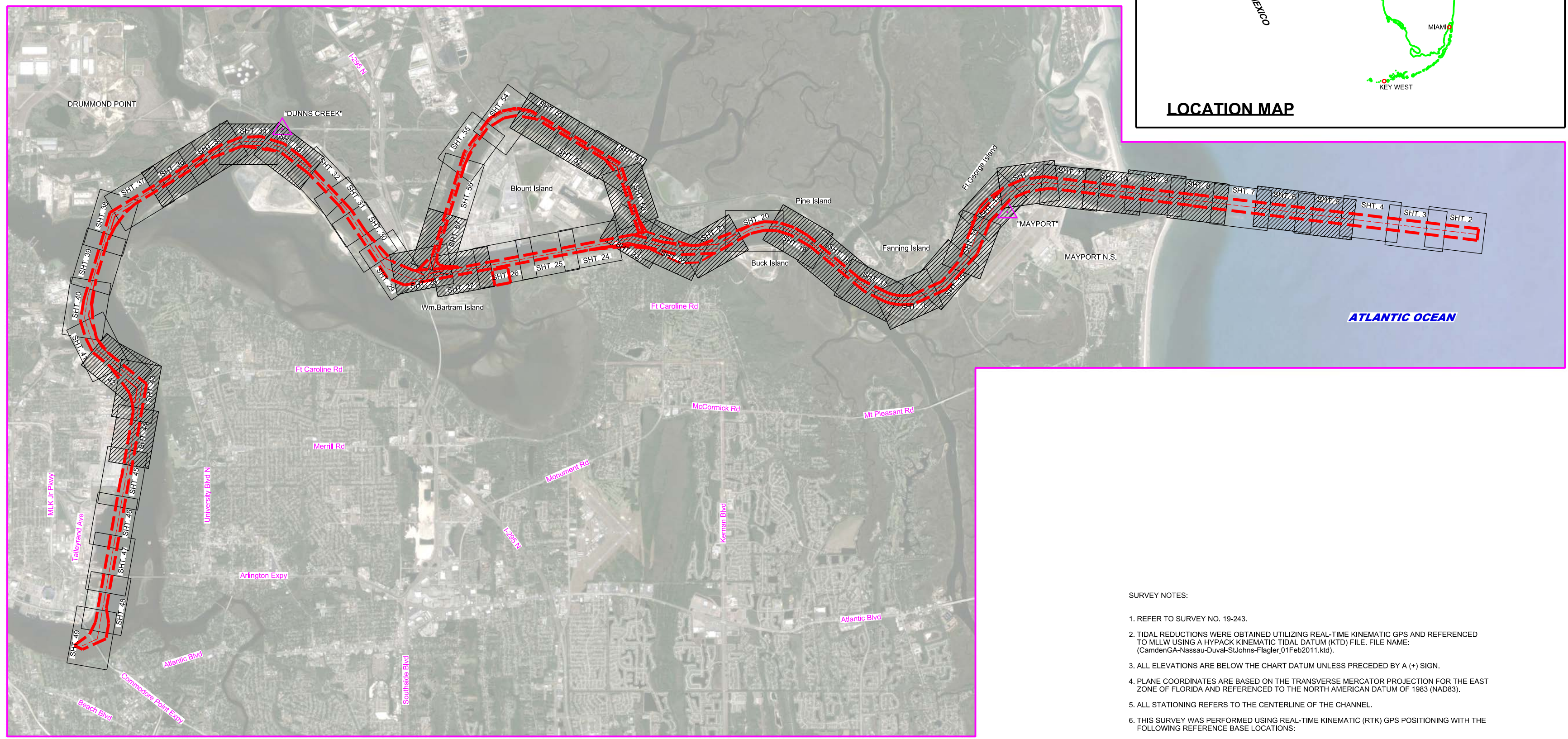
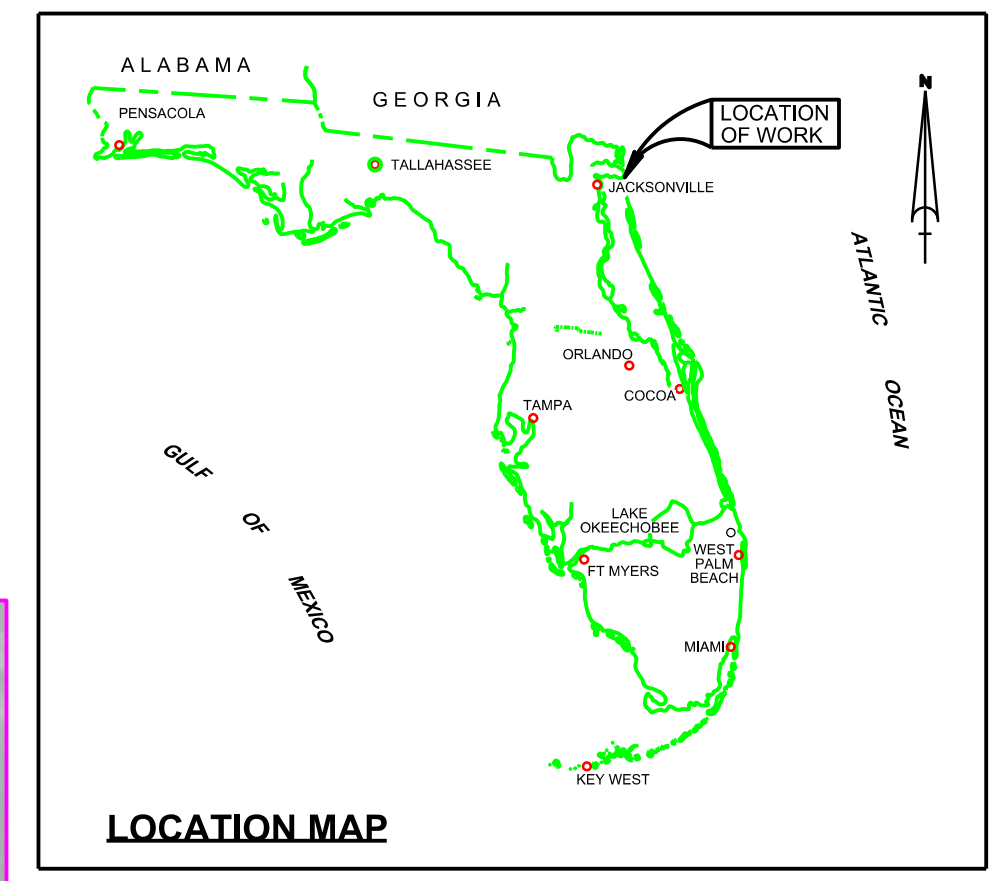


