



# TARRYTOWN-ON-HUDSON

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FAX NO. 914-909-1208

September 4, 2012

Mr. Michael P. Anderson  
New York State Department of Transportation  
4 Burnett Boulevard  
Poughkeepsie, New York 12603

VIA EMAIL AND REGULAR MAIL

Re: Village of Tarrytown Comments on Final Environmental Impact Statement, Tappan Zee  
Hudson River Crossing Project

Dear Mr. Anderson:

The following should be considered the official submission of the Village of Tarrytown Board of Trustees in regards to the Final Environmental Impact Statement prepared for the Tappan Zee Hudson River Crossing Project.

1. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village made reference to a Village of Tarrytown comment relating to the Scoping Document dated November 3, 2011 requesting that a hard look be provided in the Environmental Review Process to alternatives and/or specific actions that would mitigate the substantial negative impacts the project outlined in the scoping packet ("the preferred alternative") will have on the eighty-nine unit Quay Condominiums. The Village noted that the bridge replacement alternative will render the condominium's common elements nearly valueless and that the review must consider measures that will either directly mitigate these effects or enable the private property owners to recover the lost value. The FEIS includes a statement that the Replacement Bridge Alternative is not anticipated to significantly impact the quality of life or property value of The Quay, but there is no documentation to back up this assertion. Based thereon, the Village can only presume that the "hard look" requested by the Village in our response to the Scoping Documents and to the DEIS did not occur.

Specifically, there is no analysis of the economic impact of the proximity of the new bridge on

The Quay and the diminution of the value of the units at The Quay based upon the bridge replacement project. There is also nothing in any environmental review document regarding the fact that the proximity of the bridge directly adjacent to and above the pool and tennis courts renders these amenities virtually valueless other than an acknowledgement in the DEIS that an easement must be obtained for a 0.05 acre piece of vacant land adjacent to these amenities over which the bridge will pass. The description of that easement in the DEIS makes clear that the value ascribed to it is not nearly equivalent to, and simply does not take into account, the adverse environmental impacts the sheer presence of the massive bridge structure will have on the value of these amenities and the FEIS does nothing to rectify this deficiency. The DEIS failed completely to mitigate these negative impacts and the FEIS repeats this failure. The FEIS document also does not assess the economic impact of the proximity of the bridge to the Tappan Landing neighborhood and the Irving neighborhood.

2. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village reiterated a request that was originally included in the Village of Tarrytown comments on the Scoping Document dated November 3, 2011 that a hard look be given to the alternative concept of constructing one new bridge to the north of the existing bridge (to serve westbound/northbound traffic) and rehabilitating the existing bridge (to serve eastbound/southbound traffic). Similar to the DEIS, there is nothing in the FEIS addressing this particular concept, other than the statement in Executive Summary that the EIS considers two alternatives (No Build and Replacement Bridge) and that other alternatives, including Rehabilitation, Tunnel and Single Structure were determined "not to be reasonable because they would not meet the project's goals and objectives". However, the concept noted herein was never evaluated in any environmental document.
3. Although there has been considerable reporting in the print media regarding financing of the preferred alternative, nothing definitive is included in the FEIS in regards to how the project will be funded. The FEIS document states that the completeness of the DEIS is not dependent upon a financial plan being provided for the Tappan Zee Hudson River Crossing Project. It is difficult for the Village to accept such a comment since the funding component of the project has such a major impact upon the project and the region. It is the position of the Village that the failure of any environmental review document to address the financing issue is a severe shortcoming of the entire environmental review process.

In addition, the Village's comments regarding the DEIS noted that the document had failed to address the impact of an increase on tolls on both work related and discretionary travel. The concern regarding work travel also related to the impact on lower income drivers paying the increased toll in order to get to work. Although the FEIS document addresses the toll issues for work related travel, the conclusion that there is minimal impact due to the fact that there are not a significant number of low income drivers utilizing the bridge provides an extremely narrow perspective and fails to evaluate the impact on that sector of the population that actually does use the bridge for travel to work. The FEIS document fails to take a hard look at discretionary

travel and the impact on tourism and retail activities in Westchester and Rockland Counties.

4. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village made reference to comments from the Village dating back to October 2006 that that a hard look be given the concept of a Tappan Zee Bridge Bus-Train transfer station being constructed as part of the toll plaza. This issue was not addressed in the DEIS or the FEIS and it remains the position of the Village of Tarrytown that such a transfer station would provide, among other benefits, significantly reduced travel times, especially for commuters traveling to New York City for work purposes. Similarly, such a transfer station would also greatly enhance the flexibility of all other inter-county bus routes by allowing every bus crossing the bridge to provide transfer service to the Metro-North trains. The transfer station would also mitigate the negative environmental impacts associated with the continuation of the existing Tappan Zee Express bus service traversing the Village's streets when driving to and from the current Metro North Railroad (MNRR) station, as well as any negative impacts likely to result from future expansions in bus service, including a Bus Rapid Transit system. The transfer station would also provide significant benefits to the multitude of residents who live near the toll plaza, including and especially providing pedestrian access to MNRR. Such access not only would mitigate a portion of the adverse environmental impacts the new bridge will impose directly on those residents, but also would provide the broader environmental benefit of eliminating the need for those residents to utilize automobiles to travel to the current train station. The FEIS is silent in relation to this concept and it is the position of the Village that because of the concept's numerous benefits, in particular its potential to mitigate adverse environmental impacts, a Tappan Zee Bus-Train transfer station should have been evaluated as part of the environmental review process.
5. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village noted that there was a discussion in the document regarding the Westchester Bridge Staging Area, the Westchester Inland Staging Area and a roadway between the two areas. The DEIS document asserts that the staging areas and the connector road pose no significant adverse environmental impacts and the Village questioned that conclusion. The FEIS document notes that the temporary roadway and the staging areas meet the National Ambient Air Quality Standards (NAAQS) and the Village must once again note that it is the belief of the Village that it is highly unlikely that the creation of staging areas that presently do not exist will have no significant adverse impacts on the residential neighborhoods in which they are in close proximity, especially in relation to the noise, vibration and air pollution that will be generated by trucks and equipment utilizing the areas and the road. The Village locations that will be adversely impacted are the Irving neighborhood just south of the bridge, the Quay condominiums, and the Tappan Landing neighborhood just north of the Quay.

It does not appear that the following issues that were noted by the Village in the March 30, 2012 letter were considered in the FEIS. First, the fact that the existing noise barrier located adjacent to Van Wart Avenue (south of the toll plaza and NYS Thruway work area) is currently

inadequate to address the noise issues in the adjacent neighborhood. Second, the cumulative negative impacts that are likely to occur from the simultaneous development and construction of the 96-acre General Motors site in Sleepy Hollow. In the latter case, the Village of Sleepy Hollow has approved this project and its construction during the Tappan Zee Bridge Replacement Project period is a virtual certainty. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village noted that the preferred alternative provides for a bike and pedestrian trail on the new crossing; however, the DEIS does not address parking issues associated with access to the new trail. The response to the Village's comment is that this issue will be addressed during the design-build process. It is the position of the Village of Tarrytown that the issue requires an evaluation as part of the environmental review process, since the trail has secondary adverse impacts, namely added traffic and an increased demand for parking that is likely to result from the public's attempts to utilize that amenity. This issue has not been analyzed in the FEIS and it remains the position of the Village of Tarrytown that the environmental review process must address this access issue and provide suitable mitigation for the adverse environmental impacts associated with it.

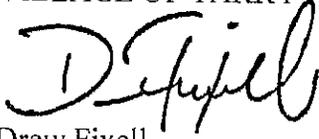
7. In the March 30, 2012 official submission from the Village of Tarrytown concerning the DEIS, the Village referenced Tarrytown Mayor Drew Fixell's comments at the March 1, 2012 public hearing, in which Mayor Fixell reiterated the statements contained in the November 3, 2011 letter concerning the need for mass transit on the new bridge, especially that the inclusion of mass transit will mitigate many of the adverse environmental impacts that the bridge creates for the Village of Tarrytown, the County and the region. The FEIS reiterates statements in the DEIS asserting that mass transit is beyond the scope of the project and that the new bridge will be constructed in a manner to accommodate mass transit in the future. However, it remains the position of the Village that mass transit, specifically Bus Rapid Transit (BRT) or other enhanced bus service, must be explicitly committed to and should be considered now rather than later. Absent that, there can be no assurance that the region will ever see mass transit on the Tappan Zee Bridge and, therefore, that there will be substantially less mitigation of the significant adverse environmental impacts associated with the new bridge.

