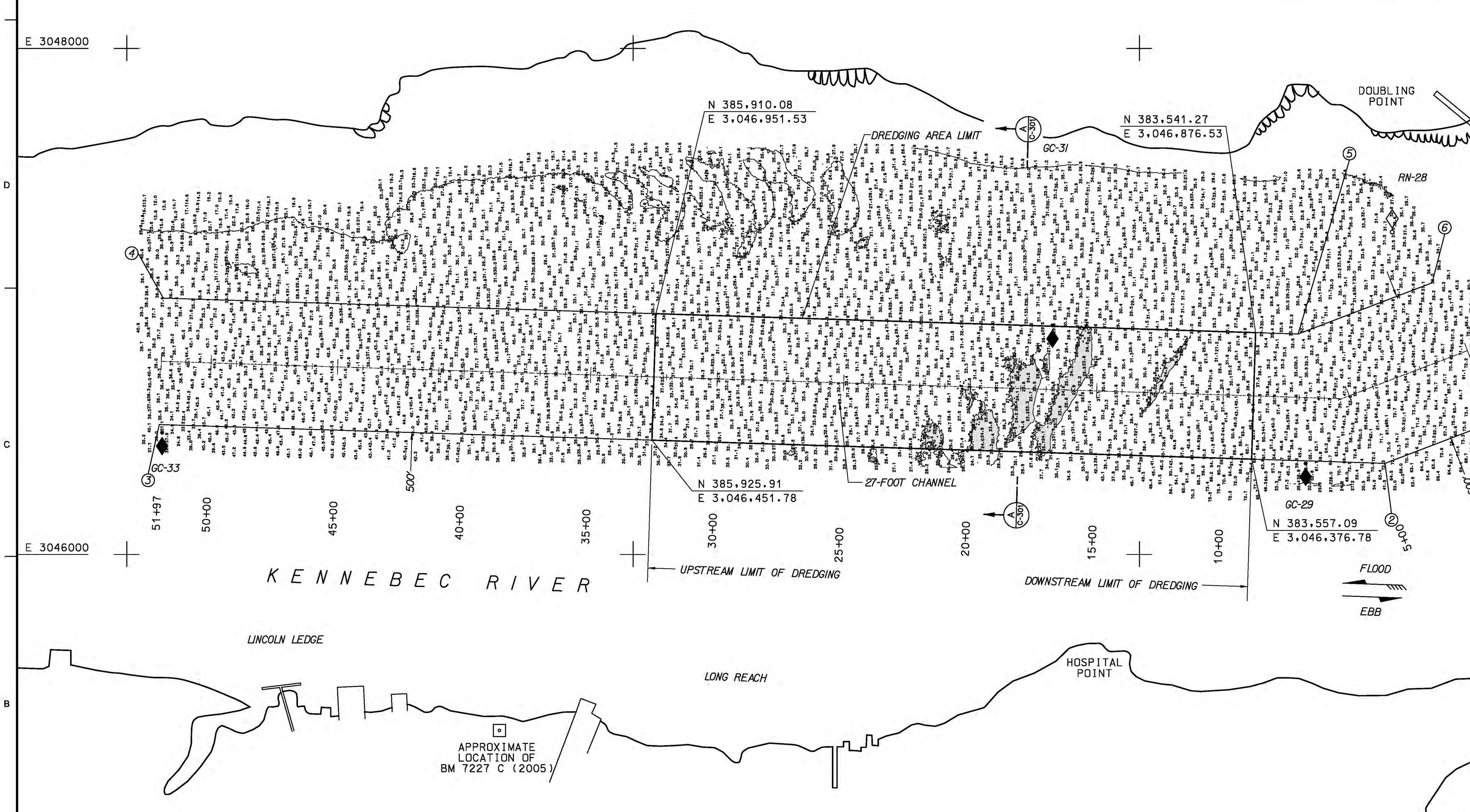
US Army Corps of Engineers®
New England District

