

## SECTION I

NM 51/08

Chart 12327

NM 51/08

NEW YORK HARBOR - LOWER BAY - CHANNEL DEPTHS								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
AMBROSE CHANNEL	39.9	45.9	45.8	41.7	4-03	2000	9.2	45
SANDY HOOK CHANNEL (EAST)	34.6	39.9	38.4	31.5	9-07	A800-2200	3.5	A35
SANDY HOOK CHANNEL	B24.4	37.6	37.5	32.5	9-07	800	2.4	35
CHAPEL HILL:								
SOUTH CHANNEL	29.0	28.8	29.5	27.7	11,12-06;1,2,3-07	1000	2.7	30
NORTH CHANNEL	29.5	C29.6	D26.5	E23.6	11,12-06;1,2,3-07	1000	1.8	30
TERMINAL CHANNEL	45.0	45.0	45.0	45.0	12-02	400-1050	0.8	35
RARITAN BAY EAST REACH	32.8	38.2	37.7	33.9	6,7,9-07	600	4.0	35
RARITAN BAY WEST REACH	32.9	39.6	39.2	33.3	6,7-07	600	2.4	35
SEGUINE POINT BEND	32.9	35.0	36.9	30.5	7-07	600-800	1.2	35
RED BANK REACH	35.7	41.0	40.6	36.6	7-07	600	1.2	35
WARD POINT BEND (EAST)	30.5	38.4	36.9	34.9	7-07	600-800	1.1	35
WARD POINT BEND (WEST)	35.7	34.5	31.0	30.7	7-07	600-800	1.3	35
RARITAN RIVER CUT OFF	17.8	19.8	17.9	12.9	7-08	600-1100	1.0	20
WARD POINT SECONDARY CHANNEL	17.4	17.5	20.0	19.8	6-04;8-06;1-08	400	0.9	30
GREAT BEDS REACH	18.8	21.6	22.3	19.8	7-08	300	0.6	25
SOUTH AMBOY REACH	19.8	21.9	22.0	17.9	7-08	300	1.2	25
<p>A. THE NAVAL FACILITIES ENGINEERING COMMAND MAINTAINS A 45 FT PROJECT FOR A WIDTH OF 600 FT IN SANDY HOOK CHANNEL (EAST) TO THE TURNING BASIN.</p> <p>B. EXCEPT FOR SHOALS TO 14.0 FT AT 40°28'44.7" N 74°01'01.1" W ALONG THE LEFT OUTSIDE QUARTER OF REACH.</p> <p>C. 27 FT WRECK LOCATED AT 40°31'55.0" N 74°02'23.6" W AND A 28 FT OBSTRUCTION LOCATED AT 40°31'44.2" N 74°02'25.7" W</p> <p>D. 27 FT OBSTRUCTIONS LOCATED AT 40°32'24.3" N 74°02'11.6" W AND 40°32'16.5" N 74°02'13.5" W.</p> <p>E. 24 FT OBSTRUCTION LOCATED AT 40°31'53.8" N 74°02'15.8" W.</p>								
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION								

Chart 12331

NM 51/08

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
RARITAN BAY EAST REACH	32.8	38.2	37.7	33.9	6,7-07	600	4.0	35
RARITAN BAY WEST REACH	32.9	39.6	39.2	33.3	6,7-07	600	2.4	35
SEGUINE POINT BEND	32.9	35.0	36.9	30.5	9-06;7-07	600-800	1.2	35
RED BANK REACH	35.7	41.0	40.6	36.6	7-07	600	1.2	35
WARD POINT BEND (EAST)	30.5	38.4	36.9	34.9	7-07	600-800	1.1	35
WARD POINT BEND (WEST)	35.7	34.5	31.0	30.7	7,07	600-800	1.3	35
OUTERBRIDGE REACH	34.1	35.3	35.8	34.5	5,7-07	600	1.6	35
PORT SOCONY REACH	32.6	34.8	34.9	31.9	5-07	600-800	0.8	35
PORT READING REACH	18.0	34.1	34.5	26.7	5-07	500	1.8	35
FRESH KILLS REACH	31.1	34.3	35.6	33.4	5-07	500	1.8	35
RARITAN RIVER CUTOFF	17.8	19.8	17.9	12.9	7-08	600-1100	1.0	20
WARD POINT SECONDARY CHANNEL	17.4	17.5	20.0	19.8	6-04;8-06;1-08	400	0.9	30
GREAT BEDS REACH	18.8	21.6	22.3	19.8	7-08	300	0.6	25
SOUTH AMBOY REACH	19.8	21.9	22.0	17.9	7-08	300	1.2	25
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION								

