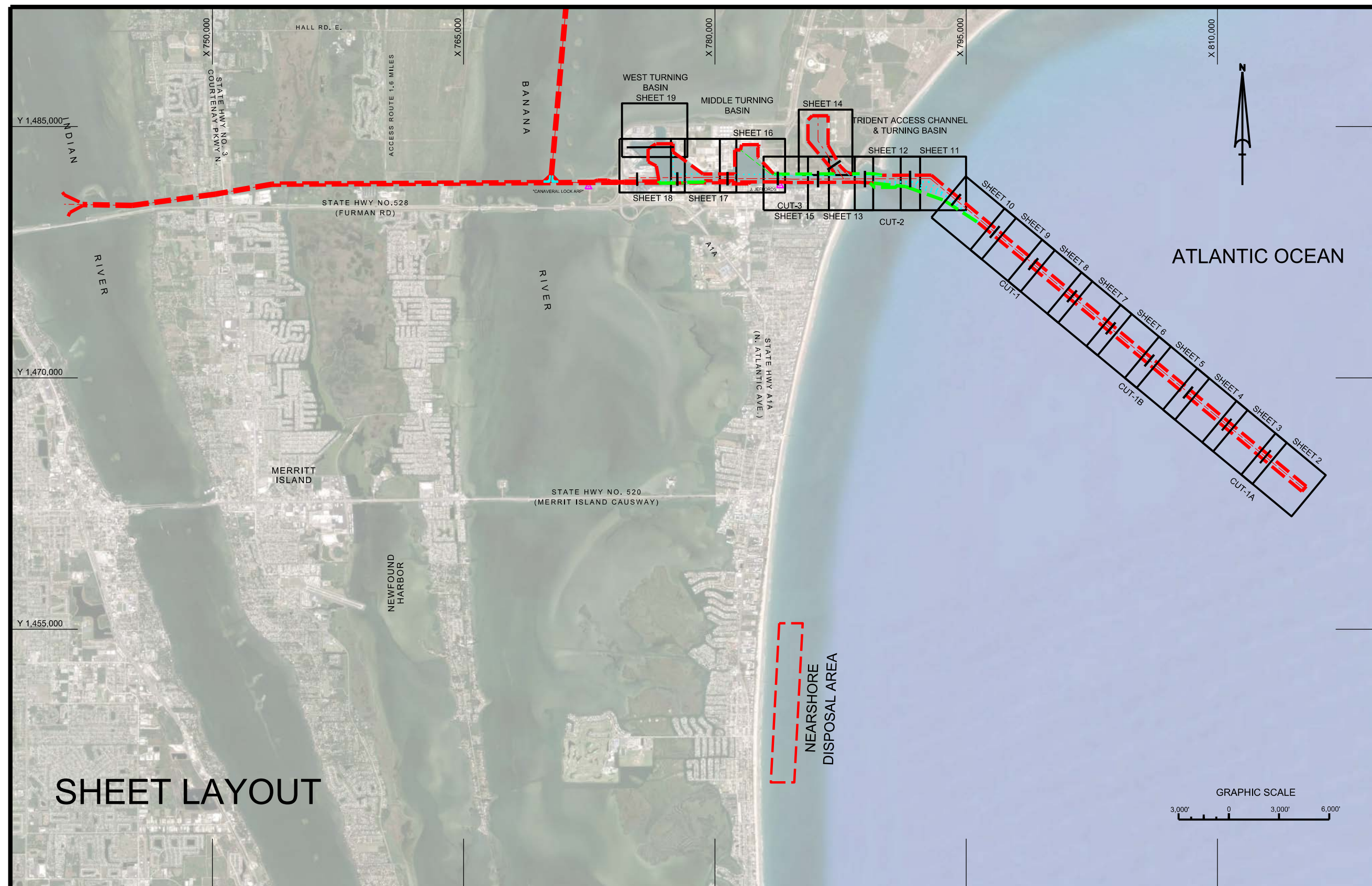
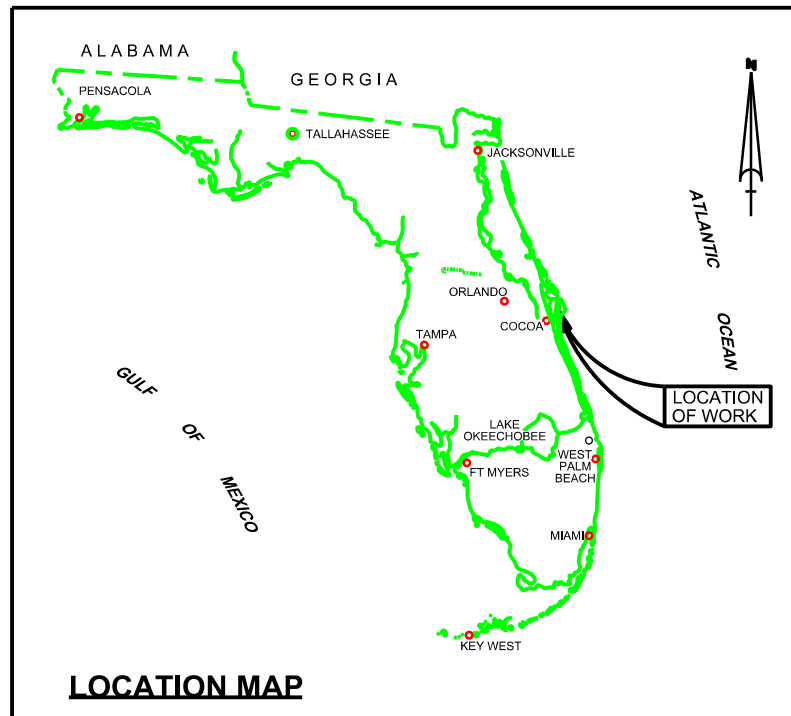


