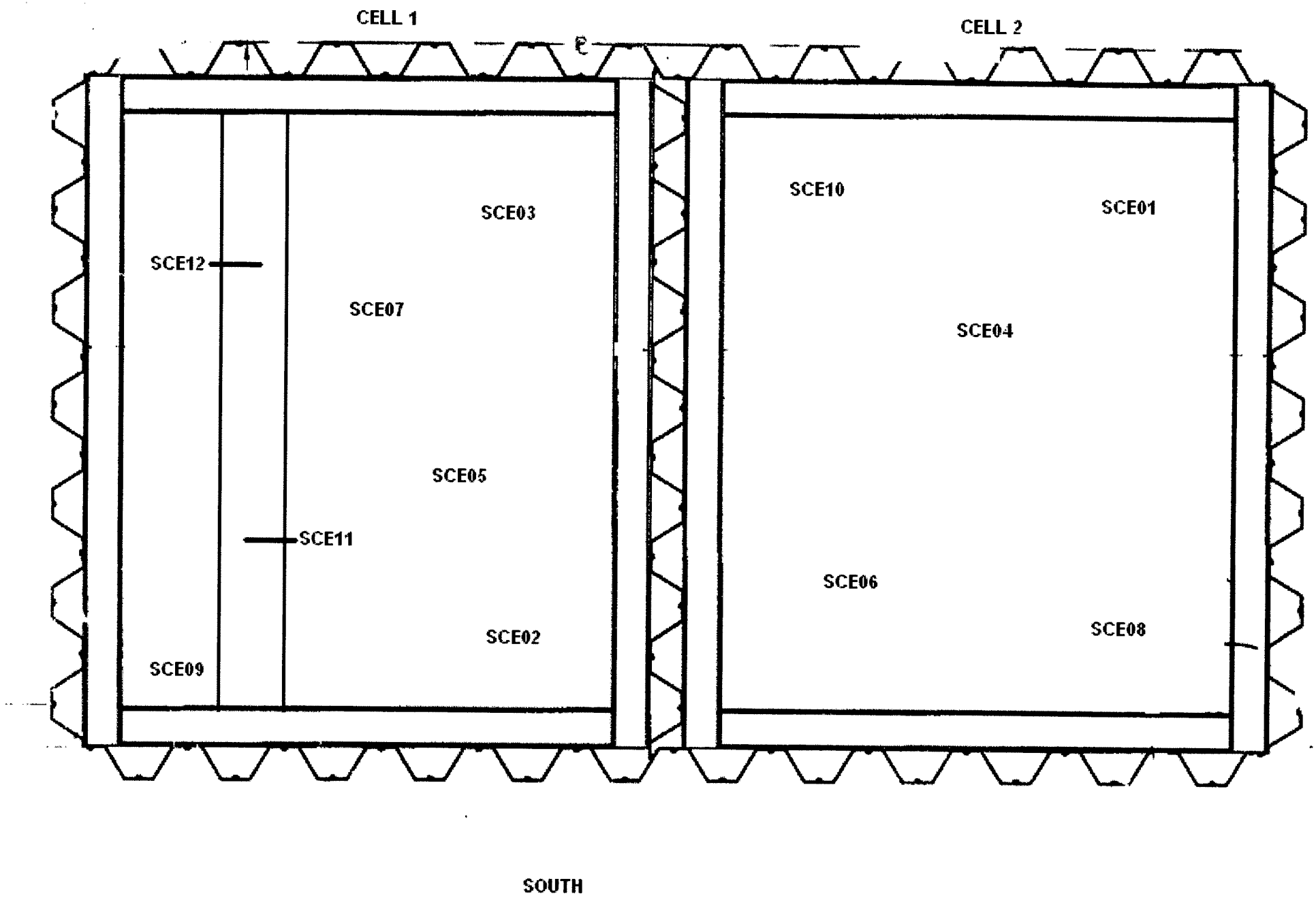
Remarks:

Material Type: SAND
Item # H.T.L.

Reported To: --

Min. Compaction Req. 90 %
Complies: -

Submitted By: Materials Testing Lab, Inc.


CELL 1
CELL 2
SCE10
SCE01
SCE03
SCE12
SCE07
SCE04
SCE05
SCE11
SCE06
SCE08
SCE02
SCE09
SOUTH

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-011
Date: 05/22/07
Technician: Robert Villavicencio

☐ **Street** ☐ **Sidewalk** ☐ **Other**

General Location: **North Clinton Ave. & Union Blvd.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	1st Lift	Cell 2 Middle North	2.6	116.7	128.7	90.7
2	1st Lift	Cell 1 East center	3.8	117.8	128.7	91.5
3	2nd Lift	Cell 1 Northeast Region	2.7	115.8	128.7	90.0
4	2nd Lift	Cell 2 West Middle	3.3	117.4	128.7	91.2
5	3rd Lift	Cell 1 West Middle	3.3	117.6	128.7	91.4
6	3rd Lift	Cell 2 Southeast	3.9	119.8	128.7	93.1

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 95%
Complies: Yes

Reported To: Jay Carvalho

Submitted By: Materials Testing Lab, Inc.

WATRAL

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MT Group
MATERIALS TESTING

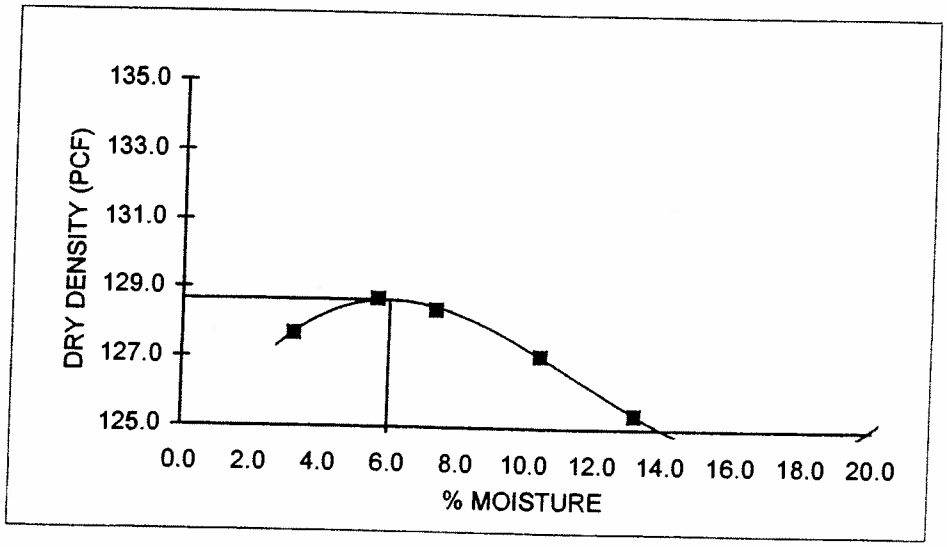
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-SAND-002
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

