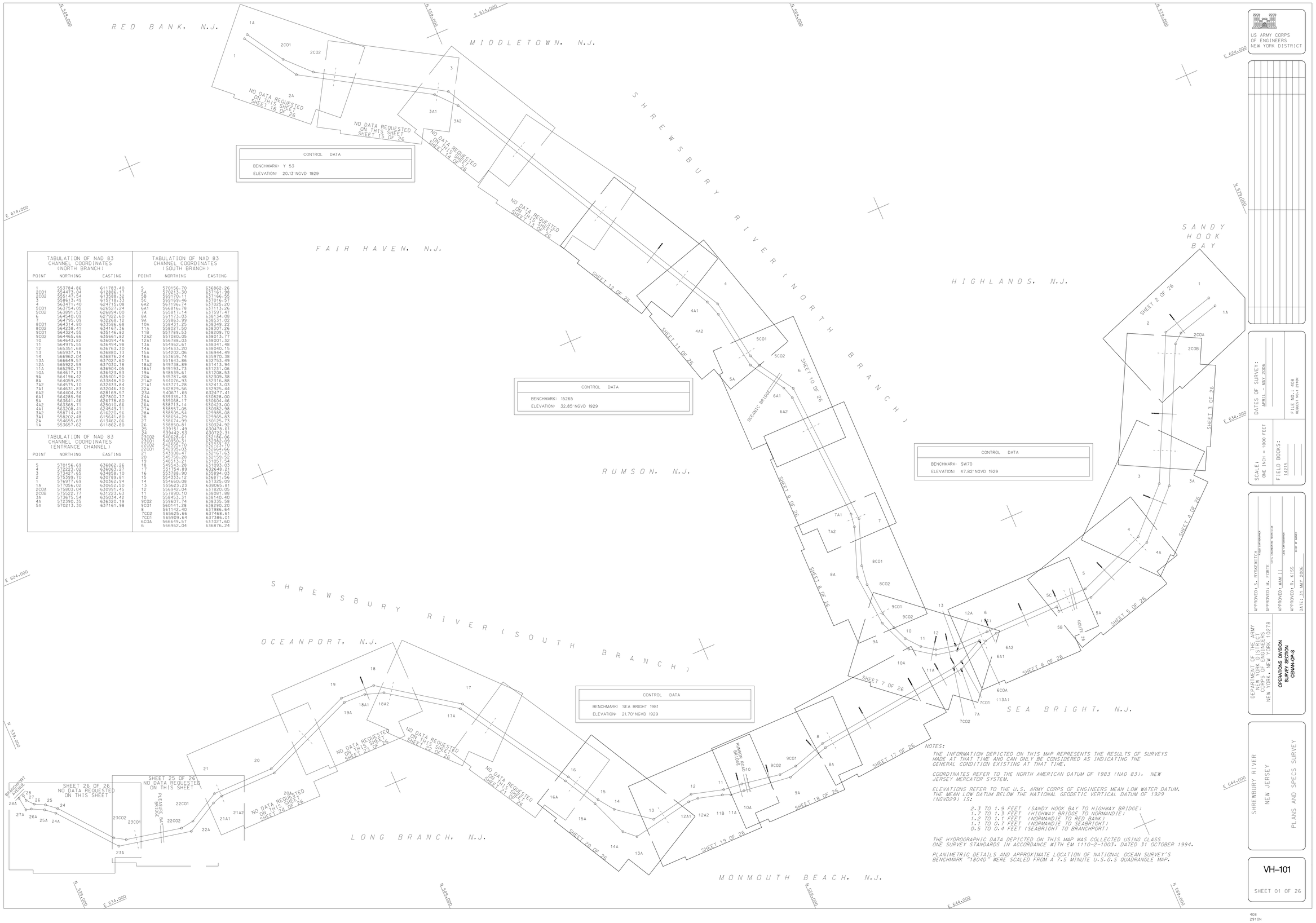


CONTROL DATA

BENCHMARK: Y 53

ELEVATION: 20.13' NGVD 1929

CONTROL DATA

BENCHMARK: 15265

ELEVATION: 32.85' NGVD 1929

CONTROL DATA

BENCHMARK: SW70

ELEVATION: 47.82' NGVD 1929

CONTROL DATA

BENCHMARK: SEA BRIGHT 1981

ELEVATION: 21.70' NGVD 1929

TABULATION OF NAD 83 CHANNEL COORDINATES (NORTH BRANCH)

POINT	NORTHING	EASTING
1	553784.86	611783.40
2CO1	554473.04	612886.17
2CO2	555147.54	613588.32
3	558613.49	615718.33
4	563471.40	624715.08
5CO1	563754.05	626527.24
5CO2	563891.53	626894.00
6	564540.09	627922.60
7	564795.09	632268.12
8CO1	564314.80	633586.68
8CO2	564238.41	634167.36
9CO1	564324.55	635146.82
9CO2	564465.66	635661.82
10	564643.82	636094.46
11	564975.55	636494.98
12	565351.68	636763.30
13	565937.16	636880.73
14	566962.04	636876.24
13A	566649.57	637027.60
12A	565922.59	637030.78
11A	565280.71	636904.05
10A	564671.13	636423.53
9A	564196.42	635401.90
8A	564059.81	633848.50
7A2	564575.10	632433.84
7A1	564631.83	632046.30
6A2	564404.34	628169.57
6A1	564285.96	627800.77
5A	563641.46	626178.60
4A2	563365.71	625010.66
4A1	563208.41	624543.71
3A2	558714.43	616220.96
3A1	558202.48	615641.80
2A	554655.63	613462.06
1A	553657.62	611862.80

TABULATION OF NAD 83 CHANNEL COORDINATES (ENTRANCE CHANNEL)

POINT	NORTHING	EASTING
5	570156.69	636862.26
4	572223.02	636063.27
3	573427.65	634858.10
2	575399.70	630789.81
1	576977.69	630362.94
1A	577056.02	630652.50
2COA	575803.04	630991.45
2COB	575522.77	631223.63
3A	573675.54	635034.42
4A	572390.35	636320.19
5A	570213.30	637161.98

TABULATION OF NAD 83 CHANNEL COORDINATES (SOUTH BRANCH)

POINT	NORTHING	EASTING
5	570156.70	636862.26
5A	570213.30	637161.98
5B	569170.11	637166.55
5C	569169.46	637016.57
6A2	567196.74	637025.20
6A1	566816.78	637113.26
7A	565817.14	637597.47
8A	561173.03	638134.08
9A	559863.99	638531.02
10A	558431.25	638349.22
11A	558027.50	638307.26
11B	557789.53	638209.70
12A2	557080.05	638013.77
12A1	556788.03	638001.32
13A	554962.61	638341.48
14A	554633.20	638040.15
15A	554202.06	636944.49
16A	553659.74	635970.38
17A	551643.86	632753.49
18A2	549738.89	631413.94
18A1	549193.73	631231.06
19A	548539.41	631208.53
20A	545787.48	632309.38
21A2	544076.93	632316.88
21A1	543771.28	632413.03
22A	542829.56	632925.44
23A	540671.65	632477.41
24A	539335.13	630828.00
25A	539068.17	630604.46
26A	538713.14	630423.00
27A	538557.05	630382.98
28A	538505.54	629985.08
28	538654.29	629965.83
27	538674.99	630125.73
26	538850.81	630324.92
25	539151.49	630478.61
24	539442.53	630722.31
23CO2	540628.61	632186.06
23CO1	540950.51	632392.09
22CO2	542595.70	632723.70
22CO1	542995.03	632664.66
21	543908.47	632167.63
20	545758.28	632159.52
19	548513.21	631057.54
18	549543.28	631093.03
17	551754.89	632648.21
16	553788.90	635894.03
15	554333.12	636871.56
14	554660.08	637325.09
13	555623.23	638065.81
12	556942.04	637820.05
11	557890.10	638081.88
10	558453.31	638140.40
9CO2	559607.74	638335.58
9CO1	560141.28	638290.20
8	561142.40	637986.64
7CO2	565625.66	637468.61
7CO1	565909.64	637386.01
6COA	566649.57	637027.60
6	566962.04	636876.24

NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE AT THAT TIME AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

