



DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
9900 SOUTHWEST 107<sup>TH</sup> AVENUE, SUITE 203  
MIAMI, FLORIDA 33176

REPLY TO  
ATTENTION OF

February 19, 2019

Regulatory Division  
South Permits Branch  
Miami Permits Section

***PUBLIC NOTICE***  
***(Revised)***

Permit Application Number SAJ-2019-00183 (SP-MIB)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Monroe County  
C/o Roman Gastesi  
1100 Simonton Street, Suite 205  
Key West, Florida 33040

WATERWAY AND LOCATION: The project would affect waters of the United States associated with the Florida Bay. The projects are located within multiple canal systems within the Big Pine Key and No Name Key, Monroe County, Florida.

Directions to the site are as follows: Take US Highway No 1 South. Projects are located between MM30 and 32. See below for individual area locations.

- 1) Canal #255 located between Louise Street and Big Pine Street
- 2) Canal #265 located between Bimini Lane and Tortuga Lane
- 3) Canal #273 located between Bogie Drive and Hellenga Drive
- 4) Canal #287 located between Atlantis Drive and Hollerich Drive
- 5) Canal #293 located between Avenue H and Avenue I
- 6) Canal #295 located between Avenue G and Avenue H
- 7) Canal #297 located between Avenue F and Avenue G
- 8) Canal #299 located between Avenue E and Avenue F
- 9) Canal #300 located between Avenue D and Avenue E
- 10) Canal #315 located Overseas Hwy and Warner Street
- 11) Canal #282 located between Avenue A and Gordon Drive

APPROXIMATE CENTRAL COORDINATES:

Canal #255

Latitude: 24.707640 Longitude: -81.371645

Canal #265

Latitude: 24.698786 Longitude: -81.319200

Canal #273

Latitude: 24.695908 Longitude: -81.350077

Canal #287

Latitude: 24.677061 Longitude: -81.346022

Canal #293

Latitude: 24.674409 Longitude: -81.342066

Canal #295

Latitude: 24.673856 Longitude: -81.341513

Canal #297

Latitude: 24.673093 Longitude: -81.340948

Canal #299

Latitude: 24.672419 Longitude: -81.340753

Canal #300

Latitude: 24.671803 Longitude: -81.339915

Canal #315

Latitude: 24.662244 Longitude: -81.338138

Canal #282

Latitude: 24.684035 Longitude: -81.355360

PROJECT PURPOSE:

Basic: Maintenance dredge to restore water depths in navigable waters of the United States.

Overall: Maintenance dredge to restore water depths in navigable waters of the United States in the Village of Islamorada, Florida.

EXISTING CONDITIONS: The wetland system consists of a saltwater system. The projects are located within developed subdivisions adjacent to canals tributary to the Florida Bay. The canals were significantly impacted by Hurricane Irma creating pockets of accumulated sediment throughout the canal systems. The subject canal systems do have areas that support mangrove shorelines and potentially wetland lots; however, the agent has attested that no impacts to mangroves are proposed. In addition, the agent has stated that the dewatering sites and disposal areas will be located within upland

areas. Furthermore the agent has included on the drawings that no impacts to corals, seagrass, mangroves, or hard bottom communities are proposed based on a desktop review conducted by the agent.

**PROPOSED WORK:** The applicant seeks authorization to maintenance dredge a total of 16,643.13 cubic yards of sediment accumulated post Hurricane Irma within a 9.73 acre area within eleven canal systems to restore water depths to pre-Hurricane Irma conditions and to install temporary floating turbidity barriers around all work areas that are in/over navigable waters of the United States. Material will be dredged utilizing a hydraulic vacuum dredge or mechanical clam shell to remove the sediment accumulation depending on the composition of the material. The utilization of either system will result in the collection of a slurry from the canal bottom comprised of sediment and saltwater. The vessel based dredge excavates and places the material in a dedicated dewatering area. The contractor will either use a mechanical or passive dewatering system to handle the dredged material. The dewatering system will be located in an upland staging area adjacent to the canals. Once dewatered, the material will be transported to an approved upland disposal location dependent on the chemical characteristics of the material.

**COMPENSATORY MITIGATION** – The applicant/agent has provided the following explanation why compensatory mitigation should not be required: No impacts to corals, seagrass, mangroves, or hard bottom communities are proposed as the activity is limited to canal systems/waterways affected by Hurricane Irma; therefore, no migration is proposed.

**CULTURAL RESOURCES:** The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

**ENDANGERED SPECIES:**

The U.S. Army Corps of Engineers (Corps) has determined the project *may affect, but is not likely to adversely affect* (“MANLAA”) the West Indian manatee (*Trichechus manatus*) or its designated critical habitat. Since the proposal by the applicant is for in-water construction, potential impacts to the endangered manatee were evaluated using The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida (Manatee Key), dated April 2013. Use of the Manatee Key resulted in the following sequential determination: A > B > C > G > N > O > P4 “*may affect, but is not likely to adversely affect.*” The Corps will request initiation of formal consultation with the Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act by separate letter.

The Corps has determined the proposed project *may affect, but is not likely to adversely affect* (“MANLAA”) the swimming green sea turtles (*Chelonia mydas*), loggerhead sea turtles (*Caretta caretta*), hawksbill sea turtles (*Eretmochelys imbricata*),

Kemp's ridley sea turtles (*Lepidochelys kempii*), leatherback sea turtles (*Dermochelys coriacea*), the smalltooth sawfish (*Pristis pectinata*) and Acropora sp. critical habitat. The Corps has reached a *no effect* determination on Acropora sp. and corals species; (*Dendrogyra cylindrus*, *Orbicella annularis*, *Orbicella faveolata*, *Orbicella franksi*, *Mycetophyllia ferox*). The Corps will request National Marine Fisheries Service's concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

**ESSENTIAL FISH HABITAT (EFH):** This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would impact approximately 9.73 acres of submerged bottom utilized by various life stages of marine life. The Corps has not independently verified if wetlands and/or submerged aquatic resources area located within the project footprint. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the Florida Keys. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**NOTE:** This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line and confirmation of resources located within the project footprint has not been verified by Corps personnel. Site inspections will be conducted by the Corps and/or benthic surveys will be required to document existing site conditions within the project footprint prior to reaching a final decision on the project.

**AUTHORIZATION FROM OTHER AGENCIES:** Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

**COMMENTS** regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Miami Permits Section, 9900 SW 107<sup>th</sup> Avenue, Suite 203, Miami, Florida 33176 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

**QUESTIONS** concerning this application should be directed to the project manager, Maria Bezanilla, in writing at the Miami Permits Section, 9900 SW 107<sup>th</sup> Avenue, Suite 203, Miami, Florida 33176, by electronic mail at [Maria.I.Bezanilla@usace.army.mil](mailto:Maria.I.Bezanilla@usace.army.mil), by fax at (305) 526-7184, or by telephone at (305) 779-6057.

**IMPACT ON NATURAL RESOURCES:** Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

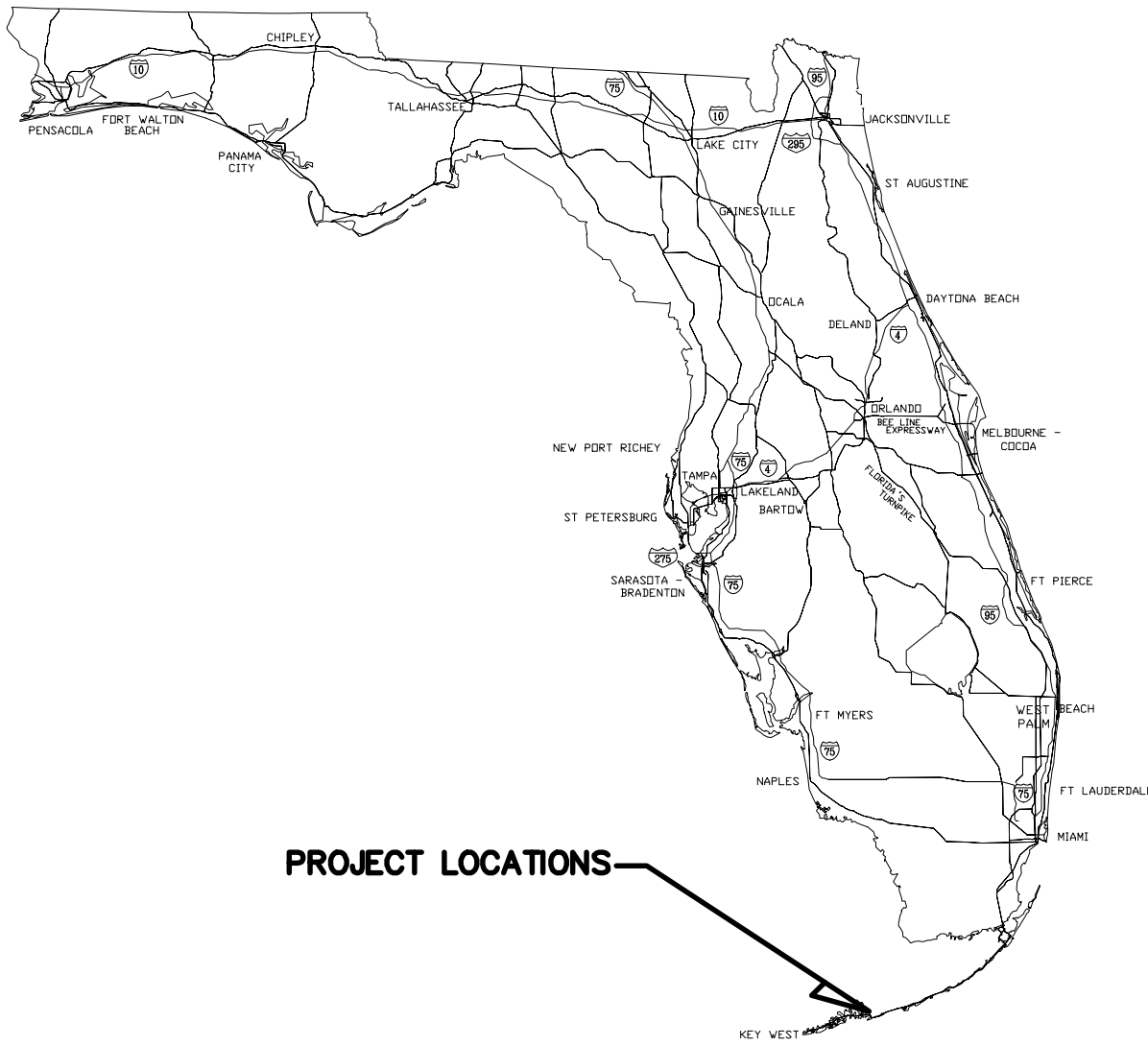
The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COASTAL ZONE MANAGEMENT CONSISTENCY:** In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

