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February 11, 2010 Our Ref.: 08753/220

Mr. V. Gil
Maple Leaf Sports & Entertainment Ltd.
50 Bay Street, Suite 500
Toronto, Ontario
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Dear: Mr. Gil:

Re: Traffic Management Plan – Proposed Access Control Equipment at ACC Vehicle Service Ramp located at Lake Shore Boulevard and Bay Street, City of Toronto

As requested by Maple Leaf Sports & Entertainment Ltd. (MLSE), we have prepared a Traffic Management Plan that builds upon our Traffic Management Opinion dated October 30, 2009 which outlined our professional opinion on the potential transportation impacts as a result of the implementation of a proposed access control equipment at the Air Canada Centre (ACC) vehicle service ramp (Metro Ramp) near the northwest corner of Lake Shore Boulevard West and Bay Street. This Traffic Management Plan discusses the traffic impacts as a result of the activation of the access control equipment under two circumstances: 1) in the event of a security threat to the ACC building complex at any time of the day/week; and 2) during late night hours when ACC service vehicular traffic is not anticipated (typically around 12:00 a.m. to 5:00 a.m.).

1.0 BACKGROUND

LEA Consulting Ltd. (LEA) was retained by MLSE to review the access control equipment that is proposed to be installed at the top of the service vehicular ramp (Metro Ramp) to allow ACC the ability to limit vehicular access to the underground loading area when necessary. As we understand it, the access control equipment consists of two retractable bollards, a gate control arm and intercom speaker which will all act as one integral unit. For example, when the retractable bollards are not activated the gate control arm will remain in the "upright" position. In the event the retractable bollards are activated, the gate control arm will be in the "down/closed" position.

The underground service area currently serves the ACC, but it is ultimately intended to serve Block 4 (25 York Street – Telus Building), Block 5 (15 York Street – Maple Leaf Square) and the revitalized Union Station in the future, as seen in **Figure 1**. Our Traffic Management Plan assumes that the ACC building complex, Block 4 and Block 5 will use the service vehicular ramp and tunnel at this time. As the service delivery needs of Union Station become available in the future, the Traffic Management Plan will need to be updated to address the concerns related to the security operations and management of the service vehicular ramp and tunnel and the impact of the access control equipment to Union Station as well as the other users.

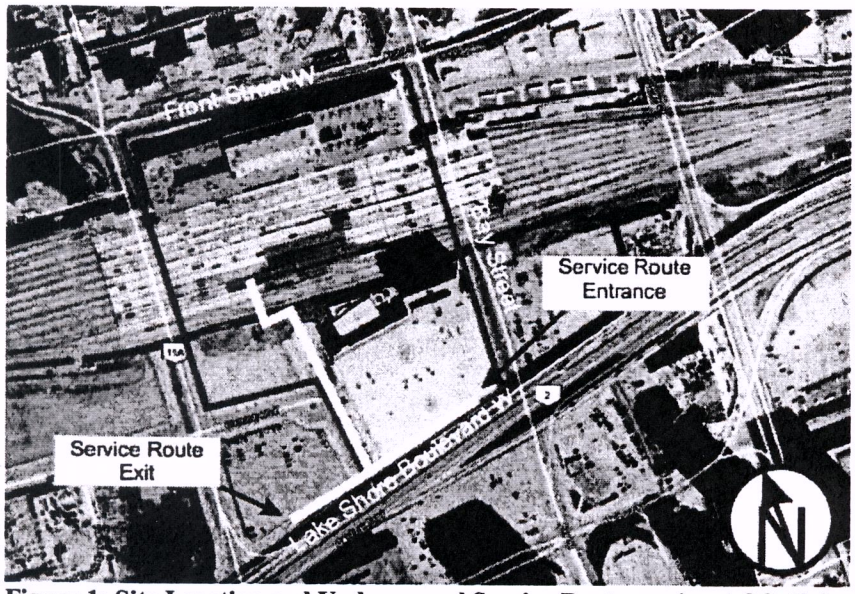

Figure 1: Site Location and Underground Service Route serving ACC, Union Station, 15 York Street and 25 York Street

2.0 NORMAL HOURS OF OPERATION FOR SERVICE DELIVERIES TO UNDERGROUND FACILITY

Although the access control equipment will not be activated during normal business hours, this section outlines the protocols and operations of the underground service tunnel during normal hours of operations.

