Town of Medley
Office of Capital Projects & Development Services
7777 NW 72 Avenue, Medley, Florida 33166

Date:	**August 15, 2016**
Subject:	**Bid for Construction of NW 89th Avenue, NW 93rd Street and NW 95th Street Roadway and Drainage**
Solicitation Number:	**ITB 2016-004**
OCPDS Number:	**SW-0103**
Opening Date / Time:	~~**August 17, 2016 at 3:00 PM**~~ **August 24, 2016 at 3:00 PM**
ADDENDUM Number:	**3**

To all interested proposers:

The Town of Medley defines a solicitation "Addendum" as an addition to or amendment of the original terms, conditions, specifications, or instructions of a procurement solicitation (e.g. Invitation for Bids, Request for Proposals or Request for Qualifications), including but not limited to questions and answers, which are considered a material part of the solicitation.

Please note the following updates:

Revisions to the Project Manual (Solicitation Documents) as follows (deletions ~~strikethrough~~, additions underlined):

Page "Part 1-24":

4.	OPENING OF BIDS	~~August 17, 2016~~ August 24, 2016
5.	SELECTION COMMITTEE RECOMMENDATION OF AWARD	~~August 24, 2016~~ August 31, 2016

Bidder Questions (answers in *italics*):

1. **Do you have Geotechnical Report for this project?**
   Geotechnical report and geotechnical report addendum are attached.

2. **Who pays for the Density Tests?**
   The contractor is responsible for the required density testing per the plans and specifications.

3. **The Contractor must clean the new and existing drainage system? (Sheet 4- General Notes, Item # 45)**
   Per note 45 on sheet 4 of the Plans, the Contractor shall clean and seal existing manholes and inlets to remain. New drainage system shall be cleaned prior to final inspection.

4. **Additionally the Contractor must seal all existing structures? (same item)**
   See answer to question 3 above.

5. **The Items concerning to striping must include the Paint Striping, correct?**

Temporary paint striping shall be included in pay item 102-1, Maintenance of Traffic. Refer to Note 36, Sheet No. 4, Phase I plans and Note 38, Sheet No. 18, Phase II plans.

6. **The relocation of trees is on the same area?**
   Relocated trees will be installed at locations directed by the Town within 15 miles of their original location.

7. **In Phase II, plans call for relocation of fire hydrants from one station to another. How this operation will take place? By tapping on the existing line or cut in a tee? Please clarify.**
   Fire hydrant will be installed by tapping into the existing water main. All materials shall be provided by the contractor, tap will be performed by Town forces or under the supervision of Town forces.

8. **In Phase II, plans call for a 16" Steel Sleeve for 12" Water main line in conflict with the proposed structures. What is the length of sleeve required for each conflict structure? There is no detail. Can you provide one?**
   The sleeve shall be per FDOT Index 307.

9. **Structures S-102B and S-304 are indicated as Driveway inlets, but the bid form does not have an item for them. Please clarify.**
   S-102B and S-304 are included in the bid form under item no. 28 (INLETS, CURB, TYPE P-5 <10').

November 11, 2014

Mr. Barton Fye, P.E.
Kimley Horn
1221 Brickell Avenue, Suite 400
Miami, Florida 33131

Re: Percolation Tests and Preliminary Pavement Design Recommendations
Medley Flood Mitigation Project
Medley, Florida
NV5 Project No. 146678

Dear Mr. Fye:

As requested, NV5, Inc., previously Vertical V-Southeast, Inc. and Bureau Veritas North America, Inc. (BVNA), performed soil borings and percolation tests in the area of the proposed pavement along NW 93rd Street between the F.E.C Rail Road track and NW 87th Avenue. Soil borings and percolation tests were also performed in 2008 by BVNA and the result of the tests are included in Appendix 4 of this report.

SITE AND PROJECT INFORMATION

The project site is located at in the Town of Medley, generally from NW 90th Street to NW 106th Street and between NW 95th Avenue and the F.E.C. Rail Road track to the east. The streets and avenues tested are currently paved. However, a new pavement is planned for the tested areas. It is estimated that grade is at about Elevation +6.0 feet with respect to the 1929 National Geodetic Vertical Datum (NGVD). A site and vicinity map is presented on Drawing 1.

LOCAL GEOLOGY

Miami-Dade County is located on the southern flank of a stable carbonate platform on which thick deposits of limestones, dolomites and evaporites have accumulated. The upper two hundred feet of the soil profile is composed predominantly of limestone and quartz sand. These sediments were deposited during several glacial and interglacial stages when the ocean was at elevations higher than present.

In many portions of Miami-Dade County, surface sand deposits of the Pamlico Formation are encountered. The Pamlico sands overlie the Miami Limestone. In western Miami-Dade County, portions of the Everglades Region interfinger with the Pamlico sand. The Everglades soil consists of peat and calcareous silt (marl).

The Miami Limestone is a soft to moderately hard, white, porous to very porous, sometimes sandy, oolitic calcareous cemented grainstone. The Miami Limestone outcrops in

portions of Miami-Dade County. The Miami Limestone has a maximum thickness of about 35 feet along the Atlantic Coastal Ridge and thins sharply near the coastline and more gradually in a westerly direction. The Miami Limestone was formed about 130,000 years ago at a time when the sea level was twenty-five feet higher than it is today. This environment facilitated formation of concentrically layered sand sized carbonate grains called oolites. These grains formed by repeated precipitation of calcium carbonate around the nucleus of a sand or shell grain.

The Miami Limestone can be separated into two facies: the barrier bar oolitic facies and the tidal shoal limestone facies. The barrier bar facies is characterized by lenses of oolitic limestone separated by intermittent, 1-inch thick or less, uncemented sand layers (cross-bedded limestone). Zones of higher porosity are characteristic and parallel the bedding planes of the cross-bedded limestone. The tidal shoal limestone facies is characterized by a distinct lack of bedding planes. In addition, burrowing organisms have churned previously deposited sediments, which have resulted in high porosity channels in the rock. These ancient channels give the rock an appearance of a hardened sponge in some areas.

The Fort Thompson Formation underlies the Miami Limestone, and includes sand, sandstone, and limestone. The upper zones of the Fort Thompson Formation consist of sand having a thickness ranging from 5 to 35 feet. The remainder of the formation consists of coralline limestone, quartz sandstone, sandy limestone and freshwater limestone. The type of soils within the formation and the degree of cementation vary with lateral extent and depth.

The Fort Thompson Formation is underlain by the Tamiami Formation. The Tamiami Formation consists of sands, silts, clays, and sometime fossiliferous limestone. The upper portions of the Tamiami Formation are permeable and make up the lower reaches of the Biscayne Aquifer. This Formation ranges in thickness from zero to 300 feet in South Florida.

FIELD EXPLORATION

BORINGS

The subsurface conditions at the site were additionally explored with five engineering test borings drilled to a depth of 15 feet below the existing grade. BVNA also performed a subsurface Exploration Study in 2008. Test locations for this and the 2008 study are shown on Drawing 1. The 2014 test locations were marked and identified in the field by NV5. The borings were drilled with a truck-mounted drill rig utilizing the rotary wash method. Samples of the subsurface materials were recovered at roughly 2-foot intervals within the upper 10 feet of the borings and at approximately 5-foot intervals thereafter using a Standard Penetration Test split-spoon sampler (SPT) in substantial accordance with ASTM D-1586, "Standard Test Method for Standard Penetration Test and Split-Barrel Sampling of Soils." The 2008 tests were advanced to 14 feet below grade. This test procedure drives a 1.4-inch I.D. split-tube sampler into the subsurface profile using a 140-pound hammer falling 30 inches. The total number of blows required to drive the sampler the second and third six-inch increments is the

SPT N-value, in blows per foot, and is an indication of material strength. Upon completion of the borings, the lower portions of the boreholes were backfilled with the soil cuttings, and the remaining portions closed with cement grout.

The soil/rock samples recovered from the borings were classified by a geotechnical engineer. The collected samples were later re-examined to confirm field classifications. Visual soil classifications were made in accordance with ASTM D2487 and ASTM D2488. The results of the classification and consequent generalized stratification are shown in the records of test borings in Appendix A (sheets A-1 through A-7). The 2008 soil boring test results are presented in Appendix C. Strata contacts shown on these drawings are approximate. The boring data reflect conditions at the specific test locations only, and at the time the borings were drilled.

FIELD PERMEABILITY TESTS

In addition to the borings, NV5 performed also, two field permeability tests at the locations shown on Drawing 1. The 2008 study included 25 percolation tests. The tests were performed to a depth 15 feet each. The 2014 tests are denoted as P-1 (2014) and P-2 (2014). The tests were performed in general accordance with the South Florida Water Management District's *Usual Open Hole Procedure*. The results for the 2014 study are presented in Appendix B (P-1 (2014), and P-2 (2014)), and the results for the 2008 study are presented in Appendix C.

PRELIMINARY PAVEMENT RECOMMENDATIONS

For use in the design of heavy duty pavement (tractor trailer roadway areas), NV5 estimates the traffic load at 3,000,000 total 18-kip Equivalent Single Axle Load Repetitions. We estimate that the subgrade material has a minimum Soil Support Value of 6 and a minimum Modulus of Subgrade Reaction of 200 pounds per cubic inch when prepared as recommended herein. Using a twenty-year design life, this data yields a flexible pavement structural number of about 1.2.

We recommend the following preliminary minimum flexible asphalt pavement section. Final pavement thickness design should be confirmed by the project civil engineer based on anticipated traffic loadings. Pavements should be designed and constructed in accordance with the current editions of the appropriate Florida Department of Transportation's pavement design manuals. Pavement subgrades should be prepared as described herein.

Flexible asphalt pavement section comprise the following as a minimum:

- 3 inches of FDOT S-1 surface course installed in two 1.5-inch-thick lifts
- 8 inches of limerock base course compacted to at least 100 percent relative compaction when compared with the AASHTO T-180. The limerock base should have a minimum Limerock Bearing Ratio (LBR) of 100. The base course can also be an asphaltic concrete material (FDOT specified ABC-3 or equivalent with a minimum Marshall Stability of 1,000 lbs).

- 12 inches of stabilized subgrade compacted to at least 95 percent relative compaction. The subgrade should have a minimum with a minimum LBR of 40 percent as specified by Florida Department of Transportation (FDOT) requirements for Type B or Type C Stabilized Subgrade.

We recommend that the bottom of the stabilized subgrade be at least 18-inches above the seasonal high groundwater table.

SITE PREPARATION AND GRADING

1. Pavement areas should be proof rolled with a heavy roller operating at its maximum vibrational frequency and a travel speed of not more than two feet per second. The proof rolling should be observed by NV5 to identify and mitigate any weak subgrade conditions evidenced by yielding or rutting at the wheels of the roller or truck. Proof-rolling should include planned development footprints plus a five-foot perimeter.

2. In general base material should consist of inorganic crushed limestone with a maximum rock size of 1.5 inches. The subgrade material should consist of at least twelve (12) inches of either crushed limerock or inorganic sand and limestone with less than 10 percent passing the number 200 sieve, or crushed limestone with a maximum particle size of three inches.

We appreciate the opportunity to be of service. In the event you have questions about information in this report, please contact the undersigned at 305.666.3563.

Sincerely,

NV5, Inc.

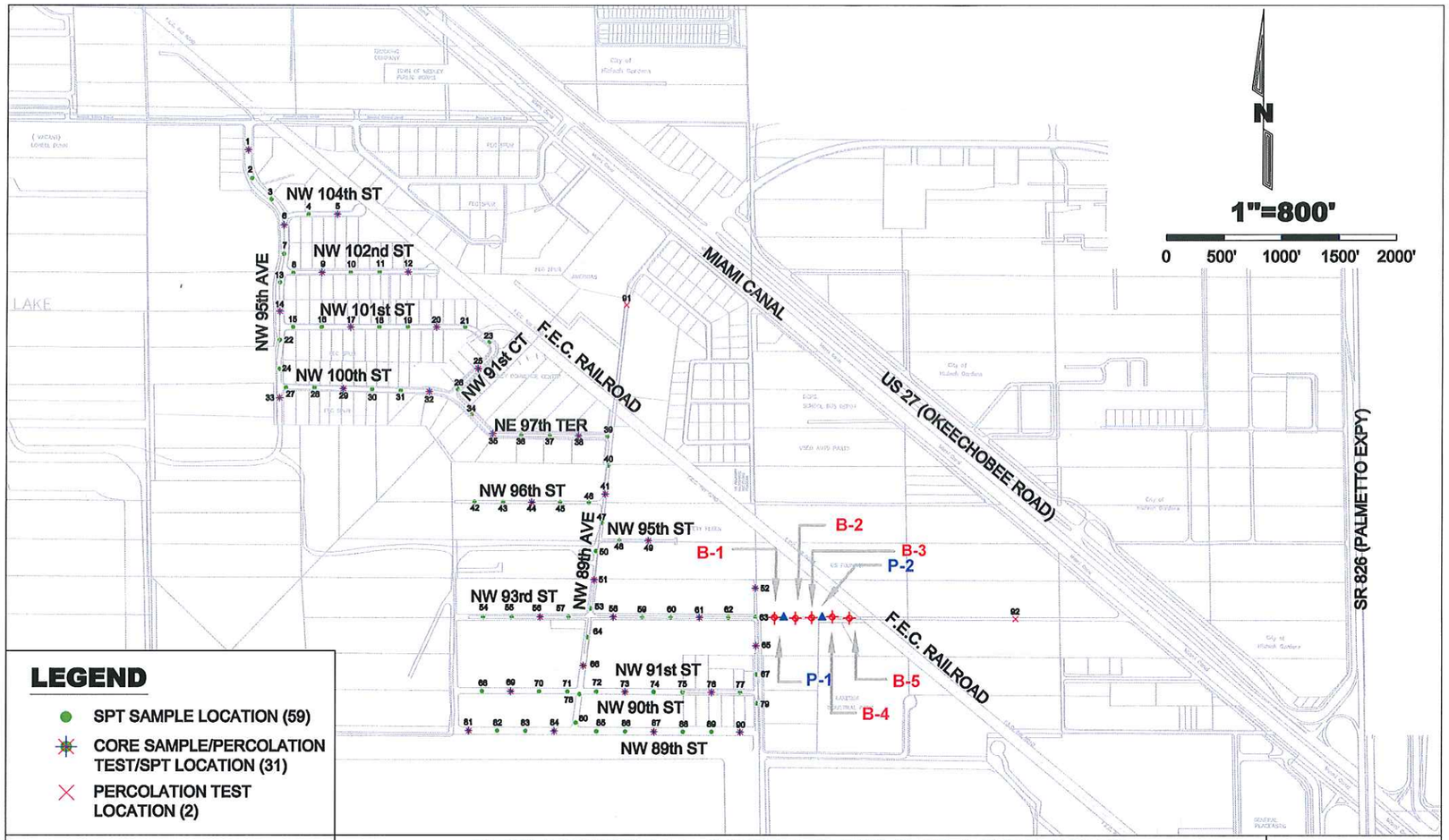
ALFREDO BUDIK LICENSE No. 43884 STATE OF FLORIDA PROFESSIONAL ENGINEER

Alfredo Budik, P.E.
Senior Engineer
Florida License No. 43884

Distribution: Copy via Email
Copy to NV5 File

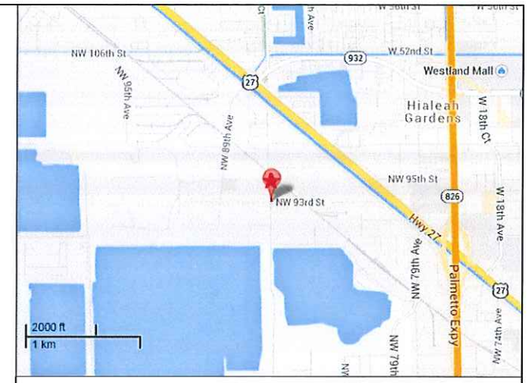
Attachments: Drawing No.1 – Site Vicinity Map and Test Location Plan
Record of Test Borings (Sheets A-1 to A-7)
Results of Constant Head Field Borehole Drainage Tests P-1 and 2

APPENDIX Subsurface Exploration and Percolation Tests by Bureau Veritas North America

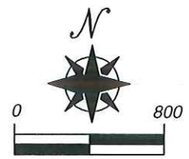


LEGEND

- SPT SAMPLE LOCATION (59)
- CORE SAMPLE/PERCOLATION TEST/SPT LOCATION (31)
- PERCOLATION TEST LOCATION (2)



Site Vicinity Map



Approximate Scale in Feet

LEGEND:

B-1 - Soil Boring Test Location (2014)

P-1 - Drainage Test Location (2014)

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing taken Westhorp & Associates drawing figure 1

Westhorp & Associates, Inc.

GEOTECHNICAL SAMPLE/TESTING LOCATIONS SKETCH

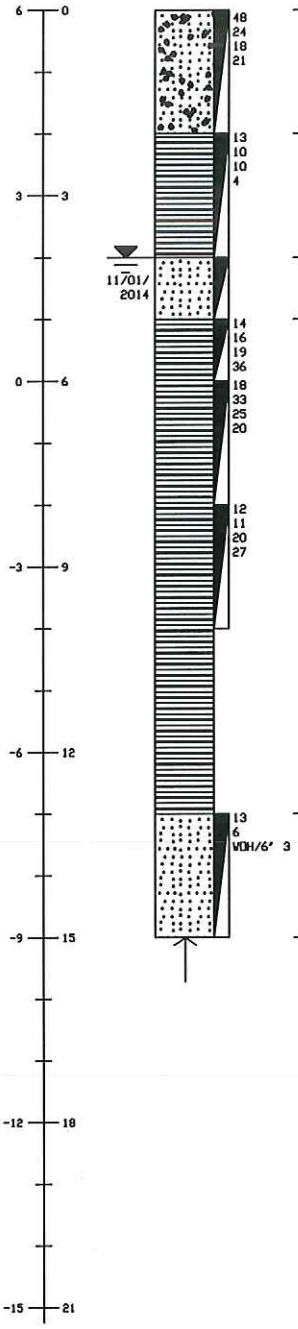
TOWN OF MEDLEY
MIAMI-DADE COUNTY, FLORIDA

FIGURE 1

NV5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*				DWN BY: *WO*
	PROJECT NAME: *Medley Flood Mitigation*				CKD BY: *AB*
	PROJECT LOCATION: *Medley , Florida*	PROJECT NO: *146678*	DATE: *11/05/14*	DWG NO: *1*	APD BY ___

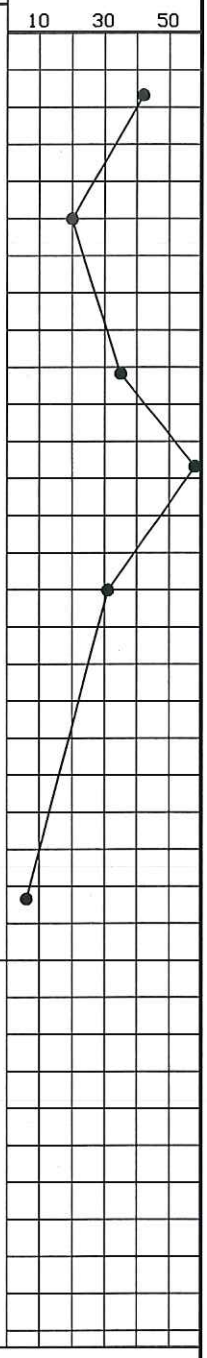
RECORD OF TEST BORING

PROJECT: Medley Flood Mitigation, Medley FL
BORING NO: B-1
PROJECT NO: 146678 START: 11/01/2014 FINISH: 11/01/2014 WEATHER: Sunny
BORING LOCATION: Refer to Test Location Plan DRILLER: Carson/Parada
DRILL: CME-75 DRILL CONTRACTOR:
ELEVATION (EST.): + 6 Feet (NGVD) GROUNDWATER: 4 feet (depth) DATE CHECKED: 11/01/2014
BORING METHOD: Rotary drill with wash, mud & casing FLUID LOSS: None
NOTES:



ELEV. / DEPTH	SOIL SYMBOLS AND FIELD TEST DATA	MAJOR SOIL COMPONENT	OTHER COMPONENTS	STANDARD PENETRATION TEST DEPTH	N
		LIMESTONE FRAGMENTS & SAND (PROBABLE FILL)	Dense, gray	0'-2'	42
		LIMESTONE	Very soft, gray, with some sand	2'-4'	20
		SAND	Dark brown sand, some limestone fragments	4'-5'	
		LIMESTONE	Medium hard, tan, with some sand	5'-6'	35
			Moderately hard, gray, with some sand	6'-8'	58
			Medium hard, tan, with some sand	8'-10'	31
		SAND	Loose, gray	13'-15'	6

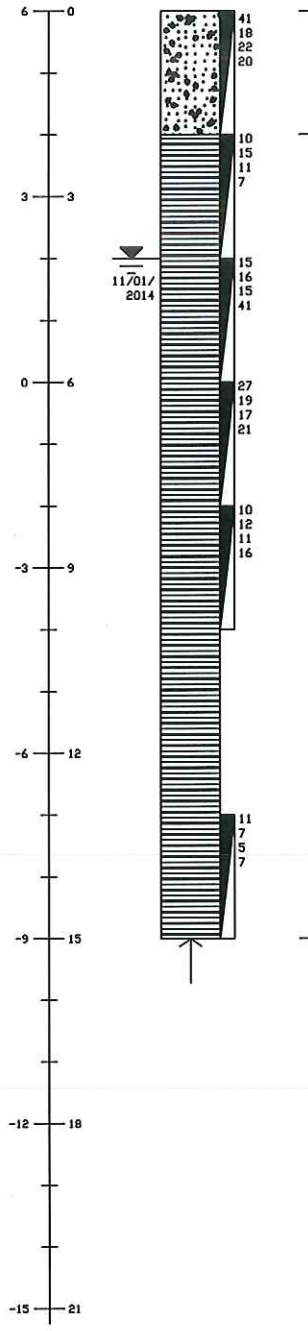
STANDARD PENETRATION TEST CURVE



Refer to Notes and Legend on separate sheet for additional information.
This Record of Test Boring is part of the project Geotechnical Report.
It should not be assumed that changes in the 'N-Value' are a linear function.
Soil and rock samples recovered using a ASTM D-1586 test proceedures.

