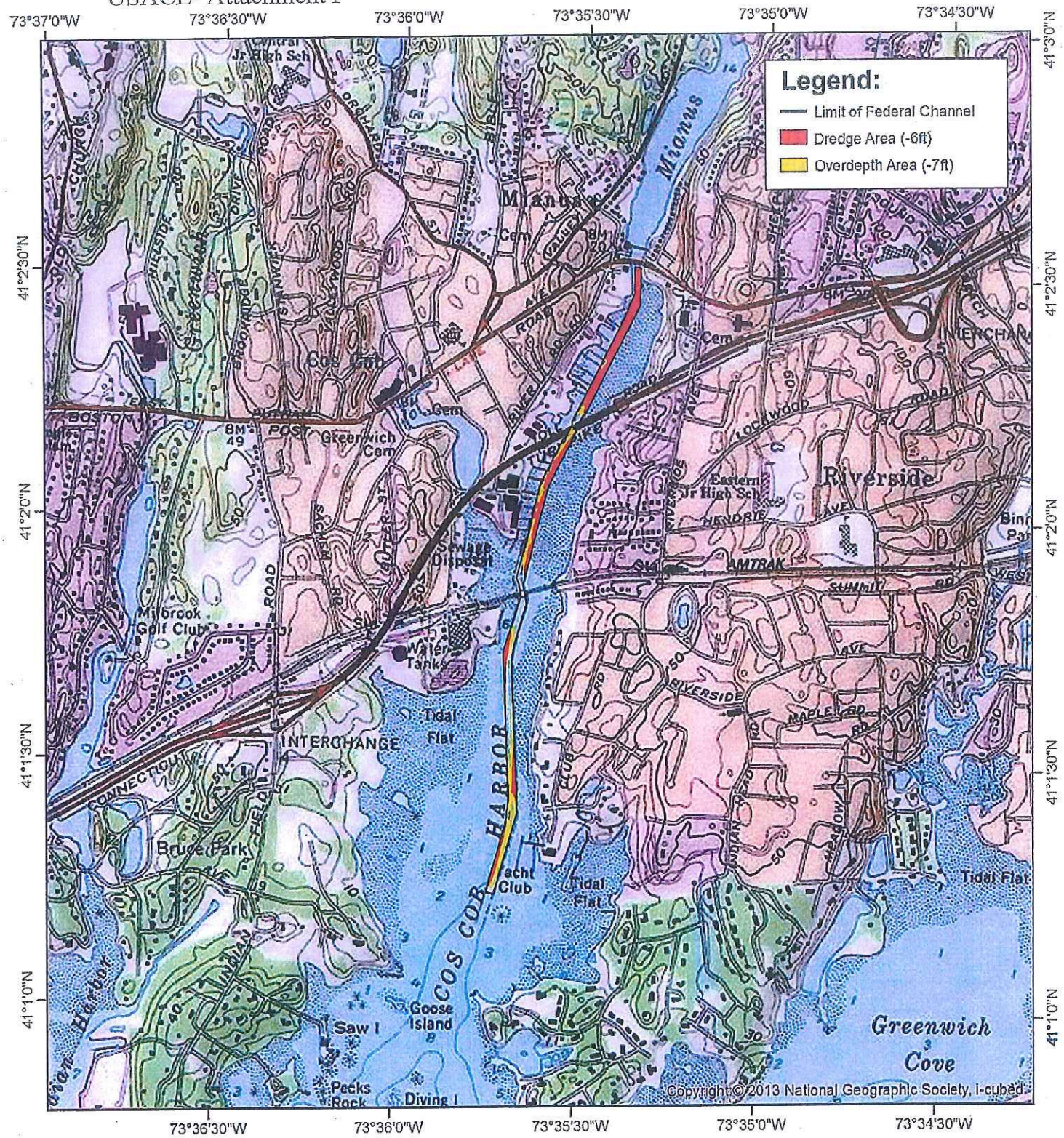
USACE- Attachment I



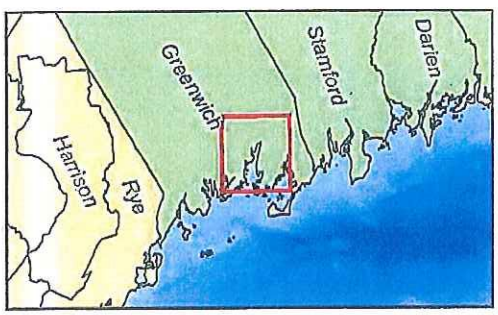
US Army Corps of Engineers
New England District

