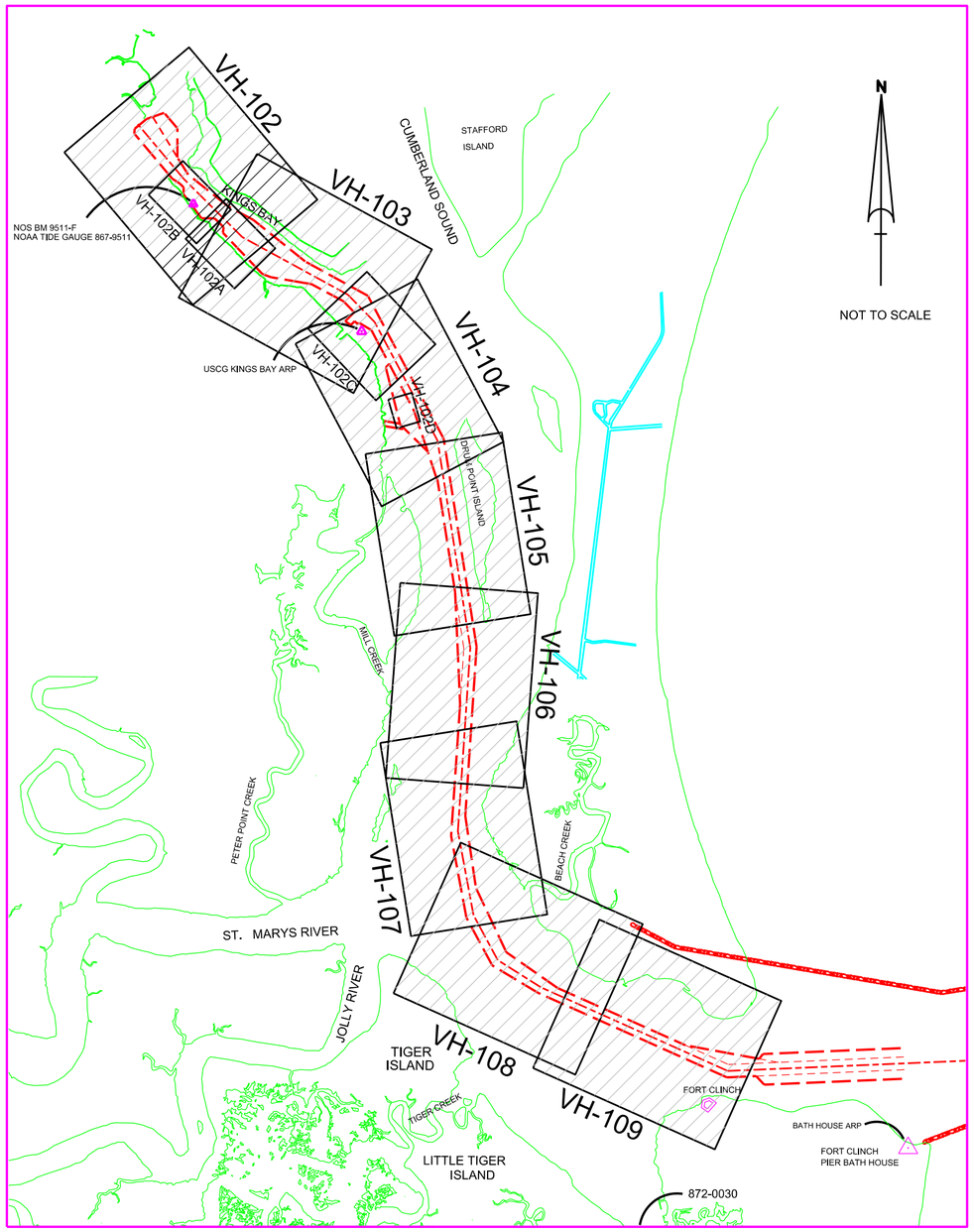
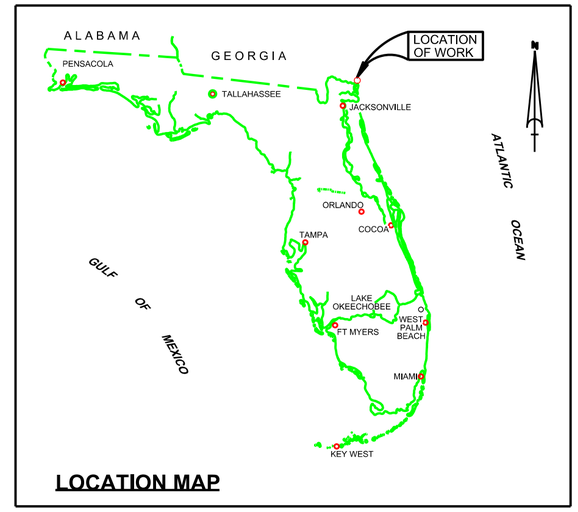
U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA
KINGS BAY INNER CHANNEL
HYDROGRAPHIC EXAMINATION SURVEY
4TH QUARTER FY14





LOCATION MAP

LEGEND	
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	TIDE STAFF

DEPTH COLOR CODE	
≤39.9	
40.0-41.9	
42.0-45.9	
46.0-48.9	
≥49.0	

SURVEY NOTES:

1. REFER TO SURVEY NO. 14-161.
2. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) TIDAL DATUM.
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
4. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS USING A HYPACK KINEMATIC TIDAL DATUM MODEL (KINGSBAY-2013 06 26.KTD).
5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF GEORGIA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
6. ALL AZIMUTHS ARE GRID; RECKONED CLOCKWISE FROM SOUTH.
7. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
8. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATIONS:

   REFERENCE BASE LOCATED AT "BATH HOUSE ARP" (OPUS PID # BBCB08), FOR RANGE-A THRU RANGE-C.

   REFERENCE BASE LOCATED AT "USCG KINGS BAY ARP" (OPUS PID # BBK29), FOR RANGE-D THRU RANGE-I.
9. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, 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 BENCH MARKS ASSOCIATED WITH THE TIDE GAUGE SITES SPECIFIED BELOW:

   NOAA TIDAL STATION 872-0030, FERNANDINA, FL, FOR RANGE-A THRU RANGE-G (OUTSIDE WRA)

   NOAA TIDAL STATION 867-9511, KINGS BAY, GA, FOR RGE-G THRU RGE-I (INSIDE WRA)
10. VERTICAL MEASUREMENTS WERE MADE USING A RESON MODEL 7101 MULTIBEAM SYSTEM AND A ROSS MODEL 835C SMARTSOUNDER WITH A DUAL-FREQUENCY (28/200KHZ) TRANSDUCER. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY FROM RANGE-A THRU RANGE-D AND LOW FREQUENCY FROM RANGE-E THRU RANGE-I.

VESSEL	DATE OF SURVEY	AREA SURVEYED
SB-36	3 SEP 2014	RGE-A, RGE-A-1 & RGE-A2
SB-36	4 SEP 2014	RGE-B & RGE-C, STA 19+000 TO 22+547
SB-36	5 SEP 2014	EHW-A, WARPING WHARF, RGE-G, STA 39+200 TO 42+217 & RGE-H, STA 42+300 TO 44+300
SB-36	6 SEP 2014	RGE-H, STA 45+000 TO 45+436, RGE-I, REFIT WHARF & DRY DOCK
SB-36	7 SEP 2014	RGE-E, STA 30+748 TO 31+500, RGE-D, STA 24+000 TO 29+500
SB-36	8 SEP 2014	RGE-D, STA 29+600 TO 30+700 & STA 22+547 TO 23+900, RGE-E, STA 31+600 TO 35+999 & SITE-6
SB-36	9 SEP 2014	RGE-G, STA 37+504 TO 39+100 & RGE-F
SB-36	10 SEP 2014	RGE-C, STA 15+349 TO 19+000 & RGE-D, STA 22+547 TO 25+000
SB-36	23 SEP 2014	MSF

11. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
12. 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 AND IS NOT TO BE USED FOR NAVIGATION.
13. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 30 NOV 2013 AND EM 1110-2-6056, STANDARDS AND PROCEDURES FOR REFERENCING PROJECT ELEVATION GRADES TO NATIONWIDE VERTICAL DATUMS, 31 DEC 2010.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No. | Symbol | Zone | Description

