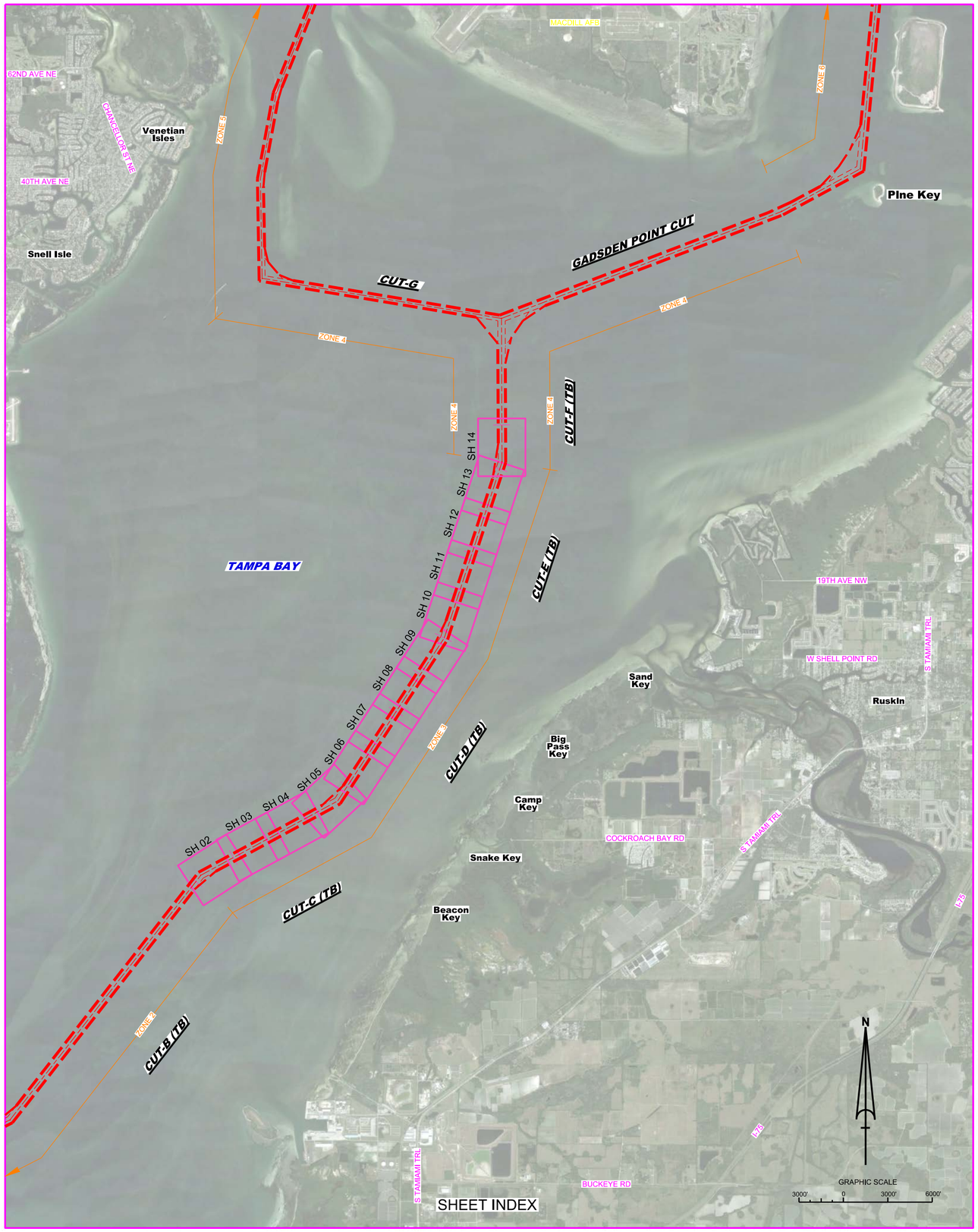
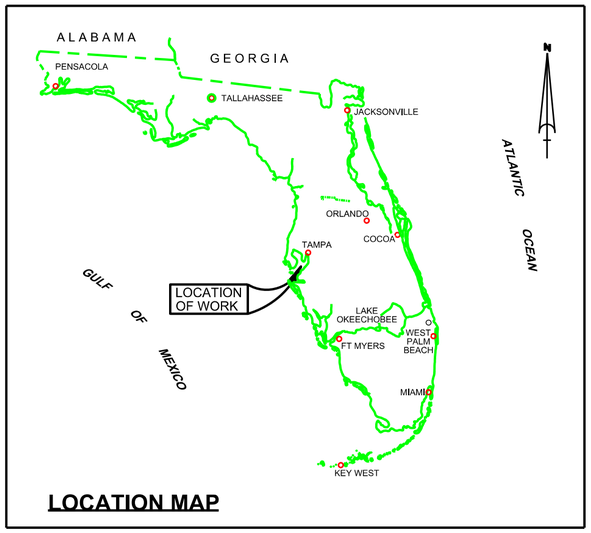