**REQUEST FOR PUBLIC HEARING:** Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.



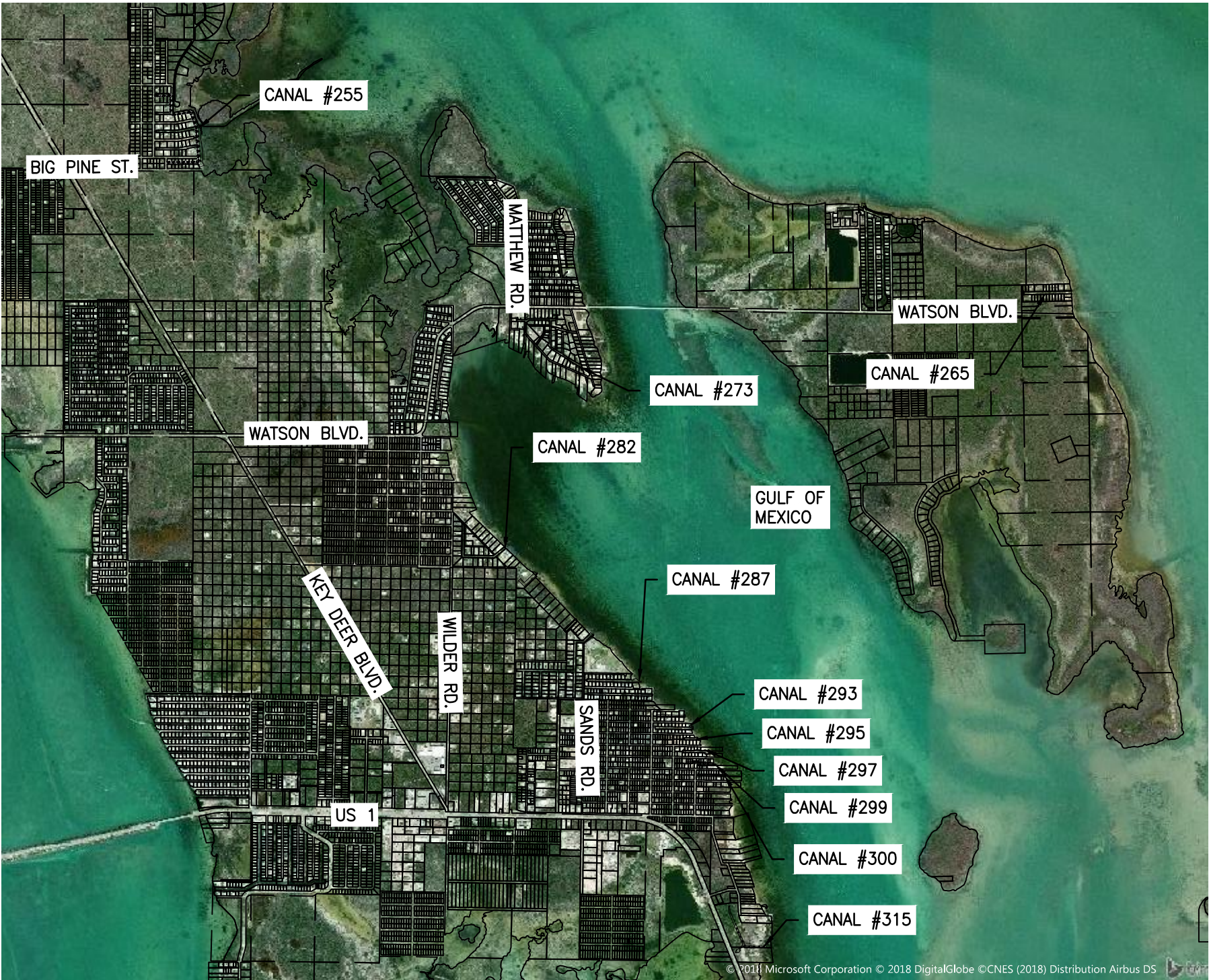
GENERAL SCOPE OF SITE WORK  
FOR  
DESIGN AND PERMITTING  
OF  
SEDIMENT REMOVAL POST HURRICANE IRMA FOR  
11 RESIDENTIAL CANALS IN BIG PINE KEY  
MONROE COUNTY, BIG PINE KEY, FLORIDA



ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

GOVERNING SPECIFICATIONS:  
THE PROJECT DEVELOPMENT CODE;  
PART 1 AND 2 MONROE COUNTY PUBLIC WORKS MANUAL DATED SEPTEMBER 1983;  
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS 2010;  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP);  
SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD);  
UNITED STATES ARMY CORPS OF ENGINEERS (USACE);  
IN THE EVENT OF A CONFLICT, THE MOST RESTRICTIVE APPLIES.

CANAL LOCATIONS TABLE		
CANAL #	LATITUDE	LONGITUDE
255 BIG PINE KEY	24.707640°	-81.371645°
265 No Name Key	24.698786°	-81.319200°
273 BIG PINE KEY	24.695908°	-81.350077°
282 BIG PINE KEY	24.684035°	-81.355360°
287 BIG PINE KEY	24.677061°	-81.346022°
293 BIG PINE KEY	24.674409°	-81.342066°
295 BIG PINE KEY	24.673856°	-81.341336°
297 BIG PINE KEY	24.673093°	-81.340948°
299 BIG PINE KEY	24.672419°	-81.340753°
300 BIG PINE KEY	24.671803°	-81.339915°
315 BIG PINE KEY	24.662244°	-81.338138°



LEGEND  
CANAL FOOTPRINTS

VICINITY MAP

SUNSHINE STATE ONE CALL OF FLORIDA  
CALL BEFORE YOU DIG  
1-800-432-4770

- CALL 1-800-432-4770 TWO FULL BUSINESS DAYS (BUT NOT MORE THAN FIVE) BEFORE DIGGING TO FIND OUT WHERE BURIED FACILITIES (ELECTRIC, GAS, TELECOMMUNICATIONS, CABLE WATER, SEWER) ARE LOCATED.
- WAIT THE REQUIRED TIME FOR THE UTILITIES ON SITE TO BE LOCATED AND MARKED WITH COLOR-CODED PAINT, FLAGS OR STAKES AND CONFIRM THAT THE SITE HAS BEEN LOATED.
- RESPECT AND PROTECT THE MARKS DURING THE PROJECT, IF MARKS ARE DESTROYED, REQUEST A NEW LOCATE TICKET.
- DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID HITTING THE BURIED UTILITY LINES.

- SHEET INDEX
- MONROE COUNTY SEDIMENT REMOVAL COVER SHEET
  - SEDIMENT REMOVAL - CANAL #255 - DSR3
  - SEDIMENT REMOVAL - CANAL #265- DSR3
  - SEDIMENT REMOVAL - CANAL #273- DSR3
  - SEDIMENT REMOVAL - CANAL #282- DSR3
  - SEDIMENT REMOVAL - CANAL #287- DSR3
  - SEDIMENT REMOVAL - CANAL #293- DSR3
  - SEDIMENT REMOVAL - CANAL #295- DSR3
  - SEDIMENT REMOVAL - CANAL #297- DSR3
  - SEDIMENT REMOVAL - CANAL #299- DSR3
  - SEDIMENT REMOVAL - CANAL #300- DSR3
  - SEDIMENT REMOVAL - CANAL #315- DSR3

wood.

ENVIRONMENT &  
INFRASTRUCTURE  
SOLUTIONS, INC.  
5845 NW 158TH STREET  
MIAMI LAKES, FL 33014  
TEL: (305) 826-5588

PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



REVISIONS

NO.	DATE	BY	APPROVED

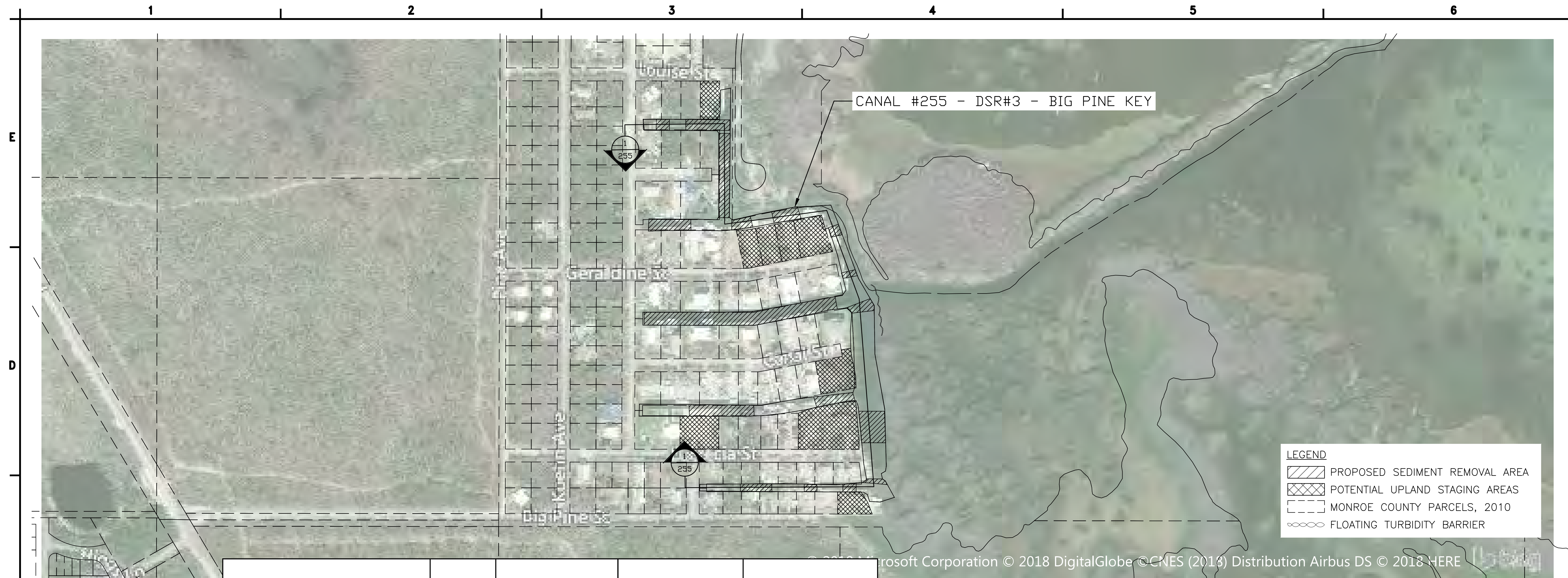
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APPROVED BY:	RH
DATE:	10/01/2018

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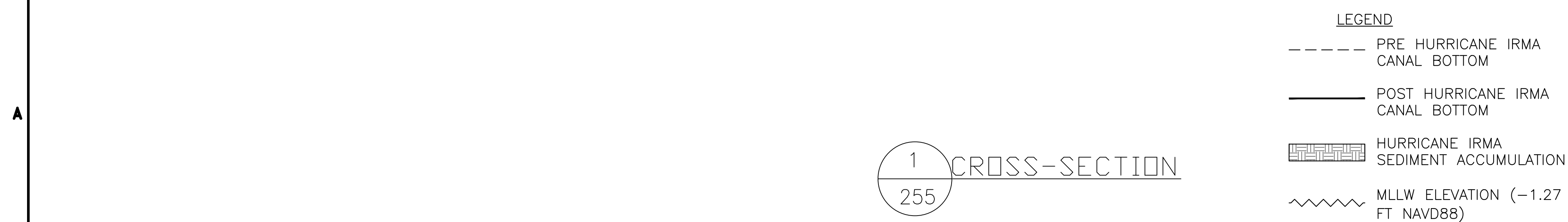
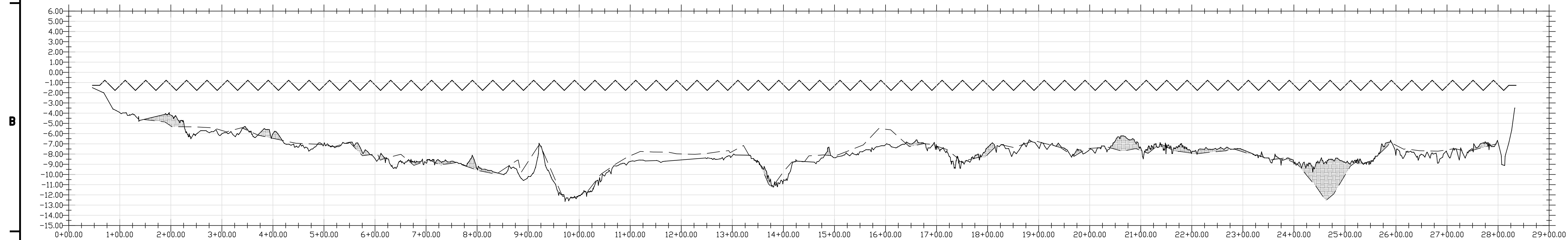
MONROE COUNTY  
SEDIMENT REMOVAL  
COVER SHEET

SHEET NUMBER:	REV. #
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
255 BIG PINE KEY	3	249775.31	119401.58	2147.25



- NOTES:**
- 1) MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
  - 2) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
  - 3) THE PROFILE IS JUST A REPRESENTATION OF THE IMPACTS TO THE CANAL SYSTEM, IN SOME INSTANCES NOT ALL FINGER CANALS ARE REPRESENTED WITH A CROSS SECTION HOWEVER THE IMPACTS ARE TYPICAL WITHIN EACH SEGMENT AND ARE PART OF THE EVALUATION TO BE RESTORED.
  - 4) CONTRACTOR SHALL ENSURE TURBIDITY OUTSIDE CANAL IS 0 NTU ABOVE BACKGROUND AT ALL TIMES DURING CONSTRUCTION ACTIVITY.
  - 5) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.

