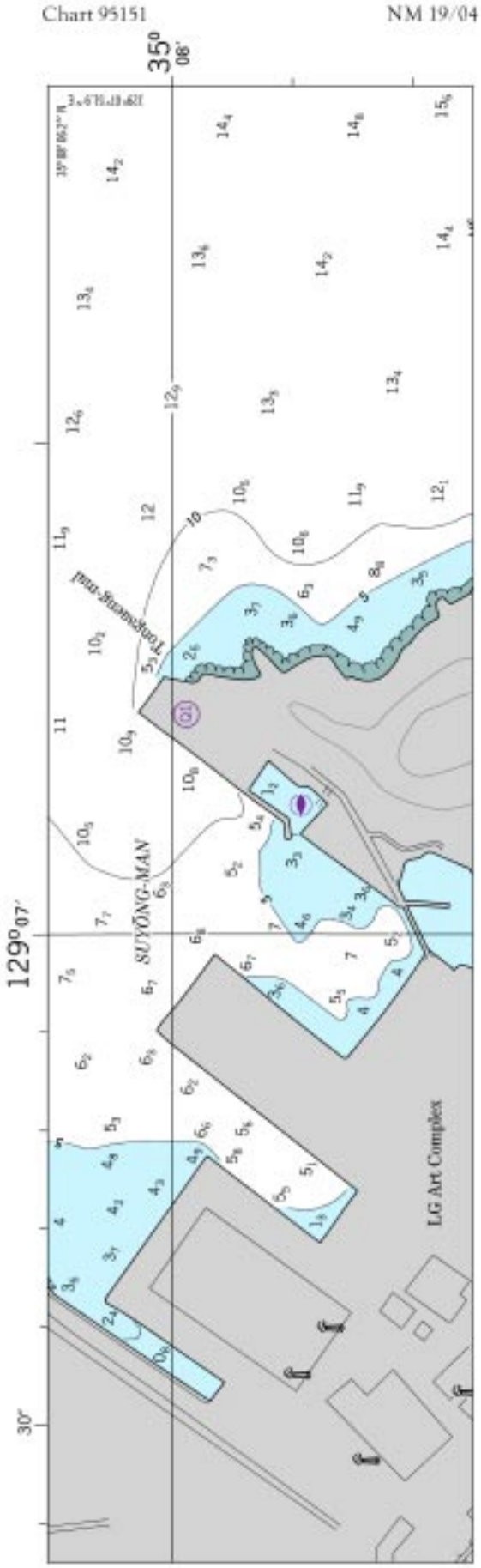
