ADDENDUM NO. 1
TO THE CONTRACT DOCUMENTS
for the construction of the

Date: April 4, 2014
Project No.: 476166

NORTH SIMONTON STORMWATER EMERGENCY OUTFALL

CITY OF KEY WEST
KEY WEST, FLORIDA

To All Planholders and/or Prospective Bidders:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of the North Simonton Stormwater Emergency Outfall dated March 2014 as fully and completely as if the same were fully set forth therein:

PRE-BID MEETING

1. Attached is the meeting minutes from the pre-bid meeting held on April 3, 2014.
2. Attached is a copy of the sign-in sheet from the pre-bid meeting.

SPECIFICATIONS

PART 2 – CONTRACTING FORMS

SECTION 00 41 13, BID FORM

DELETE in its entirety and REPLACE with the attached.

PART 3 – SPECIFICATIONS

SECTION 01 01 00, GENERAL REQUIREMENTS

1. Page 1, paragraph 1.01, ADD the following:

"H. The following additional information is attached at the end of this section:

1. South Florida Water Management District Environmental Resource Standard General Permit N. 44-00314-P.
2. South Florida Water Management District Environmental ERP Modifications.
3. Nutting Engineers; Report of Geotechnical Information dated August 21, 2002.

4. Nutting Engineers; Report of Geotechnical Information for North Simonton dated March 2014."

2. Page 3, paragraph 2.02.D, ADD the following sentence at the end of the paragraph:

"The list of City blackout no work dates is located at the end of this section."

3. Page 15, ADD the following:

"PART 9 SUPPLEMENTS

9.01 SUPPLEMENTS

A. The supplement listed below, following "END OF SECTION" is part of this Specification.

1. South Florida Water Management District Environmental Resource Standard General Permit N. 44-00314-P.
2. South Florida Water Management District Environmental ERP Modifications.
3. Nutting Engineers; Report of Geotechnical Information dated August 21, 2002.
4. Nutting Engineers; Report of Geotechnical Information for North Simonton dated March 2014.
5. City Blackout No Work Dates."

SECTION 26 32 13.13, DIESEL ENGINE GENERATOR SET

1. Page 3, paragraph 1.04.A ADD the following at the end of the Extra Materials Table:

Item	Quantity
Spare keypad with display	1 complete set per unit

DRAWINGS

Drawings DELETE and REPLACE the following:

Civil - C-01: SITE PLAN

All Bidders shall acknowledge receipt of Addendum No. 1 in the Bid Form. Bids submitted without this acknowledgement will be considered informal.

CH2M HILL

_____

Sean Mc Coy, P.E.

Appended hereto and part of Addendum No. 1:

Prebid Meeting Minutes and Sign-in Sheet, attached.
Section 00 41 13, Bid Form, attached.

Section 01 01 00, Supplement 1, South Florida Water Management District Environmental Resource Standard General Permit N. 44-00314-P, attached.

Section 01 01 00, Supplement 2, South Florida Water Management District Environmental ERP Modifications, attached.

Section 01 01 00, Supplement 3, Nutting Engineers; Report of Geotechnical Information dated August 21, 2002, attached.

Section 01 01 00, Supplement 4, Nutting Engineers; Report of Geotechnical Information for North Simonton dated March 2014, attached.

Section 01 01 00, Supplement 5, City Blackout No Work Dates, attached.

Drawing: Civil, C-01 Site Plan, attached.

END OF ADDENDUM

MANDATORY PRE-BID MEETING MINUTES

CITY OF KEY WEST

North Simonton Stormwater Emergency Outfall
Old City Hall
Thursday April 3, 2014 at 10:00 AM

1. Introductions (sign-in)

   See Sign in sheet attached

2. Project Summary

   The project consists of the installation of an emergency generator with concrete platform, associated electrical and I&C, approximately 300 linear feet of 36-inch pipe and an outfall to ocean along with all related work and appurtenances.

   See section 01 11 00 *Summary of Work* for additional details

3. Contract Time and Estimated Schedule

   Substantial completion-240 calendar days after notice to proceed
   Final Completion-within 30 calendar days after substantial completion

   Estimated NTP: June 2nd, 2014

   Bids due April 16, 2014 at 3:00 PM

   Bidder's questions must be submitted in writing by close of business April 8, 2014. Submit questions to;

   Sean McCoy
   CH2M HILL
   sean.mccoy@ch2m.com

4. Liquidated Damages

   $3,000/day for failure to meet substantial
   $1,000/day for failure to meet final

5. Grant Information

   The contractor will be required to assist the City Key West Grant Administrator in meeting the reporting requirements of the FEMA grant.

   (Discussion by City Grants Administrator).

   Davis-Bacon not required, see additional information in specifications

6. Allowance

A contingency allowance of $120,000 is included in the proposal for unforeseen conditions and conflicts. Payment of the contingency allowance shall be based on actual costs and authorized by Work Change Directive.

A permitting allowance of $30,000 is included in the proposal for payment of permits only.

A Keys Energy allowance of $2,000 is included in the proposal for payment of work by Keys Energy only.

7. Subcontracting

PICS and electrical subcontractors to be identified in proposal
All other subcontractors shall also be identified in proposal

8. Permits

City of Key West building permits shall be the responsibility of the contractor.

City of Key West license is required for certified or registered electrical and general contractors.

Contractor is required to obtain the De-watering permit.

SFWMD (ERP) permit and USACE permit has been obtained by the City.

FDEP notification has been sent by the City for connection to the pump station, no further action required.

Contractor will be required to comply with all permit requirements.

9. Construction Sequencing

Pipeline and outfall construction shall start September 1st, and must be substantially complete by September 30, 2014.**

**Liquidated Damages will be applied to this Substantial Completion date. See Bid Form, section 00 41 13 paragraph 4.

~~Construction of the generator platform shall not begin until the generator is within 60 days of being received at the project site.~~ ***This is not a constraint for this project.***

Stormwater System shall remain operational at all times. Contractor is required to provide temporary relocation of existing control panel and above ground equipment. Control Panel will need to be temporarily relocated above the 100 year flood elevation.

There is no way to isolate the stormwater injection wells during the installation of the outfall tee piping. This Tee with isolation valve will need to be coordinated with a favorable weather forecast.

Provide 14 days notice for any required shut downs (if required).

10. Staging Area

Contractor shall utilize the south/west section of the parking lot as shown on drawing C-01. If additional space is required, contractor will need to coordinate with the City Public Works Department. Upon completion of construction the lay down area shall be restored to original or better condition.

11. Working Hours

City of Key West has a noise ordinance that allows working hours between 8:00 AM to 7:00 PM, Monday through Friday and 9:00 AM to 5:00 PM Saturday.

The City has identified Blackout dates during which no site work shall occur. See Attachment 1 for list. These dates will be added to the contract documents by addendum.

12. Job Site Security

Contractor shall be responsible for safety of public and the materials on site. See specification section 010100.

13. Existing Utilities

Contractor is responsible for utility location.

Notify all utility offices which are affected by construction operations a minimum of 48 hrs in advance. Where utility relocation is required in documents, contractor shall coordinate with utility.

14. General Requirements

Public safety and property is of utmost importance.

Contractor shall employ and pay for all independent lab testing as required by the specifications.

Contractor shall verify elevations and location of existing facilities shown on drawings prior to start of construction.

15. Technical requirements

All stainless steel components to be 316, all electrical enclosures to be NEMA 4X 316 SST.

The diesel engine generator is to be outfitted with aluminum, sound attenuated, structurally reinforced weatherproof enclosure capable of withstanding 200 mph winds.

The design of this project is based around a Detroit Diesel Generator as specified. Generator dimensions and manufacturer's warranty information will be strictly adhered to by the contractor; no modifications/substitutions will be allowed.

The RTU will monitor signals from the generator, pump station, and existing drainage well pressure transmitters. The RTU will tie into the Owner's existing DFS SCADA network. Refer to Section 40 90 01 for RTU requirements.

Trees and plants have been identified on the drawings and shall be protected. Any other tree requiring trimming or removal will need approval from City Key West tree commission.

16. Engineers Cost estimate $867,000

17. City/OMI Comments

Please review the city ordinance "Cone of Silence". Contractor shall direct all technical questions, and questions concerning the contract documents to the Engineer.

18. Contractor Questions/Comments

NONE

19. A site visit will be conducted following this meeting. Additionally, contractors may look at the White Street, Patricia & Ashby, and the George Street pump stations to view a similar generator installation.

20. Meeting Adjourned

Attachment 1 Blackout (no work) Dates

2014

- July 4th weekend: Thursday July 3rd through Sunday July 6th
- Key West Lobster Fest: No work after 5pm Thursday August 7th through August 10th
- Labor Day Weekend: Friday August 29th through Monday September 1st.
    - Labor day: Monday September 1st
- SoMo Marathon and Half Marathon: Thursday and Friday, October 9th and 10th.
- Goombay Festival: Friday and Saturday October 17th and 18th.
- 36th Annual Fantasy Fest: Week of October 19th through October 26th.
- 34th Annual Key West World Championship Super Boat Races: Sunday November 2nd through Sunday November 9th.
- Thanksgiving Holiday: Thursday November 27th through Saturday 29th.
- Holiday Week: December 24th through January 3rd 2015.

2015

- Key West Half Marathon: Sunday January 18th. (Don't know if we need to list this, as CoKW noise ordinance does not allow work on Sunday's anyway)?
- Presidents Day: Monday February 16th.
- Memorial Day: Monday May 25th.

SIGN-IN

MANDATORY PRE-BID MEETING

City Key West

North Simonton Stormwater Emergency Outfall

Old City Hall

Thursday, April 3, 2014 at 10:00 AM

To insure all contact information is recorded correctly and meeting minutes are sent to the right email address: PLEASE PRINT CLEARLY

Name	Company	Phone No.	Cell Phone	E-mail
Sean McCoy	CH2M Hill	305 294-1645	801 946-0135	sean.mccoy@CH2M.com
Andrew Smith	CH2M HILL	294 1645		asmyth@ch2m.com
Rick Giannetti	Giannetti	586 268-2090		rgiannetti74@Comcast.net
Tony Donofrio	Giannetti	586 268-2090	954 914 8378	tonydupworth@tim.com
Andrew Toppino	Toppino's	305-797-5839		AJToppino@GMAIL.com
Richard Toppino	Toppino's	305-797-1002		RichardJToppino@aol.com
Paul Waters	Douglas N. Higgins	305-797-1019		dnhigginskeywest@aol.com
Dwight Devore	Nearshore Electric	305-294-3991		dwightnearshore@bellsouth.net
Jeffery Kirk	Nearshore Electric	305-294-3991		Nearshore@BellSouth.net
Tom Casey	Overholt Construction	305-712-0758		TCASEYNA@Aol.Com
John Bortelmo	OMI	292-5102		John.Bortelmo@CH2M.com
Carolyn Sheldon	City of Key West	305-809-3741		csheldon@keywestcity.com
Jay Gewin	City of Key West	305-809-3902		jgewin@keywestcity.com
STEVE GARDNER	C.K.W.	305-304-3930		SGARDNER@KEYWESTCITY.COM
ARNOLD COLLINS	OMI	305-747-5107		ARNOLD.COLLINS@CH2M.COM

Name	Company	Phone No.	Cell Phone	E-mail
MIKE SMITH	FLORIDA KEYS ELECT.	305-296-4028		msmith@flkeyselectric.com

NOTE TO BIDDER: Use preferably BLACK ink for completing this Bid form.

BID FORM

To: The City of Key West

Address: 3126 Flagler Avenue, Key West, Florida 33040

Project Title: ITB #14-010005/ North Simonton Stormwater Emergency Outfall

CH2M HILL Project No.: 476166

City of Key West Project No.: ST 1302

Bidder's person to contact for additional information on this Bid:

Company Name:_____

Contact Name: _____

Telephone: _____

1. BIDDER'S DECLARATION AND UNDERSTANDING

1.1. The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

1.2. The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the Work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

1.3. The Bidder further agrees, as evidenced by signing the Bid, that if awarded a Contract, the Florida Trench Safety Act and applicable trench safety standards will be complied with.

©COPYRIGHT 2014 CH2M HILL

2. CONTRACT EXECUTION AND BONDS

2.1. The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the Work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

3. CERTIFICATES OF INSURANCE

3.1. Bidder agrees to furnish the Owner, before commencing the Work under this Contract, the certificates of insurance as specified in these Documents.

4. START OF CONSTRUCTION AND CONTRACT COMPLETION TIMES

4.1. The Bidder agrees to begin work within 10 calendar days after the date of the Notice to Proceed and to achieve Substantial Completion within 240 calendar days from the date when the Contract Times commence to run as provided in paragraph 2.03.A of the General Conditions, and Work will be completed and ready for final payment and acceptance in accordance with paragraph 14.07 of the General Conditions within 270 calendar days from the date when the Contract Times commence to run. A second Substantial Completion for the outfall pipe from the 36-inch valve to the outfall structure and the outfall structure is 30 days after start of construction for the outfall pipe and outfall structure. The installation of the 36-inch outfall pipe and outfall structure cannot start until September 1st.

5. LIQUIDATED DAMAGES

5.1. In the event the Bidder is awarded the Contract, Owner and Bidder recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in paragraph Start of Construction and Contract Completion Times above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Owner and Bidder also recognize the delays, expense, and difficulties involved in proving in a legal or other dispute resolution proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Bidder agree that as liquidated damages for delay (but not as a penalty) Bidder shall pay Owner $3,000.00 per day for each day that expires after the time specified for each substantial completion.

©COPYRIGHT 2014 CH2M HILL

5.2. After Substantial Completion, if Bidder neglects, refuses, or fails to complete the remaining Work within the Contract Times or any Owner-granted extension thereof, Bidder shall pay Owner $1,000.00 for each day that expires after the time specified in paragraph Start of Construction and Contract Completion Times, above for completion and readiness for final payment. Liquidated damages shall run concurrent.

5.3. Owner will recover such liquidated damages by deducting the amount owed from the final payment or any retainage held by Owner.

6. ADDENDA

6.1. The Bidder hereby acknowledges that he has received Addenda Nos._____, _____, _____, _____, _____, (Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

7. SALES AND USE TAXES

7.1. The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated Bid Prices for the Work. Cash allowances DO NOT include any sales and use tax. Equipment allowance includes taxes as shown in Equipment Suppliers' Bid.

8. PUBLIC ENTITY CRIMES

8.1. "A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list."

©COPYRIGHT 2014 CH2M HILL

9. COMBINED UNIT PRICE AND LUMP SUM WORK

9.1. The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents. For unit price bid items, the estimate of quantities of work to be done is tabulated in the Proposal and, although stated with as much accuracy as possible, is approximate only and is assumed solely for the basis of calculation upon which the award of Contract shall be made. For lump sum bid items, it is expressly understood that the amounts are independent of the exact quantities involved. The Bidder agrees that the amounts for both unit price and lump sum work represent a true measure of labor and materials required to perform the Work, including all allowances for overhead and profit for each type of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.

10. UNIT PRICE SCHEDULE

10.1. Unit prices have been computed in accordance with paragraph 11.03.C of the General Conditions and Section 01 29 00, Payment Procedures, paragraph 1.07.B.

10.2. Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Prices Bid items will be based on actual quantities, determined as provided in the Contract Documents.

11. UNFORESEEN CONDITIONS ALLOWANCE

11.1. Bidder further agrees that the amount shown is an estimated amount to be included in the Total Base Bid for unforeseen conditions and conflicts. Bidder further acknowledges that payment will be based on actual costs as determined in conformance with the Contract Documents and as authorized by Work Change Directive. The Owner will negotiate with the Contractor how each Allowance will be spent prior to performing the work.

12. PERMIT ALLOWANCE

12.1. Bidder further acknowledges that this amount shown is an estimated amount to be included in the Total Base Bid for any Permits required by the City of Key West and any Regulatory Agency Permit(s). Bidder acknowledges that payment will be based on actual cost for the permit(s).

©COPYRIGHT 2014 CH2M HILL

13. KEYS ENERGY SERVICE ALLOWANCE

13.1. Bidder further agrees that the amount shown is an estimated amount to be included in the Total Base Bid to cover payment to Keys Energy Service for electrical service. Bidder further acknowledges that payment will be based on actual amount paid as indicated by appropriate invoice.

Unit Price Bid Schedule					
Item No.	**Description**	**Estimated Quantity**	**Unit**	**Bid Unit Price**	**Extended Bid Unit Price**
1	**General**				
1.1	Performance and Payment Bonds	1	EA		
1.2	Mobilization	1	LS		
1.3	Demobilization	1	LS		
1.4	General and Supplementary Conditions	1	LS		
1.5	MOT	1	LS		
1.6	Certified AutoCAD As-built	1	LS		
1.7	Surveyor	1	LS		
2	**Trench Excavation, Backfill and Storm Pipe**				
2.1	36-inch PVC SDR 51 Storm Pipe				
2.1.1	6 to 8 Feet Deep	300	LF		
3	Dewatering	1	LS		
4	Florida Trench Safety Act Compliance	1	LS		
5	**Pavement**				
5.1	Pavement Removal and Replacement	180	SY		
5.2	Pavement 70 Mils Thermoplastic Stripping	80	LF		
5.3	1-inch Asphalt Milling and 1-inch Asphalt Overlay	600	SY		
6	36-inch Buried V-405 Valves	1	EA		
7	Demolition	1	LS		

©COPYRIGHT 2014 CH2M HILL

Unit Price Bid Schedule					
Item No.	**Description**	**Estimated Quantity**	**Unit**	**Bid Unit Price**	**Extended Bid Unit Price**
8	Emergency Generator with Concrete Platform	1	LS		
9	Outfall Structure at Ocean	1	LS		
				Total of All Extended Bid Unit Prices	$_____

Unforeseen Conditions Allowance $120,000

Permit Allowance $30,000

Keys Energy Allowance $2,000

The Bidder agrees to accept as full payment for the Work proposed under this Project, as herein specified and as shown on the Drawings, the following Total Base Bid amount:

_____Dollars

(Amount written in words has precedence)

and _____Cents **TOTAL BASE BID**$_____

14. SUBCONTRACTORS

14.1. The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the Work in the event that the Bidder is awarded the Contract:

_____
Name

_____ _____ _____
Street City State Zip

_____
Name

_____ _____ _____
Street City State Zip

©COPYRIGHT 2014 CH2M HILL

_____
Name

_____ _____ _____
Street City State Zip

_____
Name

_____ _____ _____
Street City State Zip

Surety

_____whose address is

_____ _____ _____
Street City State Zip

Bidder

The name of the Bidder submitting this Bid is _____

_____ doing business at

_____ _____ _____
Street City State Zip

which is the address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

_____ _____

_____ _____

_____ _____

©COPYRIGHT 2014 CH2M HILL

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____day of _____, 20_____.

