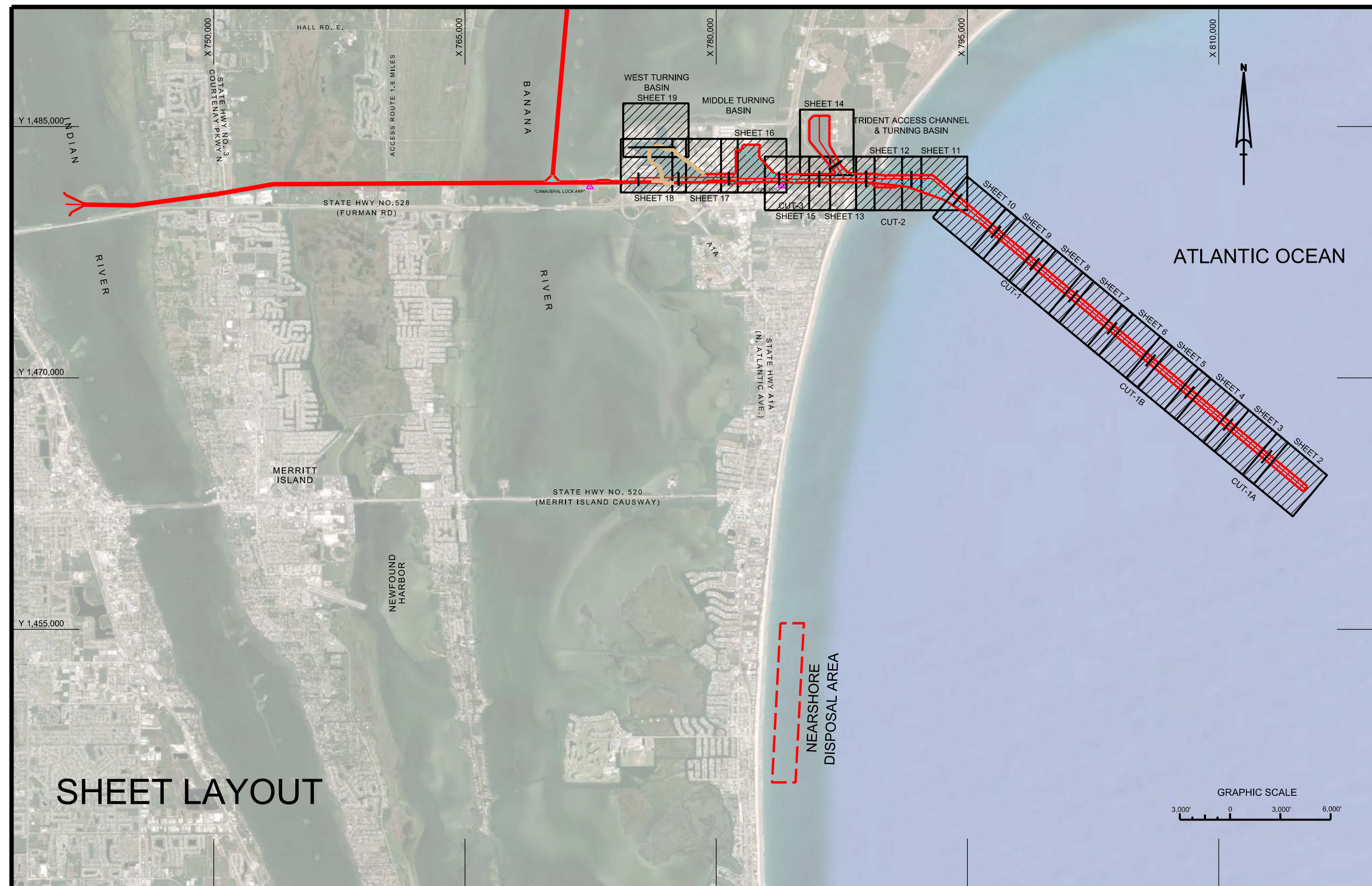
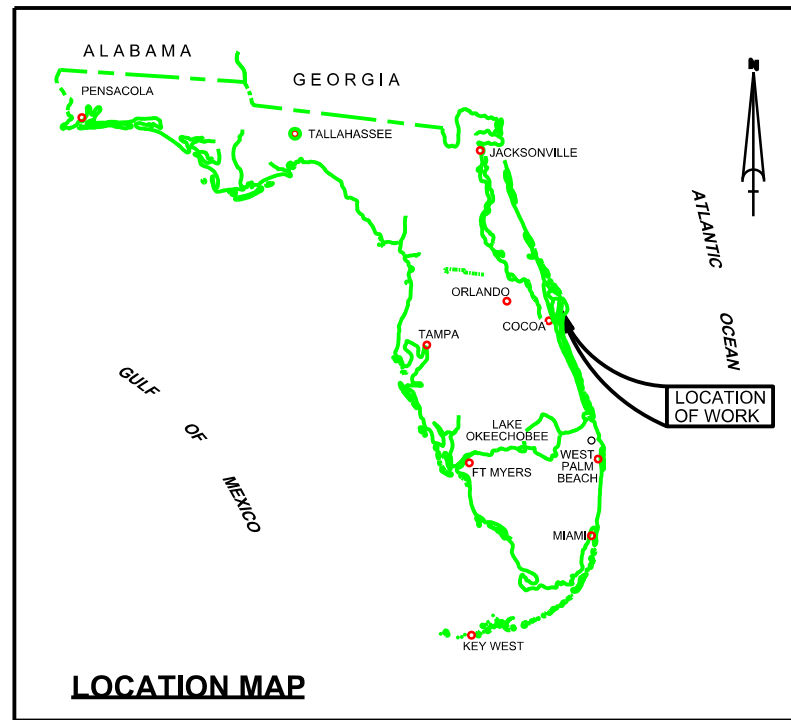


CANAVERAL HARBOR BREVARD COUNTY, FLORIDA 1Q PORT HYDRO EXAM SURVEY FY23



SURVEY NOTES

1. REFER TO SURVEY NO. 23-006.
2. 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".
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
4. 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).
5. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
6. 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)
7. 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)
8. VERTICAL MEASUREMENTS WERE MADE USING A R2 SONIC MODEL 2024 MULTI-BEAM OPERATING AT 300 KHZ, AN ECHOTRAC E20 AND A ROSS MODEL 835 SMARTSOUNDER DUAL-FREQUENCY SINGLE-BEAM TRANSDUCER OPERATING AT 230/200 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, AND THE POSEIDON WHARF.
9. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
10. 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.
11. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE 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