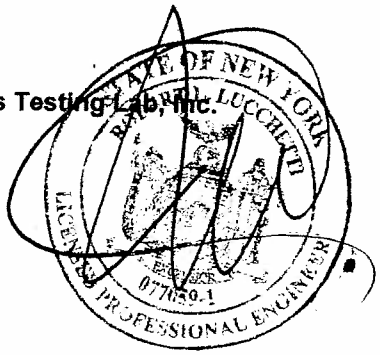
% MOISTURE	DRY DENSITY
3.2	127.7
5.6	128.7
7.3	128.4
10.4	127.1
13.2	125.4

OPTIMUM MOISTURE 5.9 % @ **MAXIMUM DRY DENSITY** 128.7 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.



ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/23/07	--	SCE07	4	Cell 1 (see diagram)	91.5	6.0	128.7	117.8	1ft lift (1ft bgs)
05/23/07	--	SCE08	4	Cell 2 (see diagram)	90.2	3.2	128.7	116.1	1ft lift (1ft bgs)
05/23/07	--	SCE09	5	Cell 1 (see diagram)	90.4	3.4	128.7	116.3	1ft lift (0ft bgs)
05/23/07	--	SCE10	5	Cell 2 (see diagram)	90.1	6.2	128.7	116.0	1ft lift (0ft bgs)
05/23/07	--	SCE11+	3	Cell 1 (see diagram)	91.4	6.5	128.7	117.6	1ft lift (2ft bgs)
05/23/07	--	SCE12+	4	Cell 1 (see diagram)	90.0	6.2	128.7	115.8	1ft lift (1ft bgs)

*Compaction requirement= 90%
*General Location= Southern Cell
*Please Refer to diagram for locations
*ENTACT Oversight= Jay Carvalho
*Backfill= Sandy Soil from Watral Brothers, Bay Shore
+ Trench was dug in new lifts, then backfilled and recompacted.

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MATERIALS TESTING

Client: ENTACT

Report #:
Date: 5-23-07
Technician: CHRIS MARRO

Project: ME 1884
Test: SOIL DENSITY
Method: NUCLEAR

☐ **Street** ☐ **Sidewalk** ☒ **Other** BACKFILL

General Location: NORTH SIDE OF EAST YARD

Test #	Elev/Depth of Test	Specific Location	WET DENSITY	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	4' BG	TRENCH	125.2	6.5	117.6	128.7	91.4
2	3' BG	TRENCH	123.0	6.2	115.8	128.7	90.0
3	2' BG	WEST SIDE OF BACKFILL AREA	124.9	6.0	117.8	128.7	91.5
4	" "	EAST " " " "	119.8	3.2	116.1	128.7	90.2
5	1' BG	WEST " " " "	120.3	3.4	116.3	128.7	90.4
6	" "	EAST " " " "	123.1	6.2	116.0	128.7	90.1

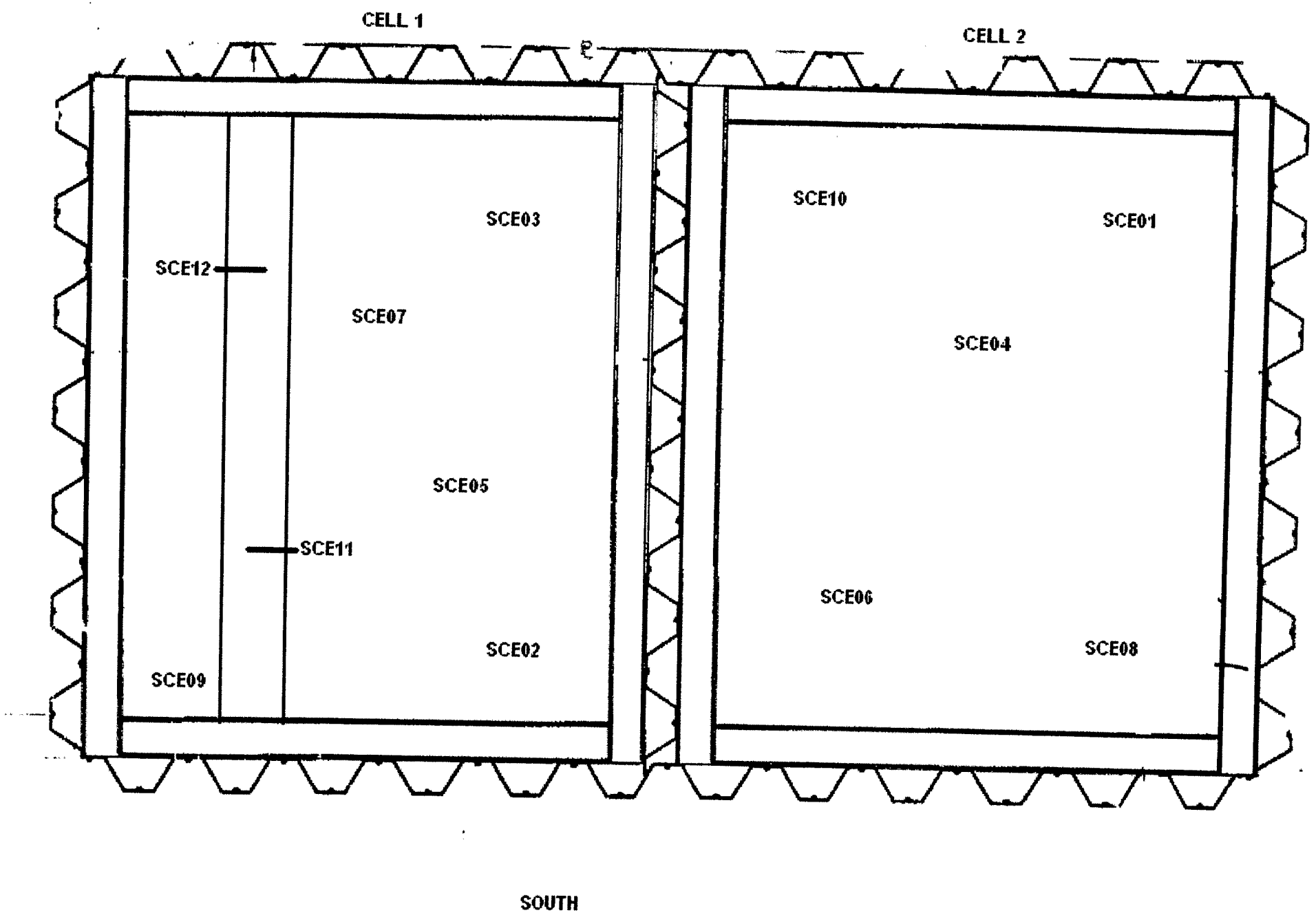
Remarks:

Material Type:
Item #

Reported To: --

Min. Compaction Req. 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.


