

# KEY WEST HARBOR MONROE COUNTY, FLORIDA EXAMINATION SURVEY FY16 8, 12, 26, 30 AND 34-FOOT PROJECT

### SURVEY NOTES

- REFER TO SURVEY NO. 16-024.
- ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) TIDAL DATUM.
- TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL. KTD FILE NAME IS: "KEYWEST\_07JAN2011.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.
- DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO 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 SITE SPECIFIED BELOW:  
NOAA TIDAL STATION 872-4580, KEY WEST, FLORIDA
- THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:  
REFERENCE BASE LOCATED AT "KH-04" (PID: BBCF03)  
TIDE STAFF LOCATED FROM "KH-08" (PID: AA1753)
- VERTICAL MEASUREMENTS WERE MADE USING A R2SONIC 2024 MULTI-BEAM SYSTEM OPERATING AT 240 KHZ AND A ROSS SMARTSOUNDER OPERATING AT 28/200 KHZ. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.
- 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 USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 30 NOV 13 AND EM 1110-2-6056, STANDARDS AND PROCEDURES FOR REFERENCING PROJECT ELEVATION GRADES TO NATIONWIDE VERTICAL DATUMS, 30 NOV 13.

LEGEND	
	BENCHMARK
	LIGHTED BEACON
	GREEN DAY BEACON
	RED DAY BEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	TIDE STAFF
	PROJECT DEPTH

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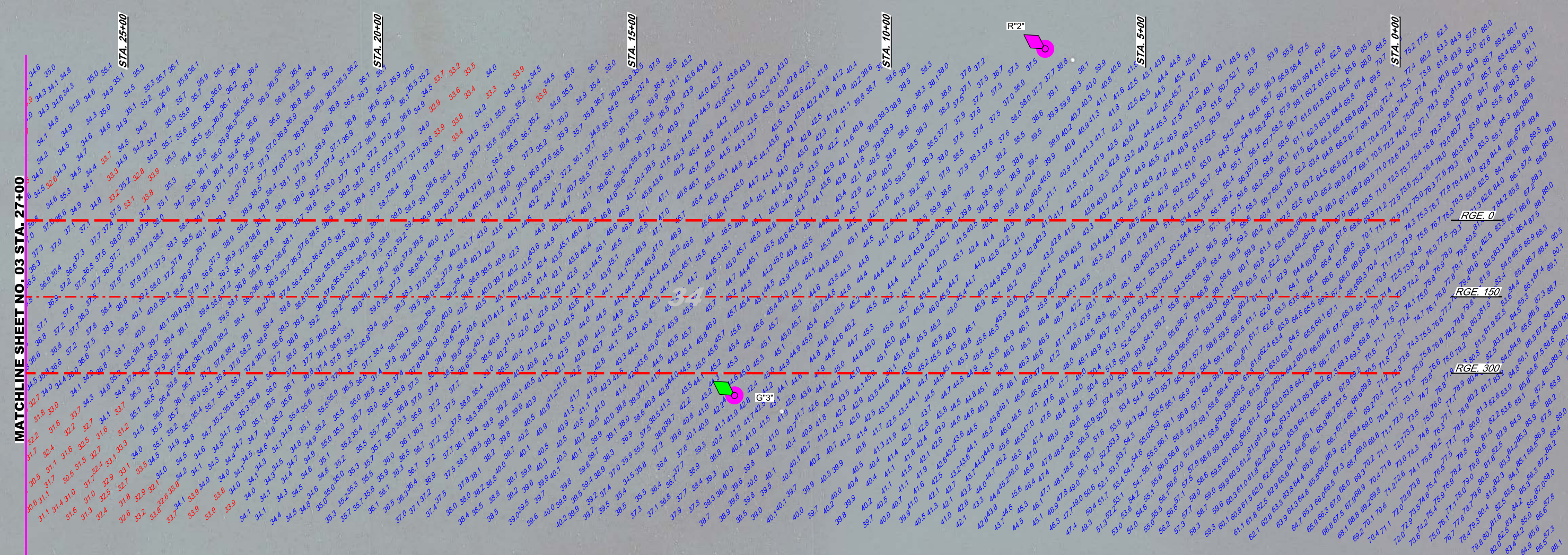
DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA

KEY WEST HARBOR  
MONROE COUNTY, FLORIDA  
EXAMINATION SURVEY FY16  
8, 12, 26, 30 & 34-FOOT PROJECT  
INDEX, LOCATION AND VICINITY  
MAP

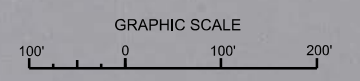
Scale: AS SHOWN  
Drawing no.  
**1 / 20**  
SHEET 01 OF 26