INDEX OF NAVIGATION AIDS

NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
RN-28	5/19/11	N 383001.87 E 3047274.01	43° - 53′ - 00.8″N 69° - 48′ - 29.3″W
GC-29	5/19/11	N 383343.74 E 3046359.46	43° - 53′ - 04.3″N 69° - 48′ - 41.8″W
GC-31	5/19/11	N 384343.63 E 3046905.43	43° - 53′ - 14.1″N 69° - 48′ - 34.3″W
GC-33	5/19/11	N 387860.92 E 3046481.29	43° - 53′ - 48.9″N 69° - 48′ - 39.9″W



KENNEBEC RIVER
BATH, MAINE
VICINITY OF DOUBLING POINT
27-FOOT CHANNEL
STATE PLANE NAD 1983 WEST ZONE

#	EASTING	NORTHING
1	3046537.93	382564.64
2	3046360.09	383029.97
3	3046513.40	387871.97
4	3047013.15	387856.15
5	3046871.21	383373.27
6	3047073.40	382844.29

PLAN - DOUBLING POINT - BASE BID ITEM NO. 0001

SCALE: 1" = 200'

BATH

GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW) 1983-2001 Tidal Epoch.
2. Topography shown is from previous surveys and/or NOAA Chart No. 13296. 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: BM 7227 C (2005) is a standard NOS disk stamped "7227 C 2005", set in a rock outcrop just west of the Deering Pier, 175.5 feet west-southwest of the northwest corner of Deering Pier, 86.6 feet west of the west edge of the Deering Pier Monument and 21.7 feet south of the centerline of the dirt road leading to the pier.
Elevation is 17.53 feet above MLLW.
This Bench Mark was used to survey Doubling Point.
4. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1983.
5. Survey was performed using a Reson 8124 multibeam echosounder system with a 200 kHz transducer. Horizontal positioning and vertical depths were obtained utilizing a Leica 1200 GPS Receiver. An RTK base station was set up on Sta. Snow (2009) using a NAVD88 to MLLW correction of 3.55 feet.
6. The sounding information shown on this map represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during May 2011.
7. The sounding information depicted on this map 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 this map 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 4540
27-foot contour shown thus:
Survey performed by Jeffrey W. Preston and crew
Refer to Survey No. 11-1114

GRAPHIC SCALE:
1" = 200' — 200 0 200 400

MARK	DESCRIPTION	DATE	APPR.
A	AMENDMENT #1 EXISTING CONDITION SURVEY UPDATED	6/02/2011	ATM

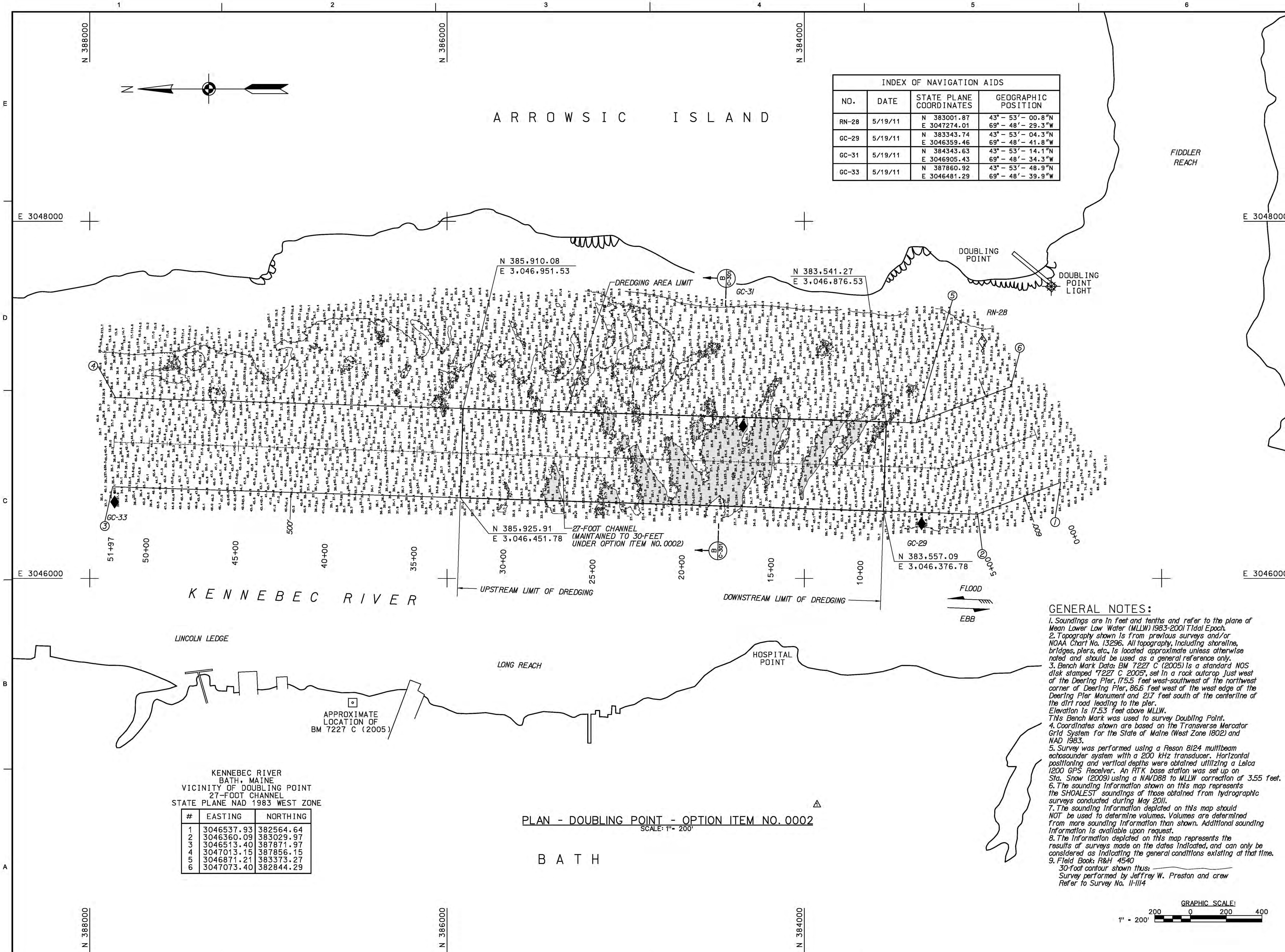
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