# CANAVERAL HARBOR BREVARD COUNTY, FLORIDA 1Q HYDROGRAPHIC EXAM SURVEY FY19



### SURVEY NOTES

- REFER TO SURVEY NO. 19-068.
  - TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL. KTD FILE NAME IS: "CANAVERALHBR-2015 02 20.KTD".
  - ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
  - PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
  - ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
  - THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:  
\*REFERENCE BASE LOCATED AT "CANAVERAL LOCK ARP" (OPUS PID: BBCV67)  
\*TIDE STAFF LOCATED FROM "JEFFORDS" (COE PID: BBCQ55)
  - DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, TIDAL EPOCH 1983-2001 AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). A MODIFIED VERSION OF NOAA'S VDATUM MODEL WAS USED TO CALIBRATE TO THE PUBLISHED MLLW HEIGHTS OF THE BENCHMARKS BELOW:  
NOAA TIDAL STATION 872-1604, TRIDENT PIER, CANAVERAL, FL (PID: BBCQ55)
  - VERTICAL MEASUREMENTS WERE MADE USING A R2 SONIC 2024 MULTI-BEAM SYSTEM OPERATING AT 240 KHZ, AN EDGETECH 6205 SIDESCAN AND MULTI-BEAM TRANSDUCER AND A ROSS SMARTSOUNDER SINGLE-BEAM TRANSDUCER OPERATING AT 28200 KHZ. HIGH FREQUENCY SOUNDINGS ARE SHOWN FOR THE WEST ACCESS CHANNEL, WEST TURNING BASIN AND CUT-1A. LOW FREQUENCY SOUNDINGS SHOWN FOR CUTS 1B, 1, 2, 3, MTB AND THE POSEIDON WHARF.
- | VESSEL | DATE OF SURVEY | CUT  |
|--------|----------------|--|
| SB-46  | 12-13 FEB 2019 | MTB, WAC, CUT-2                                      |
| SB-46  | 05-07 MAR 2019 | CUTS 1, 1A, 1B, 2, 3, POSEIDON WHF, NORTH CARGO PIER |
- AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
  - THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED ABOVE AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. THIS CHART IS SOLELY FOR THE DISTRIBUTION OF AVAILABLE DEPTHS AT THE TIME OF THE SURVEY.
  - SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USAGE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 30 NOV 2013.

LEGEND	
	MONUMENT
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	TIDE STAFF
	PROJECT DEPTH

US Army Corps of Engineers  
Jacksonville District  
SAFETY ON THIS JOB  
DEPENDS ON YOU

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA

DESIGNED BY: WRM, WRM, WRM  
CHECKED BY: GHR, WRM, WRM  
DATE: MAR 2019

19-068-CR-BRDLDGN  
CANTPO88ADDGN  
CHAYOUT83DGN

19-068-VH001DGN  
FILE NAME

CANAVERAL HARBOR  
BREVARD COUNTY, FLORIDA  
**1Q HYDROGRAPHIC EXAM SURVEY FY19**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
INDEX, LOCATION AND VICINITY  
PLAN

