SOUNDINGS IN FEET

18502

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

Formerly C&GS 6195, 1st Ed., June 1892 C-1942-576 KAPP 1731

SOURCE

A	1990 - 2006	NOS Surveys full bottom coverage
B3	1940 - 1969	NOS Surveys partial bottom coverage
B4	1900 - 1939	NOS Surveys partial bottom coverage
B5	Pre 1900	NOS Surveys partial bottom coverage

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in force. In most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

WISHKAH RIVER BRIDGES

The two swing bridges and one bascule bridge crossing the Wishkah River have a horizontal clearance of 90 feet and a vertical clearance of 8 feet. The fixed bridge has a horizontal clearance of 75 feet and a vertical clearance of 15 feet.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Astoria, OR	KEC-91	162.400 MHz
Olympia, WA	WXM-62	162.475 MHz

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.
Refer to charted regulation section numbers.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

PLANE COORDINATE GRID

The Washington State plane coordinate grid, South Zone, (based on NAD 1927) is indicated on this chart; by dashed ticks at 10,000 foot intervals. The last three digits are omitted.

The Corps of Engineers and local plane coordinate grid is shown by dotted ticks at 10,000 foot intervals. The origin is East Base, 1909.

Both grids are shown on the Westhaven Cove inset at 2,000 foot intervals.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

HEIGHTS

Heights in feet above Mean High Water.

SCALE 1:40,000
Nautical Miles
Statute Miles
Yards
Meters

LOGARITHMIC SPEED LOCATOR

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.6"2southward and 4.61" westward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

WASHINGTON

GRAYS HARBOR

Mercator Projection
Scale 1:40,000 at Lat 46° 56'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Montesano, Chehalis River	(46°58'N/123°36'W)	8.2	7.7	0.9
Aberdeen, Grays Harbor	(46°58'N/123°51'W)	10.1	9.4	1.3

Dashes (– –) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Jul 2011)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical; Al alternating; B black; Bn beacon; C can; DA diaphone; F fixed; Fl flashing; Q green; IQ interrupted quick; Iso isophase; LT HO lighthouse; M nautical mile; m minutes; MICRO TR microwave tower; Mkr marker; Mo morse code; N nun; OBSC obscured; Oc occulting; Or orange; Q quick; R red; Ra Ref radar reflector; Rn radiobeacon; R TR radio tower; Rot rotating; s seconds; SEC sector; St M statute miles; VQ very quick; W white; WHIS whistle; Y yellow

Bottom characteristics:

Blds boulders; Cb coral; Cy clay; gy gray; Grs grass; h hard; M mud; Oys oysters; Pk rock; S sand; so soft; Sh shells; sy sticky

Miscellaneous:

AUTH authorized; ED existence doubtful; Obstn obstruction; PA position approximate; PD position doubtful; Rep reported; Subm submerged; Wrecks, rock, obstruction, or shoal swept clear to the depth indicated; Rocks that cover and uncover, with heights in feet above datum of soundings.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — —

GRAYS HARBOR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2006

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

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BAR CHANNEL	45.0	46.0	46.0	8-13	1000	4.6	48
ENTRANCE CHANNEL	35.0	41.0	30.0	2-14	800-600	1.8	42
PT CHEHALIS REACH	27.0	35.0	28.0	2-14	600	1.2	40
SOUTH REACH	29.0	35.0	30.0	8-13; 2-14	600-300	4.1	36
CROSSOVER CHANNEL	22.0	27.0	23.0	2-5-09; 8-13-09	300-450	2.5	36
NORTH CHANNEL	27.0	30.0	23.0	8-13	450-300	2.4	36
HOQUIAM REACH	19.0	32.0	25.0	8-13	300	1.9	36
COW POINT REACH	24.0	36.0	30.0	8-13; 1-14	300-900	1.8	36
ABERDEEN REACH	19.0	22.0	26.0	8-13; 1-14	550-200	2.6	32
TURNING BASIN	30.0	29.0	23.0	8-13	200-550	0.3	32
THENCE TO COSMOPOLIS	23.0	25.0	27.0	8-13	200	0.8	32

