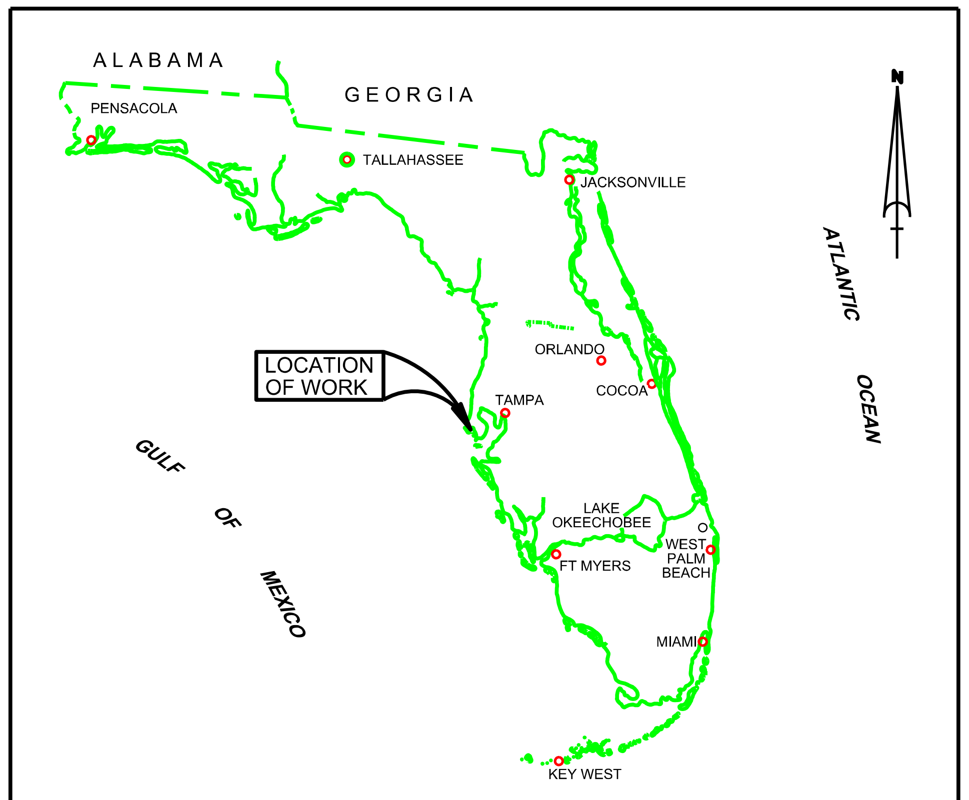
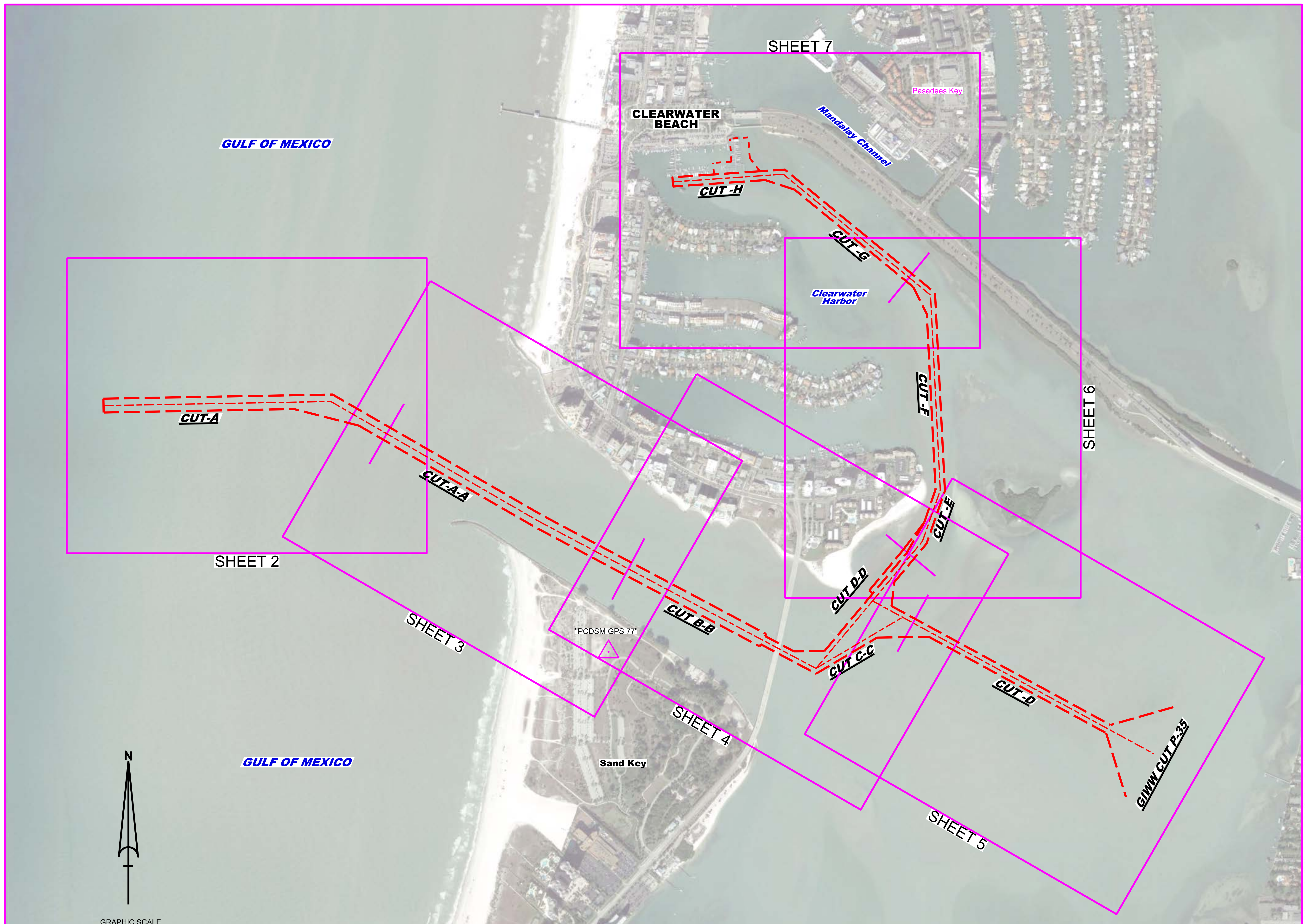
CLEARWATER PASS
PINELLAS COUNTY, FLORIDA
POST-HURRICANE HERMINE EXAMINATION SURVEY FY17
8 AND 10-FOOT PROJECT



