November 15, 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: Mount Airy Lodge Traffic Impact Study
Detailed Traffic Impact Study Review

Dear Mr. Rowe:

McCormick Taylor, Inc. has completed its detailed review of the traffic study submitted for the proposed Mount Airy Lodge redevelopment, located in Paradise Township, Monroe County. The material reviewed consisted of the following:


This detailed review builds upon our initial review, dated July 26, 2006. According to our scope of services, we conducted a project site visit and evaluated the technical elements of the traffic analysis as well as the feasibility and safety of constructing the various transportation improvements proposed in the study. We also contacted the PENNDOT District office, local municipalities, and planning agency to receive their comments on the proposed gaming facilities.

**Project Summary**

The project site is located east of Woodland Road (SR 1013) on the former site of the Mount Airy Lodge Resort in Paradise Township, Monroe County. Access to the gaming facility will be provided via two new driveways that intersect Woodland Road. Mount Airy Lodge Redevelopment will be developed as a Class II casino, outside of the urban boundaries within PennDOT District 5-0.

The traffic assessment assumed the redevelopment of the Mount Airy Lodge which will include the following specific uses:

- 3,000 slot machines
- Food and Beverage Support Services
- 200 Room Hotel
Following are our comments and findings for the initial review of the above-referenced submission:

**PennDOT and Municipal Coordination**

McCormick Taylor contacted Brian Boyer, PennDOT District 5-0 District Permits Manager. Mr. Boyer indicated that while PennDOT was very interested in the gaming projects no formal submissions had been made to the District.

McCormick Taylor contacted Reda Briglia at Paradise Township. Ms. Briglia stated that the Township has seen multiple versions of the traffic impact study and that the Township has approved the project’s land development plan. Additionally, it was her understanding that the applicant is preparing a PennDOT HOP submission. Ms. Briglia also stated that at the request of the applicant the Township has accepted ownership of Woodland Road from PennDOT. This request was made so that the applicant’s improvements to Woodland Road would need only to meet Township standards, not PennDOT standards.

**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 study area is primarily rural in character. With the exception of PA Route 611, all of the study area roadways are two-lane highways.
- During the site visit PA Route 611 in Paradise Township was restricted to one travel lane in each direction by roadway construction.
- It appears that site work (grading and drainage) is proceeding at the location of the proposed gaming facility.
- The offset intersection alignment of PA Route 611 and PA Route 314 is undesirable, particularly the western approach of PA Route 314.
- The intersection of PA Route 611 and Woodland Road/Big Daddy’s Restaurant driveway is presently a 5-leg intersection, with Strickland’s Road being the fifth leg. Strickland’s Road appears to serve the Strickland’s Pocono Resort, which was being demolished at the time of the site visit.
The “Five-Points” intersection in Mount Pocono Borough is extremely congested. Additionally, the intersection geometry appeared to present difficulty to larger trucks.

**Technical Review of the Traffic Study**

Unless specifically identified below, the most current submission by the applicant (Mount Airy Lodge Traffic Impact Study, revised September 28, 2006) has addressed the comments presented in the initial July 26, 2006 review. The following comments have not been addressed:

**Approach**

1. The revised study does not address the following intersections, which are each anticipated to serve approximately 10 percent of the assumed project traffic:
   - Bowman Road and Swiftwater Road
   - PA Route 611 and PA Route 715
   - PA Route 715 and I-80 Ramps (Exit 299)
2. The study does not include a discussion of tour buses, public transit or other modes of transportation that may be used to access the site.

**Trip Generation**

3. Due to the lack of available data in ITE Trip Generation regarding gaming facilities, the trip generation estimates for the gaming facility were based on data collected at the Dover Downs facility (Newark, Delaware).
4. The trip generation associated with the non-gaming uses were assumed to be included as part of the volumes based on the Dover Downs data.
5. When comparing the trip generation estimates for the five At-large facilities the overall (gaming and non-gaming uses), Saturday trip generation assumed in the study for the Mt. Airy Lodge project is considerably lower than the gaming components of the other At-large facilities.