8. The Village continues to employ the services of Mack Associates, LLC in regards to noise issues relating to the project, both during the construction project and after the bridge has been completed. The Village's consultant has reviewed the FEIS and Mack Associates comments, which shall be considered official comments of the Village of Tarrytown, are included with this letter.

Mr. Michael P. Anderson  
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The Village appreciates the opportunity to provide these comments in regards to the Tappan Zee Hudson River Crossing Project Final Environmental Impact Statement, however, the Village is disappointed that many of the comments included in the March 30, 2012 from the Village of Tarrytown were not addressed in the FEIS document.

Very truly yours,  
VILLAGE OF TARRYTOWN

A handwritten signature in black ink, appearing to read "D. Fixell", written over the printed name.

Drew Fixell  
Mayor

C: Board of Trustees  
Michael Blau, Village Administrator  
Paul Feiner, Supervisor and Members of the Greenburgh Town Council



# MACK

## ASSOCIATES, LLC

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29 August 2012

Mayor Drew Fixell and the Board of Trustees  
Village of Tarrytown  
One Depot Plaza  
Tarrytown, NY 10591

Re: Tappan Zee Bridge FEIS  
Noise Comments on behalf of  
Village of Tarrytown  
Westchester County

Dear Mayor Fixell and the Board of Trustees:

At your request MACK Associates, LLC (MACK) has reviewed the noise elements of the FEIS for the Tappan Zee Bridge River Crossing Project. We had also reviewed the DEIS and submitted comments to USEPA Region 2 by letter of 26 March 2012 and Michael Anderson of NYSDOT by letter of 30 March 2012. As you are aware we have also been retained by the Salisbury Point Cooperative (Salisbury) in South Nyack, Rockland County to perform the same functions.

Some very important additions have occurred that will provide enhanced noise mitigation during construction of the new facility. These include:

- Commitments for source and path controls to mitigate noise from individual pieces of equipment to defined noise limits at 50 feet that can be monitored for compliance (Table 18-24 on page 18-59); and
- Construct noise barriers (variously mentioned as “at least 8-11’ high” and “a minimum of 11’ high”) around all staging areas and along some of the construction access roads.

However, we are disappointed in the overall responsiveness of the FEIS and Response to Comments to the issues raised by our comment letters, and clarified and expanded upon in subsequent meetings. There were many comments either ignored, or not adequately addressed. On behalf of the Village of Tarrytown and Salisbury we submitted 38 pages of text with more than 100 discrete comments. These were grouped (or ignored) into 15 comments that were approximately 5 ½ pages long. However, rather than reiterate past comments, we have focused on making our points by new comments on the FEIS, the Response to Comments, and relevant Design Build Project documents. Also, for the DEIS

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review we generated two letters (one for the Village of Tarrytown, and one for the Salisbury Point Cooperative), with common attachments. This approach appears to have contributed to the aforementioned consolidation issues. Therefore, there will be no attachments and all comments will be within the body of the letter. Also, for the sake of clarity and future reference we have numbered each of our individual comments.

First we present general comments (G-1 through G-89) that relate to the project and analysis in the whole. These comments are identical in this letter to you and in a letter to Salisbury. Comments G-1 through G-71 relate to inconsistencies or uncertainties relating to the mitigation commitments that the Authority (which collectively is used to mean the NY State Thruway Authority and NYS Department of Transportation) has made. It is important that all mitigation commitments be clear to all parties (the Contractor, the Authority, local municipalities and agencies, and the public), and easily enforceable.

The remaining general comments (G-72 to G-89) relate to unresolved deficiencies in the baseline data, analysis, or mitigation. In some instances the comments stand on their own, and in other instances they introduce issues that are followed up in greater detail in the Tarrytown specific comments (T-1 through T-9). Thus, follow 98 comments on the noise aspects of the project. These comments focus on construction noise (monitoring, modeling, and mitigation). With respect to the permanent noise barriers, the visual analysis enhanced imagery that was promised at the public meetings has been deferred until the final design by the Design Build contractor. Since this seems like a reasonable approach we have not formally commented on it.

### General Noise Comments

The following general comments (G-1 through G-39) relate to text in the following document:

DB Contract Documents Part3  
Project Requirements  
Revision (Addendum No.10)  
July 18, 2012

**Exhibit B Item 2. CONSTRUCTION NOISE AND VIBRATION CONTROL** from pages B-3-3 and B-3-4 has been reproduced in its entirety in *black italics* and numbered comments added in *red italics* throughout. We have **bolded** some of the text for emphasis.

