



REPLY TO
ATTENTION OF

**DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
MIAMI REGULATORY OFFICE
9900 SOUTHWEST 107th Ave, SUITE 203
MIAMI, FLORIDA 33176**

Regulatory Division
South Permits Branch
Miami Regulatory Office
SAJ-2004-06642 (NW-AG)

MAY 21 2013

City of Miami
c/o Johnny Martinez, City Manager
3500 Pan American Drive
Miami, FL 33133

Dear Mr. Martinez:

Your application for a Department of the Army permit reverification received on April 30, 2013, has been assigned number SAJ-2004-06642 (NW-AG). A review of the information and drawings provided shows the project consists of installation of temporary structures associated with the authorized Wagner Creek and Seybold Dredge project. Specifically this project involves that installation of a manatee barrier near the NW 15th Street bridge. The proposed manatee barrier will be constructed of standard chain link fencing and concrete block anchors with bottom sections to match the contour of the sediment water interface as well as shoreline contours up to 1 foot above the High/High water line. The base of the barrier shall be secured using approximately 10 cubic yards of 12" riprap boulders to prevent manatee entrapment or entanglement. Upon completion of the work associated with the operational sections the above-mentioned structure will be removed from Waters of the U.S., and all fill associated with these temporary structure will be disposed of at an upland location.

The project is located in the City of Miami, Miami-Dade County, Florida and is situated along a 1.7 mile tributary to the Miami River. This tributary has two sections: Wagner Creek and Seybold Canal. Wagner Creek and the northern two thirds of the Seybold canal are located in Section 35, Township 53 south, Range 41 east, and the southern one-third of Seybold Canal is located in Section 2, Township 54 south, and Range 41 east.

Latitude: 25.789604°N, Longitude 80.217035°W

Your project, as depicted on the enclosed drawings dated by the Corps on May 21, 2013, is authorized by Nationwide Permit (NWP) Number 33. In addition, project specific conditions have been enclosed. This verification is valid until March 18, 2017. Please access

the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory webpage to access web links to view the Final Nationwide Permits, Federal Register Vol. 77, dated February 21, 2012, the Corrections to the Final Nationwide Permits, Federal Register 77, March 19, 2012, and the List of Regional Conditions. The website address is as follows:

<http://www.saj.usace.army.mil/Divisions/Regulatory/sourcebook.htm>.

Please be aware this web address is case sensitive and should be entered as it appears above. Once there you will need to click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP 33. Additionally, enclosed is a list of the six General Conditions, which apply to all Department of the Army authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

1. All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, 9900 Southwest 107th Avenue, Suite 203, Miami, Florida 33176. The Permittee shall reference this permit number, SAJ-2004-06642 (NW-AG), on all submittals.
2. Within 60 days of completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, the Permittee shall complete the attached "Self-Certification Statement of Compliance" form (Attached) and submit to the Corps. In the event that the completed work deviates, in any manner, from the authorized work, the Permittee shall describe, on the Self-Certification Form, the deviations between the work authorized by the permit and the work as constructed. Please note that the description of any deviations on the Self-Certification Form does not constitute approval of any deviations by the Corps.
3. Within 10 days from the date of initiating the authorized work, the Permittee shall provide to the Corps a written notification of the date of commencement of work authorized by this permit.
4. Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a re-verification of the revised work is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this proposed work from the Miami Regulatory Office.

5. Environmental controls and best management practices must be implemented to prevent any materials related to construction activities from entering the surrounding water. Any material removed as well as material applied to accomplish the project must be contained so as to prevent fugitive particulates and/or discharge to surface waters.

6. The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

7. The permittee shall ensure that no fill, clean or otherwise, storage of construction materials, equipment, or debris shall be placed outside the footprint of the authorized fill.

8. The Permittee agrees to abide by the Final Manatee Protection plan developed for this project, dated December 10, 2010, during all phases of the project (copy attached).

9. The Permittee must comply with National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" dated March 23, 2006, attached to this permit.