_____
Signature of Bidder

_____
Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this __ day of _____, 20__.

(SEAL)

_____
Name of Corporation

By: _____

Title: _____

Attest: _____
Secretary

END OF SECTION

©COPYRIGHT 2014 CH2M HILL

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
STANDARD GENERAL PERMIT NO. 44-00314-P
DATE ISSUED: June 16, 2003

Form #0941
08/95

PERMITTEE: CITY OF KEY WEST
5701 W COLLEGE RD
KEY WEST, FL 33040

PROJECT DESCRIPTION: Construction and operation of a surface water management system to serve a stormwater retrofit project known as Key West Pump Assisted Stormwater Drainage Wells.

Issuance of this permit shall also constitute a Consent of Use of State-owned sovereign submerged lands for the existing 360-foot long outfall.

PROJECT LOCATION: MONROE COUNTY,

SEC 5 TWP 68S RGE 25E
SEC 1,12,6,7 TWP 68S RGE 24E
SEC 31 TWP 67S RGE 25E
SEC 1,12,6,7 TWP 68S RGE 25E

PERMIT DURATION: See Special Condition No:1. See attached Rule 40E-4.321, Florida Administrative Code.

This is to notify you of the District's agency action concerning Notice of Intent for Permit Application No. 030107-5, dated January 7, 2003. This action is taken pursuant to Rule 40E-1.603 and Chapter 40E-40 , Florida Administrative Code (F.A.C.).

Based on the information provided, District rules have been adhered to and an Environmental Resource General Permit is in effect for this project subject to:

1. Not receiving a filed request for a Chapter 120, Florida Statutes, administrative hearing.
2. the attached 19 General Conditions (See Pages : 2 - 4 of 7),
3. the attached 10 Special Conditions (Sae Pages : 5 - 6 of 7)
4. the attached 12 Consent of use Conditions (See Pages : 7 - 7 of 7) and
5. the attached 27 Exhibit(s).

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights," we will assume that you concur with the District's action.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the Permittee (and the persons listed in the attached distribution list) no later than 5:00 p.m. on this 16th day of June, 2003, in accordance with Section 120.60(3), Florida Statutes.

BY: _____
Anthony M. Waterhouse, P.E.
Director - Surface Water Management
Palm Beach Service Center
Certified mail number 7002 3150 0000 8125 7838

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373. F.S.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.

6. Within 30 days after completion of construction of the permitted activity, the permitee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the supplied Environmental Resource Permit Construction Completion/Certification Form Number 0881. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation from the approved drawings is discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "As-built" or "Record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the

GENERAL CONDITIONS

approved responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(4), F.A.C., also known as the "No Notice" Rule.

14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and

GENERAL CONDITIONS

40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.

19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIAL CONDITIONS

1. The construction phase of this permit shall expire on June 16, 2008.
2. Operation of the surface water management system shall be the responsibility of the permittee.
3. Discharge Facilities:

Basin: Patricia & Ashby, Structure: Pump 01-1

1-8092gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: Patricia & Ashby, Structure: Pump 01-2

1-8300gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: White street, Structure: Pump 02-1

1-8245gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: White street, Structure: Pump 02-2

1-8182gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: South Duval, Structure: Pump 04-1

1-8073gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: South Duval, Structure: Pump 04-2

1-8150gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

Basin: North Duval, Structure: Pump 05-1

1-8092gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

SPECIAL CONDITIONS

Basin: North Duval, Structure: Pump 05-2

1-8226gpm' NGVD.

Receiving body : Groundwater
Control elev : 1.2 feet NGVD.

4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.

5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

7. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

8. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.

9. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

10. The authorization for construction of the surface water management system is issued pursuant to the water quality net improvement provisions referenced in Rule Section 40E-4.303(1), Florida Administrative Code; therefore, the state water quality certification is waived.

CONSENT OF USE CONDITIONS

1. No activities other than those set forth in Application No. 030107-5 and in this permit are authorized. Any additional activities on state-owned sovereignty submerged lands must receive further consent from the Governor and Cabinet, sitting as the Board of Trustees of the Internal Improvement Trust Fund (hereinafter the "Board") or their properly designated agent.

2. Grantee agrees that all title and interest to all lands lying below the historical mean high water line or ordinary high water line are vested in the Board, and shall make no claim of title or interest in said lands by reason of the occupancy or use thereof.

3. Grantee agrees to use or occupy the subject premises for those purposes specified herein, and grantee shall not permit the premises or any part thereof to be used or occupied for any other purpose or knowingly permit or suffer any nuisances or illegal operations of any kind of the premises.

4. Grantee agrees to maintain the premises in good condition in the interest of the public health, safety and welfare. The premises are subject to inspection by the Board or its designated agent at any reasonable time.

5. Grantee agrees to indemnify, defend and hold harmless the Board and the State of Florida from all claims, actions, lawsuits and demands arising out of this consent.

6. No failure, or successive failures, on the part of the Board to enforce any provision, waiver or successive waivers on the part of the Board of any provision herein, shall operate as a discharge thereof or render the same inoperative or impair the right of the Board to enforce the same in the event of subsequent breach.

7. Grantee binds itself and its successors and assigns to abide by the provisions and conditions set forth herein. In the event grantee fails or refuses to comply with the provisions and conditions of this consent, the consent of use may be terminated by the Board after written notice to the grantee. Upon receipt of such notice, the grantee shall have thirty (30) days in which to correct the violation. Failure to correct the violation(s) within this period shall result in the automatic revocation of this consent of use.

8. All costs, including attorneys' fees, incurred by the Board in enforcing the terms and conditions of this consent shall be paid by the grantee. Grantee agrees to accept service by certified mail of any notice required by Chapter 18-14, Florida Administrative Code, at the address shown on page one of this permit and further agrees to notify the Board in writing of any change of address at least ten days before the change becomes effective.

9. Grantee agrees to assume responsibility for all liabilities that accrue to the sovereignty submerged land or to the improvements thereon, including any and all drainage or special assessments or taxes of every kind and description which are now or may be hereafter lawfully assessed and levied against the property during the effective period of this consent.

10. Grantee agrees that any dispute arising from matters relating to this consent shall be governed by the laws of Florida and initiated only in Leon County, Florida.

11. The consent of use associated with these general consent conditions as well as these conditions themselves are subject to modification after 5 years in order to reflect any applicable changes in statutes, rule or policies of the Board or its designated agent.

12. In the event that any part of the structure(s) consented to herein is determined by a final adjudication issued by a court of competent jurisdiction to encroach on or interfere with adjacent riparian rights, grantee agrees to either obtain written consent for the offending structure from the affected riparian owner or to remove the interference or encroachment within 60 days from the date of the adjudication. Failure to comply shall constitute a material breach of this consent and shall be grounds for its immediate termination.

40E-4.321 Duration of Permits

(1) Unless revoked or otherwise modified the duration of an environmental resource permit issued under this chapter or Chapter 40E-40, F.A.C. is as follows:

(a) For a conceptual approval, two years from the date of issuance or the date specified as a condition of the permit, unless within that period an application for an individual or standard general permit is filed for any portion of the project. If an application for an environmental resource permit if filed, then the conceptual approval remains valid until final action is taken on the environmental resource permit application. If the application is granted, then the conceptual approval is valid for an additional two years from the date of issuance of the permit. Conceptual approvals which have no individual or standard general environmental resource permit applications filed for a period of two years shall expire automatically at the end of the two year period.

(b) For a conceptual approval filed concurrently with a development of regional impact(DRI) application for development approval (ADA) and a local government comprehensive plan amendment, the duration of the conceptual approval shall be two years from whichever one of the following occurs at the latest date:

1. the effective date of the local government's comprehensive plan amendment.
2. the effective date of the local government's development order.
3. the date on which the District issues the conceptual approval, or
4. the latest date of the resolution of any chapter 120.57, F.A.C., administrative proceeding or other legal appeals.

(c) For an individual or standard general environmental resource permit, five years from the date of issuance or such amount of time as made a condition of the permit.

(d) For a noticed general permit issued pursuant to chapter40-E-400, F.A.C., five years from the date the notice of intent to use the permit is provided to the District.

(2)(a) Unless prescribed by special permit condition, permits expire automatically according to the timeframes indicated in this rule. If application for extension if made in writing pursuant to subsection (3), the permit shall remain in full force and effect until:

1. the Governing Board takes action on an application for extension of an individual permit, or
2. staff takes action on an application for extension of a standard general permit.

(b) Installation of the project outfall structure shall not constitute a vesting of the permit.

(3) The permit extension shall be issued provided that a permittee files a written request with the District showing good cause prior to the expiration of the permit. For the purposes of this rule, good cause shall mean a set of extenuating circumstances outside of the control of the permittee. Requests for extensions, which shall include documentation of the extenuating circumstances and how they have delayed this project, will not be accepted more than 180 days prior to the expiration date.

(4) Substantial modifications to Conceptual Approvals will extend the duration of the Conceptual Approval for two years from the date of issuance of the modification. For the purposes of this section, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different water resource or environmental impacts which require a detailed review.

(5) Substantial modifications to individual or standard general environmental resource parmits issued pursuant to a permit application extend the duration of the permit for three years from the date of issuance of the modification. Individual or standard general environmental resource permit modifications do not extend the duration of a conceptual approval.

(6) Permit modifications issued pursuant to subsection 40E-4.331(2)(b), F.A.C. (letter modifications) do not extend the duration of a permit.

(7) Failure to complete construction or alteration of the surface water management system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization in order to continue construction unless a permit extension is granted.

Specific authority 373.044, 373.113 F.S. Law implemented 373.413, 373.416, 373.419, 373.426 F.S. History-New 9-3-81, Amended 1-31-82, 12-1-82, Formerly 16K-4.07(4), Amended 7-1-86, 4/20/94, Amended 7-1-86, 4/20/94, 10-3-95

NOTICE OF RIGHTS

Section 120.569(1), Fla. Stat. (1999), requires that "each notice shall inform the recipient of any administrative hearing or judicial review that is available under this section, s. 120.57, or s. 120.68; shall indicate the procedure which must be followed to obtain the hearing or judicial review, and shall state the time limits which apply." Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

Petition for Administrative Proceedings

1. A person whose substantial interests are affected by the South Florida Water Management District's (SFWMD) action has the right to request an administrative hearing on that action. The affected person may request either a formal or an informal hearing, as set forth below. A point of entry into administrative proceedings is governed by Rules 28-106.111 and 40E-1.511, Fla. Admin. Code, (also published as an exception to the Uniform Rules of Procedure as Rule 40E-0.109), as set forth below. Petitions are deemed filed upon receipt of the original documents by the SFWMD Clerk.

a. Formal Administrative Hearing: If a genuine issue(s) of material fact is in dispute, the affected person seeking a formal hearing on a SFWMD decision which does or may determine their substantial interests shall file a petition for hearing pursuant to Sections 120.569 and 120.57(1), Fla. Stat. or for mediation pursuant to Section 120.573, Fla. Stat. within 21 days, except as provided in subsections c. and d. below, of either written notice through mail or posting or publication of notice that the SFWMD has or intends to take final agency action. Petitions must substantially comply with the requirements of Rule 28-106.201(2), Fla. Admin. Code, a copy of the which is attached to this Notice of Rights.

b. Informal Administrative Hearing: If there are no issues of material fact in dispute, the affected person seeking an informal hearing on a SFWMD decision which does or may determine their substantial interests shall file a petition for hearing pursuant to Sections 120.569 and 120.57(2), Fla. Stat. or for mediation pursuant to Section 120.573, Fla. Stat. within 21 days, except as provided in subsections c. and d. below, of either written notice through mail or posting or publication of notice that the SFWMD has or intends to take final agency action. Petitions must substantially comply with the requirements of Rule 28-106.301(2), Fla. Admin. Code, a copy of the which is attached to this Notice of Rights.

c. Administrative Complaint and Order: If a Respondent objects to a SFWMD Administrative Complaint and Order, pursuant to Section 373.119, Fla. Stat. (1997), the person named in the Administrative Complaint and Order may file a petition for a hearing no later than 14 days after the date such order is served. Petitions must substantially comply with the requirements of either subsection a. or b. above.

d. State Lands Environmental Resource Permit: Pursuant to Section 373.427, Fla. Stat., and Rule 40E-1.511(3), Fla. Admin. Code (also published as an exception to the Uniform Rules of Procedure as Rule 40E-0.109(2)(c)), a petition objecting to the SFWMD's agency action regarding consolidated applications for Environmental Resource Permits and Use of Sovereign Submerged Lands (SLERPs), must be filed within 14 days of the notice of consolidated intent to grant or deny the SLERP. Petitions must substantially comply with the requirements of either subsection a. or b. above.

e. Emergency Authorization and Order: A person whose substantial interests are affected by a SFWMD Emergency Authorization and Order, has a right to file a petition under Sections 120.569, 120.57(1), and 120.57(2), Fla. Stat., as provided in subsections a. and b. above. However, the person, or the agent of the person responsible for causing or contributing to the emergency conditions shall take whatever action necessary to cause immediate compliance with the terms of the Emergency Authorization and Order.

f. Order for Emergency Action: A person whose substantial interests are affected by a SFWMD Order for Emergency Action has a right to file a petition pursuant to Rules 28-107.005 and 40E-1.611, Fla. Admin. Code, copies of which are attached to this Notice of Rights, and Section 373.119(3), Fla. Stat., for a hearing on the Order. Any subsequent agency action or proposed agency action to initiate a formal revocation proceeding shall be separately noticed pursuant to section g. below.

g. Permit Suspension, Revocation, Annulment, and Withdrawal: If the SFWMD issues an administrative complaint to suspend, revoke, annul, or withdraw a permit, the permittee may request a hearing to be conducted in accordance with Sections 120.569 and 120.57, Fla. Stat., within 21 days of either written notice through mail or posting or publication of notice that the SFWMD has or intends to take final agency action. Petitions must substantially comply with the requirements of Rule 28-107.004(3), Fla. Admin. Code, a copy of the which is attached to this Notice of Rights.

2. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the SFWMD's final action may be different from the position taken by it previously. Persons whose substantial interests may be affected by

any such final decision of the SFWMD shall have, pursuant to Rule 40E-1.511(2), Fla. Admin. Code (also published as an exception to the Uniform Rules of Procedure as Rule 40E-0.109(2)(c)), an additional 21 days from the date of receipt of notice of said decision to request an administrative hearing. However, the scope of the administrative hearing shall be limited to the substantial deviation.

3. Pursuant to Rule 40E-1.511(4), Fla. Admin. Code, substantially affected persons entitled to a hearing pursuant to Section 120.57(1), Fla. Stat., may waive their right to such a hearing and request an informal hearing before the Governing Board pursuant to Section 120.57(2), Fla. Stat., which may be granted at the option of the Governing Board.

4. Pursuant to Rule 28-106.111(3), Fla. Admin. Code, persons may file with the SFWMD a request for extension of time for filing a petition. The SFWMD, for good cause shown, may grant the extension. The request for extension must contain a certificate that the petitioner has consulted with all other parties, if any, concerning the extension and that the SFWMD and all other parties agree to the extension.

CIRCUIT COURT

5. Pursuant to Section 373.617, Fla. Stat., any substantially affected person who claims that final agency action of the SFWMD relating to permit decisions constitutes an unconstitutional taking of property without just compensation may seek judicial review of the action in circuit court by filing a civil action in the circuit court in the judicial circuit in which the affected property is located within 90 days of the rendering of the SFWMD's final agency action.

6. Pursuant to Section 403.412, Fla. Stat., any citizen of Florida may bring an action for injunctive relief against the SFWMD to compel the SFWMD to enforce the laws of Chapter 373, Fla. Stat., and Title 40E, Fla. Admin. Code. The complaining party must file with the SFWMD Clerk a verified complaint setting forth the facts upon which the complaint is based and the manner in which the complaining party is affected. If the SFWMD does not take appropriate action on the complaint within 30 days of receipt, the complaining party may then file a civil suit for injunctive relief in the 15th Judicial Circuit in and for Palm Beach County or circuit court in the county where the cause of action allegedly occurred.

7. Pursuant to Section 373.433, Fla. Stat., a private citizen of Florida may file suit in circuit court to require the abatement of any stormwater management system, dam, impoundment, reservoir, appurtenant work or works that violate the provisions of Chapter 373, Fla. Stat.

DISTRICT COURT OF APPEAL

8. Pursuant to Section 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

LAND AND WATER ADJUDICATORY COMMISSION

9. A party to a "proceeding below" may seek review by the Land and Water Adjudicatory Commission (FLAWAC) of SFWMD's final agency action to determine if such action is consistent with the provisions and purposes of Chapter 373, Fla. Stat. Pursuant to Section 373.114, Fla. Stat., and Rules 42-2.013 and 42-2.0132, Fla. Admin. Code, a request for review of (a) an order or rule of the SFWMD must be filed with FLAWAC within 20 days after rendition of the order or adoption of the rule sought to be reviewed; (b) an order of the Department of Environmental Protection (DEP) requiring amendment or repeal of a SFWMD rule must be filed with FLAWAC within 30 days of rendition of the DEP's order, and (c) a SFWMD order entered pursuant to a formal administrative hearing under Section 120.57(1), Fla. Stat., must be filed no later than 20 days after rendition of the SFWMD's final order. Simultaneous with filing, a copy of the request for review must be served on the DEP Secretary, any person named in the SFWMD or DEP final order, and all parties to the proceeding below. A copy of Rule 42-2.013, Fla. Admin. Code is attached to this Notice of Rights.

PRIVATE PROPERTY RIGHTS PROTECTION ACT

10. A property owner who alleges a specific action of the SFWMD has inordinately burdened an existing use of the real property, or a vested right to a specific use of the real property, may file a claim in the circuit court where the real property is located within 1 year of the SFWMD action pursuant to the procedures set forth in Subsection 70.001(4)(a), Fla. Stat.

LAND USE AND ENVIRONMENTAL DISPUTE RESOLUTION

11. A property owner who alleges that a SFWMD development order (as that term is defined in Section 70.51(2)(a), Fla. Stat. to include permits) or SFWMD enforcement action is unreasonable, or unfairly burdens the use of the real property, may file a request for relief with the SFWMD within 30 days of receipt of the SFWMD's order or notice of agency action pursuant to the procedures set forth in Subsections 70.51(4) and (6), Fla. Stat.

MEDIATION

12. A person whose substantial interests are, or may be, affected by the SFWMD's action may choose mediation as an alternative remedy under Section 120.573, Fla. Stat. Pursuant to Rule 28-106.111(2), Fla. Admin. Code, the petition for mediation shall be filed within 21 days of either written notice through mail or posting or

publication of notice that the SFWMD has or intends to take final agency action. Choosing mediation will not affect the right to an administrative hearing if mediation does not result in settlement.

Pursuant to Rule 28-106.402, Fla. Admin. Code, the contents of the petition for mediation shall contain the following information:

(1) the name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(2) a statement of the preliminary agency action;

(3) an explanation of how the person's substantial interests will be affected by the agency determination; and

(4) a statement of relief sought.