**STRAITS OF FLORIDA**

**MAIN SHIP CHANNEL**



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY-2 (0416)	390.124	49.824	24°28'06.98"	81°47'59.61"
LT BUOY-3 (0416)	389.408	50.492	24°28'12.57"	81°48'07.40"

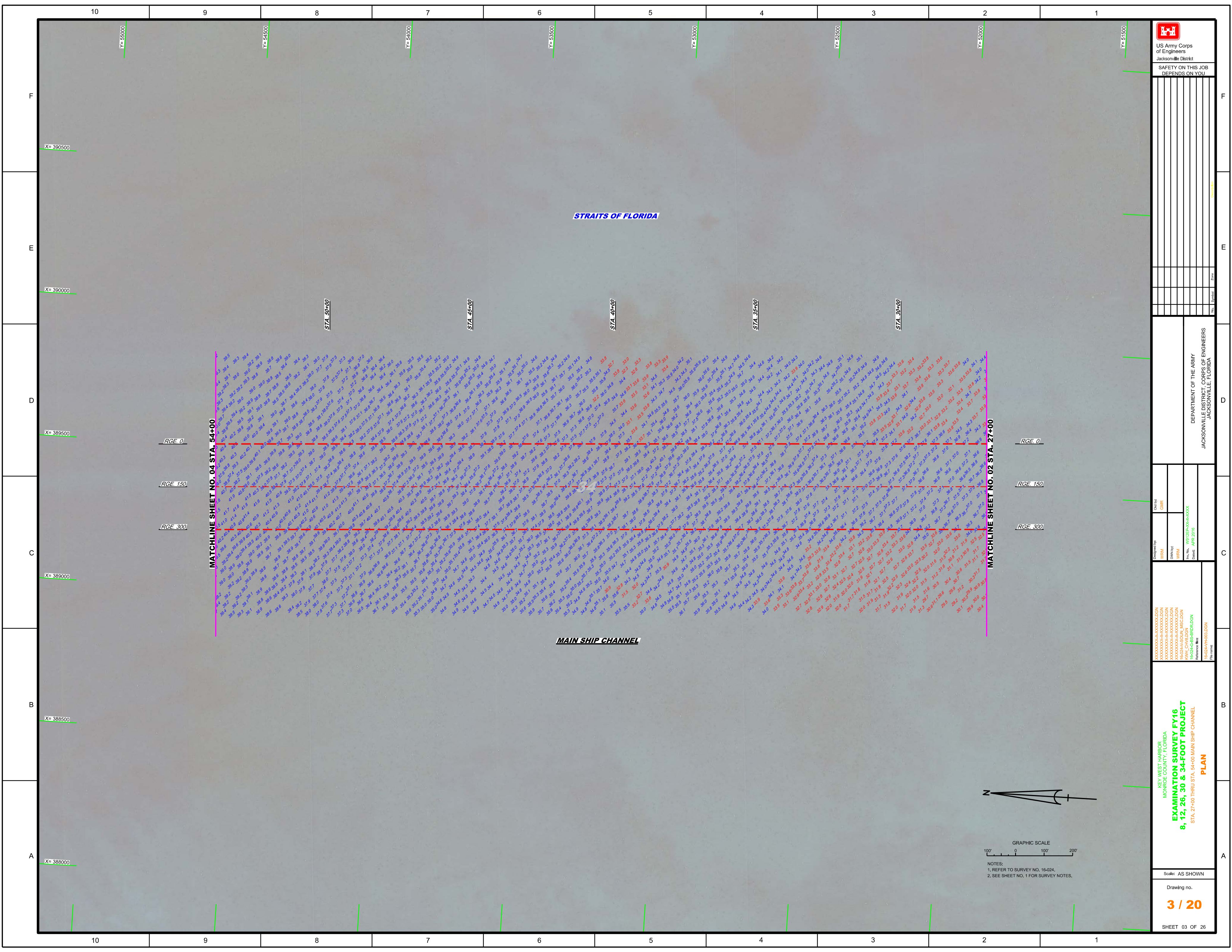



NOTES:  
1. REFER TO SURVEY NO. 16-024.  
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

KEY WEST HARBOR  
MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16**  
8, 12, 26, 30 & 34-FOOT PROJECT  
STA. 0+00 THRU STA. 27+00 MAIN SHIP CHANNEL  
**PLAN**

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

Designed by: WRM  
Checked by: GHR  
Drawn by: WRM  
In Charge: WRM  
Date: APR 2016



