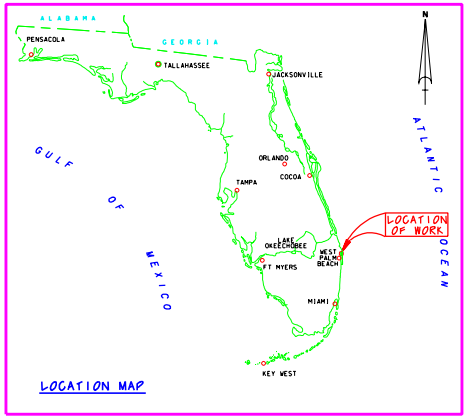
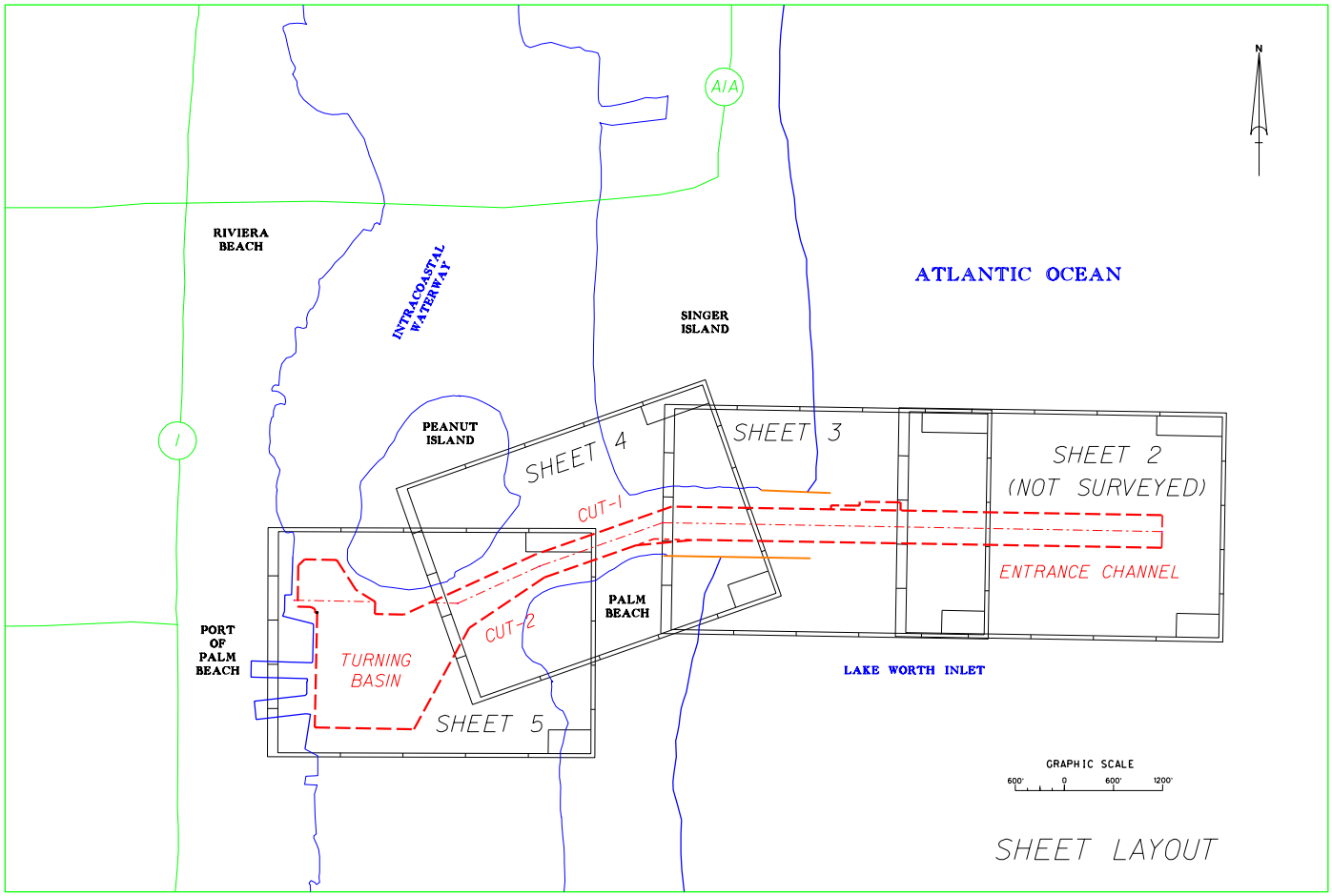
PALM BEACH HARBOR, FLORIDA
AFTER-DREDGE SURVEY





