

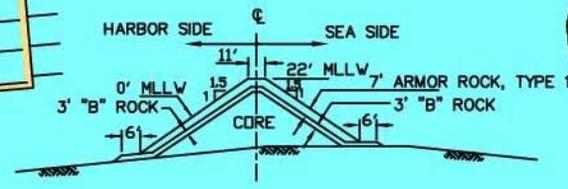
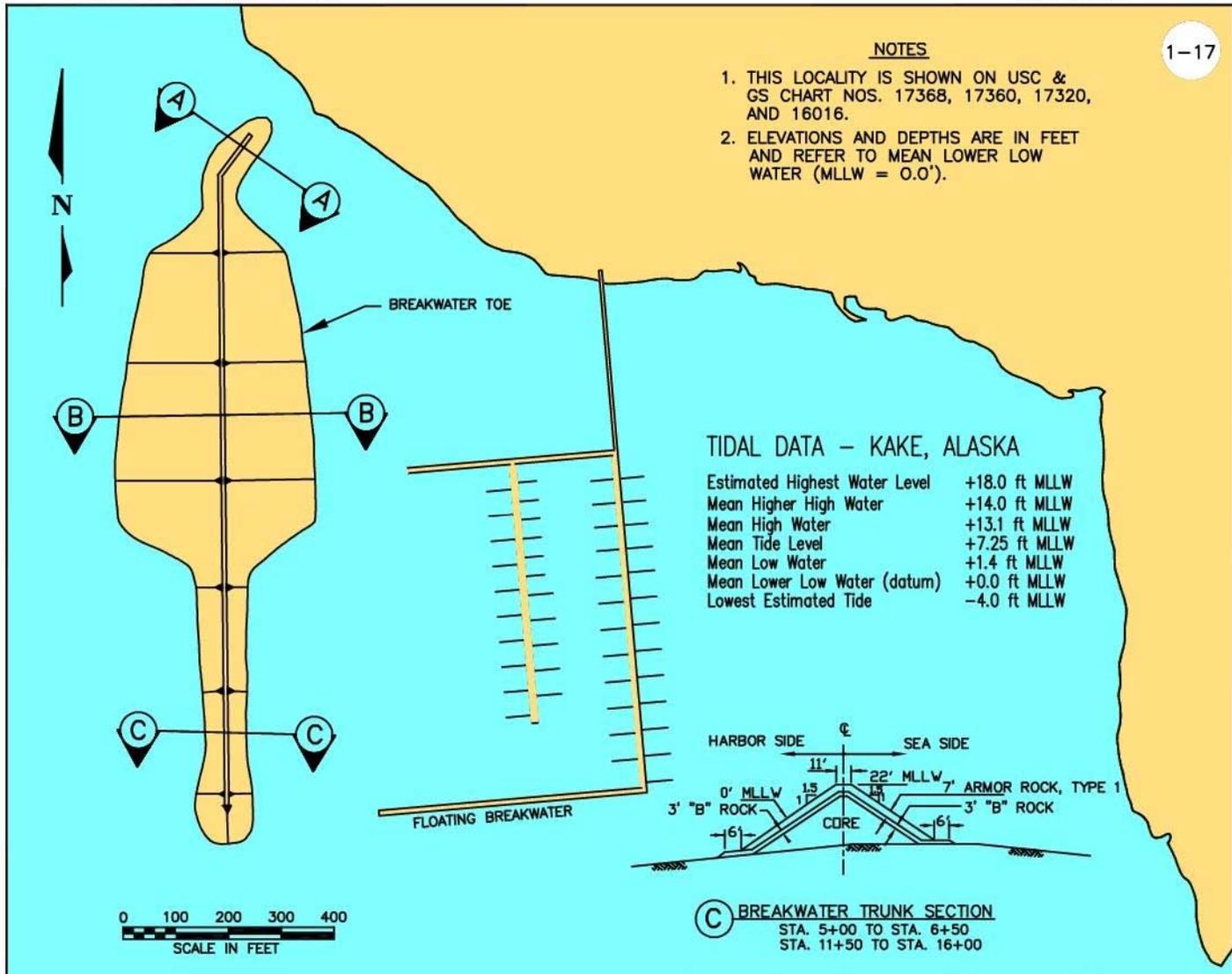
KAKE HARBOR

NOTES

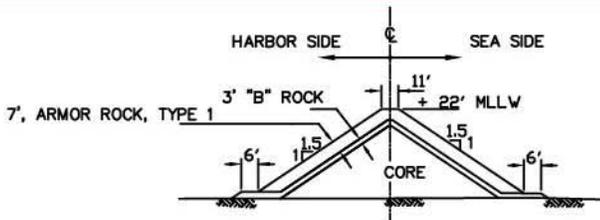
1. THIS LOCALITY IS SHOWN ON USC & GS CHART NOS. 17368, 17360, 17320, AND 16016.
2. ELEVATIONS AND DEPTHS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW = 0.0').

