1. INTRODUCTION AND BACKGROUND

1.1 Terms of Reference

The Riverside Drive Vista Improvement Project (VIP) Municipal Class Environmental Assessment (EA) responds to the City of Windsor Proposal 135-04 Terms of Reference circulated to consulting firms in October 2004 and included in Technical Appendix Volume 1 of this Environmental Study Report (ESR). The Project Team’s response to this proposal call, and decision to select a Consulting Team lead by IBI Group is documented in Staff Report #11040 SW/8513 as approved by City Council at their meeting on January 31, 2005 and is also included in Technical Appendix Volume 1.

1.2 Study Objective

According to the project Terms of Reference, the objective of the Riverside Drive Vista Improvement Project Environmental Assessment, as stated in the project Terms of Reference, is:

*To provide an improved transportation corridor that will serve the needs of the transportation system and area growth over a 20-year period.*

Unlike standard roadway Environmental Assessments (EAs) that focus primarily on the movement of people and goods, improving Riverside Drive must consider the combined transportation and aesthetic functions of the road as an important transportation route, a key civic space and in some sections, a residential street. To do this, the EA must balance the needs of the transportation system with those of the civic space and abutting residential properties.

This study objective was expanded during the public consultation process. Most participants wanted Riverside Drive improved by:

- reducing traffic speed
- reducing traffic volume
- making Riverside Drive safer for all users
- having Riverdale Drive look like a scenic drive

This is why the EA for Riverside Drive is referred to as the Riverside Drive Vista Improvement Project, to provide a plan for an improved Riverside Drive that will serve the needs of the City, residents and the surrounding area over the next 20 years. The Project also identifies opportunities to improve the visual quality and attraction of the numerous public spaces along Riverside Drive.

1.3 Study Area

The primary study area established for this project consists of the 16-km Riverside Drive alignment from Rosedale Avenue in the west near the Ambassador Bridge, east to the Tecumseh border as shown on Exhibit 1.1. This primary study area includes the existing road right-of-way plus the abutting property.

In addition to Riverside Drive and its immediate surroundings, a secondary study area was chosen for this
project, consisting of land to the south of Riverside Drive, focused on University Avenue and Wyandotte Street as the two east-west roadways that run parallel to and relatively near Riverside Drive through Windsor. Within this secondary study area, transportation conditions have been analysed on University Avenue from Huron Church Road to Aylmer Avenue, while Wyandotte Street has been analyzed from Huron Church Road to Lauzon Road.

1.4 Earlier Studies and Related Policy Foundation

The initiation and development of this Class EA is based on the following five (5) earlier studies and related policy documents that set the foundation for the role, condition and proposed improvements to Riverside Drive as part of the Windsor roadway network.

1.4.1 WINDSOR OFFICIAL PLAN

Riverside Drive is a true scenic drive along Windsor’s spectacular waterfront, making it a civic way for the enjoyment of all Windsor residents and visitors. Most major Great Lakes cities have waterfront drives, but Windsor is fortunate to have been able to preserve and reclaim major sections of waterfront along the route as public spaces. In response to these scenic and civic functions, the Windsor Official Plan applies three special designations to Riverside Drive:

EXHIBIT 1-1 – STUDY AREA

Primary Study Area

Secondary Study Area

Policy 7.2.6.5. – Scenic Drive – Riverside Drive is designated a Scenic Drive from Rosedale Avenue to the east City border on Official Plan Schedule F: Roads & Bikeways with the following operational and design characteristics:

i. Carry moderate volumes of predominantly passenger traffic adjacent to major scenic areas, areas of historical or environmental significance or along historic routes at low to moderate speeds;

ii. Appropriate bicycle facilities shall be considered;

iii. Scenic Drives usually consist of two to four undivided travel lanes with the rights of way between 20 to 24 metres, although these widths may vary depending on their location within the city;
iv. Streetscape design of the Scenic Drive shall be guided by the Civic Way and Theme Street policies; and

v. Commuter and high speed use of the residential portions of Scenic Drives shall be discouraged by the use of recognized traffic calming measures and the development of alternative parallel commuter routes.

Policy 8.11.2.12/13 – Civic Way – Schedule G of the Official Plan shows Riverside Drive designated as a Civic Way along the entire length, except in the downtown. A Civic Way is intended to have a civic image to promote and present an attractive and unifying image of Windsor, maintain a sense of welcome and arrival for travelers, create a memorable impression of the City and compliment infrastructure capital investments. As a Civic Way, Council will recognize the significance of the Drive by enhancing the public right-of-way and protect and enhance significant views and vista, public spaces and heritage resources along the route.