LOCATION MAP



SHEET INDEX

SURVEY NOTES

1. REFER TO SURVEY NO. 17-030.
2. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MEAN LOWER LOW WATER (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 BENCHMARKS ASSOCIATED WITH THE TIDE GAGE SITE SPECIFIED BELOW:

   NOAA TIDAL STATION "AWL USE" FOR ENTIRE PROJECT (PID: AG0307)
3. TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL NAMED "SPC-FL-WEST-2010-12-07.KTD".
4. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983, REALIZATION OF 2007 (NAD83(2007)).
6. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
7. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:

   REFERENCE BASE LOCATED AT "PCDSM GPS 77" (PID: DF5856)

   TIDE STAFF LOCATED FROM TIDAL BENCHMARK "AWL USE" (NGS PID: AG0307)

   VERTICAL MEASUREMENTS WERE MADE USING A ROSS 835 SMARTSOUNDER DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER AND AN EDGETECH COMBINED MULTI-BEAM AND SIDESCAN. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB-48	07 DEC 2016	CUTS A, AA, BB, CC & D
SB-48	08 DEC 2016	CUTS DD, E, F, G & H

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.
11. 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.

LEGEND

Symbol	Description
△	MONUMENT
	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

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: DEC 2016

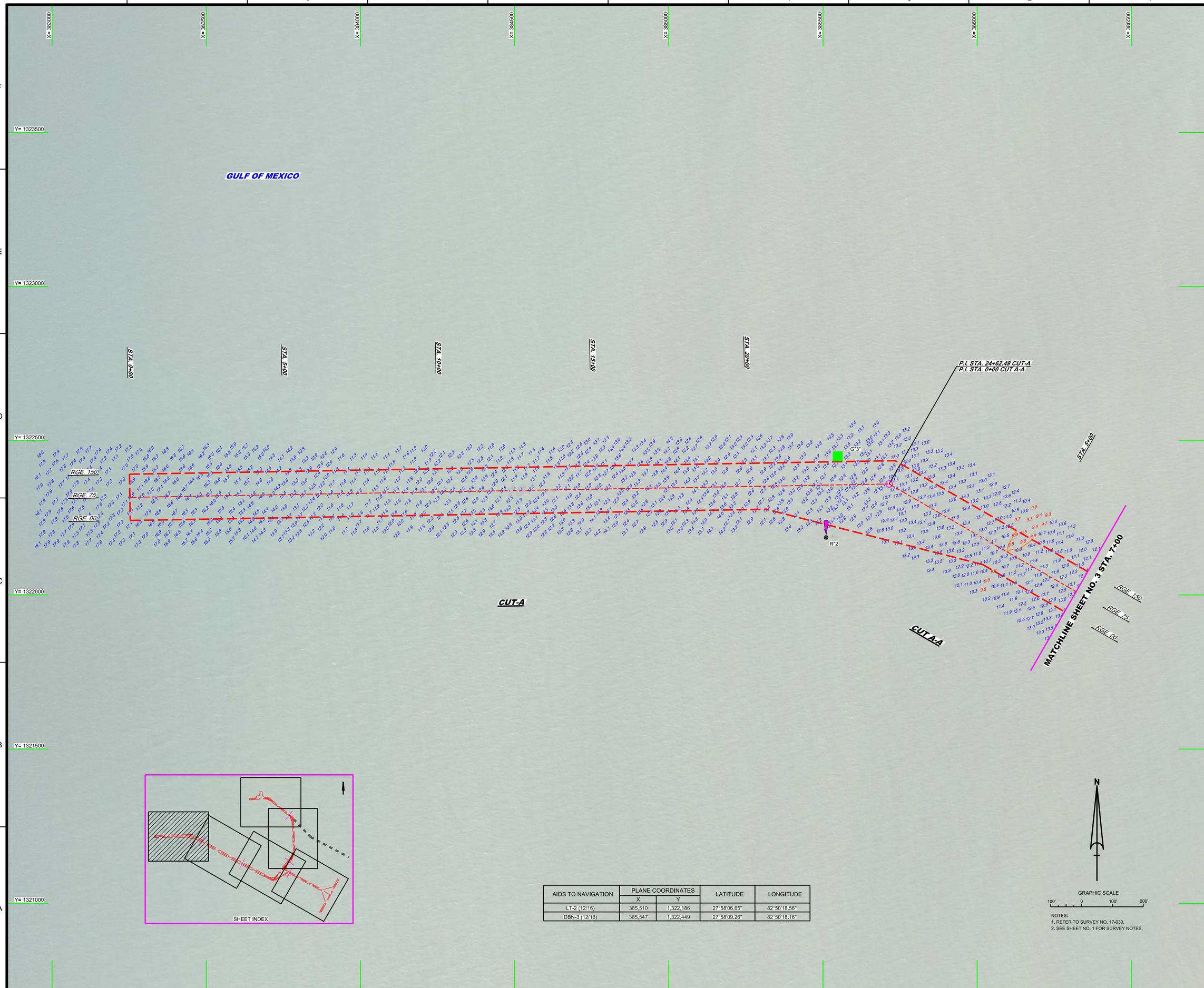
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
17-030-V-INDX.DGN
CLEARWATER-C-NGMCCF.DGN
17-030-G-BS-BRDR.DGN
Reference files:

17-030-VH-SH01.DGN
File name:

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA
POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT
INDEX, LOCATION AND VICINITY
MAP

Scale: AS SHOWN

Drawing no.
1



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-2 (12/16)	385,510	1,322,186	27°58'06.65"	82°50'18.56"
DBN-3 (12/16)	385,547	1,322,449	27°58'09.26"	82°50'18.16"

NOTES:
1. REFER TO SURVEY NO. 17-030.
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

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: DEC 2016

XXXXX-X-XXXXX.DGN
XXXXX-X-XXXXX.DGN
17-030-V-NAV.DGN
17-030-V-CON10_.DGN
17-030-V-SOUN_CTA.DGN
17-030-V-SOUN_CTAA.DGN
CLEARWATER-C-NGMCCF.DGN
17-030-C-BS-BRDR.DGN
Reference files:
17-030-VH-SH02.DGN
File name:

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

STA. 0+00 CUT-A THRU STA. 7+00 CUT A-A

PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 02 OF 07

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: WRM | Cad by: GMR
DWN by: WRM
Rev. No. W912EP-XX-X-XXXX
Dated: DEC 2016

XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
17-030-V-CON10.DGN
17-030-V-NAV.DGN
17-030-V-SOUN_CTBB.DGN
17-030-V-SOUN_CTAA.DGN
CLEARWATER-C-NCMCCF.DGN
17-030-G-BS-BRDR.DGN
Reference files:
17-030-VH-SHO3.DGN
File name:

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

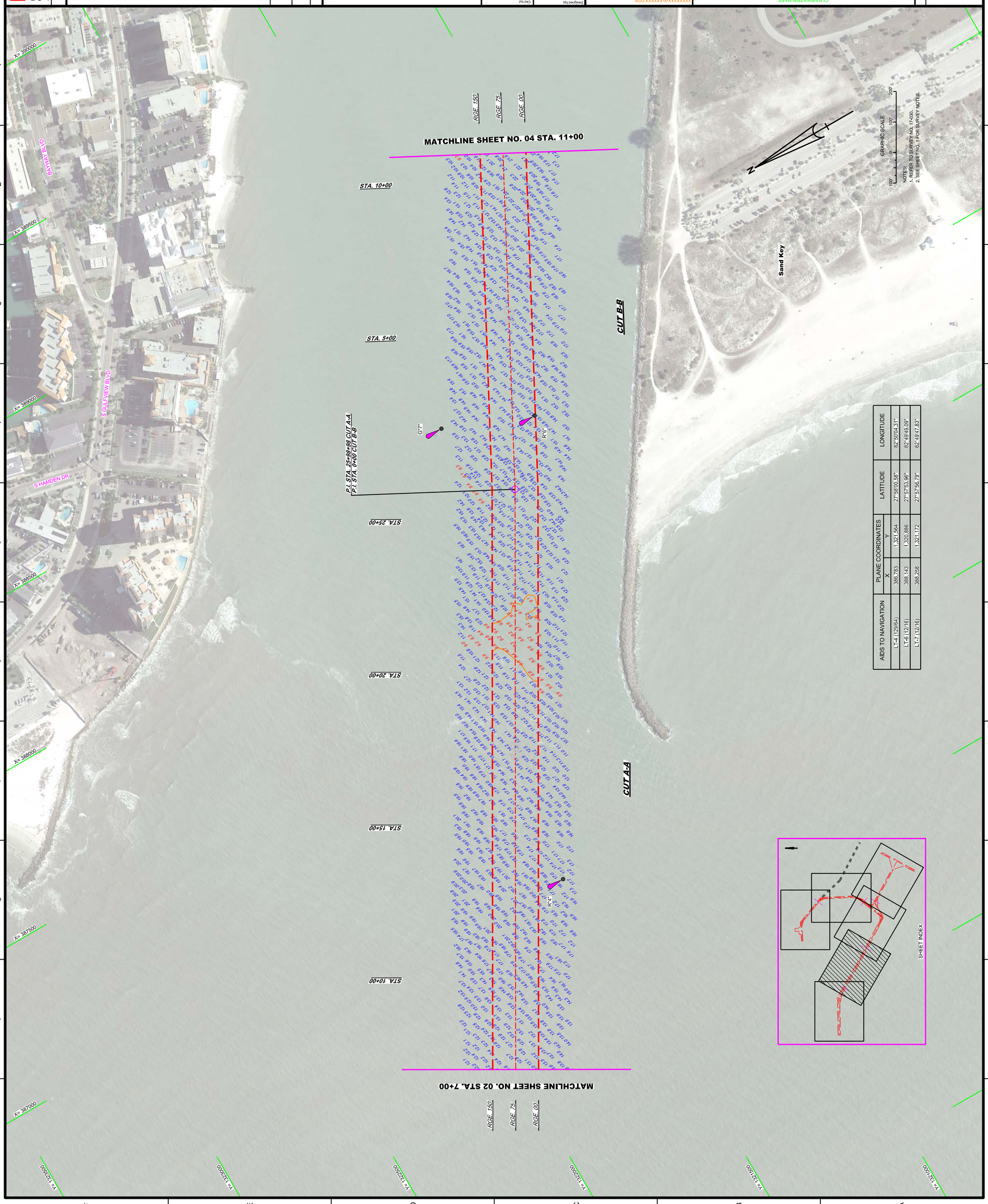
STA. 7+00 CUT A-A THRU STA. 11+00 CUT B-B

