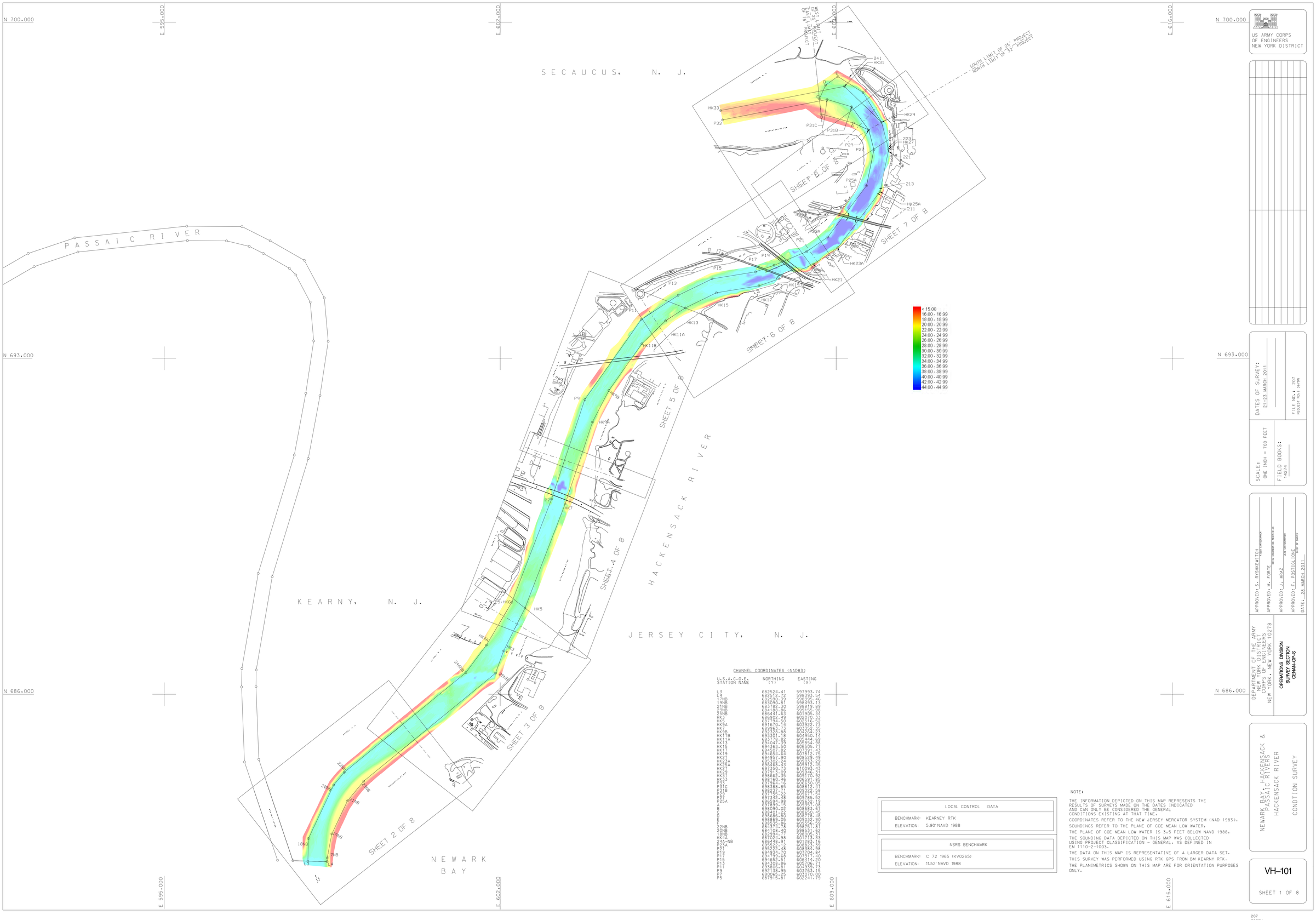
CORPS OF ENGINEERS

U. S. ARMY



CHANNEL COORDINATES (NAD83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
L3	682674.41	597393.24
L4	682612.76	598395.54
17NB	682590.39	598395.46
19NB	683980.81	598875.13
21NB	684188.50	598859.83
25NB	686441.63	601906.34
HK3	686902.49	602070.33
HK5	687794.50	602516.52
HK9A	691670.14	603922.73
HK7	689963.73	603352.35
HK9B	692328.88	604264.23
HK11B	693301.18	604950.14
HK11A	693778.82	605444.69
HK13	694047.39	605854.98
HK15	694363.50	606505.77
HK17	694507.82	607391.43
HK19	694654.64	607812.75
HK21	694957.90	608529.49
HK23A	695302.24	609033.29
HK25A	696468.43	609913.45
HK27	697350.73	610093.43
HK29	697913.09	609946.31
HK31	698662.35	609170.92
HK33	698162.46	608539.85
P33	698388.80	608812.07
P31C	698237.71	608522.48
P31B	697755.22	608679.54
P29	697142.48	608785.52
P27	696594.98	609632.19
P25A	697899.15	609357.08
A	698090.02	608683.67
B	698401.22	608650.45
C	698686.80	608778.48
D	698869.05	609032.90
E	698535.86	609556.59
F	684374.78	598751.81
22NB	684108.40	598531.62
20NB	682994.77	598005.31
18NB	687024.98	601713.13
24A-NB	686448.91	601283.16
P23A	695522.12	608823.38
P21	695224.98	608364.84
P19	694934.70	607704.84
P17	694789.68	607317.40
P15	694577.61	606411.70
P13	694308.86	605706.97
P11	693806.81	604939.73
P9	692138.95	603763.15
P7	690065.25	603070.00
P5	687915.81	602241.79

LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED THE GENERAL CONDITIONS EXISTING AT THAT TIME.

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

SOUNDINGS REFER TO THE PLANE OF COE MEAN LOW WATER.

THE PLANE OF COE MEAN LOW WATER IS 3.5 FEET BELOW NAVD 1988.

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION - GENERAL, AS DEFINED IN EM 1110-2-1003.