A. *Where practicable and feasible electric powered equipment rather than diesel powered equipment shall be used.*

*Comment G-1: Who determines what's practicable and feasible? Will the Authority review and verify?*

*Comment G-2: What are the inspection, reporting, and enforcement mechanisms involved with*

*respect to scheduling and frequency of equipment use?*

*Comment G-3: Will inspection and compliance reports be posted to the website in a timely fashion? If not, why not?*

*B. Use of impact devices such as jackhammer, pavement breakers and pneumatic tools shall be limited where practicable and feasible.*

*Comment G-4: Who determines what's practicable and feasible? Will the Authority review and verify?*

*Comment G-5: What are the inspection, reporting, and enforcement mechanisms involved with respect to scheduling and frequency of equipment use?*

*Comment G-6: Will inspection and compliance reports be posted to the website in a timely fashion? If not, why not?*

*C. Shrouds shall be utilized to limit noise exposure to the levels stated in Table 3-B-2-1.*

*Comment G-7: Which of the equipment listed will need shrouds to meet the noise levels?*

*Comment G-8: What are the inspection, reporting, and enforcement mechanisms involved with respect to scheduling and frequency of equipment use?*

*Comment G-9: Will inspection and compliance reports be posted to the website in a timely fashion? If not, why not?*

*D. Installation of appropriate noise attenuation around construction staging areas, including minimization of backup alarms and other noises.*

*Comment G-10: Who determines what's appropriate?*

*Comment G-11: The statement uses the word "around" which seem to imply path controls in the form of a wall, but the examples seem to imply source controls. Please clarify.*

*Comment G-12: What are the inspection, reporting, and enforcement mechanisms involved with respect to scheduling and frequency of equipment use?*

*Comment G-13: Will inspection and compliance reports be posted to the website in a timely*

*fashion? If not, why not?*

*E. Proper maintenance and service of all equipment used on Site, including Subcontractors' equipment, including installation of mufflers to limit noise.*

*Comment G-14: Will there be an inspection program for all new equipment brought to the Site?*

*Comment G-15: If not, how will this provision be enforced?*

*F. Use of sound attenuating curtains or shrouds on the pile driving hammers to reduce noise exposure to the levels stated in Table 3-B-2-1.*

*Comment G-16: How is this different from Item C?*

*Comment G-17: Please clarify that the shroud will enclose all four directions simultaneously. As discussed elsewhere pile driver noise will travel long distances so both shores must be protected simultaneously.*

*Comment G-17: How will compliance monitoring be conducted? Ground (or water) level monitoring at 50 feet will not be sufficient. Monitoring must also occur at representative vertical elevations.*

*G. Use of movable noise attenuation measures around pumps, trucks, and other noisy equipment when operating in close proximity to residential areas.*

*Comment G-18: What does close proximity mean?*

*Comment G-19: Is this more restrictive than Item C? If so, are there additional performance standards and enforcement mechanisms?*

*H. The development and implementation of community outreach activities related to construction noise impacts as outlined in the Environmental Documentation (EIS Chapter 18) and discussed further in Part 3, Project Requirement 8 – Public Involvement*

*I. In addition to the vibration monitoring requirements detailed in Project Requirement 10 – Geotechnics, six noise and vibration monitoring stations that shall continuously record noise and vibration shall be provided by the Design-Builder. These devices shall transmit data to a secure website to be maintained by the Design-Builder and access to the website shall be provided to the Authority or the Authority's designee. Three stations shall be located near the Westchester shoreline and three stations shall be near the Rockland shoreline. The locations of the stations shall be subject to the*

*approval of the Authority, and shall be relocated as directed by the Authority. Faulty stations shall be repaired by the Design-Builder within 48 hours of observing a fault.*

*Comment G-20: Will there be public input on the site selection? If not, why not? If so, how and when?*

*Comment G-21: We presume that the noise monitoring will be conducted to document the general success of construction noise mitigation program to limit noise increases (and impacts) to those increases disclosed in the FEIS. Thus, it will be important to monitor and document pre-construction baseline noise levels for comparison to monitored construction noise levels.*

*Comment G-22: Will the monitoring data be posted on the public website? If not, why not? If so, how quickly can the data be posted?*

*J. To the maximum extent possible, temporary noise walls shall be provided by the Design-Builder to shield residences from construction staging areas, platforms and construction works. A minimum 11 feet high, temporary noise wall shall be installed between the construction staging areas and platforms and the shorelines, and between the construction staging areas and platforms and the south side of the exit ramp (adjacent to Ferris Lane).*

