REGIONAL MUNICIPALITY OF OTTAWA-CARLETON MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT RAPPORT

Our File/N/Réf. **25** 23-97-R061-A

Your File/V/Réf.

DATE 14 May 1997

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services

Environment and Transportation Department

SUBJECT/OBJET PEDESTRIAN ACTUATED TRAFFIC CONTROL SIGNALS ON

TERRY FOX DRIVE (REGIONAL ROAD 61)

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee recommend Council approve the installation of pedestrian actuated traffic control signals on Terry Fox Drive approximately 240 m south of Edgewater Street as illustrated in Annex C and authorize the initiation of the public hearing process as required by Sections 297 and 300 of the Ontario Municipal Act, subject to the owner, Mobius Developments Limited:

- 1. paying for the total cost of the traffic signal installation and related road works as well as operating expenses in accordance with Regional Council's policy;
- 2. executing a legal agreement with respect to (1) above.

BACKGROUND

Mobius Developments Limited is developing a 1.4 ha (3.5 acre) parcel of land located in the southeast quadrant of the Terry Fox Drive and Edgewater Street intersection in the City of Kanata (Annex A). The proposed development consists of three restaurants ranging in size from 485 m^2 (5,242 ft^2) to 558 m^2 (6,000 ft^2), with 219 parking spaces, on the remaining portion of the site. A future phase will undertake the refurbishing of the existing gas bar with a 72 m^2 facility.

Vehicular access to the site will be provided by two driveways consisting of the main entrance off Edgewater Street and the second, a right-in/right-out onto Terry Fox Drive. An existing entrance from Edgewater Street, presently serving the gas bar, will be modified to suit the requirements of the commercial site. A Private Approach Permit has been granted by the Environment and Transportation Department for the right-in right/out private approach to Terry Fox Drive at the southern limits of this development.

Pedestrian access from Terry Fox Drive will be provided by a new asphalt walkway linking the existing signalized intersection of Terry Fox Drive and Edgewater Street and the northwest corner of the site (Annex B).

Although pedestrian volumes do not warrant a signalized pedestrian crossing of Terry Fox Drive at the southern limits of this property, City of Kanata Council has stipulated in the conditions of Site Plan Approval that a signalized pedestrian crossing of Terry Fox Drive will be provided in order to link Walter Baker Park, the Kanata Recreation Centre and the Ron Maslin Playhouse to the commercial site.

EXISTING CONDITIONS

Pedestrians

There are no sidewalks on either Terry Fox Drive or Edgewater Street abutting this property. An asphalt sidewalk runs along the west side of Terry Fox Drive between Palladium Drive and Maple Grove Road, terminating about 350 m north of this site. Sidewalks are also in place on Hazeldean Road at Terry Fox Drive, approximately 420 m south of this site. The City of Kanata has developed a walkway system through the Walter Baker Park which interconnects these municipal sidewalks.

A sidewalk along the north side of Walter Baker Place accommodates pedestrian movement from its signalized intersection with Terry Fox Drive to the Kanata Recreation Centre. An inter-community recreational pathway system from McCurdy Drive ends at Edgewater Street directly opposite the proposed entrance to the commercial site.

Pedestrian volumes in this area are minimal. The 1996 afternoon peak-hour counts indicate only two pedestrians at the adjacent intersection of Terry Fox/Edgewater/Walter Baker. Pedestrian volumes recorded in 1993 revealed a total of 10 pedestrians over an 8-hour period, of which four crossed Terry Fox Drive and six crossed Edgewater Street.

Bicycles

Cyclists share the existing traffic lanes with motorists. Afternoon peak-hour counts in 1996 show only two bicycles manoeuvering through the adjacent intersection of Terry Fox/Edgewater/Walter Baker.

Bicycle volumes recorded in 1993 revealed a total of 17 bicycles over an 8-hour period, of which two crossed Terry Fox Drive and 15 crossed Edgewater Street.

Transit

Transit service is not available on either Terry Fox Drive or Edgewater Street adjacent to the site. All-day and peak-period transit service is provided on McCurdy Drive and Katimavik Drive. The closest bus stops to the site are located as follows:

- 1. north and southbound on McCurdy Drive at Young Road (660 m);
- 2. north and southbound on McCurdy Drive at Maple Grove Road (550 m); and
- 3. north and southbound at Terry Fox Drive and Palladium Drive/Katimavik Road (780 m).

