[illegible]

SCALE: _____
ONE INCH = 100 FEET

FIELD BOOKS: _____
1020 _____

DATES OF SURVEY: _____
19_21-22, 26-27, 29, 30 OCT_2015

FILE NO.: 4401 N1
REQUEST NO.: 530

U.S. ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS

APPROVED: L. GEORGE / J. BERTOLLOTTI
FIELD COMMANDER

APPROVED: M. FORTE
CITY ENGINEERING FUNCTION

APPROVED: D. CLARKE
JOB COMMANDER

APPROVED: J. MARZ
SENIOR FIELD OFFICER

DATE: 12 NOVEMBER 2015.

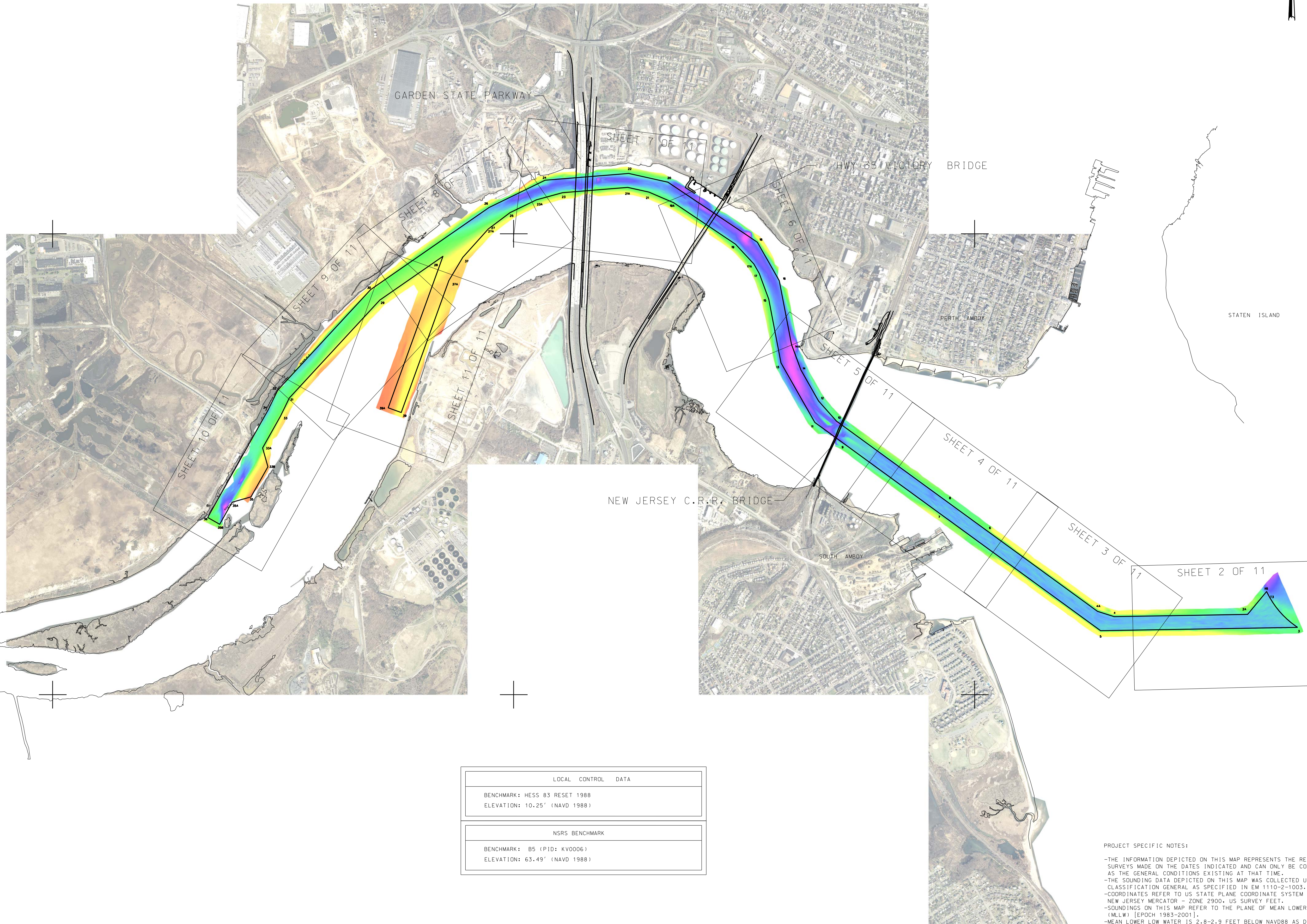
RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-101