*Comment G-23: What does "to the maximum extent possible" mean? The location and height of the barriers should be presented to the public and feedback obtained as part of the Public Information Program.*

*Comment G-24: What studies or modeling has been done to determine what an appropriate height is? Other major highway construction projects (e.g. the Central Artery in Boston) have used higher barriers with cantilevered tops to provide protection for receptors at higher elevations during construction. The following text was in a paper describing the Central Artery construction noise mitigation:*

*If practical, noise barriers should be tall enough to provide noise reduction for the upper-most stories of nearby sensitive receptors, though this may not always be achievable with abutting multi-story buildings. Indeed the limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In these cases, the barrier/curtain system must either be very tall or have some form of roofed enclosure to protect upper-story receptors.*

*Comment G-25: By saying a minimum 11' high implies that the barrier could or should be higher. Who will evaluate the appropriate height based upon the elevation of adjacent sensitive receptors?*

*K. All construction equipment, including any at-source noise abatement systems, shall not exceed the maximum noise levels shown in Table 3-B-2-1. See Part 2 DB§107-13 for nighttime noise restrictions. In addition, on Saturday mornings until midday and on Sundays all day, no equipment shall be used that emits noise above 70dBA measured at an offset distance of 50 feet if the work is on land and at the nearest point of the shoreline if the work is in the water.*

*Comment G-26: With respect to work on land does this mean that no equipment with a Lmax of 71 dBA (Table 3-B-2-1) of greater can be used during these time periods, including concrete mixer and pump trucks?*

*Comment G-27: With respect to work in or over the water how is this determined? Will the noise monitoring data in Item I be used in any way? If so how?*

*Monitoring, internal reporting, and management of noise levels by the Design-Builder shall be configured to ensure that:*

*any exceedance of the maximum permitted noise levels shall be identified by the Design-Builder within 30 minutes of the occurrence; and (ii) the activity causing the exceedance is mitigated within 1 hour of the first occurrence such that the exceedance is not repeated. Any exceedance of the maximum noise limits shall be reported to the Authority's Project Manager within 48 hours, with details of the mitigation adopted. Other than exceedance events, reporting of noise measurements shall be weekly.*

*Comment G-28: What noise monitoring other than the six stations in Item I will be required?*

*Comment G-29: Will the Authority undertake any independent verification noise monitoring?*

*Comment G-30: Who will establish, and who will review and approve the equipment specific noise monitoring protocols?*

*Comment G-31: Will the public or local municipalities be afforded the opportunity to comment on the noise monitoring protocols? If not, why not? If yes, what will the process be?*

*Comment G-32: Will the professionals hired by interested parties be provided access for verification noise monitoring should conflicts arise? If not, why not?*

*Comment G-33: Will noise measurements and exceedance data be promptly posted on the public*

website? If not, why not?

**Table 3-B-2-1 Maximum permitted noise levels from construction equipment**  
**Equipment Description - Maximum noise levels Lmax (dBA)(1)**

Compressor (air)	58
Concrete mixer truck	71
Concrete pump truck	71
Crane	70
Drill rig truck	69
Dump truck	69
Excavator	71
Flat-bed truck	66
Front end loader	74
Generator	60
Impact pile driver	90
Man lift	63
Paver	67
Pumps	73

**Comment G-34:** The FEIS says 77 dBA for pumps. Which value is correct?

Roller	70
Vibratory pile driver	90
Other	70

**Comment G-35:** We presume that "Other" includes all other pieces of equipment including, but not limited to: chain saw; concrete saw; grader; grapple; jackhammer; hoe ram; and pneumatic tools. Is that correct?

(1) A-weighted maximum sound level, measured at a distance of 50 feet from the construction equipment, with the use of relevant at-source noise abatement system controls.

**Comment G-36:** Which of these limits can be met by selection of quiet equipment, and which will require shrouds or other enclosures that will require periodic inspection?