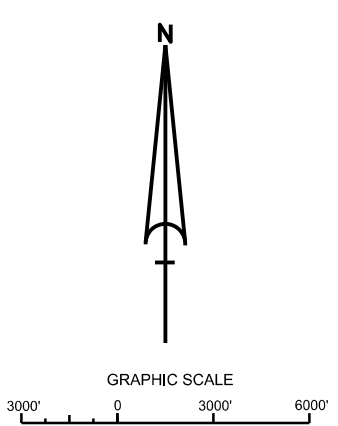
JACKSONVILLE HARBOR, FLORIDA 4th QUARTER EXAM SURVEY FY19 30, 34, 38, 40 & 42-FOOT PROJECT



SURVEY NOTES:

- REFER TO SURVEY NO. 19-243.
- TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC GPS AND REFERENCED TO MLLW USING A HYPACK KINEMATIC TIDAL DATUM (KTD) FILE. FILE NAME: (CamdenGA-Nassau-Duval-St Johns-Flagler 01Feb2011.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 "872 0218 A" (PID: D19221) FOR AREAS 1-6A
REFERENCE BASE LOCATED AT "DUNNS CREEK" (PID: BBCT64) FOR AREAS 7-11
- 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 GAUGE SITES SPECIFIED BELOW:
NOAA TIDAL STATION 872-0218, BAR PILOTS DOCK
NOAA TIDAL STATION 872-0219, DAMES POINT
- VERTICAL MEASUREMENTS WERE MADE USING AN ODOM CV 100 DUAL-FREQUENCY FATHOMETER OPERATING AT 33 AND 200 KHZ, AND A TELEDYNE RESON T20-P MULTI-BEAM SONAR OPERATING AT 200 KHZ. ALL SOUNDINGS SHOWN IN HIGH FREQUENCY EXCEPT FOR TERMINAL CHANNEL STATIONS 20+00 THRU 30+00 WHICH ARE IN LOW FREQUENCY.
- VESSEL DATE OF SURVEY AREA SURVEYED
SEA ARK 16-27 SEP 2019 AREAS 1-11
- AIDS TO NAVIGATION WERE LOCATED FOR 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 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.
- SURVEY PERFORMED BY DEGROVE SURVEYORS, INC.