PLAN

Scale: AS SHOWN

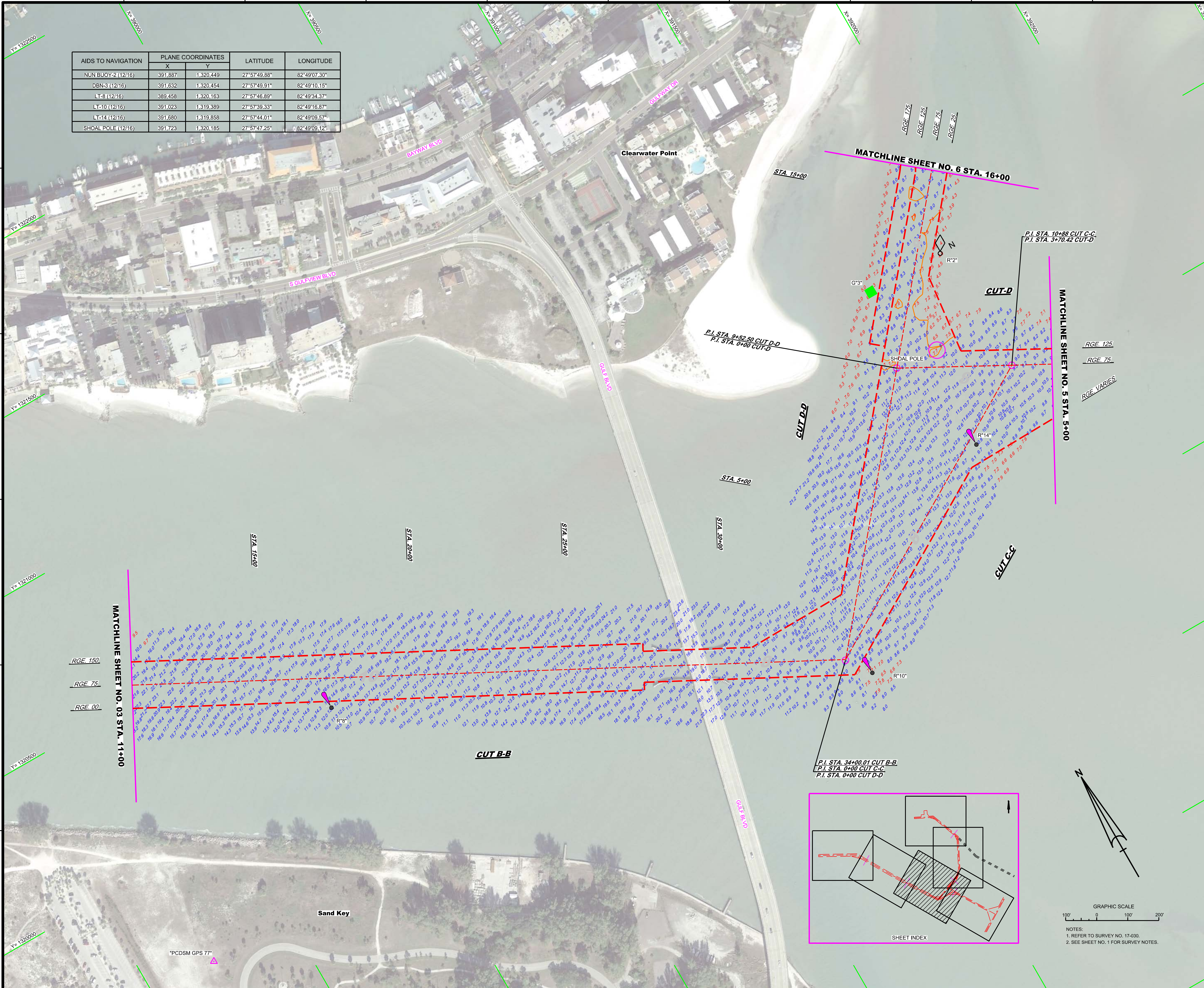
Drawing no. 3

SHEET 03 OF 07



AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
LT-4 (129/64)	386,783	1,321,564	27°58'00.58"	82°50'04.31"
LT-6 (12/16)	388,143	1,320,886	27°57'53.96"	82°49'49.09"
LT-7 (12/16)	388,258	1,321,172	27°57'56.79"	82°49'47.83"

