

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

**OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S**

**APPROVED: D. SMITH / D. SWAIN
FILM SOURCE**

**APPROVED: M. FORTE
CHIEF ENGINEERING SECTION**

**APPROVED: D. CLARKE
100% CHECKED**

**APPROVED: F. POSTIGLIO
100% CHECKED**

DATE: 6 MAY 2013

**NEW YORK & NEW JERSEY CHANNELS
RARITAN BAY EAST REACH
PLANS AND SPEC SURVEY
(POST SANDY)**

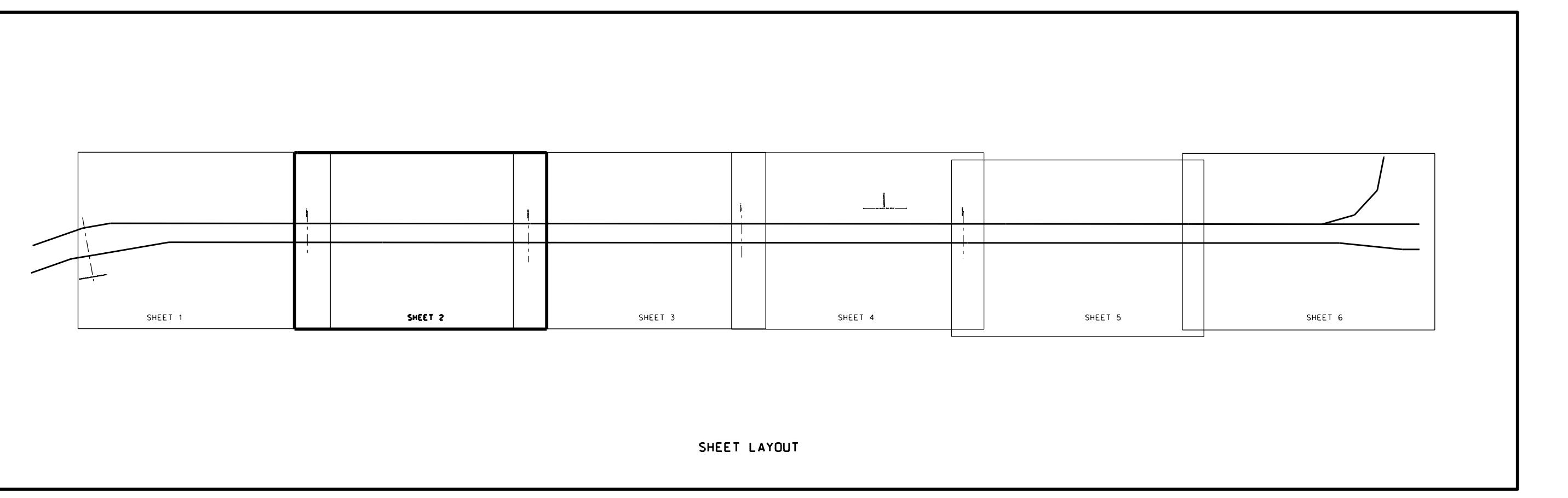
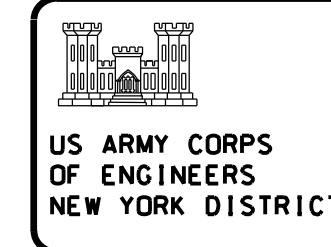
**VH-101
SHEET 1 OF 6**

