

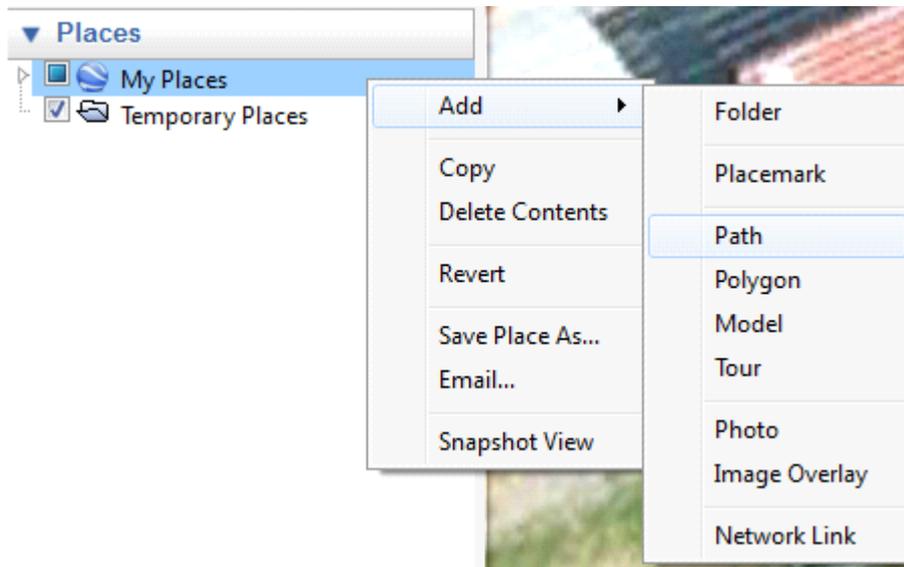
## Toolset GPS Beacon from Google Earth

Author:	Chris Sewell
Email:	Chris.Sewell@Cosworth.com
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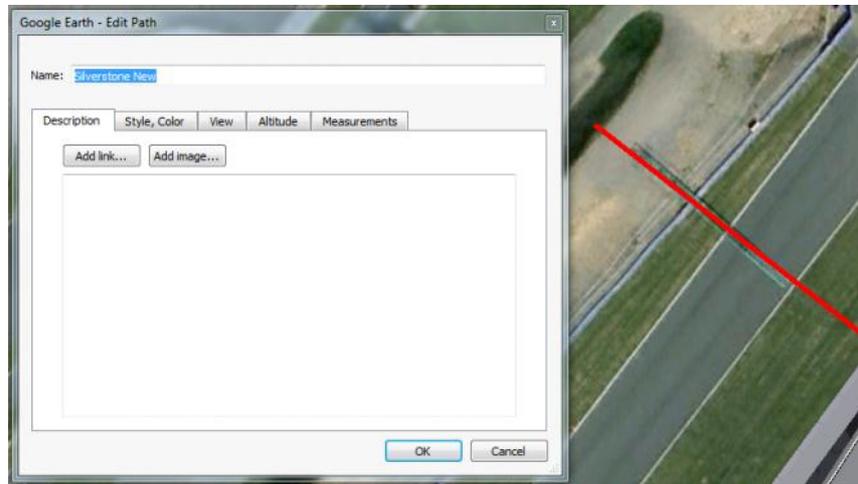
### Overview

Using Google earth it is possible to create a start finish line that can be used to generate beacon events. The following will guide you through this process.

- Beacon locations can be created using Google Earth. The following will talk you through creating a beacon location file as well as importing it into Toolset:
  - Open Google Earth
  - Right Click on My Places
  - Add
  - Path