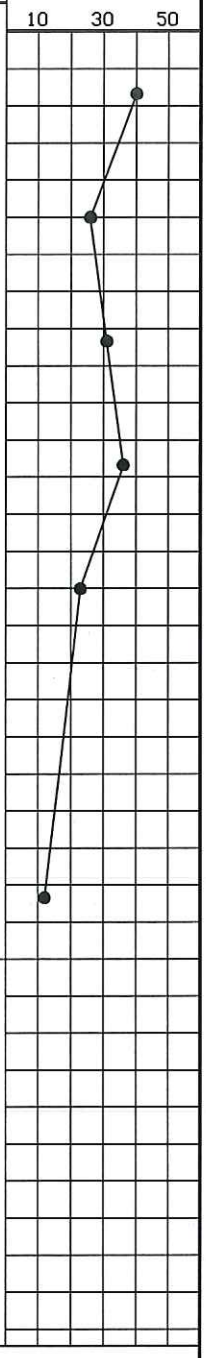
RECORD OF TEST BORING

PROJECT: Medley Flood Mitigation, Medley FL
BORING NO: B-2
PROJECT NO: 146678
START: 11/01/2014
FINISH: 11/01/2014
WEATHER: Sunny
BORING LOCATION: Refer to Test Location Plan
DRILLER: Carson/Parada
DRILL: CME-75
DRILL CONTRACTOR:
ELEVATION (EST.): + 6 Feet (NGVD)
GROUNDWATER: 4 feet (depth)
DATE CHECKED: 11/01/2014
BORING METHOD: Rotary drill with wash, mud & casing
FLUID LOSS: None
NOTES:



ELEV. / DEPTH	SOIL SYMBOLS AND FIELD TEST DATA	MAJOR SOIL COMPONENT	OTHER COMPONENTS	STANDARD PENETRATION TEST DEPTH	STANDARD PENETRATION TEST N
		LIMESTONE FRAGMENTS & SAND (PROBABLE FILL)	Dense, gray	0'-2'	40
		LIMESTONE	Soft, tan, with some sand	2'-4'	26
			Medium hard, gray, with some sand	4'-6'	31
			Medium hard, gray, with some sand	6'-8'	36
			Soft, tan, with some sand	8'-10'	23
			Medium dense, gray	13'-15'	12

STANDARD PENETRATION TEST CURVE



Refer to Notes and Legend on separate sheet for additional information.
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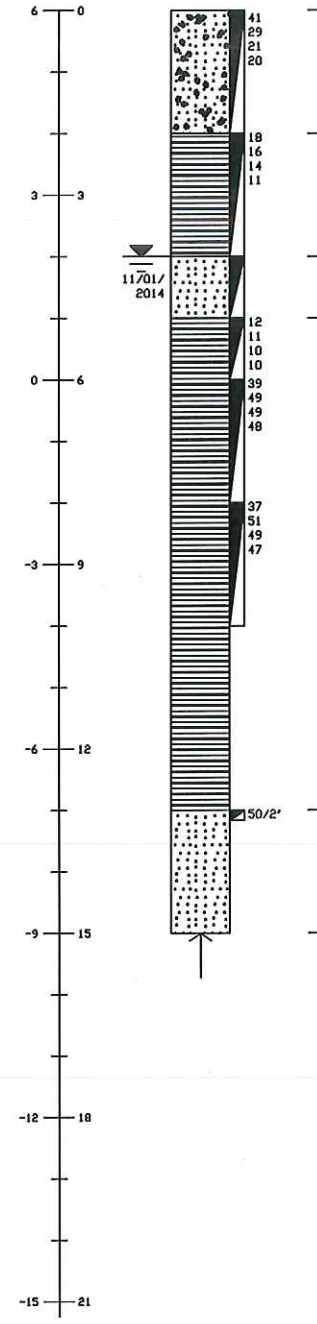
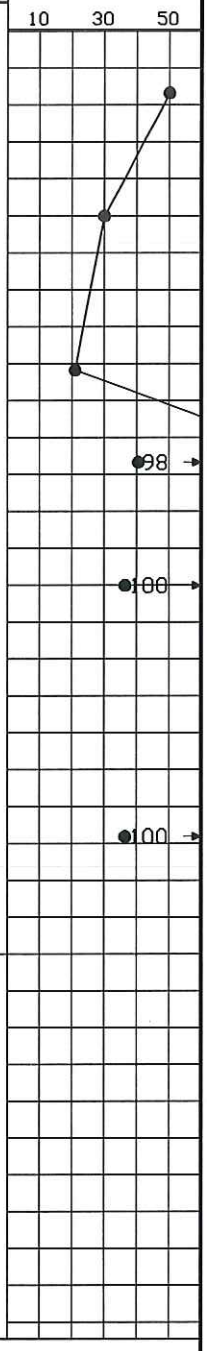
Soil and rock samples recovered using a ASTM D-1586 test proceedures.

RECORD OF TEST BORING

PROJECT: Medley Flood Mitigation, Medley FL
BORING NO: B-3
PROJECT NO: 146678
START: 11/01/2014
FINISH: 11/01/2014
WEATHER: Sunny
BORING LOCATION: Refer to Test Location Plan
DRILLER: Carson/Parada
DRILL: CME-75
DRILL CONTRACTOR:
ELEVATION (EST.): + 6 Feet (NGVD)
GROUNDWATER: 4 feet (depth)
DATE CHECKED: 11/01/2014
BORING METHOD: Rotary drill with wash, mud & casing
FLUID LOSS: None
NOTES:



ELEV. / DEPTH	MAJOR SOIL COMPONENT	OTHER COMPONENTS	STANDARD PENETRATION TEST DEPTH	N
	LIMESTONE FRAGMENTS & SAND (PROBABLE FILL)	Dense, gray	0'-2'	50
	LIMESTONE	Soft, tan, with some sand	2'-4'	30
	SAND	Dark brown sand	4'-5'	
	LIMESTONE	Soft, tan, with some sand	5'-6'	21
		Hard, gray, with some sand	6'-8'	98
		Hard, tan, with some sand	8'-10'	100
	SAND	Very dense, gray	13'-13' 2"	100



Refer to Notes and Legend on separate sheet for additional information.
This Record of Test Boring is part of the project Geotechnical Report.
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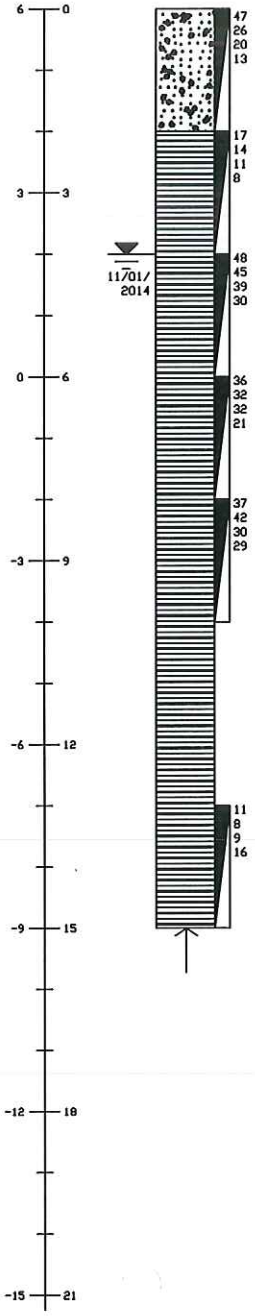
Soil and rock samples recovered using a ASTM D-1586 test proceedures.

RECORD OF TEST BORING

PROJECT: Medley Flood Mitigation, Medley FL
BORING NO: B-4
PROJECT NO: 146678 START: 11/01/2014 FINISH: 11/01/2014 WEATHER: Sunny
BORING LOCATION: Refer to Test Location Plan DRILLER: Carson/Parada
DRILL: CME-75 DRILL CONTRACTOR:
ELEVATION (EST.): + 6 Feet (NGVD) GROUNDWATER: 4 feet (depth) DATE CHECKED: 11/01/2014
BORING METHOD: Rotary drill with wash, mud & casing FLUID LOSS: None
NOTES:



ELEV. / DEPTH	SOIL SYMBOLS AND FIELD TEST DATA	MAJOR SOIL COMPONENT	OTHER COMPONENTS	STANDARD PENETRATION TEST DEPTH	N	CURVE (10 30 50)
		LIMESTONE FRAGMENTS & SAND (PROBABLE FILL)	Dense, gray	0'-2'	46	
		LIMESTONE	Soft, tan, with some sand	2'-4'	25	
			Hard, tan, with some sand	4'-6'	84	84 →
			Hard, tan, with some sand	6'-8'	64	64 →
			Hard, tan, with some sand	8'-10'	72	72 →
			Very soft, gray, with some sand	13'-15'	17	

Refer to Notes and Legend on separate sheet for additional information.
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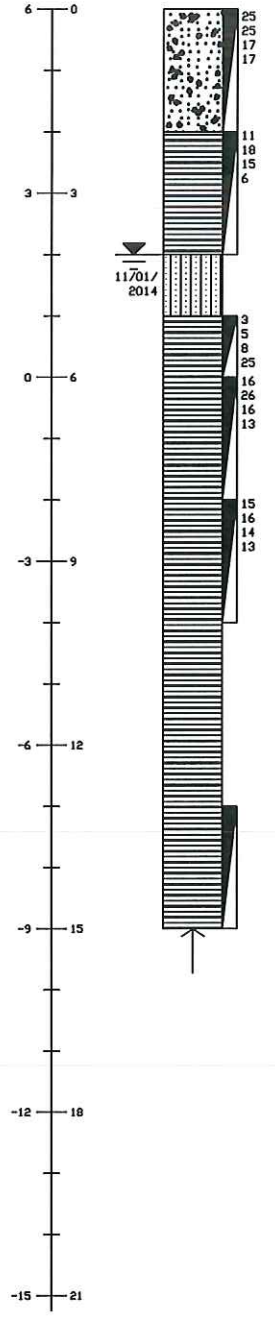
Soil and rock samples recovered using a ASTM D-1586 test proceedures.

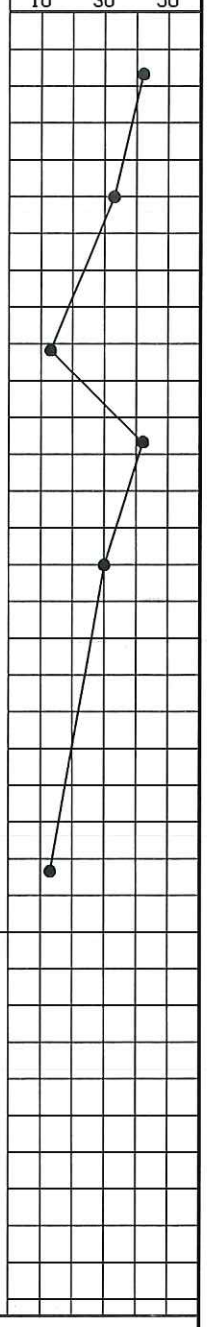
RECORD OF TEST BORING

PROJECT: Medley Flood Mitigation, Medley FL
BORING NO: B-5
PROJECT NO: 146678 START: 11/01/2014 FINISH: 11/01/2014
WEATHER: Sunny
BORING LOCATION: Refer to Test Location Plan
DRILLER: Carson/Parada
DRILL: CME-75 DRILL CONTRACTOR:
ELEVATION (EST.): + 6 Feet (NGVD) GROUNDWATER: 4 feet (depth)
DATE CHECKED: 11/01/2014
BORING METHOD: Rotary drill with wash, mud & casing
FLUID LOSS: None
NOTES:



ELEV. / DEPTH	SOIL SYMBOLS AND FIELD TEST DATA	MAJOR SOIL COMPONENT	OTHER COMPONENTS	STANDARD PENETRATION TEST DEPTH	N
		LIMESTONE FRAGMENTS & SAND (PROBABLE FILL)	Dense, gray	0'-2'	42
		LIMESTONE	Medium hard, tan, with some sand	2'-4'	33
		SILTY SAND	Brown	4'-5'	
		LIMESTONE	Very soft, tan, with some sand	5'-6'	13
			Medium hard, gray, with some sand	6'-8'	42
			Soft, tan, with some sand	8'-10'	30
			Very soft, gray, with some sand	13'-15'	13

STANDARD PENETRATION TEST CURVE



Refer to Notes and Legend on separate sheet for additional information.
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It should not be assumed that changes in the 'N-Value' are a linear function.
Soil and rock samples recovered using a ASTM D-1586 test proceedures.

KEY TO SYMBOLS

Symbol Description

Strata symbols

LIMESTONE FRAGMENTS & SAND

LIMESTONE

SILTY SAND

Sand

PEAT

Misc. Symbols

Groundwater level measured at boring completion. The date checked is indicated.

Boring continues

End of Boring

Soil Samplers

Standard penetration test.
140 lb. hammer dropped 30"

Notes:

1. Exploratory borings were drilled on 11/01/14 using a 4-inch diameter rotary drill with wash, mud and casing.

2. Groundwater was encountered at depth of 4 feet below grade upon boring completion.

3. Boring locations were taped from existing features and elevations estimated.

4. These logs are subject to the limitations, conclusions, and recommendations in this report.

5. Results of tests conducted on samples recovered are reported on the logs.

NV5

NOTES RELATED TO RECORDS OF TEST BORING AND GENERALIZED SUBSURFACE PROFILE

1. Groundwater level was encountered and recorded (if shown) following the completion of the soil test boring on the date indicated. Fluctuations in groundwater levels are common; consult report text for a discussion.

2. The boring location was identified in the field by offsetting from existing reference marks and using a cloth tape and survey wheel.

3. The borehole was backfilled to site grade following boring completion, and patched with asphalt cold patch mix when pavement was encountered.

4. The Record of Test Boring represents our interpretation of field conditions based on engineering examination of the soil samples.

5. The Record of Test Boring is subject to the limitations, conclusions and recommendations presented in the report text.

6. "Field Test Data" shown on the Record of Test Boring indicated as 11/6 refers to the Standard Penetration Test (SPT) and means 11 hammer blows drove the sampler 6 inches. SPT uses a 140-pound hammer falling 30 inches.

7. The N-value from the SPT is the sum of the hammer blows required to drive the sampler the second and third 6-inch increments.

8. The soil/rock strata interfaces shown on the Record of Test Boring are approximate and may vary from those shown. The soil/rock conditions shown on the Record of Test Boring refer to conditions at the specific location tested; soil/rock conditions may vary between test locations.

9. Relative density for sands/gravels and consistency for silts/clays and limestone are described as follows:

SPT Blows/ Foot	Sands/Gravels Relative Density	SPT Blows/Foot	Silt/Clay Relative Consistency	SPT Blows/ Foot	Limestone Relative Consistency
0-4	Very loose	0-2	Very Soft	0-20	Very Soft
5-10	Loose	3-4	Soft	21-30	Soft
11-30	Medium Dense	5-8	Firm	31-45	Medium Hard
31-50	Dense	9-15	Stiff	46-60	Moderately Hard
Over 50	Very Dense	16-30	Very Stiff	61-50/2"	Hard
		Over 30	Hard	Over 50/2"	Very Hard

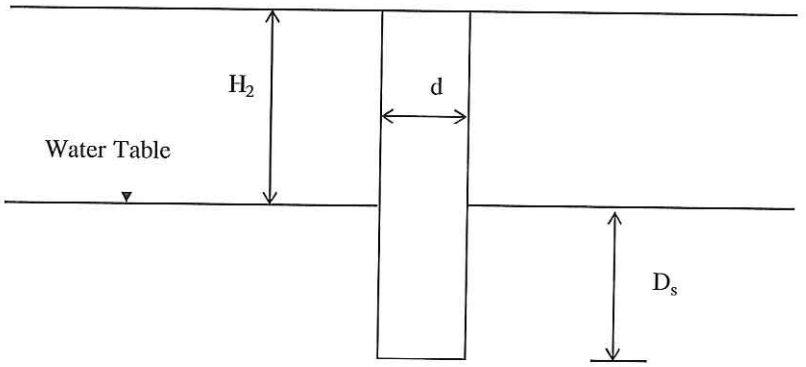
10. Grain size descriptions are as follows:

NAME	SIZE LIMITS
Boulder	12 inches or more
Cobbles	3 to 12 inches
Coarse Gravel	3/4 to 3 inches
Fine Gravel	No. 4 sieve to 3/4 inch
Coarse Sand	No. 10 to No. 4 sieve
Medium Sand	No. 40 to No. 10 sieve
Fine Sand	No. 200 to No. 40 sieve
Fines	Smaller than No. 200 sieve

11. Definitions related to adjectives used in soil/rock descriptions:

PROPORTION	ADJECTIVE	APPROXIMATE ROOT DIAMETER	ADJECTIVE
About 10%	with a trace	Less than 1/32"	Fine roots
About 25%	with some	1/32" to 1/4"	Small roots
About 50%	and	1/4" to 1"	Medium roots
		Greater than 1"	Large roots

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

4.45E-03 CFS/FT^2-FT HEAD

Q =	Average Flow Rate =	0.169329 CFS
d =	Diameter of Test Hole =	0.5 feet
H_2 =	Head on Water Table =	2.0 feet
D_s =	Saturated Hole Depth =	11.0 feet

TEST LOCATION :		Dee Drawing No. 1
TEST ELEVATION :		+6.0 Feet NGVD
DEPTH TO WATER TABLE :	4.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	76.00	GPM

SOIL PROFILE :

0.0' - 2.0'	Gray Limestone Fragments and Sand
2.0' - 4.0'	Tan Limestone
4.0' - 5.0'	Brown Sand
5.0' - 15.0'	Tan and Gray Limestone

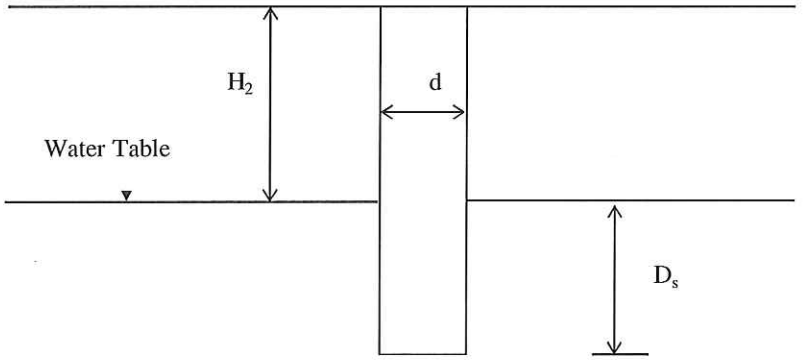
NOTES: The soil profile is determined by cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise the water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	11/01/14	146678	P-1 (2014)	TC/HP	

NV5, Inc.
Geotechnical, Environmental and Construction
Materials Testing Engineers
14486 Commerce Way, Miami Lakes, Florida 33016
Telephone: (305) 666-3563 Facsimile: (305) 666-3069

Flood Mitigation Project
NW 93rd Street
Between NW 87th Ave. & FEC RR Tracks
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

2.81E-03 CFS/FT^2-FT HEAD

Q =	Average Flow Rate =	0.167101 CFS
d =	Diameter of Test Hole =	0.5 feet
H_2 =	Head on Water Table =	3.0 feet
D_s =	Saturated Hole Depth =	11.0 feet

TEST LOCATION :		Dee Drawing No. 1
TEST ELEVATION :		+6.0 Feet NGVD
DEPTH TO WATER TABLE :	4.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	75.00	GPM

SOIL PROFILE :

0.0' - 2.0'	Gray Limestone Fragments and Sand
2.0' - 15.0'	Tan and Gray Limestone

NOTES: The soil profile is determined by cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise the water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	11/01/14	146678	P-2 (2014)	TC/HP	

NV5, Inc.
Geotechnical, Environmental and Construction
Materials Testing Engineers
14486 Commerce Way, Miami Lakes, Florida 33016
Telephone: (305) 666-3563 Facsimile: (305) 666-3069

Flood Mitigation Project
NW 93rd Street
Between NW 87th Ave. & FEC RR Tracks
Medley, Florida

APPENDIX

June 23, 2008

Town of Medley
7331 N.W. 74th Street
Medley, Florida 33166
October 30, 2007

Attention: The Honorable Ramon Rodriguez

Reference: Standard Penetration Tests
Flood Mitigation Grant
Medley, Florida
Project No. 144891

Gentlemen,

In accordance with your authorization, Bureau Veritas North America, Inc. has performed Standard Penetration Tests (SPT's) at the above referenced site, as detailed in the attached Boring Logs B-1 to B-79 and Location Plan. Boring locations were determined by Westhorp & Associates. Depths were terminated for each test, as per your instructions and were performed in general accordance with ASTM D-1586. Please refer to the attached Notes Related to Standard Penetration Test Boring Logs.

Ninety Standard Penetration Tests were scheduled for the project. This report includes the first sixty nine SPT's performed up to date.

Bureau Veritas appreciates the opportunity to provide our engineering services on this project. If you have any questions regarding these tests or if we may be of further assistance, please don't hesitate to contact us.

Respectfully submitted,
BUREAU VERITAS NORTH AMERICA, INC.