DESIGNED BY: Robert Meader | DATE:
DWN BY: VJG | CKD BY: MTM | SOLICITATION NO.: W912WJ-11-B-0002
SUBMITTED BY: Benjamin A. Piteo /S/ | CONTRACT NO.:
PLOT SCALE: 1" = 200' | PLOT DATE: 6/02/2011 | DRAWING CODE: 2683
SIZE: ANSI F | FILE NAME: KENC101.S03

MAINTENANCE DREDGING
27-FOOT DOUBLING POINT CHANNEL
27-FOOT POPHAM BEACH CHANNEL
KENNEBEC RIVER
BATH AND PHIPPSBURG, MAINE

PLAN - DOUBLING POINT
BASE BID ITEM NO. 0001

SHEET IDENTIFICATION
C-101
SHEET 3 OF 6



INDEX OF NAVIGATION AIDS

NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
RN-28	5/19/11	N 383001.87 E 3047274.01	43° - 53' - 00.8"N 69° - 48' - 29.3"W
GC-29	5/19/11	N 383343.74 E 3046359.46	43° - 53' - 04.3"N 69° - 48' - 41.8"W
GC-31	5/19/11	N 384343.63 E 3046905.43	43° - 53' - 14.1"N 69° - 48' - 34.3"W
GC-33	5/19/11	N 387860.92 E 3046481.29	43° - 53' - 48.9"N 69° - 48' - 39.9"W

KENNEBEC RIVER
BATH, MAINE
VICINITY OF DOUBLING POINT
27-FOOT CHANNEL
STATE PLANE NAD 1983 WEST ZONE

#	EASTING	NORTHING
1	3046537.93	382564.64
2	3046360.09	383029.97
3	3046513.40	387871.97
4	3047013.15	387856.15
5	3046871.21	383373.27
6	3047073.40	382844.29

PLAN - DOUBLING POINT - OPTION ITEM NO. 0002

SCALE: 1"= 200'

GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW) 1983-2001 Tidal Epoch.
2. Topography shown is from previous surveys and/or NOAA Chart No. 13296. 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: BM 7227 C (2005) is a standard NOS disk stamped "7227 C 2005", set in a rock outcrop just west of the Deering Pier, 175.5 feet west-southwest of the northwest corner of Deering Pier, 86.6 feet west of the west edge of the Deering Pier Monument and 21.7 feet south of the centerline of the dirt road leading to the pier.
Elevation is 17.53 feet above MLLW.
This Bench Mark was used to survey Doubling Point.
4. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1983.
5. Survey was performed using a Reson 8124 multibeam echosounder system with a 200 kHz transducer. Horizontal positioning and vertical depths were obtained utilizing a Leica 1200 GPS Receiver. An RTK base station was set up on Sta. Snow (2009) using a NAVD88 to MLLW correction of 3.55 feet.
6. The sounding information shown on this map represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during May 2011.
7. The sounding information depicted on this map 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 this map 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 4540
30-foot contour shown thus:
Survey performed by Jeffrey W. Preston and crew
Refer to Survey No. 11-1114

GRAPHIC SCALE:
1" = 200' — 200 0 200 400

US Army Corps of Engineers® New England District

MARK	DESCRIPTION	DATE	APPR.
1	AMENDMENT #1 EXISTING CONDITION SURVEY UPDATED	6/02/2011	ATM

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

DESIGNED BY: Robert Meader | DATE:
DWN BY: VJG | CKD BY: MTM | SOLICITATION NO.: W912WJ-11-B-0002
SUBMITTED BY: Benjamin A. Piteo /S/ | CONTRACT NO.:
PLOT SCALE: 1" = 200' | PLOT DATE: 6/02/2011 | DRAWING CODE: 2683
SIZE: ANSI F | FILE NAME: KENC102.S04

MAINTENANCE DREDGING
27-FOOT DOUBLING POINT CHANNEL
27-FOOT POPHAM BEACH CHANNEL
KENNEBEC RIVER
BATH AND PHIPPSBURG, MAINE

PLAN - DOUBLING POINT
OPTION ITEM NO. 0002

SHEET IDENTIFICATION
C-102
SHEET 4 OF 6

APPROXIMATE LOCATION OF BM 1 (1942)

HUNNEWELL POINT

FORT POPHAM

FORT POPHAM LIGHTHOUSE

CABLE AREA

BAY POINT

ATKINS BAY

RIP-RAP AREA

KENNEBEC POINT

N 335,057.32
E 3,055,300.71

N 334,812.28
E 3,054,761.35

NORTH SUGARLOAF ISLAND

AREA OF SUSPECTED LEDGE

UPSTREAM LIMIT OF DREDGING

KENNEBEC RIVER

DREDGING AREA LIMIT

27-FOOT CHANNEL

SOUTH SUGARLOAF ISLAND

N 333,434.44
E 3,056,620.91

DOWNSTREAM LIMIT OF DREDGING

GC-5

N 333,088.29
E 3,056,260.10

FLOOD

EBB

POPHAM BEACH

PHIPPSBURG

HUNNEWELL BEACH

CABLE AREA

POND ISLAND

STAGE ISLAND BAY

STAGE ISLAND

GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW) 1983-2001 Tidal Epoch.
2. Topography shown is from previous surveys and/or NOAA Chart No. 13295 . 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: BM 1 (1942) is a standard NOS disk stamped "BM 1 (1942)", set in a rock outcrop near the northwest corner of Fort Popham, 225.6 feet north-northeast of utility pole No. 36, 1,115.8 feet north of a flag pole and 27.3 feet east of the northeast corner of the Fort. Elevation is 14.84 feet above MLLW. This Bench Mark used to survey Popham Beach.
4. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1983.
5. Survey was performed using an Odom MK2 echotrac echosounder. Horizontal positioning was obtained utilizing a Leica 1200 GPS system.
6. The sounding information shown on this map represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during May 2011.
7. The sounding information depicted on this map 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 this map 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 4542
   27-foot contour shown thus: ~~~~~
   Survey performed by Paul K. O'Brien and crew
   Refer to Survey No. 11-1113

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
GC-5	5/19/11	N 333243.54 E 3055803.80	43° – 44′ – 49.1″N 69° – 46′ – 36.1″W
RN-6	5/19/11	N 334540.26 E 3055543.41	43° – 45′ – 01.9″N 69° – 46′ – 39.5″W