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

THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3470N

SCALE: ONE INCH = 700 FEET

FIELD BOOKS: 14214

APPROVED: S. RYSHKEWITCH
CHIEF, CARTOGRAPHY

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRLAZ
LEAD CARTOGRAPHER

APPROVED: E. POSTIGLIONE
CHIEF OF SURVEY

DATE: 20 MARCH 2011

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

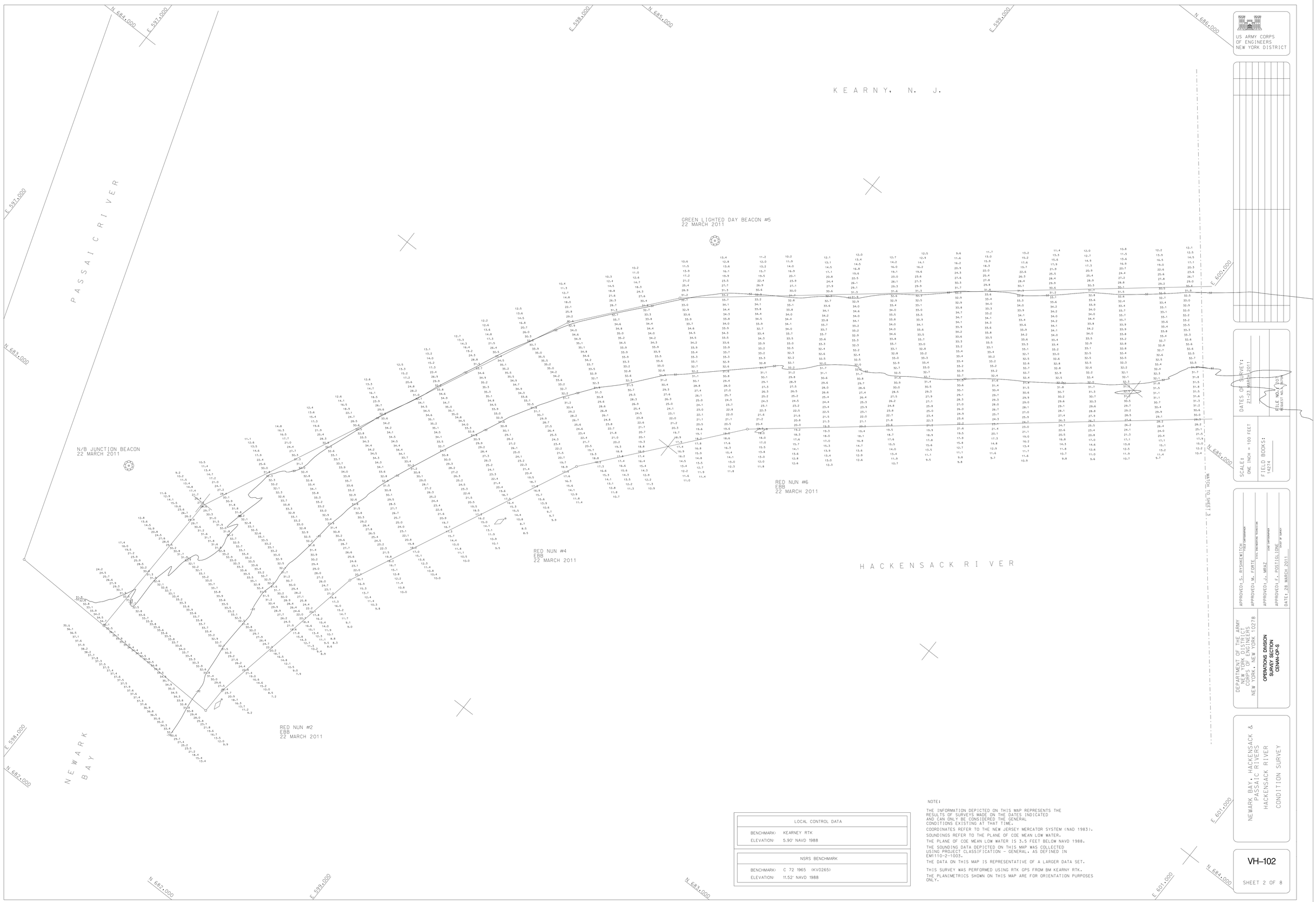
VH-101

SHEET 1 OF 8

207
3470N

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
21-23 MARCH 2011

FILE NO. 2011
PROJECT NO. 1870

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14274

APPROVED: S. RYSHKEWITCH
CHIEF CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
CHIEF CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 28 MARCH 2011

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED THE GENERAL CONDITIONS EXISTING AT THAT TIME.

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

SOUNDINGS REFER TO THE PLANE OF COE MEAN LOW WATER.

THE PLANE OF COE MEAN LOW WATER IS 3.5 FEET BELOW NAVD 1988.

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION - GENERAL, AS DEFINED IN EM1110-2-1003.

