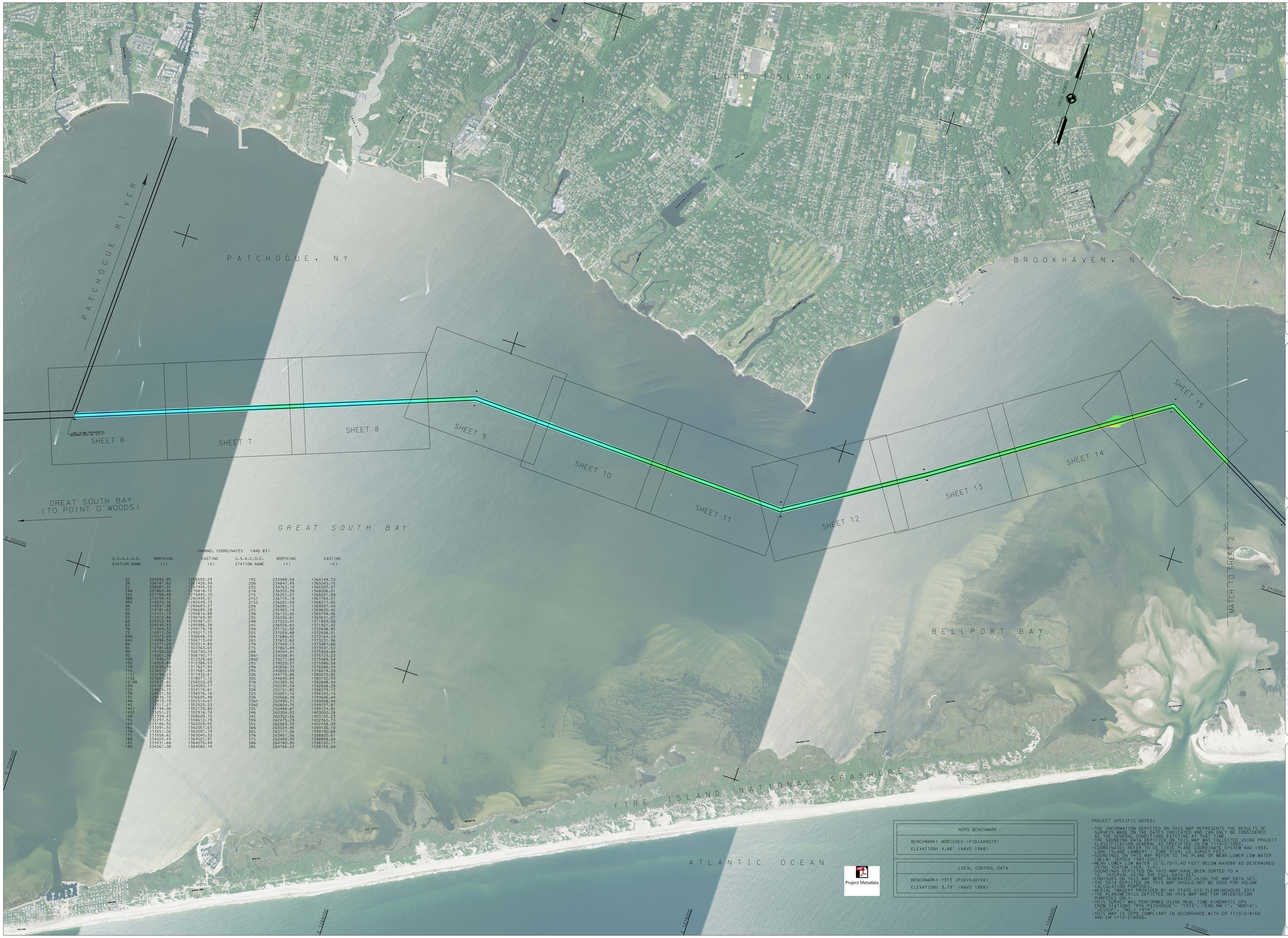
CORPS OF ENGINEERS

U. S. ARMY



CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
02	204092.85	1256555.29	19S	233988.58	1364144.70
2N	208187.62	1267428.99	20N	234847.49	1365043.15
3N	208989.01	1267445.52	20S	234763.19	1365097.97
3AN	207863.48	1267815.72	21N	236355.39	1368006.01
3BN	207154.48	1267684.70	21S	236243.15	1368124.51
3BS	210070.36	1280549.73	21S2	236705.84	1367754.83
4N	214297.98	1286683.37	22N	236085.13	1368317.65
4S	214181.60	1286689.28	22S	235983.19	1369600.42
5N	212101.19	1290816.88	23N	236132.05	1369799.96
5S	212012.88	1290769.95	23S	236036.61	1369831.07
6N	209353.44	1295987.01	24N	237023.41	1371885.00
6S	209240.53	1295986.58	24S	236926.83	1371921.42
7N	211004.33	1299179.78	25N	237152.92	1372648.85
7S	210911.36	1299217.70	25S	237059.88	1372698.01
8AN	215073.09	1306448.70	26N	237886.82	1373164.24
8AS	214986.54	1306713.04	26S	237612.60	1373231.96
8N	212271.29	1303314.89	27N	237949.13	1373487.86
8S	212181.64	1303363.65	27S	237863.89	1373541.52
9N	215150.02	1306740.24	28N	239094.41	1375909.84
9S	215061.36	1306790.17	28N1	239008.91	1375729.03
10N	217045.15	1312328.60	28N2	239277.84	1375889.54
10S	216959.88	1312388.53	28S	239020.07	1375986.58
11N	223699.98	1317627.94	29N	240656.33	1376588.44
11S	223607.15	1317681.84	29S	240602.99	1376674.30
11S1	223294.23	1317432.67	30N	244775.86	1380070.92
11S2	223667.56	1318077.12	30S	244693.84	1380132.53
12-S8	203972.82	1296520.29	31N	250385.92	1392648.94
12N	224702.86	1324093.17	31S	250285.04	1392668.28
12S	224605.15	1324115.61	32N	250151.82	1398379.13
13N	228834.30	1336576.16	32S	250051.16	1398393.15
13S	228735.79	1336614.98	33N	250488.20	1398408.94
14N	233019.79	1352514.67	33N1	250488.31	1398408.94
14S	233117.27	1352520.23	33N2	250694.76	1399124.87
14S1	233199.98	1352139.80	33S	250488.87	1399724.82
14S2	233251.22	1352916.74	34N	260304.93	1403000.28
15N	232599.43	1358609.70	34S	260302.56	1403105.23
15S	232297.52	1358612.79	35N	262475.29	1402360.70
16N	233186.50	1362024.55	35S	262563.39	1402438.99
16S	233091.50	1362057.63	36N	263024.95	1399136.10
17N	233561.00	1363001.74	36S	263117.06	1399150.89
17S	233558.62	1363040.32	37N	263451.56	1398800.61
18N	234020.44	1364021.91	37S	263489.45	1398898.04
18S	233931.68	1364070.49	38N	264780.90	1398700.17
19N	234067.08	1364082.74	38S	264788.43	1398799.89

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: Y373 (PID:KU0194)
ELEVATION: 3.79' (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.
-THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) EPOCH 1983-2001.
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM VERS. 4.0.
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A TOPOLOGICAL LEVEL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATIONS "RTK PATCHOGUE", "3373", "END RM 1", "MORIA", "JESSUP", "NO:1 1974".
-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

PR	ESD/RD	
WP	RD	

DATES OF SURVEY: 4 AUG 2015 – 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 1000 FEET

FIELD BOOKS:

APPROVED: M. APPELLO, J. BERTOLOTTI
CHIEF, CARTOGRAPHY

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
CHIF CARTOGRAPHER

APPROVED: J. MRAZ
BRANCH CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

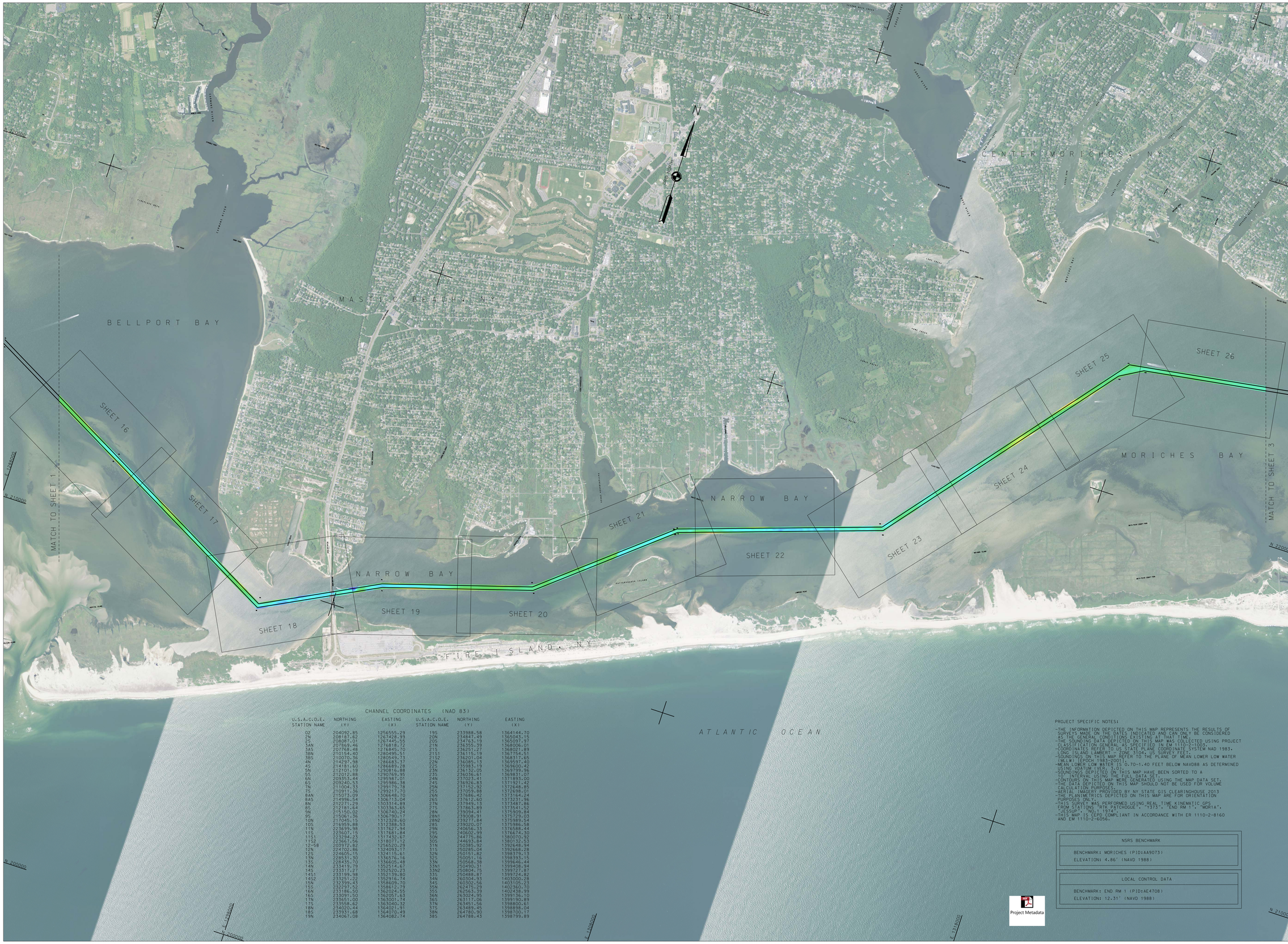
SHEET LAYOUT

CONDITION SURVEY

VH–101

SHEET 1 OF 55

FILE NO: 232
REQ NO: 4370A



CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
0Z	204092.85	1256555.29	19S	233988.58	1364144.70
2N	208187.62	1267428.39	20N	234847.49	1365043.15
2S	208087.01	1267445.55	20S	234763.19	1365097.97
3AN	207869.46	1276018.72	21N	236355.35	1368006.01
3AS	207768.48	1276845.70	21S	236251.27	1368021.89
3BN	210154.40	1280495.51	21S1	236115.19	1367754.51
3BS	210070.34	1280549.33	21S2	236201.04	1368317.65
4N	214297.98	1286683.37	22N	236085.13	1369597.40
4S	214181.60	1286689.28	22S	235983.19	1369600.42
5N	212101.19	1290816.88	23N	236132.05	1369799.96
5S	212012.88	1290769.35	23S	236036.61	1369831.07
6N	209353.44	1295987.01	24N	237023.41	1371893.00
6S	209240.53	1295986.38	24S	236926.83	1371921.42
7N	211004.33	1299179.78	25N	237152.92	1372648.85
7S	210911.36	1299217.70	25S	237059.88	1372698.01
8AN	215073.09	1306648.70	26N	237686.42	1373164.24
8AS	214986.54	1306713.04	26S	237612.60	1373231.96
8N	212271.29	1303314.89	27N	237949.13	1373487.86
8S	212181.64	1303363.65	27S	237863.89	1373541.52
9N	215150.02	1306740.24	28N	239094.41	1375909.84
9S	215061.36	1306790.17	28N1	239008.91	1375729.03
10N	217045.15	1312328.60	28N2	239277.84	1375889.54
10S	216959.88	1312384.53	28S	239020.07	1375986.58
11N	223699.98	1317627.94	29N	240656.33	1376588.44
11S	223607.15	1317681.84	29S	240602.99	1376674.30
11S1	232294.23	1317432.67	30N	244775.86	1380070.52
11S2	223667.56	1318077.12	30S	244633.84	1380132.53
12-58	209975.82	1256320.29	31N	250385.92	1392648.94
12N	224702.86	1324093.17	31S	250285.04	1392668.28
12S	224605.15	1324115.61	32N	250151.82	1398319.13
13N	228531.30	1336576.16	32S	250051.16	1398393.15
13S	228435.70	1336605.48	33N	250568.38	1399646.44
14N	233419.79	1352514.67	33N1	250490.31	1399408.94
14S	233317.27	1352520.23	33N2	250804.75	1399727.87
14S1	233199.98	1352139.80	33S	250488.87	1399724.82
14S2	233251.22	1352916.74	34N	260304.93	1403000.28
15N	232399.43	1358609.70	34S	260302.56	1403105.23
15S	232297.52	1358612.79	35N	262475.29	1402360.70
16N	233186.50	1362024.55	35S	262563.39	1402438.99
16S	233091.50	1362057.63	36N	263024.95	1399136.10
17N	233651.00	1363001.74	36S	263117.06	1399190.89
17S	233558.62	1363040.32	37N	263451.56	1398800.61
18N	234020.44	1364021.91	37S	263489.45	1398898.04
18S	233931.68	1364070.49	38N	264780.90	1398700.17
19N	234067.08	1364082.74	38S	264788.43	1398799.89

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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATIONS "RTK PATCHOGUE", "Y373", "END RM 1", "MORIA", "JESSUP", "NG: 1 1974".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (NAVD 1988)

Project Metadata

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	ESG/RD	
WP	RD	

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 1000 FEET

FIELD BOOKS:

APPROVED: M. APPELLO, J. BERTOLOTTI
FIELD CONDUCTOR

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
CHIEF CARTOGRAPHER

APPROVED: J. MRAZ
BRANCH CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

SHEET LAYOUT

CONDITION SURVEY

VH-102

SHEET 2 OF 55

CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
0Z	204092.85	1256555.29	19S	233988.58	1364144.70
0N	208187.62	1267428.99	20N	234847.49	1365043.15
2S	208087.01	1267445.55	20S	234763.19	1365097.97
3AN	207869.46	1276818.72	21N	236355.39	1368006.01
3AS	207768.48	1276845.70	21S	236251.27	1368021.89
3BN	210154.40	1280495.51	21S1	236115.19	1367754.51
3BS	210070.36	1280549.73	21S2	236201.04	1368317.65
4N	214297.98	1286681.37	22N	236085.13	1369957.40
4S	214181.60	1286689.28	22S	235983.19	1369600.42
5N	212101.19	1290816.88	23N	236132.05	1369799.96
5S	212012.88	1290769.95	23S	236036.61	1369831.07
6N	209353.44	1295987.01	24N	237023.41	1371893.00
6S	209240.53	1295986.38	24S	236926.83	1371921.42
7N	211004.33	1299179.78	25N	237152.92	1372648.85
7S	210911.36	1299217.70	25S	237059.88	1372698.01
8AN	215073.09	1306648.70	26N	237366.42	1373164.24
8AS	214996.54	1306713.04	26S	237612.60	1373231.96
8N	212231.29	1303314.89	27N	237849.13	1373487.86
8S	212181.64	1303363.63	27S	237863.83	1373541.52
9N	215150.02	1306740.24	28N	239094.41	1375909.84
9S	215061.96	1306790.17	28N1	239008.91	1375723.03
10N	217045.15	1312328.60	28N2	239277.84	1375989.54
10S	216959.88	1312388.53	28S	239020.07	1375986.58
11N	223699.98	1317627.94	29N	240656.33	1376588.44
11S	223607.15	1317681.84	29S	240602.99	1376674.30
11S1	223294.23	1317432.67	30N	244775.86	1380070.92
11S2	223667.56	1318017.12	30S	244693.84	1380132.53
12-58	203972.82	1256520.29	31N	250385.92	1392648.94
12N	224702.85	1324093.17	31S	250285.04	1392668.28
12S	224605.15	1324115.61	32N	250151.82	1398379.13
13N	228511.30	1336576.16	32S	250051.16	1398393.15
13S	228435.70	1336605.48	33N	250568.38	1399646.44
14N	233419.79	1352514.67	33N1	250490.31	1399408.94
14S	233317.27	1352520.23	33N2	250804.75	1399727.87
14S1	233195.98	1352139.80	33S	250484.87	1399724.82
14S2	233251.22	1352816.74	34N	260304.93	1403000.28
15N	232399.43	1358609.70	34S	260302.56	1403105.23
15S	232297.52	1358612.79	35N	262475.29	1402360.70
16N	233186.50	1362024.65	35S	262561.39	1402438.99
16S	233091.50	1362057.63	36N	263024.95	1399136.10
17N	233651.00	1363001.14	36S	263117.06	1399190.89
17S	233568.62	1363040.32	37N	263451.56	1398800.61
18N	234020.44	1364021.91	37S	263489.45	1398898.04
18S	233931.68	1364070.49	38N	264780.50	1398700.17
19N	234067.08	1364082.74	38S	264788.43	1398799.89

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATIONS "RTK PATCHOGUE", "5373", "END RM 1", "MOR1A", "JESSUP", "NO:1 1974".
-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

PM	EGO/RD	
WP	RD	

DATES OF SURVEY: 4 AUG 2015 – 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 1000 FEET

FIELD BOOKS:

APPROVED: M. APPELBO. J. BERTOTTI
CHIEF, ENGINEERING DIVISION

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
CHIEF CARTOGRAPHER

APPROVED: J. MRAZ
BRANCH CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

SHEET LAYOUT

CONDITION SURVEY

VH-103

SHEET 3 OF 55

FILE NO: 232
REQ NO: 4370A

CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.28	21S1	236115.19	1367754.51
5N	212101.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236085.13	1369597.40
6N	209353.44	1295987.01	22S	235983.19	1369600.42
6S	209240.53	1295986.38	23N	236132.05	1369799.96
7N	211004.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.70	24N	237023.41	1371893.00
8AN	215073.09	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.01
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215150.02	1306740.24	26S	237612.60	1373231.96
9S	215061.36	1306790.17	27N	237949.13	1373487.86
10N	217045.15	1312328.60	27S	237863.89	1373541.52
10S	216959.88	1312388.53	28N	239094.41	1375909.84
11N	223699.98	1317627.94	28N1	239008.91	1375729.03
11S	223607.15	1317681.84	28N2	239277.84	1375989.54
11S1	223294.23	1317432.67	28S	239020.07	1375986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240602.99	1376674.30
12S	224605.15	1324115.61	30N	244775.86	1380070.92
13N	228531.30	1336576.16	30S	244693.84	1380132.53
13S	228435.70	1336605.48	31N	250385.92	1392648.94
14N	233419.79	1352514.67	31S	250285.04	1392668.28
14S	233317.27	1352520.23	32N	250151.82	1398379.13
14S1	233199.98	1352139.80	32S	250051.16	1398393.15
14S2	233251.22	1352916.74	33N	250568.38	1399646.44
15N	232399.43	1358609.70	33N1	250490.31	1399408.94
15S	232297.52	1358612.79	33N2	250804.75	1399727.87
16N	233186.50	1362024.55	33S	250488.87	1399724.82
16S	233091.50	1362057.63	34N	260304.93	1403000.28
17N	233651.00	1363001.74	34S	260302.56	1403105.23
17S	233558.62	1363040.32	35N	262475.29	1402360.70
18N	234020.44	1364021.91	35S	262563.39	1402438.99
18S	233931.68	1364070.49	36N	263024.95	1399136.10
19N	234067.08	1364082.74	36S	263117.06	1399190.89
19S	233988.58	1364144.70	37N	263451.56	1398800.61
20N	234847.49	1365043.15	37S	263489.45	1398898.04
20S	234763.19	1365097.97	38N	264780.90	1398700.17
21N	236355.39	1368006.01	38S	264788.43	1398799.89
21S	236251.27	1368021.89			

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: JESS 2015
ELEVATION: 9.64' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATIONS "RTK PAHOGUE", "Y373", "END RM 1", "MOR1A", "JESSUP", "NO.1 1974".
- 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

PR ESO/RD
MP RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 1000 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

SHEET LAYOUT

CONDITION SURVEY

VH-104

FILE NO: 232
REQ NO: 4370A

CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.28	21S1	236115.19	1367754.51
5N	212101.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236085.13	1369597.40
6N	209353.44	1295987.01	22S	235983.19	1369600.42
6S	209240.53	1295986.38	23N	236132.05	1369799.96
7N	211004.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.70	24N	237023.41	1371893.00
8AN	215073.09	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.01
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215150.02	1306740.24	26S	237612.60	1373231.96
9S	215061.36	1306790.17	27N	237949.13	1373487.86
10N	217045.15	1312328.60	27S	237863.89	1373541.52
10S	216959.88	1312388.53	28N	239094.41	1375909.84
11N	223699.98	1317627.94	28N1	239008.91	1375729.03
11S	223607.15	1317681.84	28N2	239277.84	1375989.54
11S1	223294.23	1317432.67	28S	239020.07	1375986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240602.99	1376674.30
12S	224605.15	1324115.61	30N	244775.86	1380070.92
13N	228531.30	1336576.16	30S	244693.84	1380132.53
13S	228435.70	1336605.48	31N	250385.92	1392648.94
14N	233419.79	1352514.67	31S	250285.04	1392668.28
14S	233317.27	1352520.23	32N	250151.82	1398379.13
14S1	233199.98	1352139.80	32S	250051.16	1398393.15
14S2	233251.22	1352916.74	33N	250568.38	1399646.44
15N	232399.43	1358609.70	33N1	250490.31	1399408.94
15S	232297.52	1358612.79	33N2	250804.75	1399727.87
16N	233186.50	1362024.55	33S	250488.87	1399724.82
16S	233091.50	1362057.63	34N	260304.93	1403000.28
17N	233651.00	1363001.74	34S	260302.56	1403105.23
17S	233558.62	1363040.32	35N	262475.29	1402360.70
18N	234020.44	1364021.91	35S	262563.39	1402438.99
18S	233931.68	1364070.49	36N	263024.95	1399136.10
19N	234067.08	1364082.74	36S	263117.06	1399190.89
19S	233988.58	1364144.70	37N	263451.56	1398800.61
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21N	236355.39	1368006.01	38S	264788.43	1398799.89
21S	236251.27	1368021.89			

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

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.
- -COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- -SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- -MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
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- -THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- -AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
- -THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- -THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATIONS "RTK PATCHOGUE", "Y373", "END RM 1", "MOR1A", "JESSUP", "NO.1 1974".
- -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

PR ESO/RD
MP RD

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 1000 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

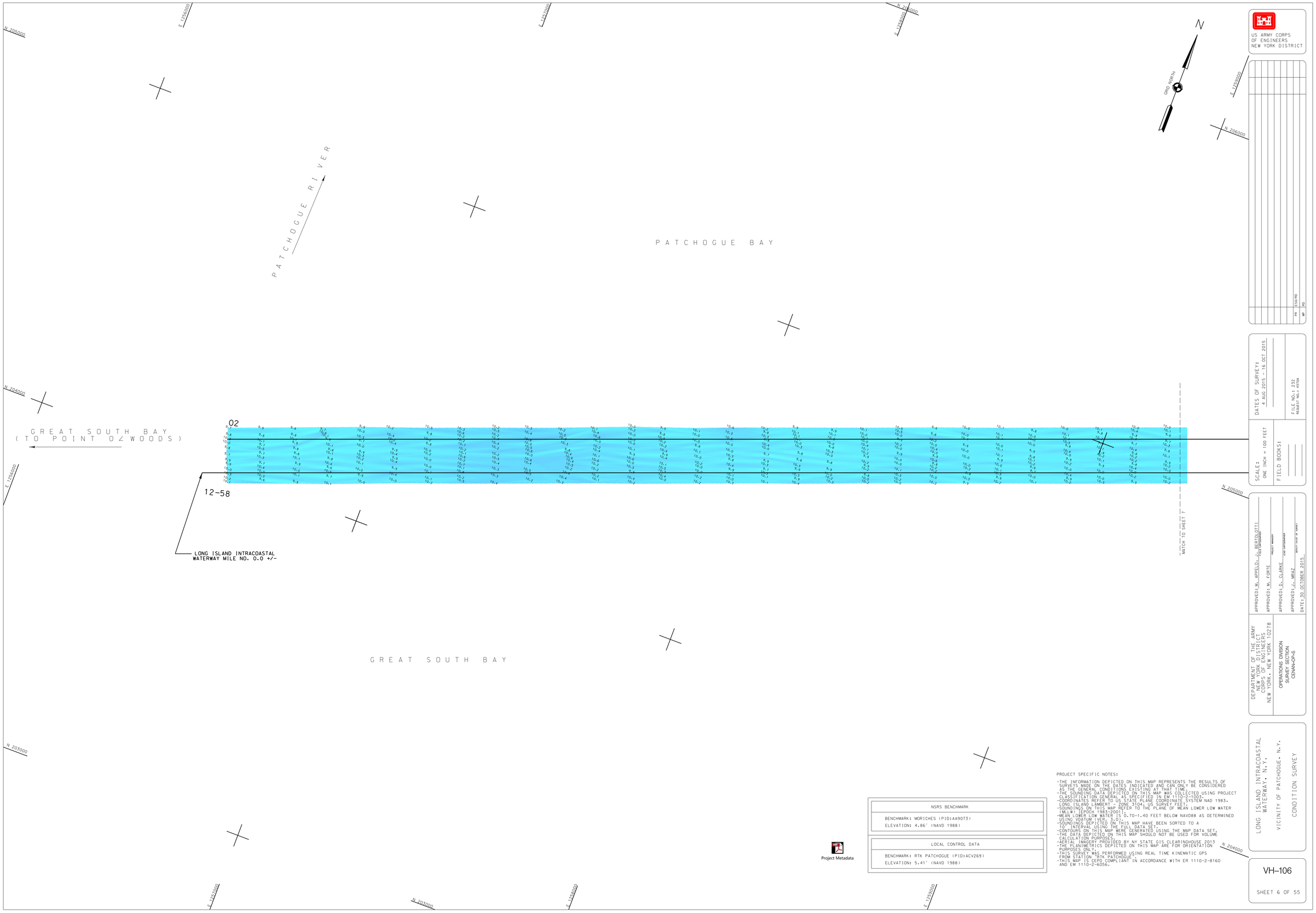
LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

SHEET LAYOUT

CONDITION SURVEY

VH-105

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: RTK PATCHOGUE (PID:ACV269)
ELEVATION: 5.41' (NAVD 1988)

Project Metadata

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 SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK PATCHOGUE".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
PROJECT MANAGER

APPROVED: M. FORTE
PROJECT ENGINEER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