As provided in Section 120.573, Fla. Stat. (1997), the timely agreement of all the parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57, Fla. Stat., for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within 60 days of the execution of the agreement. If mediation results in settlement of the dispute, the SFWMD must enter a final order incorporating the agreement of the parties. Persons whose substantial interest will be affected by such a modified agency decision have a right to petition for hearing within 21 days of receipt of the final order in accordance with the requirements of Sections 120.569 and 120.57, Fla. Stat., and SFWMD Rule 28-106.201(2), Fla. Admin. Code. If mediation terminates without settlement of the dispute, the SFWMD shall notify all parties in writing that the administrative hearing process under Sections 120.569 and 120.57, Fla. Stat., remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action.

VARIANCES AND WAIVERS

13. A person who is subject to regulation pursuant to a SFWMD rule and believes the application of that rule will create a substantial hardship or will violate principles of fairness (as those terms are defined in Subsection 120.542(2), Fla. Stat.) and can demonstrate that the purpose of the underlying statute will be or has been achieved by other means, may file a petition with the SFWMD Clerk requesting a variance from or waiver of the SFWMD rule. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have concerning the SFWMD's action. Pursuant to Rule 28-104.002(2), Fla. Admin. Code, the petition must include the following information:

(a) the caption shall read:
Petition for (Variance from) or (Waiver of) Rule (Citation)

(b) The name, address, telephone number and any facsimile number of the petitioner;

(c) The name, address telephone number and any facsimile number of the attorney or qualified representative of the petitioner, (if any);

(d) the applicable rule or portion of the rule;

(e) the citation to the statue the rule is implementing;

(f) the type of action requested;

(g) the specific facts that demonstrate a substantial hardship or violation of principals of fairness that would justify a waiver or variance for the petitioner;

(h) the reason why the variance or the waiver requested would serve the purposes of the underlying statute; and

(i) a statement of whether the variance or waiver is permanent or temporary, if the variance or waiver is temporary, the petition shall include the dates indicating the duration of the requested variance or waiver.

A person requesting an emergency variance from or waiver of a SFWMD rule must clearly so state in the caption of the petition. In addition to the requirements of Section 120.542(5), Fla. Stat. pursuant to Rule 28-104.004(2), Fla. Admin. Code, the petition must also include:

a) the specific facts that make the situation an emergency; and

b) the specific facts to show that the petitioner will suffer immediate adverse effect unless the variance or waiver is issued by the SFWMD more expeditiously than the applicable timeframes set forth in Section 120.542, Fla. Stat.

WAIVER OF RIGHTS

14. Failure to observe the relevant time frames prescribed above will constitute a waiver of such right.

28-106.201 INITIATION OF PROCEEDINGS
(INVOLVING DISPUTED ISSUES OF MATERIAL FACT)

(2) All petitions filed under these rules shall contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding, and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and

(f) A demand for relief.

28-106.301 INITIATION OF PROCEEDINGS
(NOT INVOLVING DISPUTED ISSUES OF MATERIAL FACT)

(2) All petitions filed under these rules shall contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding, and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and

(e) A demand for relief.

28-107.004 SUSPENSION, REVOCATION, ANNULMENT, OR WITHDRAWAL

(3) Requests for hearing filed in accordance with this rule shall include:

(a) The name and address of the party making the request, for purposes of service;

(b) A statement that the party is requesting a hearing involving disputed issues of material fact, or a hearing not involving disputed issues of material fact; and

(c) A reference to the notice, order to show cause, administrative complaint, or other communication that the party has received from the agency.

42-2.013 REQUEST FOR REVIEW PURSUANT TO SECTION 373.114 OR 373.217

(1) In any proceeding arising under Chapter 373, F.S., review by the Florida Land and Water Adjudicatory Commission may be initiated by the Department or a party by filing a request for such review with the Secretary of the Commission and serving a copy on any person named in the rule or order, and on all parties to the proceeding which resulted in the order sought to be reviewed. A certificate of service showing completion of service as required by this subsection shall be a requirement for a determination of sufficiency under Rule 42-2.0132. Failure to file the request with the Commission within the time period provided in Rule 42-2.0132 shall result in dismissal of the request for review.

(2) The request for review shall identify the rule or order requested to be reviewed, the proceeding in which the rule or order was entered and the nature of the rule or order. A copy of the rule or order sought to be reviewed shall be attached. The request for review shall state with particularity:

(a) How the order or rule conflicts with the requirements, provisions and purposes of Chapter 373, F.S., or rules duly adopted thereunder;

(b) How the rule or order sought to be reviewed affects the interests of the party seeking review;

(c) The oral or written statement, sworn or unsworn, which was submitted to the agency concerning the matter to be reviewed and the date and location of the statement, if the individual or entity requesting the review has not participated in a proceeding previously instituted pursuant to Chapter 120, F.S., on the order for which review is sought;

(d) If review of an order is being sought, whether and how the activity authorized by the order would substantially affect natural resources of statewide or regional significance, or whether the order raises issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from a standpoint of agency precedent, and all the factual bases in the record which the petitioner claims support such determination(s); and

(e) The action requested to be taken by the Commission as a result of the review, whether to rescind or modify the order, or remand the proceeding to the water management district for further action, or to require the water management district to initiate rulemaking to adopt, amend or repeal a rule.

28-107.005 EMERGENCY ACTION

(1) If the agency finds that immediate serious danger to the public health, safety, or welfare requires emergency action, the agency shall summarily suspend, limit, or restrict a license.

(2) the 14-day notice requirement of Section 120.569(2)(b), F. S., does not apply and shall not be construed to prevent a hearing at the earliest time practicable upon request of an aggrieved party.

(3) Unless otherwise provided by law, within 20 days after emergency action taken pursuant to paragraph (1) of this rule, the agency shall initiate a formal suspension or revocation proceeding in compliance with Sections 120.569, 120.57. and 120.60, F.S.

40E-1.611 EMERGENCY ACTION

(1) An emergency exists when immediate action is necessary to protect public health, safety or welfare; the health of animals, fish or aquatic life; the works of the District; a public water supply, or recreational, commercial, industrial, agricultural or other reasonable uses of land and water resources.

(2) The Executive Director may employ the resources of the District to take whatever remedial action necessary to alleviate the emergency condition without the issuance of an emergency order, or in the event an emergency order has been issued, after the expiration of the requisite time for compliance with that order.

Included with this letter/permit is a brochure from the Florida Department of Environmental Protection (DEP) on Florida's National Pollutant Discharge Elimination System (NPDES) program for construction activities. As the brochure indicates, the U.S. Environmental Protection Agency authorized the DEP in October 2000 to implement the NPDES stormwater permitting program in Florida. The District is assisting DEP by distributing this information to entities which may be subject to regulation under the NPDES program. No response to the District is required.

A "Generic Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land" **is required for a construction activity which contributes stormwater discharges to surface waters of the State or into a municipal separate storm sewer system and disturbs five or more acres of land. A permit is required for less than five acres if the activity is part of a larger common plan of development or sale that will meet or exceed the five acre threshold.**

The permit required under DEP's NPDES stormwater permitting program is separate from the Environmental Resource Permit required by the District. Receiving a permit from the District does not exempt you from meeting the NPDES program requirements.

If you have any questions on the NPDES program, there are DEP phone numbers, mailing addresses and internet web page addresses in the brochure. The DEP web site, at www.dep.state.fl.us/water/stormwater/npdes/, provides information associated with the NPDES program including all regulations and forms cited in the brochure.

Last Date For Agency Action: 20-JUN-2003

GENERAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Key West Pump Assisted Stormwater Drainage Wells

Permit No.: 44-00314-P

Application No.: 030107-5

Application Type: Environmental Resource (New General Permit)

Location: Monroe County, S5/T68S/R25E
S1,12,6,7/T68S/R24E
S31/T67S/R25E
S1,12,6,7/T68S/R25E

Permittee : City Of Key West

Operating Entity : City Of Key West

Project Area: 2.1 acres

Project Land Use: Residential
Commercial

Drainage Basin: GULF OF MEXICO

Drainage Basin: ATLANTIC OCEAN

Receiving Body: Groundwater **Class:** N/A

Special Drainage District: NA

Conservation Easement To District : No

Sovereign Submerged Lands: Yes

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit to authorize construction and operation of a stormwater retrofit project to serve existing residential and commercial development within the City of Key West.

The application is also a request for Consent of Use of State-owned sovereign submerged lands for the existing 360-foot long outfall serving South Duval Street.

PROJECT EVALUATION:

PROJECT SITE DESCRIPTION:

The project area consists of four previously developed locations within the City of Key West. The areas are described by the following street names Patricia and Ashby, White Street, South Duval and North Duval. These four areas are shown on the location map (Exhibit 1). There are no permitted surface water management systems serving these four areas. With the exception of Ashby and Patricia Streets, stormwater runoff is collected by a system of inlets and culvert which directs the runoff to outfall pipes which discharge offshore the island. Patricia and Ashby Streets flow to tidal areas via overland sheetflow. These four areas experience standing water due to inadequately placed storm drains and high tides that slow or stop the runoff to the existing outfalls. The water that ponds in these areas is a hazard to vehicular and pedestrian traffic. Road closures are common during certain combinations of rainfall and tidal events.

PROPOSED PROJECT:

The overall objective of this project is to capture untreated runoff that is presently flowing to tidewater and to divert it to vortex separators for water quality treatment prior to discharging it to the groundwater table via pressurized wells. Any runoff that cannot be accommodated by the wells will be directed back to the existing outfalls. The construction details for each of the four locations is as follows.

Patricia Street and Ashby Street: Improvements will include replacement of four existing catch basins, addition of one new catch basin, conveyance pipes, a vortex separator, a pump station and one pressurized drainage well for disposal of stormwater runoff. The pump station will have two pumps. One will serve as a backup.

White Street: Improvements will include five new catch basins, a positive shutoff valve on the existing 18 inch diameter outfall pipe, conveyance pipes, a vortex separator, a pump station and three pressurized drainage wells. The positive shutoff valve on the existing outfall will fail in an open position in case of a power failure. The pump station will have two pumps which will operate with different "On" elevations and the same "Off" elevation.

South Duval Street: Improvements will include a positive shutoff valve on the existing 36 inch diameter outfall pipe, conveyance pipes, a vortex separator, a pump station and two pressurized drainage wells. The positive shutoff valve on the existing outfall will fail in an open position in case of a power failure. The pump station will have two pumps which will operate with different "On" elevations and the same "Off" elevation.

North Duval Street: Improvements will include replacement of twenty existing catch basins, addition of four new catch basins, conveyance pipes, a vortex separator, a pump station and two pressurized drainage wells. The pump station will have two pumps which will operate with different "On" elevations and the same "Off" elevation.

LAND USE:

The existing developed areas served by the retrofitted systems are a mixture of residential and commercial land uses. The contributing drainage area is 128.92 acres. The construction footprint for the proposed work is 2.1 acres. No new development is proposed as part of this application.

WATER QUANTITY:

Discharge Rate :

The discharge rates to the existing outfall pipes which direct stormwater runoff offshore will be reduced significantly under the proposed plan. Runoff will only go to the existing outfalls if the pump stations receive the runoff at a rate greater than they were designed to operate at.

Control Elevation :

Basin	Area (Acres)	Ctrl Elev (ft, NGVD)	WSWT Ctrl Elev (ft, NGVD)	Method Of Determination
Patricia & Ashby	.15	1.2	1.20	Wet Season Soil Borings
White street	.60	1.2	1.20	Wet Season Soil Borings
South Duval	.15	1.2	1.20	Wet Season Soil Borings
North Duval	1.20	1.2	1.20	Wet Season Soil Borings

Receiving Body :

Basin	Str.#	Receiving Body
Patricia & Ashby	Pump 01-1	Groundwater
Patricia & Ashby	Pump 01-2	Groundwater
White Street	Pump 02-1	Groundwater
White Street	Pump 02-2	Groundwater
South Duval	Pump 04-1	Groundwater
South Duval	Pump 04-2	Groundwater
North Duval	Pump 05-1	Groundwater
North Duval	Pump 05-2	Groundwater

Discharge Structures: Note: The units for all the elevation values of structures are (ft, NGVD)

Pumps:

Basin	Str#	Count	Type	Capacity
North Duval	Pump 05-1	1	Electric	8092gpm
North Duval	Pump 05-2	1	Electric	8226gpm
Patricia & Ashby	Pump 01-1	1	Electric	8092gpm
Patricia & Ashby	Pump 01-2	1	Electric	8300gpm
South Duval	Pump 04-1	1	Electric	8073gpm
South Duval	Pump 04-2	1	Electric	8150gpm
White street	Pump 02-1	1	Electric	8245gpm
White street	Pump 02-2	1	Electric	8182gpm

WATER QUALITY :

The authorization for construction of the surface water management system is issued pursuant to the water quality net improvement provisions referenced in Rule Section 40E-4.303(1), Florida Administrative Code; therefore, the state water quality certification is waived. The proposed work will improve water quality by significantly reducing the discharge of untreated stormwater runoff through the existing outfall

culverts. In addition, runoff will be routed through the vortex separators prior to discharge down the pressurized wells. No new development is proposed as part of this application.

WETLANDS:

No wetlands are involved in project development. Adverse impacts to wetlands or other surface waters are not anticipated with project development.

Endangered Species:

The project site does not contain preferred habitat for wetland-dependent endangered or threatened wildlife species or species of special concern. No wetland-dependent endangered/threatened species or species of special concern were observed onsite, and submitted information indicates that potential use of the site by such species is minimal. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site.

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

SOVEREIGN/SUBMERGED LANDS:

The proposed project will utilize an existing 225-foot long, 36-inch diameter outfall which occupies less than 1,000 square feet. No modifications to this structure are proposed or authorized by this permit issuance. Issuance of this permit shall also included the Consent of Use for activities within sovereign submerged lands.

RELATED CONCERNS:

Water Use Permit Status:

A. Water Use Permit application for dewatering (appl. no. 030522-13) has been submitted. This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation, unless the work qualifies for a general permit issued pursuant to Section 40E-20 FAC.

Historical/Archeological Resources:

The District has not received correspondence from the Florida Department of State, Division of Historical Resources indicating that the agency has objections to the issuance of this permit.

DCA/CZM Consistency Review:

The District has not received a finding of inconsistency from the Florida Department of Community Affairs or other commenting agencies regarding the provisions of the federal Coastal Zone Management Plan.

Enforcement:

There has been no enforcement activity associated with this application.

STAFF REVIEW:

DIVISION APPROVAL:

NATURAL RESOURCE MANAGEMENT:

Anita R. Bain

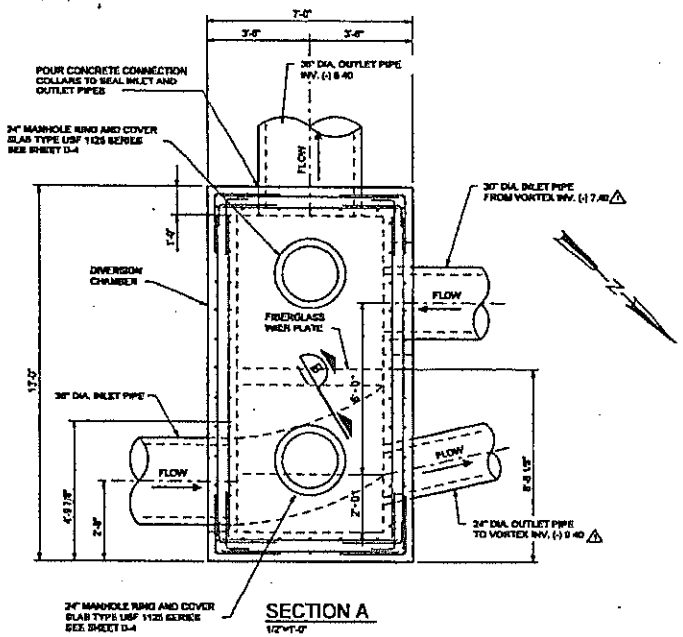
Anita R. Bain

DATE: 6/10/03

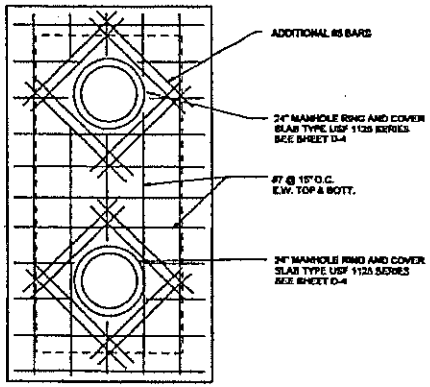
SURFACE WATER MANAGEMENT:

Carlos A. DeRojas, P.E.

