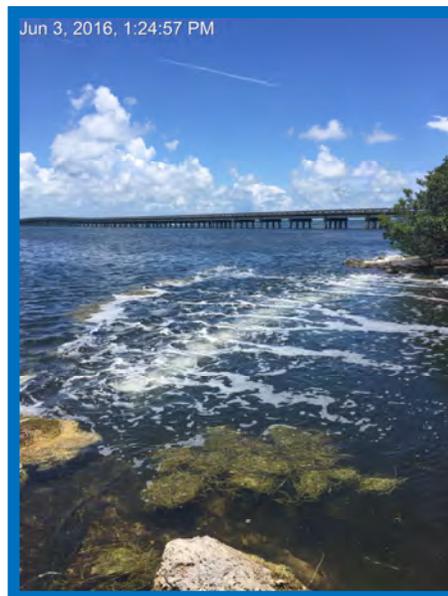
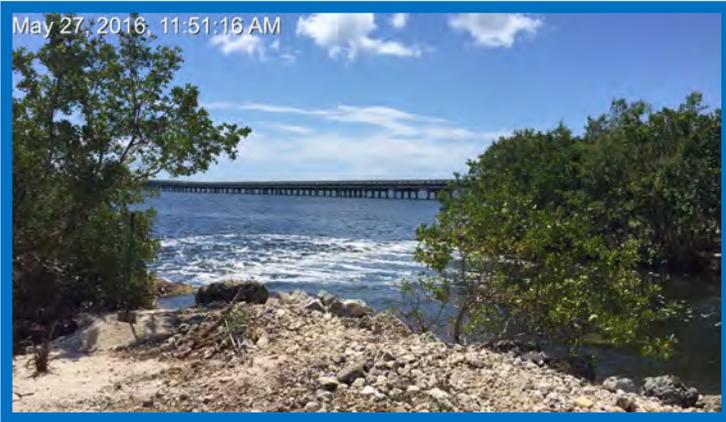


CONSTRUCTION ENGINEERING INSPECTION REPORT
CANAL#266 CANAL RESTORATION PROJECT
DOCTOR'S ARM BETWEEN BAILEYS AND WITTERS LANES
BIG PINE KEY, MONROE COUNTY, FLORIDA KEYS



PREPARED BY:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.
5845 N.W. 158th Street
Miami Lakes, Florida 33014



Amec Foster Wheeler Project No. 6783-14-2614

October 2016



Amec Foster Wheeler E&I, Inc.
5845 N.W. 158th Street
Miami Lakes, Florida 33014
Tel (305) 826-5588
Fax (305) 826-1799

www.amecfw.com

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1.0 BACKGROUND/PURPOSE

The purpose of this report is to document the completion of construction activities in Canal #266 located in Big Pine Key, FL. This project is one of the Monroe County Canal Restoration Demonstration Projects testing various canal water quality improvement technologies to determine the cost and water quality improvement effectiveness. The existing weed barrier system has allowed the entry of seaweed into Canal 266 which has formed a thick layer of decomposing organic muck at the bottom. As a result, oxygen levels have been consumed, depleted, and the water quality has become *Poor*. The drop in oxygen levels is also preventing the inhabitation of fish or other marine organisms. The Monroe County *Canal Management Master Plan*, which addresses all of the County residential canals, recommends removal of the organic material and installing an air curtain at the canal mouth, on the canal bottom, to prevent seaweed from entering the canal. The removal of the organic material was previously completed and the Construction Engineering Inspection report for the organic material removal was previously submitted. The air curtain restoration technology will prevent seaweed from entering the canal, restore some oxygen levels to habitable conditions, and help improve the water quality of the canal system. These restorations are being monitored for the next two years by Florida International University (FIU) to determine the effectiveness. This monitoring data will be used in the canal program planning to determine if additional technologies are required in Canal 266 to improve the water quality to FDEP standards.

Amec Foster Wheeler completed the construction administration and engineering inspection services for the installation of the air curtain. The Amec Foster Wheeler organizational chart included the following personnel:

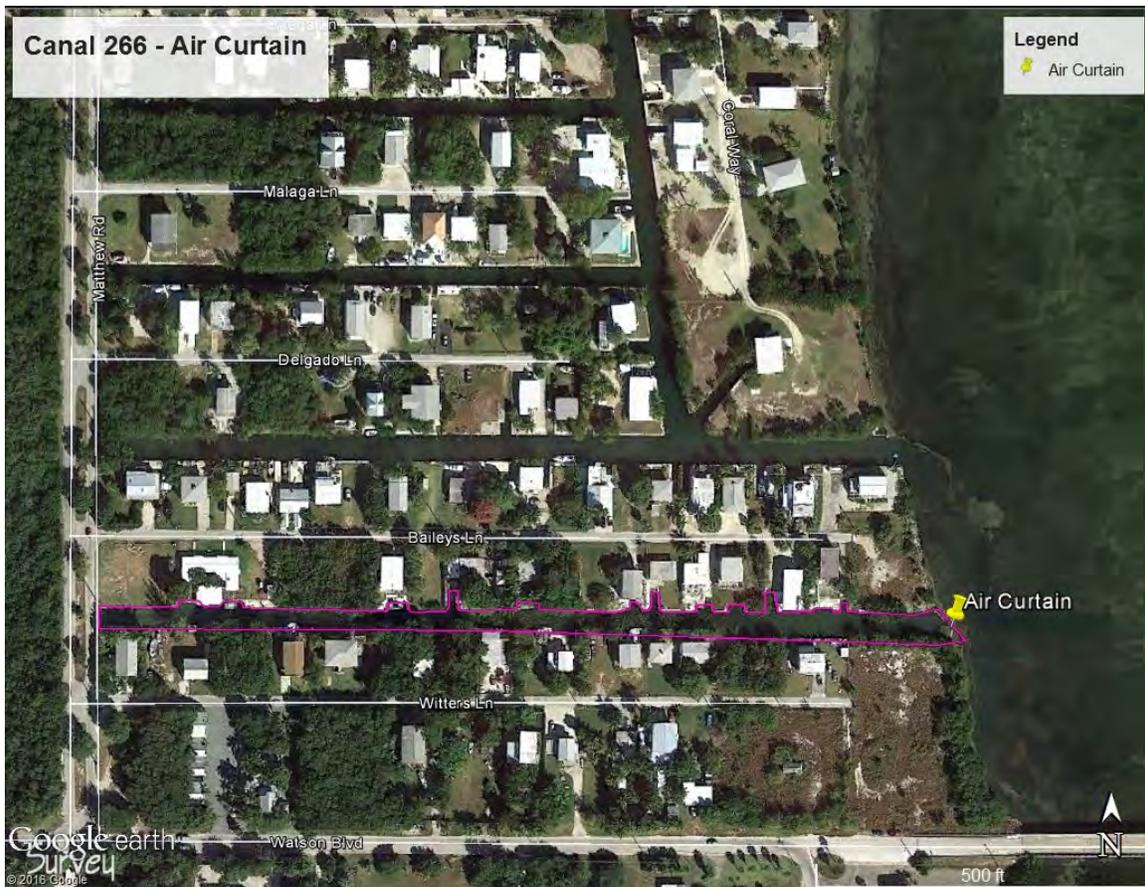
- Ricardo Fraxedas, P.E. – Principal Engineer
- Stephen Hanks, P.E. – Engineer of Record
- Greg Corning, P.E. – Project Engineer
- Jeremy Paris, P.W.S. – Project Scientist
- Derek Dadesky, E.I. – Field Engineer

Earth Tech Enterprises, Inc. was contracted by Monroe County to complete the installation and operation and maintenance for the air curtain system. The installation contract value was \$101,192 and the operation and maintenance is a Not-to-Exceed contract value of \$49,500.