MIANUS RIVER FNP, GREENWICH, CT
DREDGE AREAS FROM 2014 USACE SURVEY

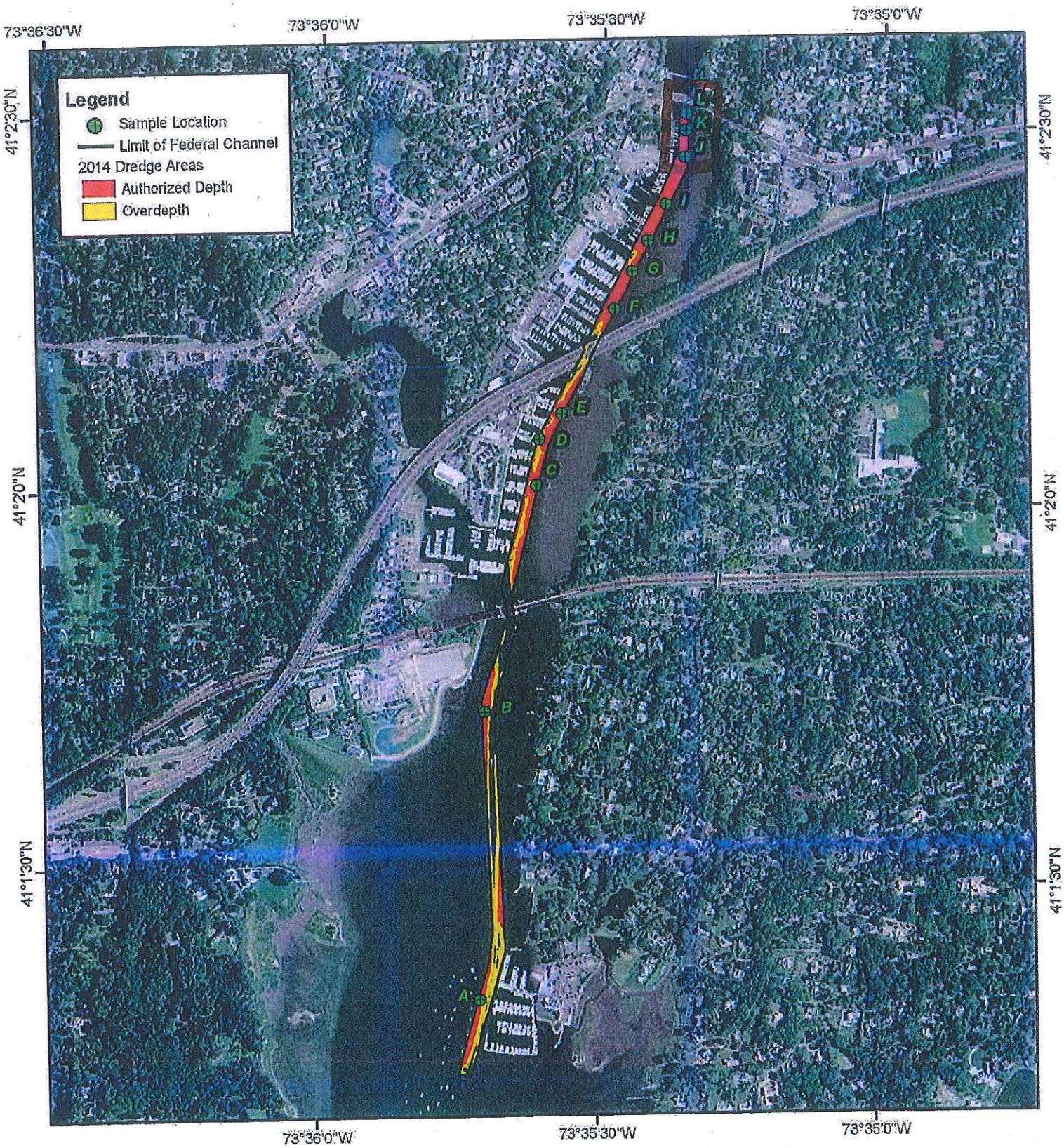
0 770 1,540 2,310 3,080 3,850 Feet
0 390 780 1,170 Meters
1:20,000

USA TOPO

GCS NAD1983



Sheet 1068



US Army Corps of Engineers
New England District

FIGURE 1:
MIANUS RIVER FNP, GREENWICH, CT
2015 SAMPLE LOCATIONS

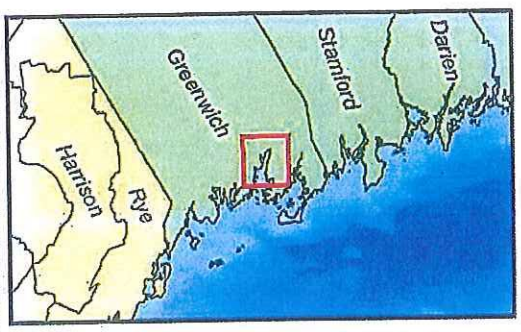
0 500 1,000 1,500 2,000 2,500 Feet

0 250 500 750 Meters

1:13,000

2012 NAIP AERIAL PHOTOGRAPHY

GCS NAD1983



Sheet 2068

USACE

Attachment I

Sheet 3 of 8

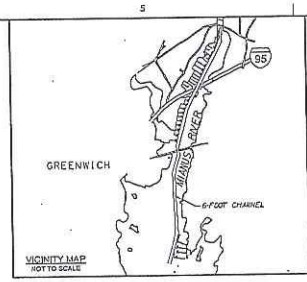
US Army Corps
of Engineers®
New England
District

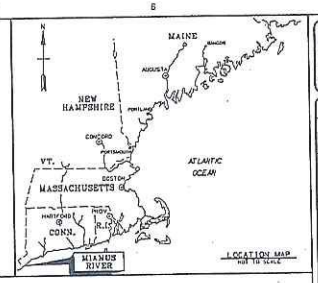
MAINTENANCE DREDGING
6-FOOT CHANNEL

MIANUS RIVER
GREENWICH, CONNECTICUT

SOLICITATION #:

These plans are the same as the condition survey. just have shoal areas shaded in w/ gray color.