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



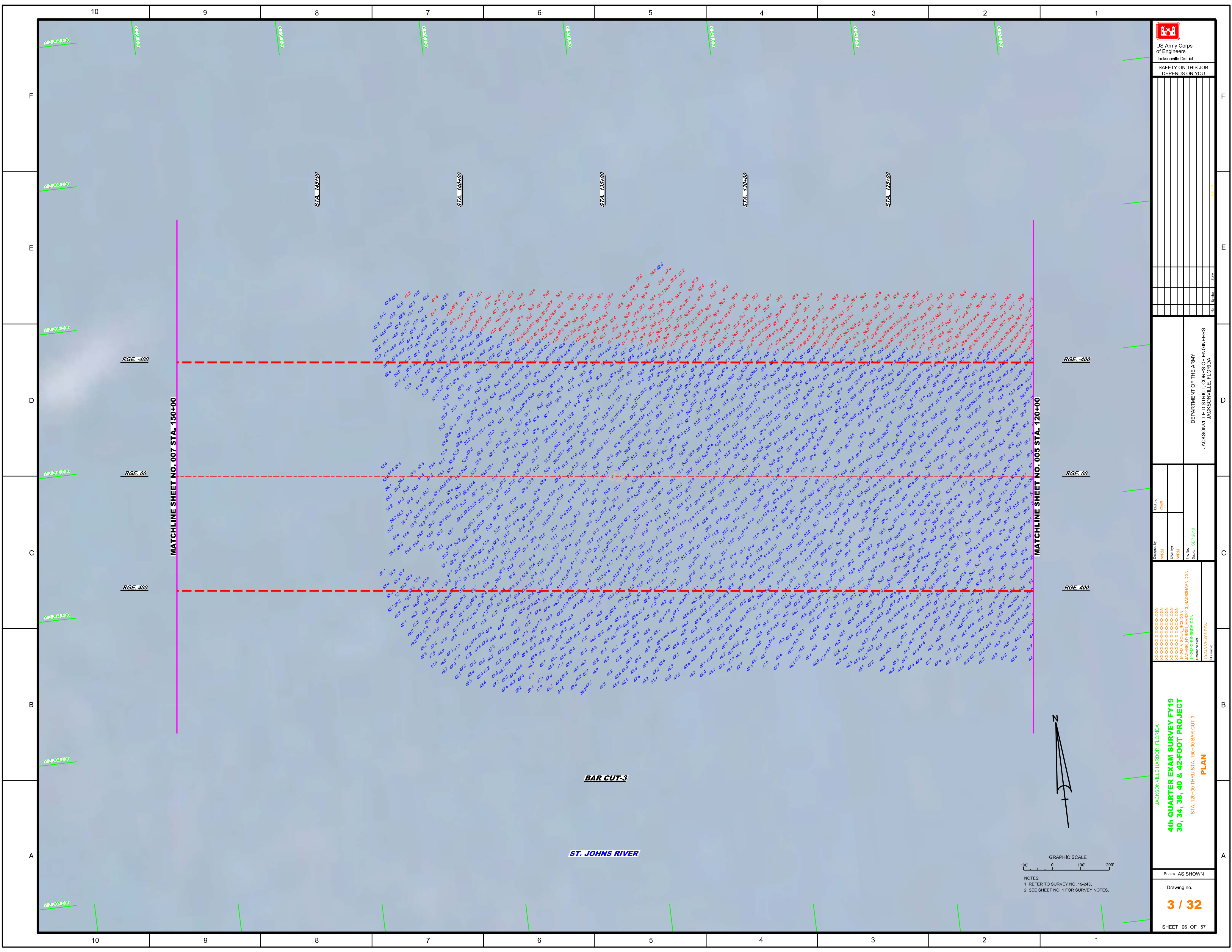
US Army Corps of Engineers
Jacksonville District
SAFETY ON THIS JOB DEPENDS ON YOU

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

Check by: GHR
Designed by: WRM
Drawn by: WRM
File No.: JAXHR 19243-EG-BB-016.DGN
Reference File: 19-243-EG-H01.DGN
Date: SEP 2019

JACKSONVILLE HARBOR, FLORIDA
4th QUARTER EXAM SURVEY FY19
30, 34, 38, 40 & 42-FOOT PROJECT
INDEX, LOCATION AND VICINITY MAP

Scale: AS SHOWN
Drawing no. 1 / 32
SHEET 01 OF 57



MATCHLINE SHEET NO. 007 STA. 150+00

MATCHLINE SHEET NO. 005 STA. 120+00

BAR CUT-3

ST. JOHNS RIVER



GRAPHIC SCALE
Scale: AS SHOWN
NOTES:
1. REFER TO SURVEY NO. 19-243.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