1.1 PROJECT AREA

The project site is located between Witters and Baileys Lanes in Monroe County, Big Pine Key, Florida; Section 14 & 25, Township 66 S, Range 29 E, (Latitude: 24°41'56" North; Longitude: - 81°21'01" West). **Figure 1** provides a site location map.

Figure 1 – Doctor's Arm Big Pine Key



1.2 PROJECT OVERVIEW

The project included the removal of the existing non-working air curtain and the installation of an air curtain with 28 diffusers placed on 14 weighted plastic bases placed on the canal bottom across the 60 foot wide mouth of the canal. This will result in the creation of an air curtain that will prevent the movement of seaweed into the canal under most circumstances. Each of the 14 weighted plastic bases contains 2 diffusers that connect to a manifold via 0.5-inch bottom line self-weighted tubing. The manifold contains 14 needle valves to allow for air flow adjustment. From the manifold, two 1.25-inch stainless steel lines connect to two equipment cabinets, each of which contains 7 compressors. The system also includes a weather monitor and wind vane to allow the system to turn off at times of favorable wind conditions, which reduces energy use and allows for free passage of sea life in and out of the canal. All work was done per design and permit requirements.

2.0 CONSTRUCTION ENGINEERING & INSPECTION

Amec Foster Wheeler provided construction engineering and inspection services for the oversight of the canal restoration project to ensure that all permit requirements and design specifications were followed. The field activities extended from April 18, 2016 through May 21, 2016. Turbidity and endangered species monitoring was conducted during the in-water work associated with the canal restoration. An activity summary table is provided below.

2.1 SUMMARY OF ACTIVITIES

General Field notes were prepared each day of construction and photo documentation of the activities were collected. Copies of photo documentation are included in **Attachment A** and the table below provides a weekly summary.

Table 1. Weekly Construction Summary

Construction Week	Activities Description
Week 1: April 18 to 22	Ordering equipment and began upland work including the electrical trenching, pour concrete pads for pumps and set compressors.
Week 2: April 25 to 29	Continued upland work including the electrical trenching, pour concrete pads for pumps and set compressors. Completed electrical inspections and notified homeowners of the closure of the canal.
Week 3: May 2 to 7	Turbidity barrier was installed at the mouth of canal to minimize sediment transfer into the OFW. County inspections were completed and the removal of the existing weed barrier began.
Week 4: May 9 to 14	Contractor continued to remove the existing weed barrier and also began laying out the proposed diffusers and self-weighted tubing.
Week 3: May 16 to 21	Contractor completed the placement of the proposed diffusers and self-weight tubing and tested the equipment. The air curtain was fully functional and the project completed.

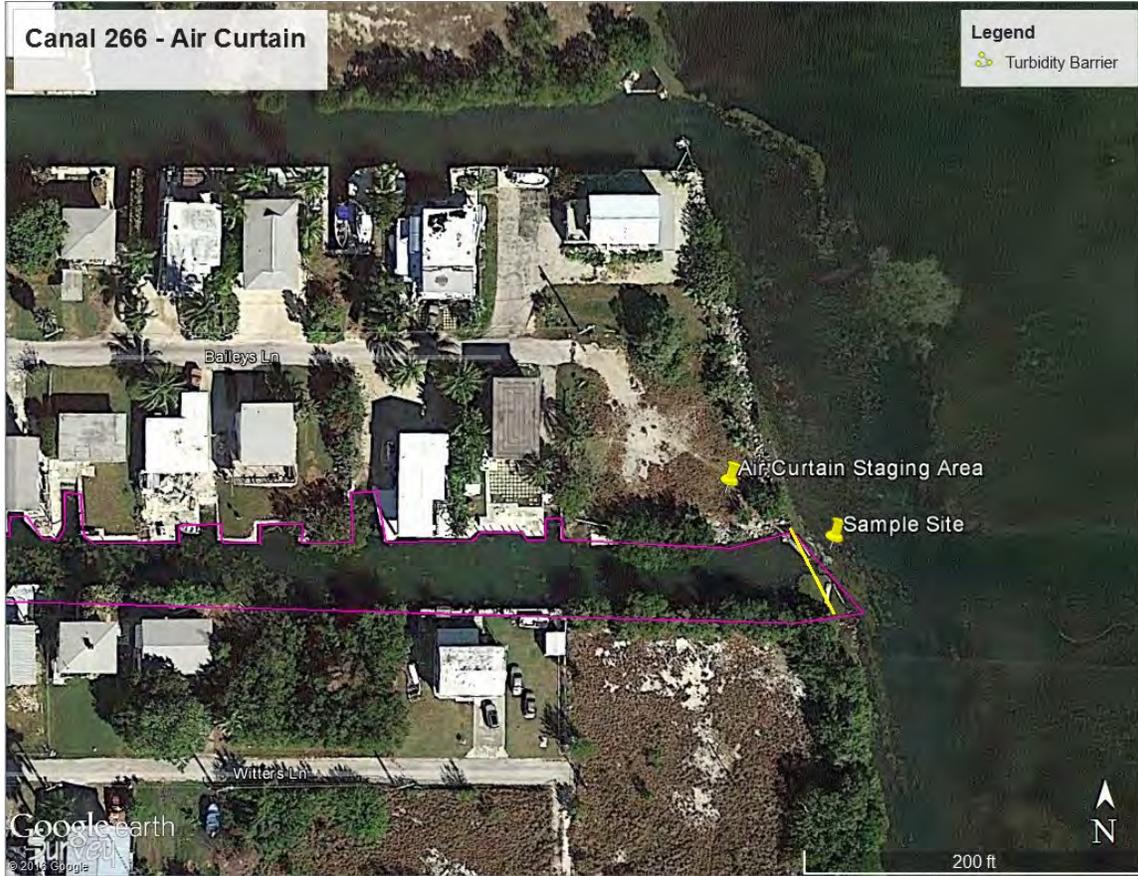
2.2 SUMMARY OF TURBIDITY MONITORING

Water quality samples were taken by Amec Foster Wheeler to ensure that turbidity measurements were in compliance with South Florida Water Management District (SFWMD) Permit No. 44-00590-P, U.S. Army Corps of Engineers (USACE) Permit No. SAJ-2014-03356 (NW/GP-MIB), and Florida Keys National Marine Sanctuary (FKNMS) Permit No. FKNMS-2015-067. Per State requirements, turbidity within Florida Outstanding Waters is not to exceed an increase of 0 NTU above background levels at the canal mouth. Water samples were collected using Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOP), and turbidity was measured using a Hach 2100Q portable turbidity monitor. The turbidity meter was calibrated every day prior to processing water samples.

