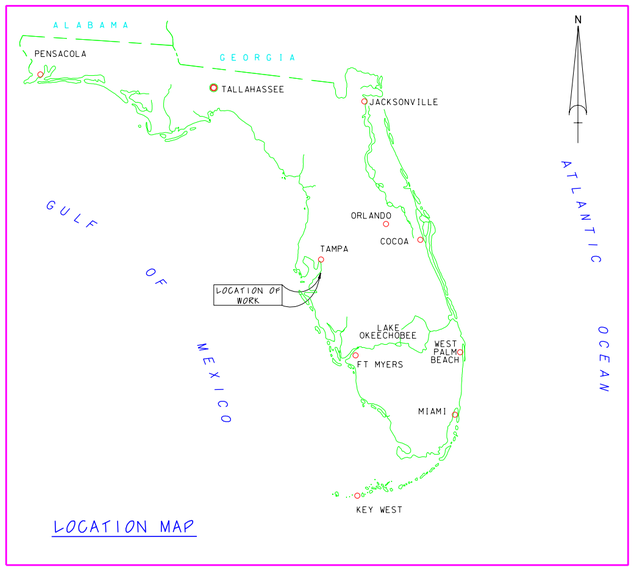
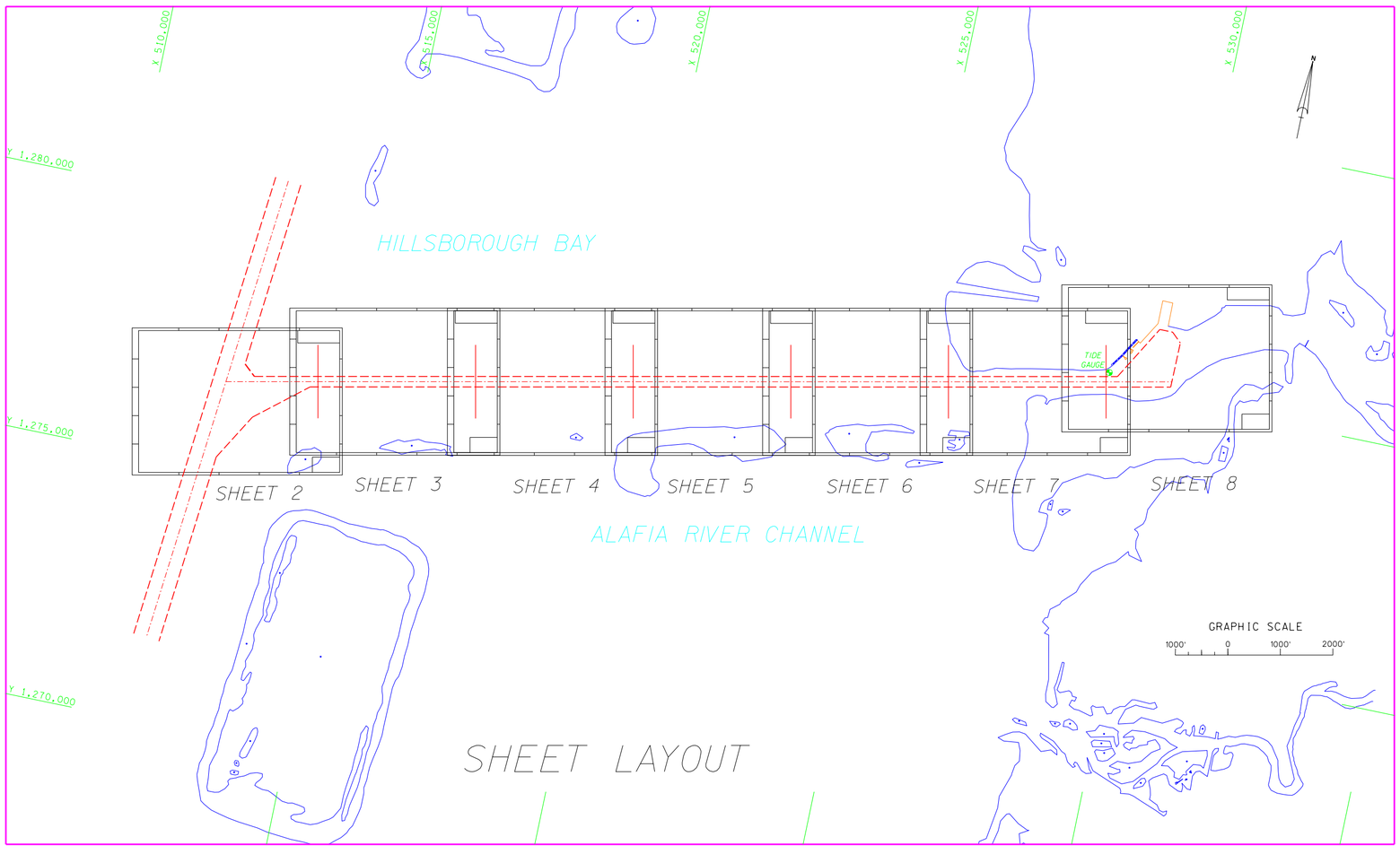
TAMPA HARBOR, FLORIDA
ALAFIA RIVER CHANNEL
PROJECT CONDITION SURVEY



LOCATION MAP



SHEET LAYOUT

SURVEY NOTES:

1. REFER TO SURVEY NO. 02-058.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) WHICH IS 0.95 FEET BELOW NGVD 1929. TIDAL DATUM DERIVED FROM NOAA TIDAL BENCHMARK SHEET FOR "LONG SHOAL, MACDILL AFB" (FLORIDA 872 6604).
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
4. TIDAL REDUCTIONS WERE MADE FROM A STAFF SET ON A PILING IN THE VICINITY OF THE TURNING BASIN, AND REFERENCED FROM COE BENCHMARK "TH-63".
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 AZIMUTHS ARE GRID; RECKONED CLOCKWISE FROM SOUTH.
7. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
8. SURVEY WAS PERFORMED USING DIFFERENTIAL GPS FOR POSITIONING AND UTILIZING THE USCG NAVBEACON SYSTEM AS THE REFERENCE SITE. VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMART SOUNDER DEPTH RECORDER WITH A 28KHZ (LOW FREQUENCY) TRANSDUCER.
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.
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, 1 JAN 02.