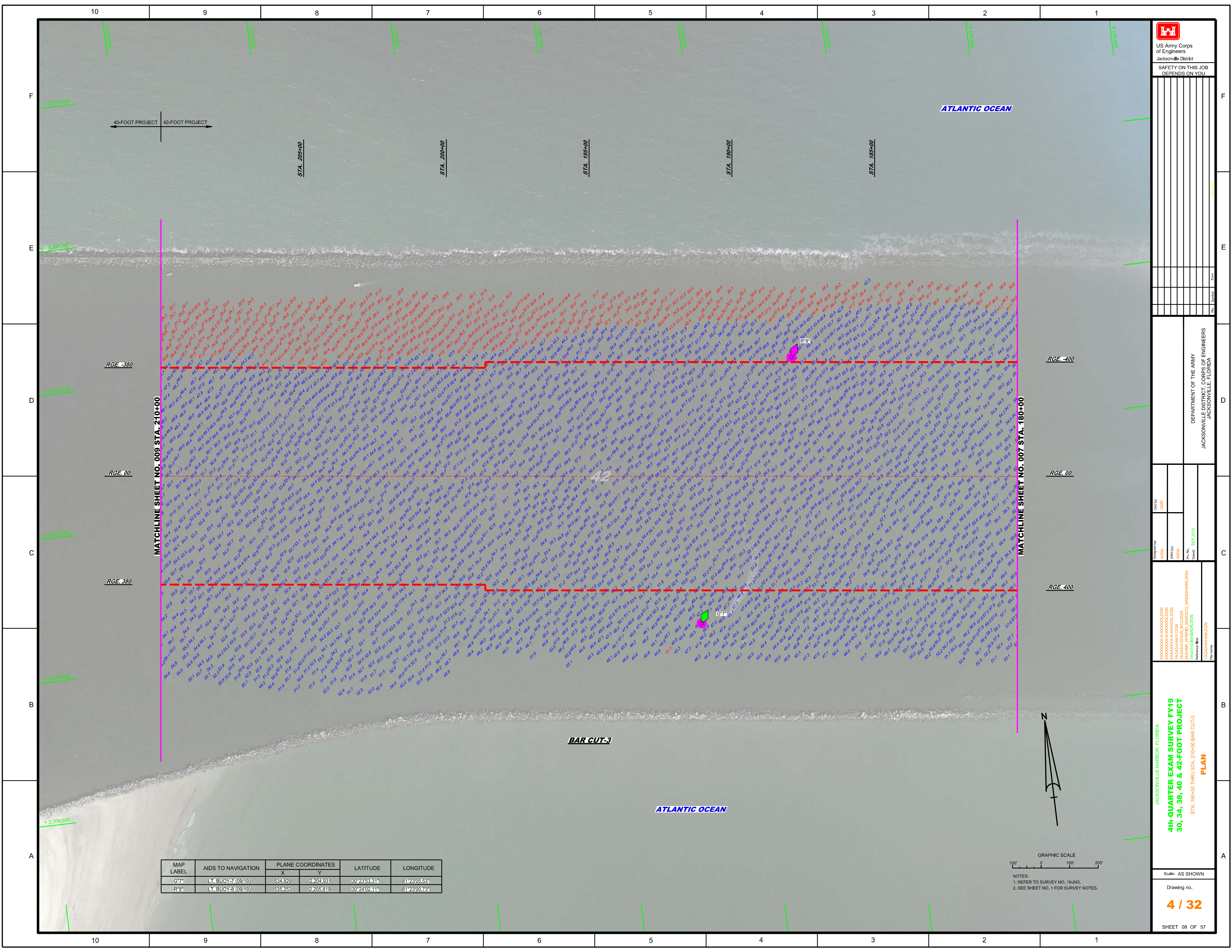
US Army Corps
of Engineers
Jacksonville District


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DEPENDS ON YOU

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

Checked By: GHR
Designed By: WRM
Drawn By: WRM
File No: 19-243-000
Date: 09-20-2019

JACKSONVILLE HARBOR, FLORIDA
4th QUARTER EXAM SURVEY FY19
30, 34, 38, 40 & 42-FOOT PROJECT
STA. 120+00 THRU STA. 150+00 BAR CUT-3
PLAN



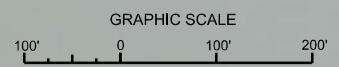

 US Army Corps of Engineers
 Jacksonville District
 SAFETY ON THIS JOB
 DEPENDS ON YOU

Designed by	WRM
Checked by	GHR
Drawn by	WRM
Reviewed by	JANER (YPRD) MAR03, NA03BARDON
Date	SEP 2019
Project	19-24-VH-00-00