HEET 1 OF 11

FILE NO. 4401 N1
REQ. NO. 530

RANITRIN RIVER			
EASTING	NORTHING	POINT ID	
562332.896	602237.683	X6	
561921.440	601741.950	2A	
562377.602	601535.063	73	
563006.270	601460.070	3	
590297.490	601693.550	4	
558665.930	601808.010	4A	
587322.040	601388.590	5	
562694.940	603356.868	6	
555236.714	603936.776	7	
551534.438	604179.174	8	
553155.840	605453.280	9	
553004.820	605935.130	10	
552533.540	605907.460	11	
526164.160	606372.610	12	
551799.070	607199.350	13	
523232.620	607043.720	14	
552027.930	607599.100	14A	
551534.230	607582.010	15	
551763.070	607582.010	16	
551329.320	609137.270	17	
551210.180	609346.430	17A	
551287.470	609816.800	18	
550812.690	609774.340	19	
549475.340	601072.550	19A	
549346.600	611120.370	20	
549346.600	610900.850	21	
548477.640	611003.330	22	
548496.540	611309.140	22A	
547062.360	610892.200	23	
546493.630	610736.740	23A	
546682.880	611162.470	24	
545920.310	610457.710	25	
545466.630	610507.510	26	
545466.630	610333.410	27	
544590.060	610103.330	27A	
544466.950	609511.860	28	
543096.680	608561.200	29	
542898.670	608788.920	30	
541134.390	606437.390	31	
540883.810	606608.220	32	
540945.550	606047.320	33	
540555.650	605353.610	33A	
540679.990	605103.330	34	
540679.560	605186.290	34B	
540302.710	604291.380	35	
539894.230	604176.860	35A	
539624.760	603697.450	35B	
539363.260	603844.420	36	
544897.390	609488.400	37	
544595.010	609893.140	37A	
543462.260	611222.060	39	
543280.080	606223.950	39A	



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 SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION SCHEMES SPECIFIED IN EM 1110-2-1003.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD83, NEW JERSEY MERCATOR - ZONE 2000, US SURVEY FEET.
- ELEVATIONS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 2-8.2-9 FEET BELOW NAVD83 AS DETERMINED USING UDOLM VERT. 3.01.
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' INTERVAL USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.
- SOUNDING DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- AERIAL IMAGERY PROVIDED BY NUGIN 2012-2013
- THE PLANNETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "BAZARDO HILLS".
- THIS MAP IS NOT TO BE USED IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.



[illegible]

