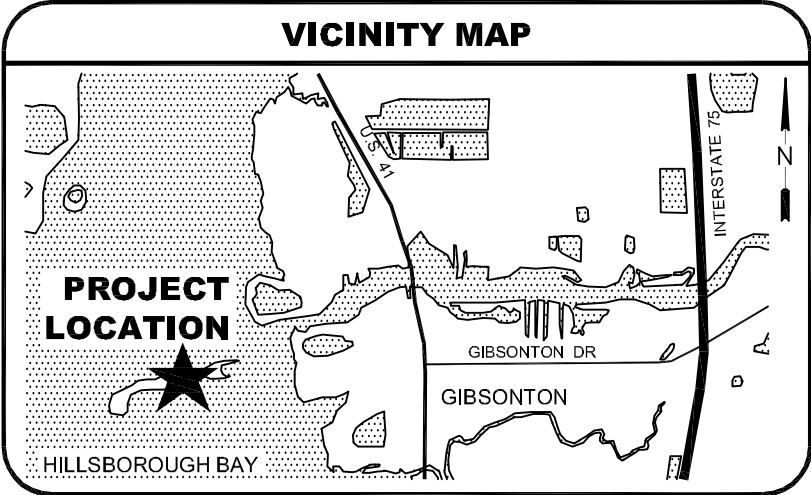


CONSTRUCTION SITE PLAN FOR:

ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

SECTION 22, TOWNSHIP 30 SOUTH, RANGE 19 EAST
HILLSBOROUGH COUNTY, FLORIDA



- GENERAL NOTES
1. All elevations are based on NAVD 88 datum. All existing information as provided by survey data prepared by Dr. Ping Wang, University of South Florida.
 2. Tidal Datum (1983–2001 Epoch) based on Station ID Number 872–6604, Long Shoal – Macdill AFB. The Tidal Datum is based on NAVD 88 in feet are as follows: MHHW = +0.96
MHW = +0.74 MSL = –0.19 MLW = –1.24 MLLW = –1.62.

Prepared For:

 **Audubon** FLORIDA

410 SOUTH WARE BOULEVARD, SUITE 702
TAMPA, FLORIDA 33619
Ph. (813) 623-6826

Prepared By:

 **LMA**
Landon, Moree & Associates, Inc.
Civil & Environmental Engineers - Planners - Surveyors
31622 U.S. 19 NORTH PALM HARBOR, FLORIDA 34684
Phone: (727)789-5010, Fax: (727)787-4394, Toll Free: 1-800-262-7960
WWW.LMAENGR.COM
EB #4096

PLAN INDEX

1.	COVER SHEET
2.	AERIAL BASEMAP
3.	PHASE I MODIFICATIONS
4.	PHASE II - PROPOSED BREAKWATER
5.	PHASE II - PROPOSED BREAKWATER
6.	PHASE III - PROPOSED BREAKWATER
7.	PHASE III - PROPOSED BREAKWATER
8.	DETAILS & CONSTRUCTION NOTES

REVISIONS

REVISION DATE	COMMENTS

PERMITS

PERMIT TYPE	NUMBER	APPROVED
FDEP ERP		
TAMPA PORT AUTHORITY		
USACOE		

ALL ELEVATIONS REFER TO NAVD 88 DATUM

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UTILITY WARNING NOTE

ABOVE-GROUND OR UNDER-GROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - CALL "SUNSHINE STATE ONE CALL" (1-800-432-4770) AND THE UTILITY OWNER(S) BEFORE BEGINNING WORK. PROVIDE OWNER WITH CODE NUMBER OF PROJECT.

NOTE TO CONTRACTOR/OWNER

CONSTRUCTION IS NOT AUTHORIZED UNTIL PLANS HAVE BEEN ISSUED BY LANDON, MOREE & ASSOCIATES, INC. STAMPED "ISSUED FOR CONSTRUCTION". ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET FORTH IN THE HILLSBOROUGH COUNTY LAND DEVELOPMENT, ZONING, AND/OR RELATED ORDINANCES AND SPECIFICATIONS AS APPLICABLE.

FEBRUARY 19, 2013
JOB# 649-01



AERIAL OBTAINED FROM: MOSAIC FERTILIZER, LLC

DATE OF PHOTOGRAPHY: 2012

THE STATE PLAN COORDINATE SYSTEM SHOWN IS BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA.