FILE NO.: 408 REQUEST NO.: 2910N

SCALE: ONE INCH = 1000 FEET

FIELD BOOKS: 14215

APPROVED: S. RYSKIEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — FINAL CARTOGRAPHIC TECHNICIAN
APPROVED: MAM II — LEAD CARTOGRAPHER
APPROVED: R. KISS — CHIEF OF SURVEY
DATE: 31 MAY 2006

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

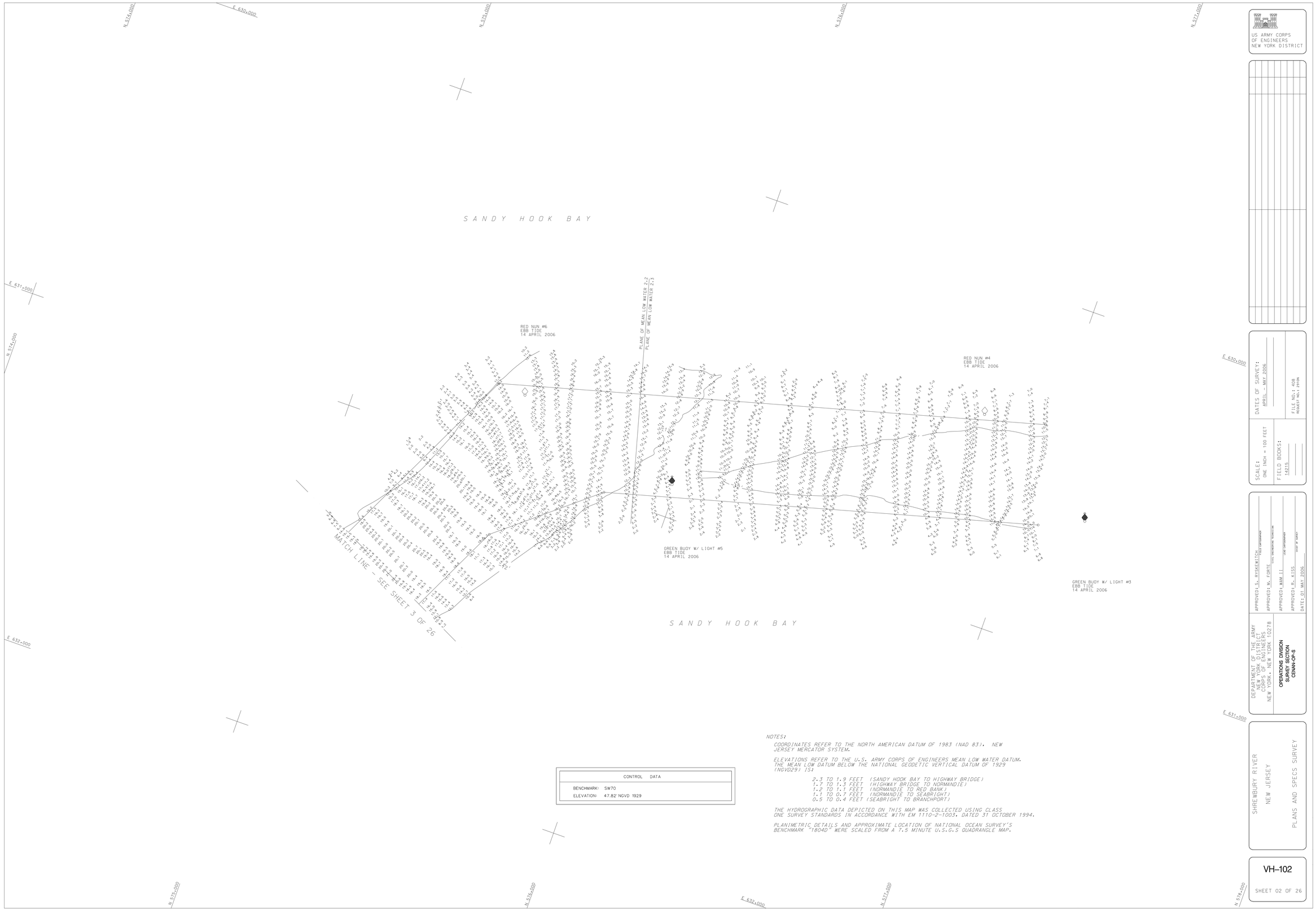
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWBURY RIVER
NEW JERSEY
PLANS AND SPECS SURVEY

VH–101

SHEET 01 OF 26

408
2910N



CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003. DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL – MAY 2006

FILE NO.: 408
HYDRO NO.: 4108

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: ABM II
LEAD CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

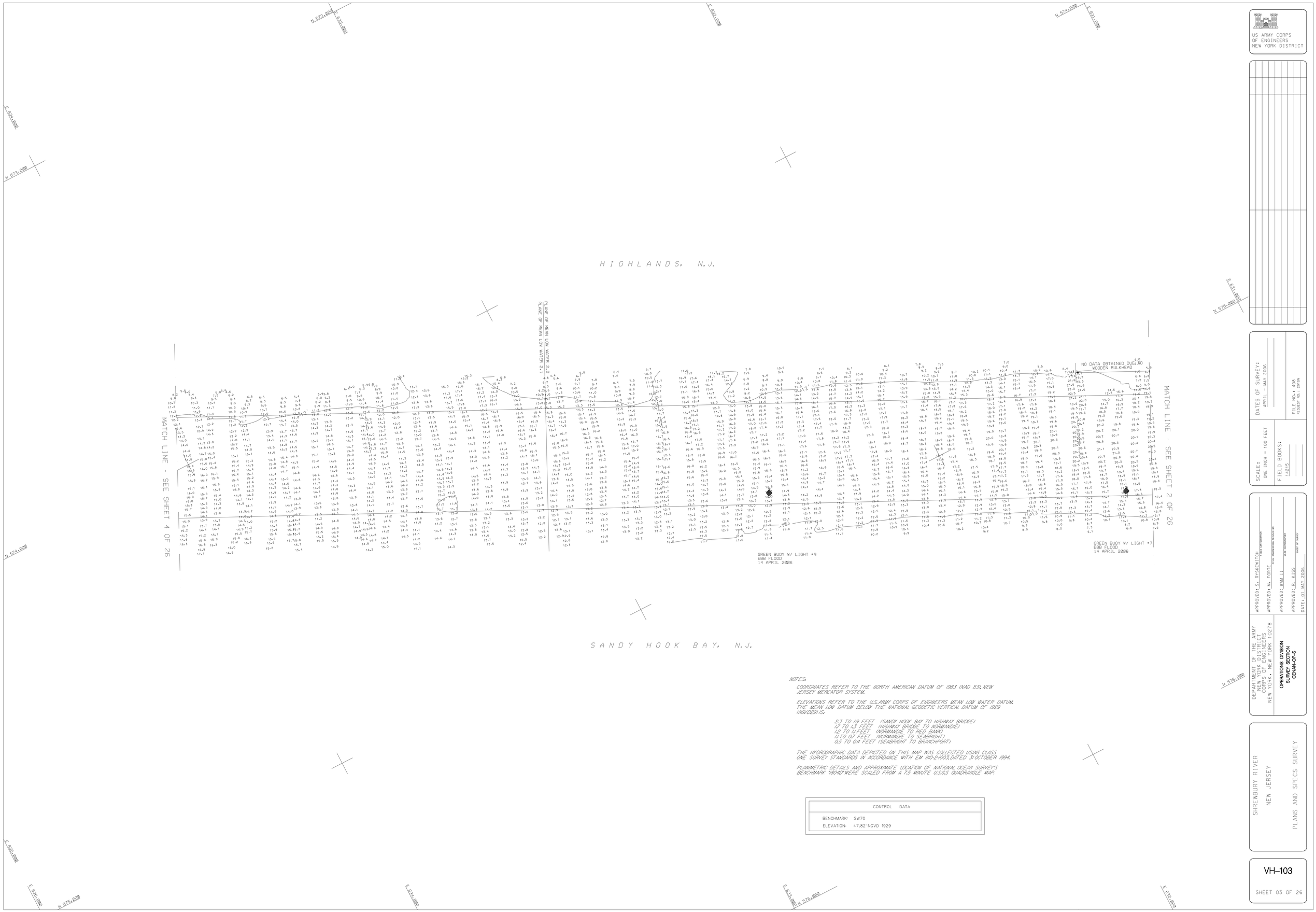
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-102

SHEET 02 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1B040" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14215