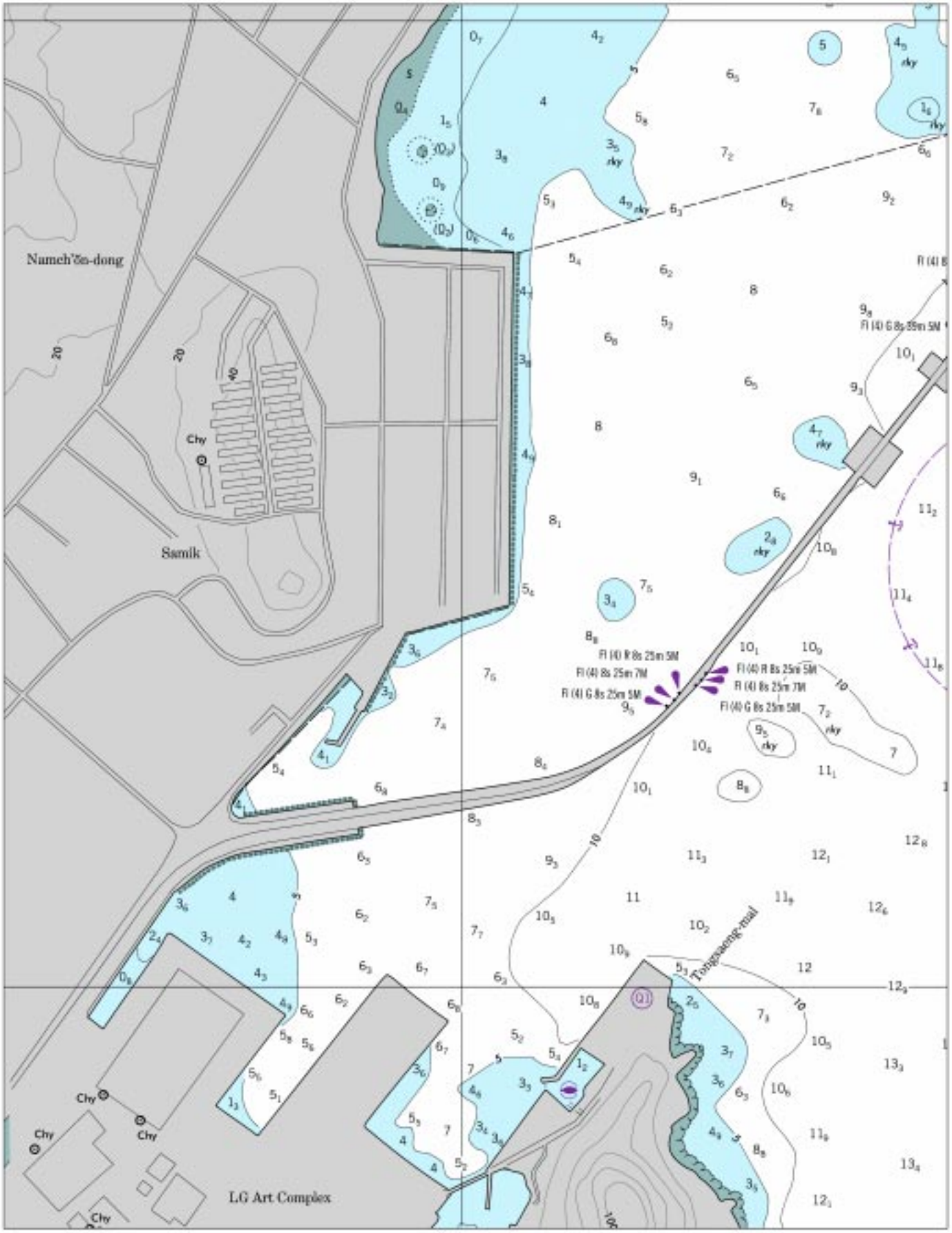