0 OCT 2015

DATES OF SURVEY:
19.21.22.26.27.29.30

SCALE:
ONE INCH = 100

SCALE:
ONE INC

APPROVED: L. GEORGE / J. BERTOLUCCI
FIELD CARTOGRAPHER

NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

NEW YORK DIS-
CORPS OF ENG
NEW YORK. NEW YORK

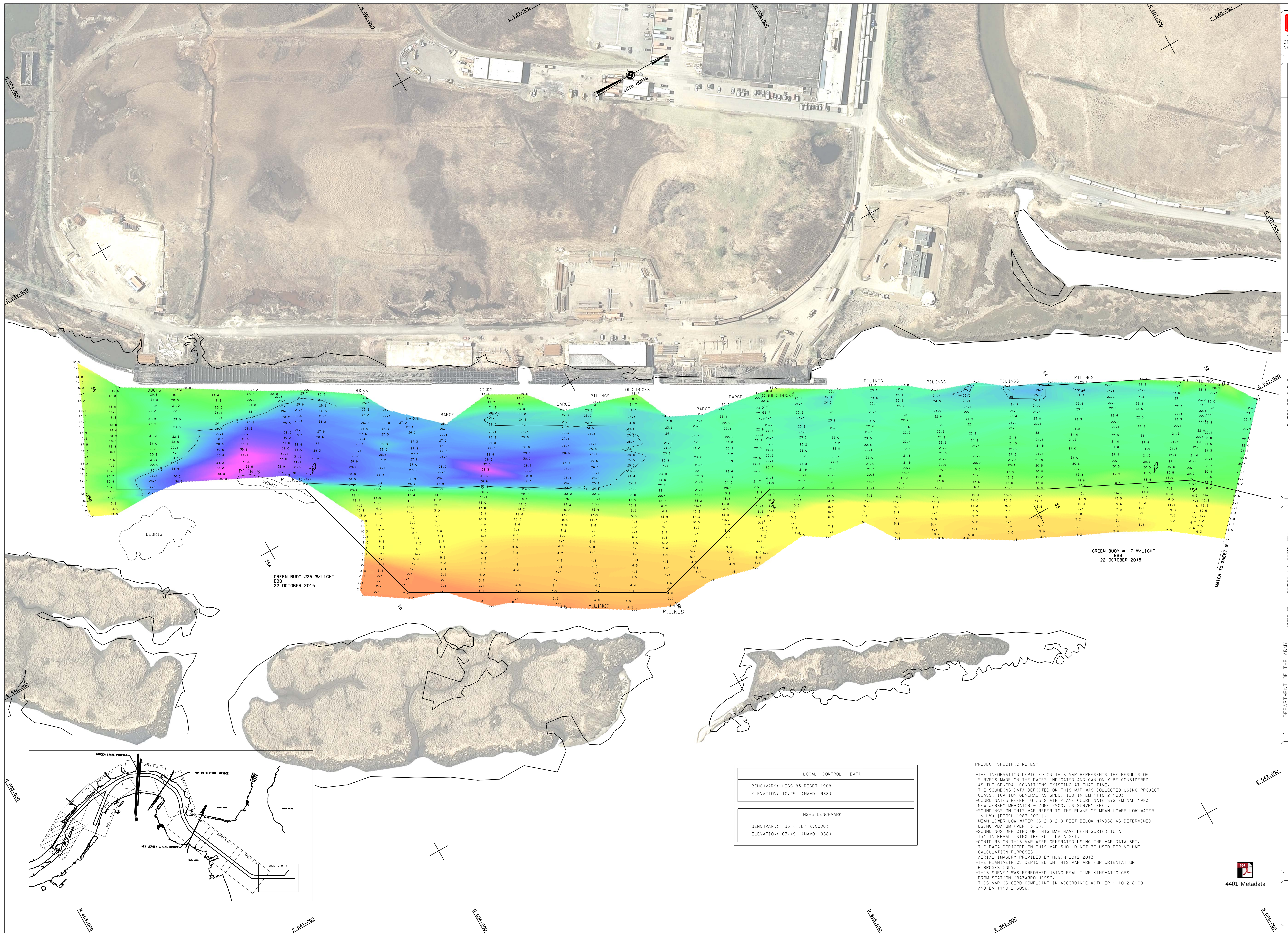
RARITAN RIVER

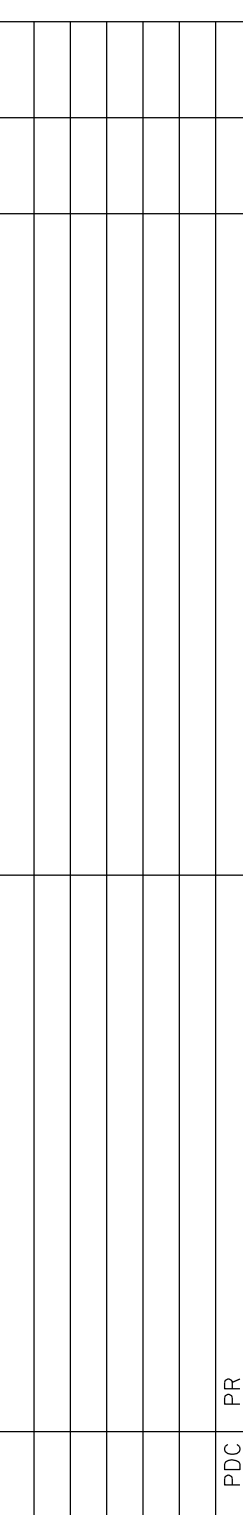
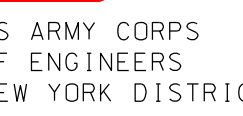
RARITAN RIVER

VH-110

SHEET 10 OF 11

FILE NO. 4401 N1
CO. NO. 630





SCALE: ONE INCH = 100 FEET

FIELD BOOKS:
1020

DATES OF SURVEY:
19-21-22-26-27-29-30 OCT 2015

FILE NO.: 4401 N1
PROJECT NO.: 530

APPROVED: L. GEORGE / J. BERTOLUCCI	PLANT COMMISSIONER
APPROVED: M. FORTE	CIVIL ENGINEERING SECTION
APPROVED: D. CLARKE	SEAL COMMISSIONER
APPROVED: J. MRAZ	SENIOR CHIEF OF SURVEY

NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

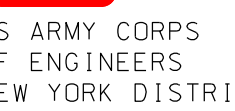
RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-109

FILE NO. 4401 M
REQ. NO. 530

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 SOUNDING DATA ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983.
- THE SOUNDING DATA ON THIS MAP WAS COLLECTED USING THE FOLLOWING:
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1989-2001].
- SOUNDING DATA ON THIS MAP WAS COLLECTED USING THE FOLLOWING:
- USING DATUM (VFM, 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' 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.
- AERIAL IMAGERY PROVIDED BY NGIN 2012-2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "BAZARO HEISS".
- THIS MAP IS CERTIFIED CORRELLANT IN ACCORDANCE WITH EM 1110-2-8160 AND EM 1110-2-6058.