10. This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. Prior to the initiation of any construction, projects qualifying for this Nationwide permit must qualify for an exemption under section 403.813(1), F.S. or 373.406, F.S., or otherwise be authorized by the applicable permit required under Part IV of Chapter 373, F.S., by the Department of Environmental Protection, a water management district under section 373.069, F.S., or a local government with delegated authority under section 373.441, F.S., and receive Water Quality Certification (WQC) and applicable Coastal Zone Consistency Concurrence (CZCC) or waiver thereto, as well as any authorizations required for the use of state-owned submerged lands under Chapter 253, F.S., and, as applicable, Chapter 258, F.S. You should check State-permitting requirements with the Florida Department of Environmental Protection or the appropriate water management district.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (<http://www.myfwc.com/license/wildlife/>) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (<http://www.fnai.org/>) also maintains updated lists, by county, of documented occurrences of those species.

11. Cultural/Historic Properties:

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

12. The Permittee shall ensure that all contractors, sub-contractors, and entities associated with the implementation of the project review, understand, and comply with the approved plans and special conditions made part of this permit. Complete copies of the permit and approved plans shall be available at the construction site at all times. Failure to comply with the approved plans and permit special conditions may subject the Permittee to enforcement action.

13. All temporary structures authorized by this permit shall be removed within 7 days of completion of the dredging activities at the associated operational sections.

This letter does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a re-verification of the revised work is required prior to initiation of those changes. It is the Permittee's responsibility to request a re-verification of this proposed work from the Miami Regulatory Office.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Albert Gonzalez by telephone at 305-779-6055.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit the following link and complete our automated Customer Service Survey: <http://per2.nwp.usace.army.mil/survey.html>. Your input is appreciated – favorable or otherwise.

Sincerely,



ALBERT GONZALEZ
Project Manager

Enclosures
General Conditions
Self-Certification Statement of Compliance
Permit Transfer Request
Site plans dated May 21, 2013

FWS Standard Manatee Conditions for In-Water Work (2011)
NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions (2006)

Copies Furnished:

City of Miami
David Cole, agent CH2MHILL

bcc:
CESAJ-RD-PE

GENERAL CONDITIONS
33 CFR PART 320-330

PUBLISHED FEDERAL REGISTER DATED 13 NOVEMBER 1986

1. The time limit for completing the work authorized ends on **date identified in the letter**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow a representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: NW-33

Application Number: SAJ-2004-06642

Permittee's Name & Address (please print or type): _____

Telephone Number: _____

Location of the Work: _____

Date Work Started: _____ Date Work Completed: _____

Description of the Work (e.g., bank stabilization, residential or commercial filling, docks, dredging, etc.): _____

Acreage or Square Feet of Impacts to Waters of the United States:

Describe Mitigation completed (if applicable): _____

Describe any Deviations from Permit (attach drawing(s) depicting the deviations): _____

I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

Signature of Permittee

Date

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2004-06642 (NW-AG)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, FL 32232-0019.

(TRANSFEEE-SIGNATURE)

(SUBDIVISION)

(DATE)

(LOT) (BLOCK)

(NAME-PRINTED)

(STREET ADDRESS)

(MAILING ADDRESS)

