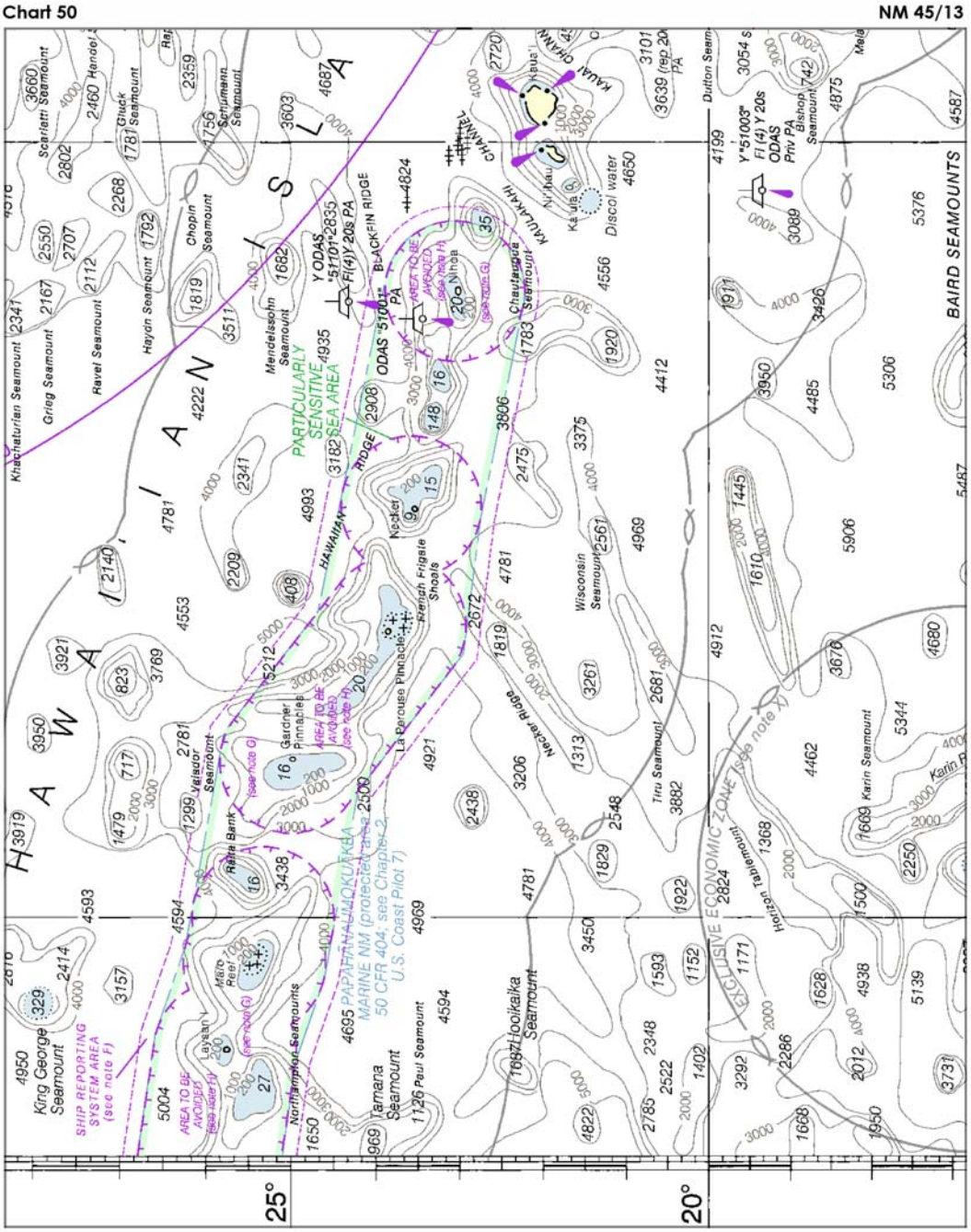


Chart 50
NM 45/13
HAWAIIAN ISLA
BAIRD SEAMOUNTS
PARTICULARLY SENSITIVE SEA AREA
PAPAHANAUMOKUAKEA MARINE NM (protected area 50 CFR 404; see Chapter 2, U.S. Coast Pilot 7)
EXCLUSIVE ECONOMIC ZONE (see note X)
SHIP REPORTING SYSTEM AREA (see note F)
AREA TO BE AVOIDED (see note H)
AREA TO BE AVOIDED (see note G)
AREA TO BE AVOIDED (see note H)
AREA TO BE AVOIDED (see note G)
BLACKFIN RIDGE
HAWAIIAN RIDGE
KAULAKAHI CHANNEL
Discol water
Kaula
Nihoa
Necker
Necker Ridge
Gardner Pinnacles
La Perouse Pinnacles
French Frigate Shoals
Raita Bank
Maro Reef
Layaan
Northampton Seamounts
Tamana Seamount
Paul Seamount
Hooikaika Seamount
Wisconsin Seamount
Tiru Seamount
Horizon Tablemount
Karin Seamount
Bishop Seamount
Dutton Seam
Chautauqua Seamount
Mendelssohn Seamount
Chopin Seamount
Haydn Seamount
Ravel Seamount
Grieg Seamount
Khachaturian Seamount
Scarlatti Seamount
Gluck Seamount
Schumann Seamount
Valador Seamount
King George Seamount
Y ODAS "51101" Fl(4)Y 20s PA
ODAS "51001" PA
Y "51003" Fl (4) Y 20s ODAS Priv PA
25°
20°