CELL 1
CELL 2
SCE03
SCE10
SCE01
SCE12
SCE07
SCE04
SCE05
SCE11
SCE06
SCE02
SCE08
SCE09
SOUTH

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ME1884
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-013
Date: 05/23/07
Technician: Chris Marro

☐ **Street** ☐ **Sidewalk** ☒ **Other** Backfill

General Location: **North side of East yard**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@4' Below grade	Trench	6.5	117.6	128.7	**91.4**
2	@3' Below grade	Trench	6.2	115.8	128.7	**90.0**
3	@2' Below grade	West side of backfill area	6.0	117.8	128.7	**91.5**
4	@2' Below grade	East side of backfill area	3.2	116.1	128.7	**90.2**
5	@1' Below grade	West side of backfill area	3.4	116.3	128.7	**90.4**
6	@1' Below grade	East side of backfill area	6.2	116.0	128.7	**90.1**

Remarks:

Material Type:
Item #

Min. Compaction Req. 90%
Complies: Yes

Reported To: Jay Cavalho

Submitted By: Materials Testing Lab. Inc.

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MT Group
MATERIALS TESTING

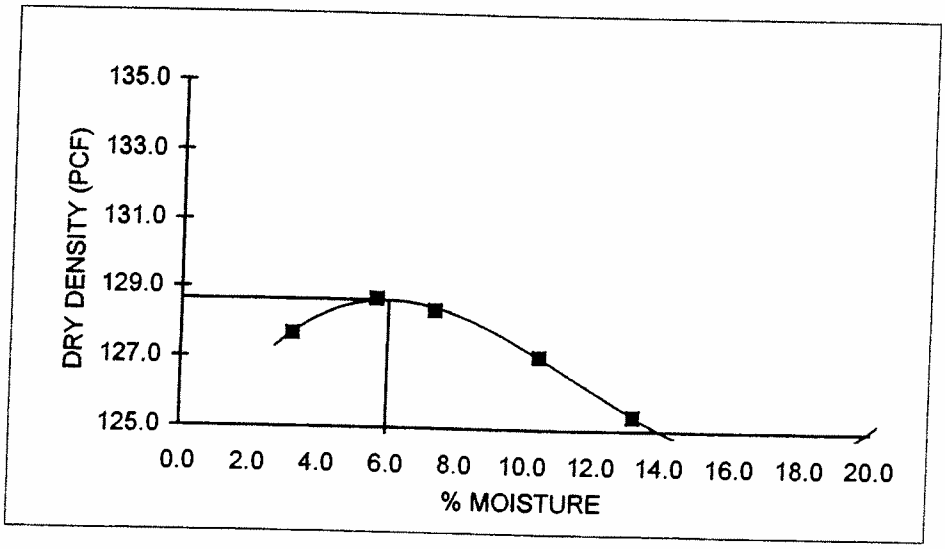
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-SAND-002
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

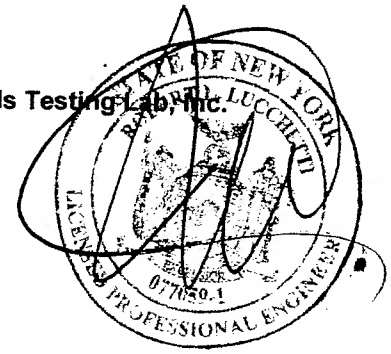
% MOISTURE	DRY DENSITY
3.2	127.7
5.6	128.7
7.3	128.4
10.4	127.1
13.2	125.4

OPTIMUM MOISTURE 5.9 % @ **MAXIMUM DRY DENSITY** 128.7 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.



ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
05/25/07	--	1	1	Group D sheet #75	90.9	5.4	120.6	109.6	1ft lift
05/25/07	--	2	2	Group D sheet #72	92.0	3.2	120.6	111.0	1ft lift
05/25/07	--	3	3	Group D sheet #73	92.8	2.2	120.6	111.9	6in lift
05/25/07	--	4	4	Group D sheet #68	91.6	4.7	120.6	110.4	6in lift
05/25/07	--	5	5	Group D sheet #74	92.7	3.2	120.6	111.7	1ft lift
05/25/07	--	6	1	Group E sheet #54	91.7	3.8	120.6	110.6	1ft lift
05/25/07	--	7	2	Group E sheet #55	90.7	4.8	120.6	109.4	1ft lift
05/25/07	--	8	3	Group E sheet #56	93.9	2.6	120.6	113.3	1ft lift

*Compaction requirement= 90%
*General Location= Segments 1&2, sheets 52-76
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Jay Carvalho
*Backfill= Sandy Soil from Watral Brothers, Bay Shore

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MATERIALS TESTING

Client: ENTACT

Report #:
Date: 5-25-07
Technician: CHRIS MARRO

Project: ME 1884
Test: SOIL DENSITY
Method: NUCLEAR

☐ Street ☐ Sidewalk ☒ Other TRENCH

General Location: SOUTH HALF OF TRENCH ON WEST SIDE OF THE STREET

Test #	Elev/Depth of Test	Specific Location	WET DENSITY	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	3' BG	SOUTH SIDE OF TRENCH	115.5	5.4	109.6	120.6	90.9
2	2' BG	" " "	114.5	3.2	111.0	120.6	92.0
3	1' BG	" " "	114.4	2.2	111.9	120.6	92.8
4	3' BG	CENTER OF TRENCH	115.6	4.7	110.4	120.6	91.6
5	@ GRADE	SOUTH SIDE OF TRENCH	115.3	3.2	111.7	120.6	92.7
6	2' BG	CENTER OF TRENCH	114.8	3.8	110.6	120.6	91.7
7	1' BG	" " "	114.7	4.8	109.4	120.6	90.7
8	@ GRADE	" " "	116.2	2.6	113.3	120.6	93.9

Remarks:

Material Type: SAND
Item #

Reported To: --

Min. Compaction Req. 90%
Complies: Y

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ME1884
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-014
Date: 05/25/07
Technician: Chris Marro

☐ **Street** ☐ **Sidewalk** ☒ **Other** Trench

General Location: **Trench on West side of N. Clinton Ave.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@ 3' Below Grade	South side of Trench	5.4	109.6	120.6	**90.9**
2	@ 2' Below Grade	South side of Trench	3.2	111.0	120.6	**92.0**
3	@ 1' Below Grade	South side of Trench	2.2	111.9	120.6	**92.8**
4	@ 3' Below Grade	Center of Trench	4.7	110.4	120.6	**91.6**
5	@ Grade	South side of Trench	3.2	111.7	120.6	**92.7**
6	@ 2' Below Grade	Center of Trench	3.8	110.6	120.6	**91.7**
7	@ 1' Below Grade	Center of Trench	4.8	109.4	120.6	**90.7**
8	@ Grade	Center of Trench	2.6	113.3	120.6	**93.9**

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 90%
Complies: Yes

Reported To:

Submitted By: Materials Testing Lab, Inc.