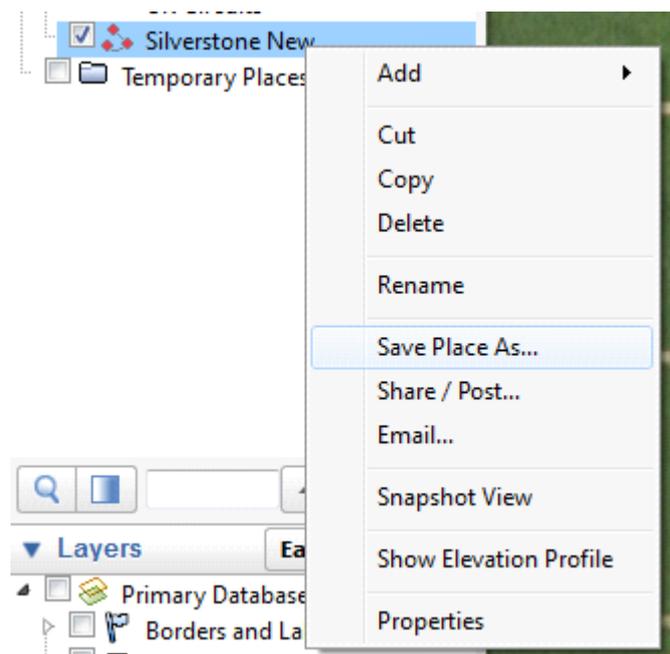
- The Edit path window will appear
  - Enter the name for your "Start Finish Line"
  - Using the mouse draw the start finish line as you wish it to be used
    - This line should completely cross the track in the are you need. A beacon will be triggered every time this line is crossed.



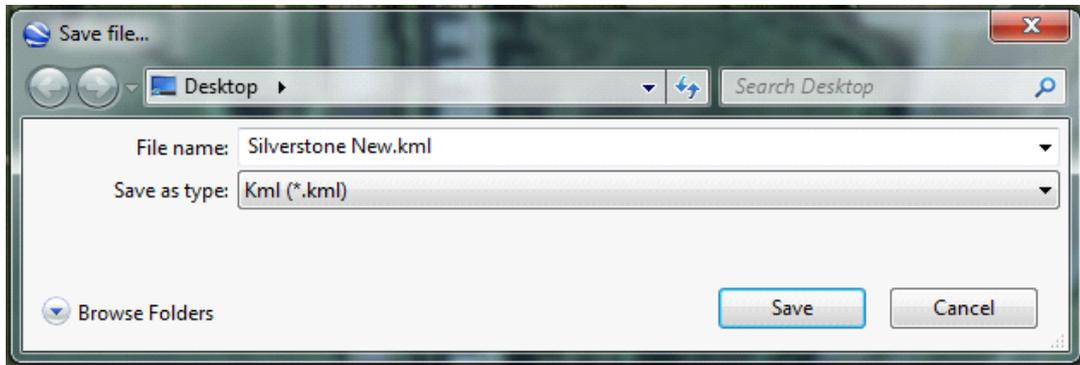
- You can add multiple "Start Finish" lines to a single file if the circuit in question has multiple.



- Once you have created your "Start Finish" line you will need to export it:
  - Right click on the path and click Save Place As...



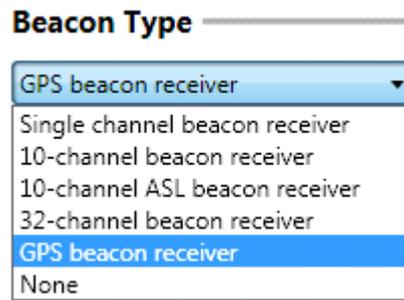
- It is important that you select the \*.kml file format that is available with the drop down box



- Once you have created you "Start Finish" .kml file this can be imported into Toolset using the Beacons Tab on the left.



- You must select the following Beacon Type:
  - GPS Beacon Receiver



- Once the GPS Beacon Receiver has been selected you will be prompted to define the GPS Channel that you wish to use. These are selected using the button at the end of the field.

**Input Data**

Select the channels which will provide the current longitude and latitude, and optionally a channel that gives information about when the values in the longitude and latitude channels contain valid information. It is recommended that you obtain all of these channels from a single NMEA 0183 Sentence.

Longitude: NMEA RX RMC Longitude

Latitude: NMEA RX RMC Latitude

Position valid when: NMEA RX RMC Status is Valid

- With all of the other options selected you can then import your .kml file using the import button beside beside Track Name
- Once you have added the track you will be able to select the Beacon, if you have added multiple paths to a single .kml you will be able to select the one you want from the drop down menu.

**Beacon Location**

Either manually enter the longitude and latitude for the end points of the line that will generate a beacon when crossed, or select a file that contains such information and select an appropriate beacon line.

Track Name: Silverstone

Beacon: Silverstone Old

Start: 52° 4' 44.184" N, 1° 0' 55.696" W

Finish: 52° 4' 42.698" N, 1° 0' 55.511" W

Decimal degrees (selected) / Degrees minutes and seconds