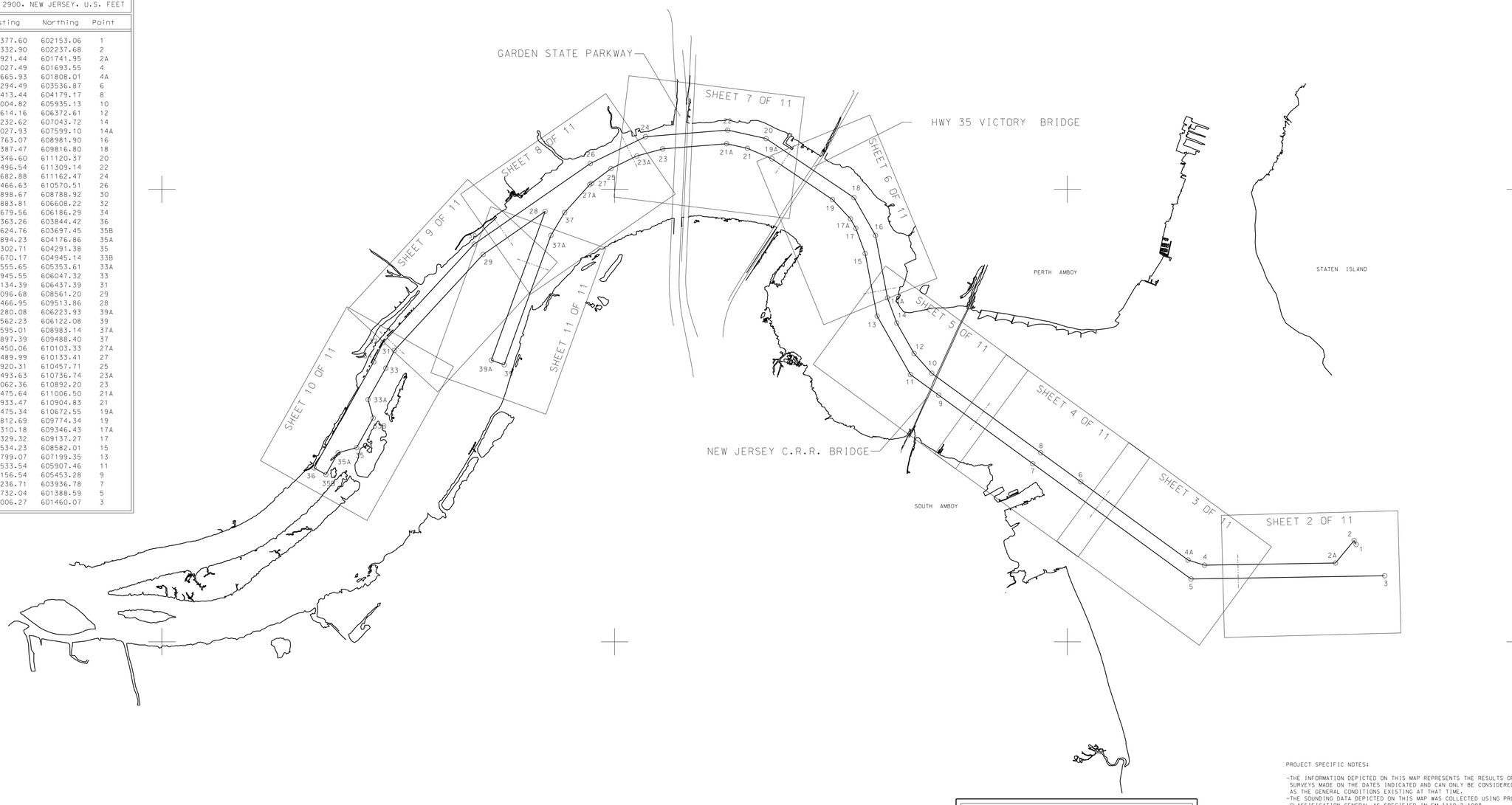
TABULATION OF CHANNEL COORDINATES U.S. STATE PLANE. NAD 83. ZONE 2900. NEW JERSEY. U.S. FEET		
Easting	Northing	Point
562377.60	602153.06	1
562332.90	602237.68	2
561921.44	601741.95	2A
559027.49	601693.55	4
558665.93	601808.01	4A
556294.49	603536.87	6
555413.44	604179.17	8
553004.82	605935.13	10
552614.16	606372.61	12
552232.62	607043.72	14
552027.93	607599.10	14A
551763.07	608981.90	16
551387.47	609816.80	18
549346.60	611120.37	20
548496.54	611309.14	22
546682.88	611162.47	24
545466.63	610570.51	26
542898.67	608788.92	30
540883.81	606608.22	32
540679.56	606186.29	34
539363.26	603844.42	36
539624.76	603697.45	35B
539894.23	604176.86	35A
540302.71	604291.38	35
540670.17	604945.14	33B
540555.65	605353.61	33A
540945.55	606047.32	33
541134.39	606437.39	31
543096.68	608561.20	29
544466.95	609513.86	28
543280.08	606223.93	39A
543562.23	606122.08	39
544595.01	608983.14	37A
544897.39	609488.40	37
545450.06	610103.33	27A
545489.99	610133.41	27
545920.31	610457.71	25
546493.63	610736.74	23A
547062.36	610892.20	23
548475.64	611006.50	21A
548933.47	610904.83	21
549475.34	610672.55	19A
550812.69	609774.34	19
551310.18	609346.43	17A
551329.32	609137.27	17
551534.23	608582.01	15
551799.07	607199.35	13
552533.54	605907.46	11
553156.54	605453.28	9
555236.71	603936.78	7
558732.04	601388.59	5
563006.27	601460.07	3



LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

PROJECT SPECIFIC NOTES:

- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
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- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

		PB/RD	PR
		RD	MP

DATES OF SURVEY:
18-23,30,31 DECEMBER 2013
2,4 JANUARY 2014
25-28 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 1000FEET

FIELD BOOKS:

APPROVED: M. APPELD
FIELD CARTOGRAPHER
APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE
CHIEF CARTOGRAPHER
APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

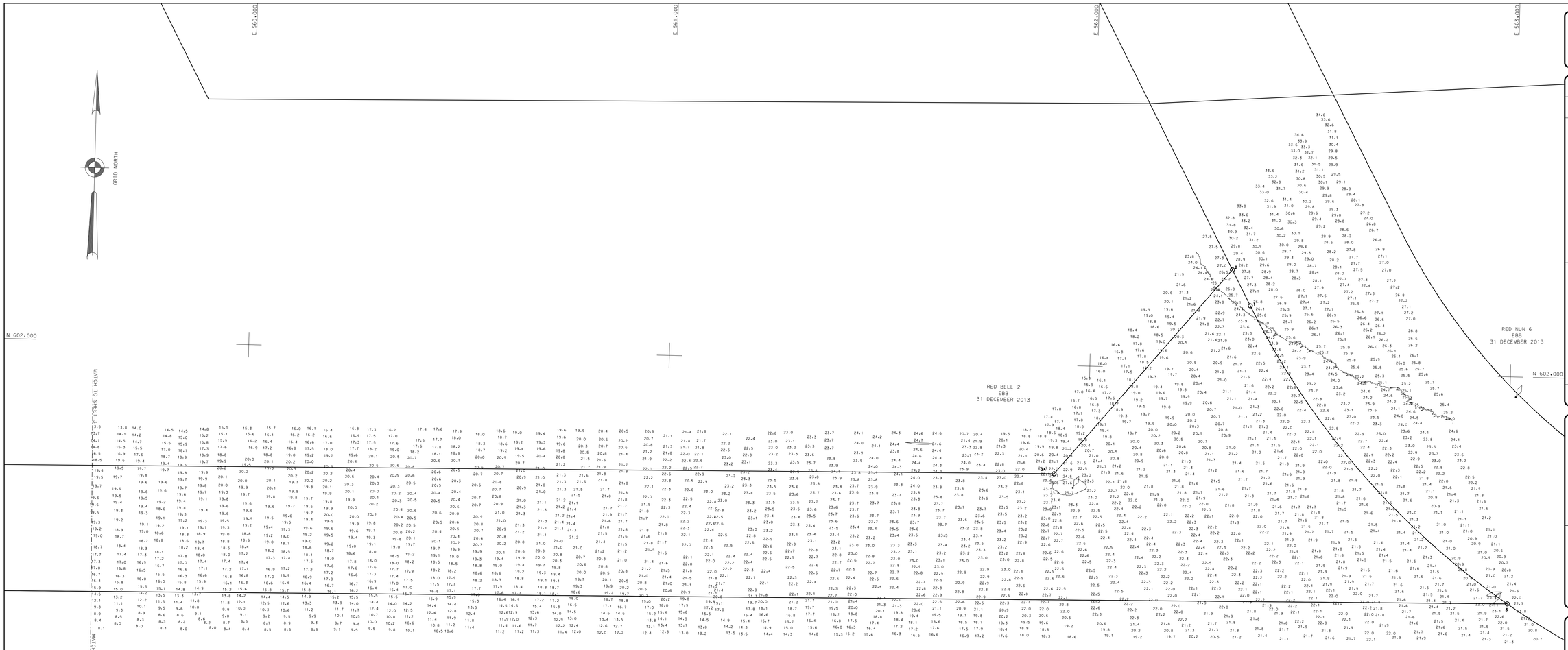
RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