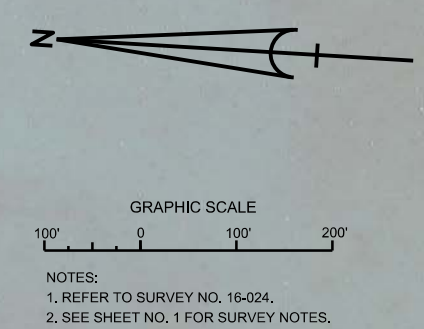

  
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 JACKSONVILLE, FLORIDA

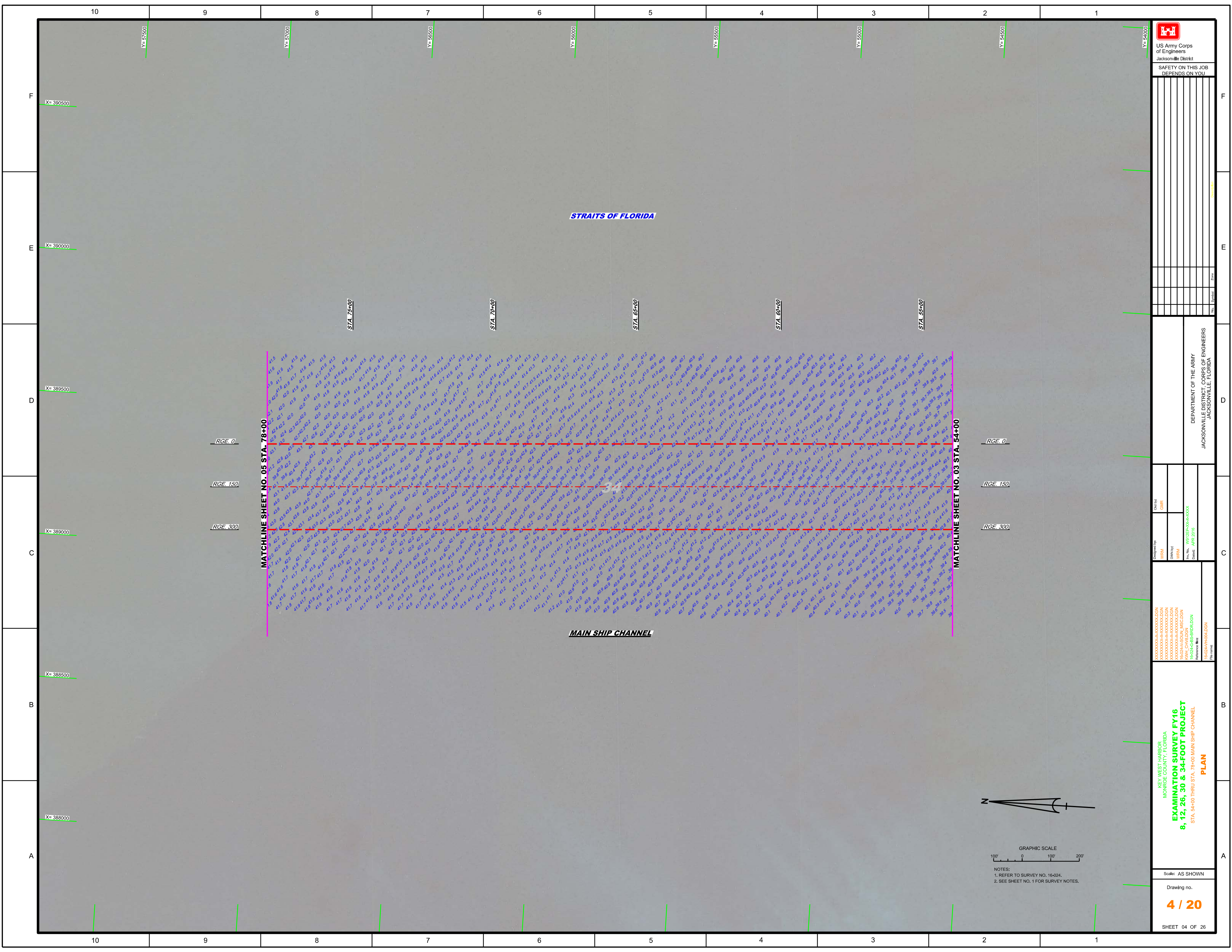
Drawn by: **WRM**  
 Checked by: **GHR**  
 Date: **APR 2016**


KEY WEST HARBOR  
 MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
 STA. 27+00 THRU STA. 54+00 MAIN SHIP CHANNEL  
**PLAN**

Scale: AS SHOWN  
 Drawing no.  
**3 / 20**  
 SHEET 03 OF 26



NOTES:  
 1. REFER TO SURVEY NO. 16J024.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.



