



Corporation of the  
**City of St. Thomas**

**Report No**

ES81-15

**File No.**

07-151

**Directed to:** Mayor Jackson and  
Members of City Council

**Meeting Date:** August 10, 2015  
**Date Authored:** July 27, 2015

**Department:** Environmental Services

**Attachments**

**Prepared By:** Dave White, C. Tech, CRS  
Supervisor, Roads & Transportation

1. Revision to 1-700.

**Subject:** Elgin – St. Thomas Cycling Master Plan  
Part of Phase 1 Implementation of Roadway Improvements

**Recommendation:**

THAT: Report ES81-15, Elgin – St. Thomas Cycling Master Plan St. Thomas - Phase 1 Implementation of Operational Roadway Improvements, be received for information; and

THAT: Council endorse the revisions to the Roads and Transportation Maintenance and Operating Procedure 1-700 contained in Report ES81-15 which authorizes the use of Ontario Traffic Manual (OTM) Book 18 Cycling Facilities for a consistent application and justification of cycling traffic devices, and

THAT: The road sections detailed in Report ES81-15 be completed as soon as practical.

**Origin:**

At the meeting of March 17, 2008 the recommendations in Report ES12-08 were carried by Council. At that time, the Roads and Transportation Maintenance and Operating Procedure 1-700 was approved by Council and did not include the 2013 publication of Book 18.

At the meeting of September 8, 2014 the recommendations from Report ES98-14 Elgin-St. Thomas Cycling Master Plan (Final) were carried by Council. The recommendations are shown below .

*THAT: Report ES98-14 relating to the Elgin St. Thomas Cycling Master Plan (Final) be received for information; and further*

*THAT: The Elgin St. Thomas Cycling Master Plan (Final) be received and used as a guidance document in the City's Capital budgeting of road works and any roadway operational improvements as outlined in the Plan; and further*

*THAT: The Phase 1 roadway improvements involving the creation of bicycle facilities at the locations, as outlined in Report ES98-14, be implemented.*

This report provides Council with some background and a project plan to implement the part of Phase 1, the roadway operational improvements that do not require the removal of on street parking.

**Analysis:**

Ontario Traffic Manual (OTM) Book 18 was recently published by the Province and has been used to provide the recommended standard guidance to cyclists and motorists in this report. The OTM Book 18 Introductory pages and the applicable signs and marking specifications are included in *Attachment #2*.

A full analysis of the City road network was completed during the Cycling Master Plan development by The MMM Group. The plan identified four routes as phase 1 roadway operational improvements. The first route, known as the Talbot Spur Route, utilizes the multi use trail along the Talbot spur tourist rail line between Parkside School and Kains Street. This location has recently been implemented.

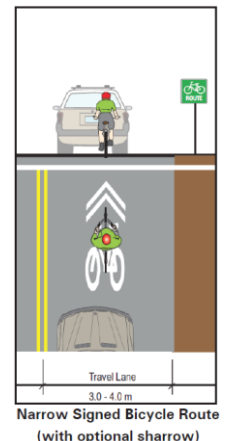
It should be noted that roads are intended for transportation movements which include bicycles and active transportation while for private parking needs to be considered a use that is secondary to the transportation function. Roadway operational improvements must be made to the existing road surface in the remaining road routes in order to safely incorporate bicycle facilities. The routes covered in this report are as follows and other routes will be considered in upcoming reports;

1. The Burwell Road Route (Ron McNeil Line to South Edgeware Road),
2. South Edgeware Road (Burwell Road to Balaclava Street) will be added to Bylaw at a later time,
3. The Northwest Route (including Balaclava Street, Malakoff Street, Alma Street & Kains Street),
4. Ross Street (Talbot Street to Jonas/Amelia Street) will be added to the Bylaw at a later time.

A further review of each road section was completed. Road sections were measured for existing road width, current parking restrictions and remaining clear road width. The Ontario Traffic Manual Book 18 identifies the suggested minimum lane widths for urban shared roadways and signed bicycle routes.

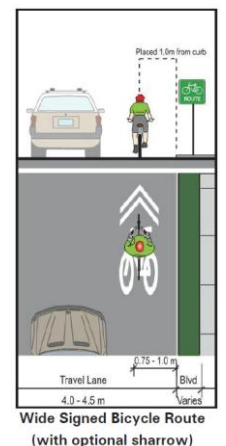
A facility (road) is considered to be narrow if the minimum, one direction lane width is 3.0 m and Wc-24 Single File road signs and tabs are used along with sharrow pavement markings. An example from the manual is shown to the right. Motorists and cyclists in these road sections may be required to operate together in single file.

### Shared Use Lane Single File



A facility (road) is considered to be wide if the minimum, one direction lane width is 4.0 m and Wc-19 Share the Road signs and for such application, tabs are used along with optional sharrow pavement markings. An example from the manual is shown to the right. Motorists and cyclists in these road sections are required to share the road and operate alongside each other.