TIDAL DATA - KAKE, ALASKA

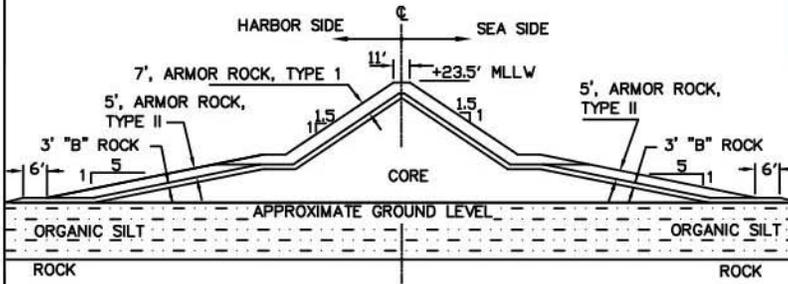
Estimated Highest Water Level	+18.0 ft MLLW
Mean Higher High Water	+14.0 ft MLLW
Mean High Water	+13.1 ft MLLW
Mean Tide Level	+7.25 ft MLLW
Mean Low Water	+1.4 ft MLLW
Mean Lower Low Water (datum)	+0.0 ft MLLW
Lowest Estimated Tide	-4.0 ft MLLW



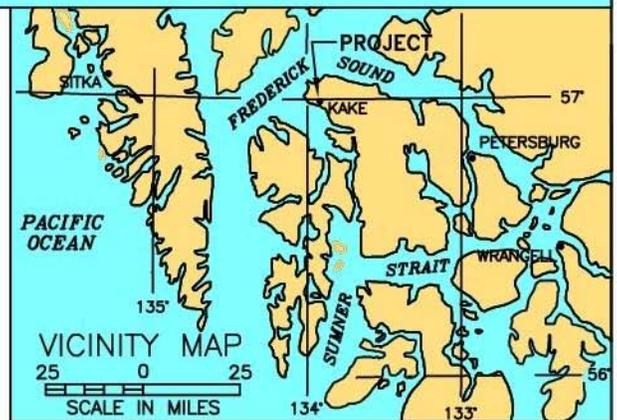
C BREAKWATER TRUNK SECTION
 STA. 5+00 TO STA. 6+50
 STA. 11+50 TO STA. 16+00



A BREAKWATER HEAD SECTION
 STA. 16+00 TO STA. 17+00



B BREAKWATER TRUNK SECTION
 STA. 6+50 TO STA. 11+50



KAKE, ALASKA

KAKE HARBOR ALASKA

2000



KAKE HARBOR, ALASKA
(CWIS NO. 72739)

Condition of Improvement 30 September 2009

AUTHORIZATION: Rivers and Harbors Act, 13 August 1968 (Senate Doc. 249, 75th Congress, 1st Session) as adopted, provides for a 1,580 foot long west breakwater and a 900 foot long south breakwater enclosing a 7 acre berthing area at -15 feet MLLW.

EXISTING PROJECT:	<u>LENGTH</u>	<u>HEIGHT</u>	<u>WIDTH</u>
• Breakwater	1,240 ft.	22-23.5 ft.	varies

PROJECT USAGE: Fishing vessels find moorage at Portage Cove Harbor, a site 3 miles from town, protected by the new permanent Federal breakwater and a state maintained floating breakwater.

PROGRESS OF WORK:

- 1971 - Pre-construction planning is initiated; field surveys are completed.
- 1972 - Foundation and materials investigations begin.
- 1976 - Pre-construction investigations reveal poor foundation conditions resulting in project re-evaluation and reformulation.
- 1979 - Additional field investigation verifies poor subsurface conditions. The project is modified to include a 1,150 foot long west breakwater with a 960 foot shoreward access causeway and a 1,050 foot long floating south breakwater.
- 1980 - Sampling and testing of bottom sediments is conducted.
- 1982 - Plans and specifications are completed.
- 1983 - A wind monitoring station is set up in June, and an aquatic biological study is initiated.
- 1986 - The biological study is completed and wind data collection continues.
- 1991 - Wind data is evaluated.
- 1994 - A geophysical investigation is conducted at the Portage Cove harbor about 3 miles from the town site.
- 1996 - A General Reevaluation Report is issued in July covering possibilities at the Portage Cove site.
- 1998 - Breakwater construction begins at Portage Cove.
- 2000 - The breakwater is completed in October.
- 2009 - A temporary tide gauge is installed in the fall to take observations for a tidal datum update.

COST TO DATE:

GI PED Appropriation	\$273,151
GI PED Costs	\$273,151
CG Appropriation	\$16,021,585
CG Costs	\$16,021,094
CG Contributed Appropriation	\$1,971,000
CG Contributed Costs	\$1,971,000

RANGE OF TIDE:	<u>Mean Range</u>	<u>Diurnal Range</u>	<u>Extreme Range</u>
	12.0'	14.0'	22.0'

Kake Harbor



View from the Kake Harbor boardwalk in the fall of 2009.