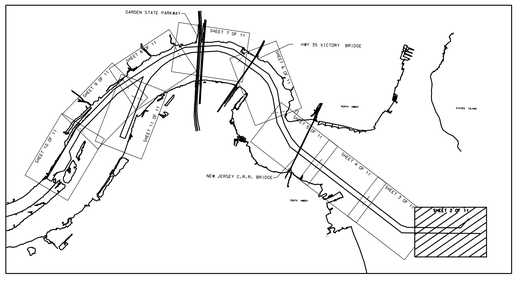
VH-101

SHEET 1 OF 11

CORPS OF ENGINEERS

U. S. ARMY





LOCAL CONTROL DATA
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NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD	PR
RD	MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

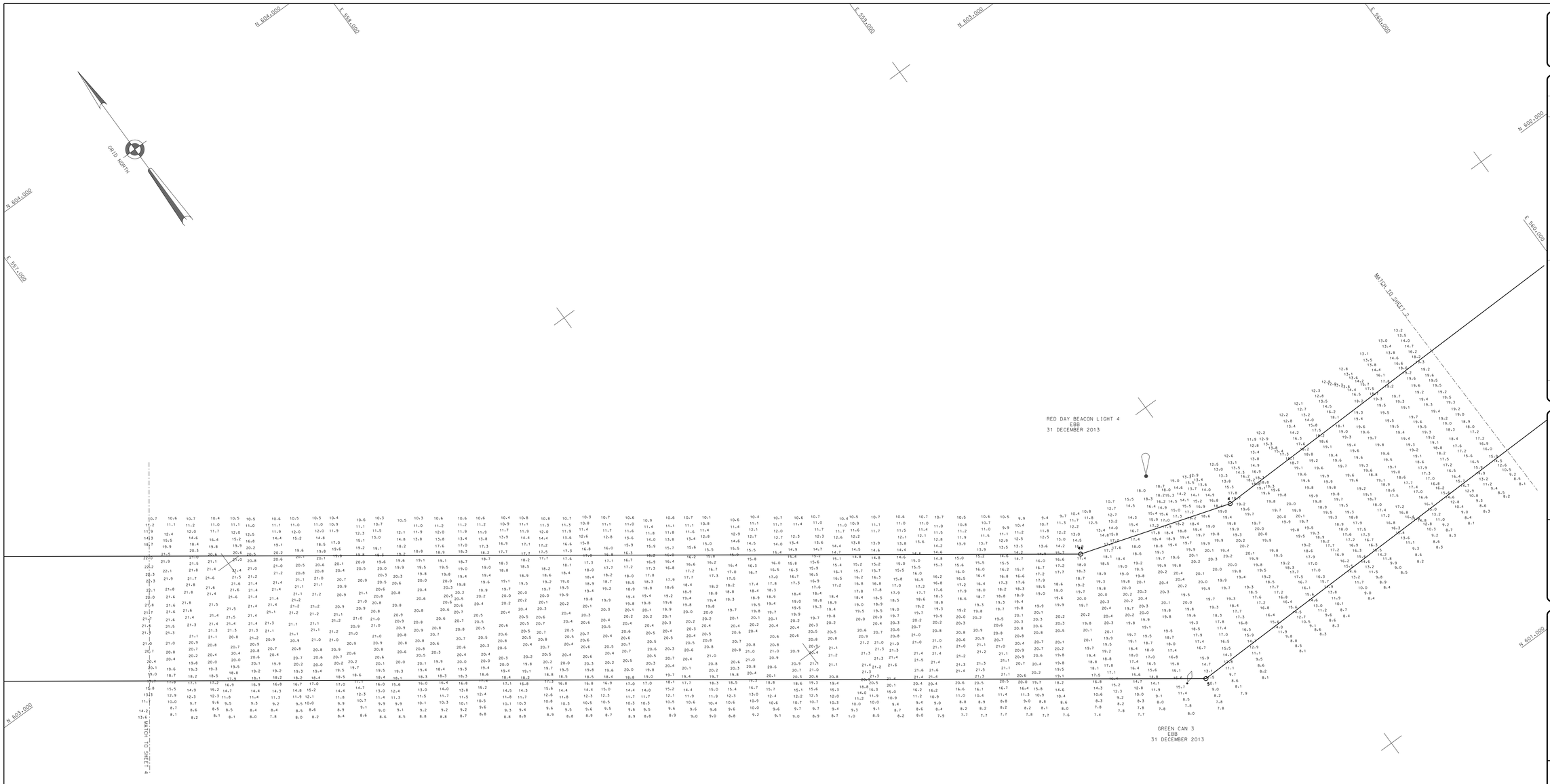
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

