

SCALE: ONE INCH = 200 FEET

FIELD BOOKS: N/A

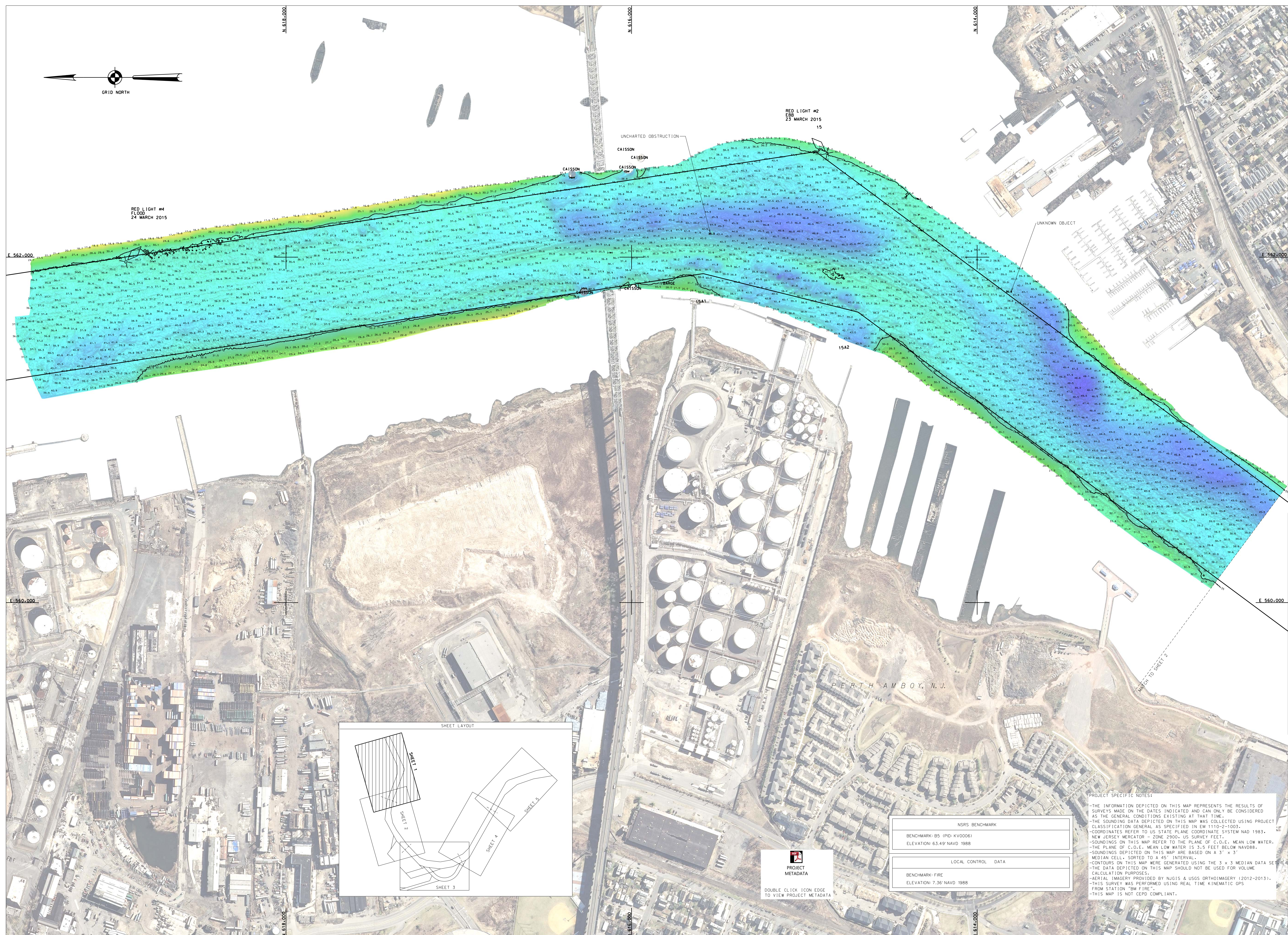
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 1027

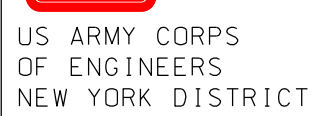
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

VH-101

SHEET 1 OF 5

FILE NO.: 1377
EQUEST NO.: 4310/D/M



[illegible]

SCALE : ONE INCH = 200 FEET	DATES OF SURVEY : 23-25, 31 MARCH 2015 1,2,6 APRIL 2015
FIELD BOOKS : 1020 _____ _____	FILE NO. : 1377 REQUEST NO. : 4310/P/N2

APPROVED: D. SMITH/P. KEARNS
FIELD ENGINEER

APPROVED: M. FORTÉ
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CARDS/ENGINEER

APPROVED: J. WRAZ
SENIOR CHIEF OF SURVEY

DATE: 13 APRIL 2015

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

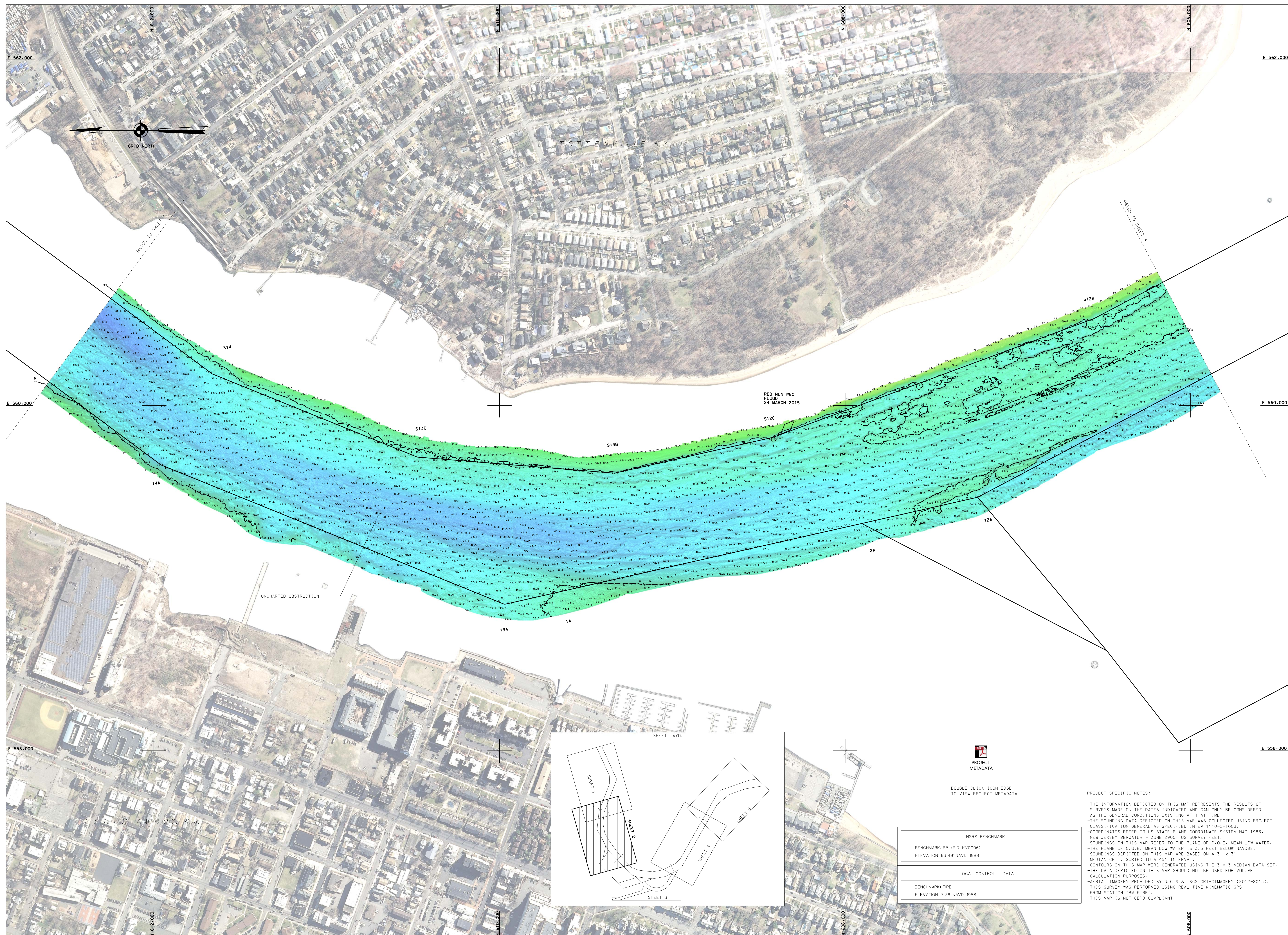
OPERATIONS DIVISION
SURVEY SECTION
CENM-OP-S