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

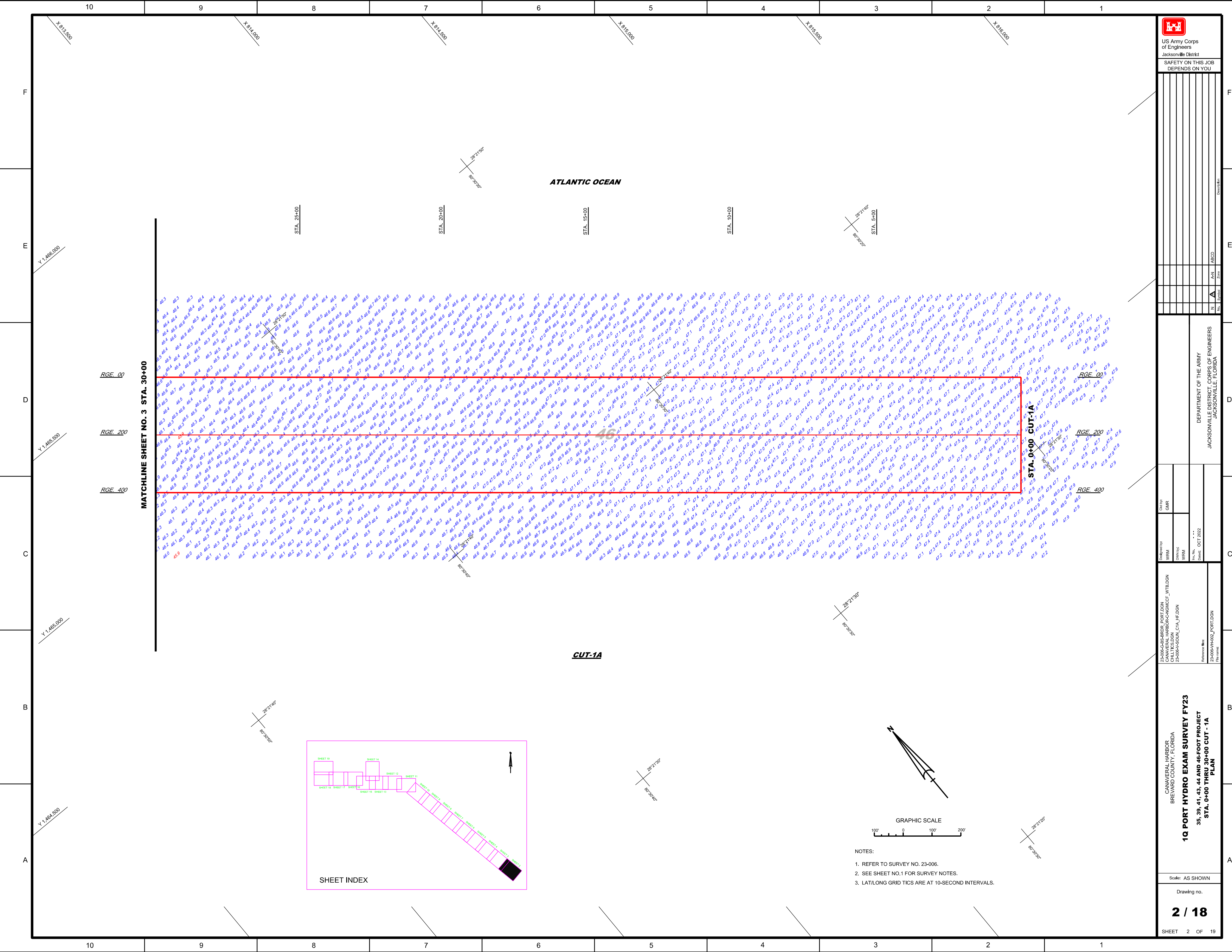
22-006-CA-SABARD_L_PORTRDGN
 CANAVERAL HARBOR-CANAGMCF_WYBLDGN
 CHAYLOUTBLDGN

1Q PORT HYDRO EXAM SURVEY FY23
 35, 39, 41, 43, 44 AND 46-FOOT PROJECT
 INDEX, LOCATION AND VICINITY
 PLAN



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

Zone	Symbol	A	B	C	D	E	F
N	▲						
AN	▲						
ABCD	▲						



ATLANTIC OCEAN

STA. 25+00

STA. 20+00

STA. 15+00

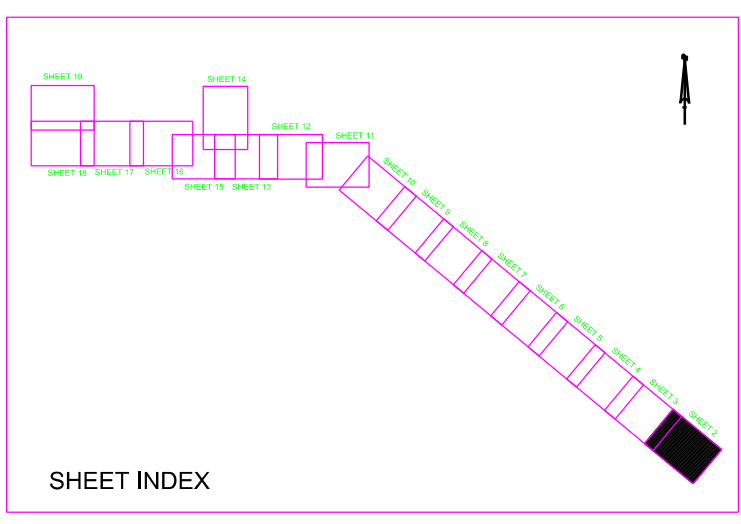
STA. 10+00

STA. 5+00

MATCHLINE SHEET NO. 3 STA. 30+00

STA. 0+00 CUT-1A

CUT-1A



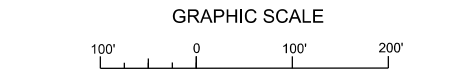
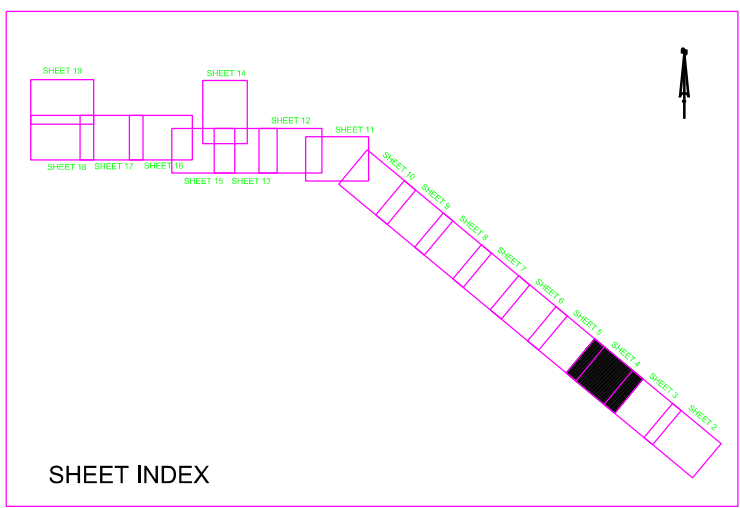
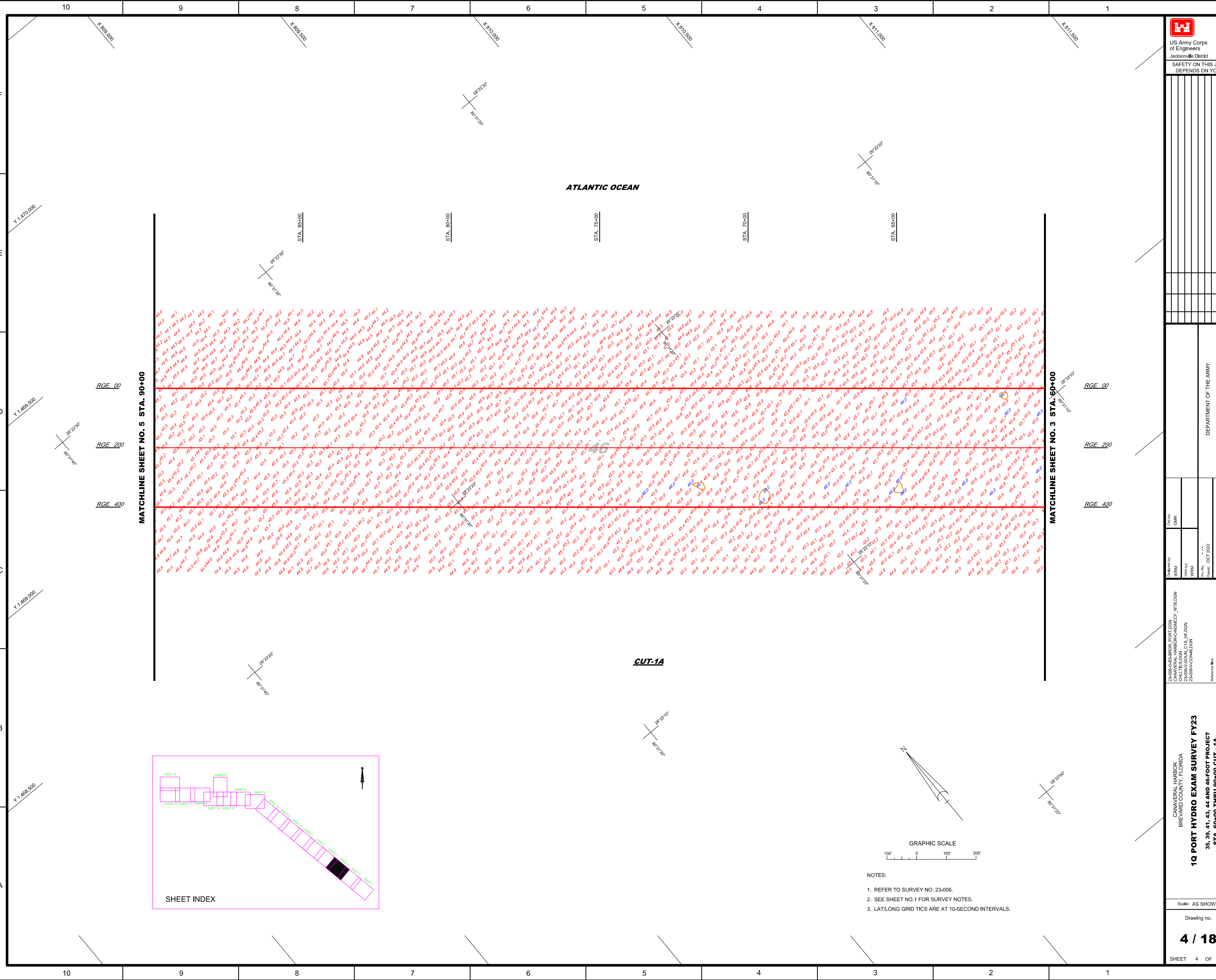
- NOTES:
1. REFER TO SURVEY NO. 23-006.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.
 3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