Automobiles

Terry Fox Drive adjacent to the site is a two-lane undivided rural arterial roadway with a posted speed of 70 km/h. Traffic volumes recorded in 1993 indicate an average annual daily traffic (AADT) volume of 12,300 vehicles using the Terry Fox/Edgewater/Walter Baker intersection. In 1996 the AADT at this intersection increased to 13,200 vehicles with approximately 11,200 vehicles per day travelling on Terry Fox Drive adjacent to the site.

Afternoon peak-hour volumes recorded in 1996 show 581 and 765 vehicles per hour northbound and southbound respectively on Terry Fox Drive adjacent to the site.

Edgewater Street is a two lane undivided local/collector roadway with a posted speed of 50 km/hr. Traffic volumes recorded in 1996 on this roadway show an AADT of 1,700 vehicles per day adjacent to the site with an afternoon peak-hour volume of 102 and 104 vehicles per hour eastbound and westbound respectively.

DESIGN PROPOSAL

The City of Kanata's intended purpose for a signalized crosswalk on Terry Fox Drive at the southerly access to this site is to create a safe pedestrian link from the Walter Baker Park through this commercial development to the City's inter-community recreational pathway system.

In order to meet the City's Site Plan Approval conditions, Mobius Developments Limited requests that the Transportation Committee approve the proposed creation of a pedestrian crossing of Terry Fox Drive, complete with the installation of pedestrian actuated traffic control signals (Annex C).

This installation will not alter the roadway's geometry nor will it affect the existing dimension of the travelled portion of Terry Fox Drive. However, the following will be required:

- 1. the installation of traffic control signals;
- 2. the installation of additional signs in the vicinity of the crossing; and
- 3. the provision of revised pavement markings.

Pedestrians

Because pedestrian traffic is extremely light adjacent to the site, sidewalks have not been provided on Terry Fox Drive or Edgewater Street as part of this development. An asphalt walkway will be constructed at the northwest corner of the site to accommodate pedestrian movement from the intersection of Terry Fox Drive and Edgewater Street.

The City of Kanata requires the installation of pedestrian actuated signals on Terry Fox Drive at the south end of the site as well as the construction of the necessary walkways back into the development. In addition, Kanata will undertake the construction of an asphalt walkway from the proposed pedestrian crossing to the existing walkway system in the Walter Baker Park. An illustration of these walkways is shown in Annex C.

It is intended that pedestrian actuated traffic control signals be installed at this location for the following reasons:

- 1. the provision of a protected area for pedestrians to safely cross Terry Fox Drive;
- 2. the connection of Walter Baker Park, the Kanata Recreation Centre and the Ron Maslin Playhouse to the commercial facilities on this site; and
- 3. the formation of an integral link to the recreational pathway system enabling pedestrians to reach the amenities of the Walter Baker Park via this commercial site.

Bicycles

The existing area bicycle system will not be affected. Cyclists will benefit from the provision of a safe and convenient way to cross Terry Fox Drive which connects Walter Baker Park and the recreational paths to the commercial facilities on the site.

Transit

Transit service will not be adversely affected. Accessibility will be improved since the bus stop on McCurdy Drive at Young Road will be safer and easier to reach via the pedestrian actuated signals and the recreational pathway system.

Automobiles

Vehicular access to the site shall be provided by the two approved entrances. An existing entrance on Edgewater Street will be improved to provide all-directional access and egress to the commercial site. The private approach from Terry Fox Drive has been designed as a right-in/right-out only facility in accordance with the Regional Environment and Transportation Department's requirements. Both entrances have been designed to provide minimal disruptions to through traffic.

Continuous traffic flow on Terry Fox Drive will be interrupted by use of the proposed pedestrian actuated signals; however, the signals will be interconnected with the Regional signal monitoring system and co-ordinated with the existing traffic control signals along Terry Fox Drive. Furthermore, the proposed signals would be easily seen from all directions since there is little horizontal or vertical curvature along this portion of Terry Fox Drive and a minimum of signage that could obscure or reduce visibility.

FINANCIAL STATEMENT

Should Regional Council approve the traffic signal installation, Mobius Developments Limited will be responsible for 100 percent of the costs. In addition, it will be necessary for Mobius Developments Limited to pay the annual maintenance costs for traffic signals until such time as <u>both</u> the following conditions are met:

- 1. the traffic signals satisfy the Ministry of Transportation of Ontario traffic control signal installation warrants; and
- 2. Regional Council has approved the assumption of the annual maintenance costs.