[illegible]

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 1020

DATES OF SURVEY: 19-21-22-26-27-29-30 OCT 2015

FILE NO.: 4401 N1

APPROVED: L. GEORGE J. BERTOLUCCI
TITLE: CHIEF ENGINEER

APPROVED: M. FORTE
TITLE: CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
TITLE: CHIEF DESIGNER

APPROVED: J. MRAZ
TITLE: DESIGN CHIEF OF WORKS

NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

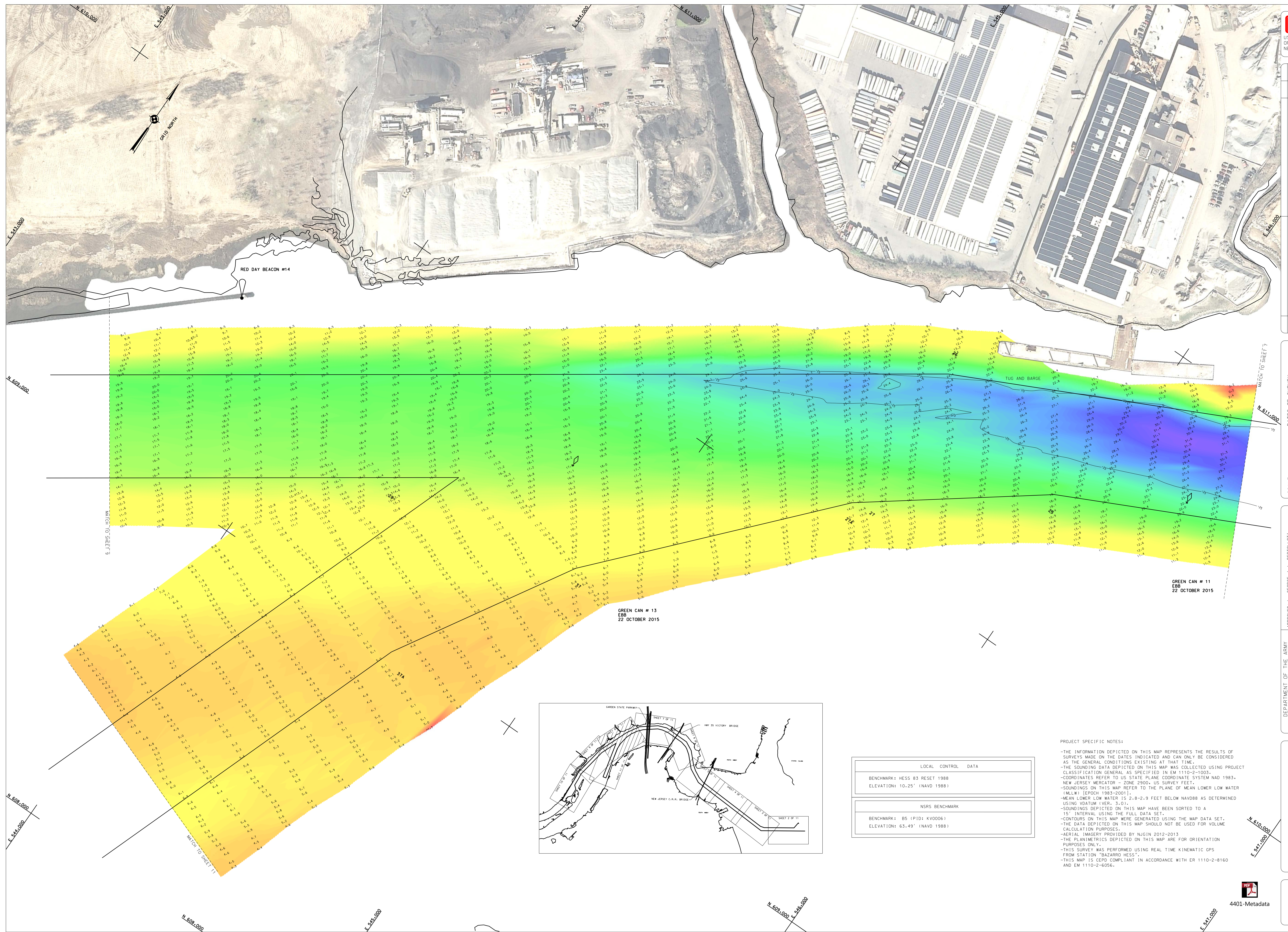
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

