

November 8, 2006

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

RE: Majestic Star Casino, Pittsburgh: Transportation and Parking Assessment
Detailed Traffic Impact Study Review

Dear Mr. Rowe:

McCormick Taylor, Inc. has completed its detailed review of the traffic study submitted for the proposed Majestic Star Casino, located in the City of Pittsburgh. The material reviewed consisted of the following:

- Majestic Star Casino, Pittsburgh: Transportation and Parking Assessment, prepared by IBI Group, dated December 2005, revised October 2006.
- Letter and supplemental data prepared by IBI Group and dated September 29, 2006, responding to the Initial Review Comments, dated September 7, 2006.

This detailed review builds upon our initial review, dated September 7, 2006. Consistent with our approved scope of work McCormick Taylor conducted a project site visit; evaluated the technical elements of the traffic analysis; assessed the feasibility of constructing the various transportation improvements proposed in the study; and contacted the PennDOT District office and municipal representatives.

Project Summary

The project site is located along the Ohio River in the North Shore of Pittsburgh, just south of PA Route 65 between Heinz Field and U.S. Route 19. The primary patron and service access is to be provided off of Reedsdale Street. The main “ceremonial” entrance (i.e., porte cochere) is located off of North Shore Drive. The casino would be a Class II gaming facility, inside the Pittsburgh urban boundary within PennDOT District 11-0.

The study considered the casino to be known as The Majestic Star Casino, which would include the following:

- 3,000 slot machines, which would be permitted to expand up to 5,000 slots after a minimum of 6 months of operation
- Restaurants and bar facilities
- Entertainment facilities

- 5,100 (minimum) space parking garage

Following are our comments and findings for the detailed review of the above-referenced submission:

PennDOT and Municipal Coordination

McCormick Taylor contacted Cheryl Moon-Sirianni, PennDOT District 11-0 Assistant District Engineer for Design. Ms. Moon-Sirianni indicated that while PennDOT was very interested in the gaming projects no formal submissions had been made to the District. Further conversations with Jeff Karr ADE Maintenance and Bill Lester Permits Manager indicated that initial conversations had taken place with the applicant but only with regards to traffic impact requirements.

McCormick Taylor contacted Sidney Kaikai, Transportation Planner at Pittsburgh's Department of City Planning. Mr. Kaikai indicated that the Department had completed an in-house review, available for download on the Department's website, of the proposals for all three gaming sites in Pittsburgh. Mr. Kaikai also noted the following specific items regarding the Majestic Star Casino plan:

- The proposed facility is isolated from adjacent neighborhoods. While this will make access more difficult it does limit impacts to the neighborhoods.
- The proposed traffic improvements include significant reconstruction and reconfiguration of the existing local streets and interchange ramps to limited access facilities.
- The adjacent Pittsburgh sports franchises (Steelers and Pirates) have opposed the development of a casino near the stadiums.
- Majestic Star has indicated that a smaller, "temporary" gaming facility would precede the construction of a permanent facility. The Department of Planning is "skeptical" about this approach.

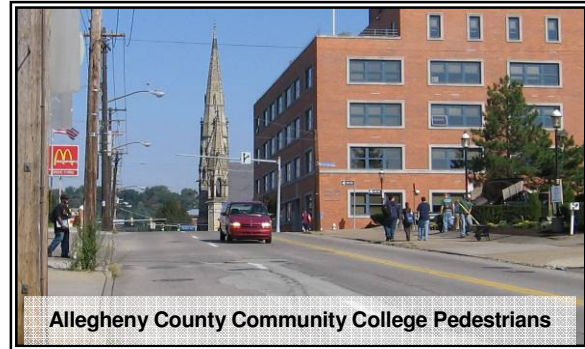
Site Visit

McCormick Taylor visited the location of the proposed gaming facility and the study area addressed within the applicant's impact study. The following observations were made as part of the site visit:

- The roadways and traffic signals within the vicinity of Heinz Field appear to be in good condition and may have recently been constructed as part of the stadium project. Facilities west of PA Route 65 appeared to be in fair condition.
- Utilities within the Heinz Field area appear to be located underground.
- A considerable volume of pedestrian traffic was observed, particularly within the vicinity of Ridge Avenue and Allegheny Avenue. Much of this activity

appeared to be associated with the Allegheny County Community College, located along Ridge Avenue east of the project area, and the associated student parking lot located in the southwest quadrant of the Ridge Avenue/Allegheny Avenue intersection.

