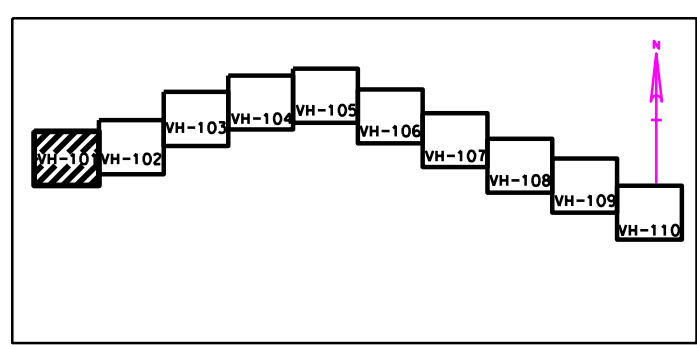
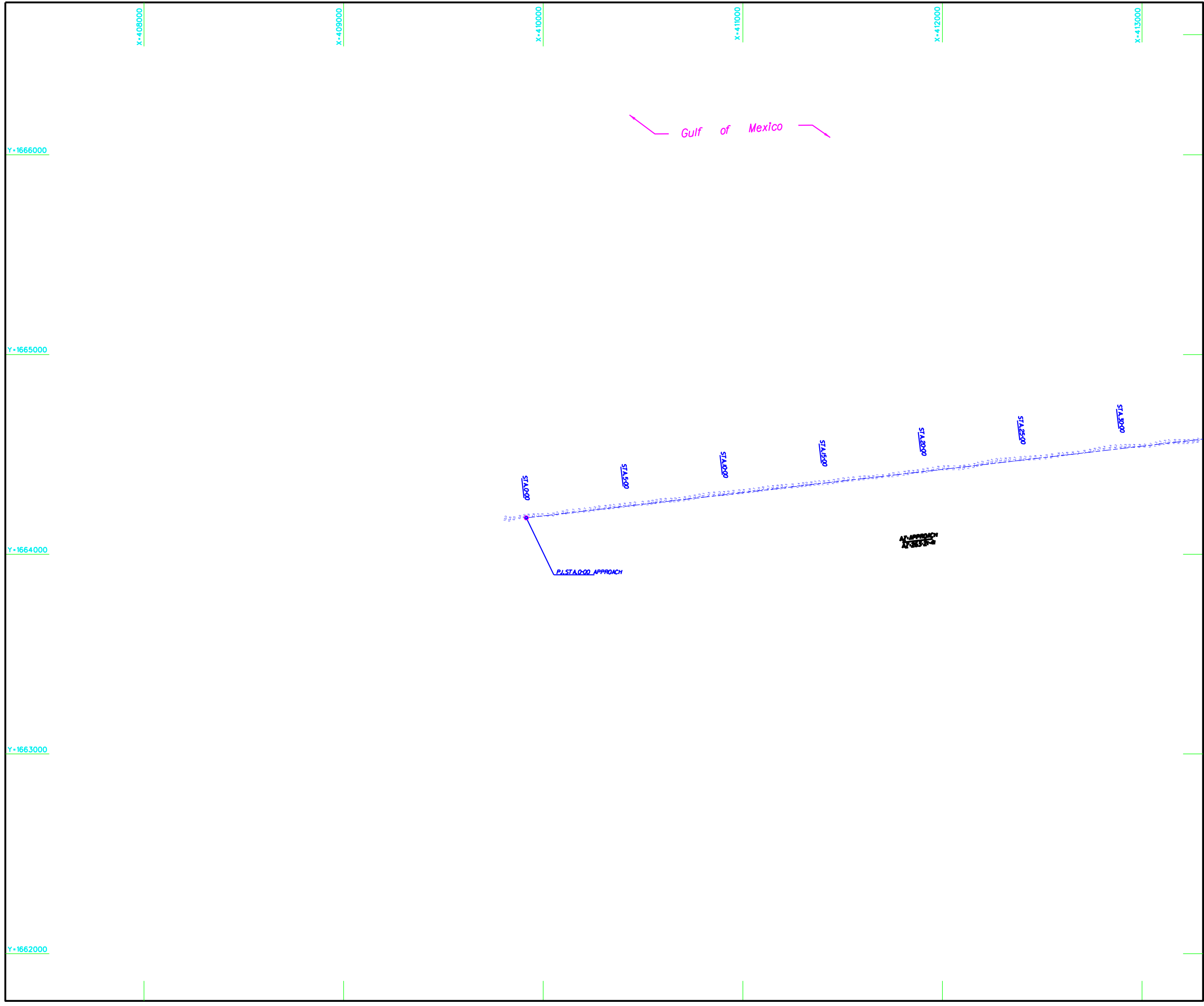
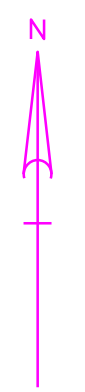


10 9 8 7 6 5 4 3 2 1

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SHEET LAYOUT



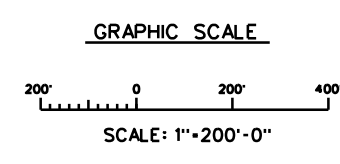
ABBREVIATIONS

REL.	= RANGE
STA.	= STATION
AZ.	= AZIMUTH
P.I.	= POINT OF INTERSECTION
R	= RED
G	= GREEN

LEGEND

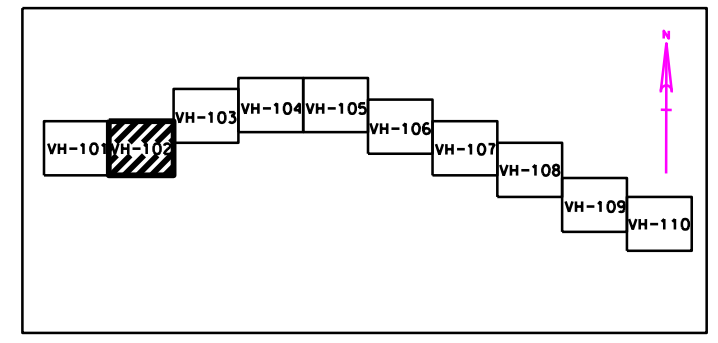
	CHANNEL CENTERLINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



 US Army Corps of Engineers Jacksonville District	
SAFETY ON THIS JOB DEPENDS ON YOU	
Client:	GRN
Designed by:	BDC
Drawn by:	BDC
File No.:	WR2256-14-0601
Date:	12 SEP 2013
CRISTAL RIVER, FLORIDA PROJECT CONDITION SURVEY GULF OF MEXICO TO STATION 633+06.37	DEGROVE SURVEYORS, INC. 2131 CORPORATE SQUARE BLVD. JACKSONVILLE, FLORIDA DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA
Scale: AS SHOWN	Drawing no.
VH-101	

10 9 8 7 6 5 4 3 2 1



SHEET LAYOUT



No.	Symbol	Zone

DEGROVE SURVEYORS, INC.
2131 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

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

Checked by:	GRN
Designed by:	BDC
Drawn by:	BDC
File No.:	WP2524-24-0601
Contract:	12 SEP 2013