LOCATION MAP

TAMPA HARBOR
CUTS C, D AND E (TB) (ZONE 3)
HILLSBOROUGH COUNTY, FLORIDA
EXAMINATION SURVEY FY17
43-FOOT PROJECT

SURVEY ZONE	CUTS
2	MULLET KEY CHANNEL, CUT-A (TB), CUT-B)TB)
3	CUT-C (TB), CUT-D (TB), CUT-E (TB)
4	CUT-F, CUT-G, GADSDEN POINT CUT
5	CUT-J, CUT-J2, CUT-K
6	CUT-A (HB), CUT-C (HB), CUT-D (HB)

LEGEND	
△	MONUMENT
	LIGHTED BEACON
■	GREEN DAYBEACON
▲	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
C	CAN BUOY
N	NUN BUOY
	TIDE STAFF
8	PROJECT DEPTH

SURVEY NOTES

1. REFER TO SURVEY NO. 17-137.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO THE NOAA REPORTED MLLW TIDAL DATUM RELATIVE TO THE 1983-2001 TIDAL EPOCH.
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 (NAD83).
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 LOCATIONS:

   REFERENCE BASE LOCATED AT "DILLMAN" (OPUS PID: BBCD48)

   TIDESTAFF LOCATED FROM "EDD 60" (OPUS PID: AG5298)
8. 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 V-DATUM MODEL WAS USED AND CALIBRATED TO THE PUBLISHED MLLW HEIGHTS OF THE BENCHMARKS ASSOCIATED WITH THE GAGE SITES SPECIFIED BELOW:

   NOAA TIDAL STATION 872-6520, ST. PETERSBURG, TAMPA BAY, FLORIDA
9. VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMARTSOUNDER DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER AND A R2SONIC 2024 MULTIBEAM SYSTEM OPERATING AT 300 KHZ. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB JACKSONVILLE	24 JUL 2017	CUT-C
SB JACKSONVILLE	25 JUL 2017	CUT-D
SB JACKSONVILLE	26 JUL 2017	CUT-E

10. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
11. 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.
12. 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 2013.

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: VRM
DWN by: VRM
Ckd by: GMR
Trv. No.
Date: JUL 2017

