

REGION OF OTTAWA CARLETON

REPORT

RÉGION D'OTTAWA CARLETON

RAPPORT

Our File/N/Réf.           **50 67-99-0001**  
Your File/V/Réf.

DATE                       30 June 1999

TO/DEST.                 Co-ordinator  
Corporate Services and Economic Development Committee

FROM/EXP.               Environment and Transportation Commissioner

SUBJECT/OBJET         **1999 RESURFACING AND  
RESURFACING - PROVINCIAL HIGHWAY TRANSFER  
PROGRAMMES – INCREASES IN AUTHORITY**

### DEPARTMENTAL RECOMMENDATIONS

**That the Corporate Services and Economic Development Committee recommend Council approve:**

- 1. Additional expenditure authority in the amount of \$2,100,000 to the 1999 Resurfacing Programme, Account No. 912-30752;**
- 2. Additional expenditure authority in the amount of \$1,700,000 to the Resurfacing - Provincial Highway Transfers Programme - 1999 Project, Account No. 912-30747;**
- 3. The establishment of additional debenture authority in the amount of \$3,800,000.**

### BACKGROUND

The 1999 Resurfacing and Resurfacing - Provincial Highway Transfers Programmes were received as part of the 1999 Capital Works Budget by Transportation Committee on 05 February 1999 and, on 24 February 1999, Council approved a 1999 budget of \$7,280,000 for the former Programme and a 1999 budget of \$2,045,000 for the latter Programme.

## DISCUSSION

Pavement maintenance includes the routine work carried out to ensure satisfactory pavement performance throughout its design life. The Department uses two levels of pavement maintenance actions:

- a. Major Maintenance - Activities including routing and sealing cracks, hot-mix patching, distortion corrections, drainage improvements, erosion control, frost treatments and asphalt strip repairs.
- b. Rehabilitation - Required where pavement problems are severe and extensive. Treatments include partial/full depth removal and asphalt resurfacing, in-place recycling and/or reconstruction.

If resurfacing work is delayed beyond the time of identified need, the pavement structure rapidly deteriorates toward a “failed” state and road maintenance costs increase dramatically. The most effective treatment for a failed pavement is total reconstruction, which costs at least 10 times as much as resurfacing. In addition to these reconstruction and maintenance costs, users of failed roads and proximate businesses and residents must endure rougher driving conditions, increased noise levels and vibrations, increased vehicle repair and operating costs and, at the extreme, less safe travel conditions.

The finalized 1999 Resurfacing Programmes, in recognition of co-ordination requirements with other works and the approved 1999 Capital Works Budget, has been provided to the Chair and Regional Councillors and was received by the Transportation Committee at its meeting of 19 May 1999. There are insufficient funds in the 1999 Resurfacing Programme accounts to cover all of the 1999 needs. Staff have examined each of the road sections on the 1999 list to identify which of the road sections that will not be resurfaced in 1999 due to lack of funds are in imminent danger of “failing”. There are nine such critical road sections on the 1999 Resurfacing Programme (estimated resurfacing cost of \$2.1 M) and one such critical road section on the 1999 Resurfacing - Provincial Highway Transfers Programme (estimated cost of \$1.7 M).

To preclude the Corporation from being encumbered with the significantly increased reconstruction liability that would result if these roads fail, it is proposed that the project authority for the two 1999 Resurfacing Programmes be increased by a total of \$3.8 M.

Staff have also identified eight other locations on the 1999 Resurfacing Programme needs list that are in danger of failing. However, these locations are not as critical because the best resurfacing strategy for these roads (Cold-in-Place Recycling) is the same whether these roads have failed or not and this strategy is unique in that it can restore full structural strength and a normal life-expectancy to the road (the technique is applicable to only roads with rural cross sections at this time). Therefore, the Region’s construction liability normally will not increase if the resurfacing of these roads is delayed. However, user costs, noise, vibrations and routine road maintenance costs would still increase. It should be noted that an increase in authority for the 1999

Resurfacing Programmes to accommodate the ten critical locations, would greatly increase the chances of these less critical road sections being resurfaced in the 2000 Programmes.

The most recent reassessment of the average annual resurfacing programme funding needed to keep the system in its current condition was \$12 M. This included the former provincial highways. Price increases have been experienced this year and this figure will be updated for the 2000 budget submission.

Due to the lead time required to call tenders and award contracts, the Department will proceed with tender calls in parallel with Committee and Council consideration of this report. Subject to approval of the requested funds transfers by the Corporate Services and Economic Development Committee and Council, the award of contracts will proceed in accordance with normal corporate policy. It is expected the work would commence around mid-August 1999.

#### EXPENDITURE JUSTIFICATION

The Resurfacing Programme is a planned annual programme of pavement maintenance to maintain a given level of serviceability and minimize long-term costs throughout the approximately 1,250 km Regional road network. This represents a significant investment in infrastructure which requires continuous protection and upkeep (replacement value in excess of \$3 B).

Postponement will result in the accelerated deterioration of roadway granular bases and asphaltic surfaces. Pavement cracks, distortions and defects will become more severe, resulting in increased ride roughness and significantly increased user and maintenance costs for these roadway sections. Pavements that "fail" will encumber the Region with significant cost liabilities for reconstruction.

#### CONSULTATION

Weekly notices outlining work progress in the 1999 Resurfacing Programmes are issued to the Information and Public Affairs Division. Communities affected by the resurfacing work are kept informed via the installation of project signs and the distribution of flyers and notices.

FINANCIAL STATEMENT

	912-30752	912-30747
	\$	\$
Approved Budget to Date	7,180,000	2,987,000
Total Paid and Committed	<u>(4,890,490)</u>	<u>(896,740)</u>
Balance Available	2,289,510	2,090,260
ADDITIONAL AUTHORITY REQ'D	<u>2,100,000</u>	<u>1,700,000</u>
Balance Remaining	<u>4,389,510</u>	<u>3,790,260</u>

Funds are requested in the amount of \$2,100,000 for the 1999 Resurfacing Programme, Account No. 912-30752 (Order No. 900077), (Reference page No. 132, 1999 Capital Budget), bringing the revised total budget to \$9,280,000 and \$1,700,000 for the Resurfacing - Provincial Highway Transfers Programme - 1999 Project, Account No. 912-30747 (Order No. 900072), (Reference page No. 194, 1999 Capital Budget), bringing the revised total budget to \$4,687,000.

*Approved by  
M.J.E. Sheflin, P.Eng.*

LAR/ms

FINANCE DEPARTMENT COMMENT

No uncommitted funds are available in the Region Wide Capital Reserve Fund. Additional debenture authority of \$3,800,000 is required to finance the proposed additional resurfacing programme expenditures.

*Approved by T. Fedec  
on behalf of the Finance Commissioner*