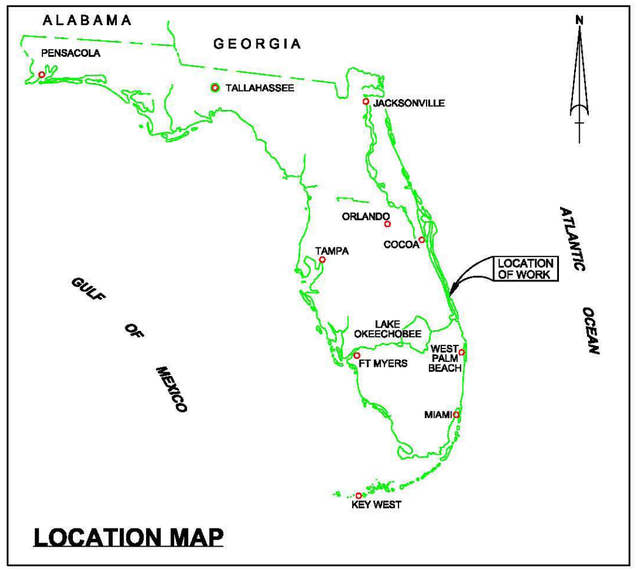
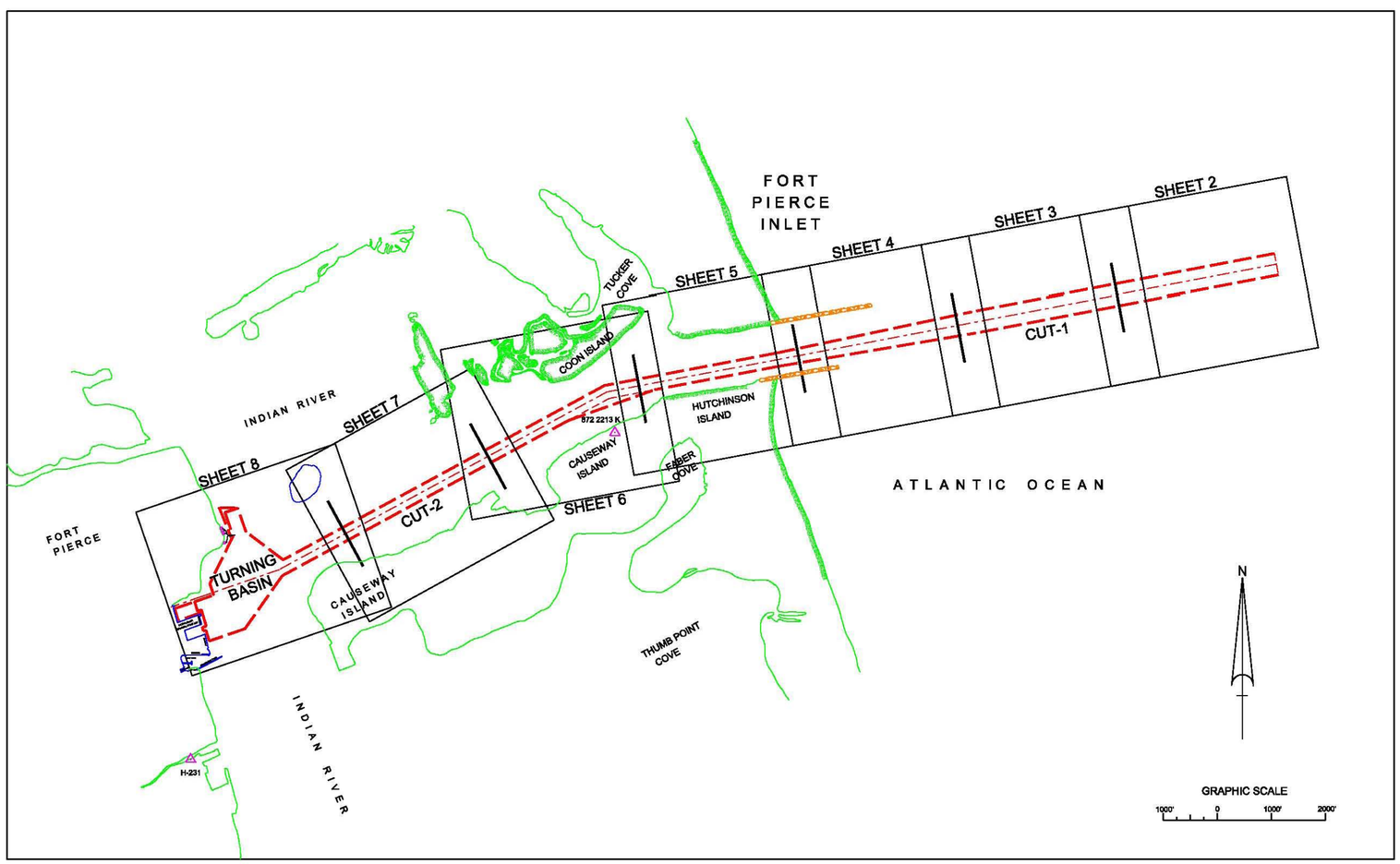
FORT PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA
EXAMINATION SURVEY FY11



LOCATION MAP



MAP SHEET NOTES:

1. REFER TO SURVEY NO. 11-026.
2. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO THE NOAA REPORTED MEAN LOWER LOW WATER (MLLW) TIDAL DATUM RELATIVE TO THE 1983-2001 TIDAL EPOCH.
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 (FTPIERCE-ONLY.KTD).
5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA 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 "H-231":
NORTHING: 1,133,851.59'
EASTING: 875,503.15'
NAVD88 ELEV: 6.84'

REFERENCE BASE LOCATED AT "872 2213 K":
NORTHING: 1,139,897.937'
EASTING: 883,348.827'
NAVD88 ELEV: 1.634'

TIDE STAFF LOCATED AT "872 2213 K"
NAVD88 ELEV: 1.84'
MLLW ELEV: 3.96'

VERTICAL MEASUREMENTS WERE MADE USING AN EDGETECH 4600 INTERFEROMETRIC BATHYMETRY SYSTEM 230 KHZ AND A ROSS SMARTSOUNDER DUAL FREQUENCY 28/200 KHZ SINGLE-BEAM SOUNDER. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	AREA
WB-32	25-27 JAN 2011	CUT-2 & TURNING BASIN
WB-32	28-29 APR 2011	CUT-1

9. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
10. 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.
11. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 1 JAN 02.

LEGEND	
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
C	CAN BUOY
N	NUN BUOY
	TIDE STAFF
8	PROJECT DEPTH

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N	△	A-N	ABCD

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

Cad by: D.V.T.
Designed by:
DWN by: F.W. & D.M.W.
Inv. No. - - -
Dated: 04 2011

11-026-G-BR-BRDR.DGN
INTERSECT-FTPIERCE-1SEC NAD83-V8-2D.DGN
NEWFL-MAP.DGN
FTPIERCE283.DGN
INDXBS.DGN
Reference files:
11-026-VH-001.DGN
File name:

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

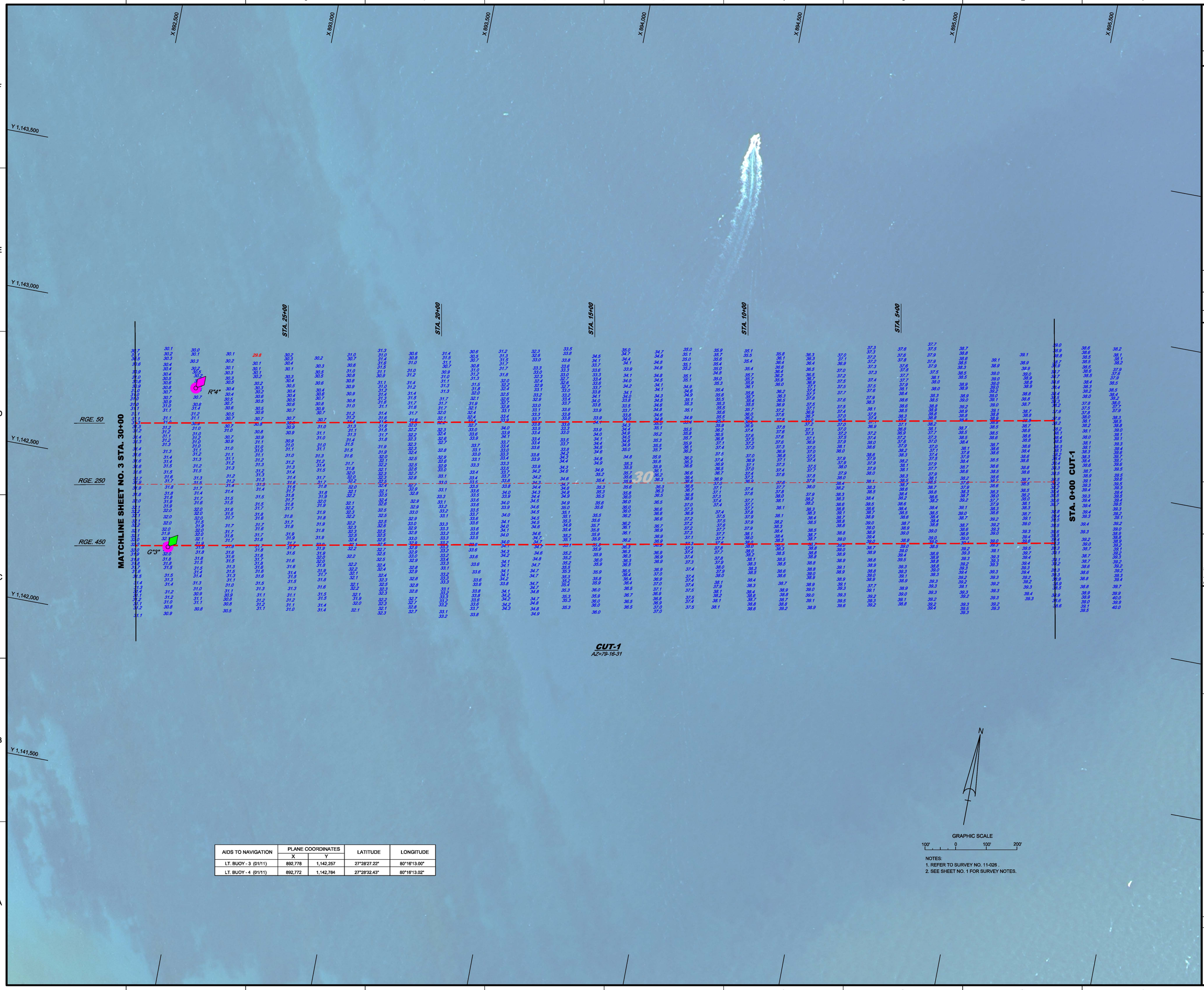
COVER, INDEX AND LOCATION PLAN

Scale: AS SHOWN

Drawing no.