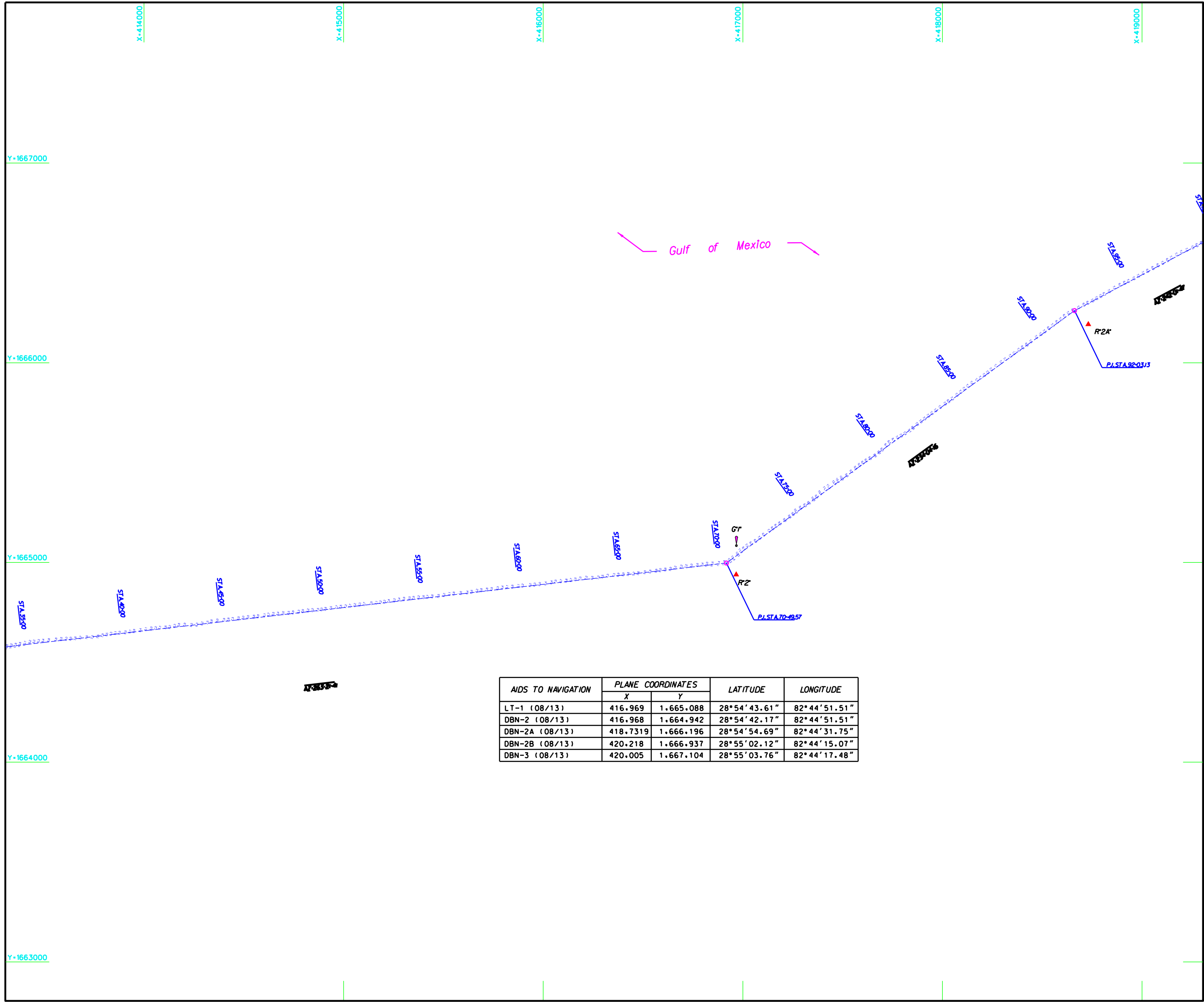
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13-129ACR-FOPOLDGN
13-129ACR-ROLDGN

13-129AG-GR-BBOLDGN
Reference Mark: 13-129ACR-102DGN
File Name:

CRYSTAL RIVER, FLORIDA

PROJECT CONDITION SURVEY

GULF OF MEXICO TO STATION 633+06.37



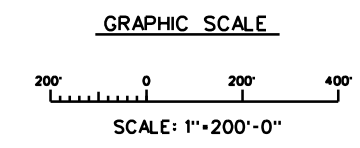
ABBREVIATIONS

RGE.	=	RANGE
STA.	=	STATION
AZ.	=	AZIMUTH
P.I.	=	POINT OF INTERSECTION
R	=	RED
G	=	GREEN

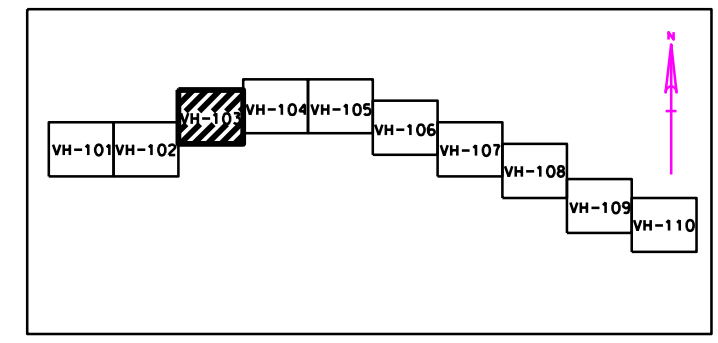
LEGEND

---	CHANNEL CENTER LINE
---	CONTOUR W/ ANNOTATION
•BM	BENCHMARK
✱	LIGHTED BEACON
■	GREEN DAYBEACON
▲	RED DAYBEACON
●	RED LIGHTED BUOY
●	GREEN LIGHTED BUOY
○	CAN BUOY
○	NUN BUOY
⚠	CAUTION MANATEE SIGN
⚓	TIDE STAFF

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-1 (08/13)	416.969	1.665.088	28°54'43.61"	82°44'51.51"
DBN-2 (08/13)	416.968	1.664.942	28°54'42.17"	82°44'51.51"
DBN-2A (08/13)	418.7319	1.666.196	28°54'54.69"	82°44'31.75"
DBN-2B (08/13)	420.218	1.666.937	28°55'02.12"	82°44'15.07"
DBN-3 (08/13)	420.005	1.667.104	28°55'03.76"	82°44'17.48"



SHEET LAYOUT

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

DEIGROVE SURVEYORS, INC.
2137 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

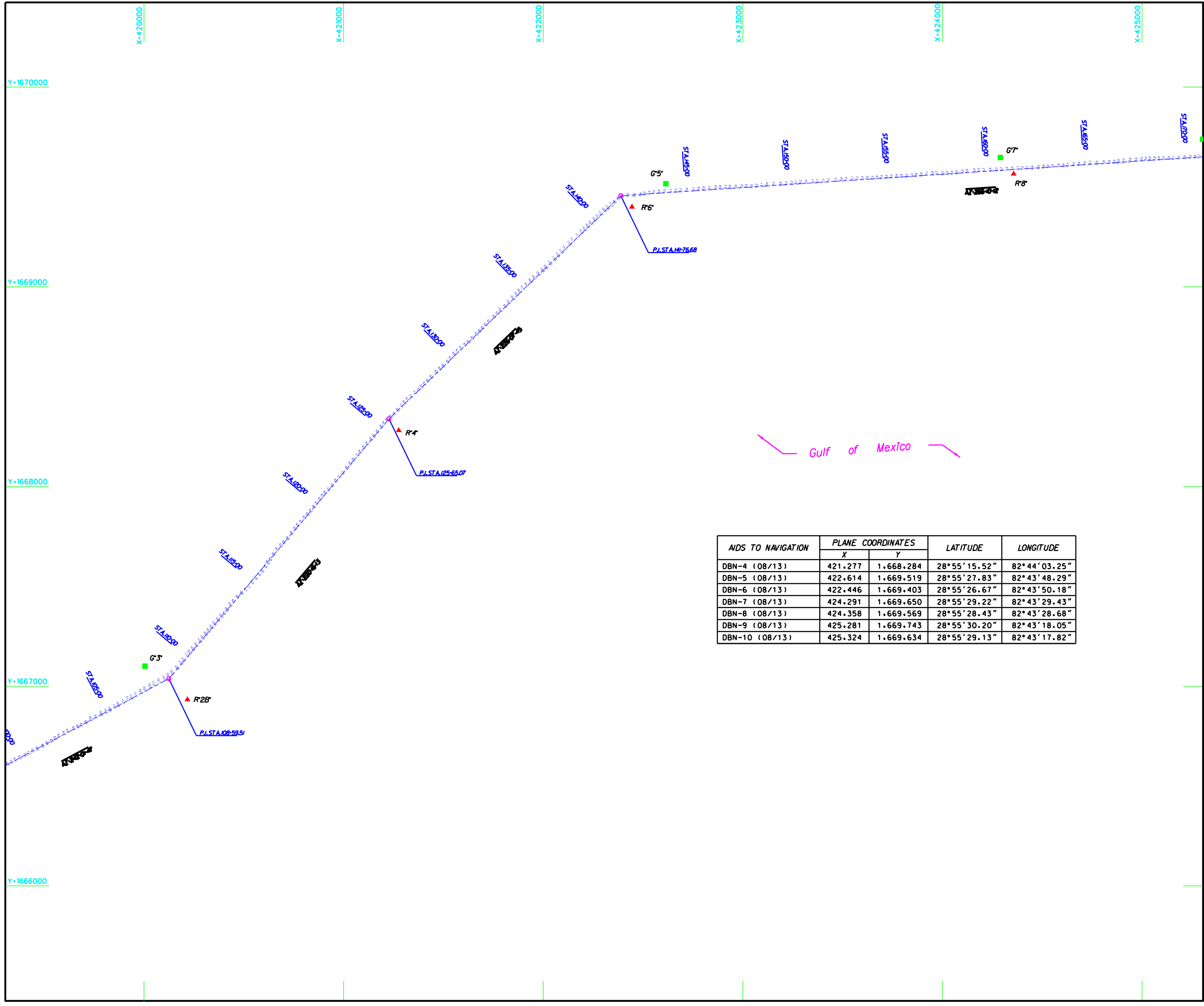
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

