

## **Exploring Geodetic Elevation**

### **What is Geodetic Elevation?**

A geodetic elevation is a conceptual coordinate system that uses a reference system to define locations. It is used in surveying to create maps (contour maps, etc...). There are two types of geodetic elevations (datum) – horizontal and vertical. the horizontal datum may be used to describe a point on the reference surface, while a vertical datum is used to measure/define depths in reference to a surface.

A geodetic elevation has three components: a geodetic latitude, geodetic longitude, and ellipsoidal height (depth). This elevation is most generally used in describing land elevations and the use of charts can be used to determine it.

### **How does Geodetic Elevation relate to Ordinary High-Water Level?**

A Geodetic Elevation can have numerous reference planes which include sea level – depending on the area of interest. Therefore, the Ordinary High-Water Level may be of interest when defining a reference surface for the Geodetic Elevation or datum.

The geodetic elevation may be used quoted in height above Ordinary High-Water Level.

### **How does Geodetic Elevation impact construction at Sunny Point Lane?**

The horizontal plane of a geodetic elevation in reference to the Ordinary High-Water Level will be of interest in the construction of Sunny Point Lane. This elevation can show the height (depth) difference of the building foot print in relation to the Ordinary High-Water Level, main road, and the salt marsh. It can be used to determine the safest location of this building footprint in relation to the marsh, road, and High-Water Level.