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
Red Dog Dock, AK	9491094

Table 9: NWLON Tide Stations

File Name	Status
9491094.tid	Final Approved

Table 10: Water Level Files (.tid)

File Name	Status
S325KR2013CORP_20131125.zdf	Final

Table 11: Tide Correctors (.zdf or .tc)

The NWLON station on Red Dog Dock (949-1094), was utilized on this project for tide corrections.

BMPG (bottom mounted pressure gauges) were deployed at the project extents to capture zoning characteristics across the area. Preliminary zones provided by CO-OPS were refined using the BMPG data.

Refer to the HVCR for more information regarding tides and tide zones.

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The projection used for this project is UTM Zone 3 N.

The following PPK methods were used for horizontal control:

Single Base

The CORS site in Kotzebue (OTZ1, operated by the FAA) was used extensively for comparison and QC purposes. It was also used for PPK processing for rare instances when REDD was not operational, as described in the HVCR and DAPR.

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
OTZ1	OTZ1

Table 12: CORS Base Stations

The following user installed stations were used for horizontal control:

HVCR Site ID	Base Station ID
REDD	REDD

Table 13: User Installed Base Stations

The project base station (REDD) broadcasted RTK positions for real time and preliminary positioning for the majority of the project. REDD also continuously logged data, enabling PPK processing. All real-time positions were replaced in processing with PPK positions.

C.3 Additional Horizontal or Vertical Control Issues

3.3.1 Additional Issues

None to note.