Policy 8.11.2.10/11 – Theme Street – Schedule G of the Official Plan also designates the section of Riverside Drive in the core, from Caron Avenue to Marentette Avenue, as a Theme Street to enhance the public right-of-way, protect and enhance views, vistas and heritage resources, encourage building and streetscape elements that provide shelter from inclement weather and encourage character-enhancing signage.

Other Official Plan transportation policies affecting Riverside Drive include:

Policy 7.2.4.3 (a) Cycling Network – Riverside Drive is designated as a Bikeway on Schedule F, with the exact location to be determined on a site specific basis.

Policy 7.2.2.6 (f) Traffic Calming – Implement traffic calming devices in existing neighbourhoods and require traffic calming in new neighbourhoods consistent with the Traffic Calming Policy.

Policy 7.2.3.1 (c) Pedestrian Network – Provide, within the public right-of-way, a walking environment that encourages people to walk to work or school, for travel, exercise, recreation and social interaction.

1.4.2 RIVERSIDE DRIVE EAST CLASS ENVIRONMENTAL ASSESSMENT SCREENING REPORT: STRABANE TO ST. ROSE

In 1995, the City commissioned preparation of an Environmental Report to review the function and identify potential improvements to Riverside Drive between St. Rose Avenue and Strabane Avenue. Following five points of public contact plus an extensive public outreach program with the public and involved agencies, a number of alternative solutions were evaluated to improve Riverside Drive. The preferred solution for the road was two lanes for motorists, two exclusive lanes for cycling, intersection improvements and diverting traffic to alternative routes. Although this preferred solution was supported by the project’s Liaison Committee, in June 1996 the study report was tabled for Council’s consideration but ultimately was deferred in 1997 by Council resolution CR98/97 until the Official Plan update and WALTS study were completed as described below.

1.4.3 WINDSOR AREA LONG RANGE TRANSPORTATION STUDY (WALTS)

In 1999, Windsor City Council approved the WALTS study as the new Transportation Master Plan for the City that also satisfied Phase 1 and 2 of the Municipal Class Environmental Assessment process. In the future
travel demand forecasting, the Plan identifies Riverside Drive as a Scenic Drive in terms of its planning capacity and operations. Owing to capacity deficiencies forecast on Riverside Drive, WALTS recommended that a traffic calming program be implement on the Drive between Walker Road and Jefferson Blvd.

This recommendation raised concerns from some Riverside Drive residents. Another recommendation for the full or partial removal of on-street parking from Wyandotte Street, running parallel to Riverside Drive, was also criticized by some merchants. As a result, at its September 13, 1999 meeting, City Council amended their earlier resolution CR943/99 approving the WALTS study by adding:

a) the removal of on-street parking on Wyandotte be not pursed until sufficient off-street parking is available; and

b) reference to specific projects to implement bicycle lanes including Riverside Drive East BE REMOVED from the study since they can be dealt with as part of the Bicycle Use Development Plan and subsequent functional studies; and

c) that no consideration be given to widen Riverside Drive East from Strabane to St. Rose for the purpose of a bike lane.

1.4.4 BICYCLE USE MASTER PLAN (BUMPP)

In May, 2001, City Council approved the Bicycle Use Master Plan (BUMP) as a planning document to guide bikeway planning, budgeting and implementation of a comprehensive cycling network for Windsor. BUMP recommends a Primary Cycling Network that includes exclusive on-road bike lanes along the entire length of Riverside Drive from the Ambassador Bridge area to the east City boundary. Bike lanes are also recommended on the parallel University Avenue route west of McDougall Street, and on Wyandotte Street east of Strabane.

According to a public attitude survey conducted as part of the BUMP study, about 23% of the City population cycle for utilitarian purposes, and as shown on Exhibit 1.2, 26% of Windsor area residents responded that adding more on-street bike lanes is the number one thing that could be done to improve cycling in Windsor. The same was said for more bike paths and trails, suggesting a strong latent demand for more cycling routes in Windsor.