As the ACC accommodates a diverse range of events from music concerts to Toronto Maple Leafs, Toronto Raptors Basketball and Toronto Rock Lacrosse games, the hours of operation for the service tunnel varies depending on the scheduled events. In general, however, most scheduled ACC deliveries coincide with typical office business hours. It is anticipated that with the joint use of the service tunnel by ACC, Block 4 and 5, the hours of operations for the service tunnel will generally remain the same with some variation depending on the service demands of the ACC, Block 4 and 5.

ACC service vehicles and trucks have access to the underground service tunnel via the service vehicle ramp (Metro Ramp) located off Lake Shore Boulevard on the west side of Bay Street. The scheduled service delivery vehicles and trucks are then directed to the appropriate loading dock by ACC security personnel who are located at the foot of the service ramp. Once deliveries are made, vehicles are directed towards the service tunnel exit located further west along Lake Shore Boulevard.

With respect to scheduling, all trucks entering the underground service tunnel will be scheduled using a web based scheduling software in order to ensure smooth operations of the loading area and to minimize any disruption to traffic and pedestrians along Lake Shore Boulevard and Bay Street. There may be instances when queues along Lake Shore Boulevard may be created as a result of scheduled and unscheduled service deliveries attempting to enter the service vehicle ramp. In these cases, the current practice is for the Dock Logistic Supervisor, ACC control room and security booth personnel to communicate amongst each other and to quickly direct each service vehicle/truck to their respective loading areas in order to alleviate queues on Lake Shore Boulevard.

Vehicles or trucks that unknowingly enter the service ramp and underground loading area during normal business hours are directed by security personnel to exit the underground facility using the outbound ramp. For the safety of pedestrians, traffic along Lake Shore Boulevard and ACC security personnel, vehicles that unknowingly enter the underground service tunnel are not asked to back-up onto Lake Shore Boulevard. To deter vehicles from unknowingly entering into the underground service facility altogether, a permanent sign is posted at the vehicle ramp that indicates the driveway is for Shipping & Receiving and there is no access to public parking.

With the implementation of the access control equipment, the retractable bollards will not be activated and the gate control arm will remain in the "upright" position during normal business hours. This will ensure that service delivery vehicles and trucks have unobstructed access to the underground service tunnel. To this end, the implementation of the access control equipment is not expected to change or interrupt the current operations of the service vehicle ramp during regular business hours.

3.0 ACTIVATION OF ACCESS CONTROL EQUIPMENT

As mentioned earlier, the access control equipment (retractable bollards and gate control arm acting as one integral unit) will be activated and restrict vehicular access under two circumstances: 1) in the event of a security threat (expected and unexpected) to the building complex at any time of the day/week; and 2) during late night hours when service vehicular traffic is not anticipated (typically during 12:00 a.m. to 5:00 a.m.). This section describes the operations and procedures that will be followed by the ACC, Block 4 and 5 with the implementation of the access control equipment.

3.1 Scenario 1: Activation of Bollards during After Hours (typically around 12:00 a.m. to 5:00 a.m.)

It is proposed that the access control equipment will be activated when scheduled deliveries to the facility via the service tunnel/vehicle ramp are at their minimum. This entails that the bollards will be activated and the gate control arm will be in the "down/closed" position. The purpose of activating the access control equipment is to create a barrier and provide an opportunity to identify vehicles before they enter the underground complex outside of typical service tunnel hours of operation. While it is acknowledged that during "after hours" bollard activation will vary depending on delivery scheduling on any given day, the bollards would typically be activated during the after hour period between 12:00 a.m. to 5:00 a.m.

In the case where scheduled or authorized service trucks arrive at the service vehicle ramp, outside of typical hours of operation, security personnel or a Building Control Centre officer will be available at the foot of the service ramp, 24 hours a day and 7 days a week to respond to the vehicle and allow it to enter the underground service tunnel. Primary control of the access control equipment will be in the security booth located in the ACC loading dock and secondary and backup control will go to the ACC security control room. It is proposed that security personnel from the ACC, Block 4 and Block 5 will be present during after hours in order to monitor their respective loading docks as well as to monitor access to the underground facility.