Chart 95151
NM 19/04
35° 08'
129° 07'
30"
SUYONG-MAN
LG Art Complex

Chart 95153 (A) NM 19/04



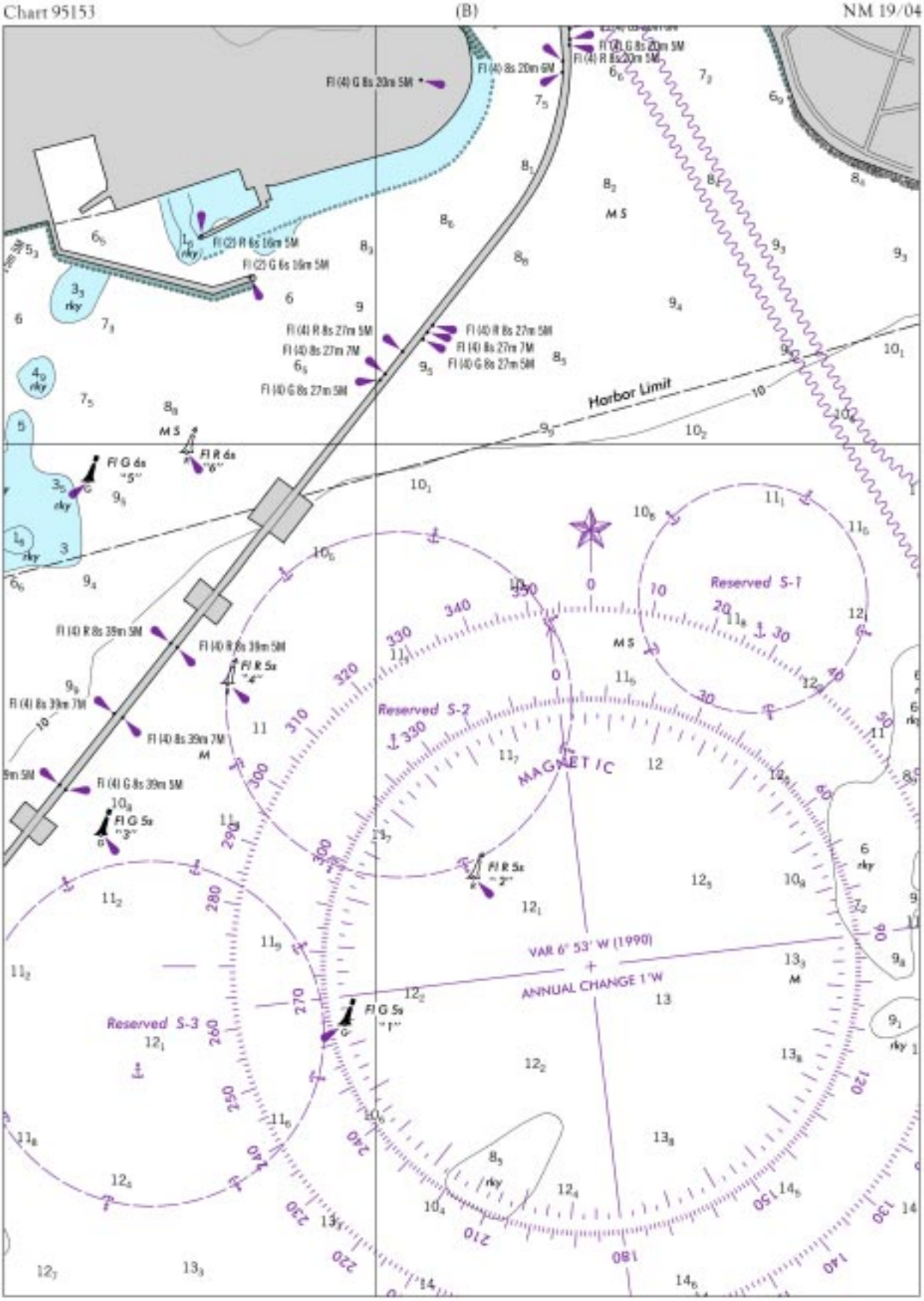


Chart 95153
(B)
NM 19/04
Fl (4) G 8s 20m 5M
Fl (4) 8s 20m 6M
Fl (4) R 8s 20m 5M
Fl (2) R 6s 16m 5M
Fl (2) G 6s 16m 5M
Fl (4) R 8s 27m 5M
Fl (4) 8s 27m 7M
Fl (4) G 8s 27m 5M
Fl (4) R 8s 27m 5M
Fl (4) 8s 27m 7M
Fl (4) G 8s 27m 5M
Harbor Limit
Fl G 6s "5"
Fl R 6s "6"
Fl (4) R 8s 39m 5M
Fl (4) R 8s 39m 5M
Fl R 5s "4"
Fl (4) 8s 39m 7M
Fl (4) 8s 39m 7M
Fl (4) G 8s 39m 5M
Fl G 5s "3"
Fl R 5s "2"
Fl G 5s "1"
Reserved S-1
Reserved S-2
Reserved S-3
MAGNETIC
VAR 6° 53' W (1990)
ANNUAL CHANGE 1'W