Scale: AS SHOWN  
Drawing no.  
**1 / 17**  
SHEET 1 OF 19





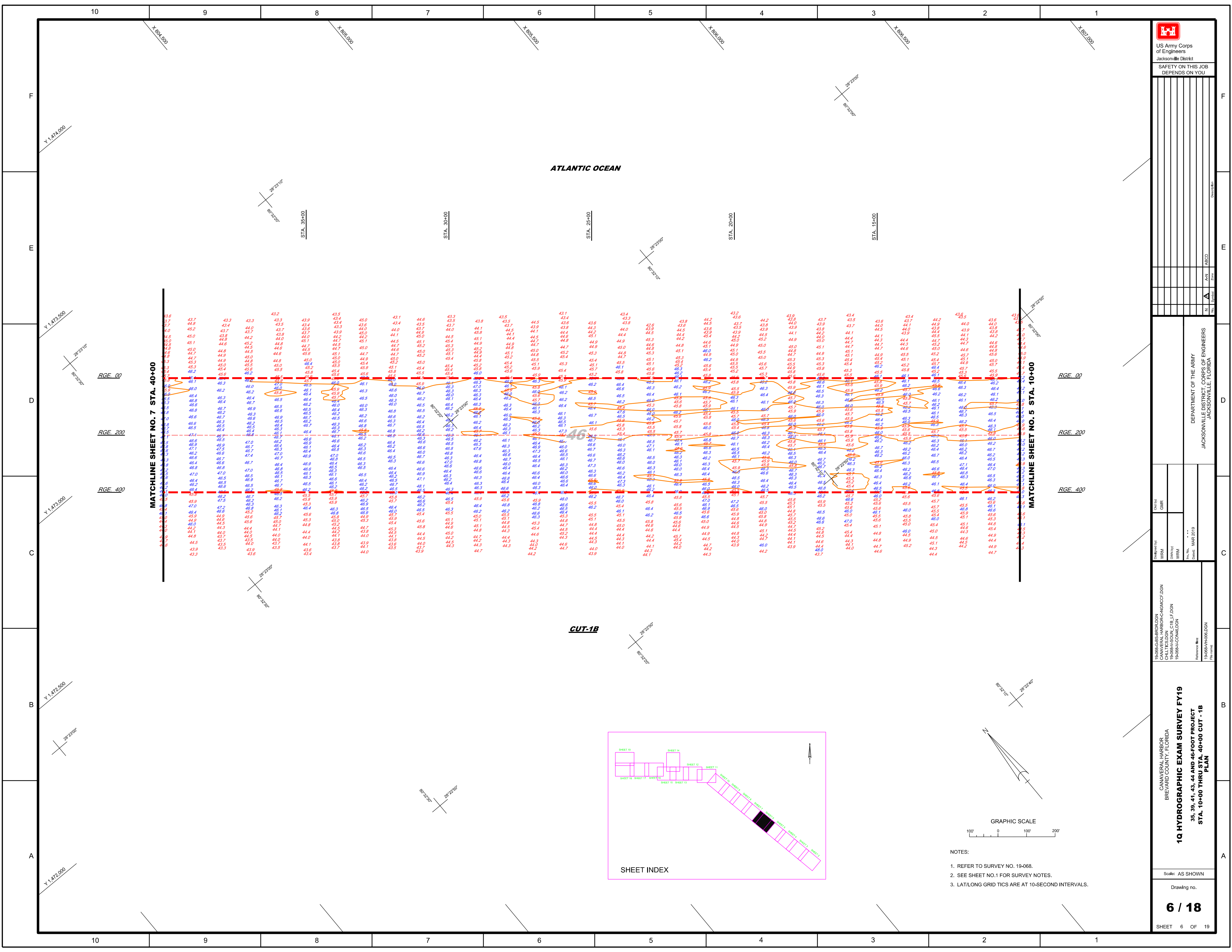












NOTES:
   
 1. REFER TO SURVEY NO. 19-068.
   
 2. SEE SHEET NO.1 FOR SURVEY NOTES.
   
 3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.











US Army Corps  
of Engineers

Jacksonville District

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DATE: 03/19/2019  
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SCALE: AS SHOWN