INDEX TO DRAWINGS

SHEET NO.		DESIGN FILE	SHEET TITLE
1	G-001	MIA-263_G-001.dgn	COVER SHEET AND INDEX
2	G-002	MIA-263_G-002.dgn	GENERAL PLAN, LEGEND, INDEX TO NAVIGATION AIDS AND GENERAL NOTES
3	C-101	MIA-263_C-101.dgn	PLAN AND SECTION STA. 0+00 TO STA. 30+00
4	C-102	MIA-263_C-102.dgn	PLAN AND SECTION STA. 30+00 TO STA. 64+00
5	C-103	MIA-263_C-103.dgn	PLAN AND SECTIONS STA. 64+00 TO STA. 81+84

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS IN THIS SET AS INDICED ON THIS SHEET

APPROVED FOR TECHNICAL ADEQUACY BY:

TECHNICAL LEAD ENGINEER — DATE

REVIEWED BY:

CHIEF, SURVEY SECTION — DATE

REVIEWED BY:

CHIEF, GEOTECHNICAL/WATER RESOURCES BRANCH — DATE

REVIEWED BY:

CHIEF, GEO-ENV BR/DEPUTY CHIEF, ENGINEERING/PLANNING DIV — DATE

APPROVAL RECOMMENDED BY:

CHIEF, DESIGN BRANCH — DATE

APPROVED BY:

CHIEF, ENGINEERING / PLANNING DIVISION — DATE

This project was designed by the U.S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents, within the scope of their employment as required by ER 1110-1-8152.

US Army Corps of Engineers® New England District

MARK	DESCRIPTION	DATE	APPR.	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

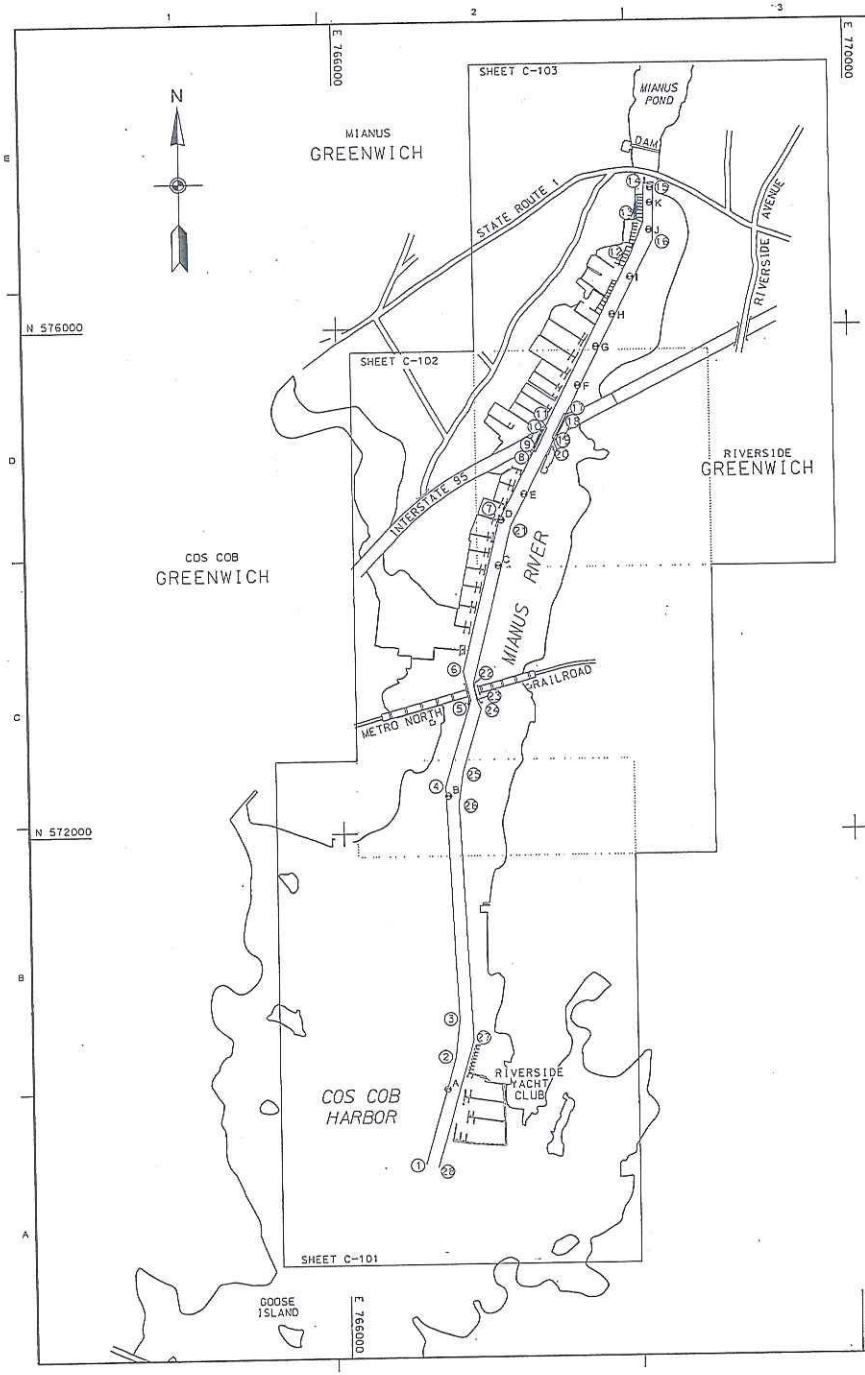
DESIGNED BY: CORPS OF ENGINEERS
DATE:
SOLICITATION NO.:
CONTRACT NO.:
FOR DACE FY-XX
FOR DACW FY-XX
DRAWING CODE: 04-263
PROJECT CODE: (CONTRACTOR)