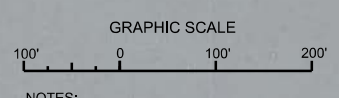

  
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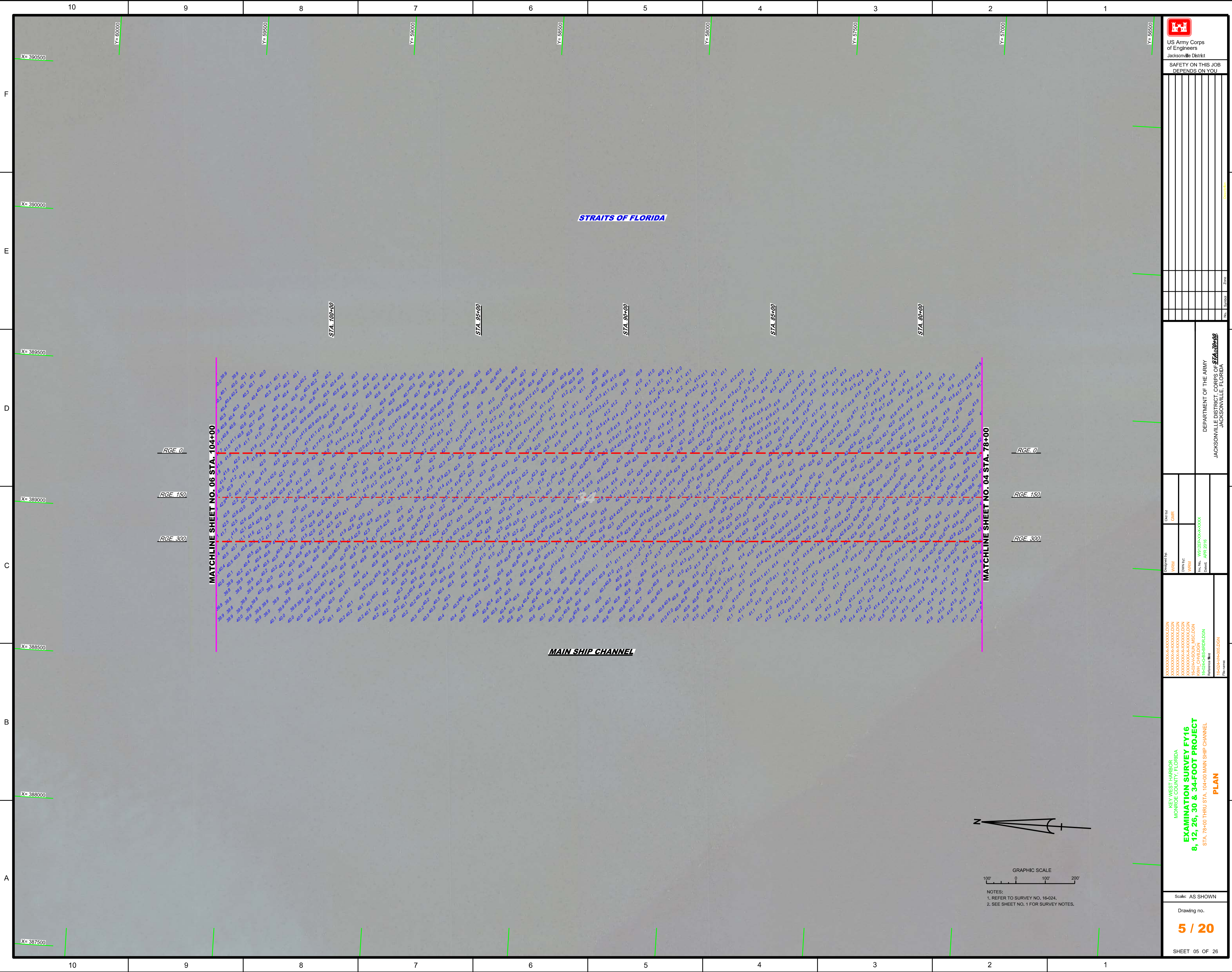
Designed by: WRM  
 Drawn by: WRM  
 Checked by: WRM  
 Date: APR 2016

KEY WEST HARBOR  
 MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
 STA. 54+00 THRU STA. 78+00 MAIN SHIP CHANNEL  
**PLAN**

Scale: AS SHOWN  
 Drawing no.  
**4 / 20**  
 SHEET 04 OF 26



NOTES:  
 1. REFER TO SURVEY NO. 16-024.  
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REV.	DATE	BY	APP.	DESCRIPTION

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**JACKSONVILLE DISTRICT CORPS OF ENGINEERS**  
**JACKSONVILLE, FLORIDA**

Designed by: **WRM**  
Checked by: **GHR**

Drawn by: **WRM**  
Approved by: **WRM**

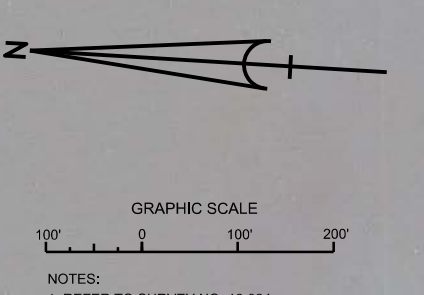
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Date: APR 2016