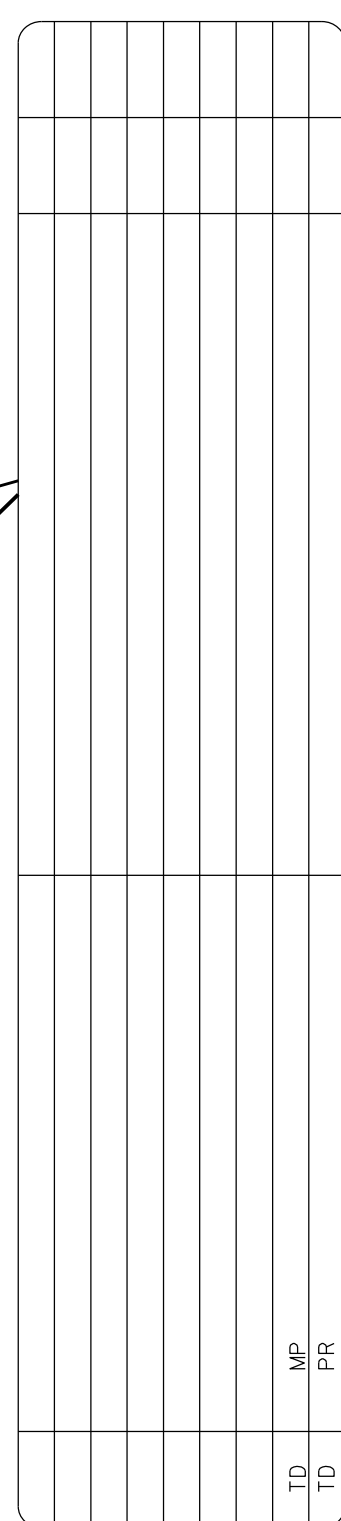
N. Y. & N. J. CHANNELS
OUTERBRIDGE TO SEGUINE POINT
CONDITION SURVEY

VH-102

SHEET 2 OF 5

FILE NO.: 1377
REQUEST NO.: 4310/D/N2





FILE NO.: 1377
REQUEST NO.: 4310/D/N2

SCALE:
ONE INCH = 200 FEET

FIELD BOOKS:
1020

APPROVED: D. SMITH/P. KEARNS
FIELD SUPERVISOR

APPROVED: M. FORTE
CIVIL ENGINEERING SUPERVISOR

APPROVED: D. CLARKE
LOCAL SUPERVISOR

APPROVED: J. MARAZ
DEPUTY CHIEF OF BUREAU

DATE: 13 APRIL 2015

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

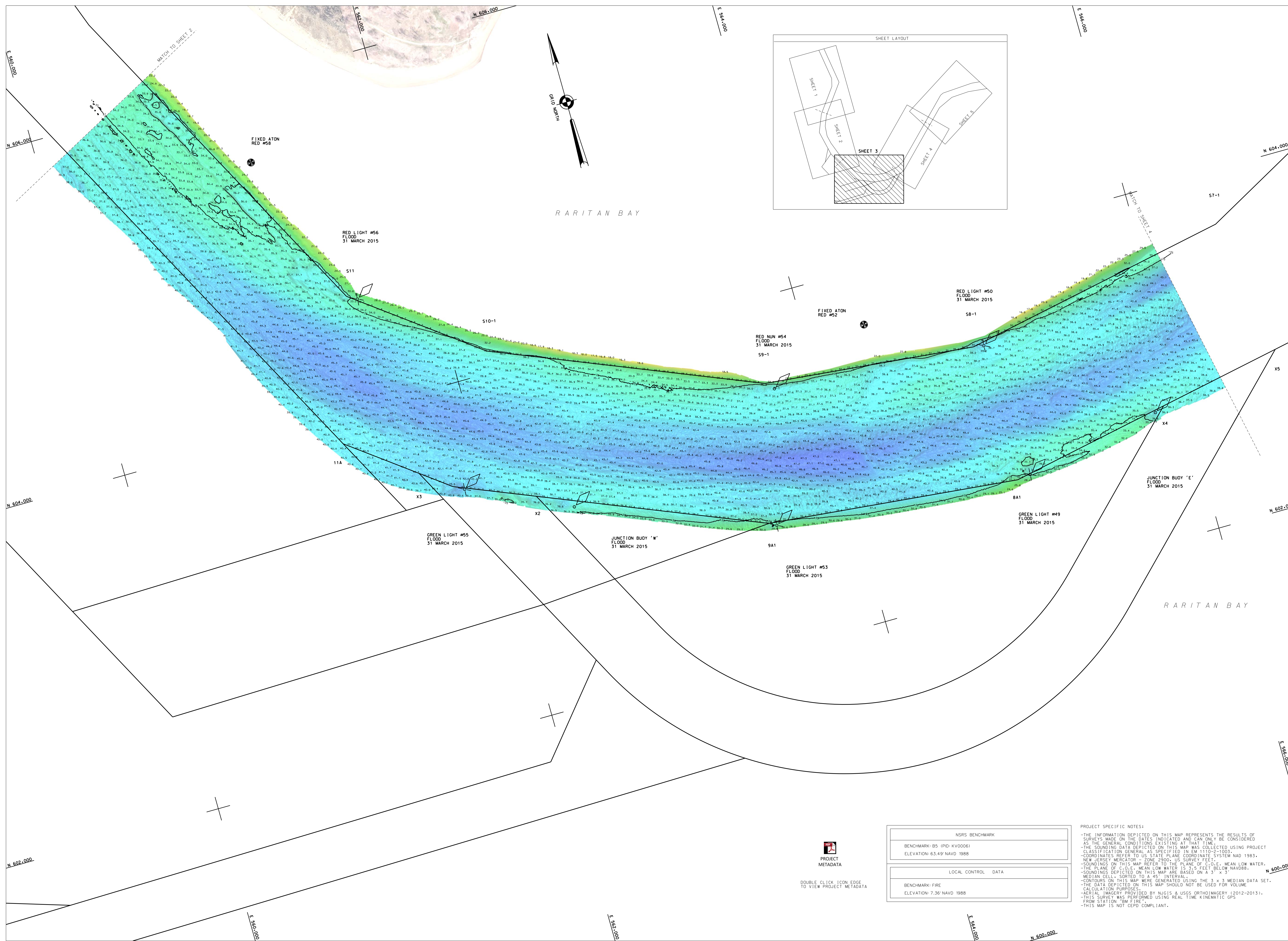
OPERATIONS DIVISION
SURVEY SECTION
CENAM-OP-S