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
NUN BUOY-2 (12/16)	391,887	1,320,449	27°57'49.88"	82°49'07.30"
DBN-3 (12/16)	391,632	1,320,454	27°57'49.91"	82°49'10.15"
LT-8 (12/16)	389,458	1,320,163	27°57'46.89"	82°49'34.37"
LT-10 (12/16)	391,023	1,319,389	27°57'39.33"	82°49'16.87"
LT-14 (12/16)	391,680	1,319,858	27°57'44.01"	82°49'09.57"
SHOAL POLE (12/16)	391,723	1,320,185	27°57'47.25"	82°49'09.12"



NOTES:
1. REFER TO SURVEY NO. 17-030.
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: WRM
DWN by: WRM
Ckd by: GMR
Inv. No. W912EP-XX-X-XXXX
Dated: DEC 2016

Reference files:
17-030-V-NAV.DGN
17-030-V-CON8.DGN
17-030-V-SOUN_CTD.DGN
17-030-V-SOUN_CTDD.DGN
17-030-V-SOUN_CTCC.DGN
17-030-V-SOUN_CTBB.DGN
CLEARWATER-C-MGMCCF.DGN
17-030-G-BS-BRDR.DGN

File name: 17-030-VH-SH04.DGN

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

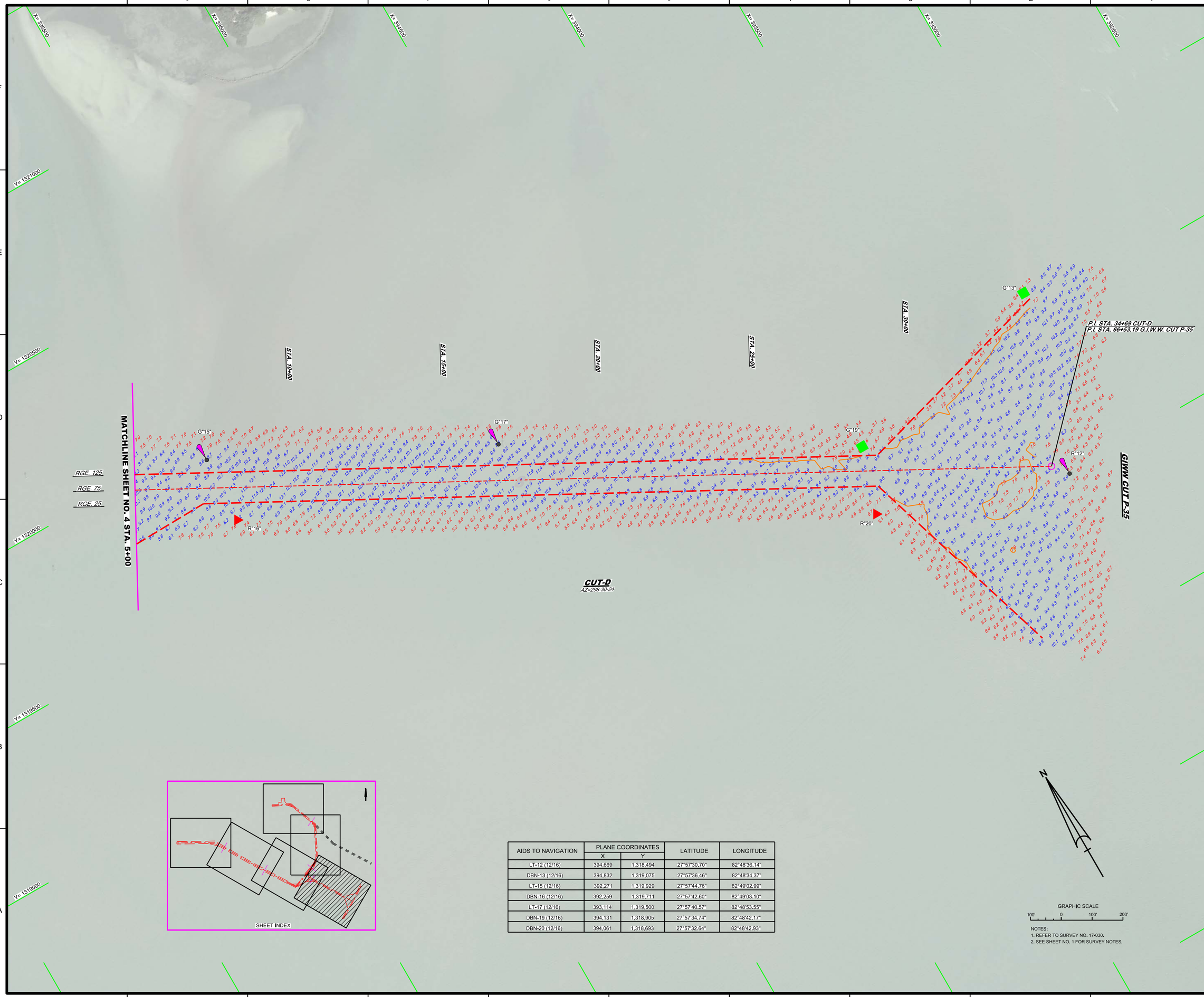
POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