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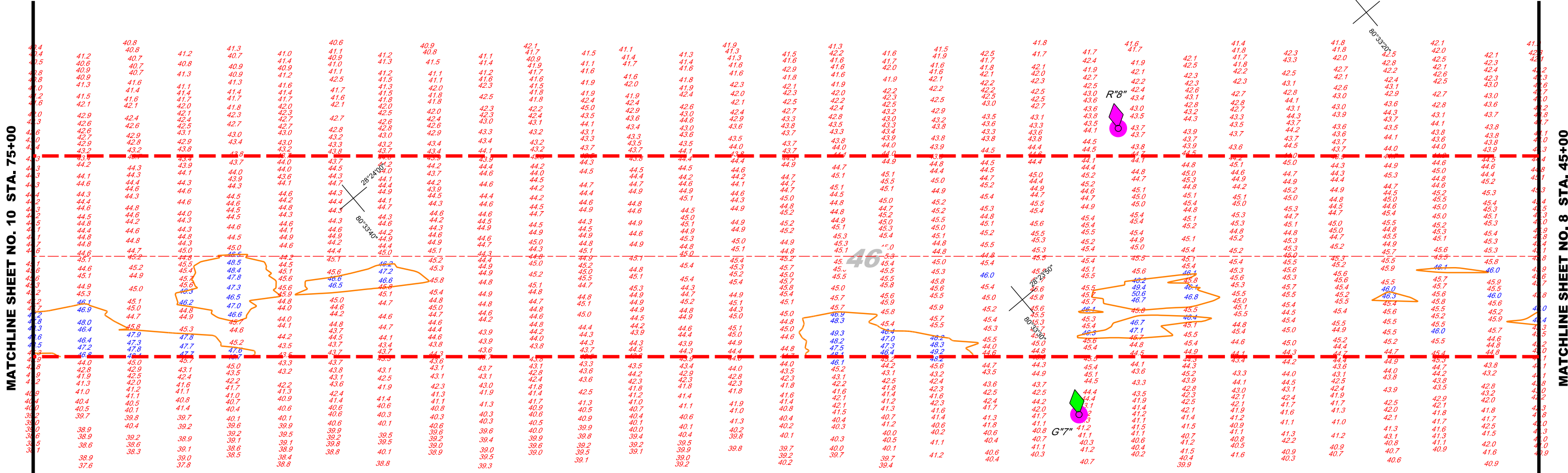
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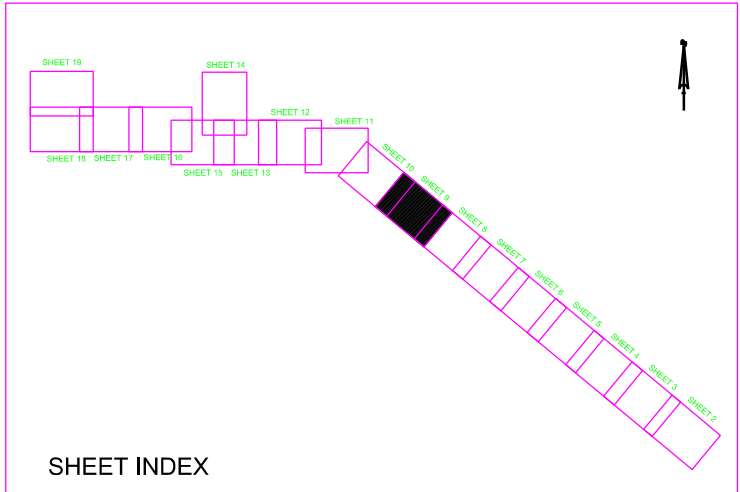
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DESIGNED BY: WRM  
CHECKED BY: WRM  
SCALE: AS SHOWN

ATLANTIC OCEAN

CUT-1



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-7 (03/19)	798.104	1,477.134	28°23'47.54"	80°33'30.86"
LT. BUOY-8 (03/19)	798.528	1,477.524	28°23'51.38"	80°33'25.89"