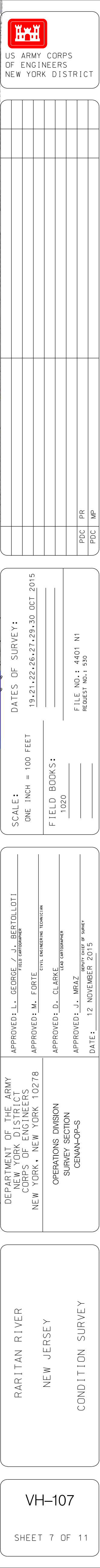
RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

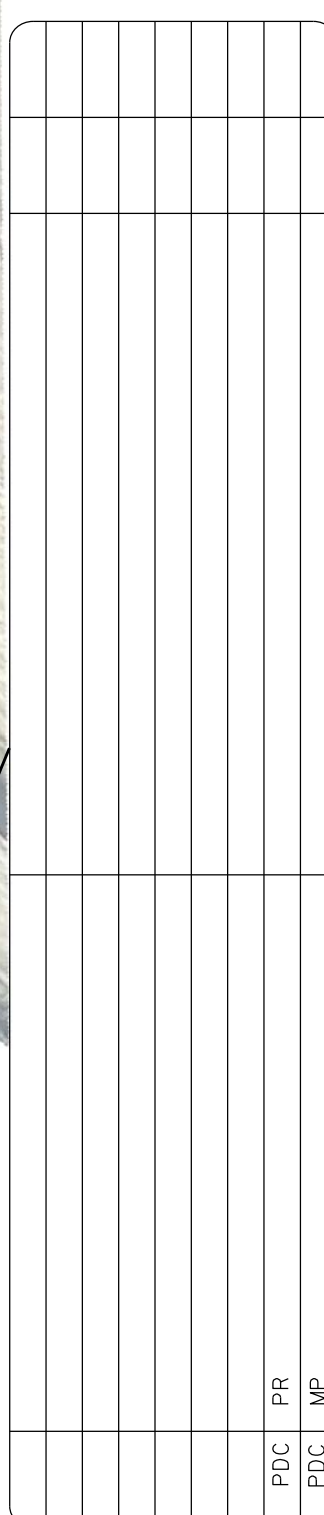
VH-108

SHEET 8 OF 1

FILE NO. 4401
REQ. NO. 530







APPROVED: L. GEORGE / J. BERTOLLOTTI
TITLE: LANDSCAPER

APPROVED: M. FORTE
TITLE: CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
TITLE: LANDSCAPER

APPROVED: J. MRAZ
TITLE: SENIOR CHIEF OF SURVEY

DATE: 12 NOVEMBER 2015

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

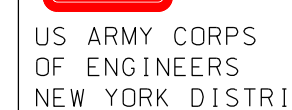
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-106

SHEET 6 OF 11

FILE NO. 4401 N
REQ. NO. 530

[illegible]

