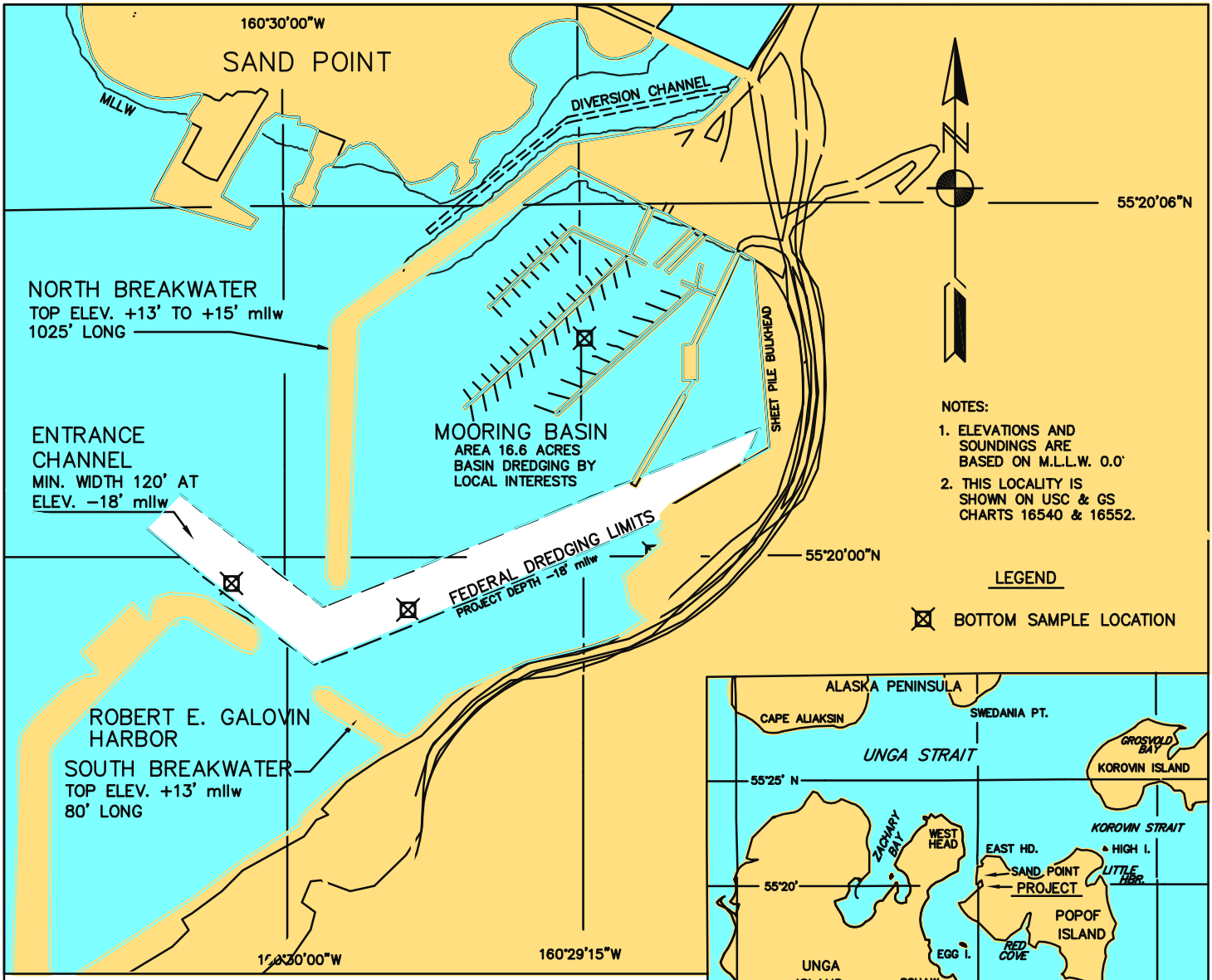
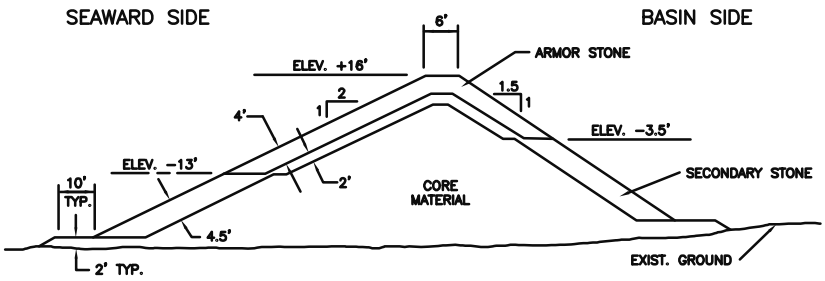
HUMBOLDT HARBOR

CORPS OF ENGINEERS

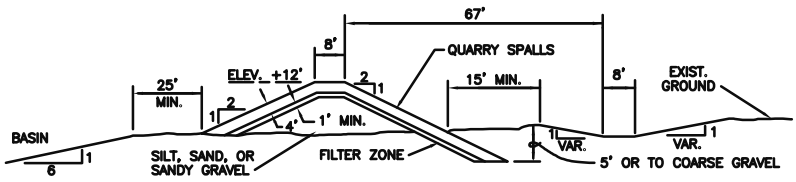
U.S. ARMY





TYPICAL BREAKWATER SECTION

NOT TO SCALE



TYPICAL SECTION
DIVERSION DIKE & DIVERSION CHANNEL

NOT TO SCALE

VICINITY MAP

SCALE IN MILES
0 5 10

SCALE IN KILOMETERS
5 0 5 10

HUMBOLDT HARBOR
ALASKA

REVISED 1996

100 0 100 200 300 400 500
SCALE IN FEET

100 50 0 50 100
SCALE IN METERS

HUMBOLDT HARBOR AT SAND POINT, ALASKA
(CWIS NO. 74949)

Condition of Improvement 30 September 2010

AUTHORIZATION: Rivers and Harbors Act, 27 October 1965, as adopted under Section 201, 20 September 1970 (House Doc. 91-393, 91nd Congress, 2nd Session) and authorized by the Chief of Engineers, 29 September 1970, provides for construction of two rubble-mound breakwaters totaling approximately 1,635 feet in length, a protected basin with an area of about 16.6 acres, an entrance channel 120 feet wide by 1,200 feet long to a depth of -18 feet MLLW, a rubble-mound diversion dike 1,175 feet long, and a diversion channel 775 feet long.