**Analytical Approach**

6. The number of other planned developments included in developing future traffic volumes appears excessive, particularly considering the marginal volume of traffic anticipated to be added to the study area by several of the developments.
7. The appendix to the revised study includes an analysis of the PA Route 611/PA Route 940/PA Route 196 intersection in Mount Pocono Borough. While the analysis does estimate the additional traffic volume and delay that the redeveloped Mount Airy Lodge would add to the intersection, the study does not suggest any specific improvements to the intersection.

8. The peak hour factors used in the analysis of several intersections were either inconsistent between analysis horizons or changed without justification. The use of a higher than appropriate peak hour factor can significantly influence the results of the capacity analysis. Specific movements that were adjusted include, but are not limited to:
   - Westbound PA Route 314 (Eastern Leg) at PA Route 611.
   - Westbound, northbound, and southbound approaches of PA Route 611/Grange Road/Green Springs Driveway.
   - Eastern Driveway at Woodland Road
   - Western Driveway at Woodland Road

9. The evaluation of the Woodland Road/Western Site Driveway intersection does not include the Employee Parking Driveway approach.

**Evaluation of the Recommended Improvements**

McCormick Taylor evaluated the recommended roadway improvements identified in the Traffic Impact Study for Mount Airy Lodge Redevelopment. The mitigations measures proposed were reviewed for completeness and adequacy in serving the anticipated additional traffic volumes.

10. The study’s recommendation to install a traffic signal and provide other roadway improvements at the intersection of PA Route 611 and PA Route 314 is discussed in the text but is not reflected in the level-of-service tables or figures found in the report. Therefore, it is not clear if the applicant is committed to implementing these improvements. A potential alternative to the proposed improvements to PA Route 611 and PA Route 314 (Western Leg) intersection could be to realign the PA Route 314 approach to intersect PA Route 611 at Woodland Road. This alternative may provide more favorable sight distance and operational geometry.

11. The traffic associated with the proposed Mount Airy Lodge development is projected to contribute to traffic delay and level-of-service degradations at the “Five Points” intersection of PA Route 611/PA Route 940/PA Route 196; however no mitigation is proposed.
12. The proposed “interim” improvements to PA Route 611 and I-80 (Interchange #298), specifically the conversion of the existing center turn lane into a second northbound lane may adversely impact access to existing properties on the eastern side of the road.

13. At some study area intersections, a traffic signal would be required to provide acceptable levels of service. However, based on the traffic volumes provided in the study it does not appear that these locations will meet the applicable warrants for a traffic signal installation:
   - PA Route 940 & PA Route 191/Red Rock Road
   - PA Route 611 & Meadowside Road/Trinity Hill Road
   - PA Route 611 & Grange Road/Green Springs Driveway

14. Operations at several locations under post-development conditions, while not degraded for pre-development projections, will operate at deficient levels of service:
   - PA Route 611 & I-80 Ramps (Interchange #298)
   - PA Route 611 & PA Route 314 (Eastern Leg)

15. 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 relatively low trip generation assumptions (as noted above) may be influencing the reported results.

**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 5-0, 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 (as previously noted Paradise Township accepted ownership of Woodland Road from PennDOT); 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.

- Overhead utilities were observed along Woodland Road, PA Route 611, Carlton Road, and PA Route 314 where intersection improvements are
proposed. These facilities may need to be relocated as part of the proposed roadway and intersection improvements.

- The design of the signal proposed for PA Route 611 and PA Route 314 (Western Leg) must accommodate the limited sight distance resulting from the approach geometry.
- The study proposes to close the Strickland’s Road approach at the intersection of PA Route 611/Woodland Road/Big Daddy’s Driveway. However, the study does not describe how access to the former Strickland’s Pocono Resort will be maintained.

**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 expanding the study area and utilizing trip generation assumptions consistent with other At-large applications.
- Consideration of alternatives to the current improvements proposed for the following intersections:
  - PA Route 611 & I-80 Ramps (Interchange #298)
  - PA Route 611 & PA Route 314 (Western Leg)
- Advancing the design of the proposed intersection improvements, including verification that sufficient right-of-way is available.
- Initiating coordination with utility agencies regarding relocation needs associated with roadway and intersection improvements.
- Ensuring that the proposed accesses adequately accommodate pedestrian traffic from the employee parking area opposite Woodland Road.

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

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

Mount Airy Lodge Traffic Impact Study
Paradise Township, Monroe County