With respect to unexpected service vehicles that request access permission, security personnel or a Building Control Centre officer will determine whether the vehicle will be allowed to enter the underground complex or if there is a perceived security threat. In the case where the unexpected vehicle does not pose a security threat, the vehicle will be directed towards the service tunnel exit. For the safety of pedestrians and oncoming traffic along Lake Shore Boulevard as well as ACC security personnel,

unexpected vehicles will be asked to exit using the outbound ramp rather than backing-up onto Lake Shore Boulevard.

In the case where there is a perceived threat, ACC security staff will make their way to the top of the ramp and conduct a quick security screen before allowing the vehicle to enter the service tunnel and exit using the outbound ramp. Should the vehicle be rejected after security personnel or the Building Control Centre officer completes the security screening at the top of the ramp, they will act as a flagperson to facilitate the vehicle to safely reverse onto Lake Shore Boulevard and depart from the site. As a safety measure, the flagperson(s) will use pylons and wear reflective safety clothing (eg. safety vest) in order to notify vehicles and pedestrians on Lake Shore Boulevard of the back-up manoeuvre.

It is our view that the activation of the proposed access control equipment typically between the times of 12:00 a.m. and 5:00 a.m. will not create any adverse traffic conditions, congestion, or delays for the following reasons:

i) it is expected that most arrivals will pass the "security check" and be directed to proceed in a forward motion to the service tunnel exit;
ii) by using safety equipment such as pylons and signs combined with security personnel and flagpersons, any required back-up manoeuvres can be done safely; and
iii) if a delivery vehicle is rejected after the security screening process and security personnel directs the vehicle to back-out of the service ramp, traffic and pedestrian volumes are not expected to be heavy in comparison to regular business hours.

3.2 *Scenario 2: Activation of Bollards during a Security Threat (Expected and Unexpected)*

In the event that the ACC is notified by a government agency, police or on-site security forces that there is a security threat (expected or unexpected) to the building complex (ACC, Block 4 and 5), the access control equipment may be activated. In this circumstance, the activation of the access control equipment may occur during normal ACC operating hours and daytime traffic periods (including peak or off-peak periods) and as such may create traffic-related concerns, including creating additional traffic delays and queues along Lake Shore Boulevard and Bay Street as a result of service trucks stopped at the service ramp entrance and/or queuing on Lake Shore Boulevard. The safety of pedestrians crossing the west-leg of the Lake Shore Boulevard/Bay Street intersection would also be an aspect that may be impacted in this scenario.

It is important to acknowledge, however that while there may be traffic implications, the priority for the ACC and its neighbours sharing the underground truck service area as well as outside police forces during a security threat, is to ensure the safety of the building complex patrons and to avoid a potentially dangerous situation. To this end, it is critical that during a security threat, only authorized vehicles be allowed access to the underground service tunnel.

Under this circumstance, security personnel and/or other building officers will be stationed at the top of the ramp in order to conduct a security screen before allowing the authorized/scheduled vehicles to enter the service tunnel. In order to minimize queues along Lake Shore Boulevard and Bay Street, security personnel and/or other officers will begin pre-screening service vehicles/trucks that request access to the underground service facility and authorize vehicles that have been checked by security personnel. Unannounced and unauthorized vehicles or trucks will be restricted from entering the underground service complex and therefore may need to back-up onto Lake Shore Boulevard. In order to facilitate any back-up manoeuvres,

security personnel will act as flagpersons and use signs and pylons in order to notify traffic at Lake Shore Boulevard/Bay Street and pedestrians crossing the west-leg of the intersection that they need to slow down or stop to allow for back-up manoeuvres. The use of these tools will also notify other ACC service vehicles/trucks that they cannot enter the service vehicle ramp.

It should also be recognized that the frequency of pre-determined security threats is expected to be very minimal and therefore any resulting impact to traffic and pedestrians along Lake Shore Boulevard will also be minimal.

As a condition of approval, the ACC will maintain yearly statistics on the number of times and the duration of when the access control equipment is activated during normal hours of operation due to a security threat. Furthermore, the ACC will record the agency that initiated the "security threat" procedure (eg. government agency, police, on-site security forces) and describe the outcome of the "security threat". As a means to improve efficiencies, the ACC may hold an annual meeting with City of Toronto's Traffic Operations Staff (Toronto and East York District) in order to review the operation statistics and modify the Traffic Management Plan, as appropriate.

