

REGION OF OTTAWA-CARLETON
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REPORT
RAPPORT

Our File/N/Réf. **50 20-00-R016AT**
Your File/V/Réf.

DATE 29 March 2000

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services
Environment and Transportation Department

SUBJECT/OBJET **MOTORCYCLE RACING - HERON PARK -
INQUIRY TC-17-99**

DEPARTMENTAL RECOMMENDATION

That Transportation Committee recommend Council approve that staff, in conjunction with the Ottawa-Carleton Regional Police Services, undertake a pilot project to assess the effectiveness of rumble strips as speed control devices, in the Heron Park area and for the specific purpose of deterring late-night motorcycle racing.

BACKGROUND

Over the past few years, an annoying situation has developed in the vicinity of the Heron Road/Bronson Avenue interchange. Specifically, a number of motorcyclists have come to regard that area as an ideal venue for late-night racing. The interchange is well illuminated and offers a wide variety of topographical challenges such as hills, descents, banked turns, linked right-left curves, etc; it provides access to the Revenue Canada and Confederation Heights campuses and in combination with roads in those complexes, provides a number of alternative circuits; and, perhaps of most importance to those users, it offers direct connections to a number of high-speed get-away routes. The area is illustrated in Annex A and the preferred racing routes appear to be those illustrated in Annexes B and C.

The racing activities are confined to late-night periods and therefore pose few, if any, risks to other roadway users. However, that is of little consolation to residents in Heron Park North, Ottawa South and the Glebe, who must contend with the resultant noise impacts late into the night.

Police can do little to curb the disturbances which vary in scope from impromptu races between two riders to elaborate affairs involving more than twenty. The area is open and spread out and as little traffic is on the road at that time of night, police arrival is highly conspicuous. Officers are not permitted to engage in high-speed chases and even if they were, the cars and motorcycles they are equipped with simply can't catch the participants. When they do pull riders over on the adjacent road network, they are then faced with the challenge of proving that those particular drivers had participated in racing activities. There are seldom witnesses, many motorcycles and helmeted riders look the same and, in many cases, it's virtually impossible to identify one from another unless a license number can be used. That poses additional problems in that the small license plates used on those vehicles cannot be read under high-speed, low-light conditions.

Moreover, the participants do not always race head-to-head. Usually, they compete in "time trials" with "staged" starts so that each competitor is widely separated from the next, perhaps by several seconds or more. Since anyone may operate a motorbike provided they acquire the proper certification and in the eyes of the courts everyone is innocent until proven otherwise, police find it difficult to obtain a conviction for racing if those charged deny the claim and indicate they were simply travelling alone and passing through the area on the public roads.

As a result, police routinely pull bikers over in this area; however, aside from having them produce the required documentation (license, registration and insurance certificate), there is little the officer can do other than question their possible involvement in racing activities and warn them of the consequences. To add to police frustration, the courts have also dismissed several excessive noise charges noting that the term "excessive" is vague and that without proof from sound measuring equipment, new or fairly new unmodified motorcycles are assumed to meet the vehicle standards set out by Transport Canada.

In view of these annual spring-to-fall annoyances and the associated enforcement problems encountered by police, the ward Councillor tabled an inquiry at the Transportation Committee meeting of 15 September 1999, asking that staff provide a report "on possible structural changes that could be made to the road to discourage such use".

To that end, a task force was assembled comprised of local residents, staff, police, the ward Councillors from the City and Region and a representative from Public Works and Government Services Canada. Several meetings were held over the winter, numerous concepts were "brainstormed" and an extensive web search was conducted to see if similar situations had been faced and dealt with by other road authorities. In the final analysis, based primarily on information obtained from interviews with local motorcycle dealers, it was the consensus of the group that rumble strips appear to offer the most viable solution and therefore should be tested as a means of deterring that late-night annoyance.

DISCUSSION

Without exception, residents on the task force are convinced that the solution to this problem lies in altering the road surface. They recall that when some of the ramps were “milled” for paving last summer, the racing stopped and overnight tranquillity returned; however, as soon as the new pavement was laid, the motorcyclists returned and the noise was worse than ever.

Police and residents also observe that the motorbikes used in these activities are generally all road-racing types - i.e. they are not the bigger “Harley-Davidson” types nor are they the smaller off-road, moto-cross types. Dealers indicate that while suspension systems on road-racing motorbikes are designed to accommodate undulating changes in the road surface, the one thing they do not handle well is any sort of wash-board effect. Accordingly, the solution to the problem has focused on that area.

As previously noted, an extensive web search was undertaken; however, it provided little insight into similar problems nor did it yield any rumble strip designs that may deter motorcycle usage. Nonetheless, as shoulder rumble strips similar to those along Hwy 416 are in use by a number of Provincial and State road authorities, it does introduce the notion that a straightforward solution may be found if those strips were applied on an in-lane, curb-to-curb basis.