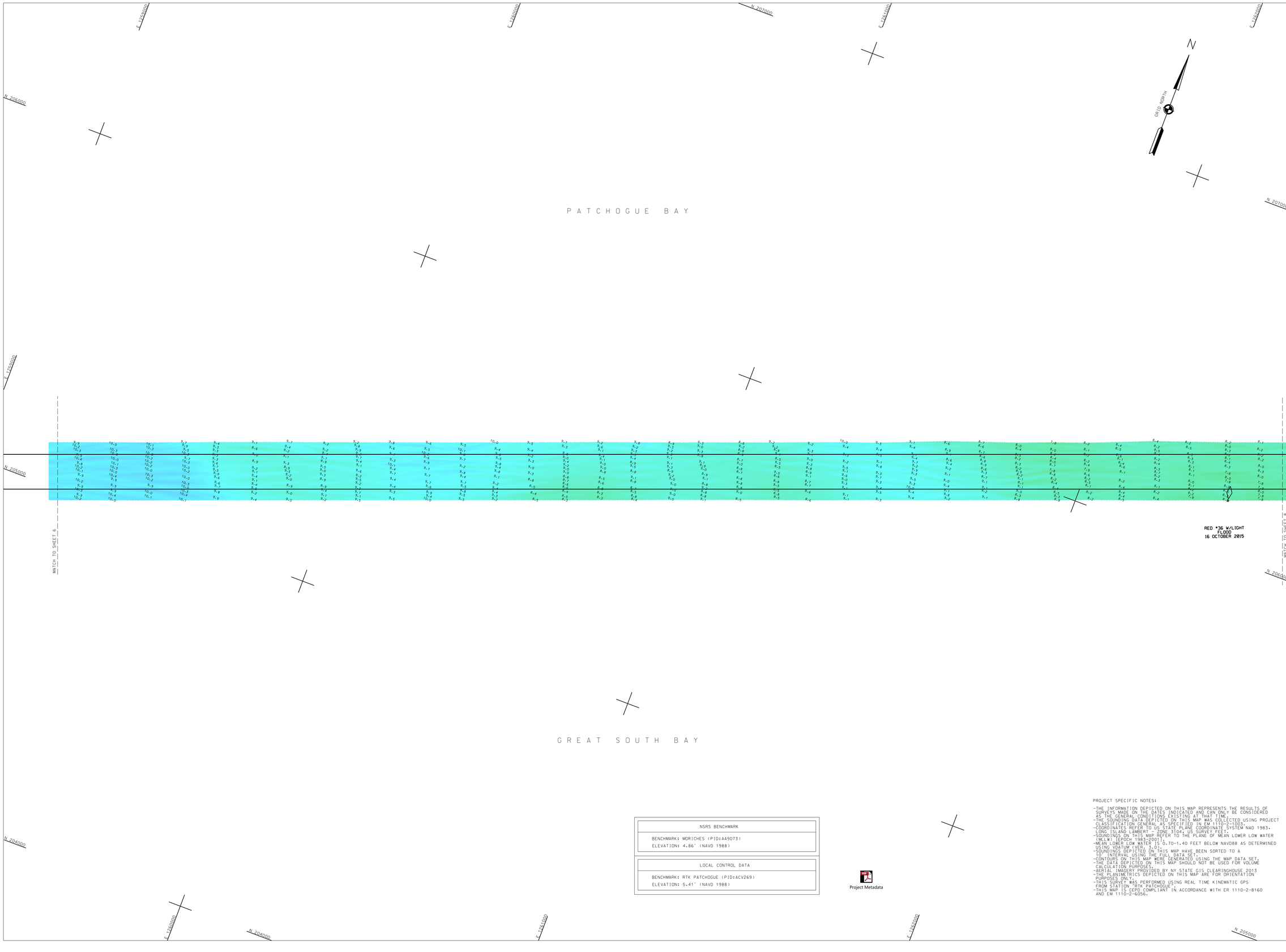
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-106

SHEET 6 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: RTK PATCHOGUE (PID:ACV269) ELEVATION: 5.41' (NAVD 1988)

Project Metadata

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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-AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
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-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK PATCHOGUE".
-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

PR | ESG/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

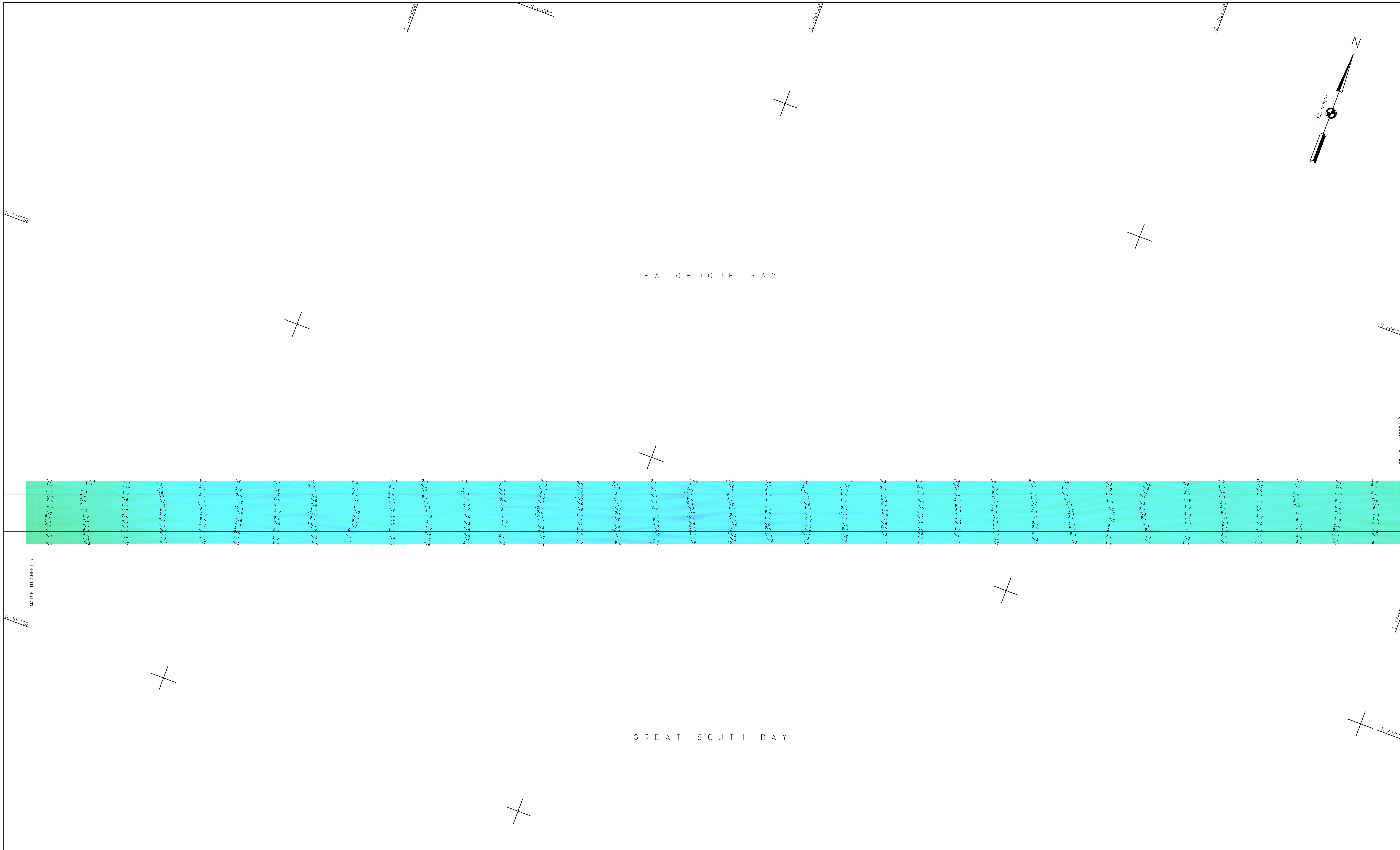
VH-107

SHEET 7 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR	ESO/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: RTK PATCHOGUE (PID:ACV269) ELEVATION: 5.41' (NAVD 1988)

Project Metadata

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 SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK PATCHOGUE".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

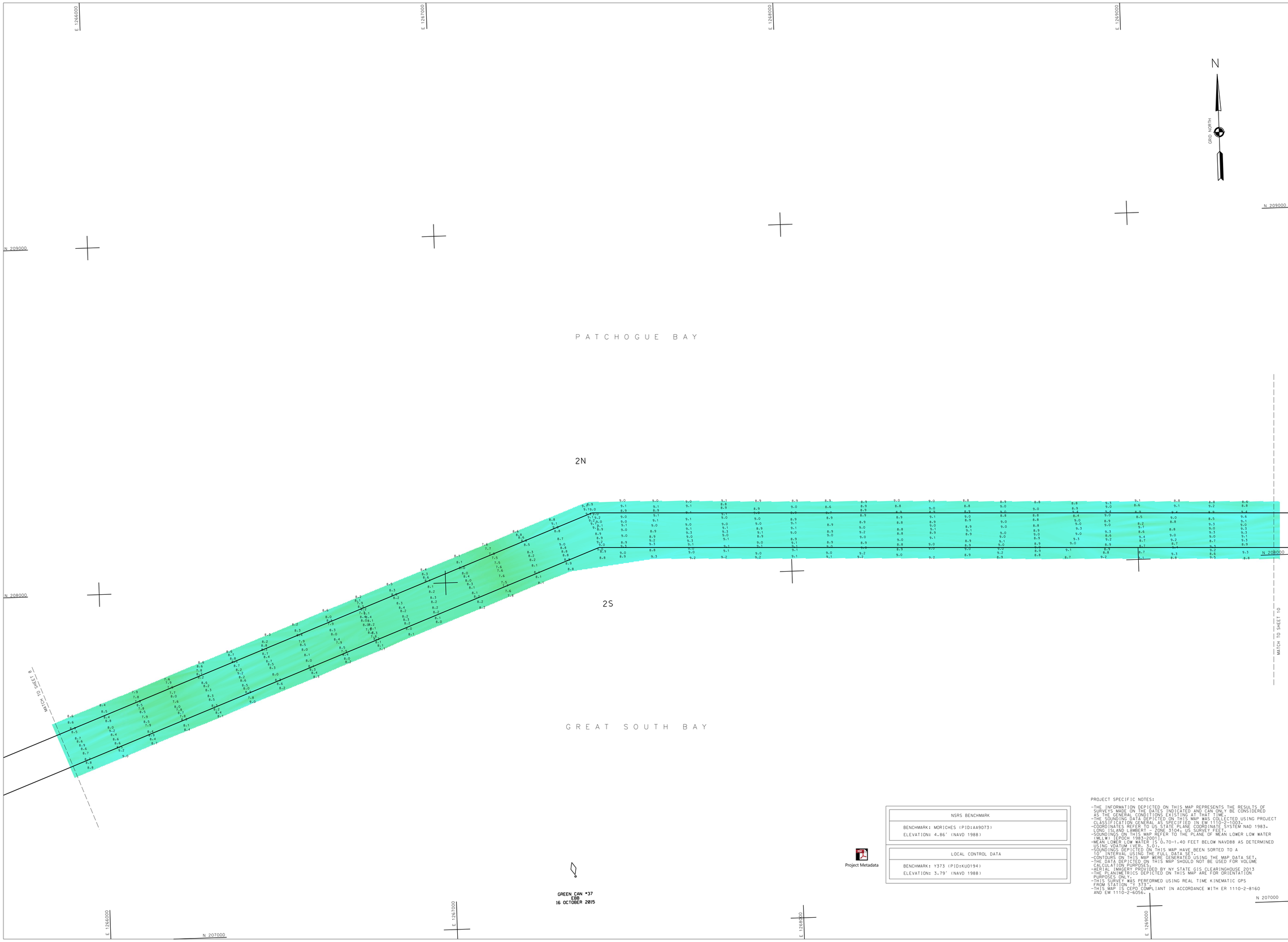
VH-108

SHEET 8 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: Y373 (PID:KU0194)
ELEVATION: 3.79' (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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- AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
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- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "Y 373".
- 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

PR | ESG/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

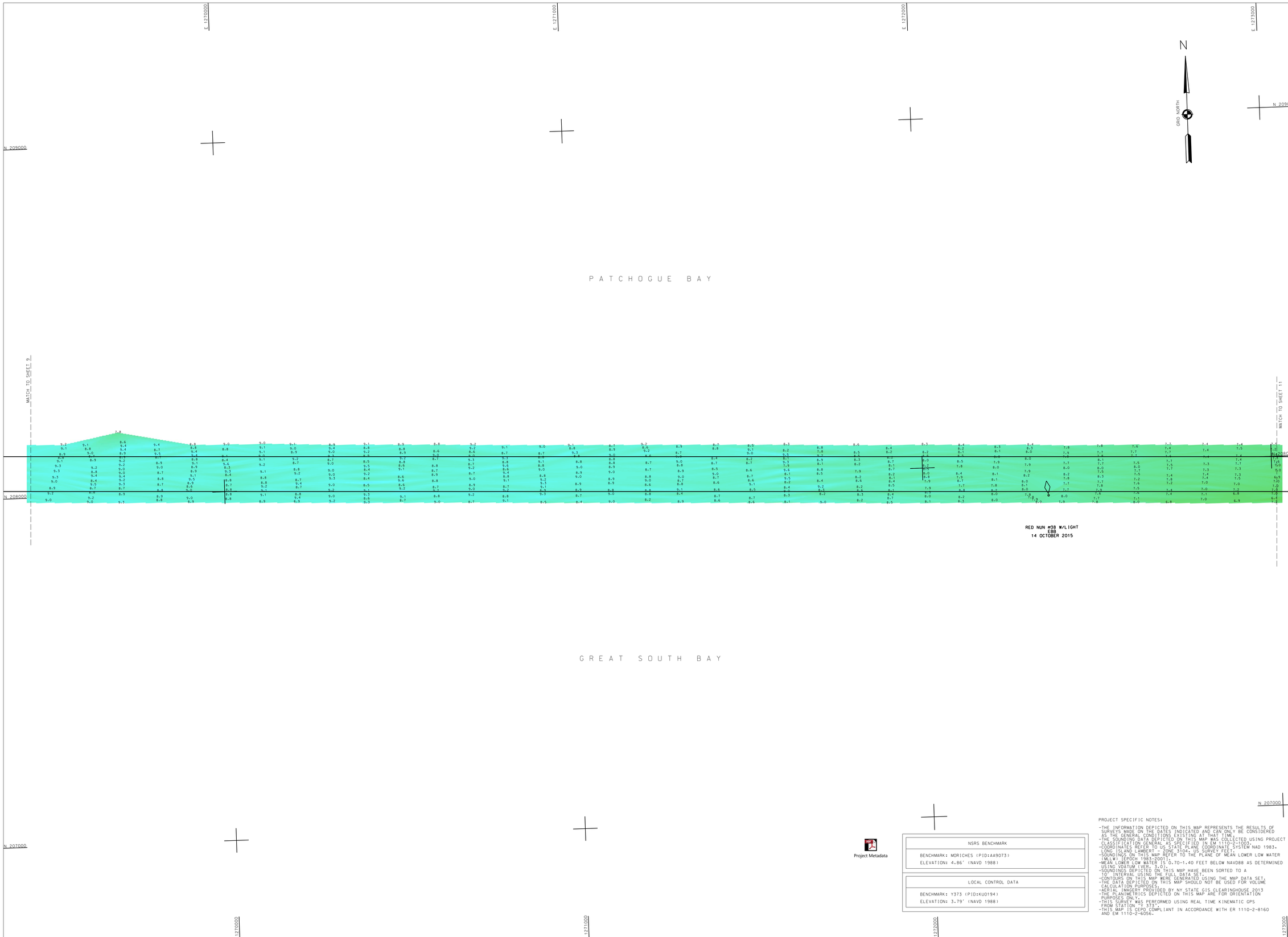
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-109

SHEET 9 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: Y373 (PID:KU0194)
ELEVATION: 3.79' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

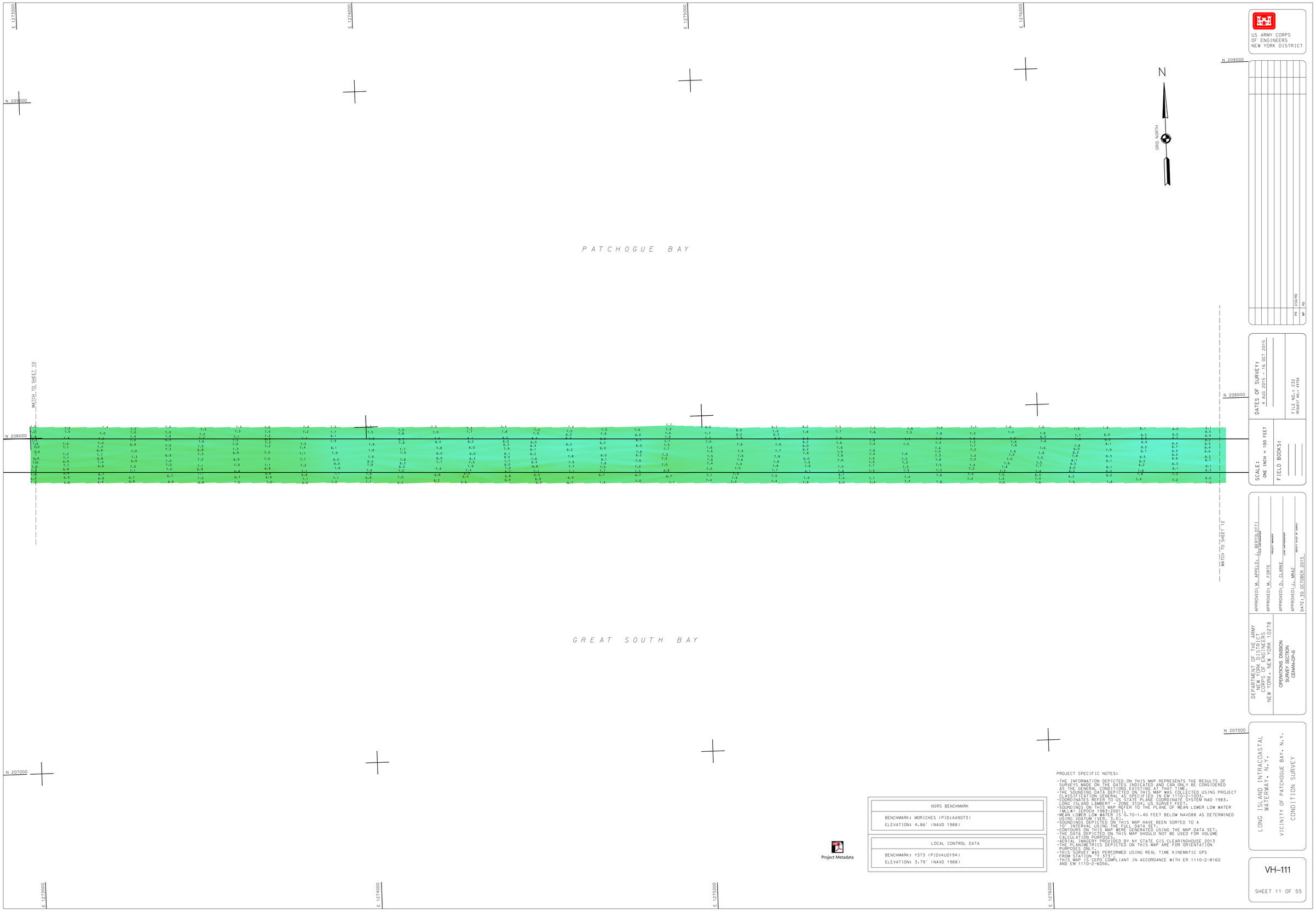
VH-110

SHEET 10 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE BAY, N.Y.

CONDITION SURVEY

VH-111

SHEET 11 OF 55

Project Metadata

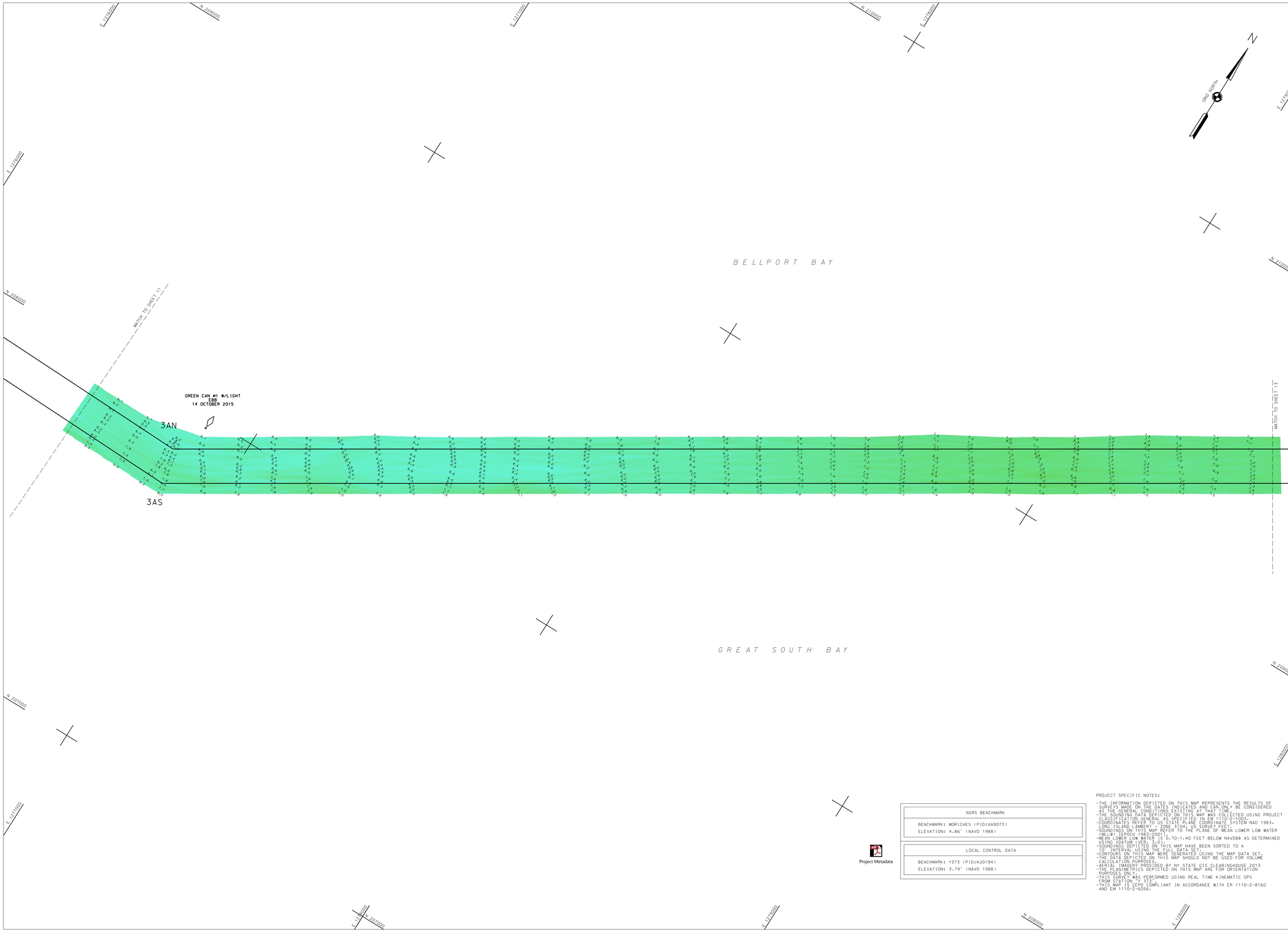
NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: Y373 (PID:KU0194) ELEVATION: 3.79' (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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "Y 373".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

FILE NO: 232
REQ NO: 4370A



Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: Y373 (PID:KU0194) ELEVATION: 3.79' (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.
- THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "Y 373".
- 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

PR ESG/RD
MP RG

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

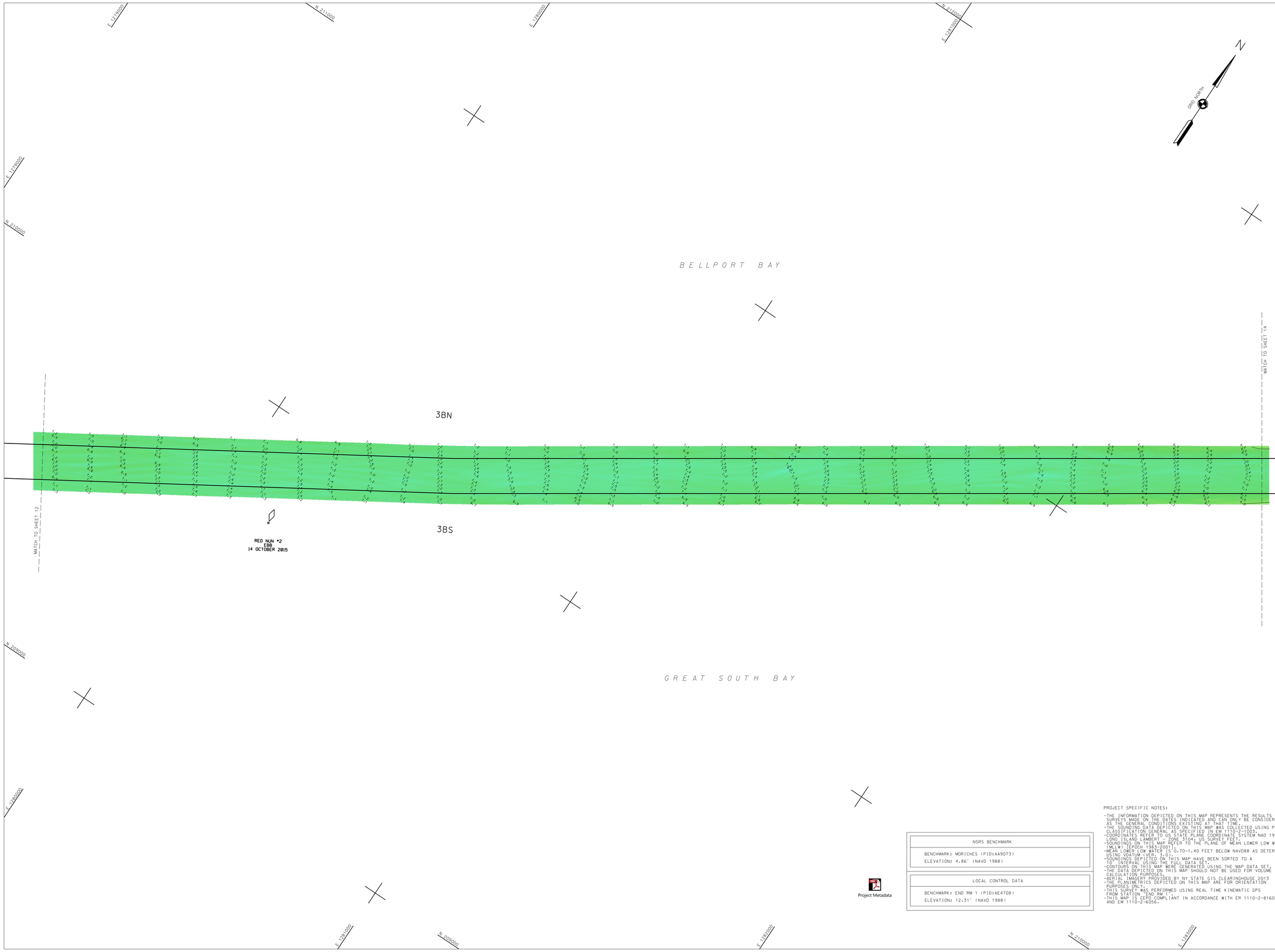
VICINITY OF BELLPORT BAY, N.Y.