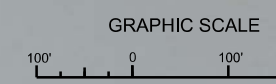
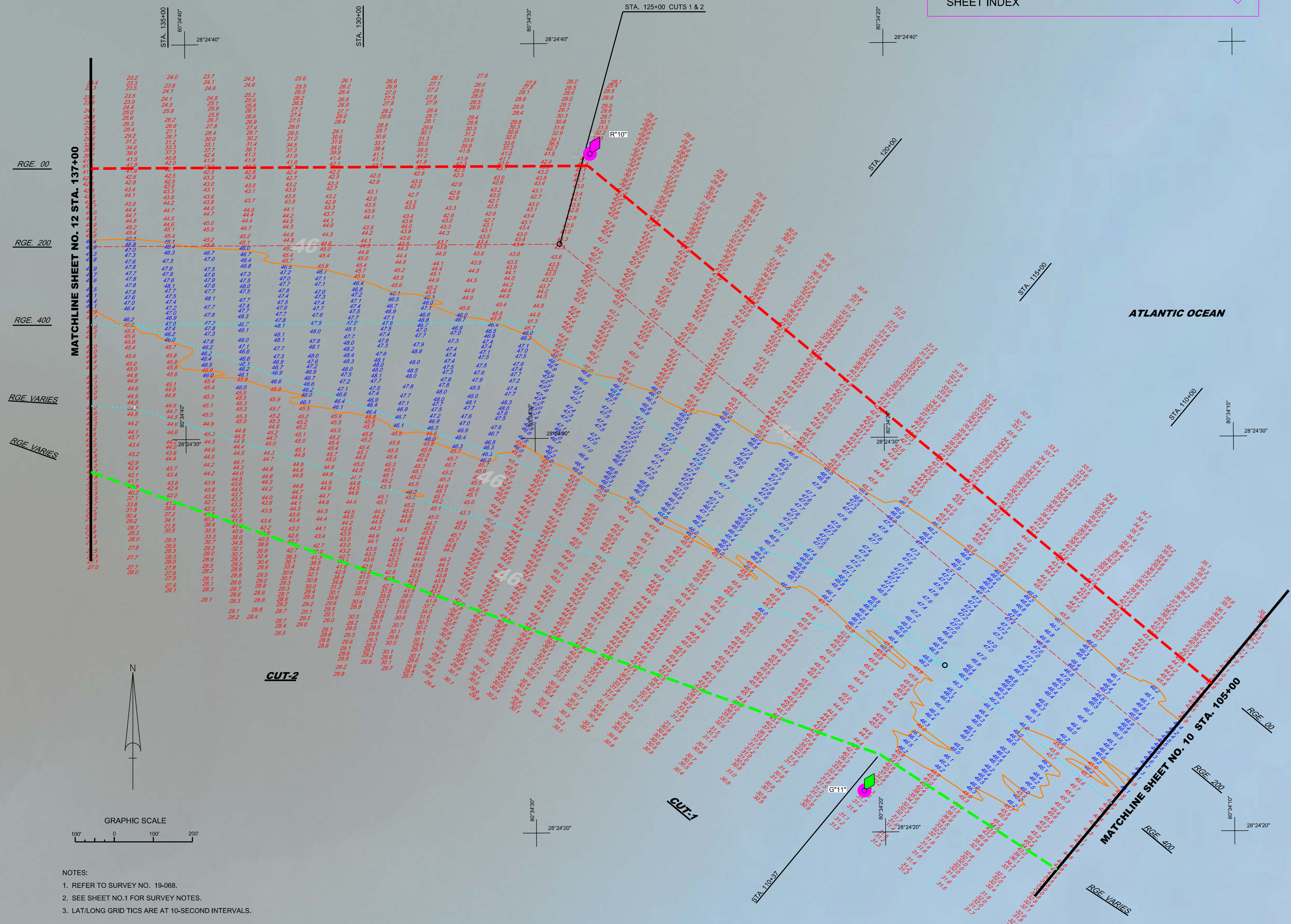
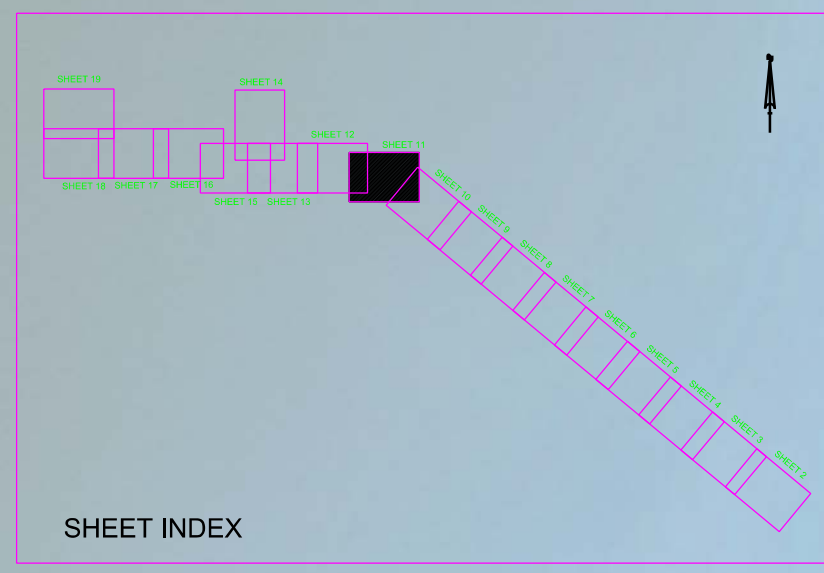


- NOTES:
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  - SEE SHEET NO.1 FOR SURVEY NOTES.
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AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-10 (03/19)	792,930	1,482,132	28°24'37.21"	80°34'28.39"
LT. BUOY-11 (07/18)	793,606	1,480,602	28°24'22.04"	80°34'20.69"