To explain that point further, the web search indicated that nine road authorities including Maine, Massachusetts, New Jersey, New York and Pennsylvania, all have design standards for shoulder rumble strips calling for “milled-in grooves” 400 mm. (16”) long, 175 mm. (7”) wide and 13 mm. (1/2”) deep. Three others use the same depth of cut but with lengths of 600 mm. (24”), 700 mm. (28”) or across the full shoulder and, all specify 300 mm. (12”) centre-to-centre spacing. While shoulder strips are usually continuous, or are applied in groups of 15 to 20 grooves spaced 15 to 20 m. apart, the configuration visualised for this application would probably consist of 5 to 10 grooves installed across the road surface at a few strategic sites. Hopefully, if racers lose interest in one or two popular circuits, they will find the area less appealing and the problem will disappear.

To determine an effective configuration, a development site will first be chosen on an out-of-use road section. Four or five grooves would then be milled into the surface using the shoulder strip standards for depth, width and spacing, and police would then test the configuration at various speeds on their motorcycles, assessing the resultant effects. Additional grooves could be added until an effective configuration is devised.

LEGAL IMPLICATIONS

The legal implications which could arise if a motorcyclist is killed or seriously injured as a result of striking a rumble strip and losing control, are obviously significant. It cannot be over-stressed that we are dealing with public roads, anyone is permitted to own and operate a motorcycle provided they acquire the proper licensing certification and, not all motorcycle operators are racers. Therefore, in trying to develop an acceptable rumble strip configuration, we are really trying to create a situation that discourages motorcycle racing yet does not unduly impact on the safety of other roadway users.

Our Legal Department advises that road authorities are permitted to test and develop new devices, such as traffic calming measures intended to alter driver behaviour, provided the impacts on public safety are not unduly compromised and the development program is approved by Council.

OTHER CONCERNS

There are two other issues which must also be addressed in this pilot project. Specifically, the rumble strips must not unduly compromise the safety, comfort and convenience of cyclists (bicycle travellers, in this case) and, the noise generated by other vehicles driving over the rumble strips must not simply eliminate one problem but create another.

With respect to the first issue, two options will be assessed. First, we would look at reducing the depth of the grooves within a metre of the curb from 13 mm. to perhaps 5mm, so that in low-light conditions they would still appear to be full-depth and continuous to motorcycle racers, and secondly, we will assess the possibility of eliminating the grooves entirely within say ½ metre of the curb. The challenge is to find a way to accommodate the safe passage of cyclists while at the same time discouraging use of the area immediately adjacent to the curb, by motorcycle racers.

In view of this concern, the Regional Cycling Advisory Group (RCAG) has been requested to participate fully with staff, police and other member of the task force, in developing and field testing various options to address this issue.

The noise created by the rumble strips does not appear to be as big an issue. As there are no residences in the immediate vicinity of the interchange and because vehicle volumes are low at night anyway, it is hoped that the noise generated by vehicles travelling over the rumble strips will be of far less than that currently resulting from racing motorcycle engines. Further, it seems logical to expect that continuous, high-revving engine sounds created by racing motorcycles would “carry” for a much greater distance than would those intermittent noises created by car tires striking rumble strips. Nonetheless, to ensure that we are not solving one problem but introducing another, noise measurements will be conducted throughout the entire rumble strip development process.

SUMMARY

In view of the nature of the problem and the lack of any information on devices that may possibly be used to deter motorcycle racing, it appears that successful resolution rests in our ability to devise some type of surface treatment that will diminish the attractiveness of Heron Park roads for that purpose.

The preferred option is to test rumble strips. Rather than attempt to find a completely new configuration, particularly in view of legal implications which could arise if a roadway user were to challenge that the rumble strips introduced an unexpected hazard which resulted in a personal injury, it is proposed that the standards approved for shoulder rumble strips by various State Highway authorities (for depth, width and spacing), be adopted and that these grooves be applied transversely across the road in a series of several grooves.

To determine the minimum number of grooves required to effectively introduce the required “feedback” to motorcycle operators, a development site will be set up on an out-of-use road section and police will test various configurations using their motorcycles.

As part of that process, RCAG would be requested assist in the design and field-testing of various rumble strip configuration options and noise measurements would be taken to ensure that any option recommended for installation on the public roads, does not produce an off-setting noise consequence.

And finally, staff will develop warning signage that will be installed in advance of each rumble strip, informing drivers that they are entering a “speed deterrent test site” ...or words to that effect.

PUBLIC CONSULTATION

This issue has arisen at and been responded to by staff, police and the Regional Ward Councillor, at Neighbourhood Committee meetings in all three of the affected areas (i.e. Heron Park North, Ottawa South and the Glebe). In addition, the ward Councillor recently had over 18,000 flyers delivered in the noise catchment area, alerting residents that this issue will be considered by Transportation Committee and is tentatively for presentation on 19 April 2000.