APPROVED: S. RYSKEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CHIEF, HYDROGRAPHIC TECHNICIAN
APPROVED: BAM II — LEAD CARTOGRAPHER
APPROVED: R. KISS — CHIEF OF SURVEY
DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

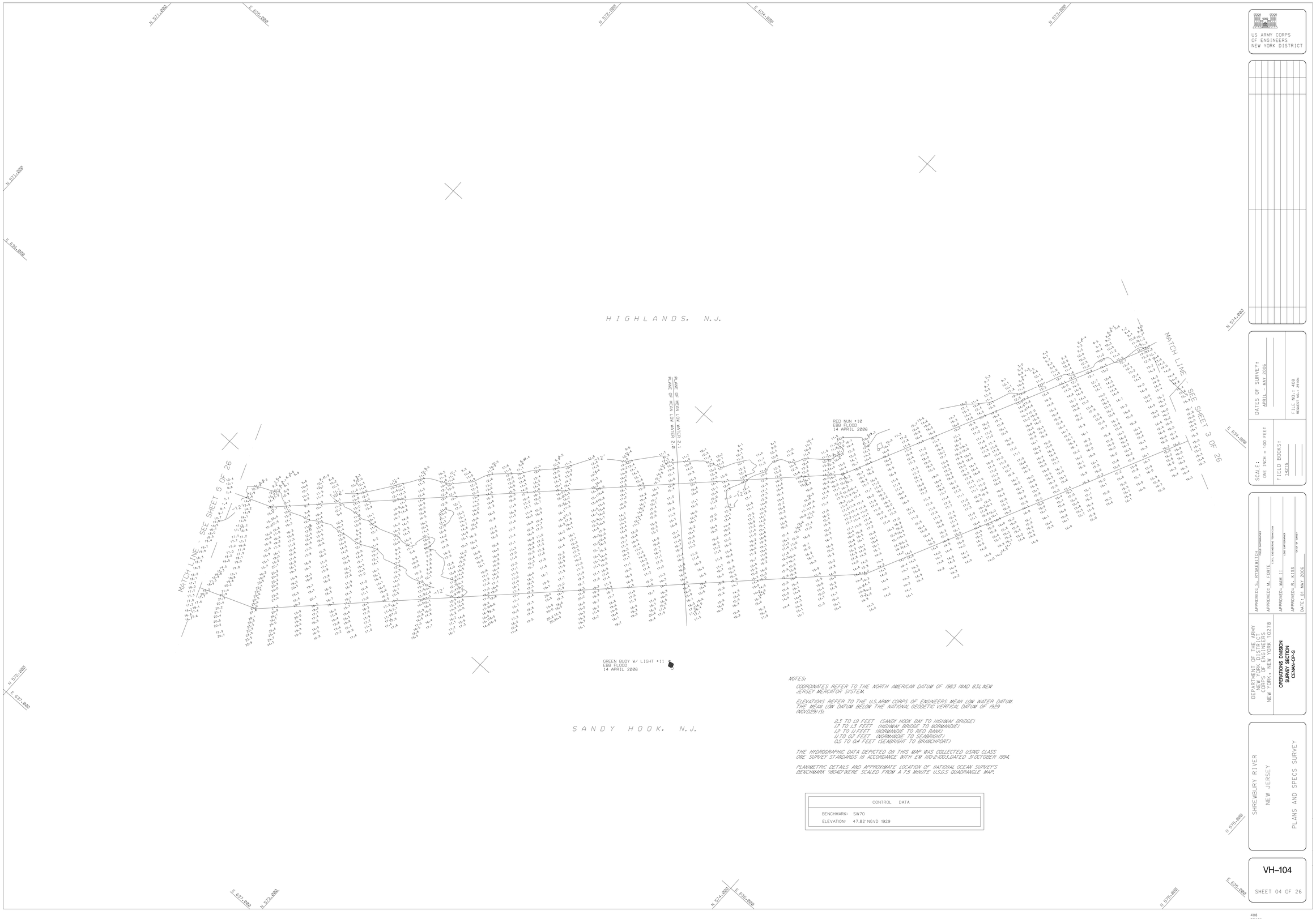
SHREWSBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–103

SHEET 03 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

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1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CHIEF, HYDROGRAPHIC TOPOGRAPHIC SURVEYS

APPROVED: BRIAN J. LI
CHIEF CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

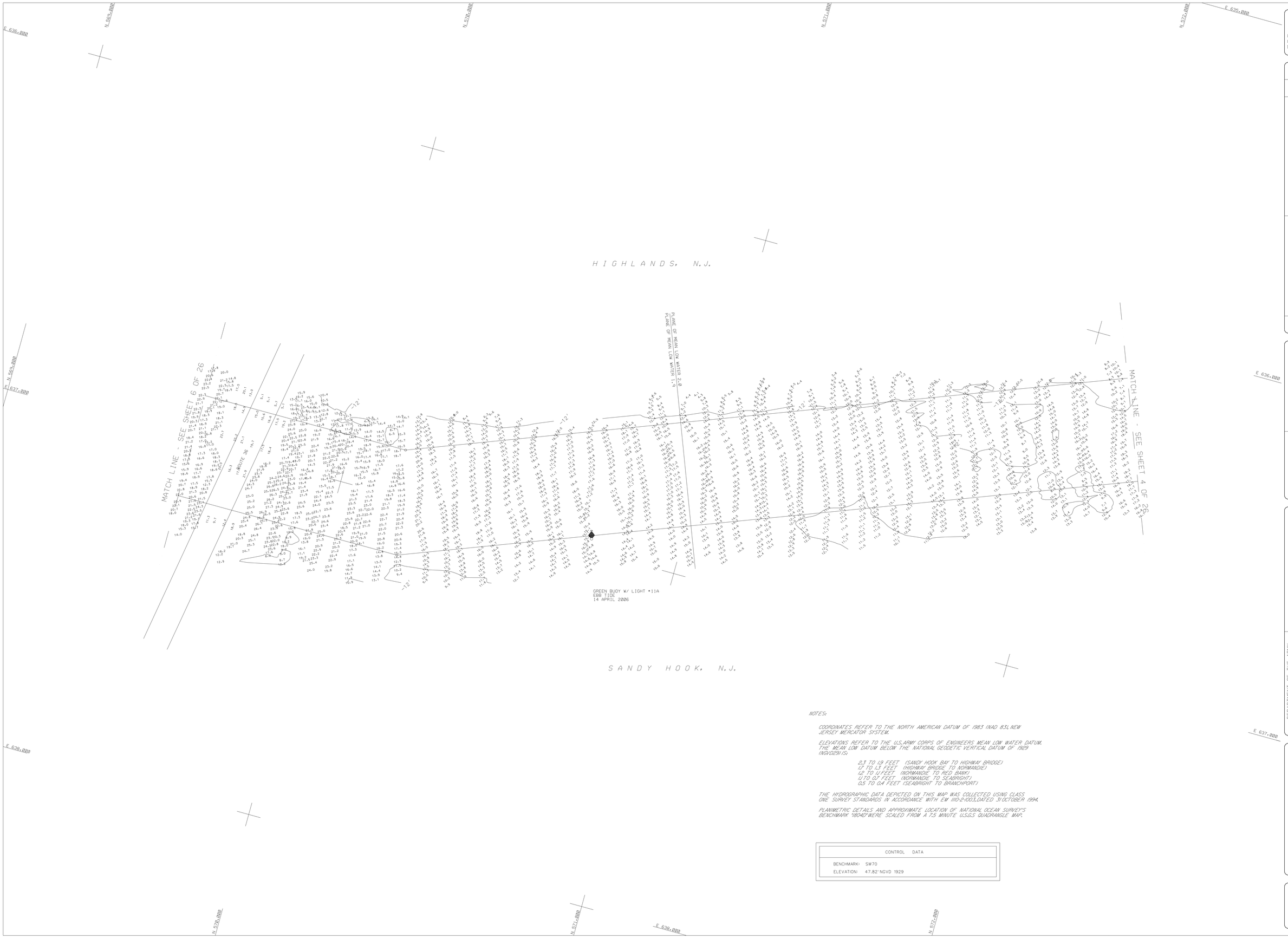
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–104

SHEET 04 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "18040" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

SCALE:
ONE INCH = 100 FEET

FILE NO.: 408
REQUEST NO.: 2910N

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
LAB CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWSBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-105

SHEET 05 OF 26

408
2910N

N 567,000 N 569,000 N 569,000

E 636,000

HIGHLANDS, N.J.