CONDITION SURVEY

VH-112

SHEET 12 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

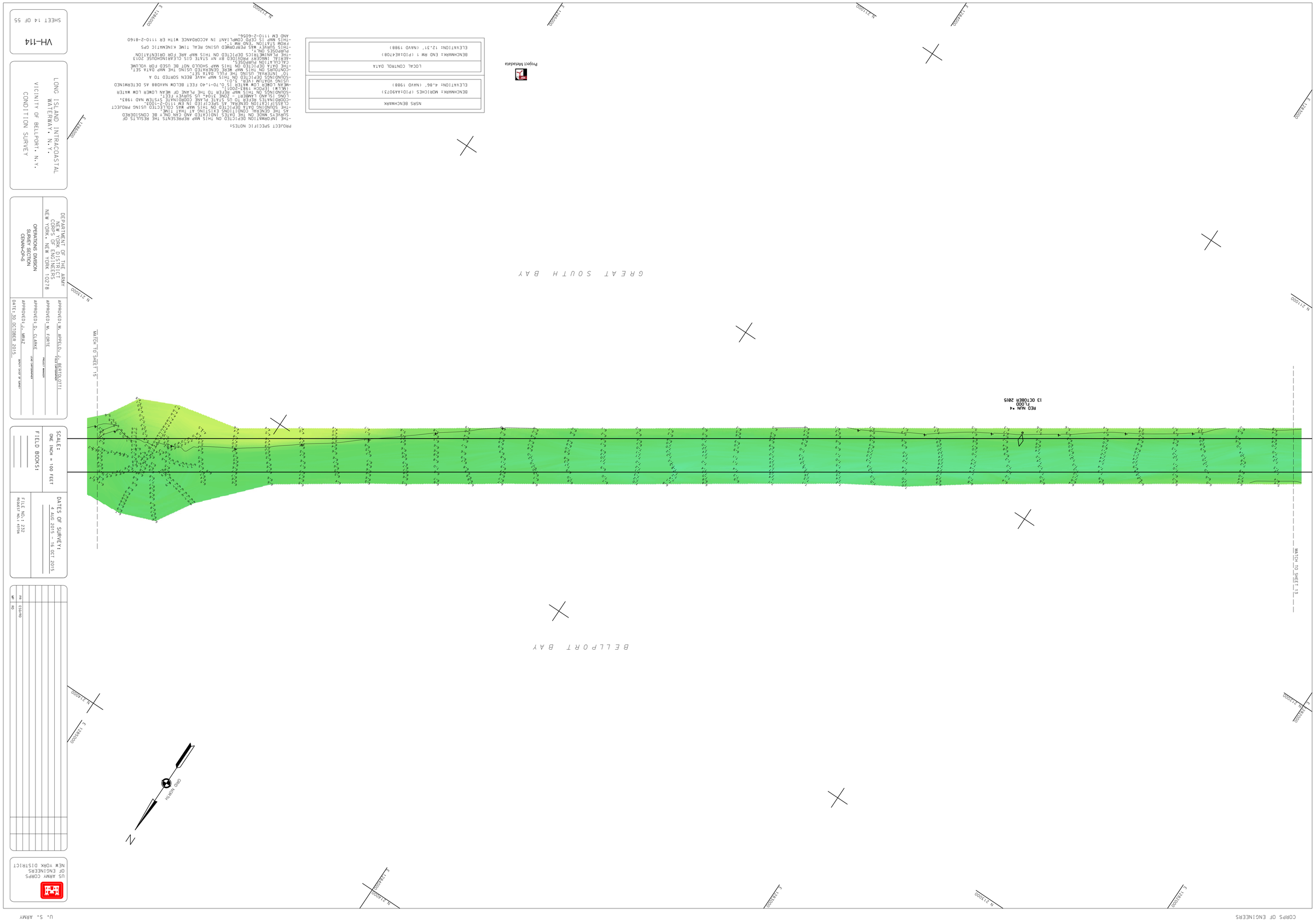
VICINITY OF BELLPORT, N.Y.

CONDITION SURVEY

VH-113

SHEET 13 OF 55

FILE NO: 232
REQ NO: 4370A



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 COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983.
CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
USING VDATUM (VER. 3.0).
MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED
SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A
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 NY STATE GIS CLEARINGHOUSE 2013
THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION
PURPOSES ONLY.
THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS
FROM STATION "END RM 1".
THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160
AND EM 1110-2-6056.

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.
VICINITY OF BELLPORT, N.Y.
CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

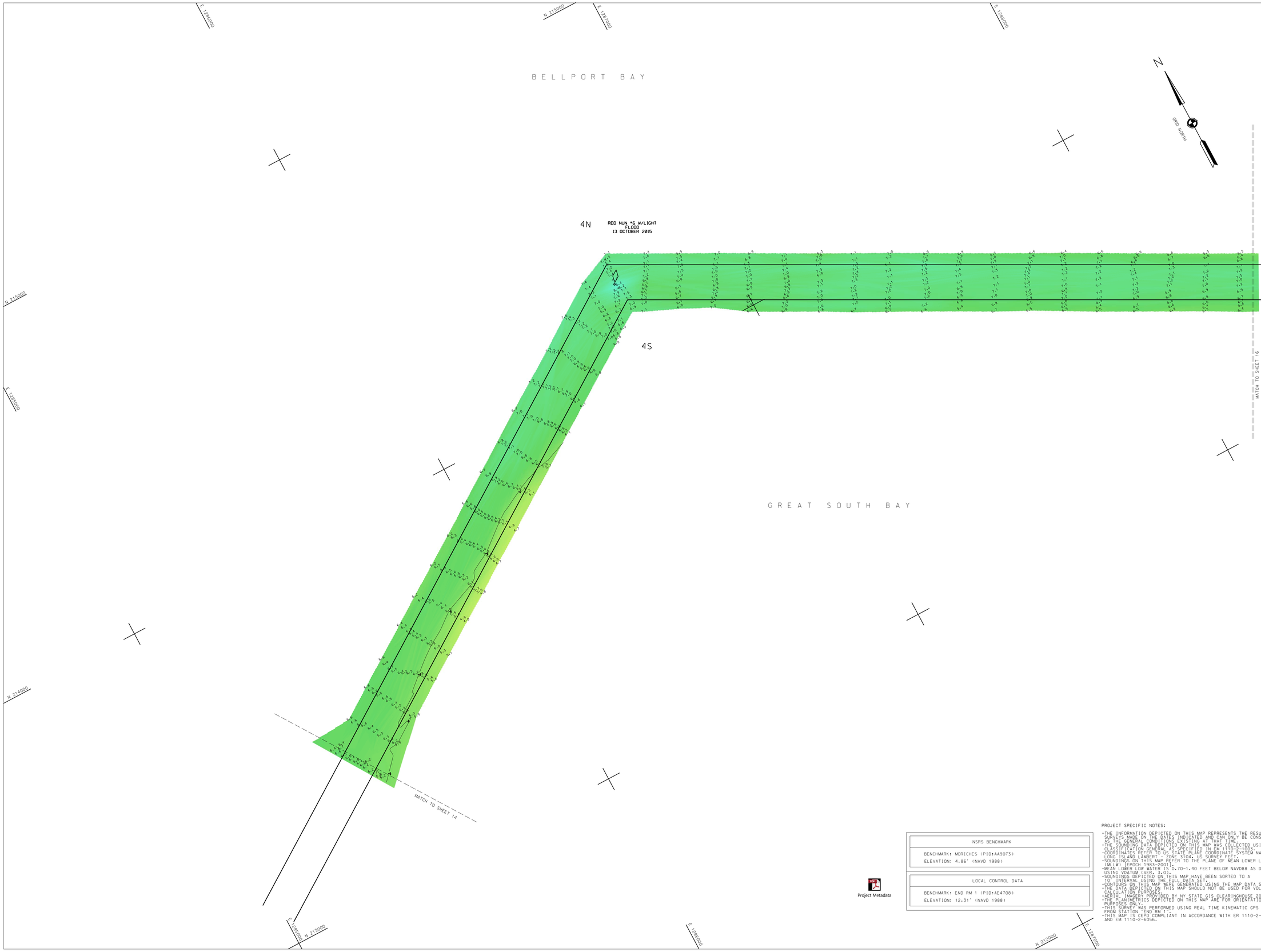
VH-114

SHEET 14 OF 55

FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- 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

PR ESG/RD
MP RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

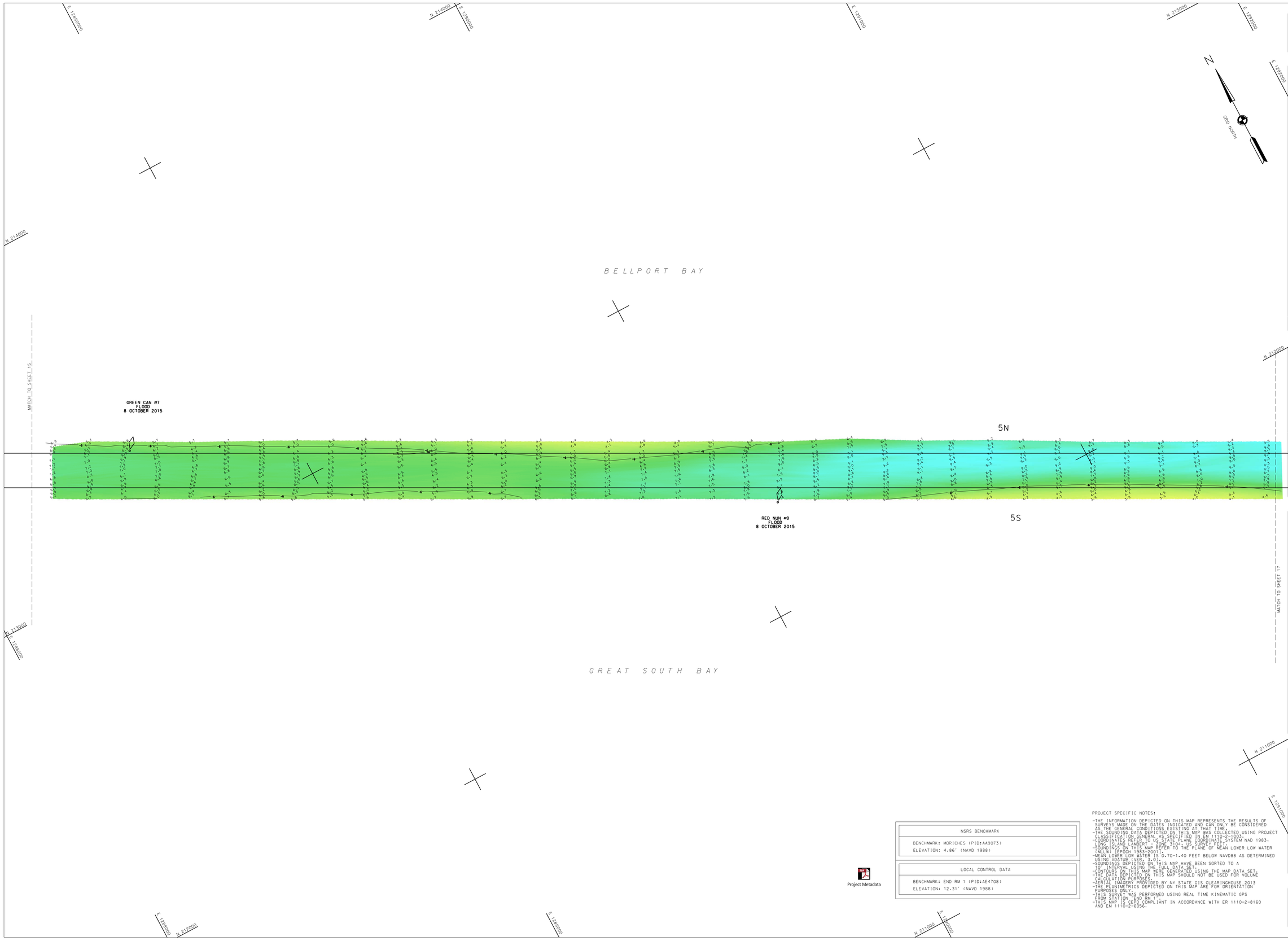
VICINITY OF BELLPORT, N.Y.

CONDITION SURVEY

VH-115

SHEET 15 OF 55

FILE NO: 232
REQ NO: 4370A



Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708) ELEVATION: 12.31' (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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- 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

PR	ESG/RG	
MP	RD	

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

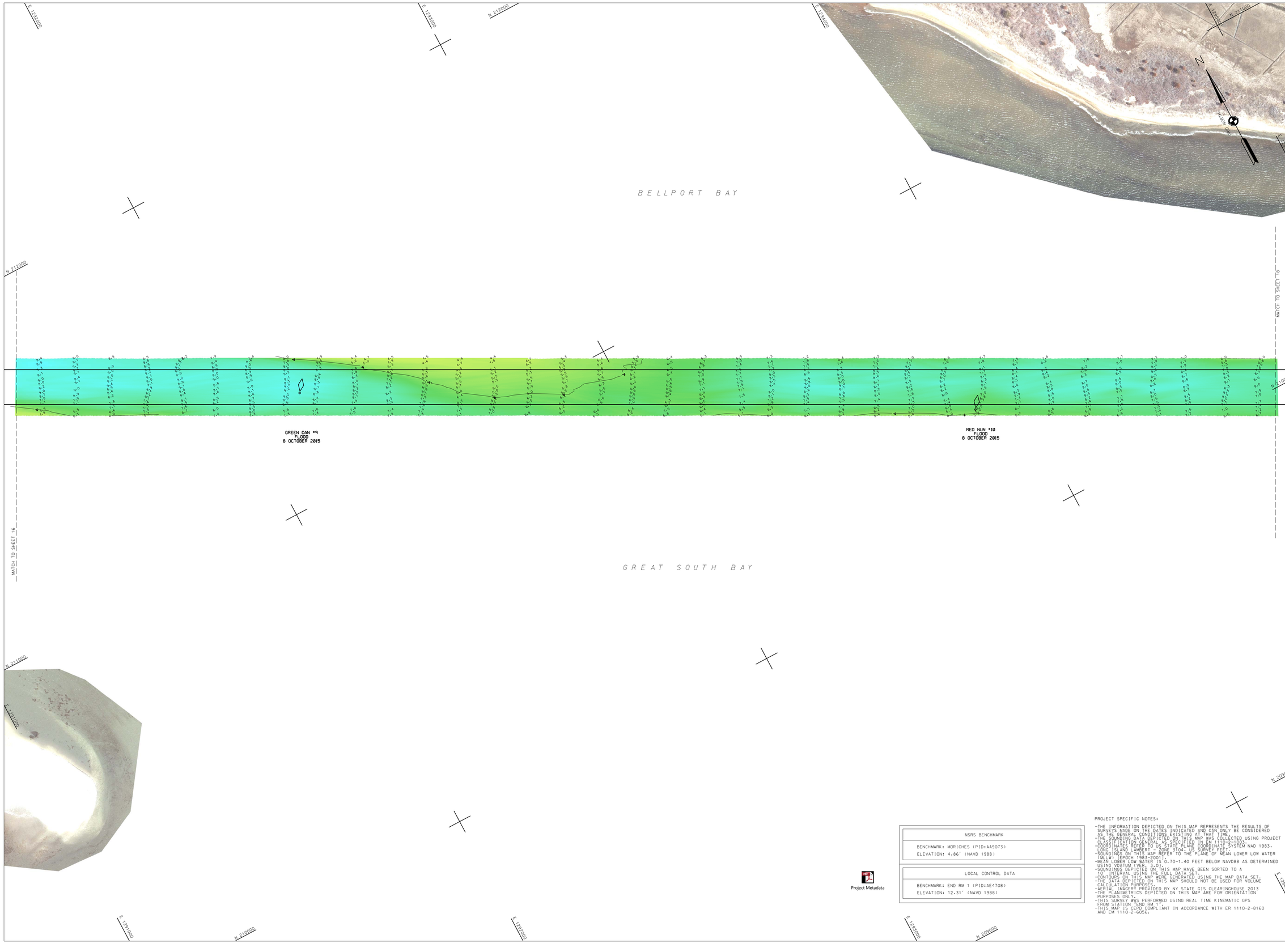
VICINITY OF BELLPORT BAY, N.Y.

CONDITION SURVEY

VH-116

SHEET 16 OF 55

FILE NO: 232
REQ NO: 4370A



Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708) ELEVATION: 12.31' (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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- 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

PR	ESQ/RD	
MP	RD	

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF BELLPORT BAY, N.Y.

CONDITION SURVEY

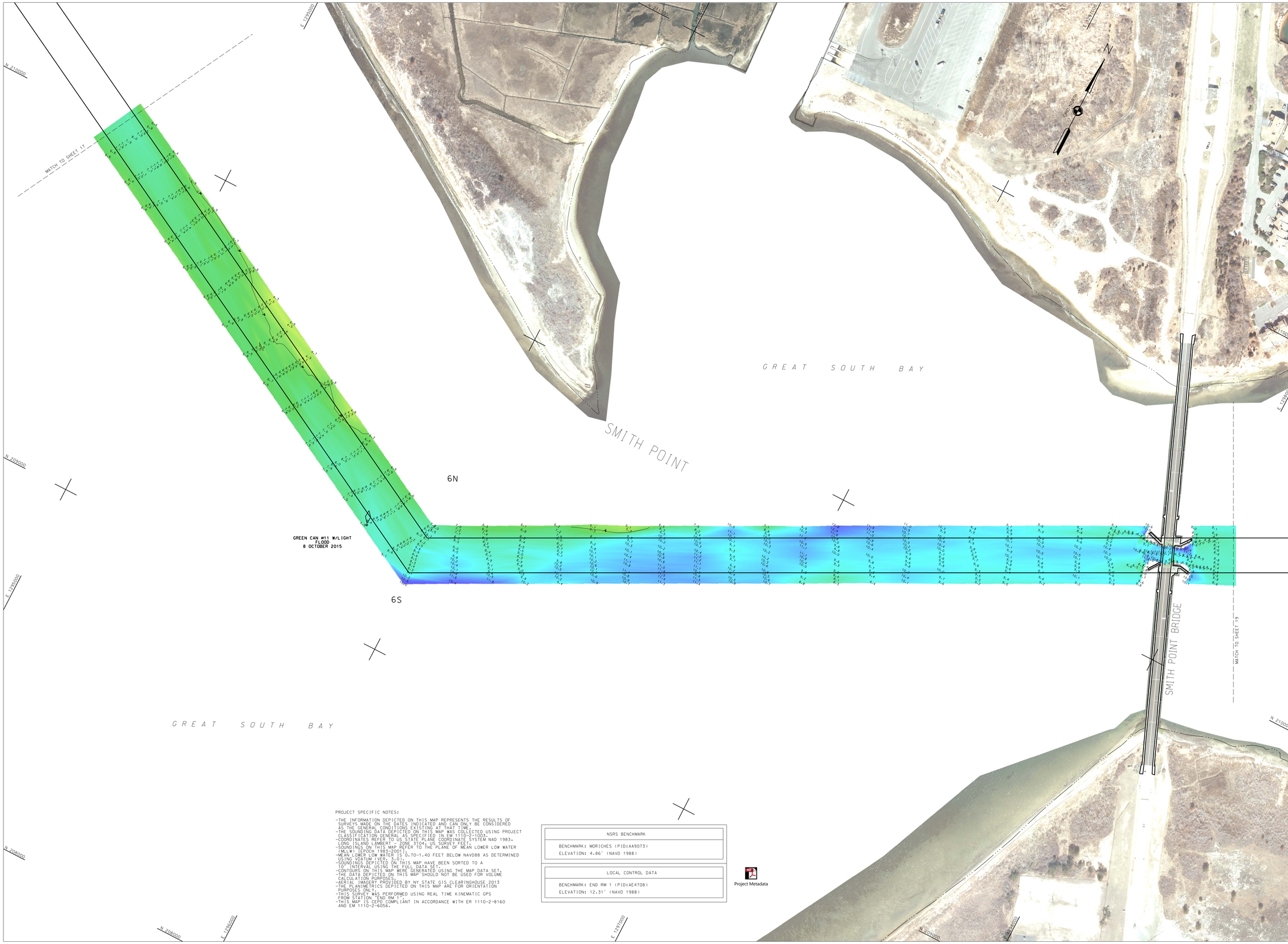
VH-117

SHEET 17 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708) ELEVATION: 12.31' (NAVD 1988)

Project Metadata

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR ESG/RD
MP RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

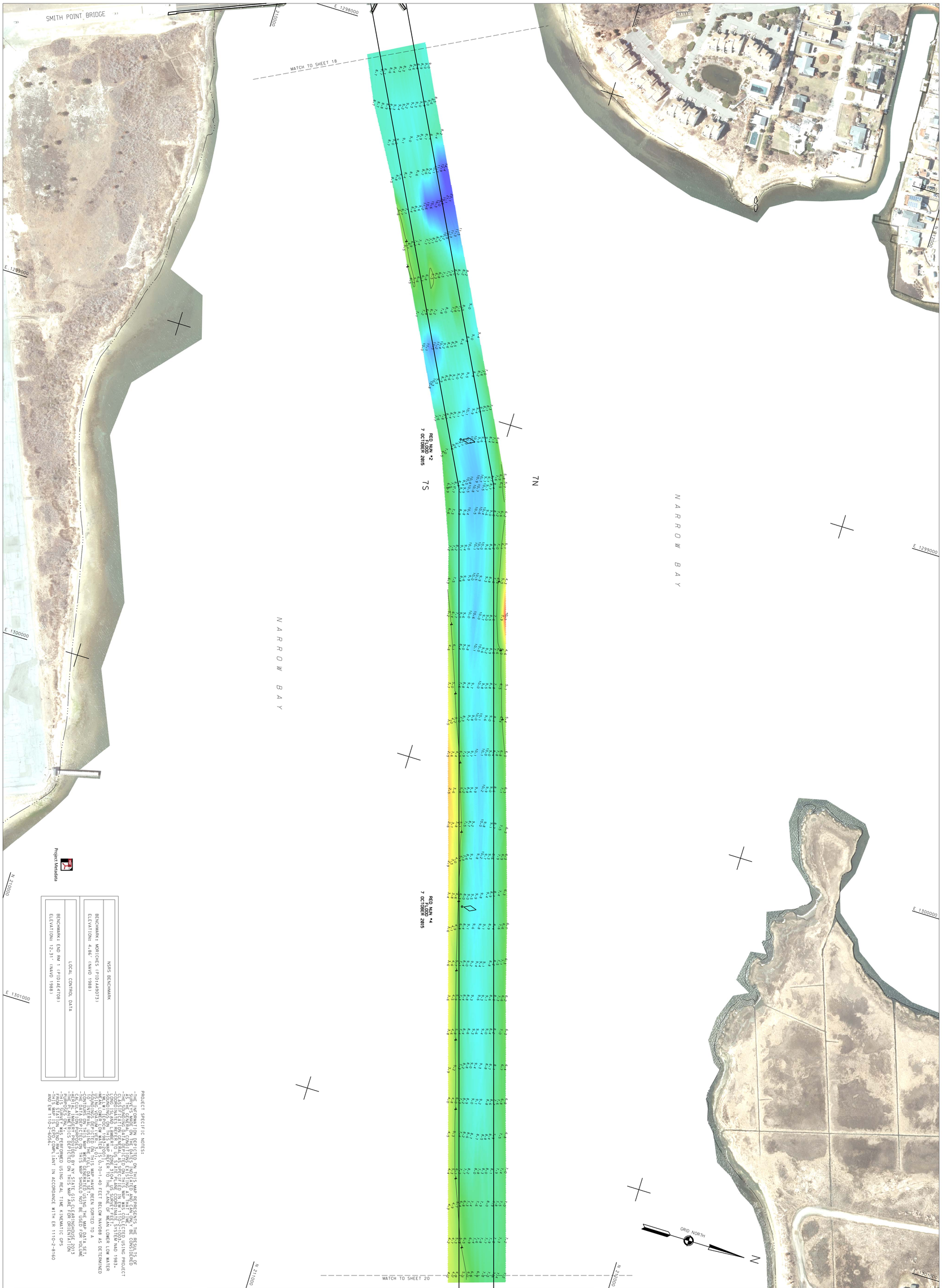
VICINITY OF SMITH POINT, N.Y.

CONDITION SURVEY

VH-118

SHEET 18 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (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.
-THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
-COORDINATES REFER TO THE STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT 3.0 (OCT 2004 US SURVEY FEET).
-SOUNDINGS ON THIS MAP ARE REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VERT 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013 PURPOSES ONLY.
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION AND EM 1110-2-6056.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION EPOD RM 1.
-THIS MAP IS CERTIFIED COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

Project Metadata

CORPS OF ENGINEERS

U. S. ARMY

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	ESQ/RD
MP	RD

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF NARROW BAY, N.Y.

CONDITION SURVEY

VH-119

SHEET 19 OF 55

FILE NO: 232
REQ NO: 4370A

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (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.
-THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CONTROL DATA REFERENCED TO THE STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT, ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM VERT 3.01.
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION ENDS RM 1.
-THIS MAP IS CERTIFIED COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

CORPS OF ENGINEERS

U. S. ARMY

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	ESQ/RD
MP	RD

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER
APPROVED: M. FORTE
PROJECT MANAGER
APPROVED: D. CLARKE
LEAD CARTOGRAPHER
APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

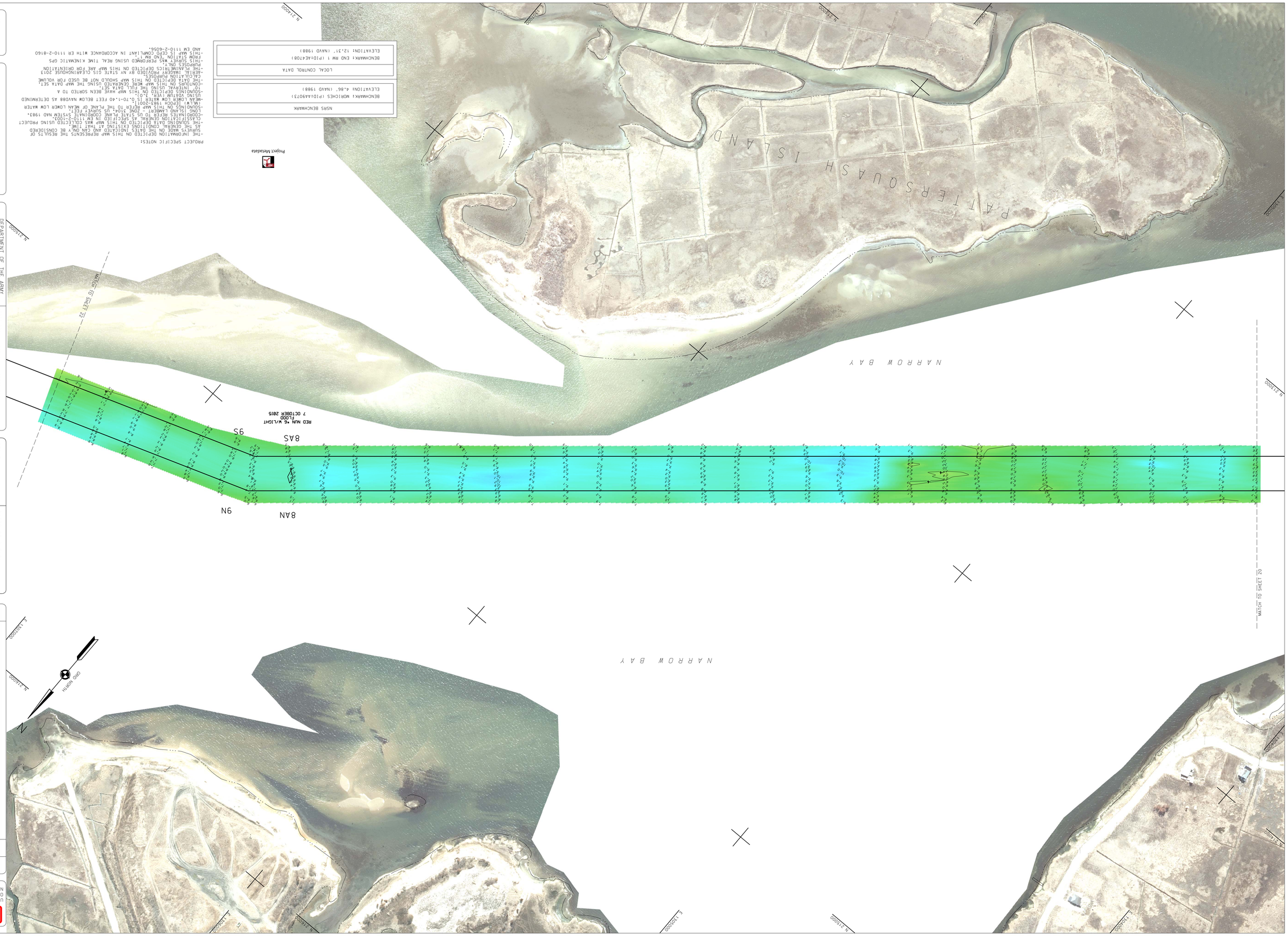
VICINITY OF MASTIC BEACH, N.Y.