EXHIBIT 1.2 - CHANGES THAT WOULD IMPROVE WINDSOR AREA CYCLING

<table>
<thead>
<tr>
<th></th>
<th>Total n=501</th>
<th>Non-Cyclist n=264</th>
<th>Recreational n=122</th>
<th>Utilitarian n=115</th>
</tr>
</thead>
<tbody>
<tr>
<td>More bike paths and trails (off-street)</td>
<td>28</td>
<td>24</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>More bike lanes (on-street)</td>
<td>26</td>
<td>24</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>Better education for cyclists</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Better education for motorists</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Enforce rules/regulations (give tickets/fines)</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Repair potholes and bad pavement</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Promote cycling</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>More bicycle parking</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Cyclists SHOULD be on sidewalks</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>DK/NOS</td>
<td>17</td>
<td>20</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

Decima asked: “What ONE thing do you feel the City or your employer or school could do to improve cycling in Windsor?”
The BUMP survey also shows that additional biking facilities are desirable to both cyclists and non-cyclists. Other responses such as better cycling education and enforcement were less significant.

The BUMP survey results also show that in Windsor, cyclists and drivers alike prefer major roads with bicycle lanes from a safety standpoint, as they form a more definite space between the bicycle rider and motorists. Exhibit 1.3 from the BUMP outlines the results of a survey question on the safety perceptions of cyclists on four different types of bike routes. It is interesting to note that 67% of respondents would feel safe cycling in bike lanes on major roads:

The proposal for bike lanes on Riverside Drive included in the BUMP recommendations once again raised concerns by some Drive residents, with City Council finally approving BUMP but with the following condition in their resolution CR554/2001:

*That the issue of bicycle facilities along Riverside Drive, between Strabane Avenue and Lauzon Road, be referred to a Traffic Calming Study, and further that the Traffic Calming Study and ESR (Environmental Study Report) be considered during the 2002 Budget deliberations and that CR943/99 adopted ion August 30, 1999 remain in place until such time as the Traffic Calming Study and the ESR are considered.*

The Riverside Drive Vista Improvement Project is the ESR and traffic calming study requested by City Council in CR554/2001.

In summary, Windsor City Council has deferred the question of how to improve Riverside Drive, and specifically the section between St. Rose and Strabane, three times in the past ten years in response to the opposition of some Riverside Drive residents to proposed exclusive bike lanes:

**EXHIBIT 1.3: “WOULD YOU FEEL SAFE CYCLING ON...”**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike tracks or paths</td>
<td>Defer Riverside Drive to Official Plan and WALTS</td>
<td>Defer specific bike lane implementation to BUMP</td>
<td>Defer bike lanes on Riverside Drive between Strabane and St. Rose to Traffic Calming Study and E/A</td>
</tr>
</tbody>
</table>
1.4.5 CENTRAL RIVERFRONT IMPLEMENTATION PLAN (CRIP)

The CRIP plan includes a number of design guidelines for Riverside Drive from the Ambassador Bridge east to Walker Road, including:

- Riverside Drive should not be widened for additional through lanes of auto traffic.
- The street should be developed as a scenic tree-lined drive encouraging reduced traffic speeds and volumes.
- Specially marked and textured pedestrian crossings should be provided at key intersections.

The CRIP plan also recommends construction of a pedestrian promenade along the north side of Riverside Drive from Huron Church Road east to Walker Road as a wide pedestrian walk for the promotion of pedestrian use, street trees, prominent views to the river and slower traffic speeds on the Drive that will help define the Drive as a pedestrian promenade and scenic drive.

Not only was the CRIP plan adopted by City Council in 2000, it was also subsequently incorporated into the Windsor Official Plan as a special policy area by being included in Volume II: Secondary Plans and Special Policy Areas. As a result, CRIP recommendations, guidelines and priorities, for example dealing with a planned Pedestrian Promenade along the north side of Riverside Drive in the core have the status of civic policy.

1.5 Class Environmental Assessment Planning Process

1.5.1 RATIONALE FOR THE ENVIRONMENTAL ASSESSMENT

As this Environmental Study Report (ESR) documents, transportation-related problems and opportunities on Riverside Drive involve the combined conditions and impacts associated with traffic, the right-of-way surface, users safety and the streetscape. According to Appendix 1 of the Municipal Class EA (June 2000), some of the alternative solutions available to address these conditions would be Schedule 1 pre-approved projects not requiring an EA. These include:

- Construction or reconstruction of sidewalks or bicycle paths within the existing road right-of-way;
- Resurfacing with no change in horizontal alignment;
- Streetscaping not part of another project costing under $1.5 M;
- Construction of localized operational improvements at specific locations such as addition of a left turn lane costing less than $1.5 M; and
- Installation of traffic control devises such as stop signs or signals costing less than $6 M;

However, if these cost limits noted above are exceeded, the Class EA requires the completion of at least a Schedule B EA. Furthermore, there are two types of projects available for Riverside Drive that would clearly require a Schedule C level of EA, namely:
• Reconstruction where a reconstructed road will not be for the same purpose, use, capacity or at the same location as the facility being reconstructed. It could be argued the addition of bike lanes as one type of alternative improvement on Riverside Drive would alter the purpose and use of the street; and

• The installation of traffic calming measures on Riverside Drive costing more than $1.5 M.

As a result, the City of Windsor as the EA proponent confirmed early in the Terms of Reference preparation that the Riverside Drive VIP would be conducted as a Schedule C EA, but that this would be re-confirmed in Phase 2 of the process. The proponent also selected to conduct a Class EA rather than an Individual EA because the scope of the undertaking to improve Riverside Drive was believed to be suitably focused, and could be adequately addressed within the Municipal Class EA process.

The only difference between the two types of EAs is that the Individual EA requires the preparation of a Terms of Reference for approval by the Minister of the Environment. The Class EA complies with Section 13 (3)(a) of the EA Act, provided that the approval process is followed. The Class EA process also includes the possibility of Minister review and approval through the Part II Order provisions of the EA Act.

The EA proponent, the City of Windsor, also decided to establish the full 16 kilometre length of Riverside Drive from Rosedale Avenue to the east City boundary as the primary study area so that a more comprehensive and integrated approach to street improvements could be planned, rather than piece-mealing a number of separate EA projects along the Drive.

1.5.2 CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) TRIGGER

Under subsection 5(1) of the Canadian Environmental Assessment Act (CEAA), a federal environmental assessment may be required when, in respect of a project, a federal authority:

• Is the proponent;

• Makes or authorizes payment or any other form of financial assistance to the proponent;

• Sells, leases or otherwise disposes of lands; or

• Issues a permit, or license or other form of approval pursuant to a statutory or regulatory provision referred to in the Law List Regulations.

These planned actions of federal authorities are commonly called “triggers that require.”

In order for the CEAA to apply, there must be a project, there must be a federal authority and there must be a trigger under section 5(1) of the Act. Exhibit 1.4 provides information on potential CEAA triggers that may be relevant to the Riverside Drive VIP. It is not inclusive, and proponents are encouraged to refer to the Canadian Environmental Assessment Act and associated regulations to identify all possible triggers for their project.
EXHIBIT 1.4 SELECTED POTENTIAL CEEA TRIGGERS FOR PROJECTS

<table>
<thead>
<tr>
<th>Potential Project Trigger</th>
<th>Provisions of Act</th>
<th>Responsible Authority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is being funded with federal money</td>
<td>CEAA s.s. 5(1)b</td>
<td>The funding department</td>
<td>Act is triggered where federal money is being provided (e.g., Transport Canada Strategic Highway Infrastructure Program)</td>
</tr>
<tr>
<td>Is likely to affect a facility regulated by the NEB (e.g. oil or gas pipeline)</td>
<td>National Energy Board Act, s. 52, 58 and 74</td>
<td>National Energy Board</td>
<td>Act is triggered by application by a regulated-company to the NEB under sections of the NEB Act that are Law List triggers</td>
</tr>
<tr>
<td>Is likely to affect the operation of a railway company or property</td>
<td>Canadian Transportation Act</td>
<td>Transport Canada, Canadian Transportation Agency</td>
<td>generally will apply to projects where a rail line crossing is contemplated</td>
</tr>
<tr>
<td>Is likely to harmfully affect fish or fish habitat</td>
<td>Fisheries Act, s.s. 22(1), 22(2), 22(3), 32, 35(2) and 37(2)</td>
<td>Fisheries and Oceans Canada</td>
<td>- applies to any work in or near water provision of sufficient water flow passage of fish around barriers screening of water intakes destruction of fish by means other than fishing (e.g., blasting) authorization is required to harmfully alter, disrupt or destroy fish habitat</td>
</tr>
<tr>
<td>Is likely to substantially interfere with the public right to navigation</td>
<td>Navigable Waters Protection Act, s.s. 5(1)(a), 6(4), 16 and 20</td>
<td>Transport Canada</td>
<td>- applies to any work in, on, over, under, through or across navigable water - approval is required for a new bridge, boom, dam or causeway (incl. culverts) - other works that cause changes to flows, water levels or navigation clearances may require approval</td>
</tr>
</tbody>
</table>