13-129-AG-GR-CHALDGN
13-129-AG-GR-POPOLDGN
13-129-AG-GR-BOULDGN

13-129-AG-GR-BOULDGN
Reference: 13-129-GR-103LDGN

Scale: AS SHOWN

Drawing no.
VH-103



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-4 (08/13)	421.277	1.668.284	28°55'15.52"	82°44'03.25"
DBN-5 (08/13)	422.614	1.669.519	28°55'27.83"	82°43'48.29"
DBN-6 (08/13)	422.446	1.669.403	28°55'26.67"	82°43'50.18"
DBN-7 (08/13)	424.291	1.669.650	28°55'29.22"	82°43'29.43"
DBN-8 (08/13)	424.358	1.669.569	28°55'28.43"	82°43'28.68"
DBN-9 (08/13)	425.281	1.669.743	28°55'30.20"	82°43'18.05"
DBN-10 (08/13)	425.324	1.669.634	28°55'29.13"	82°43'17.82"

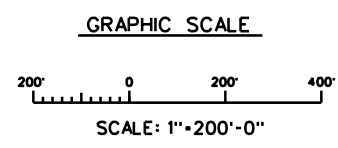
ABBREVIATIONS

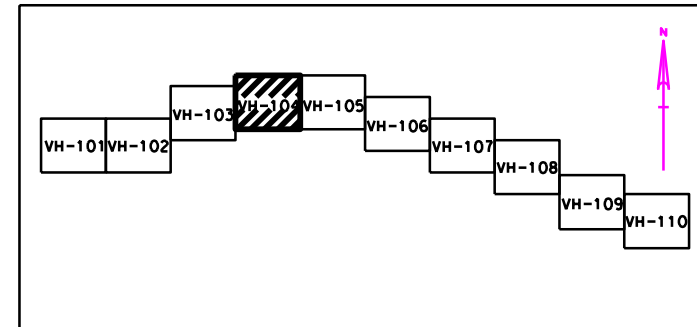
RCE. = RANGE
STA. = STATION
AZ. = AZIMUTH
P. I. = POINT OF INTERSECTION
R = RED
G = GREEN

LEGEND

- CHANNEL CENTERLINE
- CONTOUR W/ ANNOTATION
- BENCHMARK
- LIGHTED BEACON
- GREEN DAYBEACON
- RED DAYBEACON
- RED LIGHTED BUOY
- GREEN LIGHTED BUOY
- CAN BUOY
- NUN BUOY
- CAUTION MANATEE SIGN
- TIDE STAFF

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.





SHEET LAYOUT

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

Checked by:	GRN
Designed by:	BDC
Drawn by:	BDC
File No.:	W12525-14-04-001
Drawn:	12 SEP 2013

DEGREVE SURVEYORS, INC.
2137 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

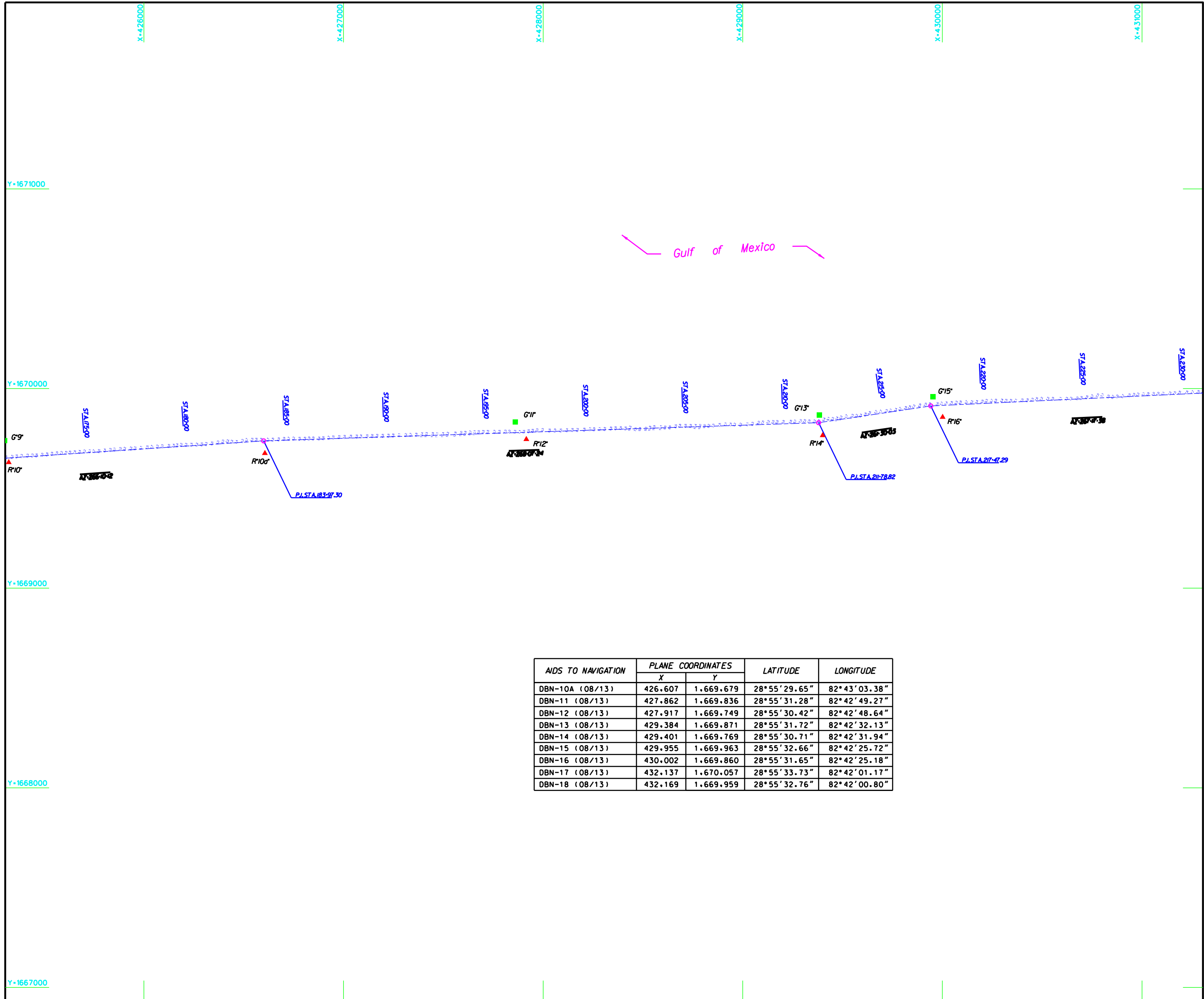
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