CONDITION SURVEY

VH-120

SHEET 20 OF 55

FILE NO: 232
REQ NO: 4370A



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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL DATA SET.
-CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. CALCULATION PURPOSES.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-HERE LANDMARK PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013 PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708)
ELEVATION: 12.31' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.
VICINITY OF MASTIC BEACH, N.Y.
CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELO, J. BERTOLOTTI
FIELD COORDINATOR
APPROVED: D. FORTE
PROJECT MANAGER
APPROVED: D. CLARKE
LEAD CARTOGRAPHER
APPROVED: J. MRAZ
CHIEF, DIVISION OF SURVEY
DATE: 30 OCTOBER 2015

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

PR	ESG/RD
MP	RD

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

SHEET 21 OF 55

VH-121

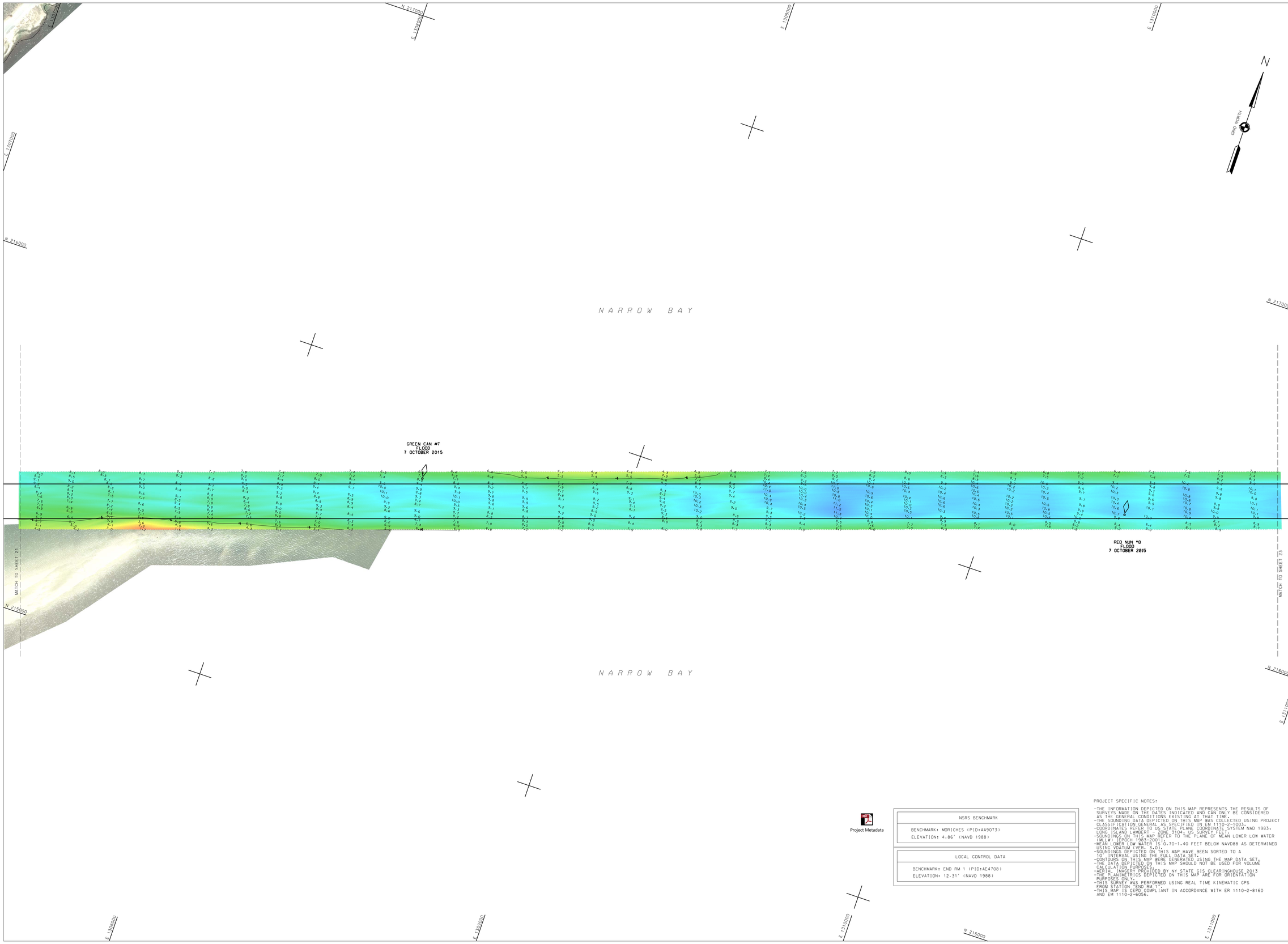
FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL
WATERWAY, N.Y.

VICINITY OF FORGE POINT, N.Y.

CONDITION SURVEY

Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: END RM 1 (PID:AE4708) ELEVATION: 12.31' (NAVD 1988)

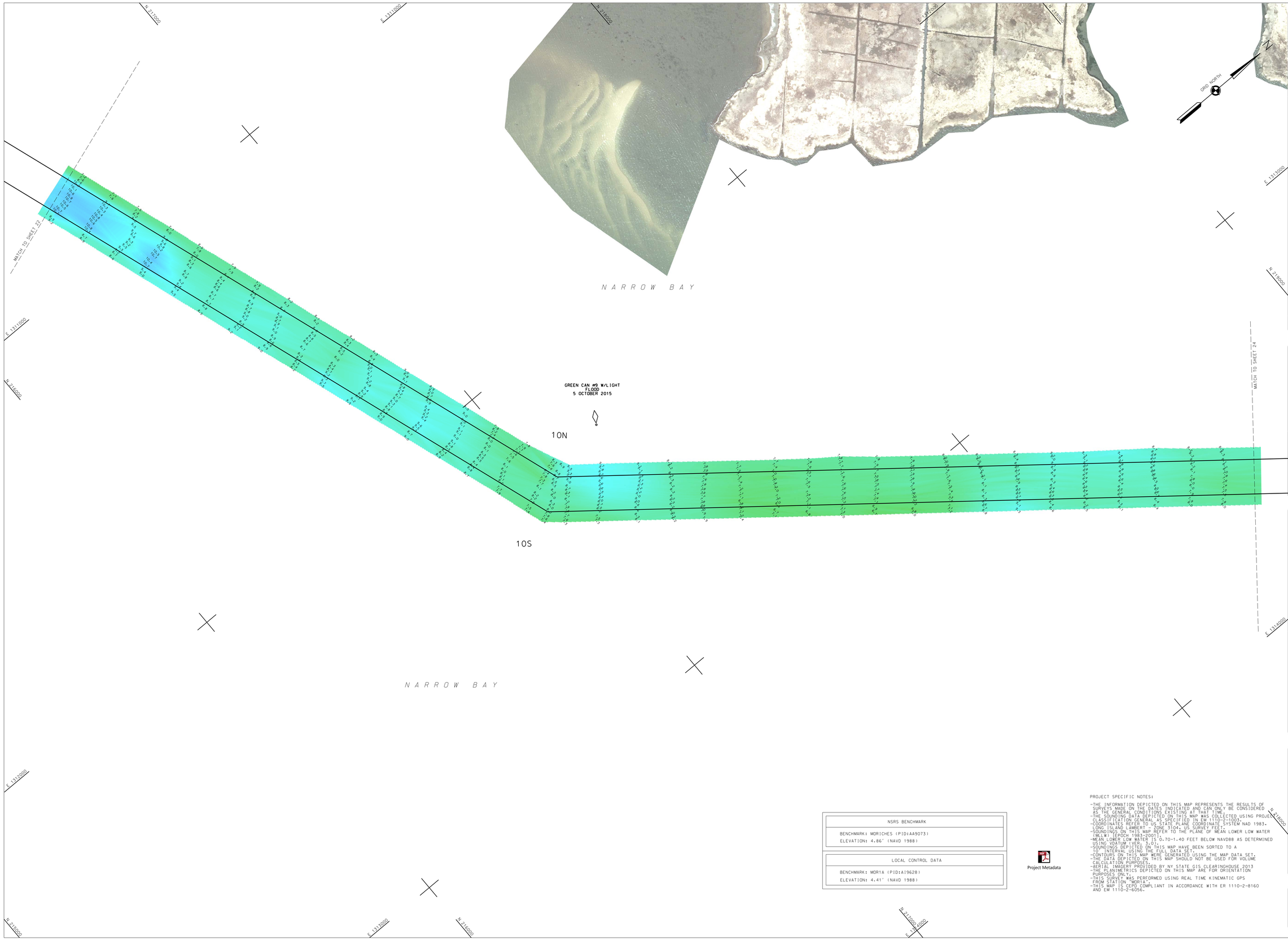
PROJECT SPECIFIC NOTES:

- 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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "END RM 1".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

VH-122

SHEET 22 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

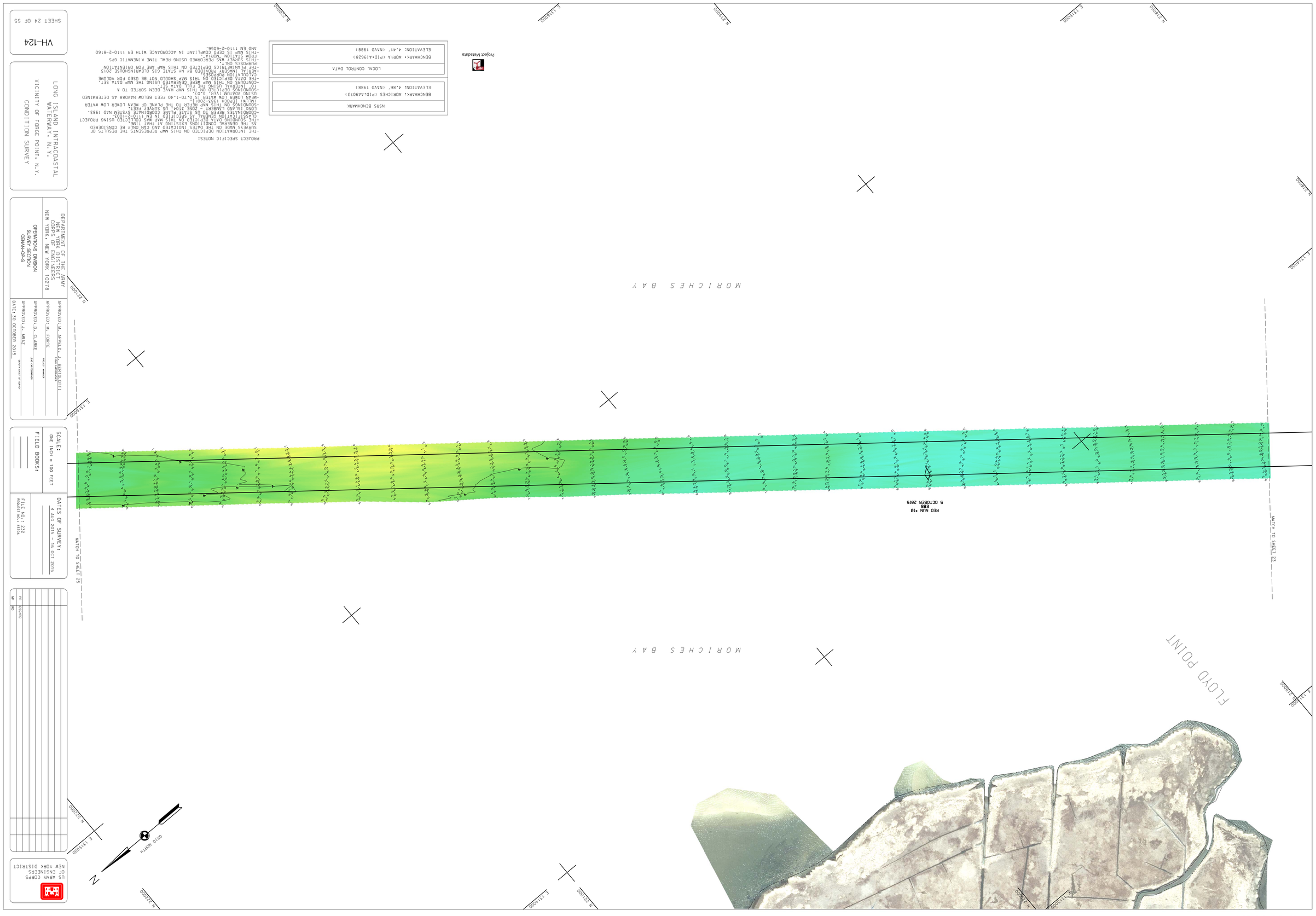
LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF FORGE POINT, N.Y.

CONDITION SURVEY

VH-123

FILE NO: 232
REQ NO: 4370A



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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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.
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MORIA".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MORIA (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.
VICINITY OF FORGE POINT, N.Y.
CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CONSULTANTS

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

PR	ESD/RD
MP	RD

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

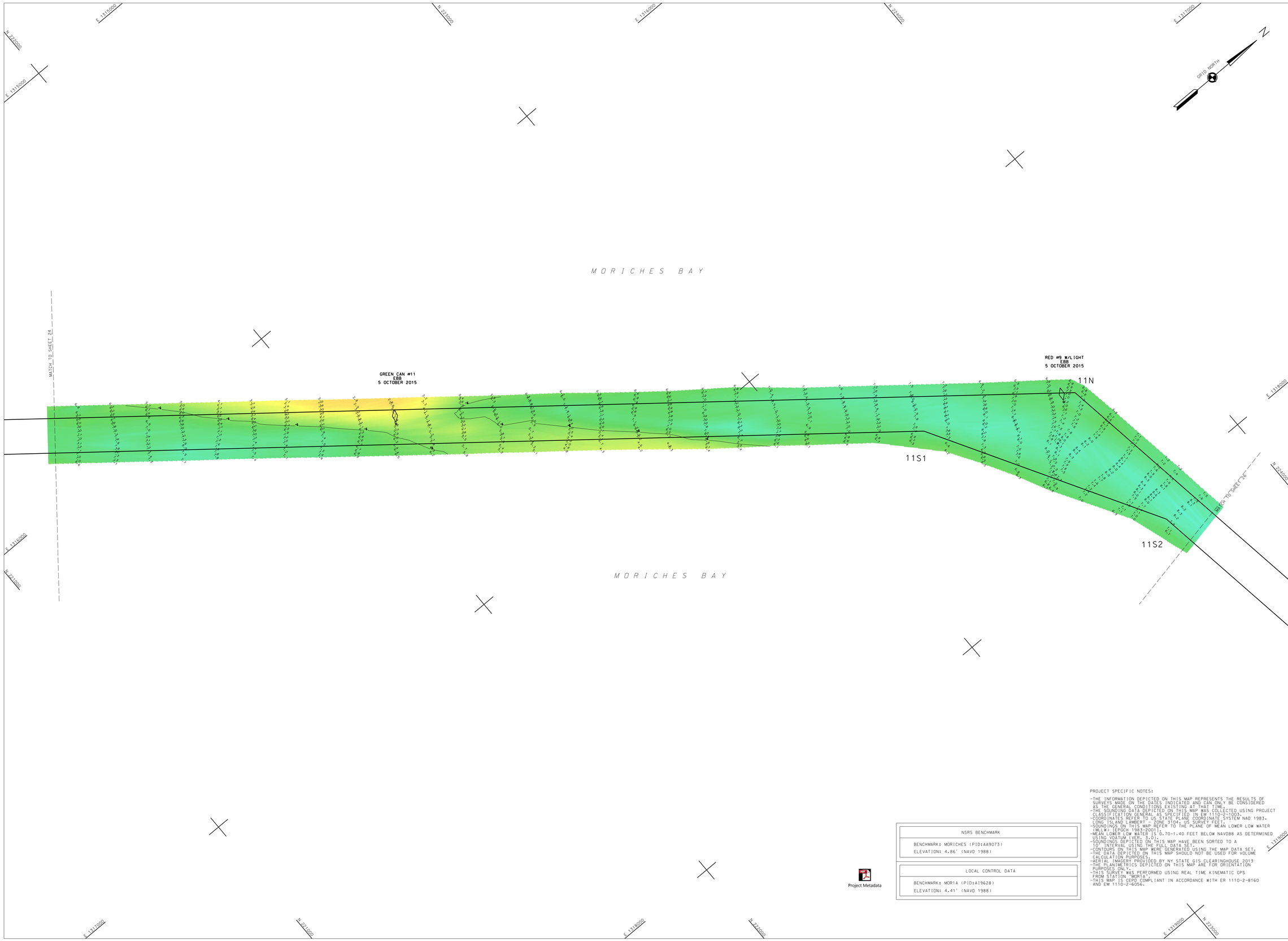
VH-124

SHEET 24 OF 55

FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- 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

PR	ESG/RG
MP	RG

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

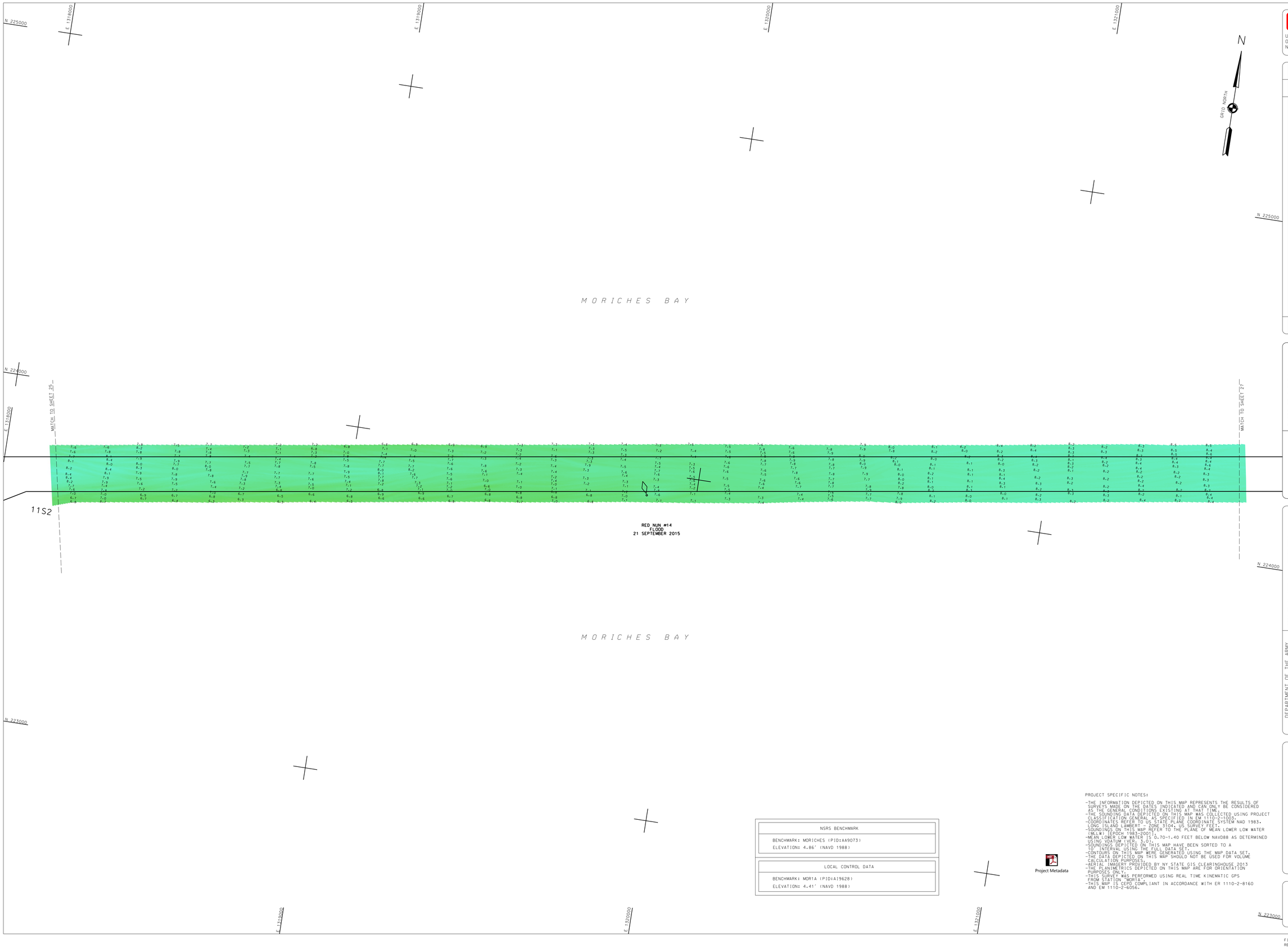
VICINITY OF FORGE POINT, N.Y.

CONDITION SURVEY

VH-125

SHEET 25 OF 55

FILE NO: 232
REQ NO: 4370A



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF CENTER MORICHES, N.Y.

CONDITION SURVEY

VH-126

SHEET 26 OF 55

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

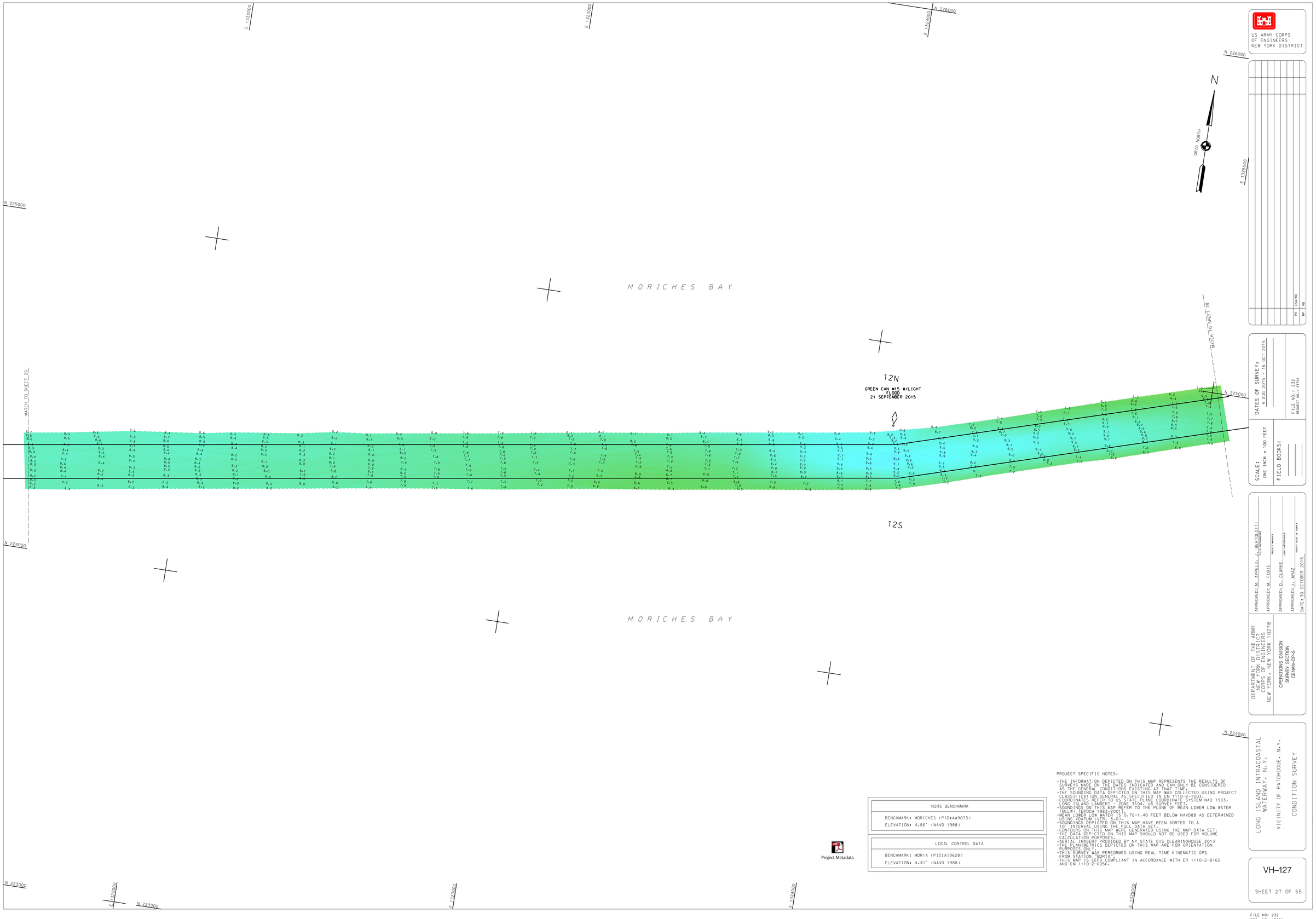
LOCAL CONTROL DATA

BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-127

SHEET 27 OF 55

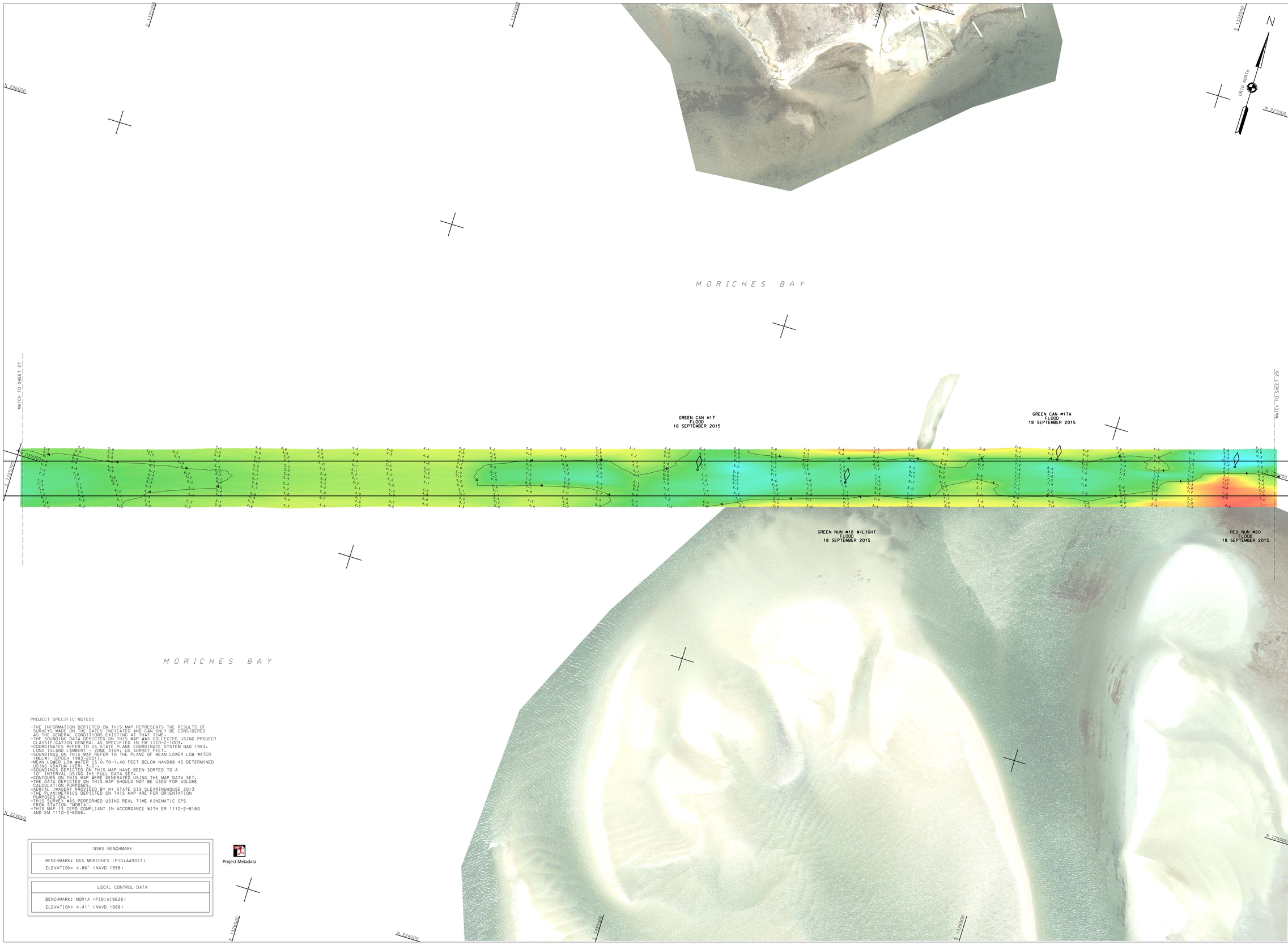
Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (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.
-THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.



