
CITY OF KELOWNA

MEMORANDUM

Date: June 19, 2002
File No.: 8330-20
To: City Manager
From: Ron Westlake, Transportation Manager
Subject: **Traffic Planning – Byrns Rd**

RECOMMENDATION

THAT Council receive the report of the Transportation Manager dated June 19, 2002;

AND THAT Council direct staff to construct a raised agricultural crossing on Byrns Rd in conjunction with the farming operations of Mr. Steve Day;

AND FURTHER THAT staff be directed to amend the classification for Byrns Rd from arterial to collector status in the Transportation Plan to 2020.

Background

At the Public Hearing of May 28, 2002 on the Aberdeen development west of Burtch Rd and south of Guisachan Rd, Council heard from residents and farmers along Byrns Rd. Although, not directly related to the subject development, Mr. Steve Day and Mr. Ken Day expressed opposition against increased traffic along Byrns Rd. Council requested staff to investigate specific traffic issues raised by the public and report back prior to the fourth reading of the proposed development. The specific issues were as follows:

- Consider introducing left turn restrictions at Byrns Road and Benvoulin Road
- Reconsider the 'arterial' designation of Byrns Road
- Look at the potential for accelerating the timing for extending Burtch Rd south to KLO Rd
- Look at ways to slow down traffic that will take Wilkinson Ave to get to Springfield Rd once Nelson Rd is closed
- Consider whether adjustments are warranted to the timing/phasing operation of the traffic signal at Gordon/Guisachan

Byrns Road Traffic Considerations

The concerns expressed by the Byrns Rd property owners/residents was principally related to shared use of this public road. The principal concern expressed was about the anticipated increase traffic volumes and the effect this will have upon farming operations.

Agricultural Plan & Traffic

The City of Kelowna Agricultural Plan does not specifically address the issue of increased traffic volumes within agricultural areas. While as a transportation objective it states "...support alternatives that reduce unnecessary road access in agricultural areas...", it also indicates "...support the protection of long term road network corridors".

In areas where the mobility requirements of a growing community coincide with agricultural land uses, the plan suggests that agricultural needs be considered in the type of road cross-section to be developed. This would indicate that a widened roadway shoulder be incorporated into the cross-section to allow for both agricultural land uses and transient traffic. The 20-Year Major Road Network Plan does not indicate that Byrns Road will need to be widened beyond the current two-lane roadway that it is today. However, the improved two-lane cross-section standard that is being constructed later this year, will accommodate the agricultural needs of the roadway along with cyclists and transient traffic.

The Agricultural Plan also supports the introduction of appropriate warning signage indicating to motorists the presence of agricultural activity in the immediate area.

Byrns Rd Traffic Considerations

As noted above, concerns were expressed by the agricultural users regarding the notion of increased traffic volumes on Byrns Rd. For perspective, traffic volumes along other arterial roadways, which pass through ALR lands, are listed below:

Roadway	Average Daily Traffic
McCulloch Road (near Gulley)	5400 vehicles
Lakeshore Road (near Barnaby)	7300 vehicles
Glenmore Road (near Scenic)	7800 vehicles
Benvoulin Road (near Byrns)	30,000 vehicles
Byrns Road (near Benvoulin)	2900 vehicles

From this table, it is evident that traffic volumes along Byrns Road are relatively light as compared to other arterial roadways that pass through ALR lands. It would also appear that there are ample roadway crossing opportunities with existing flows.

Although speeding is typically addressed by enforcement it is not possible to provide continuous enforcement. The widening of the road with bike lanes, planned for later this year with the sewer trunk project, will make the road safer for its shared use with cyclists, pedestrians and farm equipment. The 1.5m bike lanes will be constructed on both sides of Byrns Rd as well as gravel shoulders. Farm equipment will be able to almost pull right off the roadway.

There are three existing potential agricultural crossings locations on Byrns Rd. Regular crossings of Byrns Rd might be expected from only those operations which need to cross the road. From a review of ownership of lands along Byrns Rd, it appears that there is only one case where a farming operation crosses Byrns Rd. This is the Day family operation at the east end of Byrns Rd. The properties are shown on the attached plan

Future Plans for Byrns Rd

The Guisachan/Byrns roadway is identified in the City of Kelowna Official Community Plan as well as the Transportation Plan as an important long-term east-west arterial corridor. Byrns Rd between Burtch Rd and Benvoulin Rd is identified as a two-lane rural

roadway and this cross-section will be in place later this year. This corridor will provide direct access to Kelowna General Hospital from the east and provide travel alternatives to KLO Rd and Springfield Rd. The ability to increase capacity along these other corridors is limited by right-of-way constraints to four lanes. Other options along other east-west potential connections in this area have been eliminated (i.e. connecting Munson to Raymer) as a result of previously approved developments.

