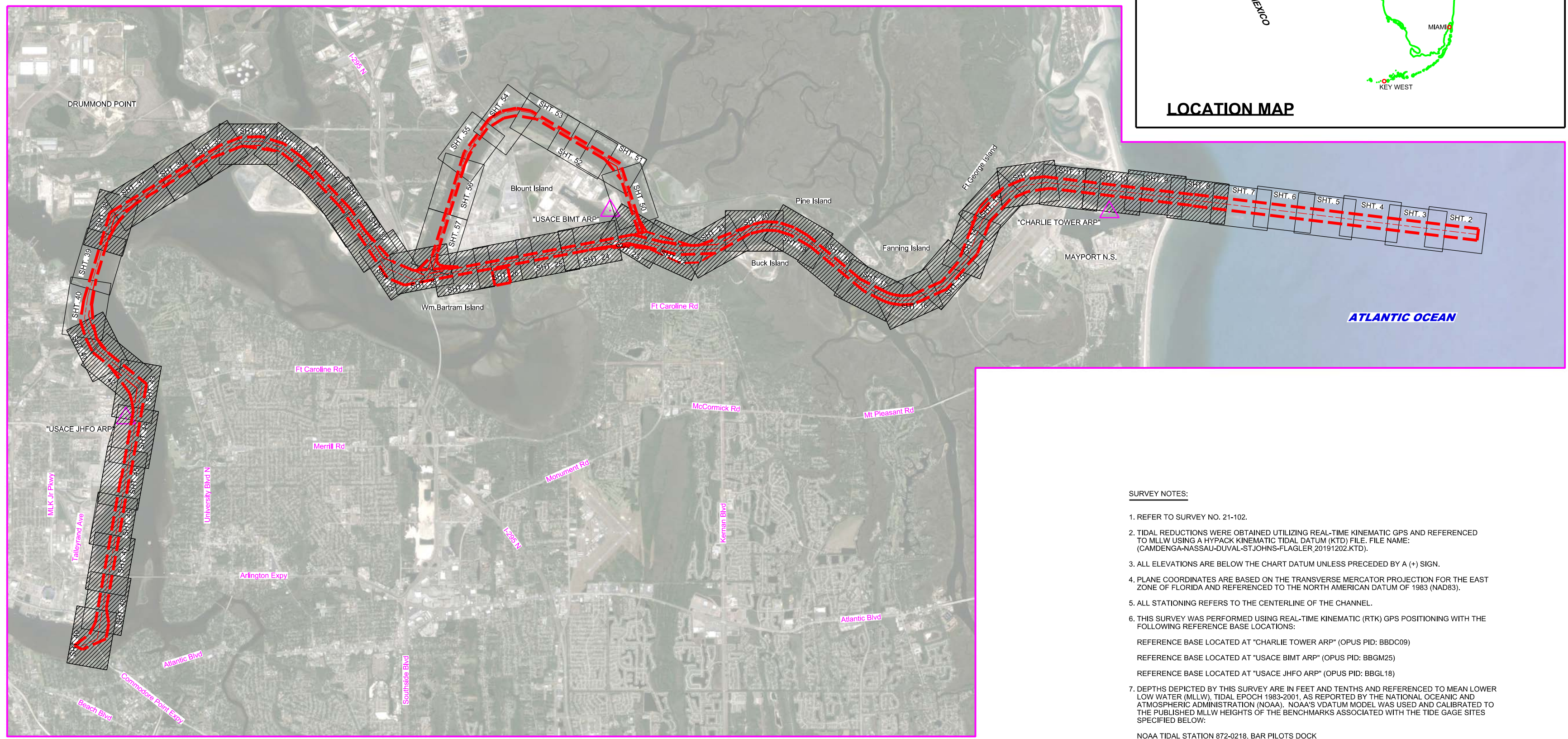
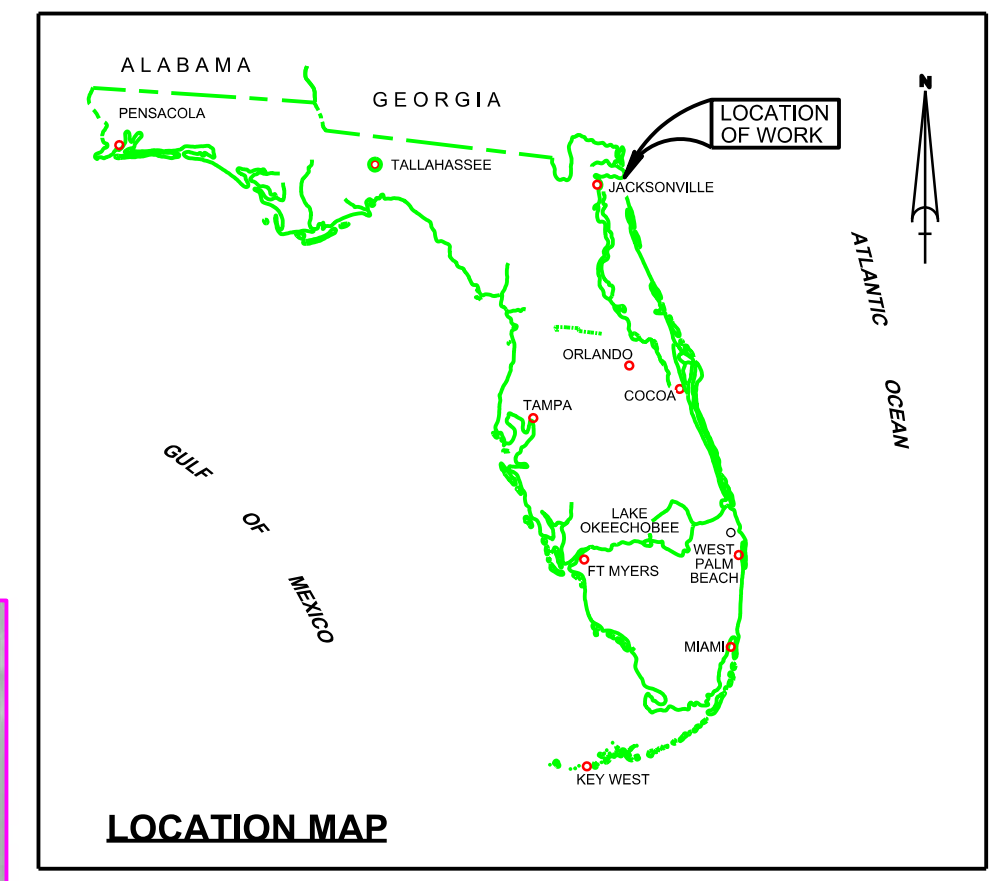