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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MORIA".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: NGS MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

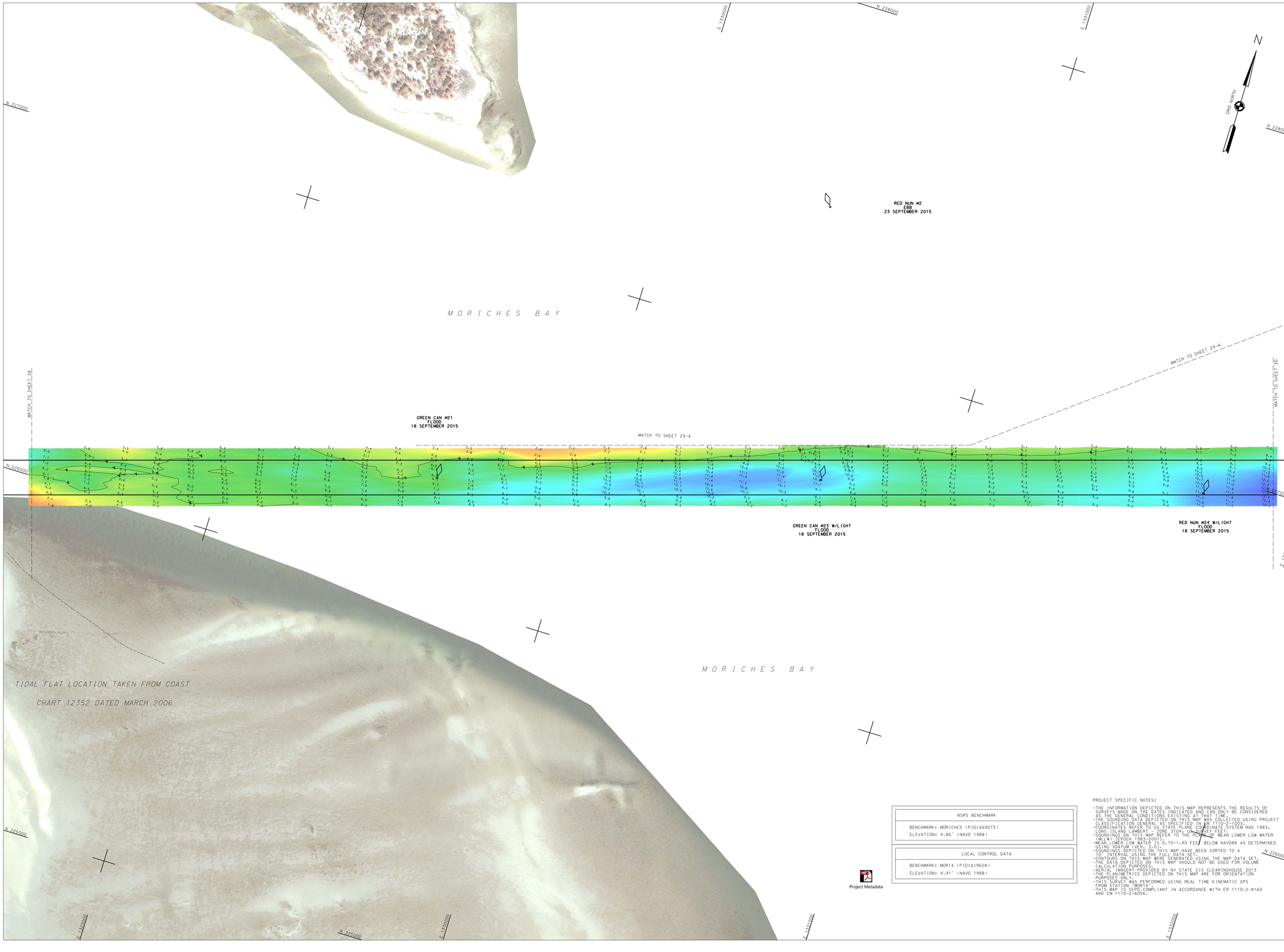
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-128

SHEET 28 OF 55

FILE NO: 232
REQ NO: 4370A



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628) ELEVATION: 4.41' (NAVD 1988)

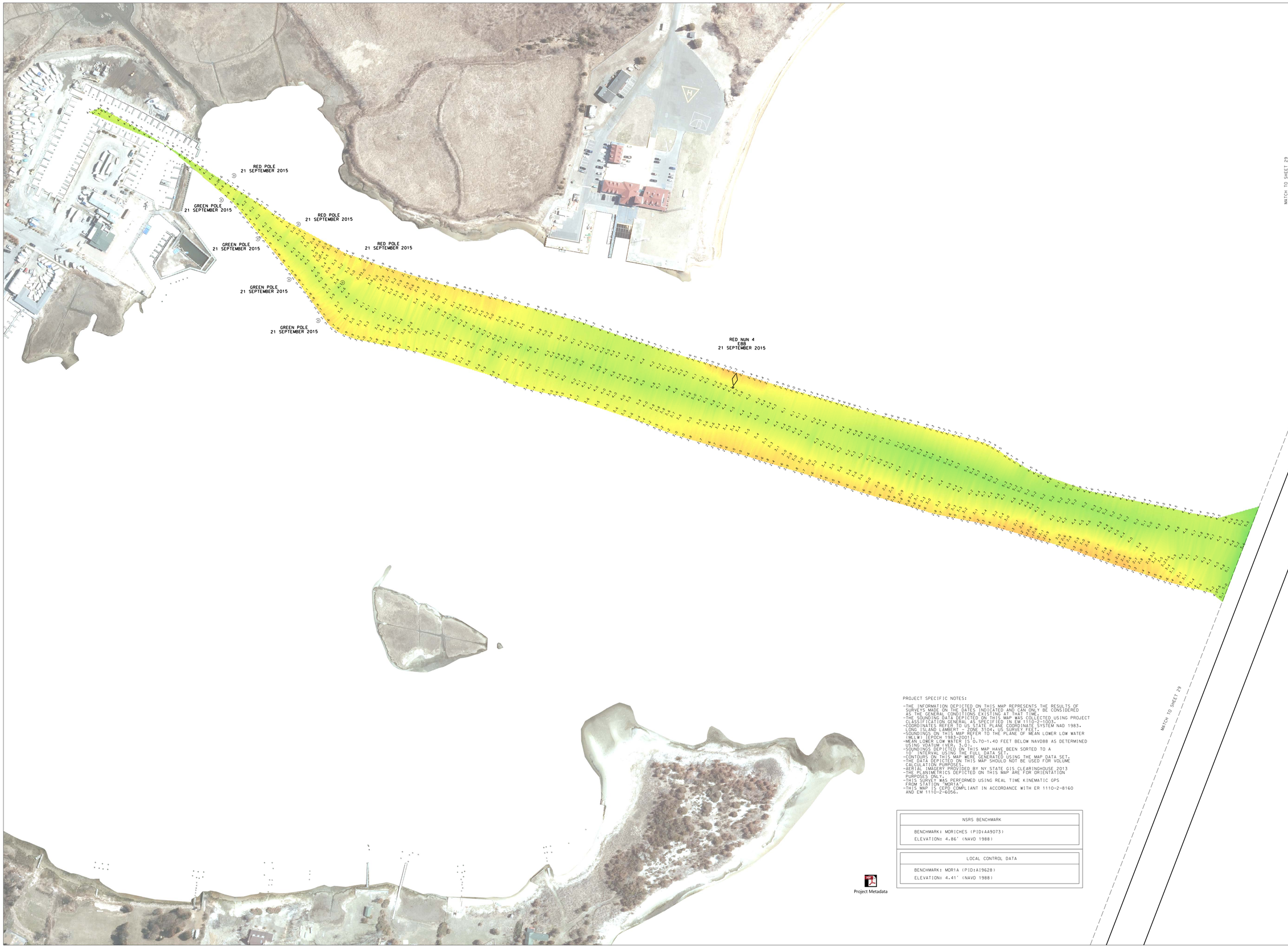
Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

VH-129

FILE NO: 232
REQ NO: 4370A



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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

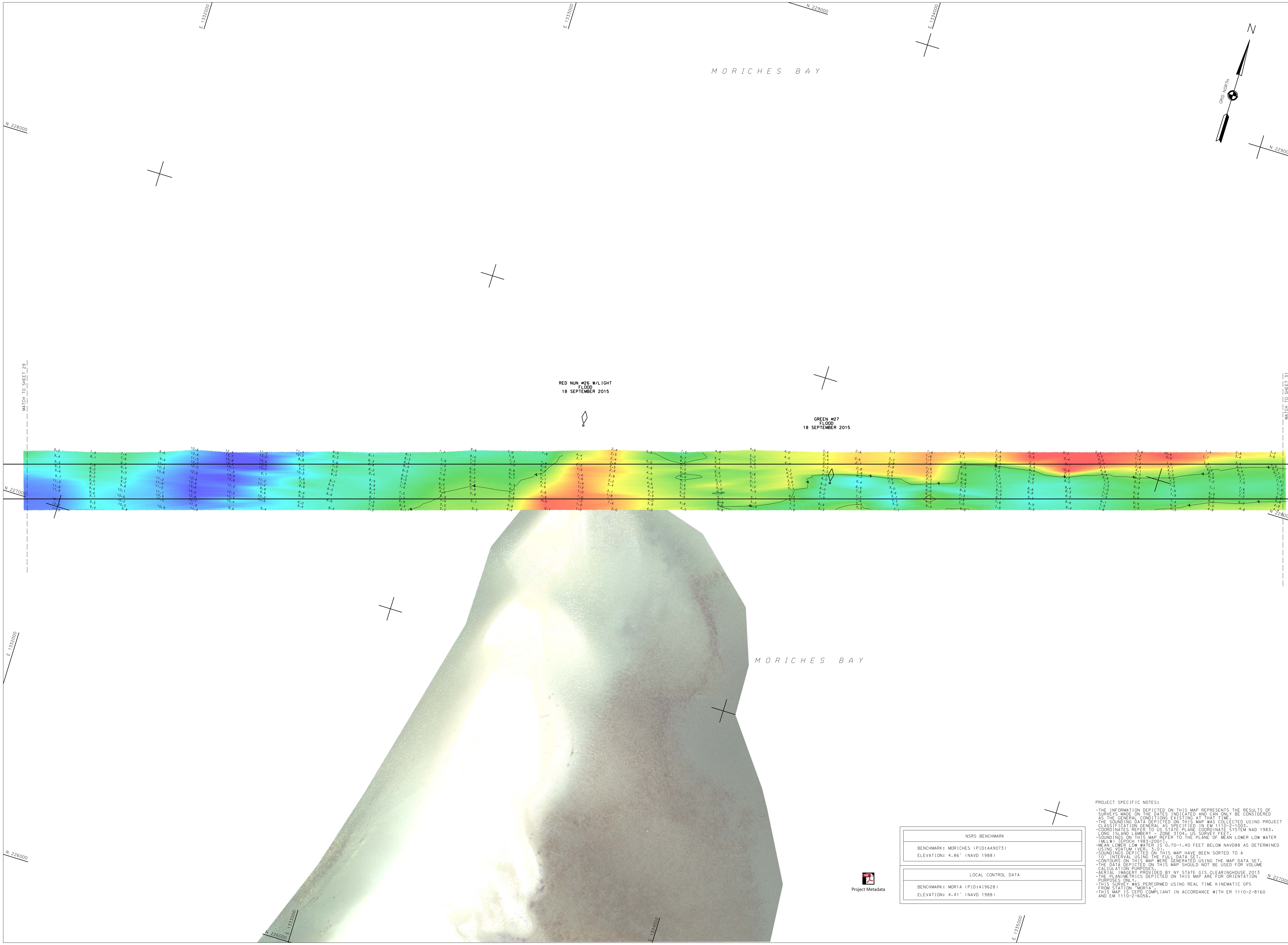
VH-129

SHEET 29A OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628) ELEVATION: 4.41' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- 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

PR | ESO/RD
MP | RD

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

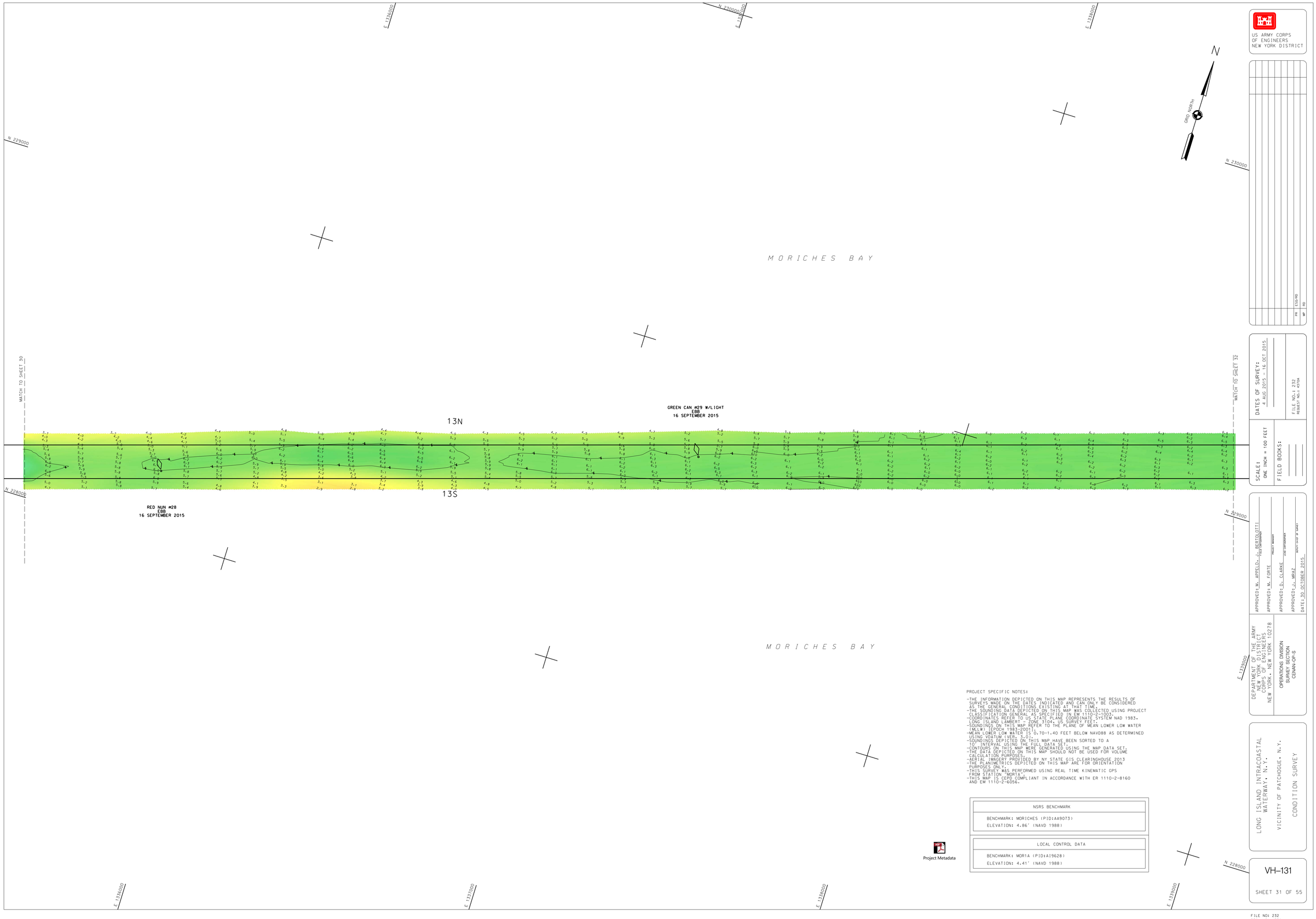
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-130

SHEET 30 OF 55

FILE NO: 232
REQ NO: 4370A



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD		
WP	RD		

DATES OF SURVEY:
4 AUG 2015 – 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 43710A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, Jr. (BERTOLOTTI)
CHIEF, FIELD SURVEYS

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CELNAV-OPS

LONG ISLAND INTRACOASTAL
WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

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.
-COORDINATES RELATE TO U.S. STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND ZONE, SPCS 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MORIA".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

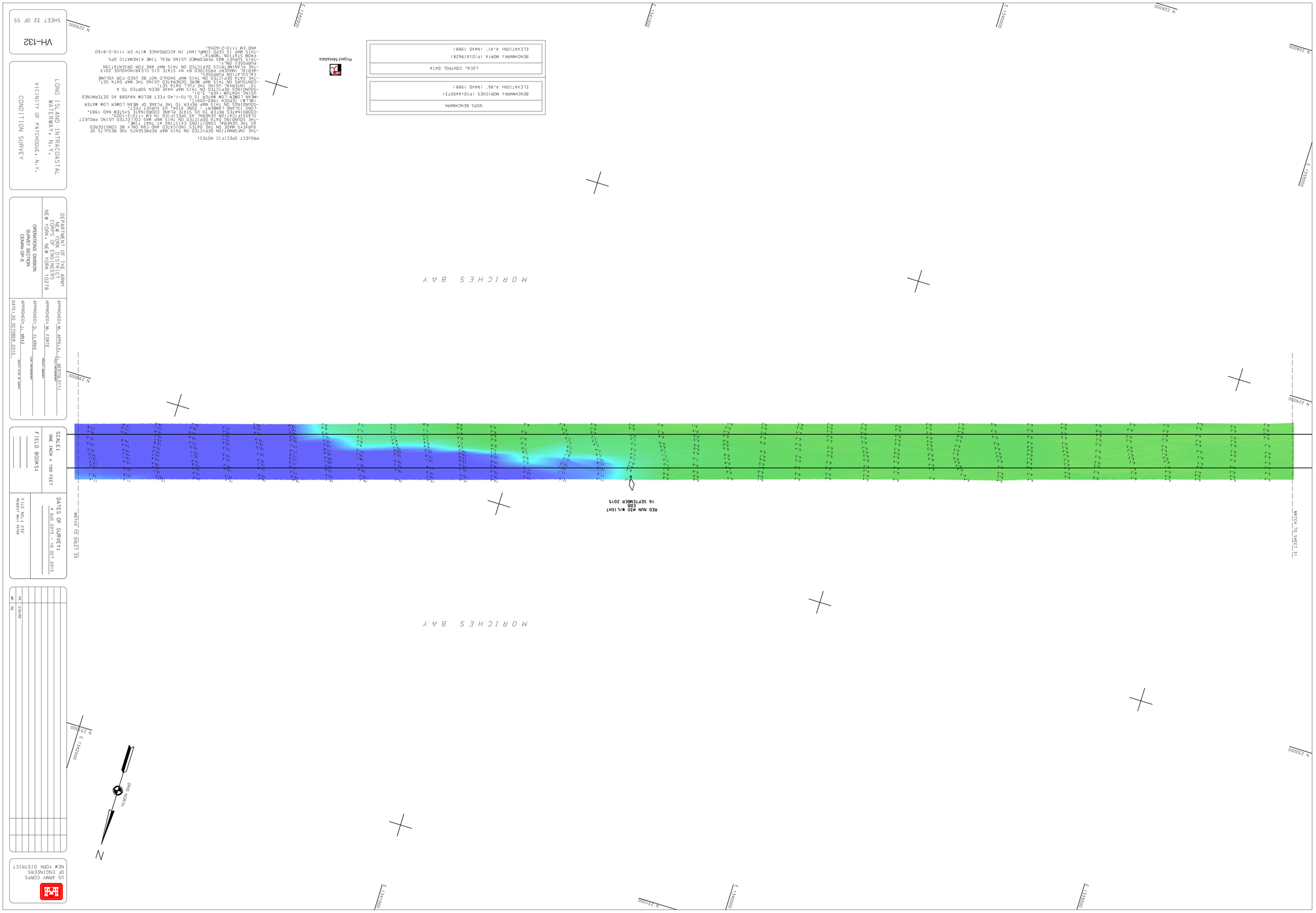
NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MORIA (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

VH-131

SHEET 31 OF 55



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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VOLTUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MORIA".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: MORIA (PID:A19628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.
VICINITY OF PATCHOGUE, N.Y.
CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
PROJECT MANAGER
APPROVED: M. FORTE
PROJECT MANAGER
APPROVED: D. CLARKE
LEAD CARTOGRAPHER
APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

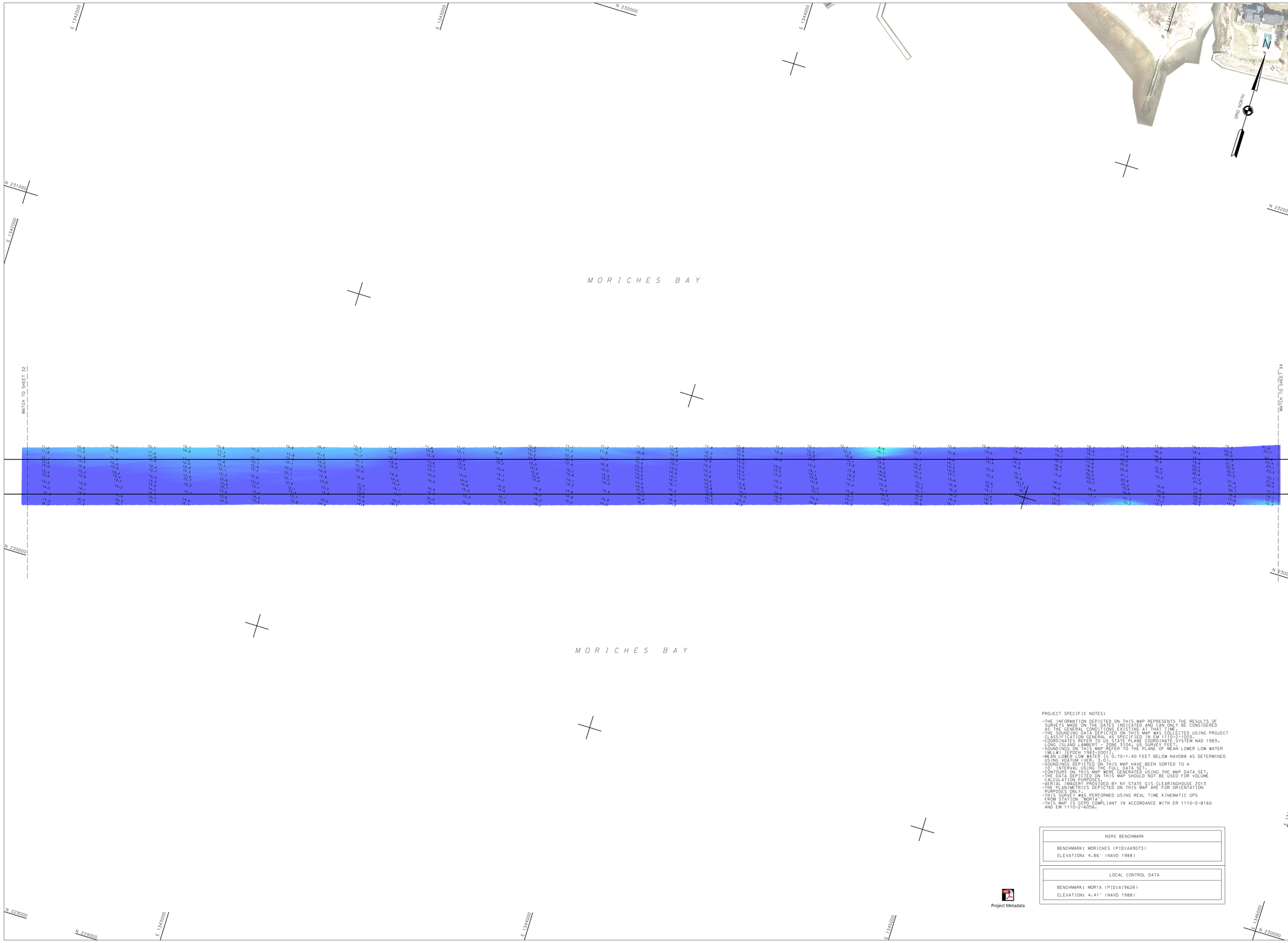
VH-132

SHEET 32 OF 55

FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS



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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (NAVD 1988)

Project Metadata

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

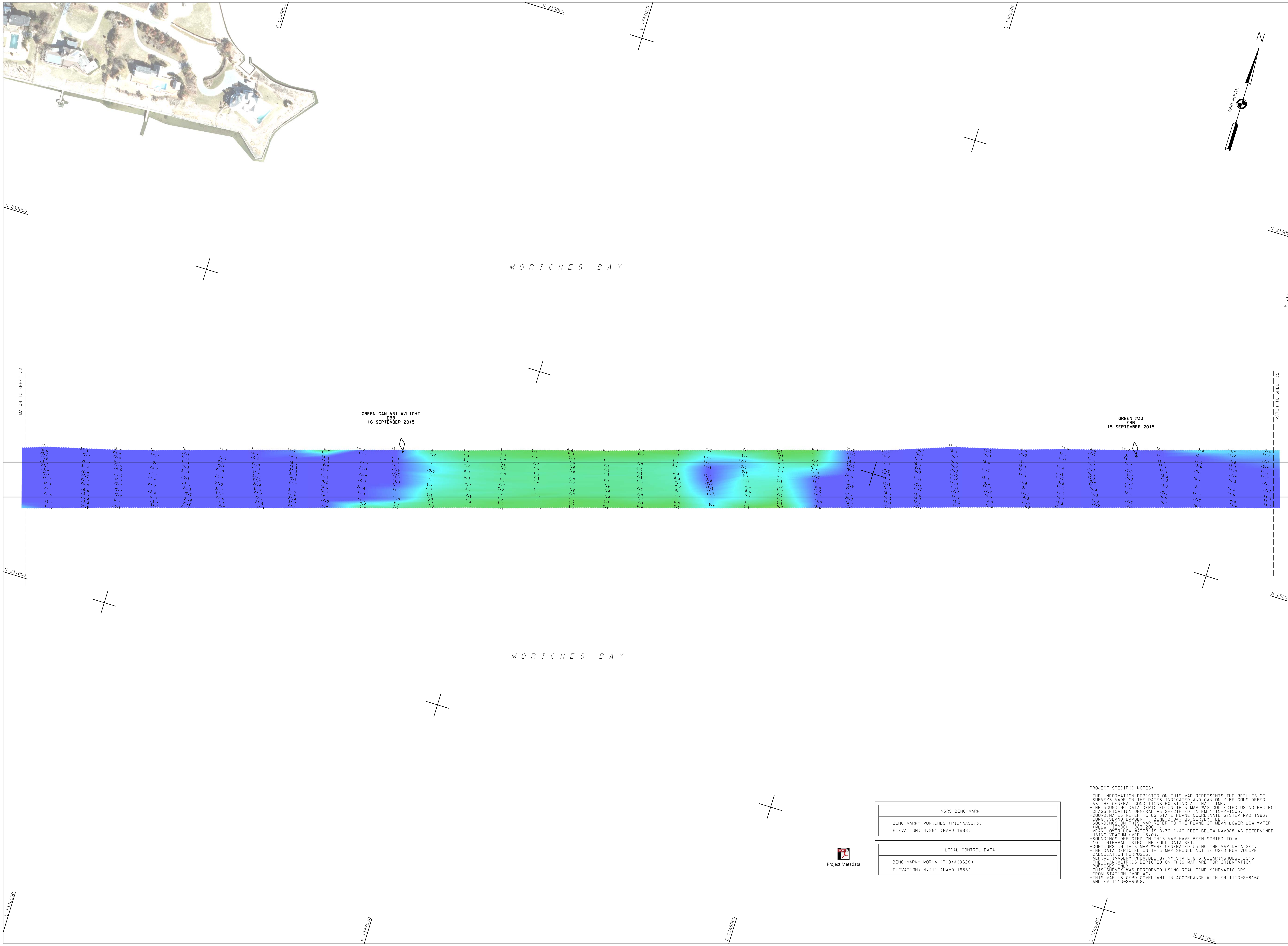
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-133

SHEET 33 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: MOR1A (PID:AI9628)
ELEVATION: 4.41' (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.
- -THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- -SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- -MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- -SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- -THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- -THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "MOR1A".
- -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