PROJECT SPECIFIC NOTES:
 -THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
 -THE COORDINATES AND ELEVATIONS ARE UNADJUSTED AND UNRECTIFIED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
 -COORDINATES REFER TO THE STATE PLANE COORDINATE SYSTEM NAD 1983.
 -NEW YORK STATE PLANE 2011 CONVERSION PROVIDED BY NY DOB.
 -SOUNDINGS ON THIS MAP REFER TO THE PLANE OF C.O.E. MEAN LOW WATER.
 -THE PLANE OF C.O.E. MEAN LOW WATER IS 3.4' TO 3.5' FEET BELOW NAVD88.
 -THE PLANE OF C.O.E. MEAN LOW WATER IS 1.5' TO 2.0' FEET ABOVE OLD ORCHARD LIGHT.
 -THE PLANE OF C.O.E. MEAN LOW WATER IS 3.4' BELOW NAVD 1988.
 -THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.
 -SOUNDINGS WERE THINNED TO A 25' INTERVAL USING THE COMPLETE DATA SET.
 -CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.
 -THE DATA ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
 -THIS SURVEY WAS PERFORMED USING REAL TIME KINETIC GPS FROM STATION 'GK-1C'.
 -THIS MAP IS NOT CEPD COMPLIANT.

LOCAL CONTROL DATA

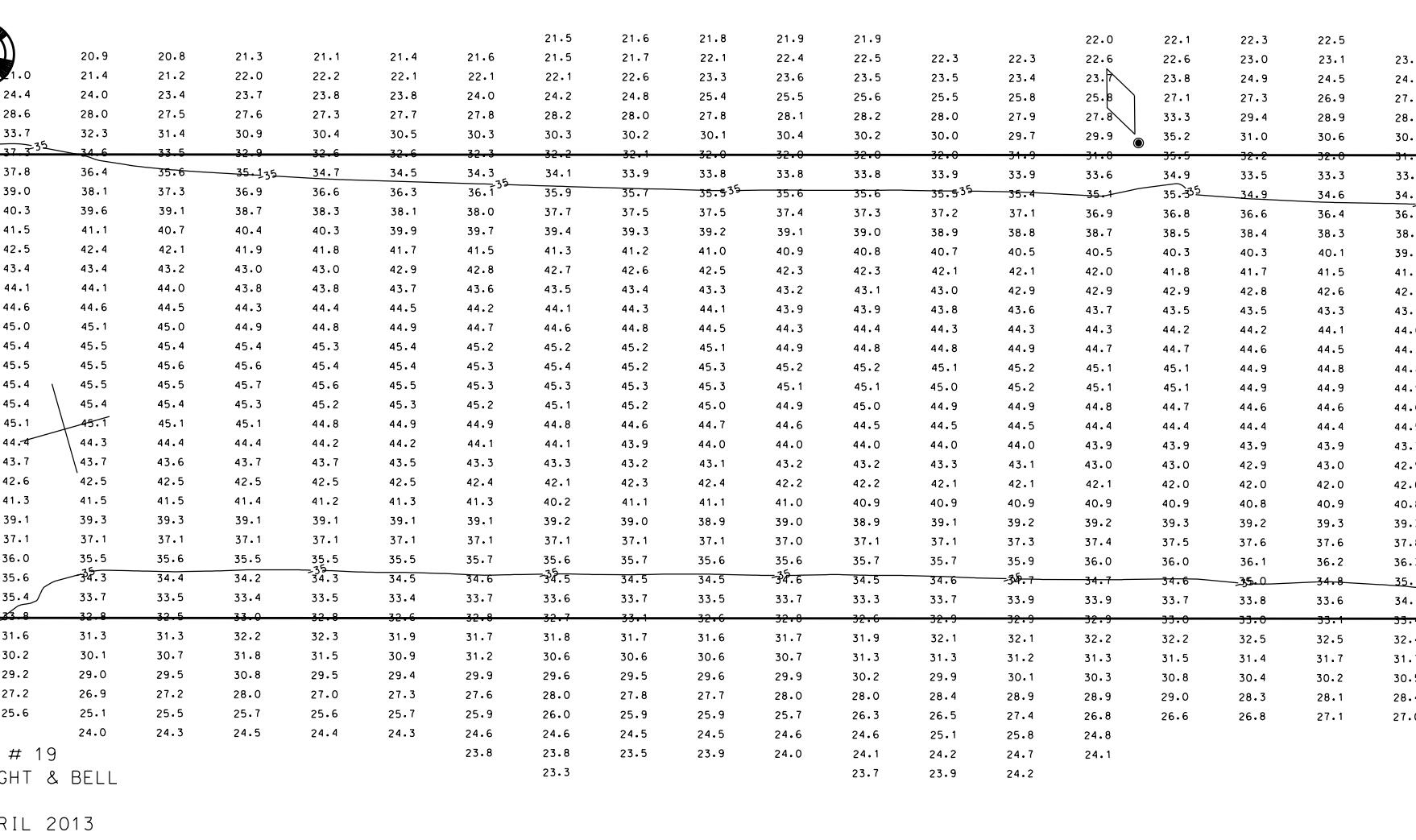
BENCHMARK: NICHOLLS
ELEVATION: 6.39' NAVD 1988