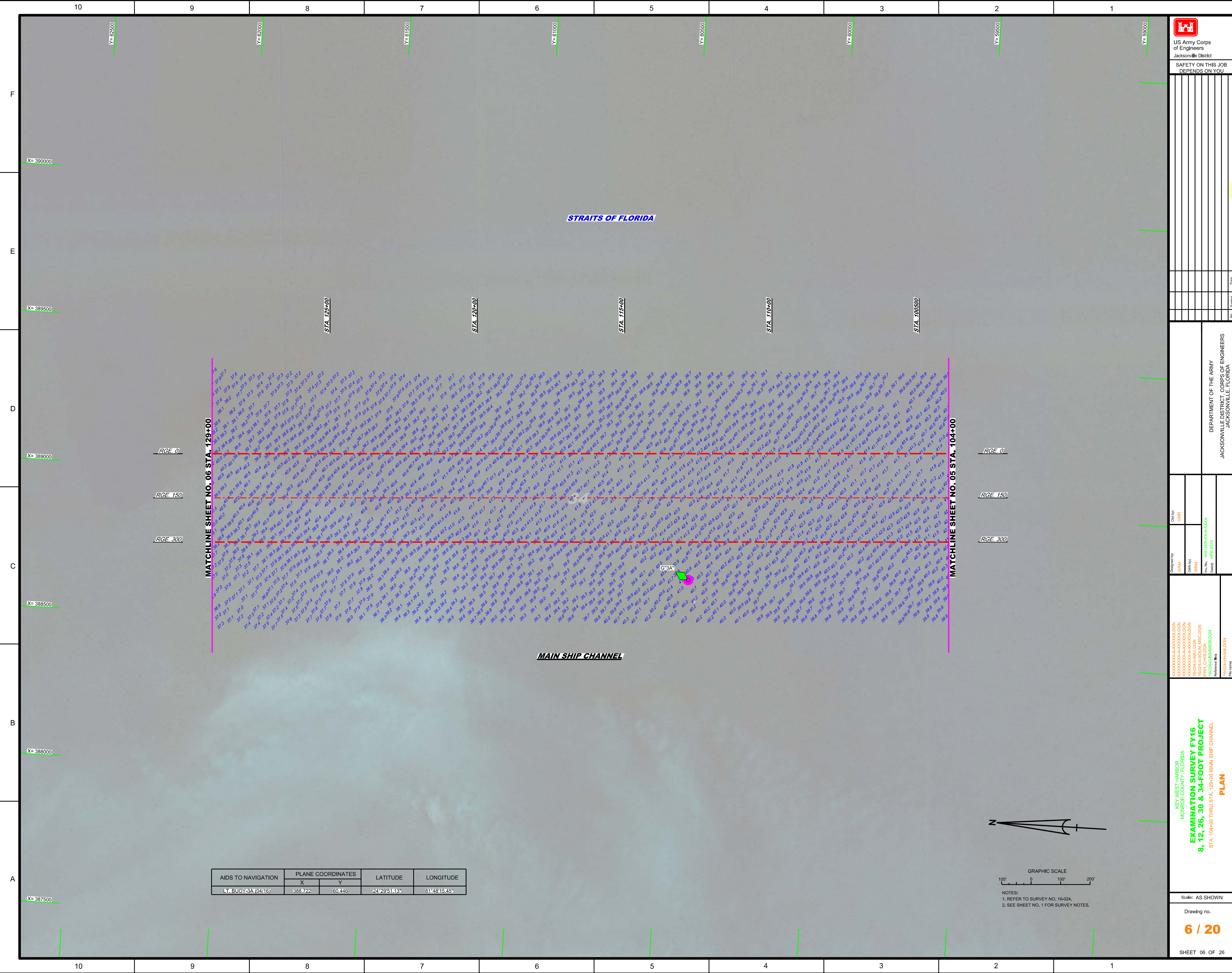
**KEY WEST HARBOR**  
**MONROE COUNTY, FLORIDA**  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
**STA. 78+00 THRU STA. 104+00 MAIN SHIP CHANNEL**  
**PLAN**

Scale: AS SHOWN

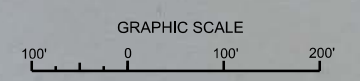
Drawing no. **5 / 20**

SHEET 05 OF 26





AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3A (0416)	388,722	60,446	24°29'51.13"	81°48'15.45"



NOTES:  
1. REFER TO SURVEY NO. 16-024.  
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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Drawn by: **WRM**