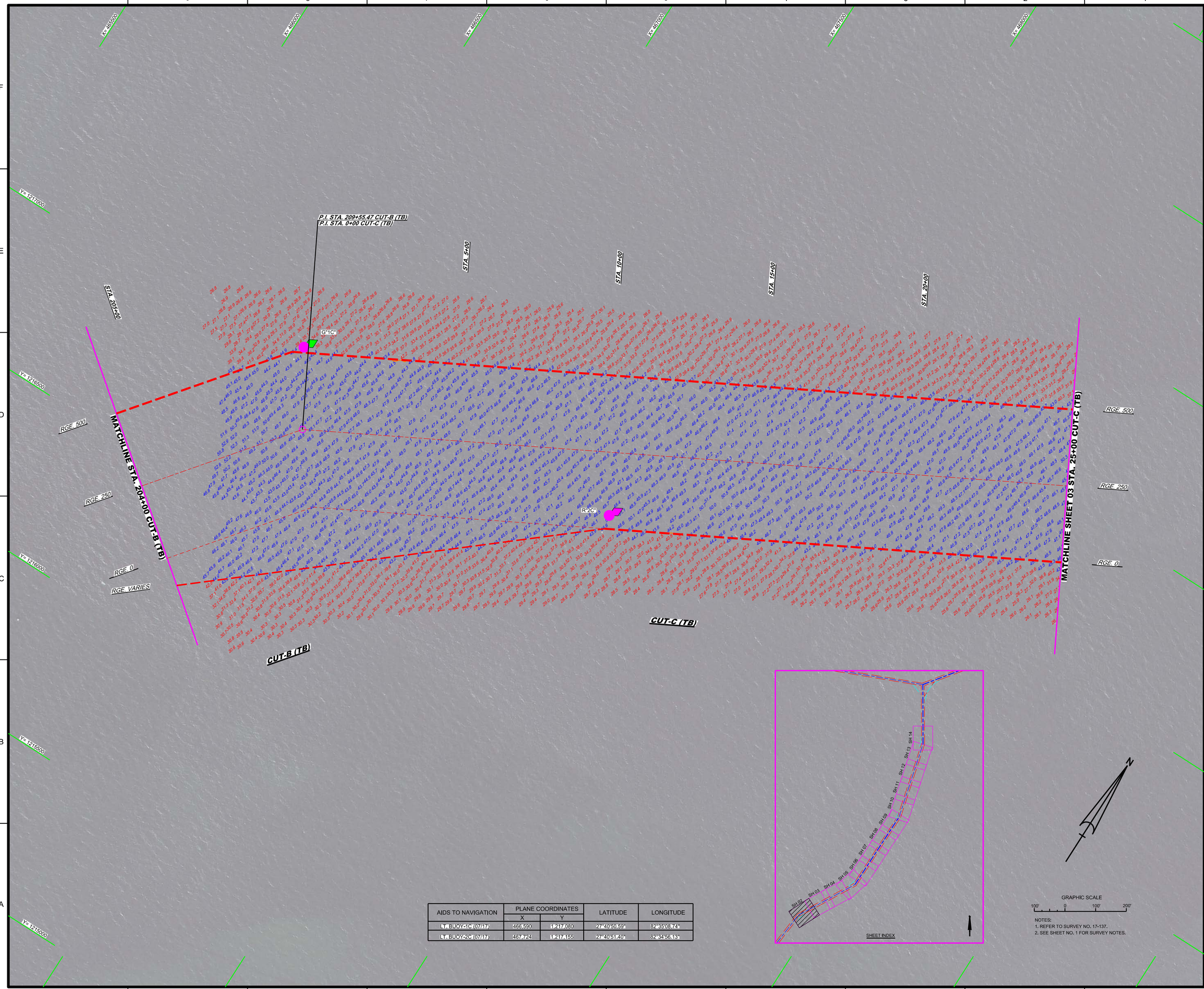
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
17-137-A-IND2_ZONE3.DGN
TAMPA HARBOR-C-SPMCCF.DGN
17-137-C-BS-BRDR.DGN
Reference files
17-137-AH01_Z3.DGN
Parameters

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT
INDEX, LOCATION AND VICINITY
MAP

Scale: AS SHOWN

Drawing no.
1

SHEET 01 OF 14



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-1C (07/17)	466,590	1,217,080	27°40'50.59"	82°35'08.74"
LT. BUOY-2C (07/17)	467,724	1,217,155	27°40'51.40"	82°34'56.13"

NOTES:
1. REFER TO SURVEY NO. 17-137.
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

Cad by: CMR
Designed by: VIRM
DWN by: VIRM
Rev. No.
Date: JUL 2017

17-137-VIRM-02_CUT-B.DGN
17-137-VIRM-03_CUT-C.DGN
17-137-VIRM-04_CUT-D.DGN
17-137-VIRM-05_CTC.DGN
TAMPA HARBOR-C-NGMCCF.DG

17-137-C-BS-BKDR.DGN
Reference files:

17-137-VIRM-02_Z3.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT

STA. 204+00 CUT-B (TB) THRU STA. 25+00 CUT-C (TB)

