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

## REPORT RAPPORT

Our File/N/Réf. **25** 23-97-R63

Your File/V/Réf.

DATE 12 June 1997

TO/DEST. Co-ordinator, Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services

**Environment and Transportation Department** 

SUBJECT/OBJET MERIVALE ROAD (REGIONAL ROAD 63) ROADWAY

MODIFICATIONS AND TRAFFIC CONTROL SIGNALS FOR

**CENTRAL PARK SUBDIVISION** 

#### DEPARTMENTAL RECOMMENDATIONS

- 1. That the Transportation Committee recommend Council approve the drawing prepared by Cumming Cockburn Consulting Engineers as shown in Annex B, illustrating the proposed Merivale Road widening and construction of two intersections with traffic control signal installations subject to the developer:
  - a. funding the total cost of the proposed works;
  - b. executing a legal agreement with respect to (1) above;
- 2. Authorize the initiation of the public hearing process as required by Sections 297 and 300 of the Ontario Municipal Act.

#### **BACKGROUND**

Ashcroft Development Inc. is in the process of developing its Central Park subdivision adjacent to Merivale Road between Baseline Road and Caldwell Avenue. The main subdivision access road will have two intersections with Merivale Road.

Part of the development will include widening of Merivale Road to the satisfaction of the RMOC to accommodate pedestrian and vehicular traffic, especially at the two intersections described above. The site location is shown in Annex A.

#### **EXISTING CONDITIONS**

#### Pedestrian

A concrete sidewalk exists on the west side of Merivale Road adjacent to the subdivision. No data regarding pedestrian volumes is available for the location of the two proposed intersections. Traffic volume surveys completed in May 1997 for the adjacent Merivale Road/Baseline Road intersection indicate the following characteristics:

- 1. over an 8-hour period, the total number of north-south pedestrian movements is 116;
- 2. for the A.M. Peak Period, the total number of north-south pedestrian movements is 29 (between 7:00-9:00); and
- 3. for the P.M. Peak Period, the total number of north-south pedestrian movements is 28 (between 7:00 9:00).

#### **Bicycles**

There is no existing bicycle lane on Merivale Road along the frontage of the Central Park subdivision. The following traffic volume characteristics are taken from a survey completed in May 1997 at the adjacent Merivale Road/Baseline Road intersection:

- 1. for the A.M. Peak Hour, the total number of north-south bicycle movements is 13; and
- 2. for the P.M. Peak Hour, the total number of north-south bicycle movements is 19.

#### **Transit**

OC Transpo was contacted regarding bus service along Merivale Road. OC Transpo indicated there are four bus routes regularly using Merivale Road which operate on a 30-minute headway. In addition to the regular bus services, two peak hour routes are added Monday to Friday between 6:00-8:30 a.m. and 3:00-6:00 p.m. which operate on a 20-minute headway.

#### Automobile

Merivale Road is a four-lane undivided arterial with a posted speed limit of 60 km/h. Traffic volumes recorded in 1997 indicated an annual average daily traffic volume of 7,400 vehicles northbound and 11,100 vehicles southbound adjacent to the subdivision.

There is only one side street along this section of Merivale Road, McCooey Lane, which provides limited access to the Federal Experimental Farm east of Merivale Road. Merivale Road, adjacent to the subdivision, is mostly on tangent and the existing alignment together with the proposed widening are illustrated in Annex B.

#### **DESIGN AND OPERATIONAL PROPOSALS**

It is recommended that Transportation Committee approve the widening proposal illustrated in Annex B. The owner/developer has agreed to pay for all costs related to the proposed widening.

#### Proposed Geometric Changes

The proposed geometric changes to Merivale Road are required to accommodate vehicular turning movements both in and out of the proposed subdivision at the two proposed signalized intersections. It should be noted that the two new intersections are about 280 metres apart.

#### Northern Intersection

The proposed geometry of the new northern intersection is shown in Annex C. Both a southbound deceleration lane and a northbound left turning lane are to be provided. To accommodate vehicular access at a proposed entrance to a future commercial parking lot located at approximately 90 m south of the northern intersection, the northbound left turn lane is proposed to continue south to the southern intersection. There is no proposed southbound acceleration taper.

#### **Southern Intersection**

The proposed geometry of the new southern intersection is shown in Annex D. Both a southbound deceleration lane and a northbound left-turning lane are to be provided. The left-turning lane will have a storage length of 40 m.

#### **Proposed Operational Changes**

Both intersections will be signalized. The construction of medians at each leg of the intersection, including the subdivision road, is proposed. In addition to the new southbound lane, a 1.5 m wide bicycle lane is also proposed to be included adjacent to the curb.