Victor R. Lopez, E.I.
Project Engineer

Alfredo Budik, P.E.
Vice President
Florida License No. 43884

Distribution: 2 – Client
1 – Westhorp & Associates

Enclosures: Notes Related to Standard Penetration Test Boring Logs
Boring Logs B-1 to B-79 (69 Tests)
Borings Location Plan

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-1

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/7/08 **COMPLETED** 6/7/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	37-30-24-27 (54)		
2.5		SS 2	63	30-21-18-43 (39)		
5.0	Tan SANDY LIMESTONE, some Silt	SS 3	63	23-15-13-16 (28)		
7.5		SS 4	63	11-12-13-14 (25)		
10.0		SS 5	67	8-8-11-12 (19)		
12.5		SS 6	58	8-7-8-10 (15)		
		SS 7	58	7-8-8-9 (16)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-2

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/7/08 **COMPLETED** 6/7/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	75	33-33-25-29 (58)		
2.5			SS 2	67	28-31-21-34 (52)		
		Tan SANDY LIMESTONE	SS 3	67	42-31-24-20 (55)		
5.0		▼					
			SS 4	63	10-16-16-15 (32)		
7.5		Tan fine grained SAND	SS 5	58	6-7-10-13 (17)		
10.0			SS 6	58	6-11-11-10 (22)		
12.5			SS 7	58	7-10-9-11 (19)		
		Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-3

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/7/08 **COMPLETED** 6/7/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	63	51-31-39-49 (70)		
2.5		SS 2	63	61-51-61-70 (112)		
5.0	Tan SANDY LIMESTONE	SS 3	58	25-51-33-100 (84)		
7.5		SS 4	54	30-29-28-22 (57)		
10.0		SS 5	50	20-21-22-22 (43)		
12.5		SS 6	50	18-17-17-15 (34)		
	Brown fine grained SAND	SS 7	50	10-9-10-9 (19)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-4

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.7 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.7 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	27-23-17-12 (40)		
2.5	Tan SANDY LIMESTONE	SS 2	92	10-11-16-21 (27)		
5.0		SS 3	83	15-17-9-11 (26)		
7.5		SS 4	92	7-7-5-6 (12)		
10.0		SS 5	92	4-5-4-5 (9)		
12.5		SS 6	92	6-7-8-7 (15)		
		SS 7	83	12-10-10-12 (20)		
	Bottom of hole at 14.0 feet.					

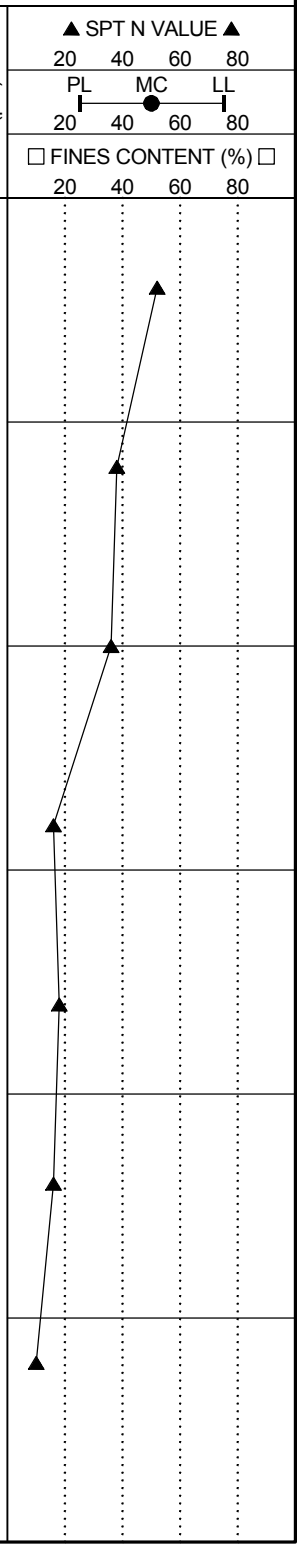
▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-5

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/9/08 **COMPLETED** 6/9/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.3 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.3 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	92	43-35-17-13 (52)		
2.5		SS 2	92	13-15-23-28 (38)		
	Dark brown SILTY SAND with Organics Tan SANDY LIMESTONE					
5.0		SS 3	83	20-20-16-14 (36)		
		SS 4	92	12-8-8-8 (16)		
7.5		SS 5	83	7-10-8-15 (18)		
10.0		SS 6	92	10-8-8-7 (16)		
12.5		SS 7	92	5-5-5-4 (10)		
	Bottom of hole at 14.0 feet.					



BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-6

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/7/08 **COMPLETED** 6/7/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	34-27-32-52 (59)		
2.5		SS 2	67	33-23-61-52 (84)		
5.0	Tan SANDY LIMESTONE	SS 3	63	37-32-30-31 (62)		
7.5		SS 4	54	19-17-14-9 (31)		
10.0		SS 5	50	9-8-7-6 (15)		
12.5		SS 6	50	6-5-4-4 (9)		
		SS 7	50	4-5-4-4 (9)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-7

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/7/08 **COMPLETED** 6/7/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	63	51-16-12-10 (28)		
2.5		SS 2	67	14-26-33-20 (59)		
5.0	Dark brown SILTY SAND with Organics	SS 3	58	4-2-2-3 (4)		
7.5	Dark brown SILTY SAND with traces of Organic stain	SS 4	50	1-1-1-13 (2)		
10.0	Tan SANDY LIMESTONE	SS 5	54	14-12-9-8 (21)		
12.5	Tan fine grained SAND	SS 6	50	8-9-14-15 (23)		
	Tan SANDY LIMESTONE	SS 7	50	10-12-13-14 (25)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

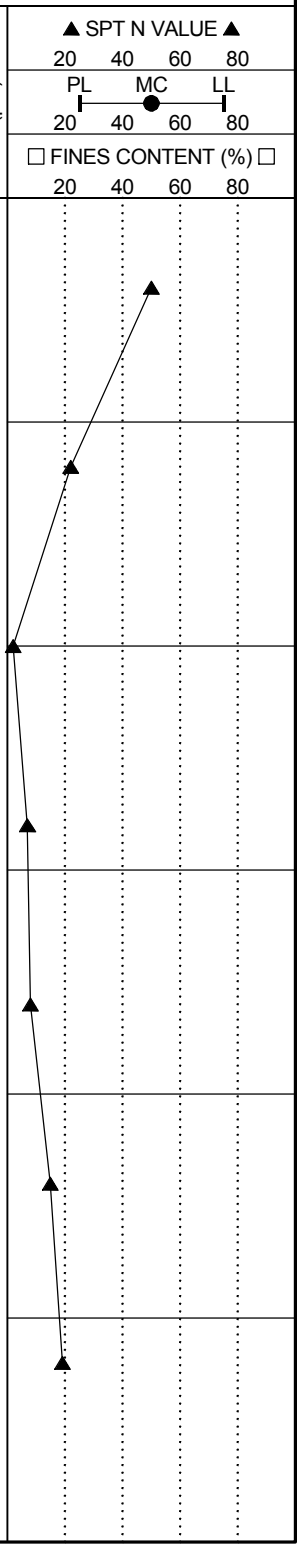
GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-8

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.8 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.8 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS, some SILT	SS 1	83	20-25-25-17 (50)		
2.5		SS 2	92	12-15-7-7 (22)		
5.0	Light brown SILTY SAND Dark brown SILTY SAND with Organics	SS 3	100	4-1-1-1 (2)		
7.5	Brown SILTY SAND	SS 4	100	2-4-3-2 (7)		
10.0	Tan SANDY LIMESTONE	SS 5	83	3-4-4-5 (8)		
12.5		SS 6	83	6-7-8-7 (15)		
		SS 7	92	8-10-9-10 (19)		
	Bottom of hole at 14.0 feet.					



BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-9

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/8/08 **COMPLETED** 6/8/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.25-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	51-23-24-52 (47)		
2.5	Brown SILTY SAND	SS 2	54	22-16-15-10 (31)		
5.0	Dark brown SILTY SAND with Organics Tan SANDY LIMESTONE	SS 3	58	5-5-7-8 (12)		
7.5		SS 4	54	4-5-5-5 (10)		
10.0	Brown SILTY SAND Tan SANDY LIMESTONE	SS 5	50	4-1-2-16 (3)		
12.5		SS 6	50	9-9-5-4 (14)		
		SS 7	50	4-4-5-4 (9)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-10

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	18-16-18-12 (34)		
2.5	Dark brown SILTY SAND, some Limestone Fragments	SS 2	92	4-4-4-4 (8)		
	Dark brown SILTY SAND with Organics	SS 3	96	2-2-4-10 (6)		
5.0	Tan SANDY LIMESTONE	SS 4	83	11-10-11-15 (21)		
7.5		SS 5	83	8-10-10-10 (20)		
10.0		SS 6	83	12-14-12-10 (26)		
12.5		SS 7	83	14-18-13-10 (31)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-11

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.7 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.7 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	20-18-10-13 (28)		
2.5	Dark brown SILTY SAND with Organics	SS 2	92	9-4-2-2 (6)		
5.0	Tan SANDY LIMESTONE	SS 3	100	5-15-15-14 (30)		
7.5		SS 4	96	13-13-15-15 (28)		
10.0		SS 5	96	11-8-8-8 (16)		
12.5		SS 6	83	12-13-18-12 (31)		
		SS 7	83	10-11-13-10 (24)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
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North Miami Beach
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BORING NUMBER B-12

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/8/08 **COMPLETED** 6/8/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.12-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	36-17-11-12 (28)		
2.5		SS 2	63	9-11-11-8 (22)		
5.0	Brown SILTY SAND with Organics	SS 3	63	4-1-2-7 (3)		
	Brown fine grained SAND	SS 4	58	7-6-6-6 (12)		
7.5		SS 5	54	7-9-19-24 (28)		
10.0	Brown SANDY LIMESTONE, some silt	SS 6	50	18-16-15-15 (31)		
12.5		SS 7	50	10-11-11-10 (22)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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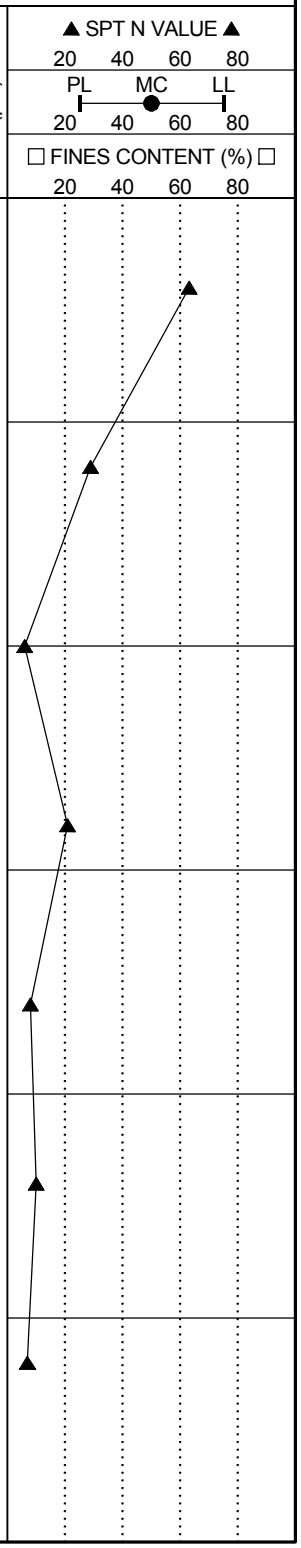
BORING NUMBER B-13

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/8/08 **COMPLETED** 6/8/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	51-32-31-20 (63)		
2.5		SS 2	58	14-14-15-21 (29)		
5.0	Dark brown SILTY SAND with Organics	SS 3	67	5-4-2-3 (6)		
7.5	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 4	58	4-8-13-14 (21)		
		SS 5	50	6-4-4-7 (8)		
10.0	Brown SANDY LIMESTONE	SS 6	50	8-6-4-3 (10)		
12.5		SS 7	50	4-4-3-4 (7)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-14

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/8/08 **COMPLETED** 6/8/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 5.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 5.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	40-26-20-23 (46)		
2.5		SS 2	63	30-17-14-20 (31)		
5.0		SS 3	58	19-20-15-10 (35)		
7.5	Dark brown SILTY SAND with Organics	SS 4	50	8-7-4-4 (11)		
10.0	Brown SANDY LIMESTONE	SS 5	50	8-8-6-7 (14)		
12.5	Tan SANDY LIMESTONE	SS 6	50	11-10-12-12 (22)		
		SS 7	50	10-10-11-11 (21)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-15

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.7 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.7 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	92	27-17-8-8 (25)		
2.5		SS 2	75	4-2-1-1 (3)		
5.0	Light brown SILTY SAND	SS 3	25	0-1-1-1 (2)		
7.5	Light brown SANDY LIMESTONE, some SILT	SS 4	25	1-0-0-1 (0)		
10.0	Tan SANDY LIMESTONE	SS 5	75	2-6-6-6 (12)		
12.5		SS 6	67	4-8-3-6 (11)		
		SS 7	75	5-10-8-6 (18)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-16

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Light brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	22-15-14-9 (29)		
2.5	Brown SILTY SAND	SS 2	100	6-4-4-12 (8)		
	Tan SANDY LIMESTONE	SS 3	100	12-8-9-18 (17)		
5.0	▼	SS 4	96	15-18-10-13 (28)		
7.5		SS 5	92	5-9-9-7 (18)		
10.0		SS 6	92	10-13-12-11 (25)		
12.5		SS 7	83	10-12-11-9 (23)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-17

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/8/08 **COMPLETED** 6/8/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Asphalt (0.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	63	37-26-40-50 (66)		
2.5			SS 2	63	50-40-31-19 (71)		
		Tan SANDY LIMESTONE	SS 3	54	23-16-20-20 (36)		
5.0		▼					
			SS 4	58	18-17-16-16 (33)		
7.5			SS 5	50	12-5-6-8 (11)		
10.0			SS 6	50	7-5-6-5 (11)		
12.5			SS 7	50	5-5-6-5 (11)		
		Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-18

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	92	30-45-20-13 (65)		
2.5		SS 2	96	13-17-17-16 (34)		
5.0		SS 3	96	15-9-5-2 (14)		
	Dark brown SILTY SAND	SS 4	96	2-5-13-15 (18)		
7.5	Tan SANDY LIMESTONE	SS 5	92	10-9-7-6 (16)		
10.0		SS 6	92	13-10-9-8 (19)		
12.5		SS 7	83	12-12-14-10 (26)		
	Bottom of hole at 14.0 feet.					

SPT N VALUE
20 40 60 80
PL MC LL
20 40 60 80
FINES CONTENT (%)
20 40 60 80

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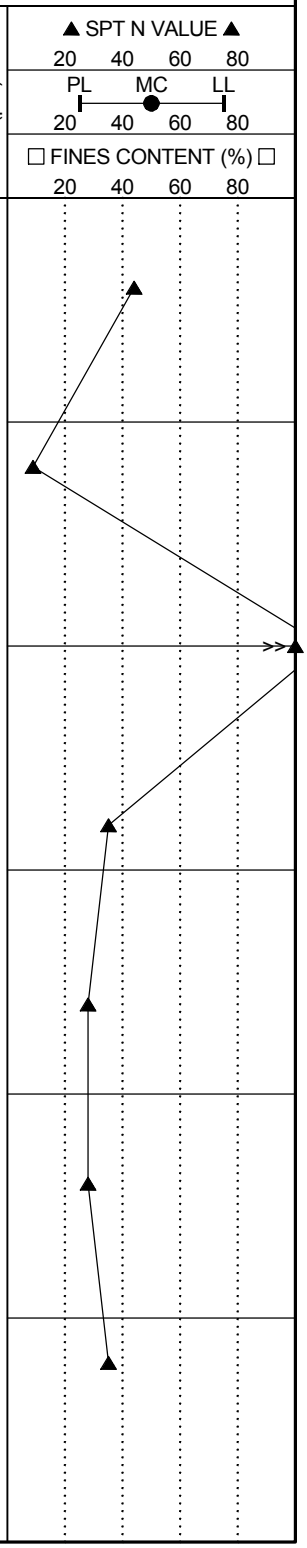
BORING NUMBER B-19

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/4/08 **COMPLETED** 6/4/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	20-27-17-4 (44)		
2.5	Brown fine to medium grained SAND	SS 2	92	3-2-7-13 (9)		
	Tan SANDY LIMESTONE					
5.0		SS 3	100	68-78-32-28 (110)		
7.5		SS 4	100	22-19-16-16 (35)		
		SS 5	100	8-14-14-14 (28)		
10.0		SS 6	92	15-16-12-10 (28)		
12.5		SS 7	92	18-18-17-12 (35)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-20

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/9/08 **COMPLETED** 6/9/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.7 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.7 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1-inch) Light brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	25-25-35-75 (60)		
2.5		SS 2	100	98-50/1"		
5.0		SS 3	42	6-8-14-14 (22)		
7.5	Brown SILTY SAND, some Limestone fragments	SS 4	42	12-10-12-12 (22)		
10.0	Tan SANDY LIMESTONE	SS 5	42	15-19-25-27 (44)		
12.5		SS 6	50	18-10-7-8 (17)		
		SS 7	50	10-11-11-10 (22)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-21

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	16-17-9-7 (26)		
2.5		SS 2	92	5-5-9-18 (14)		
5.0		SS 3	83	38-19-10-19 (29)		
	Dark brown SILTY SAND					
	Tan SANDY LIMESTONE	SS 4	83	5-10-11-19 (21)		
7.5		SS 5	92	15-15-12-13 (27)		
10.0		SS 6	92	11-8-11-8 (19)		
12.5		SS 7	96	6-8-8-8 (16)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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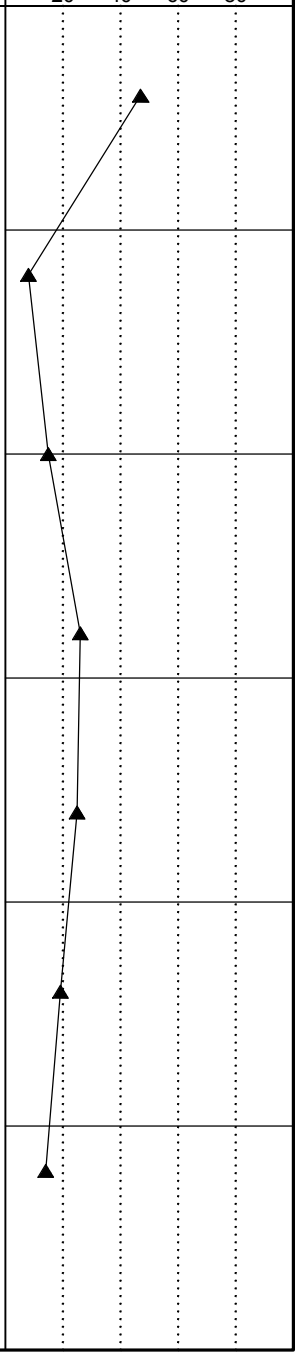
BORING NUMBER B-22

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/20/08 **COMPLETED** 6/20/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	71	42-25-22-12 (47)		
2.5		SS 2	83	7-4-4-9 (8)		
5.0	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	71	9-6-9-9 (15)		
	Tan SANDY LIMESTONE	SS 4	54	15-14-12-13 (26)		
7.5		SS 5	42	12-17-8-9 (25)		
10.0		SS 6	50	6-11-8-11 (19)		
12.5		SS 7	46	13-5-9-8 (14)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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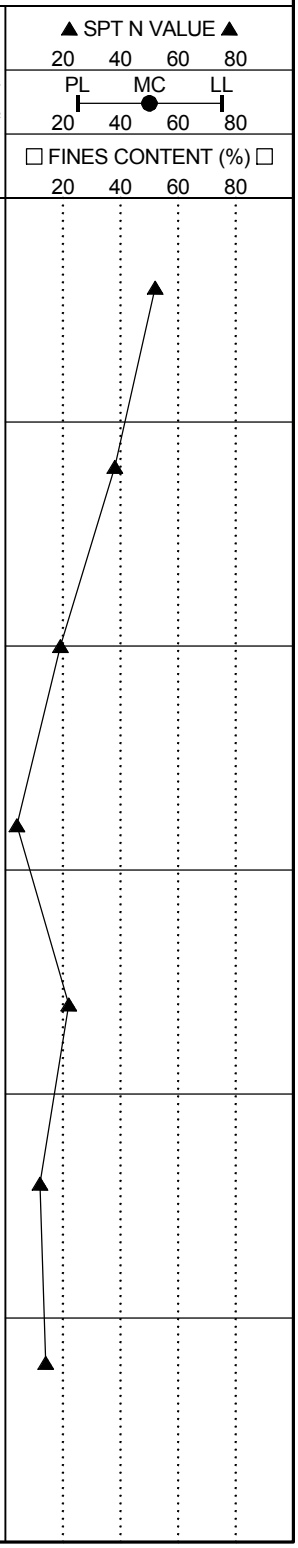
BORING NUMBER B-23

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	92	30-22-30-15 (52)		
2.5		SS 2	92	11-15-23-13 (38)		
5.0	Dark brown SILTY SAND	SS 3	96	12-11-8-6 (19)		
	Brown SILTY SAND	SS 4	88	6-3-1-11 (4)		
7.5	Tan SANDY LIMESTONE	SS 5	92	9-14-8-12 (22)		
10.0		SS 6	83	8-7-5-5 (12)		
12.5		SS 7	75	5-7-7-8 (14)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-24

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	41-22-24-19 (46)		
2.5	Gray fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	58	26-26-21-9 (47)		
5.0	Dark brown SILTY SAND with Organics	SS 3	58	3-2-4-5 (6)		
	Tan SANDY LIMESTONE	SS 4	100	100/2"		
7.5		SS 5	42	11-11-10-13 (21)		
10.0		SS 6	38	12-13-12-14 (25)		
12.5		SS 7	38	11-12-13-15 (25)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-25