COST ESTIMATE

The following cost estimates which have been developed by Ruta Engineering Associates Limited are at a conceptual stage and are provided soley for the information of the Transportation Committee and Regional Council. Mobius Developments Limited will be responsible for 100 percent of the costs.

<u>Item</u>	Cost Estimate
Pedestrian Actuated Traffic Control Signals	\$ 60,000
Construction: Private Approach on Terry Fox Drive	\$ 25,000
Engineering	\$ 6,000
Contingencies TOTAL ESTIMATED COST	\$ 9,000 \$ 100,000

CONSULTATION

The opportunity for general public input will be provided via the public hearing process.

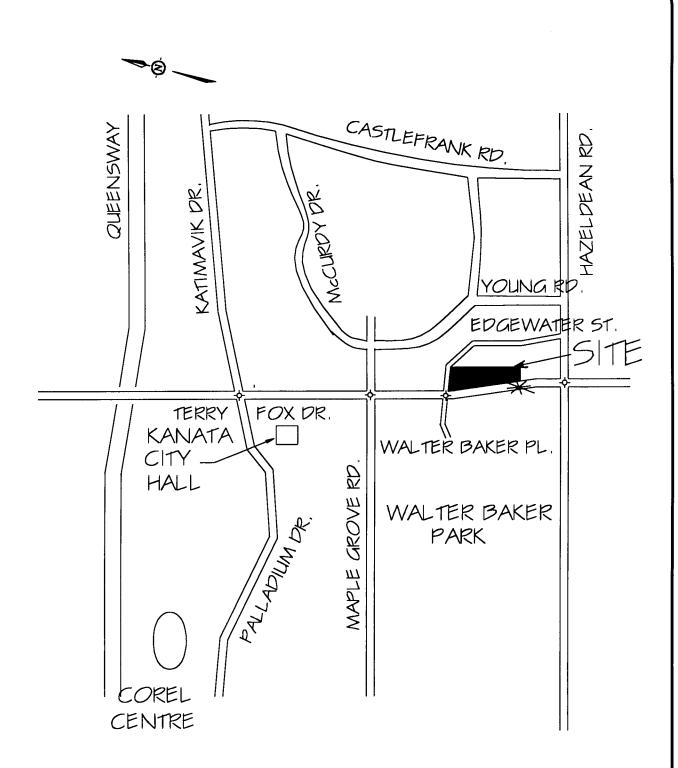
COMMENTS FROM THE REGIONAL CYCLING ADVISORY COMMITTEE

This report has been presented to the Regional Cycling Advisory Group at their meeting on Tuesday, 6 May 1997. Their comments will be available when this item is considered at Transportation Committee.

Approved by Doug Brousseau

WVH/sc

Attach. (3)