Throughout the course of the project turbidity readings were taken at a designated sample location once a day during an outgoing tide (**See Figure 2: Water Quality Sample Site Map**). The sample site was taken just outside the floating turbidity curtains to document compliance with a 0 NTU increase within the Florida Outstanding Waters. The water sample was taken to measure turbidity at 1 foot below the water’s surface.

Initial samples were collected the week prior to construction activities within the canal and averaged to establish a background turbidity value (see table below).

Figure 2 - Doctor's Arm Big Pine Key



Over the course of the project the turbidity at the sample site was mostly consistent within background levels in the OFW. Increased turbidity levels at the sample sites were correlated to natural factors that increased the bay water background levels such as high winds and rough waters which suspended particles within the bay. The table below summarizes the average turbidity measurements at the sample site compared to background turbidity levels. The turbidity measurements during the project were in compliance with the requirements set forth in the permits.

Table 2. Average Turbidity Measurements

Sample Locations	Turbidity Measurements (NTUs)	
	Average Background at 1'	Average at 1'
Sample Site 1	6.3	5.9

Conclusion: Through the course of this project, turbidity did not have any major impacts on the project's progress. Turbidity readings at the sample site outside the canal were mostly consistent with background levels. There were some days where turbidity measurements were slightly greater than 1 NTU above background but this correlated to natural environmental factors outside the canal such as high wind and rough waters. Water quality outside of the canal remained unaffected by the construction activities based upon continuous visual observations during construction activities.

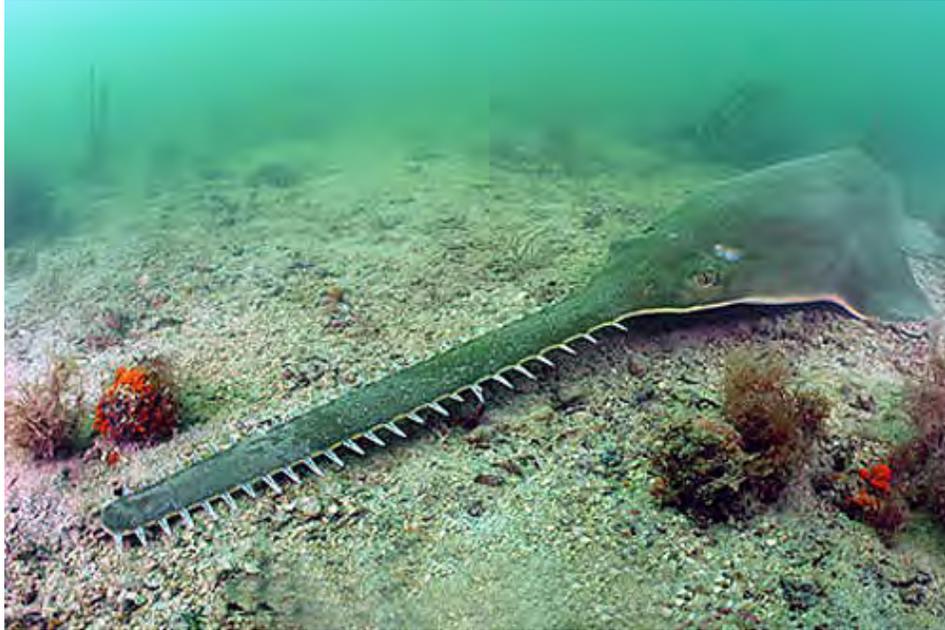
2.3 SUMMARY OF THREATENED AND ENDANGERED SPECIES ISSUES

The project site is located within an area accessible to and within the known habitat of several Federal and State listed endangered and threatened species. The species of environmental concern includes the West Indian manatee (*Trichechus manatus latirostris*), the smalltooth sawfish (*Pristis pectinate*), the Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), loggerhead sea turtle (*Caretta caretta*), green sea turtle (*Chelonia mydas*), and hawksbill sea turtle (*Eremochelys imbricate*). The West Indian manatee and smalltooth sawfish were the species most likely to be encountered and a brief description of these animals and their involvement with the project are discussed below:

West Indian manatee -Manatees have large, seal-shaped bodies with paired flippers and a round, paddle-shaped tail. They are typically grey in color (color can range from black to light brown) and occasionally spotted with barnacles or colored by patches of green or red algae. The muzzle is heavily whiskered and coarse, single hairs are sparsely distributed throughout the body. Adult manatees, on average, are about nine feet long (3 meters) and weigh about 1,000 pounds. At birth, calves are between three and four feet long (1 meter) and weigh between 40 and 60 pounds. The West Indian manatee is listed as endangered by the USFWS, and is federally protected by the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. West Indian manatees are also protected in the state of Florida by the Manatee Sanctuary Act of 1978.



Smalltooth sawfish – Sawfish have long, flat snouts edged with pairs of teeth which are used to locate, stun, and kill prey. They have 25-29 teeth per side. Smalltooth sawfish are listed as endangered by the USFWS. Their diet includes mostly fish but also some crustaceans. Adult smalltooth sawfish are occasionally found inshore but most commonly found in deeper water. Juveniles most often inhabit brackish water within a mile of land. They can be found in a wide range of habitats, including mud bottoms, sand bottoms, oyster bars, red mangrove shorelines, docks, seawall-lined canals and piers.



Conclusion: The project was not affected by the presence of threatened and endangered species. There were no sightings of manatees, smalltooth, sawfish, or sea turtles.

2.4 COMPLIANCE WITH PERMIT AND DESIGN SPECIFICATIONS

In order to comply with the specifications it was required that the Contractor provide to the Engineer and the County two five minute videos demonstrating that the weed barrier systems are functioning properly. At a minimum the videos were required to be shot from the northern and southern extent of the weed barrier systems, and preferably from water craft that traverses the weed barrier system during the five minute video. During the video the contractor placed an empty plastic water bottle on the windward side of the weed barrier system to show that the water bottle does not cross into the canal within a one minute period. The water bottle shall be retrieved from the canal after the video is complete.