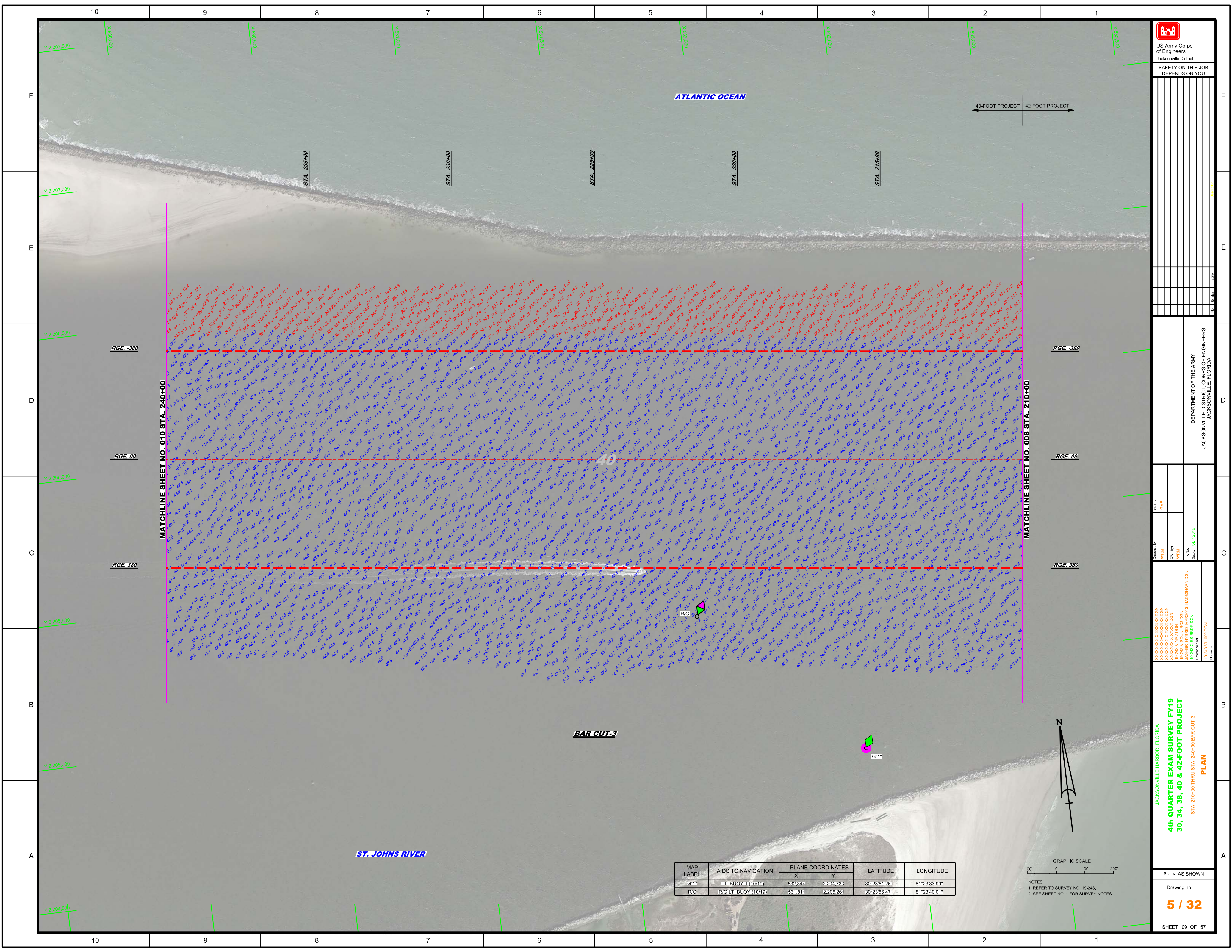
JACKSONVILLE HARBOR, FLORIDA
4th QUARTER EXAM SURVEY FY19
30, 34, 38, 40 & 42-FOOT PROJECT
 STA. 190+00 THRU STA. 210+00 BAR CUT-3
PLAN

Scale: AS SHOWN
 Drawing no.
4 / 32
 SHEET 08 OF 57

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G7*	LT BUOY (09/19)	534829	2204931	30°23'53.81"	81°23'05.53"
R8*	LT BUOY (09/19)	535253	2205619	30°24'02.41"	81°23'00.73"



NOTES:
 1. REFER TO SURVEY NO. 19-243.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.



