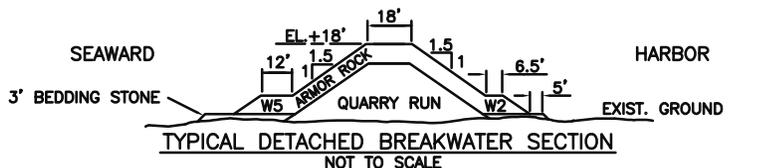
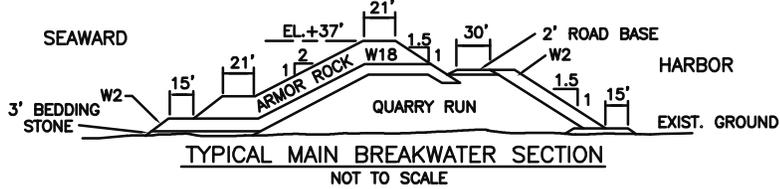
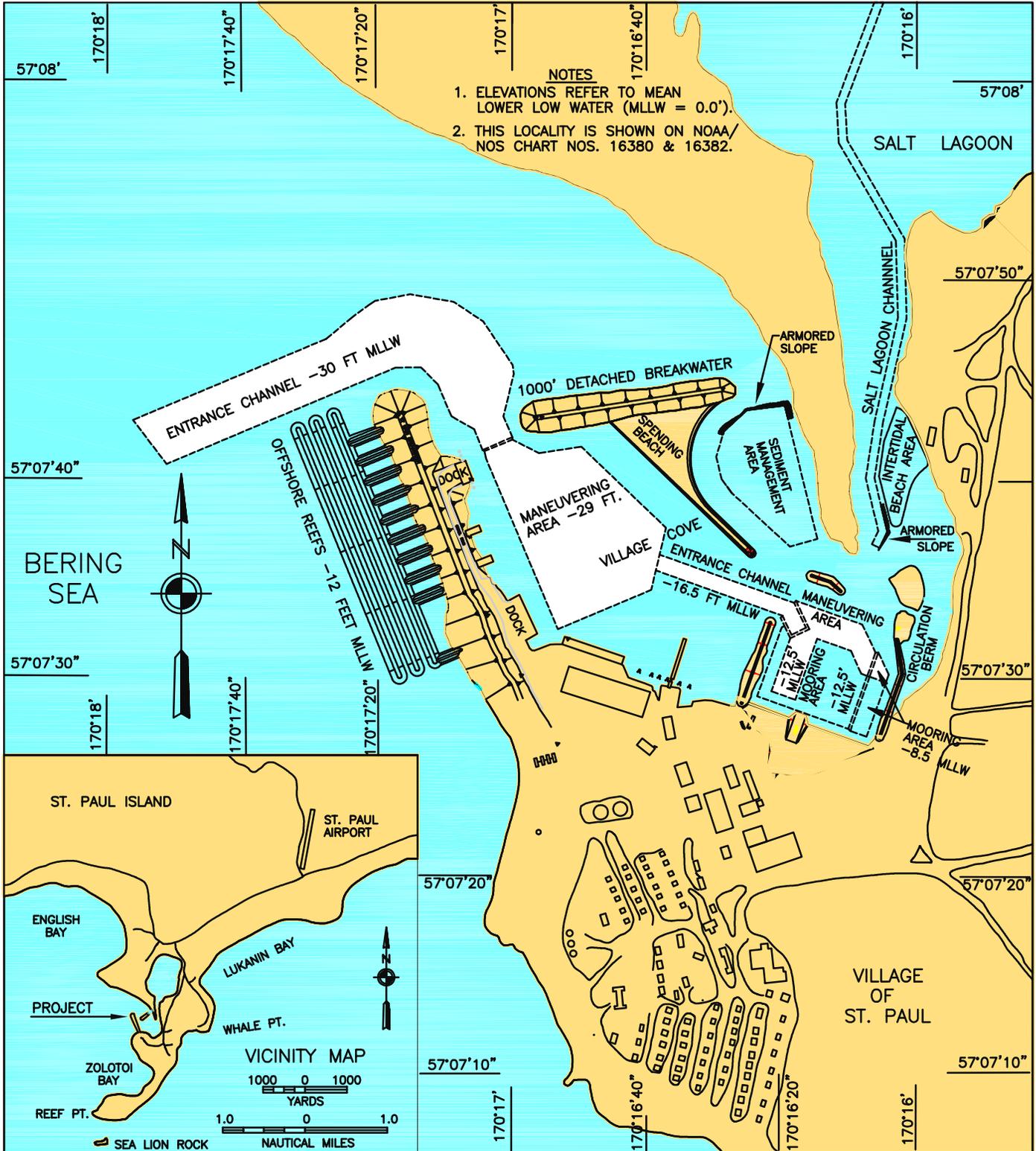
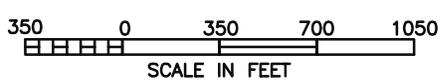