- The intersection of Reedsdale Street and Fontella Street/North Shore Drive is currently a complex series of ramps and merging lanes.
- The observed configuration of several study intersections was inconsistent with the assumed configurations used in the applicant's analysis.



Technical Review of the Traffic Study

Unless specifically identified below, the most current submission by the applicant (Majestic Star Casino, Pittsburgh: Transportation and Parking Assessment, revised October 2006) has addressed the comments presented in the initial September 7, 2006 review. The following comments have not been addressed:

Approach

1. The Assessment has not been signed or sealed by an Engineer licensed in Pennsylvania.
2. Figures illustrating traffic volumes for multiple scenarios (Existing Saturday, 2008 No-build, 2018 No-Build and 2018 Build) were not included in the Assessment.
3. The technical appendices provided with the revised assessment are incomplete. Omitted information included count data for several intersections, capacity analysis for several intersections or calculations supporting the assumed trip generation.

Trip Generation

4. 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 data for other sites as well as assumptions regarding mode split and vehicle occupancy. That said, applying the trip generation methodology for the gaming facility outlined in the applicant's response letter and the revised assessment does not produce the volumes presented in the assessment. It should be noted however that the gaming facility traffic volumes presented in the assessment are higher than those calculated using the applicant's stated methodology.

5. Insufficient documentation is provided to verify the trip generation calculations, including justification for the assumed “Peak Adjustment” and “Shared Trips (Synergy)” factors, for non-gaming components of the proposed facility.
6. When comparing trip generation estimates for the gaming component of the three Pittsburgh gaming sites, the trip generation for Majestic Star Casino is consistent with projections for Pittsburg First and higher than Station Square.

Analytical Approach

7. There are numerous inconsistencies between the count data, the traffic volumes presented in the exhibits and the volumes used for analysis including but not limited to:
 - The eastbound right-turn volume at Reedsdale Street/North Point Avenue/Lighthill Street during the 2008 Build morning and evening peak periods.
 - The westbound through volume at Porte Cochere/North Shore Drive during the 2008 Build evening peak
8. A software default peak hour factor (0.92) was used for all capacity analyses. This parameter should be calculated directly from the traffic count data. The use of a higher than appropriate peak hour factor can significantly influence the results of the capacity analysis.
9. There are numerous inconsistencies between observed intersection geometries and those used in the analyses, including but not limited to:
 - The eastbound approach of North Shore Avenue/Allegheny Avenue was assumed to have one dedicated left turn lane, a shared left-turn/right-turn lane and a dedicated right turn lane. The existing configuration provided one dedicated left-turn lane and two dedicated right-turn lanes.
 - The northbound approach of Reedsdale Street/Allegheny Avenue was assumed to have three lanes: one each for dedicated left turn, through and right turn movements. The existing configuration provides two lanes: one left-turn-lane and one shared through/right-turn lane.
 - The northbound approach of PA Route 65 Ramps/Western Avenue/West End Bridge was assumed a single northbound left turn lane. The typical configuration used for existing conditions provides two left turn lanes.
10. The appendix did not include capacity analysis summaries for the following intersections:



- North Shore Drive/Sproat Way
 - Reedsdale Street/Sproat Way
 - Reedsdale Street/Fontella Street/PA Route 65 and West End Bridge Ramps
11. The capacity analysis summaries for several intersections, listed below, appear to be based on lane configurations different from those presented in the submitted site plan:
- North Shore Drive/Porte Cochere was modeled assuming the Porte Cochere approach as having one thru lane and one shared thru right lane; the site plan indicates a single lane.
 - Reedsdale Street/North Point Avenue/Lighthill Street was modeled assuming the northbound approach provides two right turn lanes; the site plan indicates a single right turn lane.
 - Reedsdale Street/Fontella Street/PA Route 65 and West End Bridge Ramps was modeled under signal control; the site plan presented an unconventional configuration included a free-flow channelized right turn movement from the ramps.
12. The assumed signal timings used for several intersections appears inconsistent with field conditions and/or generally accepted PennDOT policy, including but not limited to:
- Dual right turn lanes typically operate with protected signal phasing, not permitted phasing as assumed for eastbound and westbound approaches of Reedsdale Street /Fontella Street under build conditions.
 - The protected and overlap turn phasing assumed for North Shore Drive/Allegheny Avenue is inconsistent with the assumed shared-lane configurations on the northbound and eastbound approaches.
 - Protected/prohibited left turn phasing, not permitted, would be considered appropriate for the northbound approach of PA Route 65 Ramps/Western Avenue/West End Bridge.
 - Protected/prohibited left turn phasing, not permitted, may be considered appropriate for the southbound approach of Ridge Avenue/Allegheny Avenue.
13. The analysis of Reedsdale Street/Allegheny Avenue indicates that during the 2008 Build evening and Saturday peaks the northbound approach will experience excessive queues which may potentially impact operations at North Shore Drive/Allegheny Avenue.