(CITY, STATE, ZIP CODE)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



STANDARD MANATEE CONDITIONS FOR IN-WATER WORK
2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

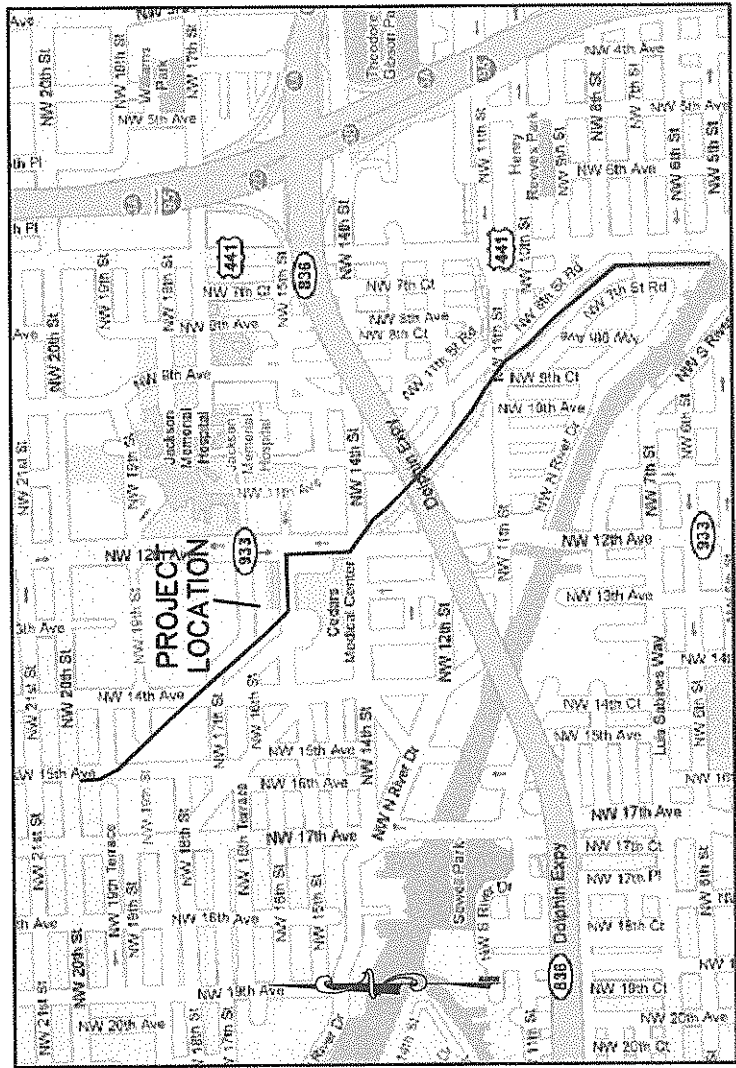
1-888-404-FWCC(3922)

cell *FWC or #FWC



MAP SHOWING A HYDROGRAPHIC & TOPOGRAPHIC SURVEY OF:

WAGNER CREEK & SEYBOLD CANAL
 DADE COUNTY, FLORIDA
 FOR: CH2MHILL



VICINITY MAP
 US ARMY NOT TO SCALE
 CORPS OF ENGINEERS
 MAY 21 2013

OPERATIONAL SECTION 1
 SHEETS 2-5
 OPERATIONAL SECTION 2
 SHEETS 5-7
 OPERATIONAL SECTION 3
 SHEETS 7-11
 OPERATIONAL SECTION 4
 SHEETS 11-13
 OPERATIONAL SECTION 5
 SHEETS 13-17
 OPERATIONAL SECTION 6
 SHEETS 17-23

LEGEND/ABBREVIATIONS	
☐	TRAFFIC CONTROL BOX
☐	CABLE BOX
☐	TELEPHONE BOX
☐	ELECTRIC METER
☐	ELECTRIC MANHOLE
☐	ELECTRIC HANG ROLL
☐	DRAINAGE MANHOLE
☐	SANITARY HANDHOLD
☐	SECURITY CAMERA
☐	CONTROL VALVE
☐	WATER METER
☐	ELECTRIC METER
☐	3" PVC PIPE
☐	SIGN
☐	WOOD UTILITY POLE
☐	CONCRETE UTILITY POLE
☐	UTILITY LOCATION
☐	CONC. LOC.
☐	CRACK LOCATION
☐	DEBRIS LOCATION
☐	STRUCTURE LOCATION
☐	GRID POINT
☐	6" TELEPHONE LINE
☐	4" TELEPHONE LINE
☐	OVERHEAD UTILITY LINE
☐	UNDERGROUND UTILITY LINE
☐	IRON PIPE LOCATION
☐	IRON ROD
☐	SEWER PIPE
☐	TOP OF BANK
☐	CHAIN LINK FENCE
☐	CONCRETE PIPE
☐	ASBESTOS CEMENT PIPE
☐	CORRUGATED METAL PIPE
☐	POLY VINYL CHLORIDE
☐	MAN HOLE
☐	RIGHT OF WAY
☐	INVERT
☐	MITERED END SECTION
☐	UTILITY LOCATION
☐	CONC. LOC.
☐	MONUMENT