**wood.**

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INFRASTRUCTURE  
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PROJECT:

**MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL**

SPONSOR:



REVISIONS

NO.	DATE	BY	APPROVED

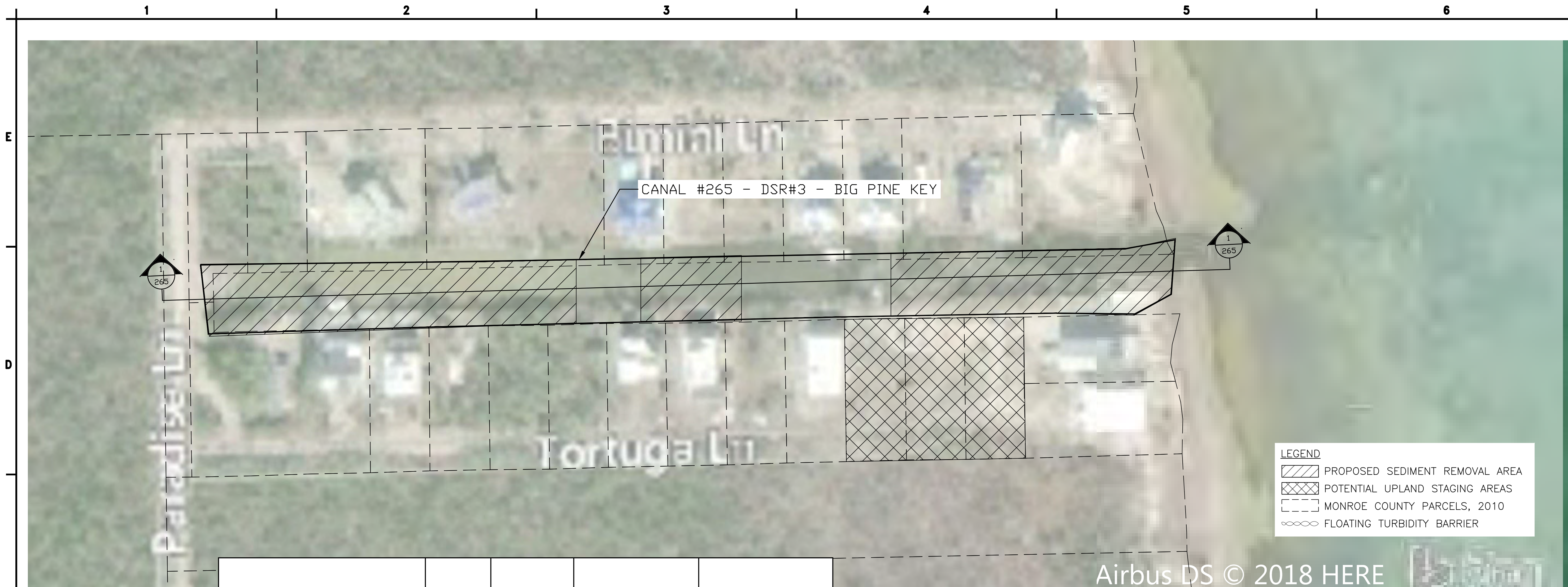
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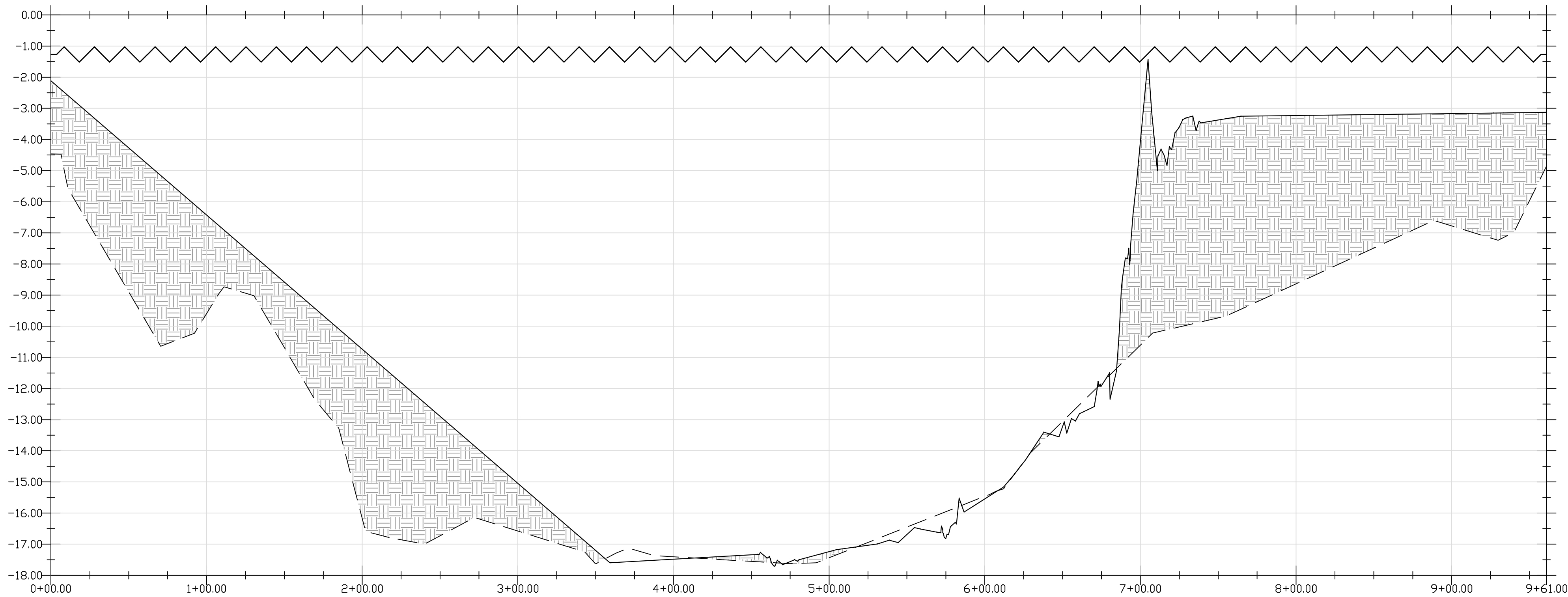
**SEDIMENT REMOVAL  
CANAL #255 -  
DSR3**

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
265 No Name Key	3	62959.40	49939.35	4048.07



