



**GILMORE & ASSOCIATES, INC.**  
ENGINEERING & CONSULTING SERVICES

September 8, 2014

File No. 12-04054T

Mr. William Bolla, Attorney  
McNamara, Bolla & Panzer  
116 East Court Street  
Doylestown, PA 18901

Reference: Villanova University – Lancaster Avenue Redevelopment  
CICD Conditional Use Special Event Transportation Plan Review  
Radnor Township, Delaware County, PA

Dear Mr. Bolla:

Gilmore & Associates, Inc. has completed the conditional use Transportation review of the Special Event Traffic and Parking Management Plan, prepared by Chance Management Advisors, Inc., prepared for Villanova University, dated September 2013 and offers the following for your consideration:

The applicant, Villanova University, intends to develop/redevelop several parcels located along Lancaster Avenue, southeast and southwest of Ithan Avenue intersection, in Radnor Township, Delaware County. The project includes construction of student housing (1,159 bed apartment-style residence halls), retail shops (University Bookstore, bistro and small convenience store) along with 147 surface parking spaces to be located on the southwest corner of Lancaster Avenue and Ithan Avenue. In addition, the project includes construction of a Performing Arts Center (with 500 – 650 total seats in two theaters) and multilevel parking structure (1,265 spaces) to be located on the southeast corner of Lancaster Avenue and Ithan Avenue. Villanova University intends to eliminate many of the existing driveway accesses located on the south side of Lancaster Avenue, west of Ithan Avenue and construct a shared surface parking facility to the rear of the existing university buildings with limited access to Lancaster Avenue at the signalized intersection of Chapel Walk. During the initial scoping meetings held in the spring of 2012, the Township requested Villanova University provide a special event plan to efficiently manage vehicular and pedestrian traffic, utilizing the roadways near Villanova University during abnormally high patron events on campus in an attempt to reduce delay for motorists not attending the special events. It is our understanding that an additional Special Event Transportation Plan will be provided based on the future campus improvements and the plan will be updated periodically based on feedback from University staff and Radnor Township Police Department. Furthermore, a meeting will be scheduled in the near future between Villanova and Radnor Township staff, to formally discuss the plan with and obtain feedback from Radnor Township.

Based on the present submission, we recommend the following revisions and/or additions to the Special Event Transportation Plan:

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1. The plan indicates motorists eastbound on Lancaster Avenue from the Blue Route (I-476) are directed to turn left and enter campus at the Spring Mill Garage; we anticipate this could cause additional delay and congestion along Lancaster Avenue as the left turn lane would be unable to process the number of vehicles. The AM and PM peak hour traffic volumes for the eastbound left-turn movement at this intersection presently operate at a LOS F. Without additional storage space, queues would exceed the available storage and delay through motorists. This should be further analyzed to determine the required storage lane and optimum timing plan.
2. Improved Pedestrian facilities should be investigated between the Spring Mill Garage to the Pavilion. It is likely a wider path will be required with the increased pedestrian volumes, along with adequate lighting along the path. ADA facilities should also be investigated.
3. The proposed permanent DMS on the bridge should be tied into the Radnor Township Police Department Station. In addition, a DMS should be provided on both northbound and southbound Blue Route (I-476) prior to both exit signs to Lancaster Avenue.
4. All scheduled campus events should be shared well in advance to a centralized University office and include what police/traffic control measures are to be deployed.
5. A Traffic Adaptive System for Lancaster Avenue beginning at Radnor Chester Road and continuing east to Lowrys Lane would assist in moving vehicular traffic along Lancaster Avenue while adjusting the intersection timings during the atypical fluctuations experienced during special events.
6. Guidance and directions for campus visitors was recommended in print and electronic informational materials; we also recommend utilizing social media for more up to date information. (Goal 1.4)
7. East Main Lot: During events designate the exit to Lancaster Avenue as the only exit. This exit should never include a left turn out onto Lancaster Avenue, therefore, all vehicles must turn right to continue east on Lancaster Avenue. (Goal 2.3)
8. Coordinate with Radnor Township Police Department with post event signal operation. We recommend the university investigate Special Event traffic signal timing operations from the Blue Route (I-476) through Ithan Avenue. (Goal 2.9)

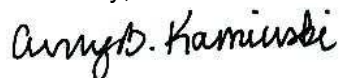
We recommend Villanova University investigate other Special Event Parking management tools and techniques such as:

1. Web-based Pre-Event Parking information along with updates via social media
2. Ticket Designated/Advanced Purchase Parking for Special Event Attendees
3. Temporary/Reversible lane management and/or turn movement restrictions

4. Traffic Signal retiming for special events as discussed above.
5. Separation of pedestrian and vehicular traffic, particularly at Ithan Avenue and Lancaster Avenue.
6. Employ use of Church Walk surface lot from Lancaster Avenue to Ithan Avenue, to gain access to Pike Lot surface lot (and future parking garage). This would provide motorists entering and exiting the proposed parking structure direct access to Lancaster Avenue through the Church Walk signalized intersection on Lancaster Avenue without delaying non-event traffic. Utilizing the proposed surface lot aisle provides the following benefits:
  - a. Provides 1,200+' of stacking length for event traffic that is separated from non-event traffic; thus allowing non-event traffic continued uninterrupted use of Lancaster and Ithan Avenue.
  - b. Provides a separation between event vehicular and pedestrian traffic, thus improving pedestrian safety during special events.
  - c. Provides Police Officers the benefit of metered entry and exit to the parking areas and access to and from Lancaster and Ithan Avenue without additional delay to non-event traffic.
  - d. Reduces the number of vehicles utilizing the Lancaster and Ithan Avenue signalized intersection thus providing additional green time for moving special event pedestrian traffic.

Please let me know if you require additional information related to this discussion.

Sincerely,



Amy B. Kaminski, P.E., PTOE  
Department Manager of Transportation  
Gilmore & Associates, Inc.