N. Y. & N. J. CHANNELS
OUTERBRIDGE TO SEQUINE POINT
CONDITION SURVEY

VH-103

SHEET 3 OF 5

FILE NO.: 1377
REQUEST NO.: 4310/D/N



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.

THE FOLLOWING DATA WERE OBTAINED FROM THE SURVEY CONDUCTED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN US E 1110-2-1003.

DATE OF SURVEY REFERENCE: 1983-01-01 COORDINATE SYSTEM: WAD 1983, NEW JERSEY MERCATOR - ZONE 20900, US SURVEY FEET.

MEAN LOW WATER (MLW) IS THE MEAN LOW WATER OF THE PLANE OF C.O.E. MEAN LOW WATER IS 3.5 FEET BELOW NAVD83.

SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CHART, CORRECTED TO 45° INTERCOMPARISON.

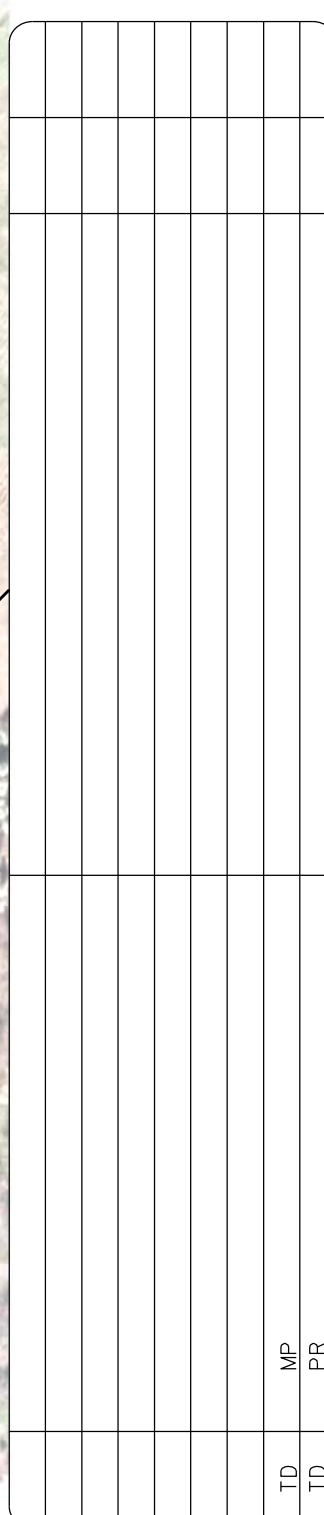
CONTOURS ON THIS MAP WERE GENERATED USING THE 3' x 3' MEDIAN DATA SET.

THIS MAP WAS GENERATED USING THE DATA SET AND THE FOLLOWING CALCULATION PURPOSES:

DATA SET GENERATED BY NADIS & USGS ORTHOMAPPING (2012-2013).

THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "BM FIRE".

THIS MAP IS NOT TO BE USED FOR ANY OTHER COMPLAINT.



SCALE: ONE INCH = 200 FEET	DATES OF SURVEY: 23-25, 31 MARCH 2015 1-2,6 APRIL 2015
FIELD BOOKS: 1020	FILE NO.: 1377 REQUEST NO.: 4310/P/42

APPROVED: D. SMITH/P. KEARNS
FIELD SUPERVISOR

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CARPENTER

APPROVED: J. MRAZ
SENIOR CHIEF OF WORKS

DATE: 13 APRIL 2015

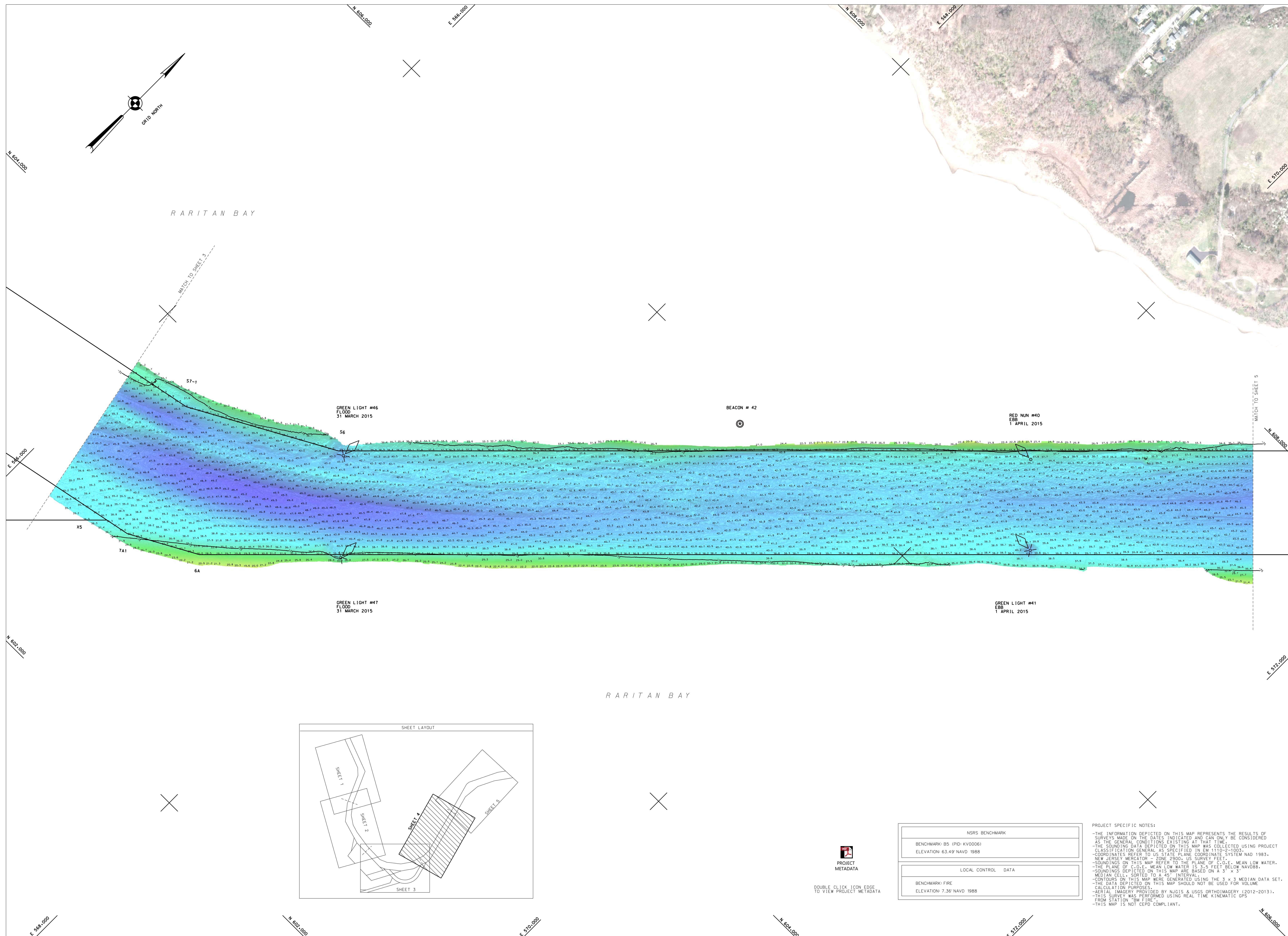
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10272