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

THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

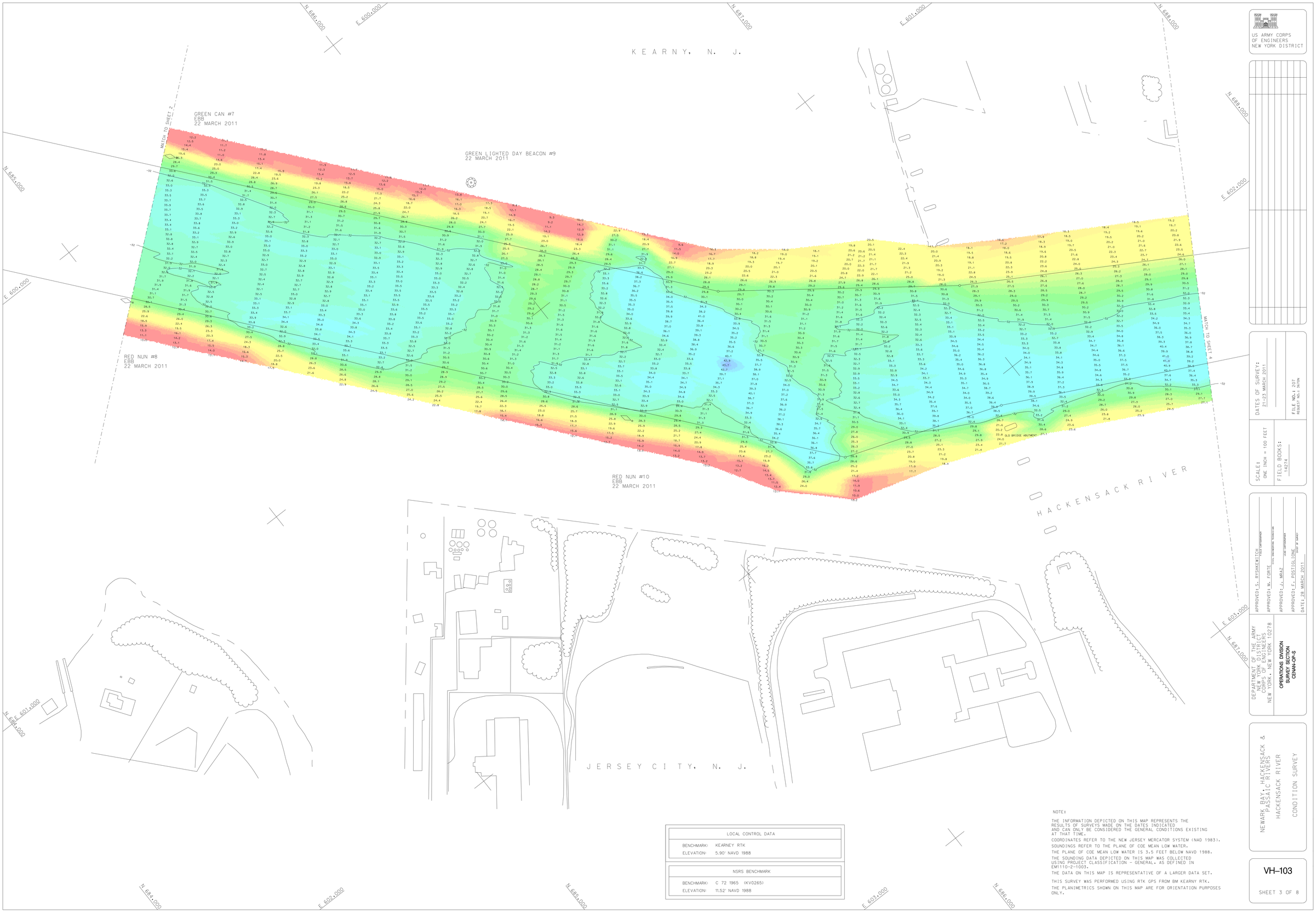
VH-102

SHEET 2 OF 8

207
3670N

CORPS OF ENGINEERS

U. S. ARMY



LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED THE GENERAL CONDITIONS EXISTING AT THAT TIME.

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

SOUNDINGS REFER TO THE PLANE OF COE MEAN LOW WATER.

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THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
27-29 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14274

APPROVED: S. RYSHKEWITCH
CHIEF CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 28 MARCH 2011