PR ESO/RD MP RD

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

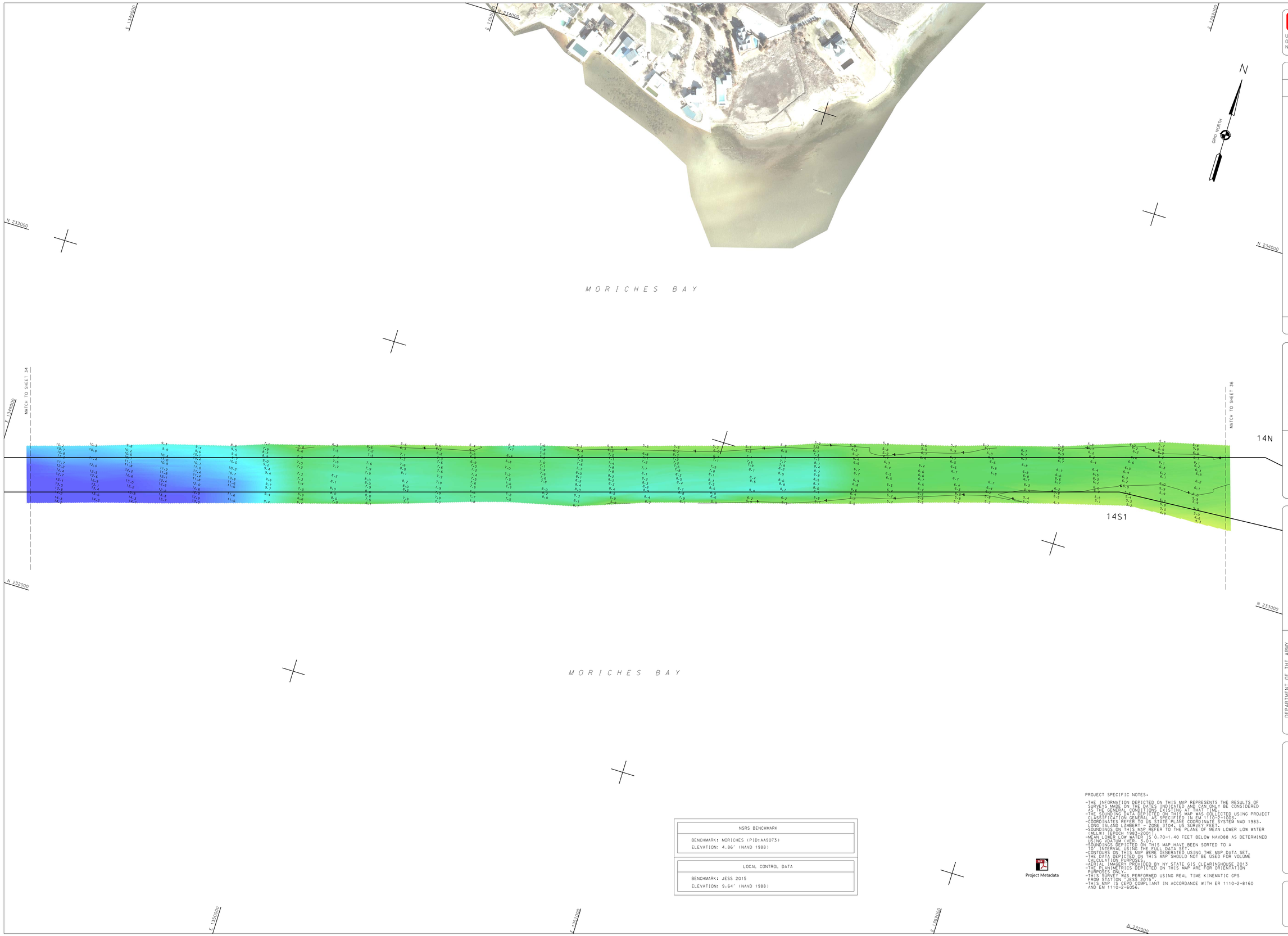
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH–134

SHEET 34 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015 ELEVATION: 9.64' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

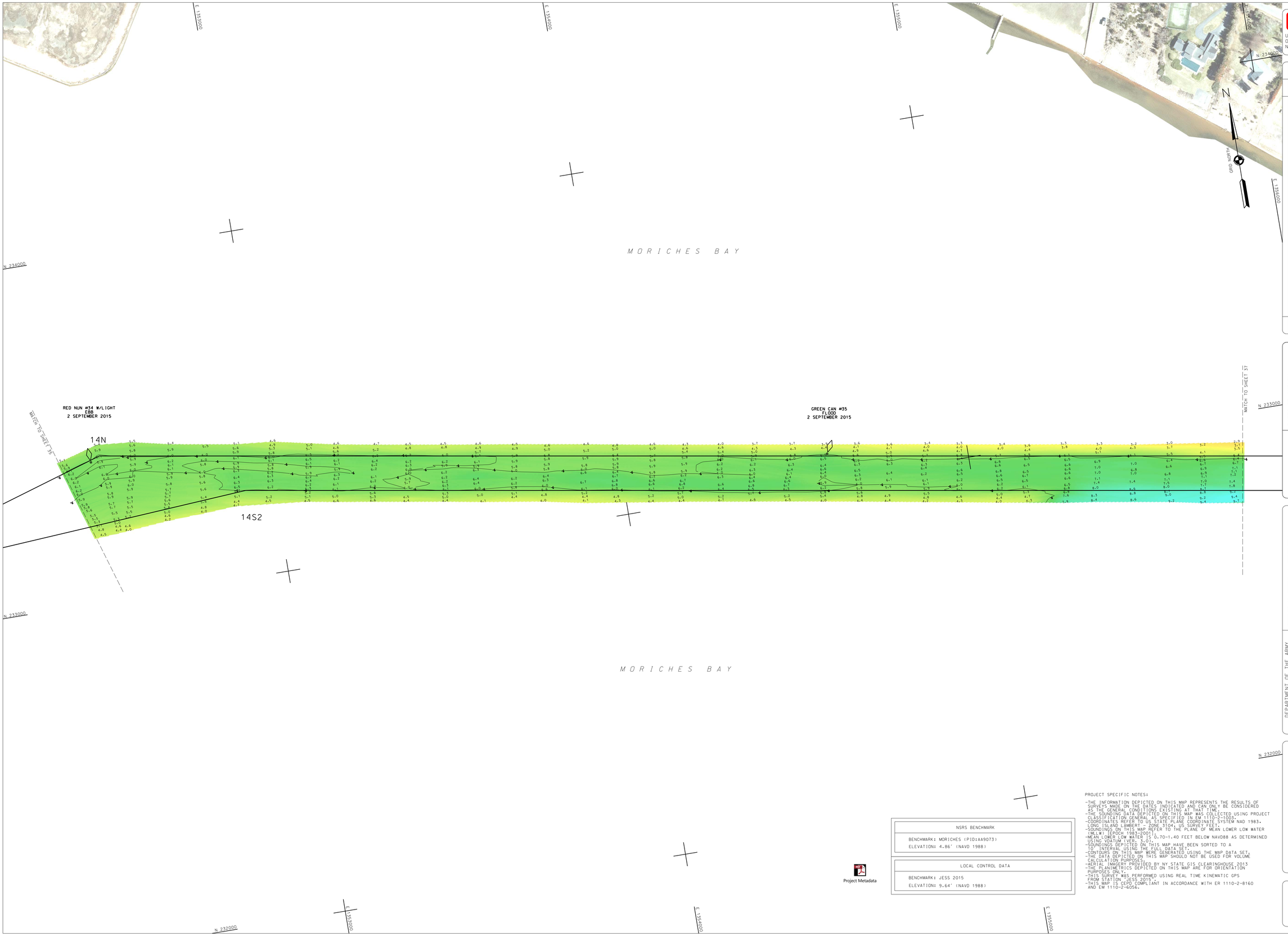
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-135

SHEET 35 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015
ELEVATION: 9.64' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- 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

PR | ESG/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

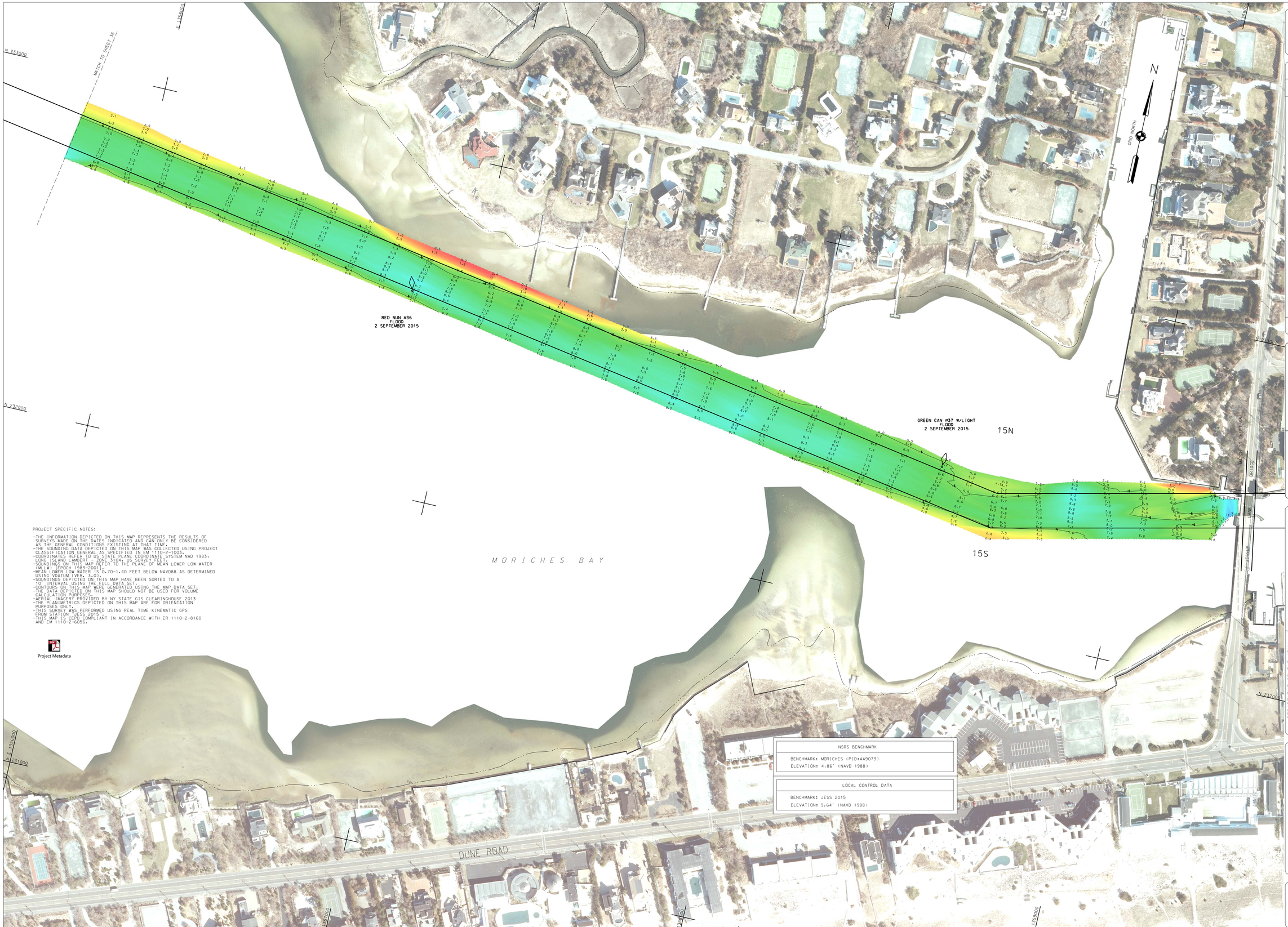
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-136

SHEET 36 OF 55

FILE NO: 232
REQ NO: 4370A



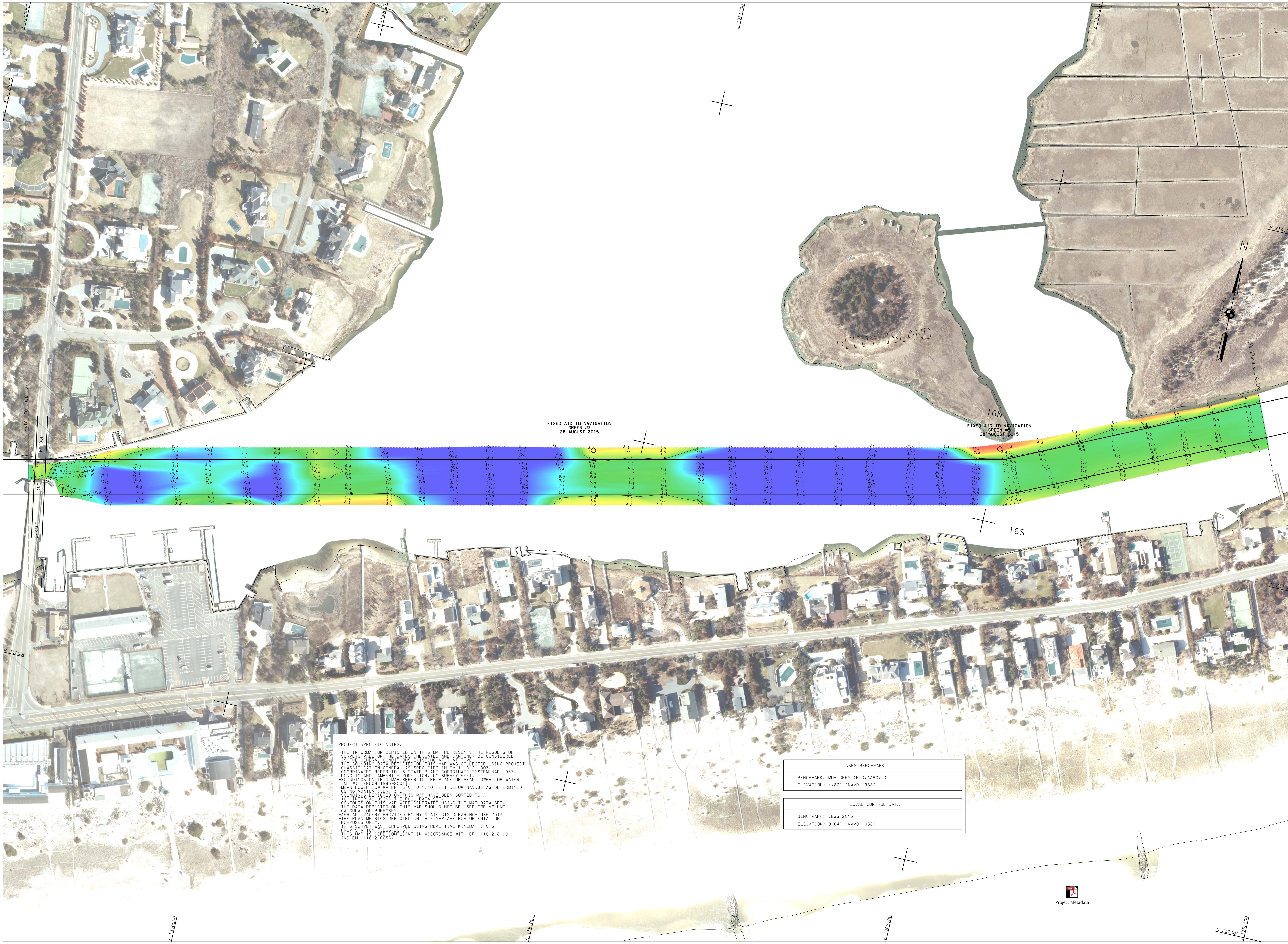
PROJECT SPECIFIC NOTES:

- 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 GENERALIZED AS SPECIFIED IN EM 1110-2-1003.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

Project Metadata

CORPS OF ENGINEERS

U. S. ARMY



PROJECT SPECIFIC NOTES:

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- -AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
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- -THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- -THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015 ELEVATION: 9.64' (NAVD 1988)

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR ESO/RD
MP RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI (FIELD CARTOGRAPHER)
APPROVED: M. FORTE (PROJECT MANAGER)
APPROVED: D. CLARKE (LEAD CARTOGRAPHER)
APPROVED: J. MRAZ (DEPUTY CHIEF OF SURVEY)
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

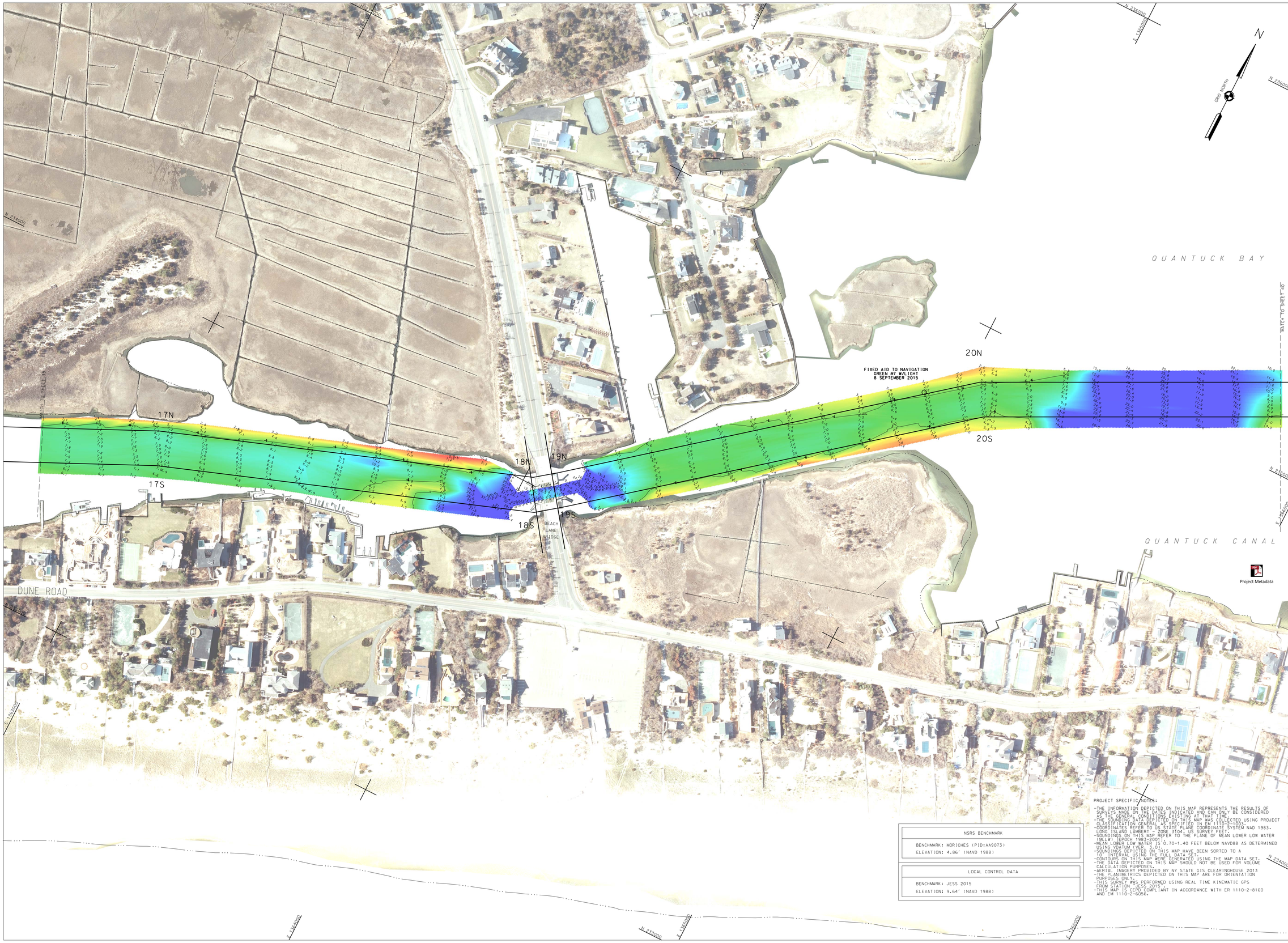
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-138

SHEET 38 OF 55

FILE NO: 232
REQ NO: 4370A



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD	
WP	RD	

DATES OF SURVEY:
4 AUG 2015 – 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD. /s/ BERIO/DTI
PROJECT MANAGER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
CHIEF CARTOGRAPHER

APPROVED: J. MRAZ
SENIOR CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

PROJECT SPECIFIC NOTES:

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-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT – ZONE 3104, US SURVEY FEET.
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-AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION JESS 2015.
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

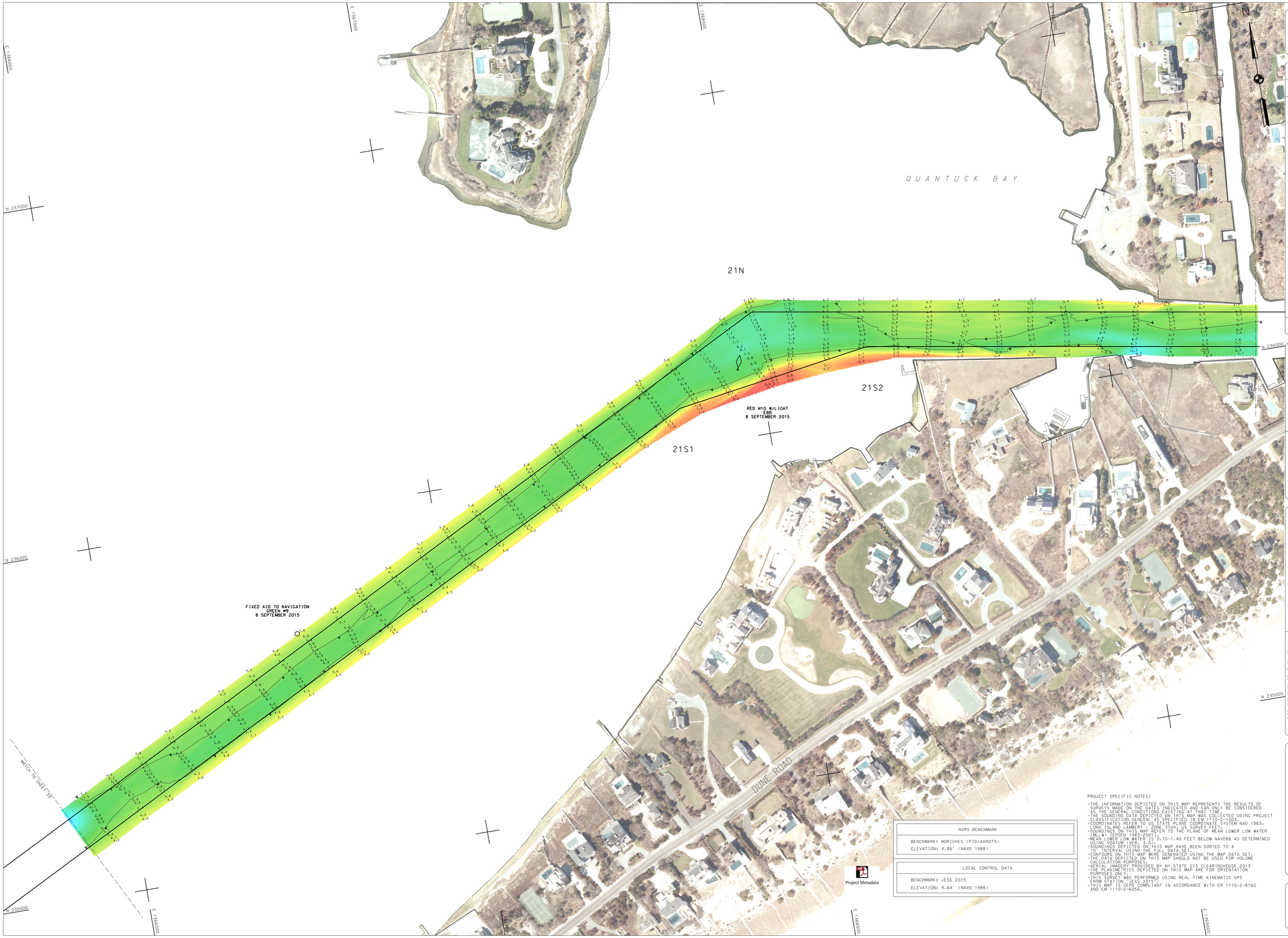
LOCAL CONTROL DATA
BENCHMARK: JESS 2015
ELEVATION: 9.64' (NAVD 1988)

VH–139

SHEET 39 OF 55

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-140

SHEET 40 OF 55

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015
ELEVATION: 9.64' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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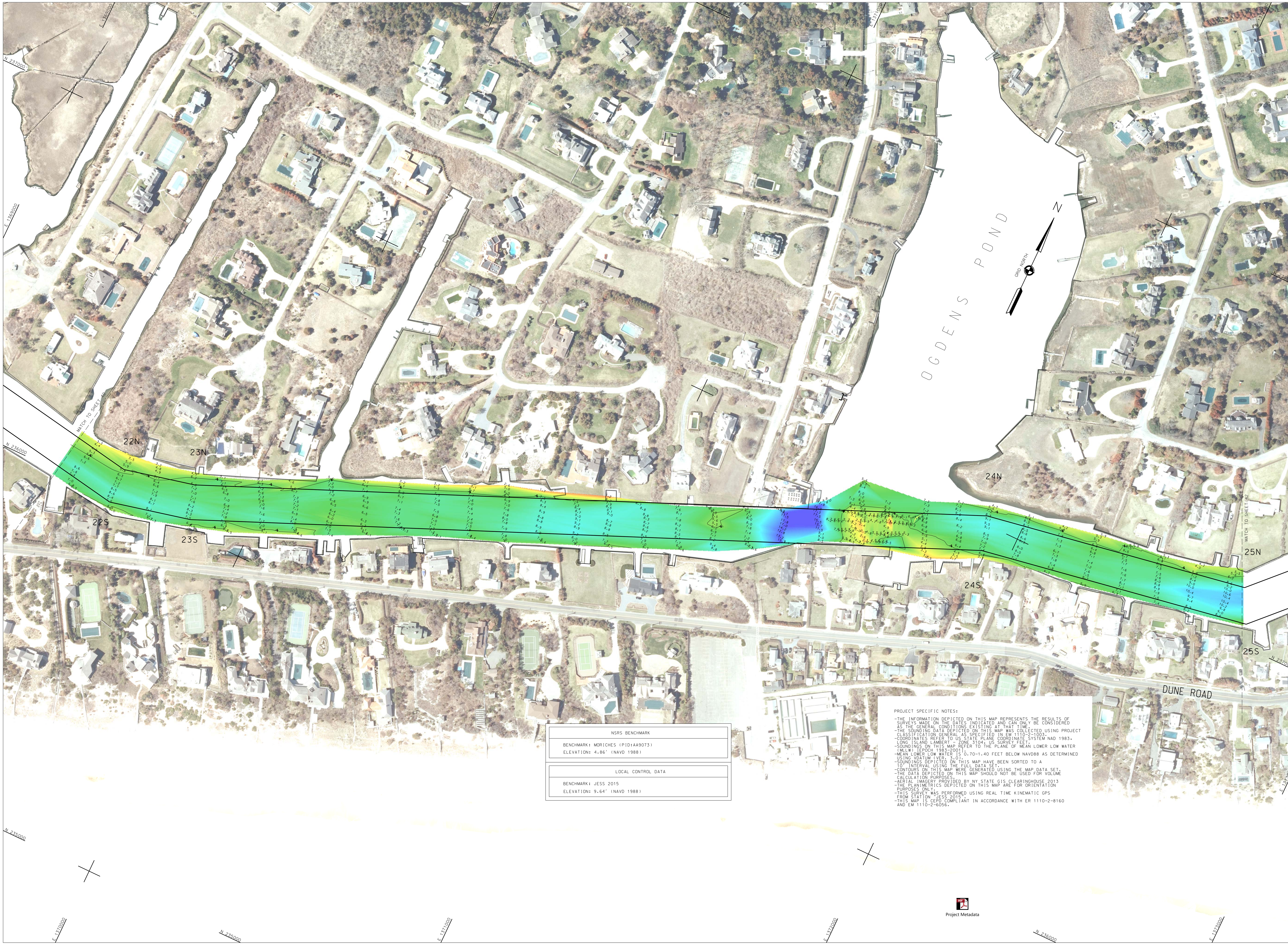
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL DATA SET.
-CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

Project Metadata

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: JESS 2015
ELEVATION: 9.64' (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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- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- 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