4.0 SUMMARY OF CONDITIONS FOR ACCESS CONTROL EQUIPMENT OPERATION

This section summarizes the suggested conditions for approval of the service vehicle access control equipment. They are as follows:

1) Agree to keep yearly statistics on the number of times and the duration of when the access control equipment is activated during normal hours of operation. The agency that initiated the "security threat" procedure and the outcome of the "threat" are also required to be described. It is suggested that a yearly review mechanism with City of Toronto Traffic Operations Staff (Toronto and East York District) be held in order to review the operation statistics. The Traffic Management Plan may be modified as appropriate.

2) That the access control gate remain in the "upright" position and the intercom system not be used, except when the bollards have been activated under one of the conditions permitted by the approved agreement (during an active security threat or during after hours).

3) That whenever the access control equipment is activated and there is a perceived security threat, the owner agrees to immediately dispatch security personnel up the service ramp in order to conduct a security screen and further direct the vehicle.

4) If the vehicle is determined to be authorized to enter, it will be allowed past the bollards and further directed at the security check at the base of the ramp.

5) If the vehicle is denied entry after the security screening, it will be directed by security personnel and flagpersons to back-out the driveway in a reverse-motion, returning to Lake Shore Boulevard. Safety equipment such as pylons and signs will be used to facilitate any back-up manoeuvres.

6) That whenever the access control system has been activated during a security threat, that the owner agrees to expeditiously deploy security personnel to begin pre-screening vehicles that request access to the underground service facility (follow steps 3 to 5, as required), and reschedule deliveries, if possible, to deter queues onto Lake Shore Boulevard and Bay Street.

7) Agree to install and maintain permanent "No Public Parking" signage at the top of the access ramp.

5.0 CONCLUSIONS

- The implementation of the access control equipment is not expected to change or interrupt the current operations of the service vehicle ramp during regular business hours as the retractable bollards will not be activated and the gate control arm will remain in the "upright" position. During normal hours of operation, service delivery vehicles and trucks will therefore have unobstructed access to the underground service tunnel.

- We anticipate that the activation of the access control equipment will have minimal traffic related impacts along Lake Shore Boulevard and Bay Street during after hours (typically around 12:00 a.m. to 5:00 a.m.) when pedestrian and vehicular traffic are not expected to be heavy. ACC security personnel will be available at the foot of the service ramp to respond to access requests and allow authorized/scheduled vehicles to enter the underground service tunnel. Unexpected service vehicles that request access and do not pose a potential security threat will be allowed access to the underground facility and directed towards the outbound ramp.

- We anticipate that the activation of the access control equipment will have minimal traffic related impacts along Lake Shore Boulevard and Bay Street in the occasion of a security threat. Although the frequency of such security threat cannot be quantified, a pre-determined security threat is expected to be very minimal.

- During a security threat (expected or unexpected), security personnel will be stationed at top of the ramp in order to conduct a security screen before allowing the authorized/scheduled vehicle to enter the service tunnel. Security personnel will pre-screen service vehicles/trucks in order to minimize queues along Lake Shore Boulevard and Bay Street.

- Unannounced and unauthorized vehicles or trucks that are denied entry will be restricted from entering the underground service complex and will need to back-up onto Lake Shore Boulevard. In order to facilitate any back-up manoeuvres, security personnel will act as flagpersons and use signs and pylons in order to notify pedestrians and traffic at Lake Shore Boulevard/Bay Street that they need to slow down or stop to allow for back-up manoeuvres. The use of these tools will also notify other ACC service vehicles/trucks that they cannot enter the service vehicle ramp.

- The ACC will keep yearly statistics on the number of times and the duration of when the access control equipment is activated during normal hours of operation due to a security threat. The agency that initiated the "security threat" procedure and the outcome of the "threat" are also required to be described. The ACC may hold an annual meeting with City of Toronto Traffic Operations Staff (Toronto and East York District) in order to review the operation statistics.

Should you have any questions or comments regarding the information provided, please do not hesitate to contact the undersigned at 905-470-0015 extension 270 or Terry Wallace at extension 234.

Yours very truly,

LEA Consulting Ltd.

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:ck

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