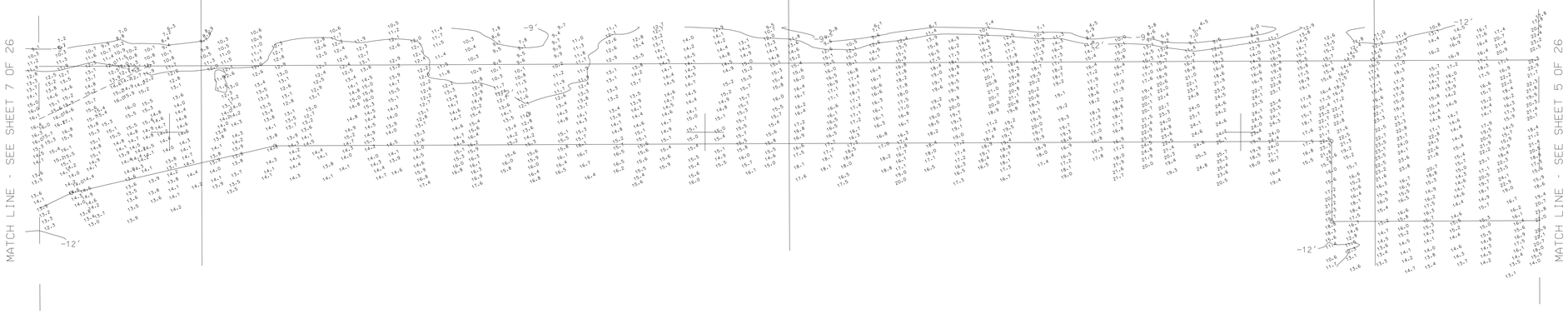
PLANE OF MEAN LOW WATER 1.4
PLANE OF MEAN LOW WATER 1.5

PLANE OF MEAN LOW WATER 1.5
PLANE OF MEAN LOW WATER 1.6

PLANE OF MEAN LOW WATER 1.6
PLANE OF MEAN LOW WATER 1.7

E 637,000

MATCH LINE - SEE SHEET 7 OF 26



MATCH LINE - SEE SHEET 5 OF 26

SEA BRIGHT, N.J.

E 638,000

NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 18D42' WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

N 567,000 N 569,000 N 569,000

E 638,000

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WKM II
LEAD CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

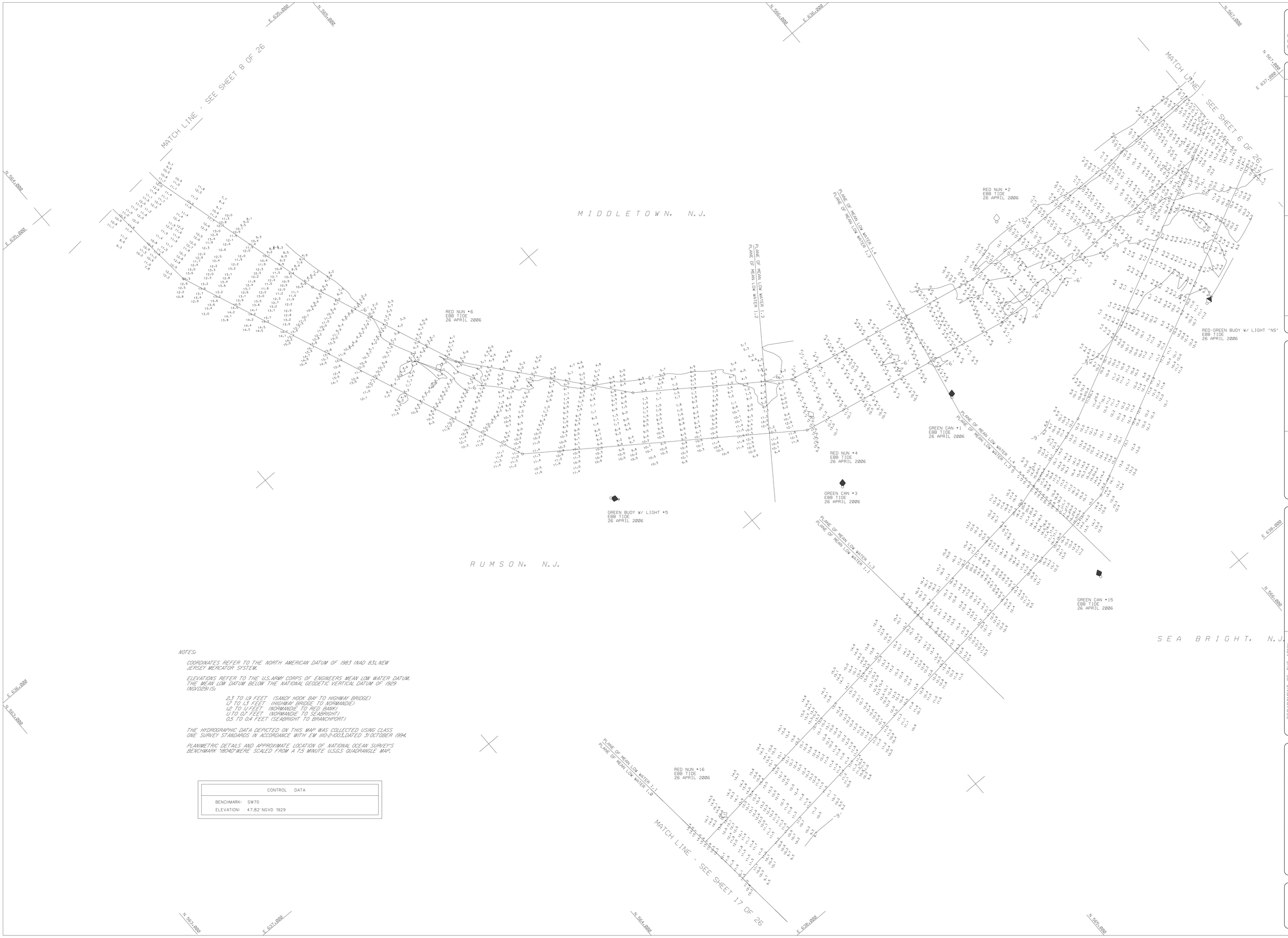
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–106

SHEET 06 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 180A07 WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKIEWITCH FIELD CARTOGRAPHER
APPROVED: M. FORTE CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II LEAD CARTOGRAPHER
APPROVED: R. KISS CHIEF OF SURVEY
DATE: 01 MAY 2006