**VH-101
SHEET 1 OF 6**



**RED LIGHT # 18 W/ BELL
ON ROCK PILE**

RED # 18 W/ BELL
EBB
30 APRIL 2013



GREEN # 19
W/ LIGHT & BELL
EBB
30 APRIL 2013

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.

-CONTROLS REFER TO THE STATE PLANE COORDINATE SYSTEM NAV 1983, NEW JERSEY MERCATOR - ZONE 2900; US SURVEY FEET.

-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF C.O.E. MEAN LOW WATER.

-THE PLANE OF C.O.E. MEAN LOW WATER IS 3.4' TO 3.5' FEET BELOW NAVD 88.

-THE PLANE OF C.O.E. MEAN LOW WATER IS 15.4' BELOW NAVD 1988.

-FROM A LINE BETWEEN PT. COMFORT BEACON AND OLD ORCHARD LIGHT TO SEQUIN PT. THE PLANE OF C.O.E. MEAN LOW WATER IS 3.5' BELOW NAVD 1988.

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

-CONTROLS WERE THINNED TO A 2' INTERVAL USING THE COMPLETE 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.

-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "GND 2".

-THIS MAP IS NOT CEPO COMPLIANT.

DEPARTMENT OF THE ARMY APPROVED: D. SMITH/D. SWAIN NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, NY 10278
OPERATIONS DIVISION SURVEY SECTION CEMAN-G/S (POST SANDY)
PLANS AND SPEC SURVEY RARITAN BAY EAST REACH