The contractor was also required to provide additional videos to demonstrate that the wind switch was functioning properly and set to the appropriate configuration. The video documented a run condition, a no-run condition, and a chattering condition. Prior to initiating the video, the motor start delay timer was set to one minute. The contractor first demonstrated that the configuration of the wind switch was correct by manually holding the weather monitor to face the north direction and shooting the wind switch

display. While the weather monitor is still facing north, the contractor demonstrated that the green run light is on and the system was running. The contractor then manually rotated the weather station to face the west for a period of one minute, and then demonstrated that the green run light was off and the system was not running. The contractor then alternated the position of the weather monitor to face east then west every 30 seconds for 2 minutes. The system should remain off during this two minute period. The motor start delay timer was set to 15 minutes after the video was complete.

Earth Tech Enterprises, Inc. provided the aforementioned videos that demonstrated successful completion of the project. Copies of all videos will be placed on CDs.

Additionally, the project specifications required that the system produce no more than 60 decibels of noise per the Monroe County Code of Ordinances. Sound readings collected near the equipment cabinets exhibited a noise level of approximately 57 decibels. However, due to homeowner concerns the manufacturer replaced the cooling fans within the cabinets to reduce the noise level. This modification has alleviated the homeowner concerns with the noise level.

Prior to installation, the County entered into an agreement to access the property located at 30990 Baileys Lane, Big Pine Key to install and maintain the weed barrier equipment for the project. After installation was completed, the staging area was restored to preconstruction conditions. A letter stating that the owner of the staging area property approved the final restoration was obtained. A copy of the access agreement and staging area approval letter are included as **Attachment B and C**.

A punch list detailing the completion of the required project elements is provided below. The project was completed per all design and permit requirements as detailed in the table below and copies of permit close out documents are included as **Attachment D**.

Table 3. Permit Documentation

Permit Agency	Permit Number	Issue Date
SFWMD	44-00590-P	June 9, 2015
USACE	SAJ-2014-03356 (GP-MIB)	September 4, 2015
FKNMS	FKNMS-2015-067	June 11, 2015
Monroe County	15105228	March 11, 2016



Project: Canal #266 Air Curtain Installation Canal Water Quality Improvement Demonstration Project
 Location: Doctor's Arm, Big Pine Key, Florida
 Contractor: Earth Tech Enterprises, Inc.
 Date: 17-June-16

ITEM NO.	DESCRIPTION	REQUIRED QUANTITY	OBSERVED QUANTITY	COMMENTS
1	Mobilization and Demobilization	1	1	All equipment was brought to the site as per the contract and removed from the project at project completion.
2	Erosion and Sediment Controls	1	1	Wattles were placed around construction area and Turbidity curtains were installed at the mouth of the canal. Erosion and sediment controls were properly maintained during construction activities and removed from the site at project completion.
3	Air Curtain System	1	1	Diffusers, compressors, weather monitor and wind vane were constructed according to plans and specifications.

PROJECT CLOSEOUT DATE: 06/17/2016

SIGN OFF ON COMPLETION:  _____

PRINTED NAME: Greg Corning

ATTACHMENT A

PROJECT PHOTOGRAPHS



Existing weed barrier across the mouth of canal (photo dated August 14, 2014)



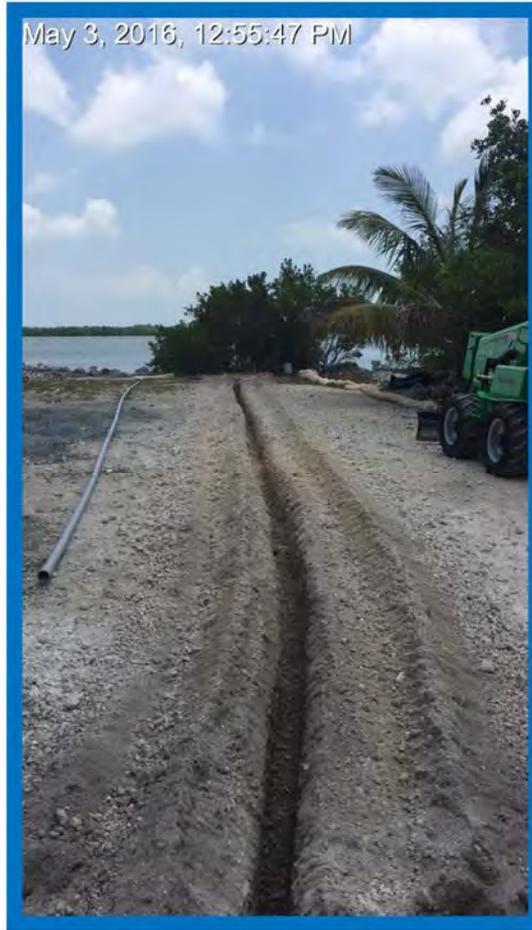
Existing weed barrier and vacant lot at mouth of canal (photo dated August 14, 2014)



Erosion and sediment control around the staging area (photo dated April 27, 2016)



Trenching for electrical conduit and tie into temporary electrical pole (photo dated May 3, 2016)



Trenching for electrical conduit (photo dated May 3, 2016)



Frame for concrete pad (photo dated May 3, 2016)



Compressor cabinets with electrical conduit for control panel (photo dated May 5, 2016)



Turbidity barrier around the existing weed gate to be removed (photo dated May 9, 2016)



Control panel, compressor cabinets, and turbidity barrier (photo dated May 11, 2016)



Compressors inside noise reducing cabinet for air curtain (photo dated May 11, 2016)



Control Panel for air curtain (photo dated May 11, 2016)



Manifold attached to compressor cabinet with pressure gauge (photo dated May 11, 2016)



May 25, 2016, 12:32:54 PM

Diffusers attached to weighted bases for air curtain (photo dated May 25, 2016)



May 27, 2016, 11:51:12 AM

Compressors in noise reducing cabinets, control panel, wind vane and air curtain installed and site restoration complete (photo dated May 27, 2016)

ATTACHMENT B

HOMEOWNER APPROVAL OF CONSTRUCTION STAGING AREA USED FOR RESTORATION



BOARD OF COUNTY COMMISSIONERS

Danny L. Kollhage, District 1
Mayor Heather Carruthers, District 3
Mayor Pro Tem George Neugent, District 2
David Rice, District 4
Sylvia J. Murphy, District 5



June 23, 2016

Larry and Pamela Aravena Lejeune
10035 Ridgely Road
Baton Rouge, LA 70709-2834

Subject: Satisfaction with Restoration Work on Your Property
Related to Use as a Staging Area for Weed Barrier Installation for Water Quality Improvement
30990 Baileys Lane, Big Pine Key, FL, 33043. Parcel Identification Number 00310730-000000

Dear Mr. Larry and Mrs. Pamela Arvena Lejeune,

The County has completed the Weed Barrier Installation water quality improvement project on your canal. We greatly appreciate the use of your property for staging of material and equipment!