JACKSONVILLE HARBOR, FLORIDA 2nd QUARTER EXAM SURVEY FY21 30, 34, 38, 40 & 42-FOOT PROJECT

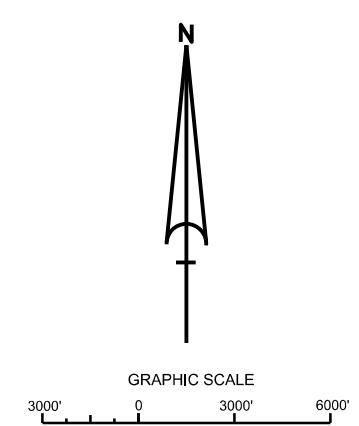


SURVEY NOTES:

- REFER TO SURVEY NO. 21-102.
- TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC GPS AND REFERENCED TO MLLW USING A HYPACK KINEMATIC TIDAL DATUM (KTD) FILE. FILE NAME: (CAMDENGANASSAU-DUVAL-STJOHNS-FLAGLER 20191202.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 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 LOCATIONS:
 REFERENCE BASE LOCATED AT "CHARLIE TOWER ARP" (OPUS PID: BBDC09)
 REFERENCE BASE LOCATED AT "USACE BIMT ARP" (OPUS PID: BBGM25)
 REFERENCE BASE LOCATED AT "USACE JHFO ARP" (OPUS PID: BBGL18)
- DEPTHS DEPICTED BY THIS SURVEY ARE IN FEET AND TENTHS AND REFERENCED TO MEAN LOWER LOW WATER (MLLW). TIDAL EPOCH 1983-2001, AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). NOAA'S VDATUM MODEL WAS USED AND CALIBRATED TO THE PUBLISHED MLLW HEIGHTS OF THE BENCHMARKS ASSOCIATED WITH THE TIDE GAGE SITES SPECIFIED BELOW:
 NOAA TIDAL STATION 872-0218, BAR PILOTS DOCK
 NOAA TIDAL STATION 872-0221, FULTON
 NOAA TIDAL STATION 872-0219, DAMES POINT
 NOAA TIDAL STATION 872-0215, NAVY FUEL DEPOT
 NOAA TIDAL STATION 872-0242, LONG BRANCH
- VERTICAL MEASUREMENTS WERE MADE USING A R2 SONIC MODEL 2024 MULTI-BEAM SYSTEM (240 KHZ), A ROSS MODEL 835C SMARTSOUNDER WITH A DUAL-FREQUENCY (28/200 KHZ) SINGLE-BEAM TRANSDUCER AND A RESON 120P MULTI-BEAM SYSTEM (300 KHZ). ALL SOUNDINGS SHOWN IN HIGH FREQUENCY EXCEPT FOR TERMINAL CHANNEL STATIONS 0+00 THRU 72+00 WHICH ARE IN LOW FREQUENCY (28 KHZ).

VESSEL	DATE OF SURVEY	AREA SURVEYED
SB-44	25-26 FEB 2021	TERMINAL CHANNEL
SV SALZER	03 MAR 2021	CUTS 53-56
SV SALZER	04 MAR 2021	CUTS 44-50
SV SALZER	21, 23, 27 APR 2021	BAR CUT-3
SV SALZER	22 APR 2021	CUTS 8-13
SV SALZER	28 APR 2021	CUTS 6-7
SV SALZER	29 APR 2021	CUTS 14-15
SV SALZER	03 MAY 2021	CUTS 16-40
SV SALZER	26-27 MAY 2021	CUTS 41-42
SV SALZER	02 JUN 2021	CUT 43
- AIDS TO NAVIGATION WERE LOCATED FOR THIS SURVEY. NAVAIDS WERE ALSO USED FROM SURVEY 21-001.
- 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 SURVEY.
- SURVEY ACCURACY 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

