

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.

ERS Datum Transformation

The following ellipsoid-to-chart vertical datum transformation was used:

Method	Ellipsoid to Chart Datum Separation File
ERS via ERTDM	OPR-P377-KR-18_NSPMVD_EPSG6332_NAD83- MLLW_Revised.csar

Table 11: ERS method and SEP file

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD 83).

The projection used for this project is Universal Transverse Mercator (UTM) Zone 3.

The following PPK methods were used for horizontal control:

- Smart Base

CORS station geometry allowed for Applanix SmartBase (ASB) processing on this project, with AB06 (False Pass) used as the the primary control station. However, ASB was only used on lines that experienced

issues with PP-RTX. Lines using ASB are itemized in the Data Acquisition and Processing section of this report.

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
AB06	False Pass

Table 12: CORS Base Stations

PPP

The Trimble PP-RTX subscription-based correction service within POSPac was used for final positioning for the majority of lines. Results were good overall, usually at 0.10 m or better vertically.

WAAS

WAAS was used for real-time positioning only.