1 / 8

SHEET 1 OF 8



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - 3 (01/11)	892,778	1,142,257	27°28'27.22"	80°16'13.00"
LT. BUOY - 4 (01/11)	892,772	1,142,784	27°28'32.43"	80°16'13.02"

NOTES:
1. REFER TO SURVEY NO. 11-026 .
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
N	△	A-N	ABCD

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

Designed by:
Cad by: D.V.T.
DWN by: F.W. & D.M.W.
Rev. No. - - -
Dated: 04 2011

11-026-JD-RBCS.DGN
INTERIM-FT-PIERCE-LIBRY-NAD83-V8-2D.DGN
11-026-V-CT1-30.DGN
11-026-V-NAV.DGN

Reference files:
11-026-VH-002.DGN
File name:

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

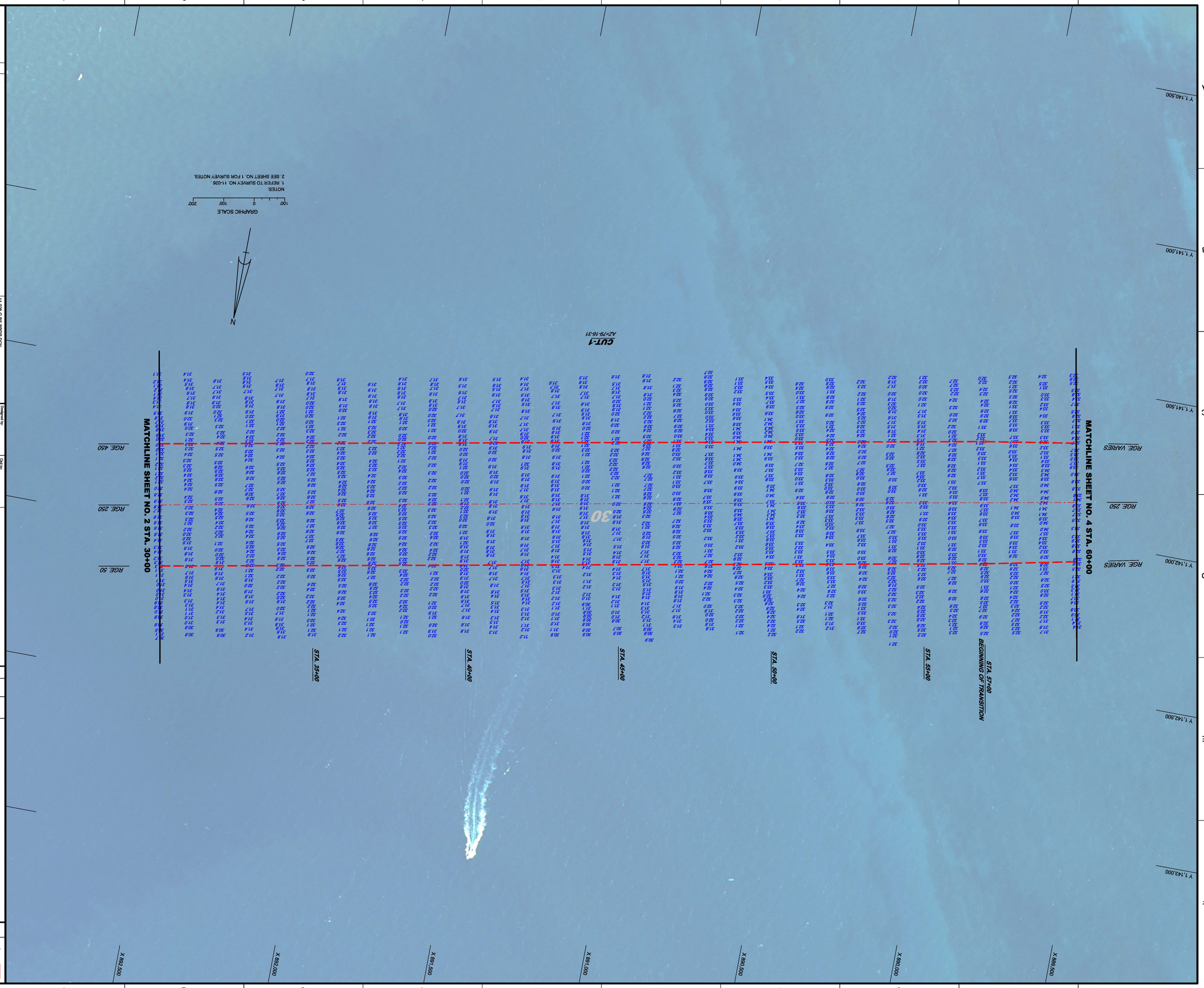
STA. 0+00 THRU STA. 30+00 CUT - 1 PLAN

Scale: AS SHOWN

Drawing no.