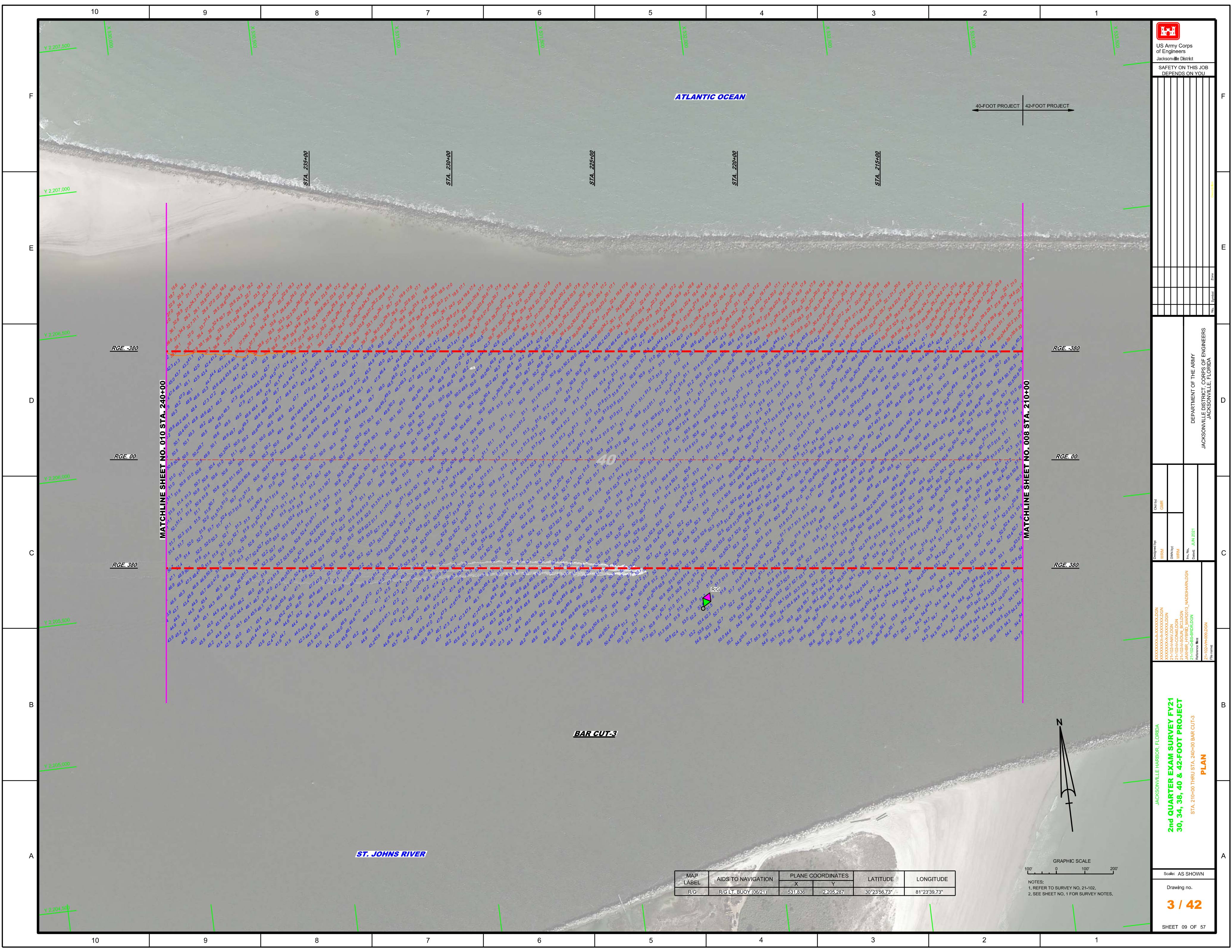


US Army Corps of Engineers
Jacksonville District
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

2nd QUARTER EXAM SURVEY FY21
30, 34, 38, 40 & 42-FOOT PROJECT
INDEX, LOCATION AND VICINITY MAP

Scale: AS SHOWN
Drawing no. 1 / 42
SHEET 01 OF 57



US Army Corps of Engineers

 Jacksonville District

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 DEPENDS ON YOU

DEPARTMENT OF THE ARMY

 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS

 JACKSONVILLE, FLORIDA

Designed by: **WRM**

 Drawn by: **WRM**

 Checked by: **WRM**

 Date: **JUN 2021**

JACKSONVILLE HARBOR, FLORIDA

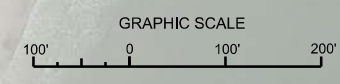
2nd QUARTER EXAM SURVEY FY21

30, 34, 38, 40 & 42-FOOT PROJECT

 STA. 210+00 THRU STA. 240+00 BAR CUT-3

PLAN

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R/G	R/G LT, BUOY (0621)	531.836	2,205.287	30°23'56.73"	81°23'39.73"



NOTES:

 1. REFER TO SURVEY NO. 21-102,

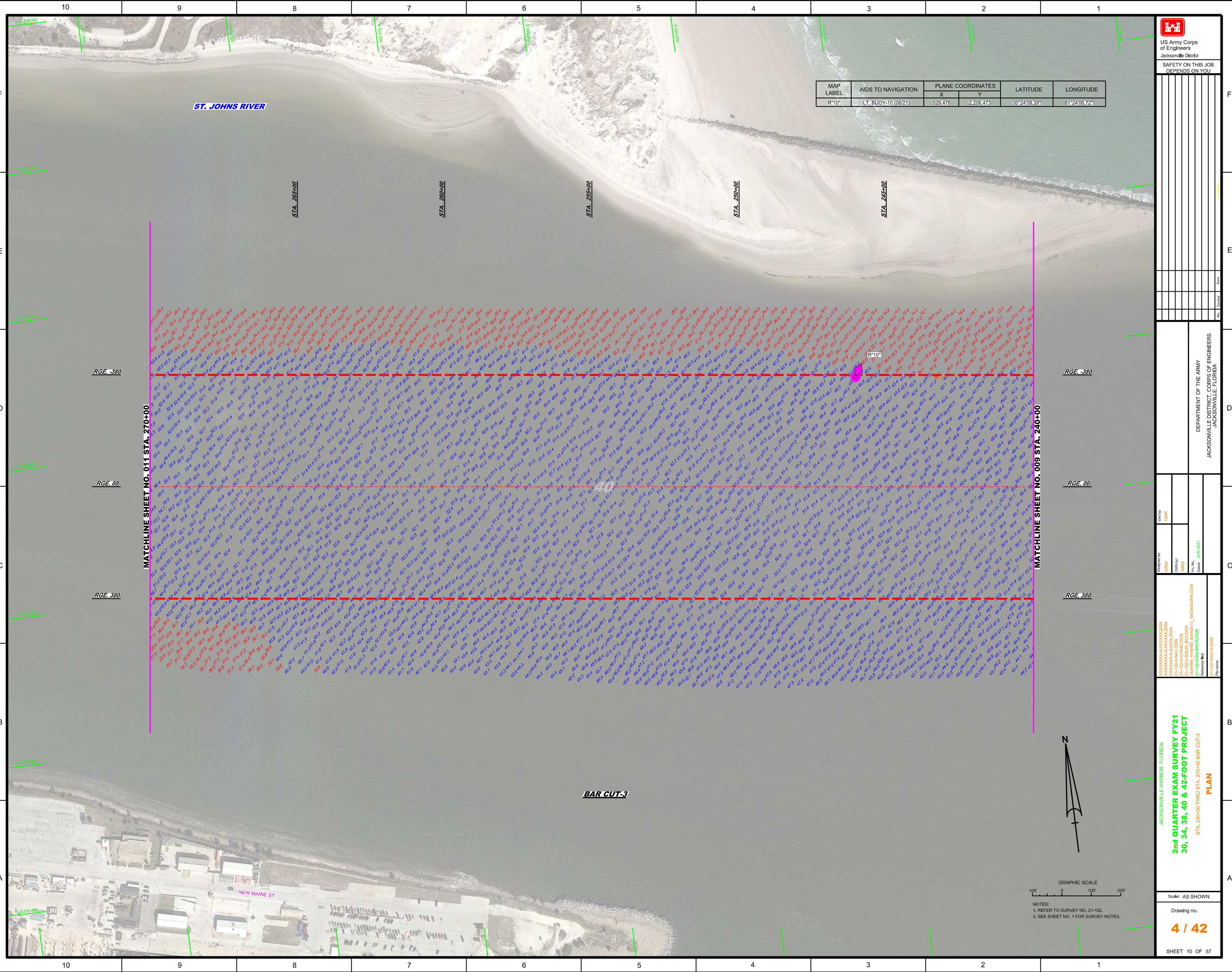
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

Scale: AS SHOWN


 Drawing no.

3 / 42

 SHEET 09 OF 57



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R-10"	LT. BUOY-10 (06/21)	529.476	2,206.473	30°24'08.39"	81°24'06.72"



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MATCHLINE SHEET NO. 011 STA. 270+00

MATCHLINE SHEET NO. 009 STA. 240+00

RGE -380

RGE -380

RGE 00

RGE 00

RGE 380

RGE 380

BAR CUT-3

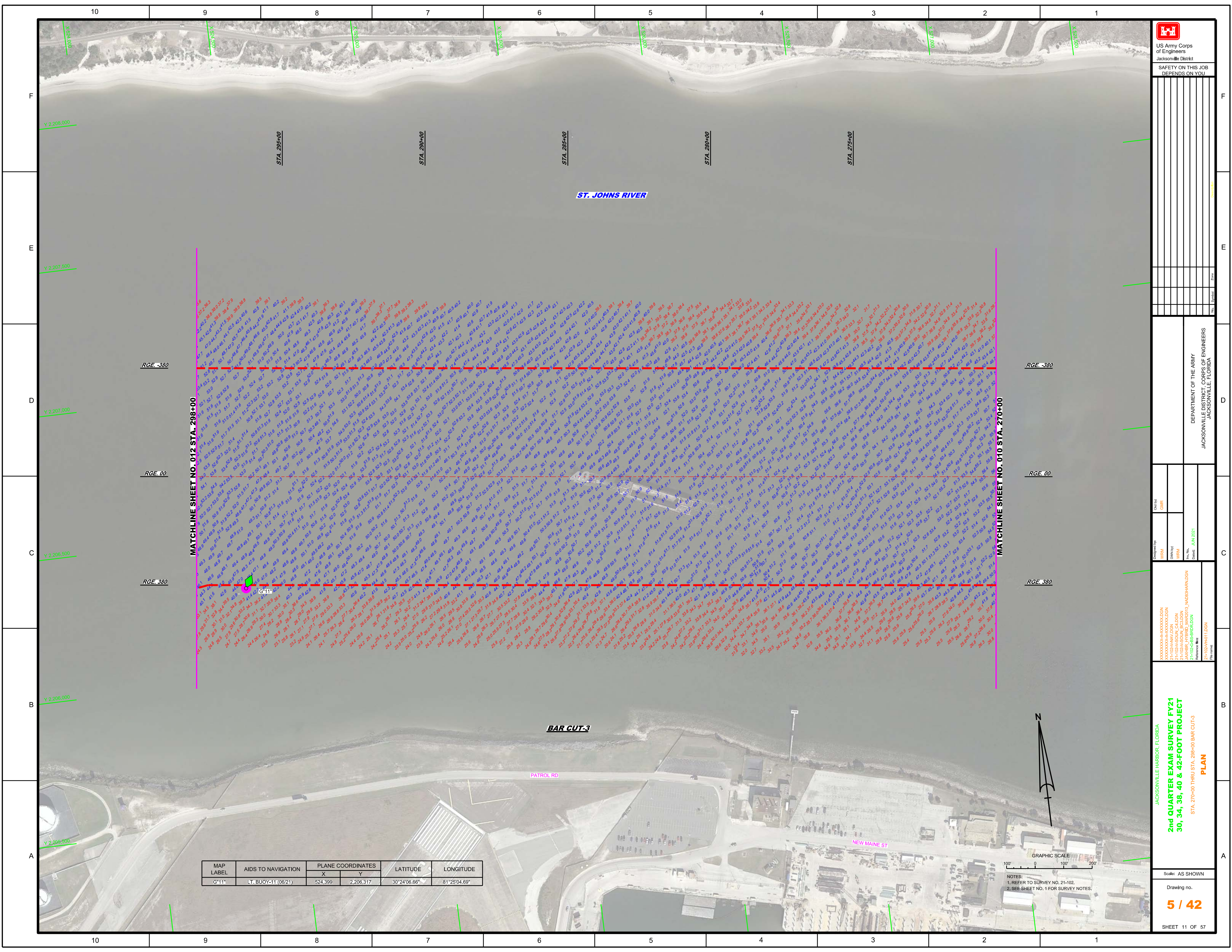
JACKSONVILLE HARBOR, FLORIDA
2nd QUARTER EXAM SURVEY FY21
30, 34, 38, 40 & 42-FOOT PROJECT
 STA. 240+00 THRU STA. 270+00 BAR CUT-3
PLAN