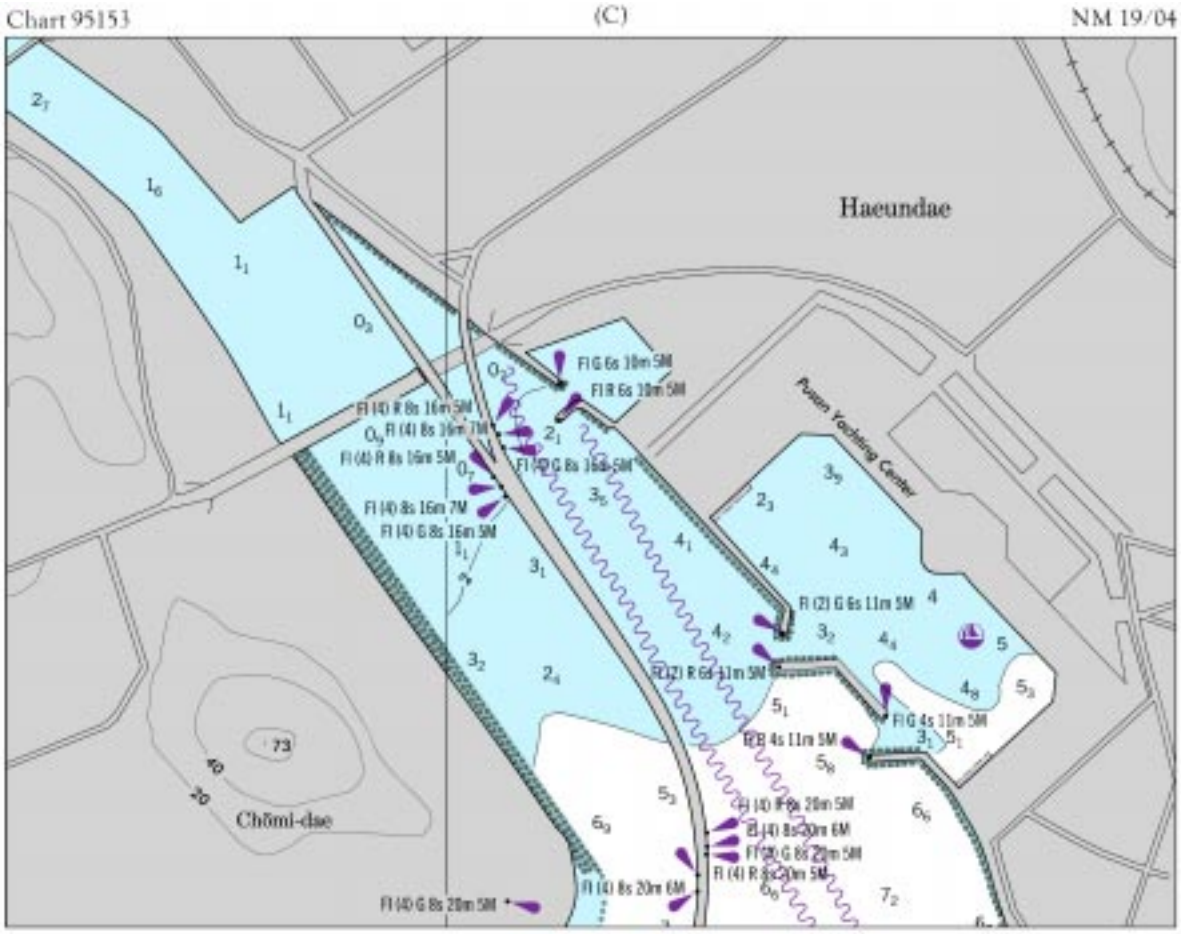


Chart 95153
(C)
NM 19/04
Haeundae
Busan Yachting Center
Chŏmi-dae
Fl G 6s 10m 5M
Fl R 6s 10m 5M
Fl (4) R 8s 16m 5M
Fl (4) 8s 16m 7M
Fl (4) R 8s 16m 5M
Fl (4) 8s 16m 7M
Fl (4) G 8s 16m 5M
Fl (2) G 6s 11m 5M
Fl (2) R 6s 11m 5M
Fl G 4s 11m 5M
Fl R 4s 11m 5M
Fl (4) R 8s 20m 5M
Fl (4) 8s 20m 6M
Fl (4) G 8s 20m 5M
Fl (4) R 8s 20m 5M
Fl (4) 8s 20m 6M
Fl (4) G 8s 20m 5M
73
40
20

Chart 12324 (Side A) NM 19/04

SANDY HOOK BAY, SHREWSBURY AND NAVESINK RIVERS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	MIDDLE HALF (FEET)	WIDTH (FEET)	DATE OF SURVEY
SANDY HOOK BAY			
TERMINAL CHANNEL	43.5	400	2-97
SHREWSBURY RIVER			
HIGHLANDS REACH	9.7	150	5-03
RUMSON REACH	7.4	150	5-03
LONG BRANCH REACH	7.6	150	5-03
NAVESINK RIVER			
BARLEY POINT REACH	4.7	150	5-03
FAIR HAVEN REACH	5.4	150	5-03
RED BANK REACH	6.3	150	5-03

