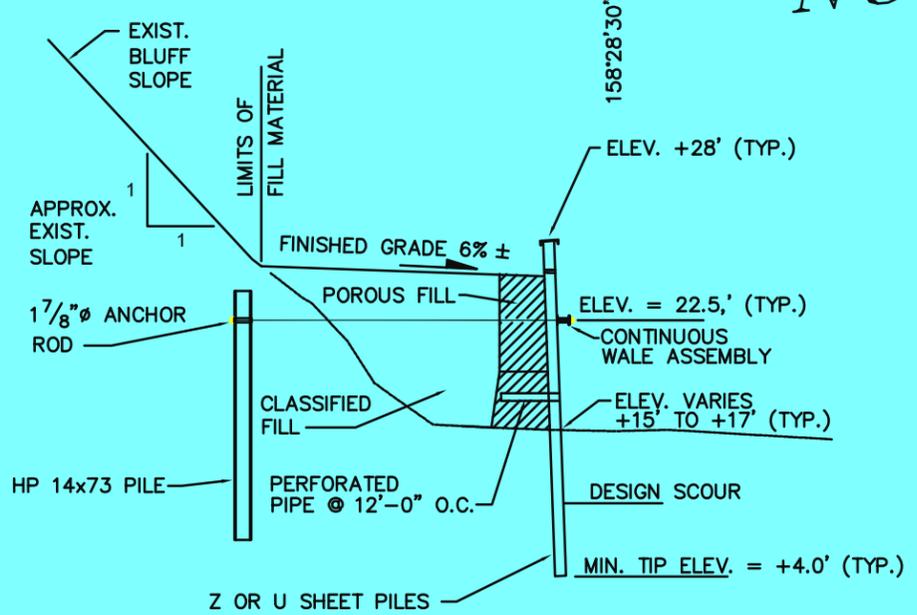
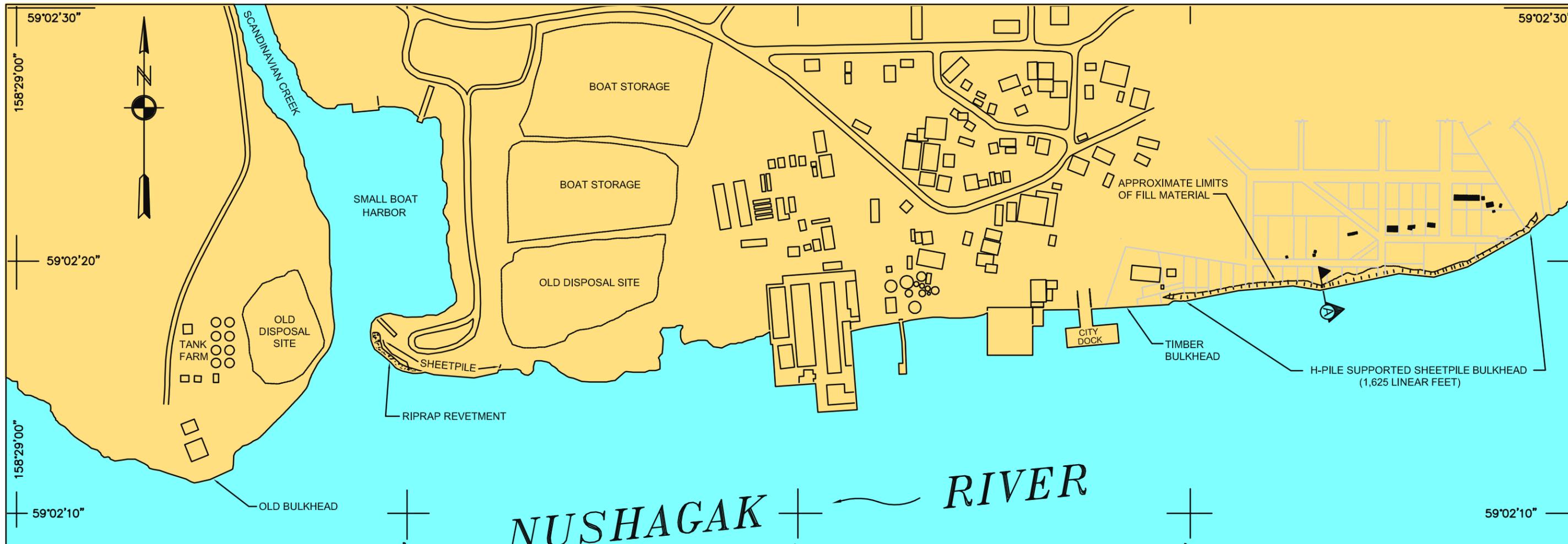
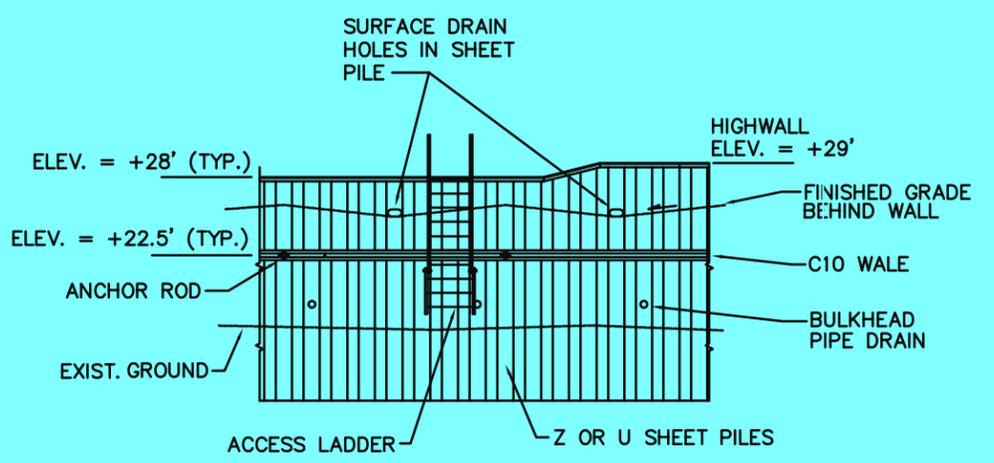