SCALE: _____
ONE INCH = 100 FEET

FIELD BOOKS: _____
1020 _____

DATES OF SURVEY: _____
19-21, 22-26, 27-29, 30 OCT 2015

FILE NO.: 4401 N1

APPROVED: L. GEORGE / J. BERTOLOTI
FIELD CADDRESSMAN

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CADDRESSMAN

APPROVED: J. MRAZ
PROPERTY MANAGER

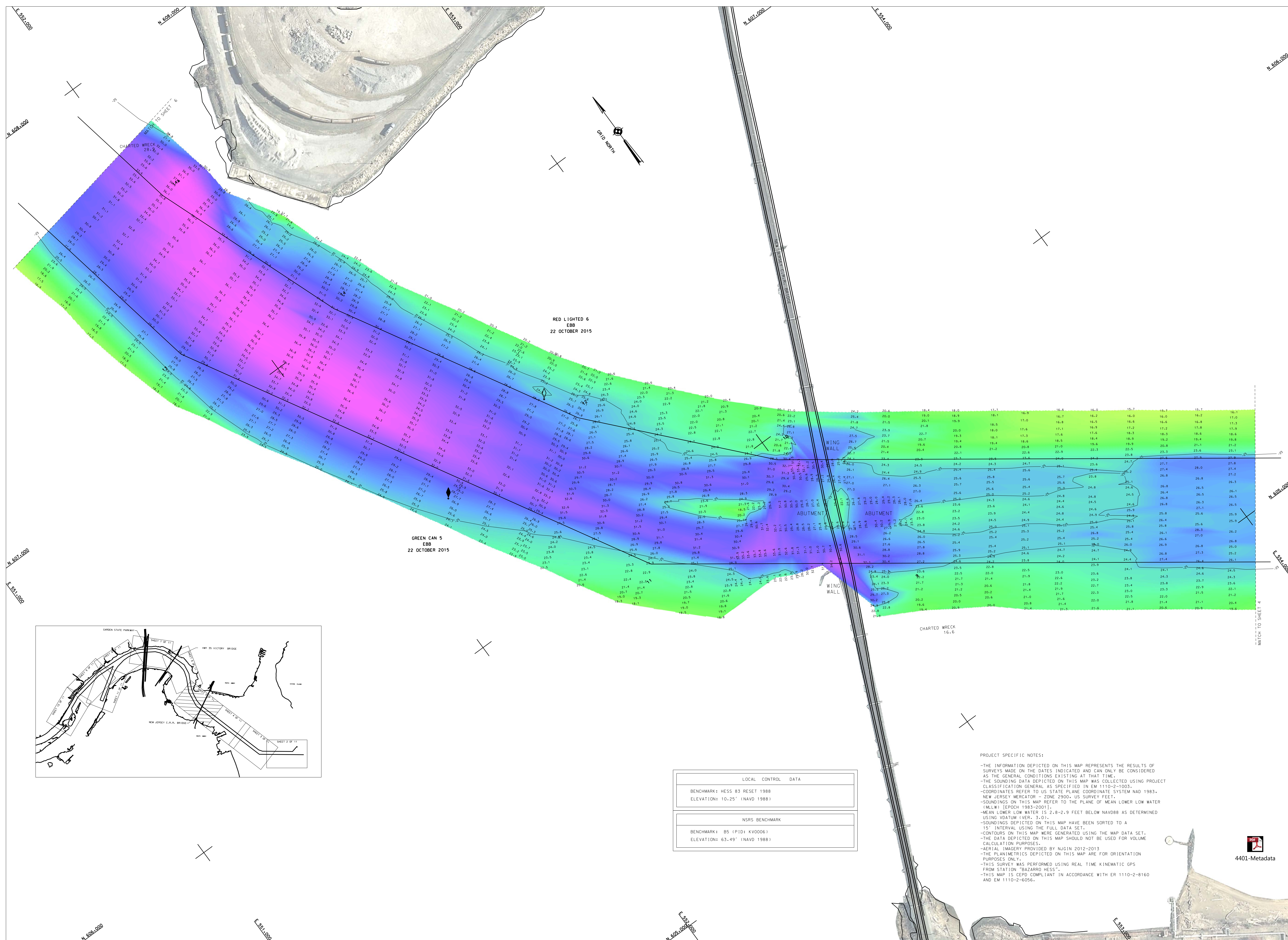
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

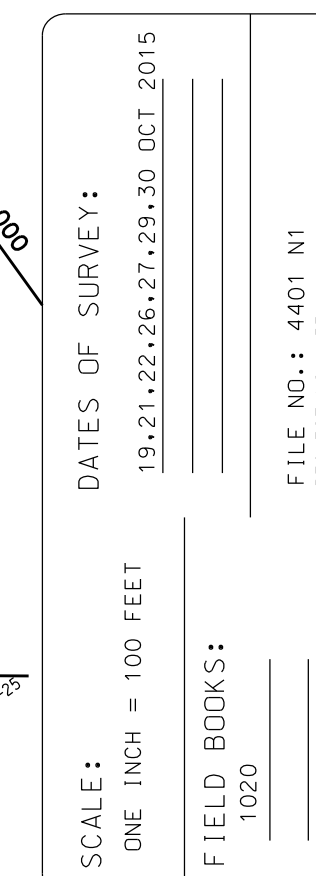
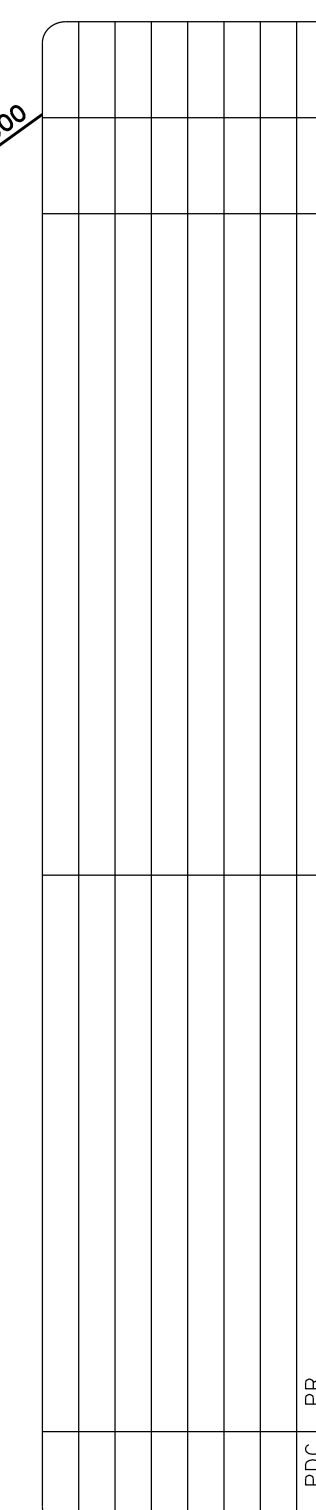
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