REDO OF WATRAL IMPORT

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MATERIALS TESTING

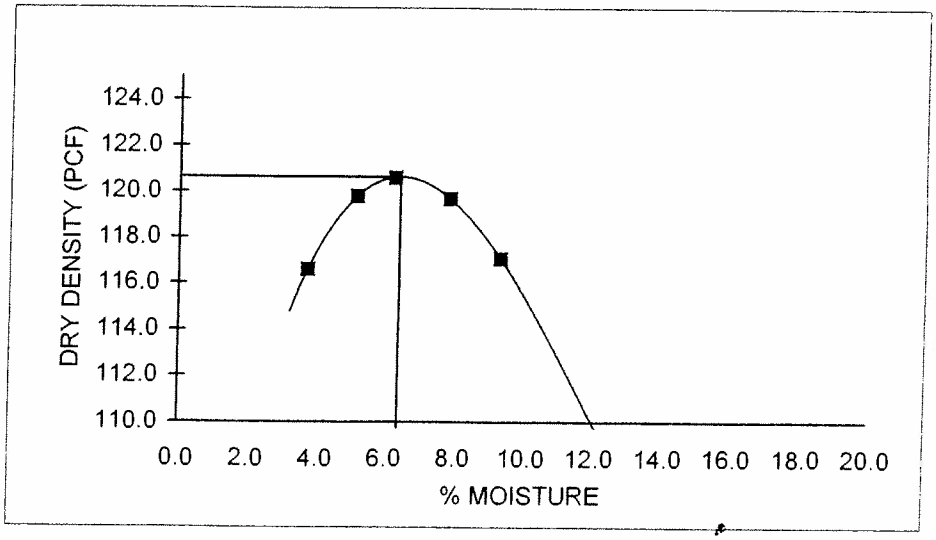
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-010
Date: 5/24/2007
Lab# : 8180

Project: Key Span - NE1886
Sample: NE1886-SAND-003
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: MTL **On** 5/24/2007 **DELIVERED BY:** MTL

% MOISTURE	DRY DENSITY
3.7	116.6
5.1	119.8
6.2	120.6
7.8	119.7
9.3	117.1

OPTIMUM MOISTURE 6.3 % @ **MAXIMUM DRY DENSITY** 120.6 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab Inc.

STATE OF NEW YORK ROBERT L. LUCCHESI LICENSED PROFESSIONAL ENGINEER 077059

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Phone (631) 815-1900 • Fax (631) 815-1901 • www.materials-testing.com

Client:	Entact Environmental 66 North Clinton Avenue Bay Shore, NY 11706	**Report #:** **Date:** **Technician:**	07EEC-015 05/24/07 Chris Marro	Page 1 of 1
Project:	ME1884			

NON-CONFORMANCE REPORT

TYPE OF INSPECTION:

[ ] Masonry	[ ] Concrete Field	[X] Soil Compaction	[ ] ND Asphalt
[ ] Welding	[ ] Bolting	[ ] Decking	[ ] Fireproofing
[ ] Firestopping	[ ] Studs	[ ] Piping	
[ ] Other:			

DESCRIPTION OF NON-CONFORMANCE:
(INDICATE REFERENCE TO APPLICABLE REQUIREMENT, IE: DRAWING SPECIFICATION, CODE OR STANDARD.)

90% compaction could not be achieved through any method in the field. A sample was taken from the stockpile for lab testing.

Reported To:

Submitted By: Materials Testing Lab, Inc.

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
06/05/07	0841	1	1	Group F sheet #38	92.4	3.6	120.6	111.4	6in lift (5ft bgs)
06/05/07	0857	2	1	Group G sheet #15	90.9	4.0	120.6	109.7	6in lift (5ft bgs)
06/05/07	0950	3	2	Group F sheet #32	90.1	3.7	120.6	108.7	6in lift (4.5ft bgs)
06/05/07	0952	4	2	Group G sheet #9	94.9	3.8	120.6	114.5	6in lift (4.5ft bgs)
06/05/07	1020	5	3	Group F sheet #45	90.8	3.0	120.6	109.5	1ft lift (3ft bgs)
06/05/07	1038	6	3	Group G sheet #6	91.6	3.5	120.6	110.5	1ft lift (3ft bgs)
06/05/07	1102	7	4	Group F sheet #50	91.8	4.3	120.6	110.7	1ft lift (2ft bgs)
06/05/07	1110	8	4	Group G sheet #12	90.0	3.9	120.6	108.5	1ft lift (2ft bgs)
06/05/07	1246	9	5	Group G sheet #18	90.8	4.0	120.6	109.5	1ft lift (1ft bgs)
06/05/07	1248	10	5	Group F sheet #10	91.5	4.1	120.6	110.3	1ft lift (1ft bgs)

*Compaction requirement= 90%
*General Location= Segment 2, sheets 5-51
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= Sandy Soil from Watral Brothers, Bay Shore

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MT Group
MATERIALS TESTING

Client: ENTACT

Report #:
Date: 6-5-07
Technician: ROBERT VILLAVICENCIO

Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ **Sidewalk** ☐ **Other** _____

General Location: V. CLINTON AV & UNION BLVD.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	1 LIFT 6 IN	SHEET # 38 5 FT BGS	3.6	111.4	120.6	92.4
2	1 6 IN	15 5 FT BGS	4.0	109.9		90.9
3	2 6 IN	32 4½ "	3.9	108.9		90.1
4	2 6 IN	9 4½ "	3.8	114.5		94.9
5	3 1 FT	45 3 "	3.0	109.5		90.8
6	3 1 FT	6 3 "	3.5	110.5		91.6
7	4 1 FT	50 2 "	4.3	110.7		91.8
8	4 1 FT	12 1 "	3.9	108.5		90.0
9	5 1 FT	18 1 "	4.0	109.5		90.8
10	5 1 FT	10 1 "	4.1	110.3		91.5

