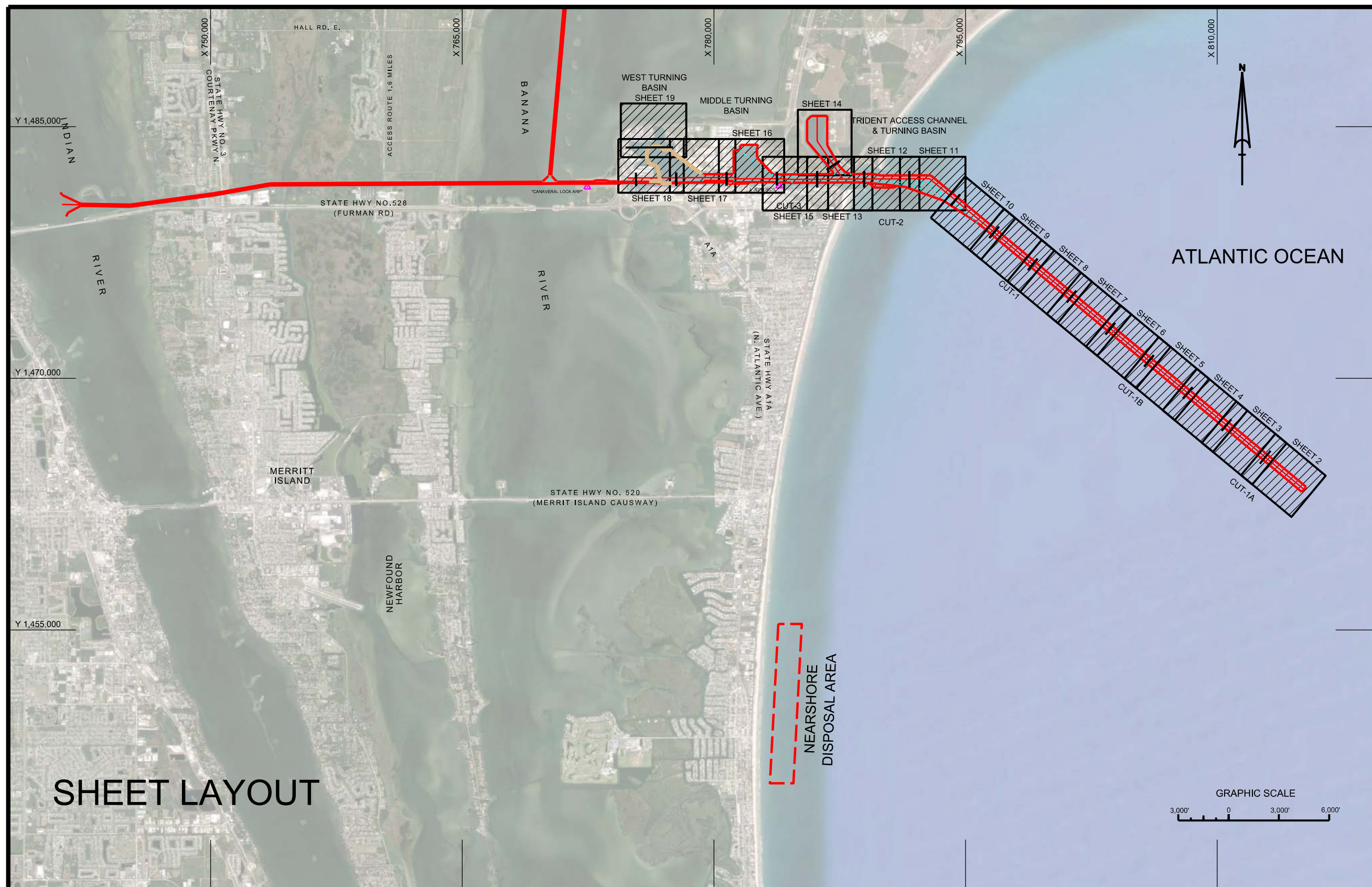
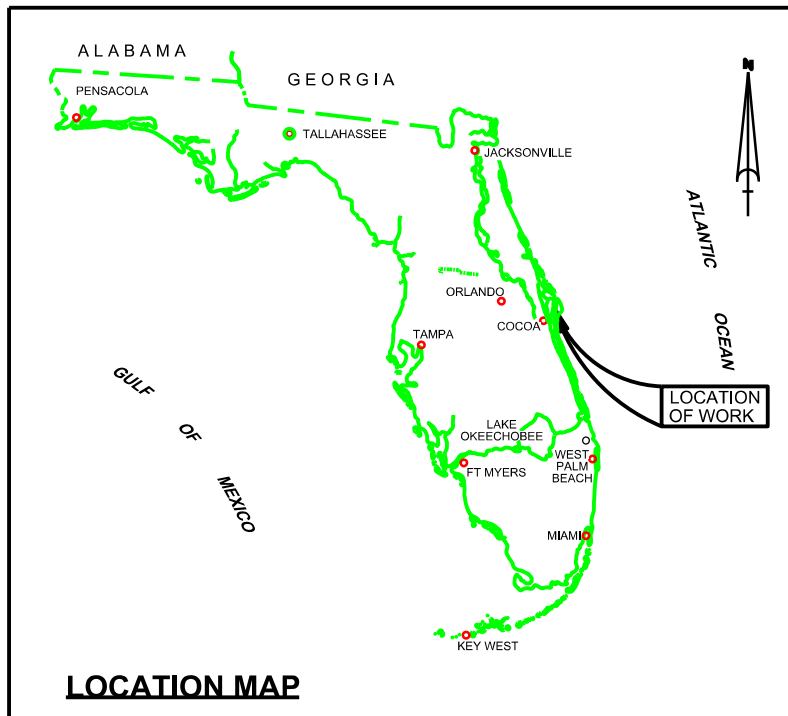