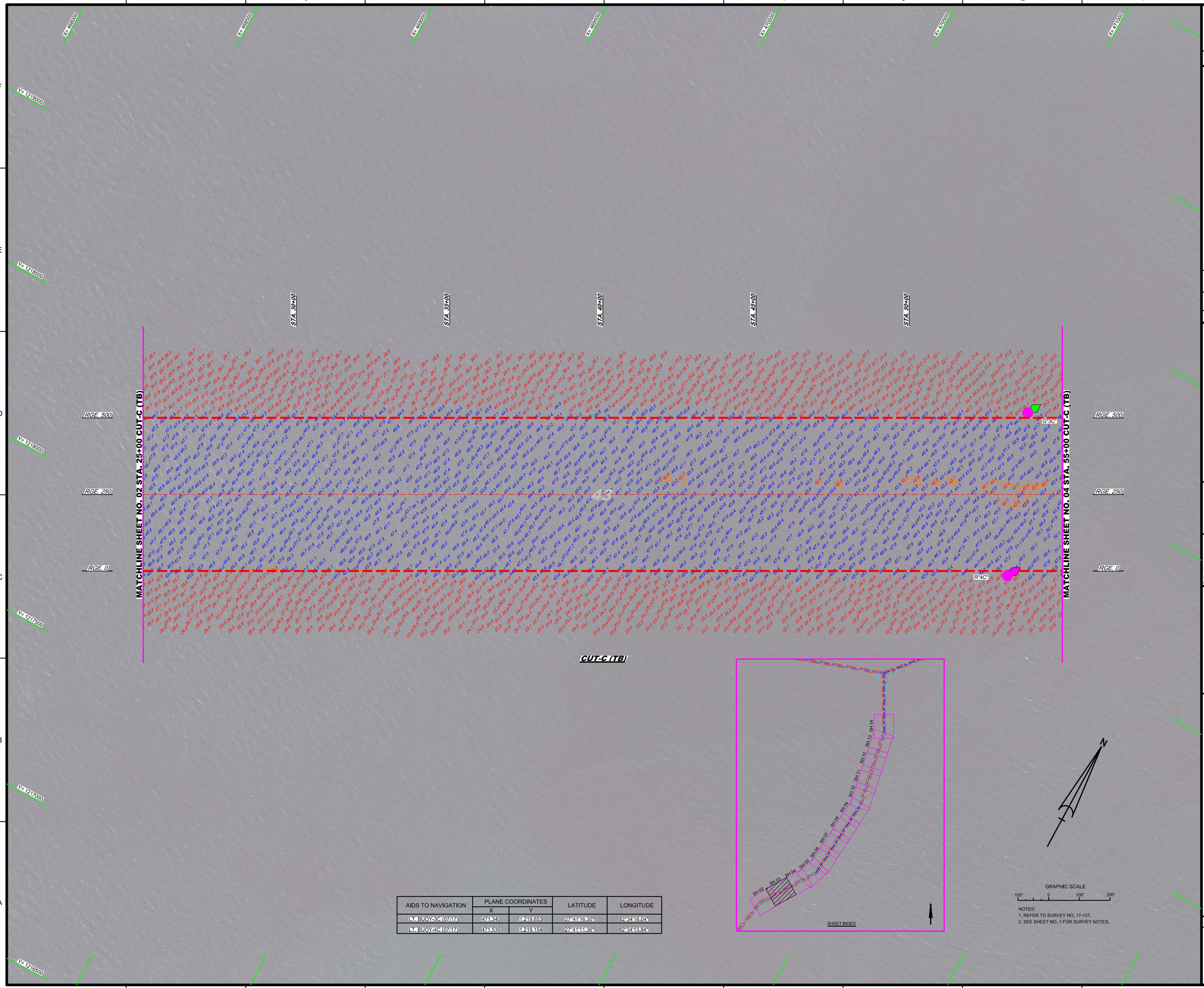
PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 02 OF 14



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3C (07/17)	471,340	1,219,653	27°41'16.30"	82°34'16.04"
LT. BUOY-4C (07/17)	471,535	1,219,154	27°41'11.35"	82°34'13.84"

NOTES:
1. REFER TO SURVEY NO. 17-137.
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: VIRM
DWN by: VIRM
Ckd by: CMR
Rev. No.
Date: JUL 2017

X:\XXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
XXXXXXXX-X-XXXXXX.DGN
17-137-X-CONM3.DGN
17-137-X-MAIN.DGN
17-137-X-SOUN_CTC.DGN
TAMPA HARBOR-C-NGMCF.DGN
17-137-X-SHORLD.DGN
Reference files:

17-137-VIRH3_Z3.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT

STA. 25+00 THRU STA. 55+00 CUT-C (TB)