Remarks:

Material Type:
Item #

Reported To: --

Min. Compaction Req. 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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NY Metropolitan Regional Office / Corporate Headquarters
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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-016
Date: 06/05/07
Technician: Robert Villavicencio

☐ **Street** ☐ **Sidewalk** ☐ **Other**

General Location: North Clinton Ave. & Union Blvd.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	@ 6" 1st lift	Sheet #38 (5' bgs.)	3.6	111.4	120.6	92.4
2	@ 6" 1st lift	Sheet #15 (5' bgs.)	4.0	109.9	120.6	90.9
3	@ 6" 2nd lift	Sheet #32 (4½' bgs.)	3.9	108.9	120.6	90.1
4	@ 6" 2nd lift	Sheet #9 (4½' bgs.)	3.8	114.5	120.6	94.9
5	@ 1' 3rd lift	Sheet #45 (3' bgs.)	3.0	109.5	120.6	90.8
6	@ 1' 3rd lift	Sheet #6 (3' bgs.)	3.5	110.5	120.6	91.6
7	@ 1' 4th lift	Sheet #50 (2' bgs.)	4.3	110.7	120.6	91.8
8	@ 1' 4th lift	Sheet #12 (2' bgs.)	3.9	108.5	120.6	90.0
9	@ 1' 5th lift	Sheet #18 (1' bgs.)	4.0	109.5	120.6	90.8
10	@ 1' 5th lift	Sheet #10 (1' bgs.)	4.1	110.3	120.6	91.5

Remarks:

Material Type:
Item #

Min. Compaction Req. 90%
Complies: Yes

Reported To: Stacy Chervinsky

Submitted By: Materials Testing Lab, Inc.

REDO OF NATRAL IMPORT

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MT Group
MATERIALS TESTING

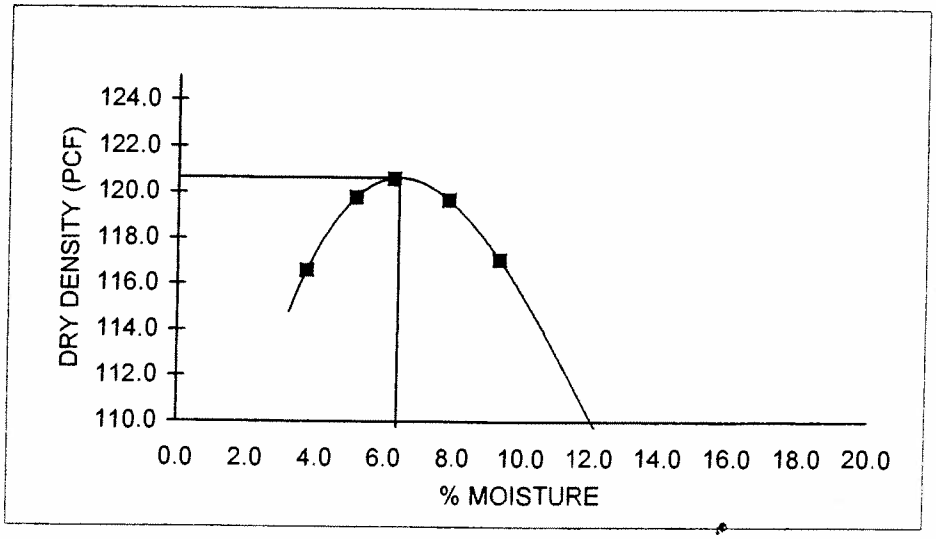
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-010
Date: 5/24/2007
Lab# : 8180

Project: Key Span - NE1886
Sample: NE1886-SAND-003
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: MTL **On** 5/24/2007 **DELIVERED BY:** MTL

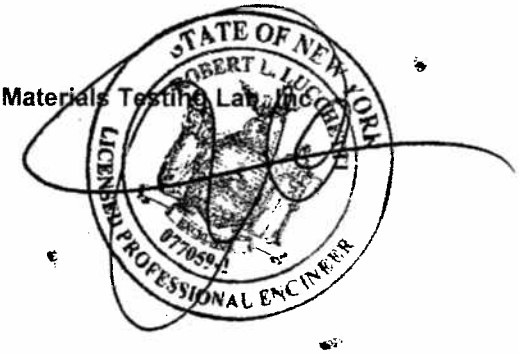
% MOISTURE	DRY DENSITY
3.7	116.6
5.1	119.8
6.2	120.6
7.8	119.7
9.3	117.1

OPTIMUM MOISTURE 6.3 % @ **MAXIMUM DRY DENSITY** 120.6 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.



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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ME1884

Report #: 07EEC-015
Date: 05/24/07
Technician: Chris Marro

NON-CONFORMANCE REPORT

TYPE OF INSPECTION:

[ ] Masonry	[ ] Concrete Field	[X] Soil Compaction	[ ] ND Asphalt
[ ] Welding	[ ] Bolting	[ ] Decking	[ ] Fireproofing
[ ] Firestopping	[ ] Studs	[ ] Piping	
[ ] Other:			

DESCRIPTION OF NON-CONFORMANCE:
(INDICATE REFERENCE TO APPLICABLE REQUIREMENT, IE - DRAWING/SPECIFICATION, CODE OR STANDARD)

90% compaction could not be achieved through any method in the field. A sample was taken from the stockpile for lab testing.

Reported To:

Submitted By: Materials Testing Lab. Inc

ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
06/07/07	1257	11	6	Group G sheet #25	90.4	2.5	141.6	128.0	6in lift (0ft bgs)
06/07/07	1303	12	6	Group F sheet #28	96.8	2.8	141.6	137.1	6in lift (0ft bgs)

*Compaction requirement= 90%
*General Location= Segment 2, sheets 5-51
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= DGA Type 4 from Tilcon, Clinton Point

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MT Group
MATERIALS TESTING

Client: ENTACT

Report #:
Date: 6-7-07
Technician: ROBERT VILLADIEGO

Project: NE 1886
Test: In-Place Density Test
Method: ASTM D2922

☑ Street ☐ Sidewalk ☐ Other

General Location: N. CLINTON AV & UNION BLVD.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp.
11	6 LIFT 1 FT	SHEET # 25 0 FT BGS	2.5	128.0	141.6	90.4
12	6 " 1 FT	" # 28 " " "	2.8	137.1	"	96.8

Remarks:

Material Type:
Item # M.T.L.