LMA

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EB# 4096

AERIAL BASEMAP

PROJECT:
ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

PREPARED FOR:
AUDUBON FLORIDA

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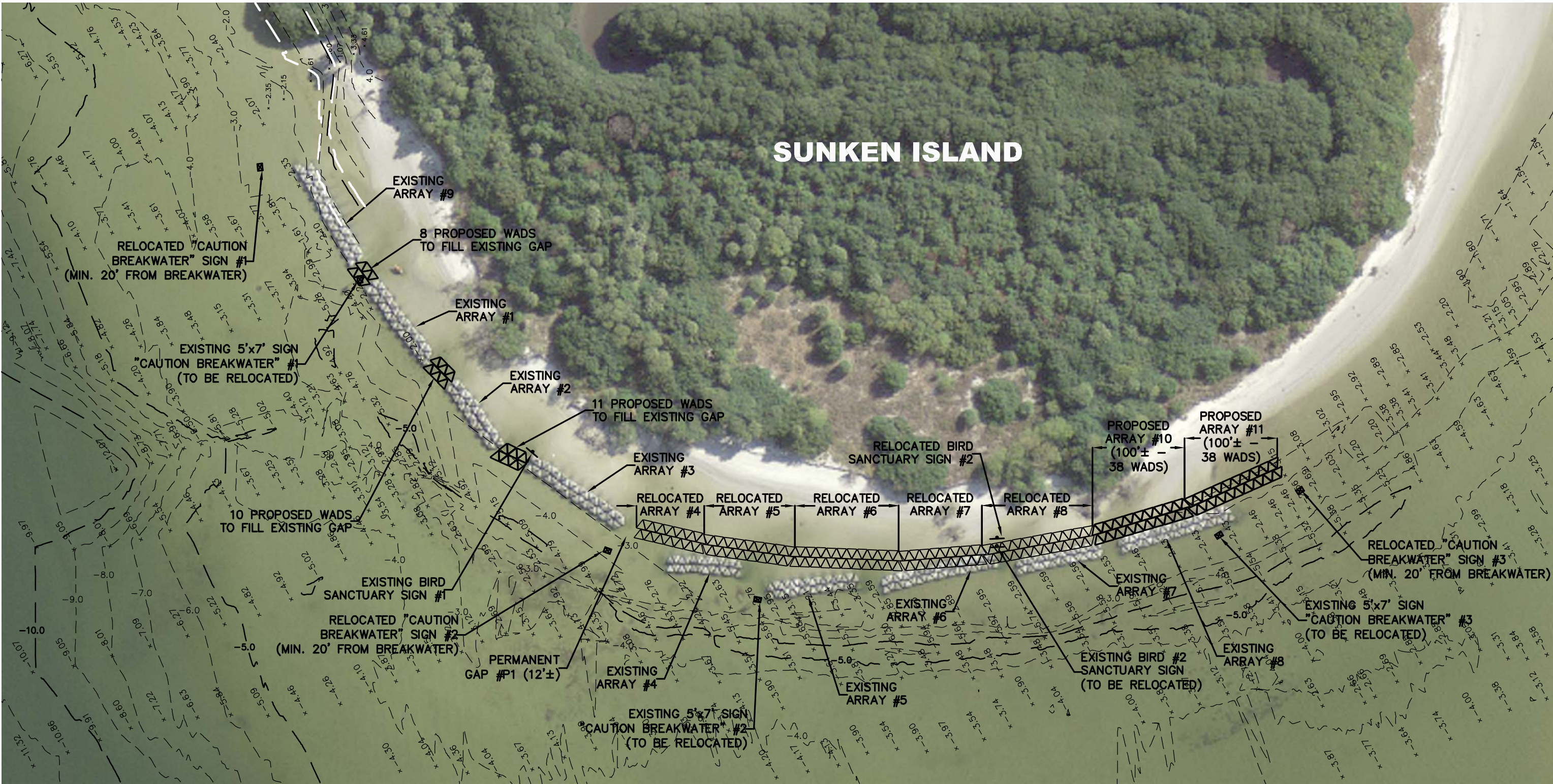
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OF **08**