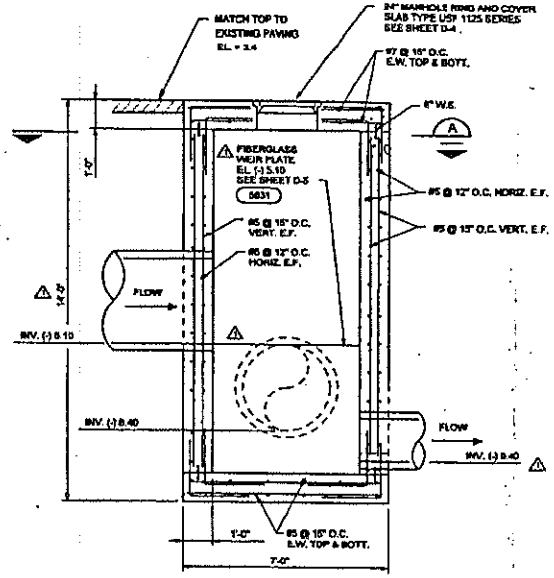
DATE: 6/10/03



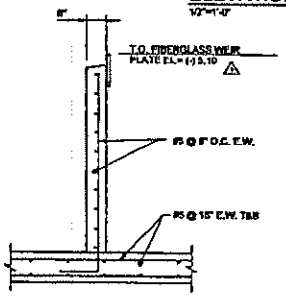
SECTION A
1/2"=1'-0"



TOP SLAB - PLAN
1/2"=1'-0"



ELEVATION VIEW
1/2"=1'-0"



SECTION B
1/2"=1'-0"

EXHIBIT 3

DESIGN S. DELLA					
DR J. PRUITT					
CHK					
APVD	02/03	ADDENDUM NO. 1	RM	KW	
	NO.	DATE	REVISION	BY	APVD

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CH2MHILL
800 FAIRWAY DRIVE, SUITE 350
DEERFIELD BEACH, FLORIDA 33441
E80000072 AAC000982

City of Key West

PULSE ASSISTED STORMWATER DRAINAGE WELLS
DUVAL STREET - NORTH
TASK ORDER NO. 5-01

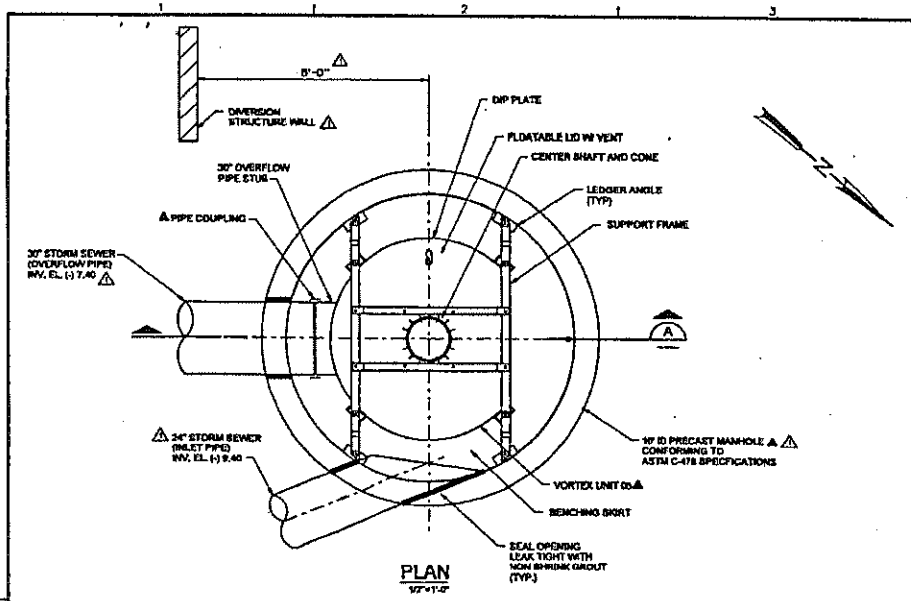
DIVERSION STRUCTURE 05-1

SHEET 27
DWG ND-2
DATE JAN. 2003
PROJ 1654B2.05

6482c002.dlv 15-APR-2003

COMPUTED

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

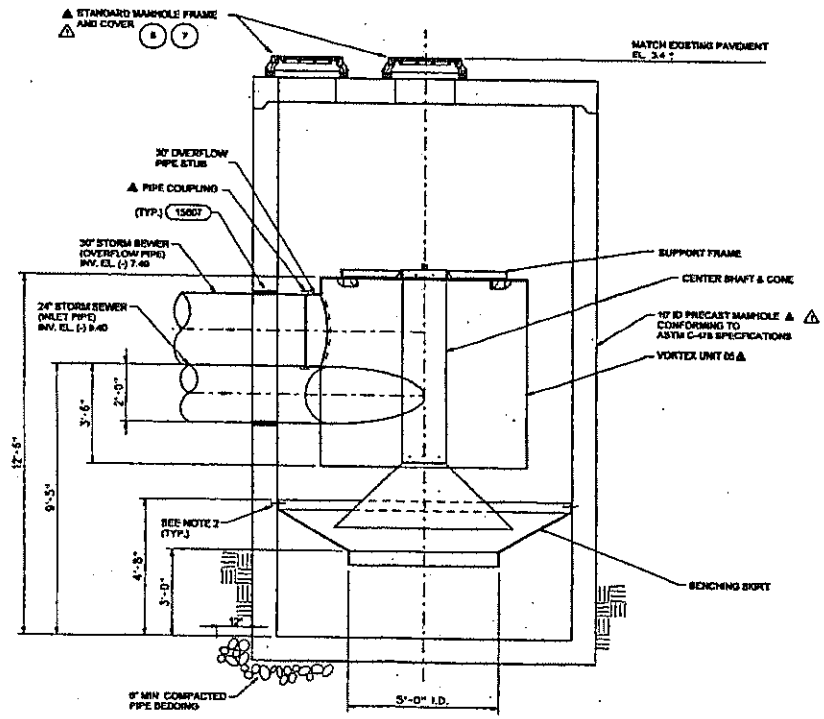


PLAN
1/2"=1'-0"

NOTES:

1. COORDINATE DIMENSIONS WITH EQUIPMENT MANUFACTURER.
2. SECURE UNIT TO PRECAST SECTION W/TYPE 316 SST ANCHORS PER EQUIPMENT MFR'S REQUIREMENTS.

DENOTES ITEMS FURNISHED BY INDUCED VORTEX SOLIDS SEPARATOR MANUFACTURE.



SECTION A
1/2"=1'-0"

K G Williams

DESIGN S. FARDIN					
DR L. BOWER					
CHK R. OLSON					
APVD R. MORALES	NO.	DATE	REVISION	BY	APVD
	1	02/03	ADDENDUM NO. 1	RW	KB

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CH2MHILL
350 FAIRWAY DRIVE, SUITE 350
DEERFIELD BEACH, FLORIDA 33441
EB0000072 AAC001092

City of Key West

PUMP ASSISTED STORMWATER DRAINAGE WELLS
DUVAL STREET - NORTH
TASK ORDER NO. 2-01

VORTEX UNIT 05

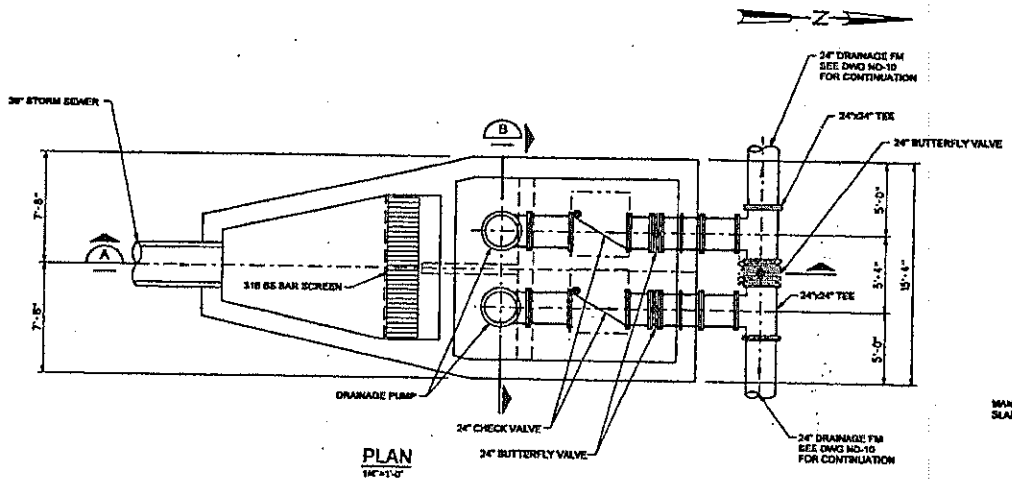
SHEET 28
DWG NO-3
DATE JAN. 2003
PWOJ 166472.02

6482c003.dlv 15-APR-2003

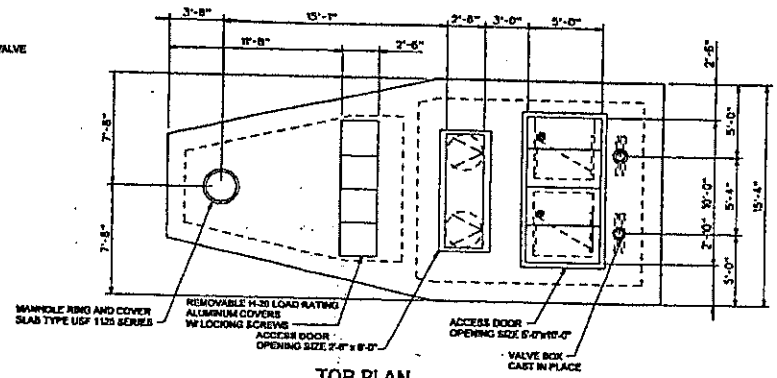
CONFORMED

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

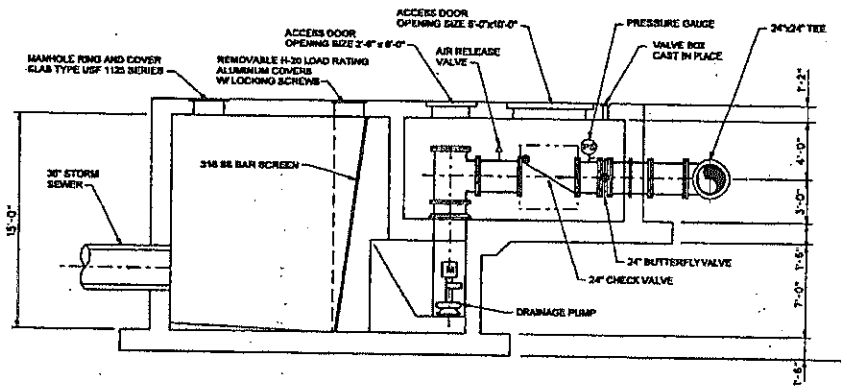
EXHIBIT 4



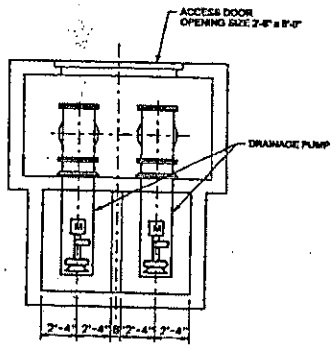
PLAN
1/4"=1'-0"



TOP PLAN
1/4"=1'-0"



SECTION A
1/4"=1'-0"



SECTION B
1/4"=1'-0"

EXHIBIT 5

DESIGN S. FAHDEN						
DR L. BOWER						
CHK R. DILSON						
APVD R. MORALES	NO.	DATE	REVISION	BY	APVD	

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

CH2MHILL
800 FAIRWAY DRIVE, SUITE 350
DEERFIELD BEACH, FLORIDA 33441
EB0000072 AAC001992

City of Key West

PUMP ASSISTED STORMWATER DRAINAGE WELLS
DUVAL STREET - NORTH
TASK ORDER NO. 5-01

PUMP STATION 05

SHEET 33
DWG ND-8
DATE NOV. 2002
PROJ 1664B2.05

6482c008.dwg 20-DEC-2002

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
District Headquarters: 3301 Gun Club Road, West Palm Beach, Florida 33406 (561) 686-8800 www.sfwmd.gov

Regulation
Application No.: 140109-8

January 29, 2014

CITY OF KEY WEST
3140 FLAGLER AVE
KEY WEST, FL 33040

Dear Permittee:

SUBJECT: 44-00314-P
Project : NORTH SIMONTON STORMWATER EMERGENCY OUTFALL
Location: Monroe County, S31/T67S/R25E

District staff has reviewed the information submitted January 9, 2014, for the modification to construct an emergency by-pass line for the previously permitted stormwater management pump station located in North Simonton Street to alleviate flooding conditions in the adjacent area that occur during extreme storm events, as shown on the submitted plans.

Based on that information, District staff has determined that the proposed activities are in compliance with the original environmental resource permit and appropriate provisions of paragraph 40E-4.331(2)(b) or 62-330.315(2)(g), Florida Administrative Code. Therefore, these changes have been recorded in our files.

Your permit remains subject to the General Conditions and all other Special Conditions not modified and as originally issued.

Should you have any questions concerning this matter, please contact this office.

Sincerely,

Carlos A. de Rojas, P.E.
Section Leader - Swm
Regulation Division

CD/el

c: C H2 M Hill
City Of Key West
Monroe County Engineer
SEAN MCCOY

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does <u>not</u> constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

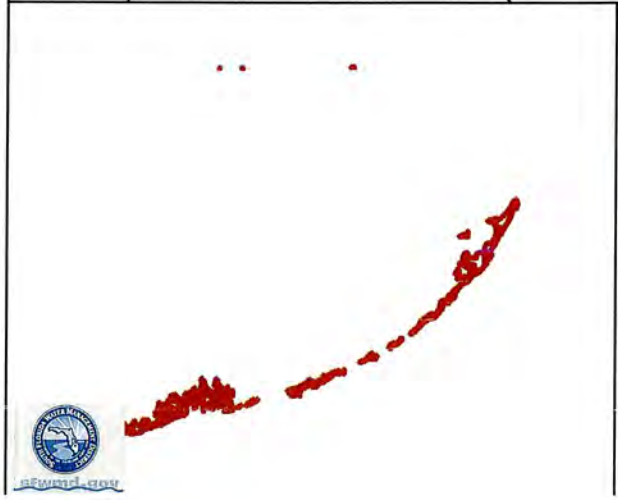
If the District takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.



MONROE COUNTY, FLORIDA

Legend

Application

Application No: 140109-8

Sec 31 / Twp 67 / Rge 25

Project Name: NORTH SIMONTON STORMWATER EMERGENCY OUTFALL

N

Map Date: 2014-01-29

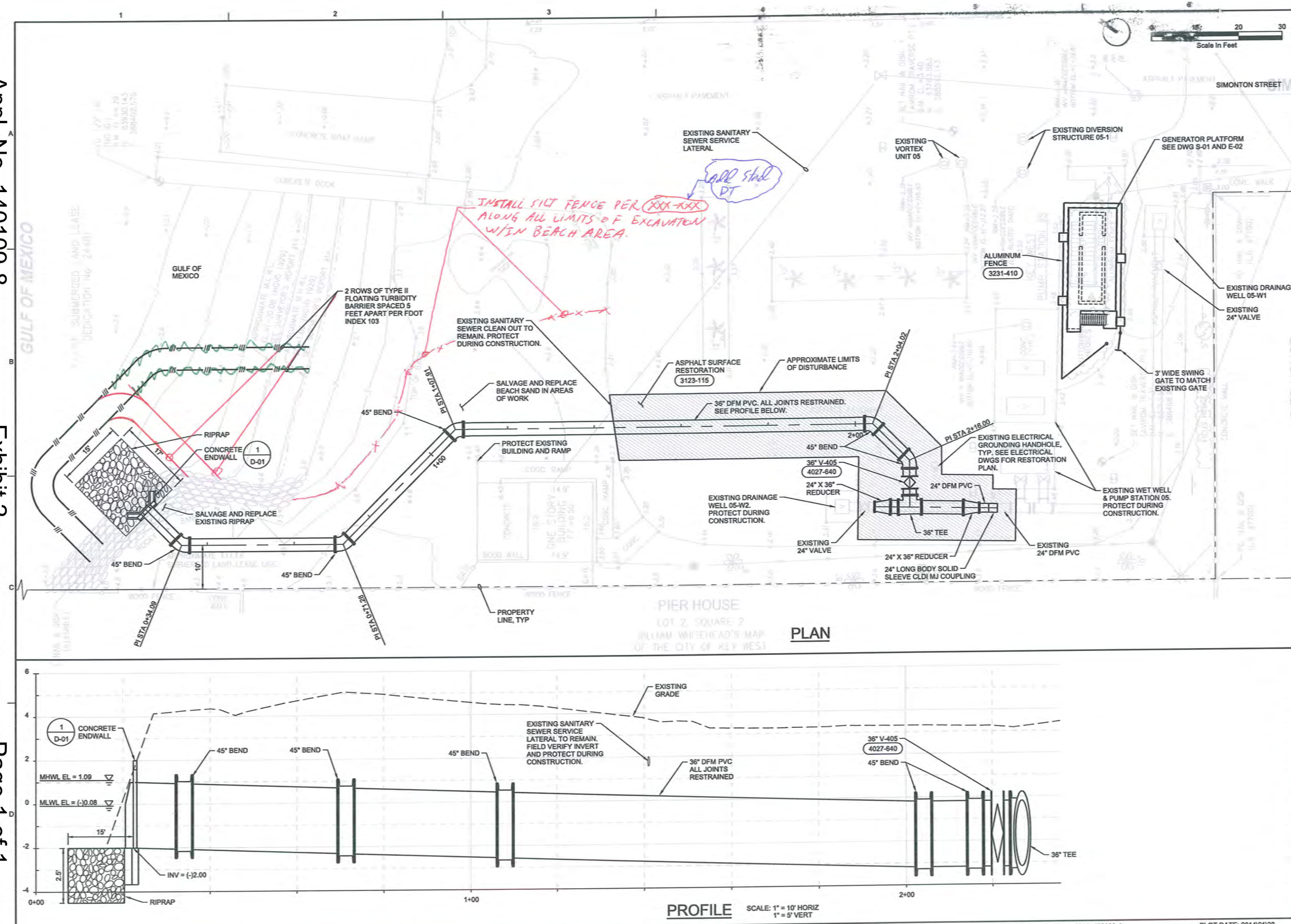
Permit No: 44-00314-P

0 145 290 Feet

Exhibit Number: 1

Appl. No. 140109-8

Exhibit 2



NO.	DATE	DSGN	DR	REVISION	CHK	APVD	BY	APVD
		R MORRISON	R MORRISON		A MALONE			R MORRISON

3011 S.W. WILLISTON ROAD
GAINESVILLE, FLORIDA 32608
EB0000072 AAC001992

OUTFALL AT THE NORTH END OF SIMONTON STREET
CITY OF KEY WEST
KEY WEST, FLORIDA

CH2MHILL®

CIVIL

SITE PLAN

1" = X'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	DECEMBER 2013
PROJ	476166
DWG	C-01
SHEET	ShtNum of ShtTot

90% DESIGN DOCUMENTS

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

©CH2M HILL 2013. ALL RIGHTS RESERVED.

$PWURL $PWPATH FILENAME: 005-C-2001_476166.dgn PLOT DATE: 2014\01\28 PLOT TIME: 1:01:19 PM

Page 1 of 1

NUTTING ENGINEERS
OF FLORIDA, INC.
ESTABLISHED 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

www.nuttingengineers.com • info@nuttingengineers.com

August 21, 2002

Mr. Steve Shillber
CH2M Hill
800 Fairway Drive Suite 350
Deerfield Beach, Florida 33441 Phone (954) 426-6112 Fax (954) 698-601013

Subject: **Report of Geotechnical Exploration**
Pump Assisted Drainage Wells for the
City of Key West
Underground Storm Water Pump Stations
Florida Keys, Florida

Dear Mr. Shillber:

Nutting Engineers of Florida, Inc. has performed a geotechnical exploration for the proposed Pump Assisted Drainage Wells for the City of Key West, Florida. The purpose of this study was to perform a subsurface exploration along the proposed stormwater line in order to obtain the general near-surface stratigraphy for the proposed construction. This report presents our findings and recommendations.

PROJECT INFORMATION

The site of the referenced project is located in the City of Key West, Monroe County, Florida. We understand that this project includes constructing pump assisted drainage wells and underground storm water pump stations for the City of Key West. The project will include stormwater pump stations at each of the sites with footprint dimensions of approximately 30 feet long by 15 feet wide. The depths of the pump stations will range from 12 to 20 feet deep. In addition, pretreatment separators that could be up to 15 feet in diameter and approximately 30 feet deep will be constructed at each site. These underground systems will be installed at three sites referred as:

- "White Street" Project
- "North Duval" Project
- "City" Project

These sites are located within the vicinity of White Street along Atlantic Drive and Sirugo Avenue, vicinity of North Duval along Simonton, Front and Wall Streets and the vicinity of United and White Street.

