

# Mason, NH Relief view

Scale: 1:18,000 (1 inch = 1500 feet)



**NOTES:**

Town boundaries (dashed red line) are from GRANIT pba.shp (2006), which are largely based on the USGS 7.5' topographic map data.

Roads, RR and Powerline ROW are from GRANIT Roads\_DOT.shp (2018), rr.shp (2003) and pipe.shp (2000).

State highways are drawn in red, Town maintained roads in black, Class VI and private roads in dotted gray.

The Powerline ROW shown as red overlay whose width matches the ROW.

The Mason Railroad Trail is drawn as a standard RR line.

Streams, open water (blue), and wetlands (green) are from GRANIT NHDFlowline.shp (2007) and NWIPlusNH.shp (2017)

Building footprints (black) are from Nashua Regional Planning Commission NRPC\_Building\_Footprints.shp (2017)

A Digital Elevation Model (DEM) was created from FEMA 2011 Nashua River Watershed classified LIDAR data, 2m resolution, processed into a 6'x6' DEM using PDAL 1.8.0. Areas of "no data" (no LIDAR points which could be classified as Ground or Water) were filled in using GDAL's fill-nodata function.

The relief image was generated from the DEM via the GDAL Hillshade function using multiple illumination directions as described in <<https://pubs.usgs.gov/of/1992/of92-422/of92-422.pdf>>.

**Notes regarding GPS locations of Town Line monuments**

I visited the town line monuments and recorded their location using GPS. A Bad Elf Surveyor GPS single frequency (L1) receiver was used to record data into a RINEX file for a minimum of 15 minutes at each monument. The RINEX files were then post-processed using the Canadian Geodetic Survey's Precise Point Positioning service CSRS-PPP (<https://webapp.geod.nrcan.gc.ca/geod/tools-outils/ppp.php>) to correct for atmospheric conditions and satellite positions. I estimate that the resulting locations fall within less than a 3 meter radius around the actual location.

The boundary monuments (circle with cross-hair) are color coded as follows:  
 Red: State Line monuments, 14" x 14" granite posts set in 1896  
 Orange: Town Line monuments, various sized granite posts  
 Green: NH Highway bounds, 3 concrete posts near Rte 31/Walker Brook Rd  
 Gray: miscellaneous monuments shown in plans recorded at the HCRR as being on Town Line

The boundary monuments are connected by a dashed-green line. Note: the actual town lines are not necessarily straight lines between monuments and my dashed green lines are not intended to represent the town boundaries. They are nothing more than visual guides to the locations of monuments.

Note the significant disparities between the town boundaries as shown by the dashed red lines and the monument locations as determined by GPS in the following locations:

- SE corner of Greenville, ~ 160 feet
- NW corner of Mason, ~ 210 feet
- NE corner of Mason, ~ 160 feet

The differences also show up as mis-placed parcel lines when compared to orthophoto images - a result of the parcel map being rubber-sheeted to align to the town boundaries.



prepared for the  
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