KENNEBEC RIVER
BATH, MAINE
VICINITY OF POPHAM BEACH
27-FOOT CHANNEL
STATE PLANE NAD 1983 WEST ZONE

#	EASTING	NORTHING
1	3057817.78	331464.66
2	3054847.12	334561.10
3	3054609.82	335256.05
4	3055082.99	335417.62
5	3055703.57	334390.62
6	3058178.58	331810.81

PLAN - POPHAM BEACH - OPTION ITEM NO. 0003
SCALE: 1"= 200'

GRAPHIC SCALE:
1" = 200' 200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPD
1	AMENDMENT #1 EXISTING CONDITION SURVEY UPDATED	6/22/2011	ATM

DESIGNED BY: Paul Hancock
DRAWN BY: VJG
CHKD BY: MTM
SUBMITTED BY: Paul K. O'Brien
PLOT SCALE: 1" = 200'
PLOT DATE: 6/22/2011
SIZE: ANSI F
DATE:
SOLICITATION NO.: W912WJ11-B-0002
CONTRACT NO.:
DRAWING CODE: 2883
FILE NAME: C:\Projects\2883

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

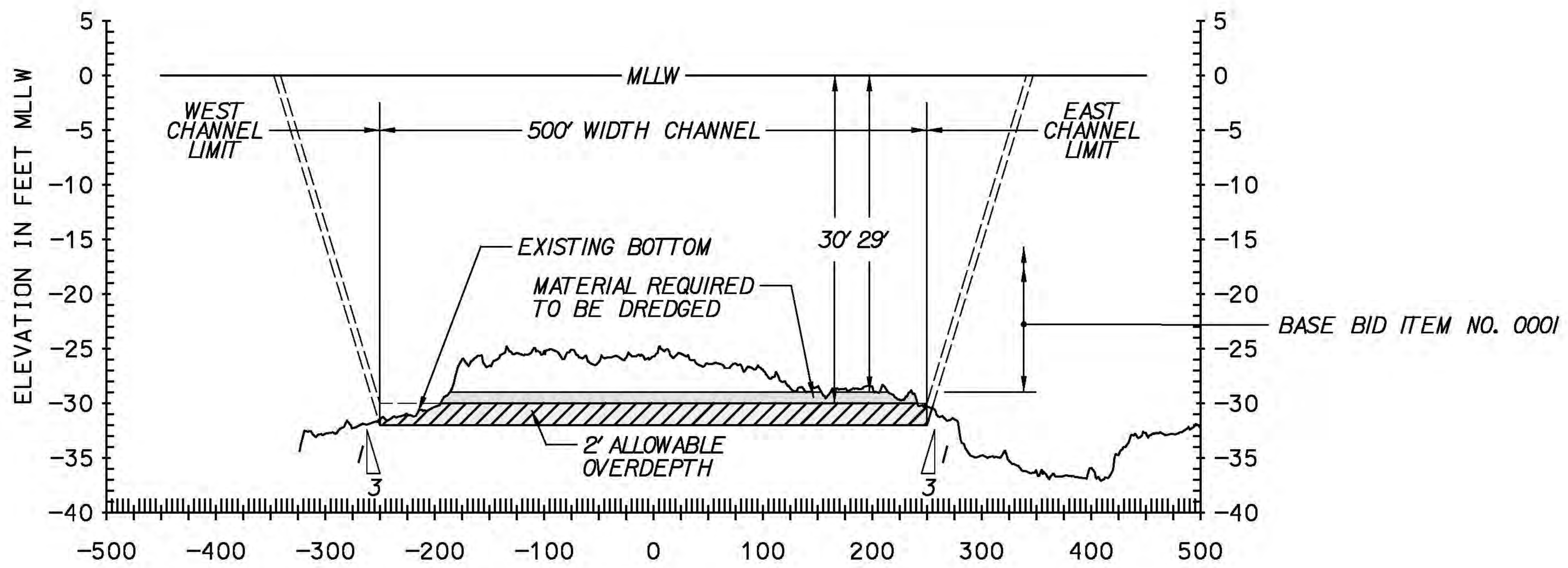
MAINTENANCE DREDGING
27-FOOT DOUBLING POINT CHANNEL
27-FOOT POPHAM BEACH CHANNEL
KENNEBEC RIVER
BATH AND PHIPPSBURG, MAINE