Once constructed, each of the new intersections will operate as a three-way signalized intersection accommodating full vehicular movements between Merivale Road and Central Park Drive.

#### Pedestrians

Pedestrian movements will be accommodated at the traffic control signals and crosswalks at each intersection.

#### **Bicycles**

There are no existing bicycle lanes on Merivale Road adjacent to the development. Merivale Road is a Primary Route in the RMOC Cycling Transportation Network Plan. The proposed widening of Merivale Road includes a 1.5 m wide southbound bicycle lane adjacent to the western curb, for the full length of the required widening.

#### Transit

Transit operations on Merivale Road will not be affected significantly by the widening or intersections. OC Transpo will advise on the final location of bus stops, adjacent to the new intersections on Merivale Road during the detail design stage.

#### FINANCIAL STATEMENT

Should Regional Council approve the proposed modifications to Merivale Road, the developer, will be responsible for 100% of all costs.

#### Construction Schedule

While it is possible that both intersections could be completed this year, it is most probable that only the northern intersection will be completed in 1997. The first phase of development centres around the northern intersection with Merivale Road. The southern intersection will be completed with the timing of completion of the interior development loop road - Central Park Drive.

#### Cost Estimates

The following cost estimates, prepared by Cumming Cockburn Consulting Engineers, are preliminary based on functional design details, and are provided solely for the information of the Transportation Committee and Regional Council.

<u>Item</u>	Cost Estimate
Construction	\$400,000
Traffic Signals	\$225,000
Engineering	\$ 60,000
Contingencies	\$ 60,000
TOTAL COST	\$745,000

### **CONSULTATION**

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

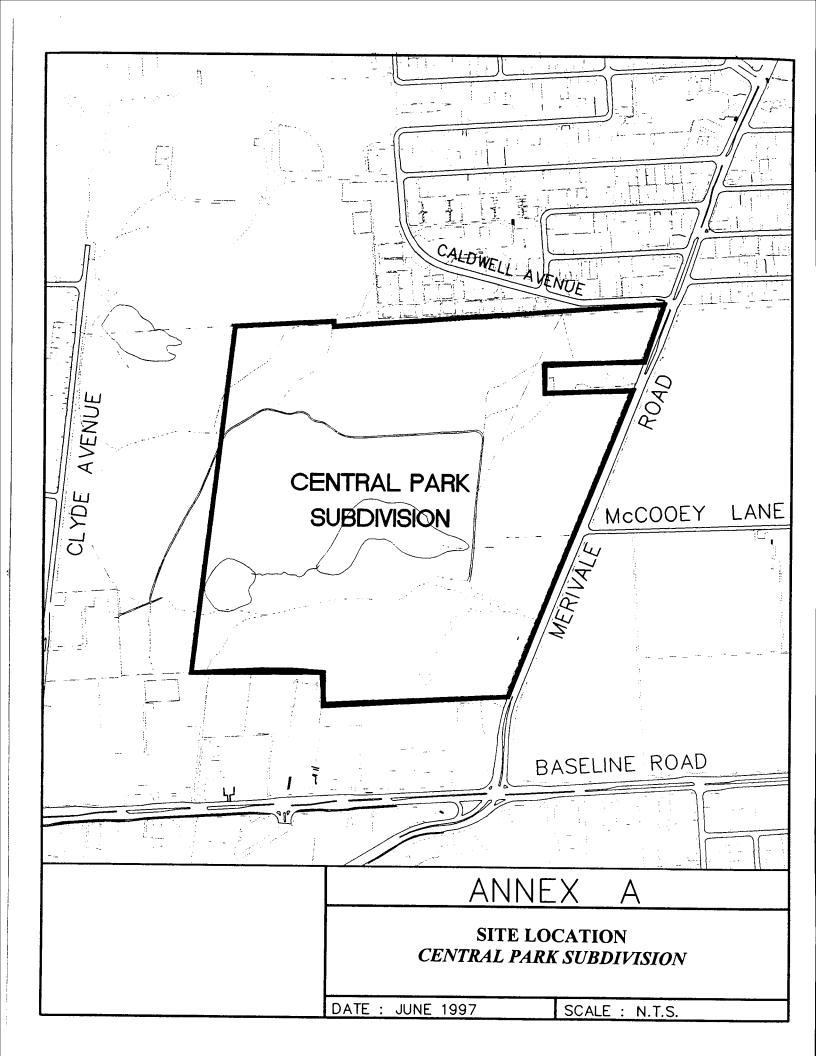
The following comment has been provided by the Regional Cycling Advisory Group (RCAG).