FINANCIAL IMPLICATIONS

As noted previously, staff will work with and draw on the expertise of others in developing a rumble strip configuration that will safely and effectively deal with this problem. A local contractor with the necessary grinding equipment must be hired to perform milling operations at the test site, and once the best possible configuration has been determined, to then install those strips at strategic sites in Heron Park. In addition, a consultant with the required noise measuring equipment must be retained and the project will also entail sign and possibly pavement marking costs.

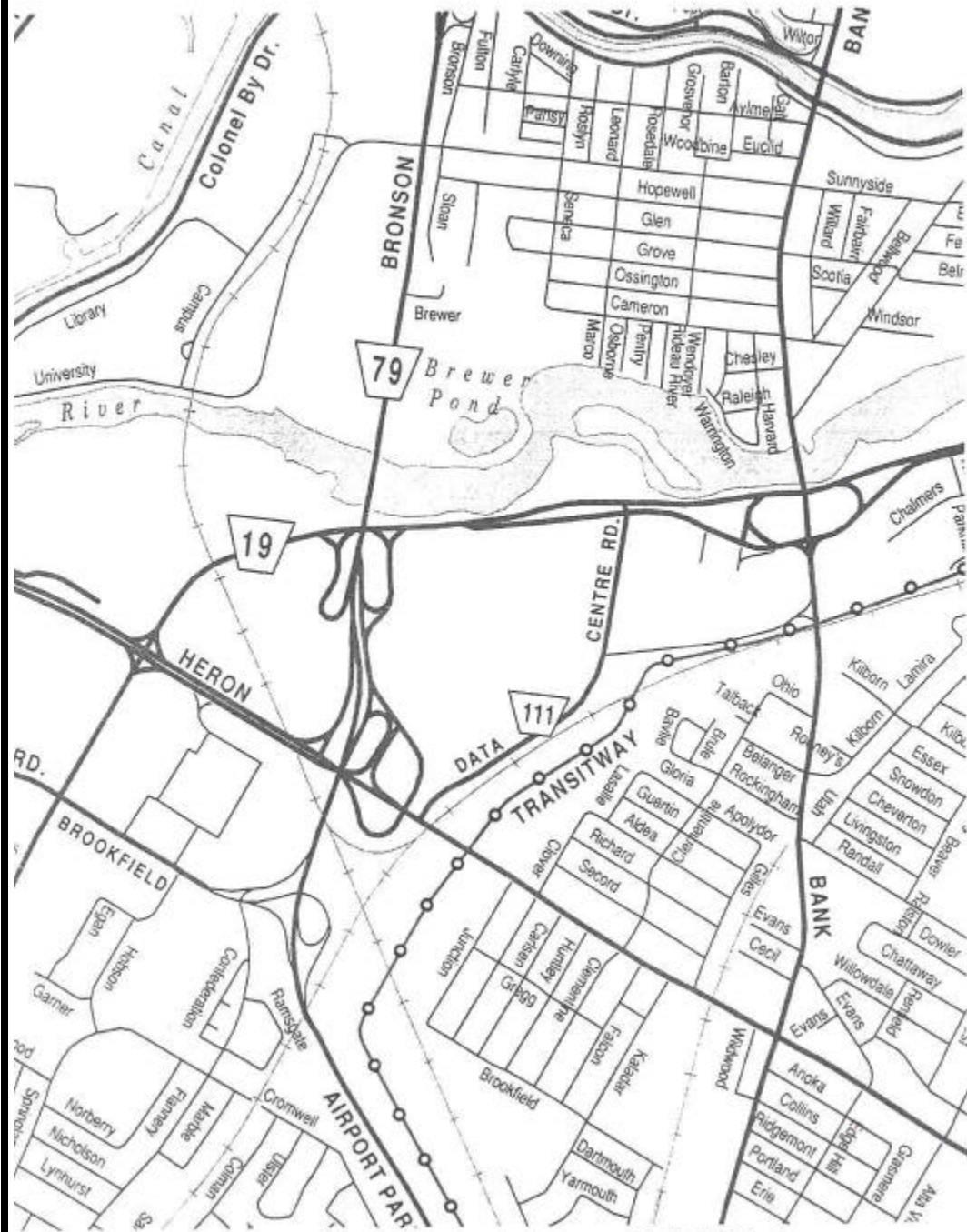
It is anticipated that the total costs associated with this pilot project will not exceed \$10,000. Funds are available in the 2000 capital budget 900065 - Traffic Calming.

*Approved by Jim Bell on behalf of
Doug Brousseau*

JFB

Attach. (3)

HERON PARK - MOTORCYCLE NOISE AREA



ANNEX A