SURVEY NOTES:

- THE SPECIFIC PURPOSE OF THIS SURVEY IS TO PROVIDE TOPOGRAPHIC LOCATIONS OF SHORELINE FEATURES AND UTILITY LOCATION WITHIN THE VICINITY OF WAGNER CREEK AND SEYBOLD CANAL IN ADDITION PROVIDE BATHYMETRIC SOUNDING, PROFILES, AND BOTTOM SAMPLES AT LOCATIONS AS DIRECTED BY THE CLIENT.
- SURVEY FIELD DATA WAS OBTAINED FROM JUNE 23, 2008 THRU JULY 17, 2008.
- ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMALS AND AREA BASED ON THE U.S. SURVEY FOOT.
- COORDINATES SHOWN HEREON ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
- ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
- BASES OF ELEVATIONS:
 CITY OF MIAMI BENCHMARK LOCATED AT THE SOUTHWEST CORNER OF NW 15th AVENUE AND NW 18th STREET, SAD BENCHMARK HAVING AN ELEVATION OF 3.568 FEET (NGVD 29).
 S.F.M.A.D. BENCHMARK LOCATED IN A CONCRETE HEADWALL ON THE WEST BANK OF SEYBOLD CANAL 30 FEET NORTH OF THE NORTH MIAMI RIVER BANK, SAD BENCHMARK HAVING AN ELEVATION OF 0.88 FEET (NGVD 29).
- BATHYMETRIC SONAR DATA WAS OBTAINED WITH A RESON MODEL 210 ECHO SOUNDER OPERATING AT A 200 MHZ FREQUENCY.
- PARCEL BOUNDARY LOCATIONS AND NON SHORELINE PLANNING FEATURES WERE OBTAINED FROM A PREVIOUS SURVEY BY WEDDIST SURVEY & MAPPING, DATED JUNE 12, 2002.
- THE BIOLOGICAL LOCATIONS, CRACK LOCATIONS, DEBRIS LOCATIONS, AND STRUCTURE LOCATIONS SHOWN ON THIS SURVEY WERE IDENTIFIED BY THE ENVIRONMENTAL CONSULTING FIRM OF MIAMI, SWAN & ASSOCIATES DURING THE 2008 SURVEY PERIOD.
- ABOVE GROUND EVIDENCE OF UNDERGROUND FEATURES SUCH AS UTILITIES AND TANKS WERE SHOWN HEREON, UNDERGROUND UTILITIES WITH NO SURFACE EVIDENCE ARE SHOWN HEREON AS IDENTIFIED AND MARKED IN FIELD BY SONING STATE ONE CALL UTILITY LOCATING SERVICE.
- THE APPROXIMATE LOCATIONS OF THE MEAN HIGH WATER AND MEAN LOW WATER LINES ARE FOR ILLUSTRATION PURPOSES ONLY AND WERE DERIVED FROM CONTOURS GENERATED FROM FIELD CROSS-SECTIONS AND WERE NOT FIELD VERIFIED.
- INSTALL MANHOLE BARRIER HERE REFER TO MANHOLE BARRIER DETAIL LOCATED ON SHEET 24.

