

G. Vertical and Horizontal Control

The vertical datum for this project is MLLW.

The vertical control method used for this survey was VDatum.

Refer to the DAPR for a complete description of vertical control procedures.

The horizontal datum for this project is World Geodetic System (WGS) 1984. *The projection used for this survey is Projected UTM 19 North.

Refer to the DAPR for a complete description of horizontal control procedures.

****The horizontal datum for all of F00761's final products is per HSSD as NAD83, and projection referenced as UTM 19N.***

H. Additional Results

Figure 6 serves as the chart comparison for survey F00761; designated soundings are highlighted in blue and the following notes correspond with Figure 6:

-Note A: Two soundings were designated but not included in the Final Feature File (FFF) in accordance with Section 7.3.2 of the HSSD. Both soundings are designated to accurately reflect the surface and give cartographic representation of the seafloor (Figures 7 and 8). The 17 ft sounding in the northwest portion of the survey is between the charted 12 ft contour and 18 ft contour. However, the majority of soundings in this area are deeper than 18 feet.

-Note B: Significant shoaling has occurred in the northwestern corner of the reported 30 ft dredging area. Shoaling was determined to be a Danger to Navigation (DTON); reference the FFF and relevant DTON Report for further information.

-Note C: Two obstructions were found along the seawall and submitted as DTONs; shoaling and portions of a collapsed sea wall exist between both obstructions. Reference the FFF and relevant DTON Report for further information.

-Note D: Three obstructions were found within the Approach Channel in Bahía de Mayaguez; obstructions are shallower than the reported controlling depths listed on NOAA Chart 25673 (Figure 9). Reference the FFF and relevant DTON Report for further information.

Reference the FFF for additional information on new features.

Several holidays exist on the perimeter of the gridded surface (see Section 5.2.2.2 of the HSSD), however no holidays exist within the main contiguous body of the finalized surface (Figures 10 and 11).

MBES acoustic backscatter data were acquired and processed as described in the DAPR (Figure 12). The raw MBES acoustic backscatter files (.all), processed GSF files, and floating point geoTIFF mosaic are included in the survey deliverables.

All four buoys within the survey area were present and on station as charted. The charted range for entrance to Mayaguez Harbor was visually verified to no longer exist.*

**** The front range as listed in the USCG District 7 2020 Light List #32355 has been replaced. Review of Google Earth imagery indicates the front range had been replaced and exists. Recommend no charting action.***