2 / 8

SHEET 2 OF 8



FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

STA. 30+00 THRU 60+00 CUT - 1
PLAN

Scale: AS SHOWN

Drawing no.

3 / 8

SHEET 3 OF 6

1:1000-S:\SURVEY\DGN\
INTERIM-FT PIERCE HBR NAD83-W-20.DGN
11-026-VH-CT1-30.DGN

Reference files:
11-026-VH-003.DGN
File name:

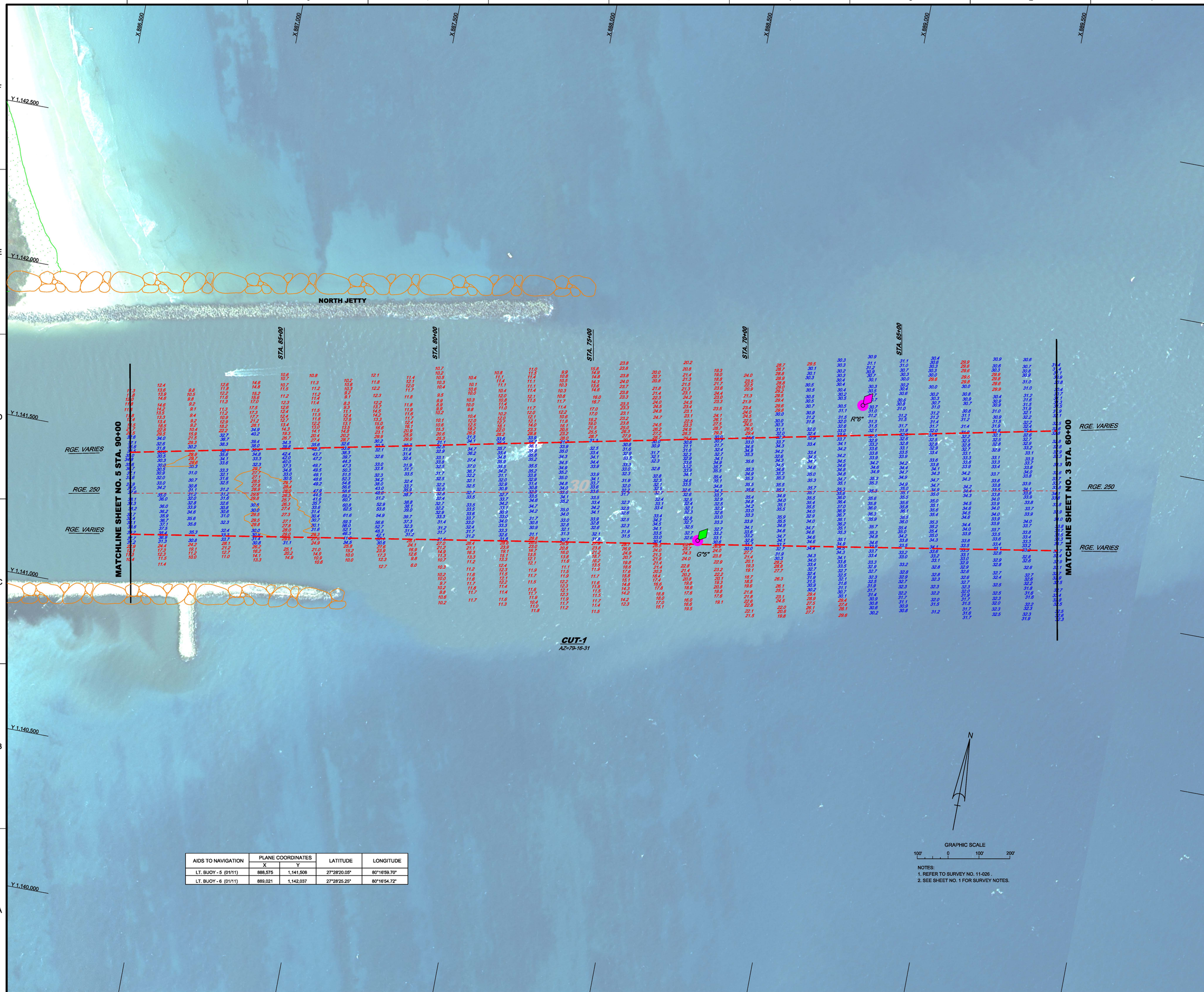
Designed by:
Drawn by: F.W. & D.M.W.
Rev. No.: - - -
Date: 04 2011
Chkd by: D.V.T.