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

4th QUARTER EXAM SURVEY FY19

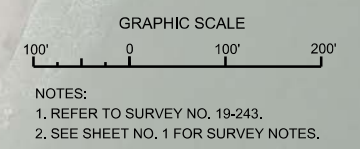
 30, 34, 38, 40 & 42-FOOT PROJECT

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

PLAN

SHEET 09 OF 57

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G**	LT. BUOY-1 (10/19)	532.344	2,204.733	30°23'51.26"	81°23'33.90"
R/G	R/G LT. BUOY (10/19)	531.811	2,205.261	30°23'56.47"	81°23'40.01"



MATCHLINE SHEET NO. 010 STA. 240+00

MATCHLINE SHEET NO. 008 STA. 210+00

RGE -380

RGE -380

RGE 00

RGE 00

RGE 380

RGE 380

BAR CUT-3

ST. JOHNS RIVER

ATLANTIC OCEAN

STA. 235+00

STA. 230+00

STA. 225+00

STA. 220+00

STA. 215+00

Y 2,207,500

Y 2,207,000

Y 2,206,500

Y 2,206,000

Y 2,205,500

Y 2,205,000

Y 2,204,500

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E

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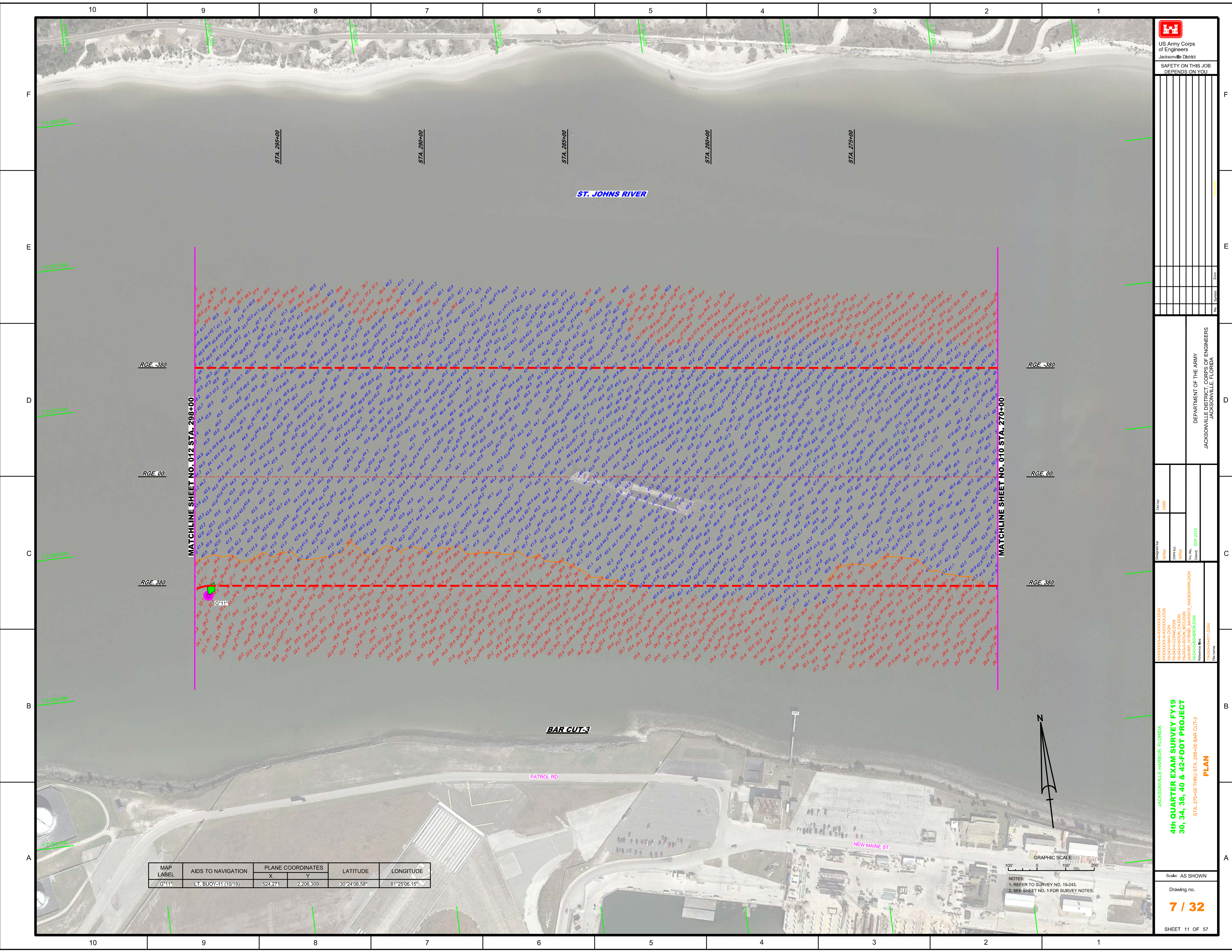
E

D

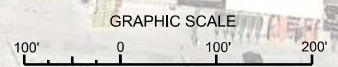
C

B

A



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G11*	LT. BUOY-11 (10/19)	524,271	2,206,309	30°24'06.58"	81°25'06.15"



NOTES:
 1. REFER TO SURVEY NO. 19-243.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