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

KAPP 1733

CONTINUATION OF
CHEHALIS RIVER
Scale 1:40,000

KAPP 1732

Grays Harbor
Westhaven Cove
WESTHAVEN COVE
Scale 1:10,000

8TH Ed., Sep./ 11
18502

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

SOUNDINGS IN FEET

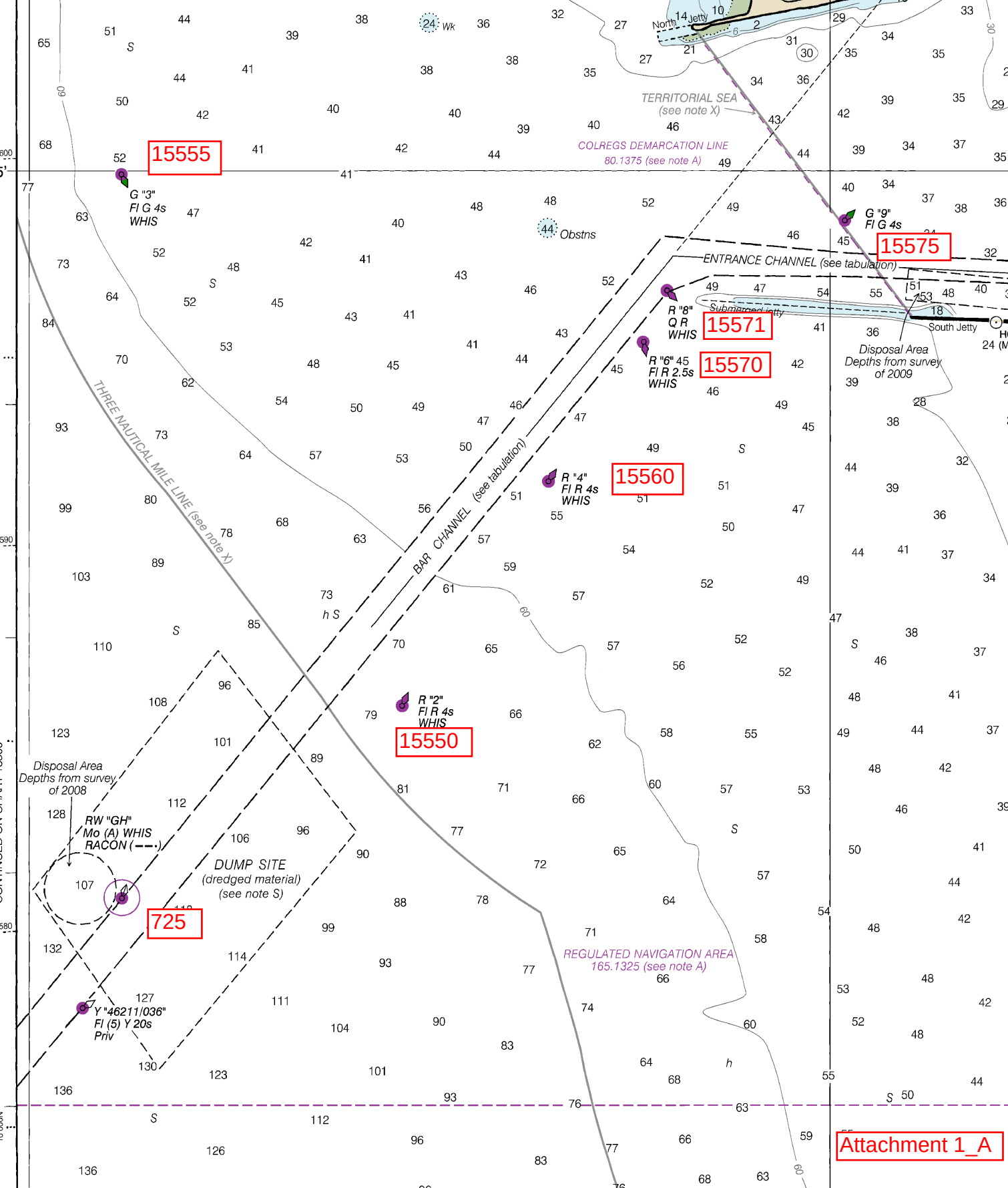
Grays Harbor, Wash
SOUNDINGS IN FEET - SCALE 1:40,000