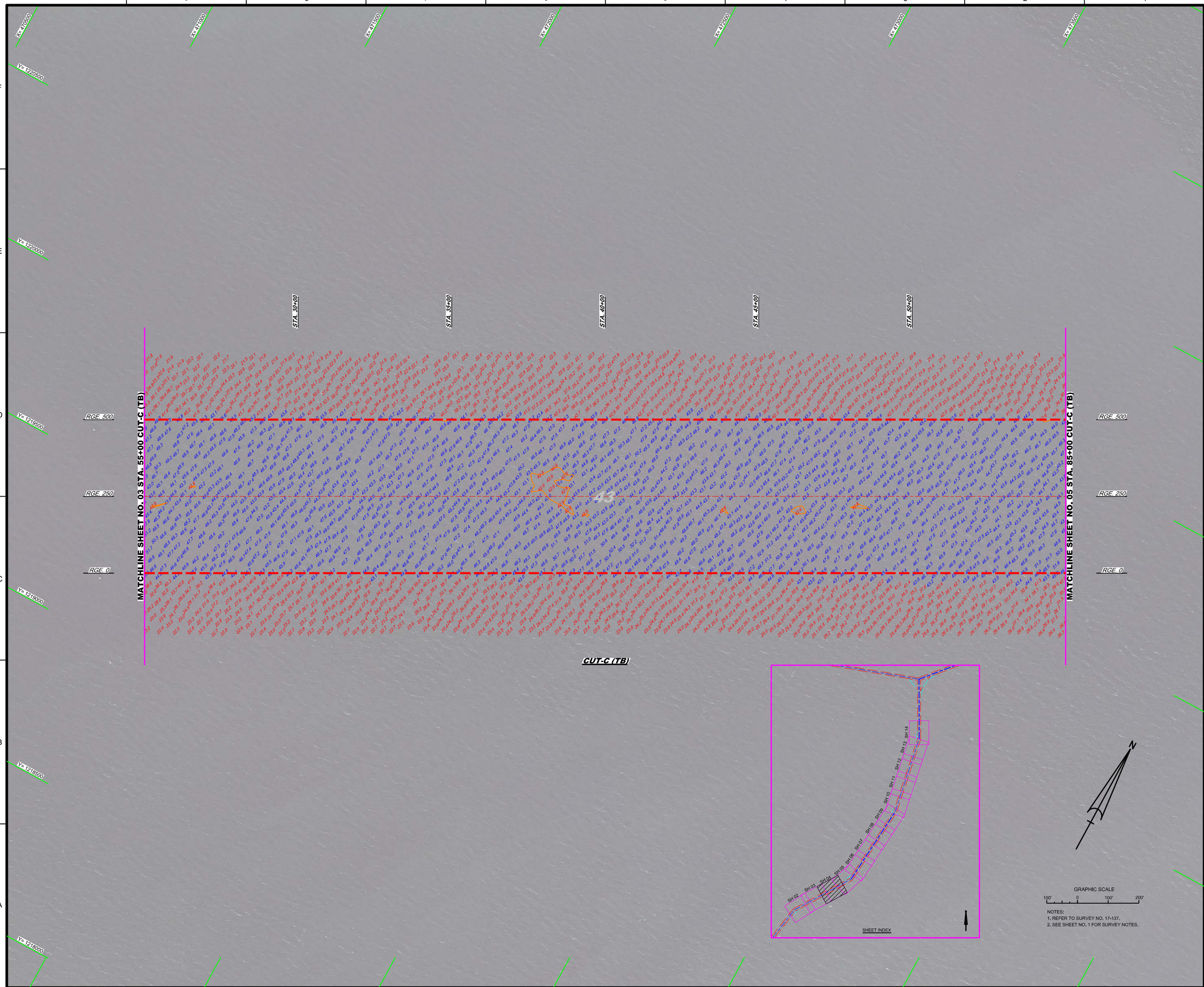
PLAN

Scale: AS SHOWN

Drawing no.

3

SHEET 03 OF 14



NOTES:
1. REFER TO SURVEY NO. 17-137.
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: VIRM
DWN by: VIRM
Ckd by: GMR
Rev. No.
Date: JUL 2017

XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
17-137-XXXXX_CTC.DGN
17-137-A-SOUN_CTC.DGN
TAMPA HARBOR-C-NGMCF.DGN
17-137-C-BS-BRDR.DGN
Reference files:
17-137-VHA_ZL.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT

STA. 55+00 THRU STA. 85+00 CUT-C (TB)