RARITAN RIVER
NEW JERSEY
CONDITION SURVEY

VH-105

SHEET 5 OF 1





APPROVED: L. GEORGE / J. BERTOLLOTTI
FIELD CHAIRSMAN

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CHAIRSMAN

APPROVED: J. MPAZ
REPRESENTATIVE OF THE PUBLIC

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 1

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 SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
- SOUNDINGS HAVE BEEN REFERRED TO U.S. STATE PLANE COORDINATE SYSTEM NAD 83, NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER AND MEAN HIGH LOW WATER.
- MEAN LOWER LOW WATER IS 2.8-2.9 FEET BELOW NAVD88 AS DETERMINED USING VDATUM IVER, 3.01.
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' INTERVAL USING THE GRID DATA SET.
- 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.
- AERIAL IMAGERY PROVIDED BY NGIN 2012-2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "BAZARRO HESS".
- THIS MAP IS CETO COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

[illegible]

DATE OF SURVEY: 19-21,22,26-27-29,30 OCT 2015

SCALE: ONE INCH = 100 FEET

FIELD BOOKS: 1020

FILE NO.: 4401 N1
REQUEST NO.: 530

APPROVED: W. FORTE CIVIL ENGINEERING TECHNICIAN
 APPROVED: D. CLARKE LEAD CONSTRUCTION
 APPROVED: J. MRAZ COUNTY CLERK OF SHERES
 DATE: 12 NOVEMBER 2015

NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

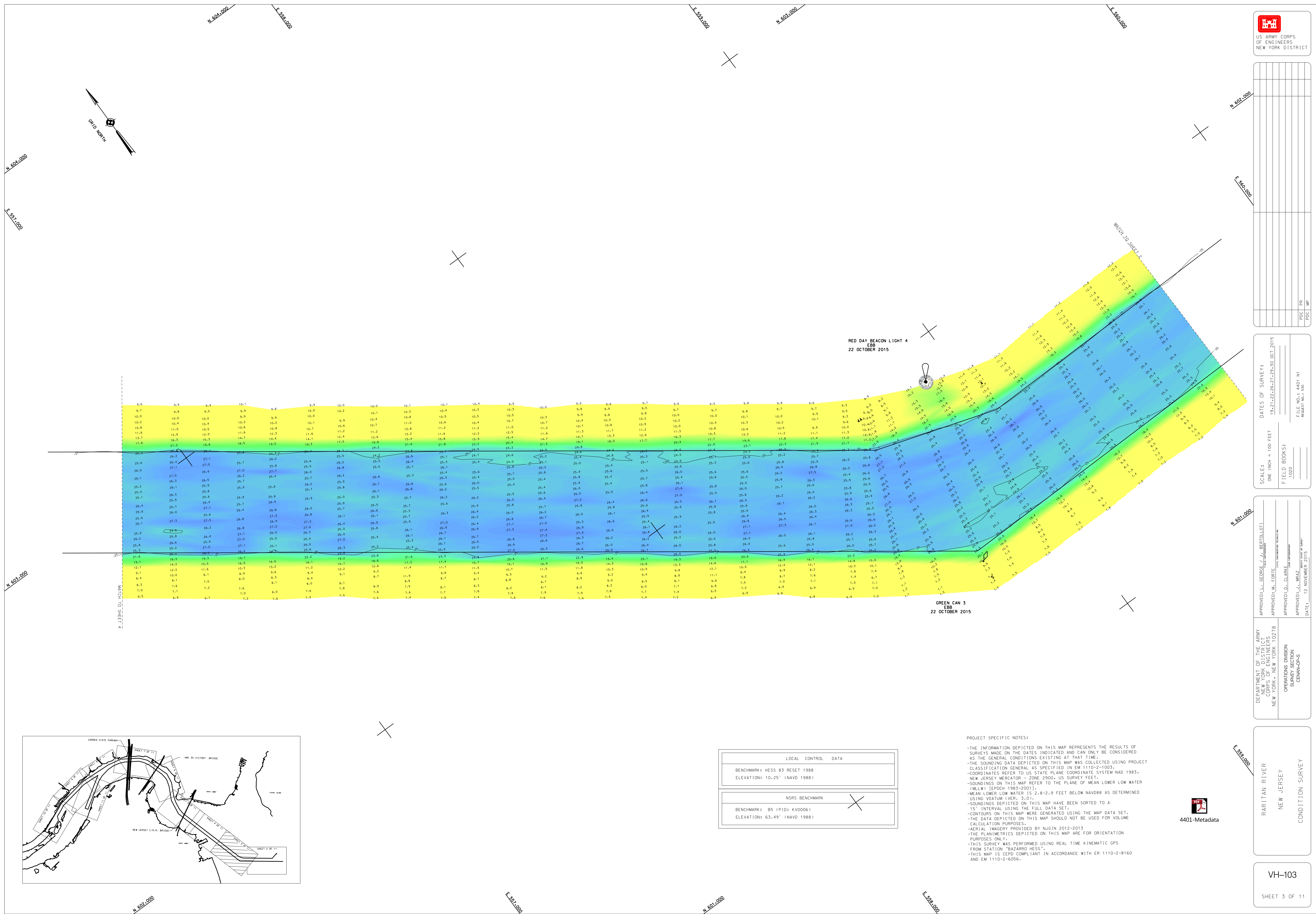
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