Evaluation of the Recommended Improvements

McCormick Taylor evaluated the recommended roadway improvements identified in the Majestic Star Casino Transportation Assessment. The mitigation measures

proposed were reviewed for completeness and adequacy in serving the anticipated additional traffic volumes.

14. The location of the existing exit ramps of PA Route 65 and the West End Bridge will most likely require Reedsdale Street to be widened to the south, towards the gaming facility.
15. The proposed separation between the right turn garage exit to Reedsdale Street and Fontella Street in combination with the projected eastbound queues may not provide sufficient opportunity for vehicles attempting to turn left to complete weaving maneuvers in an acceptable manner.
16. The assessment did not adequately address stated concerns regarding the desirability of left turning vehicles crossing four lanes of traffic from eastbound Reedsdale Street to northbound Fontella Street.
17. The proposed installation of a traffic signal at the termini of the exit ramps from PA Route 65 and the West End Bridge has the potential to result in unacceptable queues impacting main line traffic on the limited access facilities. More detailed queuing analyses should be completed. Additionally consideration should be given to incorporating “queue detectors” in the signal design to allow for adequate clearance during periods of peak demand or special traffic events.
18. Addressing the previously noted technical inaccuracies regarding lane configurations and assumed signal timings may result in the need for additional mitigation at the following intersections:
 - PA Route 65 Ramps/Western Avenue/West End Bridge
 - Reedsdale Street/Fontella Street/PA Route 65 and West End Bridge Ramps.
 - North Shore Drive/Allegheny Avenue
 - Reedsdale Street/Allegheny Avenue
19. The assessment suggests several atypical roadway and intersection configurations that may violate driver expectations resulting in undesirable conditions. Implementing a more traditional access and improvement plan may be warranted.
20. Except as noted above, it appears that the proposed improvements adequately mitigate the project impacts based on the results presented in the analysis. It should be noted that the omissions in the capacity analysis (as noted above) may be influencing the reported results and the analyzed operation of the intersection. Additionally, the inclusion of the evaluation of the 2018 design year may identify additional deficiencies requiring mitigation.

Highway Occupancy Permit Issues

McCormick Taylor evaluated issues that may impede the issuance of a PennDOT Highway Occupancy Permit (HOP). This investigation included preliminary assessments of apparent issues associated with right-of-way, existing structures, utility conflicts, and the constructability of the roadway improvements suggested in the study. It should be noted that PennDOT District 11-0, without having been provided any materials submitted by the applicant, was unable to provide comments regarding potential permitting issues.

- The project does not access a state highway; therefore an HOP is not required for the site driveways. Improvements proposed to mitigate project impacts do include modifications to state facilities, which would require an HOP. Additionally, PennDOT approval is typically required for the installation and/or modification of traffic signals.
- Improvements to limited access facilities are typically more complex and may require additional coordination with federal agencies.
- The convergence of numerous regional routes and significant destinations within the vicinity of the Majestic Star site may present additional challenges to providing adequate destination signing for the proposed gaming facility.
- Insufficient information was available to adequately assess the potential impacts of proposed improvements to existing utilities. However, transportation improvements within urban locations such as the proposed site typically require extensive utility coordination and relocation. In particular, since utilities near Heinz Field have been placed underground, it is assumed that the same arrangements will be required when the proposed site is developed.

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:

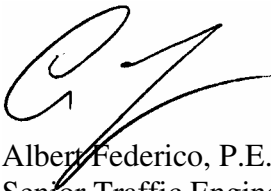
- Working with the City and PennDOT District to develop alternatives to the proposed non-traditional intersection configurations, including the intersection at Reedsdale Street and Fontella Street.
- Assessing appropriate mitigation of impacts on pedestrian traffic associated with the Allegheny County Community College.
- Developing a plan to provide access during periods impacted by traffic generated by adjacent “events”.
- Developing a regional plan for wayfinding signage compatible with the existing regional routes and nearby destinations.
- Coordinating with utility providers to assess potential relocation impacts associated with roadway improvements.

- Coordinating with transit service providers to ensure the provision of integrated service to the proposed facility consistent with the anticipated hours of operation.

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