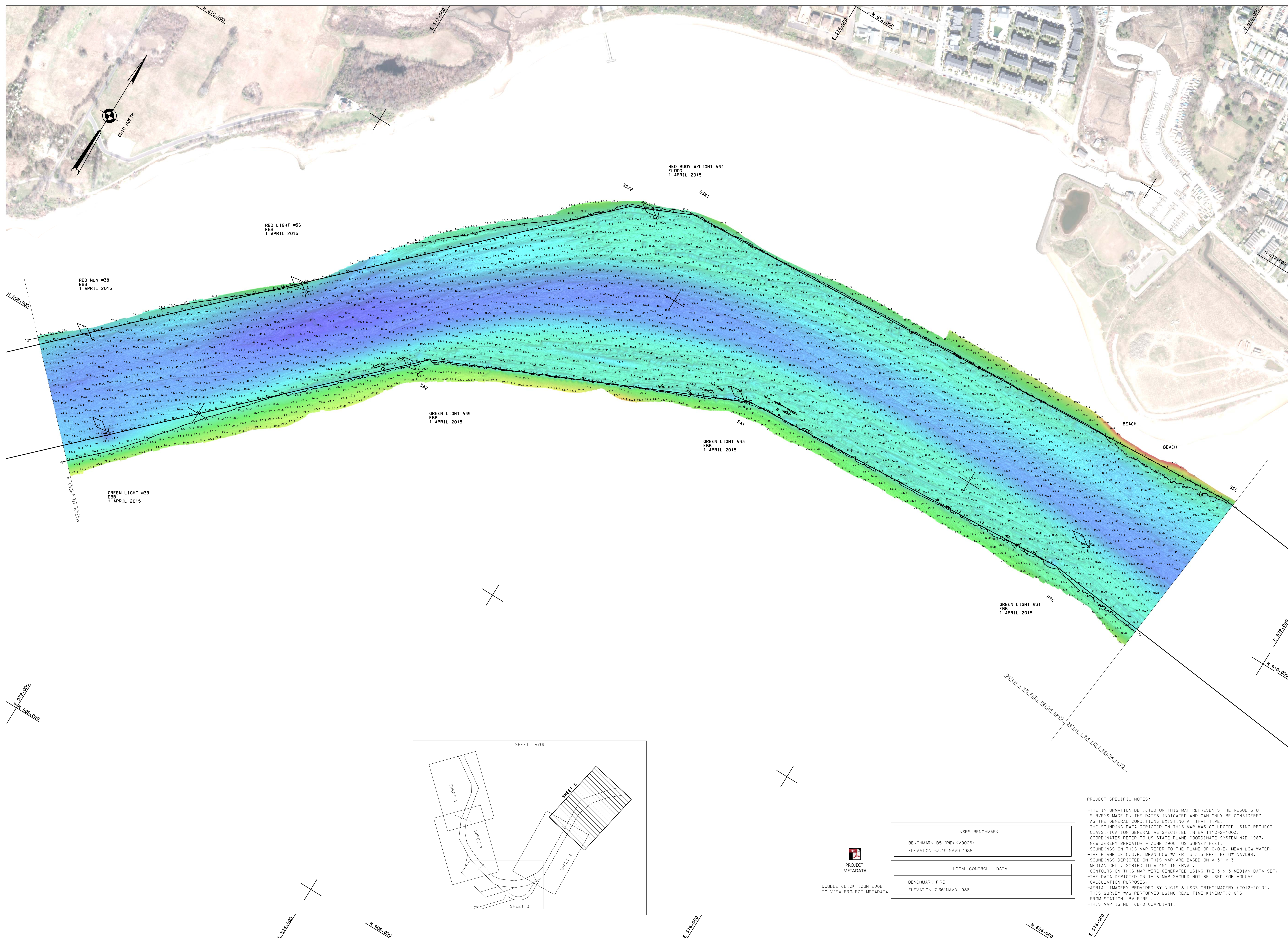
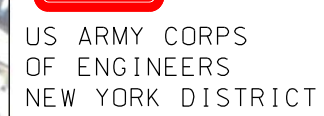
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

N. Y. & N. J. CHANNELS
OUTERBRIDGE TO SEGUINE POINT
CONDITION SURVEY

VH-104

SHEET 4 OF 5



[illegible]

SCALE: ONE INCH = 200 FEET	DATES OF SURVEY: 23-25, 31 MARCH 2015 1-2,6 APRIL 2015
FIELD BOOKS: 1020	FILE NO.: 1377 REQUEST NO.: 4310/P/2

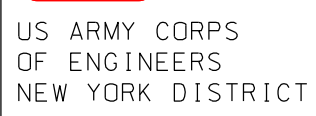
DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, NEW YORK 10278	APPROVED: D. SMITH, JR. DIST. ASSISTANT CHIEF, DISTRICT ENGINEER
OPERATIONS DIVISION SURVEY SECTION CEMAN-OPS	APPROVED: M. FORTE CHIEF, DISTRICT ENGINEER
	APPROVED: D. CLARE DIST. ASSISTANT CHIEF, DISTRICT ENGINEER
	APPROVED: J. WRAZ DIST. CHIEF OF STAFF DATE: 13 APRIL 2015

N. Y. & N. J. CHANNELS
OUTERBRIDGE TO SEQUINE POINT
CONDITION SURVEY

VH-105

SHEET 5 OF 5

FILE NO.: 1377
REQUEST NO.: 4310/D/N2

[illegible]

DATE OF SURVEY:

SCALE:

FILE NO.: 1379

DEPARTMENT OF THE ARMY NEW YORK DISTRICT	APPROVED: D. SMITH FIELD COMMANDER
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DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