SUBSURFACE EXPLORATION/GENERAL SUBSURFACE CONDITIONS

Subsurface Soil Exploration

The geotechnical exploration program associated with the proposed Pump Assisted Drainage Wells and Underground Storm Water Pump Stations to achieve the project requirements included field reconnaissance, review of the Monroe County Soil Survey Map and Standard Penetration Test borings (ASTM D-1586).

We conducted a field reconnaissance and assessed conditions with respect to the drilling equipment access, general topographic site conditions and underground utilities. Based on the above information, Nutting Engineers of Florida, Inc. developed a field geotechnical exploration program which consisted of a total of ten (10) Standard Penetration Test (SPT) borings (ASTM D-1586) to depths ranging from 15 to 25 feet below the existing ground surface. Prior to performing the fieldwork, Nutting Engineers contacted the appropriate utility companies to clear underground pipes and cables. The test borings were drilled over three sites as follows:

White Street" Project Location: Four (4) borings.

- Test borings B-02-1, B-02-2 and B-02-3 located along Atlantic Drive approximately 75 feet apart, starting at the intersection of Sirugo Avenue and Atlantic Drive.
- Test boring B-02-4 located at the proposed pump station site, 50 feet north of the landscaped median of the parking lot East of White Street and North of Atlantic Avenue.

"North Duval" Project Location: Five (5) borings,

- Test boring B-05-1 located ten feet inside the south corner of the parking lot at the north end of Simonton Street.
- Test boring B-05-2 located 50 feet from B-05-1 along the exit drive for the parking lot.
- Test boring B-05-3 located at the intersection of the parking lot exit drive and Simonton Street.
- Test boring B-05-4 located in the intersection of Simonton Street and Front Street and
- Test boring B-05-5 located in the intersection of Duval Street and Wall Street.

"City" Project Location: One (1) boring

- Test boring B-C-1 located in the southwest corner of United and Whitehead Street.

The test borings locations are indicated on the attached test boring location plan. Individual test boring reports are presented in the Appendix of this report. The borings were established in the field using approximate methods; namely, a measuring wheel and available surface controls.

Soil Survey Maps Review

A review of the Soil Survey for Monroe County revealed that at the time the survey was conducted, the soils at the site were described as Urban land. This map unit is covered by asphalt, concrete, buildings and other impervious surfaces. Urban land makes up to about 80 percent of most areas of this unit map. The natural soil cannot be observed. The soils in undeveloped areas are mainly Udorthents which were developed by spreading crushed bedrock over the original soil material.

Test Boring Results

The borings performed for this project indicated a variation in subsurface conditions at the drilled locations. Based on the borings performed at the boring locations, the sites are underlain either by fill materials, organic soils and/or by alternating sequence of cemented and uncemented limestone deposits. In descending order of occurrence, the limestone deposit includes a near surface layer of hard limestone and a wide variety of calcareous sands and shells with limestone fragments. Below this formation and the upper fill and/or organic soils, sand with limestone fragments was encountered to the termination depth of the borings. The following describes each stratum.

Stratum 1 - Fill Sands: The fill soils were found to be fine sand with varying proportions of shell and rock fragments. The fill soils were found below the pavement section to variable depths depending on the boring location. This stratum typically ranged in depths between 5 and 10 feet below the pavement structure. Test borings locations B-05-1 through B-05-5, revealed a layer of fine sand with varying proportions of shell fragments below the upper fill material and extended to depths ranging from 12 to 18 feet below existing ground surface. Standard Penetration Resistance Values (N-Values) generally ranged from 1 blow per foot to 40 blows per foot.

Stratum 2 – Organic Soils: This stratum consists of very soft organic silt with variable amounts of sand and highly compressible fibrous silty peat. This stratum was generally encountered below the fill soils comprising a thickness ranging from about 3.5 feet to 7 feet below existing ground surface. Natural water contents ranged from 94% to 212% with the highest water contents measured in samples containing higher proportions of peat. This indicates the soils can hold more than their twice weight in water, and are considered highly compressible.

Stratum 3 – Hard Limestone (Cap Rock): A surficial stratum of a hard layer of limestone was found near the ground surface at test boring locations B-02-3, B-C-1 at depths ranging from about 0.5 feet to 3 feet. Standard Penetration Resistance Values (N-Values) in this stratum generally ranged from 17 blows per foot to N-values much greater than 50 blows per foot indicating the hardness of this stratum at these boring locations.

Stratum 4 – Sand with varying proportions of limestone fragments: A stratum of fine sand with varying proportion of limestone fragments was found below the limestone formation (stratum 3) and below the upper fill and/or organic soils (strata 1 & 2) at depths ranging from about 12 feet to 22 feet and continued to the maximum exploration depths of 15 to 25 feet. N-values in this stratum generally ranged from 16 blows per foot to 31 blows per foot.

One of the most important characteristics of the limestone formation encountered in the project area is the degree of solution of the limestone. It appears that at the boring locations, solution cavities filled with loose sands may be present within the limestone formation. The split spoon typically penetrates these loose soils filled within the solution holes.

A detailed description of the interlayering of the profile components is presented in the test boring records provided in the Appendix.

GENERAL INFORMATION

Results of this study indicated that the fill, silt and peat materials and the deeper granular soils can be excavated using conventional earthwork equipment. Planning for the installation of the Pump Assisted Drainage Wells and Underground Storm Water Pump Stations should consider the silt/peat soils found below the fill materials at depths ranging from about 6 feet and 12 feet and extending to depths as much as 20 feet below grade at some boring locations. It is our opinion that this material will probably not be adequate for support of pipelines and other drainage/pump station structures. The silt and peat soils have a strong propensity for compression settlements and can affect the performance of the planned structures. Therefore, it may be necessary to extend the excavation through the compressible soils to the underlying fine sand strata and refill with well compacted approved soils.

Where limestone is encountered during construction and needs to be excavated, some heavier equipment may be required. Blasting will not be appropriate due to the presence of other utilities and structures already existing in the area. In most cases the use of a track mounted backhoe, equipped with a rock bucket, is suitable for excavations in the limestone. We note that excavation of hard limestone should be expected in the area of boring locations B-02-4 and B-C-1. Some boulders may be encountered during the excavation process. These should either be crushed or replaced with approved bedding/fill material.

We expect that non braced cut slopes made in the granular soils at an inclination of 1.5 horizontal to 1 vertical will remain stable for short periods of time provided they are not subjected to seepage, surcharge loads (e.g. from stockpiled spoil or equipment) and excessive vibration. Slope requirements of the Occupational Safety and Health Administration (OSHA) may be more restrictive and should be adhered to when applicable.

If slopes cannot be cut at and inclination of 1.5 horizontal to 1 vertical then the trench slope must be shored or shielded. Shoring and shielding procedures should conform to those presented in the Occupational Safety and Health Administration

Vibratory equipment will cause vibrations that could be felt by persons within adjacent structures. The contractor should exercise due care during performance of the vibratory work.

The proposed construction will be in close proximity to adjacent existing structures. A pre-construction condition survey should be performed to determine and document the existing condition of these adjacent structures prior to construction. The pre-construction conditions survey would involve visually inspecting the adjacent structures; measuring and photographing observable existing cracks, deterioration, or other signs of distress; and establishing elevation control points.

The pre-construction survey will provide valuable information of the existing conditions of the structures adjacent to the proposed construction. In addition, it would serve as a qualitative record document of the existing conditions of the adjacent structures prior to the start of construction.

Prior to initiating compaction operations, we recommend that representative samples of the structural fill material to be used and acceptable in-place soils be collected and tested to determine their compaction and classification characteristics. The maximum dry density, optimum moisture content, gradation and plasticity characteristics should be determined. These tests are needed for compaction quality control of the structural fill and existing soils, and to determine if the fill material is acceptable.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified immediately so that the condition or change can be evaluated and appropriate action taken.

We appreciate the opportunity to provide these services for you. If we can be of any further assistance, or if you need additional information, please feel free to contact us.

Sincerely,
NUTTING ENGINEERS OF FLORIDA, INC.

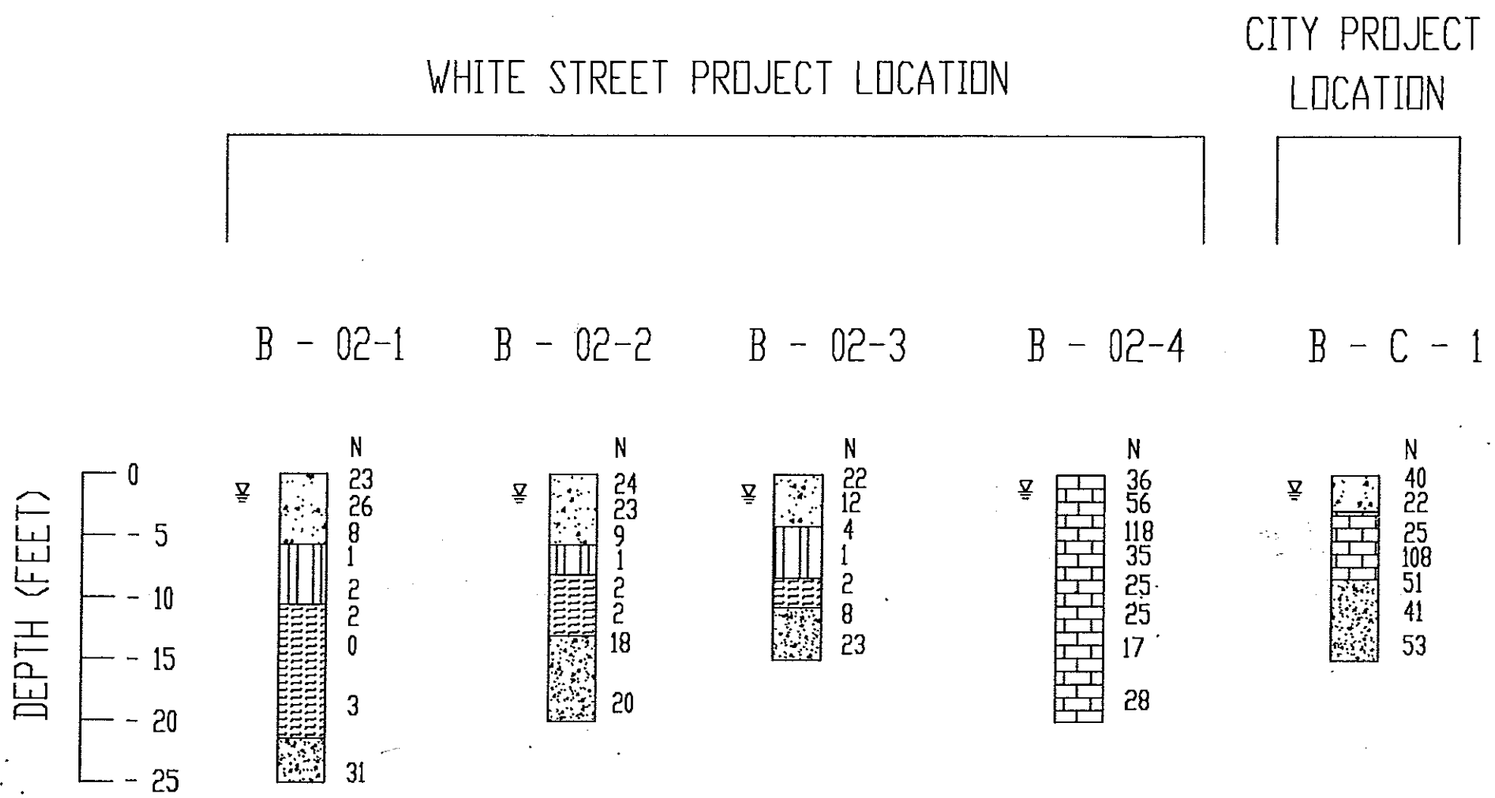
Alex R. Montenegro

Richard Wohlfarth 8/23/02

Alex R. Montenegro, E.I.
Senior Engineer/Division Manager

Richard C. Wohlfarth, P.E. #50858
Director of Engineering

CH2MHILL_Pump Assisted Drainage Wells for the City of Key West. arm



– LEGEND –

SAND WITH VARYING PROPORTIONS OF LIMESTONE AND SHELL FRAGMENTS (FILL)

FINE SAND WITH SOME PROPORTIONS OF SHELL FRAGMENTS

FIBROUS SILTY PEAT

ORGANIC SILT

LIMESTONE WITH FINE SAND

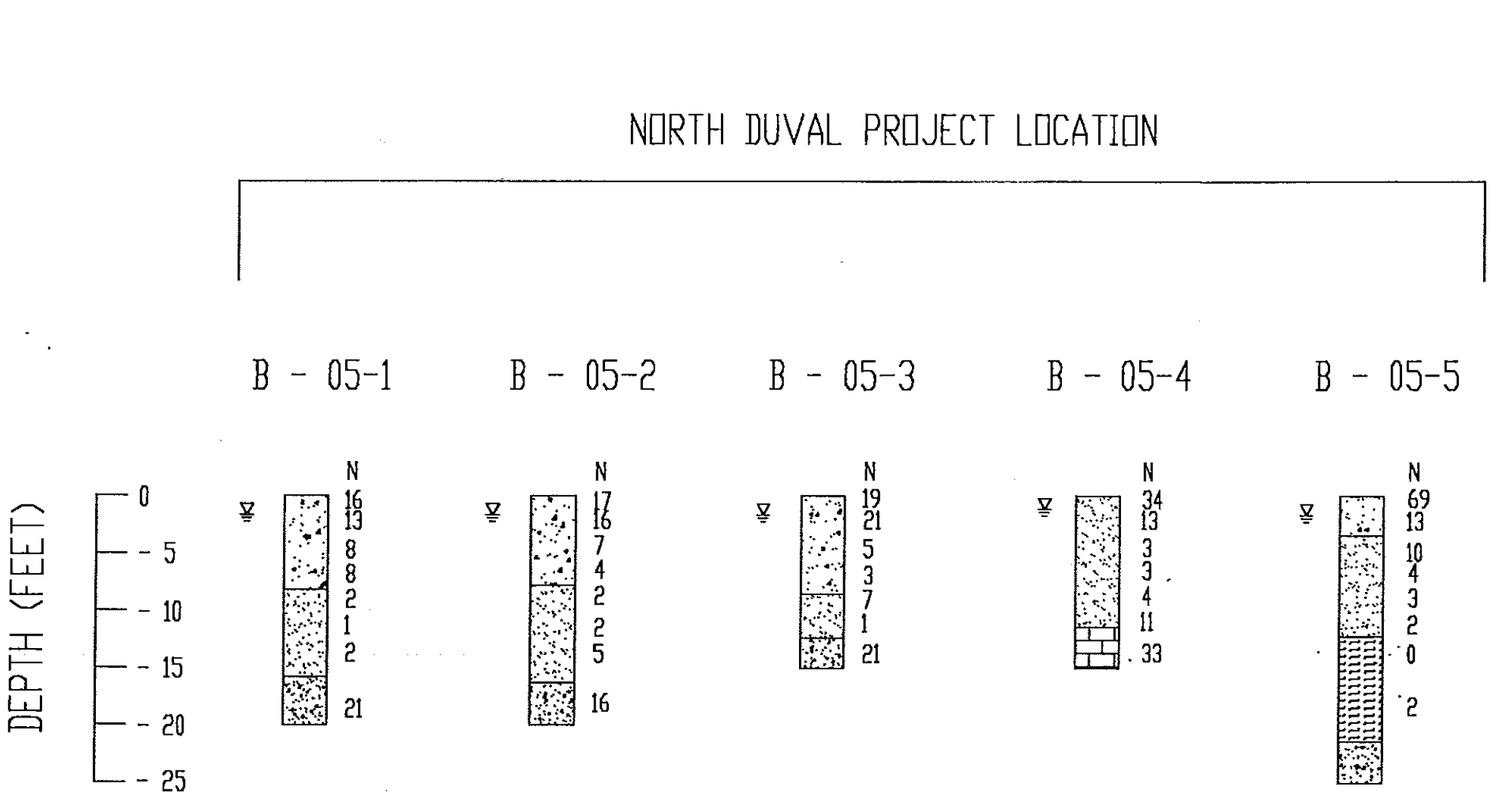
SAND WITH VARYING PROPORTIONS OF LIMESTONE FRAGMENTS

B–C–1 TEST BORING DESIGNATION

N STANDARD PENETRATION RESISTANCE (N–VALUE) BLOWS/FT.

WATER LEVEL DEPTH DURING DRILLING OPERATIONS

NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967	PUMP ASSISTED DRAINAGE WELLS FOR THE CITY OF KEY WEST UNDERGROUND STORM WATER PUMP STATIONS KEY WEST, FLORIDA *PROJECT NO. 126.4*	*GEOTECHNICAL EXPLORATION*	GENERALIZED SUBSURFACE PROFILE *NOT TO SCALE*	FIGURE 6 *AUGUST 2002*



– LEGEND –

SAND WITH VARYING PROPORTIONS OF LIMESTONE AND SHELL FRAGMENTS (FILL)

FINE SAND WITH SOME PROPORTIONS OF SHELL FRAGMENTS

FIBROUS SILTY PEAT

ORGANIC SILT

LIMESTONE WITH FINE SAND

SAND WITH VARYING PROPORTIONS OF LIMESTONE FRAGMENTS

B–C–1 TEST BORING DESIGNATION

N STANDARD PENETRATION RESISTANCE (N–VALUE) BLOWS/FT.