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

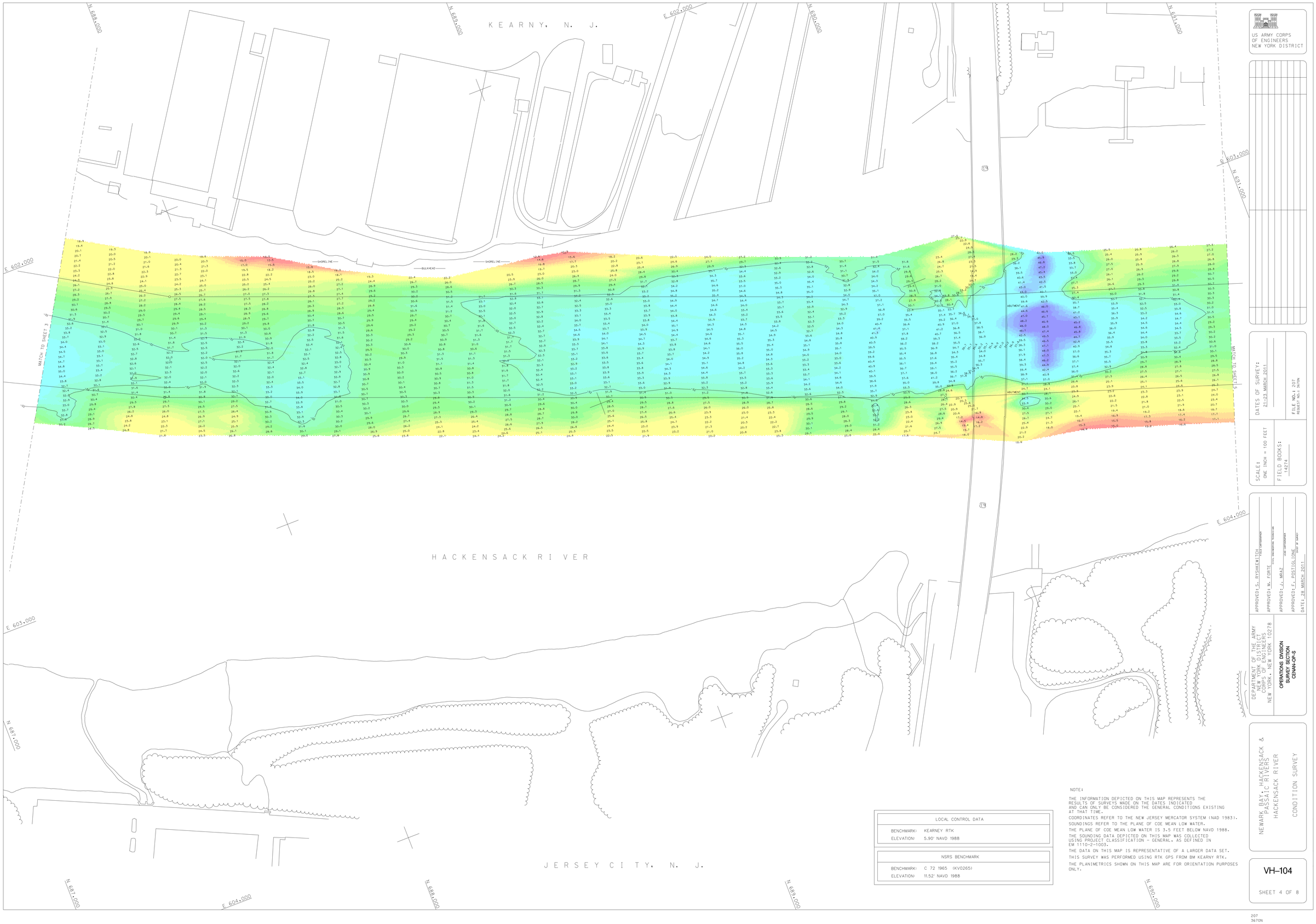
VH-103

SHEET 3 OF 8

207
3670N

CORPS OF ENGINEERS

U. S. ARMY



LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED THE GENERAL CONDITIONS EXISTING AT THAT TIME.

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