**Comment G-37:** What are the specific measures to reduce impact pile driving noise from 105 dBA to 90 dBA? Please provide a schematic that identifies the major noise generating portions of the pile driving, the location of the shrouds, and the location (horizontal

*and vertical) of the compliance noise monitoring.*

*Comment G-38: Have these measures been successfully used elsewhere? If so where? If not what confidence do you have that they will work?*

*Comment G-39: In the EIS for The San Francisco- Oakland Bay Bridge East Span Replacement (which is currently under construction) CALTRANS made the following statement*

*(<http://www.dot.ca.gov/dist4/sfobb/Environmental%20Consequences.html#4145>):*

*Caltrans has already investigated such measures as selecting a quieter pile driver, placing a shroud around the hammer, using portable shielding, sound blankets, and plywood sheets. These measures were found not to work for a variety of reasons, including not being effective, challenges in implementation due to wind conditions and elevation, and cost.*

*This raises some concerns. Will the Authority allow the Design Build contractor to not meet the noise limits for technological or cost reasons? If so, that would increase noise impacts above those disclosed in the FEIS (since the pile driver is the noisiest piece of equipment used any increases in peak pile driving noise will increase the maximum construction noise levels) and would necessitate a Supplemental EIS.*

The following general comments relate to **Exhibit B Item 7. PILE DRIVING MANAGEMENT** on page B-3-9.

*D. Limiting the periods of pile driving to no more than 12-hours per day, and predominantly within daytime hours (for example 7am to 7pm). In rare circumstances, and after notifying the Authority Project Manager, it is possible that piling may extend further than 12 hours depending on the practicality of driving.*

*Comment G-40: We can understand the use of the phrase "predominantly within daytime hours" as it relates to winter and short days (9 hours from sunrise to sunset). However, if applied in the summer time when the days are longer (15 hours from sunrise to sunset) the start time could be before 7am or the end time could be after 7pm. Why can't the Authority just commit to 7am to 7pm?*

*Comment G-41: What is the process that the Authority will use to allow pile driving for more than 12 hours a day? Will there be the opportunity for public input into that process prior to implementation? If not, why not? How will the Authority provide notice to communities that they have allowed pile driving for more than 12 hours on a particular day(s)?*

*Comment G-42: What are the schedule, cost and impact factors that the Authority will use in making a determination on such a request? Will complaints or issues relating to 7am to 7pm operations be a factor?*

The following general comments relate to PIP Section 8: Public Involvement during Design-Build Phase from page A-8-11.

*i. **Interim Information Updates for Local Officials** – the Authority, in consultation with the Design-Builder, shall provide interested municipal and county elected officials and key agencies with a two-weekly update of (1) **planned construction activities** for the subsequent two-week period, highlighting any potential for noise, dust, safety or other impacts of possible concern to local residents or travelers; (2) any **unusual traffic diversions** or delays due to planned construction activities; and (3) **nighttime or weekend construction activities** (e.g. off-hour deliveries).*

*Comment G-43: Why can't there be regular reporting of the ongoing and compliance noise monitoring?*

*A summary of any **unusual or important** public comments or concerns submitted in writing, posted on the website or received on the Project's phone hotline would also be provided, along with any planned or completed responses to those comments.*

*Comment G-44: Who makes the decisions as to which are "unusual or important"? This concern is less an issue if all comments and responses would be posted on the public website in a timely fashion.*

*Comment G-45: Wouldn't a more transparent way of reporting be to track comments by geographically (e.g. Salisbury Point, or the Irving neighborhood) and by technical area (e.g. air quality, or traffic) to provide context? Can this be done? If not, why not?*

*The Authority shall provide this information to involved municipalities and agencies that indicate an interest in receiving these "municipal e-alerts" on a two-weekly basis and at other times as deemed appropriate. Immediate contact shall also be made with local and county officials in potential affected areas connected with emergency-type events, such as accidents, spills of other events of possible public concern.*

*j. **Public Information Response Process** –Based on the recommendation included in the selected Design-Builder's proposal and finalized in consultation with the Authority, this process will clearly indicate how it will consider and utilize all forms of stakeholder input, including potential actions in consultation with the Agencies to refine the Project's design or construction activities.*

*Comment G-46: Will the Authority solicit feedback from the public on the Public Involvement Plan before it is adopted? If not, why not?*

The following general comments (G-47 to G-53) relate to  
DB Contract Documents Part2  
DB Sections 100  
General Provisions  
Revision (Addendum No.10)  
July 18, 2012

Section **DB 107-13 NOISE ABATEMENT** on pages 151 – 152 states:

*In urban or populated rural areas where quiet conditions normally prevail, no equipment that emits noise above 70 dBA measured at an offset distance of 50 feet, if the work is on land, and at the nearest point of the shoreline, if the work is in the water, shall be operated during nighttime hours unless such Work is otherwise specified in the Contract Documents. The Authority's Project Manager may authorize nighttime Work under special circumstances or emergency conditions.*