SURVEY TABULATION

VESSEL	AREA SURVEYED	DATE SURVEYED	STAFF LOCATION	BENCHMARK
WB-34	ENT. CH. & TURNING BASIN	17-18 APR 02	PILING NEAR T.B.	TH-63

BENCHMARK	NGVD ELEV. (FT)
TH-63	9.55

NGVD 1929
0.95 feet
M.L.L.W.

Relationship between NGVD 1929 and NOAA Mean Lower Low Water Tidal Datum (1960-1978 epoch)

LEGEND

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

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XX:X

Designed by: WRM
Dwn by: WRM
Ckd by: WRM

Dated: APR 2002
D.O. FILE NO.

File name: D058SH01.DGN
Reference files: BRDR98.DGN ALAFIACH83.DGN NEWFILMAP.DGN ALAFTOPO83.DGN LAYOUT1.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER
PROJECT CONDITION SURVEY
32-FOOT PROJECT
ENTRANCE CHANNEL & TURNING BASIN
COVER & LOCATION

DRAWING NO.
1/9

SHEET 1 OF 9

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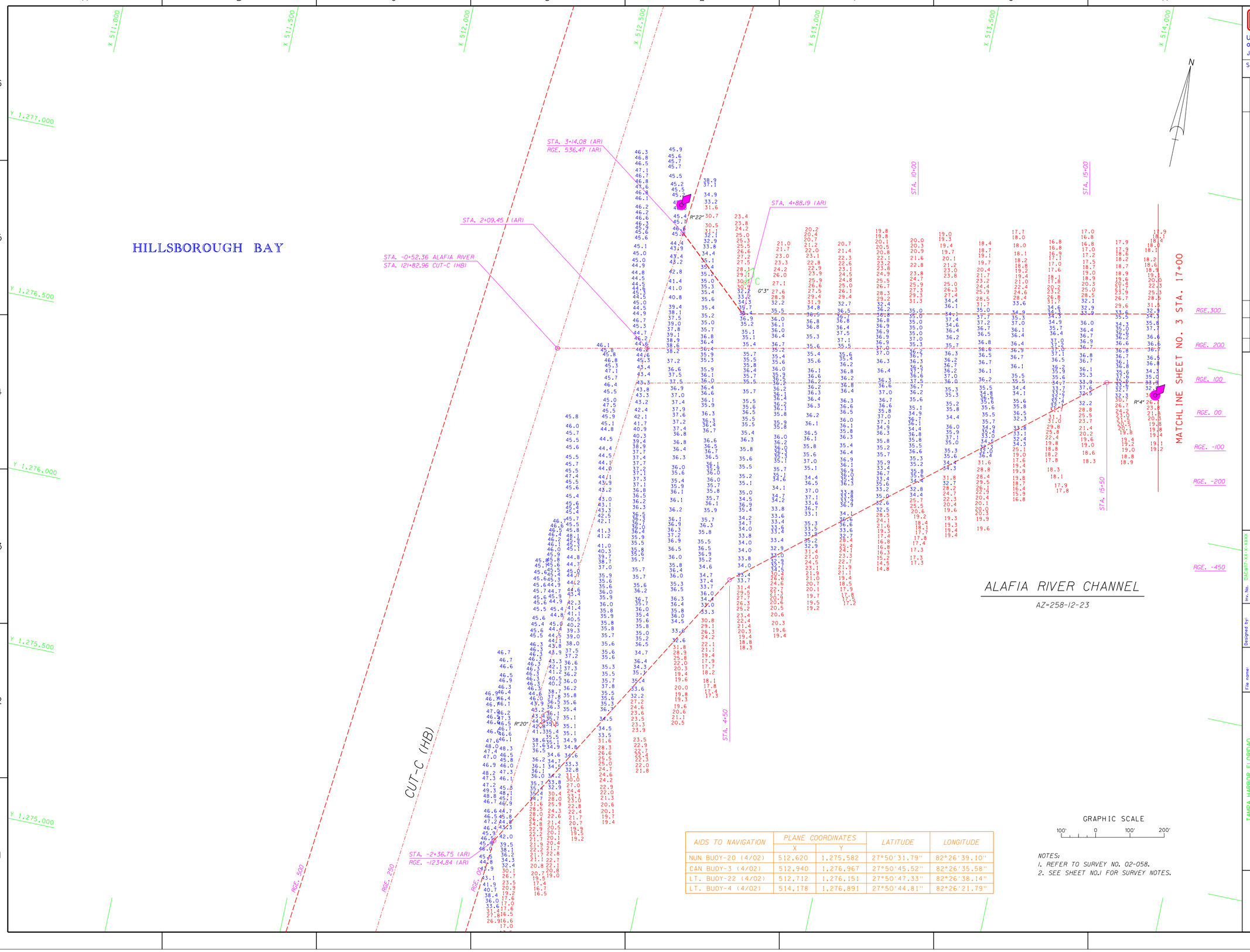

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
NUN BUOY-20 (4/02)	512,620	1,275,582	27°50'31.79"	82°26'39.10"
CAN BUOY-3 (4/02)	512,940	1,276,967	27°50'45.52"	82°26'35.58"
LT. BUOY-22 (4/02)	512,712	1,276,151	27°50'47.33"	82°26'38.14"
LT. BUOY-4 (4/02)	514,178	1,276,891	27°50'44.81"	82°26'21.79"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 02-058.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XX:X

Designed by: XXX
Cad by: WRD
Dwn by: WRD
Dated: APR 2002
D.O.F.ILE NO.

