

November 29, 2006

Mr. Glenn Rowe, P.E.  
Pennsylvania Department of Transportation  
Bureau of Highway Safety and Traffic Engineering  
Commonwealth Keystone Building  
400 North Street, 6<sup>th</sup> Floor  
Harrisburg, PA 17105

RE: Harrah's Station Square Casino Transportation Analysis  
Detailed Traffic Impact Study Review - Addendum

Dear Mr. Rowe:

As requested by the Gaming Board, McCormick Taylor, Inc. has reviewed the additional materials submitted for the proposed Harrah's Station Square Casino, located in the City of Pittsburgh. The material reviewed consisted of the following:

- Harrah's Station Square Casino Transportation Analysis, prepared by DKS Associates and GAI Consultants, dated December 2005, updated October 2006
- Harrah's Station Square Casino Transportation Analysis – Addendum 1, prepared by DKS Associates and GAI Consultants, dated November 2006
- Letter prepared by GAI Consultants dated November 13, 2006, responding to the Detailed Review Comments, dated November 9, 2006.

This additional review builds upon our detailed review, dated November 9, 2006.

### **Project Summary**

The project site is located north of Carson Street (PA Route 837), along the southwest bank of the Monongahela River within the City of Pittsburgh, Allegheny County. The project is proposed to be developed in a manner complimentary to the existing Station Square entertainment center. The Harrah's Station Square Casino and related parking facilities are proposed to be located on the portion of Station Square that is currently occupied by the west parking lots and the Amphitheatre. Access to the gaming facility will be obtained via five driveways, four along Carson Street and one existing driveway along Smithfield Street. The Harrah's Station Square Casino will be developed as a Class II gaming facility, inside the urban boundaries within PennDOT District 11-0.

The Transportation Analysis assumed the proposed gaming facility would include the following new uses, replacing the existing amphitheater and adjacent parking area:

- 4,000 slot machines
- 250-room hotel

The Addendum 1 Transportation Analysis includes the additional development of 1,200 residential units by the year 2018, replacing the 58,000 square foot restaurant/entertainment facility and parking areas east of the Smithfield Street Bridge.

It should be noted that the materials submitted do not address several elements presented during the hearing November 20<sup>th</sup>, including the initial use of the existing 58,000 square foot restaurant/entertainment building for a temporary gaming facility and the discontinuation of public parking for commuters and gaming event attendees.

### **Municipal Coordination**

The applicant has met with Department of City Planning to expand the scope of the transportation analysis and address several technical questions. The materials submitted appear to comply with elements agreed to by the City.

### **Technical Review of the Traffic Study**

Unless specifically identified below, the most current submissions by the applicant have addressed the comments presented in the previous reviews. The following comments have not been addressed:

#### **Approach**

1. The study does not address the impact of the initial use of the existing 58,000 square foot restaurant/entertainment building for a temporary gaming facility and the discontinuation of public parking for commuters and gaming event attendees.
  - The discontinuation of public parking will result in the diversion of vehicles to other parking facilities and will affect traffic patterns within the vicinity of the proposed project.
  - The removal of the existing restaurant/entertainment uses will reduce the volume of traffic currently generated by the site; however, the removal of complementary uses will also increase the amount of external traffic generated by the proposed gaming facility.
  - The placement of a temporary gaming facility east of the Smithfield Street Bridge and the related changes in projected traffic patterns are not addressed in the materials submitted.

### Trip Generation

2. Due to the lack of available data in ITE Trip Generation regarding gaming facilities, the trip generation estimates for the gaming facility were based upon patronage and employment figures provided by Harrah's. It should be noted that the projected employment figures for the gaming venue have been reduced from the previous submission.
3. The methodology presented by the applicant for estimating project traffic generation appears reasonable; however, the trip generation for Harrah's Station Square Casino continues to be significantly lower than the other Pittsburgh gaming sites (from one-half to two-thirds) depending on the period.
4. The 20% reduction assumed for interaction between gaming patrons and the existing Station Square uses do not reflect the previously noted changes to parking policies and the temporary gaming facility.

### Analytical Approach

5. Incorrectly calculated peak hour factors have been used for the analysis of several intersections. These factors are generally too high and influence the results of the capacity analysis by improving the projected operations.
6. The lane configuration and geometry of the intersections appear to be modeled correctly except as follows:
  - The existing southbound right turn taper on Smithfield Street at Carson Street is assumed to be a full turn lane; and
  - The length of several turn bays appears to have been omitted.
7. There appear to be several areas where the modeling of traffic signal operations appear to be modeled incorrectly, including:
  - There appear to be several opportunities where improved operations could be achieved by providing dedicated right turn lane "over-lap" green phases;
  - Numerous protected phases are coded as permissive operations; and
  - The phasing of Carson Street and Smithfield Street includes an additional, unneeded phase.

### **Evaluation of the Recommended Improvements**

McCormick Taylor evaluated the recommended roadway improvements identified in the Harrah's Station Square Casino Transportation Analyses. The mitigation measures proposed were reviewed for completeness and adequacy in serving the anticipated additional traffic volumes.

8. Vehicles using the existing access from the Smithfield Street Bridge will limit the potential utilization of proposed second southbound right turn lane at Carson Street. Additionally, while the study does not assume any traffic using

this access beyond existing volumes, the tight turning radius may limit the effectiveness of the widening proposed for the access.

9. As proposed the improvements to the intersection of Carson Street and Smithfield Street (providing two full southbound right turn lanes and a westbound right turn lane) will involve reducing northbound Smithfield Street to one lane approaching the bridge and widening along the east side of Smithfield Street.
10. The initial improvements to the eastern access should include reconfiguration to straighten the driveway approach, particularly if a temporary gaming facility is to be implemented.
11. In addition to the improvements noted in the previous analyses, the revised submissions include improvements to two additional intersections (Smithfield Street/Fort Pitt Boulevard and Carson Street/West End Circle), implementing new traffic control hardware to permit variable lane configurations to be used.

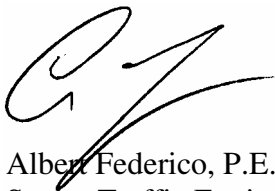
### **Conclusions**

Based on our review there are still issues that have not been addressed by the information submitted by the applicant. Further consideration of the project impacts would benefit from the applicant revising the traffic analysis to address previously noted technical deficiencies including utilizing more conservative trip generation assumptions consistent with other urban applications; and revising capacity analyses to eliminate the use of inappropriate factors.

I trust that this review will assist PennDOT and the Pennsylvania Gaming Control Board in their evaluation of this application. I am available if you have any questions regarding this review.

Very truly yours,

McCORMICK TAYLOR, INC.



Albert Federico, P.E., PTOE  
Senior Traffic Engineer

cc: Paul Resch, PA Gaming Control Board  
Paul Archibald, McCormick Taylor