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THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14274

APPROVED: S. RYSHKEWITCH
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 28 MARCH 2011

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

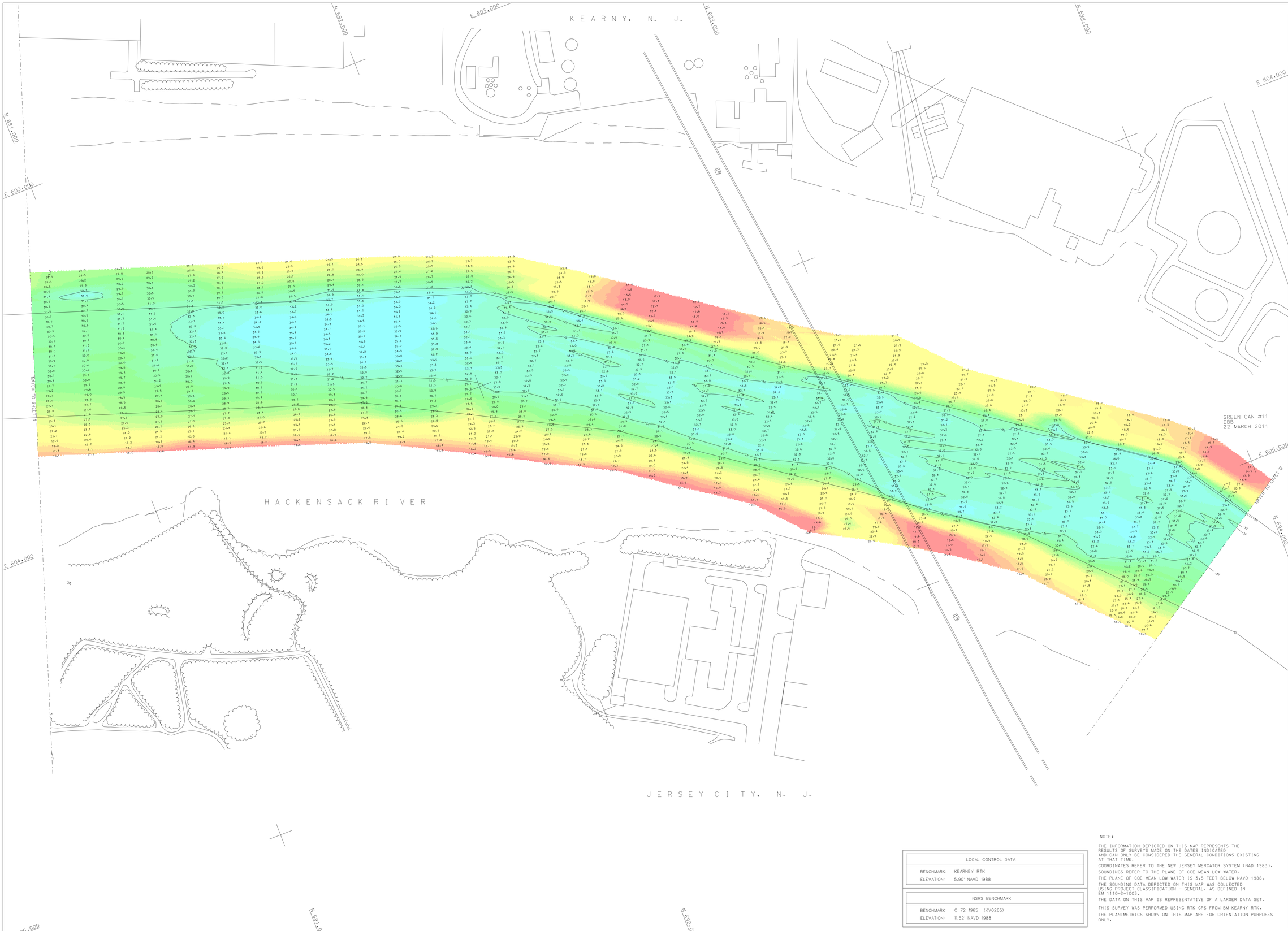
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