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 12338 NM 19/04

NEWTOWN CREEK CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 1991 AND SURVEYS TO AUG 2000

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)
CHANNEL SECTION							
A	9.1	12.0	15.5	11-91; 8-00	240-130	0.53	23
B	17.5	15.3	10.9	11-91	130	0.30	23
C	16.8	17.8	16.8	11-91	130	0.37	23
D	9.5	12.4	10.2	11-91	130	0.78	23
E	13.1	14.5	11.8	11-91	130-300	0.23	23
F B	5.1	10.4	15.3	11-91	300-150	0.14	23
EAST BRANCH: B							
G	BARE	10.3	8.5	11-91	95-130	0.13	20
H	A2.8	8.9	0.6	11-91	125-150	0.12	20
J	D BARE	D1.8	D2.7	11-91	125	0.18	20
ENGLISH KILLS: B							
K	12.4	11.0	4.6	11-91	125	0.27	20
L	7.8	11.6	8.0	11-91	125	0.17	20
M	C BARE	C0.3	C BARE	11-91	100	0.36	12

A. CONTROLLING DEPTH ON THE LEFT OUTSIDE QUARTER IS TAKEN FROM BEHIND THE BARGE UNDER THE GRAND STREET BRIDGE. A DEPTH OF 7.8 FEET IS AVAILABLE FOR THE REMAINDER OF THE REACH.

B. PROJECT DEPTH NOT ACCOMPLISHED.

C. CONTROLLING DEPTHS WERE LOCATED IN THE SOUTHERLY 250 YARDS OF THE CHANNEL AND IN THE RIGHT HALF OF THE LAST BEND AT 40°42'46.7"N-73°55'57.0"W; DEPTHS OF 7.6 FEET LEFT OUTSIDE QUARTER; 8.1 FEET MIDDLE HALF; AND 5.7 FEET RIGHT OUTSIDE WERE AVAILABLE IN THE REMAINDER OF THE REACH.

D. CONTROLLING DEPTHS WERE LOCATED IN THE LAST 100 YARDS OF THE CHANNEL SOUTH END BEING THE SHOALEST. DEPTHS OF 6.7 FEET LEFT OUTSIDE QUARTER; 8.5 FEET MIDDLE HALF; AND 7.7 FEET RIGHT OUTSIDE QUARTER AVAILABLE IN THE REMAINDER OF THE REACH.

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

Chart 12371 NM 19/04

NEW HAVEN HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 2004 AND SURVEYS TO FEB 2004

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	34.1	36.1	36.4	34.4	02-04	500	1.1	35
LIGHTHOUSE POINT REACH	33.4	35.0	34.4	33.6	02-04	400-500	2.9	35
NEW HAVEN REACH	32.8	35.0	34.6	33.9	02-04	800-500	1.0	35
EAST HAVEN REACH	13.2	16.6	15.0	15.2	1,6-83;02-04	500-100	0.1	22
QUINNIPIAC RIVER								
FERRY ST. BRIDGE REACH	A14.7	16.0	16.4	13.8	12-93	200	0.6	B 18
GRAND AVE. BRIDGE REACH	11.5	12.7	12.8	11.8	12-93	C 200	0.5	22-16
MILL RIVER								
ENTRANCE CHANNEL	8.1	D 6.5	E 9.9	7.1	10-00	200	0.3	12
EAST FORK	F 6.2	F 6.1	G 6.1	H 7.9	10-00	100	0.2	12
WEST FORK	2.6	5.3	4.9	4.9	10-00	125	0.3	12

A. EXCEPT SHOALING TO 12.7 FEET ON NORTH LIMITS OF CHANNEL.
B. THE MAINTAINED DEPTH IS 16 FEET.
C. THE PROJECT WIDTH IS 200-400 FEET AND THE MAINTAINED WIDTH IS 200 FEET.
D. EXCEPT SHOALING TO 5.5 FEET WITHIN 25 FEET OF CHAPEL ST. BRIDGE FENDER.
E. EXCEPT SHOALING TO 9.2 FEET WITHIN 10 FEET OF CHAPEL ST. BRIDGE FENDER.
F. EXCEPT SHOALING TO 2.2 FEET IN LAST 430 FEET OF REACH.
G. EXCEPT SHOALING TO 0.6 FEET IN LAST 430 FEET OF REACH.
H. EXCEPT SHOALING TO 0.5 FEET IN LAST 430 FEET OF REACH.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18521 NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
ENTRANCE TO MILLER SANDS RANGE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEBRUARY 18, 2004