VH-102
SHEET 2 OF 6

RED RUN 16 EBB 30 APRIL 2013
DATES OF SURVEY: 15-18-24-25-29-30 APR 2013
FILE NO.: 1335 RECEIVED: 5/1/2013

SCALE:
ONE INCH = 200 FEET

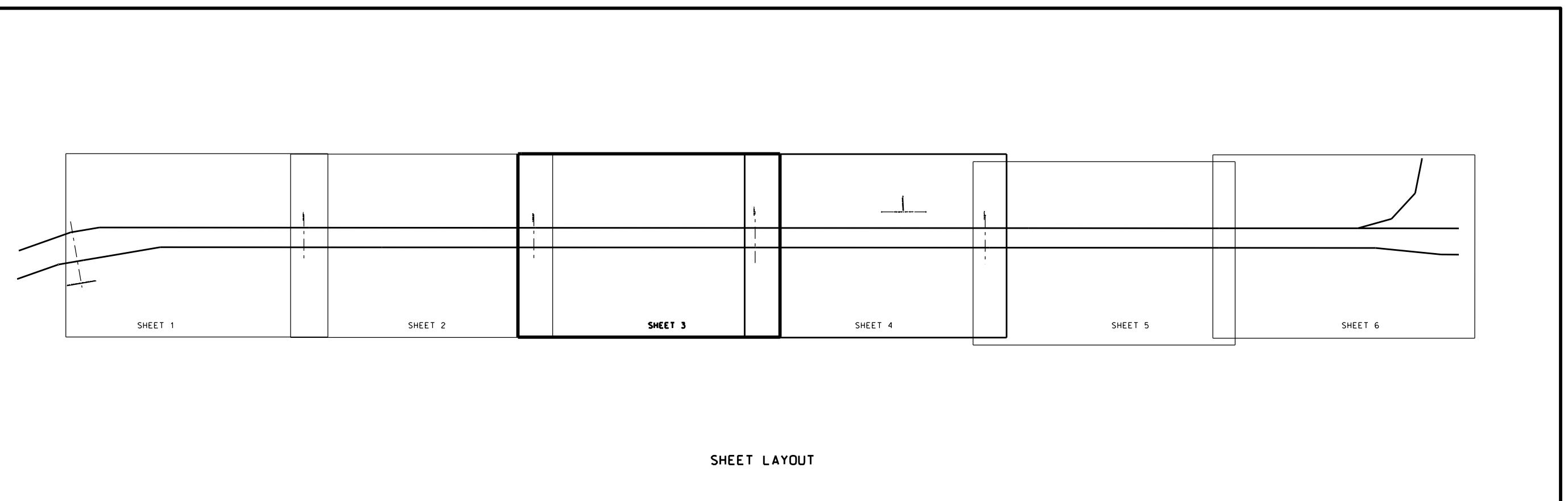
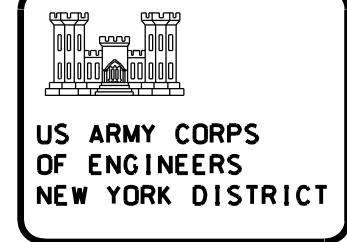
FIELD BOOKS:
943, 955

DATE: 6 MAY 2013

APPROVED: F. D. LARICE
APPROVED: G. D. MORAZ
APPROVED: D. LARICE
APPROVED: E. / /
DATE: 6 MAY 2013

1355
39740/N

N 610.000	N 608.000	N 608.000
000-985	000-985	000-985



SHEET LAYOUT

MATCH TO SHEET 2		MATCH TO SHEET 4	
<p>RED # 14 W/LIGHT & BELL EBS 30 APRIL 2013</p> <p>DATES OF SURVEY: 15-18-24-25-29-30 APR 2013</p> <p>FIELD BOOKS: SHEETS 1-6</p>			
<p>SCALE: ONE INCH = 200 FEET</p> <p>REMARKS: FILE NO. 1-135 REMARKS: No. 395-001</p>			

<p>DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, NEW YORK</p> <p>APPROVED: D. SMITH/D. SWAN TODAY APPROVED: M. FORTÉ CHIEF ENGINEER/CONTRACTOR</p> <p>OPERATIONS DIVISION SURVEY SECTION CENAN-DPS</p>	
<p>APPROVED: F. POSTIGLIONE / J. CLARKE TODAY APPROVED: G. HORN TODAY DATE: 6 MAY 2013</p>	

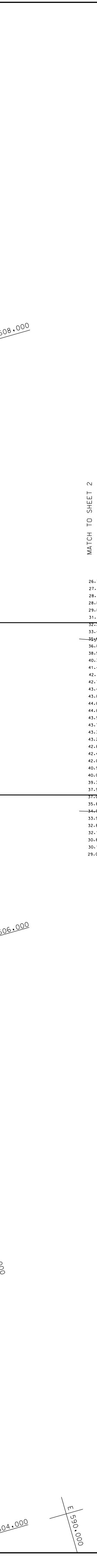
<p>NEW YORK & NEW JERSEY CHANNELS RARITAN BAY EAST REACH PLANS AND SPEC SURVEY (POST SANDY)</p>	
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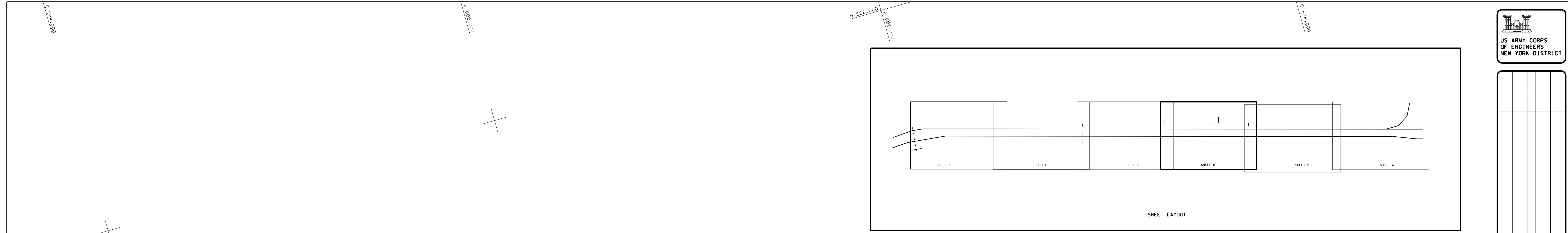
<p>VH-103</p> <p>SHEET 3 OF 6</p>