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

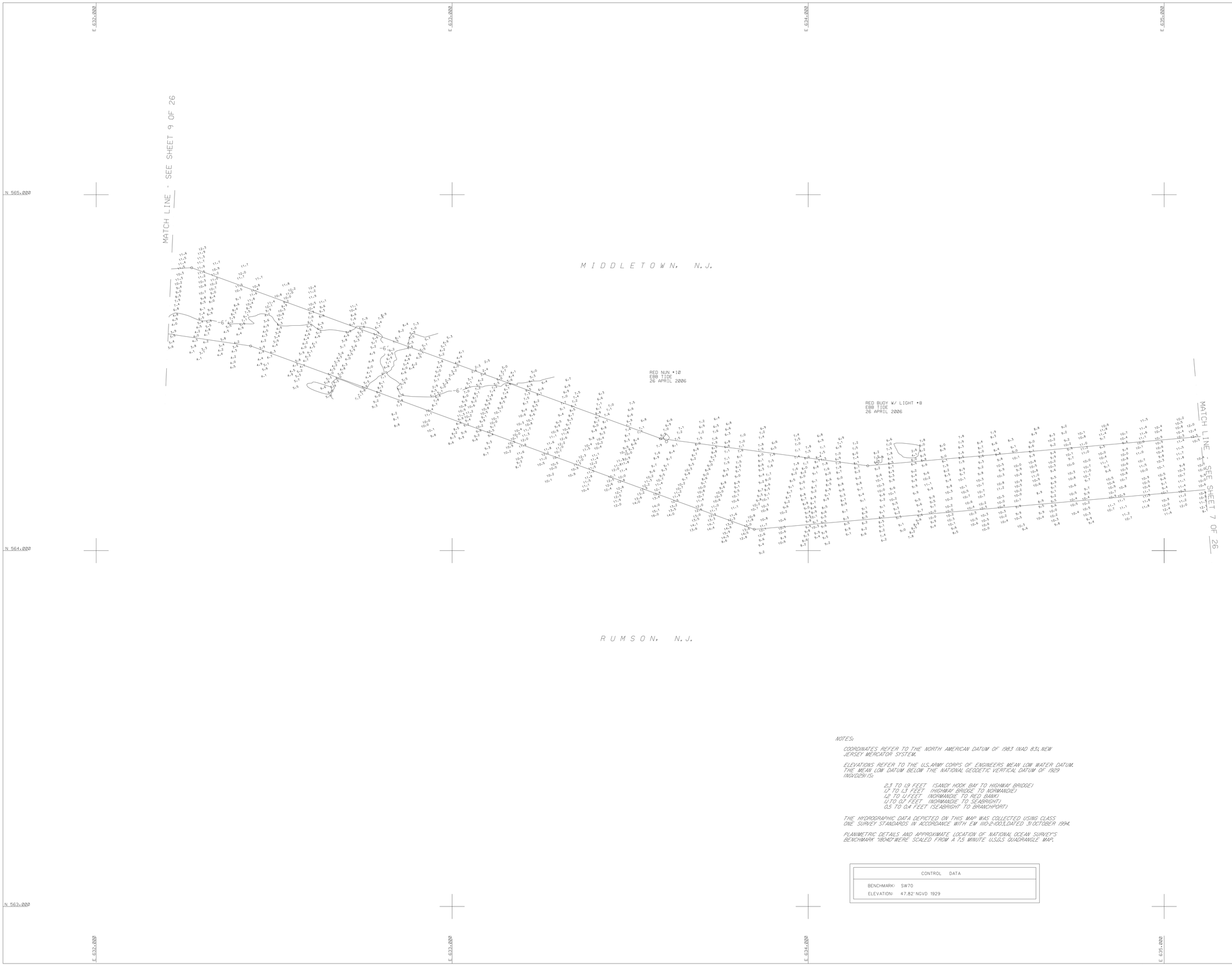
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–107

SHEET 07 OF 26



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 29106

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14215

APPROVED: S. RYSKEWITCH
CHIEF, HYDROGRAPHIC SURVEY CARTOGRAPHER

APPROVED: M. FERRIE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
LEAD CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

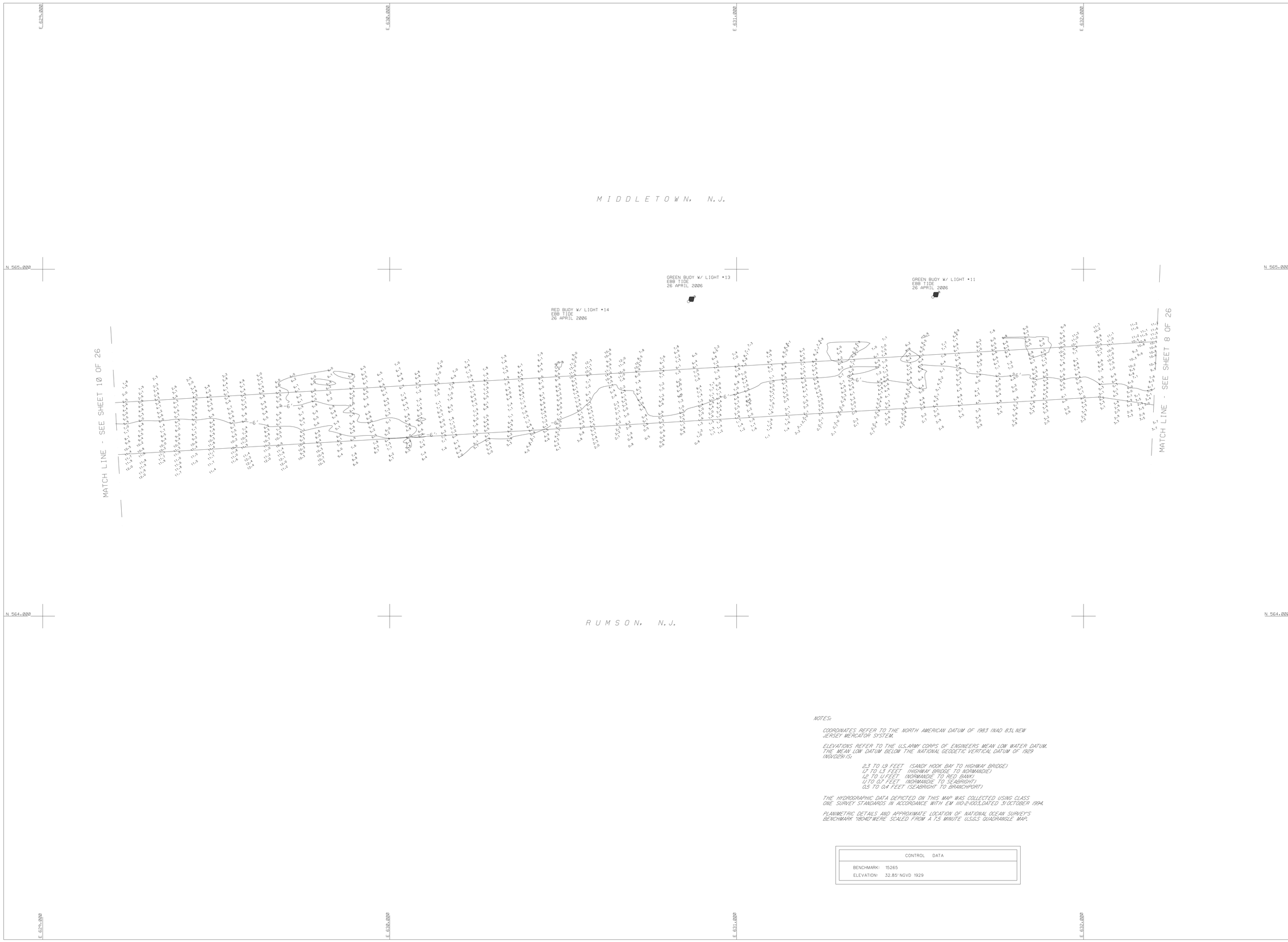
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-108

SHEET 08 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 1180AD WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	15265
ELEVATION:	32.85' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
MODEL NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
CHIEF, FIELD EXPLORATIONS
APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II
LEAD CARTOGRAPHER
APPROVED: R. KISS
CHIEF OF SURVEY
DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

