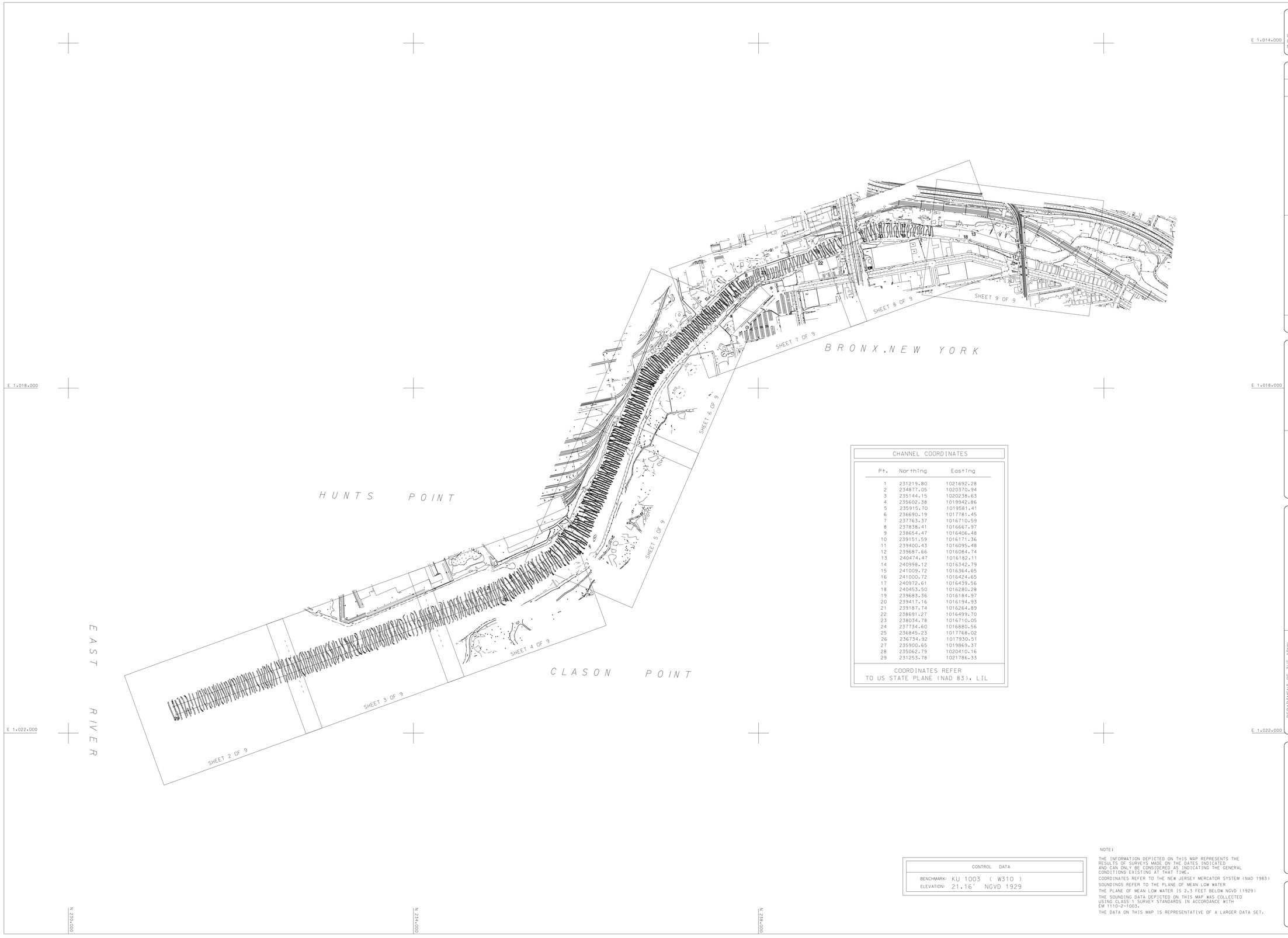


CHANNEL COORDINATES

Pt.	Northing	Easting
1	231219.80	1021692.28
2	234877.05	1020370.94
3	235144.15	1020238.63
4	235602.38	1019942.86
5	235915.70	1019581.41
6	236690.19	1017781.45
7	237763.37	1016710.59
8	237838.41	1016667.97
9	238654.47	1016406.48
10	239151.59	1016171.36
11	239400.43	1016095.48
12	239687.66	1016084.74
13	240474.47	1016182.11
14	240998.12	1016342.79
15	241009.72	1016364.65
16	241000.72	1016424.65
17	240972.61	1016439.56
18	240453.50	1016280.28
19	239683.36	1016184.97
20	239417.16	1016194.93
21	239187.74	1016264.89
22	238691.27	1016499.70
23	238034.78	1016710.05
24	237734.60	1016880.56
25	236845.23	1017768.02
26	236734.92	1017930.51
27	235900.65	1019869.37
28	235062.79	1020410.16
29	231253.78	1021786.33

COORDINATES REFER
TO US STATE PLANE (NAD 83), LIL

CONTROL DATA

BENCHMARK: KU 1003 (W310)
ELEVATION: 21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.3 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB. 07 FEB - 08 FEB.
15 FEB. 20 FEB - 21 FEB 2008.

FILE NO.: 47
REQUEST NO.: 3162A

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