SCALE:	1"=600'
JOB:	649-01.000
DATE:	02-14-2013



TIDAL DATA:
MHHW = +0.96
MHW = +0.74
MSL = -0.19
MLW = -1.24
MLLW = -1.62



EB# 4096

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PHASE I MODIFICATIONS

PROJECT:
ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

PREPARED FOR:
AUDUBON FLORIDA

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SCALE: 1"=100'

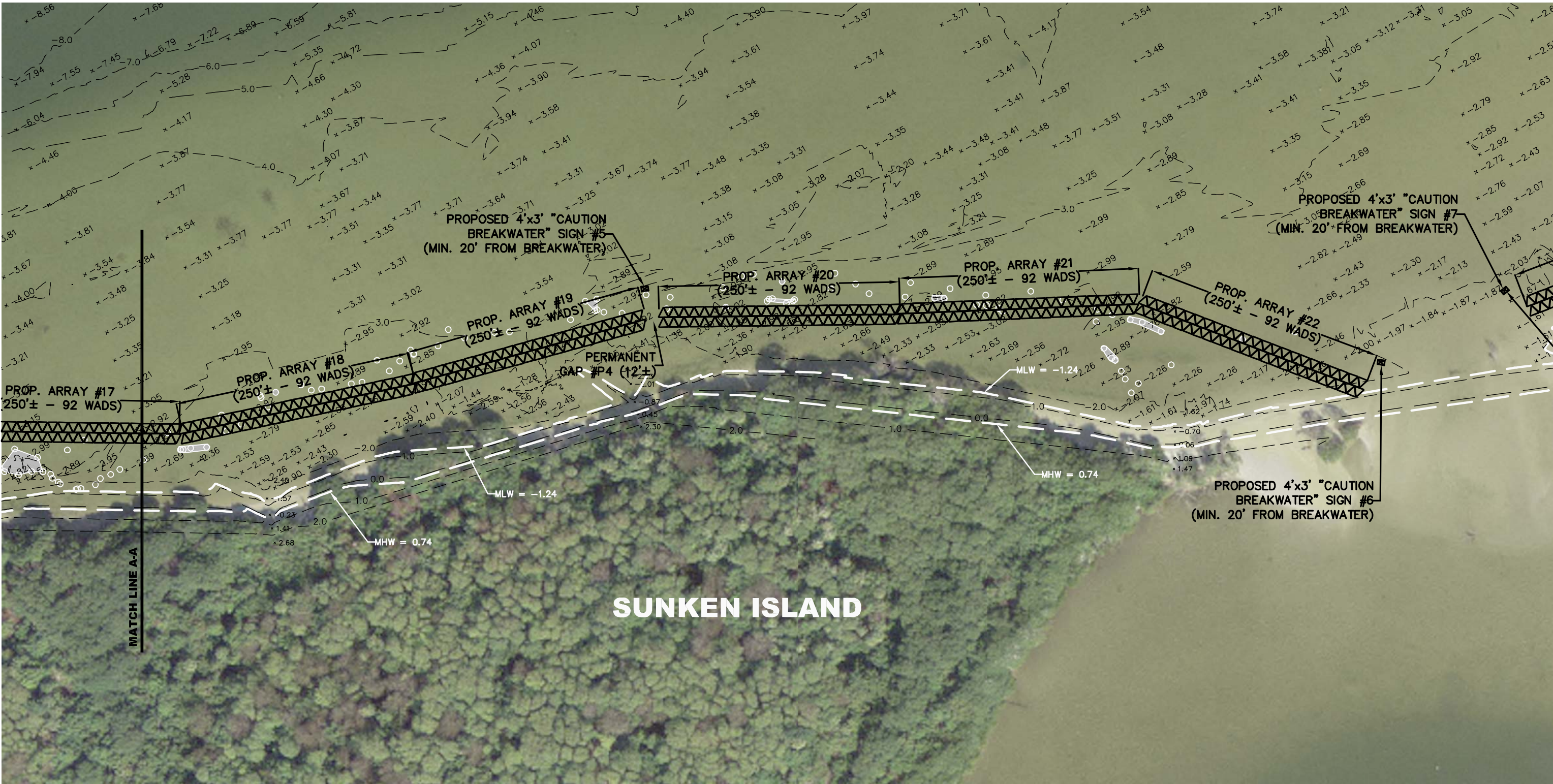
JOB: 649-01

DATE: 02-14-2013

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OF 08



- LEGEND:
- ⊙ - HALODULE WRIGHTII SPOT LOCATIONS
 - - HALODULE WRIGHTII POLYGON

TIDAL DATA:
MHHW = +0.96
MHW = +0.74
MSL = -0.19
MLW = -1.24
MLLW = -1.62



EB# 4096

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PHASE II - PROPOSED BREAKWATER