VH–104

SHEET 4 OF 8

207
3670N



US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14246

APPROVED: S. RYSHKEWITCH, CHIEF HYDROGRAPHIC SURVEYS
APPROVED: M. FORTE, CIVIL ENGINEERING TECHNICIAN
APPROVED: J. MRAZ, CAD CARTOGRAPHER
APPROVED: F. POSTIGLIONE, CHIEF OF SURVEY
DATE: 28 MARCH 2011

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

VH-105

SHEET 5 OF 8

LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

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

SOUNDINGS REFER TO THE PLANE OF COE MEAN LOW WATER.

THE PLANE OF COE MEAN LOW WATER IS 3.5 FEET BELOW NAVD 1988.

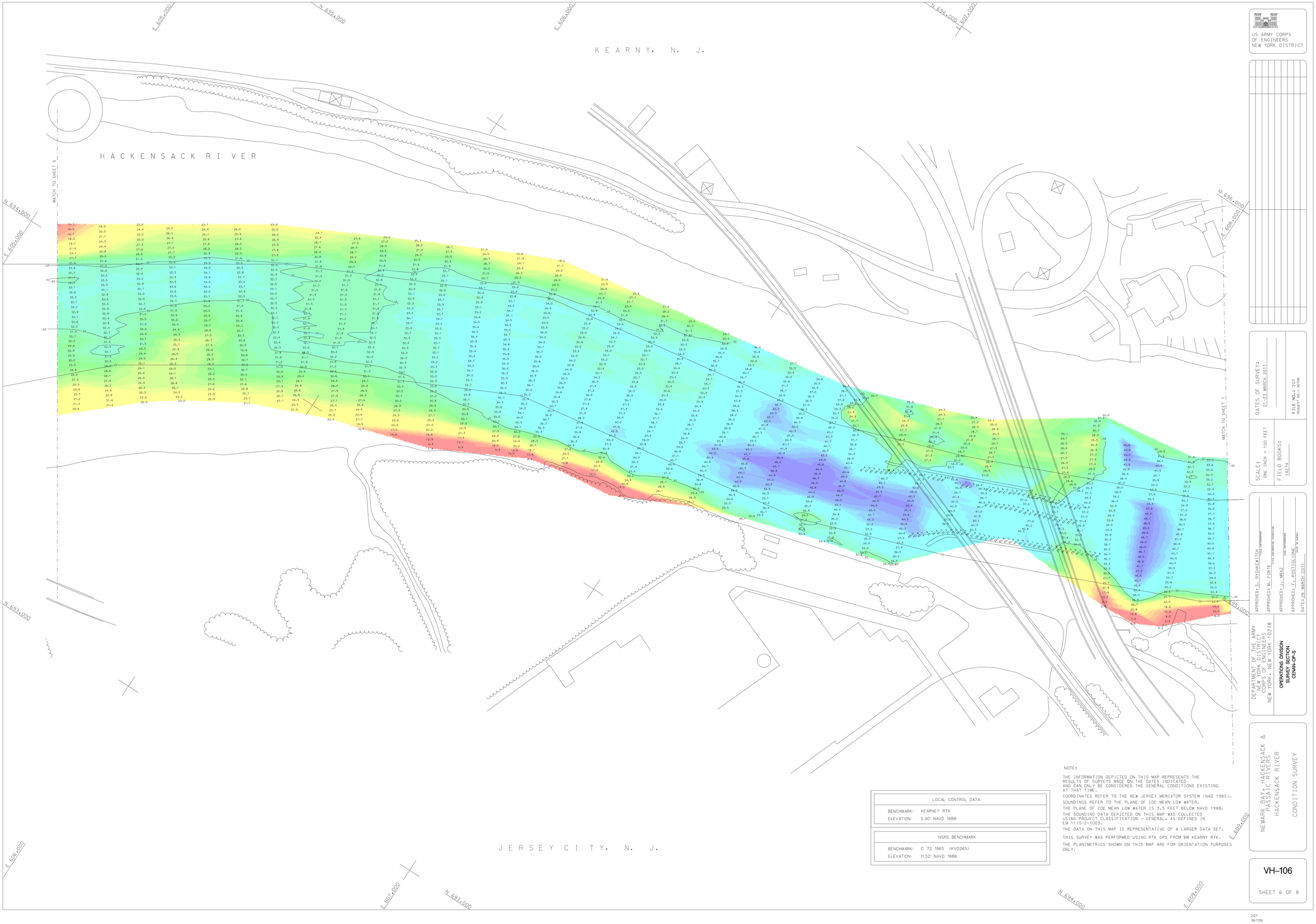
THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION - GENERAL, AS DEFINED IN EM 1110-2-1003.