### Shared Roadway with Wide Travel Lane



The minimum width for vehicle parking along a road as indicated in the Ontario Traffic Manual Book 18 is a 2.0m wide parking lane and a vehicular travel lane must be minimum 3.0m wide. Depending on the remaining clear width, appropriate signage to warn users of the narrow or wide condition are posted along with route signage. It must also be noted that, where a road does not have a parking restriction, the OTM Book 18 does allow both cycling and parking to co-exist and bicycle route signage can then be implemented through the posting of advisory share-the-road signage, combined with the painting of Sharrow Signs at intermittent intervals on the road pavement. This concept of allowing cycling advisory signage to co-exist with a possible parking function along a road side where, currently, no parking restriction exists has been advanced in the cycling route planning and recommended implementation measures as outlined in the next sections of this report.

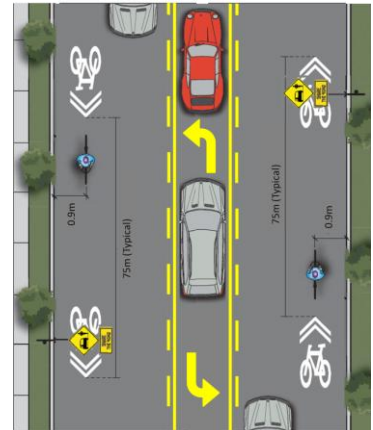
This will permit the cycling initiative to be implemented while avoiding the need to implement parking restrictions along road sides where currently such restrictions do not exist.

The following road sections, that do not require the removal of on street parking, are recommended to go forward at this time;

**1. The Burwell Road Route – Wide Signed Bike Route with Sharrows**

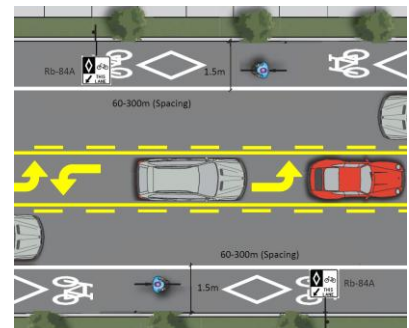
The **Burwell Road – Ron McNeil Line to South Edgeware Road** road section is 12.5 m in width with no parking anytime restrictions throughout.

The Elgin-St. Thomas Cycling Master Plan proposed dedicated bike lanes for the Burwell Road Route and the signed bike route with sharrows is a deviation from that plan. The road has an existing centre left turn lane and left turn lanes at intersections along the way. While bike lanes can be accommodated between the intersections where left turn lanes are not required, the required road width does not allow for the safe minimum widths required in OTM Book 18 and it is not recommended that the left turn lanes be eliminated. For future consideration it would be recommended that a boulevard bike path be considered on the east side of Burwell Road and the bike route with sharrows be removed from the road surface. As a result the phase 1 plan is to have the Signs and markings for the road section completed as depicted to the right.

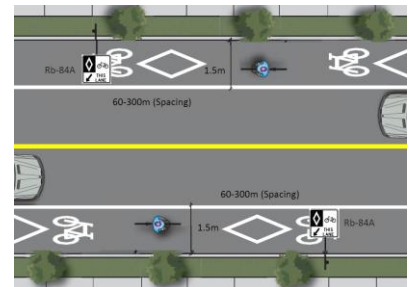


**2. South Edgeware Road – Burwell Road to BalACLava Street - Dedicated Bike Lanes**

a) The **South Edgeware Road – Burwell Road to First Avenue** road section is 11.2 m in width with no parking anytime restrictions throughout. The Elgin-St. Thomas Cycling Master Plan shows South Edgeware Road from Burwell Road to First Avenue as having existing bike lanes. This is correct but the signs and markings are not complete. This is to add the dedicated bike lanes to the roads and traffic by-law 45-89. The Signs and markings for the road section completed as depicted to the right.

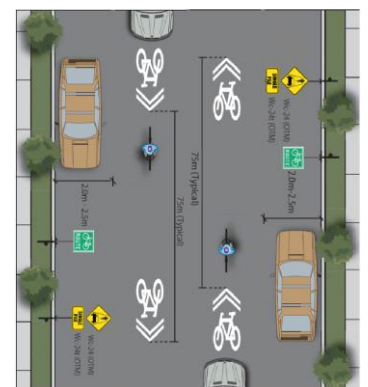


b) The **South Edgeware Road – First Avenue to BalACLava Street** road section is 10.4 m in width with no parking anytime restrictions throughout. The Signs and markings for the road section will be completed as depicted to the right.

