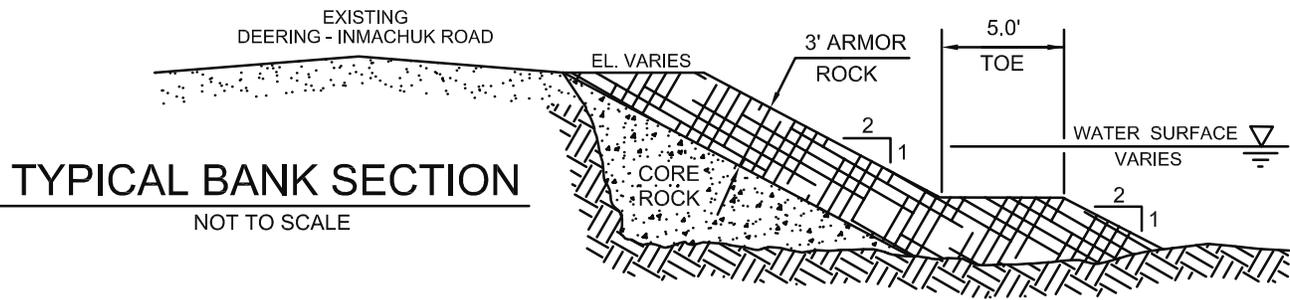
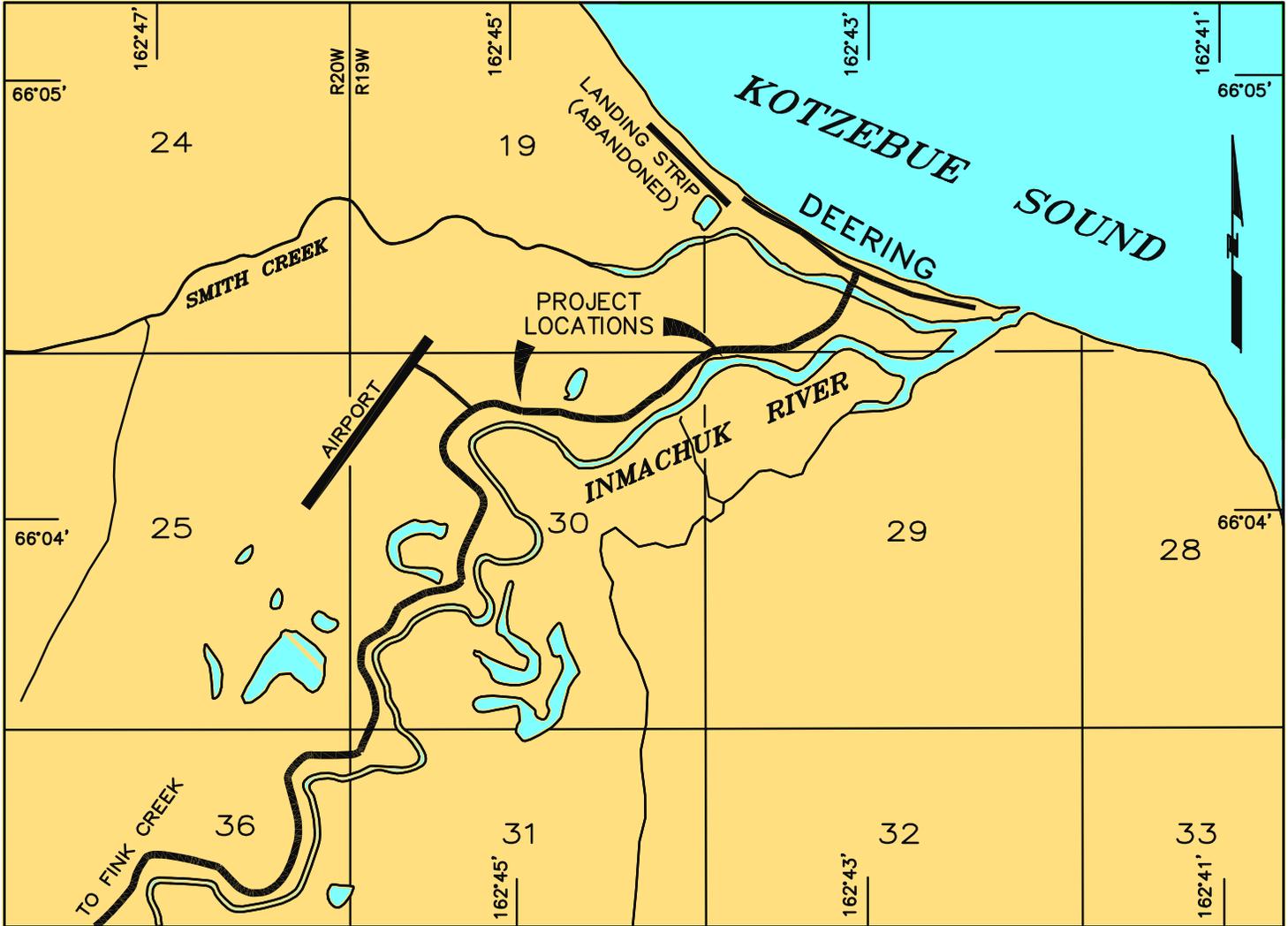
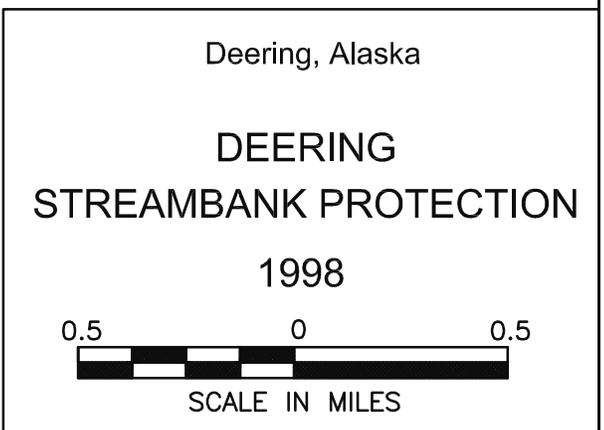
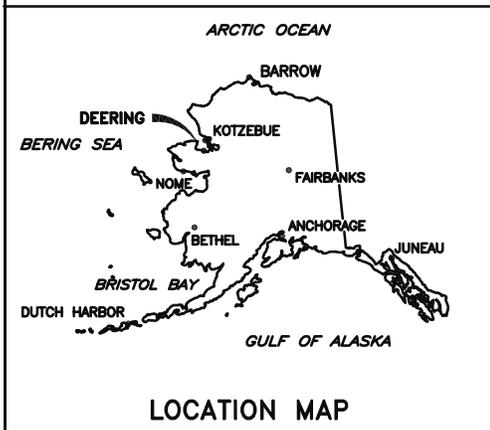