File name: D058SH02.DGN
Reference files: BRDRR8.DGN ALAFIACH83.DGN D058EC.DGN D058NAV.DGN D058CON.DGN

TAMPA HARBOR, FLORIDAQ
ALAFIA RIVER

PROJECT CONDITION SURVEY
32-FOOT PROJECT

ALAFIA RIVER STA.2+09.45 THRU STA.17+00
PLAN

DRAWING NO.
2/9

SHEET 2 OF 9

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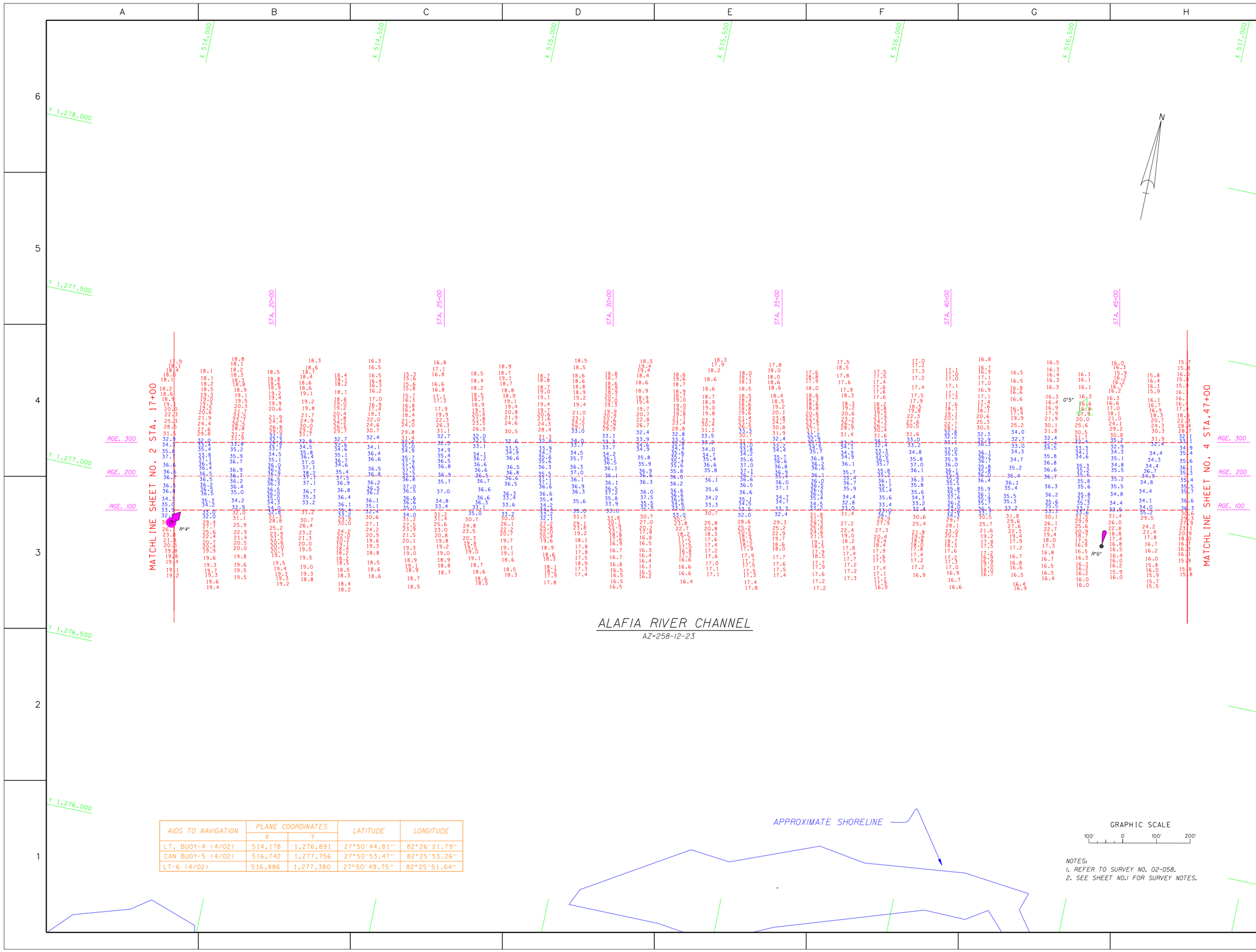

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-4 (4/02)	514,178	1,276,891	27°50'44.81"	82°26'21.79"
CAN BUOY-5 (4/02)	516,742	1,277,756	27°50'53.47"	82°25'53.26"
LT-6 (4/02)	516,886	1,277,380	27°50'49.75"	82°25'51.64"

NOTES:
1. REFER TO SURVEY NO. 02-058.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XXX

Designed by: XXX
Dwn by: WRM
Ckd by: WRM

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Reference files: BRDR98.DGN ALAFIACH83.DGN ALAFTOP083.DGN D058EC.DGN D058NAV.DGN D058CON.DGN

Dated: APR 2002
D.O.FILE NO.