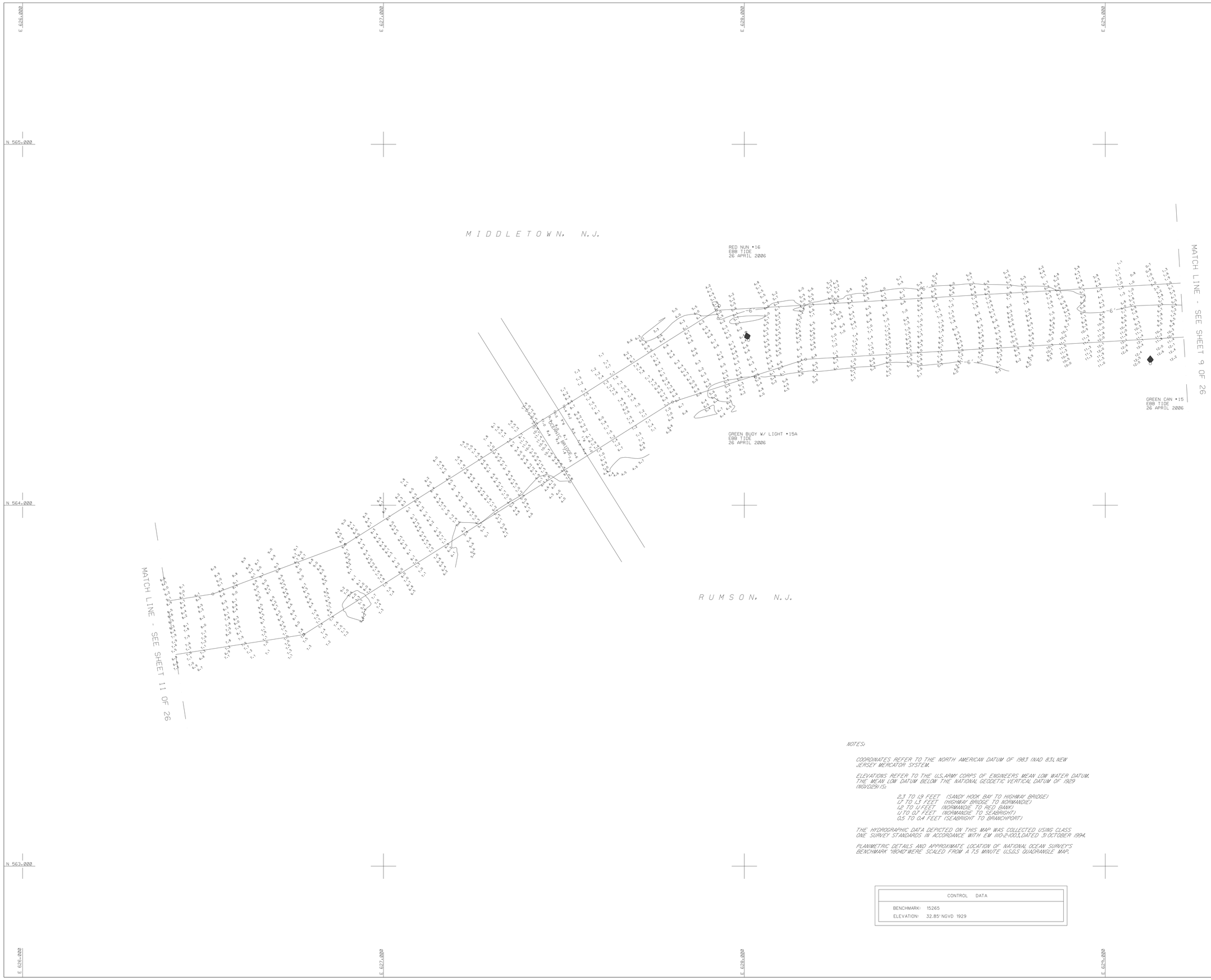
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-109

SHEET 09 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.0 FEET (NORMANDIE TO RED BANK)
1.0 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	15265
ELEVATION:	32.85' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 29106

SCALE:
ONE INCH = 1000 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWICH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WAM II
LAB CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

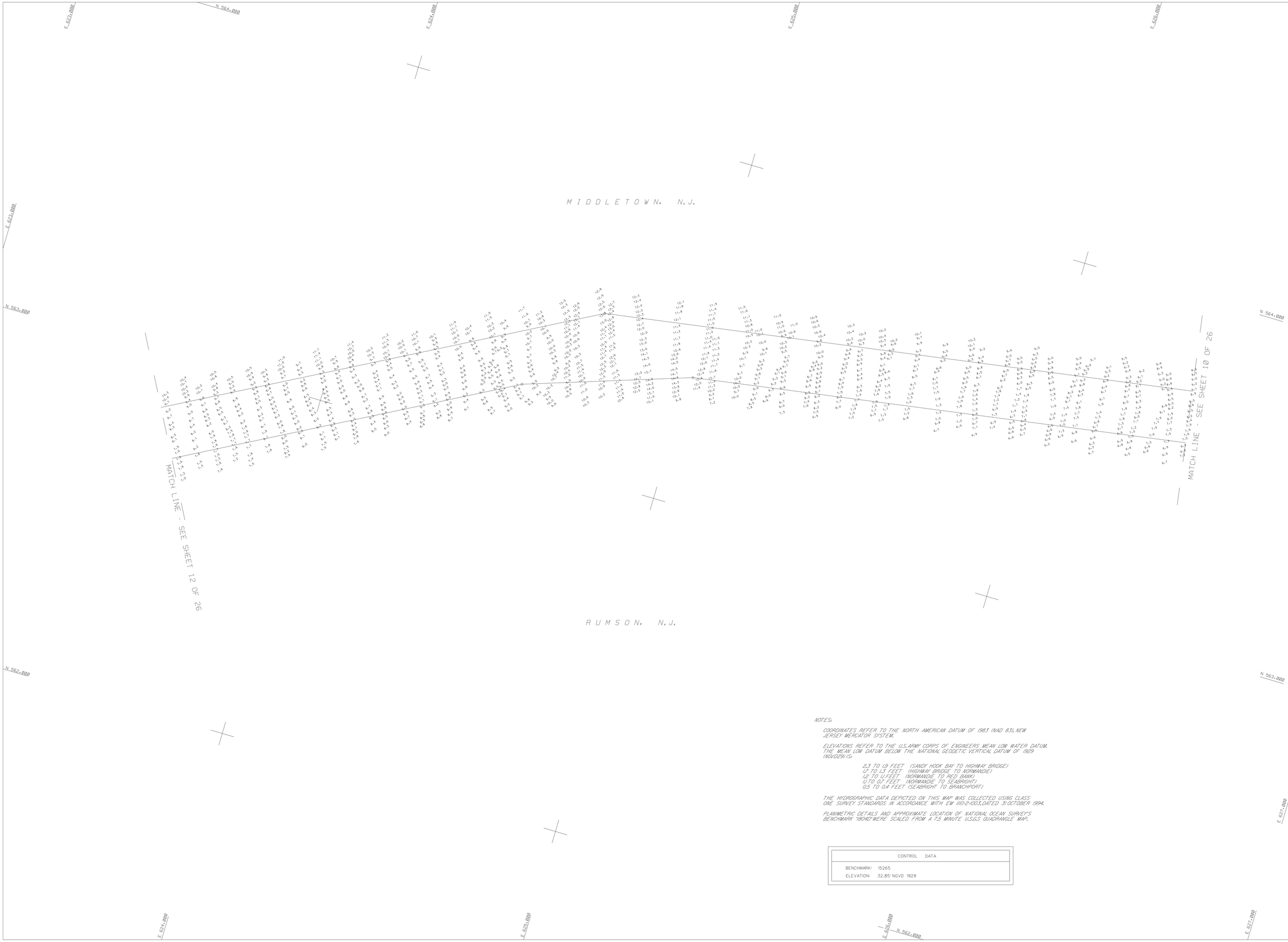
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-110

SHEET 10 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 18040 WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	15265
ELEVATION:	32.85' NGVD 1929

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 1425

APPROVED: S. RYSKEWITCH FIELD CARTOGRAPHER
APPROVED: M. FORTE CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II LEAD CARTOGRAPHER
APPROVED: R. KISS CHIEF OF SURVEY
DATE: 01 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–111

SHEET 11 OF 26

U. S. ARMY

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

SCALE: ONE INCH = 100 FEET	DATES OF SURVEY: APRIL – MAY 2006
FIELD BOOKS: 14215	FILE NO.: 408 REQUEST NO.: 2910N

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

OPERATIONS DIVISION
SURVEY SECTION
OENAN-OP-S

APPROVED: S. BRYSKEWITCH
FIELD CARTOGRAPHER
APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN
APPROVED: MAM II
CHIEF CARTOGRAPHER
APPROVED: R. KISS
CHIEF OF SURVEY
DATE: 01 MAY 2006