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/9/08 **COMPLETED** 6/9/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	58	49-31-30-18 (61)		
2.5	Light brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	50	41-31-32-22 (63)		
5.0	Dark brown SILTY SAND with Organics	SS 3	58	8-9-14-16 (23)		
	Tan SANDY LIMESTONE	SS 4	67	6-6-17-28 (23)		
7.5		SS 5	75	31-30-24-23 (54)		
10.0		SS 6	71	14-12-10-10 (22)		
12.5		SS 7	67	10-10-12-10 (22)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-26

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	28-28-18-18 (46)		
2.5	Dark brown SILTY SAND with Organics Tan SANDY LIMESTONE	SS 2	83	18-22-11-8 (33)		
5.0		SS 3	83	14-20-11-12 (31)		
7.5		SS 4	75	13-10-11-8 (21)		
10.0		SS 5	75	7-6-8-9 (14)		
12.5		SS 6	71	10-9-7-6 (16)		
		SS 7	83	11-8-9-10 (17)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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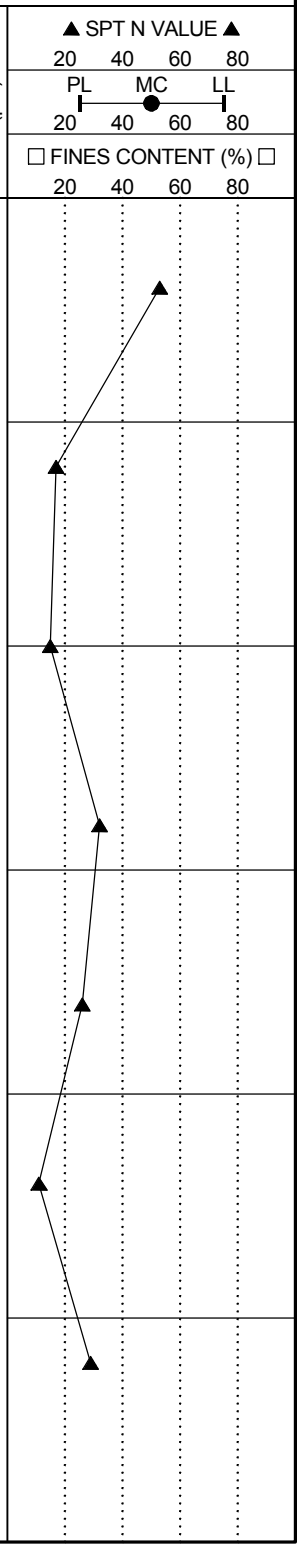
BORING NUMBER B-27

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium SAND with LIMESTONE FRAGMENTS	SS 1	67	57-26-27-37 (53)		
2.5		SS 2	67	17-9-8-7 (17)		
5.0	Brown SANDY LIMESTONE	SS 3	63	9-11-4-16 (15)		
7.5	Tan SANDY LIMESTONE	SS 4	54	24-16-16-23 (32)		
		SS 5	58	12-13-13-12 (26)		
10.0		SS 6	50	10-7-4-24 (11)		
12.5		SS 7	50	12-15-14-14 (29)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-28

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.7 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.7 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	27-30-20-28 (50)		
2.5		SS 2	96	22-14-14-11 (28)		
5.0	Tan SANDY LIMESTONE	SS 3	92	5-3-8-11 (11)		
7.5		SS 4	92	7-7-6-7 (13)		
10.0		SS 5	67	3-5-3-6 (8)		
		SS 6	75	8-10-11-36 (21)		
12.5		SS 7	100	50/5"		
	Bottom of hole at 12.5 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-29

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/9/08 **COMPLETED** 6/9/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Light brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	62-33-46-16 (79)		
2.5	Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	92	12-28-17-14 (45)		
5.0	Tan SANDY LIMESTONE	SS 3	75	6-7-7-6 (14)		
		SS 4	71	8-10-7-8 (17)		
7.5		SS 5	75	5-5-5-6 (10)		
10.0		SS 6	71	5-3-4-4 (7)		
12.5		SS 7	42	4-10-15-18 (25)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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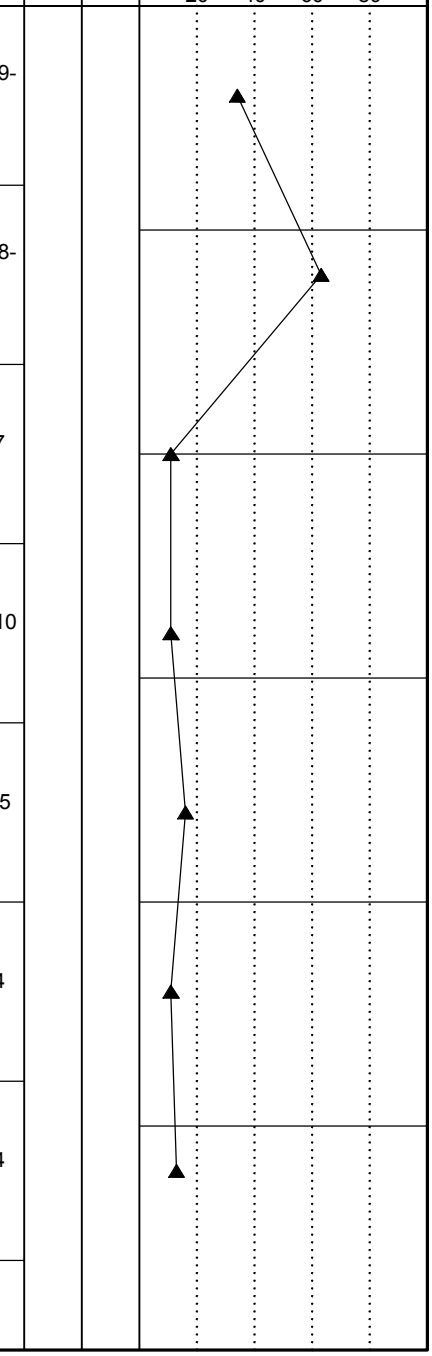
BORING NUMBER B-30

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine grained SAND with LIMESTONE FRAGMENTS	SS 1	100	18-15-19-22 (34)		
	Brown SILTY SAND with LIMESTONE FRAGMENTS					
2.5	Gray fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	100	28-35-28-52 (63)		
5.0	Brown SILTY SAND	SS 3	96	6-5-6-7 (11)		
	Light brown fine grained SAND	SS 4	96	1-1-10-10 (11)		
7.5	Tan SANDY LIMESTONE	SS 5	92	10-9-7-5 (16)		
10.0		SS 6	96	5-6-5-4 (11)		
12.5		SS 7	83	6-6-7-4 (13)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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BORING NUMBER B-31

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/5/08 **COMPLETED** 6/5/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	96	30-20-20-18 (40)		
2.5	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 2	92	10-4-3-4 (7)		
5.0	Tan SANDY LIMESTONE	SS 3	83	3-3-2-15 (5)		
		SS 4	83	5-12-17-15 (29)		
7.5		SS 5	75	14-14-14-14 (28)		
10.0		SS 6	83	17-14-12-8 (26)		
12.5		SS 7	75	9-9-11-7 (20)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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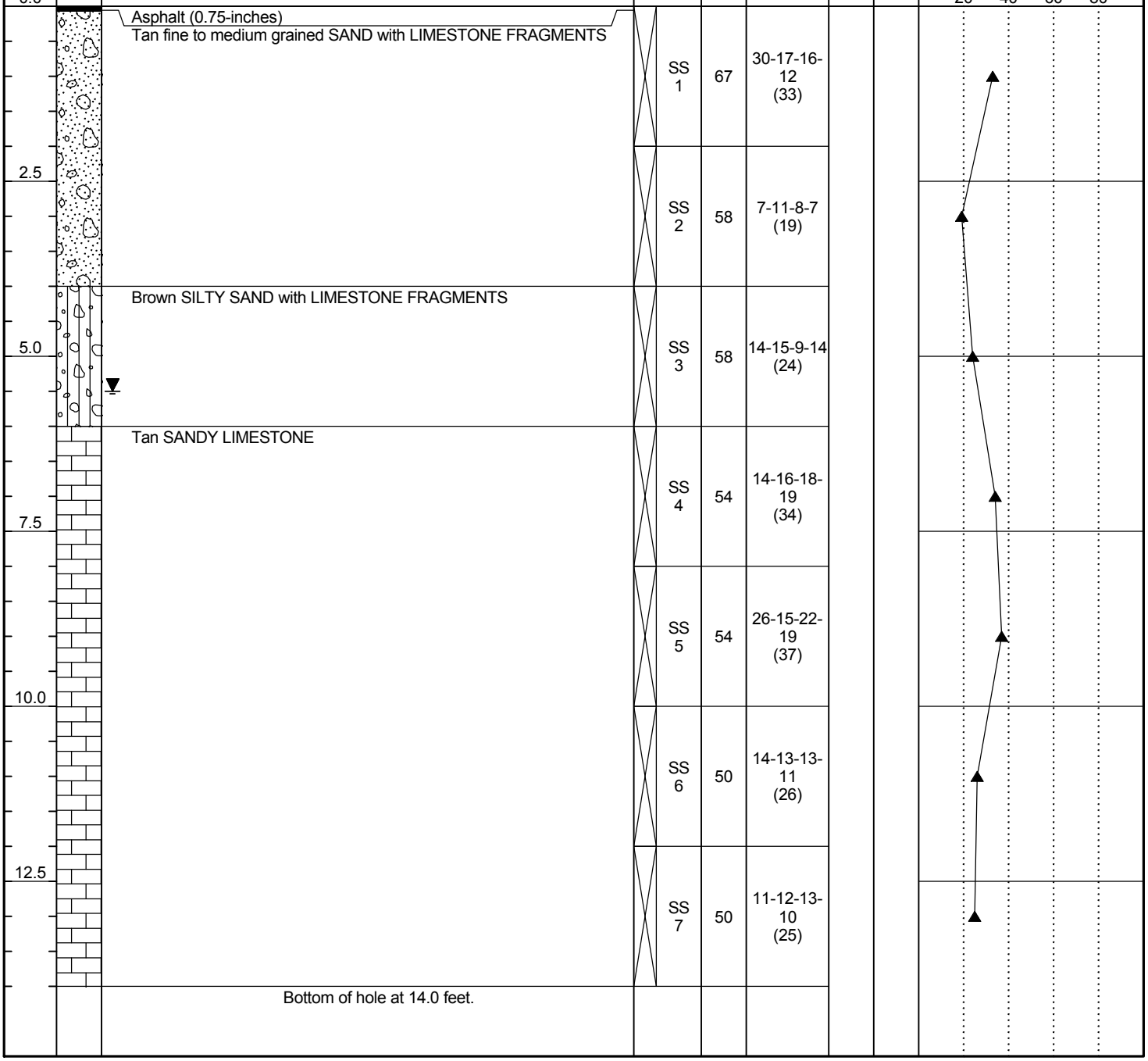
BORING NUMBER B-32

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.5 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.75-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	30-17-16-12 (33)		
2.5		SS 2	58	7-11-8-7 (19)		
5.0	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	58	14-15-9-14 (24)		
7.5	Tan SANDY LIMESTONE	SS 4	54	14-16-18-19 (34)		
		SS 5	54	26-15-22-19 (37)		
10.0		SS 6	50	14-13-13-11 (26)		
12.5		SS 7	50	11-12-13-10 (25)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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BORING NUMBER B-33

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/20/08 **COMPLETED** 6/20/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.5-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	30-27-15-20 (42)		
2.5	Gray fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	78	12-12-27-50/5"		
5.0		SS 3	63	32-29-32-20 (61)		
7.5	Tan SANDY LIMESTONE	SS 4	63	17-10-20-42 (30)		
10.0		SS 5	50	28-5-8-40 (13)		
12.5		SS 6	46	10-10-5-4 (15)		
		SS 7	50	10-5-4-8 (9)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-34

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/20/08 **COMPLETED** 6/20/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	50	24-9-16-12 (25)		
2.5		SS 2	54	10-18-9-13 (27)		
5.0	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	42	14-8-9-11 (17)		
7.5		SS 4	58	8-12-8-9 (20)		
	Tan SANDY LIMESTONE	SS 5	46	12-12-11-13 (23)		
10.0		SS 6	54	10-11-11-14 (22)		
12.5		SS 7	50	6-9-9-13 (18)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-35

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	42-24-22-12 (46)		
2.5		SS 2	67	13-16-20-16 (36)		
5.0	Brown SANDY LIMESTONE	SS 3	63	18-18-17-11 (35)		
7.5	Tan SANDY LIMESTONE	SS 4	54	6-5-4-8 (9)		
10.0		SS 5	58	14-15-14-9 (29)		
12.5		SS 6	54	7-9-10-11 (19)		
		SS 7	50	9-10-10-10 (20)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-36

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/20/08 **COMPLETED** 6/20/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 7.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 7.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	71	32-15-14-14 (29)		
2.5		SS 2	50	15-25-14-12 (39)		
5.0	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	63	9-10-11-7 (21)		
	Tan SANDY LIMESTONE	SS 4	46	7-9-6-11 (15)		
7.5		SS 5	67	9-18-16-14 (34)		
10.0		SS 6	58	13-7-9-10 (16)		
12.5		SS 7	46	10-11-9-11 (20)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

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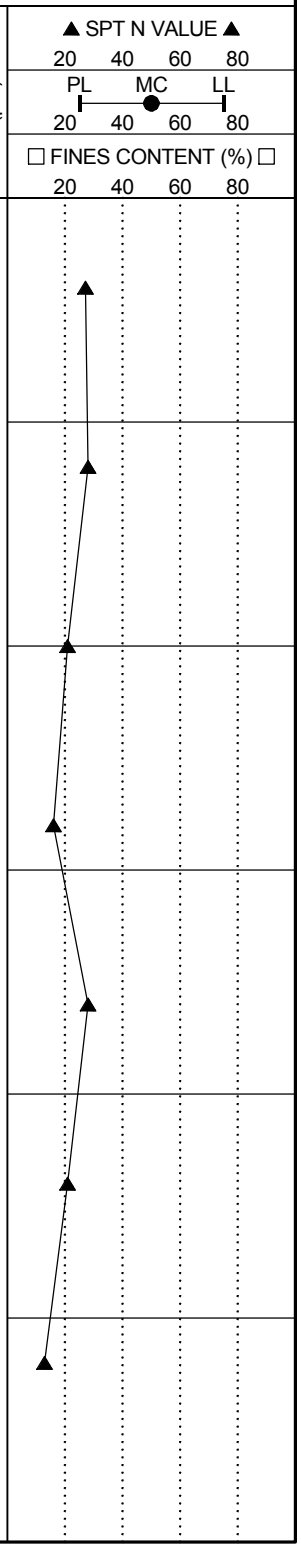
BORING NUMBER B-37

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/20/08 **COMPLETED** 6/20/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 7.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 7.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	30-15-12-10 (27)		
2.5	Dark brown SILTY SAND with Organic stain	SS 2	79	5-15-13-15 (28)		
	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	71	13-8-13-5 (21)		
5.0	Tan SANDY LIMESTONE	SS 4	83	4-8-8-12 (16)		
7.5		SS 5	75	13-14-14-12 (28)		
10.0		SS 6	54	9-9-12-11 (21)		
12.5		SS 7	63	6-8-5-8 (13)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-38

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/18/08 **COMPLETED** 6/18/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (3-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	79	25-22-13-11 (35)		
2.5	Dark brown SILTY SAND with Organics	SS 2	71	5-10-18-18 (28)		
5.0	Tan SANDY LIMESTONE	SS 3	75	5-10-15-7 (25)		
7.5		SS 4	50	10-12-10-10 (22)		
10.0	Brown fine grained SAND Tan SANDY LIMESTONE	SS 5	42	12-14-10-10 (24)		
12.5		SS 6	42	11-10-13-10 (23)		
		SS 7	42	12-10-9-8 (19)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-39

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	58	82-36-29-35 (65)		
2.5		SS 2	67	17-33-31-22 (64)		
5.0	Brown fine grained SAND	SS 3	71	18-18-17-17 (35)		
	Tan SANDY LIMESTONE	SS 4	67	14-19-21-15 (40)		
7.5		SS 5	58	18-22-12-11 (34)		
10.0		SS 6	63	8-10-17-13 (27)		
12.5		SS 7	58	10-9-8-10 (17)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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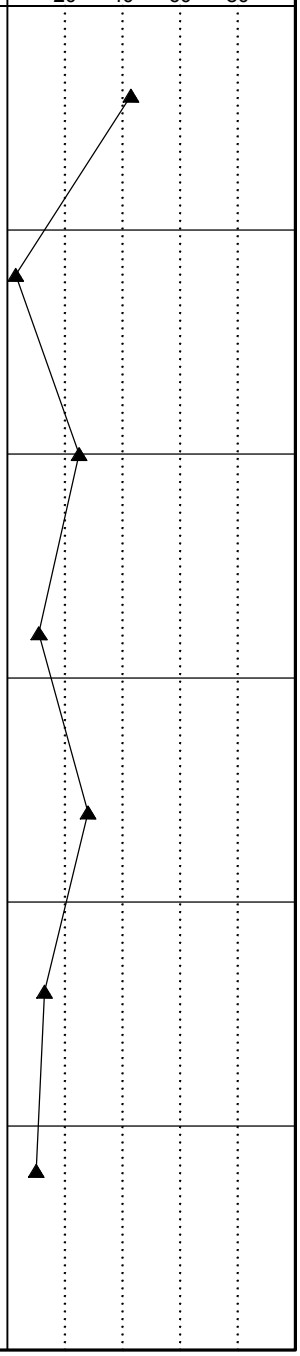
BORING NUMBER B-40

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	35-24-19-12 (43)		
2.5	Dark brown SILTY SAND with Organics	SS 2	67	3-1-2-2 (3)		
5.0	Tan SANDY LIMESTONE	SS 3	67	6-12-13-11 (25)		
7.5		SS 4	67	8-5-6-11 (11)		
		SS 5	63	13-12-16-10 (28)		
10.0		SS 6	58	8-7-6-6 (13)		
12.5		SS 7	58	5-5-5-6 (10)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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North Miami Beach
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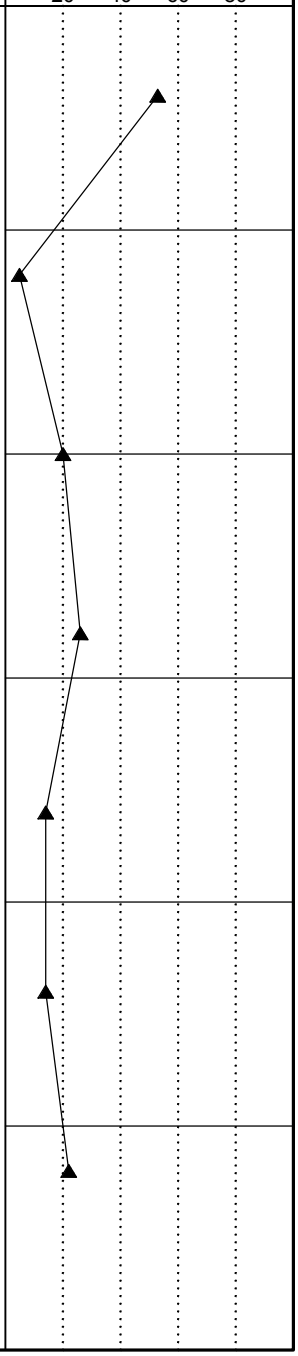
Fax: 786-248-3190

BORING NUMBER B-41

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.25-inches) Brown fine grained SAND with LIMESTONE FRAGMENTS	SS 1	75	68-35-18-15 (53)		
2.5	Dark brown SILTY SAND with LIMESTONE FRAGMENTS Brown SILTY SAND	SS 2	71	2-2-3-6 (5)		
5.0	Tan SANDY LIMESTONE	SS 3	75	9-11-9-7 (20)		
7.5		SS 4	83	11-12-14-10 (26)		
10.0		SS 5	75	10-7-7-7 (14)		
12.5		SS 6	83	7-6-8-7 (14)		
		SS 7	42	8-4-18-75 (22)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
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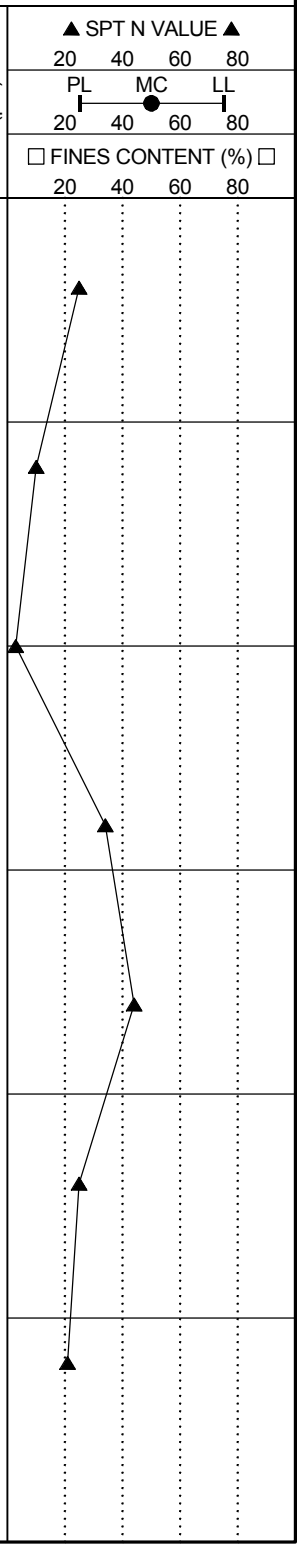
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-42

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	32-14-11-18 (25)		
2.5	Brown fine grained SAND	SS 2	67	13-5-5-6 (10)		
5.0	Brown SILTY SAND, some Limestone fragments	SS 3	58	1-1-2-8 (3)		
7.5	Tan SANDY LIMESTONE	SS 4	58	10-11-23-25 (34)		
		SS 5	58	20-23-21-21 (44)		
10.0		SS 6	58	10-13-12-10 (25)		
12.5		SS 7	58	10-10-11-11 (21)		
	Bottom of hole at 14.0 feet.					



