C. Vertical and Horizontal Control

Shoreline features were reduced to MLLW using traditional tide methods via TCARI. All MBES bathymetry were acquired relative to the ellipsoid and reduced to MLLW via VDATUM.

C.1 Vertical Control

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

Traditional Methods Used:

- TCARI

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

Station Name	Station ID
Los Angeles, CA	9410660
Santa Monica, CA	9410840
Santa Barbara, CA	9411340
Oil Platform Harvest, CA	9411406
Port San Luis, CA	9412110
Monterey, CA	9413450

Table 11: NWLON Tide Stations

File Name	Status
H13205_tides	Final Approved

Table 12: Water Level Files (.tid)

File Name	Status
L397RA2018.tc	Final

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

A request for final approved tides was sent to N/OPS1 on 10/29/2018. The final tide note was received on 01/29/2019.

ERS Datum Transformation

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

Method	Ellipsoid to Chart Datum Separation File
ERS via VDATUM	OPR_L397_RA_18_lgECpoly_xyNAD83-MLLW_geoid12b.csar

Table 14: 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 11.

WAAS

The Wide Area Augmentation System (WAAS) was used for real-time horizontal control for this survey.

C.3 Additional Horizontal or Vertical Control Issues

C.3.1 SBET Processing Method

Precise Positioning-Real Time Extended (PP-RTX) processing methods were used in Applanix POSPac MMS 8.2.1 software to produce SBETs for post-processing horizontal correction.