SHEET 1 OF 24

ARC SURVEYING & MAPPING, INC.
 5202 SAN JUAN AVENUE,
 JACKSONVILLE, FLORIDA 32210
 PHONE: 904/384-8377
 LICENSED BUSINESS NO. 6487



DRAWN BY: JKM
 DATE: 11-14-08
 FIELD BOOK & PAGE: 08-08/08-09
 JOB NO.: 07-10-07

CERTIFICATION:
 I HEREBY CERTIFY THAT THE INFORMATION DEPICTED HEREON IS TRUE AND COMPLETE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS ESTABLISHED BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G7-6 OF THE FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

RICHARD J. SAWYER
 FLORIDA REGISTERED CERTIFICATE NO. 6131

DADE COUNTY, FLORIDA
 MIAMI REGULATORY OFFICE
 Case # 2004-0664
 PROJECT NUMBER: A
 CH2MHILL

US ARMY
CORPS OF ENGINEERS

MAY 21 2013

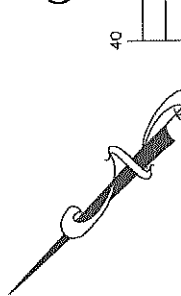
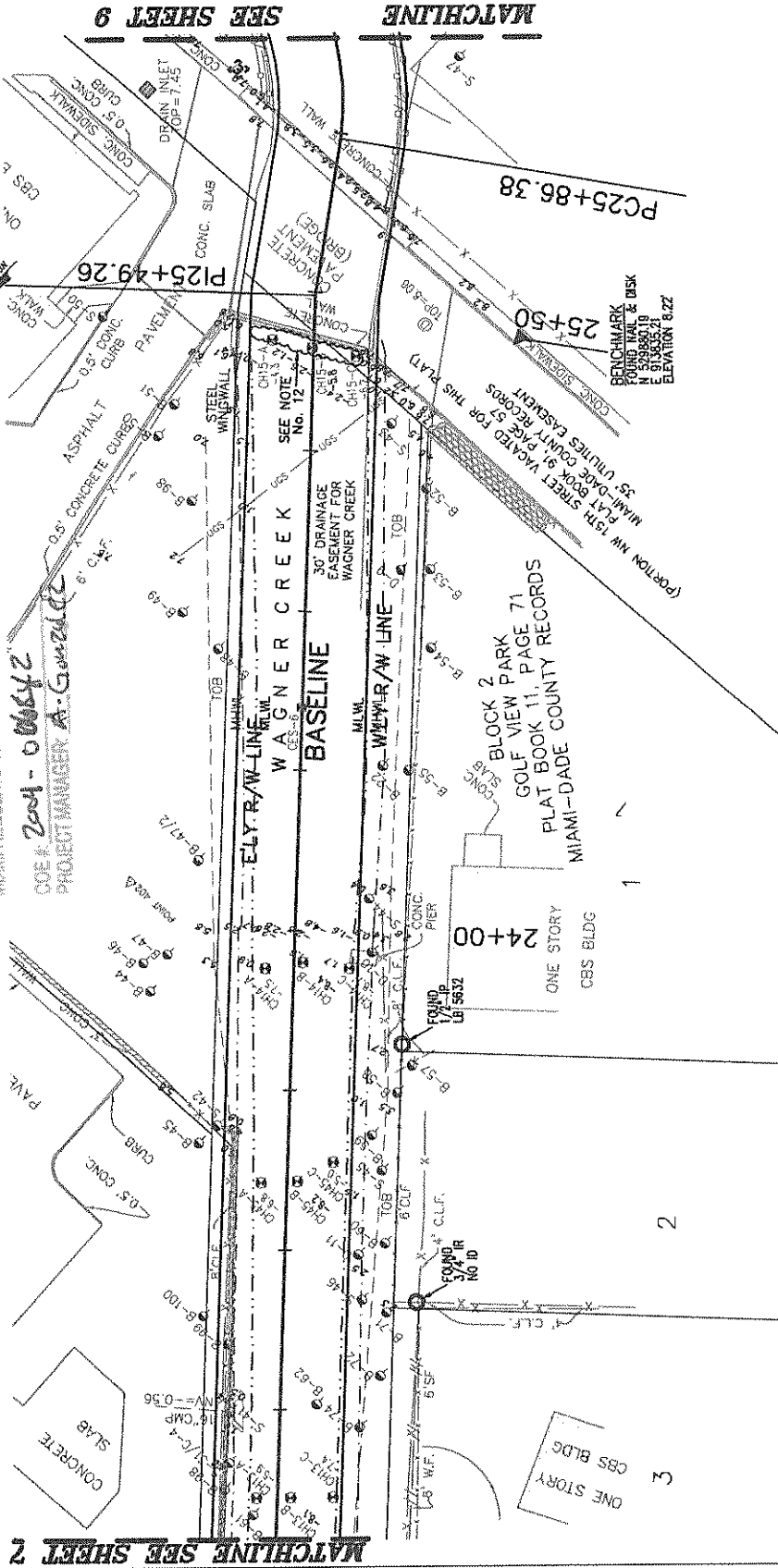
MIAMI REGULATORY OFFICE