Reported To: --

Min. Compaction Req. 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-018
Date: 06/07/07
Technician: Robert Villavicencio

[X] **Street** [ ] **Sidewalk** [ ] **Other**

General Location: North Clinton Ave. & Union Blvd.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
11	6th Lift	Sheet #25 0' bgs.	2.5	128.0	141.6	90.4
12	6th Lift	Sheet #28 0' bgs.	2.8	137.1	141.6	96.8

Remarks:

Material Type:
Item #

Min. Compaction Req.	90%
Complies:	Yes

Reported To:

Submitted By: Materials Testing Lab, Inc.

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MT Group
MATERIALS TESTING

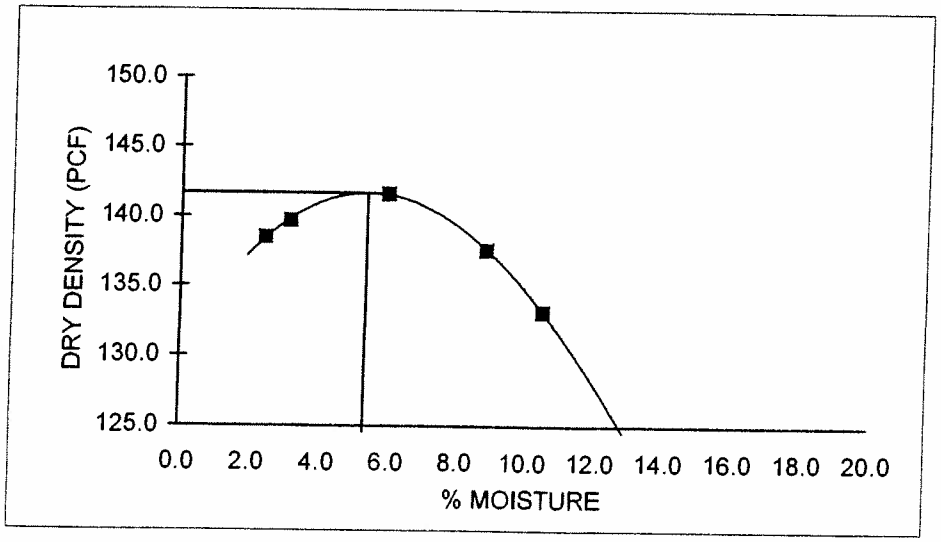
Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Report #: 07EE-006
Date: 3/26/2007
Lab# : 8097

Project: Key Span - NE1886
Sample: NE1886-DGA-001
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 3/20/2007 **DELIVERED BY:** Client

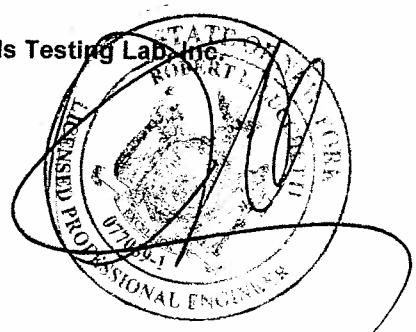
% MOISTURE	DRY DENSITY
2.4	138.5
3.1	139.7
5.9	141.6
8.8	137.6
10.5	133.2

OPTIMUM MOISTURE 5.3 % @ **MAXIMUM DRY DENSITY** 141.6 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.



ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
09/04/07	--	1	1	Group H sheet #227	90.6	7.7	127.3	115.3	1ft lift (3ft bgs), lift 1
09/04/07	--	2	1	Group I sheet #257	96.2	5.1	127.3	122.4	1ft lift (3ft bgs), lift 1
09/04/07	--	3	2	Group H sheet #241	92.6	7.0	127.3	117.9	1ft lift (2ft bgs), lift 2
09/04/07	--	4	2	Group I sheet #267	90.1	6.4	127.3	114.7	1ft lift (2ft bgs), lift 2
09/04/07	--	5	1	Group J sheet #280	96.7	7.8	127.3	123.1	1ft lift (3ft bgs), lift 1
09/04/07	--	6	1	Group K sheet #300	93.6	8.2	127.3	.119.2	1ft lift (3ft bgs), lift 1
09/04/07	--	7	2	Group J sheet #294	90.9	7.0	127.3	115.7	1ft lift (2ft bgs), lift 2
09/04/07	--	8	2	Group K sheet #303	93.1	6.9	127.3	118.6	1ft lift (2ft bgs), lift 2
09/04/07	--	9	3	Group H sheet #236	90.9	6.5	127.3	115.7	1ft lift (1ft bgs), lift 3
09/04/07	--	10	3	Group I sheet #252	97.3	6.9	127.3	123.8	1ft lift (1ft bgs), lift 3
09/04/07	--	11	3	Group J sheet #288	91.8	8.1	127.3	116.8	1ft lift (1ft bgs), lift 3
09/04/07	--	12	3	Group K sheet #301	94.5	8.7	127.3	120.3	1ft lift (1ft bgs), lift 3
09/04/07	--	13	4	Group H sheet #236	90.5	6.9	127.3	115.2	6in lift (6" bgs), lift 4
09/04/07	--	14	4	Group I sheet #263	93.4	7.8	127.3	119.0	6in lift (6" bgs), lift 4
09/04/07	--	15	4	Group J sheet #276	95.8	7.3	127.3	122.0	6in lift (6" bgs), lift 4
09/04/07	--	16	4	Group K sheet #302	95.4	7.0	127.3	121.4	6in lift (6" bgs), lift 4

*Compaction requirement= 90%
*General Location= Segment 4
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= Reuse soil from Phase 1

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Client: ENTACT

Report #:
Date: 9-4-07
Technician: ROBERT VILLAVICENCIO

Project: NE 1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ ☐ **Other** _____

General Location: CLINTON AV & UNION BLVD.

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	3' BGS / 12"	L1 EAST TRENCH 4A	7.7	115.3	127.3	90.6
2	3 "	L1 " " 4A	5.1	122.4		96.2
3	2 "	L2 " " 4A	7.0	117.9		92.6
4	2 "	L2 " " 4A	6.4	114.7		90.1
5	3 "	L1 " " 4B	7.8	123.1		96.7
6	3 "	L1 " " 4B	8.2	119.2		93.6
7	2 "	L2 " " 4B	7.0	115.7		90.9
8	2 "	L2 " " 4B	6.9	118.6		93.1
9	1 "	L3 " " 4B	6.5	115.7		90.9
10	1 "	L3 " " 4B	6.9	123.8		97.3
11	1 "	L3 " " 4A	8.1	116.8		91.8
12	1 "	L3 " " 4A	8.7	120.3		94.5

Remarks:

Material Type: SAND 127.3
Item #

Reported To: --

Min. Compaction Req. 90%
Complies:

Submitted By: Materials Testing Lab, Inc.

