

# Executive Summary

## Evaluation Study

### Phase I: Traffic and Parking Viability Assessment

### Proposed Large Venue Entertainment Centre

Presented to:

**Don Gedge**

Director, Large Venue

Entertainment Centre Project

**City of Kingston**

216 Ontario Street

Kingston, Ontario

K7L 2Z3

**CastleGlenn Consultants Inc.**

*Engineers, Project Managers & Planners*



**CASTLEGLENN CONSULTANTS LTD.**

**THIRD PARTY DISCLAIMER**

**This study has been prepared by CastleGlenn Consultants Inc. (“CGI”) for the benefit of the Client to whom it is addressed. The information and data contained herein represents CGI’s best professional judgment in light of the knowledge and information available to CGI at the time of preparation. Except as required by law, this study and the information and data contained herein are to be treated as confidential and may be used and relied upon only by the Client, its officers and employees. CGI denies any liability whatsoever to other parties who may obtain access to this study for any injury, loss or damage suffered by such parties arising from their use of, or reliance upon, this study or any of its contents without the express written consent of CGI and the Client.**

**APPLICABLE CONCEPT PLAN**

This viability assessment has been based on CastleGlenn’s best understanding of the details associated with the proposed Kingston Large Venue Entertainment Centre. As the concept plan continues to be refined and developed, minor variances to the LVEC concept plan on which this study is based may occur. Phase I of the Traffic and Parking Viability Assessment was based on a concept plan issued in January 2005, which at the time of writing was the most current version. The changes to the concept plan may involve reconfiguration of adjacent parking facilities. As well, additional sources of parking have been identified since the time of writing.

Despite these changes, it is anticipated that the modifications to the overall parking supply assumed within the viability assessment will be minor and that the recommendations and conclusions contained within will remain valid. Phase II of the Traffic and Parking study will incorporate a brief update on this matter once the new concept site plan has been finalized.

**Prepared by:**

May, 2005

Arthur E. Gordon, B.A. P. Eng.  
Principal  
CastleGlenn Consultants Inc.  
Ottawa, Ontario

Vanessa Fragua B.A.Sc.  
Traffic & Transportation Analyst  
CastleGlenn Consultants Inc.  
Ottawa, Ontario

## **EXECUTIVE SUMMARY**

### ***Introduction***

CastleGlenn Consultants Inc. was retained by the City of Kingston to examine the traffic and parking impacts of a proposed 5,000 seat Large Venue Entertainment Centre (LVEC) on the Inner Harbour. This study is the first of two phases and provides an assessment of issues related to Official Plan and Zoning Amendment application requirements.

The proposed LVEC site is bordered by the OHIP office building to the south, the Inner Harbour to the east, park land to the north and the potential Wellington Street extension to the west. For the purposes of this Phase I report, the LVEC was assumed to be in place by the end of 2006. However, should the LVEC not open until 2007, the impact to the conclusions and recommendations of this report are anticipated to be negligible.

The purpose of this assessment was to enable the City of Kingston and the LVEC Steering Committee to assess the general viability of the proposed LVEC site in terms of transportation (traffic and parking) concerns. This phase of the assessment focuses on the pre-event and post-event time periods and is intended to address such issues as:

- Can the site accommodate the vehicle traffic associated with the proposed LVEC site?
- What is the net traffic impact associated with the proposed seating capacity?
- What, if any, roadway modifications are necessary to assure efficient and effective access to the proposed LVEC site?
- What access provisions are required, if any, to handle the planned seating capacity of the proposed LVEC site?
- Are parking provisions sufficient to accommodate the planned seating capacity of the proposed LVEC site?

### ***Information Collection***

This study is supported by an exhaustive information collection program that included: site visits to the proposed LVEC site, similar sports and entertainment facilities and the Memorial Centre; an examination of historical traffic count and parking information obtained from the City of Kingston; traffic surveys during pre-game and post-game time periods; parking utilization counts at several municipal and non-municipal parking lots; and a review of current pedestrian circulation activity.

## ***Analysis and Evaluation Activities***

This study examined three different scenarios: existing weekday afternoon peak hour conditions; existing background conditions during the pre-game and post-game time periods, both with and without the impact of the proposed LVEC. The analysis activities included intersection capacity analysis, estimates of delay and a detailed evaluation of traffic and parking characteristics.