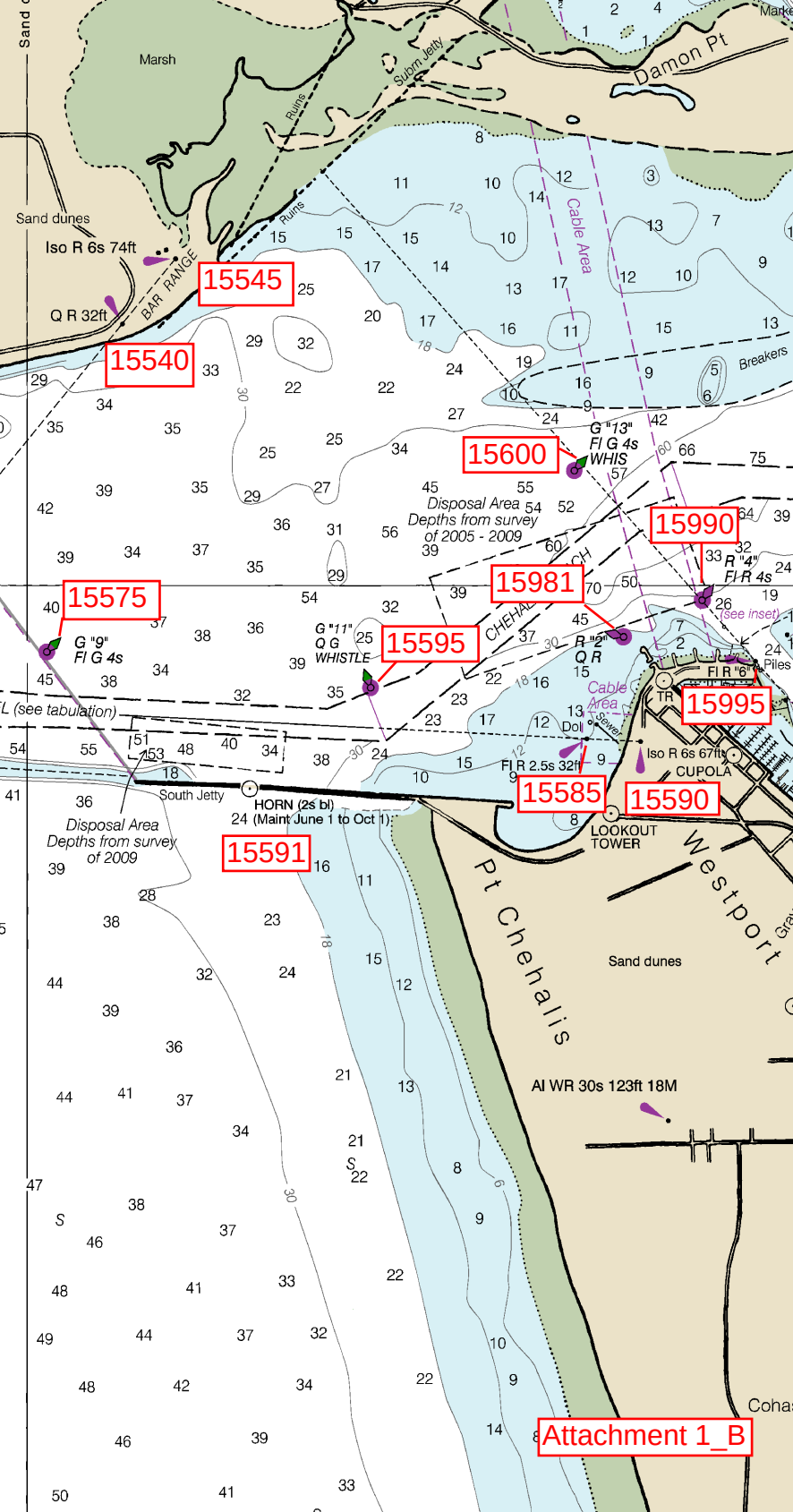
18502

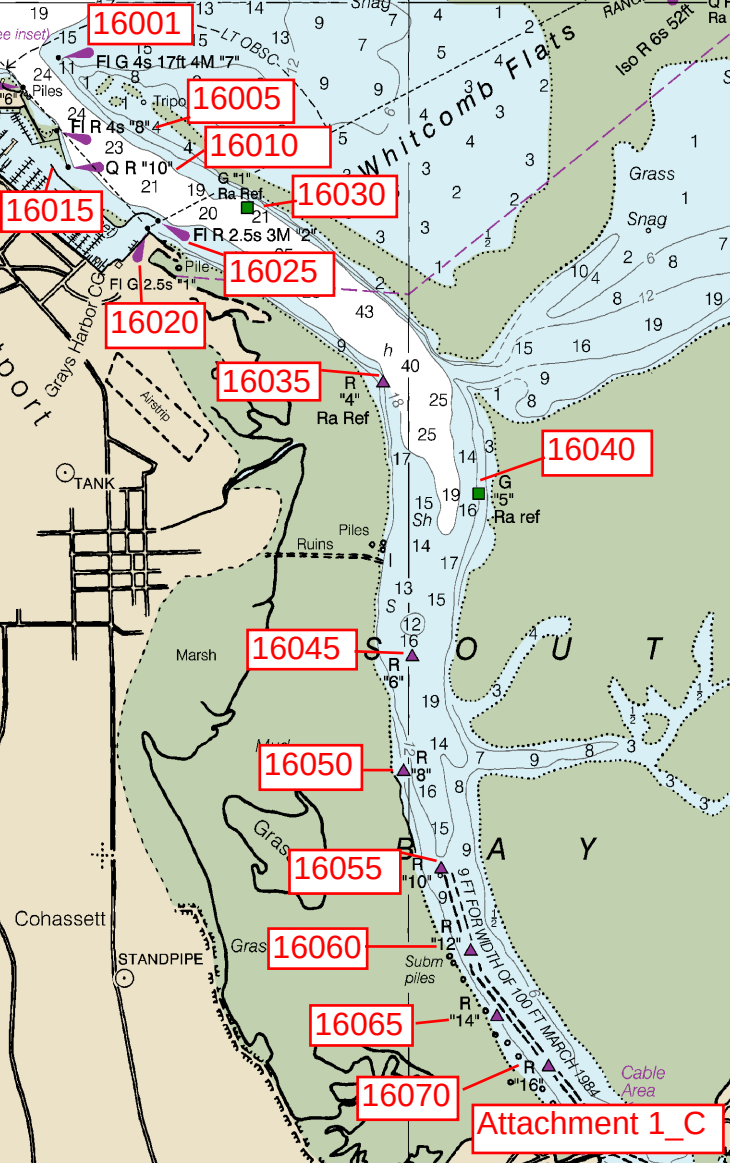
Last Correction: 8/21/2014. Cleared through:
LNM: 3314 (8/19/2014), NM: 3514 (8/30/2014), CHS: 0414 (4/25/2014)

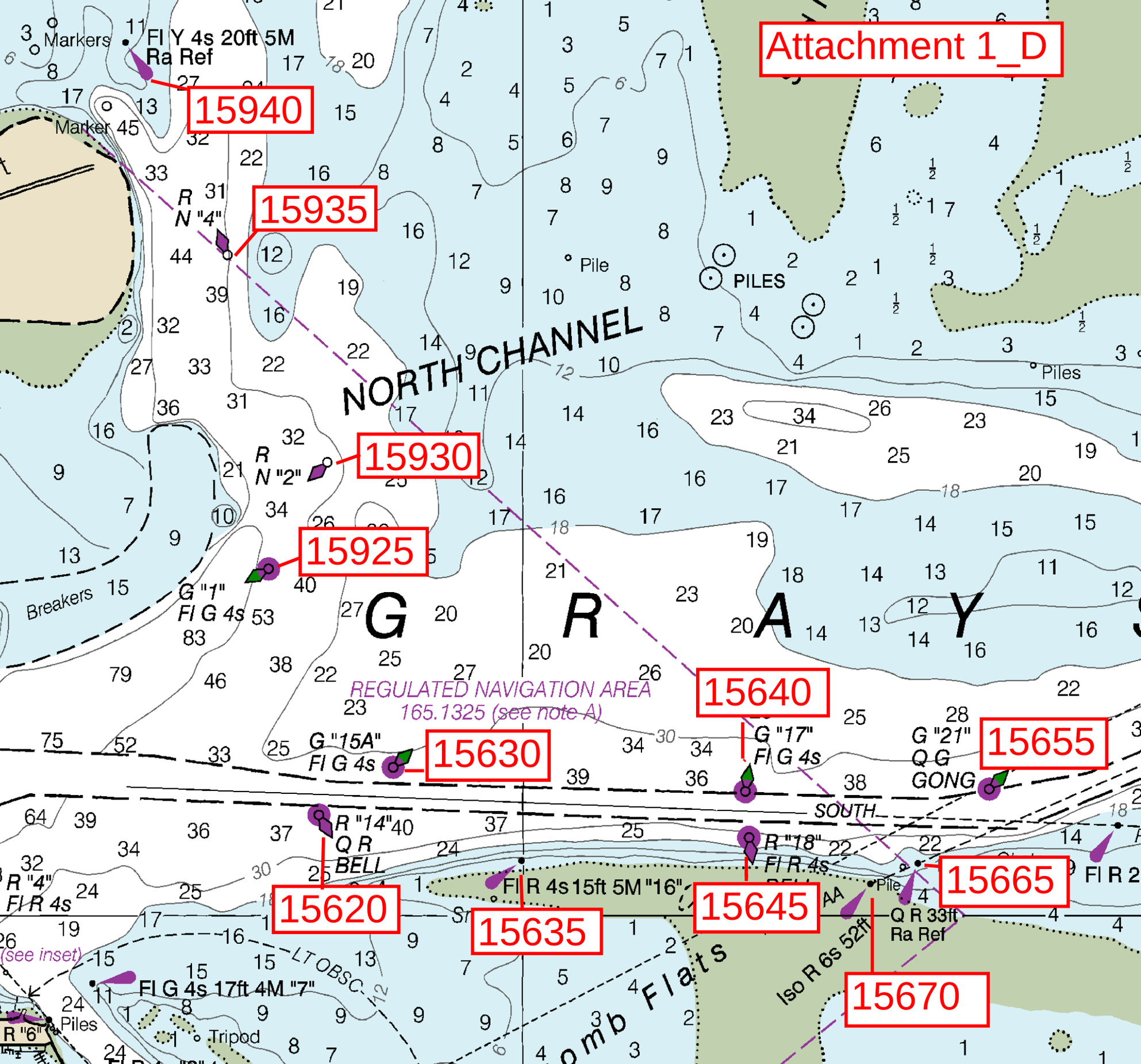
To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