Scale: AS SHOWN

Drawing no.
4 / 42

SHEET 10 OF 57

GRAPHIC SCALE
 100' 0 100' 200'
 NOTES:
 1. REFER TO SURVEY NO. 21-102.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.




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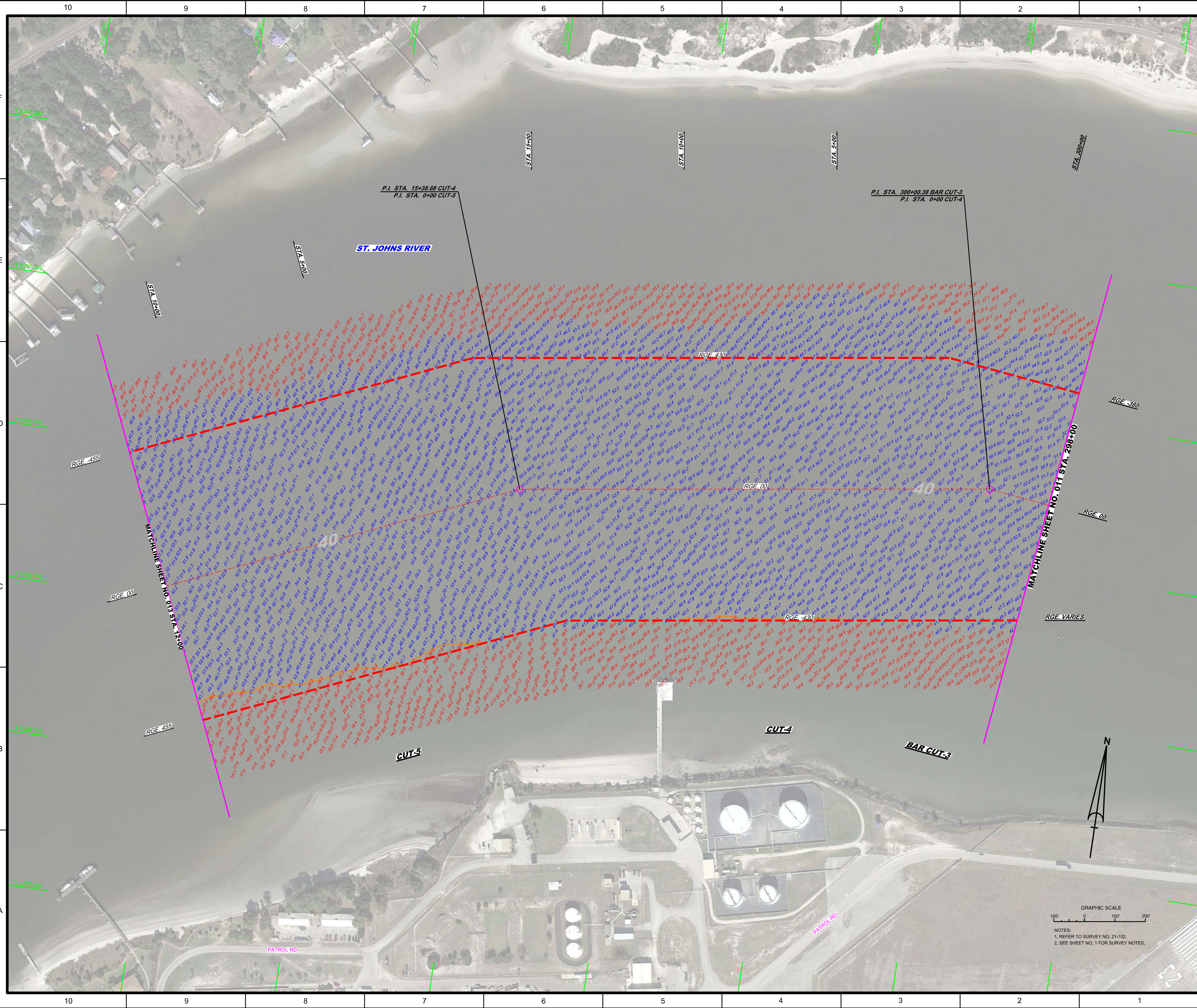
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 JACKSONVILLE, FLORIDA