* SEE FOOTNOTES						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
ENTRANCE RANGE	58	57	55	43	10-03	2640	3.3	48
SAND ISLAND RANGE (CLATSOP SPIT)	49	52	53	44	10-03	2640	2.2	48
LOWER DESDEMONA SHOAL	45	46	42	38	12-03	600	3.4	40
UPPER DESDEMONA SHOAL	42	43	47	45	12-03	600	3.6	40
TANSY POINT TURN AND RANGE	40	41	40	37	12-03	600	4.8	40
ASTORIA RANGE	42	42	43	41	12-03	600	2.7	40
TONGUE POINT CHANNEL	40	42	42	41	12-03	600	2.2	40
HARRINGTON POINT RANGE	39	41	41	37	11,12-03	600	2.6	40
MILLER SANDS RANGE	41	43	41	36	11-03	600	2.2	40

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
* CONTROLLING DEPTHS IN CHANNELS ENTERING FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER FROM THE ENTRANCE TO HARRINGTON POINT AND COLUMBIA RIVER DATUM ABOVE THAT POINT. PROJECT LENGTHS ARE IN STATUTE MILES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18521 NM 19/04

BAKER BAY WEST CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUGUST 2003

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)
ENTRANCE TO 46°16'17.91"N 124°01'50.00"W	17	16	18	8-03	150	1.3	10
46°16'17.91"N 124°01'50.00"W TO FORT CANBY	16	16	16	8-03	150	1.3	10
THENCE TO ILWACO	17	16	15	8-03	150	0.9	10
MOORING BASIN A B	3	3	3	1980	-	-	-

A. SHOALING TO 2 FEET ON RIGHT HALF, BETWEEN THE BREAKWATERS.
B. BASIN LOCALLY MAINTAINED. NO RECENT SURVEYS AVAILABLE.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18523 NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
MILLER SANDS RANGE TO GULL ISLAND TURN AND CHANNEL
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEBRUARY 18, 2004

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
MILLER SANDS RANGE	41	43	41	36	11-03	600	2.2	40
PILLAR ROCK LOWER RANGE	37	40	41	37	11-03	600	3.0	40
PILLAR ROCK UPPER RANGE	36	42	40	40	11,12-03	600	1.9	40
WELCH ISLAND REACH	40	43	44	38	12-03	600	3.2	40
SKAMOKAWA CHANNEL	28	41	42	37	2-04	600	3.3	40
STEAMBOAT REACH	49	48	46	38	2-04	600	1.4	40
PUGET ISLAND RANGE AND TURN	41	41	41	36	2-04	600	3.5	40
WAUNA RANGE	37	39	40	40	2-04	600	2.2	40
DRISCOLL RANGE	39	39	40	42	2-04	600	1.7	40
WESTPORT TURN AND RANGE	39	41	43	42	2-04	600	2.0	40
WESTPORT CHANNEL	39	42	42	40	2-04	600	2.4	40
EUREKA LOWER CHANNEL	43	44	44	44	2-04	600	2.1	40
EUREKA UPPER CHANNEL	43	44	43	41	2-04	600	0.8	40
OAK POINT CHANNEL	46	46	47	44	2-04	600	2.4	40
GULL I TURN AND CHANNEL	46	43	41	37	2-04	600	2.2	40

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES TO THE ABOVE INFORMATION

Chart 18524 (Left Panel) NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
GULL ISLAND TURN AND CHANNEL TO SAINT HELENS TURN
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEBRUARY 18, 2004