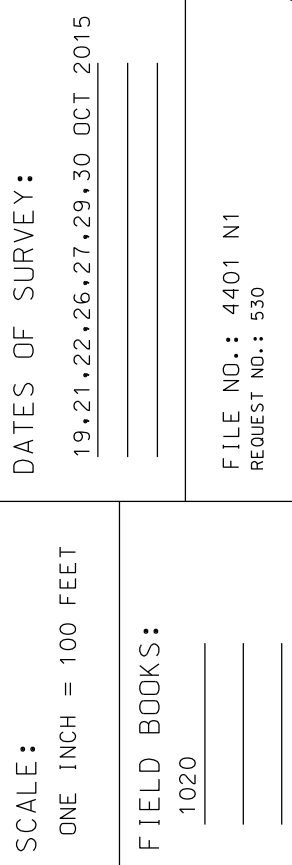
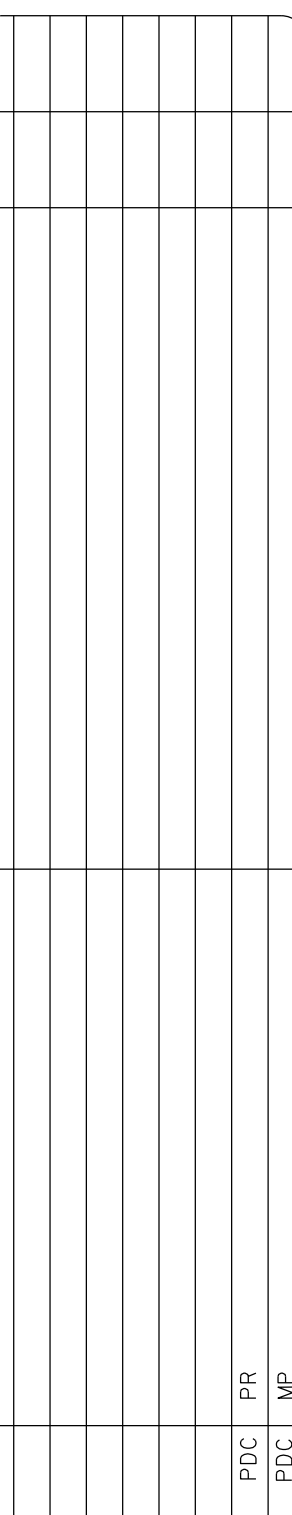
BARLIAN RIVER
NEW JERSEY
CONDITION SURVEY

H-103

SHEET 3 OF 11

E NO. 4401 N1





APPROVED: L. GEORGE / J. BERTOLLOTTI
FIELD CHARGEMAN

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: D. CLARKE
LEAD CHARGEMAN

APPROVED: J. MRAZ
CERTIFY CHIEF OF SURVEY

DATE: 12 NOVEMBER 2015

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. 4401 N1
REQ. NO. 530