STA. 11+00 CUT B-B THRU STA. 10+88.59 CUT C-C,
STA. 0+00 THRU STA. 16+00 CUT D-D, STA. 0+00 THRU STA. 5+00 CUT-D

PLAN

Scale: AS SHOWN

Drawing no. 4



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-12 (12/16)	394,669	1,318,494	27°57'30.70"	82°48'36.14"
DBN-13 (12/16)	394,832	1,319,075	27°57'36.46"	82°48'34.37"
LT-15 (12/16)	392,271	1,319,929	27°57'44.76"	82°49'02.99"
DBN-16 (12/16)	392,259	1,319,711	27°57'42.60"	82°49'03.10"
LT-17 (12/16)	393,114	1,319,500	27°57'40.57"	82°48'53.55"
DBN-19 (12/16)	394,131	1,318,905	27°57'34.74"	82°48'42.17"
DBN-20 (12/16)	394,061	1,318,693	27°57'32.64"	82°48'42.93"

NOTES:
1. REFER TO SURVEY NO. 17-030.
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

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

Designed by: WRM
Dwn by: WRM
Ckd by: GMR
Inv. No. W912EP-XX-X-XXXX
Dated: DEC 2016

XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
17-030-V-CON8.DGN
17-030-V-NAV.DGN
17-030-V-SOUN_CTD.DGN
CLEARWATER-C-XGMCCF.DGN
17-030-C-BS-BRDR.DGN
Reference files:
17-030-VH-SH05.DGN
File name:

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

STA. 5+00 THRU STA. 34+69.29 CUT-D

PLAN

Scale: AS SHOWN

Drawing no.

5

SHEET 05 OF 07

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-4 (12/14)	392,248	1,320,936	27°57'54.72"	82°49'03.32"
DBN-5 (12/16)	392,116	1,321,009	27°57'55.44"	82°49'04.80"
LT-6 (12/16)	392,390	1,321,428	27°57'59.60"	82°49'01.77"
DBN-7 (12/16)	392,264	1,321,562	27°58'00.92"	82°49'03.18"
DBN-7 (12/16)	392,367	1,323,198	27°58'17.13"	82°49'02.16"
DBN-8 (12/16)	392,353	1,322,420	27°58'09.43"	82°49'02.26"
DBN-9 (12/16)	392,177	1,323,288	27°58'18.01"	82°49'04.28"
LT-10 (12/16)	392,244	1,323,548	27°58'20.59"	82°49'03.56"

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: WRM
DWN by: WRM
Ckd by: GMR

Reference files:
17-030-V-CON8.DGN
17-030-V-NAV.DGN
17-030-V-SOUN_CTG.DGN
17-030-V-SOUN_CTF.DGN
17-030-V-SOUN_CTE.DGN
17-030-V-SOUN_CTDD.DGN
CLEARWATER-C-NGMCCF.DGN
17-030-G-BS-BRDR.DGN