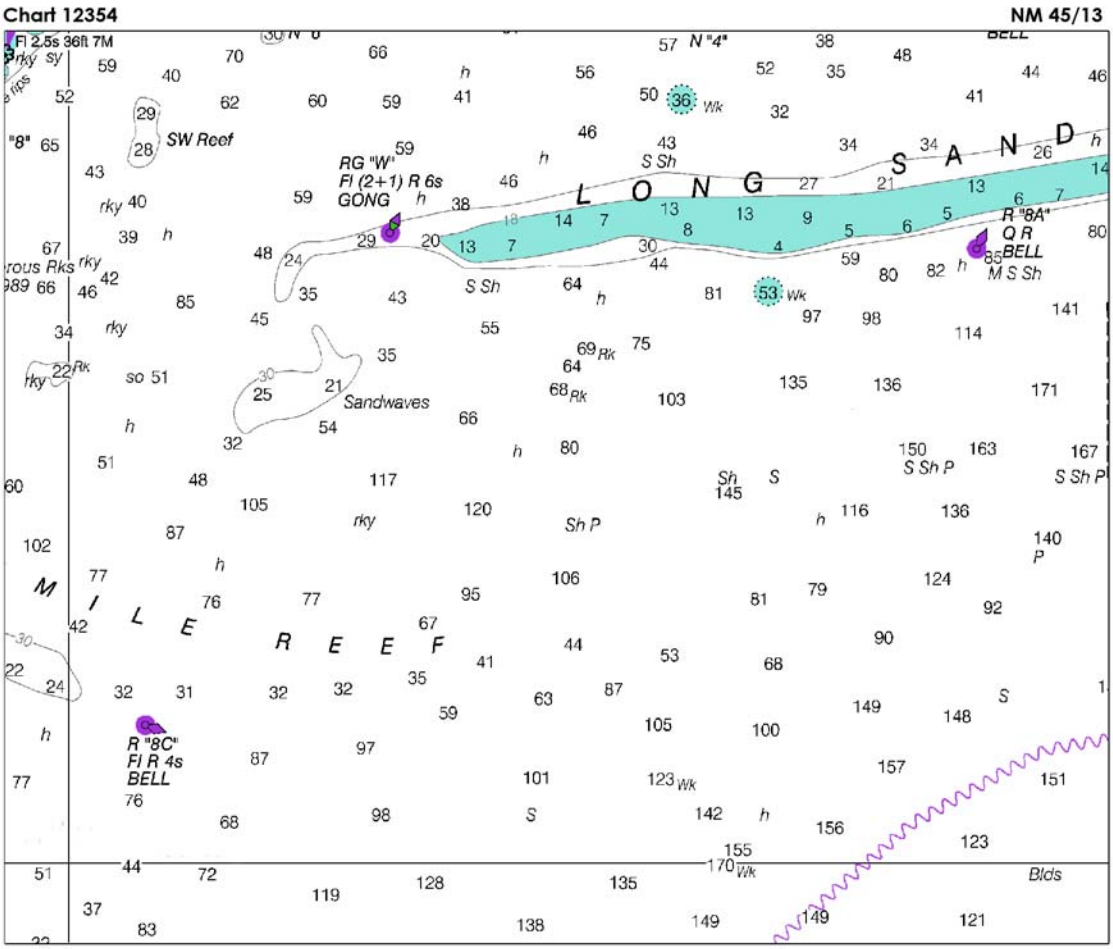


Chart 12354
NM 45/13
Fl 2.5s 36ft 7M
SW Reef
RG "W"
Fl (2+1) R 6s
GONG
L O N G S A N D
R "8A"
Q R
BELL
M S Sh
Sandwaves
M I L E R E E F
R "8C"
Fl R 4s
BELL
Bldg