SURVEY NOTES:

1. REFER TO SURVEY NO. 03-109.
2. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) WHICH IS 1.30 FEET BELOW NGVD 1929.
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
4. TIDAL REDUCTIONS WERE MADE FROM A STAFF SET ON A WOODEN PILING IN THE VICINITY OF, AND REFERENCED FROM BENCHMARK "A310".
5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1927 (NAD27).
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 200KHZ (HIGH FREQUENCY) TRANSDUCER.

VESSEL	DATE OF SURVEY	CUT
WB-34	22-23 APRIL 2003	ENTRANCE CHANNEL, CUT 1-2 & TURNING BASIN

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 SURVEYS, 1 JAN 02.

BENCHMARK	NGVD ELEV. (FT)
A-310	4.75

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

NGVD 1929
1.31 feet
M.L.L.W.

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

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
Dataset XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XX:X

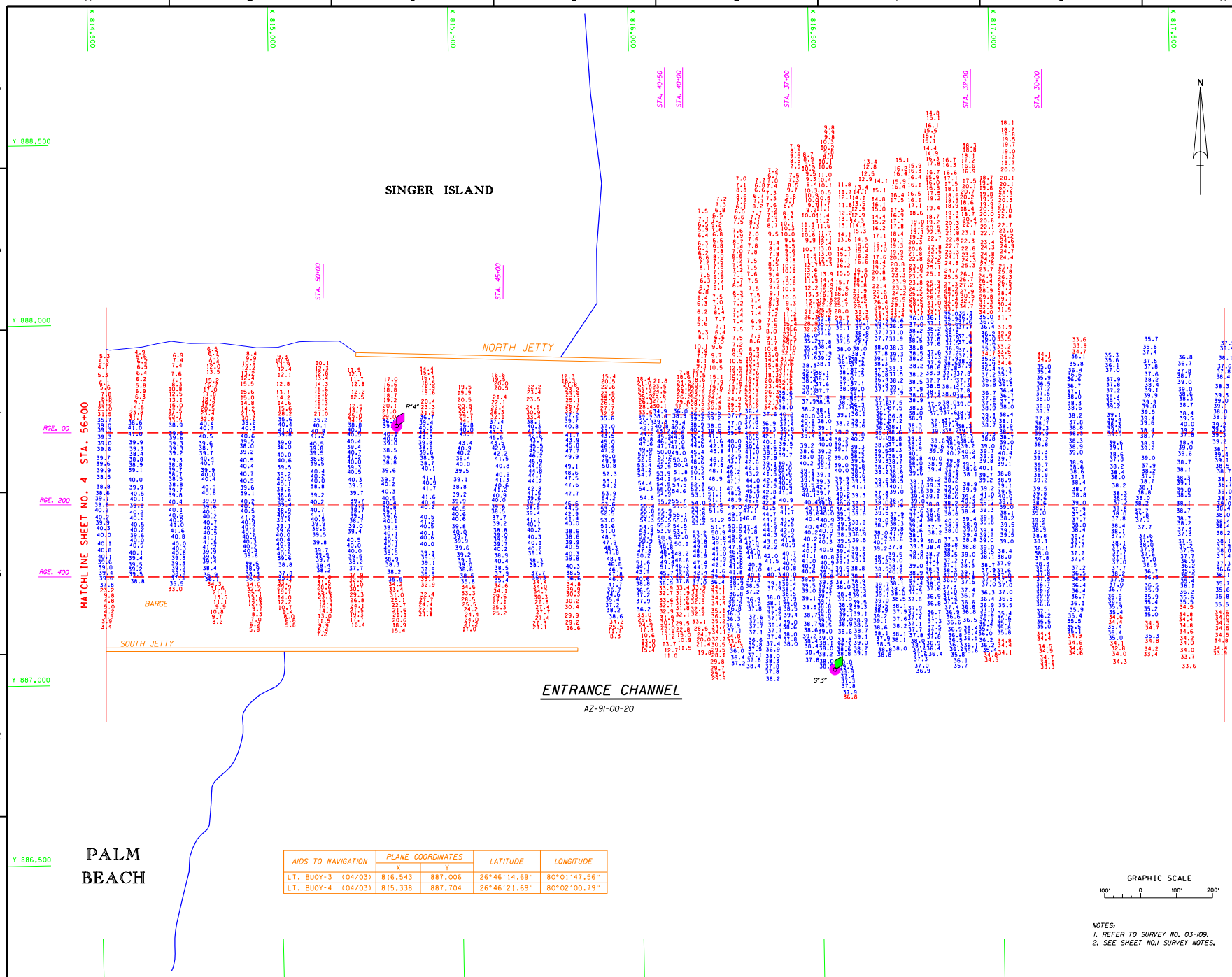
Designed by: RGS
Dwn by: PES
Ckd by: WRM
Dated: APR 2003
D.O. FILE NO.