EXISTING PROJECT:	LENGTH	DEPTH	WIDTH
• North Breakwater	1025 ft		
• South Breakwater	740 ft		
• Entrance Channel	1200 ft	-18 ft	120 ft
• Diversion Dike	1175 ft		
• Diversion Channel	775 ft		

PROJECT USAGE: The small boat basin provides protected moorage for 230 local and transient fishing boats. It is also an important harbor-of-refuge for commercial fishing vessels in the Alaska Peninsula region.

PROGRESS OF WORK:

1975 - Contract is awarded in June and construction begins in August.
1976 - Construction is completed in July 1976.
1987 - In June, a survey of the south breakwater is conducted to determine possible erosion. The survey indicates no damage to the breakwater as constructed by the Corps.
1991 - A condition survey of the harbor is performed in August.
1993 - Sampling and testing of bottom material is accomplished followed by maintenance dredging in November with only 817 cubic yards of material removed within the project dimensions. The contractor reports that hard bottom conditions prevented dredging activity.
2002 - A condition survey is conducted in August.
2006 - The latest condition survey is carried out in June, and aerial photography is taken in May.
2010 - A condition survey was conducted in July.

COST TO DATE:

CG Costs	$3,679,683
O&M Appropriation	$309,536
O&M Costs	$284,936

RANGE OF TIDE:	Mean Range	Diurnal Range	Extreme Range
	5.2'	7.2'	14.5'

CONTROLLING DEPTH: A depth of -17.9 feet MLLW controls in the maneuvering area, July 2010.

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HUMBOLDT HARBOR, ALASKA (continued)

30 September 2010

MAINTENANCE DREDGING SUPPLEMENT:

A. General

1. The Federal project was dredged in 1993 for the first time since construction (1976).
2. Material was apparently present for dredging within the basin along the southerly project limit, but that portion of the project was found to be undredgeable with the conventional hydraulic cutterhead resulting in a substantial under run; only 817 cubic yards were removed from the project in November 1993 from a possible 2934 cubic yards.
3. Local interests have the maneuvering area dredged to project depth sometime from 1998 – 2001.
4. The dredging window runs from 16 July to 14 May. Fall and winter dredging activity would be preferred to avoid conflicts with fishing vessels.

B. Sampling & Testing

1. Two sites were sampled in the Federal project and classified as silty sand (SM), the upland disposal and marine disposal sites were classified as silty sand (SM), and the inner harbor site was classified as silt with sand (ML), January 1993.
2. Chemical analysis was conducted using (6) tests as outlined with results below:

Method 8080	Pesticides and PCB's	none detected
Method 8270	Semi-volatile Organics	Fluoranthene 2.1 ppm*, all others ND or below management levels
Method 8260	Volatile Organic Compounds	none detected
Series 6000-7000's	(8) RCRA Metals	Cadmium 5.9 - 13 ppm**
	(5) of (8) detected	all others below management levels
Method 415.1	Total Organic Carbon	0.44 - 2.2 %
Method 160	Total Solids	43.0 - 71.0 %

* Found in the inner harbor outside the Federal project; minimum management level 1.7 ppm.
** Found above minimum management level of 5.8 ppm for all samples.

C. Disposal

1. Dredge spoils were conveyed via a portable pipeline from the floating dredge plant to a bermed site within the harbor.
2. The upland site was contained by a stone breakwater and constructed as an extension of the fill behind the sheet pile bulkhead. The axial dimensions are roughly 130 by 250 feet with the site center at 55°19'58.709"N latitude and 160°29'43.488"W longitude. An alternate deep water site (3330 feet x 4350 feet) is located about 1.85 miles south of the project in Popof Strait with depths in excess of 120 feet. Corners have the following geographic coordinates: (1) 55°19'03"N 160°32'58"W, (2) 55°19'03"N 160°31'44"W, (3) 55°18'30"N 160°31'44"W, and (4) 55°18'30"N 160°32'58"W.
3. Future disposal can use the current upland site; there is room to expand another 600 feet adjacent to the Federal project.

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HUMBOLDT HARBOR, ALASKA (continued)

30 September 2010

D. Environmental Permits and Reports

1. The U.S. Fish and Wildlife Service issued a Coordination Act Report in December 1985, and the Corps released a Draft Environmental Impact Statement in 1986.

2. The following permits or authorizations are listed by agency below:

Agency Name	Date of Issue	Date of Expiration
ADGC	30 Jun 87	n/a
ADEC	2 Jul 87	n/a
EPA	1986	n/a
DA	1 Aug 92	n/a

3. Water Quality: Four physical parameters were recorded at five sites, two within the Federal project, one in the harbor basin, one at the intertidal disposal site, and one at the proposed deep water disposal site. Temperature, pH, salinity, and conductivity were measured, January 1993; no chemical analysis was conducted.

Humboldt Harbor

View of the small boat harbor in 2010.

Aerial view of Sand Point with Humboldt Harbor on the left in 2010.