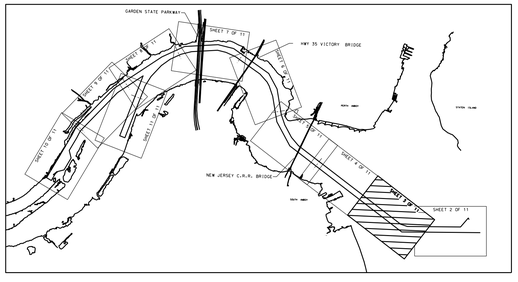
RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-102

SHEET 2 OF 11

FILE NO. 525
REQ. NO. 4110





LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD	JPR	
PBD	MP	

DATES OF SURVEY:
18-23,30-31 DECEMBER 2013
2,4-6,9-10,13-14 JANUARY 2014
24-26 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD SUPERVISOR/CHIEF
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD SURVEYOR/CHIEF
APPROVED: J. MRAZ — OPERATIONS DIVISION CHIEF
DATE: 4 MARCH 2014 — DATE OF SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-103

SHEET 3 OF 11

LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD	PR
RD	MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-104

SHEET 4 OF 11

FILE NO. 525
REQ. NO. 4110

LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD PR
RD MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARUY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELO — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY ASSISTANT CHIEF OF SURVEYS
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY

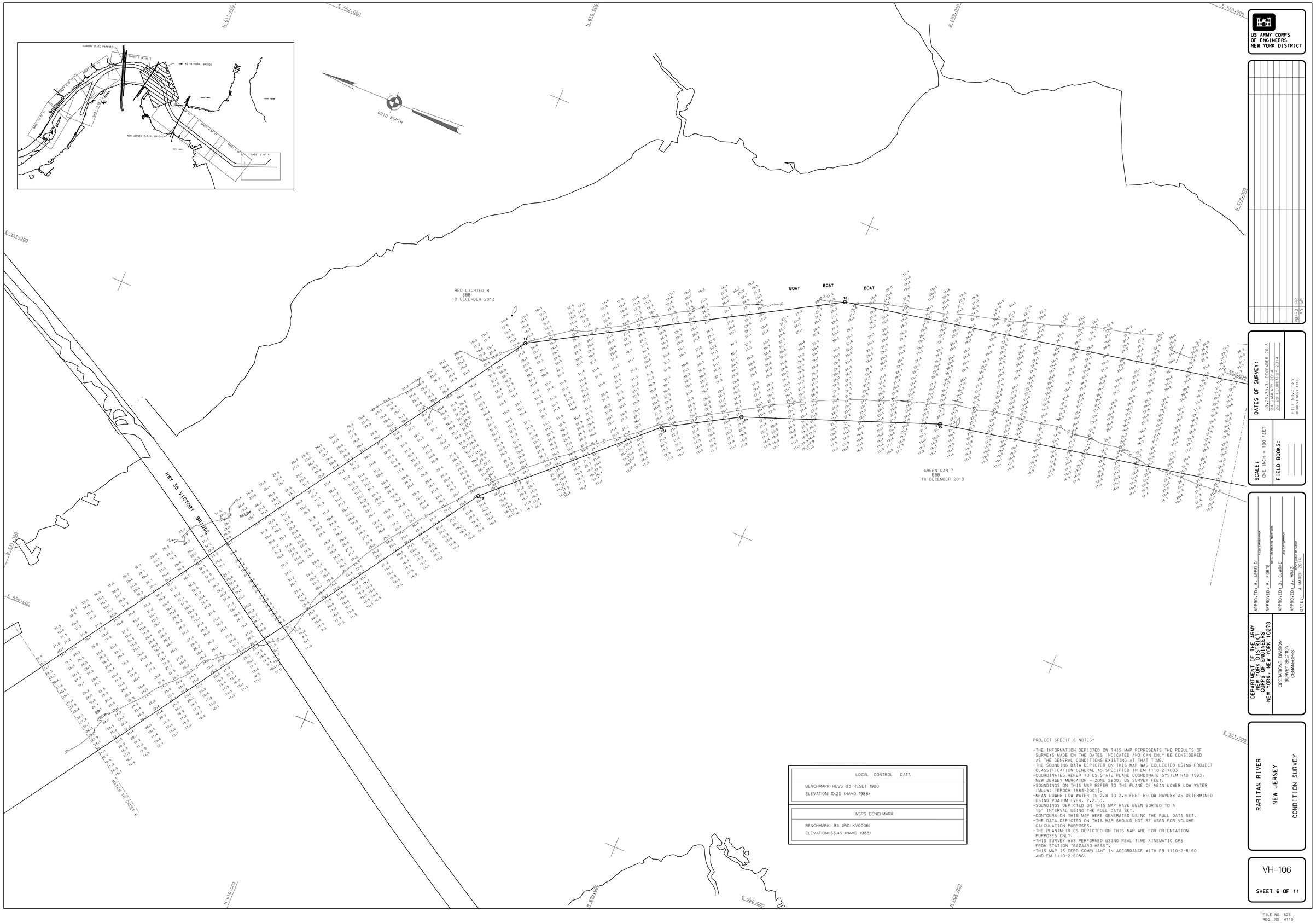
CONDITION SURVEY

VH-105

SHEET 5 OF 11

CORPS OF ENGINEERS

U. S. ARMY



LOCAL CONTROL DATA
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ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006)
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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD	PR
RD	MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARUY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-106

SHEET 6 OF 11

FILE NO. 525
REQ. NO. 4110

CORPS OF ENGINEERS

U. S. ARMY

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

		PB/RD	PR
		CHD	MP

DATES OF SURVEY:
18-23,30-31 DECEMBER 2013
1-3,6-11,13-14 JANUARY
26-28 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD SUPERVISOR
APPROVED: M. FORTE — CIVIL TECHNICAL TECHNICIAN
APPROVED: D. CLARKE — LEAD SUPERVISOR
APPROVED: J. MRAZ — MANAGER OF SURVEY
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