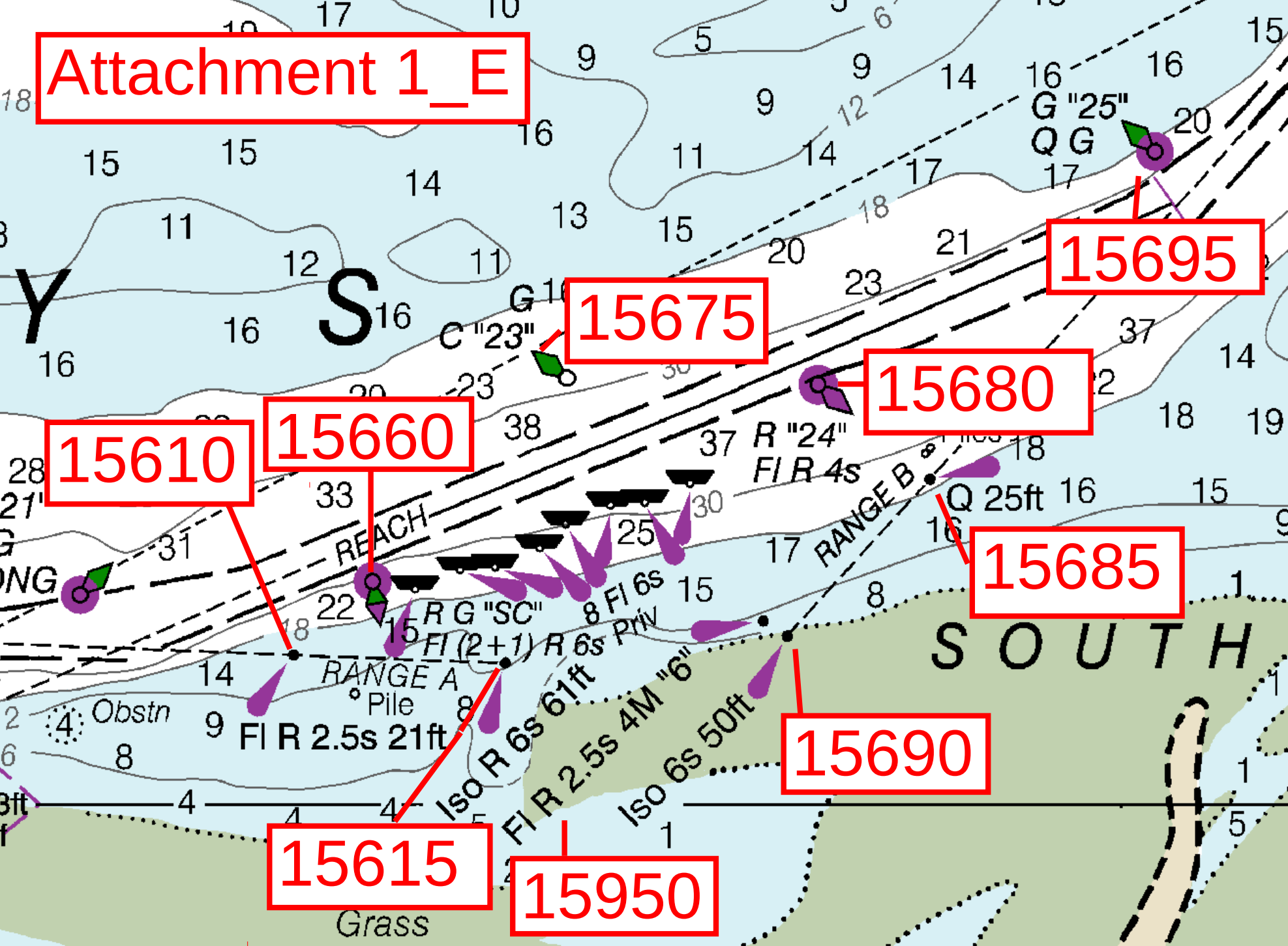
This chart was distributed as a PDF (Portable Document Format). Printing PDFs may alter the chart scale, color, or legibility that may impact suitability for navigation. Printed charts provided by NOAA certified Print on Demand (POD) providers fulfill a vessel's requirement to carry a navigational chart "published by the National Ocean Service" in accordance with federal regulations, including but not limited to 33 C.F.R. 164.33(a), 33 C.F.R. 164.72(b), and 46 C.F.R. 28.225(a). POD charts meet stringent print standards and can be recognized by an official certification of authenticity printed on the chart. A list of POD providers can be found at: nauticalcharts.noaa.gov/pod