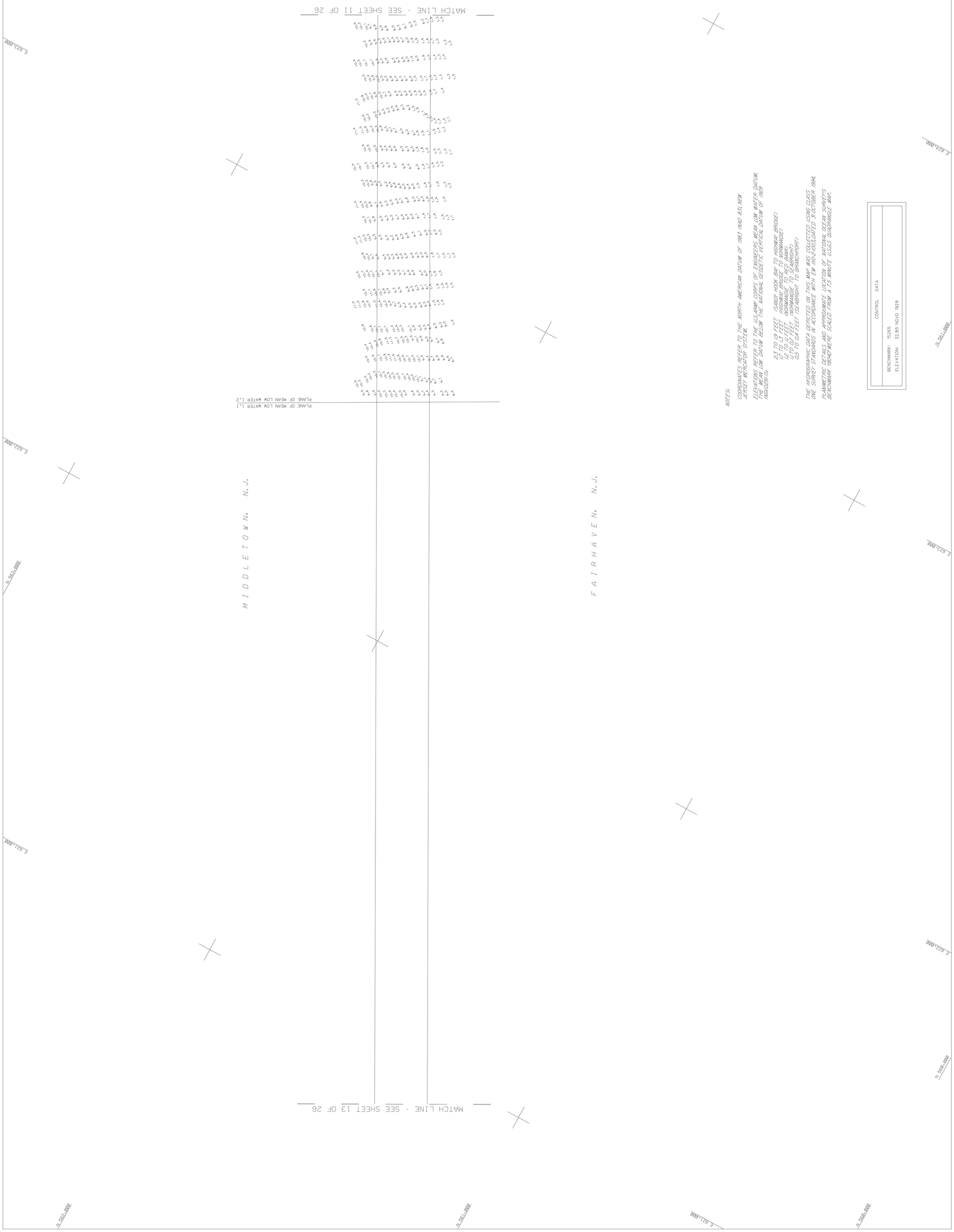
SHREWSBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–112

SHEET 12 OF 26

408
2910N



NOTES:

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

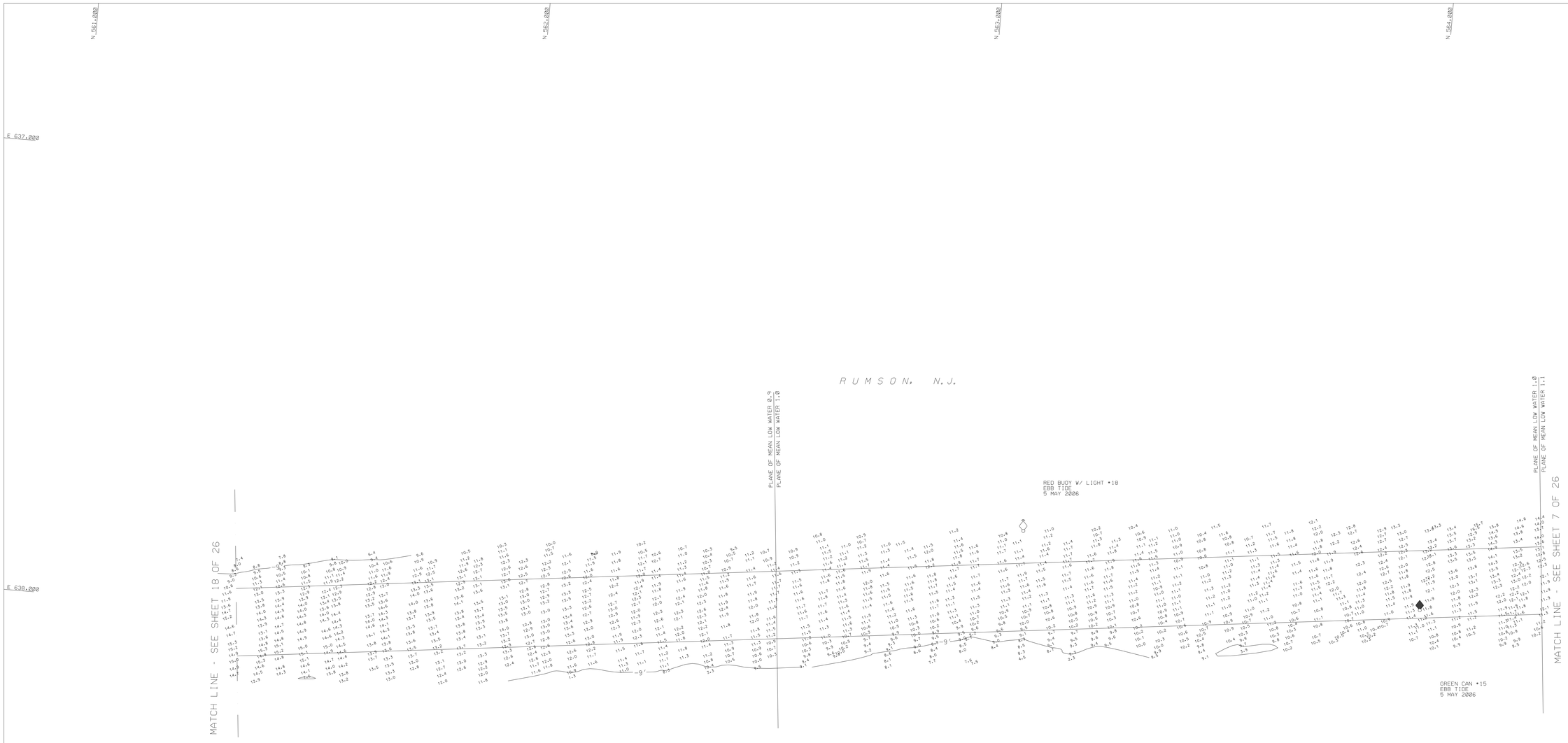
2.3 TO 1.3 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.2 TO 1.1 FEET (HIGHWAY BRIDGE TO NORMANDY)
1.1 TO 0.7 FEET (NORMANDY TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003,DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 1964D4 WERE SCALED FROM A 7.5 MINUTE USGS QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	15265
ELEVATION:	32.85' NGVD 1929

CORPS OF ENGINEERS



NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 17 - 5 MAY 2006 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 4.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 1604D WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

SCALE: ONE INCH = 100 FEET

FILE NO.: 408
REQUEST NO.: 2910N

FIELD BOOKS: 14415

APPROVED: S. RYSKEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II — LAKE CARTOGRAPHER
APPROVED: R. KISS — CHIEF OF SURVEY
DATE: 31 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH–117

