C. HORIZONTAL AND VERTICAL CONTROL

A summary of horizontal and vertical control for this survey is as follows. No additional reports for horizontal and vertical control have been formulated.

C1. Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83) because DGPS was supplied during survey. The resulting horizontal positioning of the survey vessel is typical for surveys conducted at this latitude.

C2. Vertical Control

The vertical datum for this project is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) primary tide station at Sand Point, AK (945-9450) served as control for datum determination and as the primary source for water level correctors for the surveyed area.

Tides were applied through Pydro using Final Tides and a TCARI surface originally intended for NOAA survey H12072. This TCARI grid, P183FA2009-Final, originally used a temporary water level gauge 945-9163, which was installed by the field party on Herendeen Island. As the temporary gauge data was not available during this survey, TCARI only uses the Final Tides from the Sand Point gauge to model and reduce water levels for this survey.

A few points on the southern side and in the very deepest part of this dataset were outside the TCARI grid and received no tide correction.

No further attempt was made to improve the vertical control for this survey.