TAMPA HARBOR, FLORIDA
ALAFIA RIVER
PROJECT CONDITION SURVEY
32-FOOT PROJECT
ALAFIA RIVER STA. 17+00 THRU STA. 47+00
PLAN

DRAWING NO.
3/9

SHEET 3 OF 9

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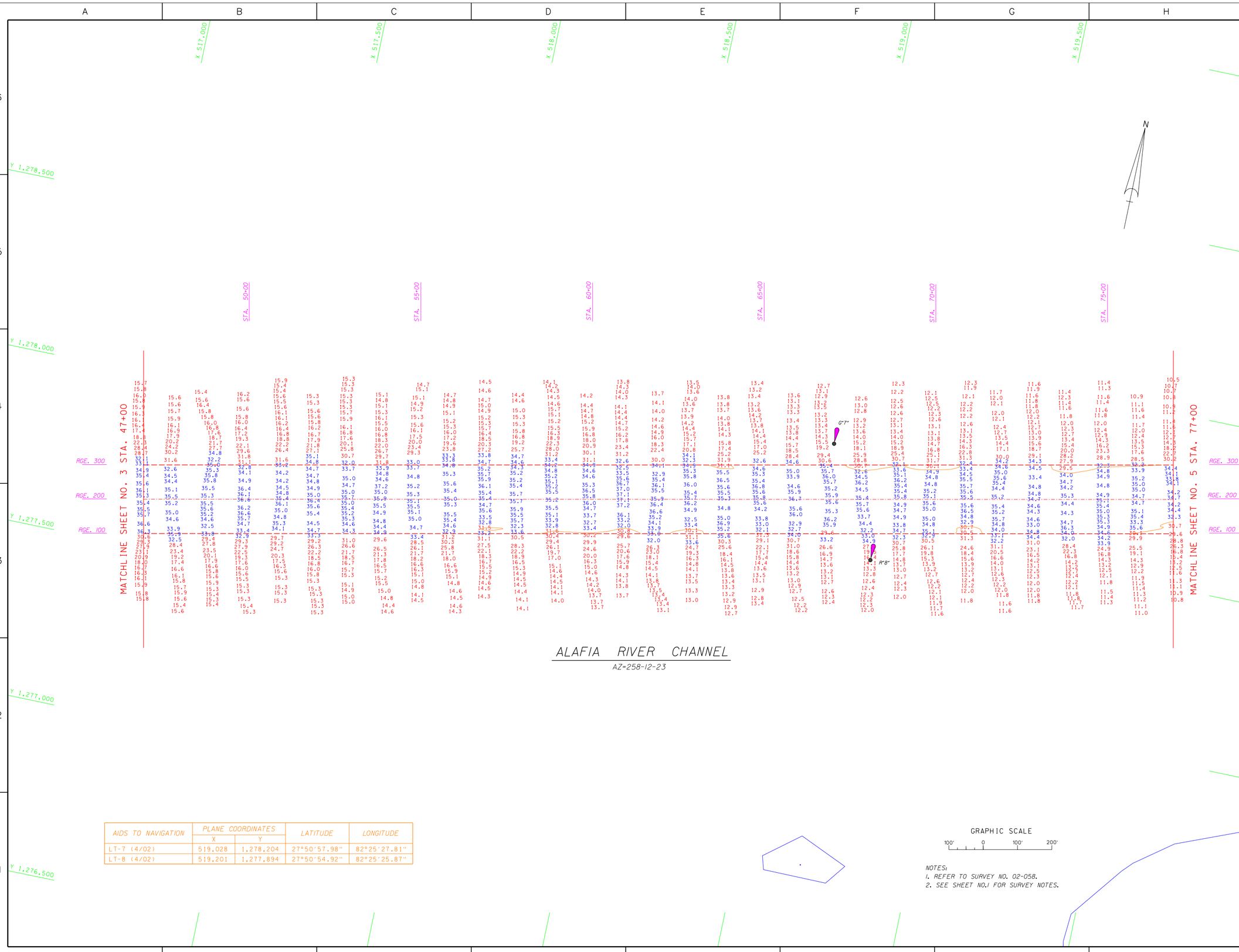

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-7 (4/02)	519,028	1,278,204	27°50'57.98"	82°25'27.81"
LT-8 (4/02)	519,201	1,277,894	27°50'54.92"	82°25'25.87"

NOTES:
1. REFER TO SURVEY NO. 02-058.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XX:X

Designed by: XXX
Dwn by: WRM
Ckd by: WRM

Dated: APR 2002
D.O. FILE NO.

File name: D058SH04.DGN
Reference files: BRDR98.DGN ALAFIACH83.DGN D058EC.DGN ALAFTOPO83.DGN D058NAV.DGN D058CON.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER

PROJECT CONDITION SURVEY
32-FOOT PROJECT

ALAFIA RIVER STA. 47+00 THRU 77+00
PLAN

DRAWING NO.
4/9

SHEET 4 OF 9

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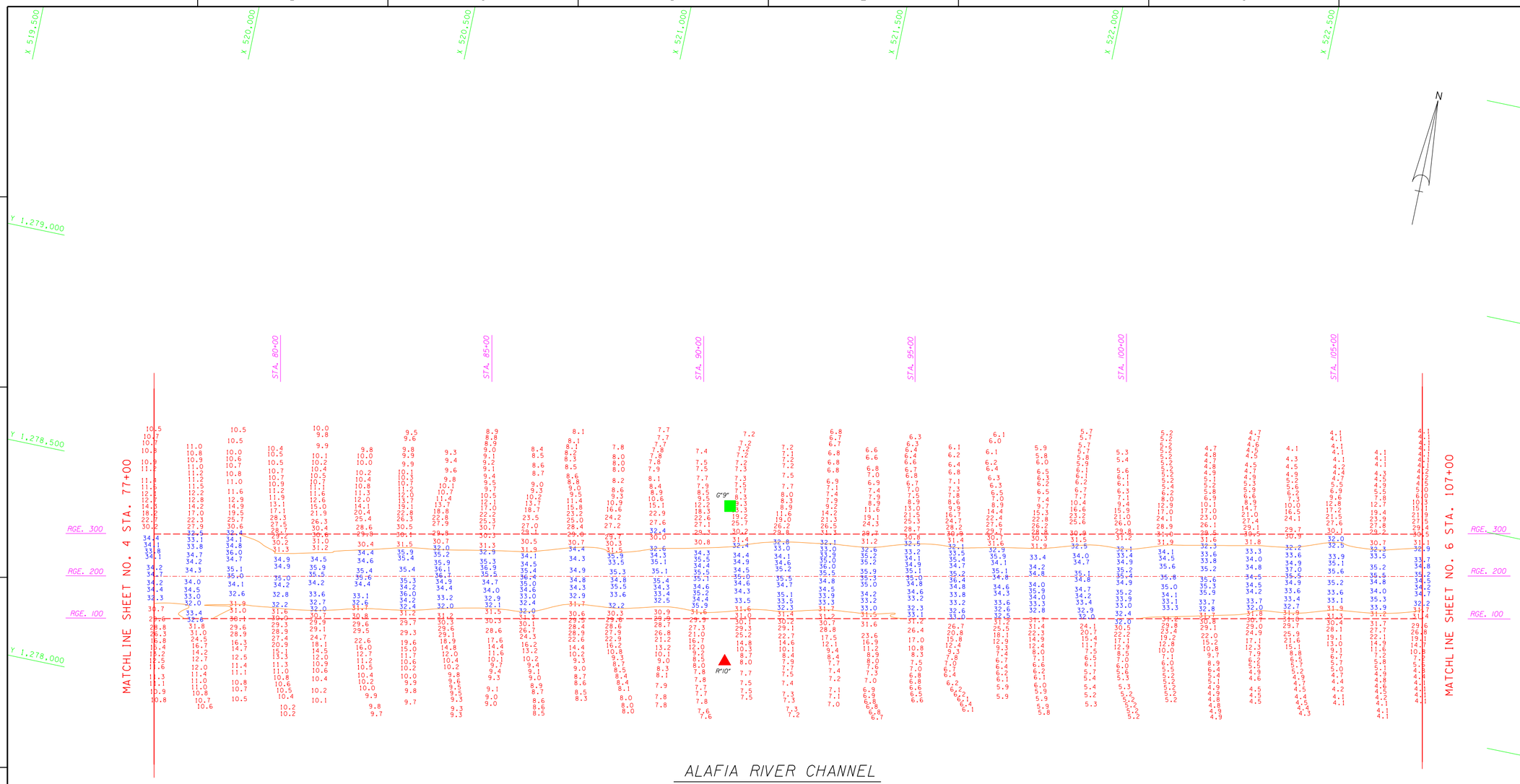
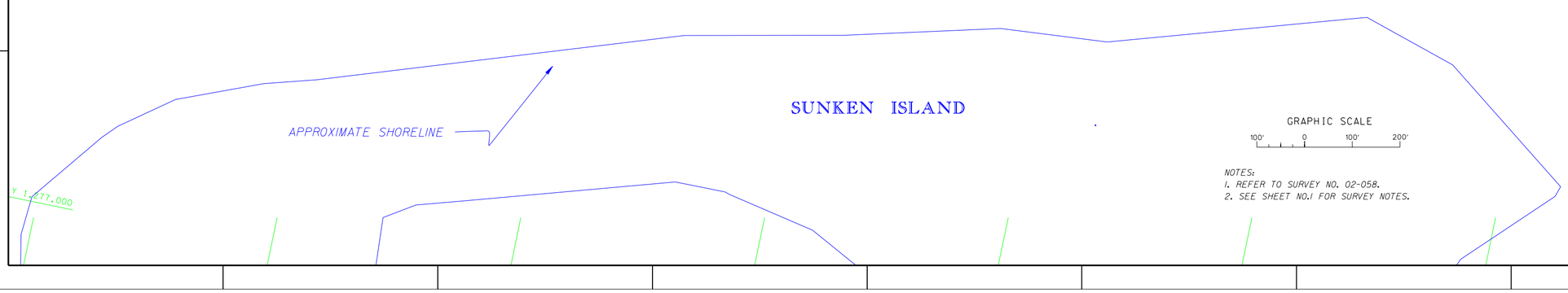