PR ESO/RD
MP RD

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

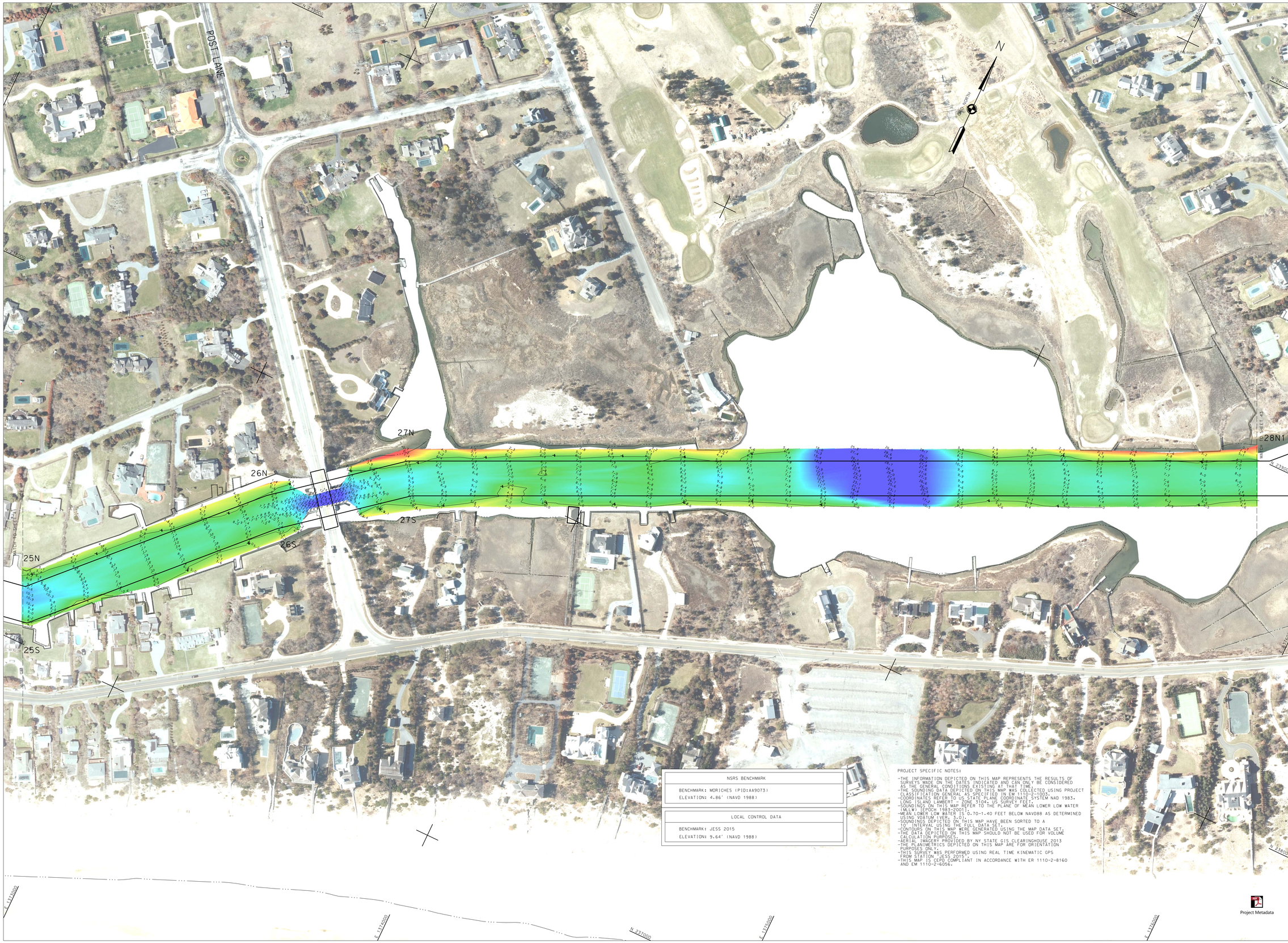
VH-141

SHEET 41 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015
ELEVATION: 9.64' (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.
- THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
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- AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- 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

PR ESG/RG

MP RG

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

Project Metadata

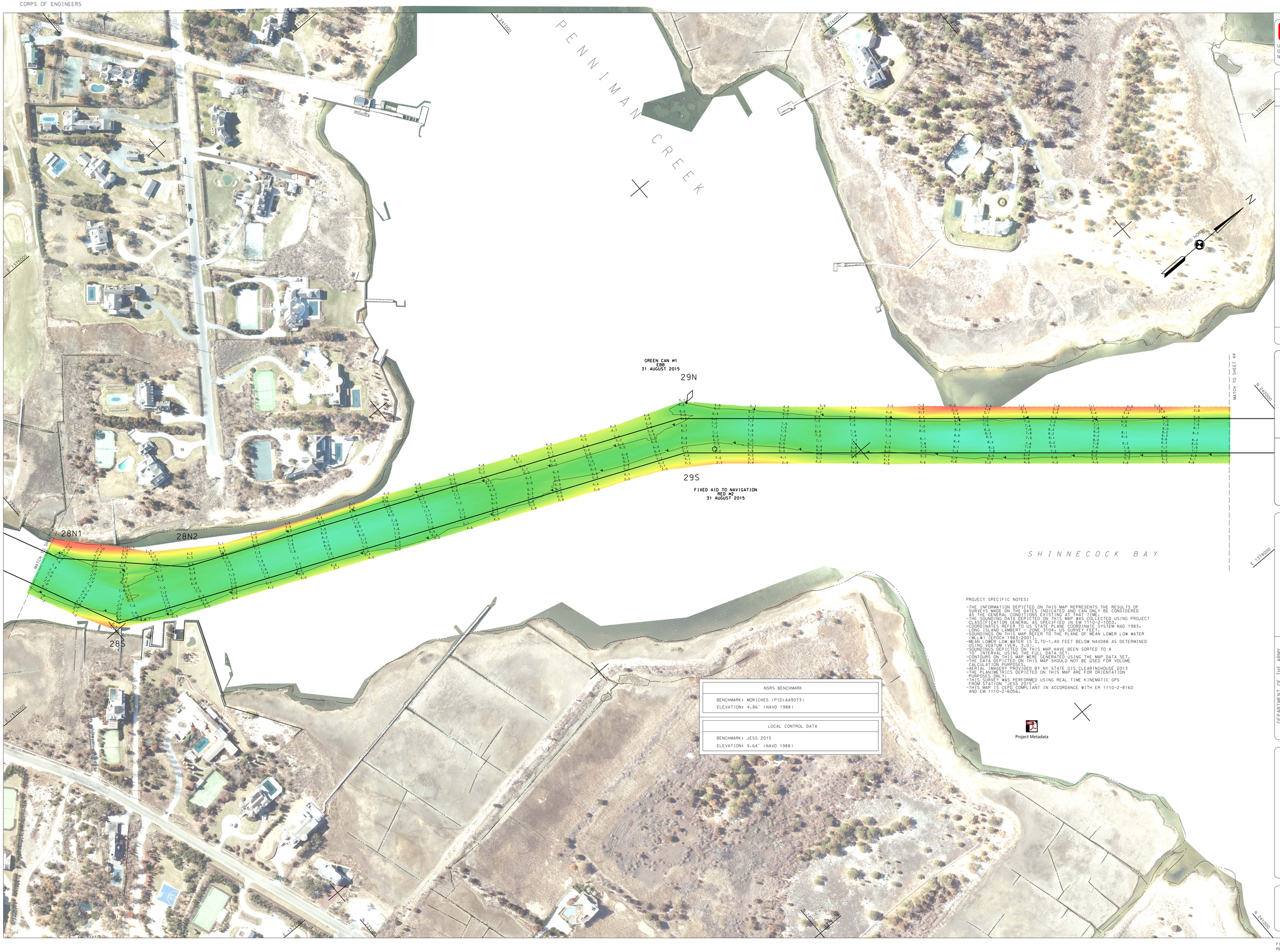
VH-142

SHEET 42 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: JESS 2015
ELEVATION: 9.64' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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- THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "JESS 2015".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

Project Metadata

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR ESG/RD
MP RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

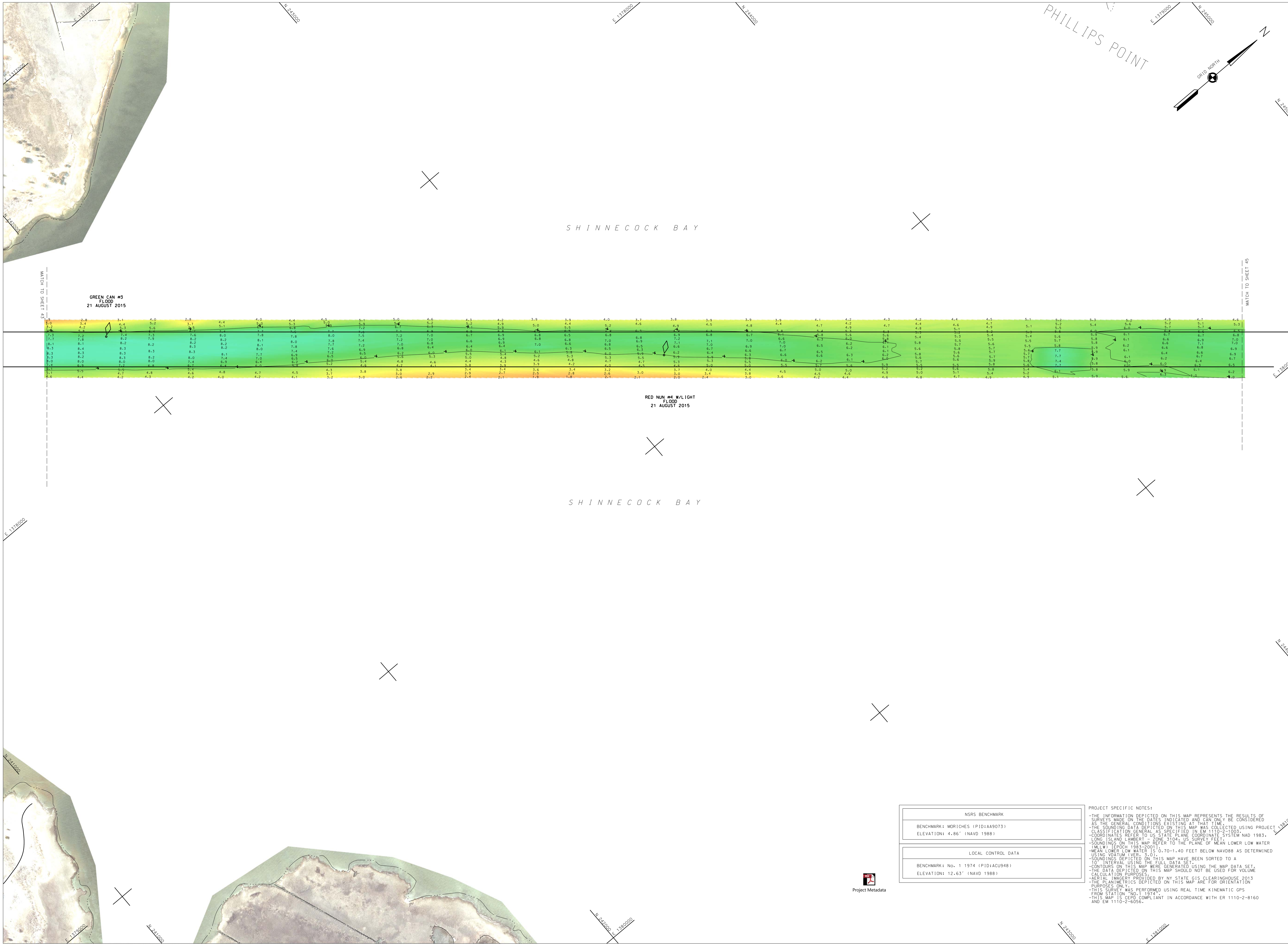
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-143

SHEET 43 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- 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

ESO/RD | RD
PR | MP

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

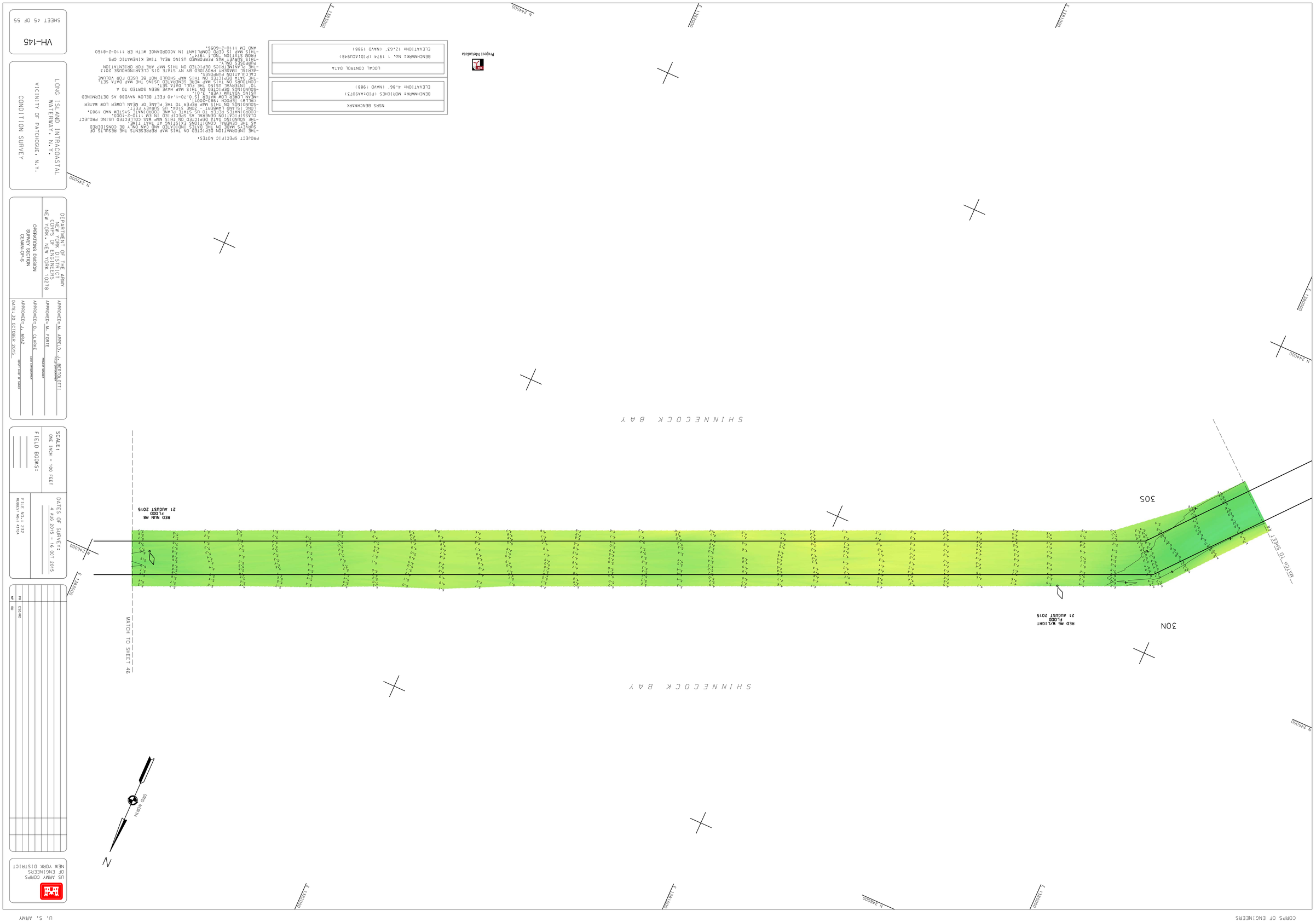
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-144

SHEET 44 OF 55

FILE NO: 232
REQ NO: 4370A



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.
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-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VOLTUM (VER. 3.0).
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL DATA SET.
-THE DATA DEPICTED ON THIS MAP MAY BE GENERATED USING THE MAP DATA SET.
-CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET.
-CALCULATION PURPOSES.
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS PURPOSES ONLY.
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 FROM STATION "NO.1 1974".
AND EM 1110-2-6056.

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CONSULTANT

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

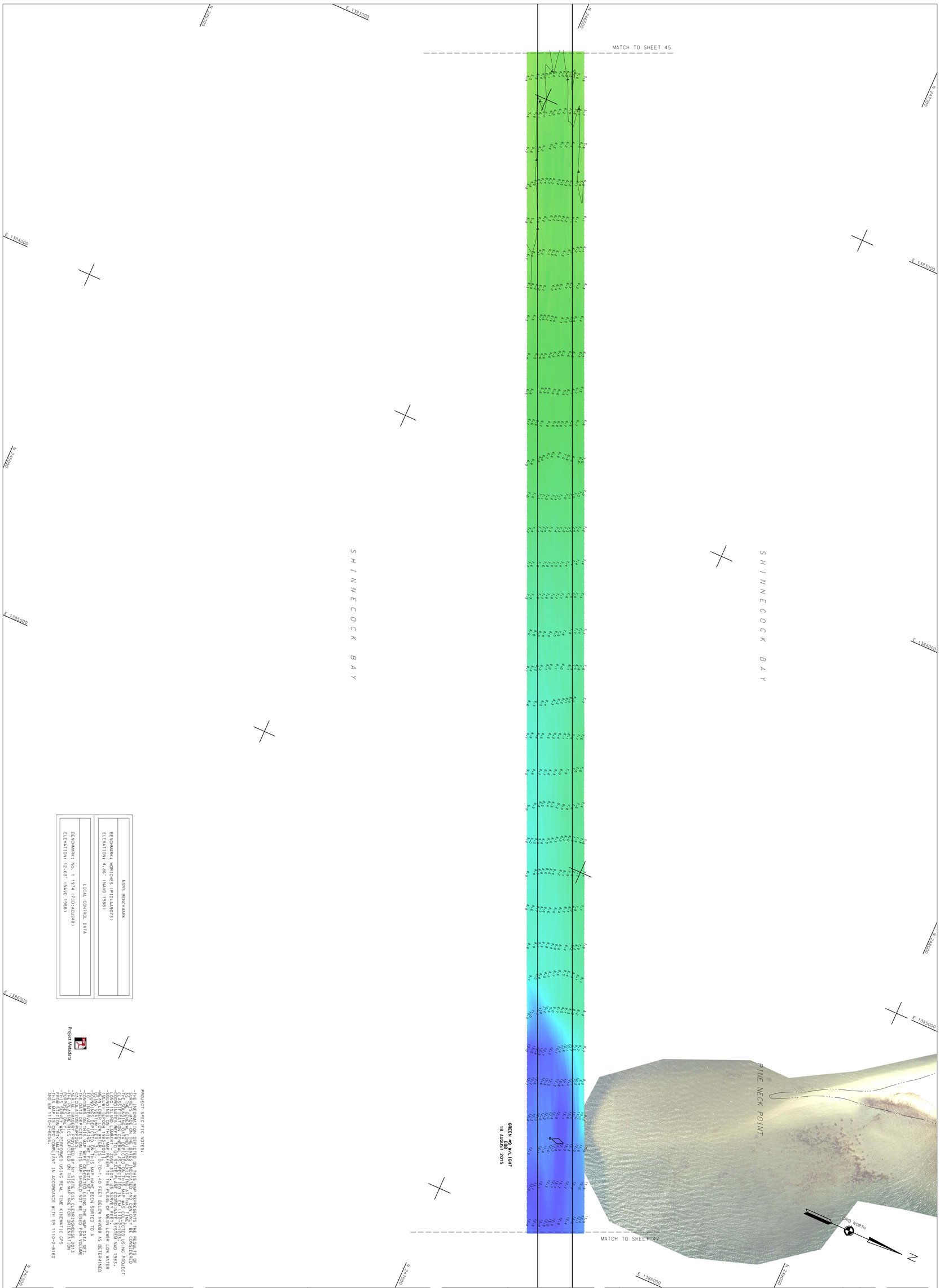
VH-145

SHEET 45 OF 55

FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS



CORPS OF ENGINEERS

U. S. ARMY

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983.
-CONGLOMERATE LAMBERT - ZONE 3104, US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) (EPOCH 1983-2001).
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VERTICAL VERIFIED TIDE.
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A CONTOURING INTERVAL USING THE FULL DATA SET.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
-PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK MAP" COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

VH-146

SHEET 46 OF 55

FILE NO: 232
REQ NO: 4370A

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER
APPROVED: M. FORTE
PROJECT MANAGER
APPROVED: D. CLARKE
LEAD CARTOGRAPHER
APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

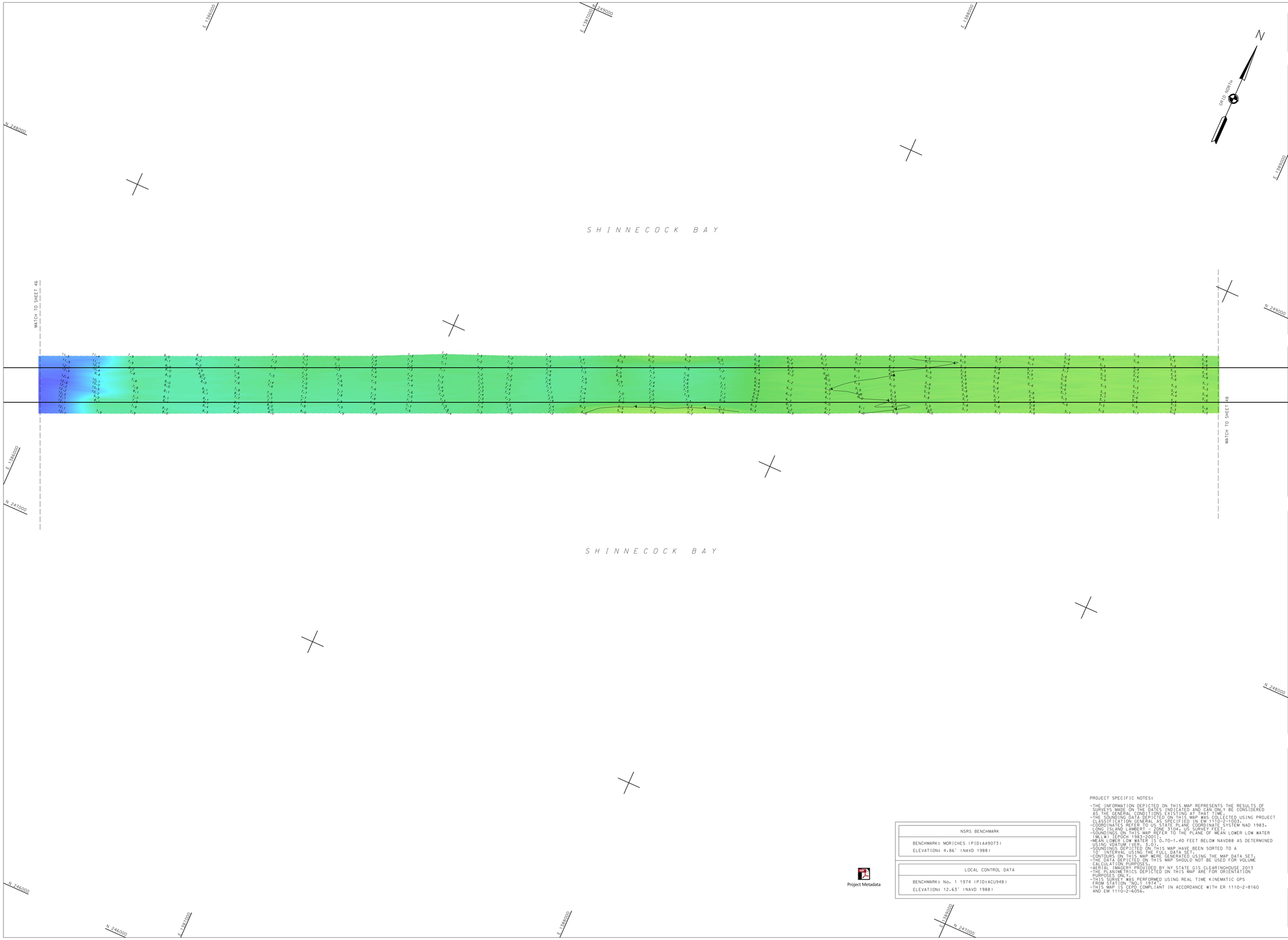
FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

PR	ESQ/RD
MP	RD

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT



NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- 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

PR | ESG/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

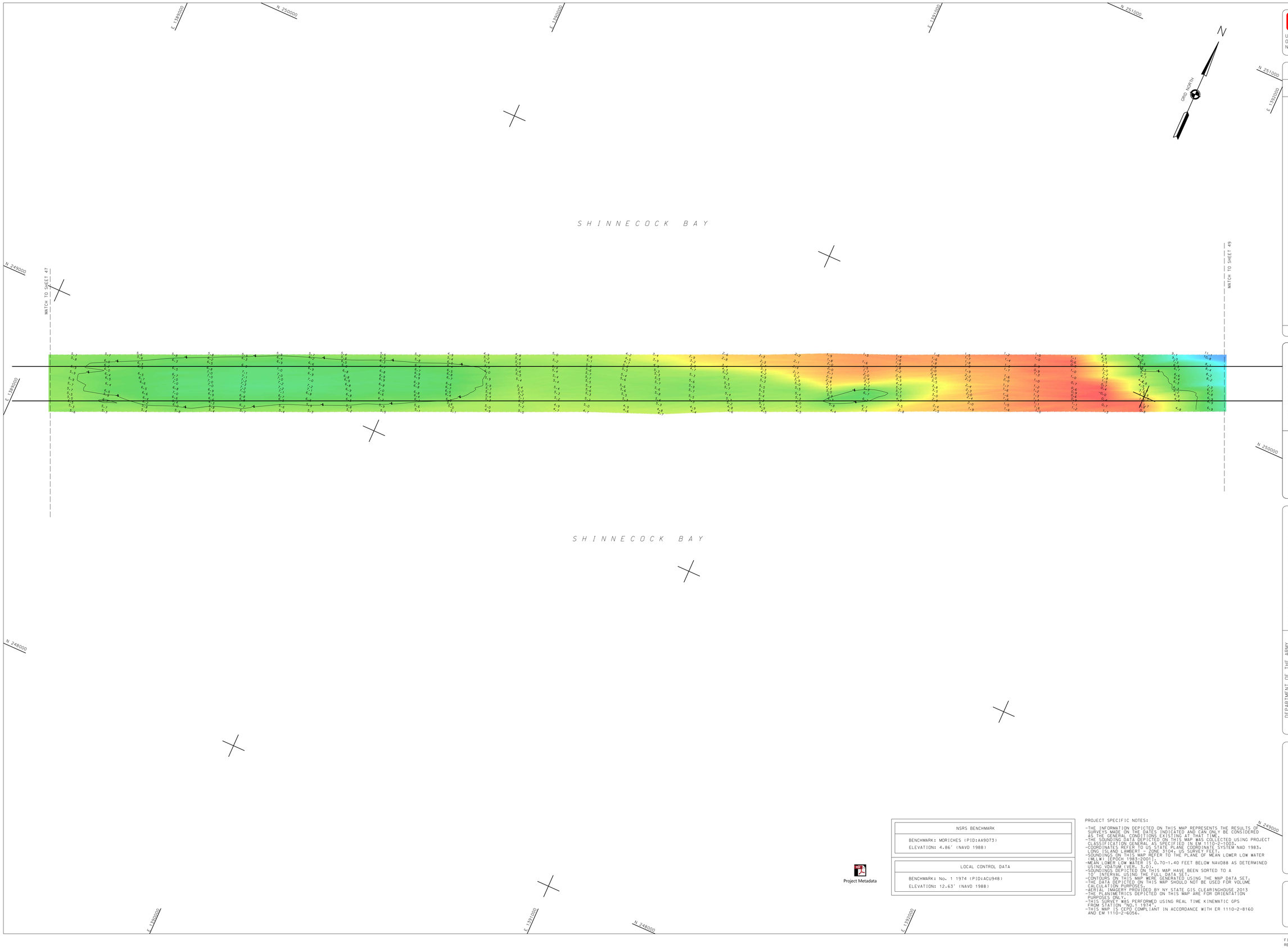
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-147

SHEET 47 OF 55

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (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.
- THE SOUNDING DATA DEPICTED 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. LONG ISLAND LAMBERT - ZONE 3104. US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO. 1 1974".
- 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