MIANUS RIVER
GREENWICH, CONNECTICUT
SPECIFICATION SURVEY

COVER SHEET AND INDEX

SHEET IDENTIFICATION
G-001

Sheet 4 of 8



MIANUS HARBOR
GREENWICH, CONNECTICUT
6-FOOT CHANNEL
STATE PLANE NAD 1983
(ZONE 0600)

#	EASTING	NORTHING
1	766606.94	569367.78
2	766849.64	570220.54
3	766885.38	570527.49
4	766800.37	572361.98
5	767009.97	573043.70
6	766955.39	573275.37
7	767253.27	574473.18
8	767533.49	575022.05
9	767553.43	575028.17
10	767643.13	575204.49
11	767636.33	575224.20
12	768309.63	576547.71
13	768419.56	576827.25
14	768429.16	577153.36
15	768504.13	577151.15
16	768490.32	576682.34
17	767797.82	575321.10
18	767777.88	575314.98
19	767684.90	575132.22
20	767891.70	575112.51
21	767348.54	574437.97
22	767031.87	573168.80
23	767060.32	573048.05
24	767093.80	572976.08
25	766939.98	572475.77
26	766906.60	572229.97
27	766993.25	570558.82
28	766703.13	569340.40

INDEX OF NAVIGATION AIDS

NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
RN-8	7/08/14	N 569042.52 E 766636.12	41° - 01' - 10.9"N 73° - 35' - 44.4"W
GC-9	7/08/14	N 569415.78 E 766650.57	41° - 01' - 14.6"N 73° - 35' - 44.3"W
RN-10	7/08/14	N 570434.83 E 766941.44	41° - 01' - 24.7"N 73° - 35' - 40.6"W
GC-11	7/08/14	N 570371.26 E 766851.02	41° - 01' - 24.0"N 73° - 35' - 41.8"W
RN-12	7/08/14	N 572141.31 E 766875.28	41° - 01' - 41.5"N 73° - 35' - 41.7"W
GC-13	7/08/14	N 572144.06 E 766789.90	41° - 01' - 41.5"N 73° - 35' - 42.8"W

LEGEND

DESCRIPTION	SYMBOL
REQUIRED DREDGING DEPTH CONTOUR	
MATERIAL REQUIRED TO BE DREDGED	
ALLOWABLE OVERDEPTH (CROSS-SECTION ONLY)	
NAVIGATION AIDS	
BASELINE / CENTERLINE	
CHANNEL COORDINATES	②
CORE SAMPLE LOCATION	G
WATER MAIN	W_x
SEWER MAIN	SS_x
CABLE AND PIPELINE AREA (NO SPUD ZONE)	
ROCK / LEDGE	

GENERAL NOTES:

1. Soundings are in feet and tenths. The reference plane is Mean Lower Low Water (MLLW) and is based on the 1983-2001 Tidal Epoch. Any soundings noted with a (-) are above the reference plane of MLLW. Any soundings without a sign are below the reference plane of MLLW and are to be considered negative.
2. Topography shown is from previous surveys and/or NOAA Chart No. 12367. All topography, including shoreline, bridges, piers, etc., is located approximate unless otherwise noted and should be used as a general reference only.
3. Bench Mark Data: Tides were recorded using RTK GPS. The MLLW to NAVD88 correction for this project is 4.07 ft. This correction is referenced from NOAA's V-Datum model in the vicinity of Mianus River, Mianus, Connecticut. NAVD88 is above MLLW; therefore the correction should be added to NAVD88 to convert to MLLW. No tide gauges were used on this project. Average range of tide is 7.2'.
4. Coordinates shown are based on the Lambert Grid System for the State of Connecticut (Zone 0600) and NAD 1983 and based on U.S. Survey feet.
5. Survey was performed using an R2 Sonic Multibeam Sonar System operating at 300kHz. Horizontal positioning and real-time tides were obtained using a Leica 1200 RTK GPS System. The RTK base station used was Station Canon (2014).
6. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during July 2014.
7. The sounding information depicted on these maps should NOT be used to determine volumes. Volumes are determined from more sounding information than shown. Additional sounding information is available upon request.
8. The information depicted on these maps represents the results of surveys made on the dates indicated, and can only be considered as indicating the general conditions existing at that time.
9. Field Book: R&H 4238
   Surveyed by: Robert MacGavern and crew
   Refer to Survey No: 14-1322