1  
265  
CROSS-SECTION

- LEGEND
- PRE HURRICANE IRMA CANAL BOTTOM
  - POST HURRICANE IRMA CANAL BOTTOM
  - ▨ HURRICANE IRMA SEDIMENT ACCUMULATION
  - ~~~~~ MLLW ELEVATION (-1.27 FT NAVD88)

- NOTES:
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  - 2) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
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wood.

ENVIRONMENT &  
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PROJECT:  
**MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL**

SPONSOR:



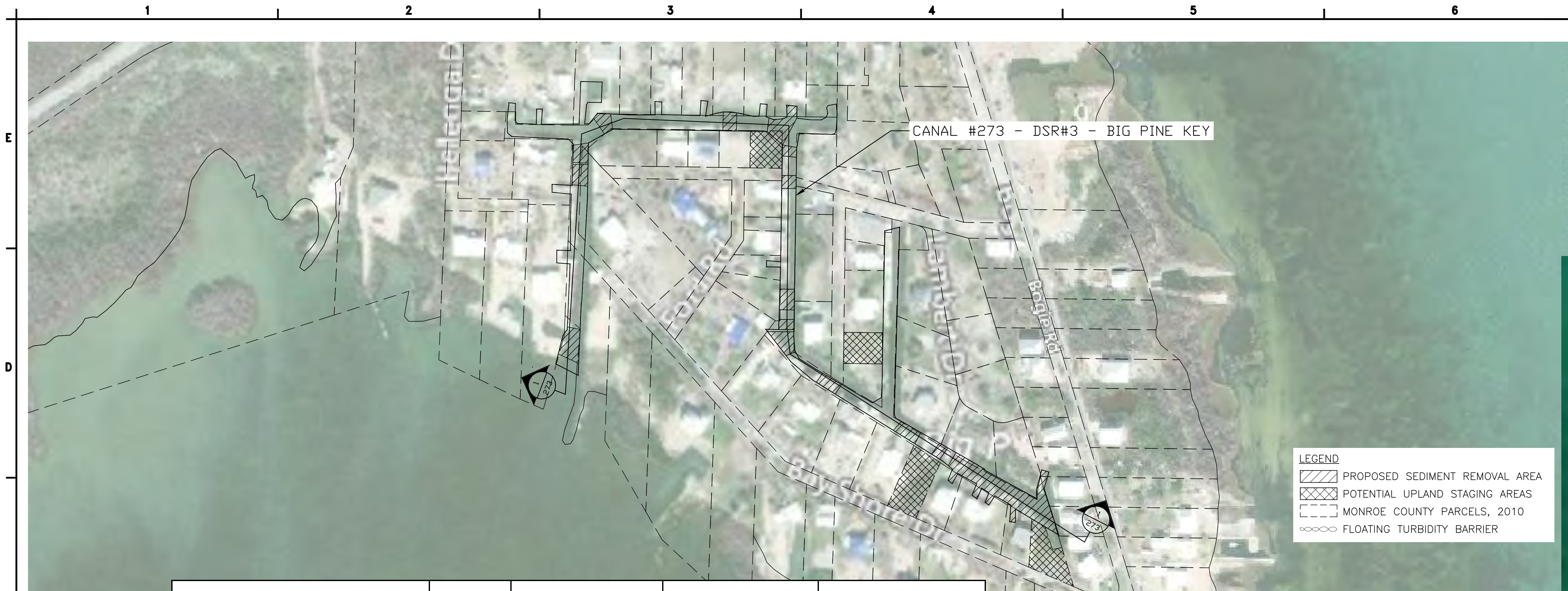
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NO.	DATE	BY	APPROVED

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DRAWN BY:	GWC
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APPROVED BY:	RH
DATE:	10/01/2018

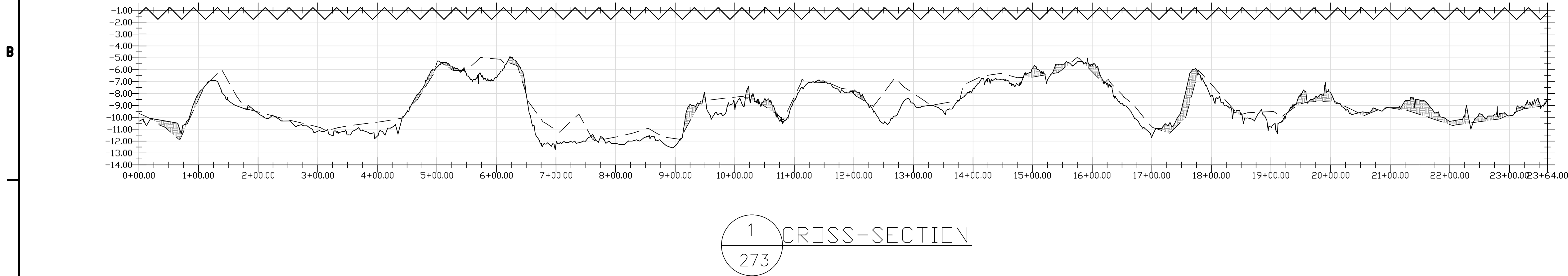
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**SEDIMENT REMOVAL  
CANAL #265 -  
DSR3**

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
273 BIG PINE KEY	3	124164.34	38469.89	1088.39



wood.

ENVIRONMENT &  
INFRASTRUCTURE  
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TEL: (305) 826-5588

PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



REVISIONS

NO.	DATE	BY	APPROVED

DESIGNED BY:	GWC
DRAWN BY:	GWC
CHECKED BY:	RH
APPROVED BY:	RH
DATE:	10/01/2018

SHEET TITLE:

SEDIMENT REMOVAL  
CANAL #273 -  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS

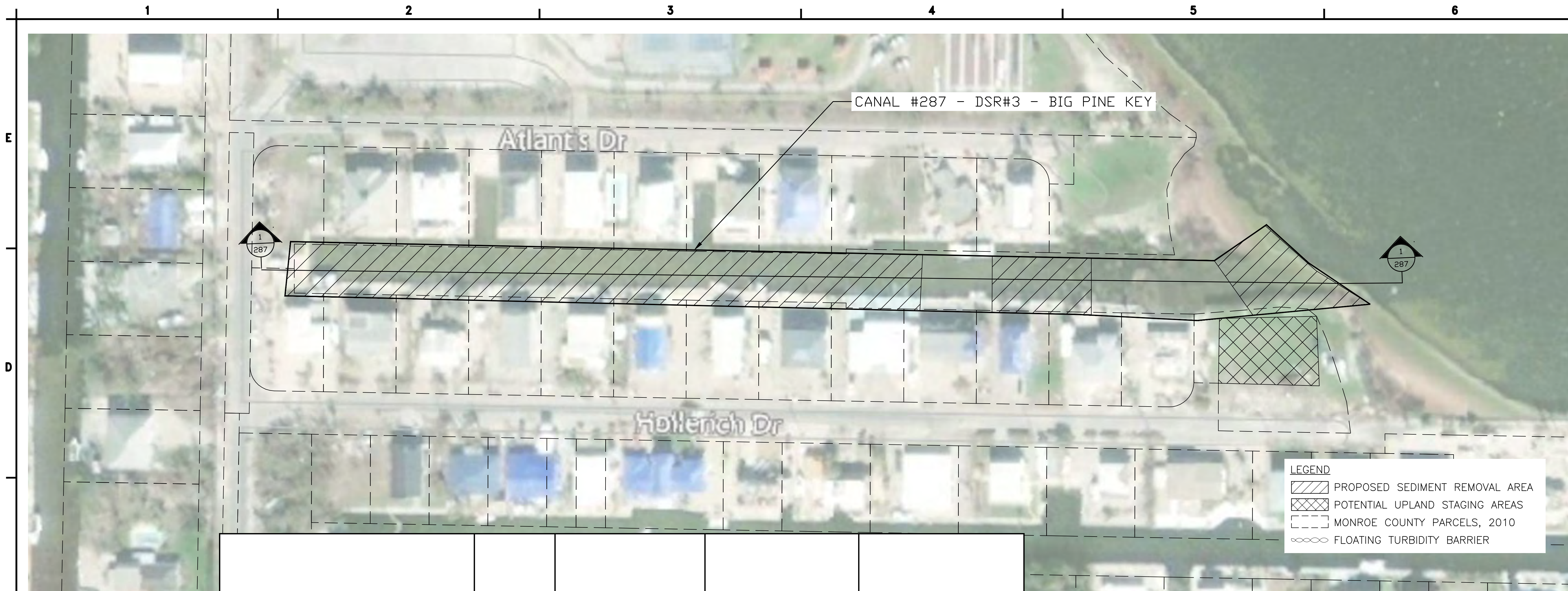
LEGEND

- PRE HURRICANE IRMA CANAL BOTTOM
- POST HURRICANE IRMA CANAL BOTTOM
- HURRICANE IRMA SEDIMENT ACCUMULATION
- MLLW ELEVATION (-1.27 FT NAVD88)

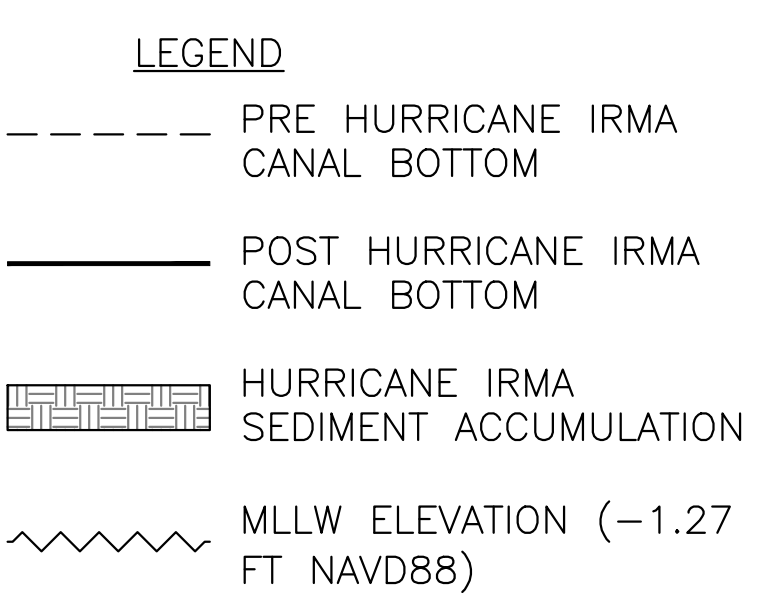
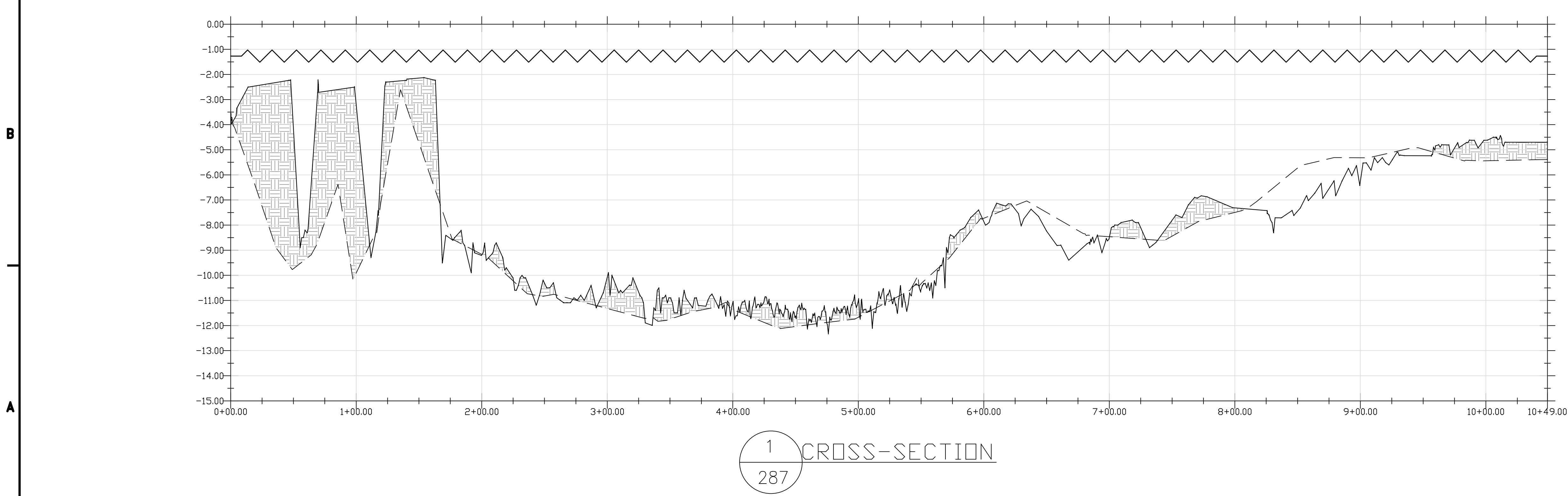
NOTES:

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- 4) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
287 BIG PINE KEY	3	62430.98	49359.12	1520.86



- NOTES:
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**wood.**

ENVIRONMENT &  
INFRASTRUCTURE  
SOLUTIONS, INC.  
5845 NW 158TH STREET  
MIAMI LAKES, FL 33014  
TEL: (305) 826-5588

PROJECT:

**MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL**

SPONSOR:



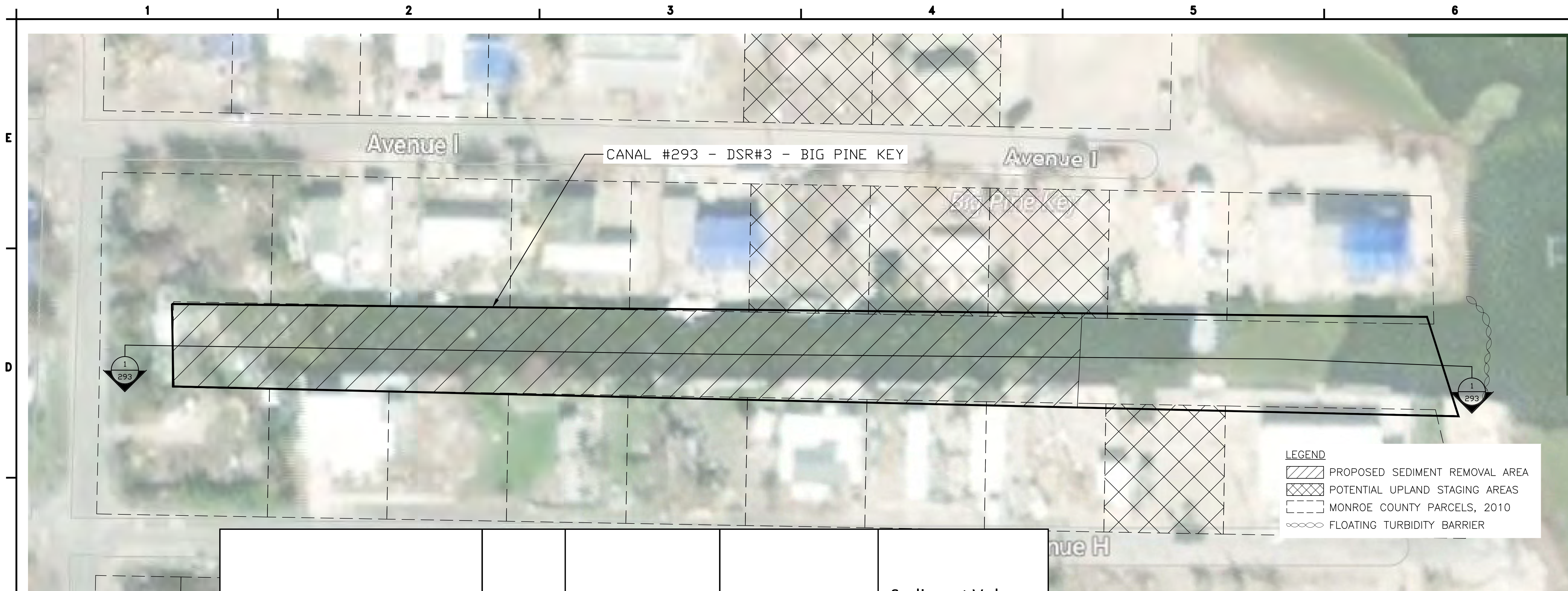
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NO.	DATE	BY	APPROVED

