

# C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

## C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

### Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Sand Point, AK	945-9450

Table 10: NWLON Tide Stations

The following subordinate water level stations were established for this survey:

Station Name	Station ID
Bird Island, AK	945-9251

Table 11: Subordinate Tide Stations

File Name	Status
9459450.tid	Final Approved
9459251.tid	Final Approved

*Table 12: Water Level Files (.tid)*

File Name	Status
H12593CORF.zdf	Final

*Table 13: Tide Correctors (.zdf or .tc)*

A request for final approved tides was sent to N/OPS1 on 09/04/2013. The final tide note was received on 11/20/2013.

The tide station installed by RAINIER personnel on Bird Island, AK (945-9251) was used as the primary control for datum determination and as a source for water level reducers from 2348 UTC on 13 July (DN194) through 0436 UTC on 18 August (DN230). The National Water Level Observation Network (NWLON) tide station in Sand Point, AK (945-9450) served as a subordinate gauge during this time. During the time of acquisition when the Bird Island gauge was not operational, the NWLON tide station in Sand Point served as the primary gauge. A complete description of the vertical and horizontal control for this survey may be found in the accompanying Horizontal and Vertical Control Report (HVCR), submitted under a separate cover.

*See attached tide note dated November 18, 2013.*