PROJECT:
ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

PREPARED FOR:
AUDUBON FLORIDA

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SCALE:	1"=100'
JOB:	649-01
DATE:	02-14-2013
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OF	08



- LEGEND:
- ⊙ - HALODULE WRIGHTII SPOT LOCATIONS
 - - HALODULE WRIGHTII POLYGON

TIDAL DATA:
MHHW = +0.96
MHW = +0.74
MSL = -0.19
MLW = -1.24
MLLW = -1.62



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PHASE III - PROPOSED BREAKWATER

PROJECT:
ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

PREPARED FOR:
AUDUBON FLORIDA

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REVISIONS

SCALE:	1"=100'
JOB:	649-01
DATE:	02-14-2013
S H E E T	06
OF	08



- LEGEND:**
-  - HALODULE WRIGHTII SPOT LOCATIONS
 -  - HALODULE WRIGHTII POLYGON

BREAKWATER ALTERATIONS:
1. ARRAYS #28 - #32 MAY BE COMPOSED OF RIP/RAP MATERIALS OR REEF BALLS AS DIRECTED BY ENGINEER.

TIDAL DATA:
MHHW = +0.96
MHW = +0.74
MSL = -0.19
MLW = -1.24
MLLW = -1.62



EB# 4096

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PHASE III - PROPOSED BREAKWATER

PROJECT:
ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

PREPARED FOR:
AUDUBON FLORIDA

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SCALE:	1"=100'
JOB:	649-01
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1. All elevations refer to the North American Vertical Datum (1988).
2. Horizontal coordinates are referenced to Florida State Plane, West Zone North American Datum of 1983 (NAD 83).
3. The Contractor shall make their own determination of the quantities of work required to complete the construction shown on the plans. The Contractor shall also make their own assessment of the site and the work required prior to bidding and any discrepancies, errors or omissions shall be brought to the attention of Audubon Florida before the bid due date.
4. The Contractor is responsible for verifying the location of all underground utilities or other objects prior to commencing work at the site. Any utilities or other items damaged during construction shall be repaired at no cost to Audubon Florida.
5. All areas or items outside the limits of construction that are damaged or disturbed by the contractor shall be restored to their original or better condition at no cost to Audubon Florida.
6. The Contractor shall check plans for conflicts and discrepancies prior to construction. The Contractor shall notify the engineer of record of any conflict before performing any work in the affected area.
7. It is the Contractor's responsibility to become familiar with the permit and inspection requirements of the various governmental agencies. The Contractor shall comply with all necessary permits and permit conditions prior to construction and schedule inspections according to agency instruction.
8. All specifications and documents referred to shall be of latest revisions and/or latest edition unless otherwise noted.
9. All work performed shall comply with the regulations and ordinances of the various governmental agencies having jurisdiction over the work.
10. Record drawings: The Contractor shall be responsible for having a registered land surveyor to record information on a set of the approved plans concurrently with construction progress. One (1) set of the final record drawings shall be submitted to the engineer. Record drawings shall comply with the requirements in the Contract Agreement.
11. Breakwater installation under this Contract shall include procurement, transportation, and placement of breakwater materials described herein and shown on the Contract Drawings. The Work consists of furnishing all labor, material, equipment, and incidentals necessary for performing the Work specified by the Contract. All Work shall be in accordance with the Plans, Specifications and requirements set forth within the Contract and Project permits. All Work is to be conducted in accordance with all federal, state and local permits and authorizations issued for this Project.
12. Site preparation: The contractor shall not disturb the existing seabed. The breakwater shall be carefully placed on the existing seabed surface.
13. The placement of materials and the construction will be completed to minimize loud or sudden noise and disturbance to any nesting birds.

a. The Contractor shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel are responsible for observing water-related activities for the presence of manatee(s).

b. The Contractor 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 N.J. of 1972, the Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act.