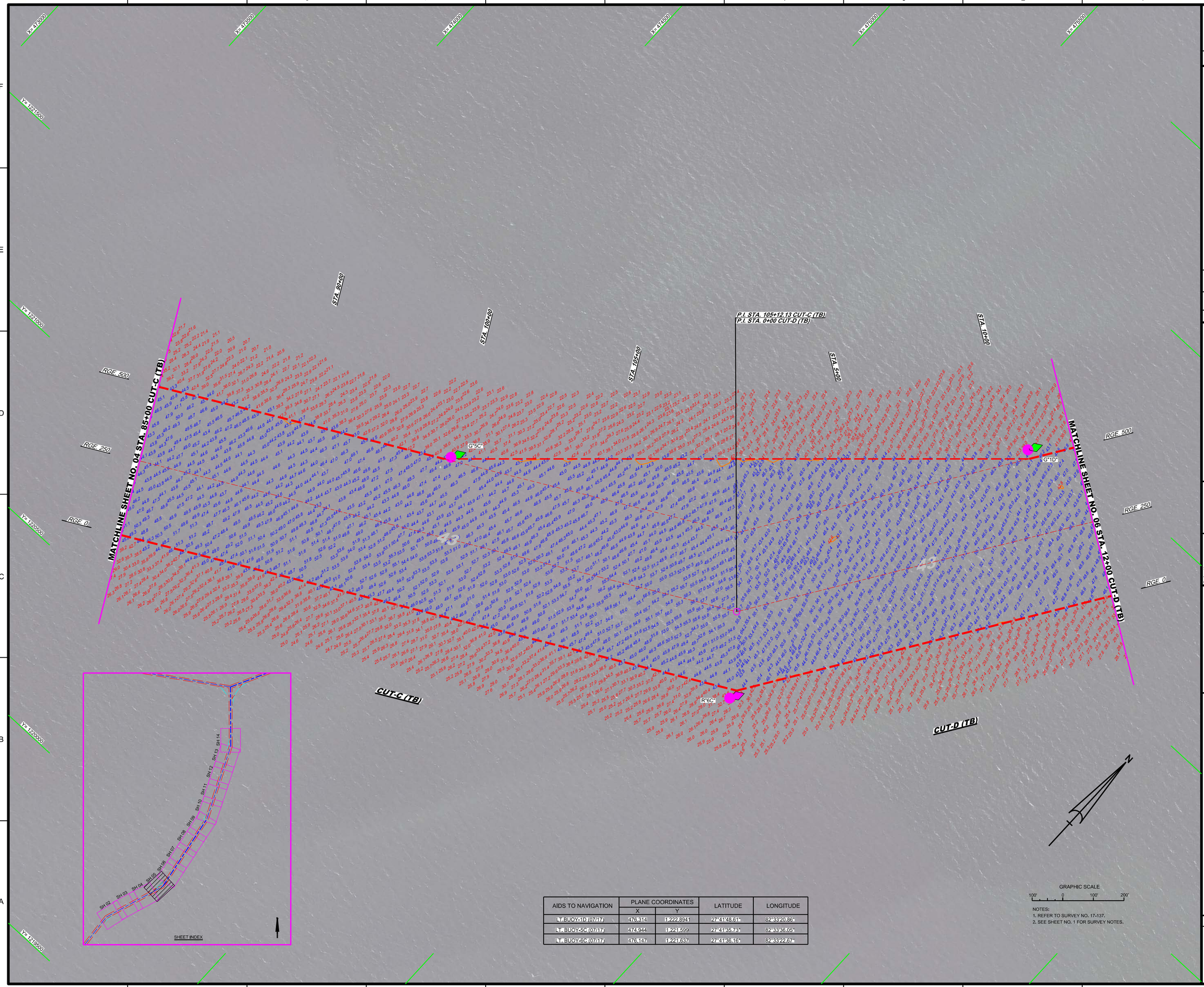
PLAN

Scale: AS SHOWN

Drawing no.

4

SHEET 04 OF 14



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT.BUOY-1D (07/17)	476,314	1,222,894	27°41'48.61"	82°33'20.86"
LT. BUOY-5C (07/17)	474,944	1,221,599	27°41'35.74"	82°33'36.05"
LT. BUOY-6C (07/17)	476,147	1,221,637	27°41'36.16"	82°33'22.67"

NOTES:
1. REFER TO SURVEY NO. 17-137.
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: VIRM
Drawn by: VIRM
Checked by: CMR
Rev. No.
Date: JUL 2017

X:\XXXXXXXX-XXXXXXX.DGN
XXXXXXXXX-XXXXXXXX.DGN
17-137-V-CONVALD.DGN
17-137-V-NAV.DGN
17-137-V-PLAN_CUT.DGN
17-137-V-SOUN_CTC.DGN
TAMPA HARBOR-C-NGMCF.DGN
17-137-V-H5-SNDR.DGN
Reference files:

17-137-V-H5_Z3.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT

STA. 85+00 CUT-C (TB) THRU 12+00 CUT-D (TB)