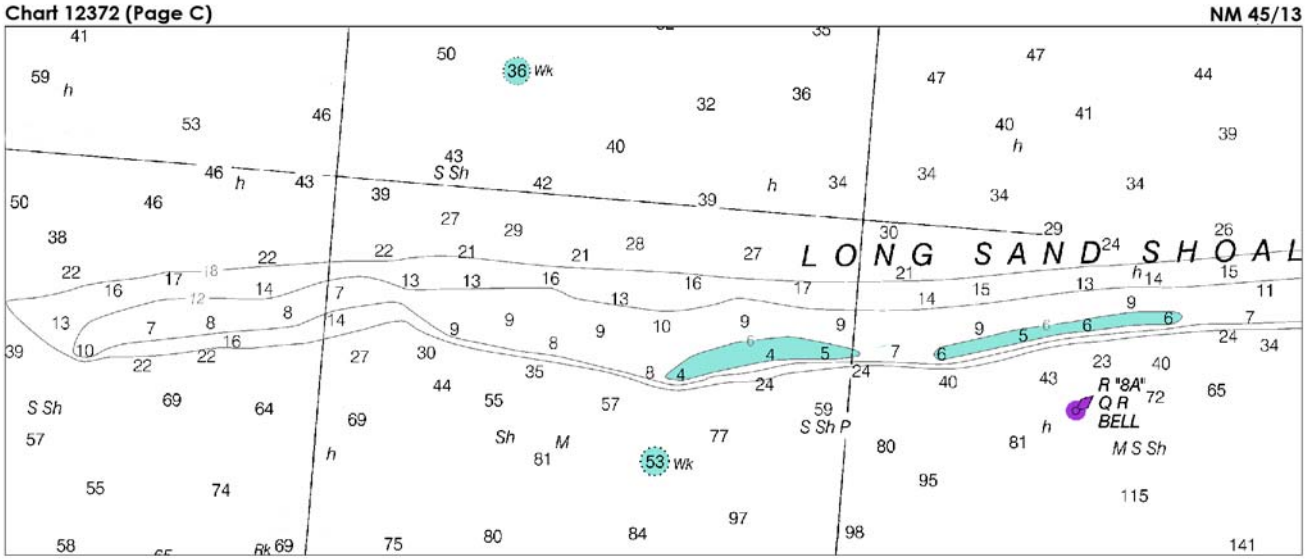


Chart 12372 (Page C)
NM 45/13
L O N G S A N D S H O A L
R "8A"
Q R
BELL
M S Sh

Chart 12375 (A) NM 45/13