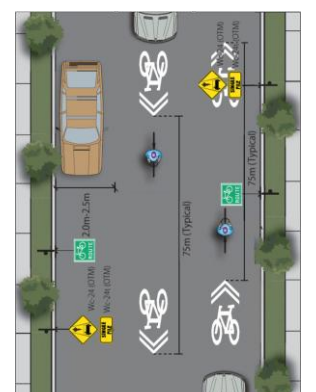


**3. The Northwest Route – Narrow Signed Bike Route with Sharrows**

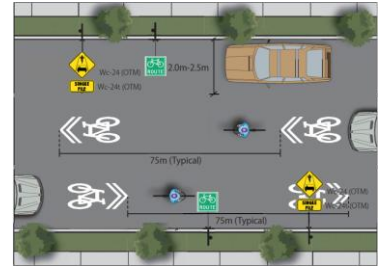
a) The **BalACLava Street - South Edgeware Road to Edward Street** road section is less than 10.0m in width with no restrictions with the exception of sight distance restrictions associated with intersections. Signs and markings for the road section will be completed as depicted to the right.



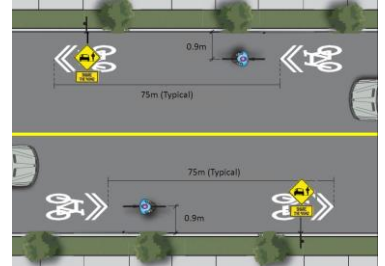
b) The **BalACLava Street - Edward Street to Malakoff Street** road section is slightly less than 10.0m in width with an existing no parking anytime restriction on the east side. Signs and markings for the road section will be completed as depicted to the right.



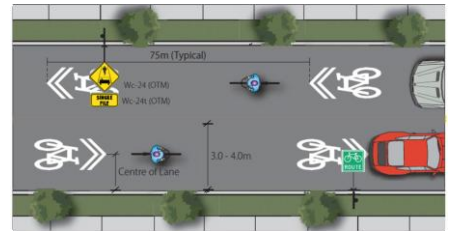
- c) The **Malakoff Street –Balaclava Street to Alma Street** road section is less than 8.0m in width with no parking anytime restriction on the south side. Signs and markings for the road section will be completed as depicted to the right.



- d) The **Alma Street – Malakoff Street to Kains Street** road section is greater than 8.0m measured at 10.5m in width with no parking restrictions on both sides. Signs and markings for the road section will be completed as depicted to the right.

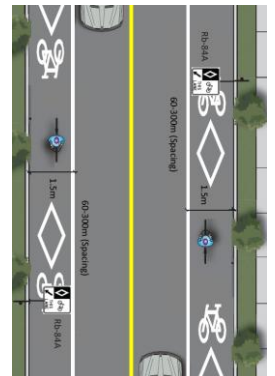


- e) The **Kains Street – Alma Street to Rail Trail** road section is greater than 8.0m measured at 8.4m in width with no parking restrictions on both sides. Signs and markings for the road section will be completed as depicted to the right.



#### 4) **Ross Street – Dedicated Bike Lanes**

The **Ross Street – Talbot Street to Jonas/Amelia Street** road section is 10 m in width with no parking anytime restrictions throughout. This is to add the dedicated bike lanes to the roads and traffic by-law 45-89.



#### **Financial Considerations:**

Most of the Bike route signs required for this project were funded through the Healthy Communities Partnership which receives funding from the Ministry of Health and Long Term Care. The cost of the additionally required signs, pavement markings, posts and all installations within this report are included the Environmental Services Operating Budget (Roads and Transportation). Additional treatments may be required in the transition between road sections.

Respectfully Submitted,

Dave White, C. Tech, CRS  
Supervisor of Roads and Transportation

Reviewed By: \_\_\_\_\_  
Treasury      Env. Services      Planning      City Clerk      HR      Other



# 1. Revision to 1-700 (adding Book 18)



## 1-700

The Ontario Traffic Manual (O.T.M.)  
Best Practices by Ontario Municipalities  
Effective Date: August 10, 2015 - Report ES81-15  
Roads and Transportation Services

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The Ontario Traffic Manual (OTM) provides policy and practical guidance on the full range of traffic control devices and their application, and is comprised of 22 separately bound books (most not published as of yet). The OTM is widely used by Municipal roads and transportation staff as a best practices reference tool for a consistent application & justification of devices.

Roads and Transportation Services make technical recommendations and justifications based on the OTM as follows;

OTM Book 2 – Sign Patterns & Fabrication - All traffic signs are ordered based on this standard.

OTM Book 5 – Regulatory Signs – The justification criteria within this book is used to make technical recommendations and field placement and maintenance of Regulatory signs.

OTM Book 6 – Warning Signs – The justification criteria within this book is used to determine appropriate sign installation, maintenance and placement of Warning signs.

OTM Book 7 – Temporary Conditions (Office & Field) – The typical figures within this book are used for road closures and contractor requirements for road closures.

OTM Book 11 – Markings and Delineation – The typical figures within this book are used for maintenance and placement pavement markings.

OTM Book 12 – Traffic Signals - The justification criteria within this book is used to make technical recommendations, maintenance and field placement of Traffic Signal Devices. In addition, standard signal timing and phasing is determined based on Book 12.

OTM Book 18 – Cycling Facilities - The justification criteria within this book is used to make technical recommendations, maintenance and field placement of Cycling Facilities.