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

OPERATIONS DIVISION
SURVEY SECTION

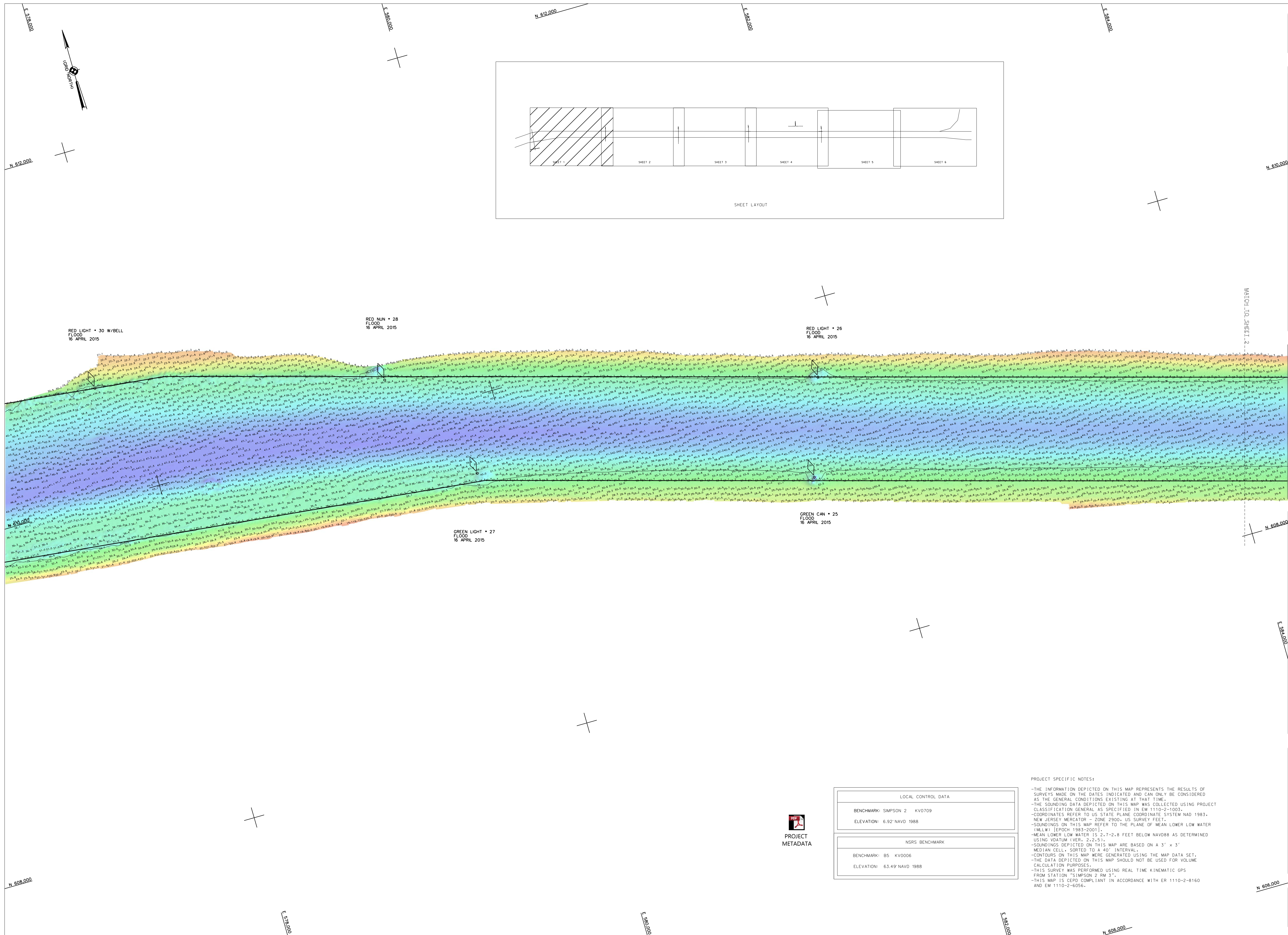
NEW YORK & NEW JERSEY CHANNELS

YORK & NEW JERSEY CHANNEL
RARITAN BAY EAST REACH

CONDITION SURVEY

VH-101

SHEET 1 OF 6



PROJECT SPECIFIC NOTES:

- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED RELIABLE FOR THE PERIODS SPECIFIED.
- THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT NUMBER 80-067.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 83. NEW JERSEY METER DATUM IS APPROX. 2.90 CM SOUTH WEST OF US STATE PLANE DATUM. SEE THIS MAP REFERENCE TO THE PLANE OF NEAR LOWER LOW WATER (MLLW) [EPOCH 1983-2001] AT A POINT 2.80 CM BELOW NAVD83 AS DETERMINED USING DATUMM (VER. 2.2,5).
- SOUNDINGS DERIVED FROM THIS MAP ARE BASED ON A 3' X 3' GRID WITH MEDIAN CELL, SORTED TO A 10' INTERVAL.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. CONTOUR VALUES ON THIS MAP SHOULD NOT BE USED FOR ANY OTHER CALCULATION PURPOSES.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "SIMPSON 2 RM 3".
- THIS MAP IS CEPO COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND ER 1110-2-8161.

[illegible]

DATE OF SURVEY:

SCALE:

FILE NO.: 1379

APPROVED: D. SMITH
FIELD ENGINEER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD ENGINEER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 21 APRIL 2015

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

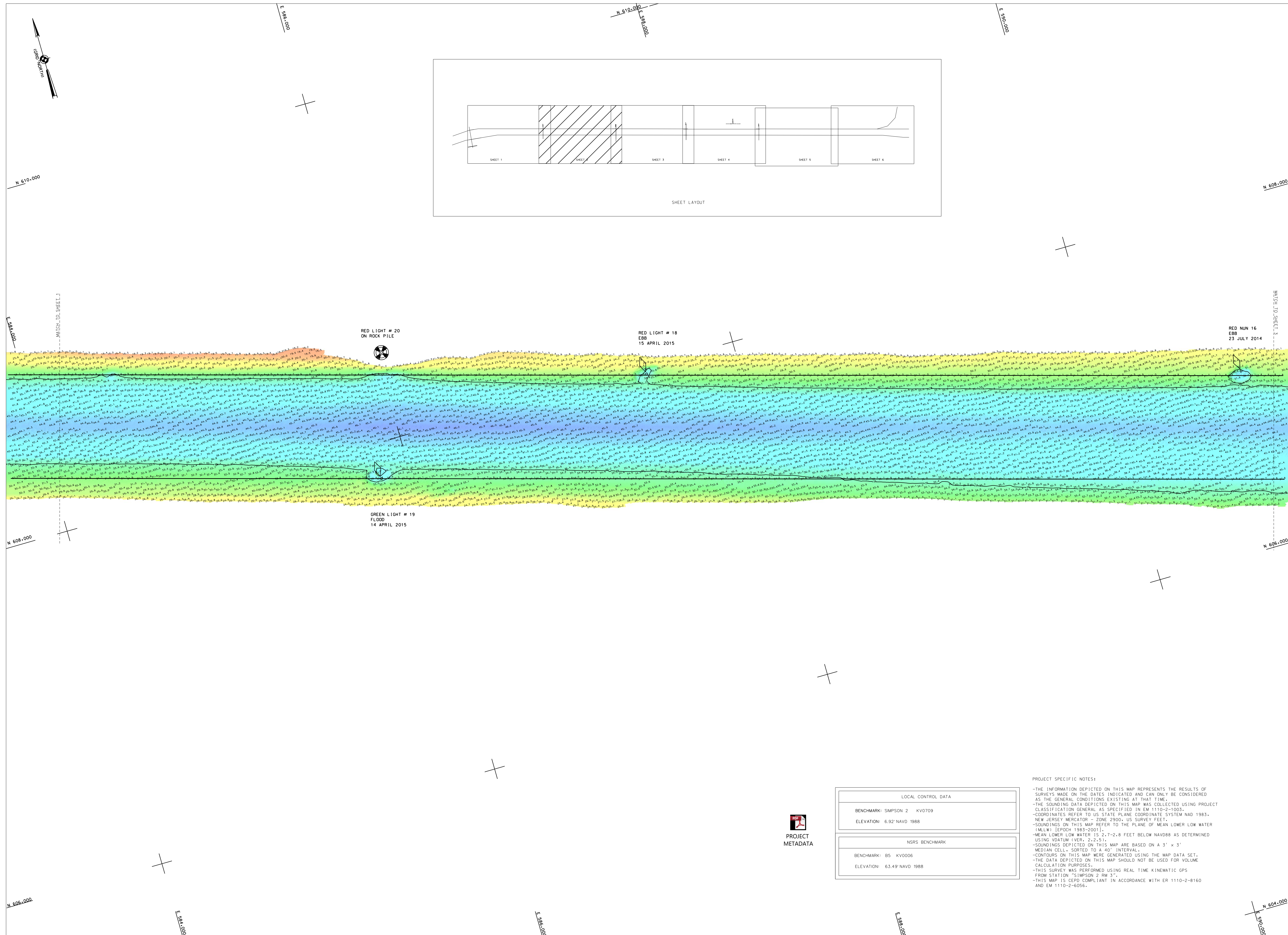
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
CONDITION SURVEY

