# **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 VDATUM	S-J939_VDatum_100m_NAD83-MLLW_geoid12b

Table 10: 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 16.

The following PPK methods were used for horizontal control:

Vessel kinematic data were post-processed using Applanix POSPac processing software and RTX positioning methods described in the DAPR. Smoothed Best Estimate of Trajectory (SBET) and associated error (RMS) data were applied to all MBES data in CARIS HIPS and SIPS.

#### WAAS

The Wide Area Augmentation System (WAAS) was used for real-time horizontal control during data acquisition.

<sup>•</sup> RTX