- NOTES:
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US Army Corps of Engineers  
Jacksonville District

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19-068-C-BS-BRDLDGN  
CANAVERAL HARBOR-CANVCF-DGN  
19-068-A-SOUN\_CL\_L\_F.DGN  
19-068-A-SOUN\_CL\_F.DGN  
19-068-A-COAST.DGN

Reference File:  
19-068-A-HR11.DGN  
File Name:

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19-068-C-BS-BRDLDGN  
CANAVERAL HARBOR  
BREVARD COUNTY, FLORIDA

**1Q HYDROGRAPHIC EXAM SURVEY FY19**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
STA. 105+00 CUT - 1 THRU STA. 137+00 CUT - 2  
PLAN

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Scale: AS SHOWN

Drawing no.

**11 / 18**

SHEET 11 OF 19

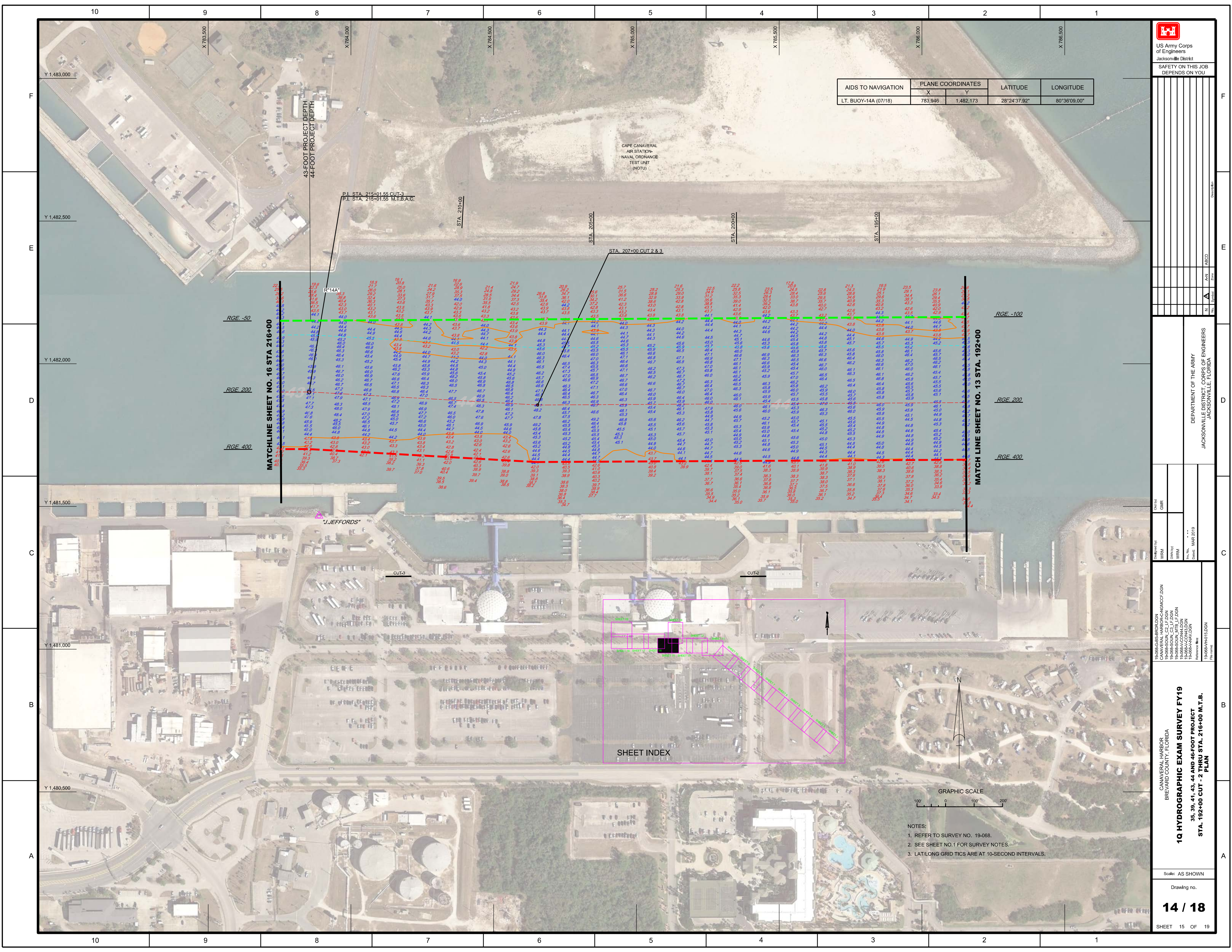












AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-14A (07/18)	783,946	1,482,173	28°24'37.92"	80°36'09.00"