VH-102

SHEET 2 OF 6

FILE NO. 1379
REQ. NO. 43220



[illegible]

SCALE: ONE INCH = 200 FEET	FIELD BOOKS:
DATES OF SURVEY: 9.13-16, APRIL 2015	FILE NO.: 1379 REQUEST NO.: 4320

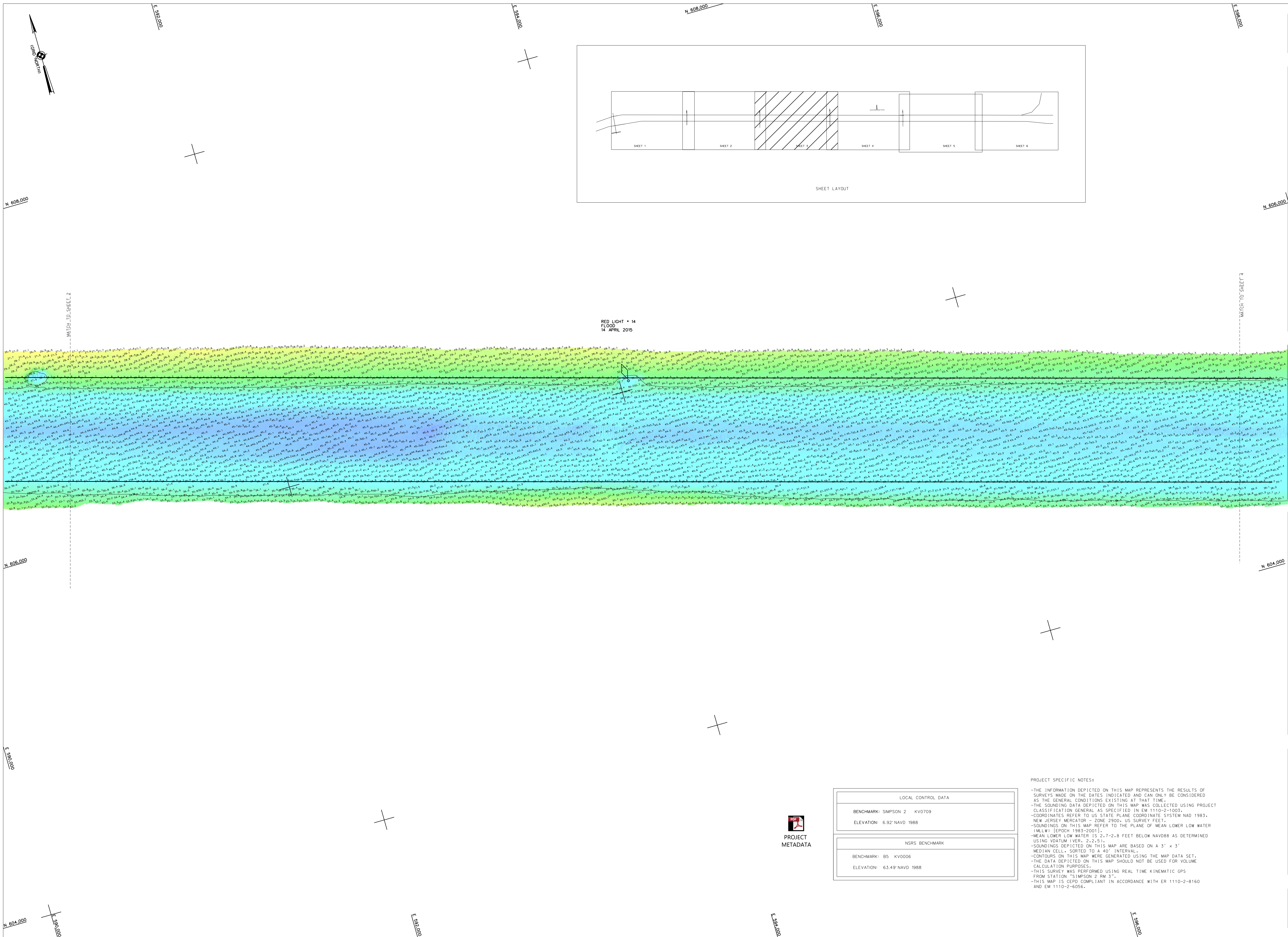
OPERATIONS DIVISION SURVEY SECTION CENAN-OP-S	DEPARTMENT OF THE ARMY ENGINEER REGIMENT CORPS OF ENGINEERS NEW YORK, NEW YORK 10278	APPROVED: D. SMITH DATE: 11/15/15 APPROVED: M. FORT DATE: 11/15/15 APPROVED: D. CLARKE DATE: 11/15/15 APPROVED: J. WRAZ DATE: 21 APR 2015
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NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
CONDITION SURVEY

/H-103

SHEET 3 OF 6

FILE NO. 1379
REQ. NO. 43220



PROJECT SPECIFIC NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A STUDY CONDUCTED BY THE U.S. ARMY CORPS OF ENGINEERS AND SHOULD BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING NOAA BUOY 46050, WHICH IS LOCATED AT 28° 15' N, 80° 50' W. THE LATITUDE AND LONGITUDE COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 83.

THE SOUNDING DATA WERE MEASURED IN METERS.

THE SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].

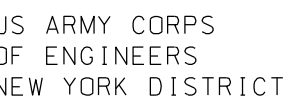
THE SOUNDING DEPTH MEASUREMENTS WERE 0.2, 2.8 FEET BELOW NAVD83 AS DETERMINED USING DATUM 1 (VER. 2.25).

THE SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' X 3' MEDIAN CELL, SORTED TO A 0.4' INTERVAL.

THE CONTOURS ON THIS MAP WERE GENERATED USING THE NOAA DATA SET "HYDROGRAPHIC SOUNDING DATA FOR THE GULF OF MEXICO" WHICH WAS USED FOR VOLUME CALCULATION PURPOSES.