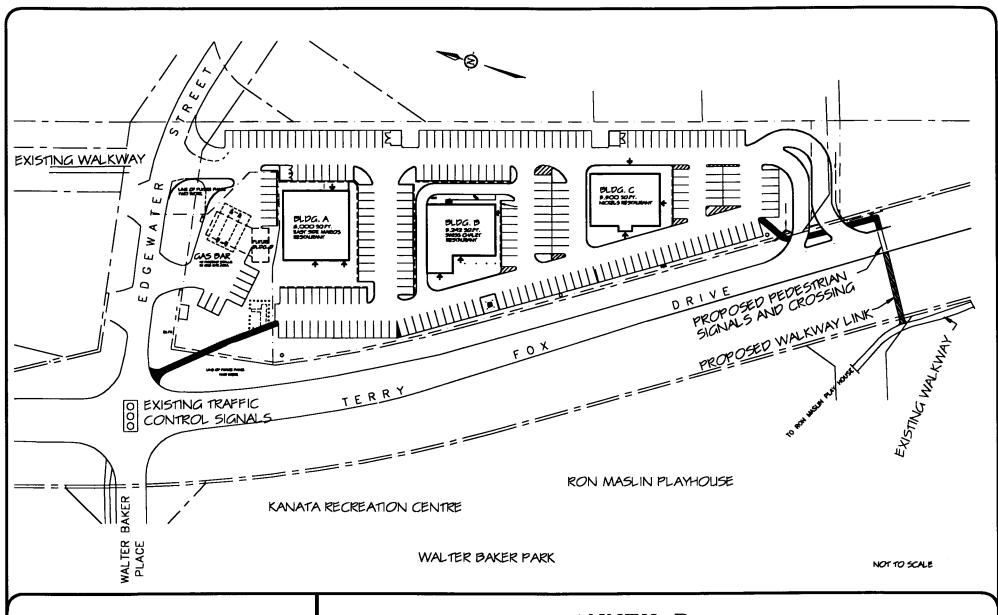
* PROPOSED PEDESTRIAN ACTIVATED SIGNALS

+ EXISTING TRAFFIC CONTROL SIGNALS

NOT TO SCALE



ANNEX A
TERRY FOX COMMERCIAL SITE
KEY PLAN

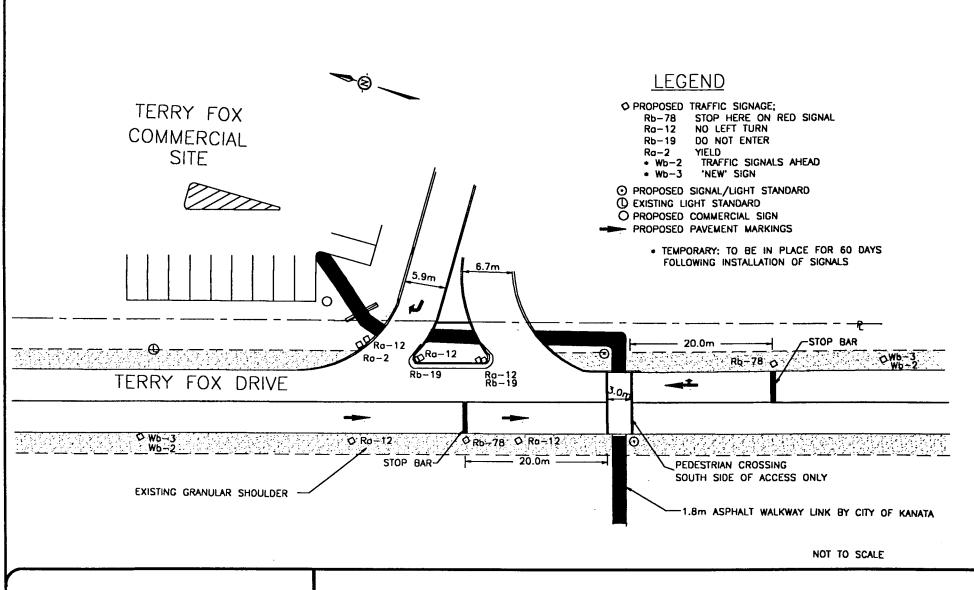




Engineering Associates Limited

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ANNEX B
TERRY FOX COMMERCIAL
SITE PLAN





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ANNEX C
PROPOSED PEDESTRIAN CROSSING
PAVEMENT MARKINGS AND SIGNAGE

Harvey:

Please forward the comments below to the appropriate body for inclusion in the Transportation Committee report.

Thanks, Peter McNichol

PEDESTRIAN ACTUATED TRAFFIC CONTROL SIGNALS ON TERRY FOX DRIVE (REGIONA L ROAD 61)

FILE: 25 23-97-061-A

The Regional Cycling Advisory Group (RCAG) has reviewed the plans of the PEDESTRIAN ACTUATED TRAFFIC CONTROL SIGNALS ON TERRY FOX DRIVE (REGIONAL ROAD 61)

and has the following comments.

Cyclists and Pedestrians crossing eastbound into the site from Walter B aker Park will be required to cross the flow of traffic twice. Once crossing Terry Fox and second crossing the vehicle entrance to the site.

This can present certain dangers as while the first crossing is signalized and pedestrians (and walking cyclists) may cross with relative ease, the second phase requires the pedestrian to cross the vehicle entrance without the benefit of signals.

As signal times can be quite short pedestrians crossing Terry Fox on the signal will be forced to negotiate with the backlog of vehicles awaiting to enter the site when the light turns green.

Pedestrians having the right of way will cause a second backup of vehic les waiting to enter the site. As the light has just turned green some vehicle operators may inadvertently crash into other vehicles waiting to turn into the site.

To solve this problem we recommend moving the pedestrian signals to the north side. One problem still remains.

Vehicles leaving the site will not have an easy view of pedestrians of ssing at the pedestrian crosswalk. To remove this problem we recommend an additional signal be used to require vehicles leaving the mall of wait (no right turn on red) while the pedestrian signal is in eff.

In Summary RCAG recommends moving the pedestrian crosswalk to the north side and adding an additional signal for vehicles leaving the new uiring them to wait will the pedestrian signal is in effect.

Sincerely,

Peter McNichol RCAG representative