SECTION I

NM 51/08

Chart 12332

NM 51/08

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
WARD POINT BEND (EAST)	30.5	38.4	36.9	34.9	7-07	600-800	1.1	35
WARD POINT BEND (WEST)	35.7	34.5	31.0	30.7	7-07	600-800	1.3	35
OUTERBRIDGE REACH	34.1	35.3	35.8	34.5	7-07	600	1.6	35
RARITAN RIVER CUTOFF	17.8	19.8	17.9	12.9	7-08	600-1100	1.0	20
WARD POINT SECONDARY CHANNEL	17.4	17.5	20.0	19.8	6-04;8-06;1-08	400	0.9	30
GREAT BEDS REACH	18.8	21.6	22.3	19.8	7-08	300	0.6	25
SOUTH AMBOY REACH	19.8	21.9	22.0	17.9	7-08	300	1.2	25
SANDY POINT REACH	20.4	A20.3	A20.2	20.4	7-08	300	0.9	25
KEASBEY REACH	14.0	18.7	21.7	19.7	7-08	300	0.9	25
RED ROOT REACH	B12.2	16.3	17.2	13.2	7-08	300	1.5	25
CRAB ISLAND REACH	C15.0	C14.5	C14.5	12.5	9-88	200	1.2	15
NORTHWEST REACH	6.0	7.5	7.5	12.2	7-62	200	1.2	15
TITANIUM REACH	4.2	4.0	2.2	1.7	7-08	300	0.6	25
SOUTH CHANNEL	D2.0	E4.2	F4.2	F2.1	7-62;3,4-90	150	0.7	15-10

A. EXCEPT FOR SHOALS TO 18.2 FT AT 40°29'47.6"N 74°16'54.0"W ON THE WESTSIDE OF THE BRIDGE FENDER  
 B. EXCEPT FOR SHOALS TO 4.4 FT AT 40°29'30.0"N 74°19'42.8"W ALONG THE LEFT OUTSIDE QUARTER OF REACH.  
 C. SHOALS LOCATED APPROXIMATELY 40°29'01.0"N, 74°21'16.0"W TO 400 YARDS SOUTH; A DEPTH OF 13 FT FOR A WIDTH OF 200 FT WAS AVAILABLE TO THE WEST OF THE PROJECT CHANNEL.  
 D. POSSIBLE 6 FT OBSTRUCTION LOCATED AT 40°29'35.4"N, 74°19'04.5"W.  
 E. POSSIBLE 4 FT OBSTRUCTION LOCATED AT 40°29'37.4"N, 74°19'04.0"W.  
 F. POSSIBLE 6 FT OBSTRUCTION LOCATED AT 40°29'34.4"N, 74°19'03.0"W.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14839

NM 51/08

CLEVELAND HARBOR CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 2008 AND REPORTS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)					PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
LAKE APPROACH CHANNEL	27.7	30.0	29.6	25.7	4-07	600-750	0.22	29
ENTRANCE CHANNEL	26.5	29.8	30.6	24.8	4-07	225-750	0.22	28
CUYAHOGA RIVER PIER RANGE	19.4	26.1	27.4	18.4	4-08	230	0.30	27
THENCE TO HOPE MEMORIAL BRIDGE	A12.6	15.9	18.5	7.7	4-08	100-700	2.69	23
THENCE TO END OF PROJECT OLD RIVER	B11.4	C19.6	D17.6	E10.1	4-08	110-400	3.11	23
FROM CUYAHOGA RIVER TO END OF PROJECT	12.7	20.1	19.5	F11.1	4-08	125-200	1.10	27
EAST BASIN AIRPORT RANGE	15.1	23.2	23.1	19.5	6-07	500	3.11	25
TURNING BASIN	22.8	22.7	22.4	22.4	6-07	400-1600	0.33	25
EASTERN SECTION	21.4	21.8	21.6	G19.7	6-07	1250-1540	0.72	27
WESTERN SECTION	22.9	27.8	23.3	19.3	6-07	1300-1540	0.28	28
WEST BASIN	H21.6	I23.9	J23.2	K18.7	6-07	1150-1570	0.91	28

A. EXCEPT FOR SHOALING TO 7.2 FEET AT 41°29'55.6"N 081°42'17.7"W.  
 B. EXCEPT FOR SHOALING TO 9.6 FEET FROM 41°29'22.2"N 081°41'36.2"W TO 41°29'21.4"N 081°41'36.2"W.  
 AND 7.5 FEET FROM 41°29'21.8"N 081°41'01.1"W TO 41°29'22.6"N 081°40'59.6"W AND 8.9 FEET IN LAST 150 FEET OF PROJECT.  
 C. EXCEPT FOR SHOALING TO 8.9 FEET FROM 41°27'53.5"N 081°40'32.5"W TO END OF PROJECT.  
 D. EXCEPT FOR SHOALING TO 9.3 FEET FROM 41°27'53.7"N 081°40'33.2"W TO END OF PROJECT.  
 E. EXCEPT FOR SHOALING TO 2.7 FEET FROM 41°29'10.8"N 081°40'47.3"W TO 41°29'09.5"N 081°40'46.0"W.  
 AND 2.6 FEET FROM 41°27'54.8"N 081°40'26.8"W OUTSIDE EDGE TO END OF PROJECT.  
 F. EXCEPT FOR SHOALING TO 9.0 FEET AT 41°29'51.2"N 081°42'44.0"W.  
 G. EXCEPT FOR SHOALING TO 16.3 FEET IN RIGHT OUTSIDE 75 FEET OF QUARTER.  
 H. EXCEPT FOR SHOALING TO 17.3 FEET IN WESTERN 500 FEET OF PROJECT.  
 I. EXCEPT FOR SHOALING TO 15.8 FEET IN WESTERN 500 FEET OF PROJECT.  
 J. EXCEPT FOR SHOALING TO 14.3 FEET IN WESTERN 500 FEET OF PROJECT.  
 K. EXCEPT FOR SHOALING TO 14.5 FEET IN WESTERN 500 FEET OF PROJECT.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