ALAFIA RIVER CHANNEL

AZ=258-12-23

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-9 (4/02)	521,330	1,278,689	27°51'02.86"	82°25'02.18"
DBN-10 (4/02)	521,393	1,278,327	27°50'59.27"	82°25'01.47"



NOTES:
1. REFER TO SURVEY NO. 02-058.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Designed by: XXX
Dwn by: WWD
Ckd by: WWD
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XX:X
Dated: APR 2002
D.O.FILE NO.

File name: D058SH05.DGN
Reference files: BROR98.DGN ALAFIACH83.DGN D058EC.DGN ALAFTOPO83.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER
PROJECT CONDITION SURVEY
32-FOOT PROJECT
ALAFIA RIVER STA. 77+00 THRU STA. 107+00
PLAN

DRAWING NO.
5/9

SHEET 5 OF 9

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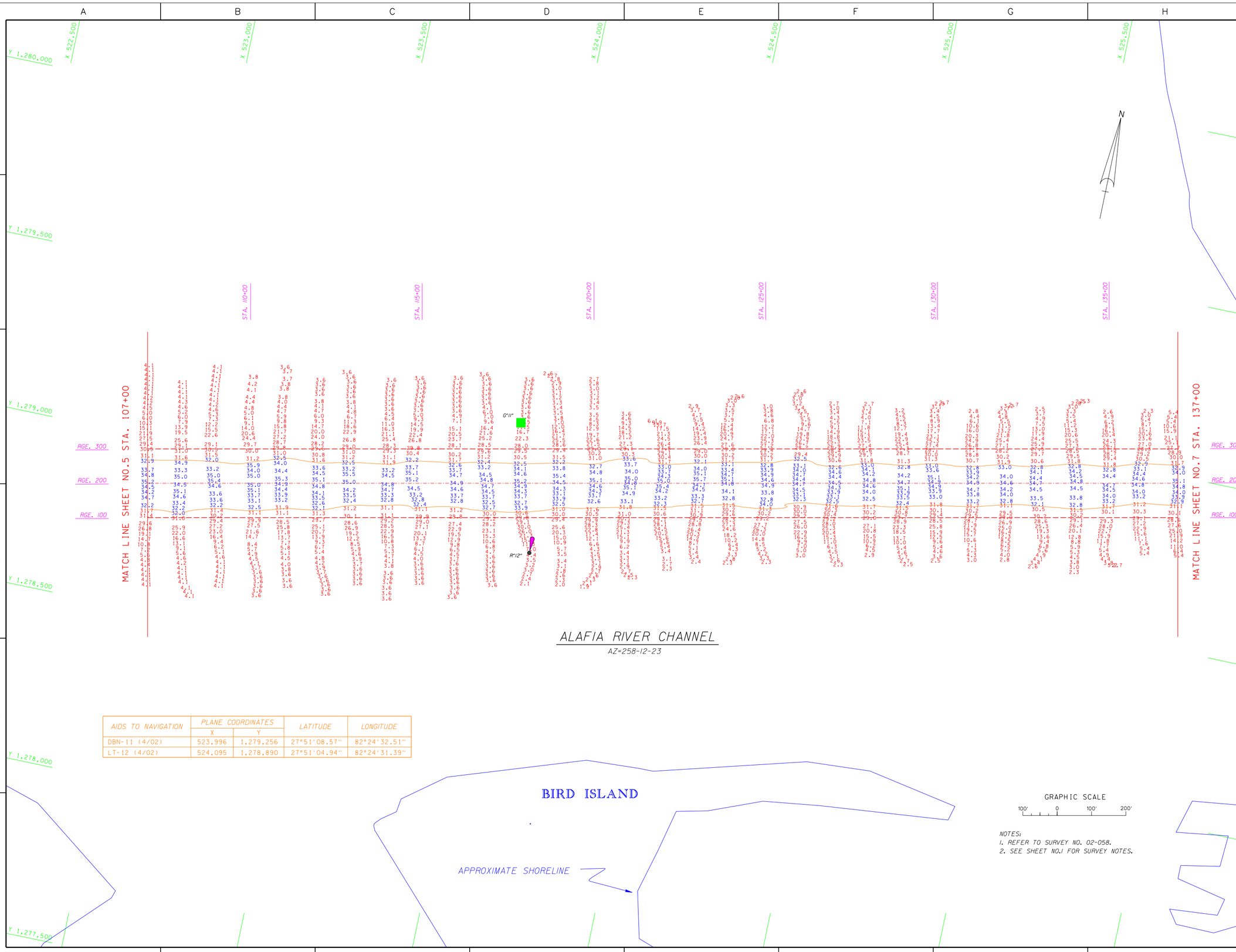