GRAPHIC SCALE:
1" = 400'
400 0 400 800

US Army Corps of Engineers® New England District

DATE	DESCRIPTION	DATE	DESCRIPTION

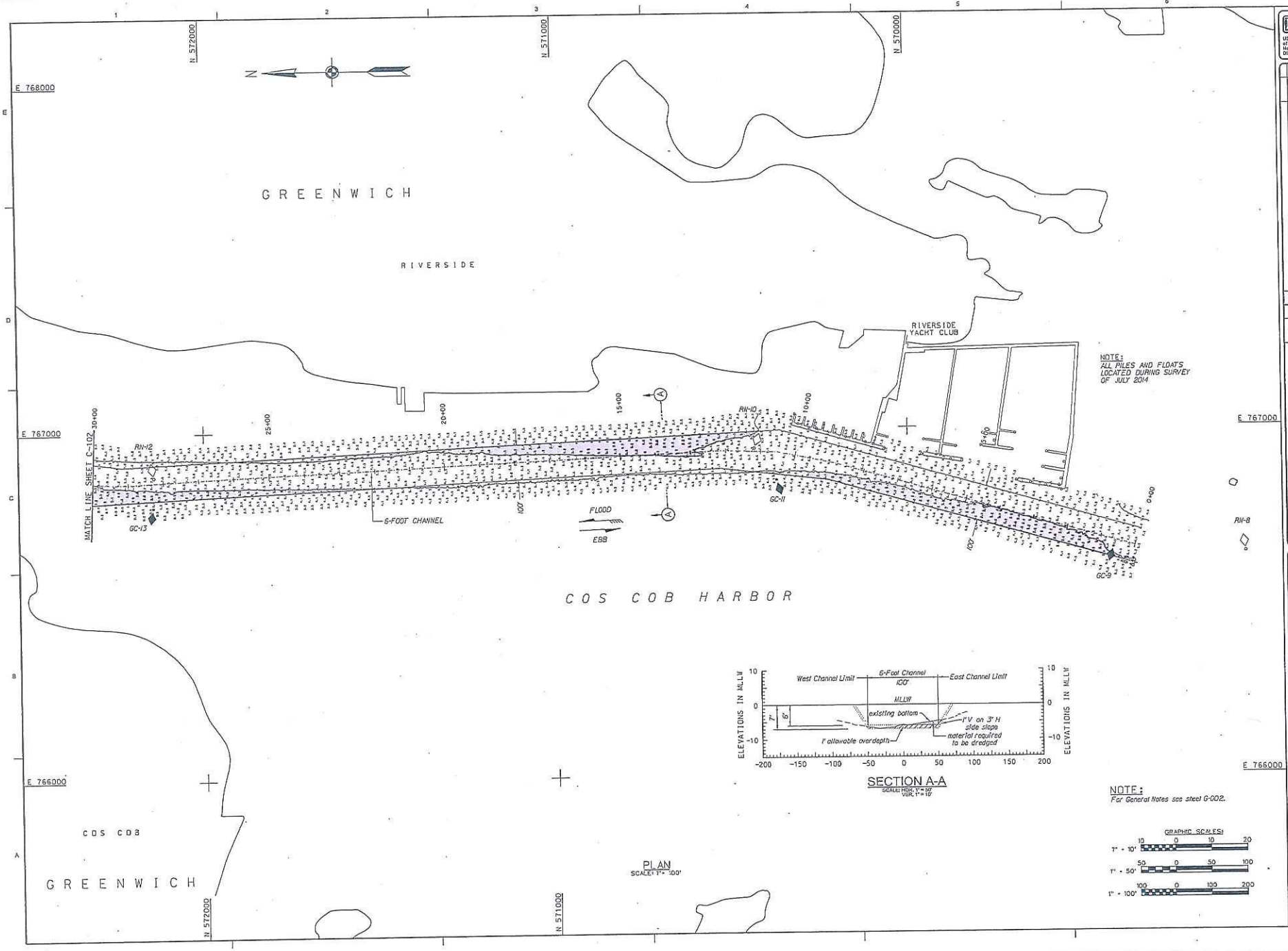
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

DESIGNED BY: DATE: SOUTH FORK INC.
DWN BY: ASE CKD BY: JMP
APPROVED BY: DATE: 10/24/14
PORTS & HARBORS BRANCH
FILE: 14-1322 PLOT SCALE: 1=400
PLOT DATE: 10/24/2014

MIANUS RIVER
GREENWICH, CONNECTICUT
SPECIFICATION SURVEY

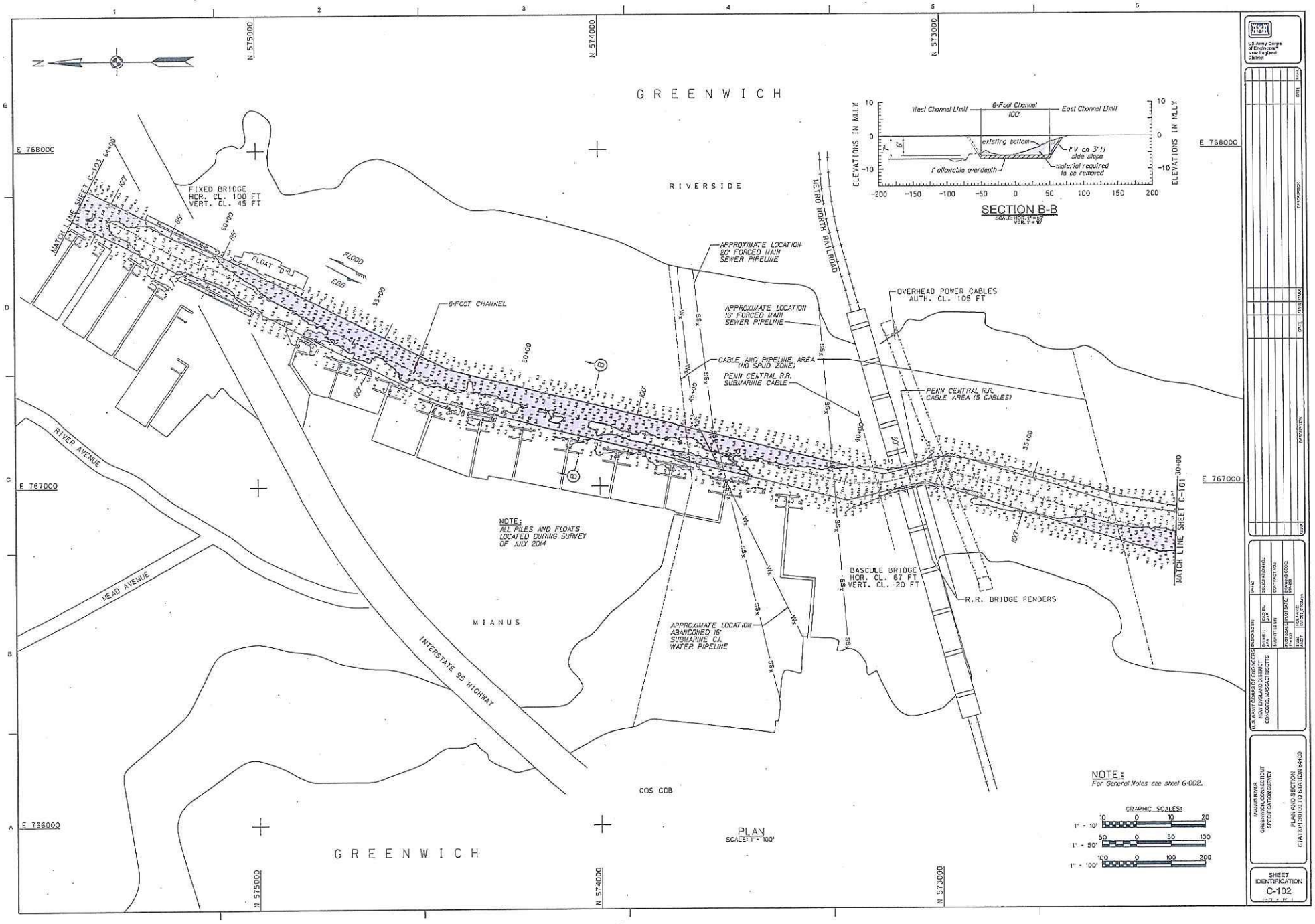
GENERAL PLAN, LEGEND, INDEX TO NAVIGATION AIDS, PROJECT COORDINATES AND GENERAL NOTES

