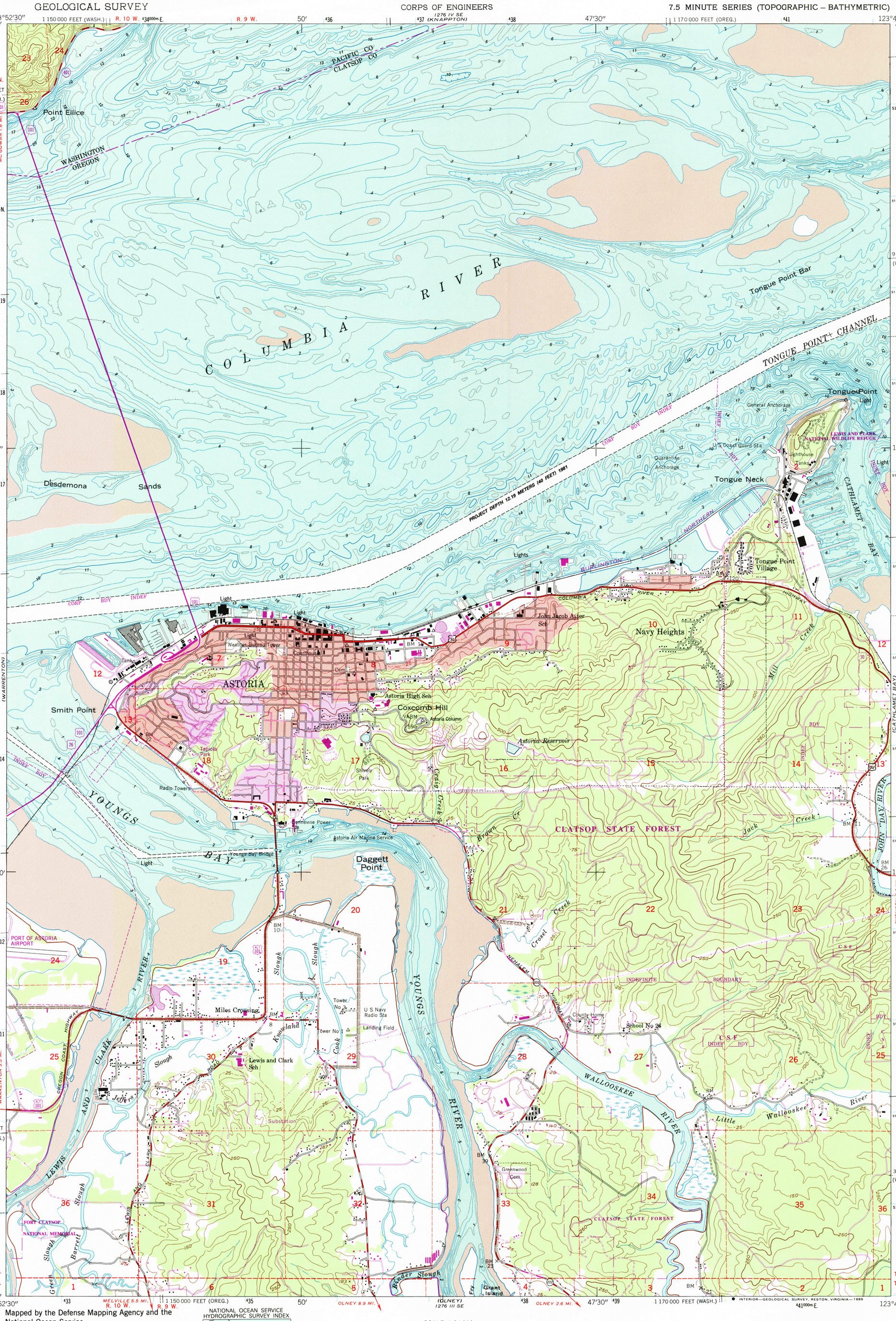
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

ASTORIA QUADRANGLE
OREGON – WASHINGTON
7.5 MINUTE SERIES (TOPOGRAPHIC – BATHYMETRIC)



CONVERSION SCALES

Feet	Meters
15000	4500
14000	4000
13000	3500
12000	3000
11000	2500
10000	2000
9000	1500
8000	1000
7000	900
6000	800
5000	700
4000	600
3000	500
2000	400
1000	300
	200
	100
0	0

Feet	Meters
1	.3048
2	.6096
3	.9144
4	1.2192
5	1.5240
6	1.8288
7	2.1336
8	2.4384
9	2.7432
10	3.0480

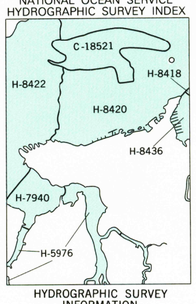
To convert feet to meters multiply by .3048

To convert meters to feet multiply by 3.2808

DEPTH GRADIENT
Meters 0 — Feet 0
Exposed at low tide
Maximum depth

Mapped by the Defense Mapping Agency and the National Ocean Service
Published for civil use by the Geological Survey
Control by NOS/NOAA, USCE, Oregon State Highway Department and Pacific Power and Light Company
Topography from aerial photographs by multiplex methods
Aerial photographs taken 1943. Field checked 1949
Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes
Mean low water (dotted) line and mean high water (heavy solid) line compiled by NOS from tide-coordinated aerial photography. Apparent shoreline (outer edge of vegetation) shown by light solid line
Polyconic projection. 1927 North American Datum
10,000-foot grid based on Oregon coordinate system, north zone and Washington coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue
To place on the predicted North American Datum 1983, move the projection lines 24 meters north and 97 meters east as shown by dashed corner ticks
There may be private inholdings within the boundaries of the National or State reservations shown on this map
Red tint indicates areas in which only landmark buildings are shown
Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1981 and other sources
This information not field checked. Map edited 1984

NATIONAL OCEAN SERVICE HYDROGRAPHIC SURVEY INDEX



HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-5976	1935	1:10,000	.01–.05
H-7940	1951	1:10,000	.02–.08
H-8418	1958	1:10,000	.02–.12
H-8436	1958	1:5,000	.01–.05
H-8420	1958	1:10,000	.01–.12
H-8422	1958	1:10,000	.01–.17
NOS CHART 18521	MARCH 27, 1982	1:40,000	

SCALE 1:24 000

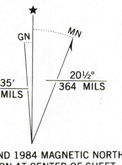
1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 50 FEET
DASHED LINES REPRESENT 25 FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS – DATUM IS MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.4 METERS

BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND/OR STANDARDS USED AT THE DATE OF THE SURVEY
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092,
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION 1951
Heavy-duty — 4 LANE | 6 LANE
Medium-duty — 4 LANE | 6 LANE
Light-duty
Unimproved dirt
U. S. Route
State Route



UTM GRID AND 1984 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ASTORIA, OREG.–WASH.
46123-B7-TB-024

1949

PHOTOREVISED 1984
BATHYMETRY ADDED 1984
DMA 1276 III NE – SERIES V892

USGS NMD HISTORICAL MAP
DEC 19 1985
REC'D FILE COPY

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1985