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

Cad by:
Designed by:
DWN by: F.A.W.
Rev. No.
Date: SEP 2014

Reference files:
14-161-KBIC-VH-101.DGN
14-161-KBIC-AREA-01.DGN
KBTOPO83.DGN
INDEX LOC.DGN

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

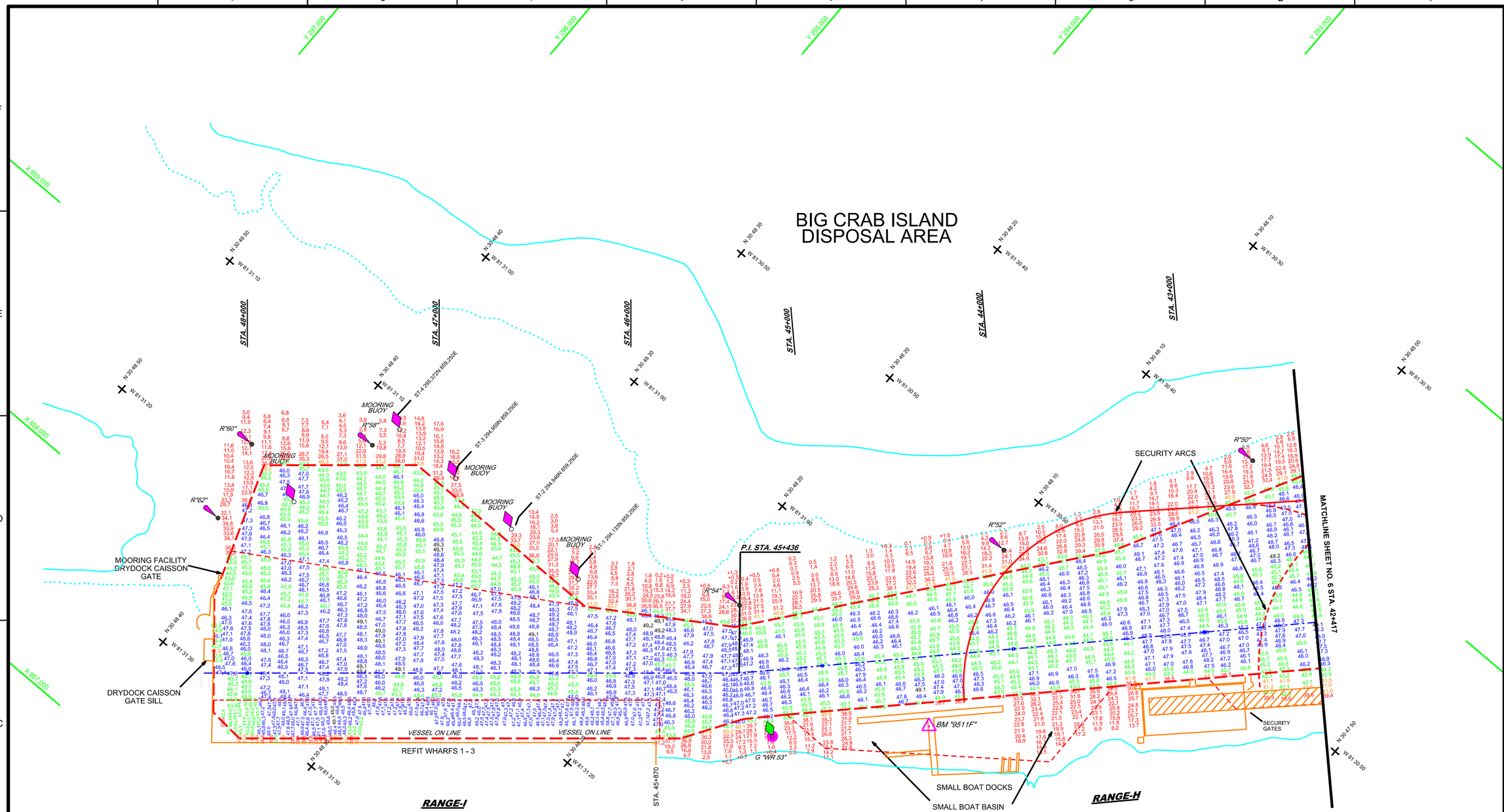
INDEX AND LOCATION PLAN

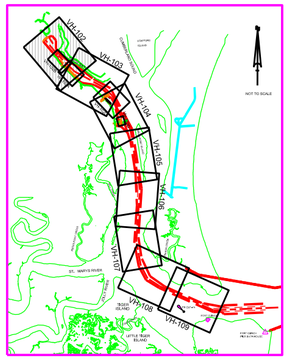
Scale: AS SHOWN

Drawing no.

VH-101

SHEET 1 OF 12





AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT - 50 (09/14)	861,997	291,837	30°48'02.91"	81°30'39.82"
LT - 52 (09/14)	860,802	292,525	30°48'09.80"	81°30'53.48"
LT BUOY - WR 53 (09/14)	859,281	292,817	30°48'12.77"	81°31'10.90"
LT - 54 (09/14)	859,690	293,390	30°48'18.42"	81°31'06.17"
LT - 58 (09/14)	859,088	295,390	30°48'38.25"	81°31'12.94"
LT - 60 (09/14)	858,686	295,872	30°48'43.05"	81°31'17.52"
LT - 62 (09/14)	858,278	295,758	30°48'41.94"	81°31'22.20"
MOORING BUOY (09/14)	859,251	294,120	30°48'25.67"	81°31'11.16"
MOORING BUOY (09/14)	859,224	294,553	30°48'29.96"	81°31'11.43"
MOORING BUOY (09/14)	859,237	294,945	30°48'33.84"	81°31'11.27"
MOORING BUOY (09/14)	859,244	295,333	30°48'37.68"	81°31'11.16"
MOORING BUOY (09/14)	858,599	295,510	30°48'39.47"	81°31'18.54"

DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

GRAPHIC SCALE

200' 0 200' 400'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Designed by:
Drawn by: F.M.W.
Checked by:
Rev. No.
Date: SEP 2014

14-161-KBIC-VH-102.DGN
Reference files:
14-161-KBIC-VH-102.DGN
14-161-KBIC-BRDR.DGN
KBTOPO3.DGN
KBTOPO3.DGN
INDEX LOC.DGN
14-161-VARGE4.LF.DGN
14-161-VARGE4.LF.DGN
14-161-VARGE4.LF.DGN
14-161-VARGE4.LF.DGN
13-161-VARGEFWHF-LF.DGN
Reference files:
14-161-KBIC-VH-102.DGN
Reference files:
14-161-KBIC-VH-102.DGN