PROJECT SPECIFIC NOTES:

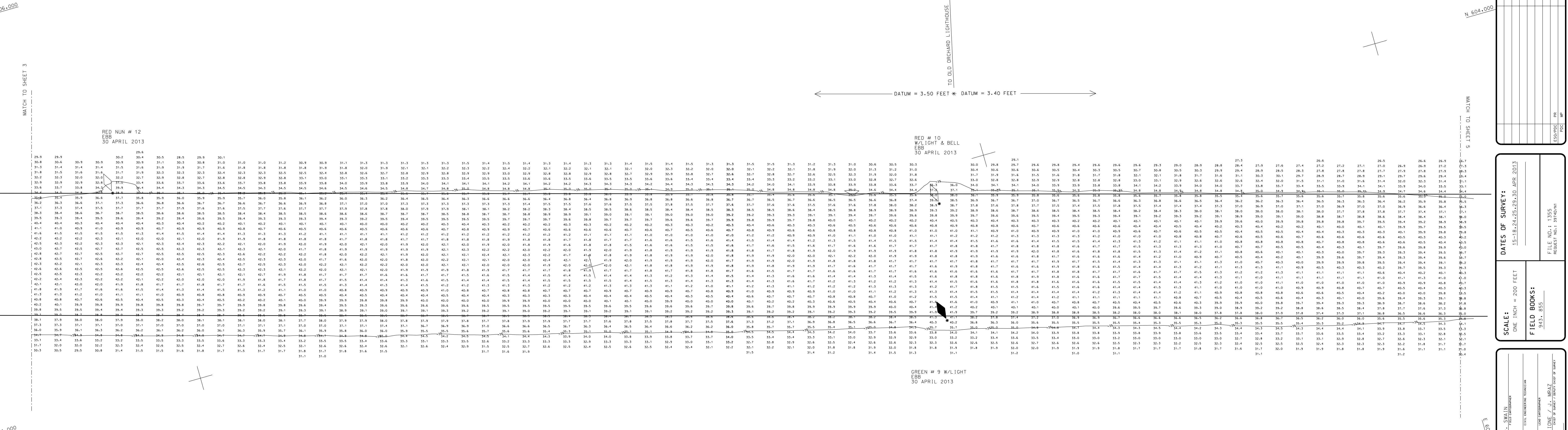
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as the general conditions existing at that time.
 The sounding data depicted on this map was collected using project specific assumptions and tools as specified in NAD 1983 UTM 1003.
 Conditions refer to the North American Vertical Datum System NAD 1983.
 NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.
 SOUNDINGS ON THIS MAP REFER TO THE PLANE OF C.O.E., MEAN LOW WATER.
 THE PLANE OF C.O.E., MEAN LOW WATER IS 3.4' TO 3.5' FEET BELOW NAVD88.
 THE PLANE OF COE MEAN LOW WATER IS 3.4' BELOW NAVD 1988.
 FROM PT. COMFORT BEACON AND OLD ORCHARD LIGHT
 TO SEQUE PT THE PLANE OF COE MEAN LOW WATER IS 3.5' BELOW NAVD 1988.
 THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.
 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.
 THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "C-12".
 THIS MAP IS NOT CEPO COMPLIANT.