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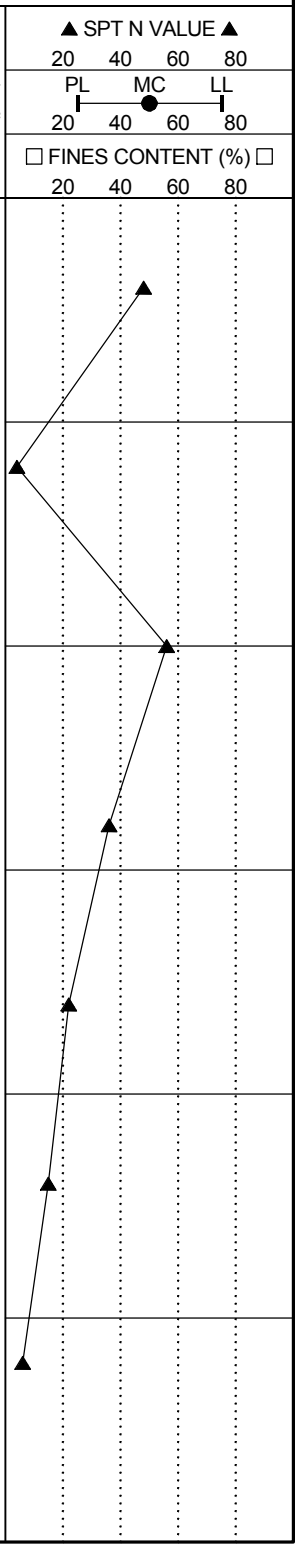
BORING NUMBER B-43

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING ---
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING ---
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	75	64-34-14-13 (48)		
2.5	Dark brown SILTY SAND with Organics Brown SILTY SAND	SS 2	83	2-1-3-5 (4)		
5.0	Tan SANDY LIMESTONE	SS 3	92	15-30-26-23 (56)		
7.5		SS 4	75	20-20-16-18 (36)		
10.0		SS 5	71	15-10-12-15 (22)		
12.5		SS 6	71	10-9-6-4 (15)		
		SS 7	75	6-3-3-11 (6)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-44

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/9/08 **COMPLETED** 6/9/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	58	31-17-15-18 (32)		
2.5	Dark brown SILTY SAND with Organics	SS 2	67	6-1-2-6 (3)		
	Brown SILTY SAND	SS 3	83	5-5-24-9 (29)		
5.0	Tan SANDY LIMESTONE	SS 4	75	34-26-28-15 (54)		
7.5		SS 5	58	8-13-8-6 (21)		
10.0		SS 6	50	8-9-4-3 (13)		
12.5		SS 7	50	4-4-3-4 (7)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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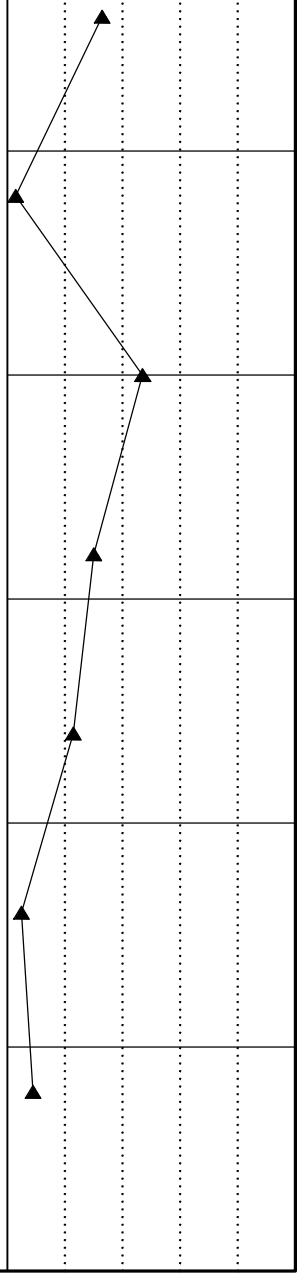
BORING NUMBER B-45

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	51-16-17-12 (33)		
2.5	Brown SILTY SAND with traces of Organics	SS 2	67	7-2-1-1 (3)		
	Tan SANDY LIMESTONE	SS 3	58	8-22-25-26 (47)		
5.0		SS 4	58	25-16-14-17 (30)		
7.5		SS 5	54	14-12-11-13 (23)		
10.0		SS 6	50	6-3-2-5 (5)		
12.5		SS 7	50	5-4-5-3 (9)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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BORING NUMBER B-46

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/10/08 **COMPLETED** 6/10/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= D-50
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	33-21-22-16 (43)		
2.5	Brown SILTY SAND with Organics	SS 2	58	7-2-2-3 (4)		
5.0	Brown fine grained SAND	SS 3	54	4-2-1-1 (3)		
7.5	Tan fine grained SAND, some Limestone fragments	SS 4	58	1-2-2-5 (4)		
10.0	Tan SANDY LIMESTONE	SS 5	58	5-8-25-34 (33)		
		SS 6	54	12-34-24-30 (58)		
12.5		SS 7	50	17-16-16-18 (32)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-47

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	38-33-38-12 (71)		
2.5	Dark brown SILTY SAND with Organics	SS 2	67	4-2-2-4 (4)		
5.0	Tan SANDY LIMESTONE	SS 3	63	8-8-4-8 (12)		
7.5		SS 4	67	12-8-5-3 (13)		
10.0		SS 5	33	8-33-29-20 (62)		
12.5		SS 6	42	10-11-10-7 (21)		
		SS 7	42	8-8-9-8 (17)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
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BORING NUMBER B-48

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/16/08 **COMPLETED** 6/16/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	64-40-22-26 (62)		
2.5		SS 2	50	120-110-90-33 (200)		
	Tan SANDY LIMESTONE					
5.0		SS 3	58	16-26-33-41 (59)		
7.5		SS 4	58	33-59-49-53 (108)		
		SS 5	67	15-18-28-34 (46)		
10.0		SS 6	58	17-33-35-11 (68)		
12.5		SS 7	50	21-19-20-18 (39)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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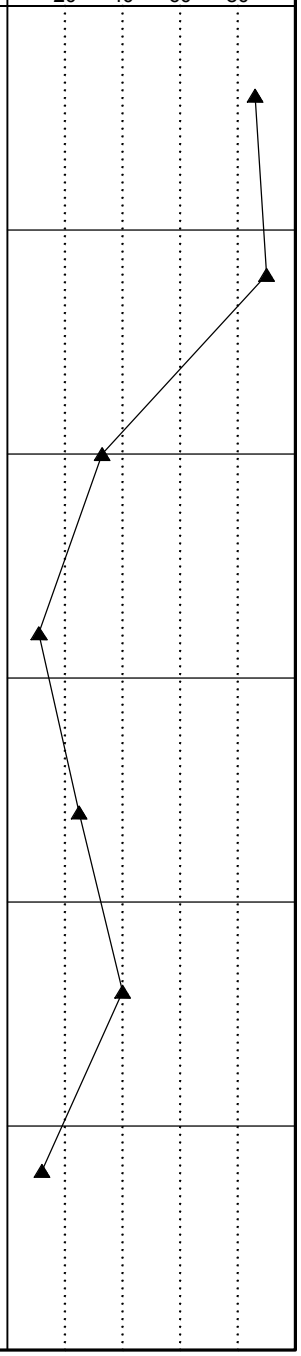
BORING NUMBER B-49

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/16/08 **COMPLETED** 6/16/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING ---
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING ---
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (0.75-inch) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	85-53-33-26 (86)		
2.5		SS 2	75	27-28-62-117 (90)		
5.0	Dark brown SILTY SAND with Organics Tan SANDY LIMESTONE	SS 3	75	10-16-17-27 (33)		
7.5	Brown SILTY SAND Tan SANDY LIMESTONE	SS 4	83	15-7-4-9 (11)		
10.0		SS 5	92	6-11-14-15 (25)		
12.5		SS 6	92	12-24-16-12 (40)		
		SS 7	83	5-5-7-17 (12)		
	Bottom of hole at 14.0 feet.					



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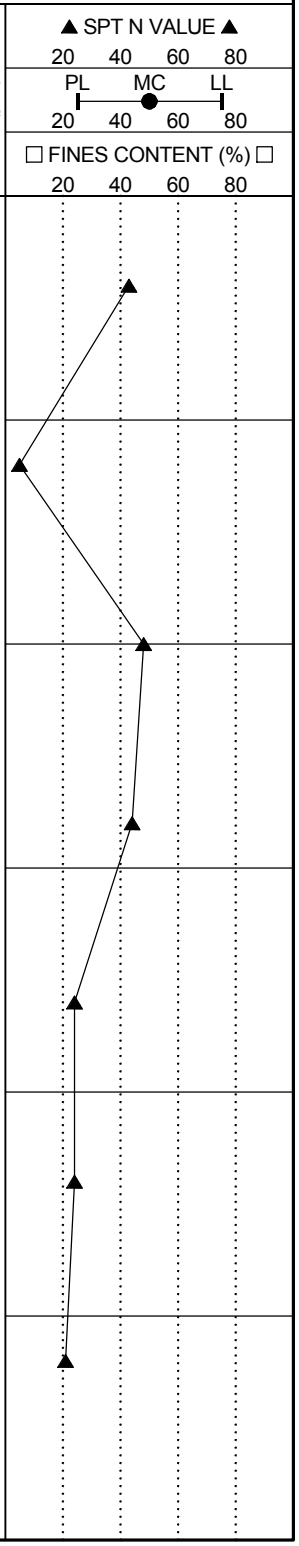
BORING NUMBER B-50

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Grayish brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	21-19-24-23 (43)		
2.5	Dark brown SILTY SAND with LIMESTONE FRAGMENTS	SS 2	67	7-3-2-4 (5)		
5.0	Tan SANDY LIMESTONE	SS 3	67	9-9-39-38 (48)		
7.5		SS 4	50	16-21-23-22 (44)		
10.0		SS 5	50	15-14-10-13 (24)		
12.5		SS 6	50	13-14-10-12 (24)		
		SS 7	50	11-11-10-11 (21)		
	Bottom of hole at 14.0 feet.					



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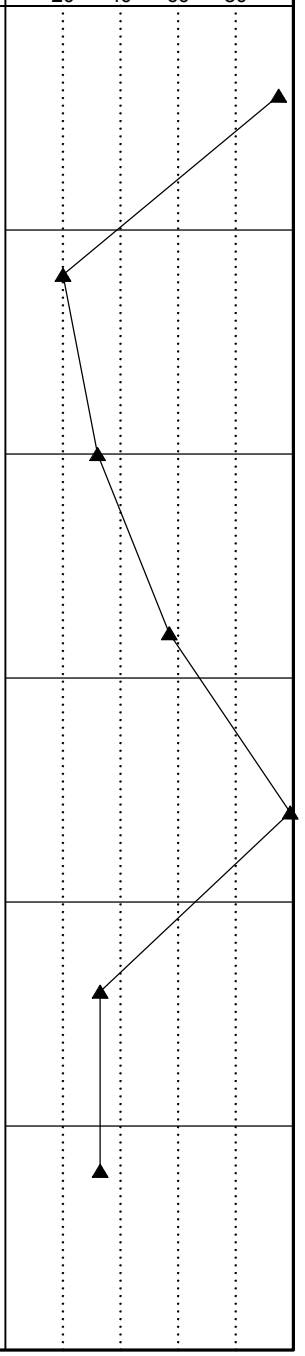
Fax: 786-248-3190

BORING NUMBER B-51

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2.75-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	75	45-60-35-30 (95)		
2.5	Light brown SILTY SAND with LIMESTONE FRAGMENTS	SS 2	83	10-12-8-68 (20)		
5.0	Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 3	75	100-16-16-13 (32)		
	Brown fine grained SAND Brown SANDY LIMESTONE	SS 4	67	10-23-34-43 (57)		
7.5	Tan SANDY LIMESTONE	SS 5	75	50-51-48-48 (99)		
10.0		SS 6	83	10-12-21-16 (33)		
12.5		SS 7	83	10-11-22-11 (33)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-53

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/18/08 **COMPLETED** 6/18/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.5 ft
LOGGED BY JR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	48-28-14-14 (42)		
2.5		SS 2	79	8-7-7-25 (14)		
	Brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	63	20-25-11-7 (36)		
5.0		SS 4	83	4-11-11-16 (22)		
7.5	Tan SANDY LIMESTONE	SS 5	71	5-12-8-4 (20)		
10.0		SS 6	54	7-6-7-7 (13)		
12.5		SS 7	58	8-5-8-7 (13)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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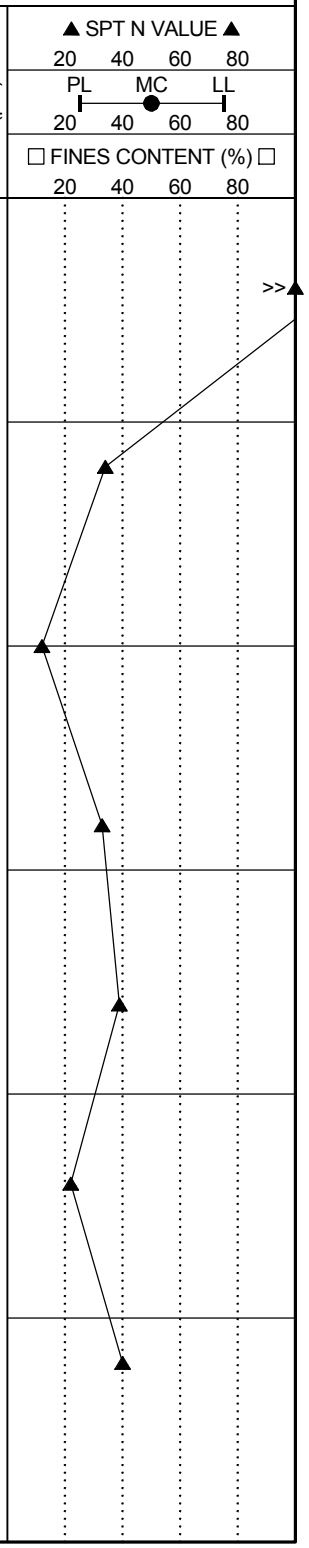
BORING NUMBER B-54

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	16-20-94-82 (114)		
2.5		SS 2	75	32-26-8-6 (34)		
5.0	Brown SILTY SAND	SS 3	75	6-7-5-6 (12)		
7.5	Tan medium grained SAND with LIMESTONE FRAGMENTS	SS 4	75	11-14-19-20 (33)		
10.0	Tan SANDY LIMESTONE	SS 5	75	17-21-18-31 (39)		
12.5		SS 6	75	5-8-14-21 (22)		
		SS 7	75	10-18-22-24 (40)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-55

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Gray fine grained SAND with LIMESTONE FRAGMENTS	SS 1	83	65-100-167-90 (267)		
2.5	Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	75	14-20-28-28 (48)		
5.0	Dark brown SILTY SAND with LIMESTONE FRAGMENTS	SS 3	50	7-5-4-4 (9)		
	Tan SANDY LIMESTONE	SS 4	75	10-12-16-14 (28)		
7.5		SS 5	75	18-20-20-32 (40)		
10.0		SS 6	75	5-6-16-22 (22)		
12.5		SS 7	75	12-16-24-26 (40)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
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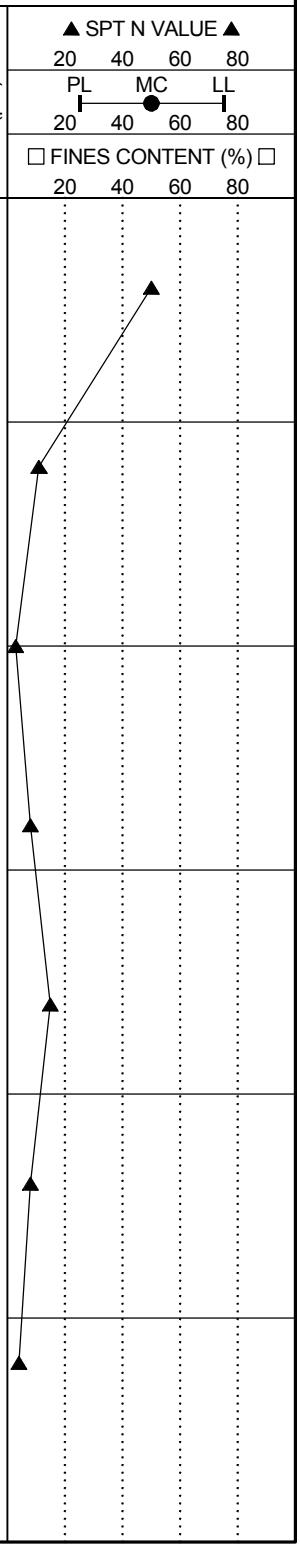
BORING NUMBER B-56

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/14/08 **COMPLETED** 6/14/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING ---
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING ---
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (3-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	45-38-12-8 (50)		
2.5		SS 2	67	7-5-6-4 (11)		
5.0	Dark brown SILTY SAND with Organics	SS 3	50	2-2-1-4 (3)		
7.5	Brown SANDY LIMESTONE	SS 4	67	3-2-6-7 (8)		
	Tan SANDY LIMESTONE	SS 5	58	12-8-7-13 (15)		
10.0		SS 6	50	3-2-6-7 (8)		
12.5		SS 7	50	6-3-1-1 (4)		
	Bottom of hole at 14.0 feet.					



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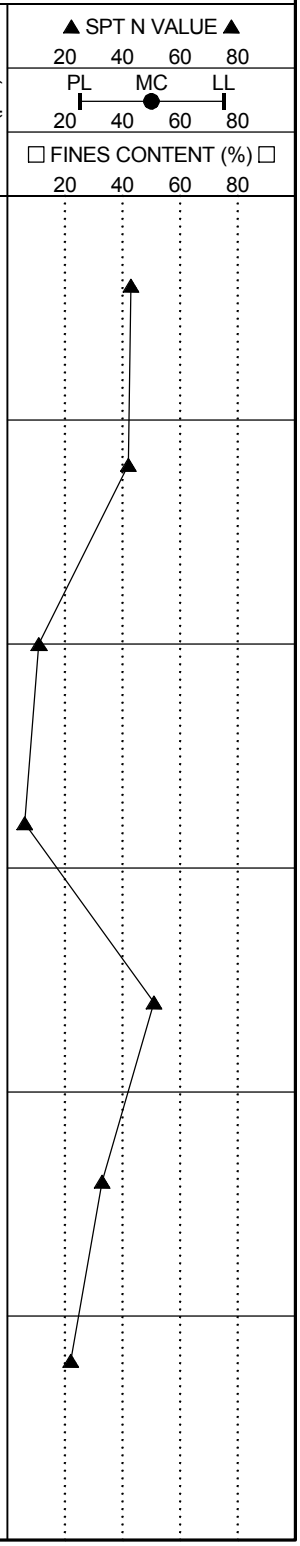
BORING NUMBER B-57

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.3 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.3 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Brown fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	68-23-20-14 (43)		
2.5	Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	67	14-17-25-18 (42)		
5.0		SS 3	58	43-7-4-5 (11)		
7.5	Brown fine grained SAND	SS 4	58	6-4-2-2 (6)		
10.0	Tan SANDY LIMESTONE	SS 5	54	27-34-17-18 (51)		
12.5		SS 6	50	19-17-16-17 (33)		
		SS 7	50	10-11-11-10 (22)		
	Bottom of hole at 14.0 feet.					