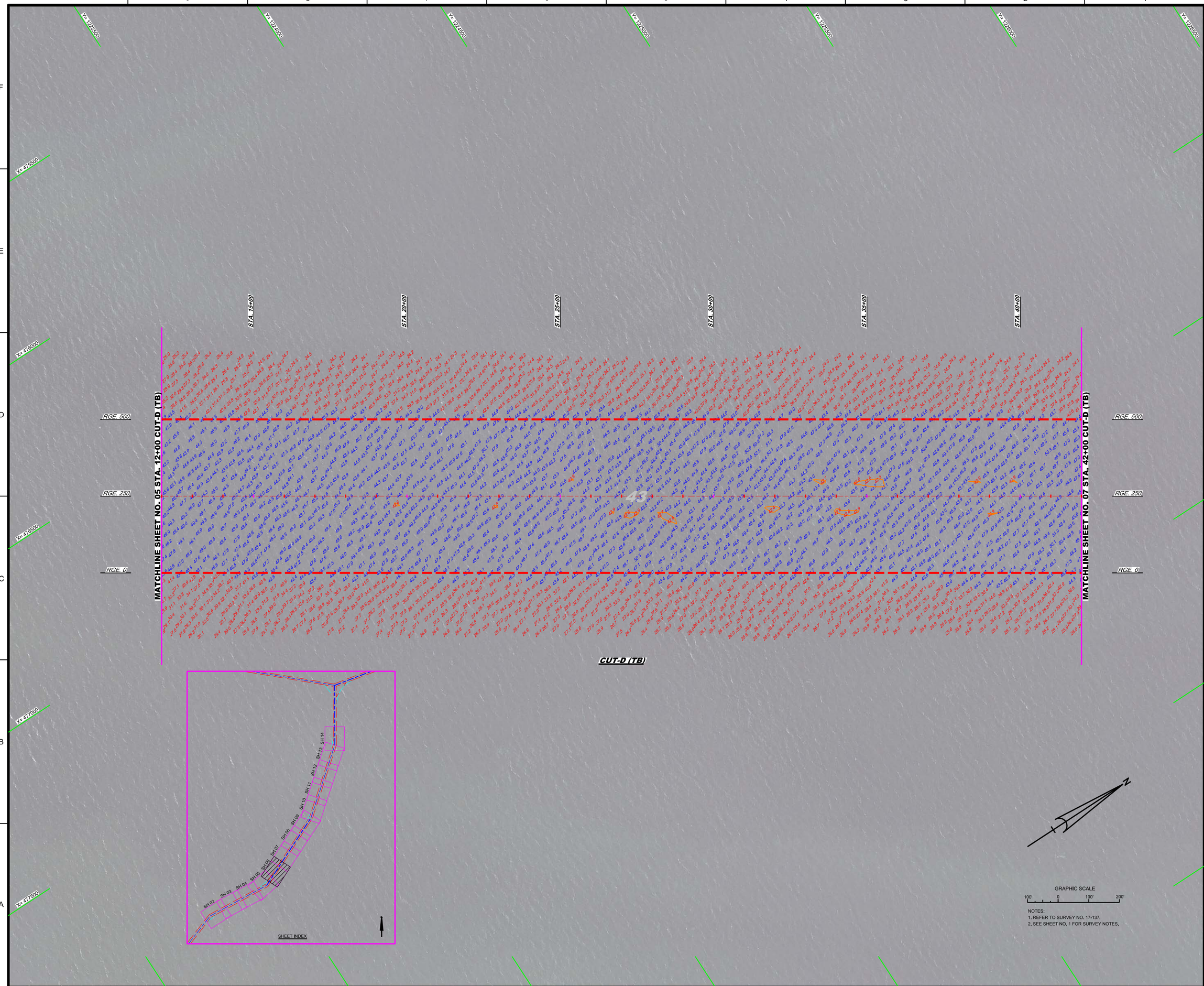
PLAN

Scale: AS SHOWN

Drawing no.

5

SHEET 05 OF 14



NOTES:
1. REFER TO SURVEY NO. 17-137.
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: VIRM
DWN by: VIRM
Chk by: CMR
Rev. No.
Date: JUL 2017

X:\XXXXXXXX-XXXXXXX.DGN
XXXXXXXX-XXXXXXX.DGN
XXXXXXXX-XXXXXXX.DGN
XXXXXXXX-XXXXXXX.DGN
XXXXXXXX-XXXXXXX.DGN
17-137-A-SOUN_CTD.DGN
TAMPA HARBOR-C-NGMCF.DGN
17-137-C-ES-SHDR.DGN
Reference files:
17-137-VHHS_Z3.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT

STA. 12+00 THRU STA. 42+00 CUT-D (TB)