Designed by: **WRM**
 Checked by: **GHR**
 Drawn by: **WRM**
 Date: **JUN 2021**

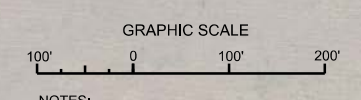
JACKSONVILLE HARBOR, FLORIDA
2nd QUARTER EXAM SURVEY FY21
30, 34, 38, 40 & 42-FOOT PROJECT
 STA. 270+00 THRU STA. 298+00 BAR CUT-3
PLAN
 Scale: AS SHOWN
 Drawing no.
5 / 42
 SHEET 11 OF 57

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*11	LT. BUOY-11 (0621)	524,399	2,206,317	30°24'06.86"	81°25'04.69"

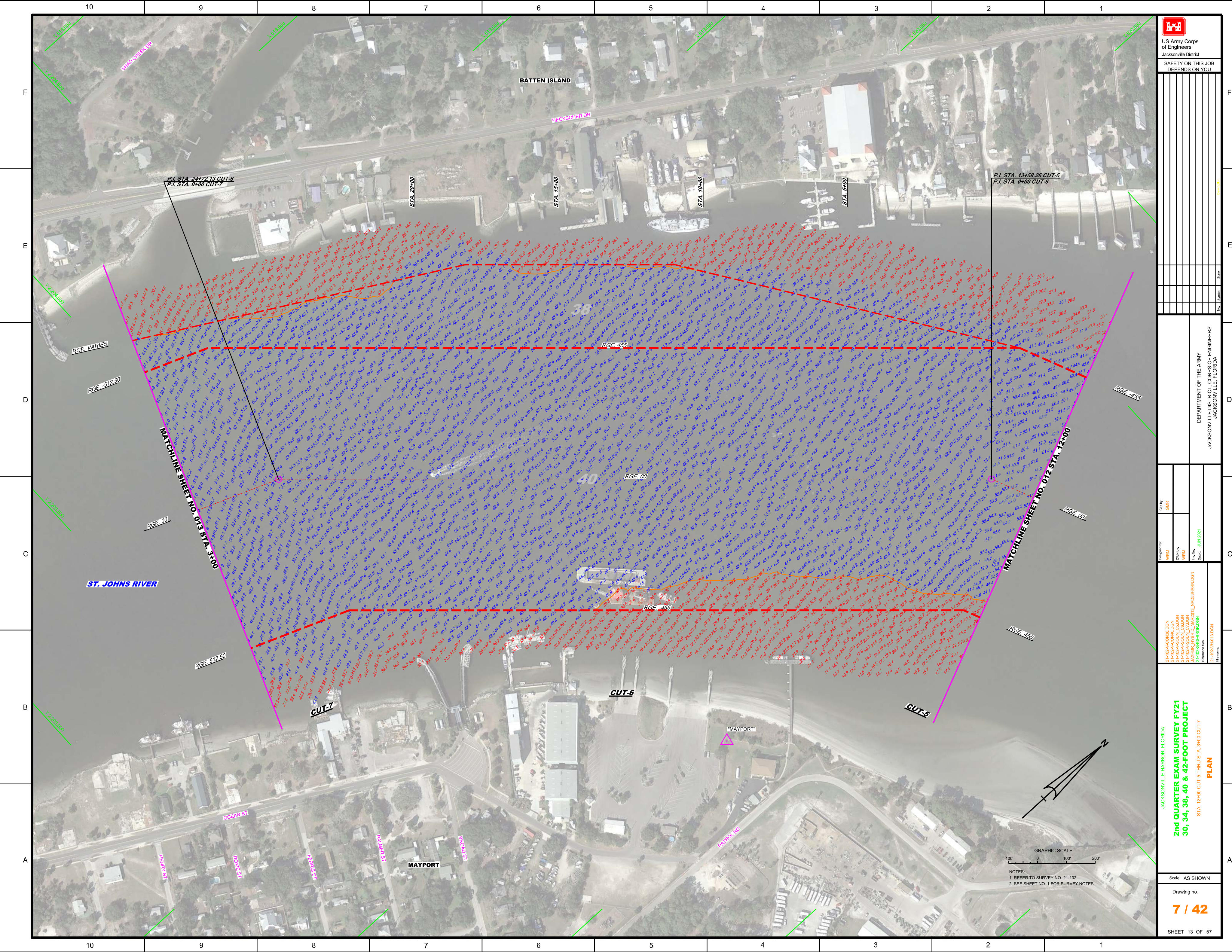
GRAPHIC SCALE
 100' 0 100' 200'
 NOTES:
 1. REFER TO SURVEY NO. 21-102.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.