Checked by: **GHR**

Designated by: **WRM**

File No: **16-024-00-004**

Date: **APR 2016**

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

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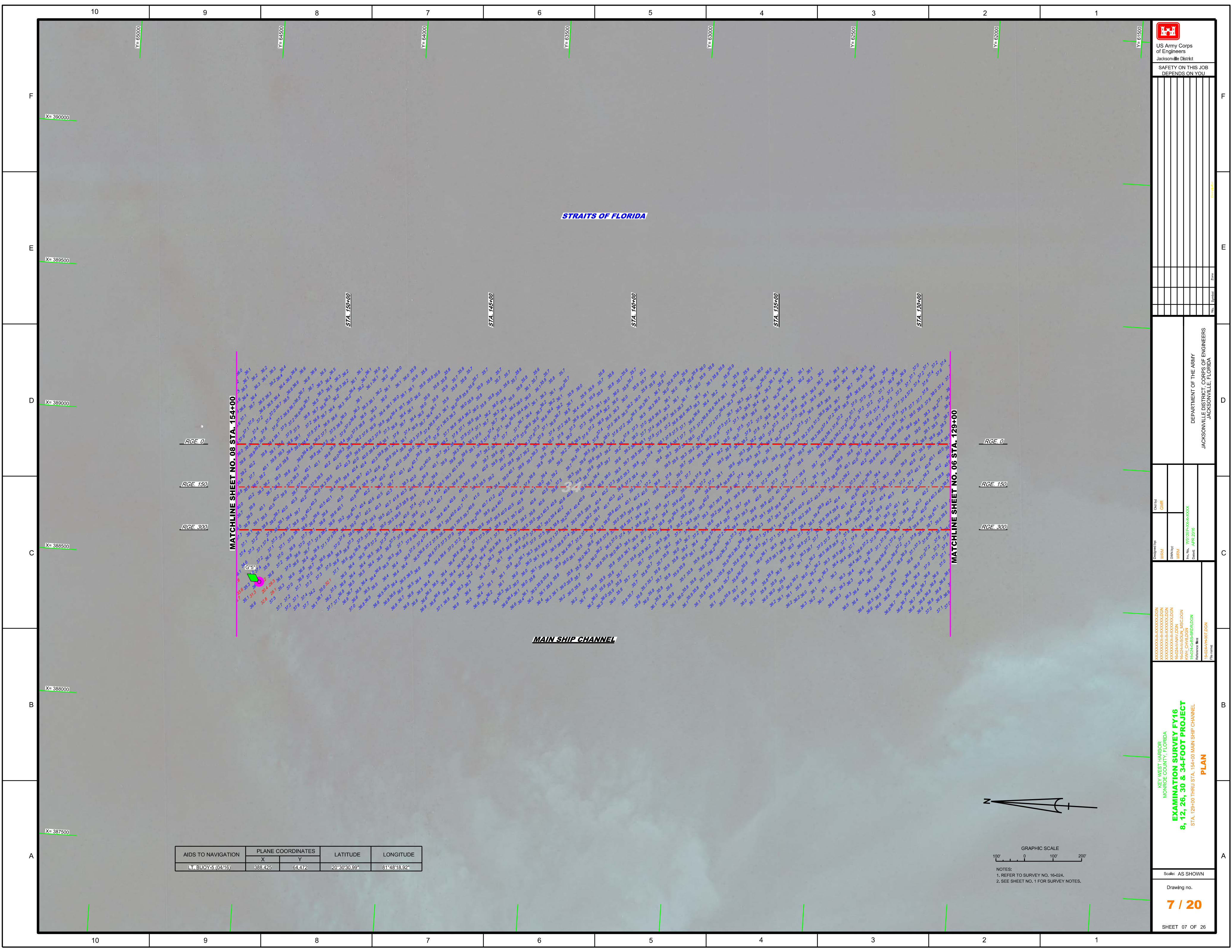
KEY WEST HARBOR  
MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16  
8, 12, 26, 30 & 34-FOOT PROJECT**  
STA. 104+00 THRU STA. 129+00 MAIN SHIP CHANNEL  
**PLAN**

Scale: AS SHOWN

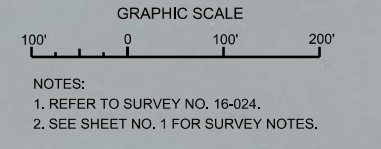
Drawing no. **6 / 20**


SHEET 06 OF 26

Reference files:  
16-024-00-004.DGN



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY-5 (0416)	388425	64472	20°50'30.99"	81°48'18.92"





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JACKSONVILLE, FLORIDA

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Designed by: **WRM**  
 Drawn by: **WRM**  
 Checked by: **WRM**  
 Date: **APR 2018**