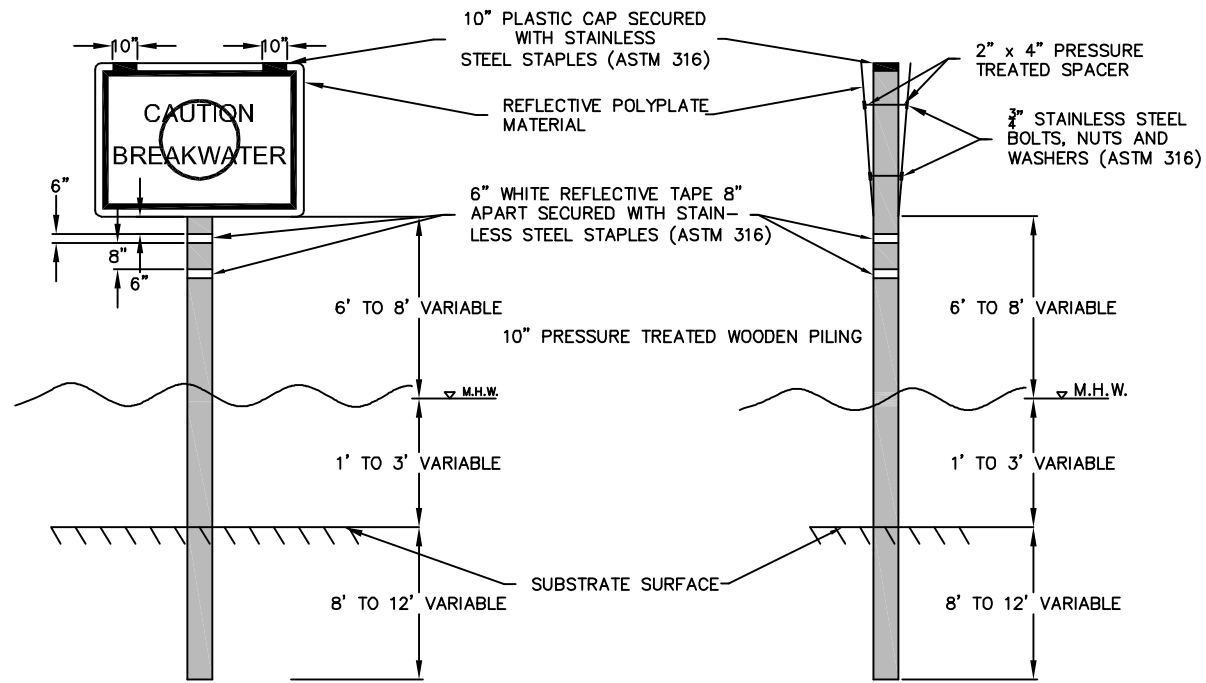
c. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

d. If manatee(s) are seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project area of its own volition.

e. Any collision with and/or injury to a manatee should be reported immediately to the FWC hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-232-2580) for North Florida or Vero Beach (1-772-562-3909) in South Florida.

f. Temporary signs concerning manatees shall be posted by the Contractor prior to and during all construction/dredging activities. All signs are to be removed by the Contractor upon completion of the project. A sign measuring at least 3 ft. by 4 ft. which reads "Caution: Manatee Area" will be posted in a location prominently visible to water related construction crews. A second sign should be posted if vessels are associated with the construction, and should be placed visible to the vessel operator. The second sign should be at least 8-1/2" by 11" which reads "Caution: Manatee Habitat" Idle speed is required if operating a vessel in the construction area. All equipment must be shutdown if a manatee comes within 50 feet of operation. Any collision with and/or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. The U.S. Fish and Wildlife Service should also be contacted in Jacksonville (1-904-232-2580) for North Florida or Vero Beach (1-772-562-3909) in South Florida."