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BORING NUMBER B-58

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.3 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.3 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (5.75-inches)					
	Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	100-35-31-16 (66)		
2.5		SS 2	67	9-7-4-2 (11)		
	Dark brown SILTY SAND with Organics	SS 3	67	4-5-12-20 (17)		
5.0	Tan SANDY LIMESTONE	SS 4	58	12-21-18-17 (39)		
7.5		SS 5	50	18-19-15-20 (34)		
10.0		SS 6	50	24-16-19-14 (35)		
12.5		SS 7	50	12-12-14-16 (26)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-59

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	68-25-26-25 (51)		
2.5		SS 2	58	9-9-9-7 (18)		
5.0	Brown fine grained SAND Brown SANDY LIMESTONE	SS 3	54	9-17-20-41 (37)		
7.5	Tan SANDY LIMESTONE	SS 4	54	20-18-17-17 (35)		
10.0		SS 5	46	19-20-18-17 (38)		
12.5		SS 6	42	18-19-20-19 (39)		
		SS 7	42	12-15-18-16 (33)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
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BORING NUMBER B-60

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	68-33-21-24 (54)		
2.5		SS 2	58	24-14-11-8 (25)		
5.0	Brown fine grained SAND, some Limestone Fragments	SS 3	42	12-5-11-14 (16)		
7.5	Tan SANDY LIMESTONE	SS 4	42	14-15-27-14 (42)		
		SS 5	46	10-12-9-17 (21)		
10.0		SS 6	50	18-24-25-20 (49)		
12.5		SS 7	50	19-21-17-12 (38)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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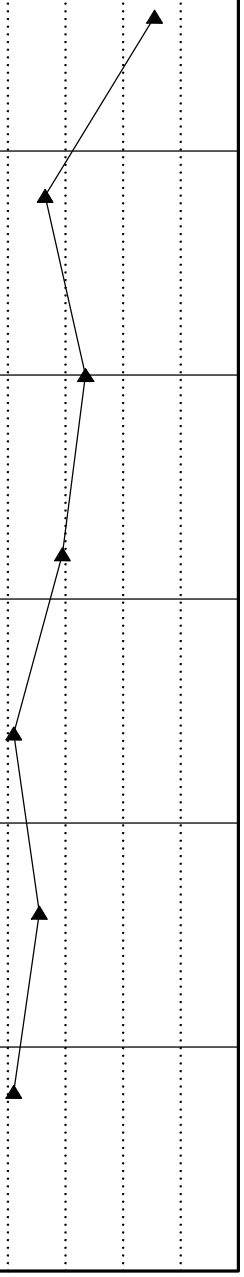
BORING NUMBER B-61

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Asphalt (3.25-inches)					
		Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	73-40-31-32 (71)		
2.5		Brown fine grained SAND, some Limestone Fragments	SS 2	67	27-16-17-20 (33)		
		Tan SANDY LIMESTONE ▼	SS 3	58	36-16-31-20 (47)		
5.0			SS 4	50	22-21-18-12 (39)		
7.5			SS 5	50	18-14-8-10 (22)		
10.0			SS 6	50	13-15-16-15 (31)		
12.5			SS 7	50	11-10-12-10 (22)		
		Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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BORING NUMBER B-62

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
AT END OF DRILLING 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	65-42-33-16 (75)		
2.5	Brown fine grained SAND	SS 2	67	14-13-14-19 (27)		
5.0	Tan SANDY LIMESTONE	SS 3	58	21-23-20-20 (43)		
7.5		SS 4	42	10-10-9-7 (19)		
10.0		SS 5	42	12-12-13-12 (25)		
12.5		SS 6	42	10-9-11-12 (20)		
		SS 7	42	10-10-11-11 (21)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-63

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 4.5 ft
LOGGED BY LG **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 4.5 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	67	58-33-20-17 (53)		
2.5	Grayish brown fine grained SAND, some Limestone Fragments	SS 2	58	14-29-16-11 (45)		
5.0	Brown SANDY LIMESTONE	SS 3	54	12-13-23-24 (36)		
7.5	Tan SANDY LIMESTONE	SS 4	58	30-36-77-120 (113)		
		SS 5	50	42-41-22-28 (63)		
10.0		SS 6	42	20-21-19-20 (40)		
12.5		SS 7	42	19-20-21-20 (41)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER B-64

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/16/08 **COMPLETED** 6/16/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 5.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 5.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	75	55-35-14-6 (49)		
2.5	Gray fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 2	75	14-15-33-60 (48)		
		SS 3	100	100/5"		
5.0						
		SS 4	75	16-17-15-16 (32)		
7.5	Brown SILTY SAND					
	Tan SANDY LIMESTONE	SS 5	75	6-4-12-11 (16)		
10.0		SS 6	83	9-33-37-35 (70)		
12.5		SS 7	83	31-33-29-35 (62)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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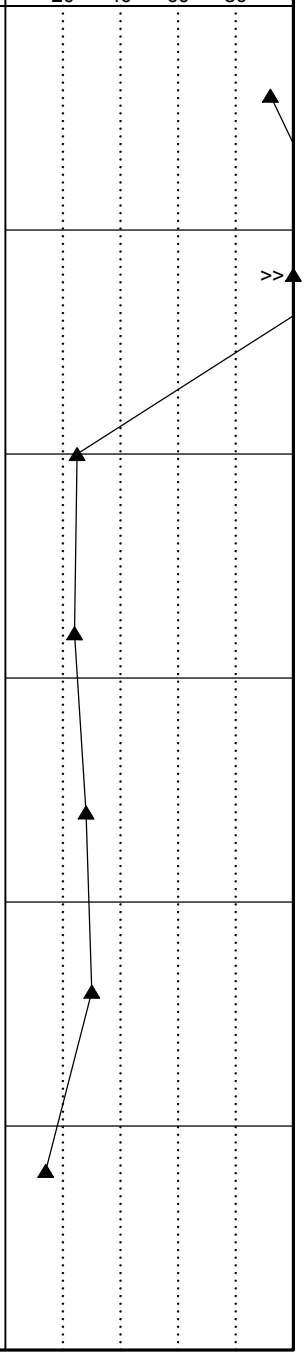
BORING NUMBER B-66

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/16/08 **COMPLETED** 6/17/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
▽ **AT TIME OF DRILLING** 6.0 ft
LOGGED BY JR **CHECKED BY** V. Lopez
▼ **AT END OF DRILLING** 6.0 ft
NOTES Drill Equipment= B-57
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0		Gray fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	71	20-52-40-52 (92)		
2.5			SS 2	83	49-65-57-23 (122)		
5.0		Light brown SANDY LIMESTONE, some Silt	SS 3	75	9-12-13-13 (25)		
7.5			SS 4	54	4-13-11-11 (24)		
		Tan SANDY LIMESTONE	SS 5	63	13-13-15-15 (28)		
10.0			SS 6	67	15-14-16-14 (30)		
12.5			SS 7	67	6-7-7-10 (14)		
		Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



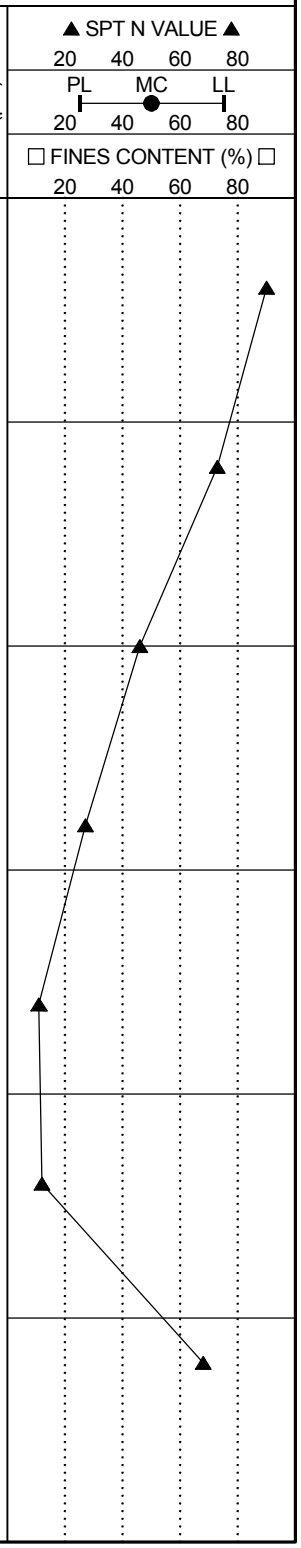
GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-67

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (2-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	49-40-50-47 (90)		
2.5		SS 2	83	40-41-32-31 (73)		
5.0	Brown fine grained SAND	SS 3	75	24-22-24-30 (46)		
7.5	Brown SANDY LIMESTONE	SS 4	75	22-12-15-11 (27)		
10.0	Tan SANDY LIMESTONE	SS 5	50	6-5-6-4 (11)		
12.5		SS 6	83	8-4-8-16 (12)		
		SS 7	83	35-30-38-43 (68)		
	Bottom of hole at 14.0 feet.					



BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-75

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	65-106-60-38 (166)		
2.5		SS 2	83	28-35-31-25 (66)		
5.0		SS 3	83	23-24-24-15 (48)		
7.5	Gray fine grained SAND, some Limestone Fragments	SS 4	75	5-6-5-6 (11)		
10.0	Brown SANDY LIMESTONE	SS 5	75	5-11-23-27 (34)		
12.5	Tan SANDY LIMESTONE	SS 6	75	10-12-18-25 (30)		
		SS 7	75	28-16-24-19 (40)		
	Bottom of hole at 14.0 feet.					

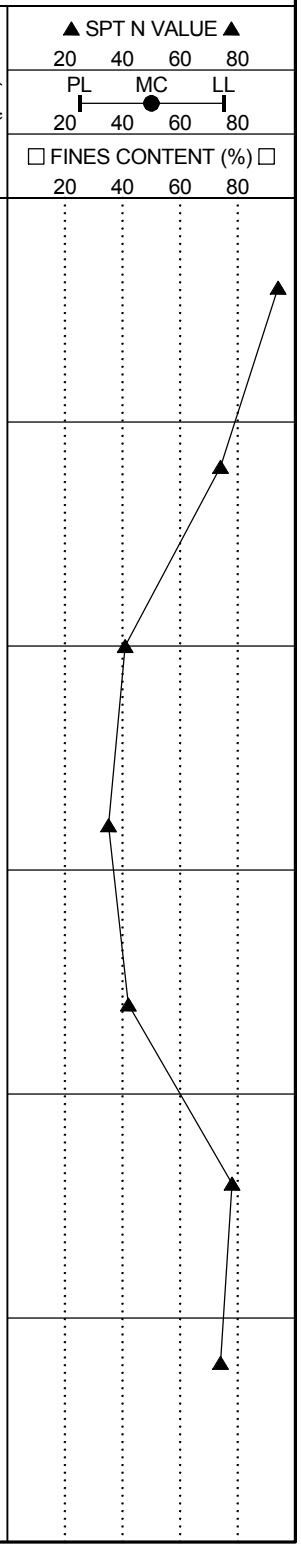
▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-76

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/18/08 **COMPLETED** 6/18/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	35-36-58-55 (94)		
2.5		SS 2	83	35-36-38-40 (74)		
5.0	Tan SANDY LIMESTONE	SS 3	83	14-20-21-37 (41)		
7.5		SS 4	75	27-23-12-7 (35)		
10.0	Tan SANDY LIMESTONE, some Silt	SS 5	75	11-19-23-63 (42)		
12.5		SS 6	75	13-33-45-58 (78)		
	Tan SANDY LIMESTONE	SS 7	75	43-35-39-30 (74)		
	Bottom of hole at 14.0 feet.					



BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-77

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 6.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 6.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	30-24-15-30 (39)		
2.5		SS 2	83	46-38-27-22 (65)		
5.0	Tan SANDY LIMESTONE	SS 3	75	13-12-13-11 (25)		
7.5		SS 4	75	10-10-8-4 (18)		
10.0		SS 5	75	4-2-16-28 (18)		
12.5		SS 6	83	74-69-76-58 (145)		
		SS 7	83	50-54-39-46 (93)		
	Bottom of hole at 14.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

>>

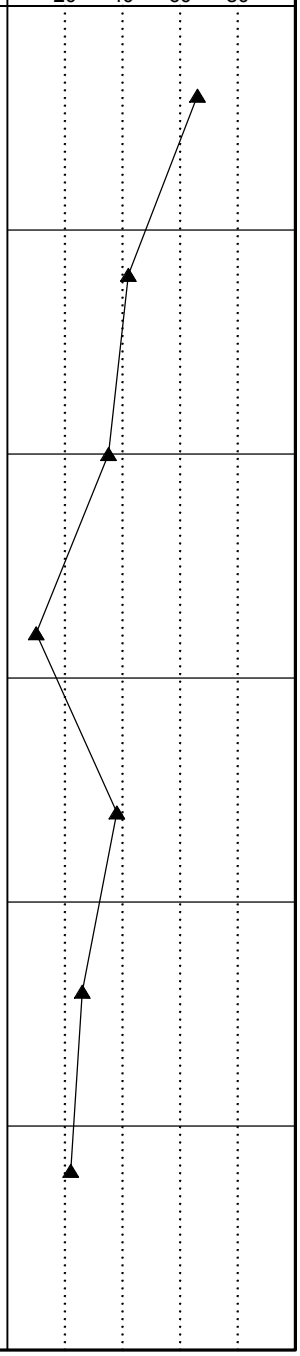
GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

BUREAU VERITAS NORTH AMERICA, INC.
308 N.W. 170 Street
North Miami Beach
Telephone: 786-248-3180
Fax: 786-248-3190

BORING NUMBER B-79

CLIENT Town of Medley
PROJECT NAME FLOOD MITIGATION GRANT
PROJECT NUMBER 21008-144890
PROJECT LOCATION NW 87th to 95th Ave & 90th to 106th St, Medley, FL
DATE STARTED 6/15/08 **COMPLETED** 6/15/08
GROUND ELEVATION Not furnished **HOLE SIZE** 2 7/8-inch
DRILLING CONTRACTOR Bureau Veritas NA
GROUND WATER LEVELS:
DRILLING METHOD
AT TIME OF DRILLING 4.0 ft
LOGGED BY AR **CHECKED BY** V. Lopez
AT END OF DRILLING 4.0 ft
NOTES Drill Equipment= B-47
AFTER DRILLING ---

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0.0	Asphalt (1.5-inches) Tan fine to medium grained SAND with LIMESTONE FRAGMENTS	SS 1	83	60-18-48-27 (66)		
2.5		SS 2	83	18-22-20-19 (42)		
	Tan SANDY LIMESTONE	SS 3	83	22-22-13-17 (35)		
5.0						
	Brown SILTY SAND, some Limestone Fragments	SS 4	50	8-5-5-10 (10)		
7.5	Tan SANDY LIMESTONE	SS 5	75	15-20-18-18 (38)		
10.0		SS 6	75	11-17-9-11 (26)		
12.5		SS 7	75	16-13-9-9 (22)		
	Bottom of hole at 14.0 feet.					



GEOTECH BH PLOTS TOWN OF MEDLEY.GPJ GINT US LAB.GDT 6/24/08

June 23, 2008

Town of Medley
7331 N.W. 74th Street
Medley, Florida 33166

Attention: The Honorable Ramon Rodriguez

Reference: Percolation Tests and Asphalt Cores
Flood Mitigation Grant
Medley, Florida
Project No. 144891

Gentlemen:

Enclosed herewith please find Percolation Test Reports Nos. P-1 to P-92, performed at the above referenced project. The tests were performed in general accordance with the South Florida Water Management District - Usual Open Hole Test Procedures. Since Standard Penetration Tests (SPT) were also performed (Submitted under separate cover). The percolation test numbers correspond to the SPT test numbers.

Thirty three percolation tests and thirty one asphalt cores were scheduled for the project. This report is for the first twenty five percolation tests and twenty three asphalt cores performed to date. The Asphalt core report is attached to this letter.

The results of the tests and remarks regarding the tests procedure is shown on the enclosed reports. The hydraulic conductivities for the "Usual Open Hole" test at the requested locations are as follows:

TEST NUMBER	TEST DEPTH	HYDRAULIC CONDUCTIVITY (CFS/FT² - FT HEAD)
P-1	15 feet	$K = 6.74 \times 10^{-5}$
P-5	15 feet	$K = 6.54 \times 10^{-3}$
P-6	15 feet	$K = 1.75 \times 10^{-4}$
P-9	15 feet	$K = 3.28 \times 10^{-4}$
P-12	15 feet	$K = 1.95 \times 10^{-4}$
P-14	15 feet	$K = 7.50 \times 10^{-5}$
P-17	15 feet	$K = 4.04 \times 10^{-4}$
P-20	15 feet	$K = 8.57 \times 10^{-3}$
P-25	15 feet	$K = 2.63 \times 10^{-3}$
P-29	15 feet	$K = 2.44 \times 10^{-3}$
P-32	15 feet	$K = 7.88 \times 10^{-3}$
P-33	15 feet	$K = 2.70 \times 10^{-5}$
P-35	15 feet	$K = 2.25 \times 10^{-3}$

P-38	15 feet	$K = 9.15 \times 10^{-4}$
P-41	15 feet	$K = 9.81 \times 10^{-3}$
P-44	15 feet	$K = 6.86 \times 10^{-3}$
P-49	15 feet	$K = 5.43 \times 10^{-3}$
P-51	15 feet	$K = 5.60 \times 10^{-3}$
P-56	15 feet	$K = 4.90 \times 10^{-3}$
P-58	15 feet	$K = 9.63 \times 10^{-3}$
P-61	15 feet	$K = 9.81 \times 10^{-3}$
P-66	15 feet	$K = 1.22 \times 10^{-3}$
P-76	15 feet	$K = 7.70 \times 10^{-5}$
P-91	15 feet	$K = 3.15 \times 10^{-4}$
P-92	15 feet	$K = 7.36 \times 10^{-3}$

Bureau Veritas appreciates the opportunity to provide our engineering services on this project. If you have any questions regarding these tests or if we may be of further assistance, please contact the undersigned.

Respectfully submitted,
BUREAU VERITAS NORTH AMERICA, INC.

Victor R. Lopez, E.I.
Project Engineer

Alfredo Budik 6/23/08

Alfredo Budik, P.E.
Vice President
Florida License No. 43884

Distribution: 2 – Client
1 – Westhorp & Associates, Inc.

Enclosures: Percolation Test Reports Nos. P-1 to P-92 (25 Tests)
Asphalt Core Report (23 Tests)
Test Location Sketch

BUREAU VERITAS

REPORT OF: ASPHALT CORE PROJECT No.:144891

CLIENT: TOWN OF MEDLEY REPORT No.: 1

PROJECT: FLOOD MITIGATION GRANT DATE: 6/23/08

ADDRESS: NW 87th to 95th Ave. & 90th to 106th St., Medley, Florida

SUMMARY

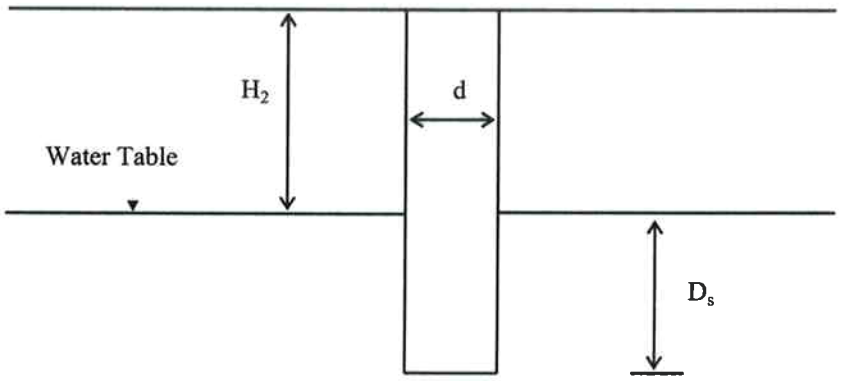
BORING	ASPHALT (Inch.)	BASE (Inch.)	SUBBASE (Inch.)
P-1	1	8	39
P-5	1	6	35
P-6	1/2	8	39
P-9	1-1/4	6	17
P-12	1-1/8	6	40
P-14	1/2	6	48
P-17	1/2	8	39
P-20	1	12	48
P-25	1	10	37
P-29	1-1/2	11	36
P-32	3/4	7	40
P-33	1/2	6	41
P-35	1/2	6	29
P-38	3	5	28
P-41	1-1/4	7	16
P-44	1-1/2	10	13
P-49	3/4	8	39
P-51	2-3/4	8	13
P-56	3	8	37
P-58	5-3/4	7	35
P-61	3-1/4	10	34
P-66	0	0	48
P-76	1-1/2	8	39

Checked by:

Bureau Veritas North America, Inc.
10125 NW 116 Way, Suite 18
Miami, FL 33178

Main: (305) 651-8483
Fax: (305) 651-4460

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

6.74E-05 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.006684 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	5.0 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	3.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone, some silt

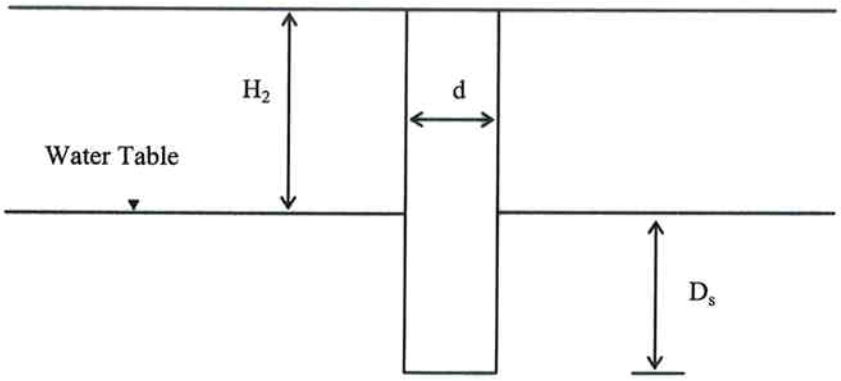
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/07/08	144891	P-1	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

6.54E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.116302 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	10.7 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.3'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	52.2	GPM

SOIL PROFILE :

0.0' - 3.5'	Tan fine to medium grained sand with limestone fragments
3.5' - 4.0'	Dark brown silty sand with organics
4.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones. Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/09/08	144891	P-5	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
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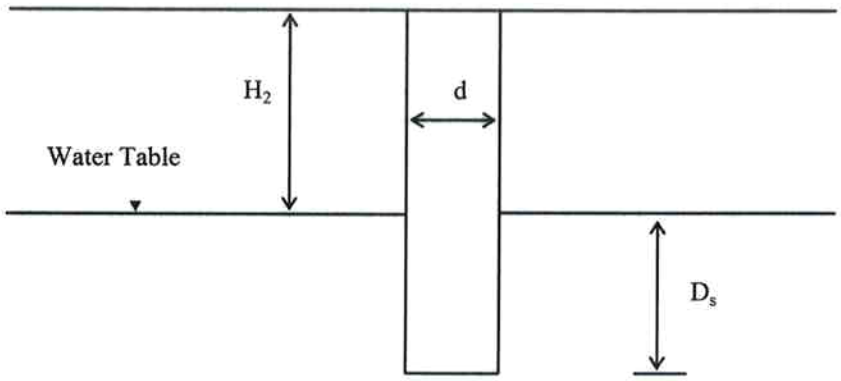
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