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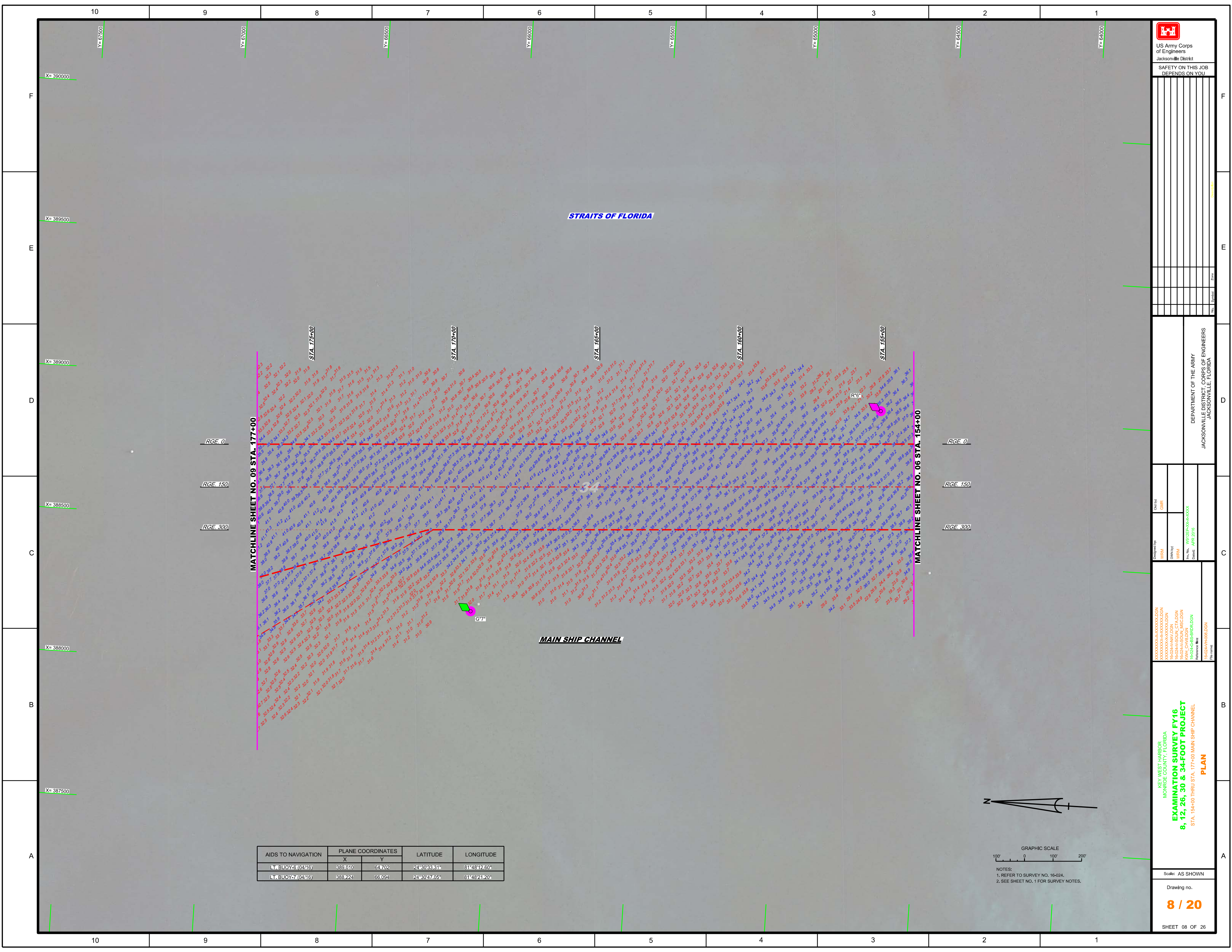
**KEY WEST HARBOR**  
**MONROE COUNTY, FLORIDA**  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
 STA. 129+00 THRU STA. 154+00 MAIN SHIP CHANNEL  
**PLAN**

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Scale: AS SHOWN

Drawing no. **7 / 20**

SHEET 07 OF 26



**STRAITS OF FLORIDA**


**MAIN SHIP CHANNEL**

MATCHLINE SHEET NO. 09 STA. 177+00  
 STA. 175+00  
 STA. 170+00  
 STA. 165+00  
 STA. 160+00  
 STA. 155+00  
 MATCHLINE SHEET NO. 06 STA. 154+00  
 RGE. 0  
 RGE. 150  
 RGE. 300

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUIOY-6 (04/16)	389,010	64,702	24°30'33.81"	81°48'12.60"
LT BUIOY-7 (04/16)	388,224	66,094	24°30'47.05"	81°48'21.20"



GRAPHIC SCALE  
 100' 0 100' 200'  
 NOTES:  
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 JACKSONVILLE, FLORIDA