<p>US Army Corps of Engineers Jacksonville District</p>	
<p>SAFETY ON THIS JOB DEPENDS ON YOU</p>	
<p>DESIGNED BY: WRM CHECKED BY: WRM DATE: JUN 2021</p>	
<p>DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA</p>	
<p>PROJECT: 2nd QUARTER EXAM SURVEY FY21 30, 34, 38, 40 & 42-FOOT PROJECT STA. 298+00 BAR CUT-3 THRU STA. 12+00 CUT-5 PLAN</p>	
<p>Scale: AS SHOWN Drawing no. 6 / 42 SHEET 12 OF 57</p>	



NOTES:
1. REFER TO SURVEY NO. 21-102.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



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Jacksonville District

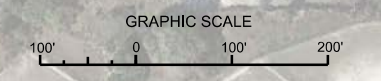
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JACKSONVILLE, FLORIDA

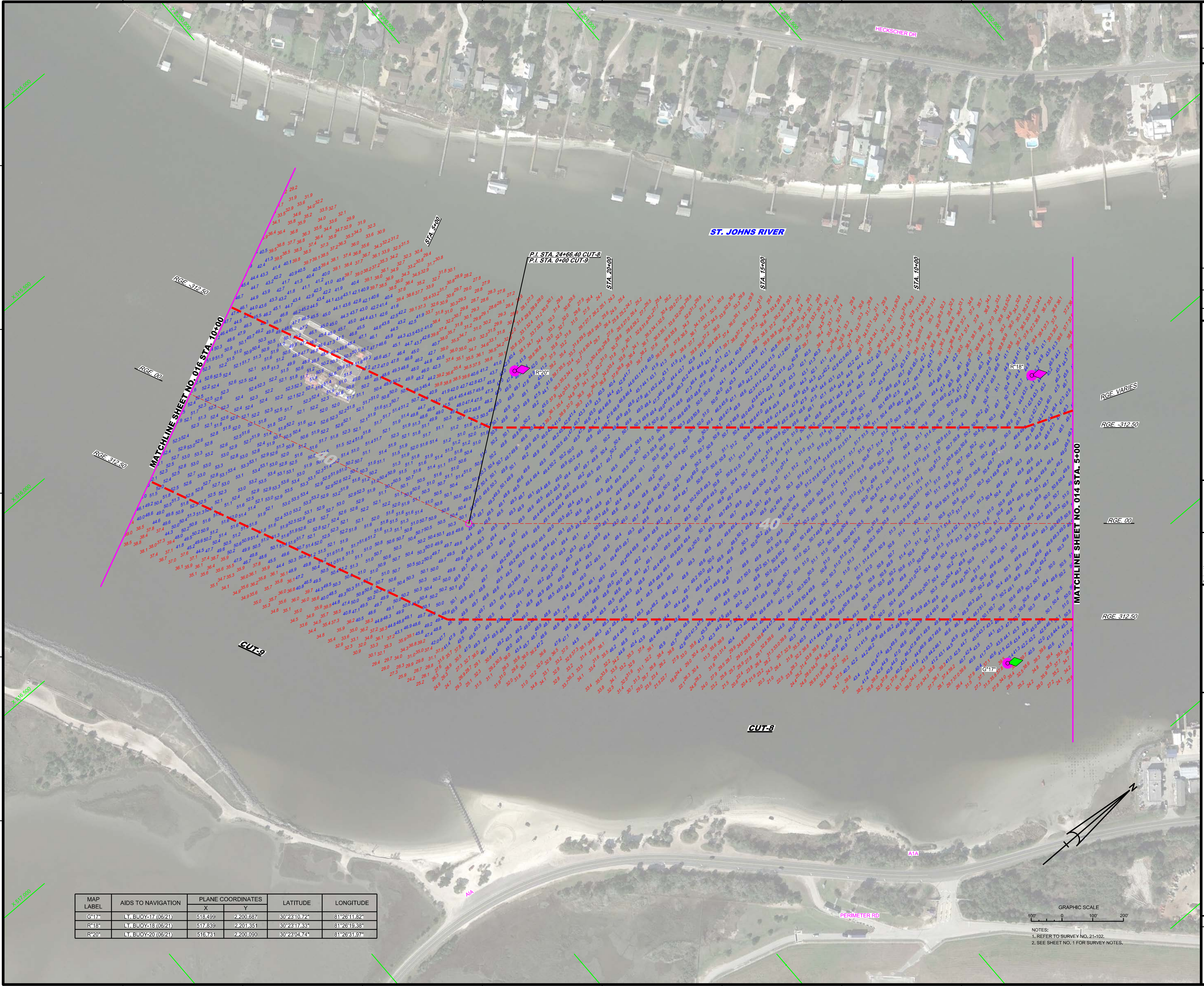
Checked By: GHR
Designed By: WRM
Drawn By: WRM
Reviewed By: JAWBER, TYPED, JAWBER, JAWBER
Date: JUN 2021

JACKSONVILLE HARBOR, FLORIDA
**2nd QUARTER EXAM SURVEY FY21
30, 34, 38, 40 & 42-FOOT PROJECT**
STA. 12+00 CUT-5 THRU STA. 3+00 CUT-7
PLAN

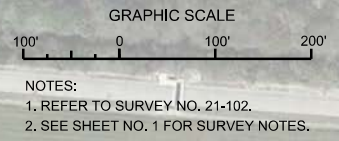
Scale: AS SHOWN
Drawing no. **7 / 42**
SHEET 13 OF 57