**DILLINGHAM BANK
STABILIZATION**



A TYPICAL SECTION PILE SUPPORTED SHEETPILE BULKHEAD
SCALE: N.T.S.



TYPICAL PILE SUPPORTED SHEET PILE ELEVATION
SCALE: N.T.S.

NOTE: SEE PROJECT NO. 1-8, DILLINGHAM HARBOR, FOR FURTHER INFORMATION.

DILLINGHAM, ALASKA

DILLINGHAM BANK STABILIZATION

REVISED 2006

SCALE IN FEET

DILLINGHAM BANK STABILIZATION, ALASKA
(CWIS NO. 075441)

Condition of Improvement 30 September 2009

AUTHORIZATION: (1) Public Law 99-190, under Section 114, dated 19 December 1985, as adopted, provides for the installation of 1,600 linear feet of steel sheet pile bulkhead along the toe of the bluff from the Dillingham city cargo dock to Snag Point. (2) Public Law 106-377, Section 1(a)(2), and Conference Report 106-988, provides for the extension of the sheet pile wall on the west side of the entrance channel to the small boat harbor, and the replacement of the existing wooden bulkhead at the city dock.

EXISTING PROJECT:	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
• Sheet pile bulkhead (City Dock to Snag Point)	1,625 ft		
• Sheet pile with rip rap (east side of entrance channel) . . .	600 ft		

PROJECT USAGE: The project is located at the head of Nushagak Bay, an arm of Bristol Bay, on the right bank of the Nushagak River, just below its confluence with the Wood River about 330 air miles southwest of Anchorage.

PROGRESS OF WORK:

- 1986 - Initial contact is made with the local sponsor.
- 1988 - City seeks additional state funding.
- 1995 - Local interests relocate the water and sewer lines near Snag Point and are reimbursed by the government.
- 1997 - Plans and specifications are completed for the City Dock to Snag Point project.
- 1998 - The Project Cooperation Agreement is signed in January, and a construction contract is awarded in September.
- 1999 - The original contract is modified to accommodate increased costs.
- 2000 - 600 feet of additional sheet pile with rip rap protection are constructed on the east side of the entrance channel.
- 2001 - Extension of the project to include the west side of the harbor entrance is directed in the 2001 Appropriation Conference Report. Plans and specifications are being developed and a Project Cooperation Agreement is being negotiated.
- 2004 - The scope and cost of the project on the west side of the entrance channel are under consideration.
- 2005 - Storms erode behind sheet piling on east side of entrance channel. Letter reports underway for improvements at the west side of the entrance channel, and for protection of the critical areas of the east side.
- 2009 - The project is inspected in September. Scour measurements were taken from mud-line to top of lower wale channel. Scour at toe in some locations exceeds design scour allowance. A comparison of the design and as-built drawing revealed a conflict regarding the tie-rod spacing. Several access ladders are extensively damaged and non-functional. Overall, the project was found to be in good condition with no visual signs of distress.

Continues on page 2-4a

DILLINGHAM BANK STABILIZATION, ALASKA (continued)

30 September 2009

COST TO DATE:

CG Appropriation 75441	\$9,673,515
CG Costs 75441	\$8,103,457

RANGE OF TIDE:Mean Range
2.3'Diurnal Range
4.0'Extreme Range
10.0'

Dillingham Bank Stabilization, Dillingham, Alaska



Shoreline in the vicinity of Dillingham.



Snag Point bank stabilization in 2004.