13-12525-GR-04-001
13-12525-GR-04-001
13-12525-GR-04-001

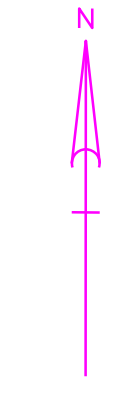
Reference files:
13-12525-GR-04-001

CRYSTAL RIVER, FLORIDA
PROJECT CONDITION SURVEY
GULF OF MEXICO TO STATION 633+06.37

Scale: AS SHOWN
Drawing no.
VH-104



Gulf of Mexico



ABBREVIATIONS

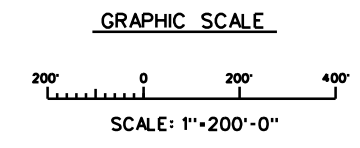
RGE.	= RANGE
STA.	= STATION
AZ.	= AZIMUTH
P. I.	= POINT OF INTERSECTION
R	= RED
G	= GREEN

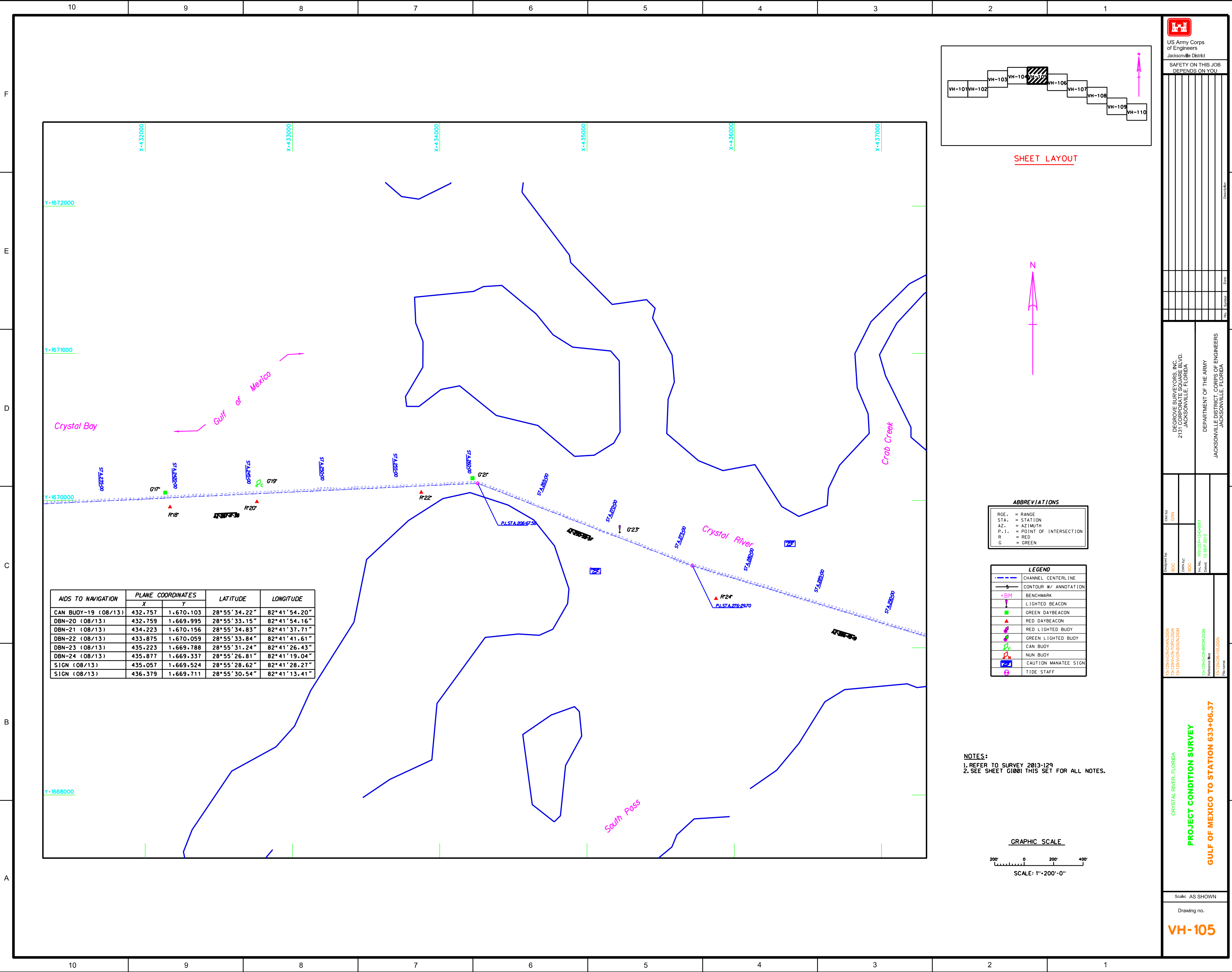
LEGEND

	CHANNEL CENTERLINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

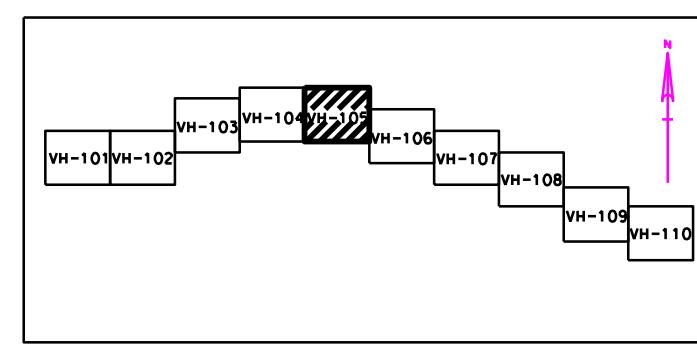
AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-10A (08/13)	426.607	1.669.679	28°55'29.65"	82°43'03.38"
DBN-11 (08/13)	427.862	1.669.836	28°55'31.28"	82°42'49.27"
DBN-12 (08/13)	427.917	1.669.749	28°55'30.42"	82°42'48.64"
DBN-13 (08/13)	429.384	1.669.871	28°55'31.72"	82°42'32.13"
DBN-14 (08/13)	429.401	1.669.769	28°55'30.71"	82°42'31.94"
DBN-15 (08/13)	429.955	1.669.963	28°55'32.66"	82°42'25.72"
DBN-16 (08/13)	430.002	1.669.860	28°55'31.65"	82°42'25.18"
DBN-17 (08/13)	432.137	1.670.057	28°55'33.73"	82°42'01.17"
DBN-18 (08/13)	432.169	1.669.959	28°55'32.76"	82°42'00.80"

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.