# CANAVERAL HARBOR BREVARD COUNTY, FLORIDA 2Q PORT HYDRO EXAM SURVEY FY21



**SURVEY NOTES**

- REFER TO SURVEY NO. 21-101.
- 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: "CANAVERAL-HBR-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 THE CURRENT REALIZATION OF THE NORTH AMERICAN DATUM OF 1983 (NAD83), BASED ON THE NOAA NATIONAL SPATIAL REFERENCE SYSTEM (NSRS).
- 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" (PID: BBCV67)  
 \*TIDE STAFF LOCATED FROM "JEFFORDS" (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 RESON T20P MULTI-BEAM SYSTEM, A R2 SONIC MODEL 2024 MULTI-BEAM AND A ROSS SMARTSOUNDER DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER OPERATING AT 28/200 KHZ. HIGH FREQUENCY SOUNDINGS ARE SHOWN FOR CUT-1A, WEST ACCESS CHANNEL AND THE WEST TURNING BASIN. LOW FREQUENCY SOUNDINGS SHOWN FOR CUTS 1, 1B, 2, 3, MTB, TRIDENT ACCESS CHANNEL AND THE POSEIDON WHARF.

VESSEL	DATE OF SURVEY	CUT
SB-48	18 MAR 2021	WEST ACCESS CHAN., WEST TURNING BASIN
SB-48	23 MAR 2021	CUT-2 & 3, MTB, WAC, POSEIDON WHARF, NORTH CARGO PIER
SB-44	25 MAR 2021	CUT-2, TRIDENT ACCESS CHANNEL
SV SALZER	09 MAY 2021	CUTS 1 & 2
SV SALZER	10 MAY 2021	CUTS 1A & 1B

**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

2Q PORT HYDRO EXAM SURVEY FY21  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
INDEX, LOCATION AND VICINITY  
PLAN