Please note Item #2 of the Hold Harmless/Maintenance Agreement you signed stated:
During the Weed Barrier Restoration Project, all existing structures and equipment will be removed. Two 3' x 3' concrete pads will be constructed on the southern end of the Property. One ¾ horsepower compressor installed inside of a noise reducing box will be located on each concrete pad and will be connected to a new electrical panel. Concrete pads will be surrounded by ornamental plants. Each compressor will supply air to a diffuser manifold which will be installed on canal bottom the width of the Canal. The contractor will be responsible for replacing in-kind any damage to private property.

Please note Item #3 of the Hold Harmless/Maintenance Agreement you signed stated:
Once the Weed Barrier Restoration Project is complete, the Contractor will return the property to its original or better condition which includes re-grading, re-sodding or resurfacing of disturbed areas.

All of the work related to use of your property for Weed Barrier installation has been completed. The property has been restored to its original or better conditions. Please inspect the videos/photographs provided to you and/or the actual property and acknowledge that the restoration meets your approval

Please return the signed notarized acceptance of the restoration work at your property to my attention or to an Amec Foster Wheeler representative.

Sincerely,

Greg Corning, P.E.
Amec Foster Wheeler
Environment & Infrastructure Americas
5845 NW 158th Street
Miami Lakes, FL 33014
Cell Phone – (314) 920-8359

ACCEPTANCE OF RESTORATION WORK

We, Larry and Pamela Aravena Lejeune, acknowledge that We are satisfied with the restoration work completed on our property located at 30990 Baileys Lane, Big Pine Key, FL, 33043, Parcel Identification Number 00310730-000000 in association with completion of the Monroe County water quality improvement weed barrier installation project.

IN WITNESS WHEREOF, the parties have agreed to the acceptance of the restoration work on this _____ day of _____, 2016

By: _____
Larry Lejeune, Property Owner

Date: _____

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, _____ by Larry Lejeune, owner of the property listed above. Who is personally known to me or has produced his _____ as identification.

Signature of Notary Public

Print Notary Name or Stamp

Commission No. _____

My commission expires: _____

By: _____
Pamela Aravena Lejeune, Property Owner

Date: _____

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, _____ by Pamela Aravena Lejeune, owner of the property listed above. Who is personally known to me or has produced her _____ as identification.

Signature of Notary Public

Print Notary Name or Stamp

Commission No. _____

My commission expires: _____

ATTACHMENT #1

Photographs of the Pre-Construction and Restored Conditions of the Properties

Apr 27, 2016, 2:22:28 PM



Photo No. 1. Pre-Construction Conditions on Staging Area for Canal #266

Apr 27, 2016, 2:22:36 PM



Photo No. 2. Pre-Construction Conditions on Staging Area for Canal #266

Jun 1, 2016, 1:35:59 PM



Photo No. 3. Post Construction Conditions on Staging Area for Canal #266



Photo No. 4. Post Construction Conditions on Staging Area for Canal #266

ATTACHMENT C

ACCESS AGREEMENT FOR EQUIPMENT

**HOLD HARMLESS/MAINTENANCE AGREEMENT AND EASEMENT
BETWEEN MONROE COUNTY, FLORIDA
AND
LARRY AND PAMELA ARAVENA LEJEUNE
REGARDING THE CANAL #266
WEED BARRIER RESTORATION BIG PINE KEY PROJECT**

THIS AGREEMENT (the "Agreement") is made and entered into by Monroe County, Florida, a political subdivision of the State of Florida (the "County"), whose address is 1100 Simonton Street, The Gato Building, Room 205, Key West, FL 33040 and Larry and Pamela Aravena Lejeune (the "Property Owners"), whose address is 10035 Ridgely Rd., Baton Rouge, LA 70709-2834.

WHEREAS, the Property Owner owns that certain real property located at 30990 Baileys Ln., Big Pine Key. Parcel Identification Number is 00310730-000000, which property abuts that body of water commonly known as Canal #266 (the "Canal") more specifically identified in Exhibit "A" attached hereto and incorporated herein (the "Property"); and

WHEREAS, the County is not under any obligation to install or maintain the equipment proposed as part of this agreement in any way; and

WHEREAS, the Weed Barrier Restoration Project is a voluntary project, and the Property Owner has fully agreed to the Weed Barrier Restoration Project scheduled for the canal which abuts and partially crosses their Property; and

WHEREAS, the Property Owner, whose property abuts the canal, has agreed to assist the County with this demonstration Weed Barrier Restoration Project to aid in the improvement of water quality within the Canal (the "Weed Barrier Restoration Project"); and

WHEREAS, as part of the Weed Barrier Restoration Project, the County will utilize the Property to remove existing structures and equipment and install new structures and equipment necessary for the Weed Barrier Restoration Project for a period of up to six (6) months or until the project is completed following issuance of a Notice to Proceed to the Contractor, more specifically identified on Exhibit "B" attached hereto and incorporated herein; and

WHEREAS, the County or Contractor, not the Property Owner, will obtain the requisite permits necessary for construction of the project; however the Property Owner may be required to sign certain application or permission forms in order for the contractor to use the Property; and

WHEREAS, the Property Owner, whose property from which the existing structures and equipment will be removed and upon which new structures and equipment will be installed is aware of the potential danger to their property, the existing shoreline, docks, seawalls, trees and other collateral damage which may not be readily apparent or which may not manifest itself until long after the Weed Barrier Restoration Project is completed; and

WHEREAS, in spite of the inherent risks the Property Owner has requested the Weed Barrier Restoration Project go forward. The Property Owner, in exchange for the County's agreement to remove existing structures and equipment and install new structures and equipment, agrees to hold the County harmless, now and forever, from any liability related to the Weed Barrier Restoration Project performed within and about the Canal.

NOW, THEREFORE, for and in consideration of the sum of Ten Dollars and other mutual covenants herein provided and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Property Owner shall release, indemnify, defend (with counsel acceptable to the County) and hold harmless the County, their officials, agents, and employees from and against any and all claims, suits, judgments, demands, liabilities, damages, cost and expenses (including but not limited to attorneys' fees, paralegals' fees, consultants' fees and costs at all administrative, pretrial, trial and appellate levels) of any kind or nature whatsoever arising out of or related in any way to the County's removal of existing structures and equipment and installation of new structures and equipment for water quality improvement purposes, including without limitation all claims relating to injury to persons (including death) or to property. The Property Owner acknowledges that his willingness to provide the above indemnities was a specifically bargained for provision of this Agreement and that specific consideration was provided for his respective above indemnities and the County acknowledges that the willingness of the Property Owner to provide the above indemnities was a material factor in the County's willingness to provide improvements to the Canal. This provision survives the termination of this Agreement.