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

RGE-H, STA 42+417 TO RGE-I, STA 48+242 INCL REFIT WHARF

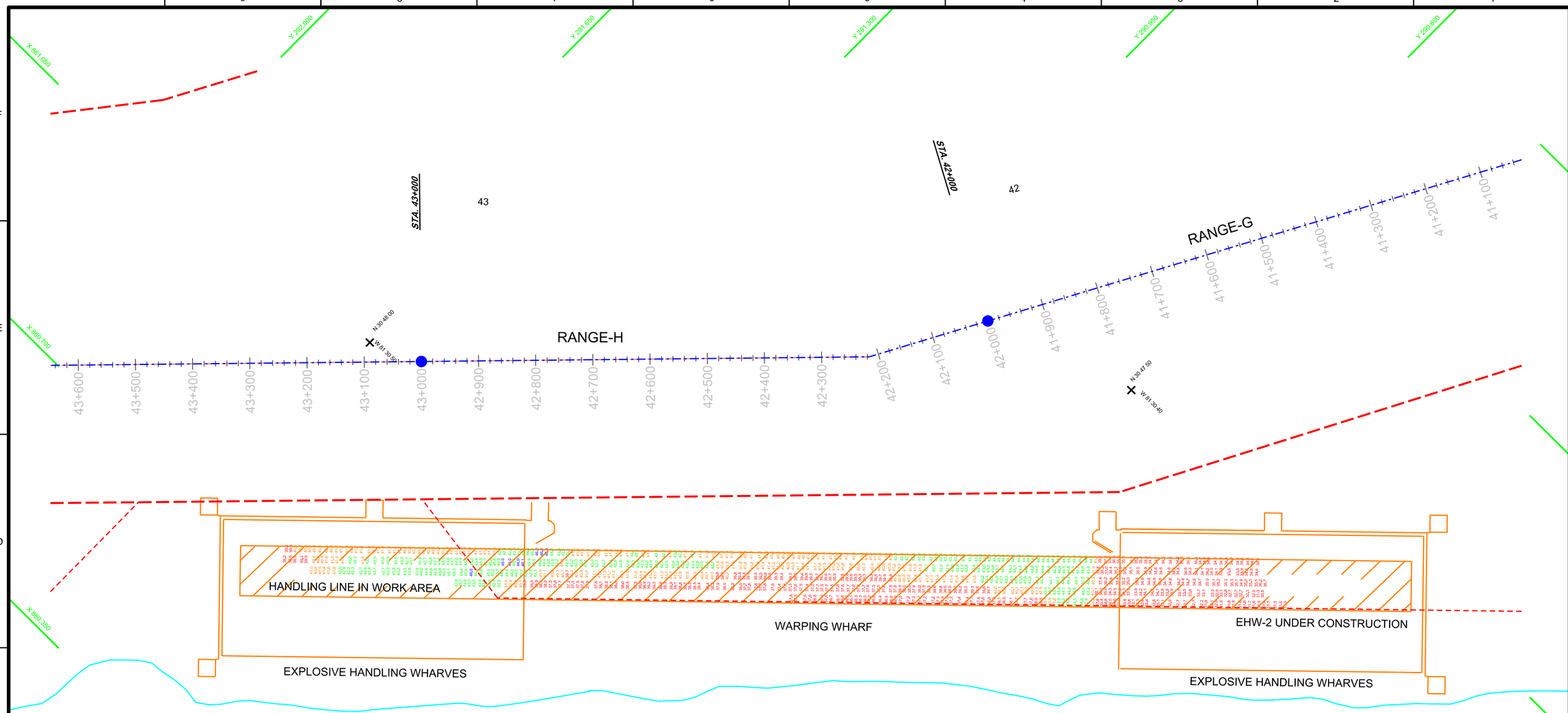
PLAN

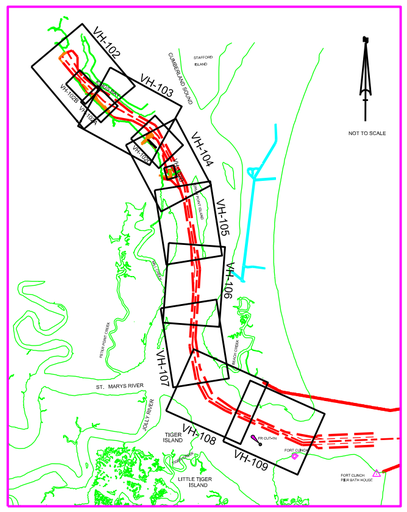
Scale: AS SHOWN

Drawing no.

VH-102

SHEET 2 OF 12





DEPTH COLOR CODE	
≤39.9	
40.0–41.9	
42.0–45.9	
46.0–48.9	
≥49.0	

GRAPHIC SCALE

70' 0 70' 140'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Designed by:
DWN by: F.M.W.
Rev. No.
Date: SEP 2014
Chk by:
DWN by:

14-161-KB\C-V-102A.DGN
14-161-KB\C-GEB-SHRP.DGN
KBTOPO\KBTOPO\KBTOPO8.DGN
INDEX LOC.DGN

Reference files:

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

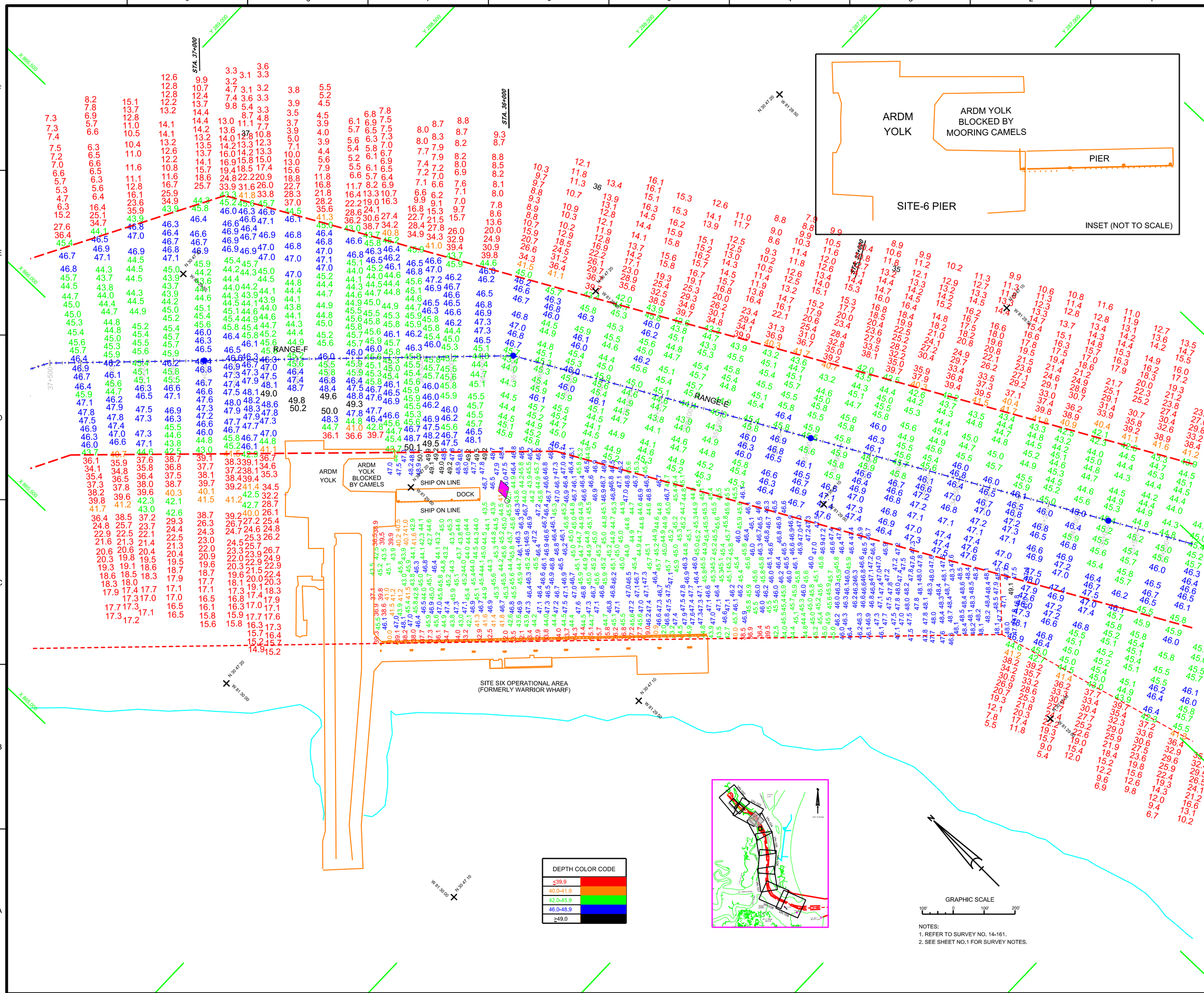
4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT
EXPLOSIVE HANDLING WHARFS
PLAN

Scale: AS SHOWN

Drawing no.

V-102A

SHEET 3 OF 12



NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Date by:
DWN by: F.M.W.
Rev. No.
Date: SEP 2014

Designed by:

14-161-KBR-45-BRDG.DGN
KBRMASS-V46-BRDG.DGN
KBTOPO83.DGN
INDEX LOC.DGN
14-161-V-SITE6-F.DGN
14-161-V-RGE-F-F.DGN
14-161-V-RGE-E-F.DGN
14-161-V-ARMDYOLK-F.DGN
Reference files:

14-161-KBIC-VH-102C.DGN
File name:

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

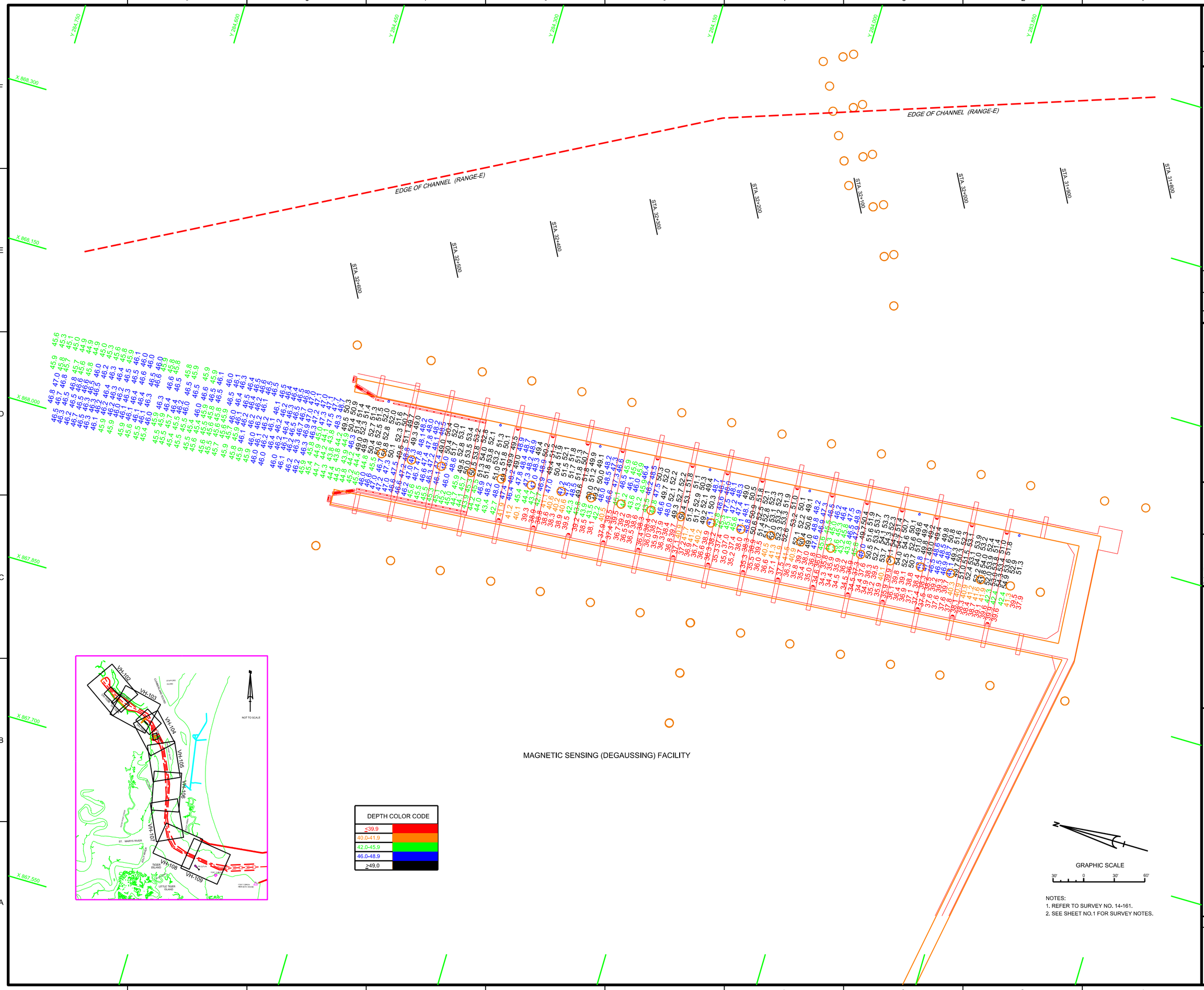
4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT
SITE 6 & ARDM YOLK PLAN

Scale: AS SHOWN

Drawing no.

VH-102C

SHEET 4 OF 12



NOTES:
1. REFER TO SURVEY NO. 14-161.
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

Designed by:
Cad by:
DWN by: F.M.W.
Rev. No.
Date: SEP 2014

Reference files:
14-161-KBF-VH-102D.DGN

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

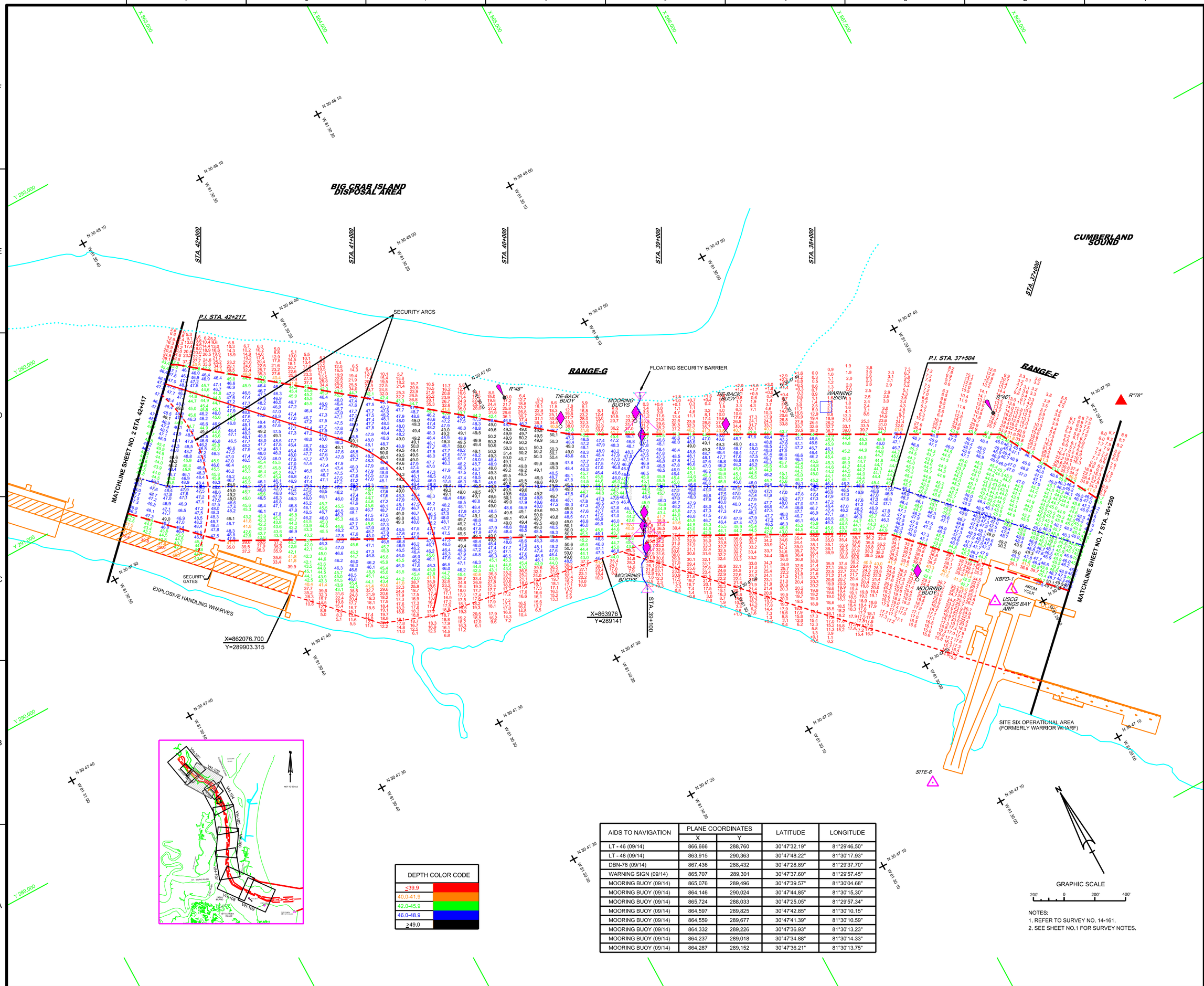
MSF OPERATION BASIN PLAN

Scale: AS SHOWN

Drawing no.