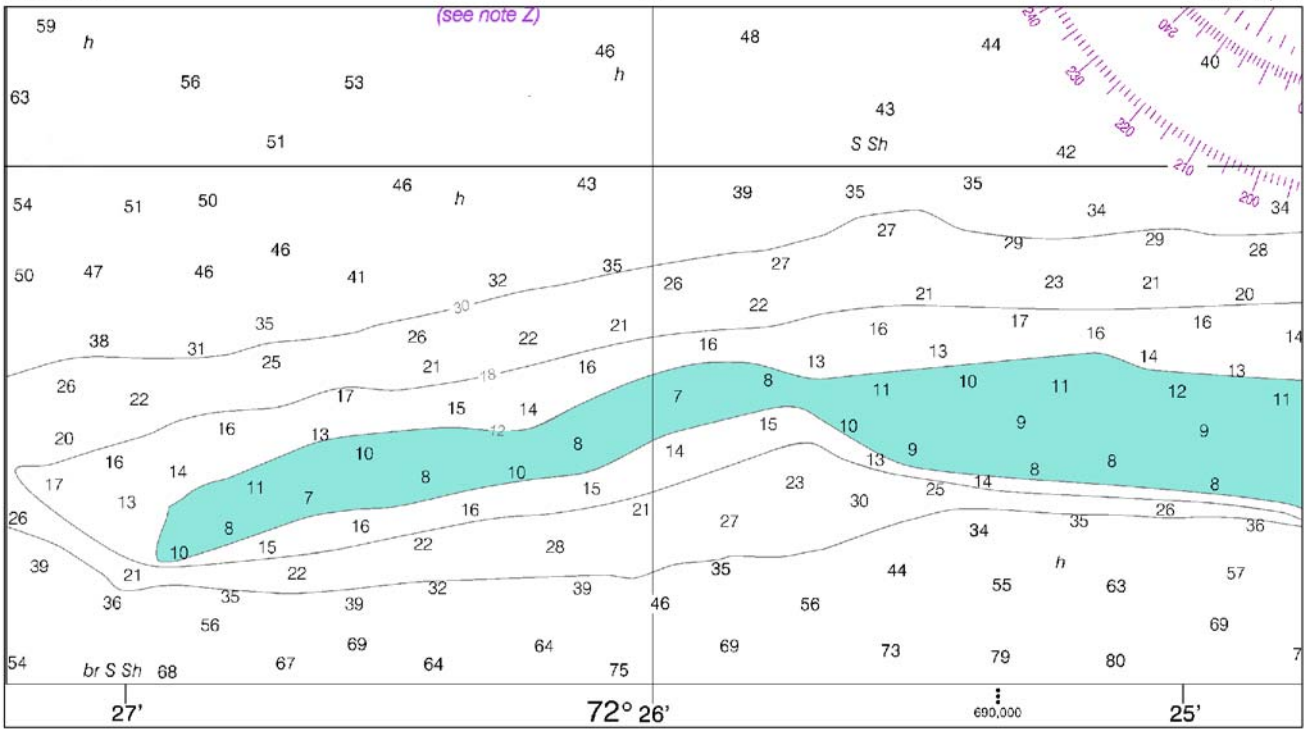


Chart 12375 (B) NM 45/13

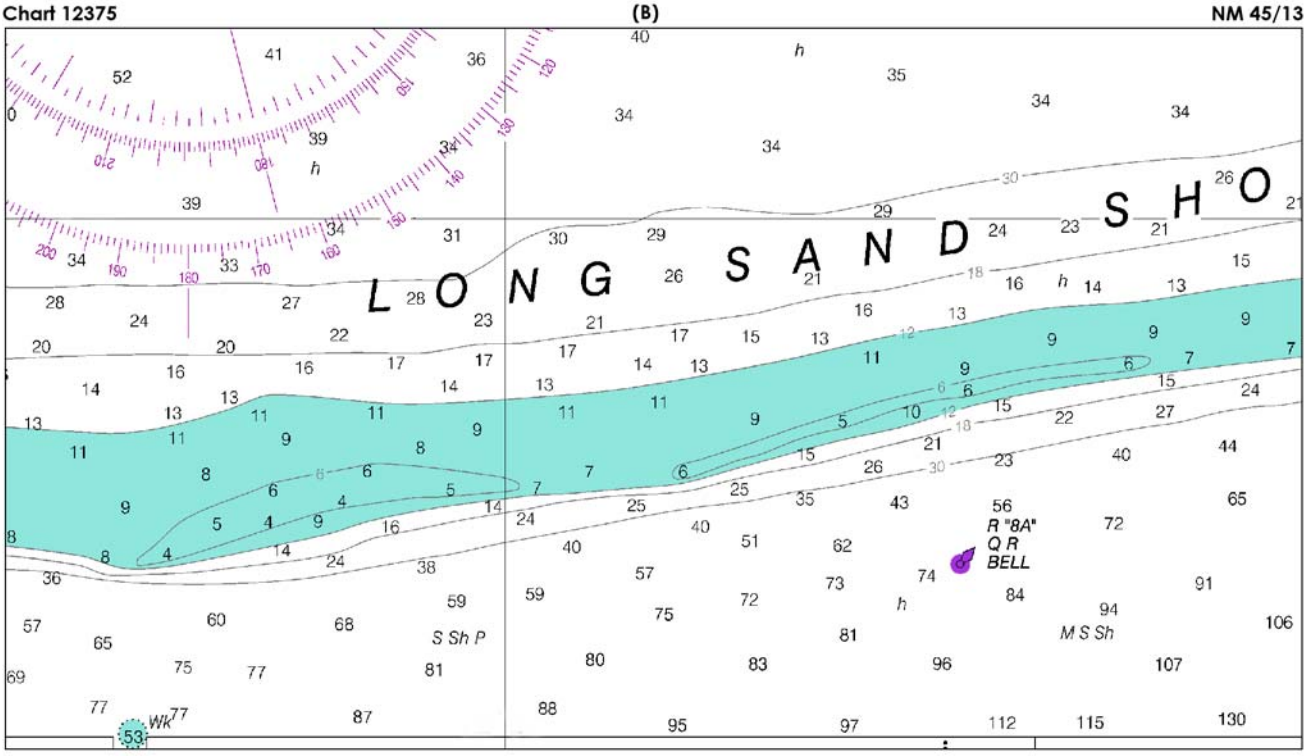
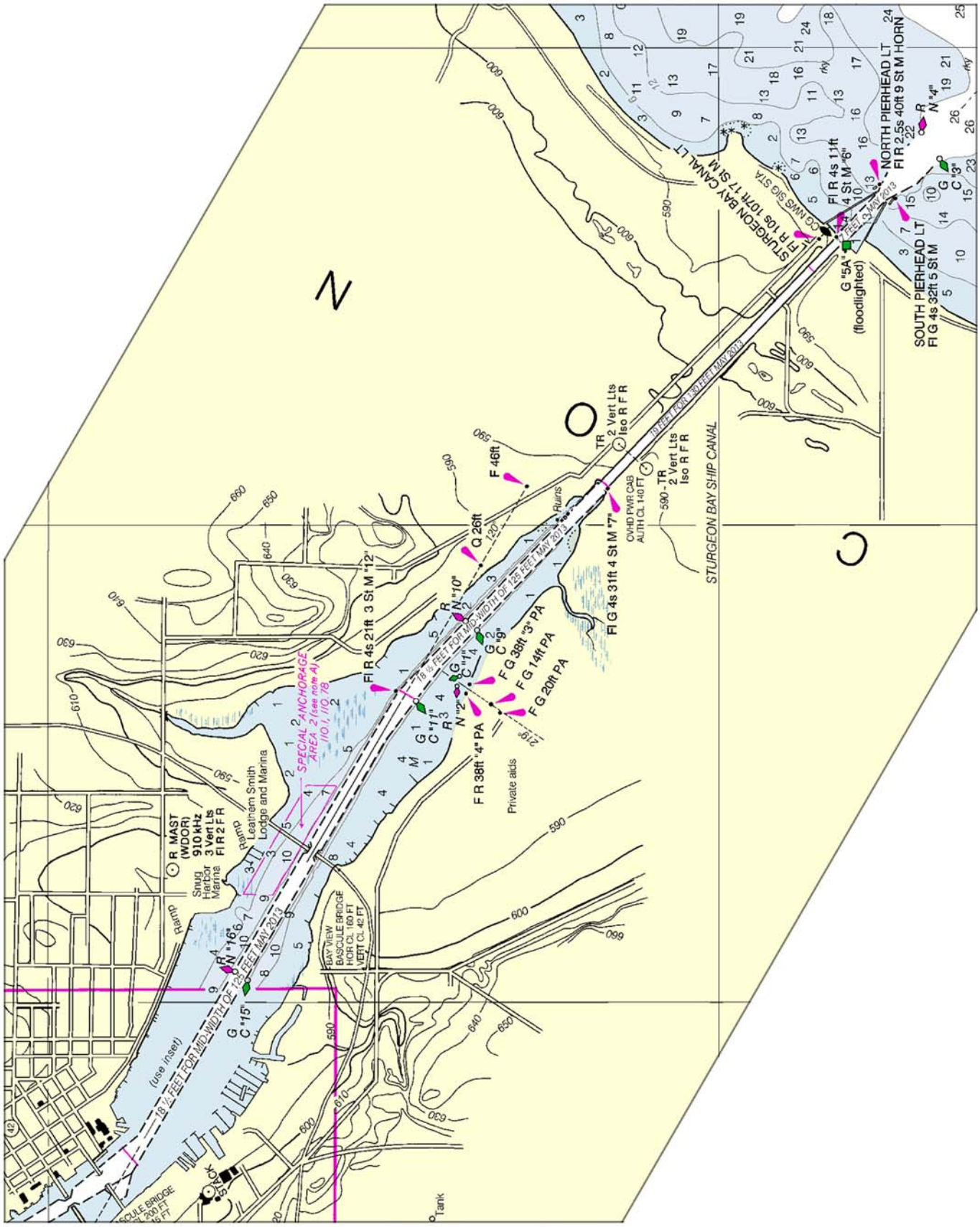