NOTES:
1. REFER TO SURVEY NO. 21-102.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G-17"	LT. BUOY-17 (06/21)	518,499	2,200,687	30°23'10.72"	81°26'11.82"
R-18"	LT. BUOY-18 (06/21)	517,839	2,201,351	30°23'17.33"	81°26'19.38"
R-20"	LT. BUOY-20 (06/21)	516,731	2,200,090	30°23'04.74"	81°26'31.97"




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 JACKSONVILLE, FLORIDA

2nd QUARTER EXAM SURVEY FY21
 30, 34, 38, 40 & 42-FOOT PROJECT
 STA. 5+00 CUT-9 THRU STA. 10+00 CUT-9
 PLAN

JACKSONVILLE HARBOR, FLORIDA
 Scale: AS SHOWN
 Drawing no.
9 / 42
 SHEET 15 OF 57

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R22	LT. BUOY 22 (05/21)	514,744	2,199,194	30°22'55.79"	81°28'54.96"



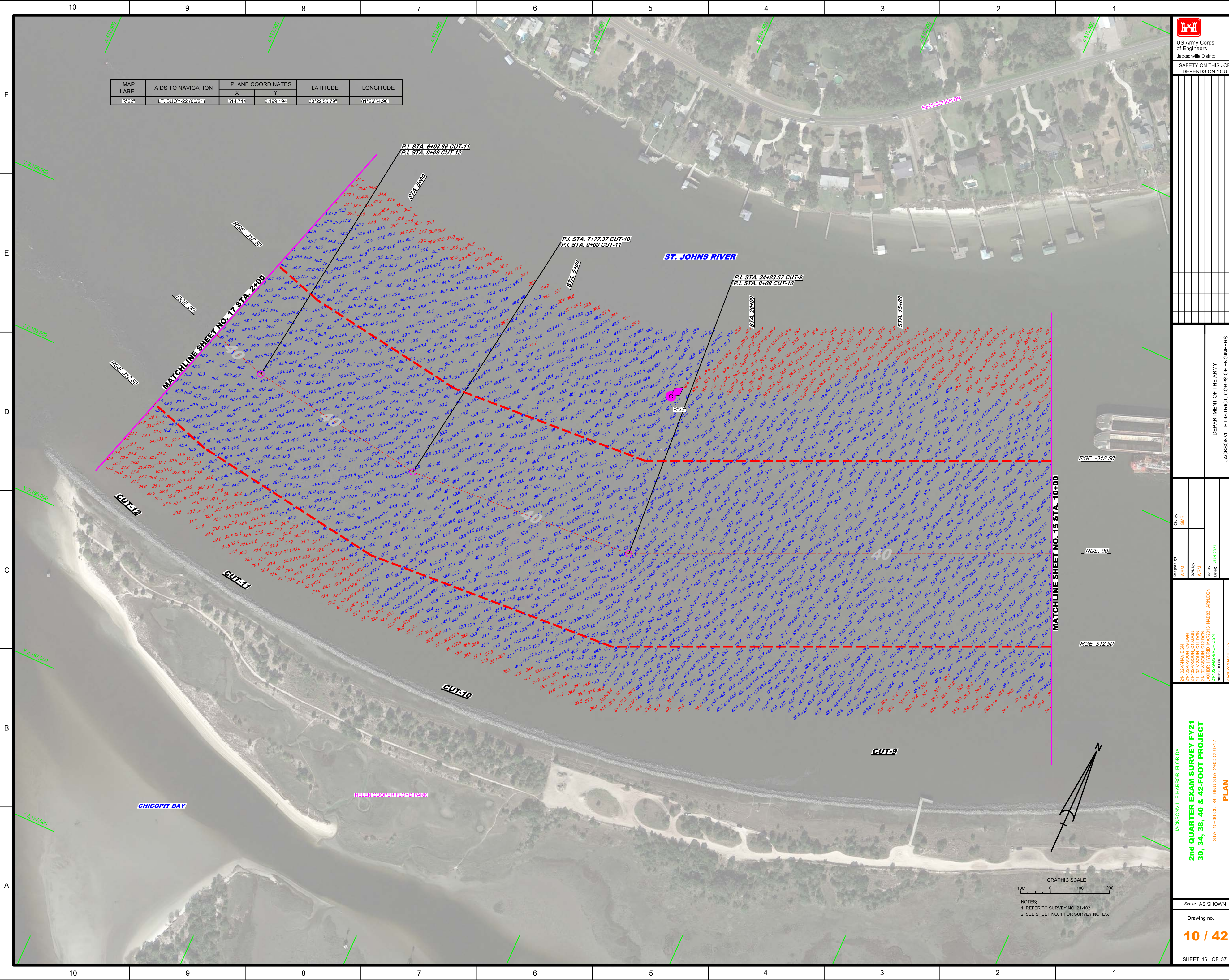
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JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Checked By: GHR
Designed By: WRM, GHR
Drawn By: WRM, GHR
Project No.: 21-1024-HQ-10-DGN
Revision: 01
Date: JUN 2021

JACKSONVILLE HARBOR, FLORIDA
**2nd QUARTER EXAM SURVEY FY21
30, 34, 38, 40 & 42-FOOT PROJECT**
STA. 10+00 CUT-9 THRU STA. 2+00 CUT-12
PLAN

Scale: AS SHOWN
Drawing No. **10 / 42**
SHEET 16 OF 57



GRAPHIC SCALE
0 100 200
NOTES:
1. REFER TO SURVEY NO. 21-102.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.