### ***Existing Conditions***

#### ***Traffic Volumes***

The existing traffic volumes that occur during the pre-event and post-event time period were found to be less than 150 vehicles-per-hour-per-direction in the immediate vicinity of the LVEC, well below the assumed theoretical capacity of 600 vehicles-per-hour-per-direction of the existing street network.

#### ***Pedestrian Volumes***

During the time period that the LVEC would be in operation, existing pedestrian traffic volumes were found to be negligible.

#### ***Memorial Centre Attendance***

The Memorial Centre has 3,080 seats, but has capacity for 3,300 when standing room is included. The time required to clear the parking facility and the adjacent roadways within the vicinity of the Memorial Centre was determined to be approximately 30 minutes.

#### ***Intersection Capacity***

All intersections examined within the vicinity of the LVEC during the afternoon peak period of travel demand were determined to provide satisfactory levels of service.

### ***Parking Supply and Demand***

- The peak period (post-event) traffic volumes generated by the proposed seating capacity (5,000 seats) for a sold out hockey event is anticipated to be approximately 2,020 vehicles.
- The available parking supply inclusive of on-site parking, downtown and spill-over area parking within a 10 minute walking distance of the LVEC site is 2,520 stalls.
- A potential enhanced transit service provides an additional 2,825 parking stalls.
- The available parking supply can meet the parking demand requirements of the LVEC.

### ***Comparison of LVEC to Similar Sports and Entertainment Facilities***

There is a greater supply of available parking within both the immediate vicinity and a 10 minute walk of the LVEC site than a majority of similar sports and entertainment facilities considered within this study. With the advent of enhanced transit service it was concluded that the supply of parking offered by the City of Kingston is more generous than that offered by the similar entertainment facilities considered within this study.

### ***What Will Happen When the LVEC Opens?***

The findings from Phase I indicate that:

- Levels of service at the intersections adjacent to the LVEC will operate under constrained traffic conditions;
- The estimated time for a patron to exit the LVEC facility after a sell-out event, including walk time to the vehicle, leaving the parking lot and clearing the road network in the immediate vicinity of the LVEC, is anticipated to take approximately 30 minutes or less; and
- Delays are also expected upon exiting structured parking facilities such as the Chown and Hanson parking facilities.

### ***Traffic Operations within the Vicinity of the proposed LVEC Site***

It is recognized that the proposed LVEC site is constrained to two primary accesses, Wellington Street to the south and a proposed private road for transit and emergency vehicles to the north.

This study recommends several potential measures to improve traffic operations during an LVEC event. Although subject to further detail and refinement in Phase II of the study, the measures include access control measures, temporary lane designations using safety cones, traffic control personnel and parking prohibitions.

### ***Conclusions***

It is concluded that the proposed Large Venue Entertainment Centre (LVEC) is viable from a traffic operations and parking perspective in that:

- Delays internal to parking facilities and roadways adjacent to the site are anticipated to be 30 minutes or less;
- The existing supply of parking within a 10 minute walk and at potential shuttle/park-and-ride locations can meet the anticipated demand for parking;
- A comparison to other similar facilities indicates that the seats-per-parking-stall ratio offered by the LVEC site is more favorable than many of the other facilities examined;

- Although traffic operations within the vicinity of the LVEC site will operate at congested conditions during the pre-event and post-event time periods during high attendance events, measures have been identified that would improve these conditions; and
- The feasibility exists to develop a “*door-to-event*” enhanced transit service that would augment *regular* transit service to provide preferential access to the site via a northern entrance.

### ***Recommendations***

It is recommended that the City of Kingston:

- Recognize that the proposed LVEC is considered “viable” from a traffic operations and parking perspective;
- Receive Phase I of this viability assessment which highlights the existing conditions in the vicinity of the proposed LVEC site and provides insight into the likely traffic operations and parking characteristics associated with the LVEC facility;
- Recognize that Phase II will provide additional detail associated with the LVEC facility and will include:
  - A traffic operations strategy and a traffic operations monitoring program;
  - A parking operations and circulation strategy and parking monitoring program;
  - A transit integration strategy and a transit monitoring program;
  - A pedestrian strategy and bicycle operational strategy;
  - A loading service strategy; and
  - A transportation security / EMS Strategy.