SHEET IDENTIFICATION
G-002



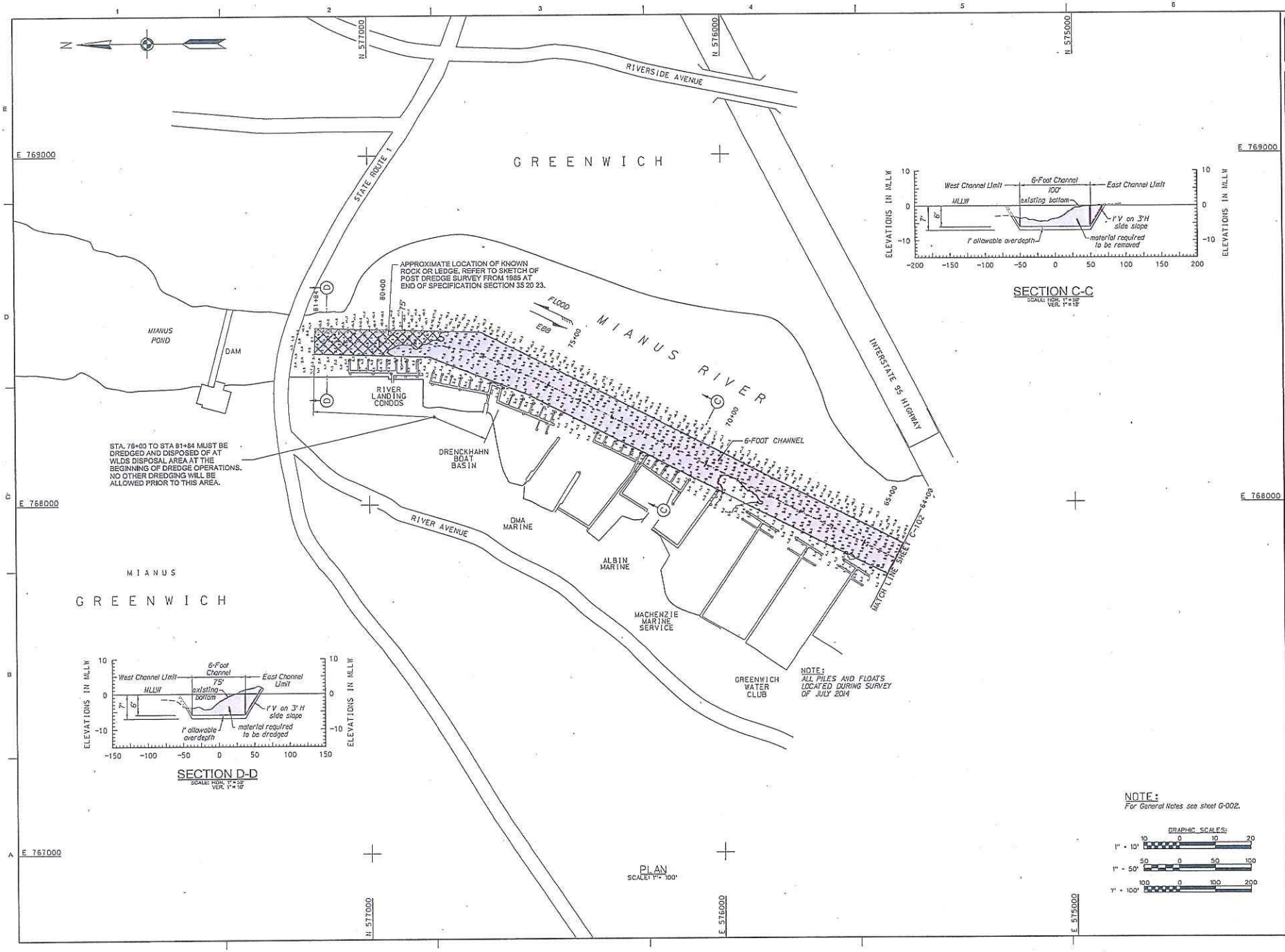
GREENWICH
RIVERSIDE
RIVERSIDE YACHT CLUB
NOTE:
ALL PILES AND FLOATS LOCATED DURING SURVEY OF JULY 2014
MATCH LINE SHEET C-102
6-FOOT CHANNEL
FLOOD
EBB
RN-12
RN-10
RN-8
GC-13
GC-11
GC-9
COS COB HARBOR
COS COB
GREENWICH
E 768000
E 767000
E 766000
N 572000
N 571000
N 570000
SECTION A-A
West Channel Limit
6-Foot Channel
East Channel Limit
100'
MLLW
existing bottom
1' V on 3' H side slope
material required to be dredged
1' allowable overdepth
ELEVATIONS IN MLLW
NOTE:
For General Notes see sheet G-002.
GRAPHIC SCALES:
1" = 10'
1" = 50'
1" = 100'
PLAN
SCALE: 1" = 100'
US Army Corps of Engineers New England District
U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT CONCORD, MASSACHUSETTS
MANNS RIVER GREENWICH, CONNECTICUT SPECIFICATION SURVEY
PLAN AND SECTION STATION 0+00 TO 30+00
SHEET IDENTIFICATION
C-101