Scale: AS SHOWN  
Drawing no.  
**1 / 18**  
SHEET 1 OF 19























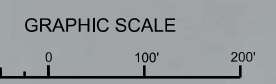
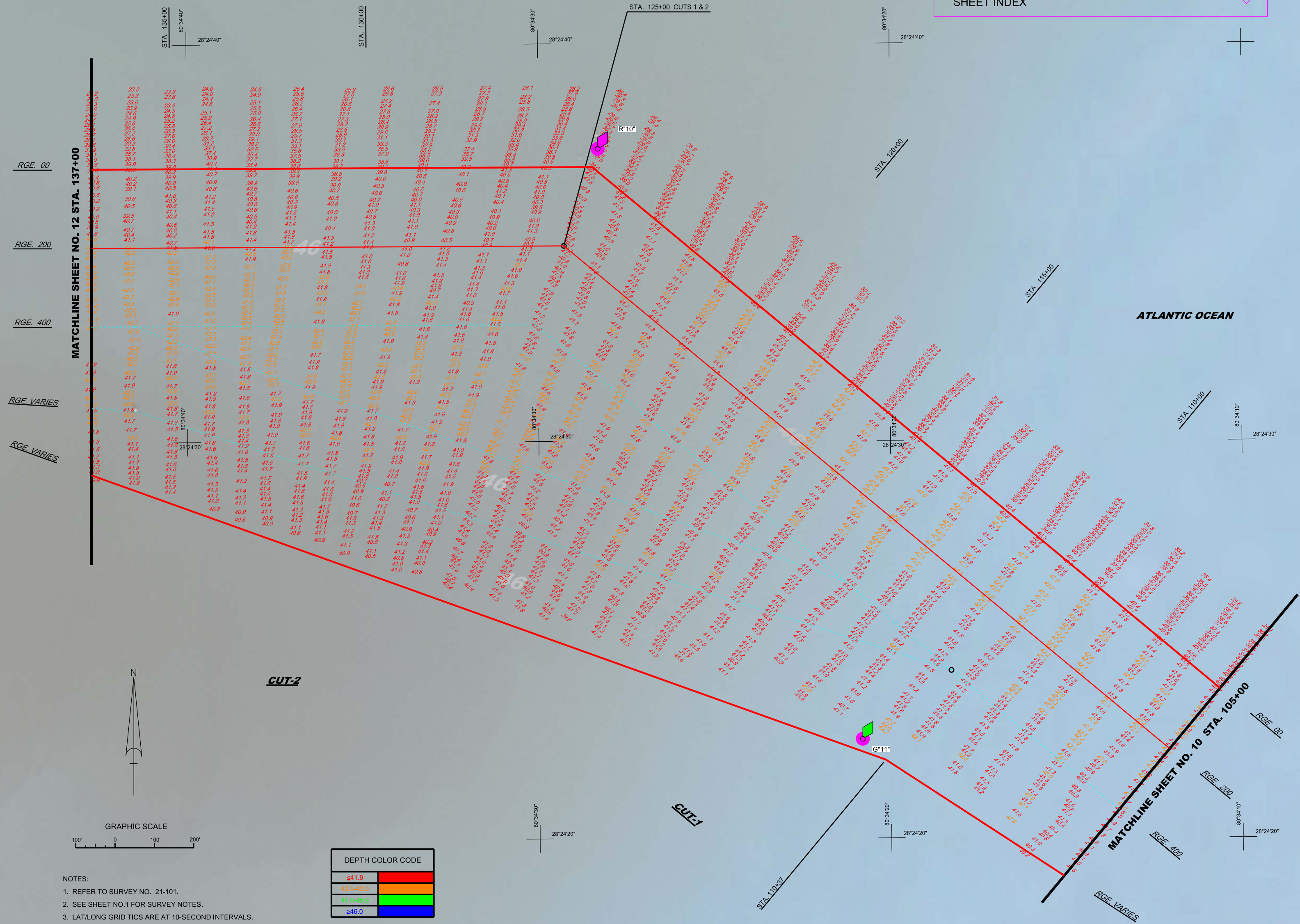
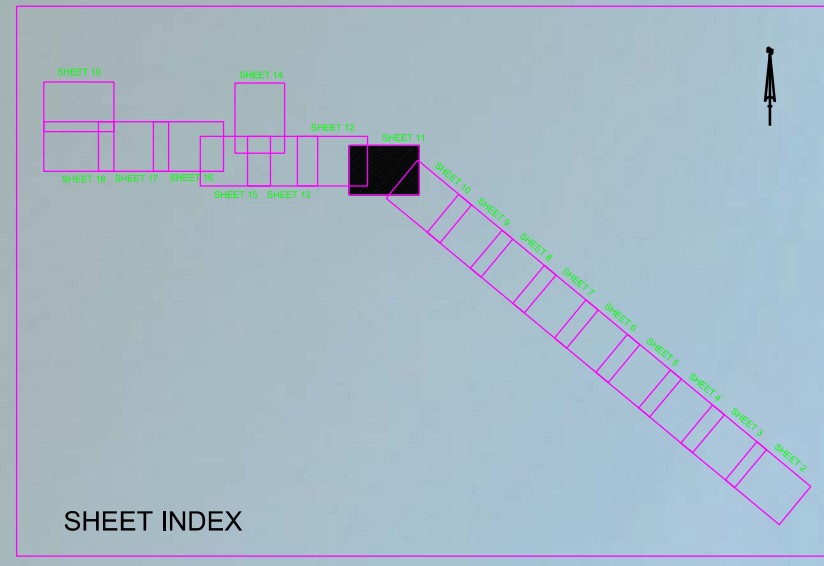








MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R*10"	LT. BUOY-10 (05/21)	792,940	1,482,147	28°24'37.67"	80°34'28.29"
G*11"	LT. BUOY-11 (05/21)	793,613	1,480,648	28°24'22.50"	80°34'20.80"



- NOTES:
1. REFER TO SURVEY NO. 21-101.
  2. SEE SHEET NO.1 FOR SURVEY NOTES.
  3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

DEPTH COLOR CODE	
≤41.9	Red
42.0-43.9	Orange
44.0-45.9	Yellow
≥46.0	Blue

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

---

21-101-GS-BRDLDGN  
CANAVERAL HARBOR-CNGMCCF\_VTB.DGN  
21-101-A-SOON\_C1\_L.F.DGN  
21-101-A-SOON\_C2\_L.F.DGN  
21-101-A-HANV.DGN

---

**2Q PORT HYDRO EXAM SURVEY FY21**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
STA. 105+00 CUT - 1 THRU STA. 137+00 CUT - 2  
PLAN

---

Scale: AS SHOWN

Drawing no.

**11 / 18**

SHEET 11 OF 19

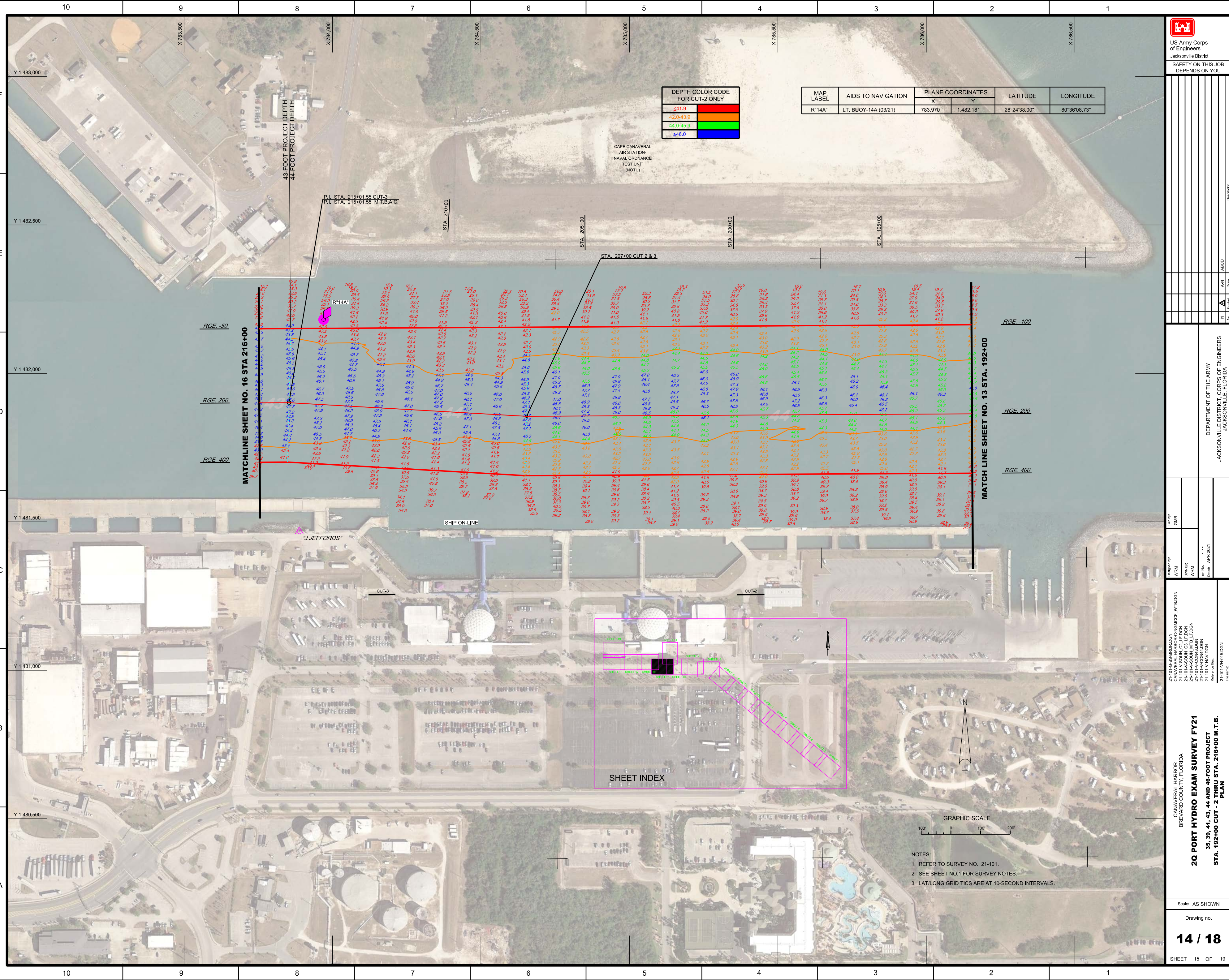












DEPTH COLOR CODE FOR CUT-2 ONLY

<41.9	Red
42.0-43.9	Orange
44.0-45.9	Green
>46.0	Blue

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R*14A*	LT. BUOY-14A (03/21)	783,970	1,482,181	28°24'38.00"	80°36'08.73"

Zone	AN	ABCD	Zone
N	A	ABCD	N

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

Checked by:	GHR
Designed by:	WRM
Drawn by:	WRM
File No.:	21-101-NAV-DGN
Date:	APR 2021

21-101-CAS-BRD-DGN  
CANAVERAL HARBOR/CANAL/CF\_WTB-DGN  
21-101-NAV-DGN  
21-101-NAV-DGN  
21-101-NAV-DGN  
21-101-NAV-DGN  
21-101-NAV-DGN

CANAVERAL HARBOR  
BREVARD COUNTY, FLORIDA  
**2Q PORT HYDRO EXAM SURVEY FY21**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
STA. 192+00 CUT - 2 THRU STA. 216+00 M.T.B.  
PLAN

Scale: AS SHOWN  
Drawing no.  
**14 / 18**

- NOTES:
- REFER TO SURVEY NO. 21-101.
  - SEE SHEET NO.1 FOR SURVEY NOTES.
  - LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