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

23-006-C&S-ERRR_PORTLDCN
CANAVERAL_HARBOR_CNGNCC_VYBDDN
23-006-A&S&O&L_CIA_HF.DGN
Reference File:
23-006-H&O&L_PORTLDCN
File name:

CANAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 0+00 THRU 30+00 CUT - 1A
PLAN

Scale: AS SHOWN
Drawing no.



- NOTES:
- 1. REFER TO SURVEY NO. 23-006.
 - 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

SAFETY ON THIS JOB
DEPENDS ON YOU

No.	Description	Symbol	Zone
N	AN	ABCD	

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

Checked By: GHR
Designed By: WRM
Drawn By: WRM
File Name: 23-006-IV-COM-18.DGN
Date: OCT 2022

23-006-IV-COM-18.PRT.DGN
CANAVERAL HARBOR-PORT/DGN
23-006-IV-COM-18.CIA.HF.DGN
23-006-IV-COM-18.DGN
Reference File: 23-006-IV-HDR-PORT.DGN
File Name:

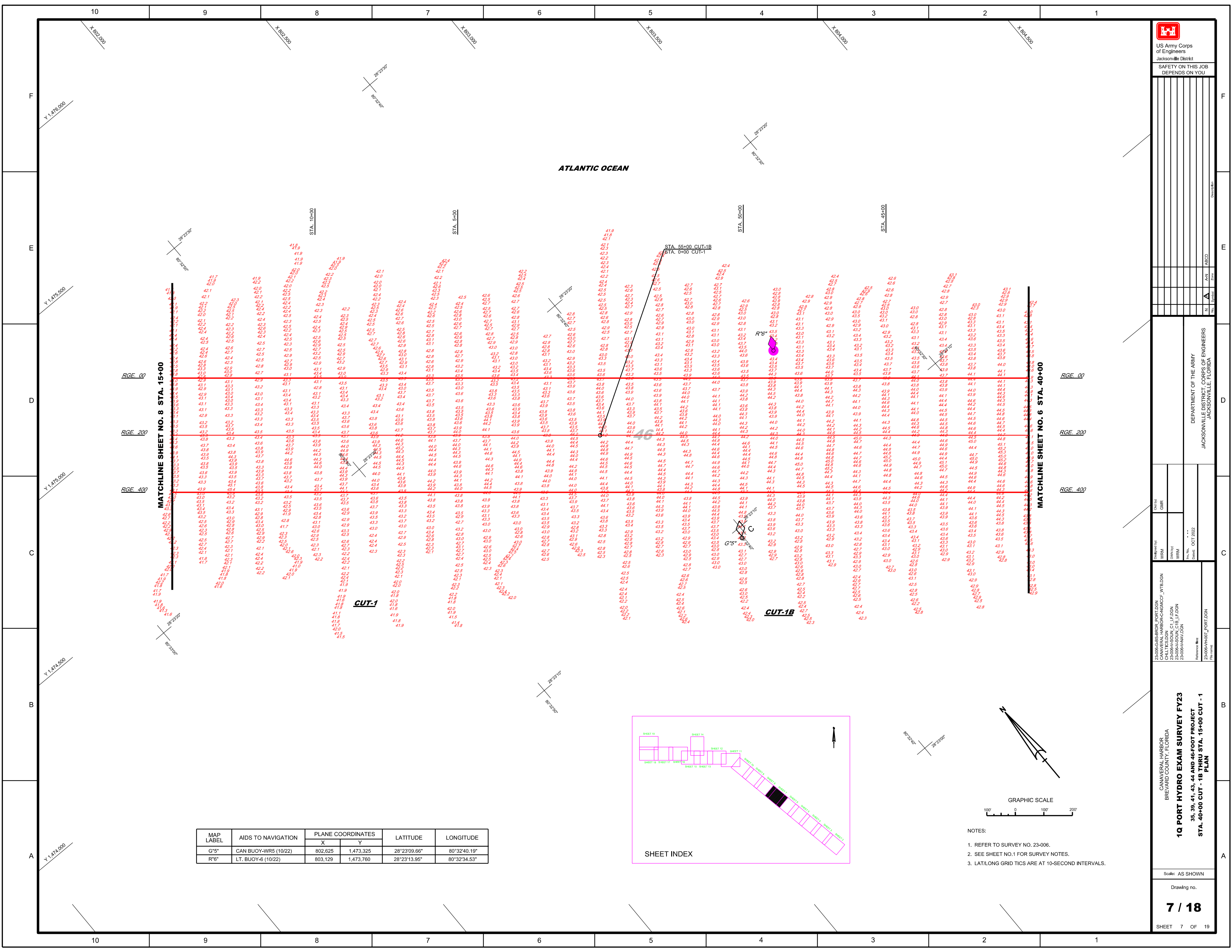
CANAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 60+00 THRU 90+00 CUT - 1A
PLAN