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

No.	Symbol	Zone	Description
N		A-N	ABCD

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - 5 (01/11)	888,575	1,141,508	27°28'20.05"	80°16'59.70"
LT. BUOY - 6 (01/11)	889,021	1,142,037	27°28'25.25"	80°16'54.72"

NOTES:
1. REFER TO SURVEY NO. 11-026 .
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
N	△	A-N	ABCD

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

Cad by: D.Y.T.
Designed by:
DWN by: F.W. & D.M.W.
Rev. No. - - -
Dated: 04 2011

Reference files:
11-026-G-FP-PIERCE.DGN
INTERIM-FT-PIERCE-LINER NAD83-V8-2D.DGN
11-026-V-CON30.DGN
11-026-V-CT1-30.DGN
11-026-V-NAV.DGN

File name: 11-026-VH-004.DGN

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

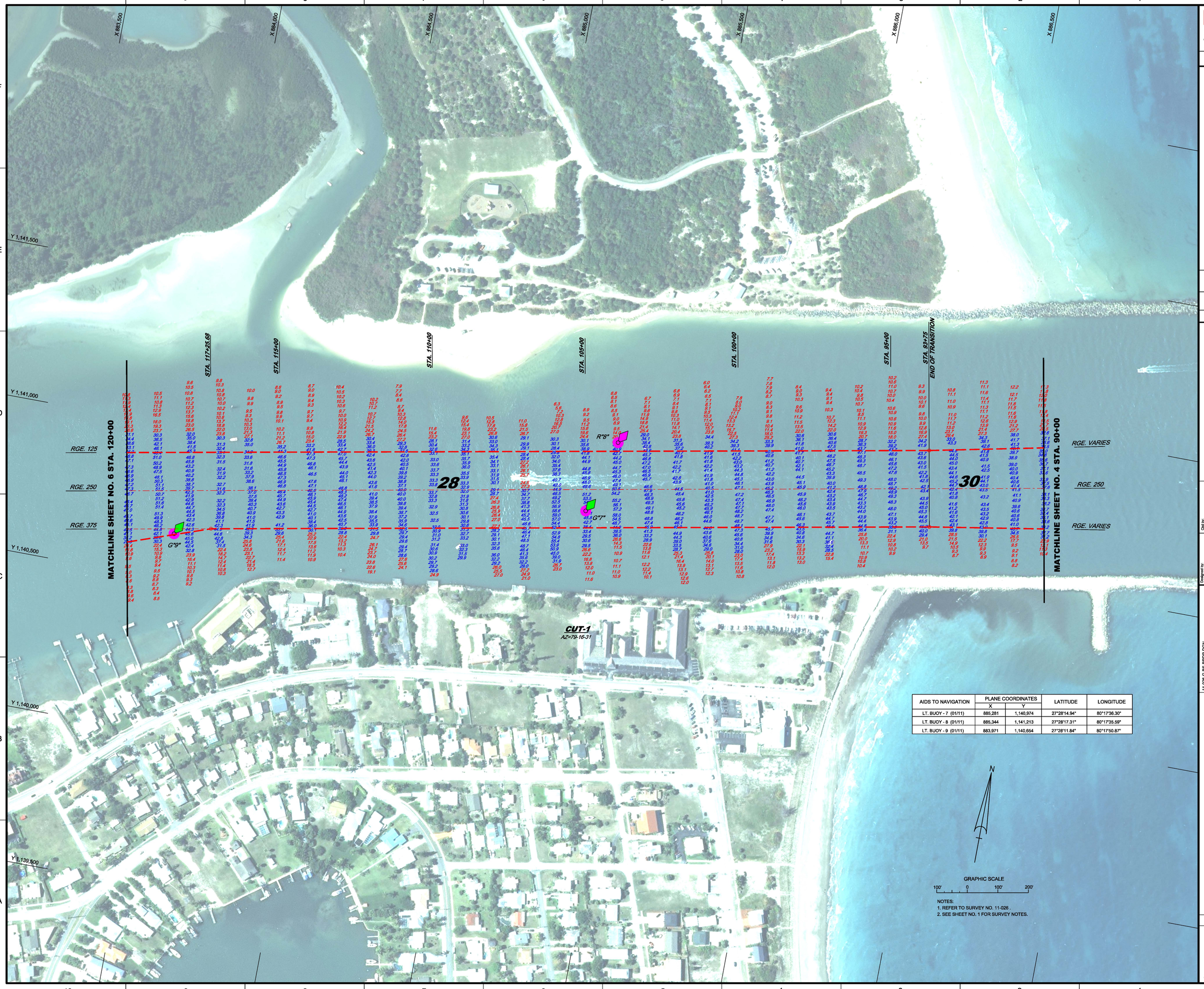
STA. 60+00 THEU STA. 90+00 CUT - 1
PLAN

Scale: AS SHOWN

Drawing no.

4 / 8

SHEET 4 OF 8



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - 7 (01/11)	885,281	1,140,974	27°28'14.94"	80°17'36.30"
LT. BUOY - 8 (01/11)	885,344	1,141,213	27°28'17.31"	80°17'35.59"
LT. BUOY - 9 (01/11)	883,971	1,140,654	27°28'11.84"	80°17'50.87"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 11-026 .
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
N	△	A-N	ABCD

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

Cad by: D.V.T.
Designed by:
DWN by:
Inv. No. - - -
Dated: 04 2011

11-026-J-PB-PIERCE.DGN
INTERIM-FT-PIERCE-HARBOR NAD83-VB-2D.DGN
11-026-V-CT1-28.DGN
11-026-V-CT1-30.DGN
11-026-Y-NAV.DGN

Reference files:
11-026-VH-005.DGN
File name:

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

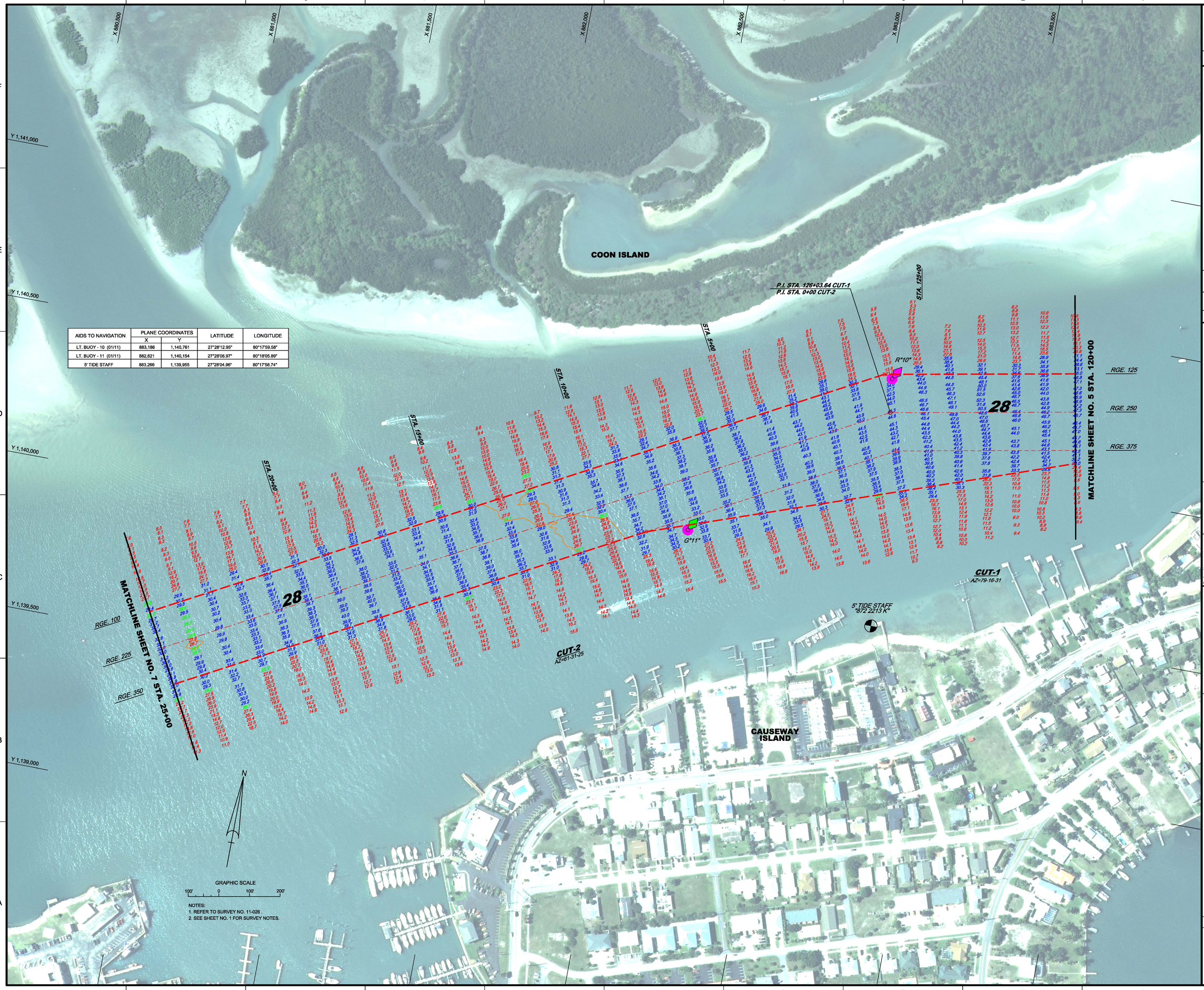
STA. 90+00 THRU STA. 120+00 CUT - 1
PLAN

Scale: AS SHOWN

Drawing no.

5 / 8

SHEET 5 OF 8



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - 10 (01/11)	883,186	1,140,761	27°28'12.95"	80°17'59.58"
LT. BUOY - 11 (01/11)	882,621	1,140,154	27°28'06.97"	80°18'05.89"
5' TIDE STAFF	883,266	1,139,955	27°28'04.96"	80°17'58.74"

NOTES:
1. REFER TO SURVEY NO. 11-026 .
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
N	△	A-N	ABCD

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

Cad by: D.V.T.
Designed by:
DWN by: F.W. & D.M.W.
Rev. No. - - -
Dated: 04 2011

11-026-A-B-PIERCE.DGN
IN FEET, STATE PLANE, NAD83-V8-2D.DGN
11-026-V-CON28.DGN
11-026-V-CT1-28.DGN
11-026-V-CT2-28.DGN
11-026-V-AXV-2.DGN

Referenced files:
11-026-VH-006.DGN
File name:

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

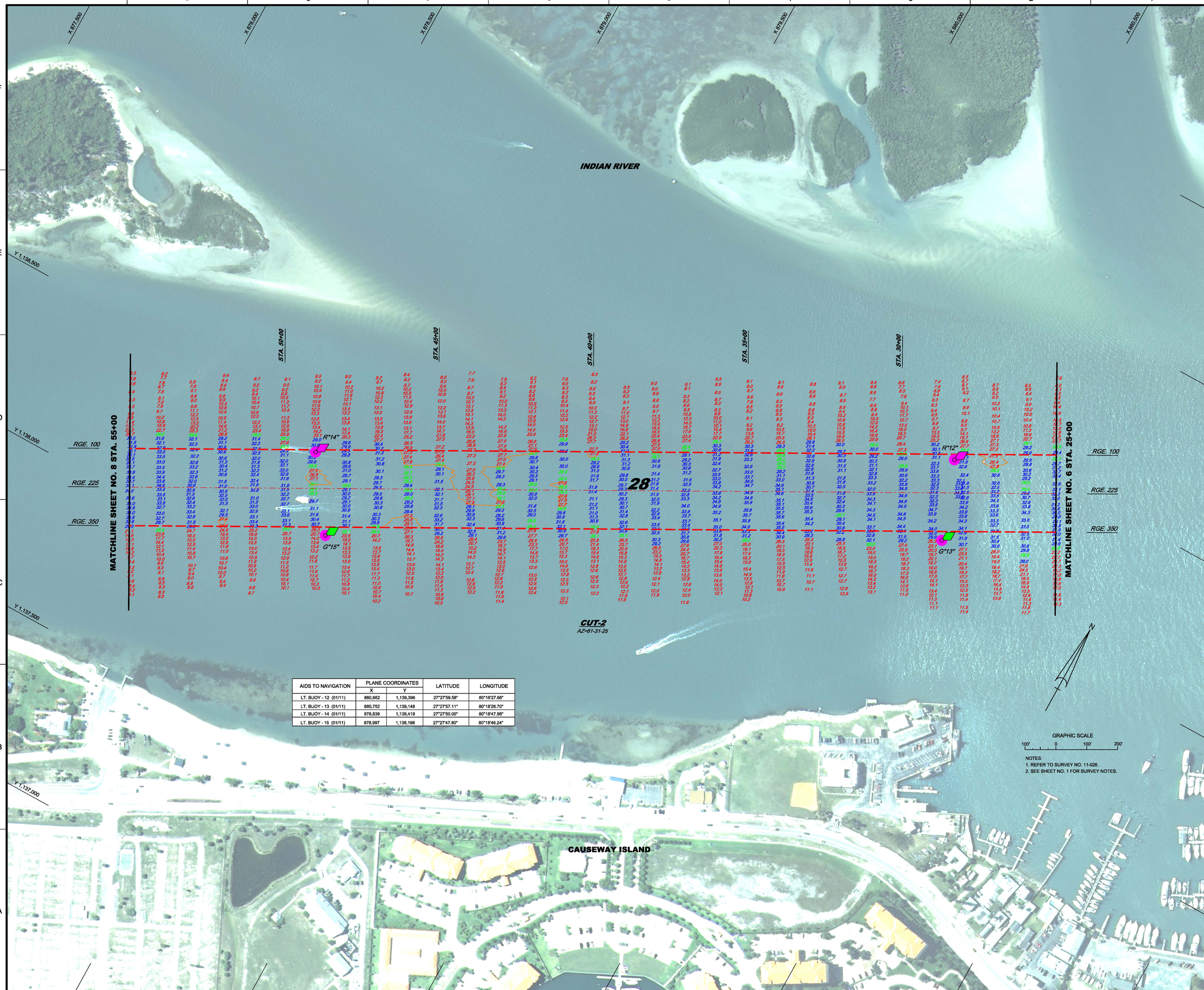
STA. 120+00 CUT - 1 THRU STA. 25+00 CUT - 2
PLAN

Scale: AS SHOWN

Drawing no.

6 / 8

SHEET 6 OF 8



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - 12 (01/11)	880,662	1,139,396	27°27'59.56"	80°18'27.68"
LT. BUOY - 13 (01/11)	880,752	1,139,148	27°27'57.11"	80°18'26.70"
LT. BUOY - 14 (01/11)	878,839	1,138,419	27°27'50.00"	80°18'47.98"
LT. BUOY - 15 (01/11)	878,997	1,138,198	27°27'47.80"	80°18'46.24"

NOTES:
1. REFER TO SURVEY NO. 11-026.
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
		A-N	ABCD

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

Designed by:
Cad by: D.V.T.
DWN by: F.W. & D.M.W.
Rev. No. - - -
Dated: 04 2011

Referenced files:
11-026-G-FD-PIERCE.DGN
INTERSECT-FT-PIERCE-LINES NAD83-V8-2D.DGN
11-026-V-CON28.DGN
11-026-V-CT2-8.DGN
11-026-V-NAV.DGN