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

THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

207
3670N



LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

NOTE:

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THIS SURVEY WAS PERFORMED USING RTK GPS FROM BM KEARNY RTK.

THE PLANIMETRICS SHOWN ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14924

APPROVED: S. RYSHKEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: J. MRAZ — LEAD CARTOGRAPHER
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEY
DATE: 28 MARCH 2011

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

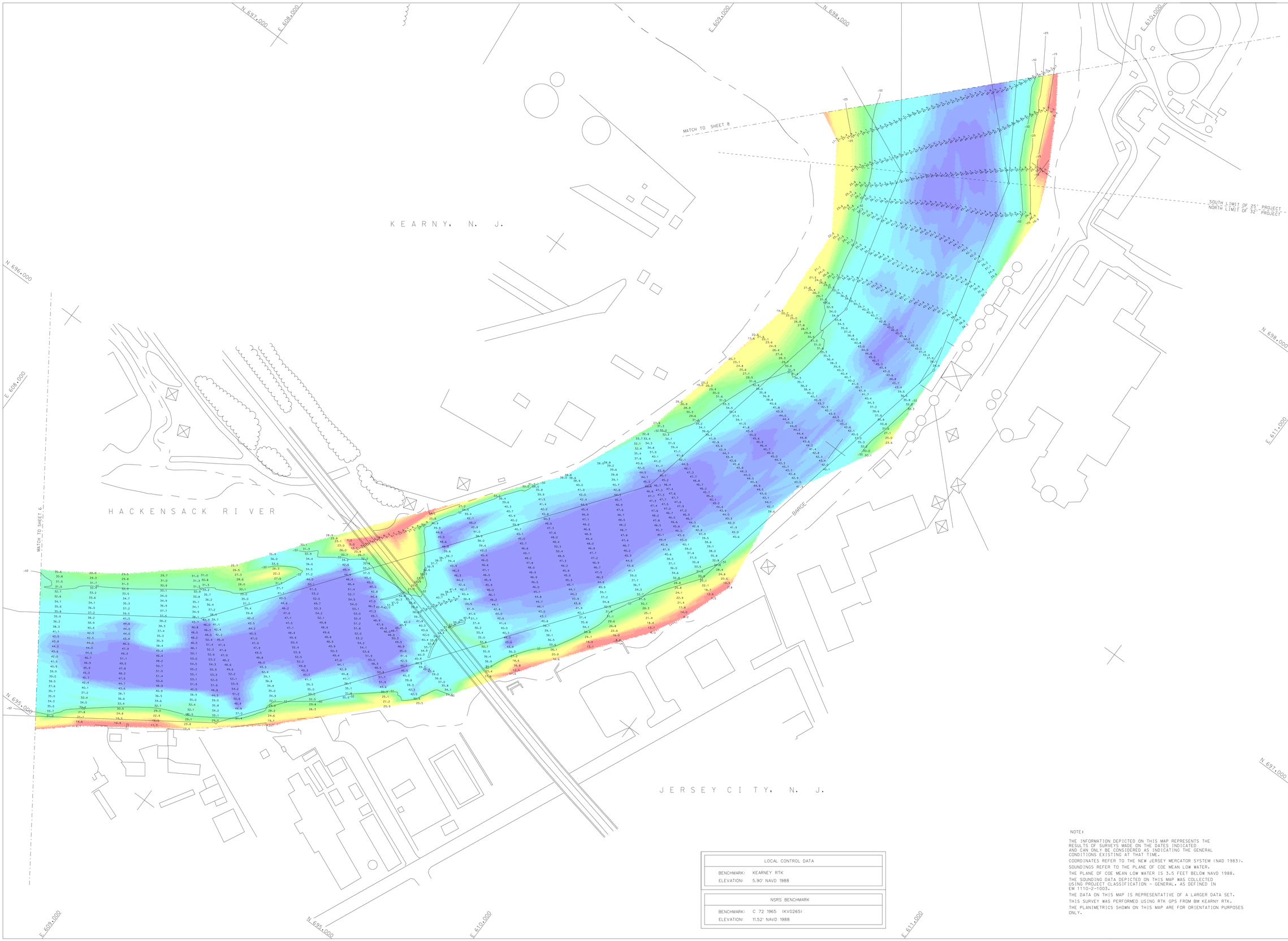
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-106

SHEET 6 OF 8



LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

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US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 1424