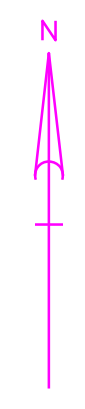




AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-19 (08/13)	432.757	1.670.103	28°55'34.22"	82°41'54.20"
DBN-20 (08/13)	432.759	1.669.995	28°55'33.15"	82°41'54.16"
DBN-21 (08/13)	434.223	1.670.156	28°55'34.83"	82°41'37.71"
DBN-22 (08/13)	433.875	1.670.059	28°55'33.84"	82°41'41.61"
DBN-23 (08/13)	435.223	1.669.788	28°55'31.24"	82°41'26.43"
DBN-24 (08/13)	435.877	1.669.337	28°55'26.81"	82°41'19.04"
SIGN (08/13)	435.057	1.669.524	28°55'28.62"	82°41'28.27"
SIGN (08/13)	436.379	1.669.711	28°55'30.54"	82°41'13.41"



SHEET LAYOUT



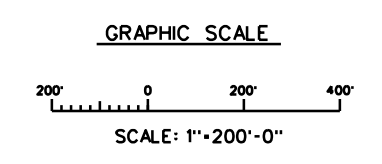
ABBREVIATIONS

RGE.	= RANGE
STA.	= STATION
AZ.	= AZIMUTH
P.I.	= POINT OF INTERSECTION
R	= RED
G	= GREEN

LEGEND

	CHANNEL CENTERLINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
 1. REFER TO SURVEY 2013-129
 2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



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

DESIGNED BY: BDC
 CHECKED BY: GIN
 DRAWN BY: BDC
 DATE: 12 SEP 2013

PROJECT: 13-129-GR-0001
 SHEET: VH-105

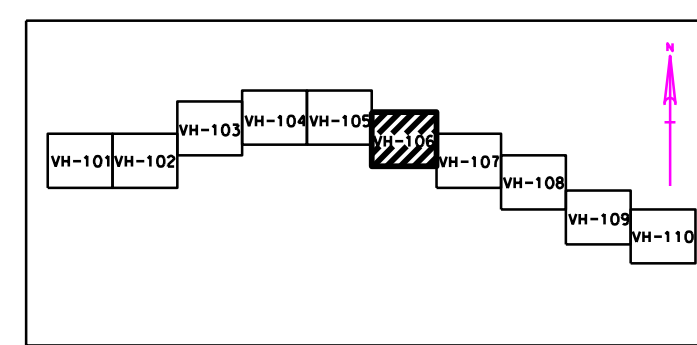
DEGREVE SURVEYORS, INC.
 2131 CORPORATE SQUARE BLVD.
 JACKSONVILLE, FLORIDA

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

PROJECT CONDITION SURVEY
 GULF OF MEXICO TO STATION 633+06.37

SCALE: AS SHOWN
 Drawing no.

VH-105



SHEET LAYOUT



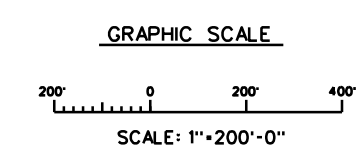
ABBREVIATIONS

RGE.	= RANGE
STA.	= STATION
AZ.	= AZIMUTH
P.I.	= POINT OF INTERSECTION
R	= RED
G	= GREEN

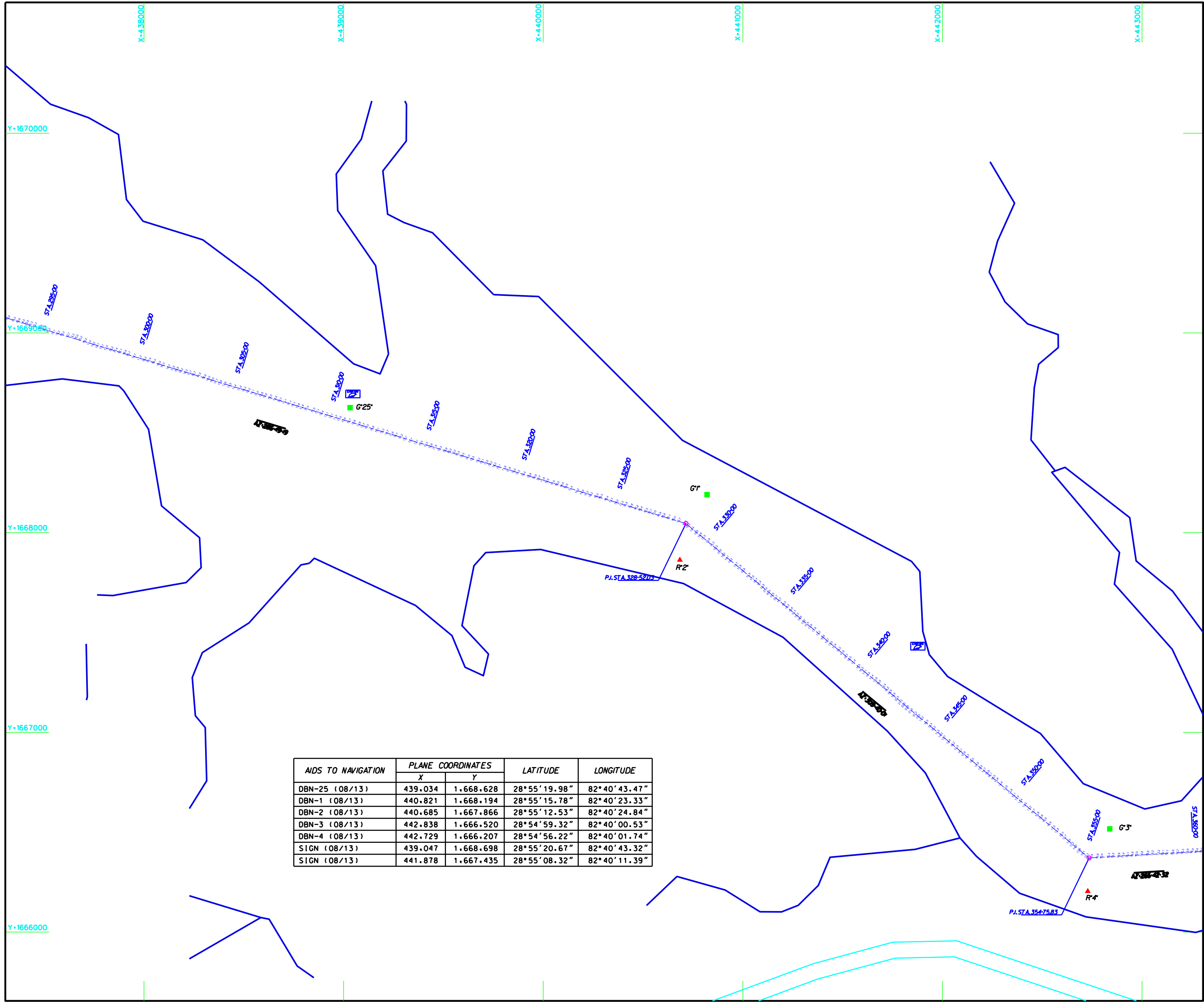
LEGEND

	CHANNEL CENTER LINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
 1. REFER TO SURVEY 2013-129
 2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-25 (08/13)	439.034	1.668.628	28°55'19.98"	82°40'43.47"
DBN-1 (08/13)	440.821	1.668.194	28°55'15.78"	82°40'23.33"
DBN-2 (08/13)	440.685	1.667.866	28°55'12.53"	82°40'24.84"
DBN-3 (08/13)	442.838	1.666.520	28°54'59.32"	82°40'00.53"
DBN-4 (08/13)	442.729	1.666.207	28°54'56.22"	82°40'01.74"
SIGN (08/13)	439.047	1.668.698	28°55'20.67"	82°40'43.32"
SIGN (08/13)	441.878	1.667.435	28°55'08.32"	82°40'11.39"

