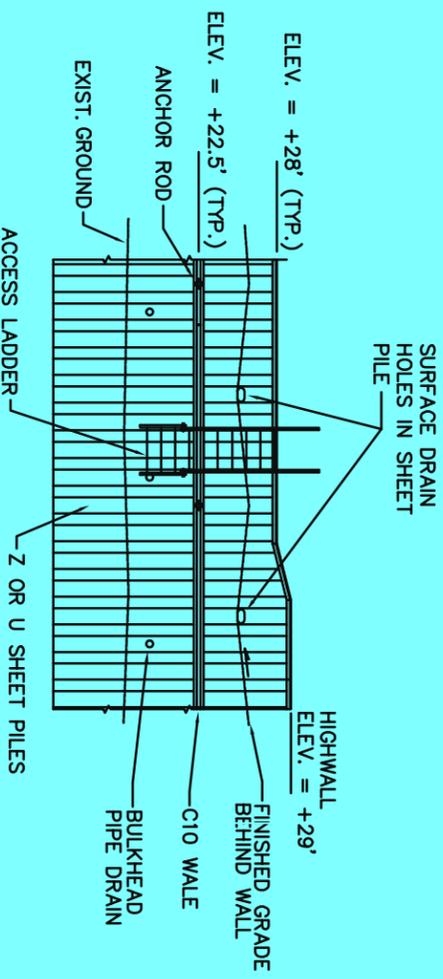
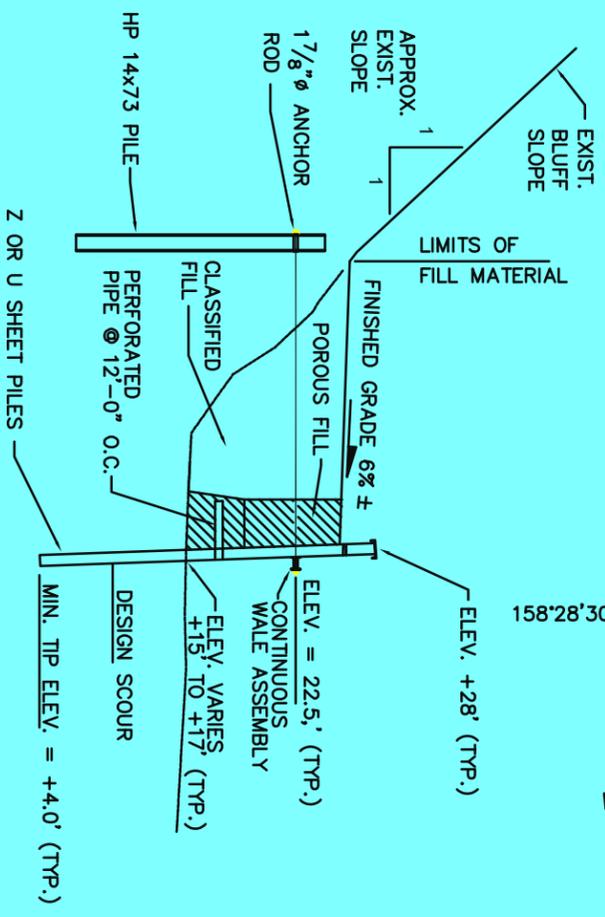
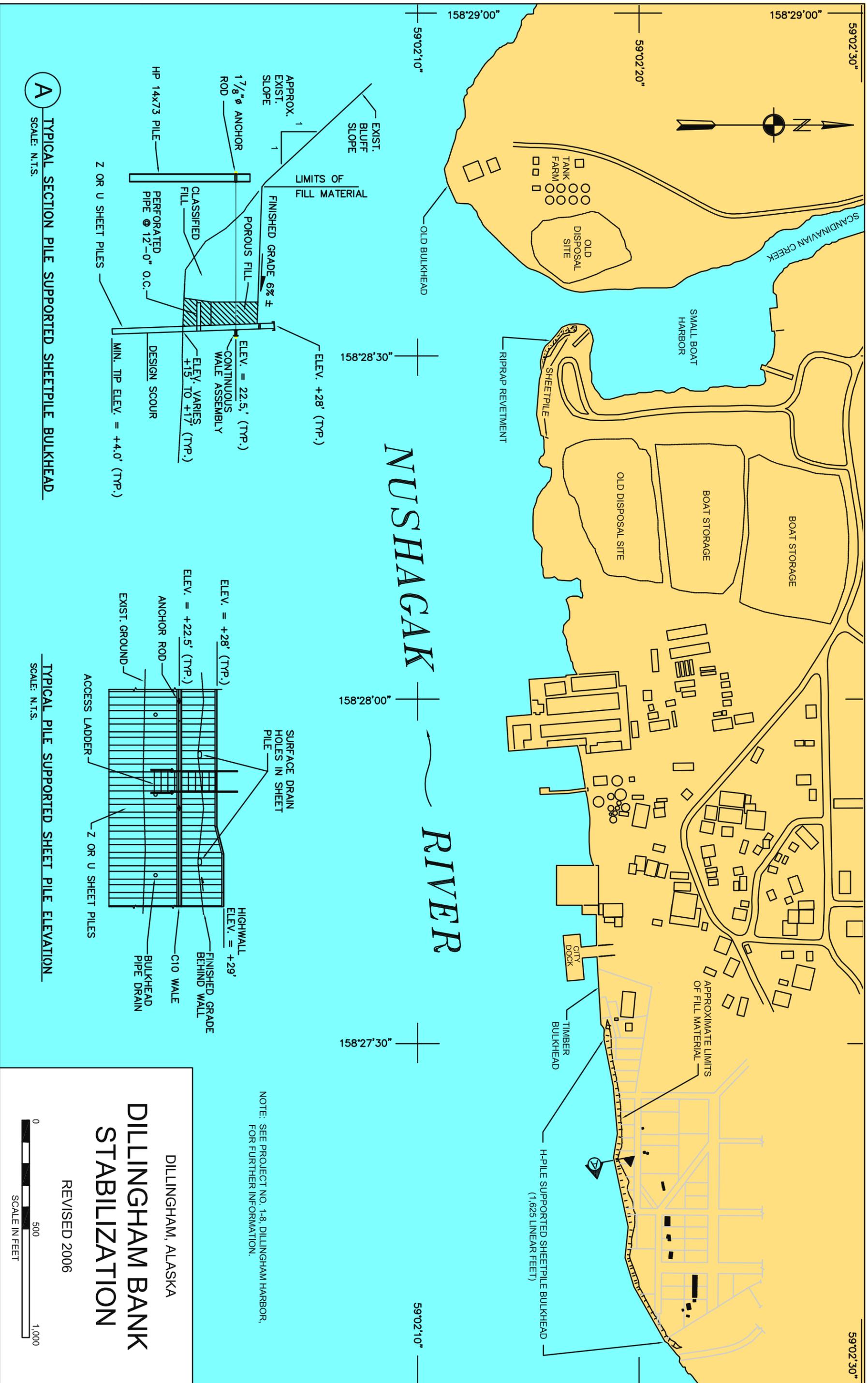


