Town of Plymouth Data Sheet

Station:	Point 181	**Billington St.**		**NGS PID#**		**ID#**	
Town:	Plymouth		**Quad:** Plym				
NAD83	**Northerly**	**Easterly**	**NAD 27**	**Northerly**	**Easterly**		
(Survey Ft)	2801333.035	881480.423	**(Survey Ft)**	340663.920	825178.770		
(meters)	853848.017	268675.770	**(meters)**	103834.571	251514.992		
						Order	
Elevation	**Vert. Datum f/m**	**Order**	**Stamping:**				
NAVD88	88.815/27.071		**Sketch**				
NAVD29	89.636/27.321		**Recov. Date:**	March 22, 2011			
Marked by:	CB\Dh						
Description:							
Reference Marks:							
Azimuth Data:							

Geodetic:

```
FILE: 50370810.11o 000186419
 2005   NOTE:  The IGS precise and IGS rapid orbits were not available
 2005   at processing time.  The IGS ultra-rapid orbit was/will be used to
 2005   process the data.
 2005

                              NGS OPUS SOLUTION REPORT
                              ========================
All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: http://www.ngs.noaa.gov/OPUS/about.html#accuracy
      USER: rfirth@townhall.plymouth.ma.us          DATE: March 23, 2011
RINEX FILE: 5037081m.11o                            TIME: 12:36:35 UTC
  SOFTWARE: page5  1009.28 master29.pl 121510      START: 2011/03/22  12:32:00
 EPHEMERIS: igu16282.eph [ultra-rapid]              STOP: 2011/03/22  19:57:00
  NAV FILE: brdc0810.11n                       OBS USED: 10343 / 12911   :  80%
  ANT NAME: TRM33429.00+GP  NONE             # FIXED AMB:    87 /    94   :  93%
ARP HEIGHT: 1.85928                          OVERALL RMS: 0.014(m)
 REF FRAME: NAD_83(CORS96)(EPOCH:2002.0000)            ITRF00 (EPOCH:2011.2210)
         X:      1572817.284(m)   0.069(m)           1572816.506(m)   0.069(m)
         Y:     -4484219.435(m)   0.014(m)          -4484217.997(m)   0.014(m)
         Z:      4239985.686(m)   0.037(m)           4239985.621(m)   0.037(m)
       LAT:   41 55 55.13875      0.025(m)        41 55 55.17215      0.025(m)
     E LON:  289 19 41.02121      0.070(m)       289 19 41.01000      0.070(m)
     W LON:   70 40 18.97879      0.070(m)        70 40 18.99000      0.070(m)
    EL HGT:           -1.226(m)   0.028(m)                -2.471(m)   0.028(m)
 ORTHO HGT:           27.071(m)   0.048(m) [NAVD88 (Computed using GEOID09)]
                        UTM COORDINATES    STATE PLANE COORDINATES
                         UTM (Zone 19)         SPC (2001 MA M)
Northing (Y) [meters]     4643576.125           853848.017
Easting (X)  [meters]      361384.527           268675.770
Convergence  [degrees]    -1.11744698           0.55623262
```

To convert meters to US survey feet
Multiply by 3.2808333333

	Point Scale 0.99983644 0.99997549 Combined Factor 0.99983663 0.99997568 US NATIONAL GRID DESIGNATOR: 19TCG6138443576(NAD 83) BASE STATIONS USED PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m) DH5837 CTPU PUTNAM CORS ARP N415358.888 W0715320.889 101040.7 DI0964 FMTS MTS FRAM COOP CORS ARP N421800.171 W0712630.865 75670.5 DI0966 XMTS MTS FOX COOP CORS ARP N420350.018 W0711501.669 50122.2 NEAREST NGS PUBLISHED CONTROL POINT LW5768 10328 N415619.134 W0704000.094 859.8 This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.
Grid Azimuth:	

To convert meters to US survey feet
Multiply by 3.2808333333