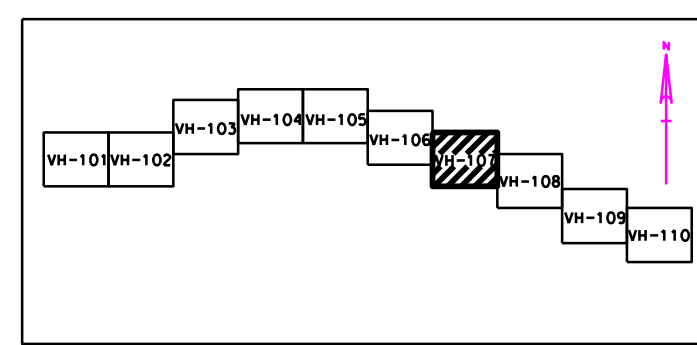


US Army Corps of Engineers
 Jacksonville District
 SAFETY ON THIS JOB
 DEPENDS ON YOU

DESIGNED BY: BDC
 CHECKED BY: GIN
 DRAWN BY: BDC
 FILE NO: W8125A-124-0001
 DATE: 12 SEP 2013

CRYSTAL RIVER, FLORIDA
PROJECT CONDITION SURVEY
GULF OF MEXICO TO STATION 633+06.37

Scale: AS SHOWN
 Drawing no.
VH-106



SHEET LAYOUT



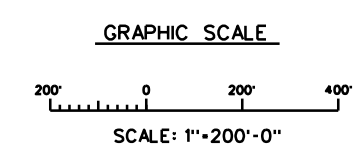
ABBREVIATIONS

RGE.	=	RANGE
STA.	=	STATION
AZ.	=	AZIMUTH
P.I.	=	POINT OF INTERSECTION
R	=	RED
G	=	GREEN

LEGEND

	CHANNEL CENTER LINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-5 (08/13)	444.732	1,666.596	28°55'00.18"	82°39'39.23"
DBN-6 (08/13)	444.596	1,666.367	28°54'57.90"	82°39'40.74"
DBN-7 (08/13)	446.539	1,665.500	28°54'49.42"	82°39'18.82"
DBN-8 (08/13)	446.521	1,665.202	28°54'46.48"	82°39'19.01"
DBN-9 (08/13)	448.584	1,665.247	28°54'47.04"	82°38'55.80"
DBN-10 (08/13)	448.457	1,665.073	28°54'45.30"	82°38'57.22"
DBN-11 (08/13)	450.071	1,664.089	28°54'35.65"	82°38'38.99"
DBN-12 (08/13)	450.143	1,663.843	28°54'33.22"	82°38'38.17"
SIGN (08/13)	444.599	1,666.307	28°54'57.31"	82°39'40.70"
SIGN (08/13)	448.277	1,665.381	28°54'48.34"	82°38'59.26"

DEGROVE SURVEYORS, INC.
2137 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

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

Designed by: BDC
Checked by: GRN
Drawn by: BDC
File No.: 13-129-GR-06-001
Date: 12 SEP 2013

13-129-GR-06-001
13-129-GR-06-001
13-129-GR-06-001
13-129-GR-06-001

CRYSTAL RIVER, FLORIDA

PROJECT CONDITION SURVEY

GULF OF MEXICO TO STATION 633+06.37

Scale: AS SHOWN

Drawing no.

VH-107

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US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB
DEPENDS ON YOU

DEGREVE SURVEYORS, INC.
2137 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

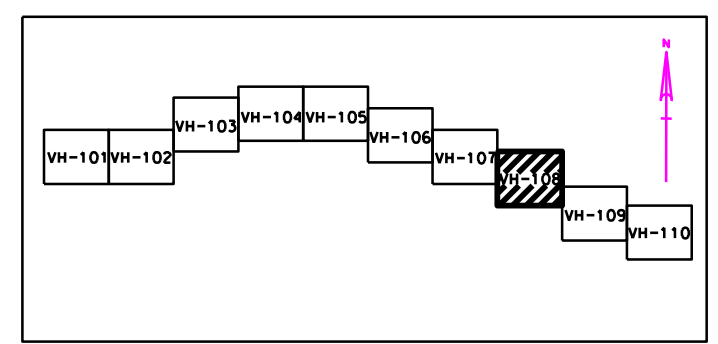
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Drawn by: BDC
Checked by: GIN

Project No: 6333+06.37
Drawing No: VH-108
Date: 12 SEP 2013

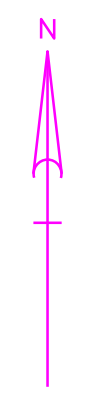
CRYSTAL RIVER, FLORIDA
PROJECT CONDITION SURVEY
GULF OF MEXICO TO STATION 6333+06.37

Scale: AS SHOWN
Drawing no.
VH-108



SHEET LAYOUT

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-17 (08/13)	454.202	1.662.428	28°54'19.42"	82°37'52.41"
DBN-18 (08/13)	454.209	1.662.191	28°54'17.07"	82°37'52.33"
DBN-19 (08/13)	455.665	1.662.954	28°54'24.71"	82°37'35.98"
DBN-20 (08/13)	455.683	1.662.693	28°54'22.12"	82°37'35.77"
SIGN (08/13)	451.269	1.664.014	28°54'34.97"	82°38'25.51"
SIGN (08/13)	451.311	1.663.736	28°54'32.22"	82°38'25.02"
SIGN (08/13)	453.438	1.662.499	28°54'20.09"	82°38'01.01"
SIGN (08/13)	453.184	1.662.056	28°54'15.69"	82°38'03.85"
SIGN (08/13)	453.926	1.662.589	28°54'21.00"	82°37'55.53"
SIGN (08/13)	453.438	1.662.113	28°54'16.26"	82°38'00.99"
SIGN (08/13)	454.972	1.662.356	28°54'18.75"	82°37'43.75"
SIGN (08/13)	455.829	1.662.444	28°54'19.67"	82°37'34.11"
POST (08/13)	455.816	1.662.450	28°54'19.72"	82°37'34.25"



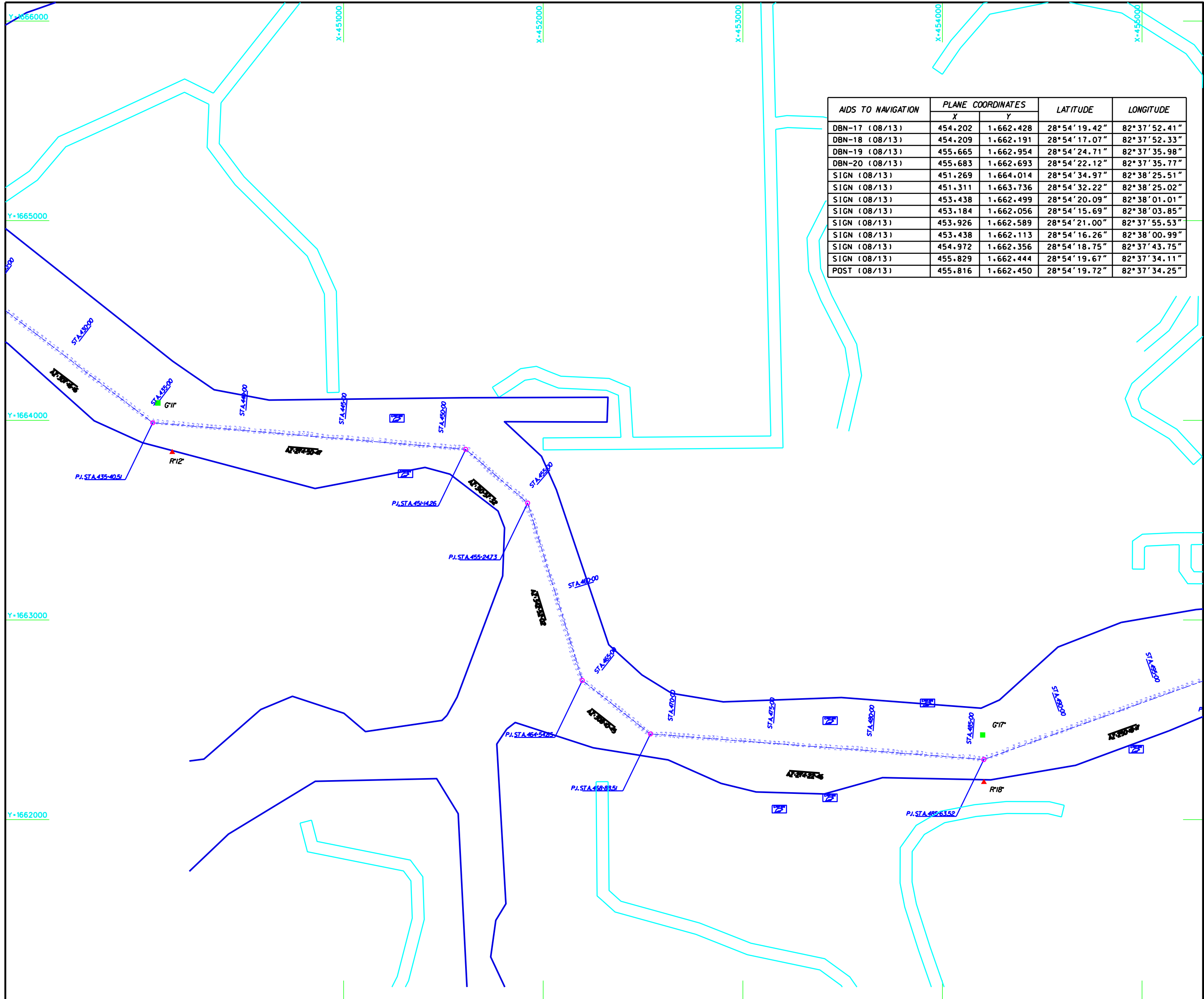
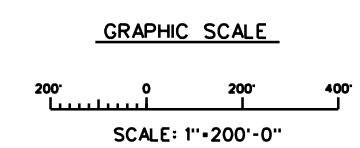
ABBREVIATIONS

