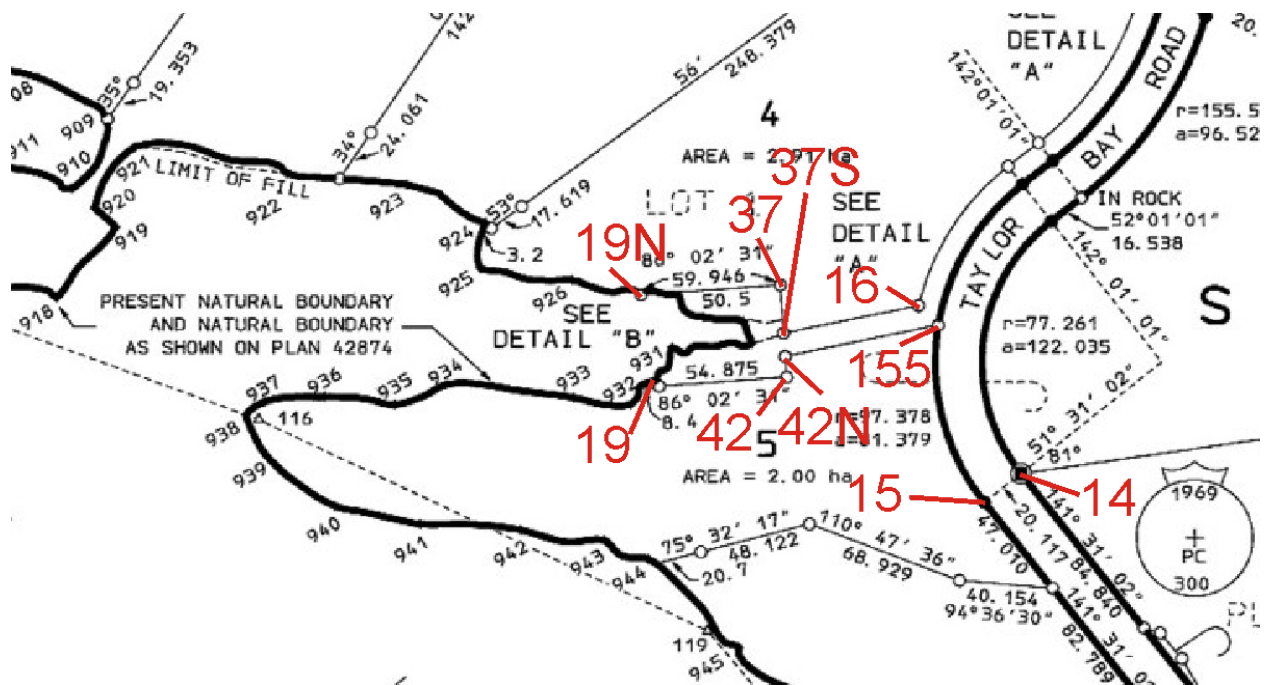


## Survey of Winston Road allowance on Gabriola Island and its relationship to lower Mallett Creek

*Nick Doe June 10, 2015*

The RDN map VIP86742 shows the Winston Road allowance, but the only indication of the course of Mallett Creek is at its exit to the sea where it is shown by two short dashed-lines, a lower one between pin 37S and the sea to the west, and another slightly above (north) of it.



Extract of RDN map VIP86742. The 10 numbers in red are arbitrarily assigned iron pin (IP) numbers; they do not appear on the RDN map, in other documents, or on the IP locator stakes in the field.

Of the 10 pins, two could not be found (no metal detector); these were 155 (the last post of the split-rail fence along the road?) and 42N (stake had been discarded down the slope, and orange-tape flag was lying detached on the track). Pin 19N was not visited.

**Addendum: July 16, 2015, pin 42N found unmarked on south side of the track.**

The road allowance runs from pin 16 west to 37S, north to 37, and west to 19N on the right or north bank; and from pin 155 west to 42N, south to 42, and west to 19 on the left or south bank.

To tie the array of pins to the geography, pin 14 was used as a reference point. Its location was determined by averaging several GPS readings to be 10U 437524.5 E, 5447717.6 N. Since this pin is marked on the RDN map as “standard rock post found”, its location may be known more accurately. Any error in the location of pin 14 will affect all other pin locations equally as all their positions were determined relative to it solely from the geometry shown in the RDN map.

The accuracy of my GPS is not up to professional surveying standards, but I was able to get a measure of the GPS error by comparing the GPS location of the pins with the locations calculated from the data in the RDN map. On average the GPS readings (NAD83 datum) were 6.0 m too far north, and 3.2 m too far east. Individual single readings could be up to 12 metres in error, but generally the standard deviation was  $N \pm 5.8$  m and  $E \pm 4.1$  m. No corrections have been applied to the positions reported here. This is far from perfect, but good enough for present purposes.



The positions of the array of ten pins on a Google Earth view.\* Relative pin positions are as in the RDN map all referenced to pin 14 (MC14-pin) whose geographic position was found by GPS. The tree cover prevents the course of Mallett Creek being clear, but distance measurements and compass bearings on the culvert\*\* and house\*\*\* near the sea confirmed that although this mapping may not be entirely accurate, errors are reasonably small and it conforms with what you see on the ground.

\* scale is 20 metres between MC14-pin and MC15-cor.

\*\* the culvert was observed 5 metres bearing  $77^\circ$  from MC16-cor. This puts it within the Taylor Bay Road allowance.

\*\*\* the house is, in this view, near the annotation "MC37-cor", as far horizontally to the left of the "M" as the "3" is to the right. It was observed 59 metres bearing  $30^\circ$  from MC19-cor.

The Winston Road allowance has an undeveloped, roughed-in trail, useable by a vehicle, running from near Taylor Bay Road down to the sea. It is easy walking. The trail head is accessible only on foot from Taylor Bay Road, and even then, it is a bit of a scramble down the embankment.

Point 48 (MC48-rd) in the view below indicates only roughly where it would be possible to provide vehicle access to the junction of Winston Road and Taylor Bay Road after leveling, ditch filling, and fence removal. There is however no demand for this and zero likelihood of this happening any time soon. For all intents and purposes, the trail is a wide footpath to the sea.



The same view as before but with observed GPS positions of the centre of the trail from Taylor Bay Road to the sea. All positions fall within the road allowance except for MC48-rd which is not a survey pin and only indicates roughly where the trail might meet Taylor Bay Road without a steep incline up the Mallett Creek/Taylor Bay Road embankment if it were ever constructed.



The same view as before but this time with the observed GPS positions of the thalweg of Mallett Creek. Pin 37S (MC37S-cor) is on the southern edge of the creek bed and would be submerged when the creek is in full flood.

The Winston Road allowance appears not to include Mallett Creek except when it is almost at the sea, although the distance between the north edge of the trail and the creek in the ravine below is at one place only about ten metres.

Access to the creek from the road allowance is hindered by it being the steep side of the ravine through which the creek flows. You can scramble up and down but the loose soil and well-weathered rock make footholds and handholds very insecure.

Access to the creek along the right (north) bank at the foot of the ravine slope is easier, a rough boulder-strewn path with ups and downs, but it doesn't require scrambling. There is no doubt in my mind however that this is outside the boundary of the road allowance. ◇