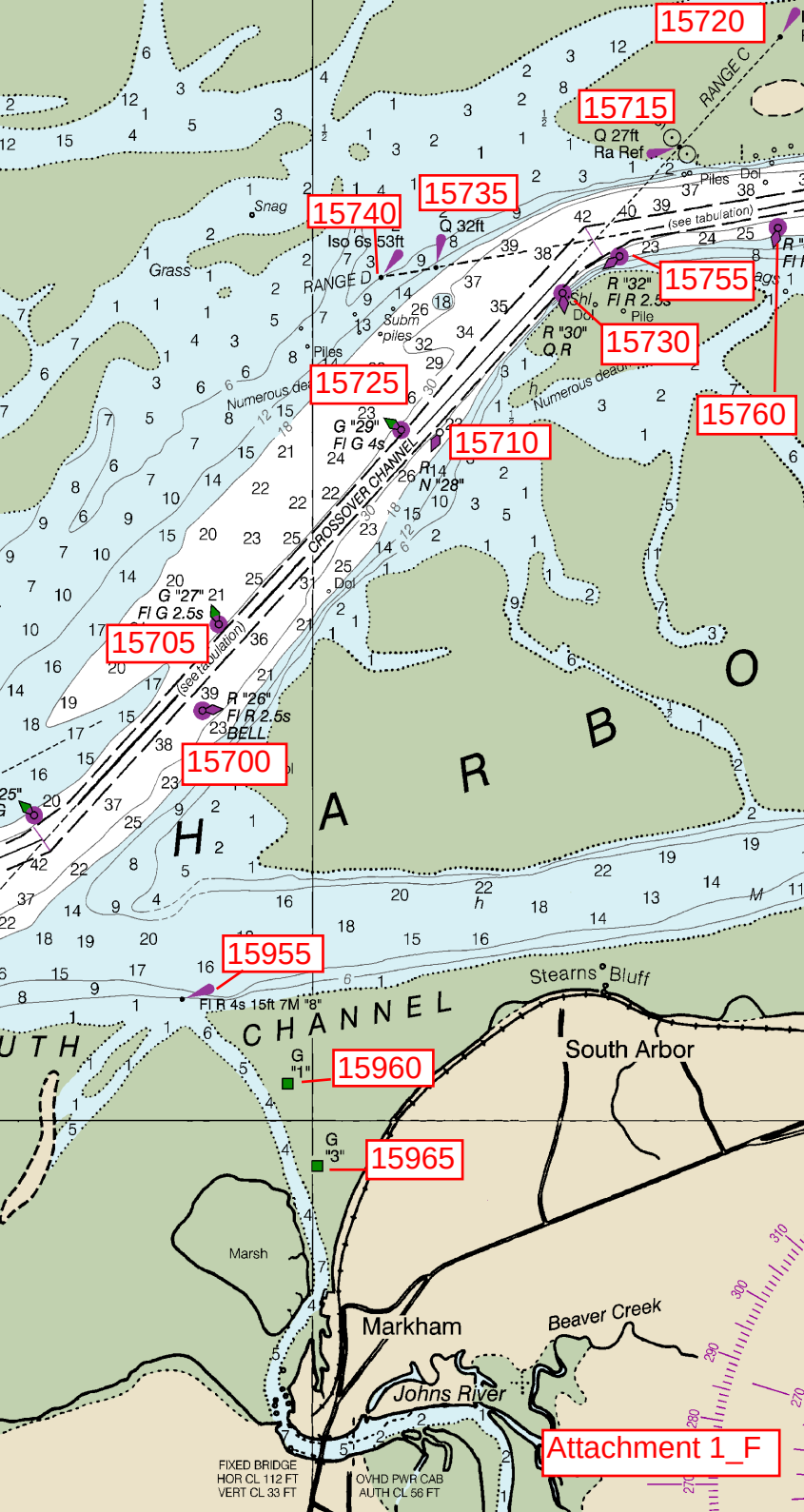

15555
G "3"
Fl G 4s
WHIS
COLREGS DEMARCATION LINE
80.1375 (see note A)
TERRITORIAL SEA
(see note X)
15575
G "9"
Fl G 4s
ENTRANCE CHANNEL (see tabulation)
Submerged Jetty
South Jetty
Disposal Area
Depths from survey
of 2009
15571
R "8"
Q R
WHIS
15570
R "6" 45
Fl R 2.5s
WHIS
Obstns
THREE NAUTICAL MILE LINE (see note X)
BAR CHANNEL (see tabulation)
15560
R "4"
Fl R 4s
WHIS
R "2"
Fl R 4s
WHIS
15550
Disposal Area
Depths from survey
of 2008
RW "GH"
Mo (A) WHIS
RACON (---·)
DUMP SITE
(dredged material)
(see note S)
725
Y "46211/036"
Fl (5) Y 20s
Priv
REGULATED NAVIGATION AREA
165.1325 (see note A)
Attachment 1_A