File name: E109SH01.DGN
Reference files: BDY01.DGN SLAYOUT.DGN NLMP1LMF.DGN

PALM BEACH HARBOR, FLORIDA
AFTER-DREDGE SURVEY
33 & 35-FOOT PROJECT
ENTRANCE CHANNEL THRU TURNING BASIN
PLAN

DRAWING NO.
1/4

SHEET 1 OF 5



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3 (04/03)	816,543	887,006	26°46'14.69"	80°01'47.56"
LT. BUOY-4 (04/03)	815,338	887,704	26°46'21.69"	80°02'00.79"

NOTES:
1. REFER TO SURVEY NO. 03-109.
2. SEE SHEET NO.1 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
Dataset XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: 1:1X

Designed by: EDSL
Drafted by: EDSL
Checked by: EDSL

Dated: APR 2003
D.O.F FILE NO.

File name: E109SH03.DGN
Reference files:
BR0988.DGN
BR1000.DGN
FB1090.DGN
E109SH01.DGN
E109SH02.DGN

PALM BEACH HARBOR, FLORIDA
AFTER-DREDGE SURVEY
35-FOOT PROJECT
STA. 25+00 THRU STA. 56+00 ENTRANCE CHANNEL
PLAN

DRAWING NO.
2/4

SHEET 3 OF 5

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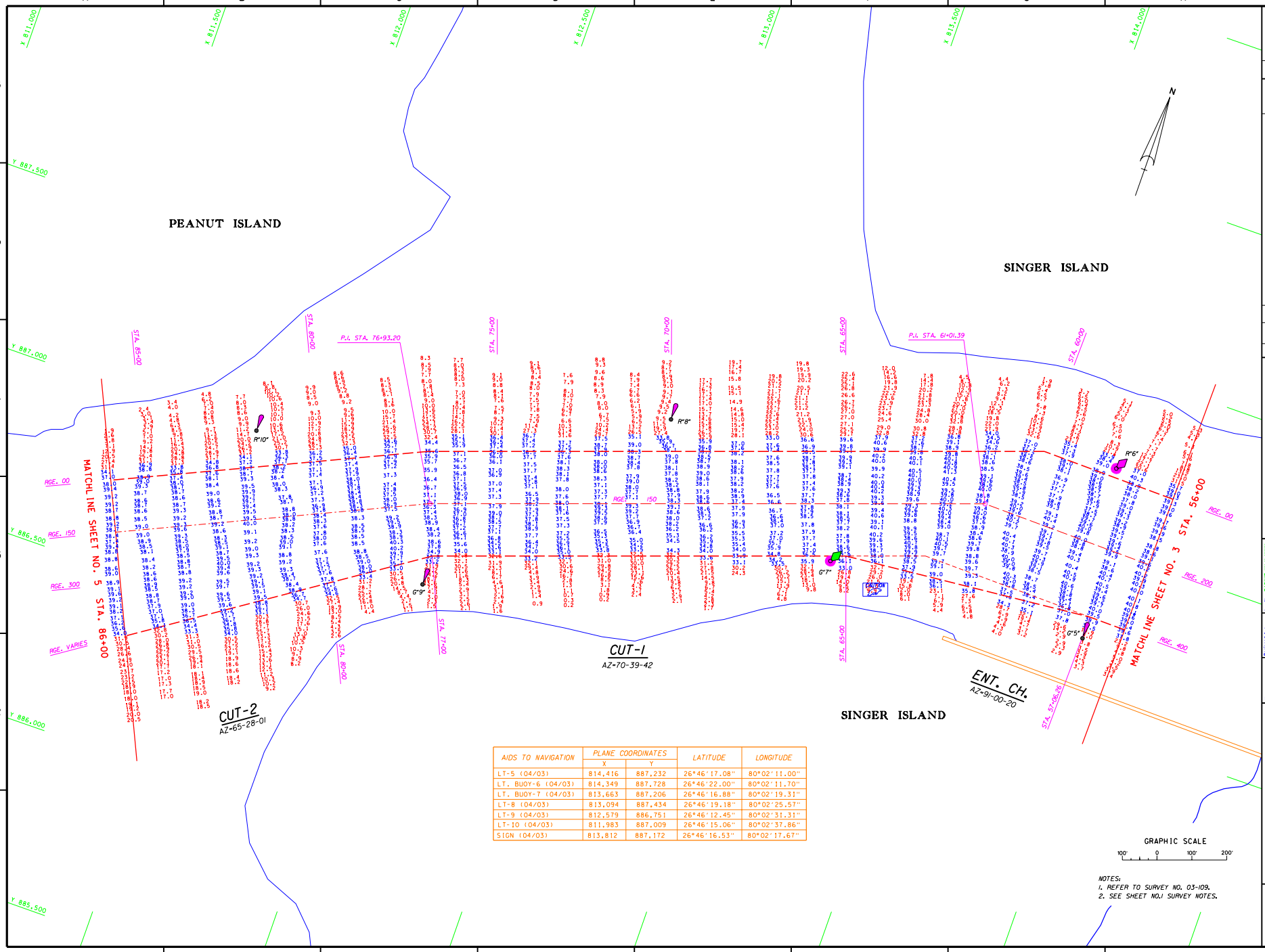


AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-5 (04/03)	814,416	887,232	26°46'17.08"	80°02'11.00"
LT. BUOY-6 (04/03)	814,349	887,728	26°46'22.00"	80°02'11.70"
LT. BUOY-7 (04/03)	813,663	887,206	26°46'16.88"	80°02'19.31"
LT-8 (04/03)	813,094	887,434	26°46'19.18"	80°02'25.57"
LT-9 (04/03)	812,579	886,751	26°46'12.45"	80°02'31.31"
LT-10 (04/03)	811,983	887,009	26°46'15.06"	80°02'37.86"
SIGN (04/03)	813,812	887,172	26°46'16.53"	80°02'17.67"

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 03-109.
2. SEE SHEET NO.1 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
Dates: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XXX XXXX
Plot scale: XXX X

Designed by:
Dwn by: BRM
Ckd by:
Dates: APR 2003
D.O.F. FILE NO.

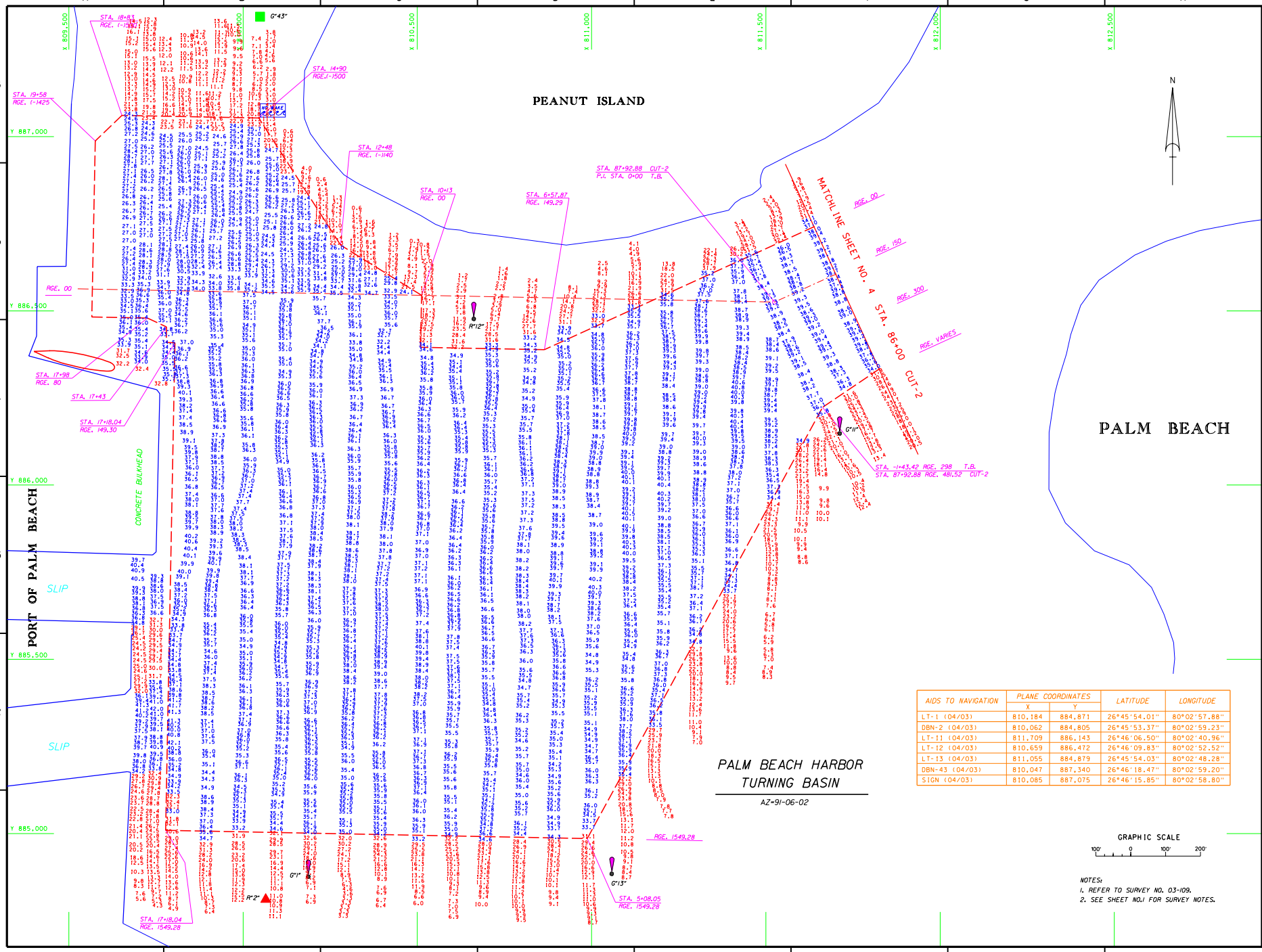
File name: E109SH04.DGN
Reference Files:
PALMBCH.DGN
PALMBCH2.DGN
PB1DPRO.DGN
PB1DPRO2.DGN
E109CT2.DGN
E109CT2.DGN
E109MAP.DGN

PALM BEACH HARBOR, FLORIDA
AFTER-DREDGE SURVEY
33 & 35-FOOT PROJECT
STA. 60+00 ENTRANCE CHANNEL THRU STA. 86+00 CUT-2