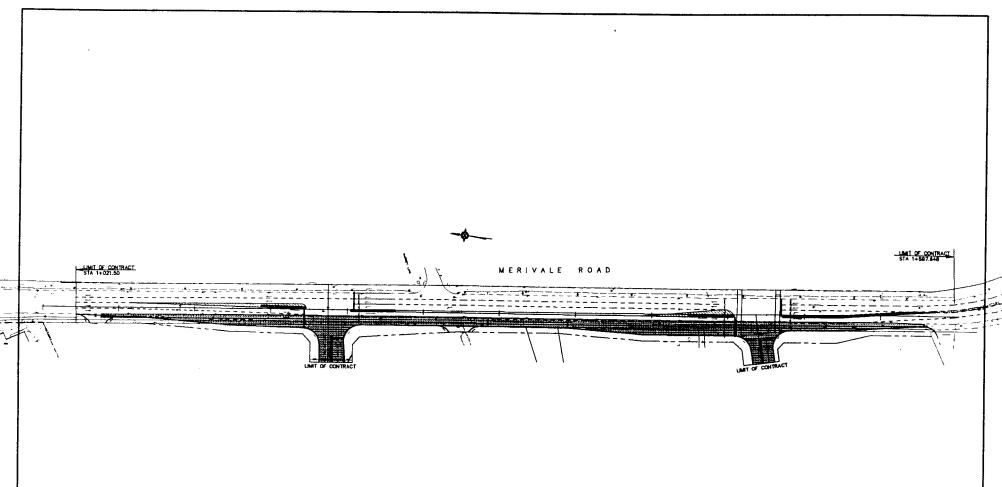
"The 5-metre wide through lane adjacent to the subdivision should have pavement markings indicating the 1.5 metre wide bicycle lane."

Approved by Doug Brousseau

WVH/sc

Attach. (4)





SHADED AREA REPRESENTS PROPOSED WDENING

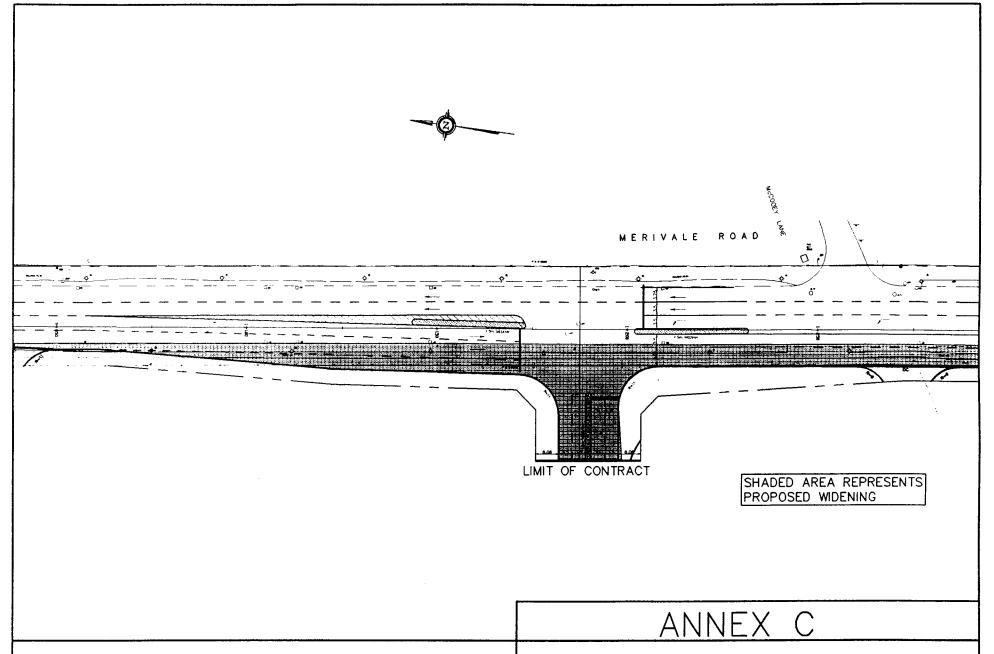


# ANNEX B

MERIVALE ROAD -- WIDENING AND CONSTRUCTION OF INTERSECTIONS CENTRAL PARK SUBDIVISION

DATE: JUNE 1997

SCALE: 1:2500





NORTHERN INTERSECTION CONSTRUCTION CENTRAL PARK SUBDIVISION

DATE: JUNE 1997

SCALE: 1:1000

LIMIT OF CONTRACT MERIVALE ROAD LIMIT OF CONTRACT SHADED AREA REPRESENTS PROPOSED WIDENING ANNEX D CCC Cumming Cockburn Limited
Consulting Engineers, Planners, and Environmental Scientists SOUTHERN INTERSECTION CONSTRUCTION CENTRAL PARK SUBDIVISION

DATE: JUNE 1997

SCALE: 1:1000