WATER LEVEL DEPTH DURING DRILLING OPERATIONS

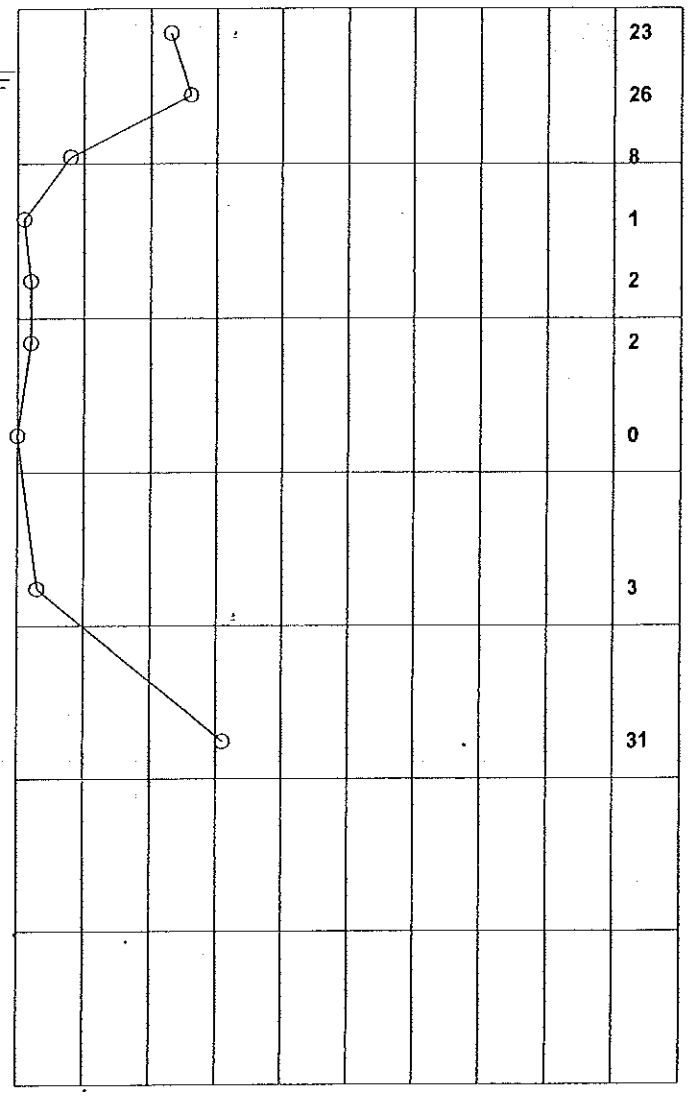
NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967	PUMP ASSISTED DRAINAGE WELLS FOR THE CITY OF KEY WEST UNDERGROUND STORM WATER PUMP STATIONS KEY WEST, FLORIDA *PROJECT NO. 126.4*	*GEOTECHNICAL EXPLORATION*	GENERALIZED SUBSURFACE PROFILE *NOT TO SCALE*	FIGURE 7 *AUGUST 2002*

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
	Silty brown quartz fine SAND, little limestone fragments	23	8/10	
	Tan quartz fine SAND and limestone fragments	26	13/12	
			10/15	
			11/8	
		8	6/5	
5.5	Tan organic SILT, trace of shell	1	3/1	
			1/1	
			0/1	
		2	1/1	
			1/1	
0.4	Brown silty PEAT	2	1/1	
			1/1	
		0	1/0	
			0/1	
		3	1/1	
			2/1	
1.3	Tan quartz fine SAND, little limestone fragments	31	10/16	
			15/17	
5	Test Boring terminates @ 25 feet.			



Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-02-1
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/5/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/5/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1.5'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
	Grass, gray tan silty quartz fine SAND			
	Tan sandy LIMESTONE	36	8/15	
			21/20	
		58	18/26	
			32/48	
		118	30/56	
			62/78	
		35	38/20	
			15/15	
		25	13/10	
9	Lt. tan LIMESTONE fragments and quartz fine sand		15/11	
		25	20/15	
			10/10	
		17	7/7	
			10/13	
		28	10/13	
			15/15	
20	Test Boring terminates @ 20 feet.			

• Penetration - N Value: 0 10 20 30 40 50 60 70 80 90

Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-02-4
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/5/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/5/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

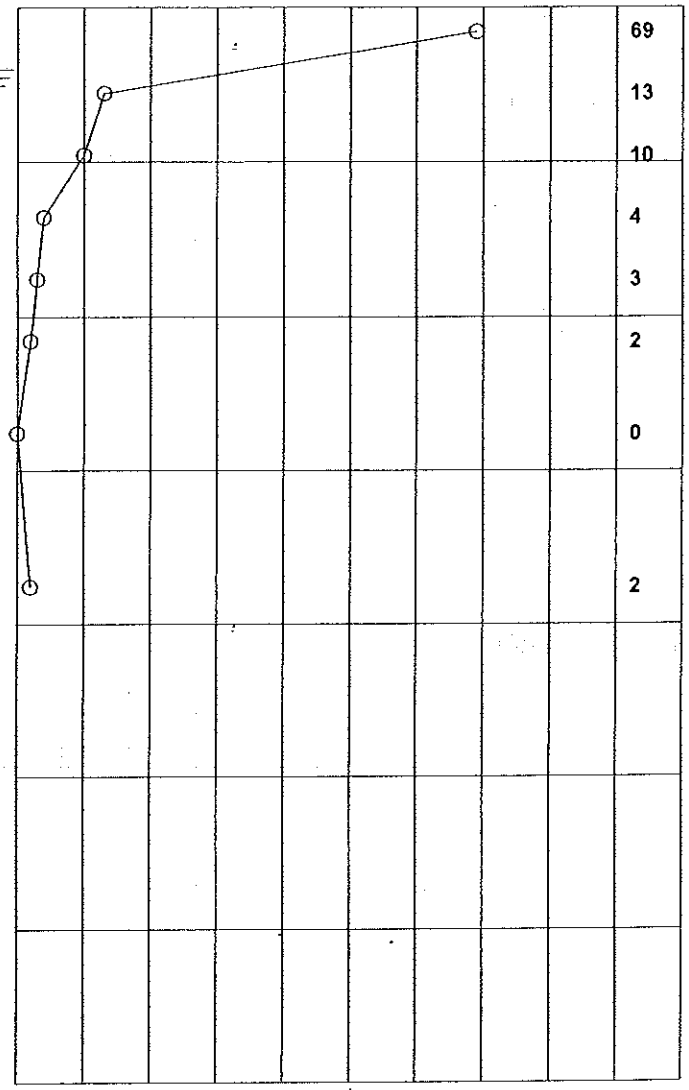
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials
	Asphalt
	Baserock
	Lt. tan quartz fine SAND and limestone fragments
2.3	Gray quartz fine SAND and limestone fragments
.9	Tan quartz fine SAND and shell, trace of limestone fragments
.9	Tan quartz fine SAND and shell
12	Washed brown ORGANICS (No Recovery)
1.5	Lt. tan quartz fine SAND and limestone fragments
.5	Test Boring terminates @ 25 feet.



N	Blows Sampler	Blows Casing
69	50/39	
	30/13	
13	6/8	
	5/7	
10	4/5	
	5/6	
4	3/3	
	1/1	
3	1/1	
	2/1	
2	1/1	
	1/1	
0	1/0	
2	1/1	
	1/1	

Client: CH2M Hill
Project Name: Pump Assisted Drainage Wells for the City of Key West
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Elevation Reference: Approx. @ road crown
Casing:Diameter: Mud Rotary
Sampler:Diameter: 2" OD x 2' Split Spoon
Groundwater depth:Immediate: 1.5'

Order #: 126.4
Hole #: B-05-5
Date Started: 8/6/02
Date Completed: 8/6/02
Hammer WT: Fall:
Hammer WT: 140# Fall: 30"

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

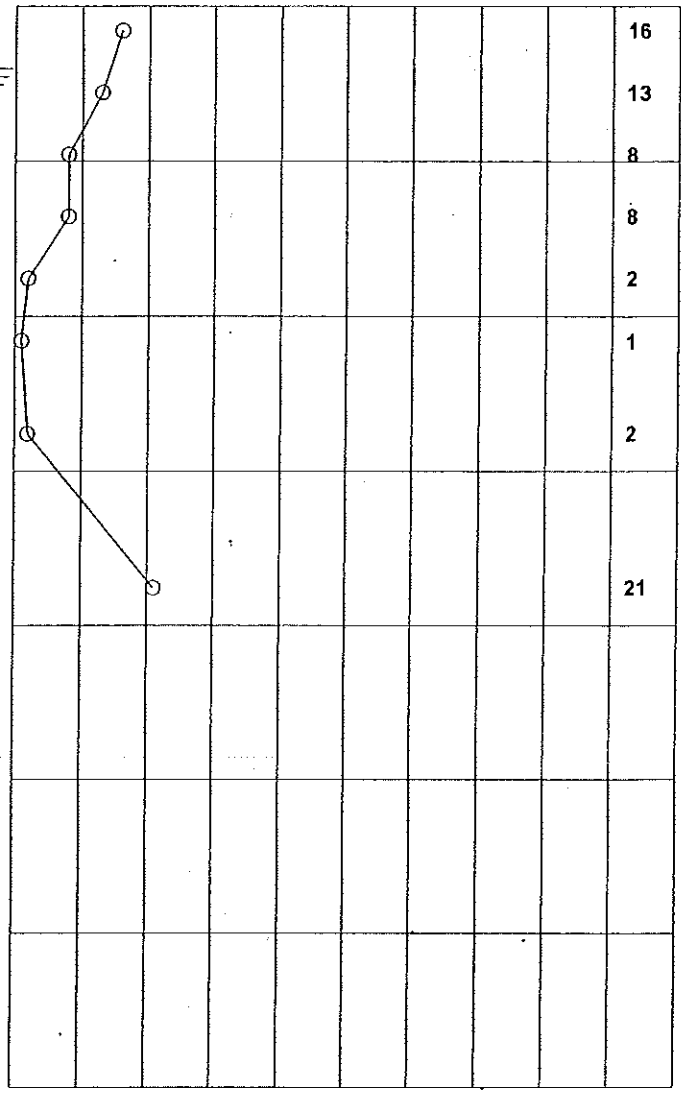
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
1	Asphalt			
6	Baserock			
1.8	Lt. tan quartz fine SAND and limestone fragments	16	30/11	
3.5	Brown quartz fine SAND, little grass and limestone fragments		5/4	
		13	5/6	
			7/7	
	Gray quartz fine SAND and limestone fragments	8	5/3	
			5/5	
		8	9/5	
			3/1	
8.3	Silty gray tan quartz fine SAND, shell fragments and limestone fragments	2	1/1	
			1/0	
9	Silty gray tan quartz fine SAND and shell fragments	1	1/0	
			1/1	
		2	1/1	
			1/3	
15.3	Lt. quartz fine SAND, little limestone fragments	21	5/8	
			13/15	
20	Test Boring terminates @ 20 feet.			



Client: CH2M Hill — Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West — Hole #: B-05-1
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons — Date Started: 8/5/02
Elevation Reference: Approx. @ road crown — Date Completed: 8/5/02
Casing:Diameter: Mud Rotary — Hammer WT: ____ Fall: ____
Sampler:Diameter: 2" OD x 2' Split Spoon — Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1.5'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	• Penetration - N Value (0 10 20 30 40 50 60 70 80 90) N	Blows Sampler	Blows Casing
	Asphalt			
	Baserock			
	Tan quartz fine SAND, little limestone fragments	17	30/10 7/5	
		16	5/8 8/6	
4.5	Silty gray quartz fine SAND, little limestone fragments (fill rock material)	7	5/4 3/3	
		4	2/2 2/2	
9	Silty gray quartz fine SAND, little shell fragments	2	1/1 1/1	
		2	2/1 1/2	
		5	2/3 2/2	
15.5	Lt. tan quartz fine SAND, little limestone fragments	16	5/8 8/10	
20	Test Boring terminates @ 20 feet.			

Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-05-2
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/5/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/5/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1.5'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

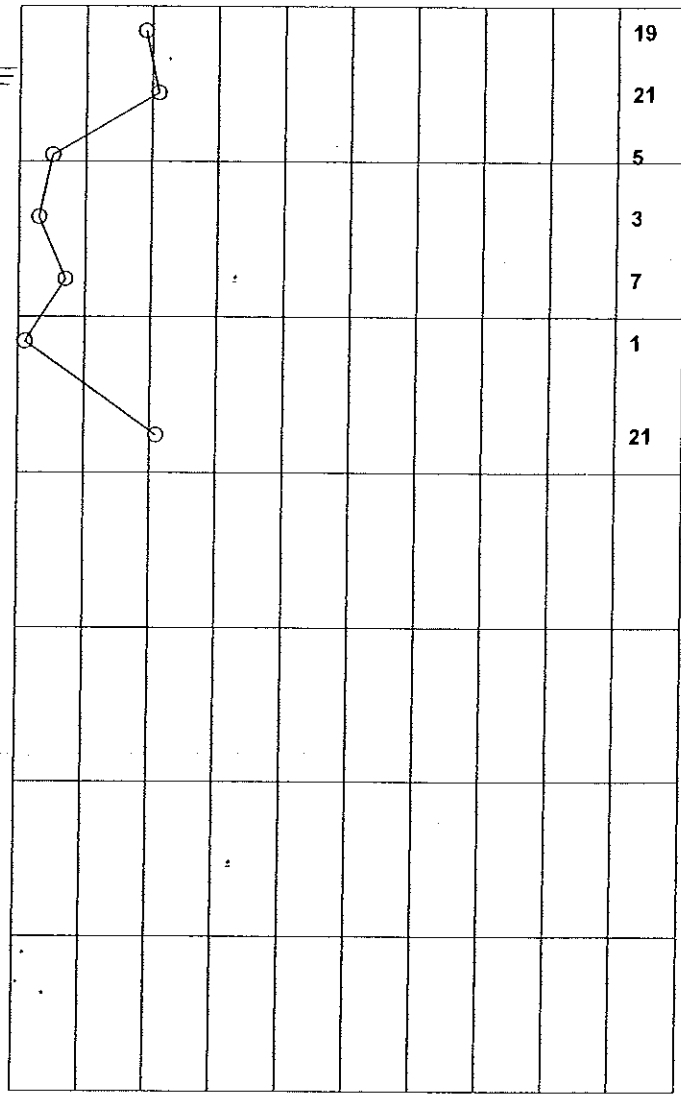
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
	Tan quartz fine SAND and limestone fragments	19	38/11	
			8/10	
		21	10/13	
			8/5	
4.5	Silty gray quartz fine SAND and limestone fragments	5	4/3	
			2/1	
		3	1/1	
			2/2	
8.5	Lt. gray silty quartz fine SAND and shell fragments	7	1/5	
			2/2	
		1	1/0	
			1/1	
12.3	Tan quartz fine SAND and limestone fragments	21	5/8	
			13/15	
15	Test Boring terminates @ 15 feet.			



Client: CH2M Hill
Project Name: Pump Assisted Drainage Wells for the City of Key West
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Elevation Reference: Approx. @ road crown
Casing:Diameter: Mud Rotary
Sampler:Diameter: 2" OD x 2' Split Spoon
Groundwater depth:Immediate: 1.5'

Order #: 126.4
Hole #: B-05-3
Date Started: 8/5/02
Date Completed: 8/5/02
Hammer WT: Fall:
Hammer WT: 140# Fall: 30"

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

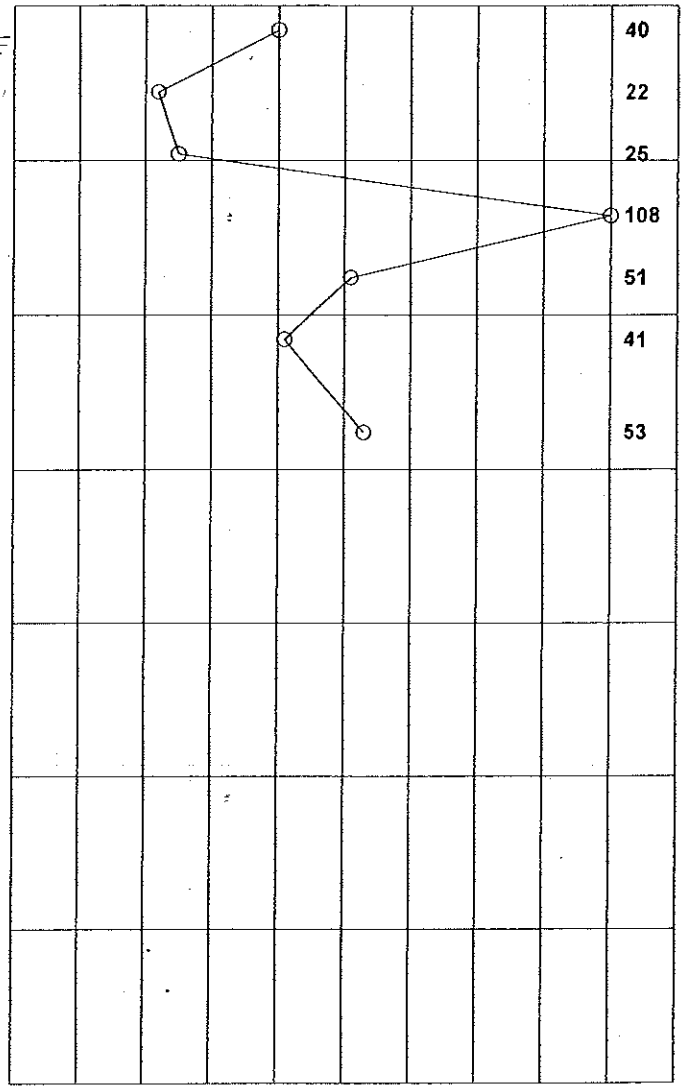
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials
	Asphalt
1.1	Tan quartz fine SAND and limestone fragments
	Lt. brown quartz fine SAND and limestone fragments
3.3	Tan OOLITE limestone
9	Lt. tan quartz fine SAND and limestone fragments
15	Test Boring terminates @ 15 feet.



Blows Sampler	Casing
118/28	
12/14	
20/13	
9/4	
13/4	
21/20	
29/50	
58/65	
22/26	
25/28	
18/21	
20/20	
18/25	
28/24	

Client: CH2M Hill
Project Name: Pump Assisted Drainage Wells for the City of Key West
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Elevation Reference: Approx. @ road crown
Casing:Diameter: Mud Rotary
Sampler:Diameter: 2" OD x 2' Split Spoon
Groundwater depth:Immediate: 1'

Order #: 126.4
Hole #: B-C-1
Date Started: 8/5/02
Date Completed: 8/5/02
Hammer WT: ____ Fall: ____
Hammer WT: 140# Fall: 30"

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

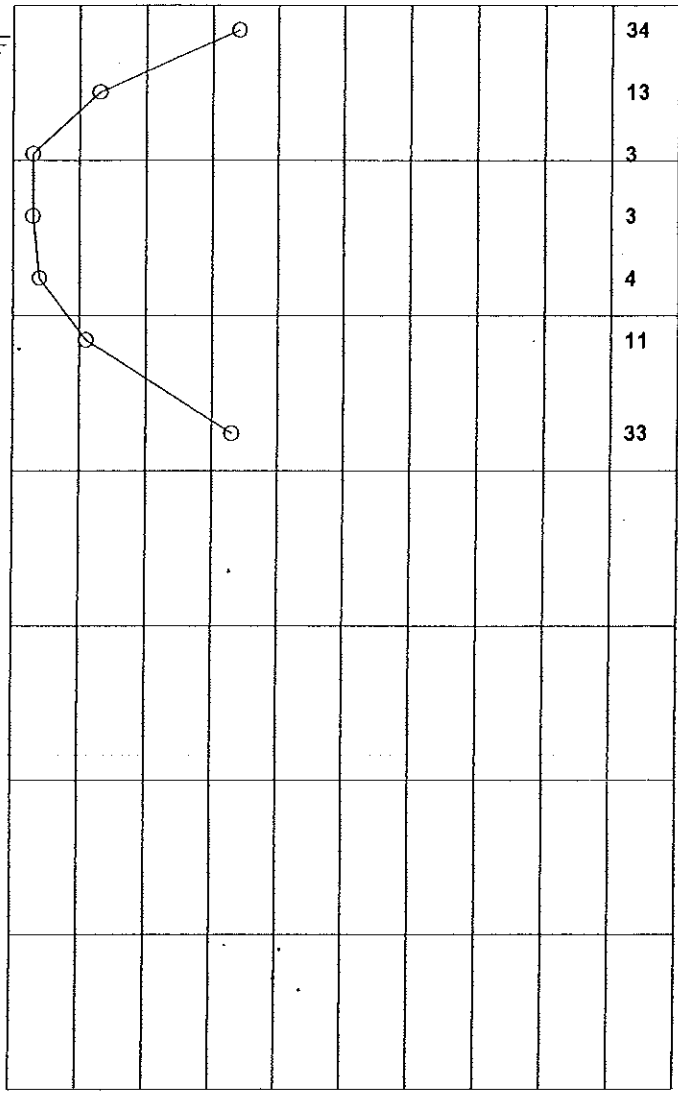
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	• Penetration - N Value (0 10 20 30 40 50 60 70 80 90)	N	Blows Sampler	Blows Casing
1	Asphalt				
.6	Baserock				
1.8	Gray quartz fine SAND and shell fragments				
	Tan quartz fine SAND and shell fragments		34	48/21	
			13	13/10	
			3	5/8	
			3	5/4	
			4	3/2	
				1/2	
				1/1	
				2/1	
				1/2	
				2/1	
11	Tan LIMESTONE fragments and quartz fine sand		11	3/5	
			33	6/10	
				13/15	
				18/15	
15	Test Boring terminates @ 15 feet.				



Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-5-4
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/6/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/6/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

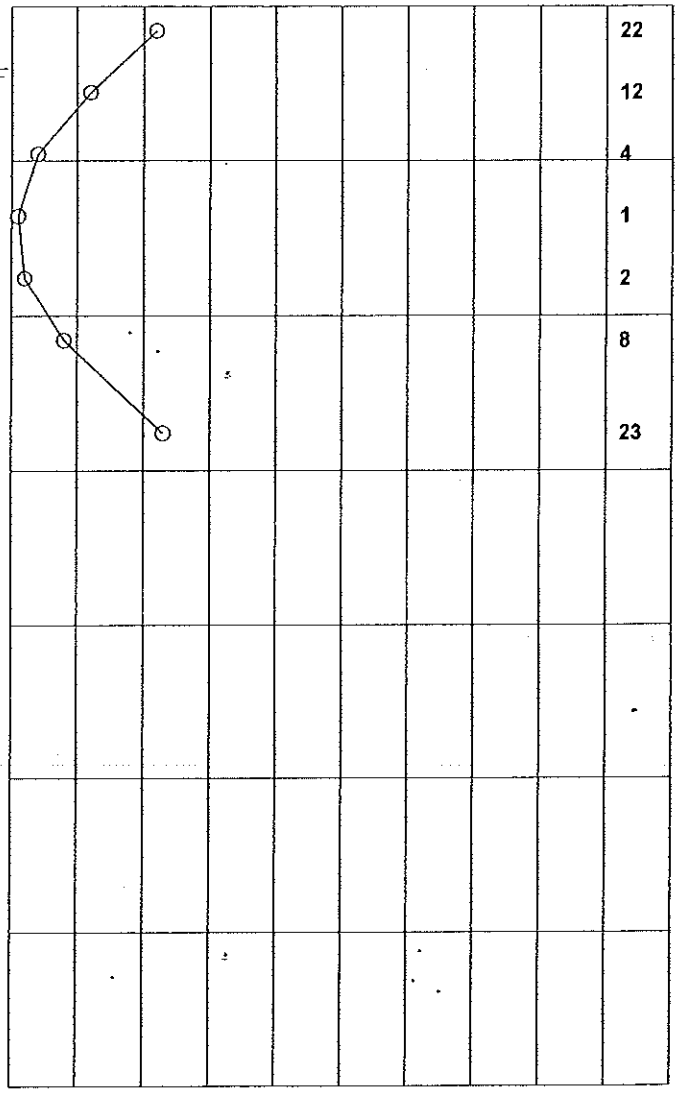
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
	Tan LIMESTONE fragments and tan quartz fine sand	22	8/13	
			9/15	
		12	10/8	
			4/4	
			4/3	
4.7	Gray/tan organic SILT	4	1/0	
			1/0	
	Tan SILT	1	1/0	
8.5	Brown PEAT	2	1/1	
			1/1	
10.5	Lt. tan quartz fine SAND and limestone fragments	8	1/3	
			5/9	
		23	8/10	
			13/18	
15	Test Boring terminates @ 15 feet.			



Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-02-3
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/6/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/6/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1.5'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

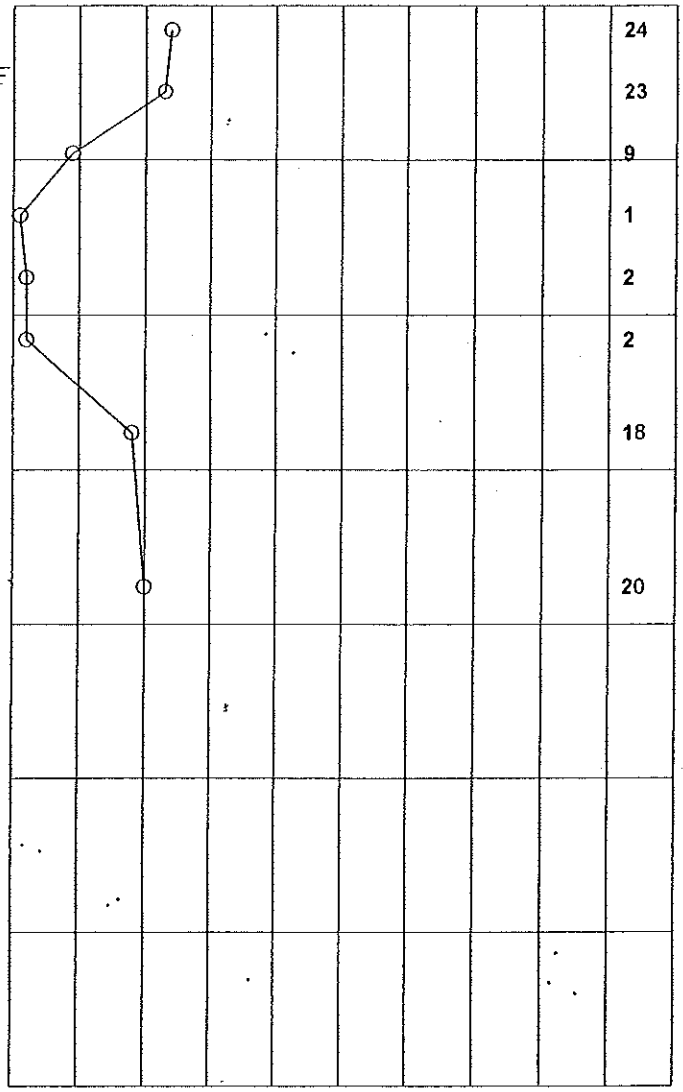
1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

NUTTING ENGINEERS
OF FLORIDA, INC.
Established 1967

Geotechnical & Construction Materials
Hydrogeology & Monitoring Wells
Engineering • Inspection • Testing

TEST BORING REPORT

Depth Feet	Description of Materials	N	Blows Sampler	Blows Casing
5	LIMESTONE fragments, gray brown quartz fine sand	24	11/12	
	Lt. tan quartz fine SAND and limestone fragments, little coral	23	12/12	
			10/13	
			10/9	
		9	8/5	
5.5	Gray organic SILT *M.C.=93.6%, O.C.=12.44%	1	4/0	
			0/1	
8.3	Brown fibrous silty PEAT *M.C.=211.7%, O.C.=43.47%	2	1/1	
			1/1	
		2	1/1	
			1/1	
13.2	Silty brown quartz fine SAND, little limestone fragments	18	1/5	
			13/10	
15	Tan quartz fine SAND and limestone fragments	20	7/10	
			10/13	
20	Test Boring terminates @ 20 feet.			



Client: CH2M Hill
Order #: 126.4
Project Name: Pump Assisted Drainage Wells for the City of Key West
Hole #: B-02-2
Project Location: White Street, North Duval
Hole Location: Approx. as located on site plan
Driller: T. Simmons
Date Started: 8/6/02
Elevation Reference: Approx. @ road crown
Date Completed: 8/6/02
Casing:Diameter: Mud Rotary
Hammer WT: Fall:
Sampler:Diameter: 2" OD x 2' Split Spoon
Hammer WT: 140# Fall: 30"
Groundwater depth:Immediate: 1.5'

SAMPLES WILL BE DISCARDED IN 60 DAYS UNLESS INSTRUCTED OTHERWISE.

by: R.C. Wohlfarth, P.E. #50858

1310 Neptune Drive, Boynton Beach, Florida 33426
Boynton Beach (561) 736-4900 • Pompano Beach (954) 941-8700 • FAX (561) 737-9975

SOIL CLASSIFICATION CRITERIA

RELATIVE DENSITY
SAND

SPT N-VALUE (blows/ft.)	RELATIVE DENSITY
0 - 4	Very Loose
5 - 10	Loose
11 - 29	Medium
30 - 49	Dense
>50	Very Dense
100/6"	Refusal

SHEAR STRENGTH
CLAY

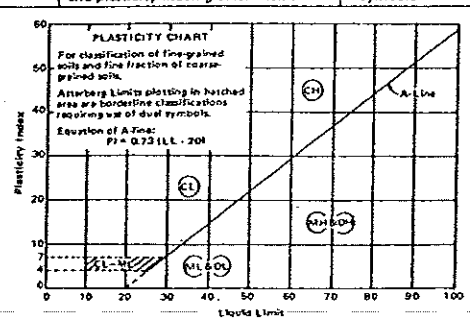
SPT N-Value (blows/ft.)	UNCONFINED COMP. STRENGTH (tons/ft.2)	CONSISTENCY
<2	<0.25	Very soft
2 - 4	0.25-0.50	Soft
5 - 8	0.50-1.00	Medium
9 - 15	1.00-2.00	Stiff
16 - 30	2.00-4.00	Very Stiff
>30	>4.00	Hard

PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76mm to 3 in.
Sand	0.074mm to 4.76mm
Silt	0.005mm to 0.074mm
Clay	<0.005mm

DESCRIPTION MODIFIERS

0 - 5%	Slight trace
6 - 10%	Trace
11 - 20%	Little
21 - 35%	Some
>35%	And

Major Divisions			Group Symbols	Typical Names	Classification Criteria	
Coarse-Grained Soils More than 50% retained on No. 200 sieve*	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Classification on basis of percentage of fines: Less than 5% pass No. 200 sieve GW, GP, SW, SP; More than 12% pass No. 200 sieve GM, GC, SM, SC; 5% to 12% pass No. 200 sieve Borderline classification requiring use of dual symbols. $C_u = D_{60}/D_{10}$ Greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3	
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines	Not meeting both criteria for GW	
		Gravels with Fines	GM	Silty gravels, gravel-sand-silt mixtures	Atterberg limits plot below "A" line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			GC	Clayey gravels, gravel-sand-clay mixtures	Atterberg limits plot above "A" line and plasticity index greater than 7	
	Sands More than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ Greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3	
			SP	Poorly graded sands and gravelly sands, little or no fines	Not meeting both criteria for SW	
		Sands with Fines	SM	Silty sands, sand-silt mixtures	Atterberg limits plot below "A" line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			SC	Clayey sands, sand-clay mixtures	Atterberg limits plot above "A" line and plasticity index greater than 7	
Fine-Grained Soils 50% or more passes No. 200 sieve*	Silts and Clays Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
			OL	Organic silts and organic silty clays of low plasticity		
	Silts and Clays Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts		
			CH	Inorganic clays of high plasticity, fat clays		
			OH	Organic clays of medium to high plasticity		
Highly Organic Soils			PT	Peat, muck, and other highly organic soils	Visual-Manual Identification, see ASTM Designation D 2488.	

*Based on the material passing the 3-in. (75-mm.) sieve.

LIMITATIONS OF LIABILITY

WARRANTY

We warrant that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. ***No other warranties, expressed or implied, are made.*** While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality or completeness of services provided by other members of those teams, the quality, completeness, or satisfactory performance of construction plans and specifications which we have not prepared, nor the ultimate performance of building site materials.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test boring; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented on a drawing or on the boring log. The location and elevation of the boring should be considered accurate only to the degree inherent with the method used.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata and groundwater data. The log represents conditions specifically at the location and time the boring was made. The boundaries between different soil strata are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling. The transition between soil strata is often gradual. Water level readings are made at the times and under conditions stated on the boring logs. Water levels change with time, precipitation, canal levels, local well drawdown and other factors.

LABORATORY AND FIELD TESTS

Tests are performed in accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test report indicates the measurements and determinations actually made.

ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it is not intended to determine the cost of construction or to stand alone as a construction specification.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations may exist between borings and may not become evident until construction. If variations are then noted, the geotechnical engineer should be contacted so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. ***Any significant changes in the nature, design, or location of the site improvements must be communicated to the geotechnical engineer*** so that the geotechnical analysis, conclusions, and recommendations can be appropriately adjusted.

CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. ***The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.*** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications.

REPORT OF
GEOTECHNICAL EXPLORATION

SIMONTON ROAD DRAINAGE IMPROVEMENTS
NORTH END OF SIMONTON ROAD.
KEY WEST, FLORIDA

FOR

CH2M HILL
6410 5TH STREET, SUITE 2A
KEY WEST, FLORIDA 33043

PREPARED BY

NUTTING ENGINEERS OF FLORIDA, INC.
2051 NW 112TH AVENUE, SUITE 126
MIAMI, FLORIDA 33172

PROJECT No. 126.27

MARCH 2014

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

2051 N.W. 112th Avenue, Suite 126
Miami, Florida 33172
305-557-3083
Toll Free: 877-NUTTING (688-8464)
Fax: 305-824-8827
Broward 954-941-8700
Palm Beach 561-736-4900
St. Lucie 772-408-1050
www.nuttingengineers.com

Geotechnical and Construction Materials | Engineering, Testing and Inspections | Environmental Services

March 17, 2014

Mr. Sean McCoy
CH2M Hill
6410 5th Street, Suite 2A
Key West, Florida 33043
Phone: 305.294.1645//Fax: 305.294.1493
Email: Sean.McCoy@ch2m.com

Re: Report of Geotechnical Exploration
Simonton Road Drainage Improvements
North End of Simonton Road.
Key West, Florida

Dear Mr. McCoy:

Nutting Engineers of Florida, Inc. has performed a geotechnical exploration for the referenced project in Key West, Florida. The purpose of the exploration was to obtain information concerning the site and subsurface conditions at a specific test location in order to provide soil parameters for the proposed improvements. This report presents our findings and recommendations.

PROJECT INFORMATION

Based on our conversations with you and review of available project plans, we understand that the City of Key West is planning on providing improvements to the north end of Simonton Road. Said improvements include an emergency outfall and generator pad. We anticipate that final grades will be within approximately one to two feet of existing grades. If any of the above assumptions or information is incorrect, we should be advised in writing in order to revise our recommendations accordingly.

GENERAL SUBSURFACE CONDITIONS

Soil Survey Maps

As part of the geotechnical exploration, we have reviewed available Soil Conservation Service (SCS) survey maps for Monroe County. These SCS maps provide qualitative information about potential general shallow soil conditions in the project vicinity. This information was derived from approximately 6 ft. deep manual auger borings, aerial

OFFICES
Palm Beach
Miami-Dade
St. Lucie

photo and surface feature interpretation at some point in the past (mid 1980's to early 1970's). The SCS data may or may not reflect actual current site conditions. As indicated in the Monroe County Soil Survey Map the series under exploration is the Udorthents-Urban land complex. The Udorthents series consists of unconsolidated or heterogeneous overburden material generally consisting of crushed coralline limestone and coarse sand used for land leveling as fill. Beneath the fill layer natural silt deposits may exist or the natural limestone formation. We note that the maximum depth of the survey is approximately six feet.

Subsurface Exploration

NUTTING ENGINEERS OF FLORIDA, INC. was requested to perform two Standard Penetration Test (SPT) borings (ASTM D-1586) to depths of twenty feet below land surface. One location was determined to be inaccessible due to utility conflicts and proximity to shoreline. The location of the test boring is indicated on the attached site plans presented in the Appendix of this report. The boring location, specified by CH2M Hill, was established in the field using approximate methods; namely, a measuring wheel and available surface controls. As such the soil boring location should be considered to be approximate.

The appended boring log presents information and descriptions of the subsurface conditions at the test boring location. Representative samples collected from the SPT boring were visually reviewed in the laboratory by a geotechnical engineer in order to confirm the field classifications. The Standard Penetration Test N-values, the number of successive blows required to drive the sampler into the soil one foot, are presented on the individual boring logs. The SPT N value has been empirically correlated with various soil properties and is considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive soils. The correlation of penetration resistance with relative density is presented in the Soil Classification Criteria attached in the Appendix.

Test Boring Results

In general, the review of the boring log indicates a surficial layer of asphalt and basecourse to approximately two and a half feet below grade, followed by loose to medium dense limestone fragments to approximately ten feet. Below this depth, loose quartz fine sand and shell were observed to approximately twelve feet, underlain by peat and roots to approximately fourteen feet. Soft to medium hard limestone was observed below this depth to twenty feet below existing grade, the maximum depth explored. A detailed description of the soil/rock profile is presented on the test boring records provided in the Appendix.

Note: Substantially different subsurface conditions may exist at intervening location between soil boring. Buried debris may or may not be identified or adequately delineated by soil boring. Test pit excavation can provide more insight into such conditions and rock

lithology if present. Such conditions may be revealed during site development activities or other related activities. Should additional assurance be desired by the client, further subsurface investigation could be performed.

Groundwater Information

The immediate groundwater level was measured at the boring location at the time of drilling. The groundwater level was encountered at a depth of approximately three feet below the existing ground surface during our subsurface exploration. Groundwater elevation should be expected to vary with tidal conditions due to the proximity to the Atlantic Ocean and Gulf of Mexico. Please review the paragraphs presented below regarding water table information and accuracy.

The immediate depth to groundwater measurements presented in this report may not provide a reliable indication of stabilized or more long term depth to groundwater at this site. Water table elevations can vary dramatically with time through rainfall, droughts, storm events, flood control activities, nearby surface water bodies, tidal activity, pumping and many other factors. For these reasons, this immediate depth to water data **should not** be relied upon alone for project design considerations.

Further information regarding stabilized groundwater elevations at the site could be developed upon specific request. Additional evaluation, which was not part of this study, might include a pumping test, monitoring of piezometers, survey of the project area for evidence of current groundwater elevation influences such as well fields, obvious construction dewatering, tidal activity, flood control canals and other surface water bodies.