Scale: AS SHOWN

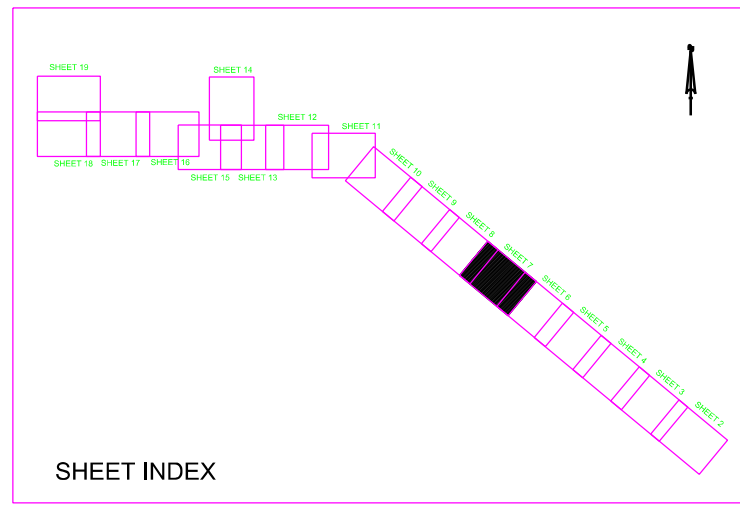
Drawing no.

4 / 18

SHEET 4 OF 19



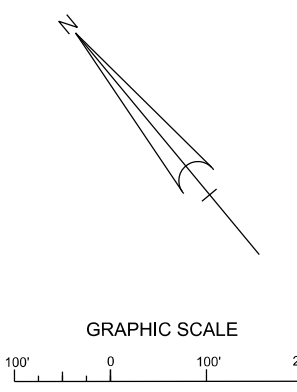
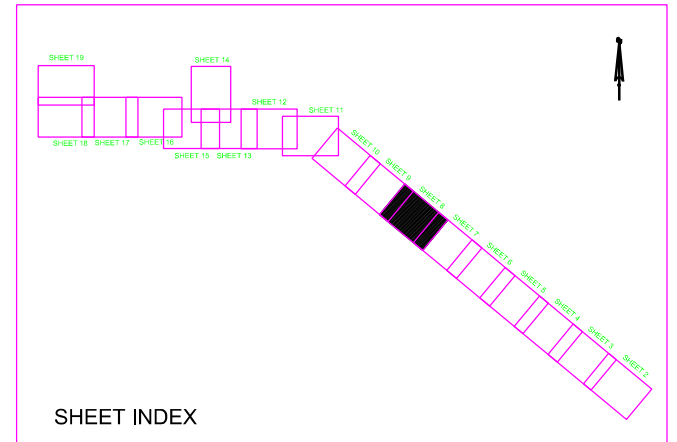
MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*5	CAN BUOY-WR5 (10/22)	802,625	1,473,325	28°23'09.66"	80°32'40.19"
R*6	LT. BUOY-6 (10/22)	803,129	1,473,760	28°23'13.95"	80°32'34.53"



- NOTES:
- REFER TO SURVEY NO. 23-006.
 - SEE SHEET NO.1 FOR SURVEY NOTES.
 - LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

ATLANTIC OCEAN

Matchline sheets with elevation data for STA. 45+00 to STA. 15+00. The table contains a grid of numerical values representing elevations at various points along the shoreline. Key features include:
- Matchline labels: MATCHLINE SHEET NO. 9 STA. 45+00 (left) and MATCHLINE SHEET NO. 7 STA. 15+00 (right).
- Stationing: STA. 40+00, STA. 35+00, STA. 30+00, STA. 25+00, STA. 20+00.
- Elevation ranges: From approximately 40.2 to 45.0 feet.
- A red circle highlights a specific area labeled '46' near STA. 30+00.



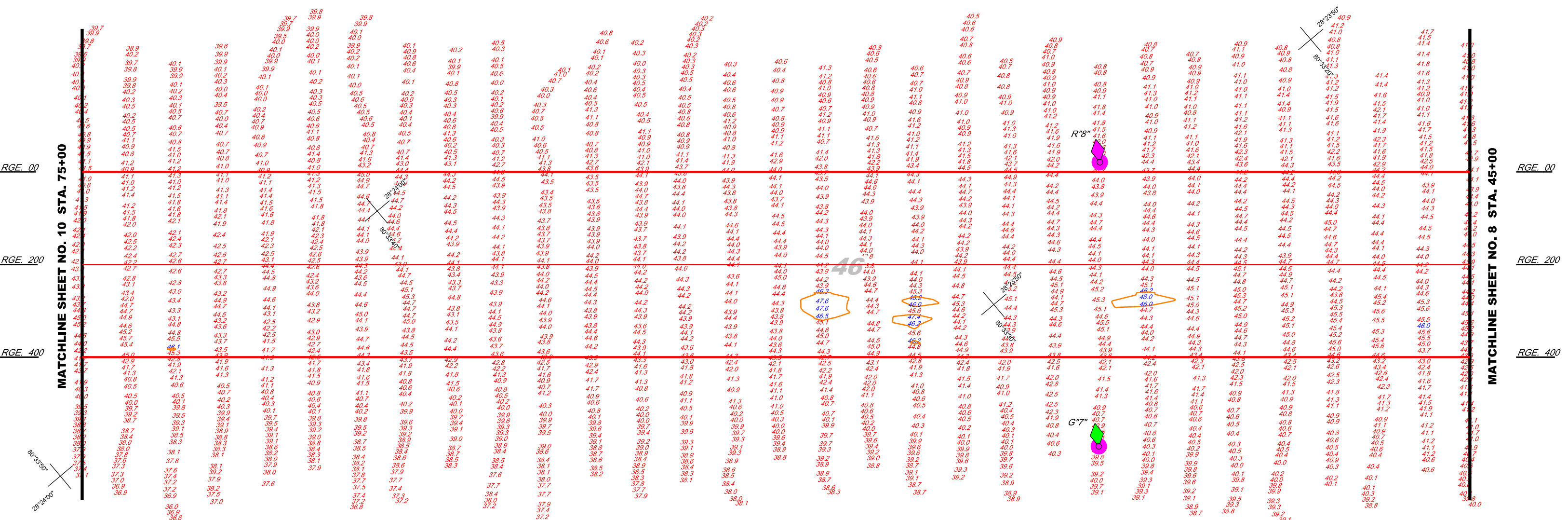
- NOTES:
1. REFER TO SURVEY NO. 23-006.
 2. SEE SHEET NO.1 FOR SURVEY NOTES.
 3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

CANAVEL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 15+00 THRU STA. 45+00 CUT - 1
PLAN

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

Checked by: GHR
Designed by: WRM
Drawn by: WRM
Date: OCT 2022

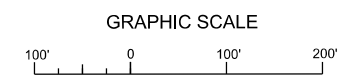
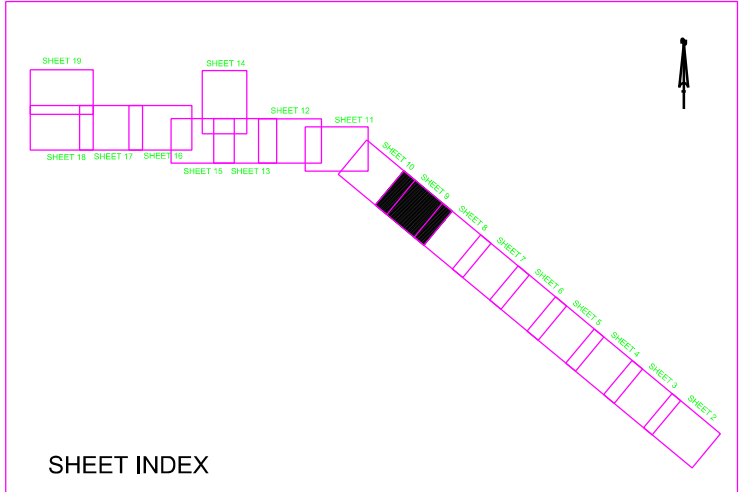
ATLANTIC OCEAN