2. During the Weed Barrier Restoration Project, all existing structures and equipment will be removed with the exception of the northern concrete pile and concrete walls as identified in Exhibit "B". Two 3' x 3' concrete pads will be constructed on the southern end of the Property. One $\frac{3}{4}$ horsepower compressor installed inside of a noise reducing box will be located on each concrete pad and will be connected to a new electrical panel. Concrete pads will be surrounded by ornamental plants. Each compressor will supply air to a diffuser manifold which will be installed on canal bottom the width of the Canal. The contractor will be responsible for replacing in-kind any damage to private property. Specifically, work to be performed on the Property is identified on Exhibit "B". The Property Owner, for and in consideration of the mutual covenants previously acknowledged, and of the benefits accruing to Property Owner by the Weed Barrier Restoration, as referenced above, hereby grants and conveys to the County, its agents and assigns, a construction easement and right of entry, attached hereto and made a part hereof as Exhibit "C" over the Property to access and construct the Weed Barrier Restoration as identified in Exhibit "B." In addition, the Property Owner agrees to sign application and/or permission forms as required in order to proceed with the project, such as application to place structures and equipment on the property.

3. Once the Weed Barrier Restoration Project is complete, the Contractor will return the property to its original or better condition which includes re-grading, re-sodding or resurfacing of disturbed areas.

4. The Property Owner, in consideration of the mutual covenants previously acknowledged, hereby grants and conveys to the County, an Easement and Right of Entry over the Property and Canal, for the purpose set forth in this Agreement, said Right of Entry given to the County and their assigns from the date the Notice to Proceed is issued to the contractor.

5. The County may terminate this Agreement at any time upon written notice to the Property Owner, notice is to be mailed to Property Owner at 10035 Ridgely Rd., Baton Rouge, LA 70709-2834. If County terminates prior to construction or if another site is chosen the agreement and easement are null and void; and no consideration will be due from either party. Accordingly, based upon the mutual covenants contained herein, Property Owner may not terminate this Agreement after execution by both parties and upon written Notice to the County in care of Rhonda Haag at Murray Nelson Government Center, 102050 Overseas Highway, Suite 2-246, Key Largo, FL 33037. Notice is effective upon mailing.

6. The indemnification, defense, and hold harmless provisions contained herein shall survive termination and shall remain in full force and effect with regard to any and all claims, suits, judgments, demands, liabilities, damages, cost and expenses which may arise now or in the future that are determined to be a result of the Weed Barrier Restoration Project.

{Remainder of this page left intentionally blank – signature page to follow}

IN WITNESS WHEREOF, the parties have executed this HOLD HARMLESS/MAINTENANCE AGREEMENT AND EASEMENT on this 15 day of July, 2015.



AMY HEAVILIN, CLERK
Charles Robertson
DEPUTY CLERK

MONROE COUNTY, FLORIDA
Board of County Commissioners

By: [Signature]
Mayor

Date: 7/15/15

[Signature]
MONROE COUNTY ATTORNEY
APPROVED AS TO FORM
PEDRO J. MERCADO
ASSISTANT COUNTY ATTORNEY
Date 6/29/15

Signatures of Larry and Pamela Aravena Lejeune:

WITNESS to
Larry Lejeune:

[Signature]
Witness

Joyce C. ARAVENA
Print Witness Name

Date 06/11/2015

By: Larry Lejeune, Property Owner

By: [Signature]
Date: 6/11/15

STATE OF Louisiana
COUNTY OF Ebato Rouge
Parish

THIS DOCUMENT NOT
PREPARED BY
THE UNDERSIGNED NOTARY
ATTESTING TO SIGNATURES ONLY

The foregoing instrument was acknowledged before me this 11 day of June, 2015 by Larry Lejeune, the owner of the property listed above. Who individually is personally known to me or individually has produced his LA driver license as identification.

[Signature]
Signature of Notary Public

Commission No. _____
My commission expires: _____



Print Notary Name or Stamp
Dajuana W. Moore, Notary No. 68583

WITNESS to
Pamela Aravena Lejeune:

[Signature]
Witness

Joyce C. ARAVENA
Print Witness Name

Date 06/11/15

By: Pamela Aravena Lejeune, Property Owner

By: [Signature]
Date: 6/11/15

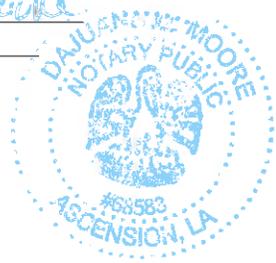
STATE OF Louisiana
COUNTY OF Ebato Rouge
Parish

THIS DOCUMENT NOT
PREPARED BY
THE UNDERSIGNED NOTARY
ATTESTING TO SIGNATURES ONLY

The foregoing instrument was acknowledged before me this 11 day of June, 2015 by Pamela Aravena Lejeune, the owner of the property listed above. Who individually is personally known to me or individually has produced his LA D2 as identification.

[Signature]
Signature of Notary Public

Commission No. _____
My commission expires: _____



Print Notary Name or Stamp
Dajuana W. Moore, Notary No. 68583

Exhibit "A"

BK 2 LT 23 AND SLY 60FT LT 24 DOCTORS ARM SUB PB3-141 BIG PINE KEY OR609-163 OR1091-1635 OR1147-1943/44 OR1176-700/01 OR2660-1950/51

OR

Lot 23 plus southerly 60 feet of Lot 24, Block 2, Doctors Arm subdivision, Big Pine Key, as recorded in Plat Book 3, Page 141, of the Public Records of Monroe County, Florida.

Exhibit "B"