COC # 2001-00642
PROJECT MANAGER: A. Gonzalez

GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.



OPERATIONAL SECTION 2 & 3 SHEET 8 OF 24

ARC SURVEYING & MAPPING, INC.

5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 6487



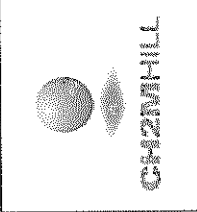
DRAWN BY: JKM DATE: 11-14-08 FIELD BOOK & PAGE 08-08/08-09 JOB NO. 07-10-07

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED HEREON IS TRUE AND CORRECT AND THAT I AM A LICENSED PROFESSIONAL SURVEYOR AS ESTABLISHED BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17-6 OF THE FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

RICHARD J. SAWYER
FLORIDA REGISTERED CERTIFICATE NO. 6131

DADE COUNTY, FLORIDA
WAGNER CREEK &
SEYBOLD CANAL
MIAMI, FLORIDA

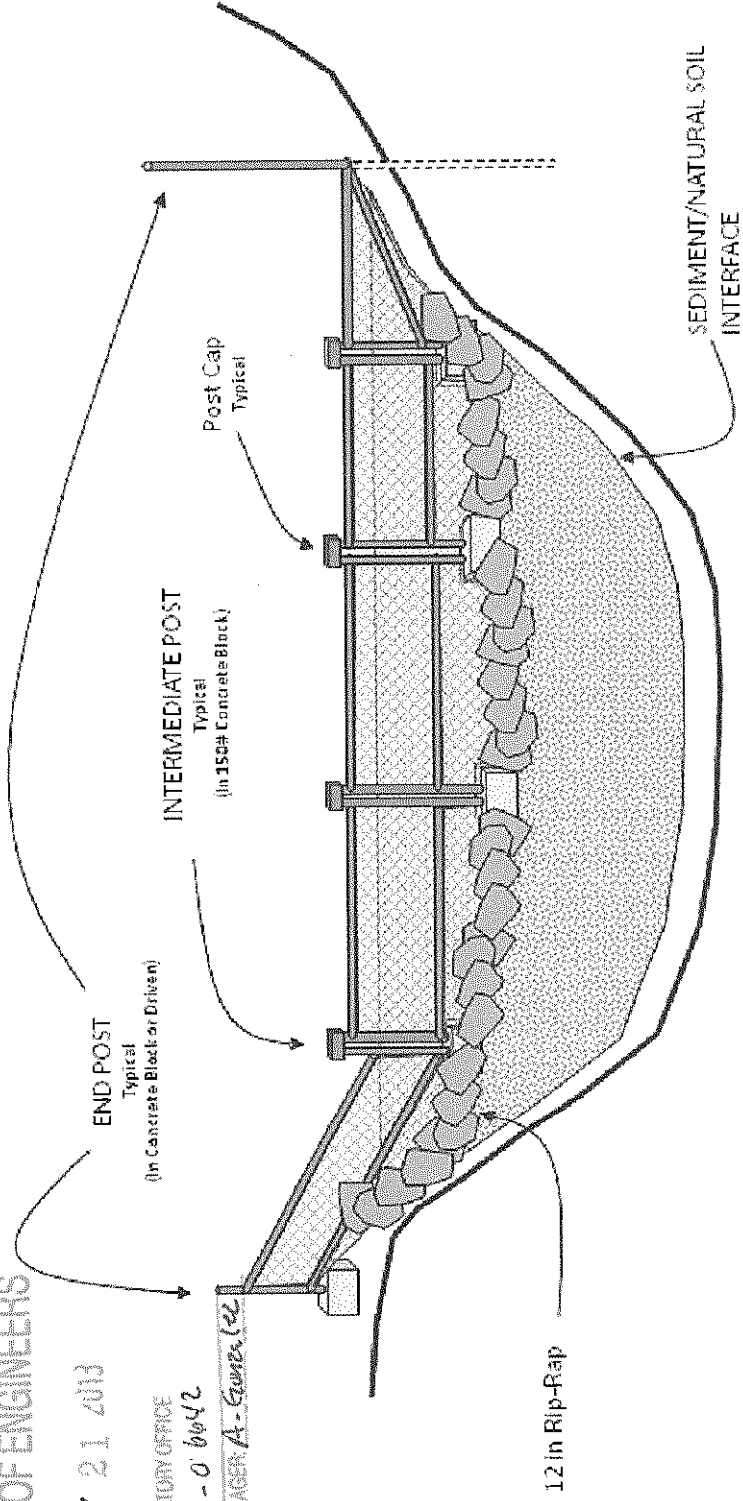


A-08-29

US ARMY
CORPS OF ENGINEERS

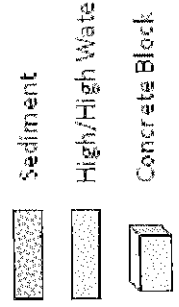
MAY 21 2013
REGIMENTAL OFFICE
CDE #: 2004-0-0042
PROJECT MANAGER: A. Gomez, CE

TYPICAL MANATEE BARRIER FIGURE D-1



NOTES

1. Installed at least 50 ft downstream of last Turbidity Barrier
2. Must be inspected, cleaned of all trash and repaired daily
3. Standard Chain Link Fencing with bottom sections cut to fit sediment contours
4. Install 12" Rip-Rap at bottom of channel to insure that access for Manatees under fencing is blocked
5. Manatee Watch to be located at and 50 ft downstream of Manatee Barrier
6. Area upstream of Manatee Barrier to be inspected each day and prior to installation
7. Regulators to be notified if Manatees sighted upstream of Manatee Barrier
8. Estimated rip-rap fill volume is 10 cubic yards with a work area of 150 square feet.



MANATEE BARRIER DETAIL SHEET 24 OF 24

ARC SURVEYING & MAPPING, INC.