Chart 14919 (A) NM 45/13



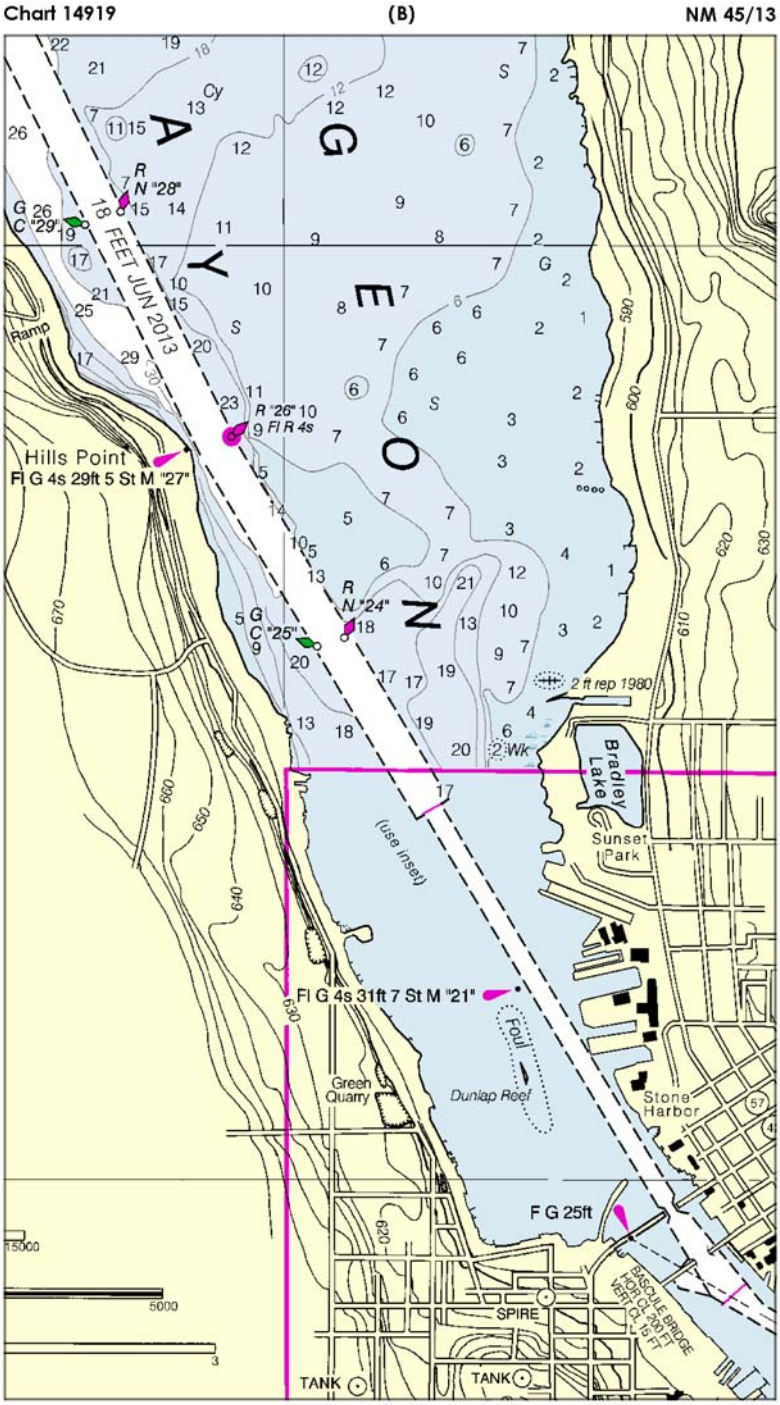


Chart 14919
(B)
NM 45/13
FEET JUN 2013
Hills Point
Fl G 4s 29ft 5 St M "27"
R "26" 10
9 Fl R 4s
R N "24"
G C "25"
R N "28"
G C "29"
Ramp
2 ft rep 1980
Bradley Lake
Sunset Park
(use inset)
Fl G 4s 31ft 7 St M "21"
Foul
Dunlap Reef
Green Quarry
Stone Harbor
F G 25ft
SPIRE
TANK
TANK
BASCULE BRIDGE
HOR CL 300 FT
VERT CL 15 FT