ASSISTANT CHIEF OF SURVEYS

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-101

SHEET 1 OF 9

47
3162A

CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.3 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB., 07 FEB. - 08 FEB.
15 FEB., 20 FEB.- 21 FEB 2008

FILE NO:: 47
REQUEST NO:: 3162A

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SMAIN — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CHIEF, HYDROGRAPHIC TOPOGRAPHIC
APPROVED: WAM LI — ASSISTANT CHIEF OF SURVEYS
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEYS
DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
GENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-102

SHEET 2 OF 9

47
3162A

CORPS OF ENGINEERS

U. S. ARMY

CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB. 07 FEB - 08 FEB.
15 FEB. 20 FEB - 21 FEB 2008

FILE NO.: 47
REQUEST NO.: 3162A

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
ASSISTANT CHIEF OF SURVEYS

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

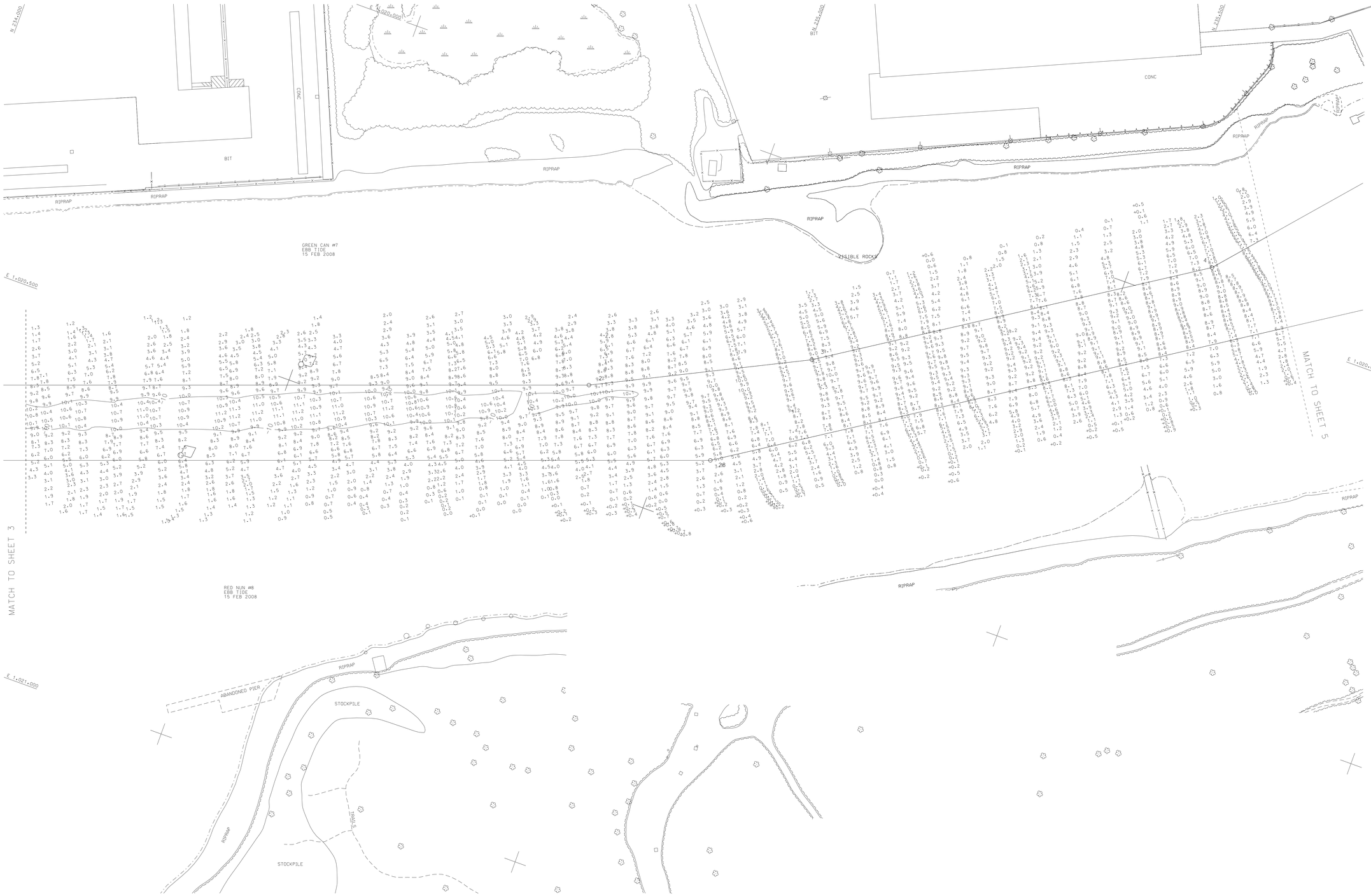
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-103