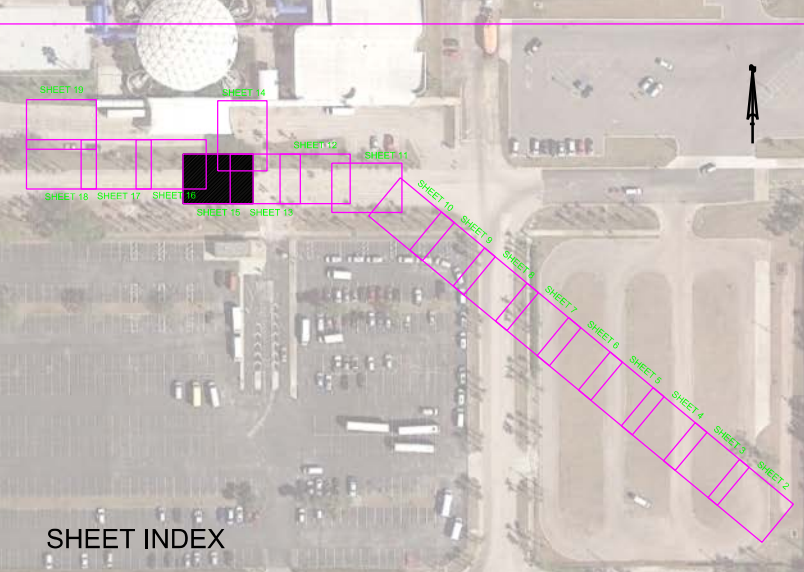
US Army Corps of Engineers
   
 Jacksonville District
   
 SAFETY ON THIS JOB
   
 DEPENDS ON YOU

DEPARTMENT OF THE ARMY
   
 JACKSONVILLE DISTRICT CORPS OF ENGINEERS
   
 JACKSONVILLE, FLORIDA

19-068-AS-BRDLDGN
   
 CANAVERAL HARBOR/CANAL/CAICCF.DGN
   
 19-068-SOUN\_MTS\_LF.DGN
   
 19-068-ACCONALLDGN
   
 19-068-AVAVDGN

**1Q HYDROGRAPHIC EXAM SURVEY FY19**
  
**35, 39, 41, 43, 44 AND 46-FOOT PROJECT**
  
**STA. 192+00 CUT - 2 THRU STA. 216+00 M.T.B.**
  
**PLAN**

- NOTES:
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  - SEE SHEET NO.1 FOR SURVEY NOTES.
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P.I. STA. 215+01.55 CUT-3
   
 P.I. STA. 215+01.55 M.T.B.A.C.