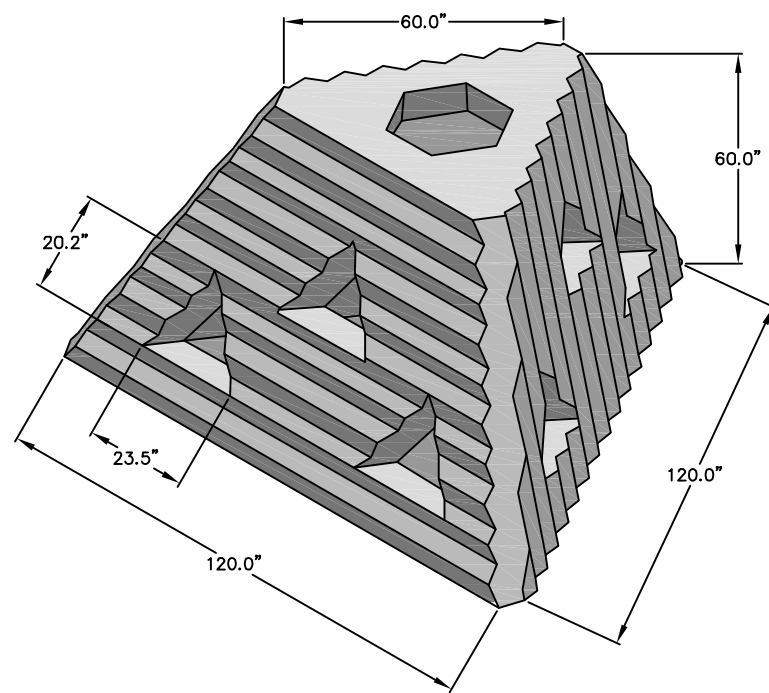
1. It shall be the sole responsibility of the Contractor to comply and enforce all applicable safety regulations. The information herein has been provided for the Contractor's information only and does not imply that the owner, owner's engineer, or engineer of record will inspect/or enforce safety regulations.
2. During the construction and/or maintenance of the project, all safety regulations are to be enforced. The Contractor or Representative shall be responsible for the control and safety of personnel. Labor safety regulations shall conform to the provisions set forth by OSHA in the Federal Register of the Department of Transportation.



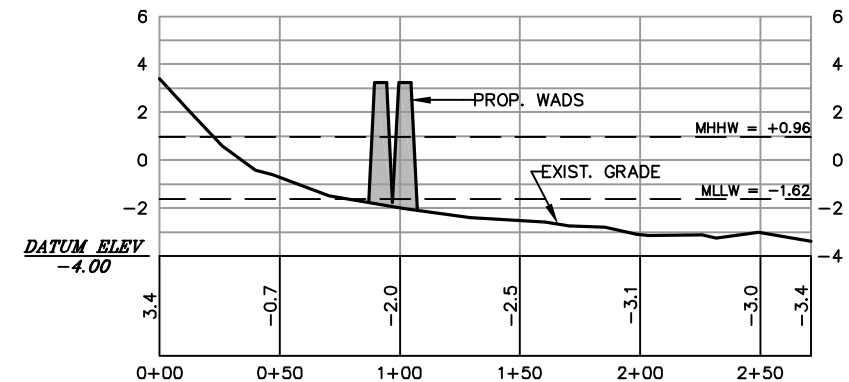
N.T.S.



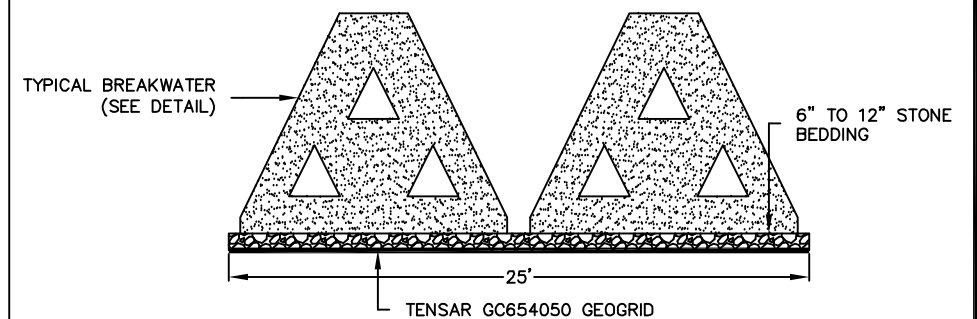
N.T.S.



N.T.S.



SCALE: 1" = 8' VERTICAL, 1" = 80' HORIZONTAL



N.T.S.



ALAFIA BANK BIRD SANCTUARY SHORELINE RESTORATION BREAKWATER

AUDUBON FLORIDA

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JOB:	649-01
DATE:	02-14-2013
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