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-11 (4/02)	523,996	1,279,256	27°51'08.57"	82°24'32.51"
LT-12 (4/02)	524,095	1,278,890	27°51'04.94"	82°24'31.39"

NOTES:
1. REFER TO SURVEY NO. 02-058.
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: WRM
Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
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Dated: APR 2002
D.O.FILE NO.

File name: D058SH06.DGN
Reference files: BRDR98.DGN ALAFIACH83DGN ALAFTOPO83.DGN D058EC.DGN D058NAV.DGN D058CON.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER
PROJECT CONDITION SURVEY
32-FOOT PROJECT
STA. 107+00 THRU STA. 137+00 ENTRANCE CHANNEL
PLAN

DRAWING NO.
6/9

SHEET 6 OF 9

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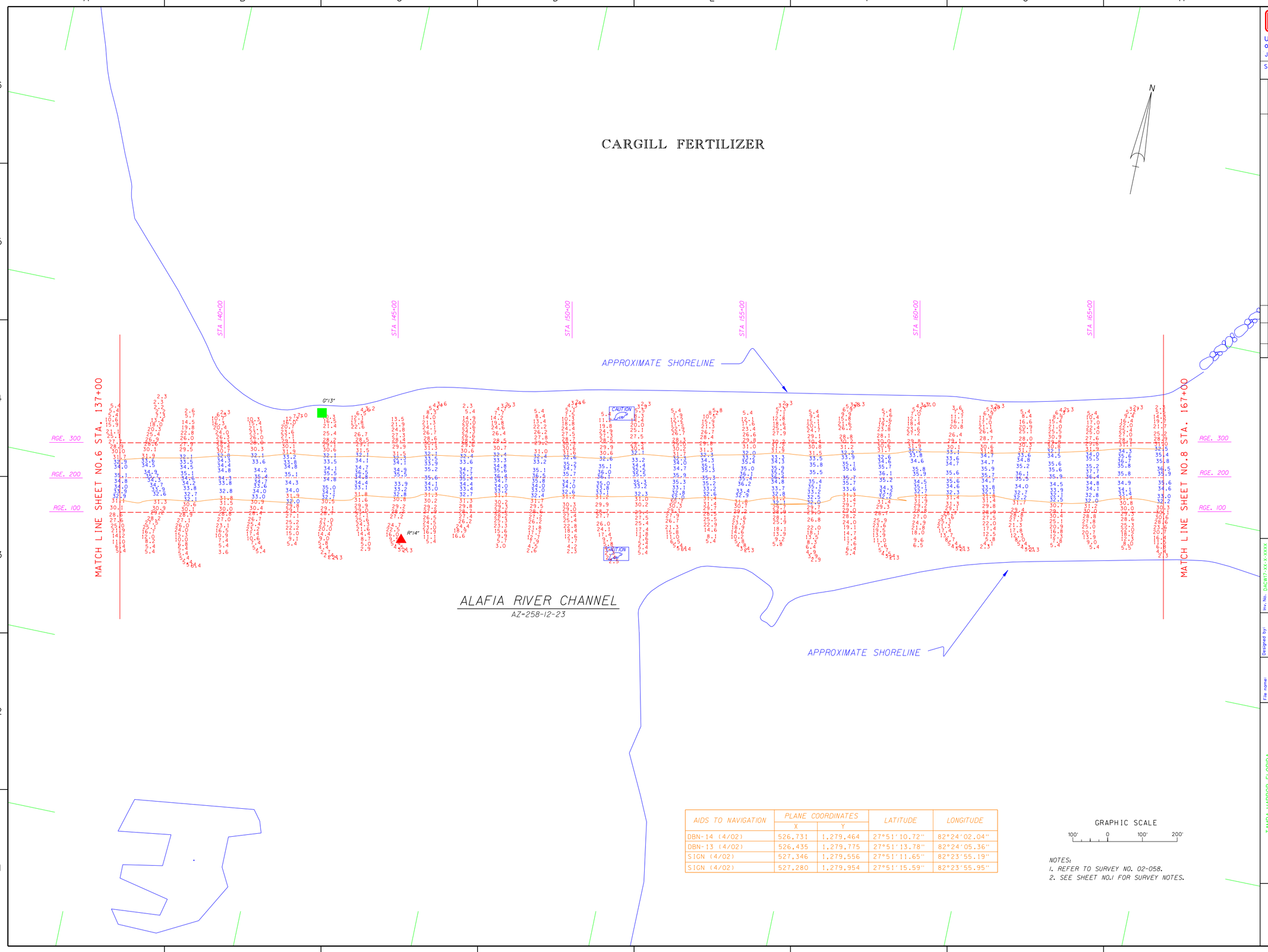

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-14 (4/02)	526,731	1,279,464	27°51'10.72"	82°24'02.04"
DBN-13 (4/02)	526,435	1,279,775	27°51'13.78"	82°24'05.36"
SIGN (4/02)	527,346	1,279,556	27°51'11.65"	82°23'55.19"
SIGN (4/02)	527,280	1,279,954	27°51'15.59"	82°23'55.95"

NOTES:
1. REFER TO SURVEY NO. 02-058.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
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Designed by: WRM
Dwn by: WRM
Ckd by: WRM

Dated: APR 2002
D.O.FILE NO.