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
GULL I TURN AND CHANNEL	46	43	41	37	2-04	600	2.2	40
STELLA RANGE	37	40	41	39	2-04	600	2.8	40
FISHER I CHANNEL	42	47	43	40	2-04	600	0.9	40
WALKER I CHANNEL	37	42	40	36	2-04	600	1.5	40
BARLOW PT. CHANNEL	45	44	43	39	2-04	600	1.3	40
SLAUGHTERS CHANNEL	38	42	38	36	2-04	600	2.3	40
SLAUGHTERS TURN AND CHANNEL OPPOSITE THE TURNING BASIN	39	39	39	40	2-04	600	1.7	40
COTTONWOOD ISLAND LOWER RANGE	38	42	42	40	1-04	600	1.7	40
COTTONWOOD ISLAND TURN	43	41	39	39	1-04	600	2.7	40
COTTONWOOD ISLAND UPPER RANGE	42	42	41	41	1-04	600	1.6	40
KALAMA LOWER RANGE	43	41	40	34	1-04	600	1.8	40
KALAMA UPPER RANGE	41	42	40	40	1-04	600	2.2	40
BYBEE LEDGE CHANNEL	40	42	41	40	1-04	600	2.1	40
MARTIN ISLAND CHANNEL	41	41	39	38	1-04	600	2.1	40
MARTIN ISLAND RANGE	40	42	41	41	1-04	600	1.4	40
COLUMBIA CITY CHANNEL	40	40	39	39	1-04	600	1.2	40
ST. HELENS RANGE	38	41	42	41	1-04	600	2.0	40
ST. HELENS TURN	42	43	42	40	1-04	600	1.7	40

* CONTROLLING DEPTHS ROUNDED TO NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18525 NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
SAINT HELENS TURN TO TOMAHAWK BAR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORTS OF FEBRUARY 18, 2004

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
ST. HELENS TURN	42	43	42	40	1-04	600	1.7	40
WARRIOR ROCK RANGE	39	40	40	40	1-04	600	1.3	40
DUCK CLUB TURN	38	38	42	41	1-04	600	1.4	40
HENRICI RANGE	40	37	39	39	1-04	600	2.6	40
FALES CHANNEL	42	42	39	38	1-04	600	1.1	40
KNAPP POINT CHANNEL	40	41	40	40	1-04	600	1.8	40
WILLOW LOWER RANGE	40	42	41	39	1-04	600	2.1	40
WILLOW UPPER RANGE	41	43	40	44	12-03	600	1.1	40
MORGAN TURN	43	45	49	46	12-03	600	1.0	40
MORGAN CHANNEL	46	45	42	42	12-03	600	1.5	40
VANCOUVER LOWER CHANNEL	47	47	54	50	12-03	500	1.0	40
VANCOUVER RANGE	40	43	43	41	12-03	500	1.3	40
VANCOUVER UPPER CHANNEL	41	42	40	40	12-03	500	0.9	40
VANCOUVER LOWER TURNING BASIN	36	38	41	40	2-04	800	1.0	40
VANCOUVER UPPER TURNING BASIN	31	27	26	24	2-04	800	0.9	35
TOMAHAWK BAR	18	18	18	17	11-03	300	3.7	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18526 NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
MORGAN CHANNEL TO TOMAHAWK BAR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEBRUARY 18, 2004

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
MORGAN CHANNEL	46	45	42	42	12-03	600	1.5	40
VANCOUVER LOWER CHANNEL	47	47	54	50	12-03	500	1.0	40
VANCOUVER RANGE	40	43	43	41	12-03	500	1.3	40
VANCOUVER UPPER CHANNEL	41	42	40	40	12-03	500	0.9	40
VANCOUVER LOWER TURNING BASIN	36	38	41	40	2-04	800	1.0	40
VANCOUVER UPPER TURNING BASIN	31	27	26	24	2-04	800	0.9	35
TOMAHAWK BAR	18	18	18	17	11-03	300	3.7	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18531 (Lower Panel) NM 19/04

COLUMBIA RIVER CHANNEL DEPTHS
TOMAHAWK BAR TO BONNEVILLE LOCKS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEBRUARY 18, 2004