1.75E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.020052 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	6.0 feet
D_s = Saturated Hole Depth =	9.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	9.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone, some silt

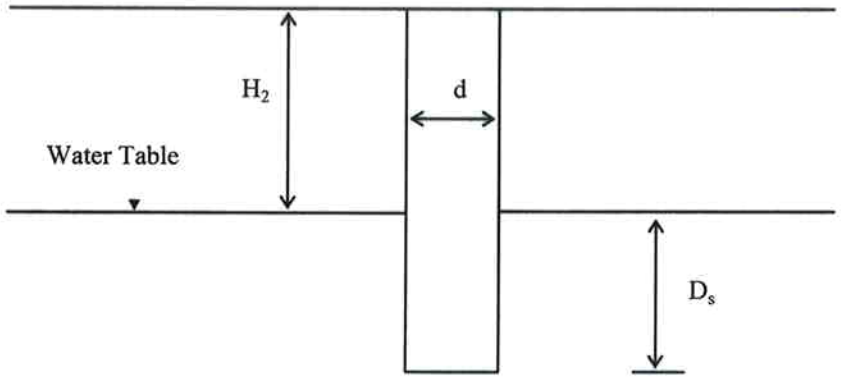
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/07/08	144891	P-6	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

3.28E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.032529 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	5.0 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	14.6	GPM

SOIL PROFILE :

0.0' - 2.0'	Tan fine to medium grained sand with limestone fragments
2.0' - 4.0'	Brown silty sand
4.0' - 5.0'	Dark brown silty sand with Organics
5.0' - 15.0'	Tan sandy limestone

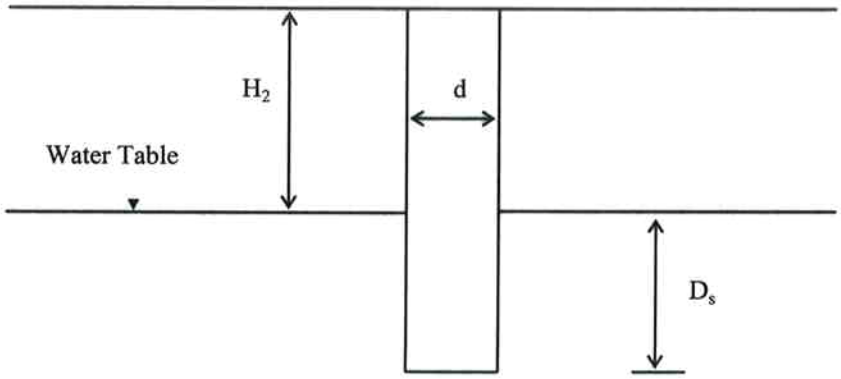
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/08/08	144891	P-9	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

1.95E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.022280 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	6.0 feet
D_s = Saturated Hole Depth =	9.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	10.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 6.0'	Brown silty sand with Organics
6.0' - 10.0'	Brown fine grained sand
10.0' - 15.0'	Brown sandy limestone

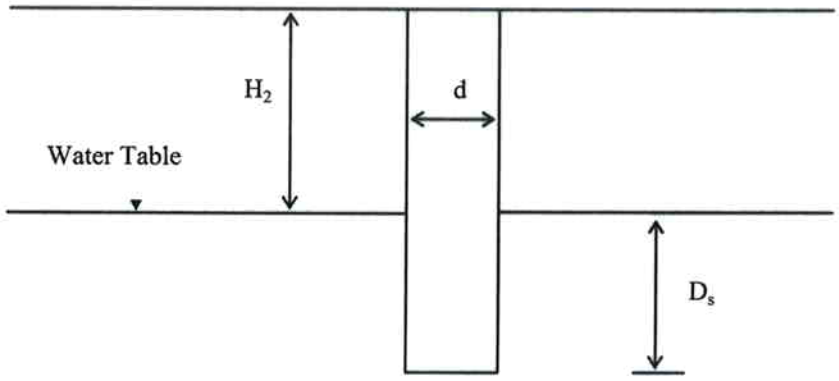
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/08/08	144891	P-12	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

7.50E-05 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.008021 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	5.5 feet
D_s = Saturated Hole Depth =	9.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	3.6	GPM

SOIL PROFILE :

0.0' - 6.0'	Tan fine to medium grained sand with limestone fragments
6.0' - 8.0'	Dark brown silty sand with Organics
8.0' - 10.0'	Brown sandy limestone
10.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/08/08	144891	P-14	LG	

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Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
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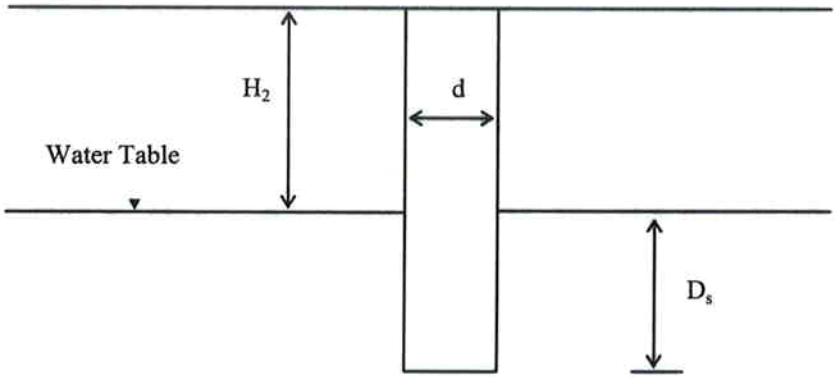
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

4.04E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.040104 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	5.0 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	18.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
8.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/08/08	144891	P-17	LG	

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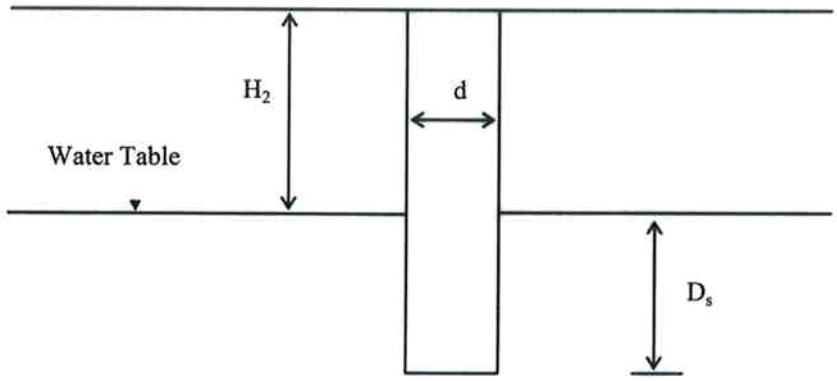
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

8.57E-03 CFS/FT^2-FT HEAD

Q =	Average Flow Rate =	0.133681 CFS
d =	Diameter of Test Hole =	0.5 feet
H_2 =	Head on Water Table =	1.0 feet
D_s =	Saturated Hole Depth =	9.3 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.7'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	60.0	GPM

SOIL PROFILE :

0.0' - 6.0'	Tan fine to medium grained sand with limestone fragments
6.0' - 8.0'	Brown silty sand, some limestone fragments
8.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/09/08	144891	P-20	LG	

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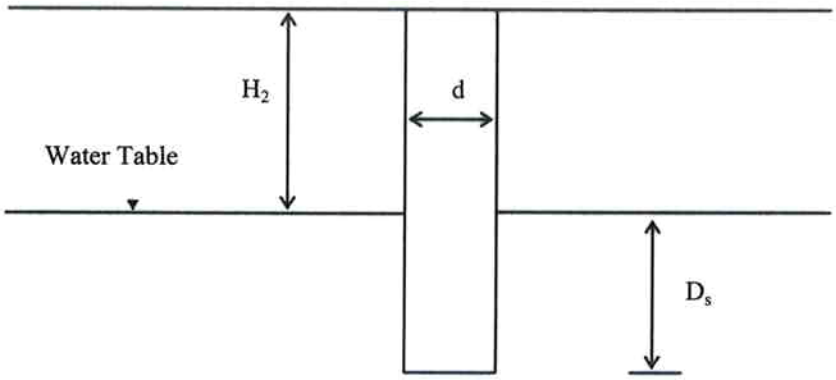
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

2.63E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.125326 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	3.0 feet
D_s = Saturated Hole Depth =	8.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	56.3	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 6.0'	Dark brown silty sand with organics
6.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/09/08	144891	P-25	LG	

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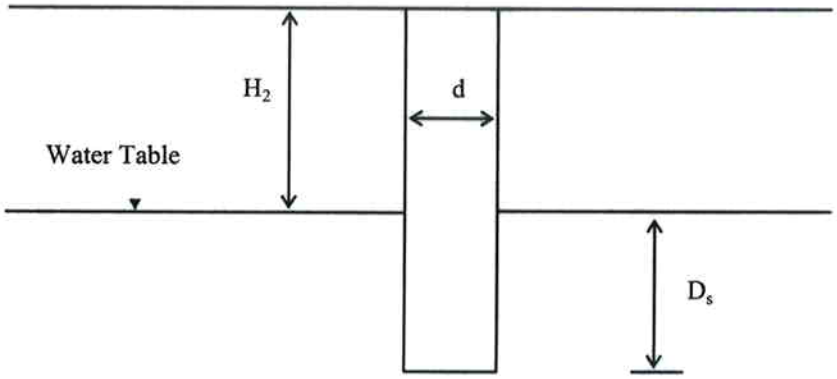
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

2.44E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.133681 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	3.0 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	60.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/09/08	144891	P-29	LG	

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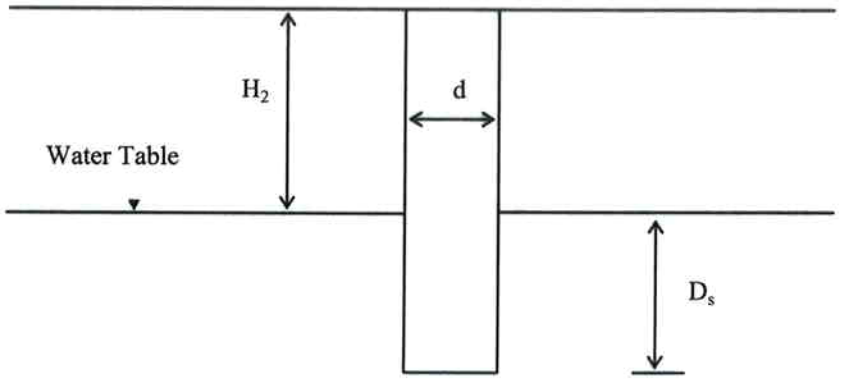
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

7.88E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.125326 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	9.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	56.3	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 6.0'	Brown silty sand with limestone fragments
6.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones. Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/10/08	144891	P-32	LG	

BUREAU VERITAS NORTH AMERICA, INC.
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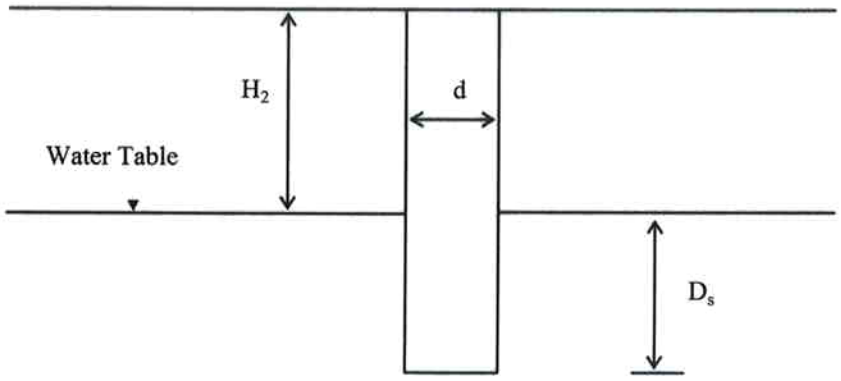
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

2.70E-05 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.002228 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	4.0 feet
D_s = Saturated Hole Depth =	11.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	1.0	GPM

SOIL PROFILE :

0.0' - 6.0'	Tan fine to medium grained sand with limestone fragments
6.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/21/08	144891	P-33	LG	

BUREAU VERITAS NORTH AMERICA, INC.
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10125 NW 116th Way, Medley, FL
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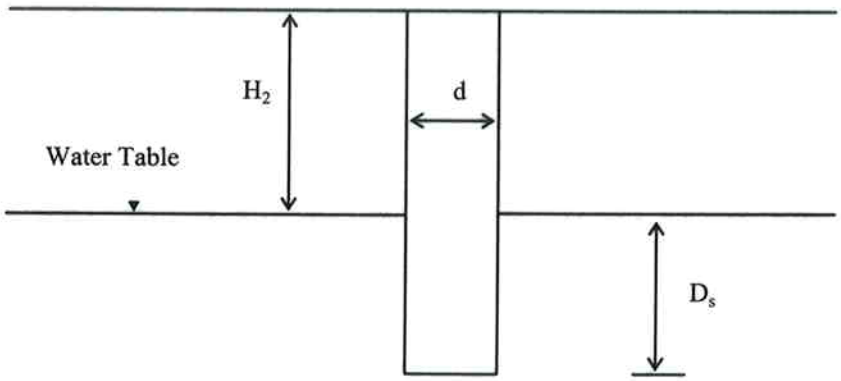
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

2.25E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.171390 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	4.0 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	76.9	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/14/08	144891	P-35	LG	

BUREAU VERITAS NORTH AMERICA, INC.
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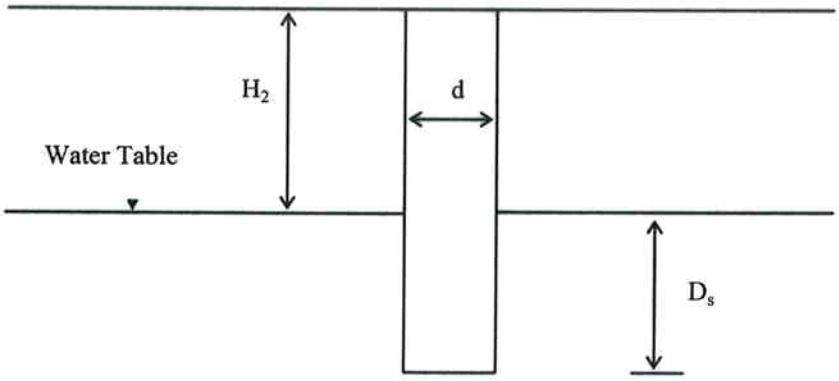
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

9.15E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.110955 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	6.5 feet
D_s = Saturated Hole Depth =	8.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	49.8	GPM

SOIL PROFILE :

0.0' - 3.0'	Tan fine to medium grained sand with limestone fragments
3.0' - 4.0'	Dark brown silty sand with Organics
8.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/18/08	144891	P-38	JR	

BUREAU VERITAS NORTH AMERICA, INC.
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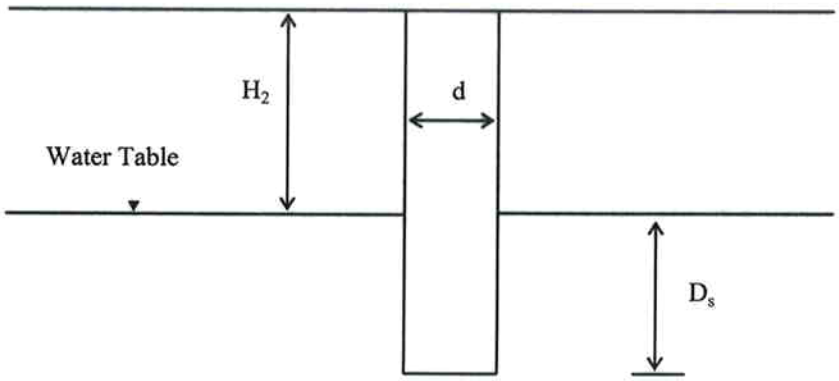
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

9.81E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.171390	CFS
d = Diameter of Test Hole =	0.5	feet
H_2 = Head on Water Table =	1.0	feet
D_s = Saturated Hole Depth =	10.5	feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	76.9	GPM

SOIL PROFILE :

0.0' - 2.0'	Brown fine grained sand with limestone fragments
2.0' - 3.0'	Dark brown silty sand with organics
3.0' - 4.0'	Brown silty sand
4.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones. Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/14/08	144891	P-41	LG	

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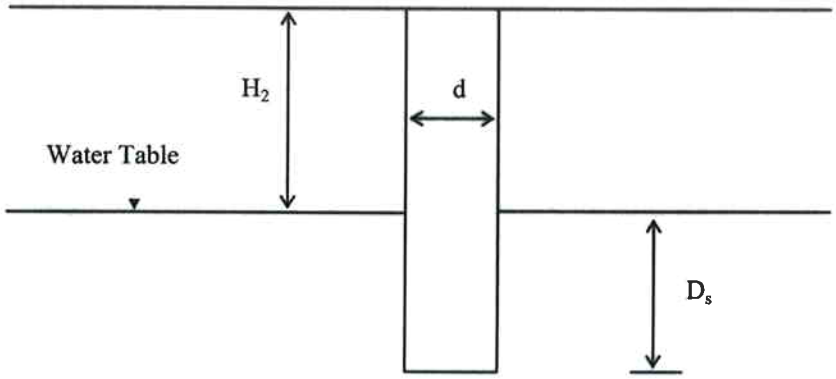
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

6.86E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.125326 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	11.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	56.3	GPM

SOIL PROFILE :

0.0' - 2.0'	Tan fine to medium grained sand with limestone fragments
2.0' - 4.0'	Dark brown silty sand with organics
4.0' - 5.0'	Brown silty sand
5.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/09/08	144891	P-44	LG	

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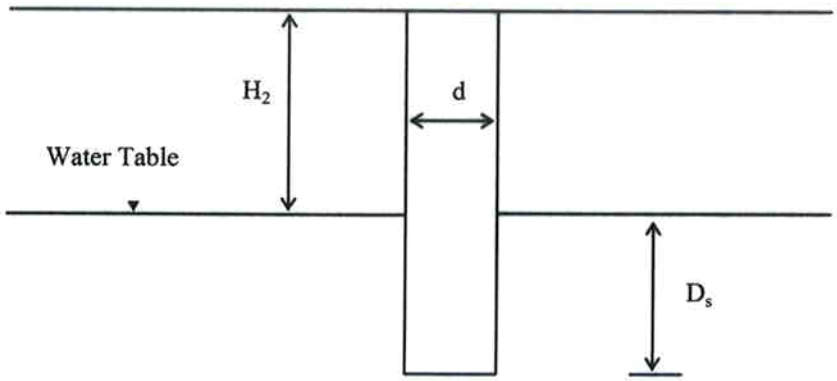
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

5.43E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.139251 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.5 feet
D_s = Saturated Hole Depth =	10.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	5.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	62.5	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 5.0'	Dark brown silty sand with organics
5.0' - 8.0'	Brown silty sand, some limestone fragments
8.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones. Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/18/08	144891	P-49	AR	

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Materials Testing Engineers
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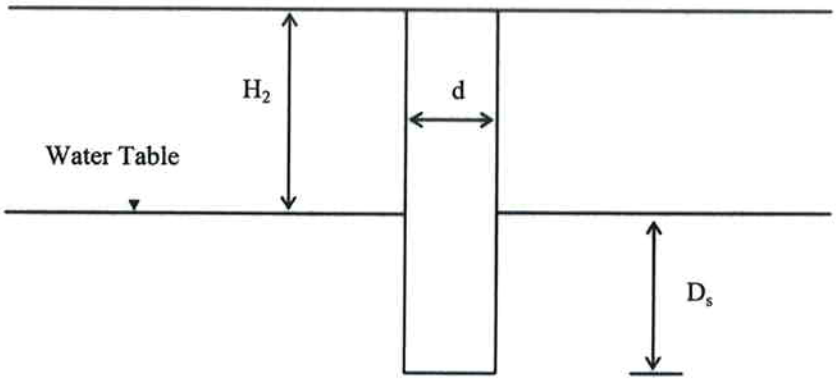
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

5.60E-03 CFS/FT^2-FT HEAD

Q =	Average Flow Rate =	0.178241 CFS
d =	Diameter of Test Hole =	0.5 feet
H_2 =	Head on Water Table =	2.0 feet
D_s =	Saturated Hole Depth =	9.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	80.0	GPM

SOIL PROFILE :

0.0' - 2.0'	Tan fine to medium grained sand with limestone fragments
2.0' - 4.0'	Light brown silty sand with limestone fragments
4.0' - 7.0'	Brown fine grained sand, some limestone fragments
7.0' - 15.0'	Tan sandy limestone

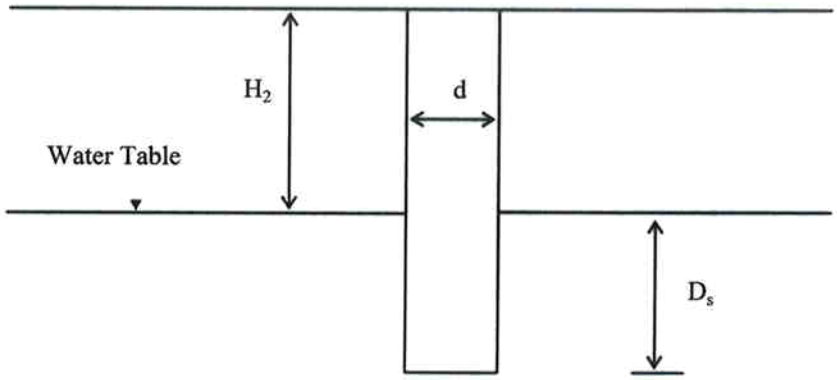
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/18/08	144891	P-51	JR	AG