Sheet 5 of 8

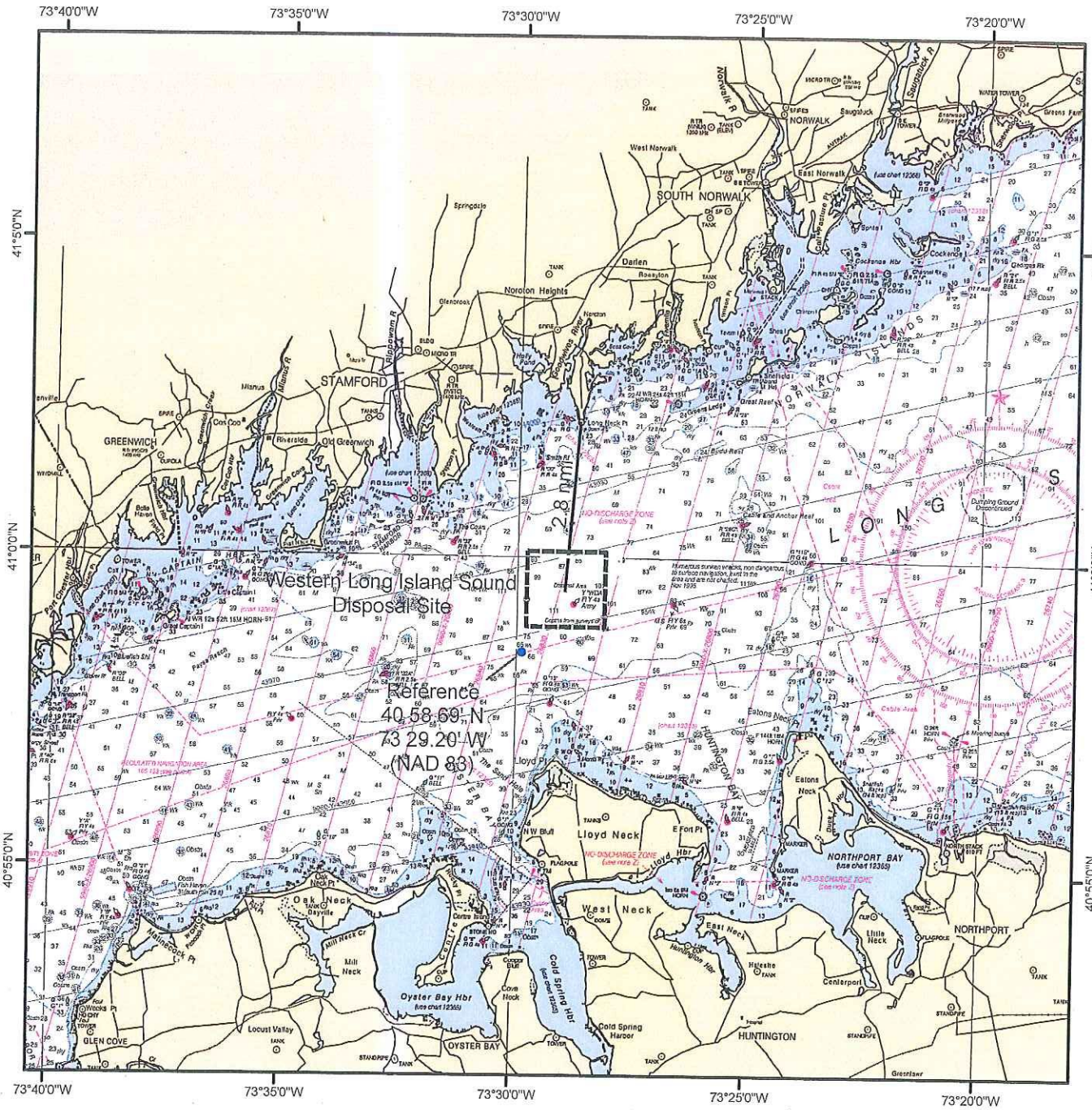

GREENWICH
RIVERSIDE
MIANUS
COS COB
GREENWICH
FIXED BRIDGE
HOR. CL. 100 FT
VERT. CL. 45 FT
MATCH LINE SHEET C-103
FLOAT
FLOOD
EBB
6-FOOT CHANNEL
APPROXIMATE LOCATION 20" FORCED MAIN SEWER PIPELINE
APPROXIMATE LOCATION 16" FORCED MAIN SEWER PIPELINE
CABLE AND PIPELINE AREA (NO SPUD ZONE)
PENN CENTRAL R.R. SUBMARINE CABLE
METRO NORTH RAILROAD
OVERHEAD POWER CABLES
AUTH. CL. 105 FT
PENN CENTRAL R.R. CABLE AREA (5 CABLES)
NOTE:
ALL PILES AND FLOATS LOCATED DURING SURVEY OF JULY 2014
BASCULE BRIDGE
HOR. CL. 67 FT
VERT. CL. 20 FT
R.R. BRIDGE FENDERS
APPROXIMATE LOCATION ABANDONED 16" SUBMARINE C.I. WATER PIPELINE
RIVER AVENUE
MEAD AVENUE
INTERSTATE 95 HIGHWAY
MATCH LINE SHEET C-101
E 768000
E 767000
E 766000
N 575000
N 574000
N 573000
PLAN
SCALE: 1" = 100'
SECTION B-B
SCALE: HOR. 1" = 50' VER. 1" = 10'
ELEVATIONS IN MLLW
West Channel Limit
6-Foot Channel
100'
East Channel Limit
existing bottom
1' V on 3' H side slope
1' allowable overdepth
material required to be removed
NOTE:
For General Notes see sheet G-002.
GRAPHIC SCALES:
1" = 10'
1" = 50'
1" = 100'
US Army Corps of Engineers New England District
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
MANUS RIVER
GREENWICH, CONNECTICUT
SPECIFICATION SURVEY
PLAN AND SECTION
STATION 39+00 TO STATION 64+00
SHEET IDENTIFICATION
C-102

Sheet 6 of 8

Sheet 7 of 8


GREENWICH
RIVERSIDE AVENUE
STATE ROUTE 1
N 577000
N 576000
N 575000
E 769000
E 768000
E 767000
MIANUS POND
DAM
RIVER LANDING CONDOS
APPROXIMATE LOCATION OF KNOWN ROCK OR LEDGE. REFER TO SKETCH OF POST DREDGE SURVEY FROM 1985 AT END OF SPECIFICATION SECTION 35 20 23.
FLOOD
EBB
MIANUS RIVER
INTERSTATE 95 HIGHWAY
6-FOOT CHANNEL