RGE.	= RANGE
STA.	= STATION
AZ.	= AZIMUTH
P. I.	= POINT OF INTERSECTION
R	= RED
G	= GREEN

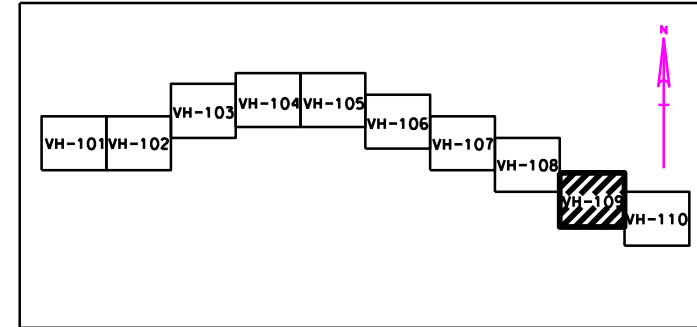
LEGEND

	CHANNEL CENTERLINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	GREEN LIGHTED BUOY
	RED LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
1. REFER TO SURVEY 2013-129
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



10 9 8 7 6 5 4 3 2 1



SHEET LAYOUT



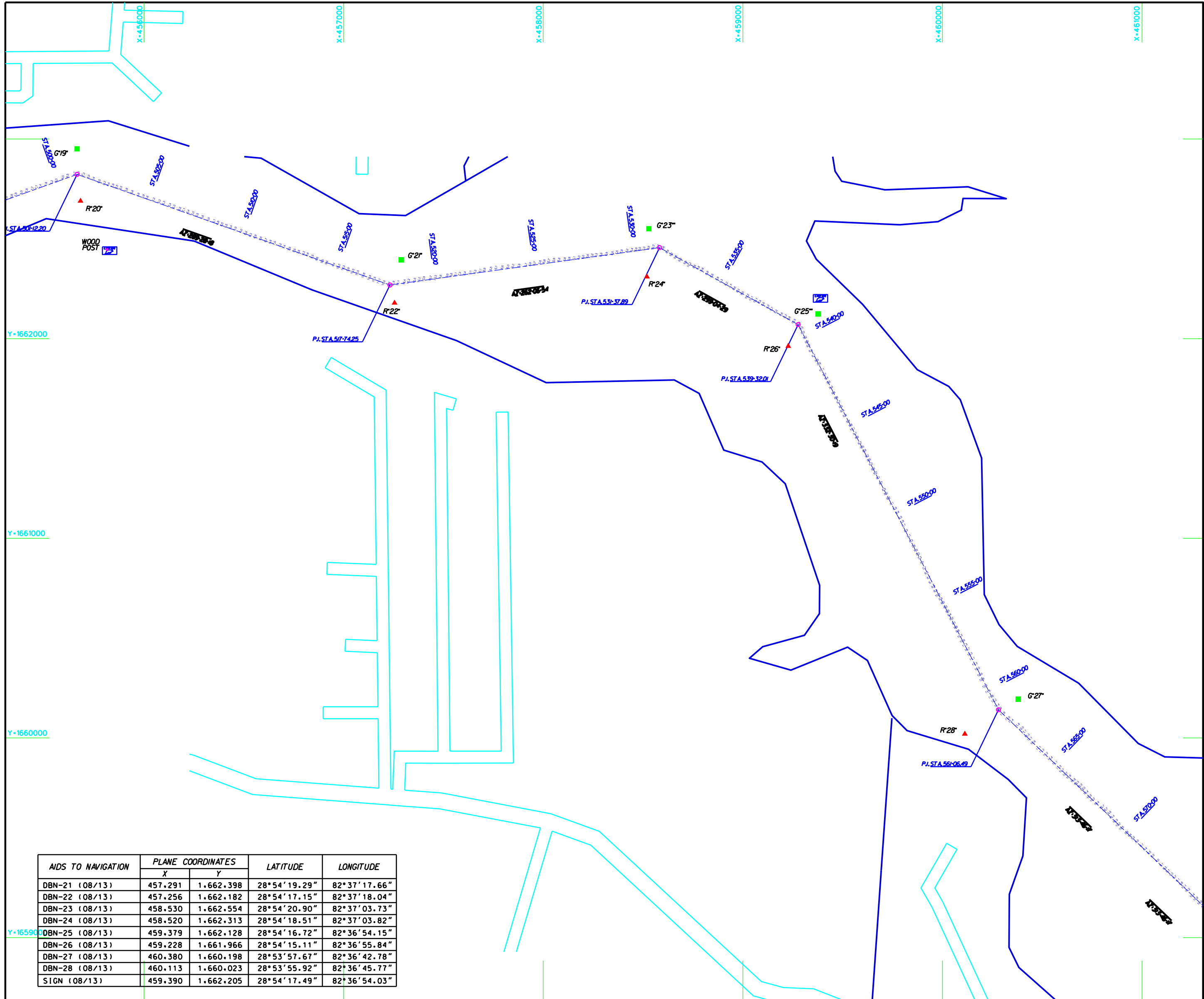
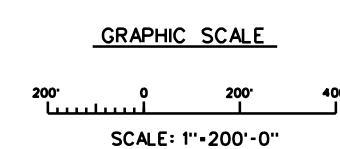
ABBREVIATIONS

RGE.	=	RANGE
STA.	=	STATION
AZ.	=	AZIMUTH
P.I.	=	POINT OF INTERSECTION
R	=	RED
G	=	GREEN

LEGEND

	CHANNEL CENTER LINE
	CONTOUR W/ ANNOTATION
	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	CAUTION MANATEE SIGN
	TIDE STAFF