PLAN - POPHAM BEACH
OPTION ITEM NO. 0003

SHEET IDENTIFICATION
C-103
SHEET 5 OF 6

US Army Corps of Engineers®
New England District

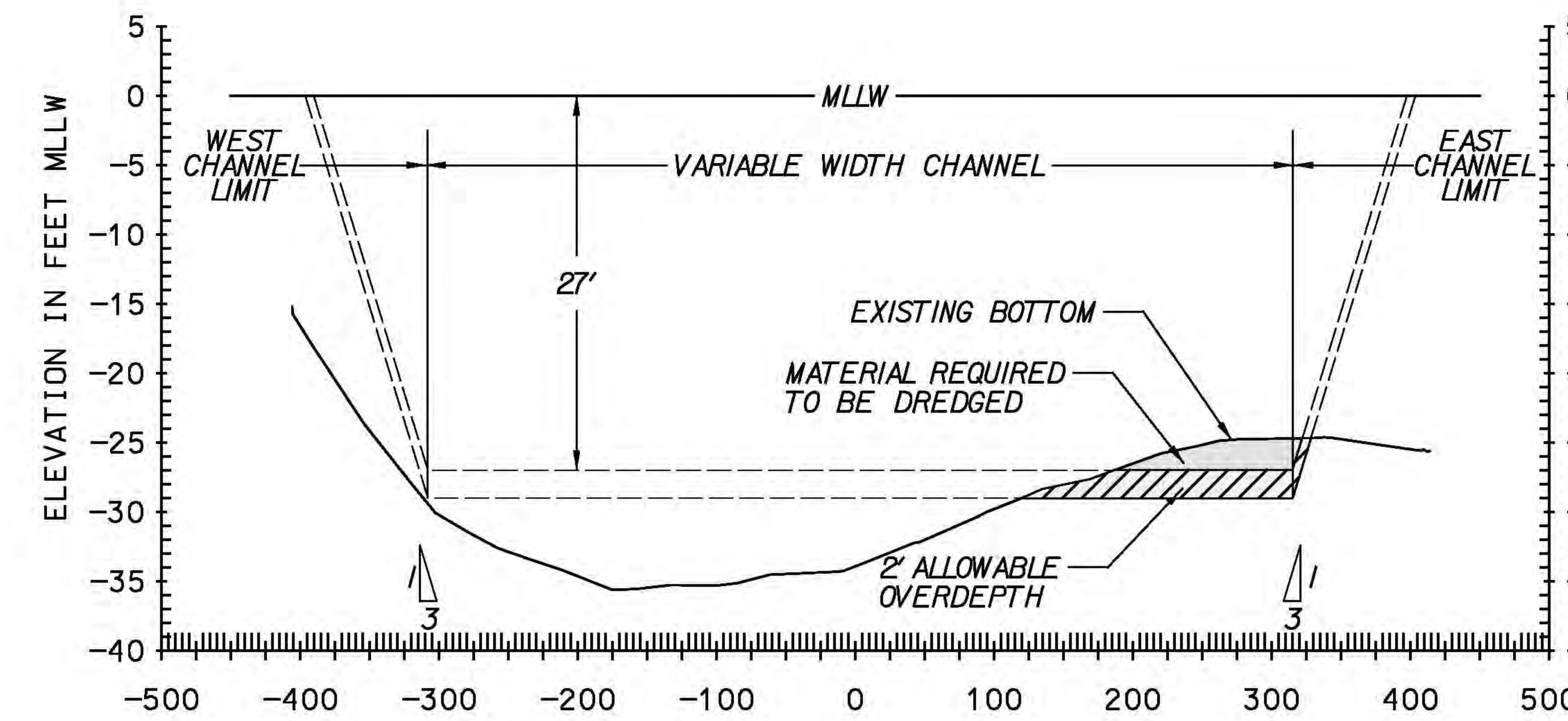
OPTION ITEM NO. 0002



SECTION B/C-102 ⚠1

SCALES: HOR. 1"=100'
VER. 1"= 10'