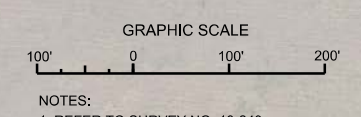
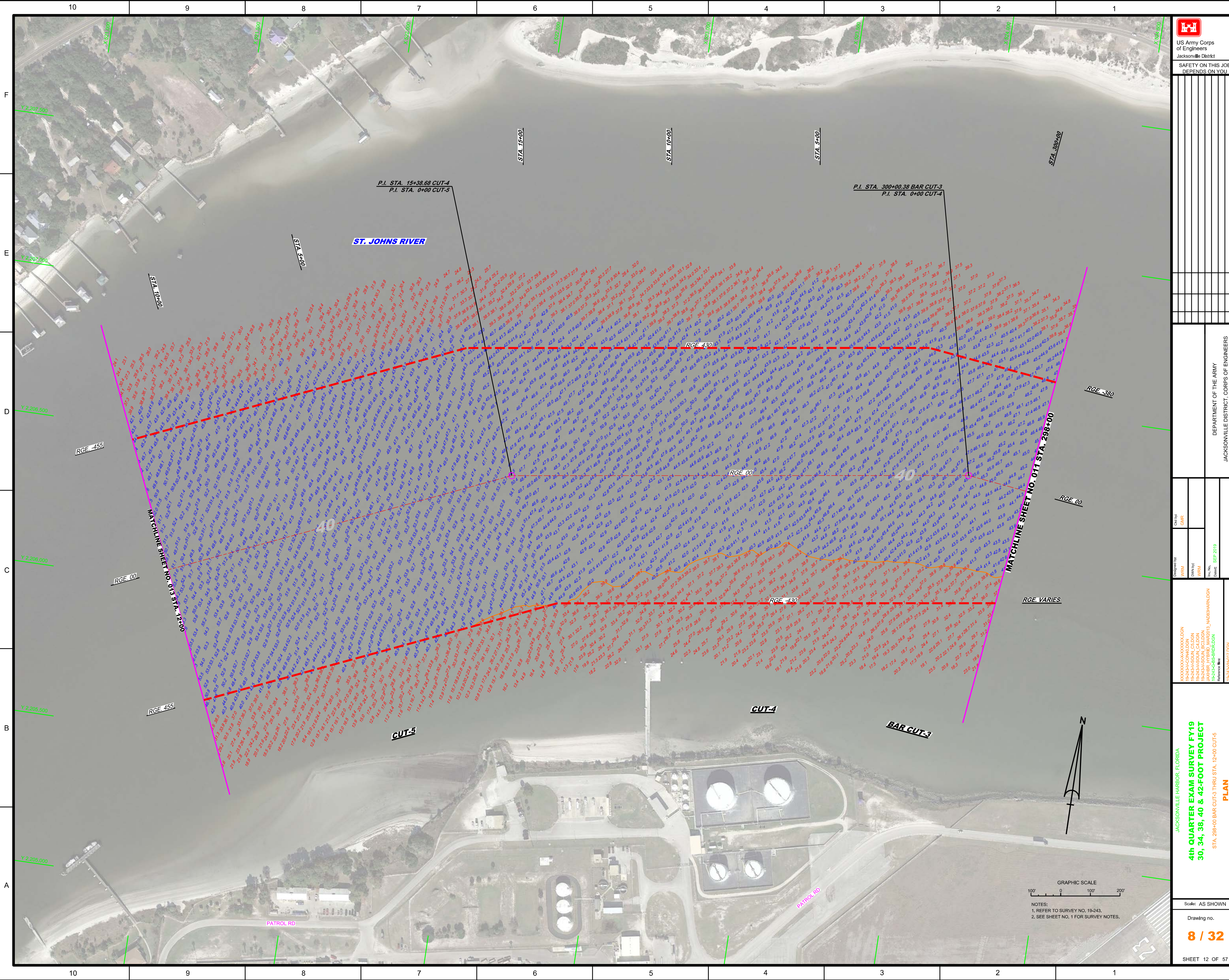
 US Army Corps of Engineers Jacksonville District SAFETY ON THIS JOB DEPENDS ON YOU	
DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA	Drawing No. 7 / 32 SHEET 11 OF 57

JACKSONVILLE HARBOR, FLORIDA
4th QUARTER EXAM SURVEY FY19
30, 34, 38, 40 & 42-FOOT PROJECT
 STA. 270+00 THRU STA. 298+00 BAR CUT-3
PLAN