VH-102D

SHEET 5 OF 12



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT - 46 (09/14)	866,666	288,760	30°47'32.19"	81°29'46.50"
LT - 48 (09/14)	863,915	290,363	30°47'48.22"	81°30'17.93"
DBN-78 (09/14)	867,436	288,432	30°47'28.89"	81°29'37.70"
WARNING SIGN (09/14)	865,707	289,301	30°47'37.60"	81°29'57.45"
MOORING BUOY (09/14)	865,076	289,496	30°47'39.57"	81°30'04.68"
MOORING BUOY (09/14)	864,146	290,024	30°47'44.85"	81°30'15.30"
MOORING BUOY (09/14)	865,724	288,033	30°47'25.05"	81°29'57.34"
MOORING BUOY (09/14)	864,597	289,825	30°47'42.85"	81°30'10.15"
MOORING BUOY (09/14)	864,559	289,677	30°47'41.39"	81°30'10.59"
MOORING BUOY (09/14)	864,332	289,226	30°47'36.93"	81°30'13.23"
MOORING BUOY (09/14)	864,237	289,018	30°47'34.88"	81°30'14.33"
MOORING BUOY (09/14)	864,287	289,152	30°47'36.21"	81°30'13.75"

DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Designed by:
Drawn by: F.M.W.
Chk'd by:
Rev. No.:
Date: SEP 2014

14-161-KGBC-BRIDR.DGN
14-161-KGBC-VH-103.DGN
KBTOPO0LD.DGN
INDEX LOC.DGN
14-161-V-RGE-H.DGN
14-161-V-RGE-G-F.DGN
14-161-V-RGE-G-L-F.DGN
14-161-V-RGE-H-L-F.DGN
Reference files:
14-161-KGBC-VH-103.DGN
By: sandyc

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

RGE- F, STA 36+200 TO RGE-H, STA 42+417

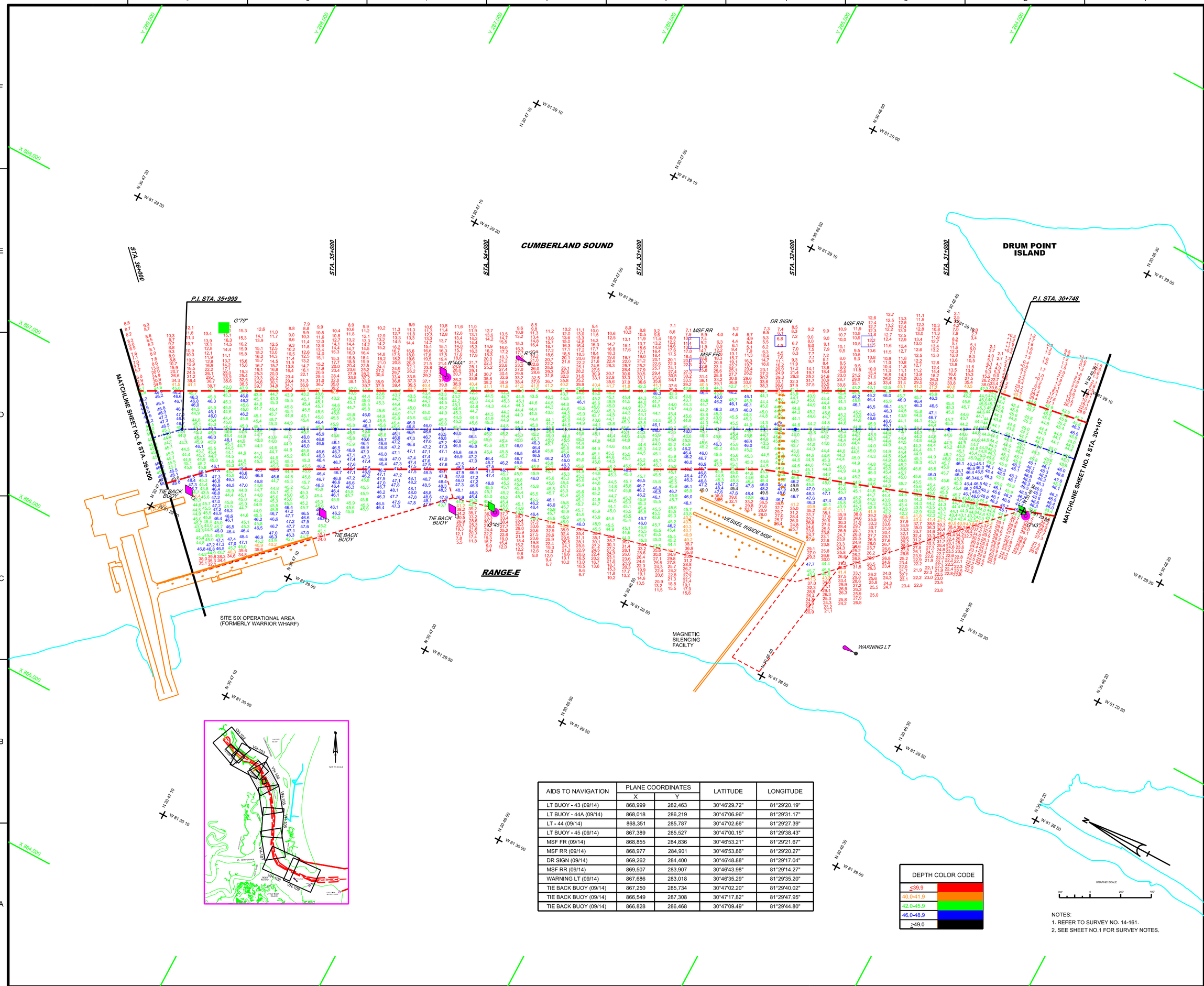
PLAN

Scale: AS SHOWN

Drawing no.

VH-103

SHEET 6 OF 12



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 43 (09/14)	868,999	282,463	30°46'29.72"	81°29'20.19"
LT BUOY - 44A (09/14)	868,018	286,219	30°47'06.96"	81°29'31.17"
LT - 44 (09/14)	868,351	285,787	30°47'02.66"	81°29'27.39"
LT BUOY - 45 (09/14)	867,389	285,527	30°47'00.15"	81°29'38.43"
MSF FR (09/14)	868,855	284,836	30°46'53.21"	81°29'21.67"
MSF RR (09/14)	868,977	284,901	30°46'53.86"	81°29'20.27"
DR SIGN (09/14)	869,262	284,400	30°46'48.88"	81°29'17.04"
MSF RR (09/14)	869,507	283,907	30°46'43.98"	81°29'14.27"
WARNING LT (09/14)	867,686	283,018	30°46'35.29"	81°29'35.20"
TIE BACK BUOY (09/14)	867,250	285,734	30°47'02.20"	81°29'40.02"
TIE BACK BUOY (09/14)	866,549	287,308	30°47'17.82"	81°29'47.95"
TIE BACK BUOY (09/14)	866,828	286,468	30°47'09.49"	81°29'44.80"

DEPTH COLOR CODE	
≤39.9	
40.0-41.9	
42.0-45.9	
46.0-48.9	
≥49.0	

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Description	Date

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

Designed by:
Drawn by: F.M.W.
Rev. No.
Date: SEP 2014

14-161-VAMV.DGN

14-161-KGB5-BRDR.DGN
KGB1-VH-VH-VH-VH.DGN
KBTOPO83.DGN
INDEX LOC.DGN
14-161-VA-RGE-E-HF.DGN
14-161-VA-RGE-E-LF.DGN
Reference files:

14-161-KGB5-VH-104.DGN
File name:

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

RGE-D, STA 30+147 TO RGE-F, STA 36+200

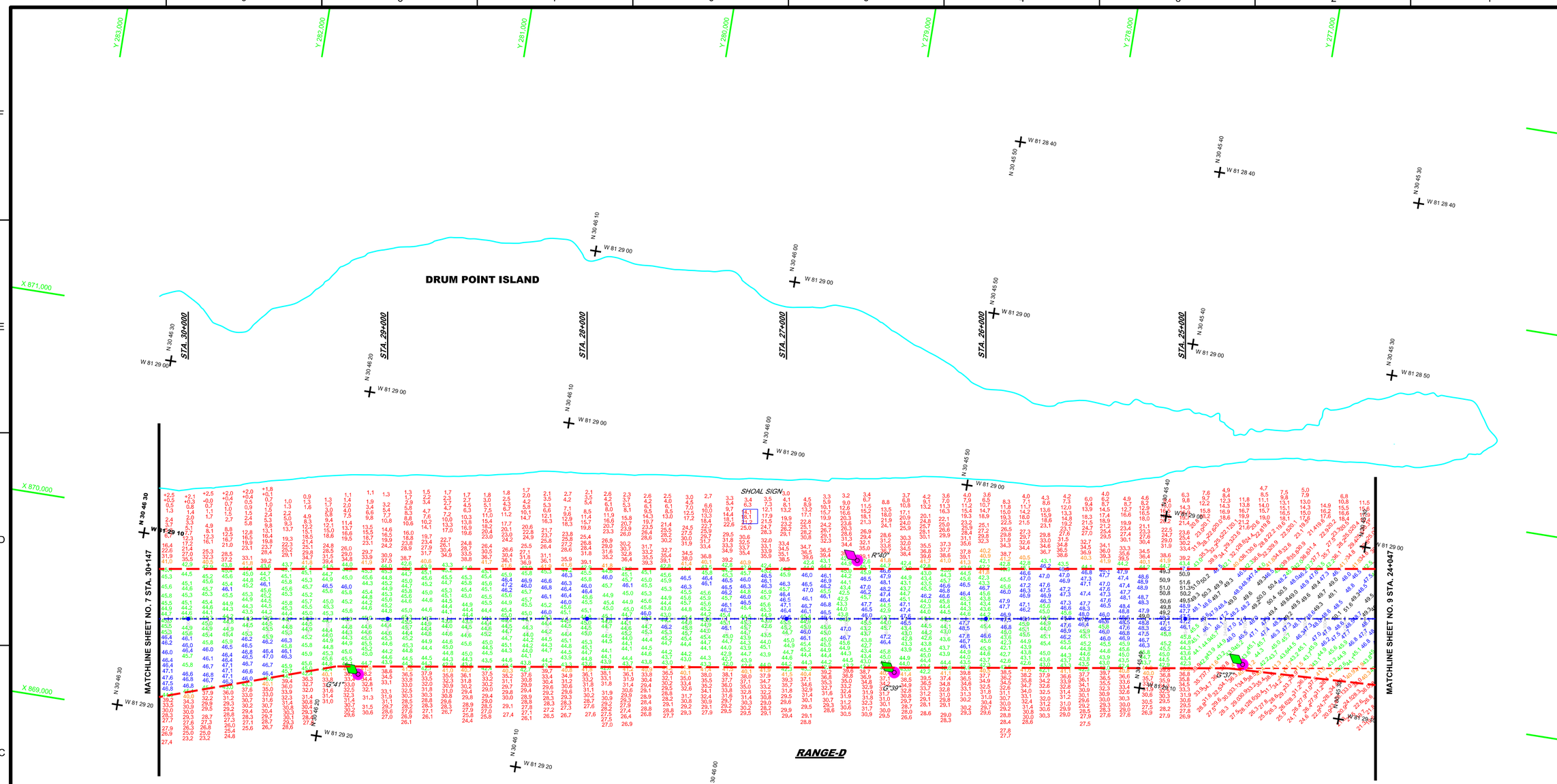
PLAN

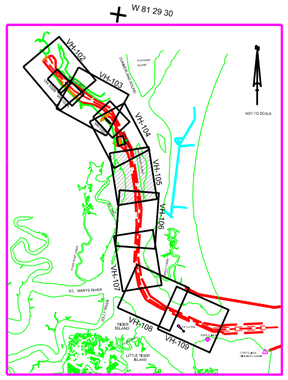
Scale: AS SHOWN

Drawing no.

VH-104

SHEET 7 OF 12





AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 37 (09/14)	870,118	276,955	30°45'35.14"	81°29'07.75"
LT BUOY - 39 (09/14)	869,799	278,673	30°45'52.16"	81°29'11.28"
LT BUOY - 40 (09/14)	870,324	278,946	30°45'54.83"	81°29'05.24"
LT BUOY - 41 (09/14)	869,360	281,326	30°46'18.44"	81°29'16.12"
SHOAL SIGN (09/14)	870,447	279,490	30°46'00.21"	81°29'03.80"

DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

GRAPHIC SCALE

200' 0 200' 400'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Chief Hydr

Chief Hydr

DWN by: F.M.W.
Rev. No.
Date: SEP 2014

14-161-H-S-B-SHGR.DGN
RGE-D-S-A-HF-2.DGN
KBTOPO83.DGN
INDEX LOC.DGN
14-161-V-ARGE.DGN
14-161-V-ARGE-D-HF.DGN

Reference files:
14-135cKBIC-VH-105.DGN
File: Sample

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

RGE-D, STA 24+047 TO STA 30+147

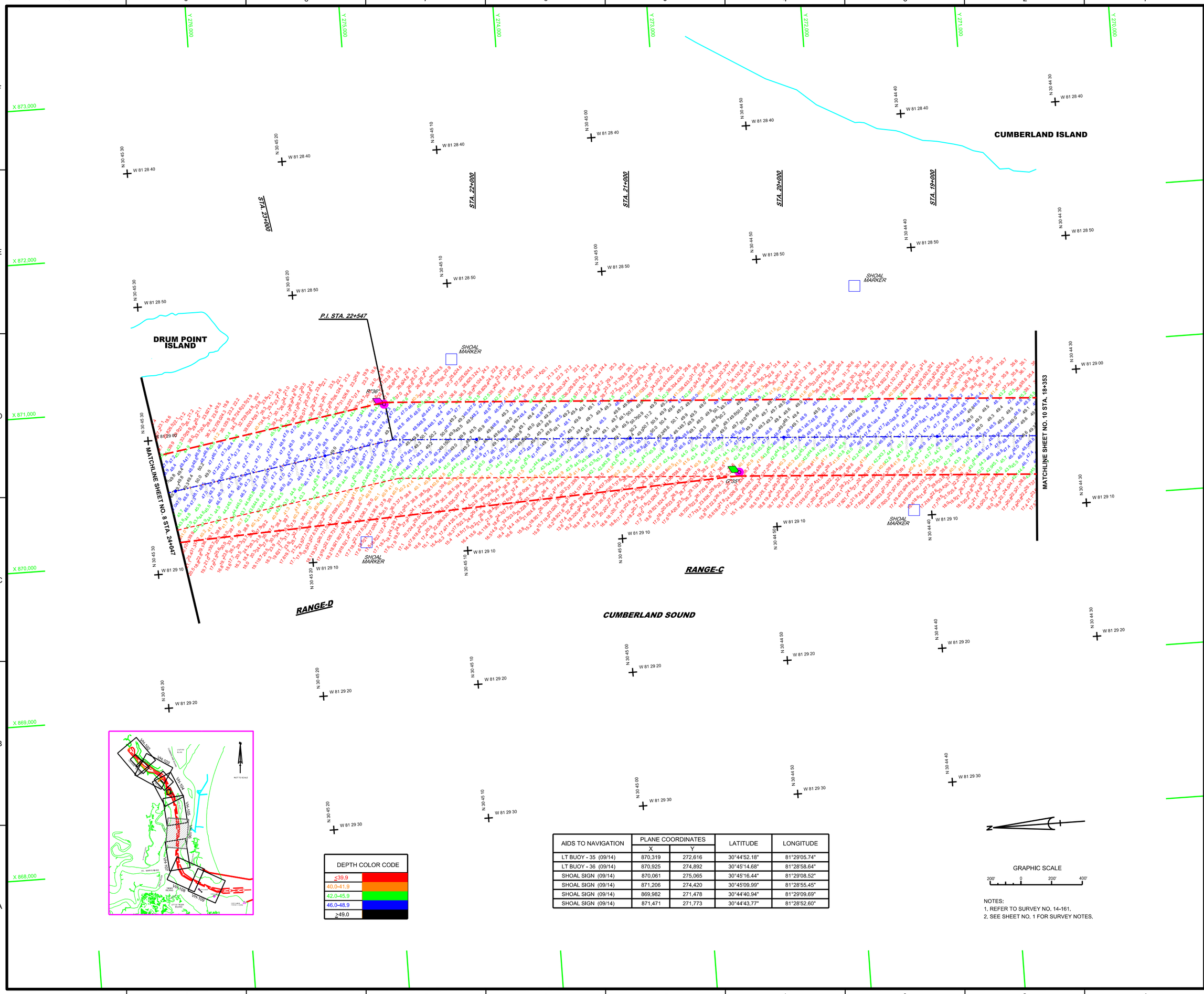
PLAN

Scale: AS SHOWN

Drawing no.