ENGINEERING EVALUATION AND RECOMMENDATIONS

Our soil exploration for this project encountered a soil profile consisting primarily of limestone with interspersed layers of sand and shell. It should be noted that a layer of organic material and roots was noted at a depth of approximately twelve to fourteen feet below grade. However, it is our opinion that the soil profile should provide adequate support for the proposed construction. Based upon the depth to ground water encountered in our exploration, we anticipate that dewatering may be necessary. If dewatering is to be performed, it is recommended that such work be designed, permitted and executed by qualified knowledgeable parties thoroughly experienced with similar local dewatering operations.

Piping laid through areas of hard to very hard limestone should be bedded in a granular material, or as specified by the civil engineer, in order to account for the associated stress concentrations on the pipe. Piping laid through these areas should be over-excavated approximately six inches below the anticipated pipe bedding elevation and backfilled

using a granular fill compacted to at least 95 percent of the materials maximum dry density.

Fill should consist of granular soil, with less than ten percent passing the No. 200 sieve, free of rubble, organics (five percent or less) clay, debris and other unsuitable material. The fill should have ASTM designation (D-2487) of GP, GW, SP, or SW, with a maximum particle size of no more than three inches or as otherwise approved by the geotechnical engineer.

As previously stated, limestone was encountered at or near the surface throughout the study area. The limestone surface undulates and the depth to the limestone may vary dramatically over small horizontal distances. Hard digging conditions should be anticipated and planned for. We are available to discuss excavation issues and to provide input concerning implementation.

Generator Pad

It is our opinion that conventional shallow foundations can be used for support of the proposed generator provided foundation criteria and site preparation are followed as discussed in this report.

Foundations supported on native limestone or well compacted structural fill may be designed for an allowable soil bearing pressure of ***2,000 pounds per square foot***. The foundations should be sized and reinforcement must be provided in accordance with the current Florida Building Code and Monroe County requirements.

Foundation Settlement

Settlement analysis was performed using the Schmertmann method based upon a hypothetical improved soil profile following completion of the compaction using a moderately sized vibratory compactor. It was estimated that upon proper completion, long-term total settlements should be on the order of approximately one inch. Differential settlements should be approximately one-half of the total settlement.

Site Preparation

Topsoil, debris from the clearing operations, and any unsuitable soils as determined by the Geotechnical Engineer will need to be completely removed within the construction area and to a lateral distance of at least 5 feet beyond the proposed construction limits and potentially further based upon depth. A Nutting Engineer's representative should be present to observe that the stripping operations are performed as we have discussed herein.

We anticipate that the limestone formation will be encountered in several areas once the site has been stripped and cleared of the surficial soils. If limestone is encountered, no further preparation is necessary. In event the bearing materials are primarily sand or a sand and limestone mix, the footing subgrades should be compacted to at least 98 percent of the material's modified Proctor maximum dry density (ASTM D-1557) to at least twelve inches below the bearing elevation. The fill should then be placed in twelve inch loose lifts and each lift compacted to at least 98 percent of the fill material's maximum dry density.

Pavements

The following would apply within pavement areas which require repair. A stabilized subgrade having a minimum LBR of 40 shall be placed to a depth of at least twelve inches below the base course. The stabilized subgrade should be compacted to an equivalent density of 98 percent of the modified Proctor maximum dry density. The base course should be placed to at least eight inches below the asphalt and should have a minimum LBR of 100. The base material should be compacted to 98 percent of the modified Proctor maximum dry density. The pavement material and thickness should be based on design requirements.

GENERAL INFORMATION

Our client for this geotechnical evaluation was:

CH2M Hill
6410 5th Street, Suite 2A
Key West, Florida 33043

The contents of this report are for the exclusive use of the client, the client's design & construction team and governmental authorities for this specific project exclusively. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of NE. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction for foundation support. Environmental issues including (but not limited to), soil and/or groundwater contamination, methane are beyond our scope of service for this project. As such, this report shall not be used or relied upon for evaluation of environmental issues.

Benefit may be realized by the performance of exploratory test pits on the site to develop additional subsurface information. The client may wish to consider performance of test pits on this project to supplement information already developed.

Prior to initiating compaction operations, we recommend that representative samples of the structural fill material to be used and acceptable in-place soils be collected and tested

to determine their compaction and classification characteristics. The maximum dry density, optimum moisture content, gradation and plasticity characteristics should be determined. These tests are needed for compaction quality control of the structural fill and existing soils, and to determine if the fill material is acceptable.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified in writing immediately so that the condition or change can be evaluated and appropriate action taken.

The vibratory compaction equipment may cause vibrations that could be felt by persons within nearby buildings and could potentially induce structural settlements. Additionally, preexisting settlements may exist within these structures that could be construed to have been caused or worsened by the proposed vibratory compaction after the fact. Pre- and post conditions surveys of these structures along with the vibration monitoring during vibratory compaction could be performed to better evaluate this concern. The contractor should exercise due care during the performance of the vibratory compaction work with due consideration of potential impacts on existing structures. If potential vibrations and impacts are not considered tolerable, then alternate foundation modification techniques should be considered and the Geotechnical Engineer notified in writing immediately.

NE shall bear no liability for the implementation of recommended inspection and testing services as described in this report if implemented by others. NE has no ability to verify the completeness, accuracy or proper technique of such procedures if performed by others.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

We appreciate the opportunity to provide these services for you and look forward to completing this and other projects with you. If we can be of any further assistance with the design or construction services, or if you need additional information, please feel free to contact us at your convenience.

Sincerely,
NUTTING ENGINEERS OF FLORIDA, INC.

3/17/14

Paul C. Catledge, P.E. #68448
Senior Engineer

Attachments: Boring Location Plan
Test Boring Report
Limitations of Liability
Soil Classification Criteria

NUTTING ENGINEERS OF FLORIDA, INC.
ESTABLISHED 1967

SIMONTON ROAD DRAINAGE IMPROVEMENTS
NORTH END OF SIMONTON RD.
KEY WEST, FLORIDA

APPROXIMATE TEST LOCATION

NOT TO SCALE

FIGURE 1

Nutting Engineers of Florida, Inc. | Established 1987
Your Project is Our Commitment
1310 Neptune Drive
Boynton Beach, FL 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-1

PROJECT NUMBER 126.27

CLIENT CH2M Hill

PROJECT NAME Simonton Road Drainage Improvements

PROJECT LOCATION North end of Simonton Street, City of Key West, FL

DATE STARTED 2/25/14 COMPLETED 2/25/14

SURFACE ELEVATION REFERENCE Same as road crown

DRILLING METHOD Standard Penetration Boring

GROUND WATER LEVELS:

LOGGED BY P. Tyson CHECKED BY C. Gworek

∇ AT TIME OF DRILLING 2.7 ft ft

APPROXIMATE LOCATION OF BORING **As located on site plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value
0		2.5-inch ASPHALT BASECOURSE	AU 1		
		∇ Tan LIMESTONE FRAGMENTS	AU 2		
		Gray LIMESTONE FRAGMENTS			
5			SS 3	5-5-6-5	**11**
			SS 4	3-3-4-4	**7**
			SS 5	5-4-3-2	**7**
10		Gray silty quartz medium SAND and SHELL	SS 6	4-3-3-4	**6**
		Dk. brown ROOT FRAGMENTS and PEAT			
		Tan LIMESTONE FRAGMENTS	SS 7	6-8-11	**19**
15					
20			SS 8	15-18-16	**34**
		Bottom of hole at 20.0 feet.			

▲ SPT N VALUE ▲
10 20 30 40
PL MC LL
20 40 60 80
□ FINES CONTENT (%) □
20 40 60 80

TEST NUTTING BOREHOLE 2-126.27 CH2M HILL - SIMONTON ROAD DRAINAGE IMPROVEMENTS.GPJ GINT US.GDT 3/17/14

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

SOIL AND ROCK CLASSIFICATION CRITERIA

SAND/SILT

N-VALUE (bpf)	RELATIVE DENSITY
0 – 4	Very Loose
5 – 10	Loose
11 – 29	Medium
30 – 49	Dense
>50	Very dense
100	Refusal

CLAY/SILTY CLAY

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 – 4	0.25 – 0.50	Soft
5 – 8	0.50 – 1.00	Medium
9 – 15	1.00 – 2.00	Soft
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
N≥ 100	Hard to v. hard	Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.
25≤ N ≤ 100	Medium hard to hard	
5≤ N ≤ 25	Soft to medium hard	

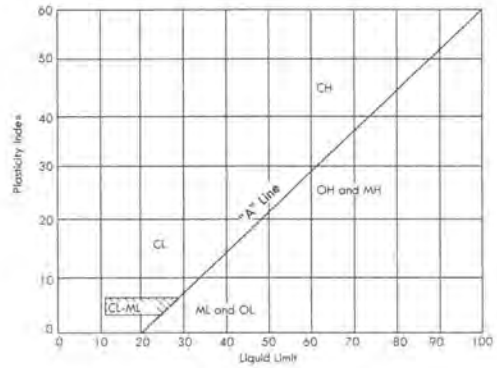
PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76 mm to 3 in.
Sand	0.074 mm to 4.76 mm
Silt	0.005 mm to 0.074 mm
Clay	<0.005 mm

DESCRIPTION MODIFIERS

0 – 5%	Slight trace
6 – 10%	Trace
11 – 20%	Little
21 – 35%	Some
>35%	And

Major Divisions			Group Symbols	Typical names	Laboratory classification criteria		
Coarse-grained soils (More than half of material is *larger* than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gavels, gravel-sand mixtures, little or no fines	Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows: Less than five percent.....GW, GP, SW, SP; More than 12 percent.....GM, GC, SM, SC; 5 to 12 percent.....*Borderline* cases requiring dual systems**	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3	
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		Not meeting all gradation requirements for GW	
		Gravels with fines (Appreciable amount of fines)	GW* d / u	Silty gravels, gravel-sand-silt mixtures		Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are *borderline* cases requiring use of dual symbols.
			GC	Clayey gravels, gravel-sand-clay mixtures		Atterberg limits above "A" line with P.I. greater than 7	
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines		$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3	
			SP	Poorly graded sands, gravelly sands, little or no fines		Not meeting all gradation requirements for SW	
		Sands with fines (Appreciable amount of fines)	SM* d / u	Silty sands, sand-silt mixtures		Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4 and 7 are *borderline* cases requiring use of dual system.
			SC	Clayey sands, sand-clay mixtures		Atterberg limits above "A" line with P.I. more than 7	
Fine-grained soils (More than half of material is *smaller* than No. 200 sieve size)	Silts and clays (Liquid limit less than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity			
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy, clays, silty clays, lean clays			
			OL	Organic silts and organic silty clays of low plasticity			
	Silts and clays (Liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts			
			CH	Inorganic clays or high plasticity, fat clays			
			OH	Organic clays of medium to high plasticity, organic silts			
	Highly organic soils		PT	Peat and other highly organic soils			



Plasticity Chart

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment

LIMITATIONS OF LIABLILITY

WARRANTY

We warranty that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. ***No other warranties, expressed or implied, are made***. While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.

ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. ***Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately*** so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. ***The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.*** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.

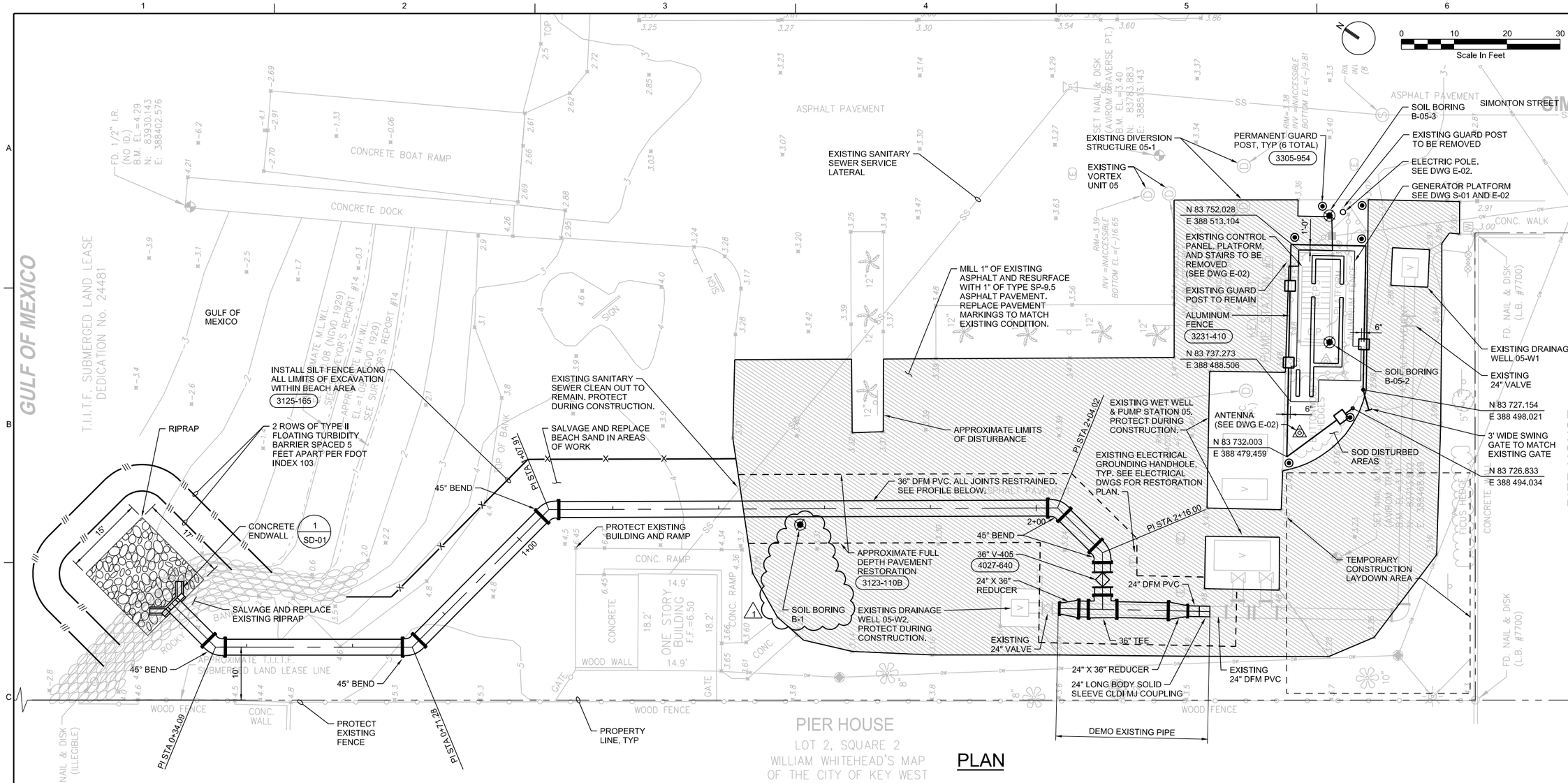
Simonton Stormwater Emergency Outfall Blackout (no work) Dates

Highlighted Dates apply to both Simonton, and Pump Station F Improvements

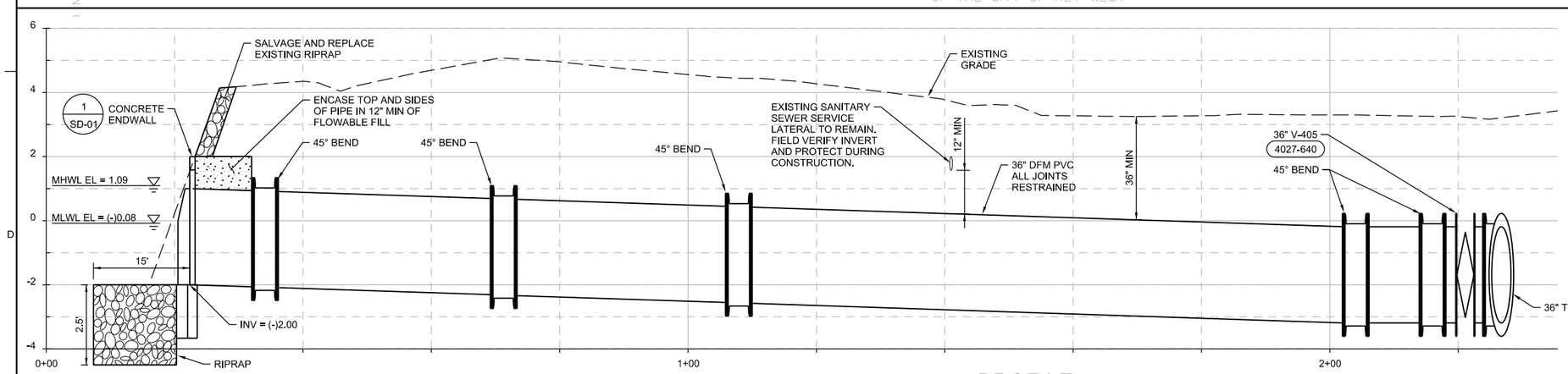
- July 4th weekend: Thursday July 3rd through Sunday July 6th
- Key West Lobster Fest: No work after 5pm Thursday August 7th through August 10th
- Labor Day Weekend: Friday August 29th through Monday September 1st.
    - Labor day: Monday September 1st
- SoMo Marathon and Half Marathon: Thursday and Friday, October 9th and 10th.
- Goombay Festival: Friday and Saturday October 17th and 18th.
- 36th Annual Fantasy Fest: Week of October 19th through October 26th.
- 34th Annual Key West World Championship Super Boat Races: Sunday November 2nd through Sunday November 9th.
- Thanksgiving Holiday: Thursday November 27th through Saturday 29th.
- Holiday Week: December 24th through January 3rd 2015.

2015

- Key West Half Marathon: Sunday January 18th. (Don't know if we need to list this, as CoKW noise ordinance does not allow work on Sunday's anyway)?
- Presidents Day: Monday February 16th.
- Memorial Day: Monday May 25th.



PLAN



PROFILE

SCALE: 1" = 10' HORIZ
1" = 5' VERT

NO.	DATE	REVISION	BY	APVD
1	3/18/14	ADDENDUM #1	RM	DG

DSGN R MORRISON | DR R MORRISON | CHK A MALONE | APVD R MORRISON

3011 S.W. WILLISTON ROAD
GAINESVILLE, FLORIDA 32608
EB0000072 AAC001992
Richard Thomas Morrison PE 67713

NORTH SIMONTON STORMWATER
EMERGENCY OUTFALL
CITY OF KEY WEST
KEY WEST, FLORIDA

CH2MHILL®

CIVIL

SITE PLAN

1" = X'

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	MARCH 2014
PROJ	476166
DWG	C-01
SHEET	ShtNum of ShtTot

BID DOCUMENTS

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.
©CH2M HILL 2014. ALL RIGHTS RESERVED.