SHEET 3 OF 9

47
3162A



CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.3 FEET BELOW NGVD (1929)

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THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB, 07 FEB - 08 FEB.
15 FEB, 20 FEB - 21 FEB 2008

FILE NO.: 47
REQUEST NO.: 3162A

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
ASSISTANT CHIEF OF SURVEYS

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEYS

DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-104

SHEET 4 OF 9

47
3162A

CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB. 07 FEB - 08 FEB.
15 FEB. 20 FEB - 21 FEB 2008

FILE NO.: 47
REQUEST NO.: 3162A

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
ASSISTANT CHIEF OF SURVEYS

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEYS

DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-105

SHEET 5 OF 9

47
3162A

CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB. 07 FEB - 08 FEB.
15 FEB. 20 FEB - 21 FEB 2008

FILE NO.: 47
REQUEST NO.: 3162A

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II — ASSISTANT CHIEF OF SURVEYS
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEYS
DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-106

SHEET 6 OF 9

47
3162A

CONTROL DATA	
BENCHMARK:	KU 1003 (W 340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
05 FEB. 07 FEB - 08 FEB.
15 FEB. 20 FEB - 21 FEB. 2008

FILE NO.: 47
REQUEST NO.: 31624

SCALE:
ONE INCH = 50 FEET

FIELD BOOKS:
14236

APPROVED: D. SWAIN — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II — ASSISTANT CHIEF OF SURVEYS
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEYS
DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-107

SHEET 7 OF 9

47
3162A

CONTROL DATA	
BENCHMARK:	KU1003 (W340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY: 05-07-08-15-20-21 FEB 2008

FILE NO: 47
REQUEST NO: 3162A

SCALE: ONE INCH = 50 FEET

FIELD BOOKS: 14236

APPROVED: D. SWAIN — FIELD OPERATIONS
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II — HYDROGRAPHIC CHIEF OF SURVEYS
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEYS
DATE: 06 MARCH 2008

