

## C. VERTICAL AND HORIZONTAL CONTROL

### VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) stations at Marcus Hook, PA (854-0433) and Philadelphia, PA (854-5240) served as datum control for the survey.

The preliminary zones and correctors used for this survey are as follows:

**Table 1: Preliminary Tide Zones & Correctors**

<b>ZONE NAME</b>	<b>CORRECTOR (min)</b>	<b>RATIO</b>	<b>REFERENCE</b>
DB43	18	1.00	8540433
DB44	30	1.02	8540433
DB45	48	1.03	8540433
DB46	-24	0.95	8545240
DB42	6	1.00	8540433

A Request for Approved Tides letter was sent to N/OPS1 on 11 January 2006 (Appendix IV). Verified water levels from the N/OPS1 CO-OPS website were downloaded on November 23, 2005, and applied to all sounding data. Refer to the September 2004-December 2005 DAPR for a summary of the methods used to determine, evaluate, and apply tide corrections to sounding data.

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Year_DOY	Min Time	Max Time
2004_338	17:09:59	18:29:03
2004_339	13:15:00	21:30:13
2004_340	13:58:55	17:06:30
2004_341	13:44:21	19:19:36