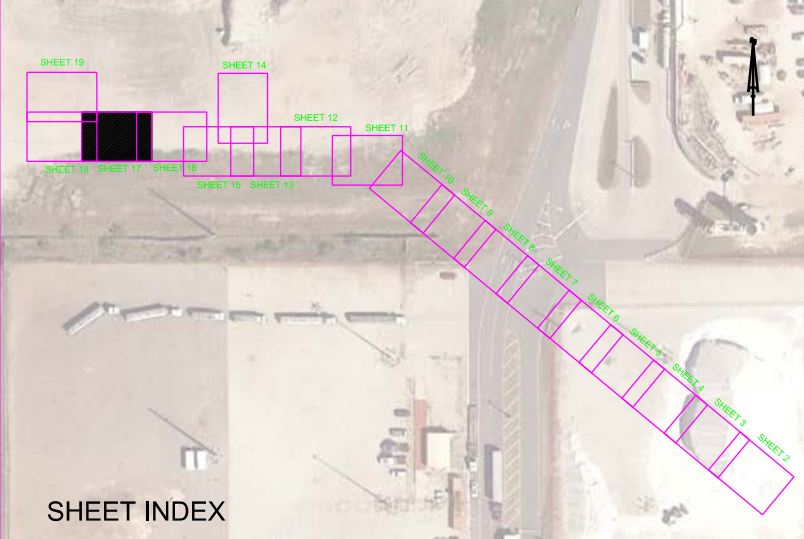








MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*15*	LT. BUOY-15 (12/20)	779,622	1,481,744	28°24'33.81"	80°36'57.44"
G*19*	LT. BUOY-19 (12/20)	778,131	1,481,721	28°24'33.63"	80°37'14.14"



MATCHLINE SHEET NO. 18 STA. 276+00

MATCHLINE SHEET NO. 16 STA. 246+00

RGE. -87.5  
RGE. 112.5  
RGE. 312.5  
RGE. 375  
RGE. 400  
RGE. 437.5

RGE. -87.5  
RGE. 112.5  
RGE. 312.5  
RGE. 375  
RGE. 437.5

STA. 175+00 BARGE CUT-1

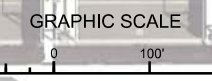
STA. 170+00 BARGE CUT-1

STA. 165+00 BARGE CUT-1

STA. 160+00 BARGE CUT-1

STA. 155+00 BARGE CUT-1

STA. 150+00 BARGE CUT-1



NOTES:  
1. REFER TO SURVEY NO. 21-101.  
2. SEE SHEET NO.1 FOR SURVEY NOTES.