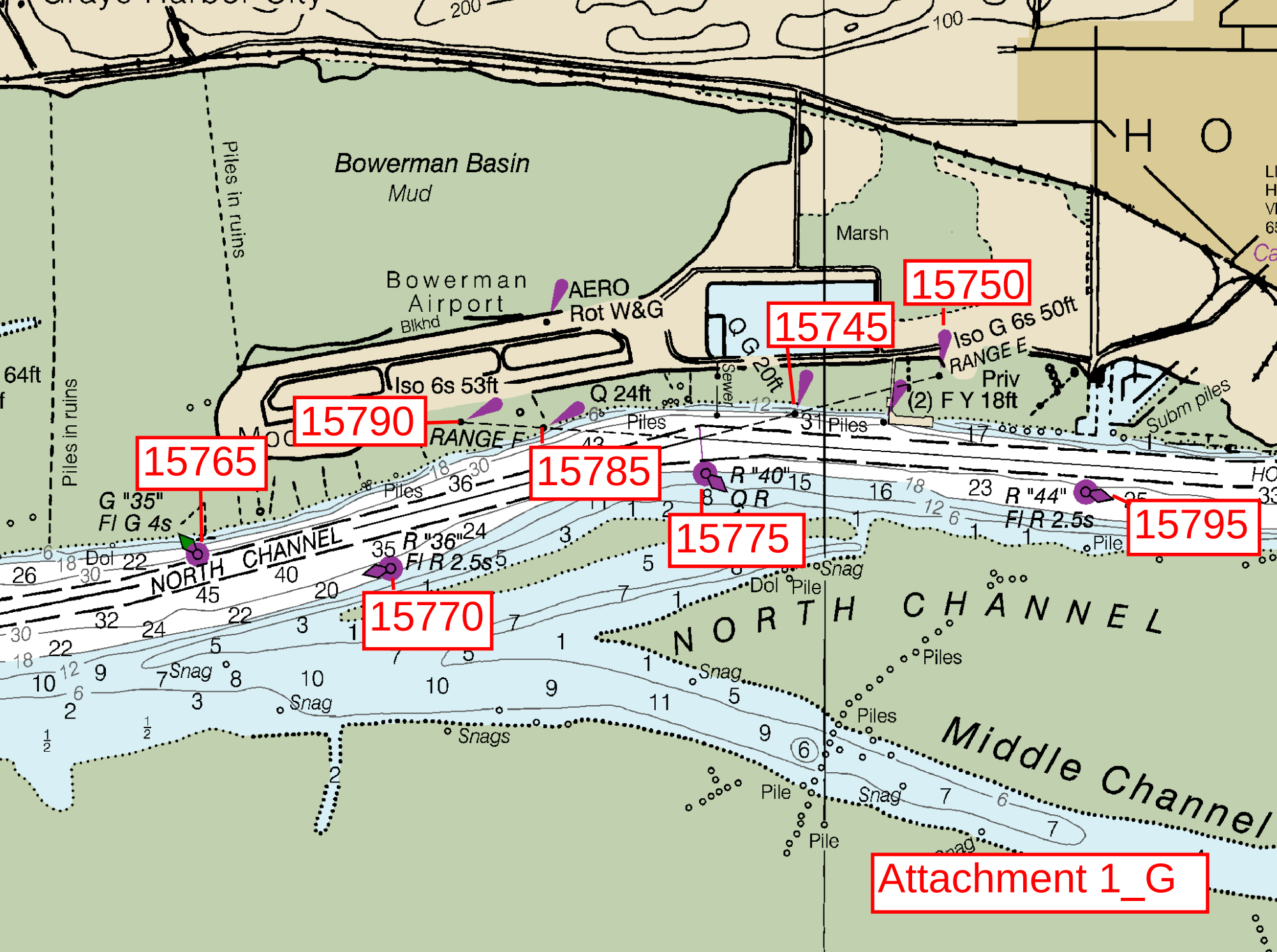

15545
15540
15600
15990
15981
15575
15595
15995
15585
15590
15591
Attachment 1_B
Marsh
Damon Pt
Subm Jetty
Ruins
Sand dunes
Iso R 6s 74ft
Q R 32ft
BAR RANGE
Cable Area
Breakers
G "13" Fl G 4s WHIS
Disposal Area Depths from survey of 2005 - 2009
R "4" Fl R 4s
(see inset)
G "9" Fl G 4s
G "11" Q G WHISTLE
R "2" Q R
CHEHALIS
Fl R "6"
TR
Piles
Dol
Sewer
Iso R 6s 67ft
CUPOLA
Fl R 2.5s 32ft
South Jetty
HORN (2s bl)
24 (Maint June 1 to Oct 1)
LOOKOUT TOWER
Pt Chehalis
Westport
Sand dunes
Al WR 30s 123ft 18M
(see tabulation)