Proposed Construction Activities

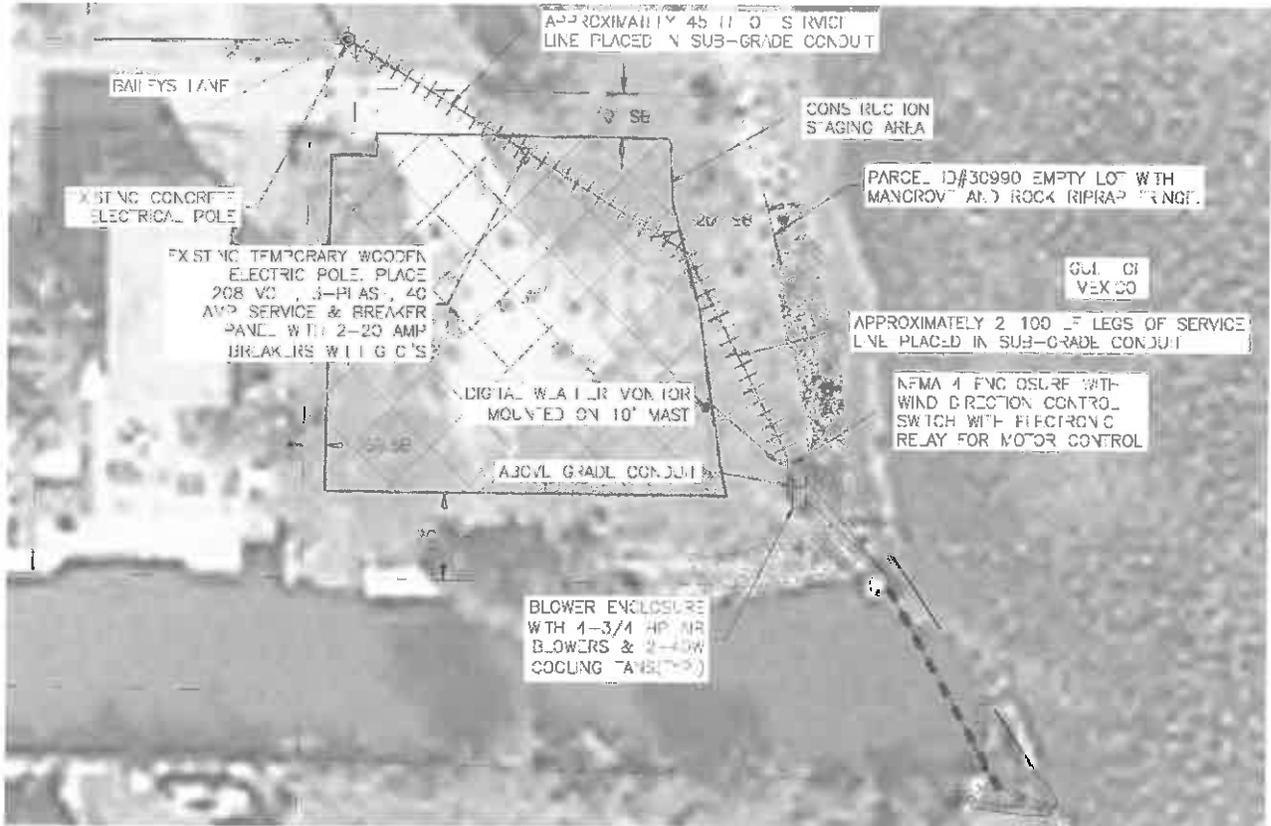


Exhibit "C"

GRANT OF EASEMENT AND RIGHT OF ENTRY

On this 11 day of June, 2015, I, Larry and Pamela Aravena Lejeune ("Owners"), in consideration of the benefits accruing to us, do hereby give, grant, bargain, and release to MONROE COUNTY ("County"), a political subdivision of the State of Florida this Grant of Easement and Right of Entry under, over, across and upon the property described as 30990 Baileys Ln., Big Pine Key, Block 2, Lot 23 and southerly 60 feet of Lot 24, as recorded in Plat Book 3, Page 141, of the Public Records of Monroe County Florida.

1. The Owner does hereby state that he has sufficient authority and title to grant this easement and right of entry.
2. The Owner agrees that the property may be used during the County's Weed Barrier Restoration Project and for future maintenance of structures and equipment. During the Weed Barrier Restoration Project, all existing structures and equipment will be removed with the exception of the northern concrete pile and concrete walls. Two 3' x 3' concrete pads will be constructed on the southern end of the Property. One $\frac{3}{4}$ horsepower compressor installed inside of a noise reducing box will be located on each concrete pad and will be connected to a new electrical panel. Concrete pads will be surrounded by ornamental plants. Each compressor will supply air to a diffuser manifold which will extend the width of the Canal.
3. The Proposed Work to be performed on the property is generally identified on Exhibit "B" as Proposed Construction Activities; however Owner agrees that this is not a complete list of equipment that may be required to accomplish the work and agrees that the amount and type of equipment is to be determined by County in its sole discretion.
4. All work on the Property shall be accomplished under permits acquired by the COUNTY or its agents.
5. Owner shall furnish and maintain the easement area free of any obstruction and shall not construct, place, or allow the placing or construction of any obstruction which would interfere with County's safe or proper installation, operation, maintenance, inspection, or staging and use of equipment located in the easement area.
6. Owner affirms that the Property where the structures and equipment will be placed, on the date of execution of this document, contains no obstruction to the Proposed Work contemplated in this Easement. Any obstruction to the safe or proper operation, maintenance, or staging of equipment located on the land at the beginning of the Project or during the Project not placed on the land by the County or its agents, may be removed by the County at Owner's expense. The County or its agents shall notify Owner of any such obstruction prior to any action in this regard and allow Owner time to remove obstruction; except for emergency conditions during which the County may require immediate, unobstructed access to the Facilities.

7. The Contractor will return the property to its original or better condition which includes re-grading, re-sodding or resurfacing of disturbed areas, and replacement of the concrete seawall.
8. Monroe County, or its agent Amec Foster Wheeler, will photograph the property prior to staging and again after restoration is complete and send the photographs to the Owner. The Owner shall inspect the photographs and/or the property and advise the County or its agent of restoration concerns which the Owner believes should be alleviated by the contractor. These concerns shall be discussed and resolved between the Owner, the County and the contractor prior to the expiration of the six (6) month construction access period.
9. This easement will run with the land in perpetuity and will be binding on and will inure to the benefit of the parties hereto.
10. The Grantor warrants that it has full power of authority to grant this easement.

{Remainder of this page left intentionally blank – signature page to follow}

IN WITNESS WHEREOF, the parties have executed this Easement and Right of Entry on this day of July 15, 2015.



ATTEST: Chimp Robertson
CLERK OF THE CIRCUIT COURT
DEPUTY CLERK

MONROE COUNTY, FLORIDA
Board of County Commissioners

By: [Signature]
Mayor

Date: 7/15/15

MONROE COUNTY ATTORNEY
APPROVED AS TO FORM
[Signature]
PEDRO J. MERCADO
ASSISTANT COUNTY ATTORNEY
Date: 6/29/15

Signatures of Larry and Pamela Aravena Lejeune:

WITNESS to
Larry Lejeune:

[Signature]
Witness

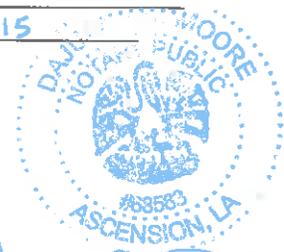
Joyce C Aravena
Print Witness Name
Date: 06/11/2015

By: Larry Lejeune, Property Owner

By: [Signature]
Date: 6/11/15

STATE OF Louisiana
COUNTY OF Orleans

THIS DOCUMENT NOT
PREPARED BY
THE UNDERSIGNED NOTARY
ATTESTING TO SIGNATURES ONLY



The foregoing instrument was acknowledged before me this 11 day of June, 2015 by Larry Lejeune, the owner of the property listed above. Who individually is personally known to me or individually has produced his LA DL as identification.