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

21-101-GS-BIRDLDGN  
CANAVERAL HARBOR-CANONCIP\_WTB.DGN  
21-101-AC-CONSLDGN  
21-101-HAN-DGN

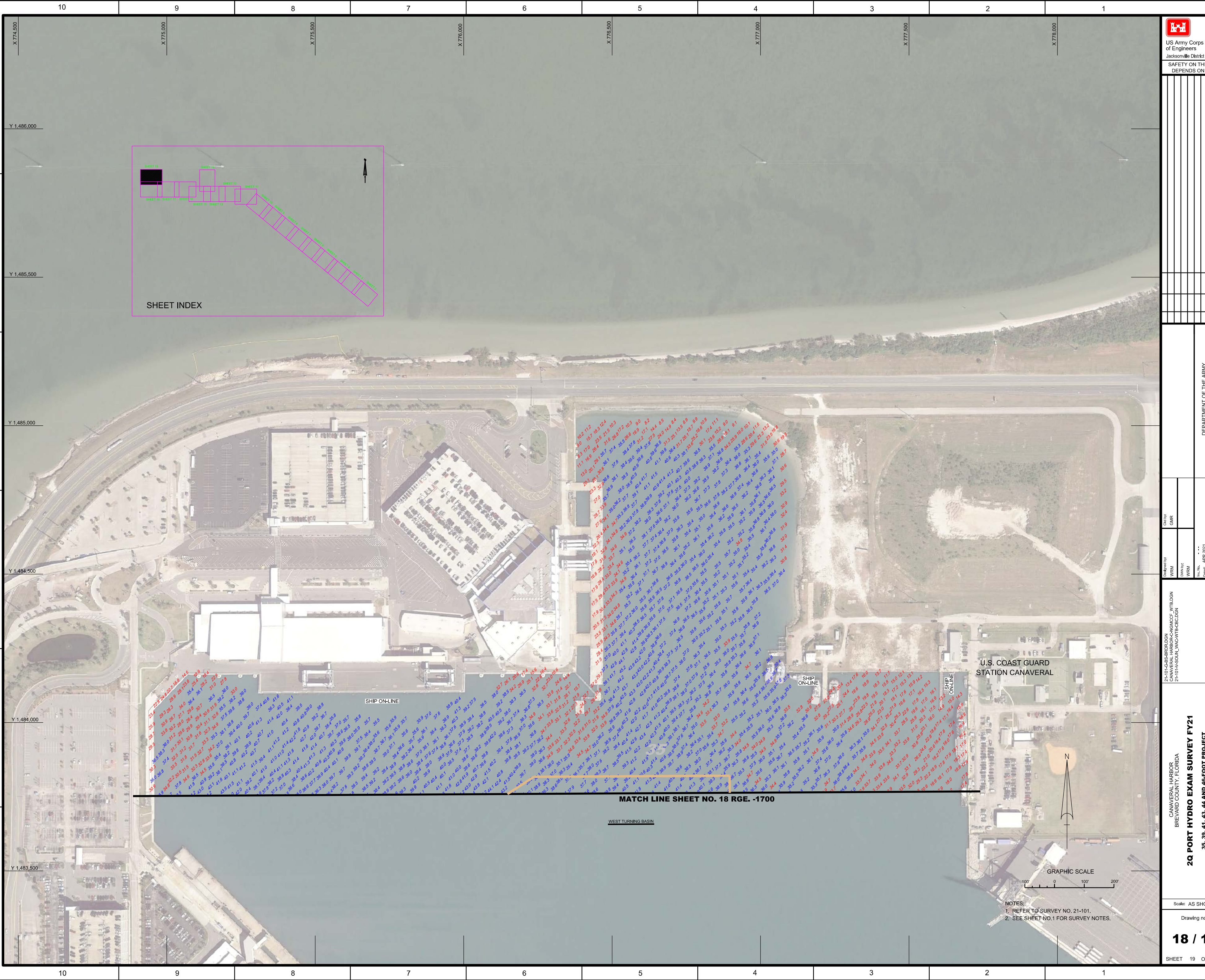
CANAVERAL HARBOR  
BREVARD COUNTY, FLORIDA  
**2Q PORT HYDRO EXAM SURVEY FY21**  
35, 39, 41, 43, 44 AND 46-FOOT PROJECT  
STA. 246+00 W.A.C. THRU STA. 276+00 W.T.B.  
PLAN

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









SHEET INDEX

Drawn by	WRM
Checked by	WRM
Date	APR 2021
Scale	AS SHOWN
Zone	N
Sheet	18
Project	21-101-HR18-DEN
Client	DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA

21-101-HR18-DEN  
CANAVERAL HARBOR-CANAVERRAL  
21-101-HR18-DEN

21-101-HR18-DEN  
CANAVERAL HARBOR-CANAVERRAL  
21-101-HR18-DEN

21-101-HR18-DEN  
CANAVERAL HARBOR-CANAVERRAL  
21-101-HR18-DEN

21-101-HR18-DEN  
CANAVERAL HARBOR-CANAVERRAL  
21-101-HR18-DEN

21-101-HR18-DEN  
CANAVERAL HARBOR-CANAVERRAL  
21-101-HR18-DEN