MATCHLINE SHEET NO. 10 STA. 75+00

MATCHLINE SHEET NO. 8 STA. 45+00

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G77	LT. BUOY-7 (10/22)	798,142	1,477,002	28°23'46.23"	80°33'30.23"
R88	LT. BUOY-8 (10/22)	798,536	1,477,473	28°23'50.88"	80°33'25.81"

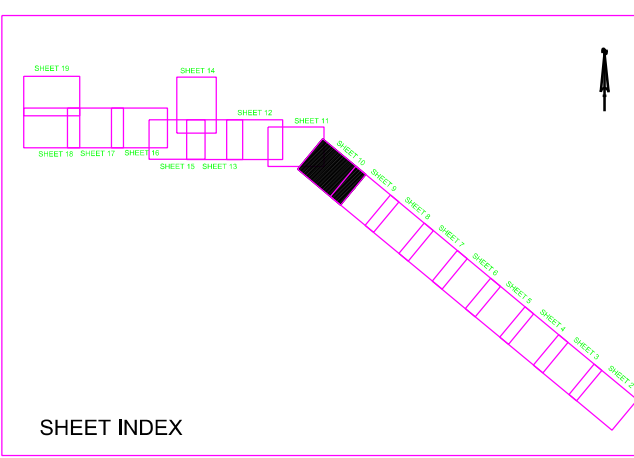
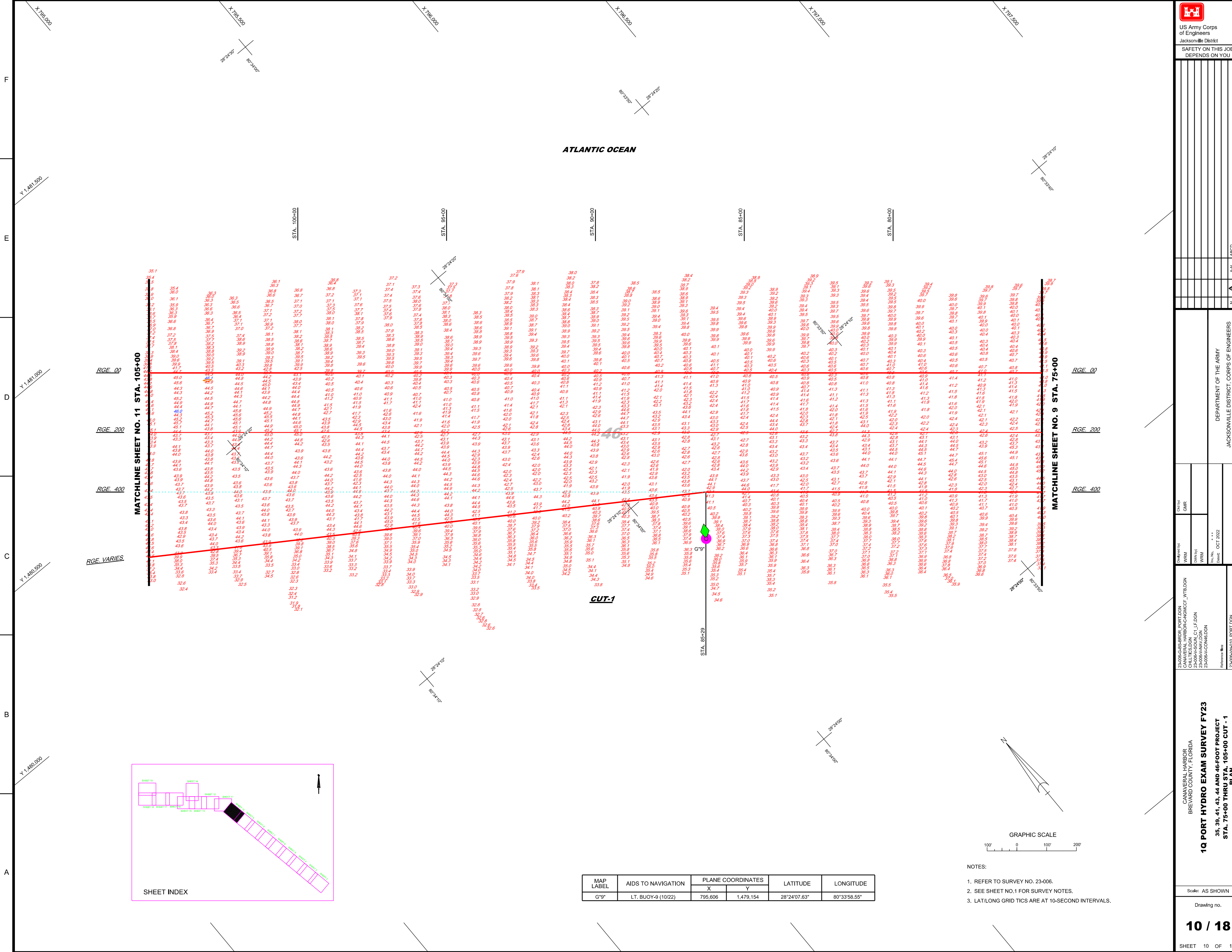


- NOTES:
1. REFER TO SURVEY NO. 23-006.
 2. SEE SHEET NO.1 FOR SURVEY NOTES.
 3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

Checked by: GHR
Designed by: WRM
Drawn by: WRM
Date: OCT 2022

23-006-GS-HRDR_PORTLON
CANAVEL HARBOR, PORTLAND
BREVARD COUNTY, FLORIDA
23-006-A-SOUP_C1_L1_F.DGN
23-006-A-NAV.DGN
23-006-A-COIN.DGN
Reference file:
23-006-A-HDRL_PORTLON
File name:

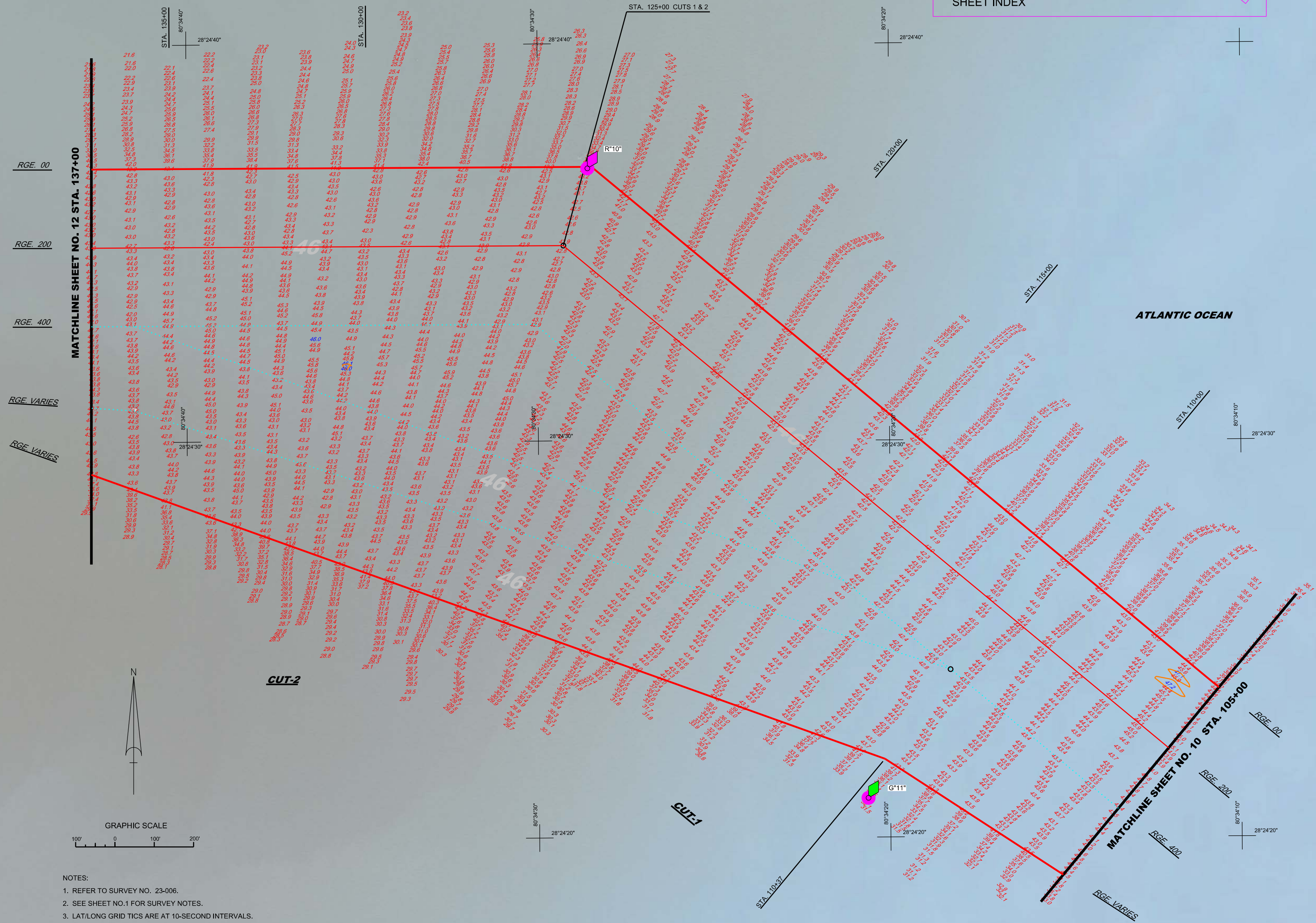
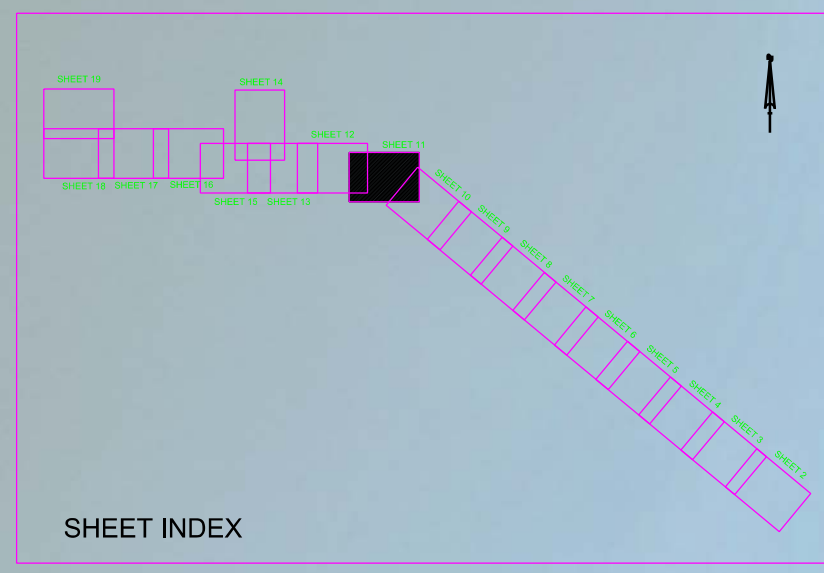
Scale: AS SHOWN
Drawing no.



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G9" G9"	LT. BUOY-9 (10/22)	795,606	1,479,154	28°24'07.63"	80°33'58.55"

NOTES:
 1. REFER TO SURVEY NO. 23-006.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.
 3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R*10"	LT. BUOY-10 (10/22)	792,915	1,482,097	28°24'36.87"	80°34'28.56"
G*11"	LT. BUOY-11 (10/22)	793,630	1,480,496	28°24'20.99"	80°34'20.62"



- NOTES:
1. REFER TO SURVEY NO. 23-006.
 2. SEE SHEET NO.1 FOR SURVEY NOTES.
 3. LAT/LONG GRID TICs ARE AT 10-SECOND INTERVALS.

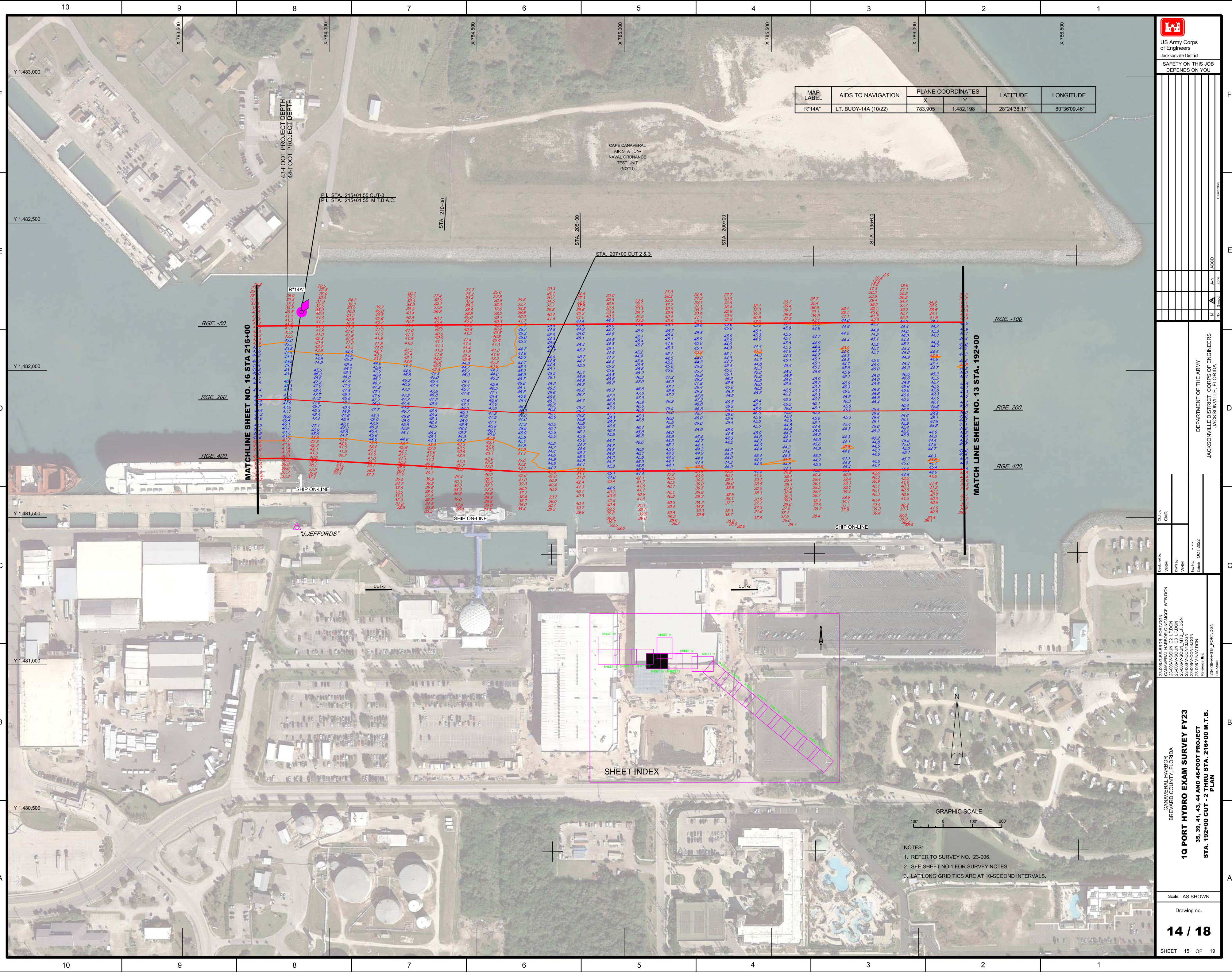
Zone	Symbol	Use
N	▲	North Arrow
A-N	□	Zone
ABCD	□	Zone