Dillingham Bank Stabilization



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



Condition of Improvements
 30 December 2014
Dillingham Bank Stabilization, Alaska
 (CWIS No. 075441)

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.

Table 1

Existing Project	Length ft.
Sheet pile bulkhead (City Dock to Snag Point)	1,625
Sheet pile with rip rap (east side of entrance channel)	600

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.

Progress of Work

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.
2010	A site survey was completed in May to determine if historic or archaeological resources were extant within the project area and consequently would be adversely affected by the placement of additional rock revetment along the southwestern shoreline.
2011	The City of Dillingham installed a scour blanket in front of the Snag Point Bulkhead to reduce future scour.

Table 2 Cost to Date

Project	Description	Cost \$
075441	CG Appropriation	8,482,556
	CG Costs	8,217,308

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
946 5374 Snag Point AK	16.58	20.64	-

Dillingham Bank Stabilization, Alaska



Aerial of Dillingham, 2005.



Riprap and sheetpile protection on the east side of the entrance channel, May 2014.

Dillingham Bank Stabilization, Alaska



H-pile supported sheetpile bulkhead, September 2008.



Riprap protection at the eastern extent of bank stabilization, 14 August 2008.

Dillingham Bank Stabilization, Alaska



City dock and sheetpile protection, 14 August 2008.



City dock and sheetpile protection, 14 August 2008.