Chart 14919 (Inset) NM 45/13

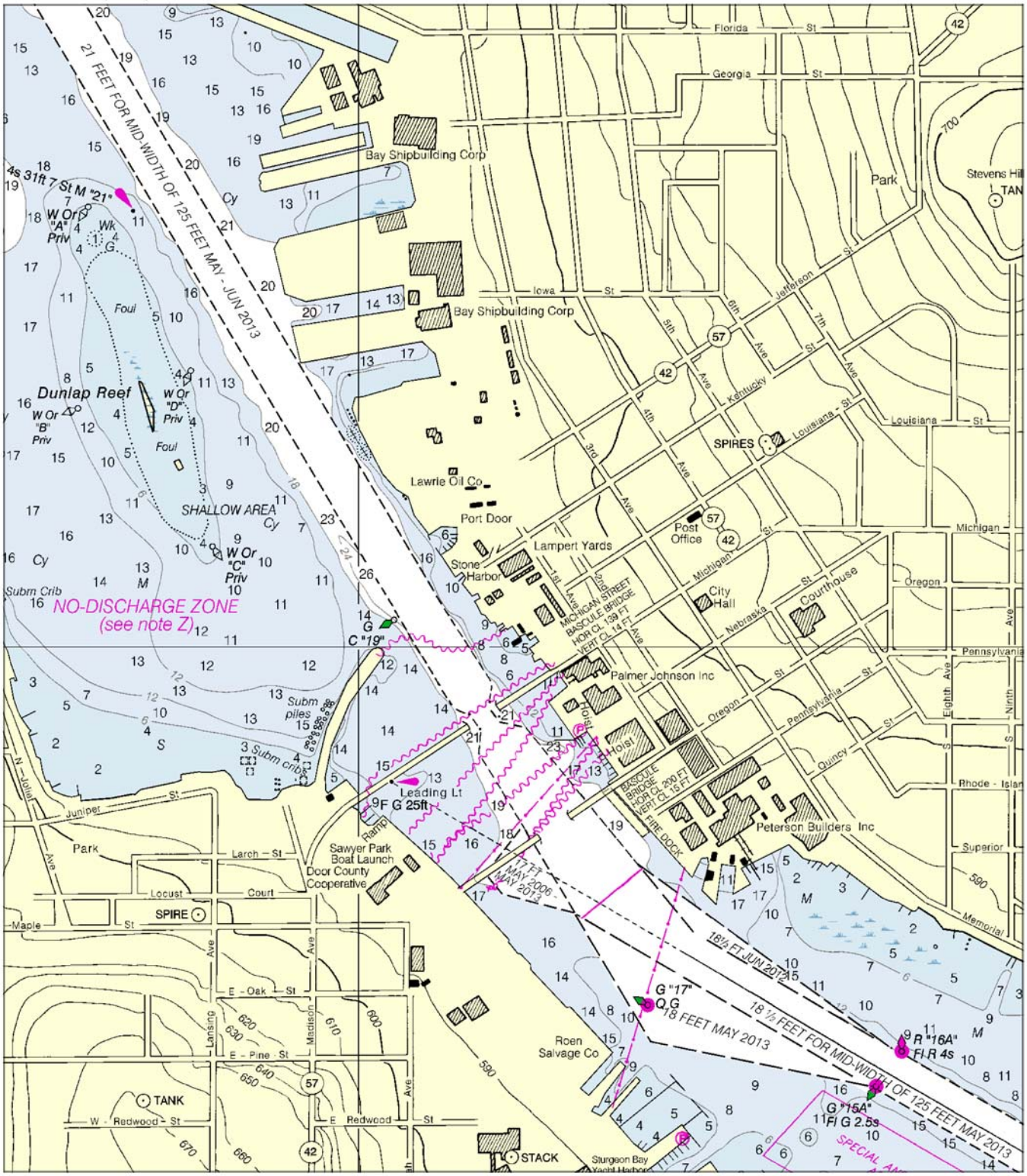


Chart 14922 (Inset Manitowoc) NM 45/13

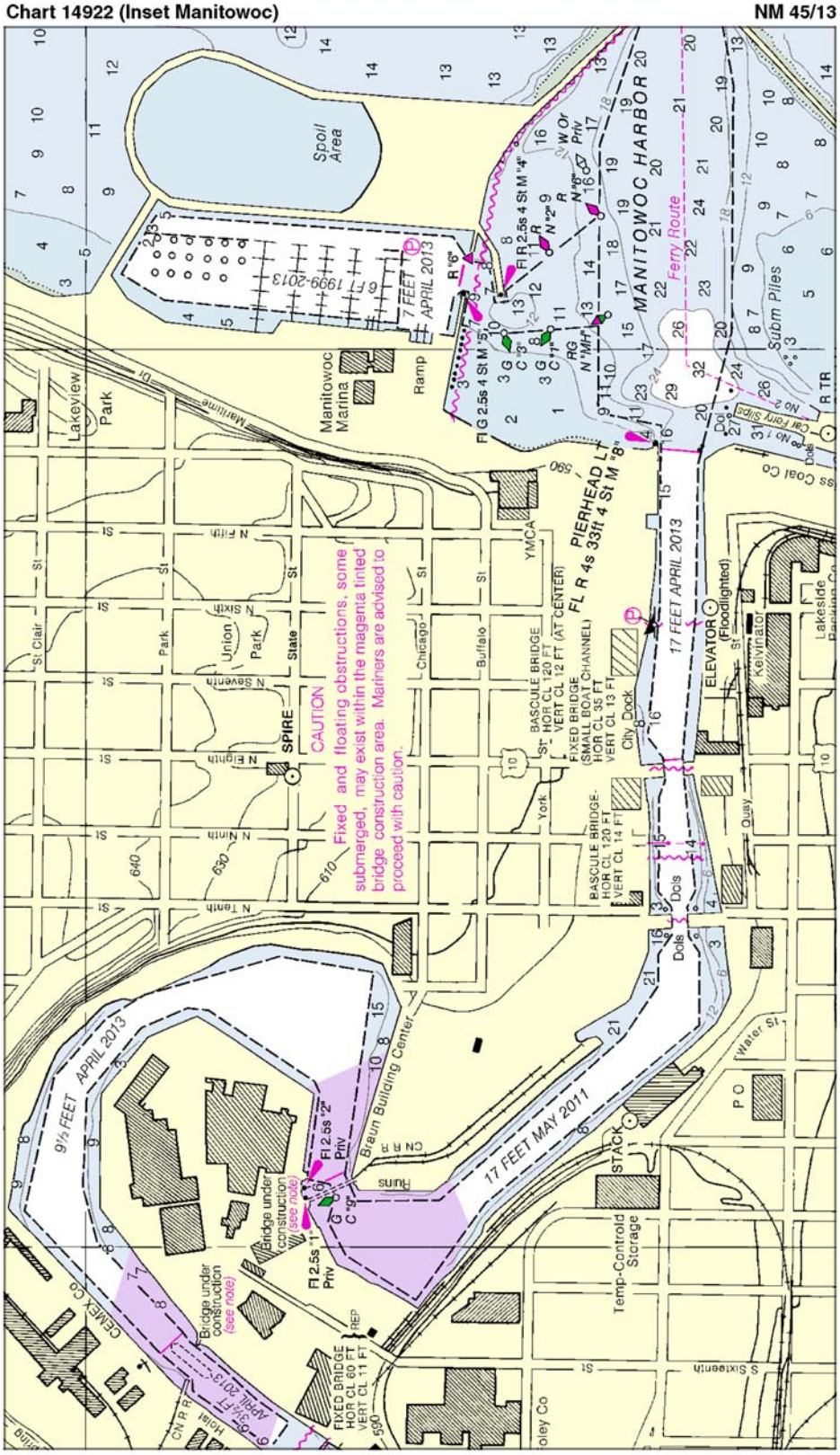


Chart 14853 (Page 11) NM 45/13

RIVER ROUGE CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2013

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 (NAUT. MILES)	DEPTH LWD (FEET)
SHORT CUT CANAL							
ENTRANCE TO WEST JEFFERSON AVE. BRIDGE	15.7	21.8	13.8	4, 5-13	100-400	1.08	21
WEST JEFFERSON AVE. BRIDGE TO I-75 BRIDGE	11.8	15.9	11.9	4, 5-13	100-200	.74	21
I-75 BRIDGE TO DIX AVE. BRIDGE	8.9	16.9	11.1	4-13	100-200	.91	21
DIX AVE. BRIDGE TO END	16.1	11.3	6.6	4-13	100-800	.25	21
OLD CHANNEL							
ENTRANCE TO 42°17'19.9"N 83°06'27.5"W	19.8	20.2	16.0	4-13	100-300	.25	25
42°17'19.9"N 83°06'27.5"W TO 42°17'23.2"N 83°06'46.0"W	10.3	18.0	5.4	8-10, 4-13	100	.27	18
42°17'23.2"N 83°06'46.0"W TO RR SWING BRIDGE	12.7	17.8	11.2	8-10	100	.29	17
RR SWING BRIDGE TO SHORT CUT CANAL	8.0	13.4	6.9	4-13	100-600	.76	17