Signature of Notary Public
[Signature]

Commission No. "Commissioned for Life"
My commission expires: _____

Print Notary Name or Stamp

Dajuana W. Moore, Notary No. 68583

WITNESS to
Pamela Aravena Lejeune:

[Signature]
Witness

Joyce C. Aravena
Print Witness Name
Date: 06/11/2015

By: Pamela Aravena Lejeune, Property Owner

By: [Signature]
Date: 6/11/15

STATE OF Louisiana
COUNTY OF Orleans

THIS DOCUMENT NOT
PREPARED BY
THE UNDERSIGNED NOTARY
ATTESTING TO SIGNATURES ONLY



The foregoing instrument was acknowledged before me this 11 day of June, 2015 by Pamela Aravena Lejeune, the owner of the property listed above. Who individually is personally known to me or individually has produced his LA DL as identification.

Signature of Notary Public
[Signature]

Commission No. "Commissioned for Life"
My commission expires: _____

Print Notary Name or Stamp

Dajuana W. Moore, Notary No. 68583

*MONROE COUNTY CANAL #266
AMEC FOSTER WHEELER PROJECT NO. 6783-14-2614
OCTOBER 2016*

ATTACHMENT D

PERMIT CLOSE OUT DOCUMENTS

Corning, Greg W

From: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Sent: Monday, July 18, 2016 11:19 AM
To: Corning, Greg W
Subject: Re: Monroe County Canal 266 and 287 - Weed Barrier Installation Project Completion - FKNMS-2015-067

Thank you, Greg, for this notification and congratulations on completing the project. FKNMS does not require anything further regarding this permit.

Sincerely,
Joanne

Joanne Delaney
Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
[Join us on Facebook](#)
[Follow us on Twitter](#)

On Mon, Jul 18, 2016 at 8:05 AM, Corning, Greg W <greg.corning@amecfw.com> wrote:

Joanne,

The construction activities for the Canal 266 and 287 weed barrier installation projects have been completed. Please let us know if you need any additional information to close out the FKNMS-2015-067 permit.

Thanks again for all your assistance

Greg Corning, P.E.

Technical Professional III - Engineer

Amec Foster Wheeler

Environment & Infrastructure Americas

5845 NW 158 St.

Miami Lakes, Fl. 33014

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: SAJ- 2014- 03356(GP -MIB)

Permittee's Name & Address (please print or type): Monroe County Board of County Commissioners

c/o Roman Gastesi, County Administrator

1100 Simonton Street, Key West, Florida 33040

Telephone Number: _____

Location of the Work: Big Pine Key, Florida

Date Work Started: 05/2016 Date Work Completed: 07/2016

PROPERTY IS INACCESSIBLE WITHOUT PRIOR NOTIFICATION: YES ___ NO X
PLEASE CONTACT _____ AT _____
TO SCHEDULE AN INSPECTION

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

Remove existing weed barrier system and install an air curtain with weighted diffusers at the mouth of the Canal.

Acreage or Square Feet of Impacts to Waters of the United States: 0.01 Acres

Describe Mitigation completed (if applicable): _____

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

N/A

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] ENGINEER OF RECORD
Signature of Permittee

7-20-16
Date

AS-BUILT CERTIFICATION AND REQUEST FOR CONVERSION TO OPERATION PHASE

Instructions: Complete and submit this page within 30 days of completion of the permitted activities, as required by the permit conditions. **Any components of the permitted activities that are not in substantial conformance with the permit must be corrected or a modification of the permit will be required in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.).** The operation phase of the permit is effective when the construction certification for the entire permit/application is approved by the Agency. If the final operation and maintenance entity is not the permittee, the permittee shall operate the system, works or other activities temporarily until such time as the transfer to the operation entity is finalized (use Form 62-330.310(2)).

Permit No.: 44-00590-P	Application No(s). 150423-7	Permittee: Monroe County BOCC
Project Name: Canal 266- Weed Bubble Diffusers		Phase (if applicable):

I HEREBY CERTIFY THAT (please choose accurately and check only one box):

- I hereby notify the Agency of the completion of construction of all the components of the system, works or other activities for the above referenced project and certify that it has been constructed in substantial conformance with the plans specifications and conditions permitted by the Agency. Any minor deviations will not prevent the system from functioning in compliance with the requirements of Chapter 62-330, F.A.C. Attached is documentary evidence of satisfaction of any outstanding permit conditions, other than long term monitoring and inspection requirements.
- At the time of final inspection, the works or activities were NOT completed in substantial conformance with the plans and specifications permitted by the Agency. (The registered professional shall describe the substantial deviation(s) in writing, and provide confirming depiction on the as-built drawings and information.)

If there were substantial deviations, plans must be submitted clearly labeled as "as-built" or "record" drawings reflecting the substantial deviations. If there are no substantial deviations, do not submit "as built" drawings.

For activities that require certification by a registered professional:

 <p>By: _____ Signature</p>	<p>Stephen Hanks Print Name</p> <p>Amec Foster Wheeler Company Name</p> <p>5845 NW 158th Street, Miami Lakes, FL, 33014 Company Address</p>	<p>FL P.E. No. 72253 Fla. Lic. or Reg. No</p> <p style="text-align: center;"><u>7-20-16</u> Date</p>
--	---	--

For activities that do not require certification by a registered professional:

<p>By: _____ Signature</p>	<p>_____ Print Name</p> <p>_____ Company Name</p> <p>_____ Company Address</p>	<p>_____ Date</p>
--------------------------------	--	-----------------------





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PERMIT INFORMATION

PLEASE NOTE: FEES LISTED ARE ESTIMATES ONLY. BEFORE WRITING ANY CHECKS, PLEASE CALL THE BUILDING DEPARTMENT TO CONFIRM.

Permit Number	15105228	RE	0031073000000
Permit Type	65 CAN	Balance Due	\$0.00
Property Address	30990 BAILEY'S LANE	Status	Open

[Permit](#) | [Plan Reviews](#) | [Inspections](#) | [Fees](#) | [Contractors](#) | [All](#)

PERMIT

PERMIT INFORMATION

Application Date	10-02-2015	Operator	griffind
Issued Date	03-11-2016	Operator	MTCCSR1
Master Number		Project Number	
C.O. Number		Operator	
C.O. Issued			
C-404 Type		Usage Class	COM
Applied Value	88456	Units	0
Calculated Value	0	Contractor ID	10323

PROPERTY ON PERMIT

RE	0031073000000
Unit	
Address	30990 BAILEY'S LANE
City/State/Zip	BIG PINE KEY, FL 33043

OWNER ON PERMIT

Name	LEJUENE LARRY W AND PAMELA
Address	14322 BAYOU TERRACE
City/State/Zip	ST AMANT, LA 70774
Type	Private

APPLICANT

No Applicant Information on file for this permit

MISCELLANEOUS INFORMATION / NOTES

30990 BAILEY'S LN DOCTORS ARM BIG PINE KEY
 COMMERCIAL
 AIR CURTAIN W/ELECTRIC
 NOTICE OF COMMENCEMENT NOT REQUIRED