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
TOMAHAWK BAR	18	18	17	11-03	300	3.7	27
AIRPORT BAR	15	18	18	2-04	300	2.8	27
GOVERNMENT ISLAND LOWER RANGE	16	17	16	2-04	300	1.1	27
GOVERNMENT ISLAND MIDDLE RANGE	14	16	16	2-04	300	1.6	27
FISHER QUARRY CHANNEL RANGE	28	24	21	2-04	300	1.0	27
GOVERNMENT ISLAND RANGE	24	30	26	2-04	300	1.1	27
GOVERNMENT ISLAND UPPER RANGE	16	19	19	2-04	300	0.8	27
LADY ISLAND RANGE	18	20	22	2-04	300	2.1	27
LADY ISLAND CHANNEL AND UPPER RANGE	27	28	21	2-04	300	0.9	27
WASHOUGAL LOWER RANGE	22	28	30	10-03	300	1.5	27
WASHOUGAL UPPER RANGE	18	29	29	10-03	300	1.1	27
GARY ISLAND RANGE	17	17	17	10-03	300	0.9	27
REED ISLAND RANGE	17	17	15	10-03	300	2.2	27
TUNNEL POINT CHANNEL	24	25	26	10-03	300	0.8	27
ROOSTER ROCK CHANNEL	26	23	25	10-03	300	1.2	27
CAPE HORN CHANNEL	34	32	31	10-03	300	2.4	27
CANDIANA CHANNEL	16	38	36	10-03	300	1.0	27
FASHION REEF LOWER RANGE	12	19	21	10-03	300	2.2	27
MULTNOMAH FALLS BAR RANGE	13	23	16	10-03	300	1.3	27
MULTNOMAH FALLS TURN	12	20	21	10, 11-03	300	0.8	27
MULTNOMAH FALLS UPPER RANGE	18	21	24	11-03	300	3.2	27
MCGOWANS CHANNEL	39	34	25	11-03	300	1.1	27
WARRENDALE LOWER RANGE	20	22	23	11-03	300	0.9	27
WARRENDALE UPPER RANGE	21	28	22	11-03	300	0.8	27
HAMILTON ISLAND REACH	21	30	27	11-03	300	0.9	27
ENTRANCE TO BONNEVILLE LOCKS	22	22	22	3-00	300	0.6	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT

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

Chart 18587 NM 19/04

COOS BAY AND ISTHMUS SLOUGH CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE COPRS OF ENGINEERS - SURVEYS TO DEC 2003

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)
ENTRANCE RANGE	39	39	39	9-03	—	1.9	47-37
ENTRANCE RANGE AND TURN	39	46	32	8-03	300-1050	0.5	37
INSIDE RANGE	38	38	38	8-03	300	0.6	37
COOS BAY RANGE	36	37	37	8,9-03	300	1.6	37
EMPIRE RANGE	36	37	38	9,12-03	300	1.3	37
LOWER JARVIS RANGE	37	36	36	12-03	300	0.8	37
JARVIS TURN	41	37	36	12-03	300	0.5	37
UPPER JARVIS RANGE	33	34	34	9,12-03	300-700	1.9	37
NORTH BEND LOWER RANGE	39	38	35	9-03	400	0.4	37
NORTH BEND RANGE	34	37	37	12-03	400	0.9	37
NORTH BEND UPPER RANGE	36	38	37	12-03	400	0.6	37
LOWER TURNING BASIN	36	38	37	12-03	400-900	0.3	37
FERNDALE LOWER RANGE	39	39	38	12-03	400	0.4	37
FERNDALE TURN	36	38	38	12-03	400	0.2	37
FERNDALE UPPER RANGE	28	37	38	12-03	400	0.7	37
MARSHFIELD RANGE	37	36	34	12-03	400	0.4	37
MARSHFIELD RANGE TO ISTHMUS SLOUGH	36	37	36	12-03	150-750	0.9	37
ISTHMUS SLOUGH	19	20	19	4-85	150	2.0	22

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

Chart 51081 (Plan A) NM 19/04

DATUM NOTE

Positions referred to the World Geodetic System 1984 (WGS-84) must be moved 9.6 seconds southward and 0.7 seconds westward to agree with this chart.

Chart 51082 NM 19/04

DATUM NOTE

Positions referred to the World Geodetic System 1984 (WGS-84) must be moved 1.4 seconds northward and 0.9 seconds westward to agree with this chart.