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Call by: GHR  
 Designed by: WRM  
 DWN by: WRM  
 File No: W02255-000-0004  
 Date: APR 2016

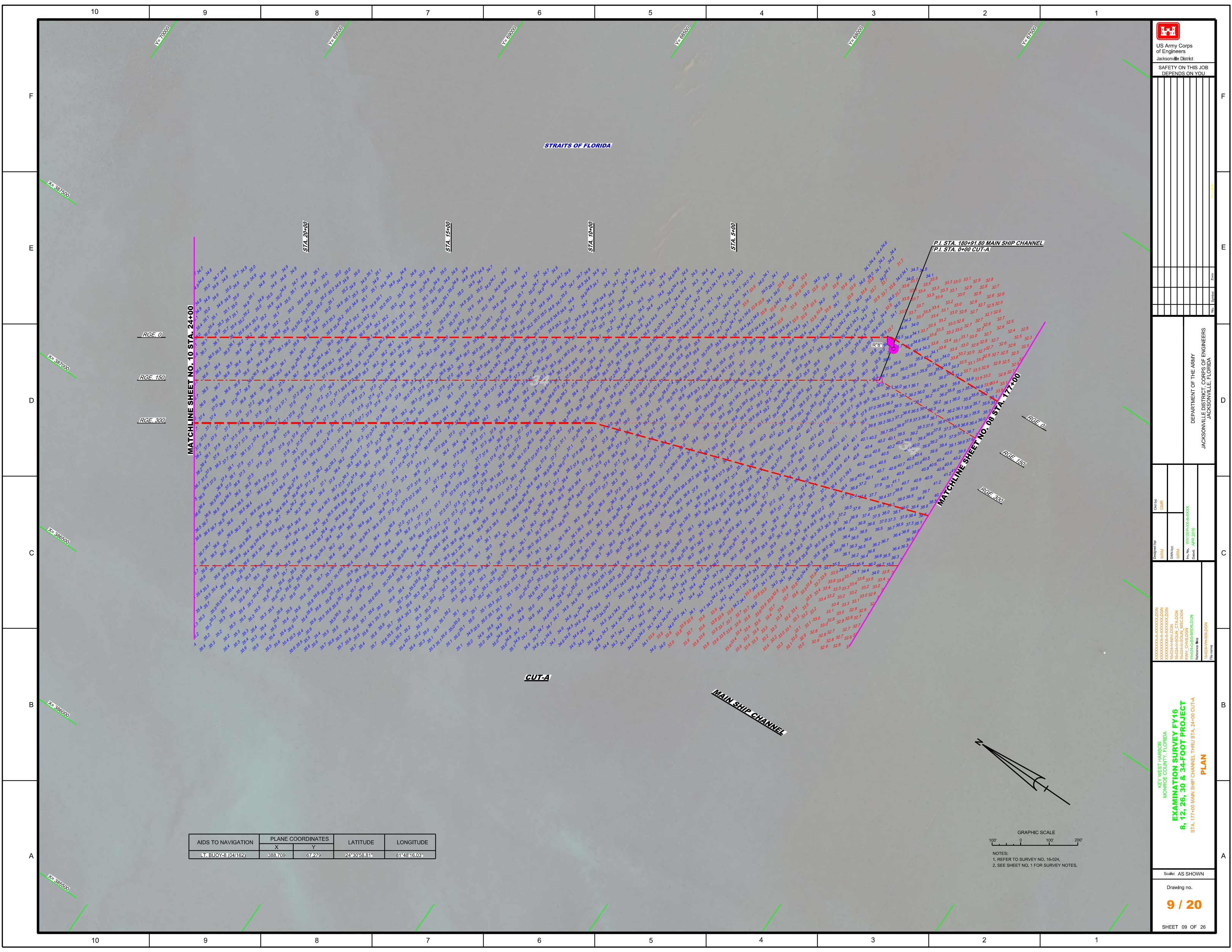
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KEY WEST HARBOR  
 MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
 STA. 154+00 THRU STA. 177+00 MAIN SHIP CHANNEL  
**PLAN**

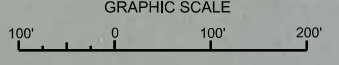
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Scale: AS SHOWN  
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**8 / 20**  
 SHEET 08 OF 26






AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-9 (04162)	388.709	67.279	24°30'58.61"	81°48'16.03"



NOTES:  
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KEY WEST HARBOR  
 MONROE COUNTY, FLORIDA  
**EXAMINATION SURVEY FY16**  
**8, 12, 26, 30 & 34-FOOT PROJECT**  
 STA. 177+00 MAIN SHIP CHANNEL THRU STA. 24+00 CUT-A  
**PLAN**

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Scale: AS SHOWN

Drawing no.  
**9 / 20**

SHEET 09 OF 26

