

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: Sands Bethworks Phase 1 Casino/Retail Development Transportation Analysis Detailed Traffic Impact Study Review

Dear Mr. Rowe:

McCormick Taylor, Inc. has completed its detailed review of the traffic study submitted for the proposed Sands Bethworks Phase 1 Casino/Retail Development, located in the City of Bethlehem. The material reviewed consisted of the following:

- Sands Bethworks Traffic Impact Study & Access Improvements Evaluation Response, prepared by Lublanecki Engineering, Inc., dated October 19, 2006.
- o Sands Bethworks Traffic Impact Study & Access Improvements Evaluation, revised by Lublanecki Engineering, Inc., dated October 19, 2006,

This detailed review builds upon our initial review, dated July 31, 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 north of Daly Avenue adjacent to the Minsi Trail Bridge (Stefko Boulevard) in the City of Bethlehem, Northampton County. The gaming and hotel components of the facility will be located east of the bridge and the retail components, including restaurants and light retail, will be west of the bridge. Access to the gaming facility and hotel will be via one new entrance to Daly Avenue east of the Minsi Trail Bridge. Access to the retail center will be via one new entrance to Daly Avenue west of the bridge. Sands Bethworks Gaming Facility will be developed as a Class II casino, within the urban boundaries of PennDOT District 5-0.



The traffic impact study assumed a proposed gaming facility that will include the following specific uses:

- o 5,000 Slot Machines
- 300-Room Hotel
- o 200,000 square foot Retail Center
- o 46,000 square foot "Multi-purpose" space

PennDOT and Municipal Coordination

McCormick Taylor contacted Brian Boyer, PennDOT District 5-0 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 Tony Hanna, Director of Community and Economic Development for the City of Bethlehem. Mr. Hanna stated that the City has had extensive conversations with the applicant and believed that the PennDOT improvements to PA Route 412 will address the majority of traffic concerns. He also indicated that he believed the proposed use is consistent with those assumed in the previous study completed by PennDOT for the PA Route 412 project.

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:

- Most of the traffic signal installations in the study area appeared to be in good condition.
- Some of the study area intersections appear to have recently been reconstructed.
- Potential widening improvements to Daly Avenue may be constrained by abandoned railroad tracks and proposed City greenway.
- Sidewalks and pedestrian accommodations are generally present and in fair condition through the majority of the study area, however some areas are partially obstructed by numerous poles.





o 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.

Technical Review of the Traffic Study

Unless specifically identified below, the most current submission by the applicant (Sands Bethworks Traffic Impact Study & Access Improvements Evaluation, revised by Lublanecki Engineering, Inc., dated October 19, 2006) has addressed the comments presented in the initial July 31, 2006 review. The following comments have not been addressed:

Approach

1. The study did not adequately address portions of PA Route 412 anticipated to serve significant volumes of project traffic accessing I-78. The study indicates that these locations were addressed by previous PennDOT studies associated with the pending improvements; however the gaming facility is projected to increase the volume of traffic using this route. Expanding the study area would be appropriate.

Trip Generation

- 2. Trip generation for the gaming and hotel facility was developed using a "patronage model" as well as assumptions regarding modal split (automobile versus bus) and vehicle occupancy.
- 3. When comparing trip generation estimates for the gaming component of the five At-large facilities, the trip generation for the Sands Bethworks facility is generally consistent with the average of all At-large projections.

Analytical Approach

4. The mitigation measures identified in the study provide an acceptable overall

level of service at the intersection of Daly Avenue and Stefko Boulevard; however operations are degraded from pre-development conditions and deficient operations are projected for the southbound left turn movement during the 2018 evening peak.





Evaluation of the Recommended Improvements

McCormick Taylor evaluated the recommended roadway improvements identified in the Sands Bethworks Traffic Impact Study. The mitigation measures proposed were reviewed for completeness and adequacy in serving the anticipated additional traffic volumes.

- 5. The study indicates that the pending PennDOT improvements to PA Route 412 and the I-78 interchange are adequate to serve project traffic; however no information supporting this conclusion has been provided.
- 6. The study recommends installation of traffic signals at all site accesses to PA Route 412 and the integration of these signals into a coordinated system.
- 7. The proposed casino access utilizes a slightly unconventional "English T" configuration that permits the concurrent movement of entering and exiting left turns.
- 8. Except as noted above, it appears that the proposed improvements adequately mitigate the project impacts based on the results presented in the analysis.

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.

- o Potential widening improvements to Daly Avenue may be constrained by abandoned railroad tracks directly to the south. Widening may also require the replacement of existing sidewalks and streetscape improvements.
- The approach of the Minsi Trail Bridge to Daly Avenue may present challenges to the proposed improvements at Stefko Boulevard.
- While specific geometric information has not been provided it appears that the proposed access to the Retail Center includes a relatively tight horizontal radius with a potentially steep downgrade.
- o 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.



Conclusions

Overall, while several items remain outstanding, the majority of issues have been addressed by the information submitted by the applicant. Further consideration of the project impacts would benefit from the applicant:

- Evaluating the project specific impacts to the interchange of I-78 and PA Route 412.
- Developing a coordinated traffic signal timing plan for Daly Street that includes provisions to minimize queuing at site accesses.
- Advancing the design of the improvements to the intersection of Daly Street and Stefko Boulevard, including verification that sufficient right-of-way is available and that geometry of the bridge approach can be accommodated.
- Coordinating with utility providers to assess potential relocation impacts associated with roadway improvements.

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