VH-105

SHEET 8 OF 12



DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 35 (09/14)	870,319	272,616	30°44'52.18"	81°29'05.74"
LT BUOY - 36 (09/14)	870,925	274,892	30°45'14.68"	81°28'58.64"
SHOAL SIGN (09/14)	870,061	275,065	30°45'16.44"	81°29'08.52"
SHOAL SIGN (09/14)	871,206	274,420	30°45'09.99"	81°28'55.45"
SHOAL SIGN (09/14)	869,982	271,478	30°44'40.94"	81°29'09.69"
SHOAL SIGN (09/14)	871,471	271,773	30°44'43.77"	81°28'52.60"

GRAPHIC SCALE

200' 0 200' 400'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Coordinate Sys:
Cad by:
DWN by: F.M.W.
Inv. No.
Date: SEP 2014

14-161-KBIC-VH-106.DGN
14-161-KBIC-ALL-PROF.DGN
KBTOPO83.DGN
KBTOPO83.DGN
INDEX LOC.DGN
14-161-VARGE-DN.DGN
14-161-VARGE-DN-HF.DGN
14-161-VARGE-DN-HF.DGN
Reference files:
14-161-KBIC-VH-106.DGN
14-161-KBIC-VH-106.DGN

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

RANGE-C, STA 18+353 TO RANGE-D, STA 24+047

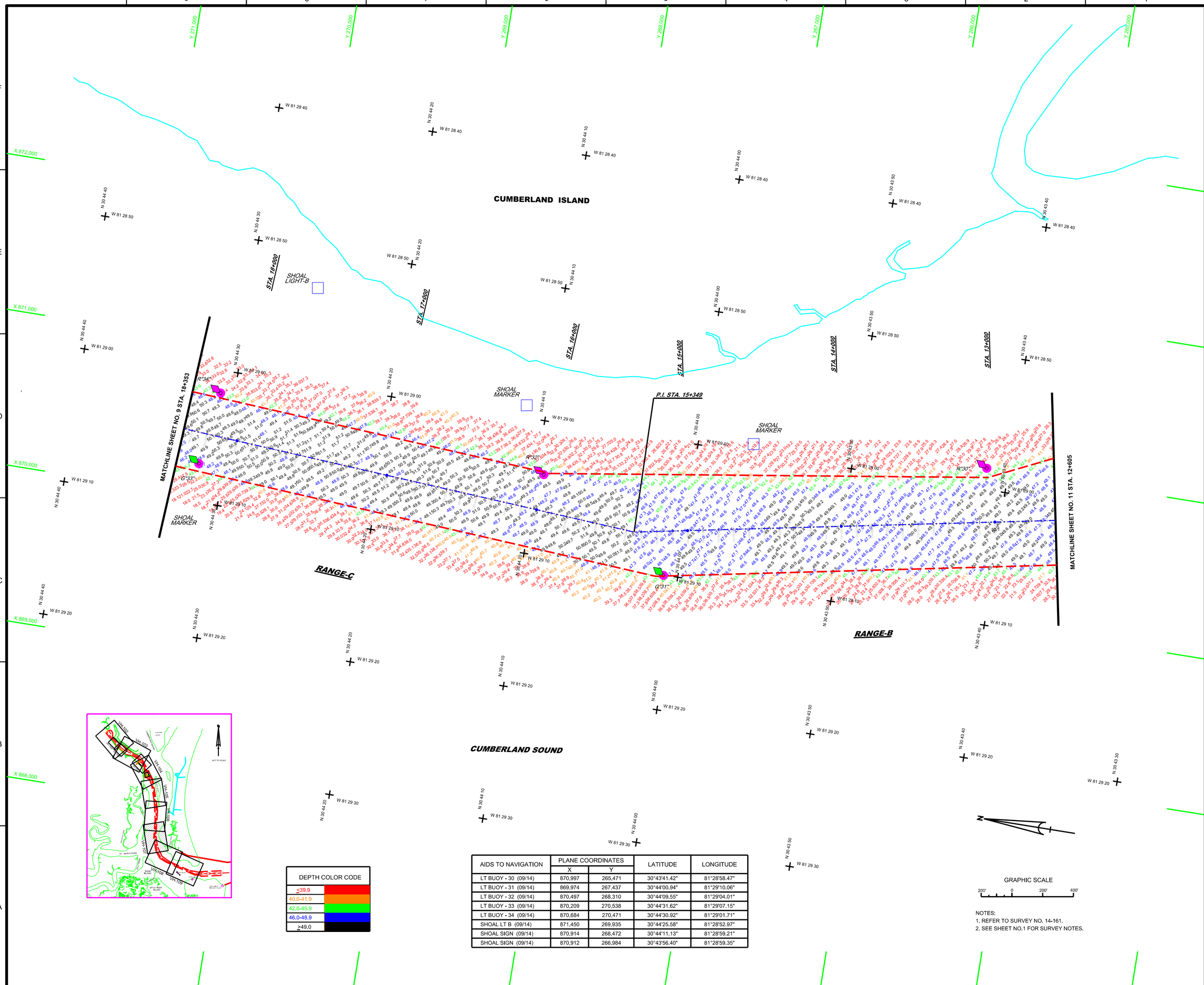
PLAN

Scale: AS SHOWN

Drawing no.

VH-106

SHEET 9 OF 12



DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 30 (09/14)	870,997	265,471	30°43'41.42"	81°28'58.47"
LT BUOY - 31 (09/14)	869,974	267,437	30°44'00.94"	81°29'10.06"
LT BUOY - 32 (09/14)	870,497	268,310	30°44'09.55"	81°29'04.01"
LT BUOY - 33 (09/14)	870,209	270,538	30°44'31.62"	81°29'07.15"
LT BUOY - 34 (09/14)	870,684	270,471	30°44'30.92"	81°29'01.71"
SHOAL LT B (09/14)	871,450	269,935	30°44'25.58"	81°28'52.97"
SHOAL SIGN (09/14)	870,914	268,472	30°44'11.13"	81°28'59.21"
SHOAL SIGN (09/14)	870,912	266,984	30°43'56.40"	81°28'59.35"

GRAPHIC SCALE

200' 0 200' 400'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Designed by:
DWN by: F.M.W.
Rev. No.
Date: SEP 2014
Cad file:

14-161-KBS-BRDR.DGN
KEYPLANS-CHF.DGN
KBTOPO8LD.DGN
INDEX LOC.DGN
14-161-VARGE-PLAN
14-161-VARGE-B-HF.DGN
14-161-VARGE-C-HF.DGN
Reference files:
14-161-KBMC-VH-107.DGN
Plot Name:

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

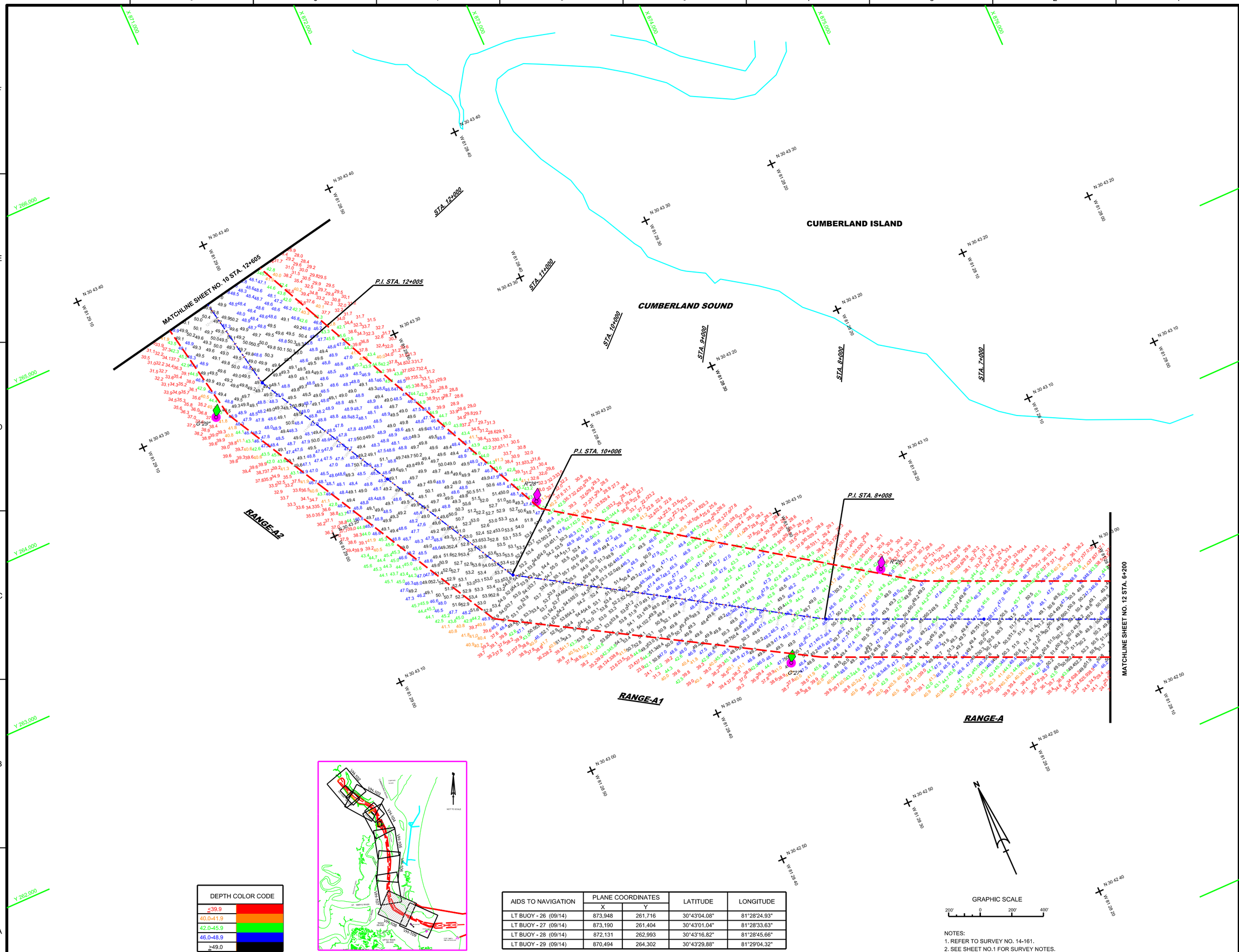
4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT
RANGE-B, STA 12+605 TO RANGE-C, STA 18+353
PLAN