PLAN

DRAWING NO.
3/4

SHEET 4 OF 5

...\e109sh04.dgn 08/08/2003 09:54:47 AM



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-1 (04/03)	810,184	884,871	26°45'54.01"	80°02'57.88"
DBN-2 (04/03)	810,062	884,805	26°45'53.37"	80°02'59.23"
LT-11 (04/03)	811,709	886,143	26°46'06.50"	80°02'40.96"
LT-12 (04/03)	810,659	886,472	26°46'09.83"	80°02'52.52"
LT-13 (04/03)	811,055	884,879	26°45'54.03"	80°02'48.28"
DBN-43 (04/03)	810,047	887,340	26°46'18.47"	80°02'59.20"
SIGN (04/03)	810,085	887,075	26°46'15.85"	80°02'58.80"

NOTES:
1. REFER TO SURVEY NO. 03-109.
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
Dataset: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: 1:1 X

Designed by: RMW
Dwn by: RMW
Ckd by: RMW

Dated: APR 2003
D.O.F FILE NO.

File name: E1DSPA05.DGN
Reference files: BKGRND.DGN
E1DSPC01.DGN
E1DTB1.DGN
E1DSPA01.DGN
E1DSPA02.DGN
E1DSPC2.DGN

PALM BEACH HARBOR, FLORIDA
AFTER-DREDGE SURVEY
24 & 33-FOOT PROJECT
TURNING BASIN & NORTH BASIN EXTENSION PLAN

DRAWING NO.
4/4

SHEET 5 OF 5