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Client: ENTACT

Report #:
Date: 9-4-07
Technician: ROBERT VILLAVICENCIO

Project: NE 1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ ☐ **Other** _____

General Location: CLINTON AV & UNION BLVD

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
21	0 BGS / 12"	L4 EAST TRENCH 4B	6.9	115.2	127.3	90.5
22	0 "	L4 " " 4B	7.8	119.0		93.4
23	0 "	L4 " " 4A	7.3	122.0		95.8
24	0 "	L4 " " 4A	7.0	121.4		95.4

Remarks:

Material Type:
Item #

Reported To: --

Min. Compaction Req. 90.0%
Complies:

Submitted By: Materials Testing Lab, Inc.

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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ~~NE7037~~ NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-012
Date: 09/04/07
Technician: Robert V.
Work order #: 107473

[X] **Street** [ ] **Sidewalk** [ ] **Other** _____

General Location: **Clinton Ave. & Union Blvd.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
9	@ 3' below grade	L1 E/ trench 4A	7.7	115.3	127.3	**90.6**
10	@ 3' below grade	L1 E/ trench 4A	5.1	122.4	127.3	**96.2**
11	@ 2' below grade	L2 E/trench 4A	7.0	117.9	127.3	**92.6**
12	@ 2' below grade	L2 E/trench 4A	6.4	114.7	127.3	**90.1**
13	@ 3' below grade	L1 E/trench 4B	7.8	123.1	127.3	**96.7**
14	@ 3' below grade	L1 E/trench 4B	8.2	119.2	127.3	**93.6**
15	@ 2' below grade	L2 E/trench 4B	7.0	115.7	127.3	**90.9**
16	@ 2' below grade	L2 E/trench 4B	6.9	118.6	127.3	**93.1**
17	@ 1' below grade	L3 E/trench 4B	6.5	115.7	127.3	**90.9**
18	@ 1' below grade	L3 E/trench 4B	6.9	123.8	127.3	**97.3**
19	@ 1' below grade	L3 E/trench 4A	8.1	116.8	127.3	**91.8**
20	@ 1' below grade	L3 E/trench 4A	8.7	120.3	127.3	**94.5**

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 90%
Complies: Y

Reported To: Stacy C.

Submitted By: Materials Testing Lab, Inc.

Materials Testing Lab Inc.
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Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: ~~NE7037~~ NE886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-012
Date: 09/04/07
Technician: Robert V.
Work order #: 107473

[X] **Street** [ ] **Sidewalk** [ ] **Other** _____

General Location: **Clinton Ave. & Union Blvd.**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
21	@ Grade	L4 E/trench 4B	6.9	115.2	127.3	**90.5**
22	@ Grade	L4 E/trench 4B	7.8	119.0	127.3	**93.4**
23	@ Grade	L4 E/trench 4A	7.3	122.0	127.3	**95.8**
24	@ Grade	L4 E/trench 4A	7.0	121.4	127.3	**95.4**

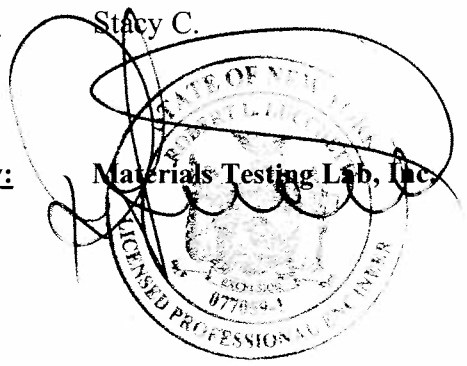
Remarks:

Material Type: Sand
Item #

Min. Compaction Req. 95%
Complies: Y

Reported To: Stacy C.

Submitted By: **Materials Testing Lab, Inc.**



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MT Group
MATERIALS TESTING

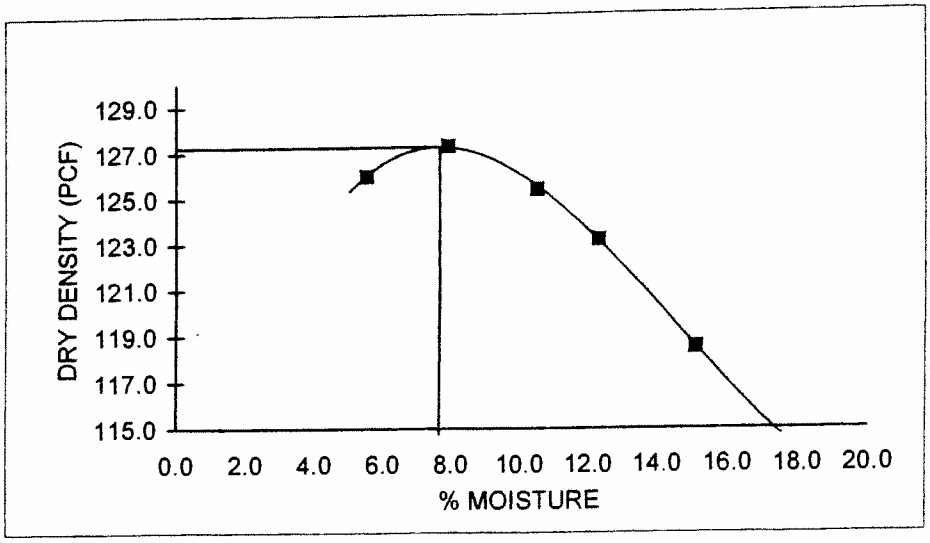
Report #: 07EE-019
Date: 7/20/2007
Lab# : 8283

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Project: Key Span - NE1886
Sample: NE1886-SOIL-06
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 7/19/2007 **DELIVERED BY:** Client

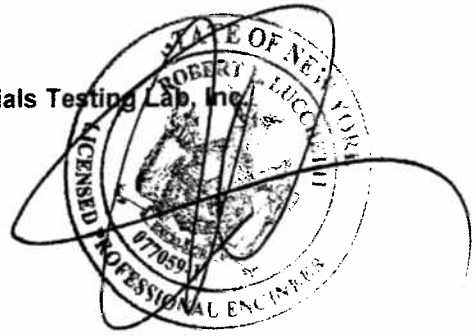
% MOISTURE	DRY DENSITY
5.5	126.0
7.9	127.3
10.5	125.4
12.3	123.2
15.1	118.5

OPTIMUM MOISTURE 7.6 % @ **MAXIMUM DRY DENSITY** 127.3 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.