THIS DRAWING WAS PREPARED USING REAL TIME KINEMATIC GPS FROM STATION "SIMPLANT 2 RM 3".

THIS MAP IS TO BE CONSIDERED IN ACCORDANCE WITH ER 1110-2-8160 AND ER 1110-2-6056.

[illegible]

FILE NO.: 1379
REQUEST NO.: 43220

SCALE:
ONE INCH = 200 FEET

FIELD BOOKS:

APPROVED: D. SMITH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 21 APRIL 2015

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

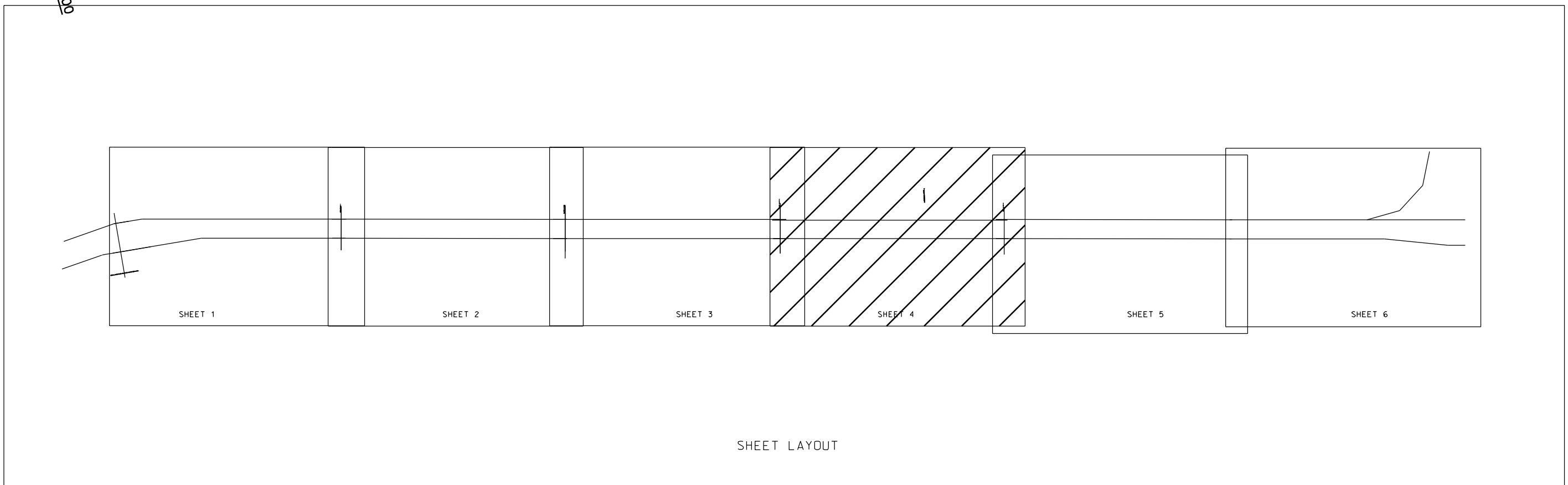
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
CONDITION SURVEY

VH-104

SHEET 4 OF 6

FILE NO. 1379
EO. NO. 43220



RED LIGHT • 10
FLOOD
13 APRIL 2015

GREEN LIGHT • 9
SLACK
13 APRIL 2015

PROJECT SPECIFIC NOTES:

[illegible]

LOCAL CONTROL

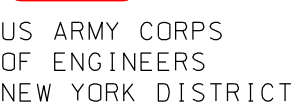
BENCHMARK: SIMPSON 2 KV0709

ELEVATION: 6.92' NAVD 1988

NSRS BENCHMARK

BENCHMARK: B5 KV0006

ELEVATION: 63.49' NAVD 1988

[illegible]

SCALE: ONE INCH = 200 FEET	DATES OF SURVEY: 9.13-16 APRIL 2015
FIELD BOOKS:	FILE NO. : 1379 REQUEST NO. : 43220

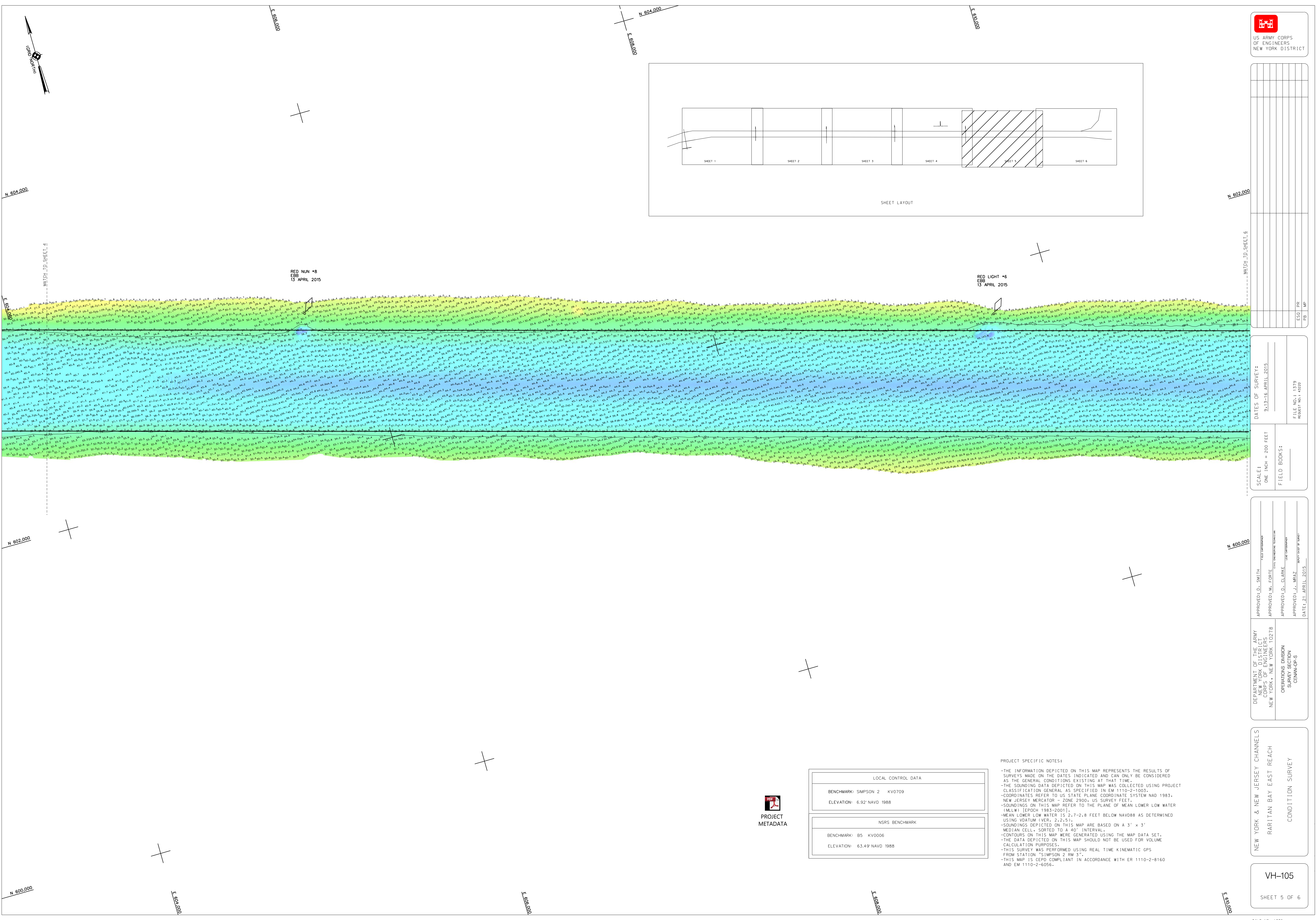
[illegible]

NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
CONDITION SURVEY

VH-105

SHEET 5 OF 6

FILE NO. 1379
REC. NO. 43220



PROJECT SPECIFIC NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL INFORMATION EXISTING AT THE TIME IT WAS OBTAINED.