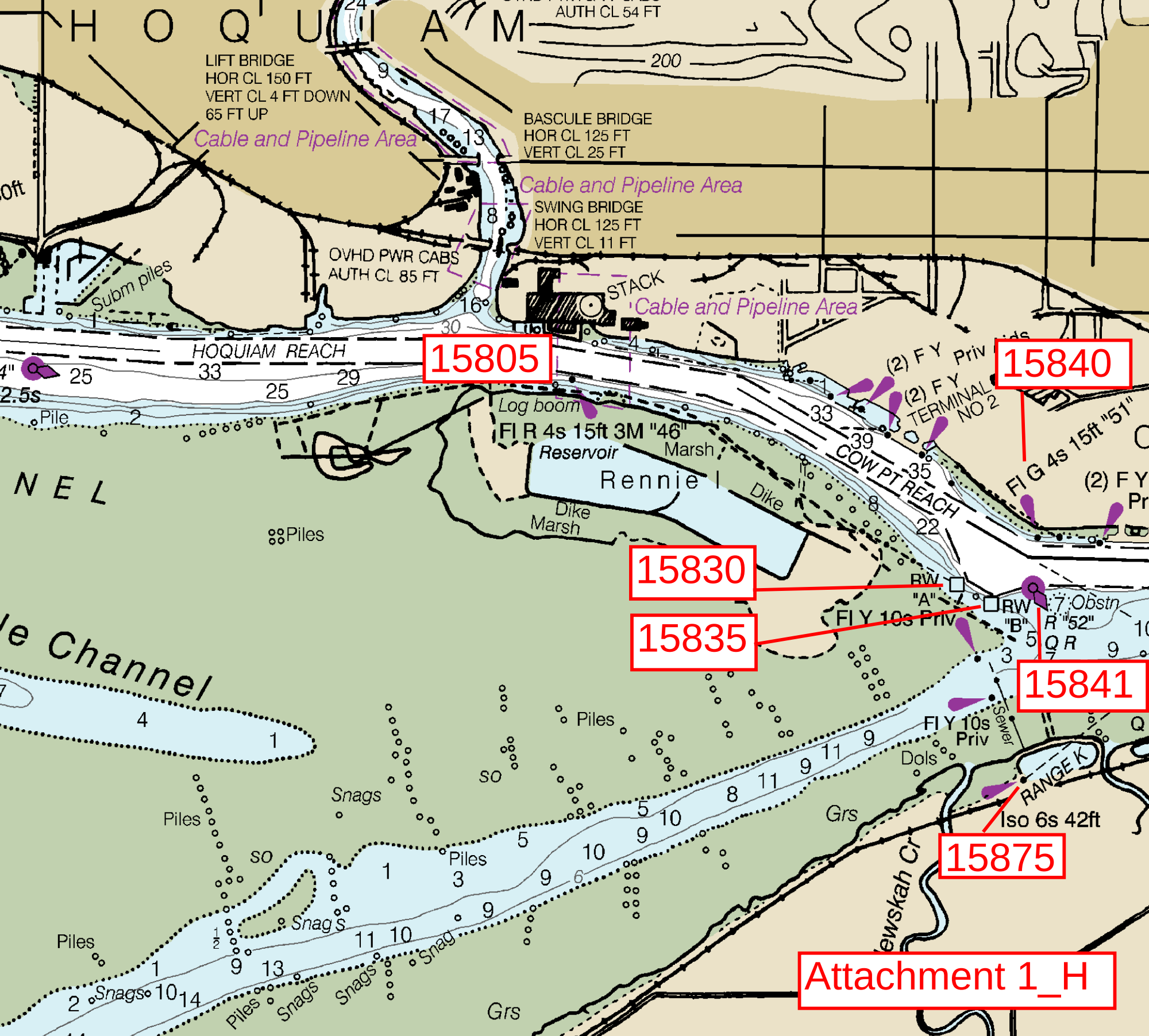

16001
16005
16010
16015
16030
16025
16020
16035
16040
16045
16050
16055
16060
16065
16070
Attachment 1_C
Fl G 4s 17ft 4M "7"
LT OBSC
Tripo
Fl R 4s "8"
Q R "10"
G "1"
Ra Ref.
Fl R 2.5s 3M "2"
Pile
Fl G 2.5s "1"
Grays Harbor CG
Airstrip
TANK
R "4" Ra Ref
G "5" Ra ref
Piles
Ruins
Marsh
R "6"
R "8"
R "10"
R "12"
R "14"
R "16"
Subm piles
9 FT FOR WIDTH OF 100 FT MARCH 1984
Cable Area
Conassett
STANDPIPE
Whitcomb Flats
Grass
Snag
Sh
SOUTH BAY
Iso R 6s 52ft


Attachment 1_D
15940
15935
15930
15925
15640
15655
15630
15620
15635
15645
15665
15670
Markers
Fl Y 4s 20ft 5M
Ra Ref
Marker 45
R
N "4"
Pile
PILES
Piles
NORTH CHANNEL
R
N "2"
Breakers
G "1"
Fl G 4s
G
R
A
Y
REGULATED NAVIGATION AREA
165.1325 (see note A)
G "15A"
Fl G 4s
G "17"
Fl G 4s
G "21"
Q G
GONG
SOUTH
R "14"
Q R
BELL
R "18"
Fl R 4s
Fl R 4s 15ft 5M "16"
Q R 33ft
Ra Ref
Iso R 6s 52ft
R "4"
Fl R 4s
(see inset)
Fl G 4s 17ft 4M "7"
LT OBSC
Piles
Tripod
R "6"
Fl R 2
Bomb Flats