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DRAWN BY:	GWC
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APPROVED BY:	RH
DATE:	10/01/2018

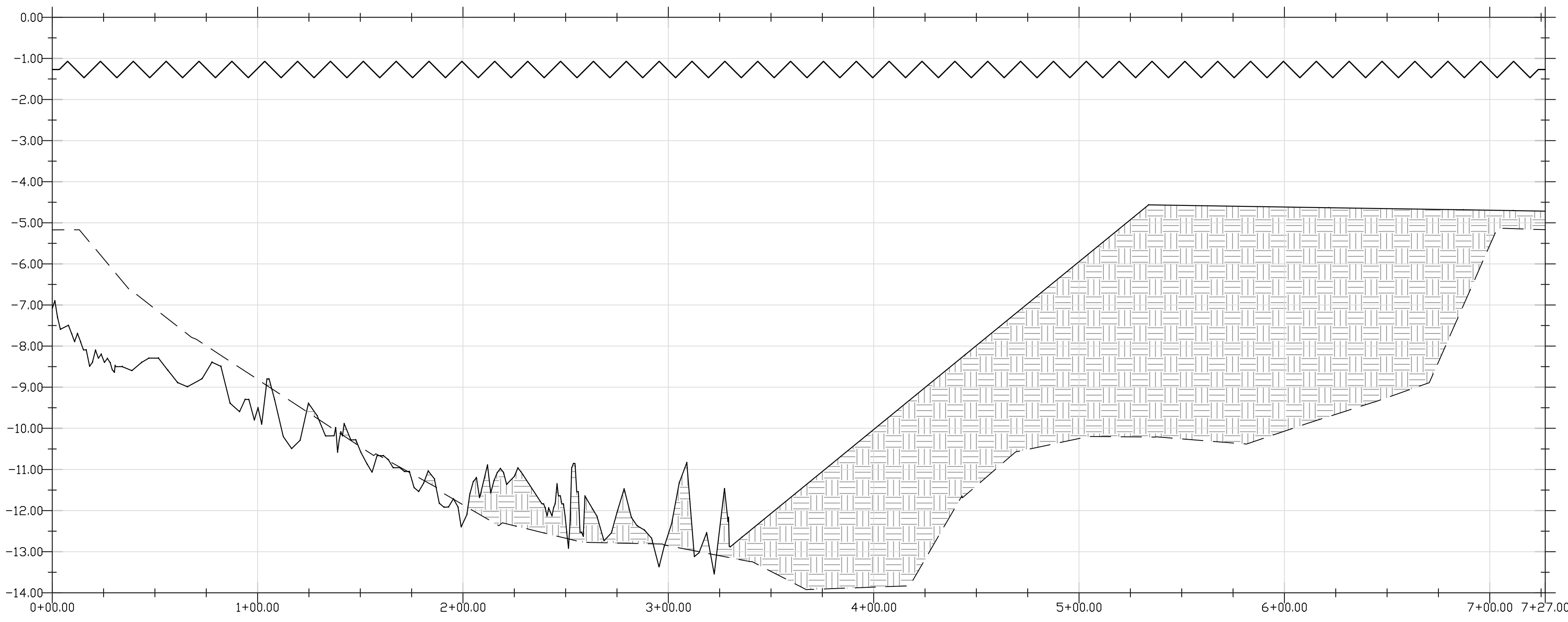
SHEET TITLE:  
**SEDIMENT REMOVAL  
CANAL #287 -  
DSR3**

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
293 BIG PINE KEY	3	39597.96	27427.49	4843.05



1  
293  
CROSS-SECTION

**LEGEND**

- PROPOSED SEDIMENT REMOVAL AREA
- POTENTIAL UPLAND STAGING AREAS
- MONROE COUNTY PARCELS, 2010
- FLOATING TURBIDITY BARRIER

**LEGEND**

- PRE HURRICANE IRMA CANAL BOTTOM
- POST HURRICANE IRMA CANAL BOTTOM
- HURRICANE IRMA SEDIMENT ACCUMULATION
- MLLW ELEVATION (-1.27 FT NAVD88)

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wood.

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MIAMI LAKES, FL 33014  
TEL: (305) 826-5588

PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



REVISIONS			
NO.	DATE	BY	APPROVED

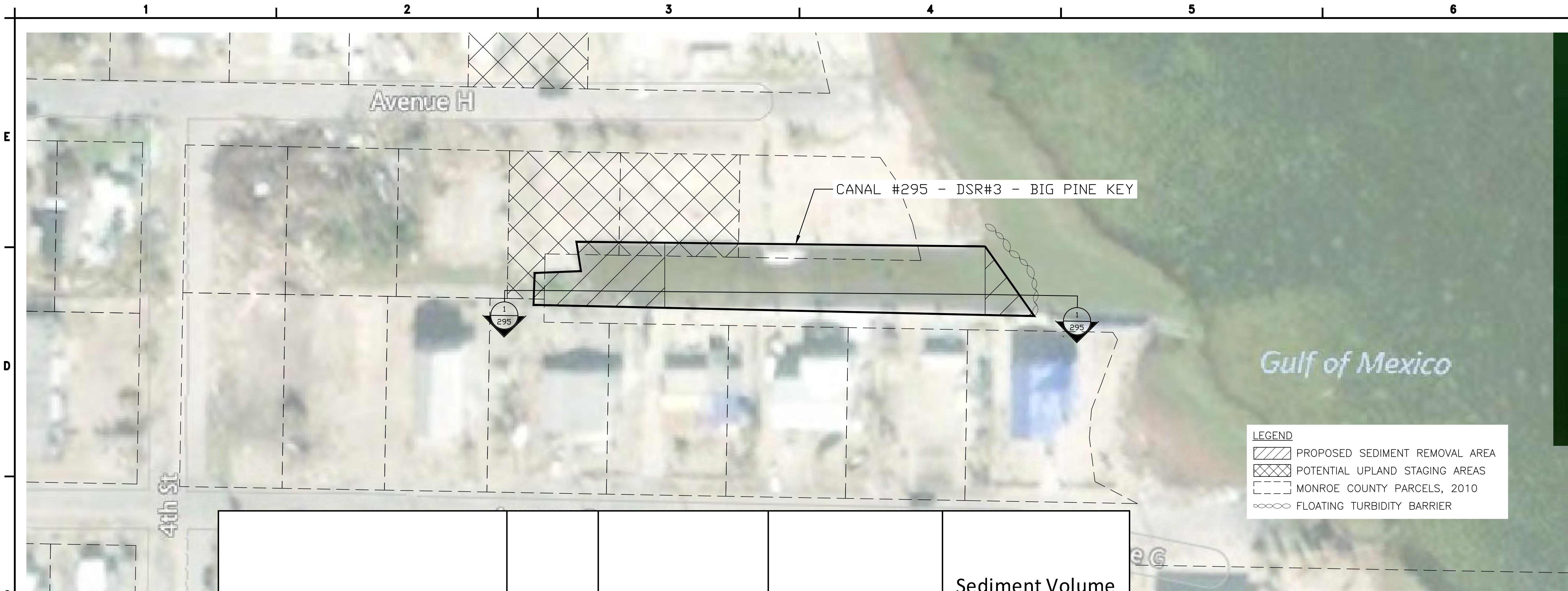
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DRAWN BY:	GWC
CHECKED BY:	RH
APPROVED BY:	RH
DATE:	10/01/2018

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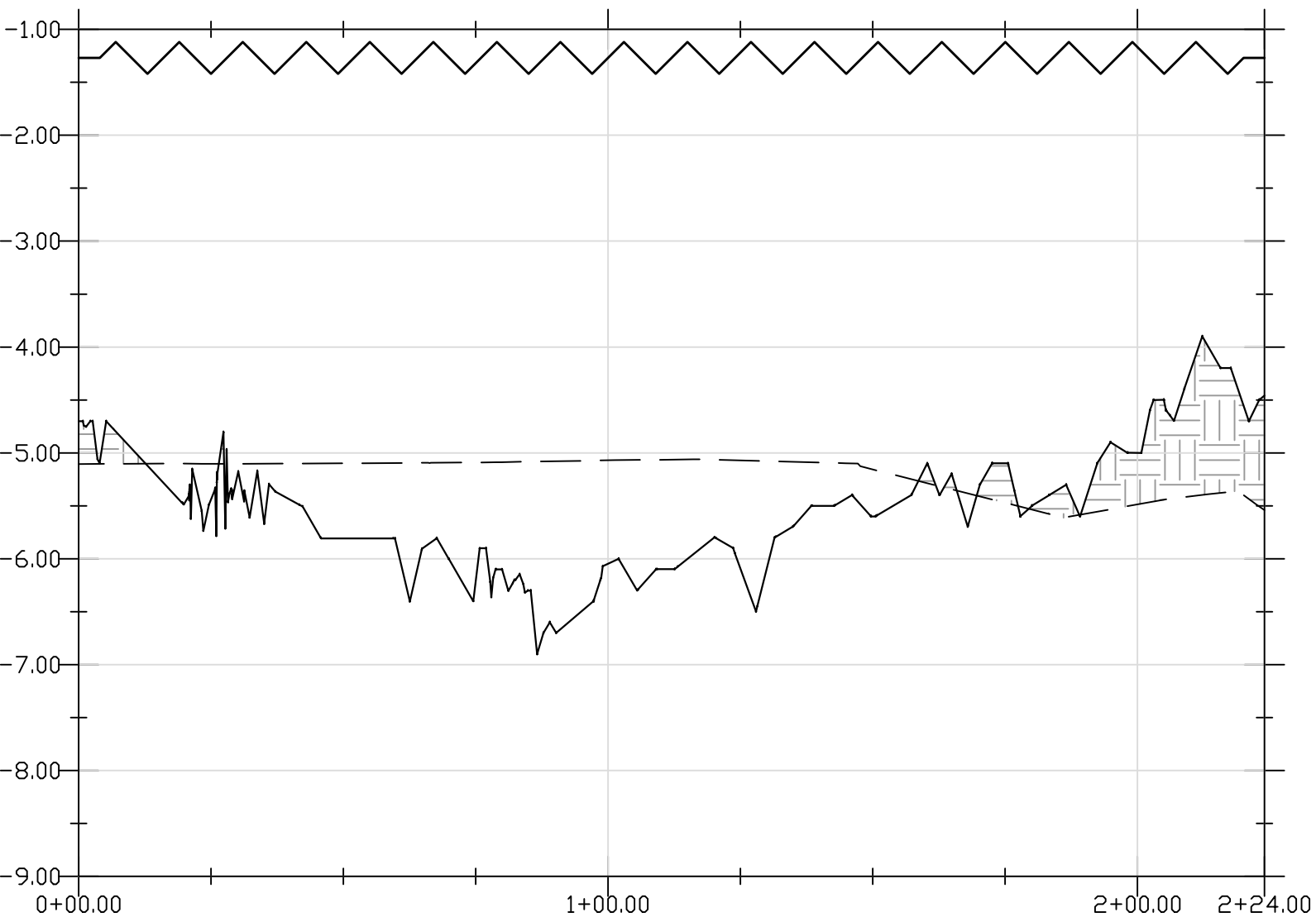
SEDIMENT REMOVAL  
CANAL #293 -  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Remal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
295 BIG PINE KEY	3	9932.25	2978.04	145.03



1 CROSS-SECTION  
295

LEGEND

- PROPOSED SEDIMENT REMOVAL AREA
- POTENTIAL UPLAND STAGING AREAS
- MONROE COUNTY PARCELS, 2010
- FLOATING TURBIDITY BARRIER

LEGEND

- PRE HURRICANE IRMA CANAL BOTTOM
- POST HURRICANE IRMA CANAL BOTTOM
- HURRICANE IRMA SEDIMENT ACCUMULATION
- MLLW ELEVATION (-1.27 FT NAVD88)

- NOTES:
- 1) MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
  - 2) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
  - 3) THE PROFILE IS JUST A REPRESENTATION OF THE IMPACTS TO THE CANAL SYSTEM. IN SOME INSTANCES NOT ALL FINGER CANALS ARE REPRESENTED WITH A CROSS SECTION HOWEVER THE IMPACTS ARE TYPICAL WITHIN EACH SEGMENT AND ARE PART OF THE EVALUATION TO BE RESTORED.
  - 4) CONTRACTOR SHALL ENSURE TURBIDITY OUTSIDE CANAL IS 0 NTU ABOVE BACKGROUND AT ALL TIMES DURING CONSTRUCTION ACTIVITY.
  - 5) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.

wood.

ENVIRONMENT &  
INFRASTRUCTURE  
SOLUTIONS, INC.  
5845 NW 158TH STREET  
