

## C.1 Vertical Control

The vertical datum for this project is Low Water Datum IGLD-1985.

### ERS Datum Transformation

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

<b>Method</b>	<b>Ellipsoid to Chart Datum Separation File</b>
ERS via VDATUM	OPR-Z394-KR-21_Whitefish_Bay_VDatumBuffer1282021_100m_NAD83_2011-LWD_IGLD85_Geoid18.csar

*Table 11: ERS method and SEP file*

A VDatum Separation Model (SEP) was provided by NOAA with the original project files and described in the PI. An updated SEP model to increase coverage area was requested and supplied during final data processing.

## 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:

- Smart Base

The following CORS Stations were used for horizontal control:

<b>HVCR Site ID</b>	<b>Base Station ID</b>
LITTLE CURRENT	LCUR
MICHIPICOTEN	MCHN
SAULT STE MARIE	MILS
MIMQ MARQUETTE	MIMQ
MUNISING	MIMU
MINB NEEBISH ISLAND	MINB
MANISTIQUE	MIQE
ST. IGNACE	MISI
POINT IROQUOIS	PTIR
ROSSPORT	ROSS
ESCANABA	SUP2
NEWBERRY	SUP3
ABRAMS	WIAB
CRANDON	WICR

*Table 12: CORS Base Stations*

The following user installed stations were used for horizontal control:

<b>HVCR Site ID</b>	<b>Base Station ID</b>
Ocean Surveys Whitefish Point	OSWP

*Table 13: User Installed Base Stations*