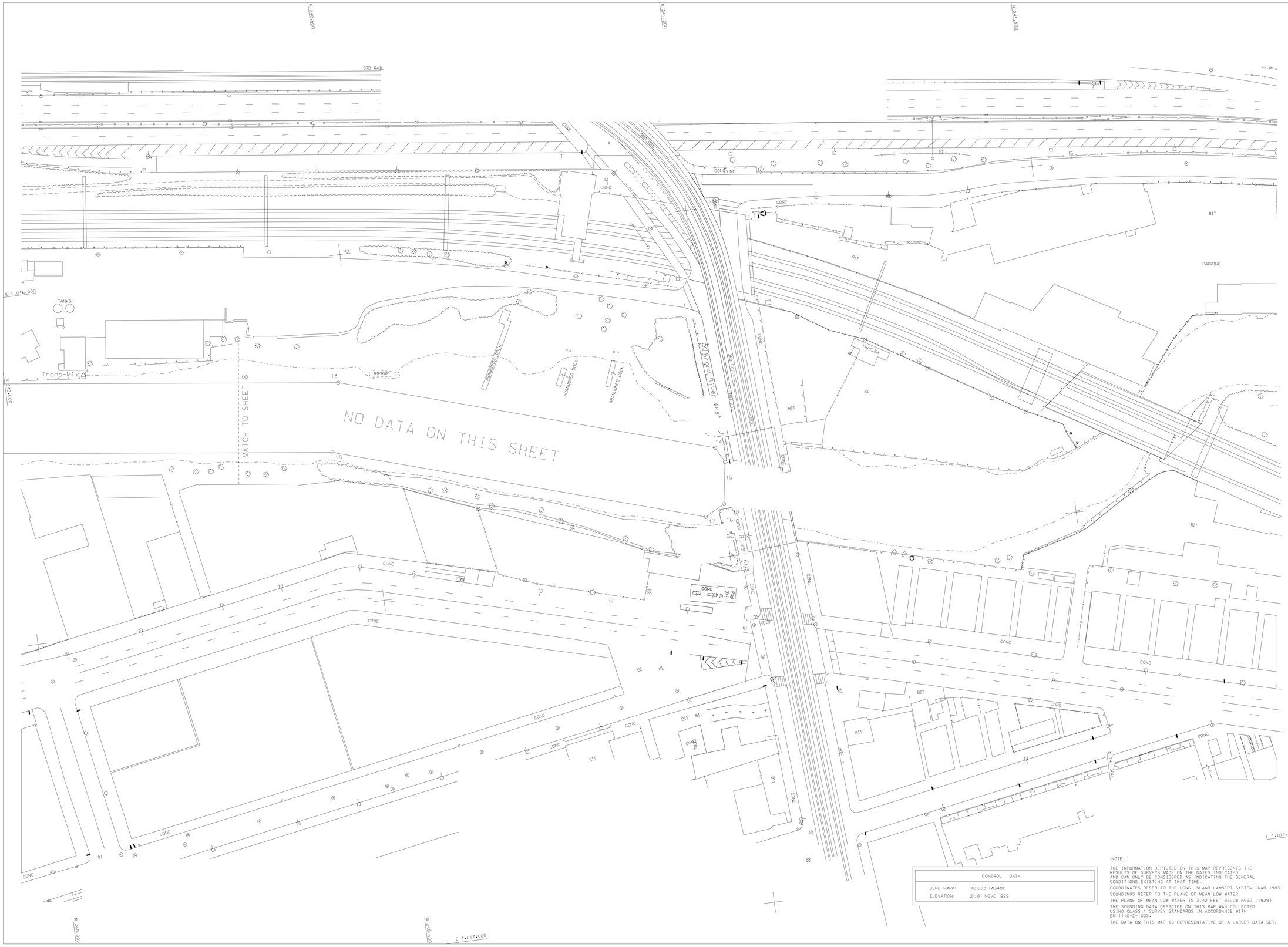
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH–108

SHEET 8 OF 9



CONTROL DATA	
BENCHMARK:	KU1003 (W340)
ELEVATION:	21.16' NGVD 1929

NOTE:

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.

COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 3.42 FEET BELOW NGVD (1929)

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THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY: 05.07.08-15.20.21 FEB 2008

FILE NO.: 47
REQUEST NO.: 3162A

SCALE: ONE INCH = 50 FEET

FIELD BOOKS: 14236

APPROVED: D. SWAIN — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II — ASSISTANT CHIEF OF SURVEYS
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEYS
DATE: 06 MARCH 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

BRONX RIVER
NEW YORK
PLANS & SPECS SURVEY

VH-109

SHEET 9 OF 9

47
3162A