MIAMI LAKES, FL 33014  
TEL: (305) 826-5588

PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



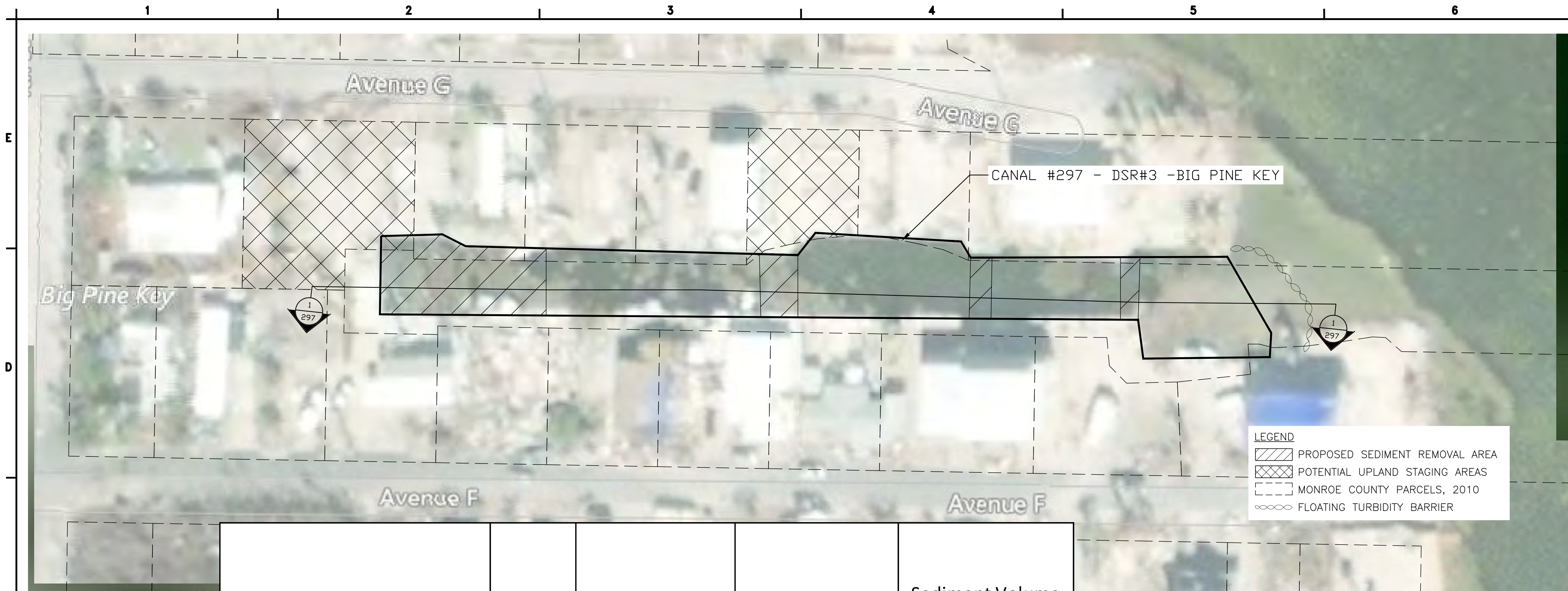
REVISIONS			
NO.	DATE	BY	APPROVED

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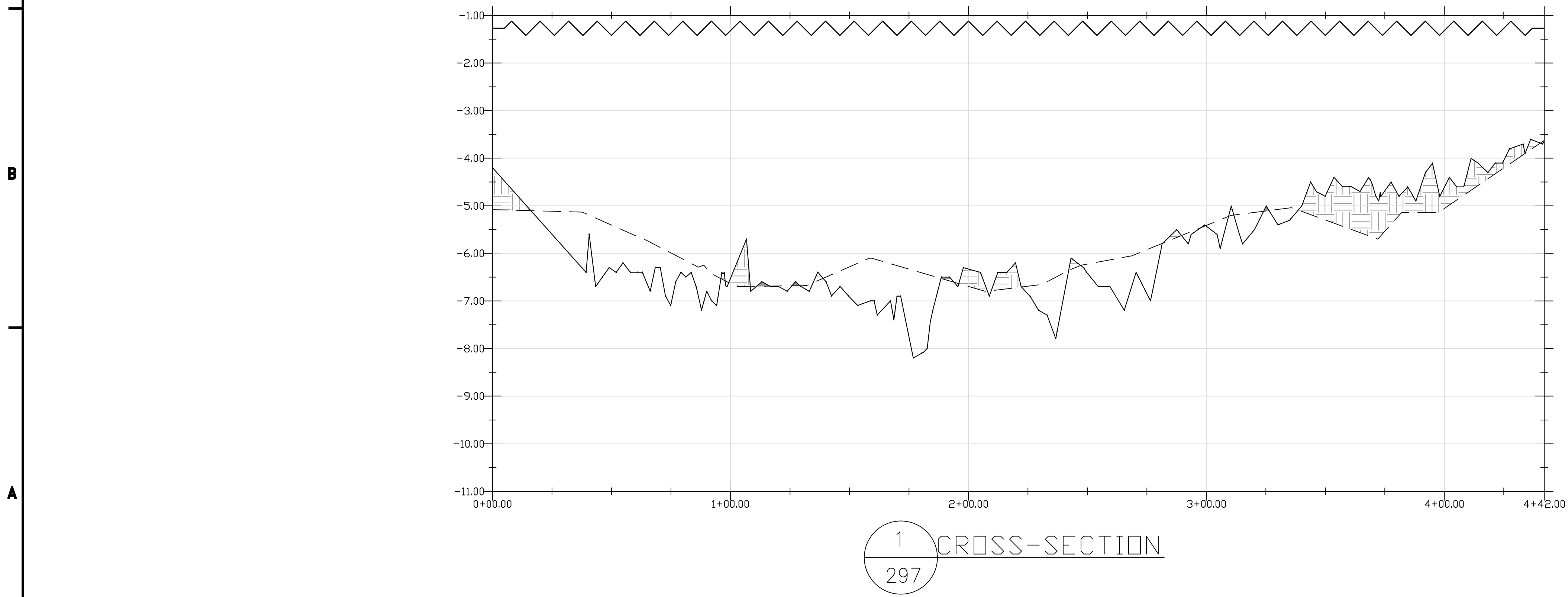
SHEET TITLE:  
SEDIMENT REMOVAL  
CANAL #295 -  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
297 BIG PINE KEY	3	19962.11	5814.17	209.63



- LEGEND
- PRE HURRICANE IRMA CANAL BOTTOM
  - POST HURRICANE IRMA CANAL BOTTOM
  - HURRICANE IRMA SEDIMENT ACCUMULATION
  - MLLW ELEVATION (-1.27 FT NAVD88)

- NOTES:
- MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
  - ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
  - THE PROFILE IS JUST A REPRESENTATION OF THE IMPACTS TO THE CANAL SYSTEM, IN SOME INSTANCES NOT ALL FINGER CANALS ARE REPRESENTED WITH A CROSS SECTION HOWEVER THE IMPACTS ARE TYPICAL WITHIN EACH SEGMENT AND ARE PART OF THE EVALUATION TO BE RESTORED.
  - CONTRACTOR SHALL ENSURE TURBIDITY OUTSIDE CANAL IS 0 NTU ABOVE BACKGROUND AT ALL TIMES DURING CONSTRUCTION ACTIVITY.
  - NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.

wood.

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PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

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REVISIONS

NO.	DATE	BY	APPROVED

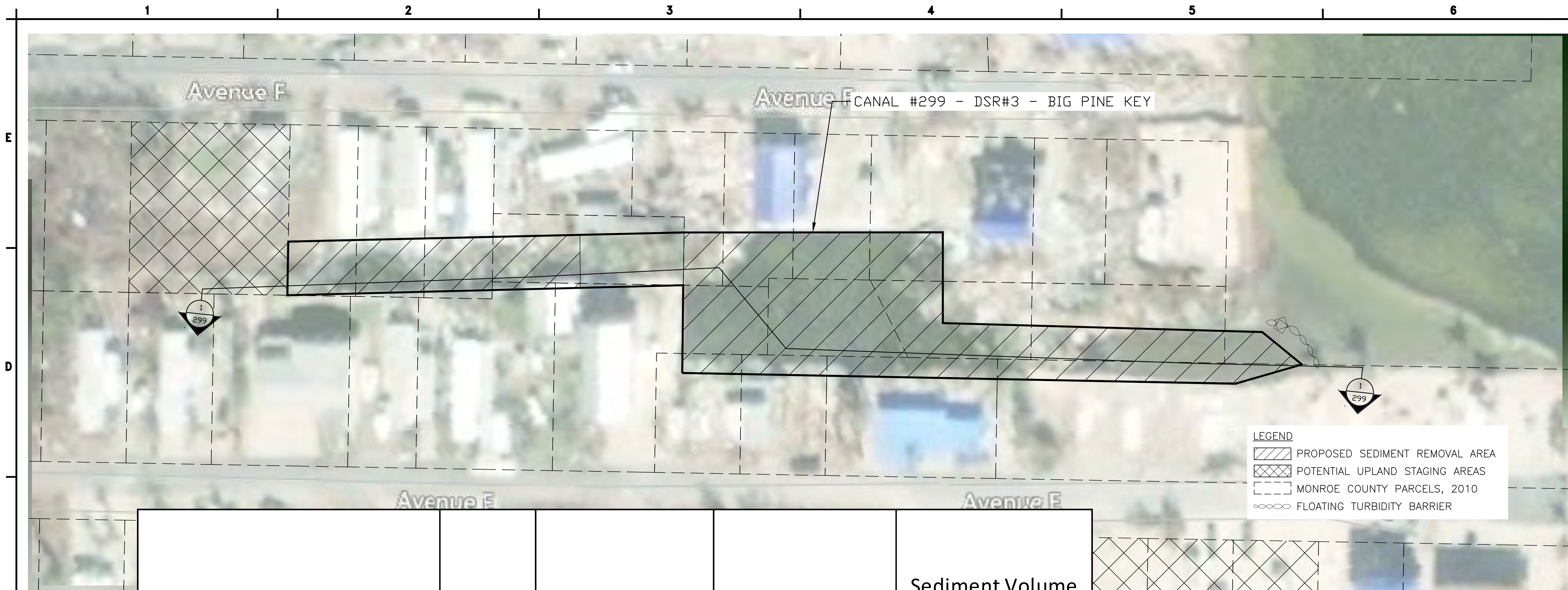
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DATE:	10/01/2018

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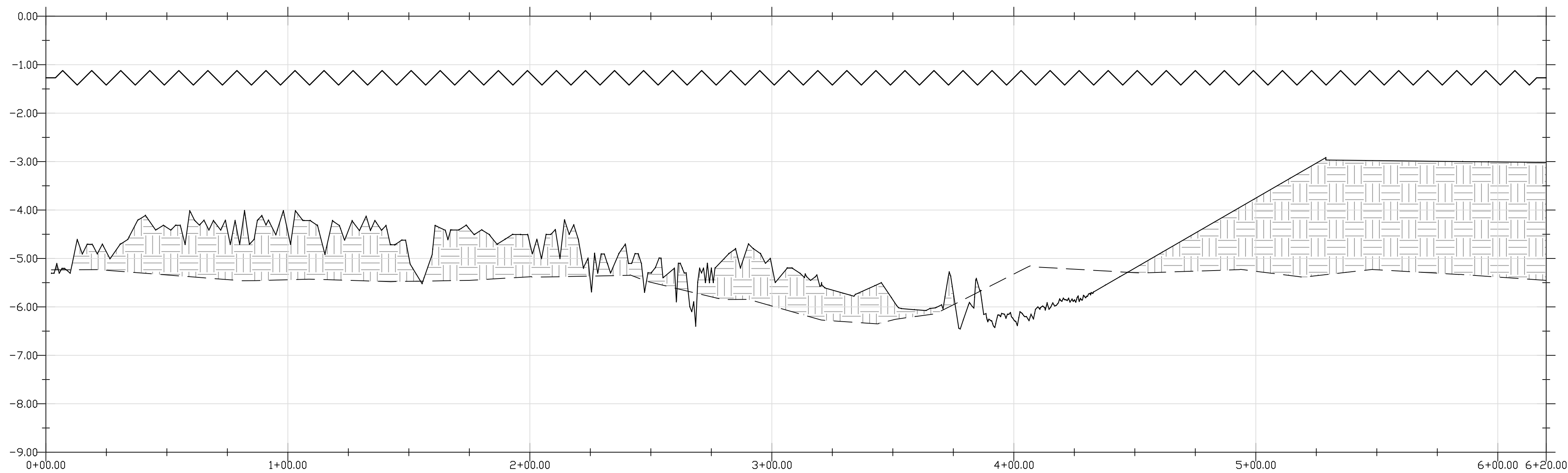
SEDIMENT REMOVAL  
CANAL #297 -  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
299 BIG PINE KEY	3	24435.77	24234.93	773.28



1 CROSS-SECTION  
299

**LEGEND**

- PRE HURRICANE IRMA CANAL BOTTOM
- POST HURRICANE IRMA CANAL BOTTOM
- HURRICANE IRMA SEDIMENT ACCUMULATION
- MLLW ELEVATION (-1.27 FT NAVD88)

**NOTES:**

- 1) MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
- 2) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
- 3) THE PROFILE IS JUST A REPRESENTATION OF THE IMPACTS TO THE CANAL SYSTEM, IN SOME INSTANCES NOT ALL FINGER CANALS ARE REPRESENTED WITH A CROSS SECTION HOWEVER THE IMPACTS ARE TYPICAL WITHIN EACH SEGMENT AND ARE PART OF THE EVALUATION TO BE RESTORED.