2. THE GENERAL DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL, AS SPECIFIED IN ER 1110-2-1035, "SYSTEMS AND METHODS FOR DATA COLLECTION AND ANALYSIS OF SURVEY DATA", NED 1983, NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.

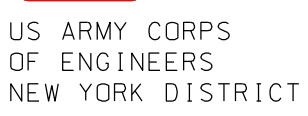
3. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) DATUM. MEAN LOWER LOW WATER IS 2.7-2.8 FEET BELOW NAVD83 AS DETERMINED USING NOAA'S 1988 DATUM CONVERSION SPECIFICATION (198001).

4. SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CELL, SORTED TO A 40' INTERVAL.

5. SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON THE MAP DATA SET. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.

6. THIS SURVEY WAS PERFORMED USING REAL TIME KINETIC GPS FROM STATION "SIMPSON 2 RM 3".

7. THIS MAP WAS PREPARED IN ACCORDANCE WITH ER 1110-2-8160 AND ER 1110-2-6056.

[illegible]

SCALE: ONE INCH = 200 FEET	DATES OF SURVEY: 9.13-16. APRIL 2015
FIELD BOOKS:	FILE NO.: 1379 REQUEST NO.: 43220

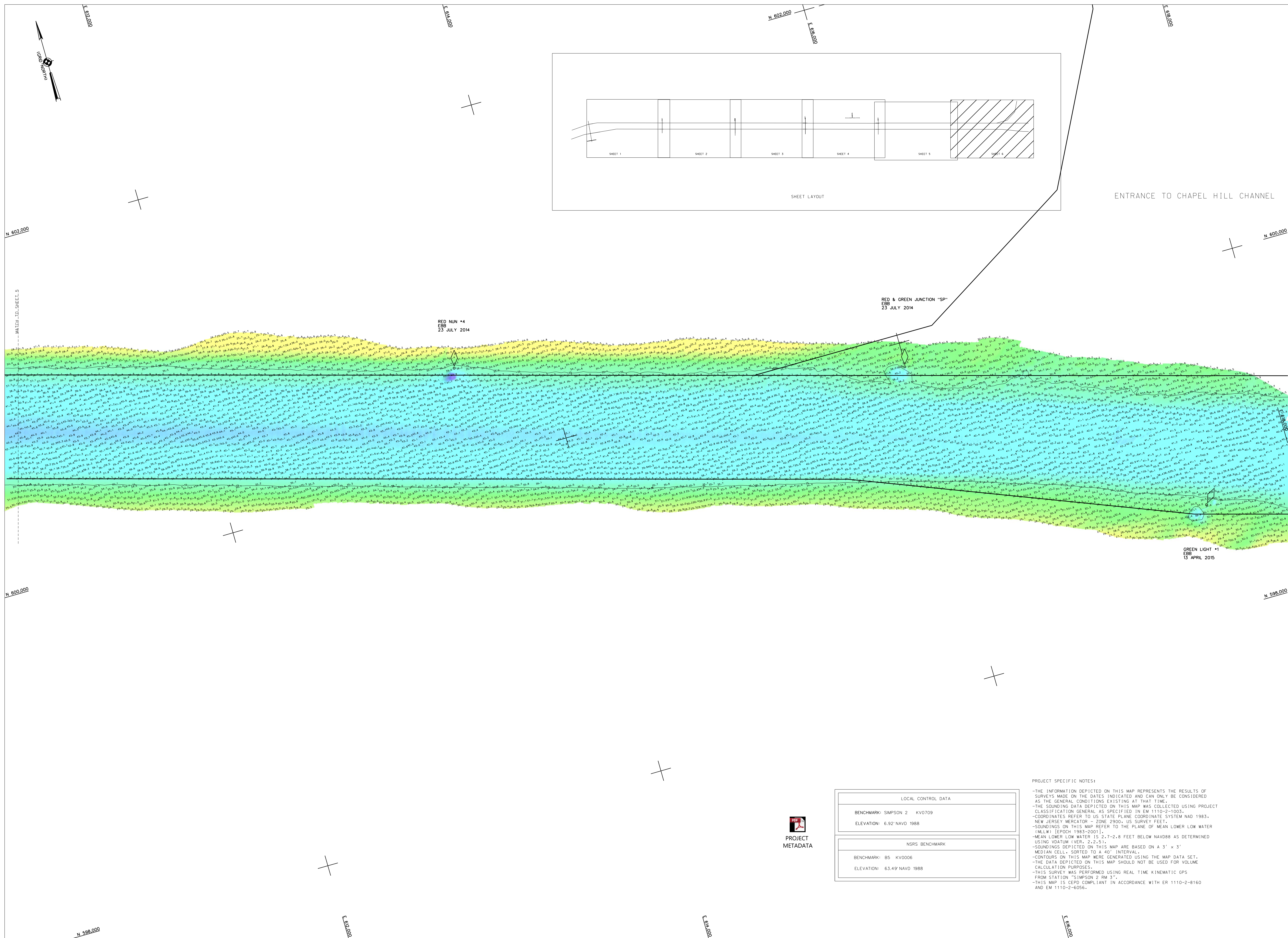
DEPARTMENT OF THE ARMY NEW YORK DISTRICT NEW YORK OFFICE NEW YORK, NEW YORK 10278	TEST CHARACTER: APPROVED: D. SMITH
OPERATIONS DIVISION SURVEY SECTION CENAP-0-S	CIVIL ENGINEERING SECTION TEST CHARACTER: APPROVED: M. FORTE
	TEST CHARACTER: APPROVED: J. J. NRAZ DATE: 21 APRIL 1965

NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
CONDITION SURVEY

VH-106

SHEET 6 OF 6

FILE NO. 1379
REQ. NO. 43220



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 A GUIDE TO GENERAL LOCATION OF DATA AT THAT TIME.
- THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL, AS SPECIFIED IN EM 1110-2-1003.
- SOUNDINGS WERE OBTAINED FROM THE NEW JERSEY STATE HYDROGRAPHIC SYSTEM NAD 1983, NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1984-2001].
- VERTICAL DATUM: 2.7-2.8 FEET BELOW NAVD83 AS DETERMINED USING DATUM (VME, 2.2,5).
- SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CELL - SORTED DATA INTERVAL.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINETIC GPS FROM STATION "SIMPSON 2 RM 3".
- THIS MAP IS IN COMPLIANCE IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.