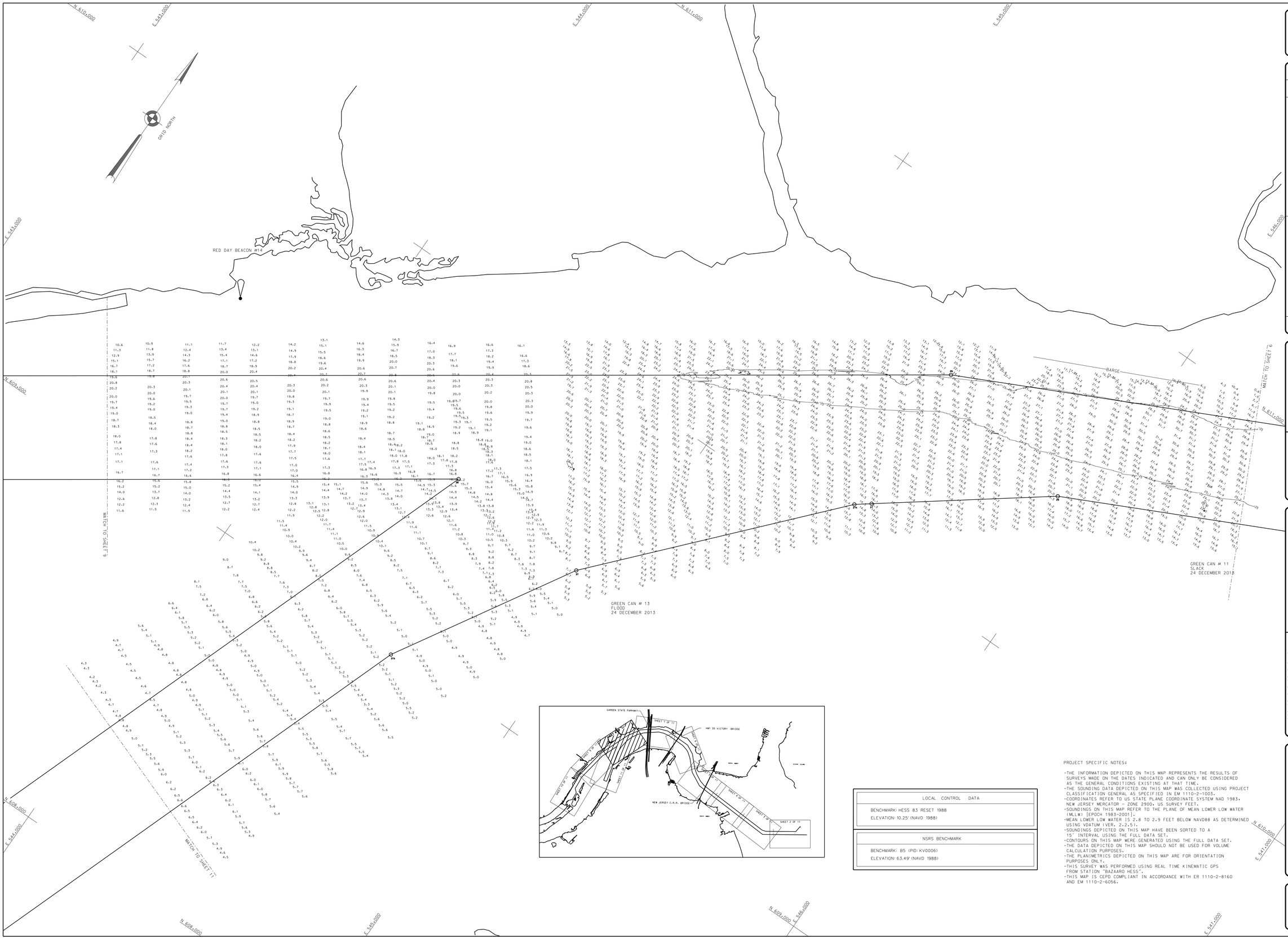
VH-107

SHEET 7 OF 11

FILE NO. 525
REQ. NO. 4110

CORPS OF ENGINEERS

U. S. ARMY



LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988
ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006)
ELEVATION: 63.49' (NAVD 1988)

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD PR
RD MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-108

SHEET 8 OF 11

FILE NO. 525
REQ. NO. 4110

LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PB/RD PR
RD MP

DATES OF SURVEY:
18,23,30,31 DECEMBER 2013
24 JANUARY 2014
26-28 FEBRUARUY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 4 MARCH 2014