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

Category	Name	Date
Designed by	WRM	
Checked by	GHR	
Drawn by	WRM	
Plot Date		OCT 2022
File Name		23-006-VH01_L_FORT.DGN

CANAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 105+00 CUT - 1 THRU STA. 137+00 CUT - 2
PLAN

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R"14A"	LT. BUOY-14A (10/22)	783,905	1,482,198	28°24'38.17"	80°36'09.46"



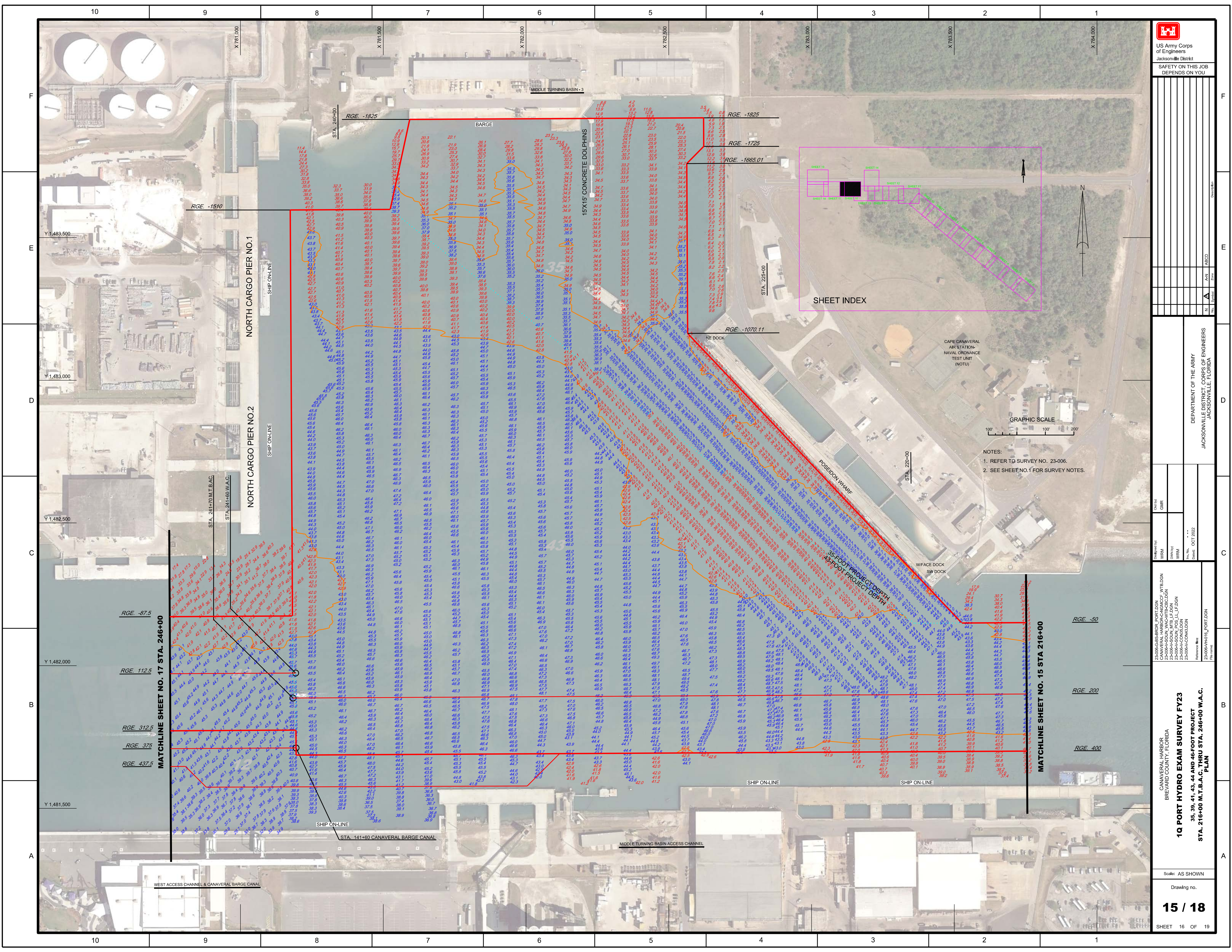
Zone	Symbol	Color	Material
N	▲	AN	ABCD
E	▲	EA	ABCD
D	▲	DA	ABCD
C	▲	CA	ABCD
B	▲	BA	ABCD
A	▲	AA	ABCD

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

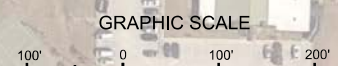
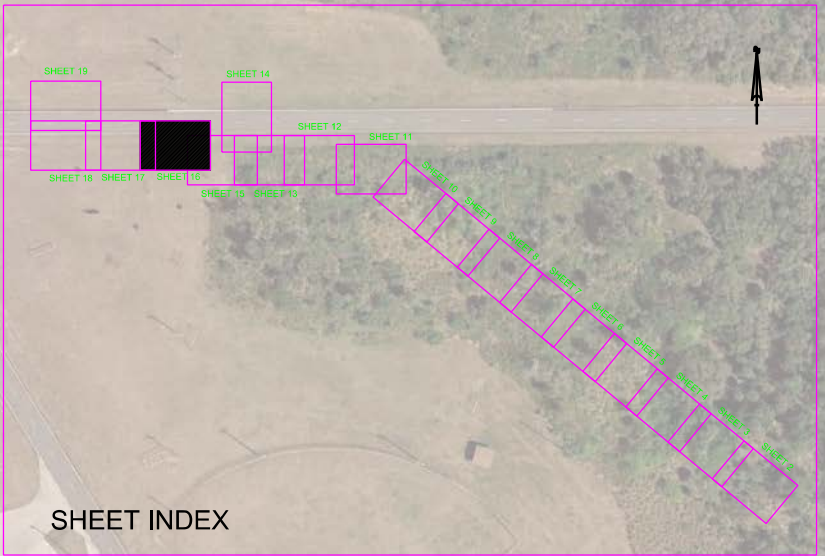
Checked by:	GHR
Designed by:	WRM
Drawn by:	WRM
Issue Date:	OCT 2022
Revision:	

23-006-CAS-BRDR_PORTLDDN
CANNAVERAL_HARBOR_CNGMCCP_WTB.LDDN
23-006-A-SOUL_CLL.LDDN
23-006-A-SOUL_MTB_LF.LDDN
23-006-A-CONC4.LDDN
23-006-A-NAV.LDDN
Reference file:
23-006-A-PORTLDDN
File name:

CANNAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 192+00 CUT - 2 THRU STA. 216+00 M.T.B.
PLAN



North arrow and coordinate grid labels (N, S, E, W, X, Y).