**DEERING
STREAM BANK
PROTECTION**



NOTE
THIS LOCALITY IS SHOWN
ON USGS QUAD SHEET,
KOTZEBUE A-2.



DEERING STREAMBANK PROTECTION, ALASKA
(CWIS NOS. 92906 & 180355)

Condition of Improvement 30 September 2009

AUTHORIZATION: Section 14, 1946 Flood Control Act (Public Law 79-562; 33 USC 701r), dated 24 July 1946, as amended by Public Law 93-251, provides for emergency stream bank protection not to exceed \$1,000,000 in federal funds.

EXISTING PROJECT:	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
• Rock revetment, mile 0.5	804 ft		
• Rock revetment, mile 0.95	575 ft		

PROJECT USAGE: The completed work provides permanent protection for the Deering-Inmachuk Road and the city's water supply. Deering is an incorporated native village about 57 air miles south of Kotzebue, Alaska. All transportation to the village is by water or air.

PROGRESS OF WORK:

- 1994 - Local sponsors indicate need to halt the bank erosion caused by the Inmachuk River. State agency review of the recommended plan is initiated.
- 1995 - The recommended plan is found to be consistent with the state Coastal Zone Program, and the project receives a Finding of No Significant Impact from the Corps of Engineers. A construction window from 31 August through 15 April is established.
- 1996 - A Project Cooperation Agreement is completed between the City of Deering and the Corps of Engineers. Project costs will be split between the Federal government (75%) and the State and local Native Corporation (25%). A construction contract is awarded in the fall.
- 1997 - The work is physically completed in October.
- 1998 - The contract is closed out, and the project is turned over to the local sponsors for maintenance. The project was inspected by the Corps and found to be in good condition.
- 2000 - Inspections in September 1999, and again in August 2000, find the project in good condition with no recommendations for maintenance.
- 2001 - The project is found in good condition by the Corps' inspector.
- 2002 - The Corps' inspector finds both revetments in good condition, August 2002.
- 2003 - The project is reported to be in excellent condition by the Corps' inspector.
- 2004 - Both revetments appear to be in good overall condition. Continued monitoring is recommended due to the dislocation and sloughing of the rip-rap at several locations.
- 2005 - The project is inspected in September: evidence of fracturing of the revetment rock is apparent throughout, some erosion of the stream banks downstream of the revetments is on-going and some stones are not keyed well, but both sections appear to be in good overall condition.
- 2009 - The project is inspected in October. The general condition of both revetment sections is good with no evidence of significant stone movement. The condition of the rip rap with regard to fracture was not confirmed during this inspection due to snow cover. Erosion of the stream banks continues. The presence of sink-holes along the riverbank suggests that thawing permafrost may be contributing to erosion.

DEERING STREAMBANK PROTECTION, ALASKA (continued)

30 September 2009

COST TO DATE:

CG Appropriation 92906	\$490,657
CG Costs 92906	\$490,656
CG Contributed Appropriation 92906	\$152,908
CG Contributed Costs 92906	\$152,908
CG Appropriation 180355	\$83,494
CG Costs 180355	\$83,494

Immachuk River, Deering, Alaska



Work in progress at mile 0.5, view upstream, September 1997.



Revetment at mile 0.95, September 1997.