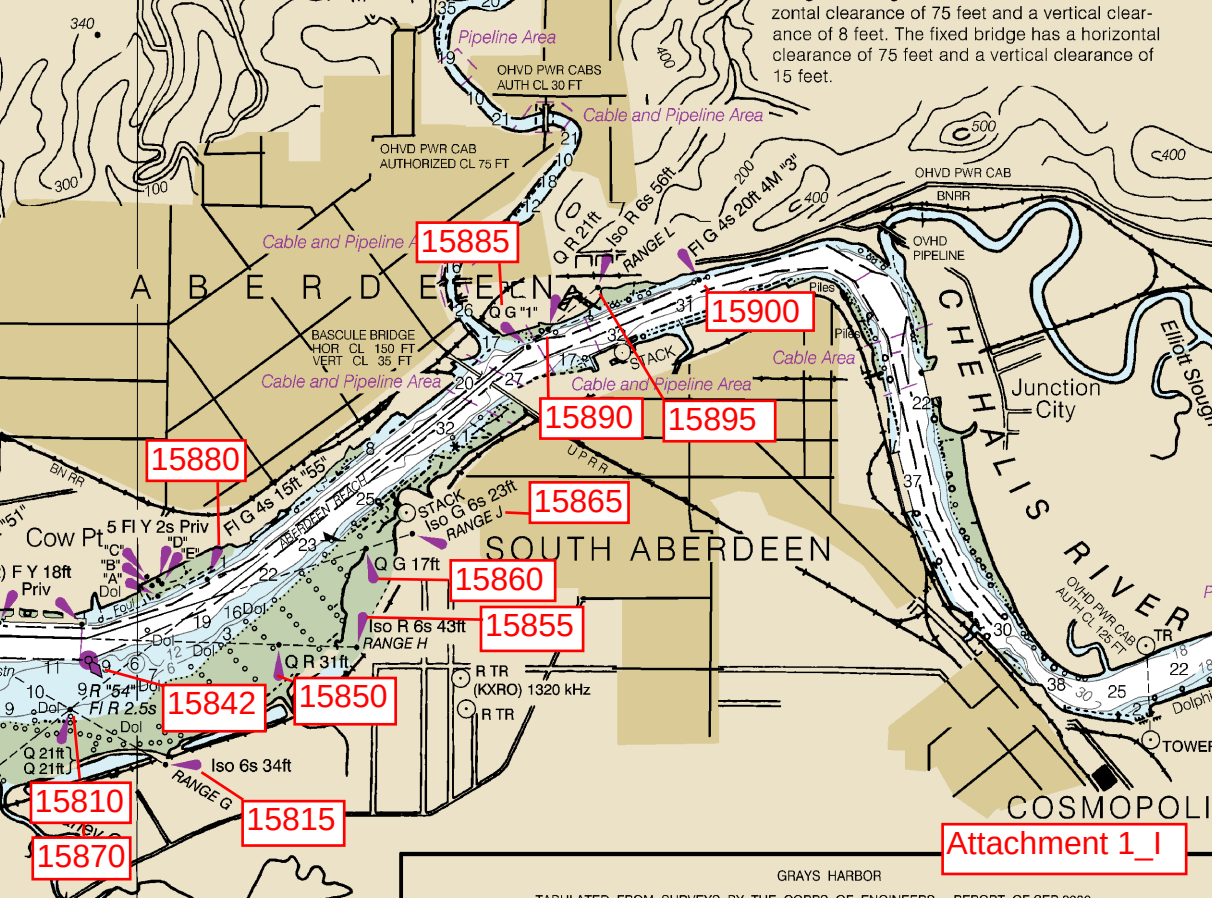

Attachment 1_E
15695
15675
15680
15610
15660
15685
15690
15615
15950
G "25"
Q G
C "23"
R "24"
Fl R 4s
Q 25ft
REACH
RANGE B
RANGE A
Pile
Fl R G "SC"
Fl (2+1) R 6s
8 Fl 6s
Fl R 2.5s 21ft
Iso R 6s 61ft
Fl R 2.5s 4M "6"
Iso 6s 50ft
Obstn
Grass
SOUTH


15720
15715
15735
15740
15755
15730
15760
15725
15710
15705
15700
15955
15960
15965
Attachment 1_F
RANGE C
RANGE D
Q 27ft
Ra Ref
Iso 6s 53ft
Q 32ft
R "32"
Fl R 2.5s
R "30"
Q.R
G "29"
Fl G 4s
R "14"
N "28"
CROSSOVER CHANNEL
G "27" 21
Fl G 2.5s
R "26"
Fl R 2.5s
BELL
Fl R 4s 15ft 7M "8"
G "1"
G "3"
CHANNEL
Stearns Bluff
South Arbor
Markham
Beaver Creek
Johns River
Marsh
Snag
Grass
Piles
Subm piles
Numerous deadh
(see tabulation)
FIXED BRIDGE
HOR CL 112 FT
VERT CL 33 FT
OVHD PWR CAB
AUTH CL 56 FT


15790
15765
15785
15775
15770
15745
15750
15795
Bowerman Basin
Mud
Piles in ruins
Bowerman Airport
Blkhd
AERO
Rot W&G
Iso 6s 53ft
RANGE F
Q 24ft
Q G 20ft
Iso G 6s 50ft
RANGE E
Priv
(2) F Y 18ft
Marsh
Piles
Subm piles
G "35"
Fl G 4s
NORTH CHANNEL
R "36"
Fl R 2.5s
R "40"
Q R
R "44"
Fl R 2.5s
Dol
Pile
Snag
Snags
Middle Channel
Attachment 1_G



HOQUIAM
AUTH CL 54 FT
200
LIFT BRIDGE
HOR CL 150 FT
VERT CL 4 FT DOWN
65 FT UP
Cable and Pipeline Area
BASCULE BRIDGE
HOR CL 125 FT
VERT CL 25 FT
Cable and Pipeline Area
SWING BRIDGE
HOR CL 125 FT
VERT CL 11 FT
OVHD PWR CABS
AUTH CL 85 FT
Subm piles
STACK
Cable and Pipeline Area
HOQUIAM REACH
15805
15840
(2) F Y
(2) F Y
TERMINAL NO 2
Log boom
Fl R 4s 15ft 3M "46"
Reservoir
Marsh
Rennie I
Dike
Dike
Marsh
COW PT REACH
Fl G 4s 15ft "51"
(2) F Y
Pile
Piles
15830
15835
RW "A"
RW "B"
Fl Y 10s Priv
Obstn
R "52"
Q R
15841
Fl Y 10s Priv
Sewer
Dols
RANGE K
Iso 6s 42ft
15875
Grs
Snags
Piles
Snag s
Snag
Snags
Piles
Grs
Attachment 1_H


zontal clearance of 75 feet and a vertical clearance of 8 feet. The fixed bridge has a horizontal clearance of 75 feet and a vertical clearance of 15 feet.
Pipeline Area
OHVD PWR CABS AUTH CL 30 FT
Cable and Pipeline Area
OHVD PWR CAB AUTHORIZED CL 75 FT
OHVD PWR CAB
BNRR
OHVD PIPELINE
Iso R 6s 56ft
RANGE L
Fl G 4s 20ft 4M "3"
Q R 21ft
Cable and Pipeline A
15885
15900
A B E R D E E N
Q G "1"
BASCULE BRIDGE
HOR CL 150 FT
VERT CL 35 FT
STACK
Piles
Cable Area
Cable and Pipeline Area
15890
15895
C H E H A L I S R I V E R
Junction City
Elliott Slough
15880
BN RR
UPR R
Fl G 4s 15ft "55"
5 Fl Y 2s Priv
Cow Pt
"C"
"B"
"A"
"D"
"E"
Dol
Fou
F Y 18ft
Priv
ABERDEEN BEACH
STACK
Iso G 6s 23ft
RANGE J
15865
SOUTH ABERDEEN
Q G 17ft
15860
Iso R 6s 43ft
RANGE H
15855
Q R 31ft
15842
15850
R TR
(KXRO) 1320 kHz
R TR
R "54"
Fl R 2.5s
Q 21ft
Q 21ft
Iso 6s 34ft
RANGE G
15810
15815
15870
OHVD PWR CAB AUTH CL 125 FT
TR
TOWER
COSMOPOLI
Attachment 1_I
GRAYS HARBOR