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

Chart 14854 (Inset) NM 45/13

RIVER ROUGE CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2013

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 (NAUT. MILES)	DEPTH LWD (FEET)
SHORT CUT CANAL							
ENTRANCE TO WEST JEFFERSON AVE. BRIDGE	15.7	21.8	13.8	4, 5-13	100-400	1.08	21
WEST JEFFERSON AVE. BRIDGE TO I-75 BRIDGE	11.8	15.9	11.9	4, 5-13	100-200	.74	21
I-75 BRIDGE TO DIX AVE. BRIDGE	8.9	16.9	11.1	4-13	100-200	.91	21
DIX AVE. BRIDGE TO END	16.1	11.3	6.6	4-13	100-800	.25	21
OLD CHANNEL							
ENTRANCE TO 42°17'19.9"N 83°06'27.5"W	19.8	20.2	16.0	4-13	100-300	.25	25
42°17'19.9"N 83°06'27.5"W TO 42°17'23.2"N 83°06'46.0"W	10.3	18.0	5.4	8-10, 4-13	100	.27	18
42°17'23.2"N 83°06'46.0"W TO RR SWING BRIDGE	12.7	17.8	11.2	8-10	100	.29	17
RR SWING BRIDGE TO SHORT CUT CANAL	8.0	13.4	6.9	4-13	100-600	.76	17

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

Chart 18584 NM 45/13

UMPQUA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2013 AND SURVEYS TO JUN 2013

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 (MILES)	DEPTH MLLW (FEET)
UMPQUA RIVER ENTRANCE							
ENTRANCE CHANNEL	20	21	25	6-13	---	1.2	26
UMPQUA RIVER TURN	21	20	21	6-13	200	1.3	22
SALMON HARBOR REACH	21	21	21	3-13	200	2.1	22
BARRETTS RANGE	19	19	18	4-13	200	2.0	22
MILE SIX BAR	21	21	19	3-13	200	2.2	22
CANNERY SANDS							
JCT TO LEEDS ISLAND LIGHT	15	14	13	4-13	200	1.8	22
GARDINER CHANNEL	11	10	3	4-13	200	1.2	22
TURNING BASIN	4	2	0	4-13	---	0.2	22
REEDSPORT REACH							
CHANNEL (9.65-10.8)	17	17	17	4-13	200	1.15	22
TURNING BASIN	21	26	24	4-13	600	0.2	22
CHANNEL (11.0-11.8)	14	12	6	4-13	200	0.8	22
WINCHESTER BAY							
WEST CHANNEL	8	10	11	4-13	100	0.8	16
EAST CHANNEL (0.0-0.7)	9	13	8	4-13	100	0.7	16
EAST CHANNEL (0.7-0.9)	9	5	6	4-13	75	0.2	12

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

Chart 18649 NM 45/13

RICHMOND HARBOR AND SOUTHAMPTON SHOAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2013

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)
SOUTHAMPTON SHOAL CHANNEL	43	45	46	43	7-13	600	1.1	45
RICHMOND HARBOR								
ENTRANCE CHANNEL	36	36	36	36	3-12;2-13	600-550	1.0	38
POINT POTRERO REACH	37	37	37	37	2-13	500-600	1.4	38
POINT POTRERO TURN	36	37	36	35	2-13	600-1250	0.6	38
HARBOR CHANNEL	36	37	37	37	3-12;2-13	850-200	0.5	38
SANTA FE CHANNEL	27	29	29	26	9-09; 3-12	200	0.5	38-30
TURNING BASIN	27	28	27	21	9-09	200-500	0.16	30

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

Chart 18653 NM 45/13

RICHMOND HARBOR AND SOUTHAMPTON SHOAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2013

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)
SOUTHAMPTON SHOAL CHANNEL	43	45	46	43	7-13	600	1.1	45
RICHMOND HARBOR								
ENTRANCE CHANNEL	36	36	36	36	3-12;2-13	600-550	1.0	38
POINT POTRERO REACH	37	37	37	37	2-13	500-600	1.4	38
POINT POTRERO TURN	36	37	36	35	2-13	600-1250	0.6	38
HARBOR CHANNEL	36	37	37	37	3-12;2-13	850-200	0.5	38
SANTA FE CHANNEL	27	29	29	26	9-09; 3-12	200	0.5	38-30
TURNING BASIN	27	28	27	21	9-09	200-500	0.16	30

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

Chart 19367 NM 45/13

HONOLULU HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAR 2013
AND NOS SURVEYS TO MAY 2009

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	41.4	43.7	44.9	A32.0	3-13	500	0.53	45
KALIHI CHANNEL ENTRANCE	31.0	35.0	35.0	B31.0	5-09	400	1.2	23
EMERGENCY TURNING BASIN	29.0	31.0	32.0	30.0	5-09	400-960	0.5	35

A. SHOALING TO 24 FEET FROM 21°17'38.8' N 157°52'16.6' W TO 21°17'41.7 W 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 19369 NM 45/13

HONOLULU HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAR 2013
AND NOS SURVEYS TO MAY 2009

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	41.4	43.7	44.9	A32.0	3-13	500	0.53	45
KALIHI CHANNEL ENTRANCE	31.0	35.0	35.0	B31.0	5-09	400	1.2	23
EMERGENCY TURNING BASIN	29.0	31.0	32.0	30.0	5-09	400-960	0.5	35

A. SHOALING TO 24 FEET AT 21°17'38.8' N 157°52'16.6' W TO 21°17'41.7' 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