LOCAL CONTROL DATA	
<p>BENCHMARK: NICHOLLS ELEVATION: 6.39' NAVD 1988</p>	





SHEET LAYOUT



TO OLD ORCHARD LIGHTHOUSE

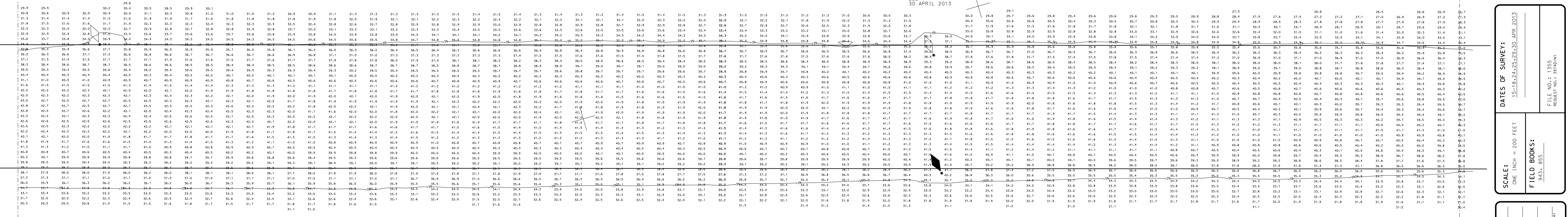
← DATUM = 3.50 FEET * DATUM = 3.40 FEET →

MATCH TO SHEET 3

RED RUN # 12

EBB

30 APRIL 2013

GREEN # 9 W/LIGHT
30 APRIL 2013

DATE OF SURVEY:	15-18-24-25-26-20 APR 2013
FIELD BOOKS:	943-805
REQUEST NO.:	13-34941
PCN:	PCN

SCALE:	ONE INCH = 200 FEET
APPROVED: D. SMITH / D. SMITH	APPROVED: M. FORTÉ / M. FORTÉ
OPERATIONS DIVISION	TECHNICAL SECTION
SURVEY SECTION	USACORPS
SENAH-EP-S	DATE: 6 MAY 2013

NEW YORK & NEW JERSEY CHANNELS	RARITAN BAY EAST REACH
PLANS AND SPEC SURVEY	(POST SANDY)

VH-104
SHEET 4 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 AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.

THE INFORMATION IS NOT TO BE USED FOR NAVIGATION OR MILITARY CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.

CONTURS REFER TO THE U.S. STATE PLANE COORDINATE SYSTEM NAD 1983.

NEW JERSEY MERCATOR PROJECTION SURVEY FEET.

SOUNDINGS ON THIS MAP REFER TO THE PLANE OF C.O.E., MEAN LOW WATER.

THE PLANE OF C.O.E. IS THE PLANE OF THE COASTAL ENGINEER BEACON,

FROM ENTRANCE TO A LINE BETWEEN PT COMPTON BEACON AND OLD ORCHARD LIGHT.

THE PLANE OF C.O.E. MEAN LOW WATER IS 3.5' BELOW NAVO 1988.

THIS SURVEY WAS PERFORMED USING RTK GPS.

SOUNDINGS WERE THINNED TO A 25' INTERVAL USING THE COMPLETE

DATA SET.

CONTURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.

THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VERTICAL SURVEYING.

CALIBRATION AND POSITIONING WERE NOT PERFORMED.

THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS.

FROM STATION "OK-12" TO THE END POINT.

THIS MAP IS NOT CEPD COMPLIANT.

LOCAL CONTROL DATA	
BENCHMARK: NICHOLLS	
ELEVATION: 6.39' NAVD 1988	

