Maryland

MARYLAND TRANSIT ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION
Martin O'Malley, Governor • Anthony G. Brown, Lt. Governor
James T. Smith, Jr., Secretary • Robert L. Smith, Administrator

December 17, 2014

Ms. Fawn Baranko
449 Upshire Circle
Gaithersburg, MD 20878

RE: Email of October 14, 2014 – Washingtonian Woods Noise Barrier

Dear Ms. Baranko:

This letter is in response to your email of October 14, 2014 regarding noise analysis and potential impacts to the Washingtonian Woods community. I apologize for the late response. However, I wanted to take the time to answer your questions as well as provide additional information regarding noise assessment on the Corridor Cities Transitway (CCT), particularly as it relates to the Washingtonian Woods community and Upshire Circle residents. This response includes an overview of the noise assessment work and answers to the five questions you raised.

The noise and vibration impact assessment for the CCT was completed in accordance with the methodologies and procedures outlined in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (May 2006) manual. The report documents the projected future build noise exposure from the operation of the proposed Bus Rapid Transit (BRT) system on the present ambient noise environment and compares those noise levels to the relevant FTA noise impact criteria.

For the CCT project, there were a total of 41 representative noise receptor sites within the study area corridor identified for recording existing noise levels. Four were in Washingtonian Woods. One of these four sites was at 421 Upshire Circle. Three other sites were at 1083, 1015 and 943 Hillside Lake Terrace. After existing noise levels were measured, CCT generated noise was then projected at the 41 locations and impacts were assessed.

Noise exposure from the Build Alternative (our proposed project) at the vast majority of residential and other noise-sensitive properties along the study area corridor are expected to remain below the FTA impact threshold. Noise impacts identified from daily operations were limited to clusters of residential properties located adjacent to the southbound side of Great Seneca Highway from approximately High Gables Drive to Muddy Branch Road. At three of the sites, noise exposure levels are projected to exceed anywhere from two to three dBA above the FTA moderate impact threshold. Noise impacts at these sites largely occur because the Build Alternative encroaches closer to residences.

Moderate noise impacts are projected to occur at the receptor site at 421 Upshire Circle and two receptor sites at 1083 and 1015 Hillside Lake Terrace. To consider mitigation for these moderate impacts, FTA's guidance recommends noise mitigation pursuant to state noise policies. Therefore, for the CCT Project, a noise barrier analysis was completed in accordance with State Highway Administration (SHA) Highway Traffic Noise-Abatement Policy.

The SHA Traffic Noise-Abatement Policy establishes feasibility and reasonableness criteria requirements for abatement consideration. Engineering feasibility is defined as the ability to provide acoustically effective noise reduction without limiting a driver's visual line-of-site on the road or causing restrictions to driveway property access. Reasonableness is defined by cost-effectiveness, which is determined by calculating the square footage per benefited residence. The square footage calculation is the total area in square feet of the face of the noise wall. A proposed noise barrier is considered cost-effective if the area of wall provided per benefited residence is equal to, or less than, 2,700 square feet.

Response to Question 1

The existing noise levels at 420 and 421 Upshire Circle are 61 dBA. The existing noise levels at 1083, 1015, and 943 Hillside Terrace Drive are 57 dBA, 58 dBA, and 62 dBA respectively. The projected noise level for the CCT project is 53 dBA at 420 Upshire Circle and 61 dBA at 421 Upshire Circle. The projected noise levels for the CCT project are 60 dBA at 1083 Hillside Terrace Drive, 60 dBA at 1015 Hillside Terrace Drive, and 58 dBA at 943 Hillside Terrace Drive. The determination of noise impact is made at a site location by assessing the combined noise of both the existing noise and project noise. At 421 Upshire Circle, 1083 Hillside Lake Terrace, and 1015 Hillside Lake Terrace, a finding of Moderate Noise Impact has been made. At 420 Upshire Circle and 943 Hillside Lake Terrace, a finding of No Impact has been made.

Response to Question 2

The completion of 30% design is now scheduled for August, 2015. The 30% plans will include any noise walls that will be part of the project. The Project Team will be in communication with residents along Upshire Circle and Hillside Lake Terrace in the first quarter of 2015 to begin to discuss noise walls in more detail.

Response to Question 3

The specific engineering components of a noise wall for the Upshire Circle and Hillside Lake Terrace areas will be addressed well in advance of the 30% design completion and will be discussed with residents.

Response to Question 4

The text in your Question 4 is not germane in this case. First, your residential development already exists and is therefore not "new development occurring after the date of public knowledge." Second, noise walls for the CCT, if constructed, will be part of an MTA project and not listed on an SHA Sound Barrier Program list.

Response to Question 5

The current schedule for the CCT Project, which is dependent on funding, is for construction to begin in Spring 2018. Based upon a final decision to incorporate noise walls, with consideration of feasibility and reasonableness criteria and community input, noise wall design would be incorporated within the overall CCT design and construction schedule. Please understand that noise wall construction may be integrated into the transitway construction. If there is a feasible way to construct a noise wall in advance of the Transitway, it can be considered. However, further engineering is required to determine the relationship between noise walls and the transitway and it is premature to determine construction staging at this time.

I appreciate your continue interest in the CCT. If you have any further questions, please feel free to contact me at 410-767-1380 or by email at rkiegel@mta.maryland.gov.

Sincerely,

Rick J. Kiegel

Rick J. Kiegel, P.E.
Project Manager, Corridor Cities Transitway

cc: Mr. Henry M. Kay, Executive Director for Transit Development and Delivery
Mr. Kevin Quinn, Director, Office of Planning and Programming