Scale: AS SHOWN

Drawing no.

VH-107

SHEET 10 OF 12



DEPTH COLOR CODE
≤39.9
40.0-41.9
42.0-45.9
46.0-48.9
≥49.0

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 26 (09/14)	873,948	261,716	30°43'04.08"	81°28'24.93"
LT BUOY - 27 (09/14)	873,190	261,404	30°43'01.04"	81°28'33.63"
LT BUOY - 28 (09/14)	872,131	262,993	30°43'16.82"	81°28'45.66"
LT BUOY - 29 (09/14)	870,494	264,302	30°43'29.88"	81°29'04.32"

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description

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

Checked by:
Drawn by: F.M.W.
Date: SEP 2014

1-x-161-VA-B5-SPRCR.DGN
KBTOPO85-SPRCR.DGN
KBTOPO85.DGN
INDEX LOC.DGN
14-161-VA-INDEX.DGN
14-161-VA-RGE-A-HF.DGN
14-161-VA-RGE-A1-HF.DGN
14-161-VA-RGE-A2-HF.DGN
Alternate files:
14-161-VA-BIC-VH-108.DGN
By: Isaac

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT
RANGE-A, STA 6+200 TO RANGE-B, STA 12+605
PLAN

Scale: AS SHOWN

Drawing no.

VH-108

SHEET 11 OF 12

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

CUMBERLAND ISLAND

MATCHLINE SHEET NO. 11 STA. 6+200

STA. 6+000 | STA. 5+000 | STA. 4+000 | STA. 3+000 | STA. 2+000 | STA. 1+000 | STA. 0+000

RANGE-A

STA. 0+000 RANGE-A

FT. CLINCH

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 23 (09/14)	678,974	258,443	30°42'41.30"	81°27'27.52"
LT BUOY - 23 (09/14)	678,424	259,560	30°42'37.01"	81°27'33.80"
LT BUOY - 24 (09/14)	678,571	260,480	30°42'51.68"	81°27'34.97"
LT BUOY - 25 (09/14)	678,334	260,012	30°42'47.07"	81°27'37.72"

DEPTH COLOR CODE

≤39.9	
40.0–41.9	
42.0–45.9	
46.0–48.9	
≥49.0	

GRAPHIC SCALE

200' 0 200' 400'

NOTES:
1. REFER TO SURVEY NO. 14-161.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

No.	Symbol	Zone	Description

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

Designed by:
Drawn by: F.A.W.
Rev. No.
Date: SEP 2014

14-161-KBIC-VH-109.DGN
Reference files:
14-161-KBIC-BRDR.DGN
KBIC-VH-ALL-RD.DGN
KBTOPO83.DGN
INDEX LOC.DGN
14-161-VA-ALL.DGN
14-161-VA-RGE-A-HF.DGN

U.S. NAVY SUBMARINE BASE
KINGS BAY, GEORGIA

4TH QUARTER FY14 EXAMINATION SURVEY
44, 45 & 46 FOOT PROJECT

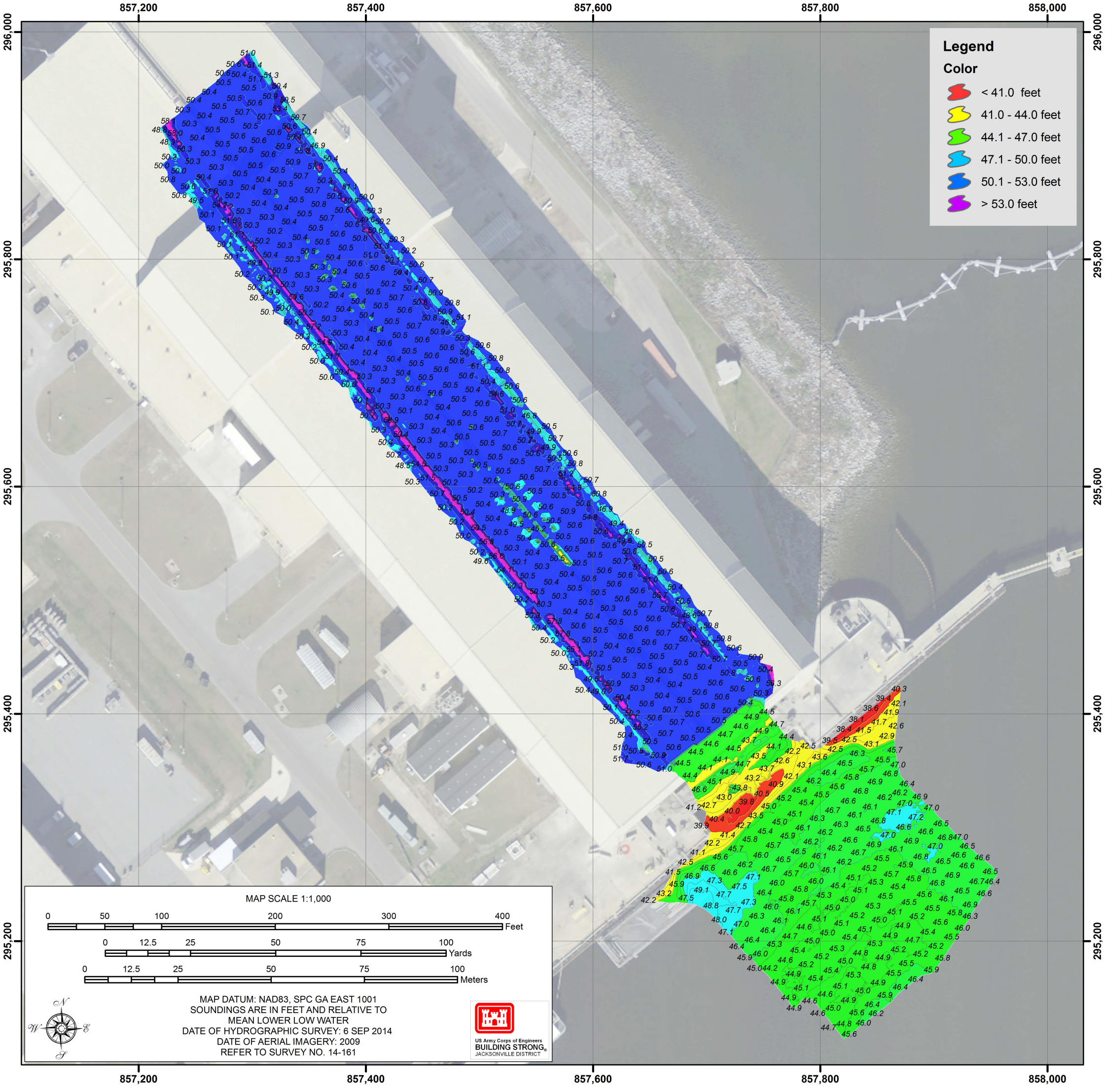
RANGE-A, STA 0+000 TO STA 6+200

PLAN

Scale: AS SHOWN

Drawing no.

VH-109

SHEET 12 OF 12

Kings Bay Inner Channel, Dry Dock