## C. Vertical and Horizontal Control

Additional information discussing the vertical and horizontal control for this survey can be found in the accompanying 2018 DAPR

## 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 13: NWLON Tide Stations

| File Name | Status |
| :---: | :---: |
| H13087_TCARI_Features.tid | Final Approved |

Table 14: Water Level Files (.tid)

| File Name | Status |
| :---: | :---: |
| L397RA2018.tc | Final |

Table 15: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 10/28/2018. The final tide note was received on 01/29/2019.

H13087 shoreline features were reduced to chart datum (MLLW) using a tid file created in Pydro utilizing the "TCARI TID file via S-57" function, then loaded in Caris Notebook. H13087 MBES data were reduced to MLLW using ERS via VDATUM processing methods. See Supplemental Correspondence regarding approval of traditional tides for use in determining feature heights.

ERS Methods Used:
ERS via VDATUM
Ellipsoid to Chart Datum Separation File:
OPR_L397_RA_18_lgECpoly_xyNAD83-MLLW_geoid12b.csar

## C. 2 Horizontal Control

The horizontal datum for this project is North American Datum 1983 (NAD83).
The projection used for this project is Universal Transverse Mercator (UTM) 10N.

Post Processed-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.

