

## **Fleeing Police On Glanworth Curve Likely Involved Ice and Loss of Control Impact Into Tree**

While the driver of a GM car struck a tree while fleeing police yesterday evening, the reason for the loss of control of the vehicle was not only speed, but also some melt down that froze in the northbound lane.

The view below shows the north end of the Glanworth curve of Wellington Road at the south edge of London, Ontario.



View of Melting Snow/Ice that flows onto the northbound lane of Wellington Road at the Glanworth Curve. The crash occurred several hundred metres in the background.

The left curve contains a significant superelevation to help drivers travel around the bend. But in creating the superelevation there is always a concern that melting snow and

ice will slide onto the travel lane and then freeze in colder conditions. Looking at the present conditions in this photo that was taken just before noon on January 22nd, 2012, we can see how the ice and snow on the south (right) side of the curve is melting and then the water is flowing onto the northbound lane. These are similar conditions to what occurred yesterday when the sun was out and providing ideal melting conditions.

The actual collision occurred around 2120 hours. But previous to that, the sun had gone down and the moisture that was present likely began to freeze. When you add a little speed to the mix bad things happen.

Below is a closer view, looking north, showing the curve just before the location where the vehicle travelled off the roadway and struck a tree on the right roadside.



View looking north on Glanworth Curve Showing Moisture on Northbound Lane at Location Where Fleeing Vehicle Left the Roadway

We would be less inclined to focus on this issue if the vehicle had performed a typical, yawing motion before leaving the roadway. Instead the tire marks suggest that the vehicle may have left the roadway while sliding almost rearwards and that is not a common scenario.

The photo below shows the location just south of where the fleeing vehicle left the roadway. The impacted tree is located just to the left of the evergreen tree in the background.



View, Looking North, Along the Right Side of the Northbound Lane of Wellington Road  
Just South of the Location Where the Fleeing Vehicle Left the Roadway.

Below is a view at the commencement of the tire marks of the fleeing vehicle as it left the roadway and struck a tree in the background (just to the left of the evergreen).



View, Looking North, at the Beginning of the Tire Marks in the Snow, Caused by the Fleeing Vehicle That Struck a Tree in the Background.

What you should recognize from these tire marks is that there is little evidence of rotation of the vehicle about its vertical axis, or there is minimal evidence of yaw. Sometimes such little evidence of yaw may signify a very high speed. But regardless, the other important point is that the vehicle was likely sliding almost backwards as it left the road and produced these tire marks.

Below is a further view of the tire marks and you should now be able to recognize the tree where the impact occurred. Note how the tire marks are not crossing each other or diverging or converging. So the vehicle is essentially sliding rearwards into the tree with little rotation. The reason for the short discontinuity in the tire marks is because the vehicle has travelled over short down-slope so it was momentarily airborne.



View of Tire Marks as They Approach the Tree Impact.

The photo below shows how the tire marks continue to be straight as they approach the tree impact.



View of Straight Tire Marks as They Approach the Tree Impact.

Below is a view of the damage caused to the struck tree. By examining the damage, as well as the particles that are imbedded in it, it is possible to obtain further information about how the impact occurred. This why we state that the vehicle probably struck the tree at least partially with its rear surface. There is also evidence that there was penetration into the occupant compartment and thus intrusion, possibly into the area where the driver was seated.



## View of Damage to Struck Tree

The unusual circumstance in this case is that the vehicle exited the roadway while leading partially with its rear end. This is not typical and suggests excessive rotation of the vehicle while it was still on the road. Noting its path with respect to the curve and combining the fact that it did not appear to go around the curve, along with the evidence of moisture and likely freezing in darkness, there is a strong likelihood that icing on the road surface was a factor in this crash. It is still unknown what roll the police played in this happening and whether police were present in this location when the fleeing vehicle approached. Thus there is a limit to what we can say about how this collision unfolded without having examined the vehicle and without knowledge of what other vehicles (including police vehicles) were in the area when the vehicle left the roadway.

We have uncovered further information but have decided to stop at this time to evaluate what further facts may be revealed through the police or the SIU. One must understand that interpretation of site evidence like this has its difficulties without a full knowledge of the investigation details.

UPDATE: JANUARY 24, 2012

Having had a chance to review our photos of the damaged parts and material imbedded in the struck tree, the conclusion regarding how the vehicle was oriented at the tree impact may be suspect. Our evaluation can only be based on the physical evidence at the site and that physical evidence shows a set of tire marks with essentially no evidence of pre-impact Yaw. The vehicle is simply sliding, albeit while off-tracking slightly. In the general condition we would expect the vehicle to come into impact leading with its front end. What has led us to believe it came into contact with its rear end is the evidence of damaged parts lying around the tree and beyond. Let us look at another photo below.



Close-up View of Red Lens Material Lying at the Base of the Struck Tree

When we see red lens material, such as shown in the above photo, and it is concentrated in small particles like it is, then it commonly suggests that the rear tail-light was in contact with the tree. Other debris from the rear of the vehicle also suggests to us that there was damage to the rear of the vehicle, hence our reasoning for the vehicle orientation.

However this is a peculiar and uncommon happening. Granted there is reason for us to believe that this uncommon happening would occur if there was ice in the northbound lane of Wellington Road and this caused the vehicle to rotate backwards while still on the road. But there can be many influences involved that we cannot be aware of and it requires a full examination of all the evidence that may be on the vehicle as well as any witness or driver statements.

We want to add further that, an impact of a tree by the rear end of a vehicle makes it difficult for penetration and intrusion to occur into the occupant compartment simply because there is so much structure to get through before reaching that occupant compartment. Yet we see that there is evidence of glass imbedded in the tree which is very commonly associated with penetration into the occupant compartment. Note the imbedded glass in the photo below.



View of Glass Particles Imbedded in Struck Tree Indicative of Occupant Compartment Involvement

Additionally, there is also orange lens material clinging to the bark and that is more associated with impact of the front end of the vehicle. In the photo below is a close-up view of that orange lens material.



View of Orange Lens Material Clinging to the Bark of the Struck Tree.

So this contradictory evidence exists. The problem would be easily solved by someone who saw the damaged vehicle but when you are working solely from site evidence the process is a little more challenging. But regardless of the vehicle's orientation, the issue of an icy road surface would still exist and either vehicle orientation could be caused by as an icy road.