- NOTES:
1. REFER TO SURVEY NO. 23-006.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

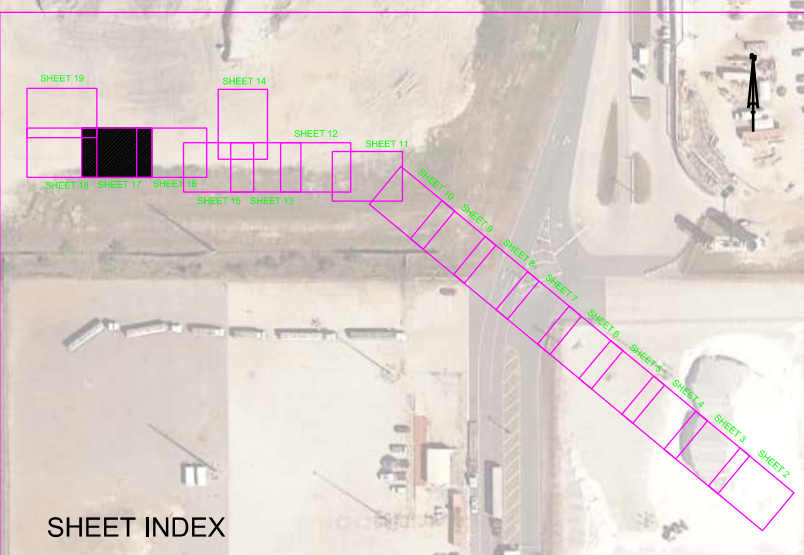
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Project metadata table including Design No., Date, and other identifiers.

23-006-GS-BRD-PORT/DGN
CANAVERAL HARBOR-CANAL/PORT/DGN
23-006-A-SOUL/MTB_ILF/DGN
23-006-A-SOUL/POS_ILF/DGN
23-006-A-COAN/DGN

CANAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 216+00 M.T.B.A.C. THRU STA. 246+00 W.A.C.
PLAN

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*15*	LT. BUOY-15 (10/22)	779,666	1,481,692	28°24'33.29"	80°36'56.95"
G*19*	LT. BUOY-19 (10/22)	778,139	1,481,673	28°24'33.15"	80°37'14.04"



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. 23-006.
2. SEE SHEET NO.1 FOR SURVEY NOTES.



US Army Corps of Engineers
Jacksonville District
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

23-006-C&S-BRDR_PORTRCON
CANAVERAL HARBOR-C&S-IBRDR_PORTRCON
23-006-A&C-CONSLDGN
23-006-H&I-CON
Reference files:
23-006-H&I-CON
File name:

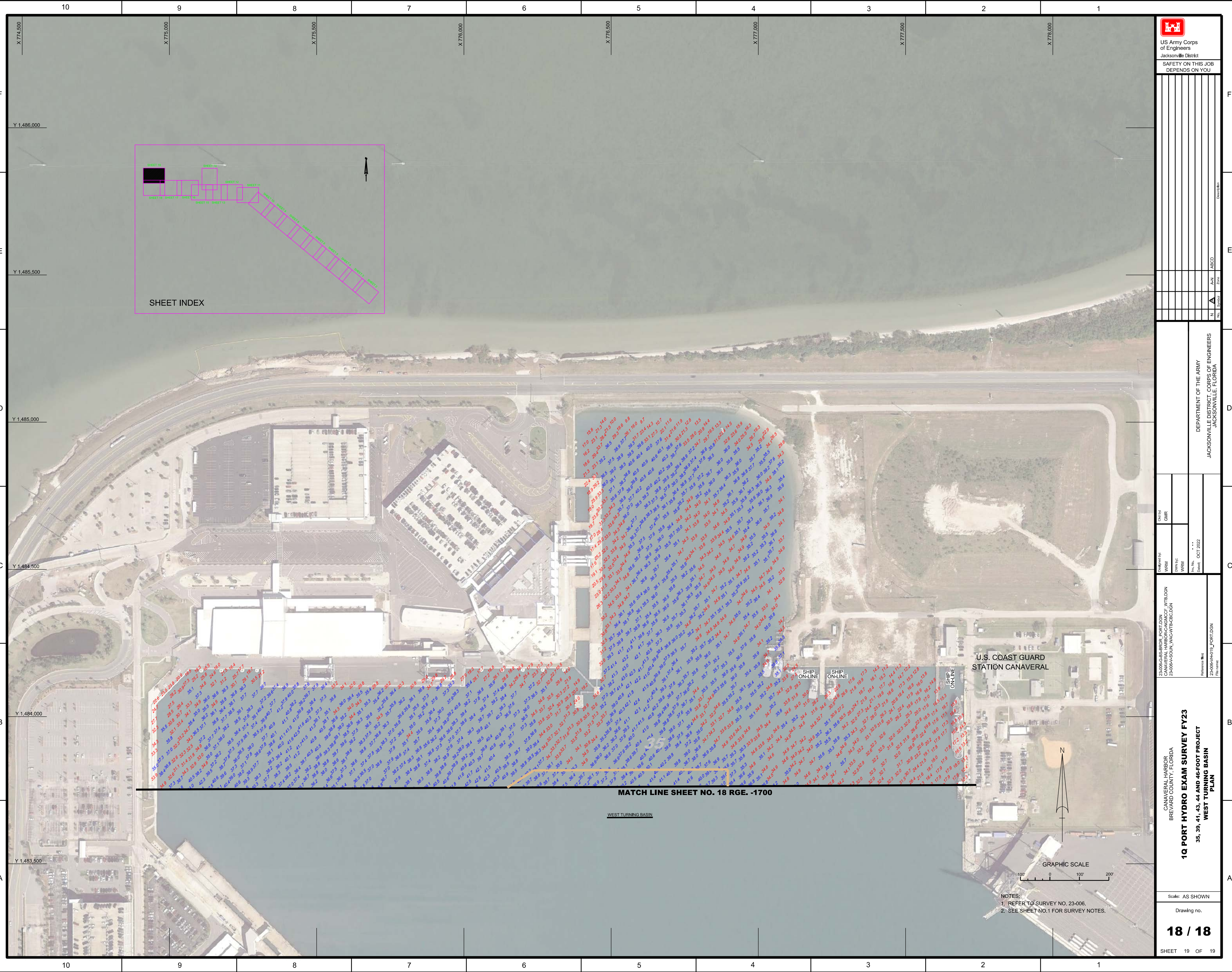
CANAVERAL HARBOR
BREVARD COUNTY, FLORIDA
1Q PORT HYDRO EXAM SURVEY FY23
35, 39, 41, 43, 44 AND 46-FOOT PROJECT
STA. 246+00 W.A.C. THRU STA. 276+00 W.T.B.
PLAN

Scale: AS SHOWN

Drawing no.

16 / 18

SHEET 17 OF 19



SHEET INDEX

MATCH LINE SHEET NO. 18 RGE. -1700

WEST TURNING BASIN

U.S. COAST GUARD
STATION CANAVERAL

GRAPHIC SCALE

NOTES:
1. REFER TO SURVEY NO. 23-006.
2. SEE SHEET NO.1 FOR SURVEY NOTES.