STA. 76+00 TO STA 81+84 MUST BE DREDGED AND DISPOSED OF AT WLDS DISPOSAL AREA AT THE BEGINNING OF DREDGE OPERATIONS. NO OTHER DREDGING WILL BE ALLOWED PRIOR TO THIS AREA.
DRENCKHAHN BOAT BASIN
RIVER AVENUE
DMA MARINE
ALBIN MARINE
MACHENZIE MARINE SERVICE
GREENWICH WATER CLUB
MATCH LINE SHEET C-102
MIANUS
GREENWICH
NOTE: ALL PILES AND FLOATS LOCATED DURING SURVEY OF JULY 2014
PLAN
SCALE: 1" = 100'
SECTION C-C
SCALE: HOR. 1" = 50' VER. 1" = 10'
West Channel Limit
6-Foot Channel
100'
East Channel Limit
MLLW
existing bottom
1' V on 3' H side slope
1' allowable overdepth
material required to be removed
ELEVATIONS IN MLLW
SECTION D-D
SCALE: HOR. 1" = 50' VER. 1" = 10'
75'
material required to be dredged
NOTE: For General Notes see sheet G-002.
GRAPHIC SCALES:
1" = 10'
1" = 50'
1" = 100'
US Army Corps of Engineers New England District
U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT CONCORD, MASSACHUSETTS
MIANUS RIVER GREENWICH, CONNECTICUT INVESTIGATION SURVEY
PLAN AND SECTIONS STATION 64+00 TO 81+84
SHEET IDENTIFICATION C-103

USACE- Attachment I



WESTERN LONG ISLAND SOUND DISPOSAL SITE

Description: The Western Long Island Sound Disposal Site (WLDS) is located 2.8 nmi (5.1 km) south of Long Neck Point, Noroton, Connecticut between three historic dredged material disposal sites (Stamford, South Norwalk, and Eaton's Neck). It is a site centered at 40° 59.500' N, 73° 28.950' W (NAD 83). The authorized disposal point (within the overall disposal area) is specified for each dredging project in other project documents.

D A M O S

DISPOSAL AREA MONITORING SYSTEM

SCALE 1:175,000

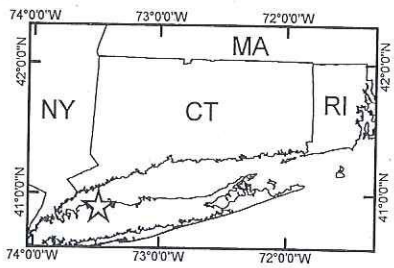
Kilometers

1 0 1 2 3 4 5 6 7

1 0 1 2 3

Nautical Miles

NOTE: This chart is not intended for use in navigation.



Sheet 8068