APPROVED: S. RYSHKEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: J. MRAZ — LEAD CARTOGRAPHER
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEY
DATE: 28 MARCH 2011

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

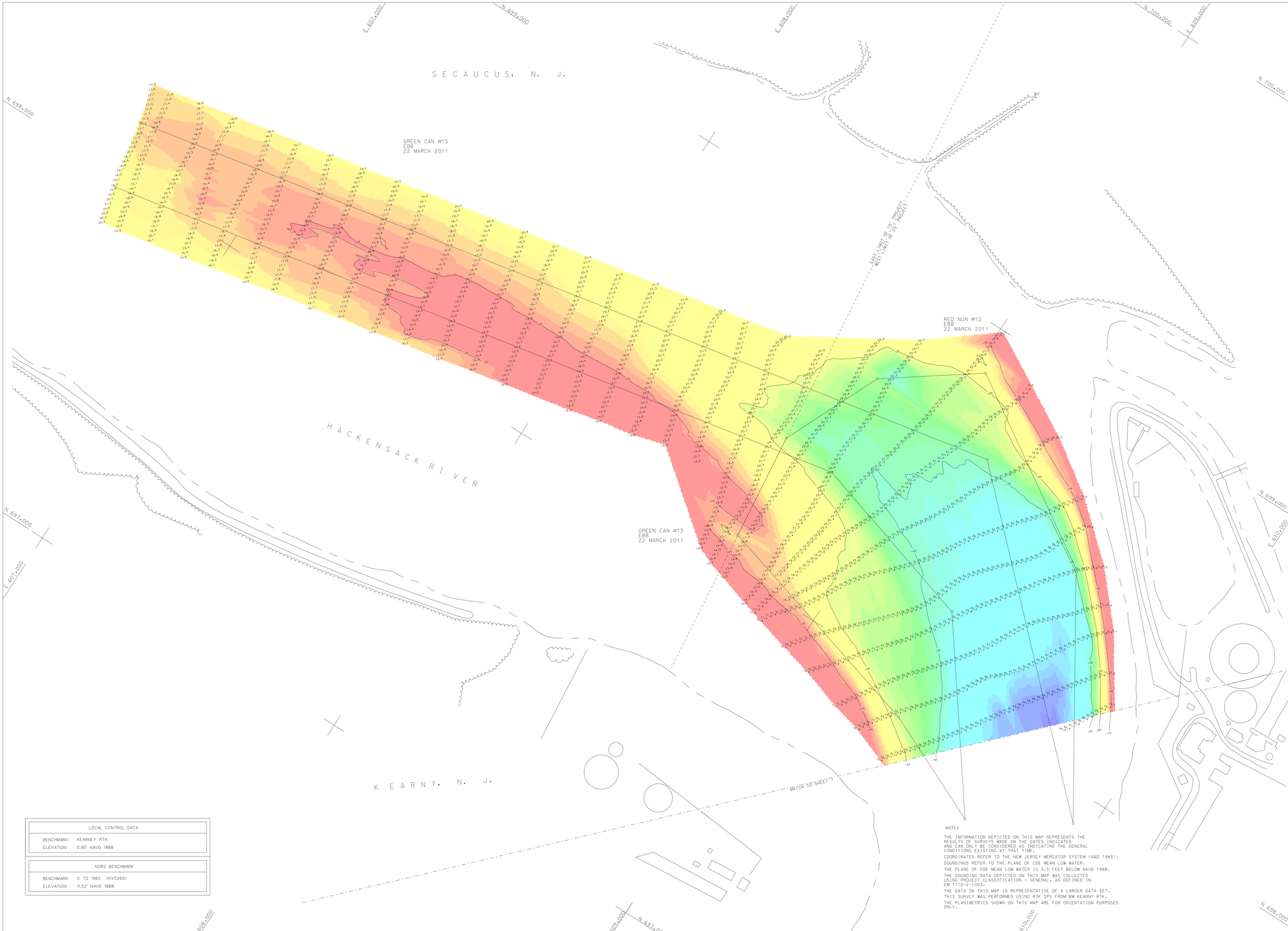
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

VH–107

SHEET 7 OF 8

207
3670N



LOCAL CONTROL DATA	
BENCHMARK:	KEARNEY RTK
ELEVATION:	5.90' NAVD 1988

NSRS BENCHMARK	
BENCHMARK:	C 72 1965 (KV0265)
ELEVATION:	11.52' NAVD 1988

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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
21-23 MARCH 2011

FILE NO.: 207
REQUEST NO.: 3670N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
1-2-4

APPROVED: S. RYSHKEWITCH
CHIEF CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 28 MARCH 2011

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-108

SHEET 8 OF 8

207
3670N