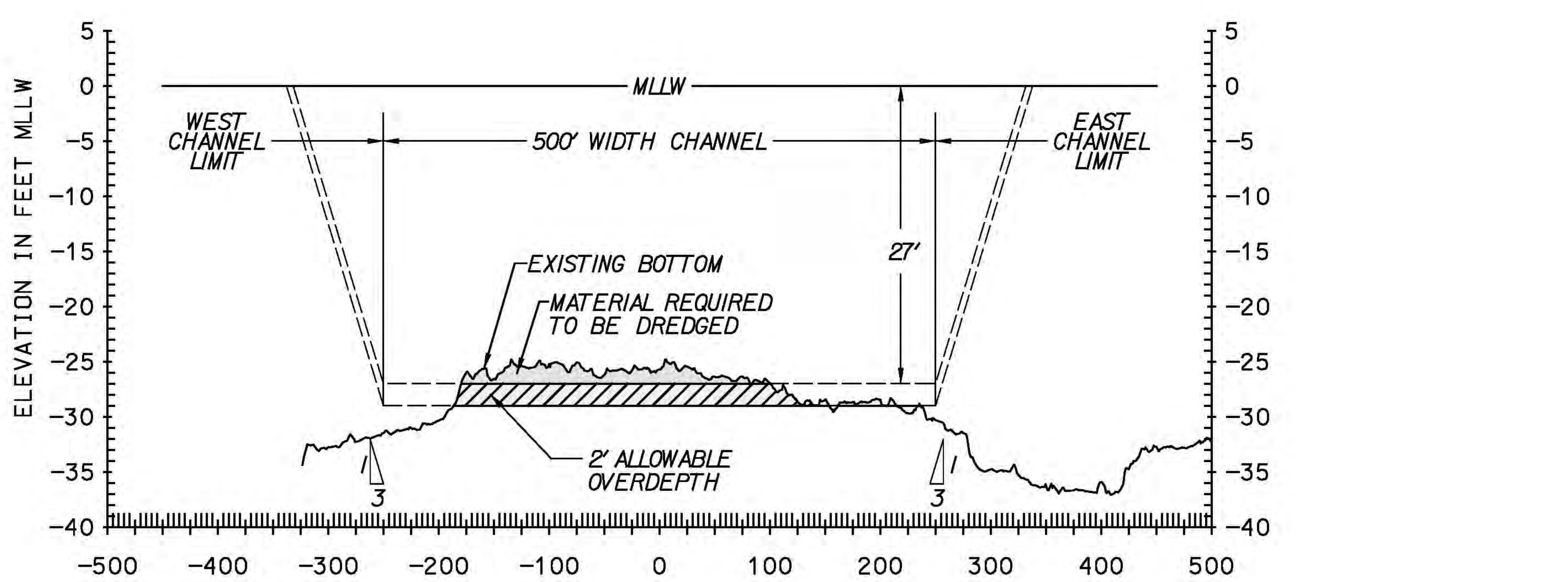
OPTION ITEM NO. 0003



SECTION C/C-103 ⚠1

SCALES: HOR. 1"=100'
VER. 1"= 10'

BASE BID ITEM NO. 0001



SECTION A/C-101 ⚠1

SCALES: HOR. 1"=100'
VER. 1"= 10'

GRAPHIC SCALES:
1" = 10' (10 0 10 20)
1" = 100' (100 0 100 200)

MARK	DESCRIPTION	DATE	APPR.
⚠1	AMENDMENT #1 EXISTING CONDITION SURVEY UPDATED	6/02/2011	ATM

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

DESIGNED BY: Robert Meader		DATE:
DWN BY: VJG	CKD BY: MTM	SOLICITATION NO.: W912WJ-11-B-0002
SUBMITTED BY: Siamac Vaghar /S/	B. Piteo /S/	CONTRACT NO.:
PLOT SCALE: 1" = 200'	PLOT DATE: 6/02/2011	DRAWING CODE: 2683
SIZE: ANSI F	FILE NAME: KENC301.S06	

MAINTENANCE DREDGING
27-FOOT DOUBLING POINT CHANNEL
27-FOOT POPHAM BEACH CHANNEL
KENNEBEC RIVER
BATH AND PHIPPSBURG, MAINE

SECTIONS

SHEET IDENTIFICATION
C-301
SHEET 6 OF 6