File name: 17-030-VH-SH06.DGN

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

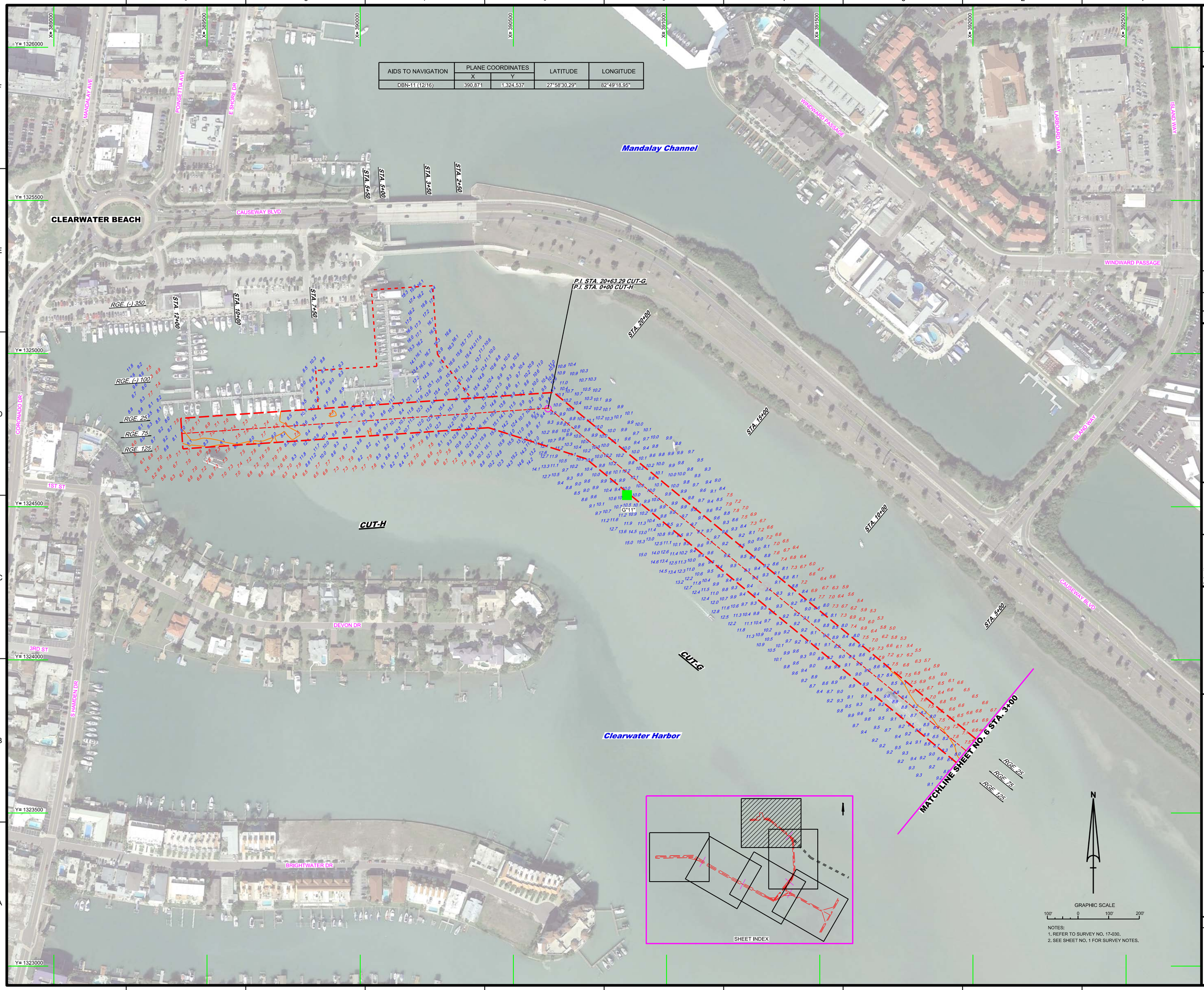
POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

STA. 16+00 CUT D-D THRU STA. 3+00 CUT-G

PLAN

Scale: AS SHOWN

Drawing no. 6



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-11 (12/16)	390,871	1,324,537	27°58'30.29"	82°49'18.95"

NOTES:
1. REFER TO SURVEY NO. 17-030.
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: WRM
Dwn by: WRM
Ckd by: GMR
Inv. No. W912EP-XX-X-XXXX
Dated: DEC 2016

Reference files:
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
17-030-V-CON8.DGN
17-030-V-NAV.DGN
17-030-V-SOUN_CTH.DGN
17-030-V-SOUN_CTG.DGN
CLEARWATER-C-NGMCCF.DGN
17-030-G-BS-BRDR.DGN
File name: 17-030-VH-SH07.DGN

CLEARWATER PASS
PINELLAS COUNTY, FLORIDA

POST-HURRICANE HERMINE EXAM SURVEY FY17
8 AND 10-FOOT PROJECT

STA. 3+00 CUT-G THRU STA. 12+00 CUT-H

PLAN

Scale: AS SHOWN

Drawing no.
7

SHEET 07 OF 07