File name: D058SH07.DGN
Reference files: BRDR98.DGN ALAFIACH83.DGN ALAFTOP083.DGN D058EC.DGN D058NAV.DGN D058CON.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER

PROJECT CONDITION SURVEY
32-FOOT PROJECT

STA. 137+00 THRU STA. 167+00 ENTRANCE CHANNEL
PLAN

DRAWING NO.
7/9

SHEET 7 OF 9

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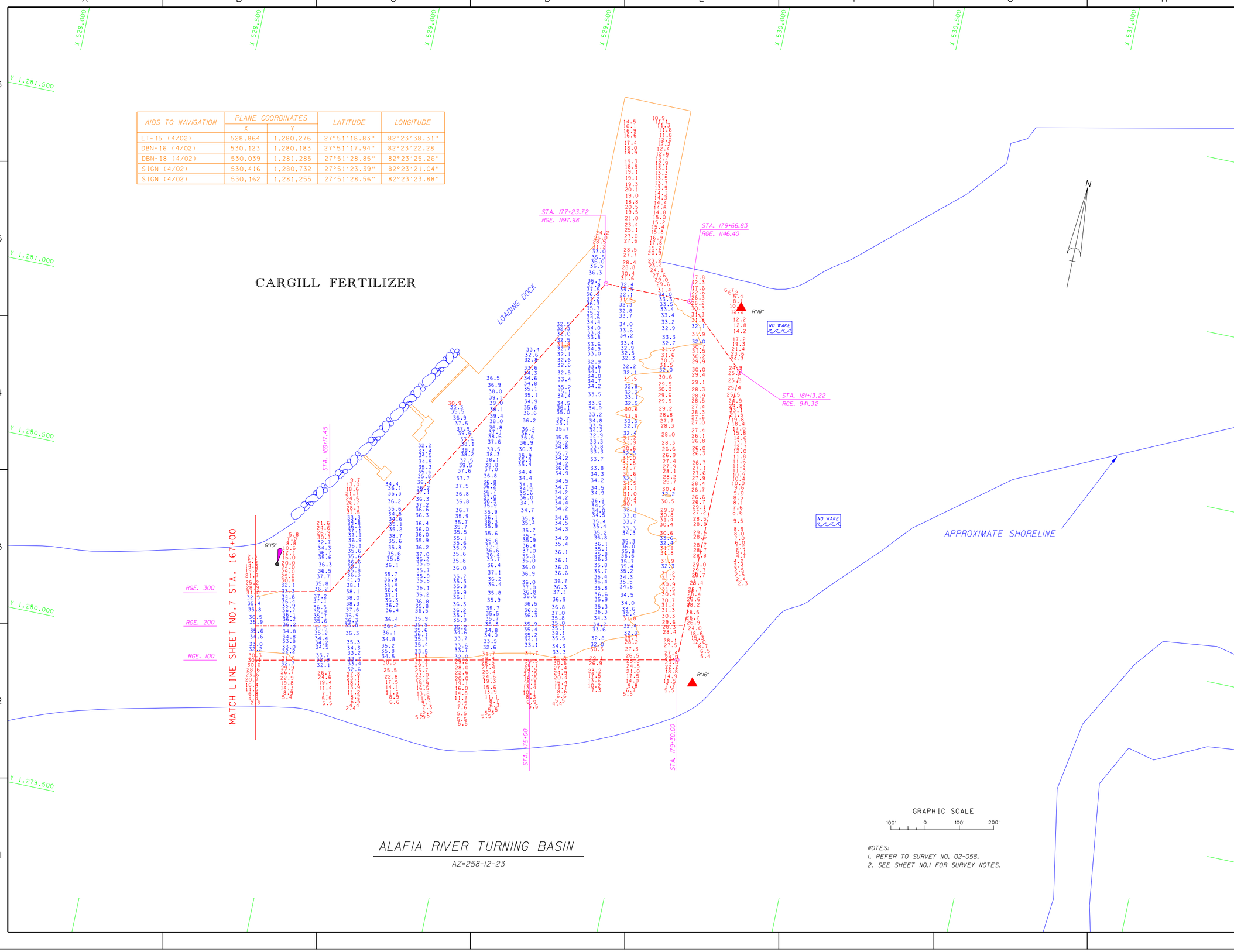
AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-15 (4/02)	528,864	1,280,276	27°51'18.83"	82°23'38.31"
DBN-16 (4/02)	530,123	1,280,183	27°51'17.94"	82°23'22.28
DBN-18 (4/02)	530,039	1,281,285	27°51'28.85"	82°23'25.26"
SIGN (4/02)	530,416	1,280,732	27°51'23.39"	82°23'21.04"
SIGN (4/02)	530,162	1,281,255	27°51'28.56"	82°23'23.88"



ALAFIA RIVER TURNING BASIN

AZ=258-12-23

NOTES:
1. REFER TO SURVEY NO. 02-058.
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: WRM
Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XX:X
Dated: APR 2002
D.O. FILE NO.

File name: D058SH08.DGN
Reference files: BR0R98.DGN ALAFTOP083.DGN ALAFIACH83.DGN D058EC.DGN D058TB.DGN D058NAV.DGN D058CON.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER

PROJECT CONDITION SURVEY
32-FOOT PROJECT

STA. 167+00 ENTRANCE CHANNEL THRU
STA. 182+00 TURNING BASIN
PLAN

DRAWING NO.
8/9

SHEET 8 OF 9

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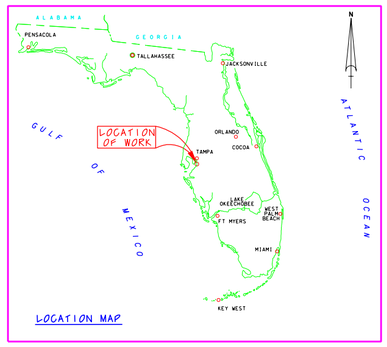
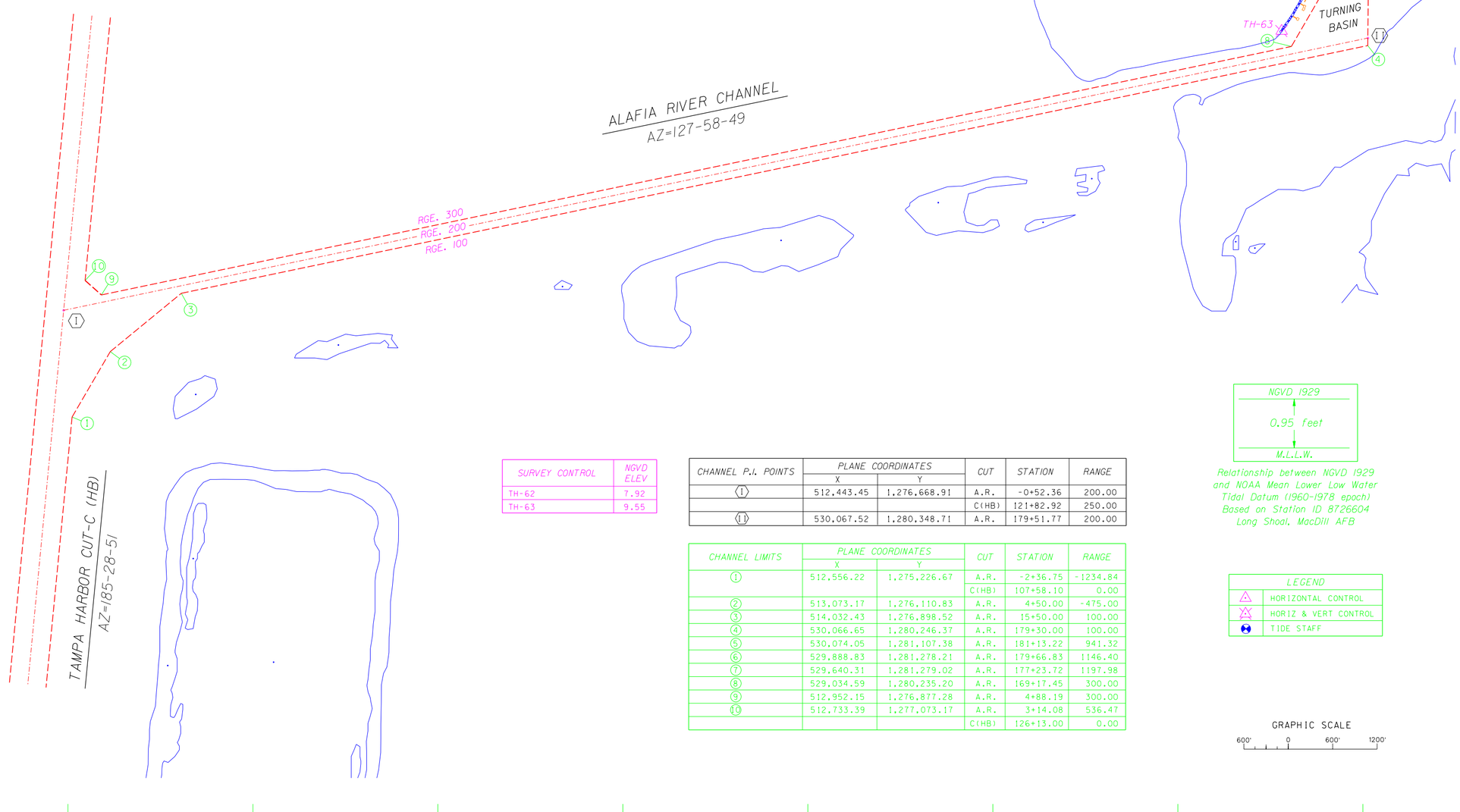


LOCATION MAP

NOTES:

1. ALL ELEVATIONS ARE IN FEET AND TENTHS AND ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUN OF 1929 (NGVD29).
2. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ALL AZIMUTHS ARE GRID; RECKONED CLOCKWISE FROM SOUTH.
4. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL WHICH IS RANGE 200.



SURVEY CONTROL	NGVD ELEV
TH-62	7.92
TH-63	9.55

CHANNEL P.I. POINTS	PLANE COORDINATES X	PLANE COORDINATES Y	CUT	STATION	RANGE
I	512,443.45	1,276,668.91	A.R.	-0+52.36	200.00
			C(HB)	121+82.92	250.00
II	530,067.52	1,280,348.71	A.R.	179+51.77	200.00

CHANNEL LIMITS	PLANE COORDINATES X	PLANE COORDINATES Y	CUT	STATION	RANGE
1	512,556.22	1,275,226.67	A.R.	-2+36.75	-1234.84
			C(HB)	107+58.10	0.00
2	513,073.17	1,276,110.83	A.R.	4+50.00	-475.00
3	514,032.43	1,276,898.52	A.R.	15+50.00	100.00
4	530,066.65	1,280,246.37	A.R.	179+30.00	100.00
5	530,074.05	1,281,107.38	A.R.	181+13.22	941.32
6	529,888.83	1,281,278.21	A.R.	179+66.83	1146.40
7	529,640.31	1,281,279.02	A.R.	177+23.72	1197.98
8	529,034.59	1,280,235.20	A.R.	169+17.45	300.00
9	512,952.15	1,276,877.28	A.R.	4+88.19	300.00
10	512,733.39	1,277,073.17	A.R.	3+14.08	536.47
			C(HB)	126+13.00	0.00

NGVD 1929
0.95 feet
M.L.L.W.

Relationship between NGVD 1929 and NOAA Mean Lower Low Water Tidal Datum (1960-1978 epoch) Based on Station ID 8726604 Long Shoal, MacDill AFB

LEGEND	
△	HORIZONTAL CONTROL
⊠	HORIZ & VERT CONTROL
⊗	TIDE STAFF

GRAPHIC SCALE
600' 0 600' 1200'

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

Inv. No. DACW17-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: xx xx xxxx
Plot scale: XX:X

Designed by: FMW
Dwn by: FMW
Ckd by:

Dated: APR 2002
D.O. FILE NO.

File name: D058SH09.DGN
Reference files: BRDR98.DGN ALAFIACH83.DGN

TAMPA HARBOR, FLORIDA
ALAFIA RIVER
32-FOOT PROJECT
ENTRANCE CHANNEL AND TURNING BASIN
CHANNEL CONTROL DATA

DRAWING NO.
9/9

SHEET 9 OF 9

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