SECTION I

NM 51/08

Chart 14867 (Inset Saginaw River)

NM 51/08

SAGINAW RIVER CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUNE 2008							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH LWD (FEET)
ENTRANCE CHANNEL	16.4	23.2	19.7	10-03; 8, 9-04; 11-06; 5-08	350	13.70	27
THENCE TO BUOY 28	25.5	26.0	23.4	5-08	200	0.47	26
THENCE TO ESSEXVILLE TURNING BASIN	23.9	23.9	19.8	5, 6-08	200	2.27	25
ESSEXVILLE TURNING BASIN	16.8	19.5	14.2	6-08	630	0.37	25-20
THENCE TO RR BRIDGE AT MILE 4.94	22.1	23.3	24.0	6-08	200	2.05	25
THENCE TO AIRPORT TURNING BASIN	18.4	20.1	17.1	6, 7-07; 11-07; 6-08	200	3.90	22
THENCE TO BUOY 64	17.0	20.7	16.3	7-04; 6-06; 7-07	200	3.20	22
THENCE TO N 43°28'52.4" W 83°54'48.0"	18.6	19.8	14.1	6-07	200	2.75	22
THENCE TO 6TH ST TURNING BASIN	12.7	18.0	15.0	5-06; 5, 6-07	200	3.10	22
6TH ST TURNING BASIN	15.6	16.2	17.1	5-07	650	0.20	22
THENCE TO C&O RR BRIDGE	15.7	13.9	10.7	9-04; 5-05; 5-07	200	0.17	22
THENCE TO CARROL ST.	15.4	15.6	13.0	10-77	200	0.30	16

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18754

NM 51/08

NEWPORT BAY CHANNEL DEPTHS								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	10.8	22.0	20.3	11.1	6-08	500	0.6	20
CORONA DEL MAR BEND	13.1	20.3	21.3	18.4	6-08	200-500	0.3	20
BALBOA REACH	14.7	16.1	14.4	13.8	6-08	200	0.5	20
HARBOR ISLAND REACH	12.5	14.4	15.7	14.8	6-08	200	0.7	20
LIDO ISLE REACH	10.8	12.4	13.4	14.4	6-08	200	0.8	20
TURNING BASIN	14.1	16.7	18.0	18.0	6-08	200-1000	0.3	20
BALBOA ISLAND, NORTH CHANNEL	6.2 A	7.2	7.5	8.2	6-08	200	0.9	10

A. 2 FT SHOAL AT 33° 36' 32.45" N 117° 53' 59.16" W

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 19369

NM 51/08

PEARL HARBOR CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE DEPARTMENT OF THE NAVY AND THE CORPS OF ENGINEERS - SURVEYS TO FEB 2007							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
OUTER ENTRANCE CHANNEL							
RIGHT OUTSIDE					300	1.0	45
CENTER	50.0	50.0	51.0	2-07	300	1.0	50
LEFT OUTSIDE					450	1.0	45
ENTRANCE CHANNEL							
RIGHT OUTSIDE					75-300	2.5	40
CENTER	43.0	43.0A	41.0	2-07	300-750	2.5	45
LEFT OUTSIDE					450-825	2.5	40

A. SHOALING TO 40 FEET AT 21°20'12.50"N 157°58'12.91"W

NOTE - CONSULT THE DEPARTMENT OF THE NAVY FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

SECTION I

NM 51/08

Chart 19369

NM 51/08

HONOLULU HARBOR CHANNEL DEPTHS								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2007								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HONOLULU CHANNEL RANGE	38.0	43.0	45.0	A43.0	6-07	500	0.53	45
KALIHI CHANNEL ENTRANCE	34.0	33.0	33.0	B14.0	2-99	400	1.2	23
EMERGENCY TURNING BASIN	28.0	34.0	34.0	27.0	2,3-99	400-960	0.5	35

A. SHOALING TO 16 FEET AT 21°17'41.2"N 157°52'14.9"W.  
 B. LOCATED ON THE CHANNEL EDGE.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 94067

NM 51/08

**NOTE**

The Traffic Separation Scheme(s) on this chart is not adopted by the International Maritime Organization.

Chart 94164

NM 51/08

**NOTE**

The Traffic Separation Scheme(s) on this chart is not adopted by the International Maritime Organization.