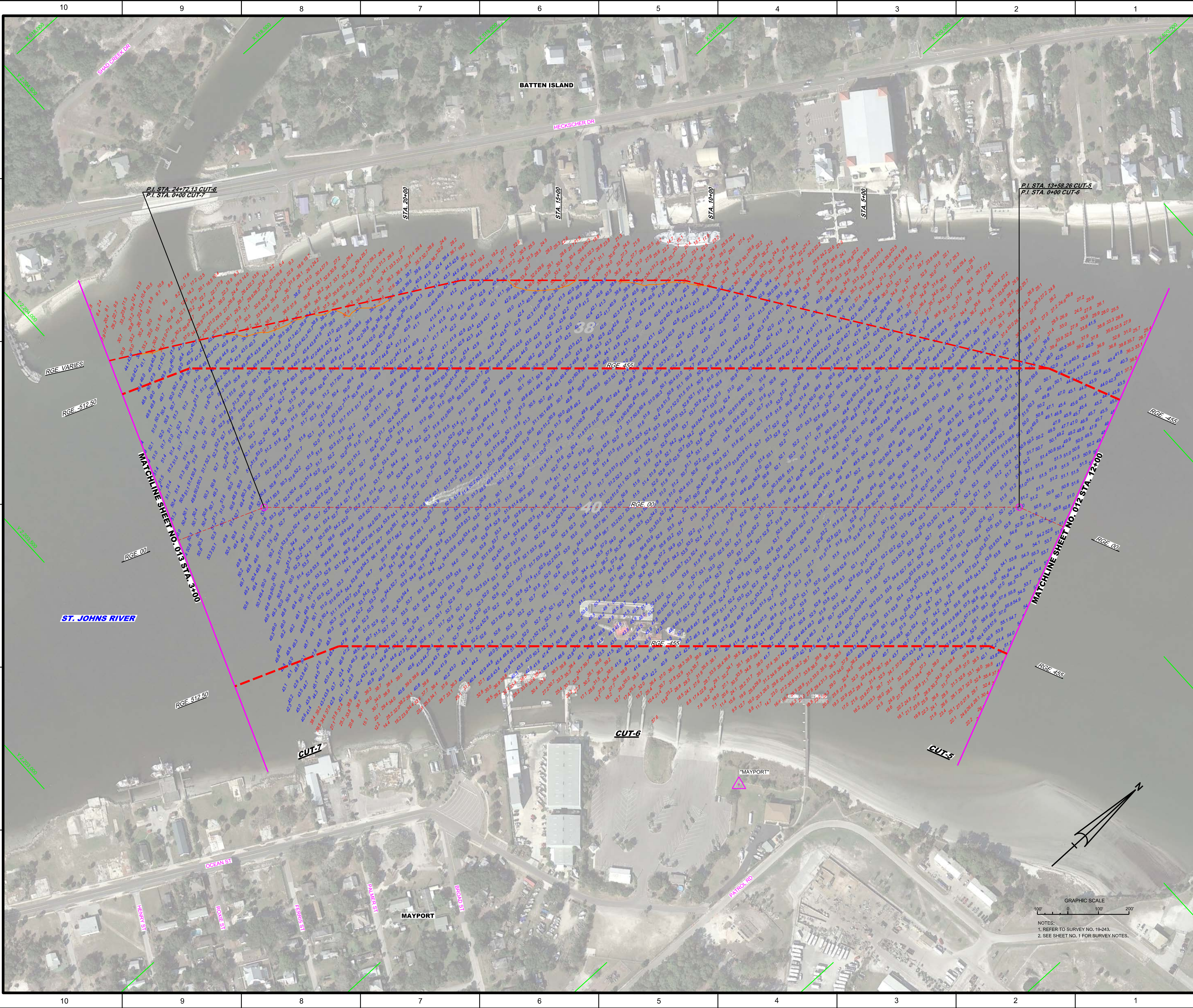
Scale: AS SHOWN
 Drawing No.: 7 / 32
 SHEET 11 OF 57

Call By: GHR
 Designed By: MRM
 Drawn By: MRM
 Date: SEP 2019

Reference: 19-243-10-1101.DGN
 19-243-10-1101.DGN
 19-243-10-1101.DGN
 19-243-10-1101.DGN
 19-243-10-1101.DGN
 19-243-10-1101.DGN



NOTES:
1. REFER TO SURVEY NO. 19-243.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



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

Checked By: GHR
Designed By: WRM
Drawn By: WRM
Date: SEP 2019

JACKSONVILLE HARBOR, FLORIDA
4th QUARTER EXAM SURVEY FY19
30, 34, 38, 40 & 42-FOOT PROJECT
STA. 12+00 CUT-5 THRU STA. 3+00 CUT-7
PLAN

Scale: AS SHOWN
Drawing no. 9 / 32
SHEET 13 OF 57