1.5.3 TIMEFRAME OF THE UNDERTAKING

The Riverside Drive VIP Environmental Assessment was officially started in February, 2005 following City Council’s approval to retain a consulting team led by IBI Group to conduct the EA. Timing of the undertaking (the collection of recommended improvement projects) to improve Riverside Drive is envisioned to be ten years. This is based on the importance that existing City policies in the Official Plan give to Riverside Drive acting as a Scenic Drive with components of a Civic Way and Theme Street in the core (see preceding Section 1.4), compared to the physical conditions and traffic characteristics given to major sections of the Drive. Section 8.2 of this ESR includes a

1 This table is not inclusive, and proponents are encouraged to refer to the Canadian Environmental Assessment Act and associated regulations to identify all possible triggers for their project. Source: Canadian Environmental Assessment Agency, January 2005.
proposed staging schedule to implement recommended improvements to the Drive that can begin soon after EA approval based on capital funding, detailed engineering and streetscape design and Council direction.

1.5.4 PROJECT TEAM

At project commencement, the Riverside VIP EA was to be led by a Steering Committee of involved senior City officials, and a Technical Committee of representatives from involved City departments. Early in the project, the need for Council representation on the Steering Committee was identified, and by June of 2005 a Steering Committee of Councillors from each of the five City wards was added to the project, with the previous senior official members acting as advisors only.

Meetings with each of the Steering and Technical Committees were held at strategic points in the project to present technical findings, review recommendations and received further project directions. The minutes of these Steering and Technical Committee meetings are provided in Technical Appendix 1 under separate cover to this EA. Membership on the project Committees and Consulting Team as of August 2006 is listed as follows:

STEERING COMMITTEE:

Councillor J. Zuk, Ward 1
Councillor C. Postma, Ward 2
Councillor F. Valentinis, Ward 3
Councillor K. Lewenza, Ward 4
Councillor J. Gignac, Ward 5, Chair
Senior Staff Support: Mike Palanacki, Acting GM of Public Works
Bob Hayes, City Planner
Fahd Mikhael, Transportation Planning Engineer
Claudia Corro DeTomasis, Transportation Planning Engineer

TECHNICAL COMMITTEE:

Fahd Mikhael, Transportation Planning Engineer, Chair
Claudia Corro DeTomasis, Transportation Planning Engineer, Chair, February 2005 – February 2006
Wes Hicks, Manager of Transportation Planning
Peter Bziuk, Executive Assistant
Mark Winterton, Manager of Road Maintenance
Steve Kapusta, Policy Analyst
Anna Godo, Engineer III
Kevin Alexander, Community Development Planner
Mike Clement, Manager of Parks Development
Michael Cooke, Senior Planner
Frank Scarfone, Property Agent

CONSULTING TEAM LEADERS:

Don Drackley, Project Manager, IBI Group
Brian Hollingworth, Traffic Engineering, IBI Group
Norma Moores, Bicycle System Planning, Stantec Consulting
Don Joudrey, Roadway Design, Stantec
Neno Kovacevic, Streetscape, IBI Group
Sue Cumming, 3rd Party Facilitator, Cumming + Company
John Matsui, Communications, Makin’ Headlines

1.5.5 CLASS ENVIRONMENTAL ASSESSMENT PLANNING PROCESS

Being carried out as a Schedule C Municipal Class EA, this project covers the following four (4) phases of the Municipal Class EA process:

- Phase 1 – Identify Problem or Opportunity (see Section 3)
- Phase 2 – Alternative Solutions (see Section 5)
- Phase 3 – Alternative Designs Concepts for Preferred Solution (see Section 7)
- Phase 4 – Environmental Study Report

1.5.6 CONTENTS OF THE ENVIRONMENTAL ASSESSMENT REPORT

In response to these four phases of the Municipal Class EA process, this ESR includes the following contents:

2. Public Consultation Process
3. Description of the Problem or Opportunity
4. Inventory of Other Existing Conditions
5. Alternative Solutions for Riverside Drive
6. Evaluation of Alternative Solutions
7. Alternative Design Concepts
8. Program Implementation