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

4.90E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.155961 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	2.0 feet
D_s = Saturated Hole Depth =	9.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	70.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 6.0'	Dark brown silty sand with Organics
6.0' - 8.0'	Brown sand with limestone fragments
8.0' - 15.0'	Tan sandy limestone

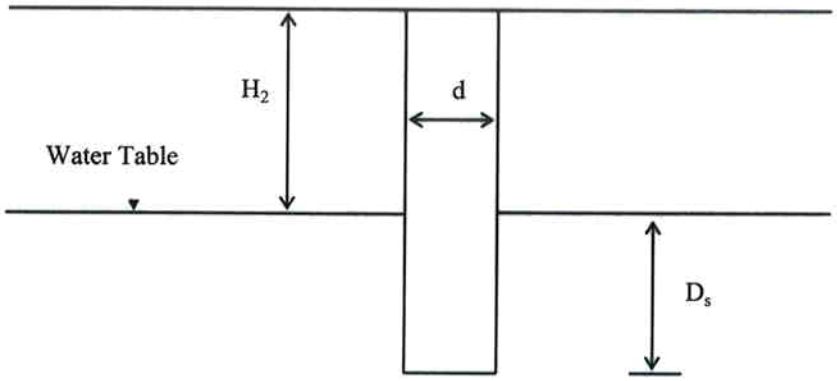
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones. Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/17/08	144891	P-56	JR	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

9.63E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.171390 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	10.7 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.3'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	76.9	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 6.0'	Dark brown silty sand with organics
6.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/15/08	144891	P-58	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
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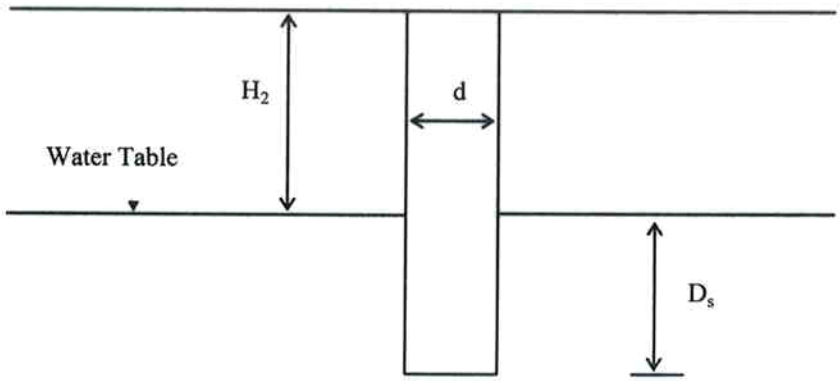
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

9.81E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.171390 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	10.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	76.9	GPM

SOIL PROFILE :

0.0' - 2.0'	Tan fine to medium grained sand with limestone fragments
2.0' - 4.0'	Brown fine grained sand, some limestone fragments
4.0' - 15.0'	Tan sandy limestone

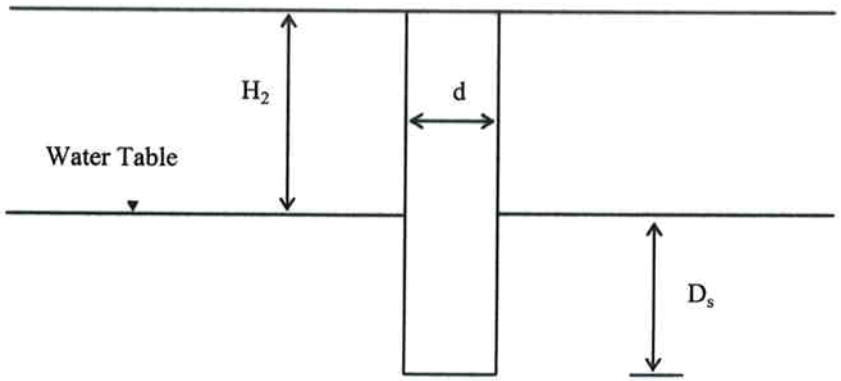
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/15/08	144891	P-61	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

1.22E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.139919 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	6.0 feet
D_s = Saturated Hole Depth =	9.0 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	62.8	GPM

SOIL PROFILE :

0.0' - 4.0'	Gray fine to medium grained sand with limestone fragments
4.0' - 8.0'	Light brown sandy limestone, some silt
8.0' - 15.0'	Tan sandy limestone

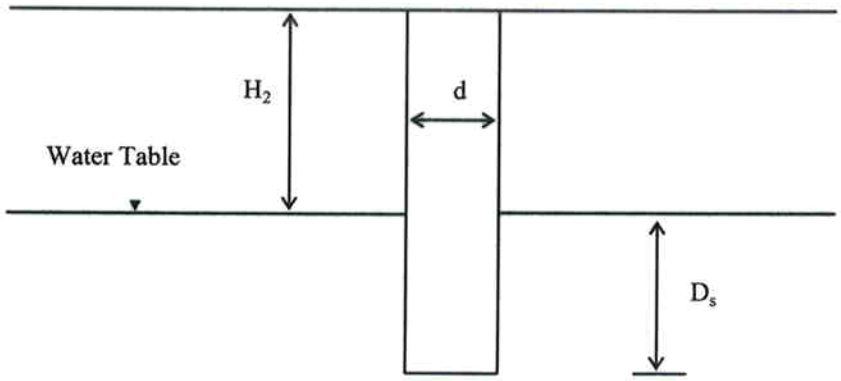
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/17/08	144891	P-66	JR	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

7.70E-05 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.008801	CFS
d = Diameter of Test Hole =	0.5	feet
H_2 = Head on Water Table =	6.0	feet
D_s = Saturated Hole Depth =	9.0	feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	6.0'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	4.0	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone, some silt

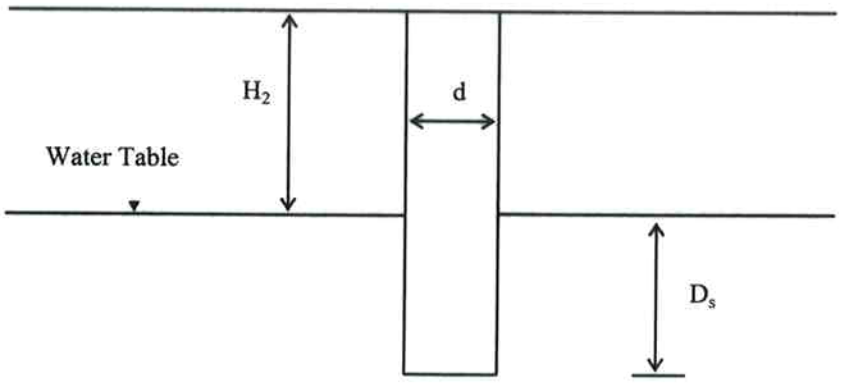
NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/18/08	144891	P-76	AR	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

3.15E-04 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.024842 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	3.8 feet
D_s = Saturated Hole Depth =	11.2 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	3.8'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	11.2	GPM

SOIL PROFILE :

0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone, some silt

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/21/08	144891	P-91	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
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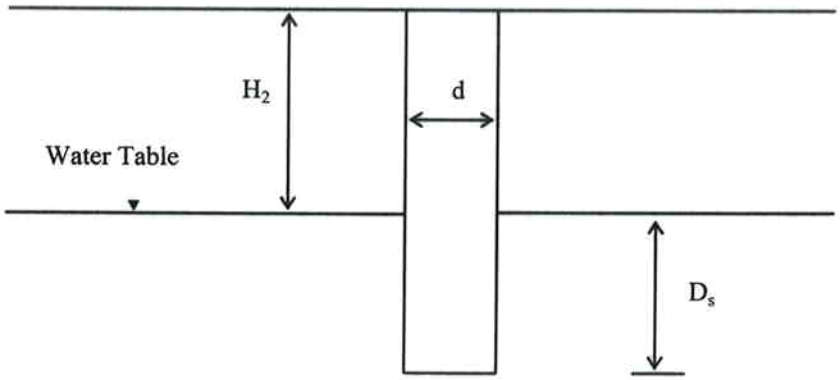
Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
" USUAL OPEN - HOLE TEST "



HYDRAULIC CONDUCTIVITY

K = Hydraulic Conductivity = $4Q/[\pi d(2H_2^2 + 4H_2Ds + H_2d)]$

7.36E-03 CFS/FT^2-FT HEAD

Q = Average Flow Rate =	0.128534 CFS
d = Diameter of Test Hole =	0.5 feet
H_2 = Head on Water Table =	1.0 feet
D_s = Saturated Hole Depth =	10.5 feet

TEST LOCATION :		See attached sketch
TEST ELEVATION :		Not Furnished
DEPTH TO WATER TABLE :	4.5'	Below Existing Grade
DEPTH OF TEST HOLE :	15.0'	Below Existing Grade
AVERAGE FLOW RATE:	57.7	GPM

SOIL PROFILE :

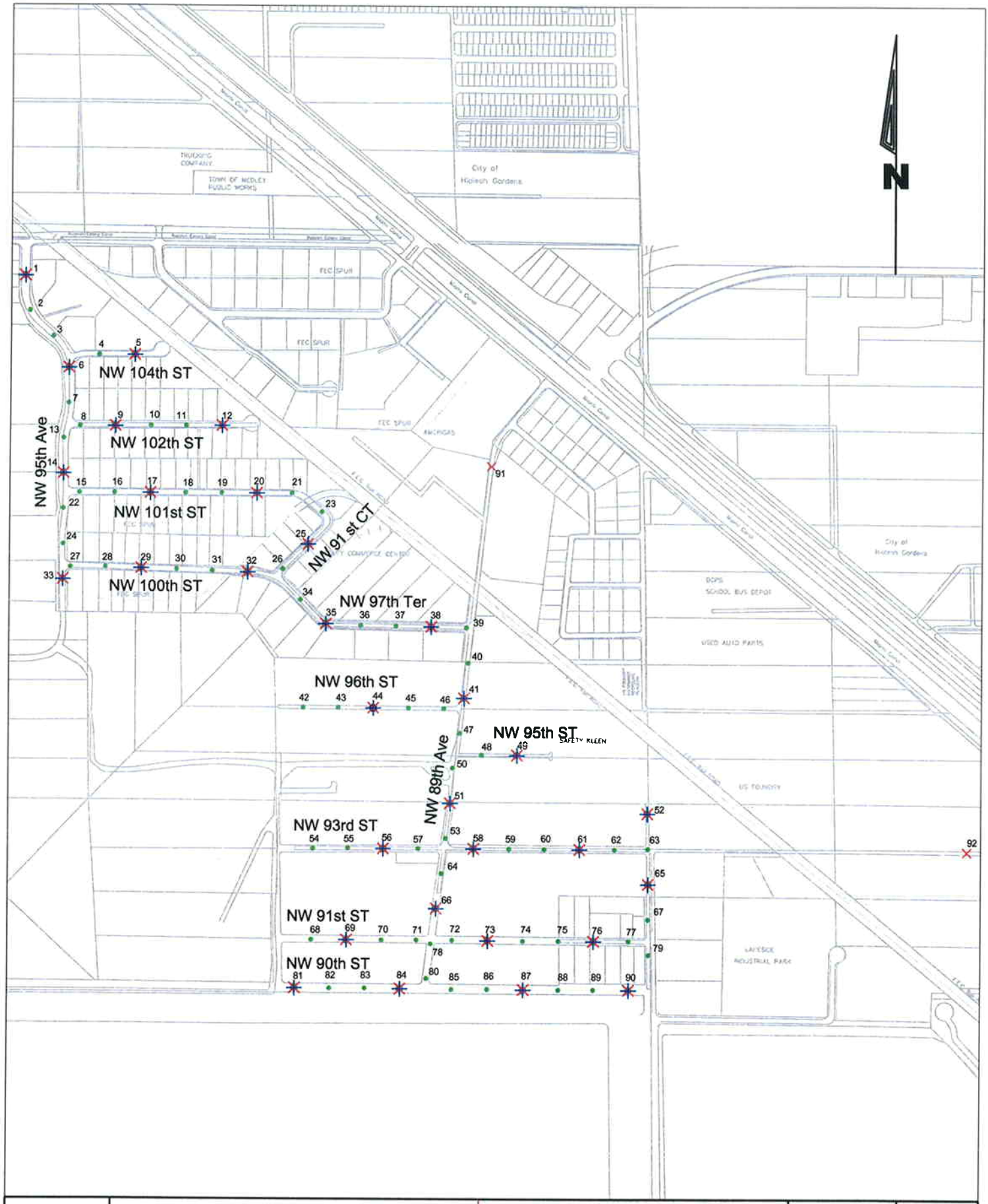
0.0' - 4.0'	Tan fine to medium grained sand with limestone fragments
4.0' - 15.0'	Tan sandy limestone

NOTES: The soil profile is determined by auger cuttings & should not be relied upon as an accurate record of soil type or for transition zones.
Unable to raise water table to ground surface. K value calculated based on actual head on groundwater surface while performing this test.

PERCOLATION TEST	Test Date	Project No.	Test No.	Tested By	Checked by:
	06/21/08	144891	P-92	LG	

BUREAU VERITAS NORTH AMERICA, INC.
Geotechnical, Environmental and Construction
Materials Testing Engineers
10125 NW 116th Way, Medley, FL
Telephone: (305) 651-8483 Facsimile: (305) 651-4460

Town of Medley
Flood Mitigation Grant
NW 87th to 95th Avenue &
NW 90th to 106th Street
Medley, Florida



Date	BUREAU VERITAS NORTH AMERICA, INC	LEGEND	Not to scale	BUREAU VERITAS
06/23/08	FLOOD MITIGATION GRANT	SPT SAMPLE LOCATION CORE SAMPLE/PERCOLATION TEST/SPT LOCATION PERCOLATION TEST LOCATION	Draw by VRL	

February 26, 2015
Revised May 5, 2015
Revised March 17, 2016

Mr. Barton Fye, P.E.
Kimley Horn
1221 Brickell Avenue, Suite 400
Miami, Florida 33131

Re: Addendum No. 1 to Pavement Design Recommendations Report
Medley Flood Mitigation Project
Medley, Florida
NV5 Project No. 146678

Dear Mr. Fye:

As requested, NV5, Inc. reviewed the subsurface exploration performed by Bureau Veritas North America, Inc. in 2008 to provide site preparation recommendations in the areas where compressible organics and silty sands were encountered. The areas where this condition was encountered are:

- NW 95th Avenue, between NW 100th Street and NW 104th Street
- NW 102nd Street between NW 95th Avenue and FEC Railroad
- NW 101st Street between NW 95th Avenue and FEC Railroad
- NW 100th Street between NW 95th Avenue and FEC Railroad
- NW 91st Court between NW 100th Street and FEC Railroad
- NW 97th Terrace between NW 91st Court and NW 89th Avenue
- NW 89th Avenue between NW 95th Street and FEC Railroad
- NW 93rd Street between 300' east of NW 89th Avenue and end of street to the west

In order to reduce the potential for localized settlements in areas where the compressible organics and silty materials are present NV5 recommends the use of a geogrid. NV5 understands that the roads will be raised approximately 18 inches above the existing grade. Drawing No. 1 attached to this addendum highlights the areas where the geogrid is recommended. The geogrid is typically used to better distribute the applied loads to a bigger area in order to reduce the settlements. Settlements are expected to be on the order of ½ to 1 inch. Drainage flow should account for the expected differential settlement with the areas excavated and backfilled with acceptable fill such as the catch basins. The following paragraphs should be incorporated into the report prepared by NV5 dated November 10, 2014.

SITE PREPARATION RECOMMENDATIONS

1. Geotechnical site preparation for areas where silty sand and/or organics were encountered within the top 4 feet of the existing grade should consist of placement of a biaxial geogrid such as Tensar BX1500 or equivalent at least 11 inches below the proposed finish grade.

2. The geogrid should be placed under the roadway and extend at least three (3) feet beyond the edge of the roadway. Overlapping should be as recommended by the manufacturer. The contractor should spread the geogrid so it is wrinkle-free prior to placement of the overburden soils.

3. For soils above the limestone the slope should be 1.5 Horizontal to 1 Vertical. Cuts in the limestone are expected to stand vertical at least for a short period of time during construction.

4. Prior to placement of any fill, the subgrade must be proofrolled using a heavy duty vibratory roller (Dynapac CA25 or equivalent).

5. Field Density Tests must be performed to verify the degree of compaction obtained with the vibratory equipment. One (1) field density test should be made approximately every 100 linear feet for each 12-inch lift of compacted backfill.

We appreciate the opportunity to be of service. In the event you have questions about information in this report, please contact the undersigned at 305.666.3563.

Sincerely,

NV5, Inc.

ALFREDO BUDIK LICENSE No. 43884 STATE OF FLORIDA PROFESSIONAL ENGINEER

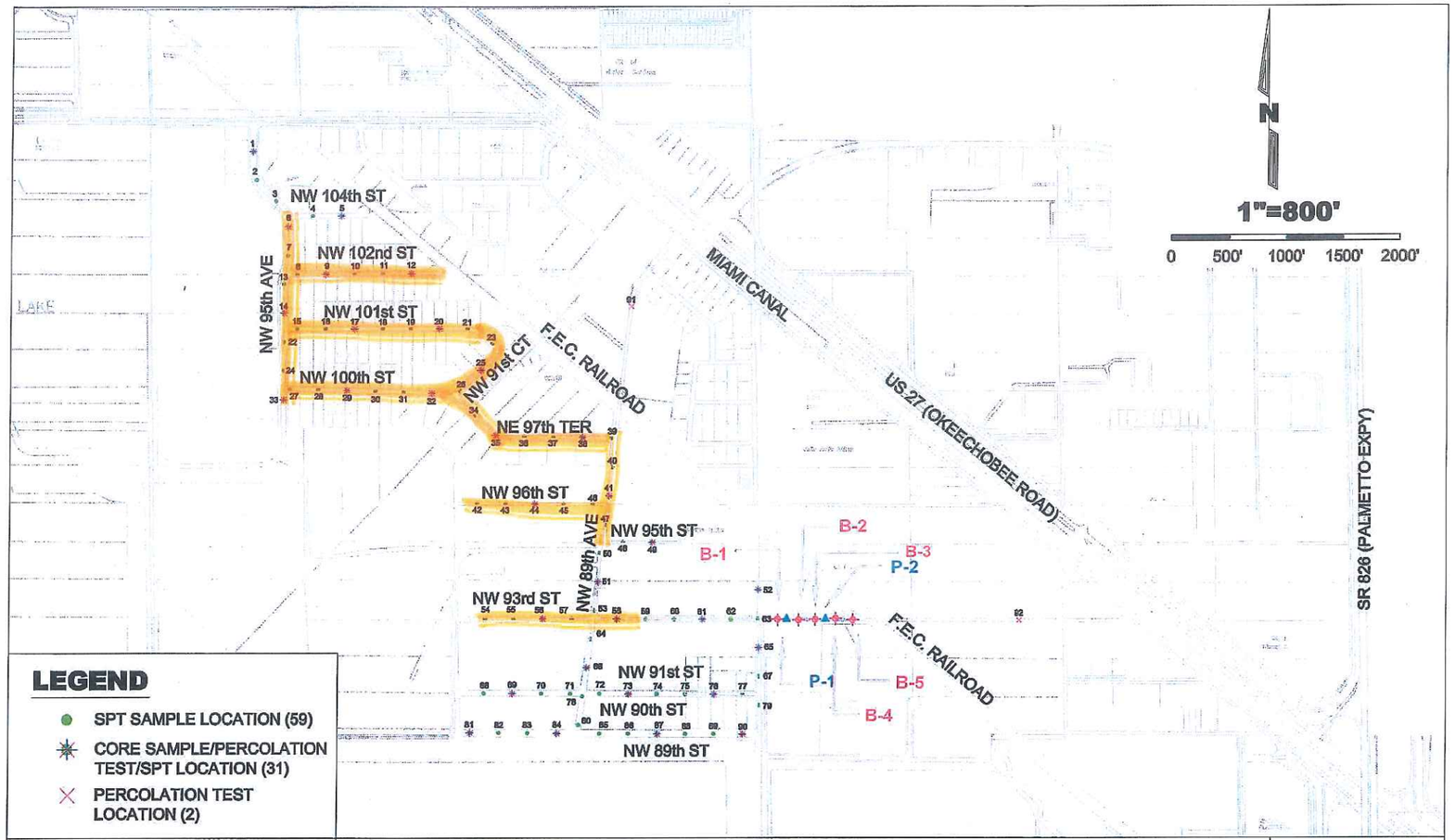
3/17/16

Alfredo Budik, P.E.
Senior Engineer
Florida License No. 43884

Distribution: Copy via Email
Copy to NV5 File

Attachments: Drawing No.1 – Site Vicinity Map and Test Location Plan

NV5



LEGEND

- SPT SAMPLE LOCATION (59)
- CORE SAMPLE/PERCOLATION TEST/SPT LOCATION (31)
- PERCOLATION TEST LOCATION (2)

Westhorp & Associates, Inc.

GEOTECHNICAL SAMPLE/TESTING LOCATIONS SKETCH
TOWN OF MEDLEY
MIAMI-DADE COUNTY, FLORIDA

FIGURE 1

Site Vicinity Map

N

0 800

Approximate Scale in Feet

LEGEND:

B-1 - Soil Boring Test Location (2014)

P-1 - Drainage Test Location (2014)

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing taken Westhorp & Associates drawing figure 1

N|V|5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*				DWN BY: *WO*
	PROJECT NAME: *Medley Flood Mitigation*				CKD BY: *AB*
	PROJECT LOCATION: *Medley , Florida*	PROJECT NO: *146678*	DATE: *11/05/14*	DWG NO: *1*	APD BY ___