5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 6487



DRAWN BY: JKM DATE: 11-14-08 FIELD BOOK & PAGE: 08-08/08-09 JOB NO.: 07-10-07

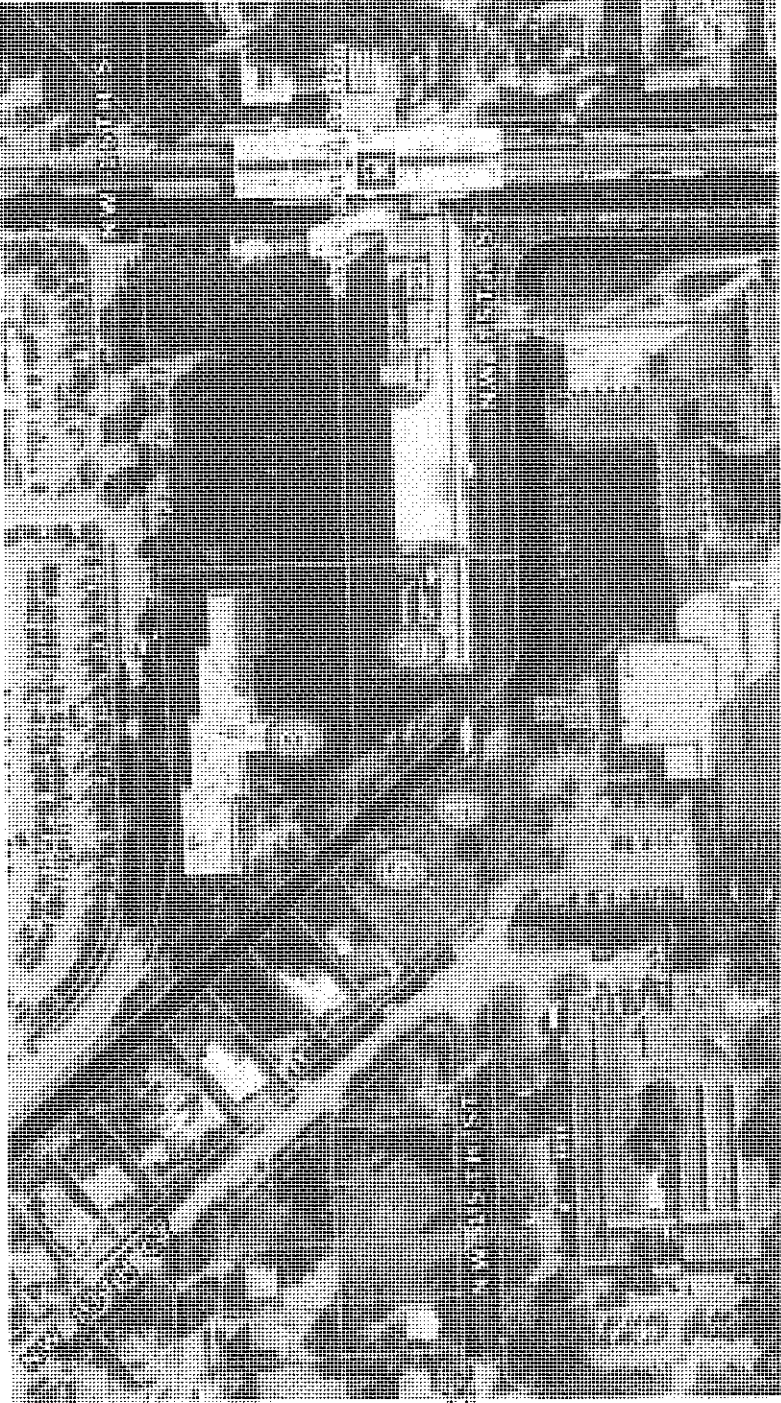
CERTIFICATION:
I HEREBY CERTIFY THAT THE INFORMATION DESCRIBED HEREON IS TRUE AND COMPLETE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS ESTABLISHED BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17-6 OF THE FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

RICHARD J. SAWYER
FLORIDA REGISTERED CERTIFICATE NO. 6131

DADE COUNTY, FLORIDA
WAGNER CREEK &
SEYBOLD CANAL
MIAMI, FLORIDA



**ATTACHMENT 3
Part 7 C**



US ARMY
CORPS OF ENGINEERS
MAY 21 2008
ENGINEERING CENTER
Camp Pele - Dade Co.
PROPERTY OF US ARMY CORPS OF ENGINEERS

Number	Property (Owner; Address, Folio)
1	University Of Miami Real Estate Office; 1400 NW 12 Avenue; 01-3135-045-0030
2	Miami-Dade County Public Health Trust; 1500 NW 12 Avenue; 01-3135-045-0020
3	MIAMI DADE COUNTY CED ; 1310 NW 16 Street; 01-3135-056-0010
4	1501 NW 13 CT LLC; N/A; 01-3135-024-0020
5	1501 NW 13 CT LLC; N/A; 01-3135-024-0030