*Comment G-47: This language is similar to, but not identical to, language in Part 3. Why not make the language identical?*

*Comment G-48: Does "noise above 70 dBA" mean an Lmax of 70 dBA?*

*Comment G-48: Nighttime should be defined.*

*Comment G-49: This clause does not address different work hours on the weekend. It should be modified to so address.*

*Comment G-48: The first part of the statement indicates that work can occur at night if it less than 70 dBA, yet the final sentence states that nighttime work may be authorized. Does that mean that any nighttime work needs to be authorized? Or does it mean that nighttime work over 70 dBA needs to be authorized?*

Every earlier version of the document also contained the following statement:

*County or municipal ordinances shall apply if they are more stringent than the requirements of the Contract Documents.*

*Comment G-49: Why was this deletion made?*

*Comment G-50: We presume that this sentence has been used in other contract documents in the State. Where else has it stayed in the contract?*

*Comment G-51: The deletion of this sentence appears to directly contravene NYSDOT procedures <https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm>*

*4.4.18 Noise Analysis Policy and Procedures*

*In some cases there may be local laws or ordinances that govern construction noise levels or hours. New York City has a local law that is quite restrictive in many areas. The Department is not generally subject to local noise control ordinances; nevertheless, the existence of those laws should be investigated during project development and every reasonable effort made to comply with their provisions during construction following the procedures provided above.*

*Please comply with NYSDOT procedures. We recommend that the Authority coordinate with each affected municipality with respect to the conditions in their noise ordinances.*

*Comment G-52: The FEIS Response to Comment 18-98 states:*

*The NYSTA is a state authority and is not required to comply with local codes and regulations. However, it is NYSTA's practice to comply with local codes and regulations where and when compliance would not result in substantial delays, require incurring additional costs, or interfere with achieving project goals.*

*This is NOT what the procedures say. There was no discussion of what the various noise codes say in the affected municipalities and how and why the project is deviating from them. The phrase "every reasonable effort" in the procedures certainly seems clear. The Authority and their consultants should have "investigated" the local noise codes during NEPA/SEQRA and assessed their ability to comply. Compliance with those parts of the noise codes that could be complied with should have been summarized. Specific reasons for non-compliance of other portions should have been documented. Any additional cost, as the response implies, should not a reason for non-compliance. Because of the sensitivity of construction noise as an issue public dialogue on what constitutes "every reasonable effort" should have been part of the NEPA/SEQRA process.*

*Comment G-53: Since the FEIS has not properly addressed the "every reasonable effort" issue and the noise mitigation measures are only vaguely defined there are many more*

*details to be finalized. How will this be accomplished moving forward? It will be important for all municipalities and affected residents to have their voices heard.*

In addition to discussions regarding construction noise in the Design Build Documents there are also discussions in the FEIS on pages 18-58 and 18-59. General comments C-54 to C-71 relate to those pages, the relevant text of which is reproduced below.

*Two significant noise abatement measures that NTSTA/NYS DOT will implement would be: (1) the use of noise barriers to reduce truck noise along the south and north sides of the ramp leading to River Road in Rockland County and on the south side of the access road leading to the staging area in Westchester County;*

*Comment G-54: This commitment includes more construction road noise barriers. See text relating to Comments G-23 to G-25. The Record of Decision/Findings Statement should include all barriers.*

*Comment G-55: The barriers along construction roads should be installed before the access roads are constructed, and dismantled only after the access roads are demolished.*

*Comment G-56: The barriers at staging areas should be installed as early in the construction sequence as possible.*

*and (2) the use of quiet equipment and path control measures. Specifically contractors will be required to construct noise barriers at least 8-11 feet high in the areas described above, and around all inland and pier staging areas.*

*Comment G-57: The Design Build documents say a minimum of 11 feet. See Comment G-25. We presume that barriers will be a minimum of 11 feet tall. Is that correct?*

*With regard to the use of quiet equipment and path control measures, Table 18-24 shows L<sub>max</sub> noise levels at 50 feet for selected typical construction equipment and the L<sub>max</sub> noise levels at 50 feet for the same equipment that contractors would be required to achieve (using quiet equipment and/or path controls [shrouds, barriers, etc.]).*