ENTACT
environmental services

RECORD OF COMPACTION TESTING

DATE	TIME	TEST #	LIFT	LOCATION	% compaction	% Moisture	Max Dry Density	Dry Density	NOTES
09/19/07	--	1	1	Group M sheet #207	94.5	6.8	127.3	120.2	1ft lift (3ft bgs), lift 1
09/19/07	--	2	1	Group L sheet #179	93.4	7.0	127.3	118.2	1ft lift (3ft bgs), lift 1
09/19/07	--	3	2	Group M sheet #213	93.3	7.9	127.3	118.7	1ft lift (2ft bgs), lift 2
09/19/07	--	4	2	Group L sheet #189	92.2	7.5	127.3	117.1	1ft lift (2ft bgs), lift 2
09/19/07	--	5	3	Group M sheet #197	92.4	6.7	127.3	117.6	1ft lift (1ft bgs), lift 3
09/19/07	--	6	3	Group L sheet #202	93.0	6.5	127.3	118.3	1ft lift (1ft bgs), lift 3
09/19/07	--	7	4	Group M sheet #183	95.5	7.8	127.3	121.5	6in lift (6" bgs), lift 4
09/19/07	--	8	4	Group L sheet #210	94.1	6.9	127.3	119.7	6in lift (6" bgs), lift 4

*Compaction requirement= 90%
*General Location= Segment 3
*Sheet Pile references are estimated.
*Please Refer to Elevation table for group locations.
*ENTACT Oversight= Stacy Chervincky
*Backfill= Reuse

Client: ENTACT ENVIRONMENTAL ASSOC.

Report #: 1
Date: 09-19-2007
Technician: ALBERTO HERNENDI

Project: KEY SPAN-NE 1886
Test: In-Place Density Test
Method: ASTM D2922

☐ **Street** ☐ **Sidewalk** ☑ **Other**

General Location: 66 North Clinton Ave. Bay Shore LI

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	1RST lift elevation	Group. M Segment 3 sheet # 207	6.8	120.2	127.3	94.5
2	" "	L 179	7.0	118.2		93.4
3	2nd lift elevation	M 213	7.9	118.7		93.3
4	" "	L 189	7.5	117.1		92.2
5	3rd lift elevation	L 197	6.7	117.6		92.4
6	" "	M 202	6.5	118.3		93.0
7	4th lift elevation	L 183	7.8	121.5		95.5
8	" "	M 210	6.9	119.7		94.1

Remarks: Minimum Compaction Request by costumer, 90%

Material Type: Sand.
Item #

Reported To: -- Stacy

Min. Compaction Req. 90%
Complies: -

Submitted By: Materials Testing Lab, Inc.

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NY Metropolitan Regional Office / Corporate Headquarters
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MT Group
MATERIALS TESTING

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706
Project: NE1886
Test: In-Place Density Test
Method: ASTM D2922

Report #: 07EEC-020
Date: 09/19/07
Technician: Alberto Herrara
Work order #: 109336

[X] **Street** [ ] **Sidewalk** [X] **Other** Parking lot

General Location: **North section**

Test #	Elev/Depth of Test	Specific Location	% Moisture	Dry Density (PCF)	Max. Dry Density (PCF)	% Comp
1	1st lift elevation		6.8	120.2	127.3	**94.5**
2	1st lift elevation		7.0	118.2	127.3	**93.4**
3	2nd lift elevation		7.9	118.7	127.3	**93.3**
4	2nd lift elevation		7.5	117.1	127.3	**92.2**
5	3rd lift elevation		6.7	117.6	127.3	**92.4**
6	3rd lift elevation		6.5	118.3	127.3	**93.0**
7	4th lift elevation		7.8	121.5	127.3	**95.5**
8	4th lift elevation		6.9	119.7	127.3	**94.1**

Remarks:

Material Type: Sand
Item #

Min. Compaction Req. **90%**
Complies: **Y**

Reported To: Stacy Chervincky

Submitted By: Materials Testing Lab, Inc.

REUSE

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MT Group
MATERIALS TESTING

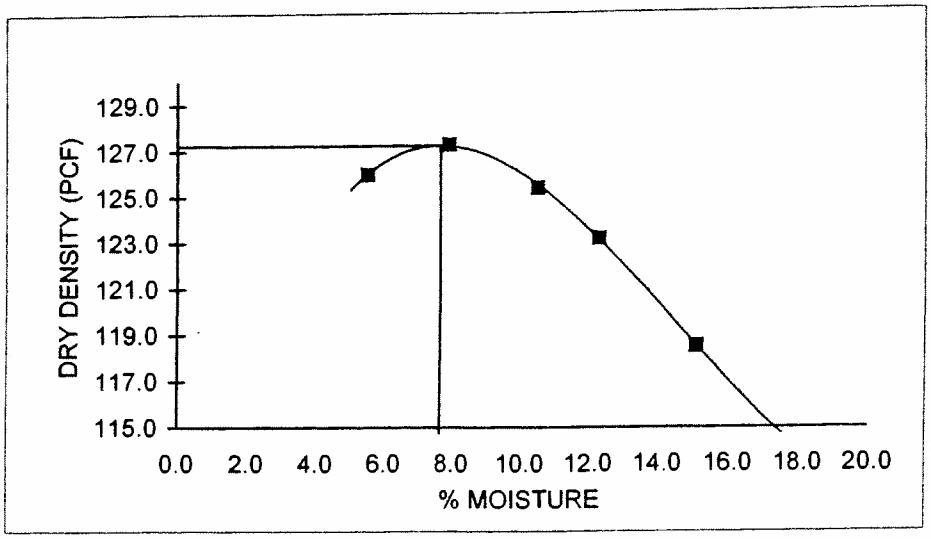
Report #: 07EE-019
Date: 7/20/2007
Lab# : 8283

Client: Entact Environmental
66 North Clinton Avenue
Bay Shore, NY 11706

Project: Key Span - NE1886
Sample: NE1886-SOIL-06
Test: Laboratory Compaction Characteristics of Soil Using Modified Effort
Method: ASTM D1557 "C"
Sampled By: Client **On** 7/19/2007 **DELIVERED BY:** Client

% MOISTURE	DRY DENSITY
5.5	126.0
7.9	127.3
10.5	125.4
12.3	123.2
15.1	118.5

OPTIMUM MOISTURE 7.6 % @ **MAXIMUM DRY DENSITY** 127.3 LBS./CU. FT.



Reported To:--

Submitted By: Materials Testing Lab, Inc.