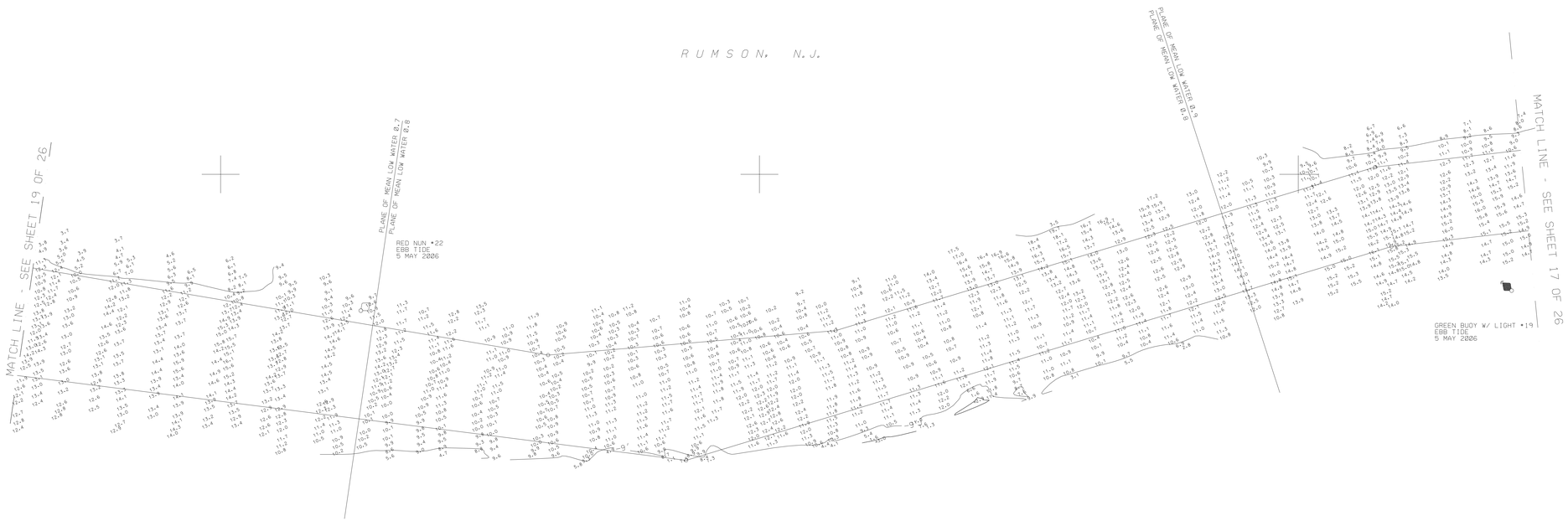
SHEET 17 OF 26

408
2910N

N 559,000 N 560,000 N 561,000

E 637,000 E 638,000 E 639,000

RUMSON, N.J.



SEA BRIGHT, N.J.

NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 17 - 20 & 5 MAY 2006 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "18040" WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SW70
ELEVATION:	47.82' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REGOCI NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
CHIEF, ENGINEERING DIVISION
APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN
APPROVED: WAM II
LEAD CARTOGRAPHER
APPROVED: R. KISS
CHIEF OF SURVEY
DATE: 31 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-118

SHEET 18 OF 26

408
2910N

N 556,000 N 557,000 N 558,000 N 559,000

E 637,000 E 638,000 E 639,000

NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 17 - 20 MAY 2003 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.1 FEET (NORMANDIE TO RED BANK)
1.1 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK "1804D" WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SEA BRIGHT 1981
ELEVATION:	21.70' NGVD 1929

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: APRIL - MAY 2006

FILE NO.: 408
REGION NO.: 2910N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 14215

APPROVED: S. RYSKEWITCH
CHIEF, FIELD CARTOGRAPHER

APPROVED: M. FORTE
CHIEF, ENGINEERING TECHNICIAN

APPROVED: MAM II
LEAD CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 31 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

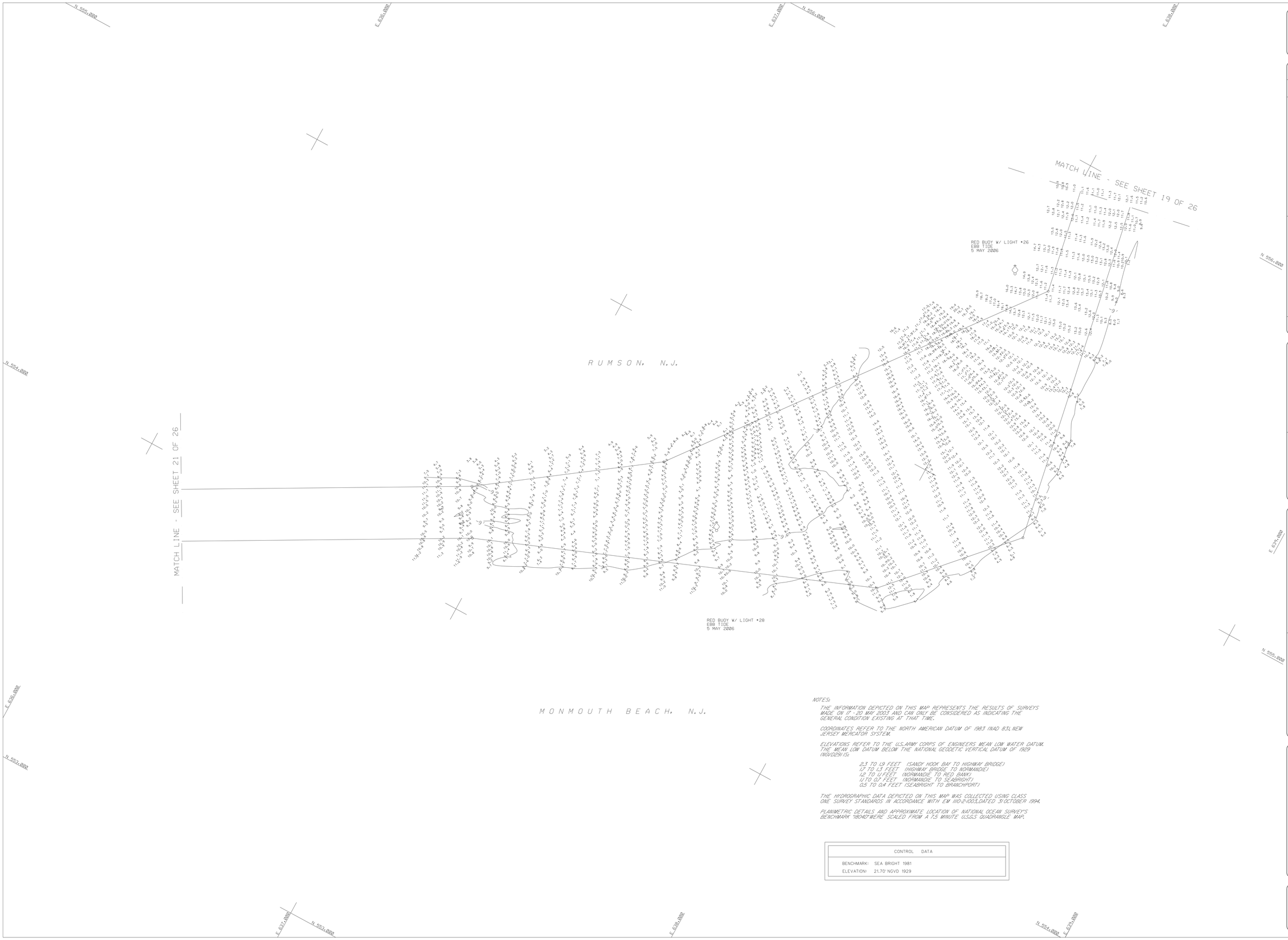
SHREWBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-119

SHEET 19 OF 26

408
2910N



NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 17 - 20 MAY 2003 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEW JERSEY MERCATOR SYSTEM.

ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM. THE MEAN LOW DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS:

2.3 TO 1.9 FEET (SANDY HOOK BAY TO HIGHWAY BRIDGE)
1.7 TO 1.3 FEET (HIGHWAY BRIDGE TO NORMANDIE)
1.2 TO 1.0 FEET (NORMANDIE TO RED BANK)
0.7 TO 0.7 FEET (NORMANDIE TO SEABRIGHT)
0.5 TO 0.4 FEET (SEABRIGHT TO BRANCHPORT)

THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS ONE SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003, DATED 31 OCTOBER 1994.

PLANIMETRIC DETAILS AND APPROXIMATE LOCATION OF NATIONAL OCEAN SURVEY'S BENCHMARK 1981 AD WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.

CONTROL DATA	
BENCHMARK:	SEA BRIGHT 1981
ELEVATION:	21.70' NGVD 1929

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
APRIL - MAY 2006

FILE NO.: 408
REQUEST NO.: 2910N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
14215

APPROVED: S. RYSKEWITCH
CHIEF CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: WEAM J.J.
CHIEF CARTOGRAPHER

APPROVED: R. KISS
CHIEF OF SURVEY

DATE: 31 MAY 2006

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

SHREWSBURY RIVER
NEW JERSEY

PLANS AND SPECS SURVEY

VH-120

SHEET 20 OF 26

408
2910N