- 4) CONTRACTOR SHALL ENSURE TURBIDITY OUTSIDE CANAL IS 0 NTU ABOVE BACKGROUND AT ALL TIMES DURING CONSTRUCTION ACTIVITY.
- 5) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.

wood.

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PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



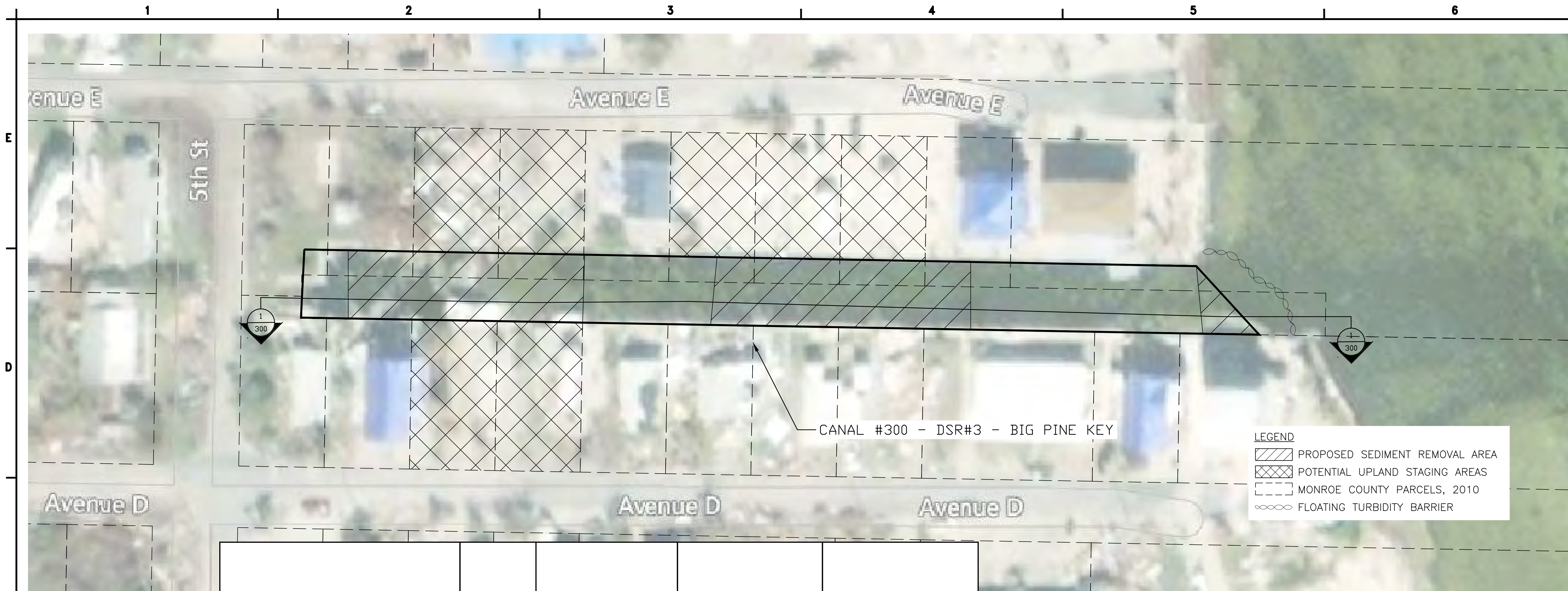
REVISIONS			
NO.	DATE	BY	APPROVED

DESIGNED BY:	GWC
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CHECKED BY:	RH
APPROVED BY:	RH
DATE:	10/01/2018

SHEET TITLE:  
SEDIMENT REMOVAL  
CANAL #299 -  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





wood.

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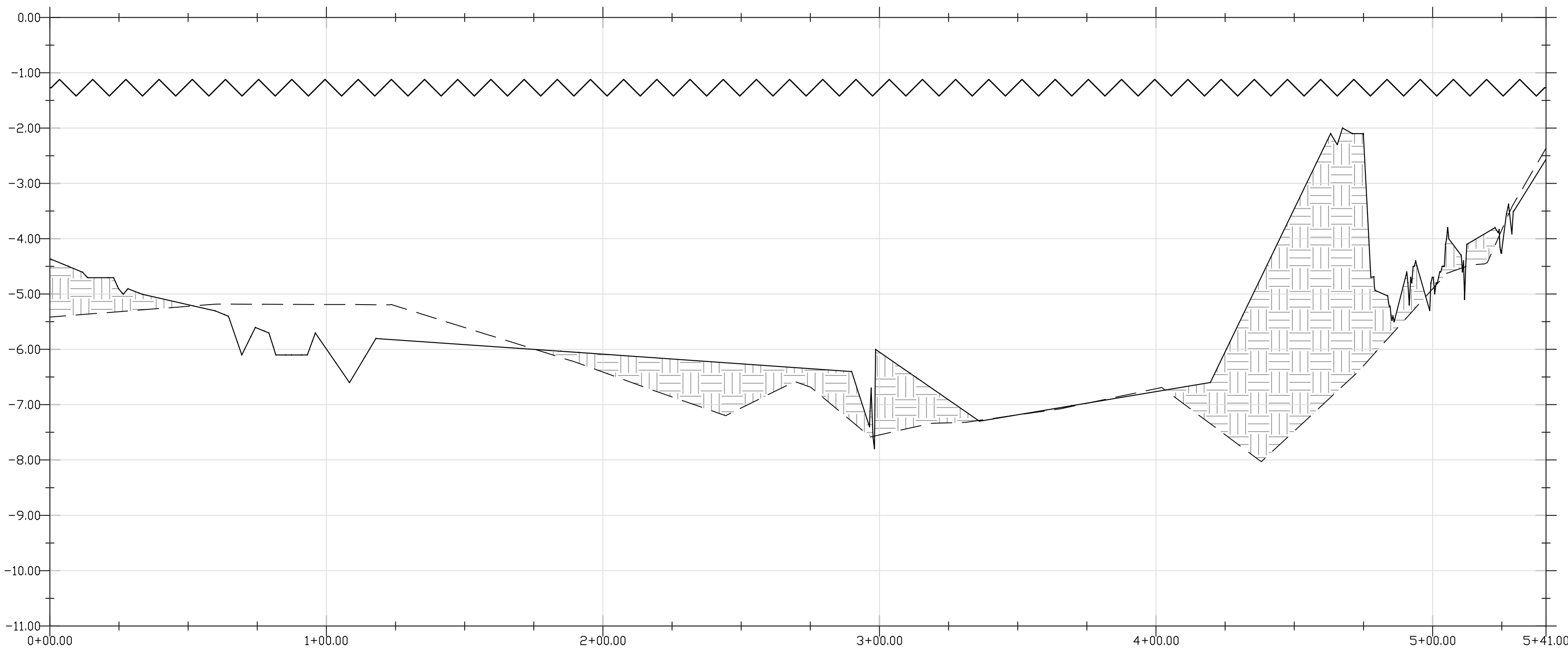
PROJECT:

MONROE COUNTY  
HURRICANE IRMA -  
EWP - PHASE III  
SEDIMENT REMOVAL

SPONSOR:



Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
300 BIG PINE KEY	3	22435.75	12108.08	460.85



LEGEND

---

PRE HURRICANE IRMA  
CANAL BOTTOM

—

POST HURRICANE IRMA  
CANAL BOTTOM

[Hatched Box]

HURRICANE IRMA  
SEDIMENT ACCUMULATION

[Wavy Line]

MLLW ELEVATION (−1.27  
FT NAVD88)

- NOTES:
- 1) MEAN LOW LOW WATER (MLLW)  
ELEVATIONS REFERENCED FROM  
NOAA TIDE STATION 8724201
- 2) ELEVATIONS SHOWN HEREON ARE  
RELATIVE TO THE NORTH AMERICAN  
VERTICAL DATUM OF 1988 (NAVD 88)
- 3) THE PROFILE IS JUST A REPRESENTATION  
OF THE IMPACTS TO THE CANAL SYSTEM,  
IN SOME INSTANCES NOT ALL FINGER  
CANALS ARE REPRESENTED WITH A CROSS  
SECTION HOWEVER THE IMPACTS ARE  
TYPICAL WITHIN EACH SEGMENT AND ARE  
PART OF THE EVALUATION TO BE  
RESTORED.
- 4) CONTRACTOR SHALL ENSURE  
TURBIDITY OUTSIDE CANAL IS 0 NTU  
ABOVE BACKGROUND AT ALL TIMES DURING  
CONSTRUCTION ACTIVITY.
- 5) NO CORAL, MANGROVE, SEAGRASS, OR  
HARD BOTTOM IMPACTS ARE PROPOSED FOR  
THE SEDIMENT REMOVAL ACTIVITIES.

1  
300

CROSS-SECTION

REVISIONS			
NO.	DATE	BY	APPROVED

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APPROVED BY:	RH
DATE:	10/01/2018

SHEET TITLE:

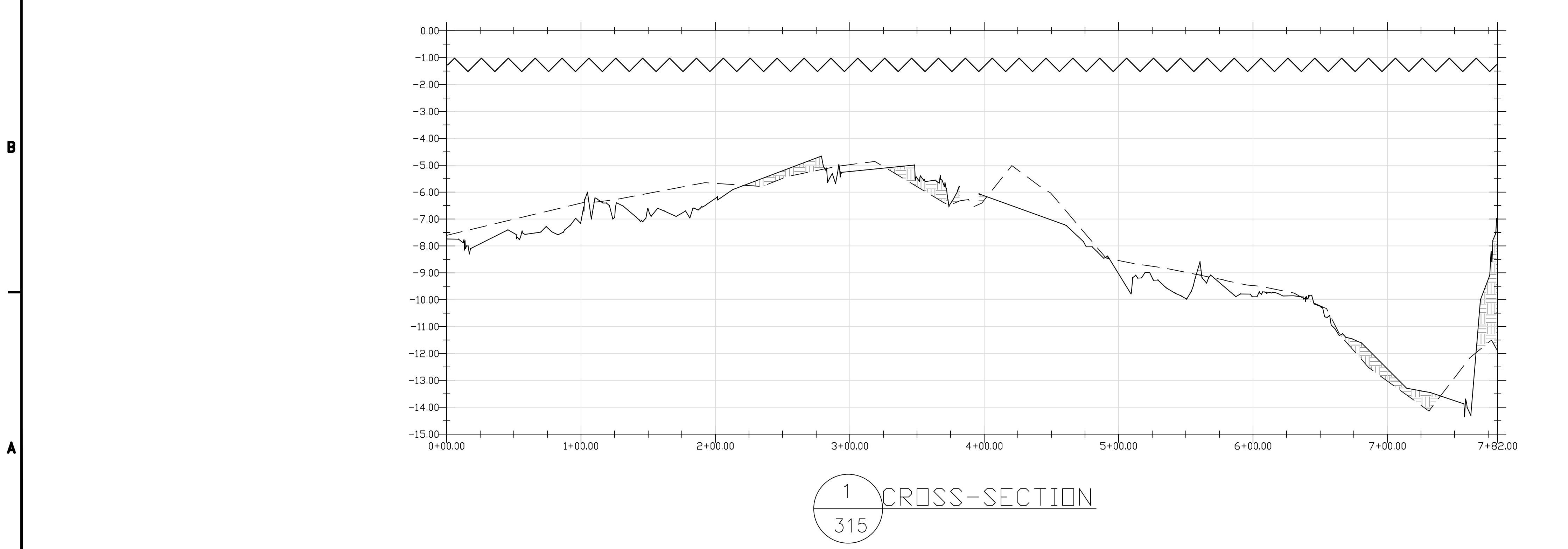
SEDIMENT REMOVAL  
CANAL #300 –  
DSR3

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Removal Volume (CY)
315 BIG PINE KEY	3	50526.94	9457.84	145.96



- LEGEND
- PRE HURRICANE IRMA CANAL BOTTOM
  - POST HURRICANE IRMA CANAL BOTTOM
  - [Hatched Box] HURRICANE IRMA SEDIMENT ACCUMULATION
  - ~~~~~ MLLW ELEVATION (-1.27 FT NAVD88)