# **ST. PAUL HARBOR**



**ST. PAUL HARBOR ALASKA**

REVISED 2010



**ST. PAUL HARBOR, ST. PAUL ISLAND, ALASKA**  
(CWIS NO. 80526, 10429, 10169)

Condition of Improvement 30 September 2010

**AUTHORIZATION:** (1) Water Resources Development Act, 17 November 1986 (Public Law 99-662, Section 202) as adopted, provides for an addition to the existing breakwater of 1050 feet at 37 feet above MLLW, a detached breakwater 1000 feet in length at 18 feet above MLLW protecting Village Cove, and a maneuvering area 200 feet wide at 18 feet below MLLW. (2) Water Resources Development Act of 1996, (Section 101(b)(3), Public Law 104-303) provides for an entrance channel at -30 feet MLLW, enlarges the maneuvering basin to 415 by 830 feet with a depth of -29 feet MLLW, creates a wave spending beach at +4 feet MLLW, a tidal channel into the Salt Lagoon at 40 feet in width at -3 feet MLLW for environmental mitigation, and three off-shore reefs 1,300 feet in length at -12 feet MLLW. (3) Water Resources Development Act of 1999, 106<sup>th</sup> Congress, provides for a small boat harbor with an entrance channel at -16 feet MLLW and a maneuvering area at -12 feet MLLW with appropriate wave protection flow directing features consisting of a breakwater of 435 feet at 10 feet above MLLW and a circulation berm of 530 feet at 10 feet above MLLW.

**LOCAL COOPERATION:** Under Section 204(e) of Public Law 99-662, the Federal government agreed to reimburse the City 80% of the project costs upon acceptance by the Corps of Engineers. Under this agreement, the project was initially funded and supervised by the City of St. Paul.

<b>EXISTING PROJECT:</b>	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
• Main Breakwater (Federal) . . . . .	1050 ft		
• Detached Breakwater . . . . .	1000 ft		
• Entrance Channel . . . . .	2000 ft	-30 ft	Varies
• Maneuvering Area . . . . .	Varies	-29 ft	Varies
• Offshore Reefs (3) . . . . .	1300 ft	-12 ft	
• Birth Area . . . . .		-29 ft	
• Intertidal Beach Area . . . . .		0 ft	

<b>SMALL BOAT HARBOR:</b>	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
• Detached Breakwater . . . . .	160 ft		
• Circulation Berm . . . . .	485 ft		
• Attached Breakwater . . . . .	435 ft		
• Entrance Channel . . . . .	Varies	-16 ft	Varies
• Mooring/Maneuvering Area. . . . .		-12 ft	
• Mooring Area (Back) . . . . .		-8 ft	

**PROJECT USAGE:** The harbor at St. Paul (Pribilof Islands) is an important harbors-of-refuge for the bottom-fishing fleet in the Bering Sea and provides crucial economic support for this remote community. (See St. George, project 1-44, for related project)

**ST. PAUL HARBOR, ALASKA** (continued)

30 September 2010

**PROGRESS OF WORK:**

- 1989 - Construction begins in May and all phases are completed in December.
- 1990 - After the project is inspected and accepted by the Corps of Engineers, the City of St. Paul is reimbursed \$18,150,000 in March.
- 1995 - A condition survey of the breakwaters and entire harbor is completed in July. Minor repairs are made to the main and detached breakwaters by placing armor stone at the damaged sites.
- 1999 - Phase I contract is awarded to construct (3) off-shore reefs to protect the main breakwater.
- 2001 - The latest condition survey of the harbor and breakwaters is completed in July. Phase I contract is modified to repair scour behind the off-shore reefs.
- 2002 - A survey of the three off-shore reefs is conducted in May.
- 2003 - The three off-shore reefs and the outer entrance channel are surveyed in May. A contract for Phase II dredging is awarded in June.
- 2005 - The Salt Lagoon and main harbor are surveyed in March. Phase II construction is completed.
- 2006 - Vertical and oblique aerial photography is taken in May. An extensive condition survey was conducted throughout the harbor and Salt Lagoon in May and June.
- 2008 - A contract for Phase III construction of the small boat harbor is prepared.
- 2009 - The contract for construction of the small boat harbor, Phase III, was awarded in May. Construction will begin in the summer of 2010.
- 2010 - As a local feature, armored slope protection was added to the breakwater berth area and the harbor dredged to -29 feet. Trenches were dredged to -33 feet in front of the existing docks. The harbor was also updated with a circulation berm, a detached breakwater, and an attached breakwater. The mooring/maneuvering area was dredged to -12.5 feet and an entrance channel was dredged to -16.5 feet. The intertidal beach area was excavated as an environmental mitigation feature. Construction was completed October.

**COST TO DATE:**

GI PED Appropriation 10429	\$696,770	CG Costs 10429	\$79,106,195
GI PED Costs 10429	\$696,770	CG Contributed Appropriation 10429	\$9,257,842
GI PED Appropriation 10169	\$534,000	CG Contributed Costs 10429	\$8,359,092
GI PED Costs 10169	\$534,000	O&M Appropriation 10169	\$1,023,428
CG Appropriation 10429	\$85,044,448	O&M Costs 10169	\$1,023,428

**RANGE OF TIDE:**

Mean Range  
2.0'

Diurnal Range  
3.2'

Extreme Range  
8.5'

**CONTROLLING DEPTH:** A depth of -29.5 feet MLLW controls at the center of the northern end of the Federally maintained maneuvering basin, May 2006.

## St. Paul Harbor, St. Paul Island, Alaska



Attached breakwater and detached breakwater in 2010.



Circulation berm at St. Paul Harbor in 2010.