

D.12 Geodetic Reference Station Geographical Coordinates

Station Geographical Coordinates

For GO Stations, the official geographical coordinates are to be located at the centre of the edge of the mini platform as outlined in figure—Geographical Coordinate Placement at Mini-Platforms.

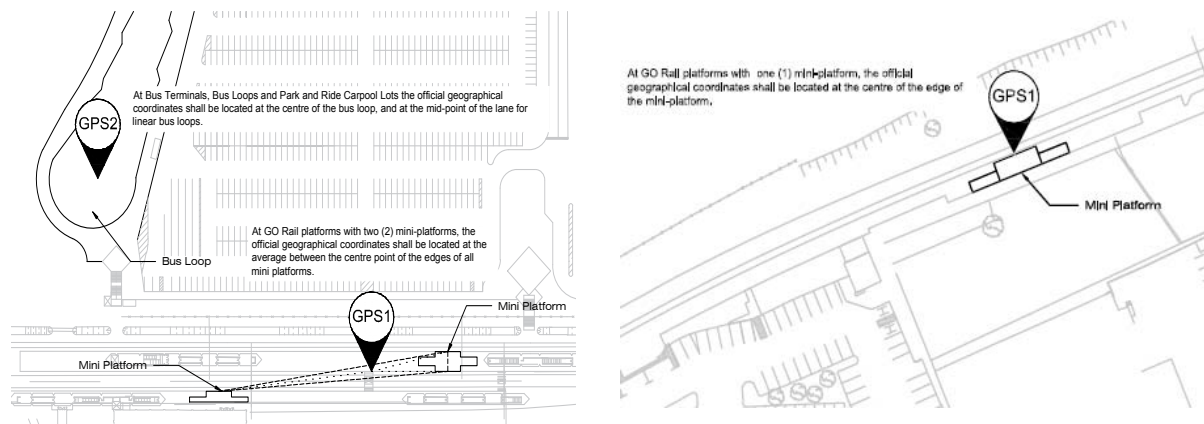


Figure D-28: Geographical Coordinate Placement

Projection System

The following Reference Datums and Grid System shall be used, in accordance with the MTO's Engineering Survey Manual dated October 2006:

Map Projection →	3-degree Modified Transverse Mercator (MTM)
MTM Zone 10	
Horizontal Reference Datum →	North American Datum (NAD) 1983, using the NAD83 Canadian Spatial Reference System (CSRS) adjustment
Horizontal Datum / Ellipsoid: NAD83 CSRS v.6 (epoch 2010.0) / GRS80	
Vertical Reference Datum →	Canadian Geodetic Vertical Datum (CGVD) 1928
Orthometric Elevation: CGVD1928:78 Adjustment	

Three-Dimensional Geodetic Control Points

- All GO Stations, Bus Terminals and Park and Ride ~~Carpool Lots~~ **Car Pool lots** shall have three-dimensional geodetic control points installed with both Vertical and Horizontal known measurements
- Along the rail corridors, three-dimensional geodetic control points shall be installed and the monuments placed on fixed and stable structures including: bridges, abutments, retaining walls and grade separations
- Control points shall be placed on a fixed and stable structure, including, station buildings, parking structures, tunnels, bridges or abutments