- NOTES:
- 1) MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
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  - 5) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTTOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES

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PROJECT:

**MONROE COUNTY HURRICANE IRMA - EWP - PHASE III SEDIMENT REMOVAL**

SPONSOR:

REVISIONS			
NO.	DATE	BY	APPROVED

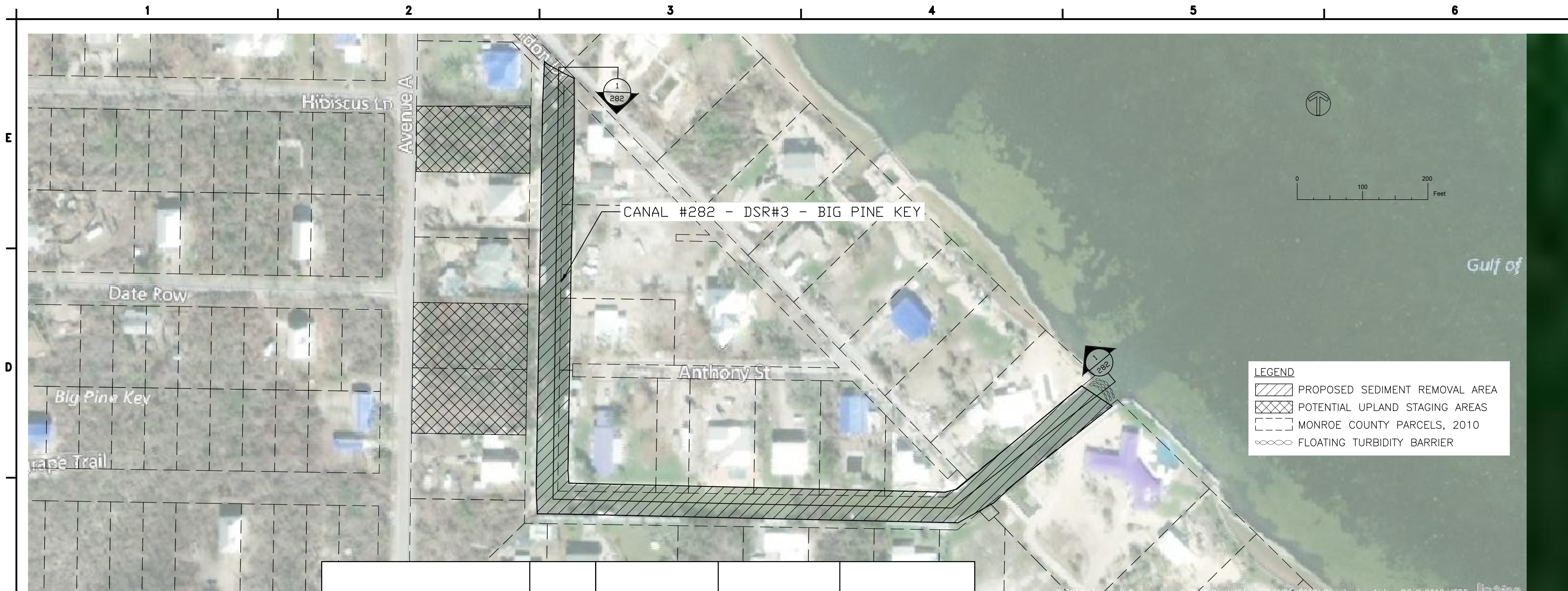
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APPROVED BY:	RH
DATE:	10/01/2018

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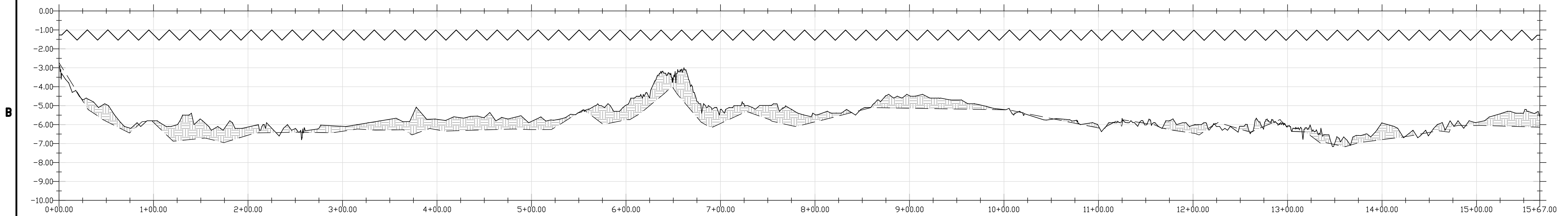
**SEDIMENT REMOVAL CANAL #315 – DSR3**

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS





Canal #	DSR #	Canal Area (Sq ft.)	Sediment Removal Area (Sq ft.)	Sediment Volume Accumulation Post Irma (CY)
282 BIG PINE KEY	3	84795.03	84795.03	1260.76



1 CROSS-SECTION  
282

- NOTES:
- 1) MEAN LOW LOW WATER (MLLW) ELEVATIONS REFERENCED FROM NOAA TIDE STATION 8724201
  - 2) ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
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  - 5) NO CORAL, MANGROVE, SEAGRASS, OR HARD BOTIOM IMPACTS ARE PROPOSED FOR THE SEDIMENT REMOVAL ACTIVITIES.

- LEGEND
- PRE HURRICANE IRMA CANAL BOTTOM
  - POST HURRICANE IRMA CANAL BOTTOM
  - HURRICANE IRMA SEDIMENT ACCUMULATION
  - ~~~~ MLLW ELEVATION (-1.27 FT NAVD88)

**wood.**

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PROJECT:

**MONROE COUNTY HURRICANE IRMA - EWP - PHASE III SEDIMENT REMOVAL**

SPONSOR:



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CHECKED BY:	RH
APPROVED BY:	RH
DATE:	10/01/2018

SHEET TITLE:

**SEDIMENT REMOVAL CANAL #282 - DSR3**

SHEET NUMBER:	REV. #
1 OF 1	
SHEET OF	SHEETS