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PINE NECK

CONDITION SURVEY

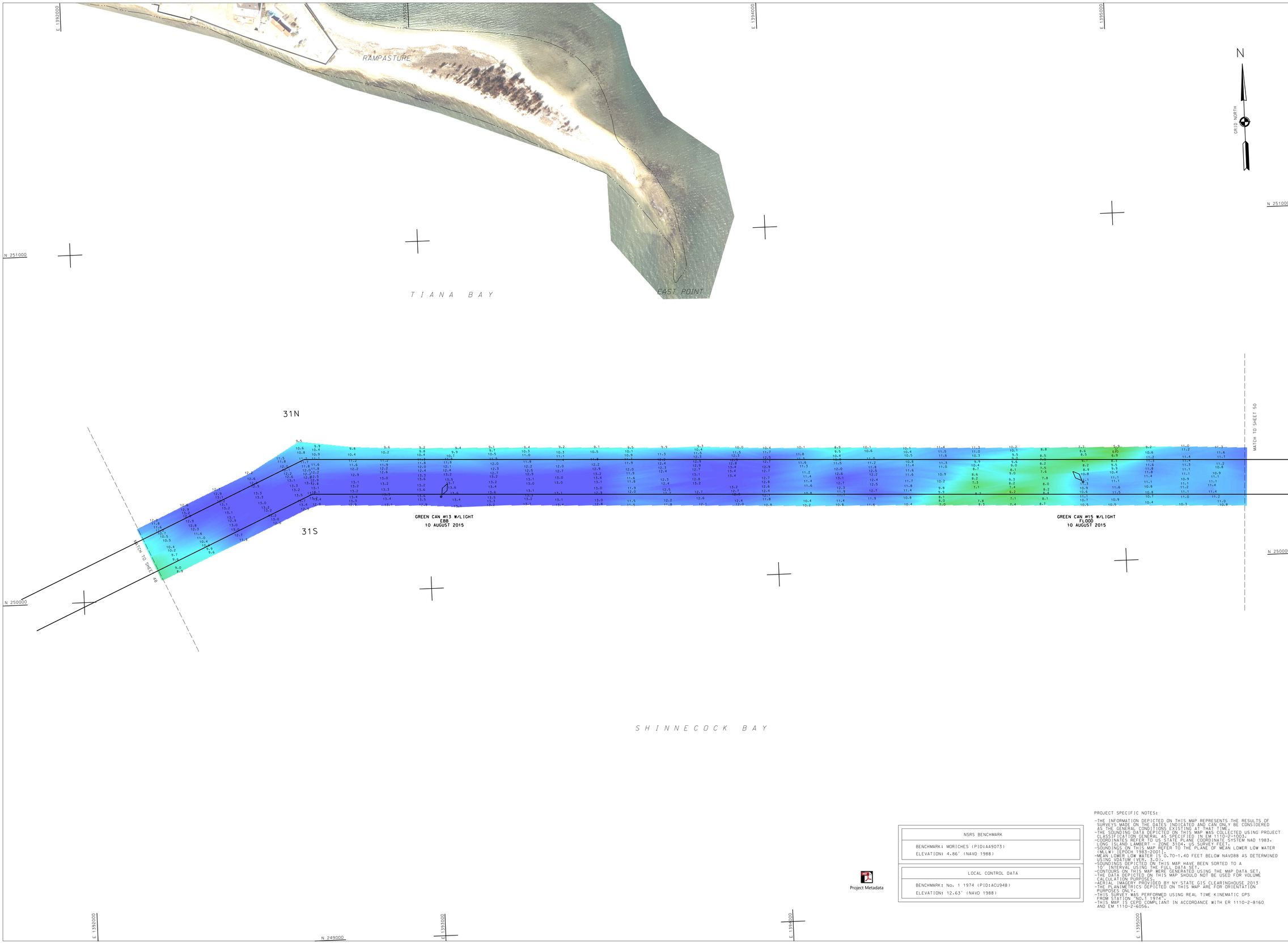
VH-148

SHEET 48 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RD
MP	RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-149

SHEET 49 OF 55

Project Metadata

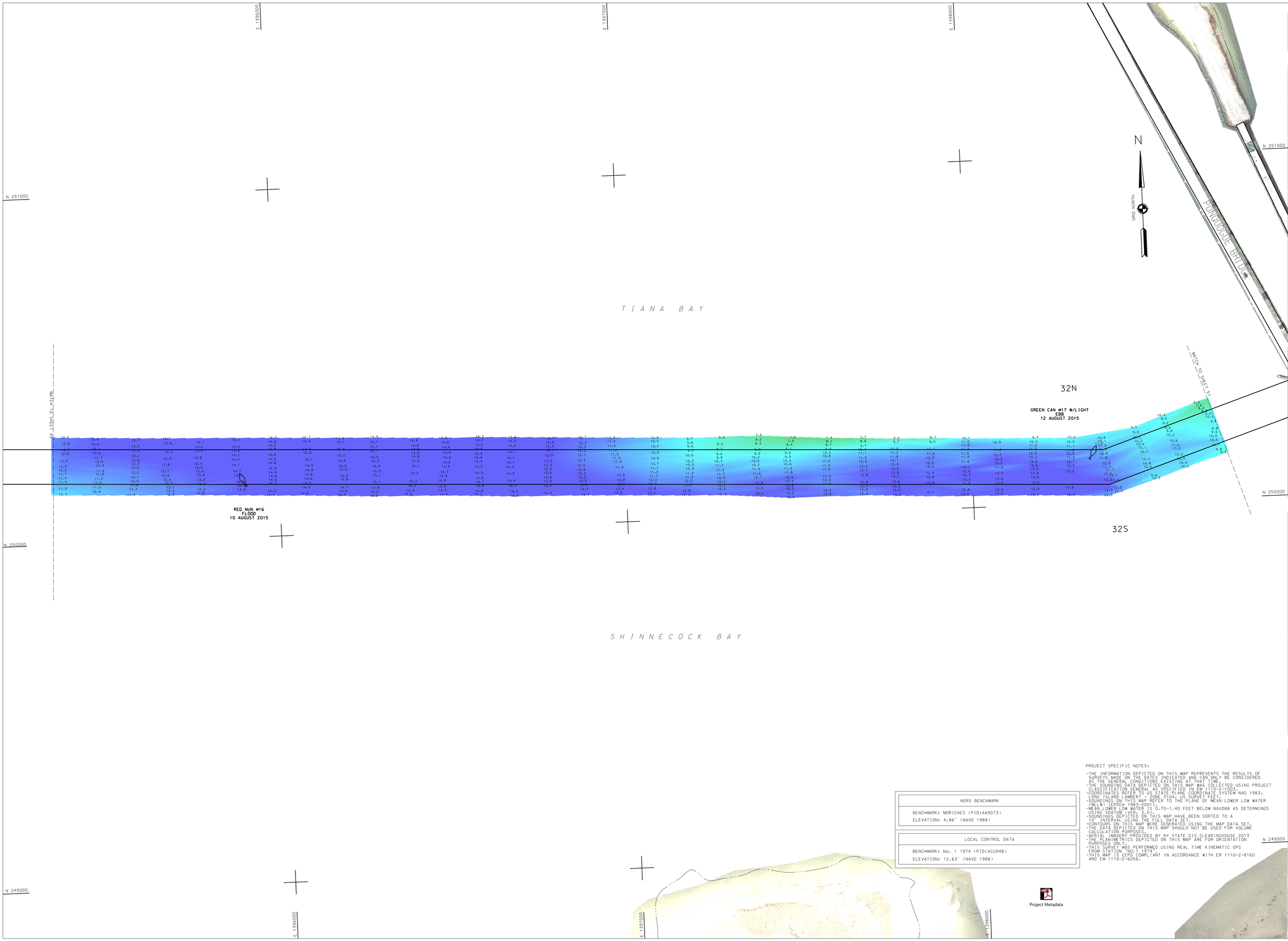
NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

FILE NO: 232
REQ NO: 4370A



NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

PROJECT SPECIFIC NOTES:

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- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
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- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

Project Metadata

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	ESG/RO	
MP	RO	

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
FIELD CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

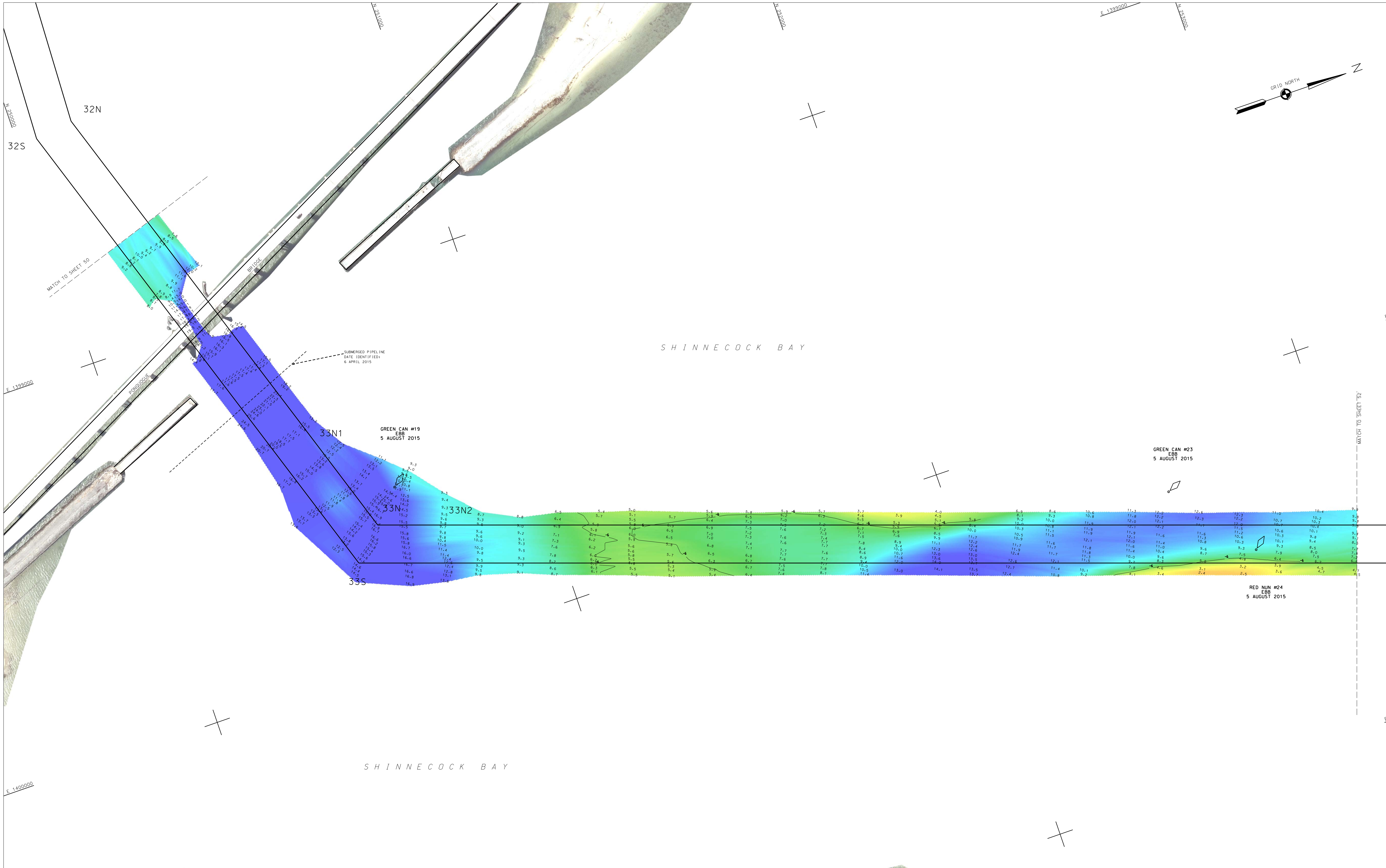
VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-150

SHEET 50 OF 55

FILE NO: 232
REQ NO: 4370A



US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	ESO/RD
MP	RD

DATES OF SURVEY: 4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER
APPROVED: M. FORTE — PROJECT MANAGER
APPROVED: D. CLARKE — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

NSRS BENCHMARK
BENCHMARK: NGS MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

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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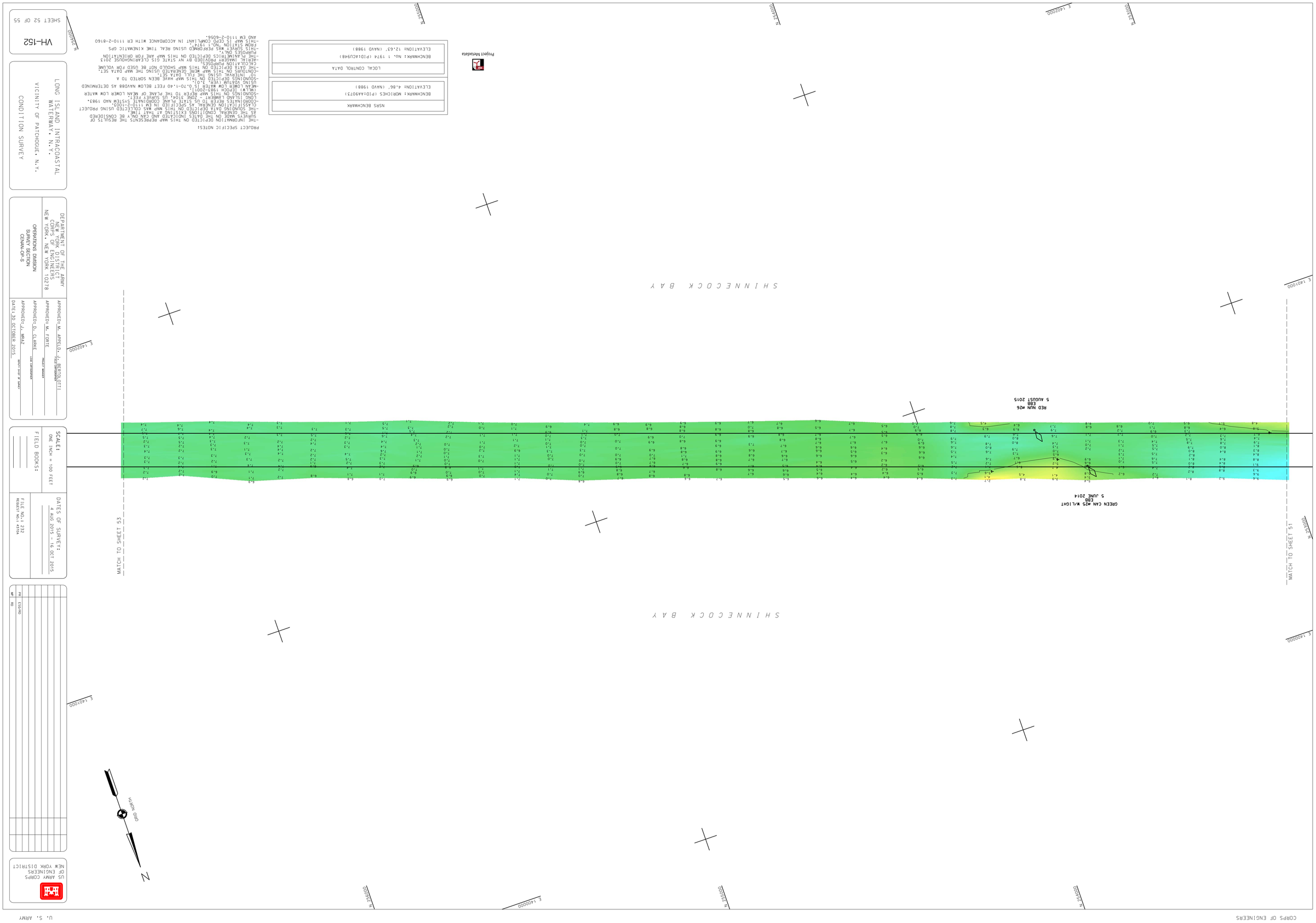
- -COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- -SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- -MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- -SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- -THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- -THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- -THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

VH–151

SHEET 51 OF 55

FILE NO: 232
REQ NO: 4370A



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.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER
-MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED (MLLW) [EPOCH 1983-2001].
-SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A USING VDATUM (VER. 3.0).
-TO INTERVAL USING THE FULL DATA SET.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-AERIAL IMAGERY PROVIDED BY NY STATE GIS CLEARINGHOUSE 2013
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NSRS BENCHMARK

BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: M. APPELO, J. BERTOLOTTI
FIELD CONDUCTOR

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

VH-152

SHEET 52 OF 55

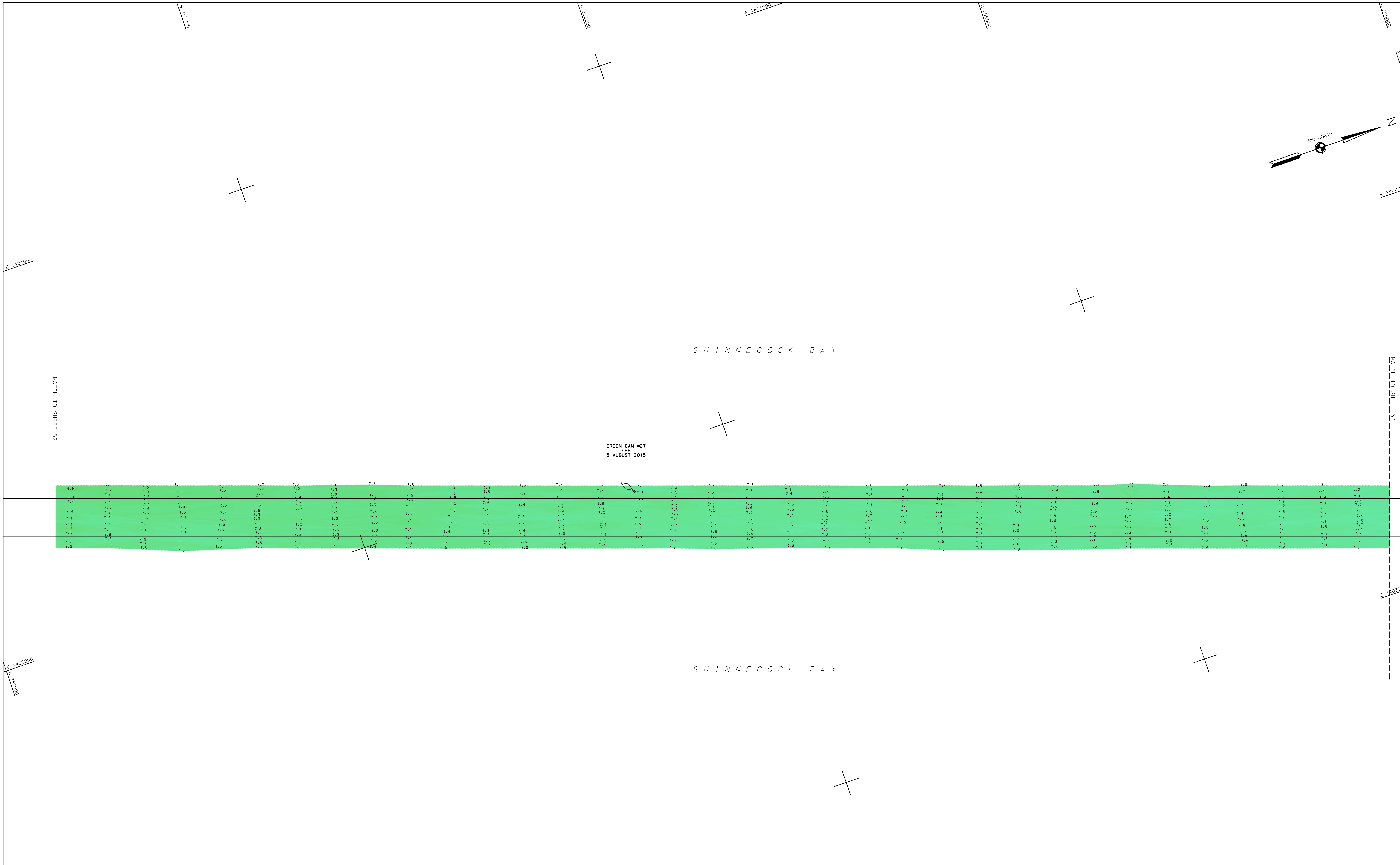
FILE NO: 232
REQ NO: 4370A

U. S. ARMY

CORPS OF ENGINEERS

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR | ESO/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI — FIELD CARTOGRAPHER

APPROVED: M. FORTE — PROJECT MANAGER

APPROVED: D. CLARKE — LEAD CARTOGRAPHER

APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL
WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073) ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948) ELEVATION: 12.63' (NAVD 1988)

Project Metadata

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.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

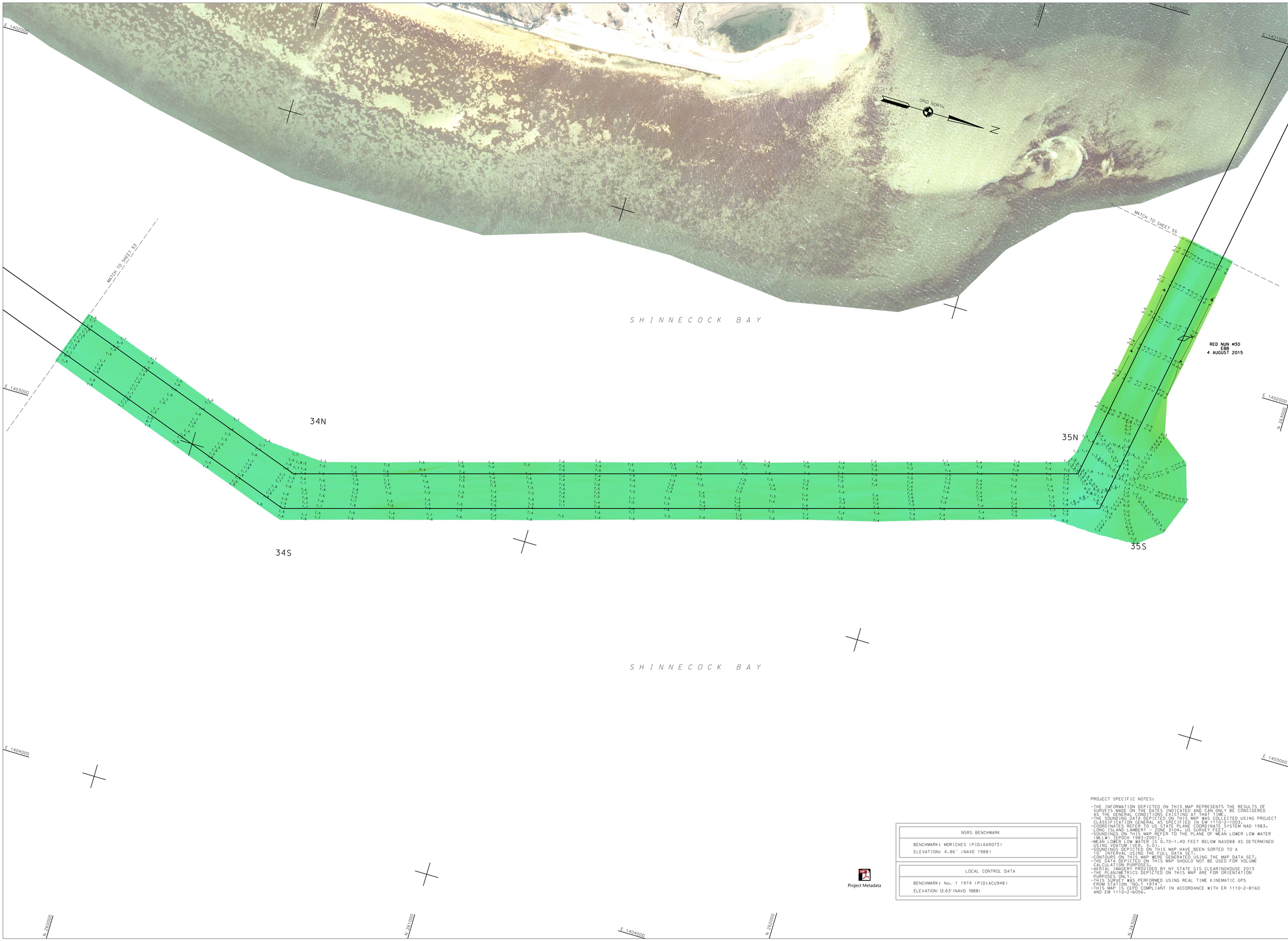
VH-153

SHEET 53 OF 55

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR | ESG/RD
MP | RD

DATES OF SURVEY:
4 AUG 2015 - 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELD, J. BERTOLOTTI
CHIEF, CARTOGRAPHER

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N.Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-154

SHEET 54 OF 55

Project Metadata

NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

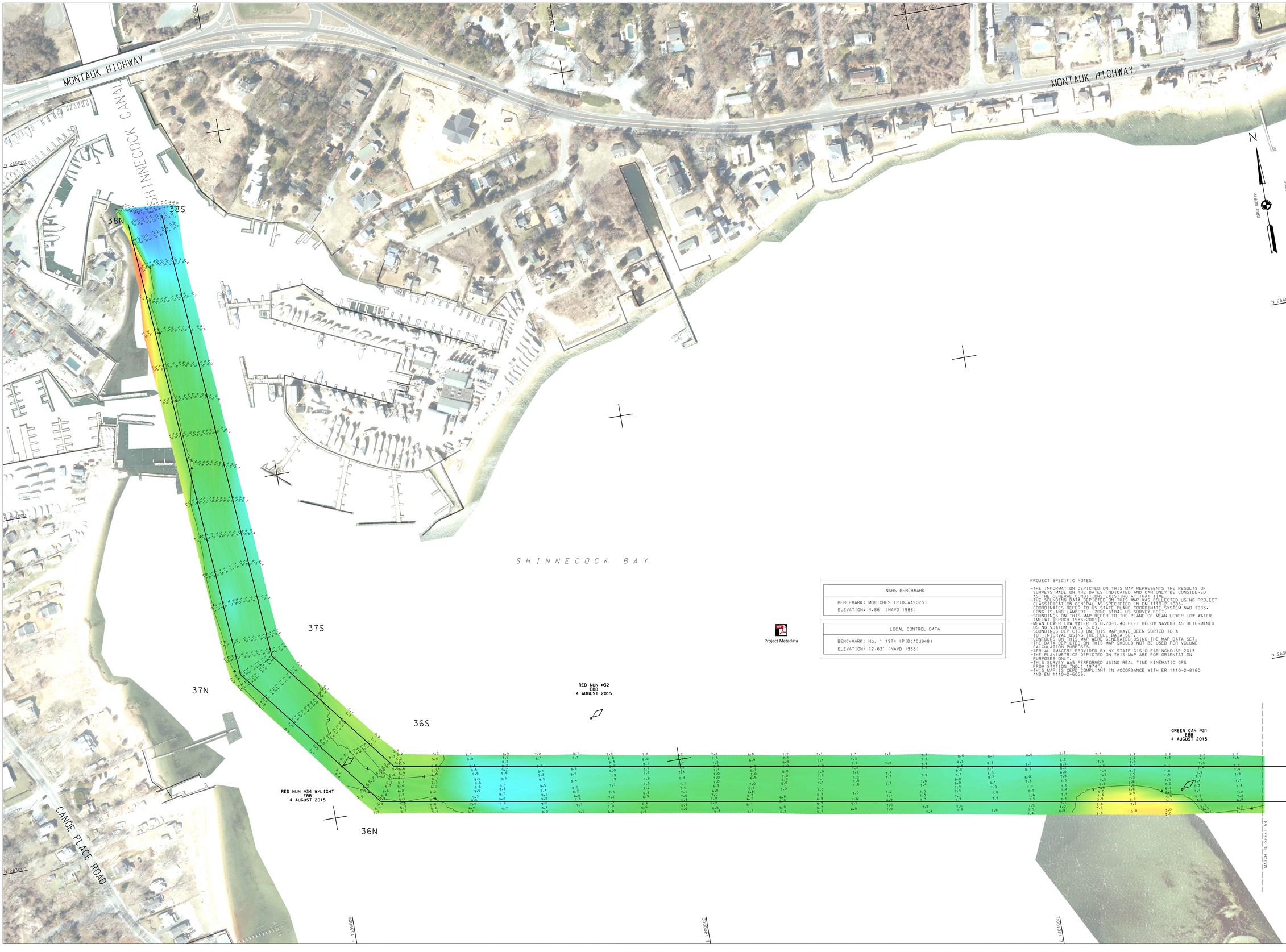
PROJECT SPECIFIC NOTES:

- 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.
- THE SOUNDING DATA DEPICTED 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, LONG ISLAND LAMBERT - ZONE 3104, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.70-1.40 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.0).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 10' INTERVAL USING THE FULL 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 NY STATE GIS CLEARINGHOUSE 2013
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NO.1 1974".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

FILE NO: 232
REQ NO: 4370A

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK
BENCHMARK: MORICHES (PID:AA9073)
ELEVATION: 4.86' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: No. 1 1974 (PID:ACU948)
ELEVATION: 12.63' (NAVD 1988)

Project Metadata

PROJECT SPECIFIC NOTES:

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US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PM	ESG/RD	
WP	RD	

DATES OF SURVEY: 4 AUG 2015 – 16 OCT 2015

FILE NO.: 232
REQUEST NO.: 4370A

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: M. APPELO - J. BERTOLOTTI
CHIEF, CARTOGRAPHY

APPROVED: M. FORTE
PROJECT MANAGER

APPROVED: D. CLARKE
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 30 OCTOBER 2015

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

LONG ISLAND INTRACOASTAL WATERWAY, N. Y.

VICINITY OF PATCHOGUE, N.Y.

CONDITION SURVEY

VH-155

SHEET 55 OF 55

FILE NO: 232
REQ NO: 4370A