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

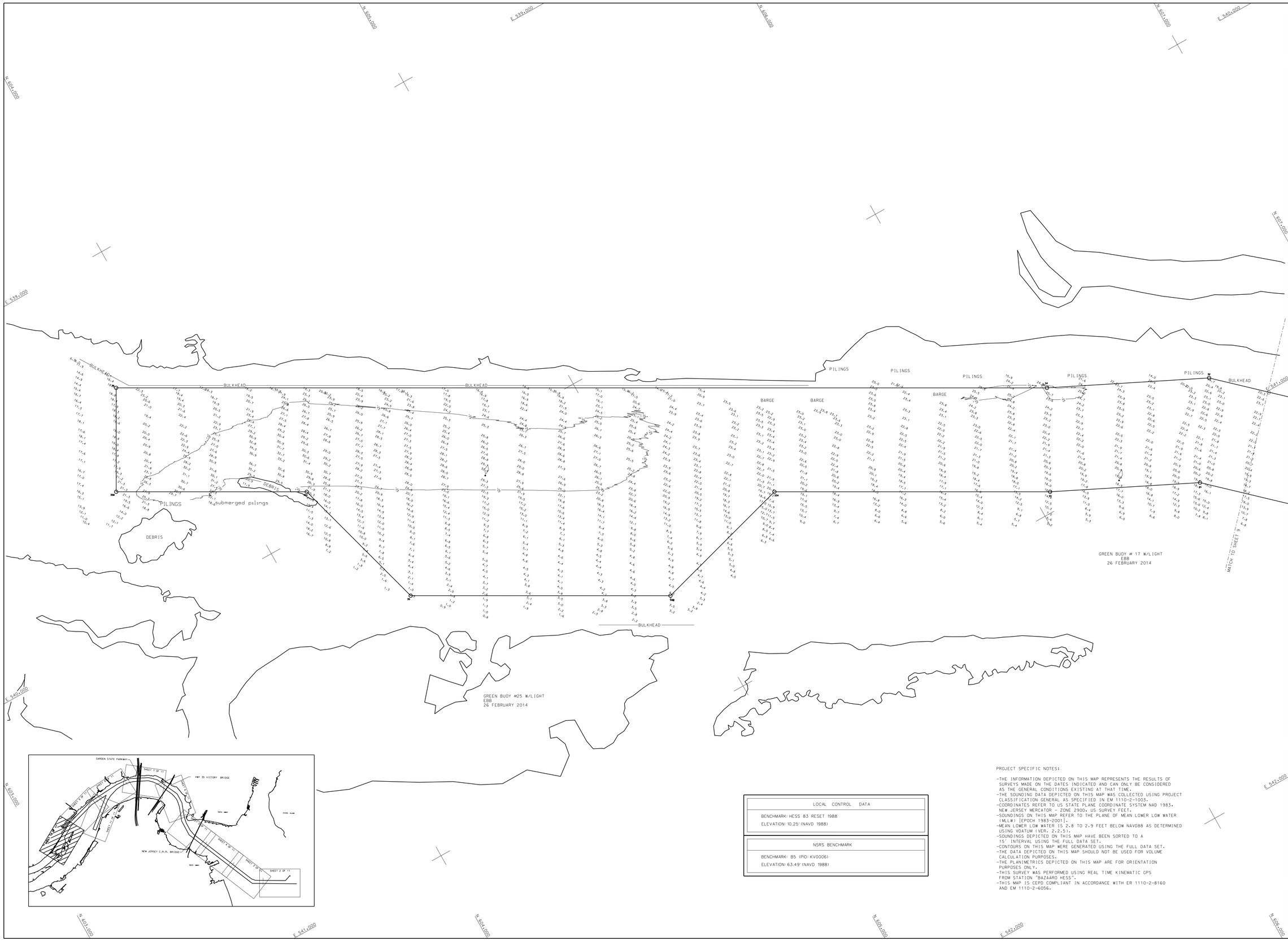
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-109

SHEET 09 OF 11

FILE NO. 525
REQ. NO. 4110



LOCAL CONTROL DATA
BENCHMARK: HESS 83 RESET 1988 ELEVATION: 10.25' (NAVD 1988)

NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006) ELEVATION: 63.49' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

		PB/RD	PR
		RD	WP

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18,23,30,31 DECEMBER 2013
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25-28 FEBRUARY 2014

FILE NO.: 525
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APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — CADD CARTOGRAPHER
APPROVED: J. MRAZ — CHIEF OF SURVEY
DATE: 4 MARCH 2014