MATCHLINE SHEET NO. 16 STA 216+00
   
 RGE -50
   
 RGE 200
   
 RGE 400

MATCHLINE SHEET NO. 13 STA. 192+00
   
 RGE -100
   
 RGE 200
   
 RGE 400

SHEET INDEX

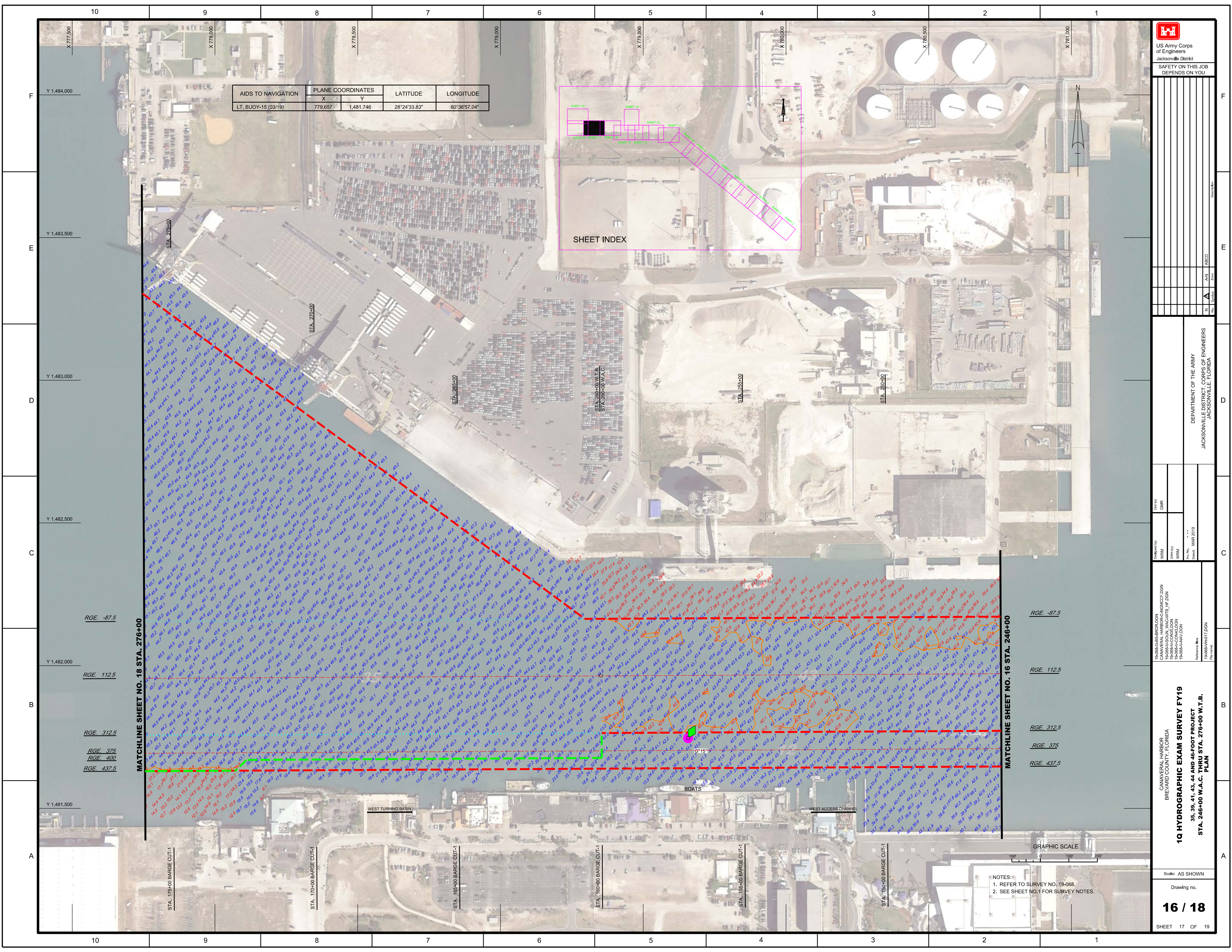
GRAPHIC SCALE



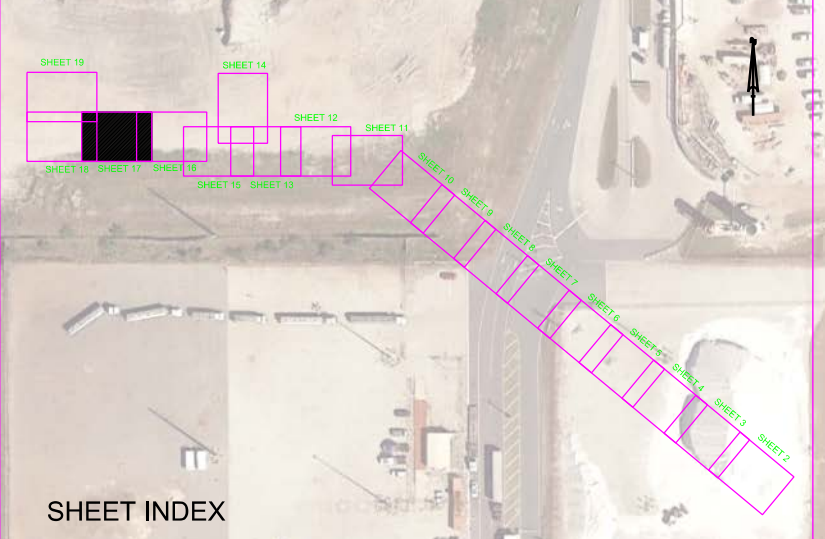








AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-15 (03/19)	779,657	1,481,746	28°24'33.83"	80°36'57.04"



Scale	AS SHOWN
Drawing no.	16 / 18
SHEET	17 OF 19

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA

19-068-C&S-BRDLDGN  
CANAVERAL HARBOR-C&S-CONV-FY19  
19-068-C&S-CONV-FY19  
19-068-C&S-CONV-FY19  
19-068-C&S-CONV-FY19

**1Q HYDROGRAPHIC EXAM SURVEY FY19**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
STA. 246+00 W.A.C. THRU STA. 276+00 W.T.B.  
PLAN

Scale: AS SHOWN  
Drawing no.  
**16 / 18**  
SHEET 17 OF 19

- NOTES:  
1. REFER TO SURVEY NO. 19-068.  
2. SEE SHEET NO.1 FOR SURVEY NOTES.







