

DATE OF MEETING NOVEMBER 16, 2020  
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**SUBJECT OPAL ROAD INTERSECTION OPERATION**

## **OVERVIEW**

### **Purpose of Report**

To advise Council of the traffic calming efforts on Opal Road and seek Council's consideration regarding additional measures to further control illegal and unsafe traffic movements at the intersection of Opal Road and Rock City Road.

### **Recommendation**

That Council direct Staff to continue monitoring the existing situation and report findings in May 2021.

## **BACKGROUND**

Opal Road is a local road located in the Rock City Neighbourhood, which provides a short connection between Rock City Road and Uplands Drive. In 2006, Opal Road residents expressed concerns about safety stemming from the speeds and volumes of traffic using Opal Road as a shortcut. That year speed humps were chosen as the most appropriate form of traffic calming. In 2018, residents raised fresh concerns, and in response, another traffic calming review was conducted which showed the average daily volume on Opal Road was above the threshold for a local road. A partial closure of the intersection with Rock City Road was chosen to reduce non-resident traffic.

The intersection of Opal Road and Rock City Road was modified in September 2019 to restrict vehicles from making turns from Rock City Road onto Opal Road. The restrictions were moderately successful but generated significant public concern. As a result, at their regular Council meeting of May 4, 2020, Council requested a follow-up report be presented in the fall of 2020.

## **DISCUSSION**

Traffic volumes and speed data were collected before and after the September 2019 intersection modification. Results showed traffic volumes had decreased by 53% from 2018 volumes. This decrease was considered successful. However, there continued to be illegal and unsafe movements taking place. These movements endangered other road users and continued to be a nuisance for nearby residents. Additional measures were installed in October 2020 because of on-going misuse. Data collected in October 2020 showed a continued decline in volumes. The summary of volumes on Opal Road, from the three data collection periods, is

shown below in Table 1. The most recent information shows a decrease of 65% to 70% from 2018 volumes.

TABLE 1 Traffic Volumes on Opal Road

Year	Average daily traffic volume	Percentage change
2006	1100 vehicles	n/a
2018 Baseline	1300 vehicles	+18% from 2006
2019	620 vehicles	-53% from 2018
2020	400 vehicles	-70% from 2018
2020 adjusted up to account for COVID	460 vehicles estimated	-65% from 2018

Both the September 2019 and the October 2020 modifications have reduced the use of Opal Road. The volume is now below the threshold for a local road. However, the restrictions have not eliminated illegal movements.

The data collection from October 2020 also included information about the ongoing illegal movements. For this report, illegal movements are defined as the left turn from Opal Road to Rock City Road, and the right turn from Rock City Road to Opal Road. There were 44 illegal movements in 7 hours of data collection, with 9 illegal movements in the afternoon peak hour.

It is a bit challenging to put these movements into context. Overall, the numbers of illegal movements are low, about 6 per hour, during the day. Conversely, they are a large portion of the turn movements, approximately 20%. Through volumes on Rock City Road are relatively low, about 200 vehicles in the afternoon peak hour. The nature of Rock City Road is such that it is not possible to entirely eliminate the illegal movements taking place. All of these factors suggest the current situation, while less than ideal, is acceptable.

There are a few more options available to tighten the turn restrictions. These include such things as rebuilding the throat of Opal Road, and/or, installing more median barrier on Rock City Road. However, more restrictive measures may impact residents in the Deerview strata development, and, private driveways on Rock City Road may be impinged. This is likely to be not well received by residents adjacent to the intersection.

Looking at the bigger picture, the drivers rerouting from Opal Road are now using Departure Bay Road. This has generated fresh concern from citizens about the operation of the intersection of Uplands Drive and Departure Bay Road. This intersection is planned to be signalized and Staff are actively monitoring the traffic volumes on a regular basis in order to evaluate the traffic signal warrant. When the volumes reach the signal warrant thresholds, the traffic signal installation date will be adjusted in the fiscal plan.

Photos of the current barrier installation at Opal Road are shown below.



**Photo 1**

Looking north on Rock City Road towards Opal Road



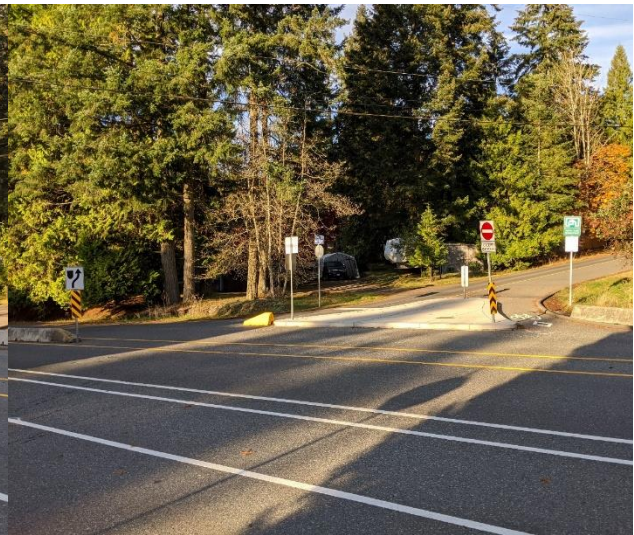
**Photo 2**

Details of the barrier installation



**Photo 3**

Looking south on Rock City Road towards Opal Road



**Photo 4**

Details of the Line Painting near Deerview Drive

## **OPTIONS**

1. That Council direct Staff to continue monitoring the existing situation and report findings in May 2021.
  - The advantages of this option: Recent changes at the intersection appear to be sufficient for the desired goals.
  - The disadvantages of this option: Some illegal traffic movements may still persist.
  - Financial Implications: None.
  
2. That Council direct Staff to install further measures to restrict illegal movements.
  - The advantages of this option: This may result in a further decrease in traffic volumes on Opal Road and safer movements at the intersection with Rock City Road.
  - The disadvantages of this option: Some portion of drivers seem determined to ignore the restriction and it may not be possible to completely eliminate the unwanted behaviour. Additionally, more restrictive barriers may negatively impact nearby residents.
  - Financial Implications: Additional installations would require more in-house engineering design and construction costs. A cost estimate would be developed after the design was carried out. |

## **SUMMARY POINTS**

- Opal Road was not planned and constructed to be a thoroughfare between Rock City Road and Uplands Drive.
- Turning restrictions have been installed at Rock City Road and Opal Road to calm traffic.
- Drivers are continuing to make illegal and unsafe movements at the intersection.
- Additional restrictions could be implemented and may have an effect on reducing the on-going illegal movements.

### **Submitted by:**

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