NOTES:
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AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-21 (08/13)	457.291	1.662.398	28°54'19.29"	82°37'17.66"
DBN-22 (08/13)	457.256	1.662.182	28°54'17.15"	82°37'18.04"
DBN-23 (08/13)	458.530	1.662.554	28°54'20.90"	82°37'03.73"
DBN-24 (08/13)	458.520	1.662.313	28°54'18.51"	82°37'03.82"
DBN-25 (08/13)	459.379	1.662.128	28°54'16.72"	82°36'54.15"
DBN-26 (08/13)	459.228	1.661.966	28°54'15.11"	82°36'55.84"
DBN-27 (08/13)	460.380	1.660.198	28°53'57.67"	82°36'42.78"
DBN-28 (08/13)	460.113	1.660.023	28°53'55.92"	82°36'45.77"
SIGN (08/13)	459.390	1.662.205	28°54'17.49"	82°36'54.03"

DEGROVE SURVEYORS, INC.
2131 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA

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

Checked By: GIN
Designed By: BDC
Drawn By: BDC
File No.: W8129A-04-0001
Date: 12 SEP 2013

13-129A-CR-CHALDON
13-129A-CR-POPOLDON
13-129A-CR-ROLDON
13-129A-CR-ROLDON
Reference Map: 13-129A-CR-1001DGN
File Name:

CRYSTAL RIVER, FLORIDA

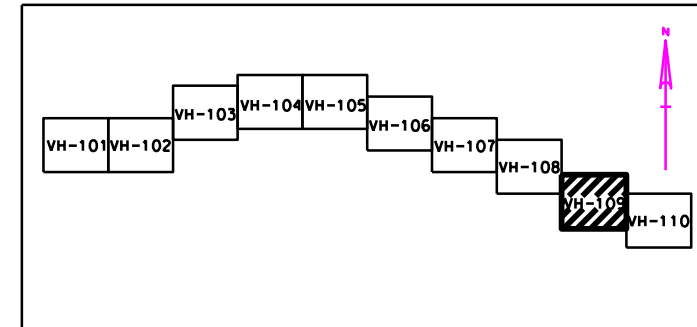
PROJECT CONDITION SURVEY

GULF OF MEXICO TO STATION 633+06.37

Scale: AS SHOWN

Drawing no.

VH-109



SHEET LAYOUT



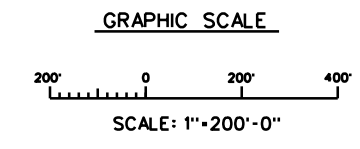
ABBREVIATIONS

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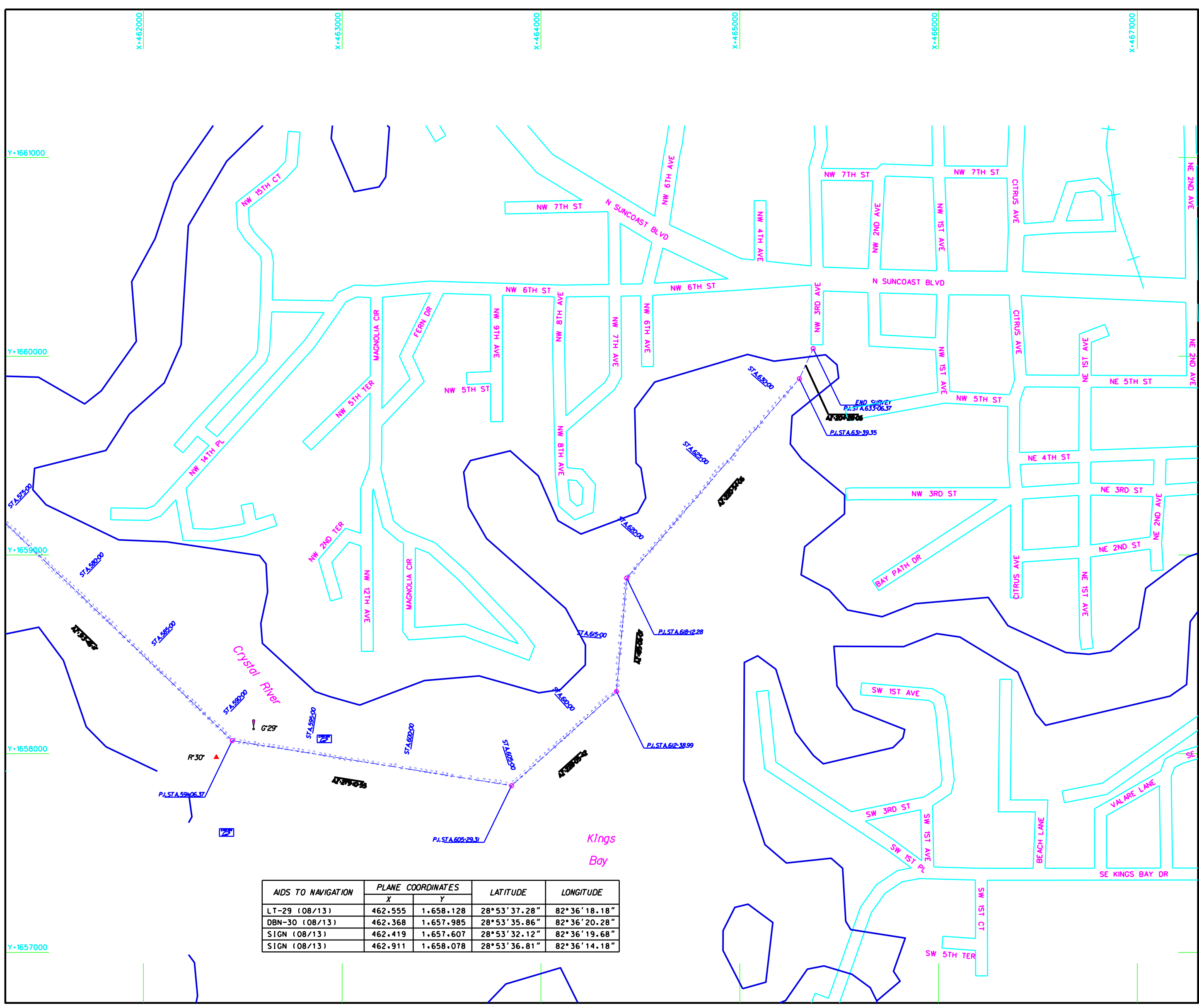
LEGEND

---	CHANNEL CENTER LINE
---	CONTOUR W/ ANNOTATION
+BM	BENCHMARK
☼	LIGHTED BEACON
▲	GREEN DAY BEACON
▲	RED DAY BEACON
☼	RED LIGHTED BUOY
☼	GREEN LIGHTED BUOY
☼	CAN BUOY
☼	NUN BUOY
☼	CAUTION MANATEE SIGN
☼	TIDE STAFF

NOTES:
 1. REFER TO SURVEY 2013-129
 2. SEE SHEET G1001 THIS SET FOR ALL NOTES.



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-29 (08/13)	462.555	1.658.128	28°53'37.28"	82°36'18.18"
DBN-30 (08/13)	462.368	1.657.985	28°53'35.86"	82°36'20.28"
SIGN (08/13)	462.419	1.657.607	28°53'32.12"	82°36'19.68"
SIGN (08/13)	462.911	1.658.078	28°53'36.81"	82°36'14.18"



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

Designed by: **BBC**
 Drawn by: **BBC**
 Checked by: **WRP/2013-04-09/01**
 Date: **12 SEP 2013**

Client: **GRN**
 Project: **13-129ACR-CHALDRN**
 13-129ACR-POPDDN
 13-129ACR-POPDDN
 13-129ACR-110DGN
 Reference: **13-129ACR-110DGN**
 File name: **13-129ACR-110DGN**

DEGREE SURVEYORS, INC.
 2137 CORPORATE SQUARE BLVD.
 JACKSONVILLE, FLORIDA

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

PROJECT CONDITION SURVEY
GULF OF MEXICO TO STATION 633+06.37

Crystal River, Florida

Scale: AS SHOWN
 Drawing no. **VH-110**