File name: 11-026-VH-007.DGN

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

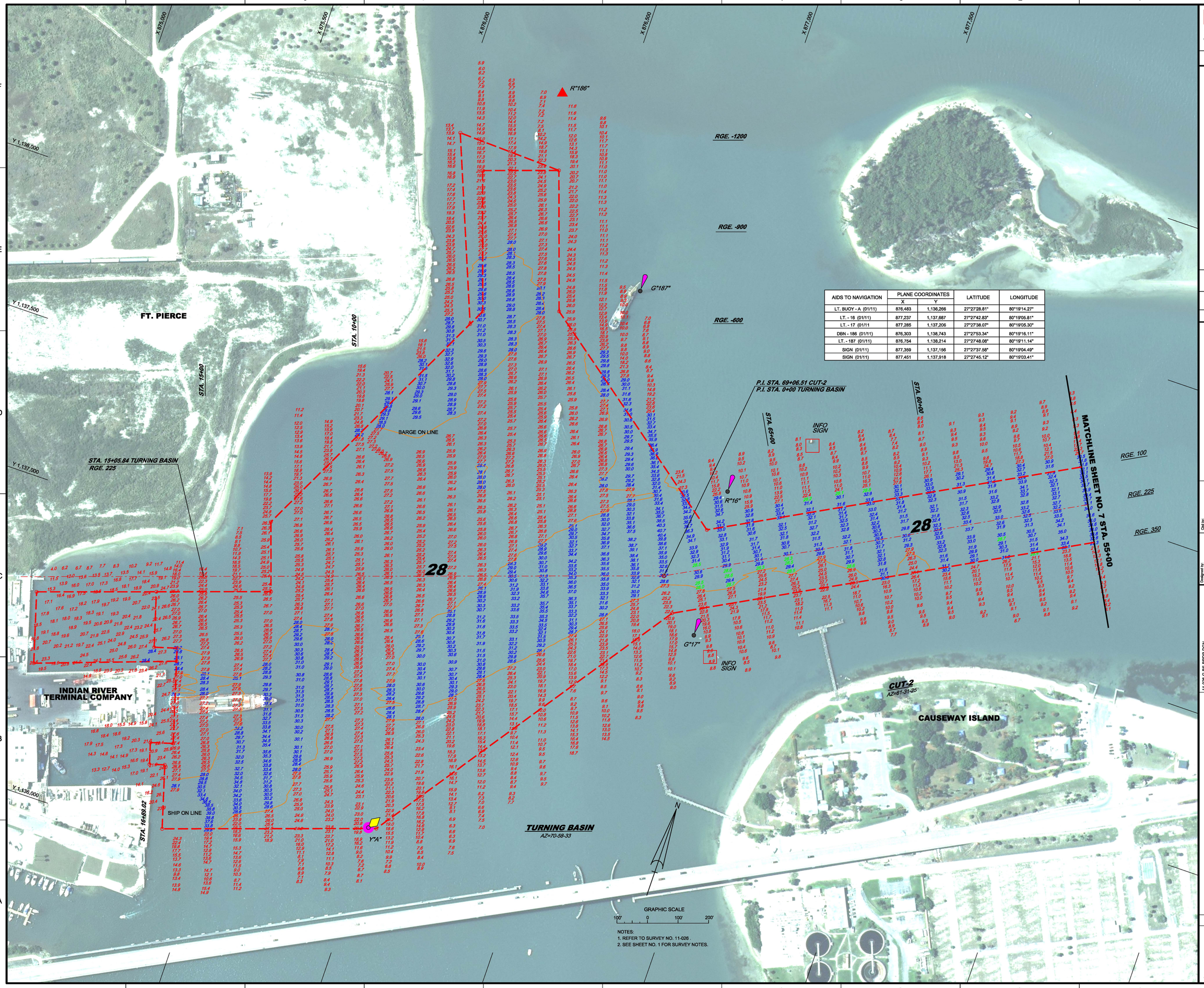
STA. 25+00 THRU STA. 55+00 CUT - 2
PLAN

Scale: AS SHOWN

Drawing no.

7 / 8

SHEET 7 OF 8



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY - A (01/11)	876,483	1,136,266	27°27'28.81"	80°19'14.27"
LT. - 16 (01/11)	877,237	1,137,687	27°27'42.83"	80°19'05.81"
LT. - 17 (01/11	877,285	1,137,206	27°27'38.07"	80°19'05.30"
DBN - 186 (01/11)	876,303	1,138,743	27°27'53.34"	80°19'16.11"
LT. - 187 (01/11)	876,754	1,138,214	27°27'48.08"	80°19'11.14"
SIGN (01/11)	877,359	1,137,156	27°27'37.58"	80°19'04.49"
SIGN (01/11)	877,451	1,137,918	27°27'45.12"	80°19'03.41"

NOTES:
1. REFER TO SURVEY NO. 11-026 .
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
N	△	A-N	ABCD

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

Cad by: D.V.T.
DWN by: F.W. & D.M.W.
Inv. No. ---
Dated: 04 2011
Designed by:

11-026-G-FS-PIERCE.DGN
IN11-026-G-FS-PIERCE-LINES
11-026-V-CON28.DGN
11-026-V-CT2-28.DGN
11-026-V-TB-28.DGN
11-026-V-TB-30.DGN
11-026-V-NAV.DGN
Referenced files:

11-026-VH-008.DGN
File name:

FT. PIERCE HARBOR
ST. LUCIE COUNTY, FLORIDA

EXAMINATION SURVEY FY11
28 AND 30-FOOT PROJECT

STA. 55+00 CUT - 2 THRU TURNING BASIN PLAN

Scale: AS SHOWN

Drawing no.

8 / 8

SHEET 8 OF 8