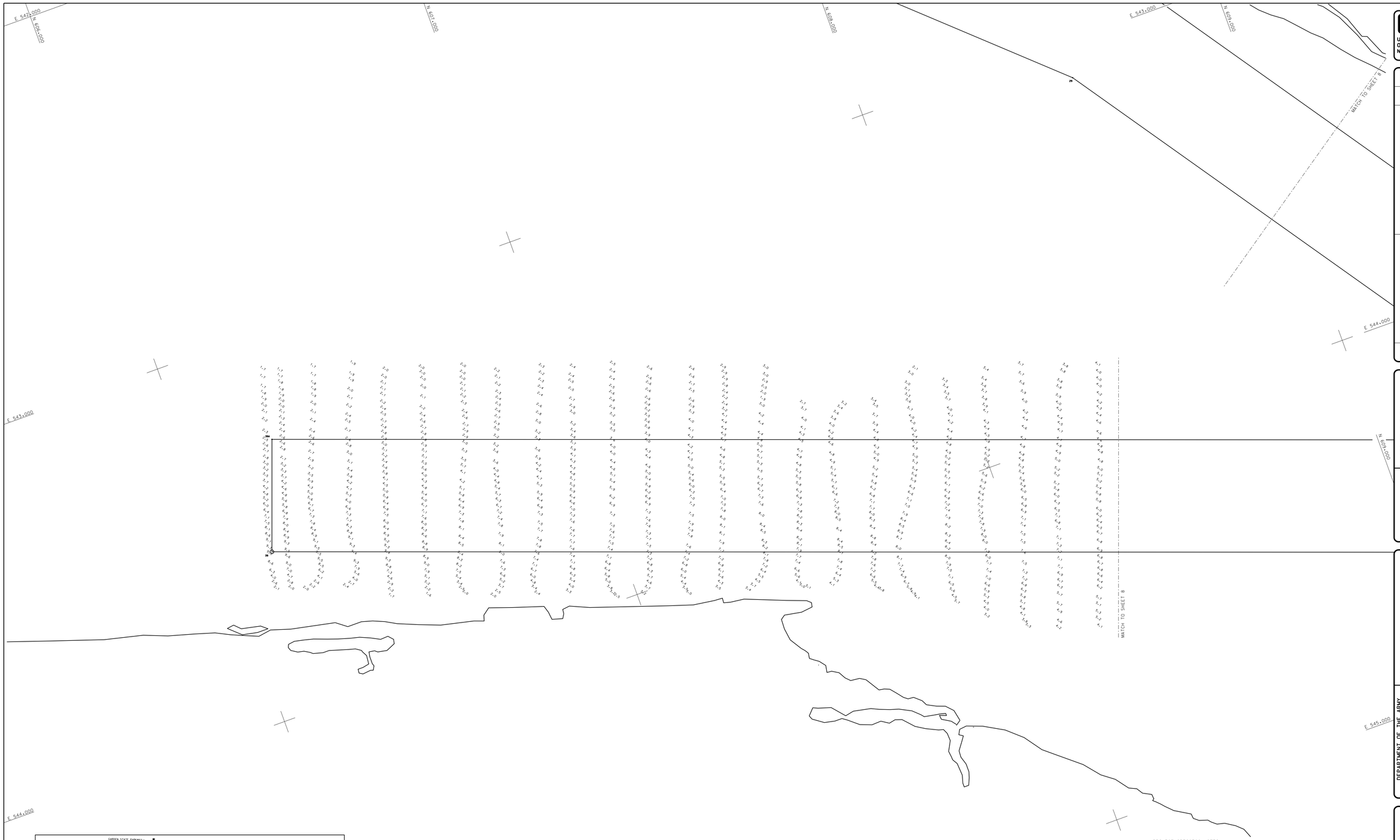
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

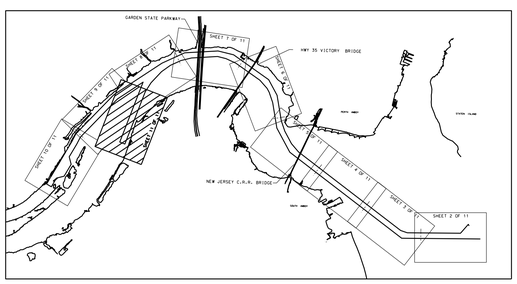
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-110

SHEET 10 OF 11





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BENCHMARK: B5 (PID: KV0006)
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PB/RD PR
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DATES OF SURVEY:
18:23:30.31 DECEMBER 2013
24 JANUARY 2014
25:26 FEBRUARY 2014

FILE NO.: 525
REQUEST NO.: 4110

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

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APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: D. CLARKE — FIELD CARTOGRAPHER
APPROVED: J. MRAZ — CHIEF, CHIEF OF SURVEY
DATE: 4 MARCH 2014

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OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-111

SHEET 11 OF 11