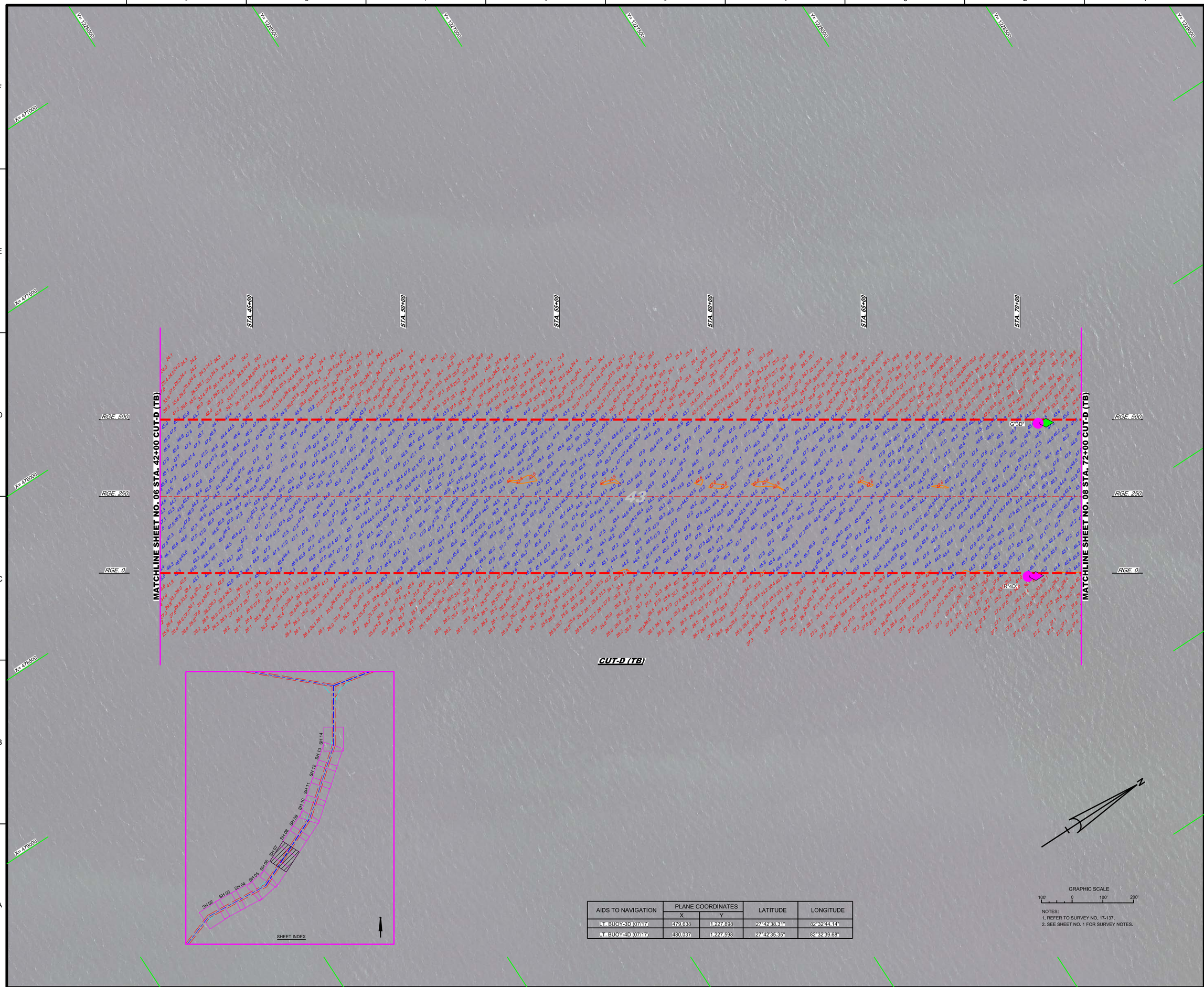
PLAN

Scale: AS SHOWN

Drawing no.

6

SHEET 06 OF 14



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3D (07/17)	479,638	1,227,898	27°42'38.31"	82°32'44.14"
LT. BUOY-4D (07/17)	480,037	1,227,598	27°42'35.35"	82°32'39.68"

NOTES:
1. REFER TO SURVEY NO. 17-137.
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: VIRM
Drawn by: VIRM
Checked by: CMR
Rev. No.
Date: JUL 2017

XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
17-137A-C-02N48.DGN
17-137A-MASTER.DGN
17-137A-SOUN_CTD.DGN
TAMPA HARBOR-C-NGMCF.DGN
17-137A-C-BS-BRDR.DGN
Reference files:
17-137A-VH01_ZL.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY17
43-FOOT PROJECT
STA. 42+00 THRU STA. 72+00 CUT-D (TB)

PLAN

Scale: AS SHOWN

Drawing no.
7

SHEET 07 OF 14