Having said this, the volumes projected for this corridor are expected to grow from the 2900 vehicles per day to between 3000 and 3500 vpd by 2020. This is far below the lower limit of an arterial, which is 8000 vpd, and it will therefore be operating more in the category of a collector road from a volume of traffic perspective.

Introducing Traffic Controls or Restrictions on Byrns Rd

As noted above, to address the speeding issue, RCMP enforcement is generally the counter measure on collector and arterial roads. Enforcement, however, cannot be provided on an ongoing basis and only on a random basis during periods of frequent violations.

Another counter measure to speeding is to make the road safer for slower moving vehicles such as farm equipment and bicycles. Council recently approved a budget to add bike lanes and gravel shoulders on both sides of Byrns Rd, which will provide a significant improvement for these users. The improvement will also provide better sight lines at driveways along Byrns Rd. This work will be completed later this year.

As a last resort, traffic calming techniques could be considered. These include things like speed humps to slow traffic down. Traffic calming is not normally used on collector or arterial roads because these are the roads where through traffic use is encouraged. However, since there are no local roads that traffic will be diverted to and traffic volumes are so low, this could be supported as a measure to slow traffic down. It would be appropriate to consider a location that would most improve the safety for crossing farm equipment.

There appears to be only one agricultural crossing of Byrns Rd. To address the safety of this crossing and speed of vehicles, it is proposed that a raised crossing be constructed. This would serve the dual purpose of a raised crossing for agricultural equipment and traffic calming for vehicles using Byrns Rd. The estimated cost of this crossing is \$12,000. This would include signage, warning motorists of farming operations. Funding for this work could come from the annual traffic-calming budget.

Left Turn Restrictions at Byrns Road and Benvoulin Road

Should Council wish to instead restrict the volumes of traffic using Byrns Rd they could consider restricting the Byrns Rd intersection with Benvoulin Rd to right-in/right-out only. This concept was recommended by the Days. It would have a significant affect on the use of Byrns Rd as even a collector road. It would also require the local traffic to travel longer distances and indirect routes making trips more inefficient. To adequately restrict the turning movements at this intersection would require raised medians along the centre of Benvoulin Rd. This work is estimated to cost \$80,000 (assuming stamped concrete surface) for which no budget source exists. If Council wishes to pursue this, then consideration can be given during its budget review for 2003.

Advancing Burtch Rd Extension from Byrns Rd to KLO Rd

The extension of Burtch Rd to KLO Rd will require a number of things to happen. This includes:

- Right-of-way acquisition;
- Land Commission approval;

- Consolidation of properties within the Land Reserve; &
- Construction of the roadway.

The estimated cost to complete the extension is \$2.4 million.

The City decided in 2000 to advance the four laning of Benvoulin Rd in advance of the Burtch Rd extension. This decision essentially meant that the Burtch Rd extension would not be required for north-south traffic movement until Benvoulin Rd reaches capacity. This is projected between 2010 and 2020. Advancing it earlier than this would mean deferring another project that would be more warranted.

The extension of Burtch Rd to KLO Rd is not expected to be fully effective in its potential for diverting the north-south traffic from Benvoulin Rd to Burtch Rd without the further extension to Benvoulin Rd. The estimated cost for this further extension is about \$750,000.

There are property owners both north and south of KLO Road that have advised that they are not prepared to sell the City the required right-of-way at this time.

Traffic Calming on Wilkinson St

Concern was expressed at the Public Hearing about traffic short-cutting on Wilkinson St between Guisachan Rd and Springfield Rd. This issue can be addressed in conjunction with the City Neighbourhood Traffic Management policy should this become a significant problem. However, in the interim, the existing stop signs protecting Wilkinson St at McBride Rd will be changed to stop the Wilkinson St traffic at McBride.

Consideration of Signal Timing Adjustments at Gordon Dr and Guisachan Rd

In light of the subject development proposal, Council heard from a resident that there will be insufficient time to allow left turns northbound onto Gordon Dr at its intersection with Guisachan Rd. Staff have investigated the operation of this intersection. The current configuration of this intersection combines this left turning movement with the through movement. As the various demands on the intersection grow, the configurations will be reviewed. In addition to providing a dedicated left turn lane when warranted; the option will also remain to provide a dedicated left turn lane. These changes would be done in conjunction with the City's annual capital works program for intersection improvements.

Ron Westlake, P.Eng.
Transportation Manager

John Vos, P.Eng.
Director of Works & Utilities

RWW

Attach.

cc. Subdivision Approving Officer