*In addition to the noise barriers and equipment with reduced noise levels specified above NYSTA and NYSDOT are committed to implementing the following generalized source control, site control, and community awareness measures to minimize and reduce potential noise concerns relating to construction activities:*

*Comment G-58: These general items are either not mentioned in the Design Build documents or*

*are worded differently. This needs to be clarified.*

▪ *Source Control Measures:*

- *Use of properly designed and well-maintained mufflers in all internal combustion engines, engine enclosures, and intake silencers;*

*Comment G-59: Who will inspect? Who will enforce?*

- *Require contractors to perform regular periodic equipment maintenance; and*

*Comment G-60: Will contractors be required to have maintenance logs for Authority inspection? If not, how will requirement be met?*

- *Use of new equipment with reduced noise levels where feasible and practicable.*

*Comment G-61: Is this requirement any more restrictive (i.e. protective of the residents) than Table 18-24?*

▪ *Site Control Measures:*

- *Place stationary equipment as far away as feasible and practicable from sensitive receptor locations;*

*Comment G-62: Who determines what is feasible and practicable?*

*Comment G-63: Will the Authority inspect equipment locations and require changes if necessary?*

- *Strategically select waste disposal sites to minimize potential noise concerns;*

*Comment G-64: Will the Authority approve waste disposal sites?*

*Comment G-63: Will the Authority inspect waste disposal sites and require changes if necessary?*

- *Where feasible, coordinate work operations to coincide with time periods when people would be least likely to be affected by construction-related noise;*

*Comment G-64: Who determines what is feasible?*

*Comment G-65: What time periods would people be least likely to be affected by construction*

*noise?*

- *Where feasible eliminate nighttime operations (in particular no pile driving will be scheduled for nighttime, Saturday morning and all day Sunday);*

*Comment G-66: The commitment is vague and inconstant with the Design Build documents. Please clarify.*

- *Eliminate "tail gate banging";*

*Comment G-67: How will this be done?*

*Comment G-68: Who will inspect?*

- *Reduce backing-up procedures for equipment with backup alarms, and replace backup alarms with strobes where acceptable per Occupational Safety and Health Administration (OSHA) and other regulations; and*

*Comment G-69: How will back-up procedures be reduced?*

*Comment G-70: There are also variable loudness back-up beepers that meet OSHA requirements. Alternate (i.e. quieter than standard) backup beepers should be required on all equipment. If not, why not?*

- *Where feasible, prior to construction operations commencing, construct noise barriers described in Chapter 12 to mitigate post construction conditions.*
- *Community Awareness Measures:*
  - *Notify the public of construction activities that may be perceived of as noisy and intrusive prior to starting construction; and*
  - *Establish means for the public to contact the engineer-in-charge (i.e., provide telephone number, email, etc.) and methods to handle complaints.*
  - *Implement a noise and vibration monitoring program.*

*Comment G-71: Many other items should be posted on the public website including, but not limited to: (1) on-going noise monitoring data; (2) noise mitigation compliance reports; and (3) complaints and responses. The responses should be clear as to how individual complaints are addressed.*

There are other items of general concern that are discussed in the FEIS or in the Response to Comments. These topics are: (1) whether a SEIS should have been prepared; (2) the acquisition and

use of noise data during and from the PIDP; (3) the lack of adequate baseline noise monitoring including L10 and Lmax data and analyses; (4) construction noise modeling using Cadna/A; (5) enhanced noise transmission over water bodies; and (6) the appropriateness of receptor controls. Specific comments are below.

*Comment G-72: Numerous commenters on the DEIS raised the issue that a SEIS needed to be prepared and not a FEIS. Part of Response R 3-18 states:*

*Partly in response to comments made with respect to the claimed need for an SDEIS, FHWA prepared a Re-evaluation to assess whether, after the completion of the DEIS, there were any changes to the proposed action or new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts that would result in significant environmental impacts not evaluated in the DEIS. The Re-evaluation, which appears in Appendix A to this FEIS, reflects the agency's determination that an SDEIS was not required.*

*This Re-evaluation (Appendix A-7) is a 607 page document with no table of contents to permit an easy review. In scanning every page we concluded that NONE of the SEIS points raised in the comments on the DEIS by anyone had been addressed. Thus, the claim that there is a link between the comments on the DEIS and the Re-evaluation is unsupported by the available information. The issue of the need for a SEIS should have been discussed globally in the Re-evaluation rather than piecemeal in Responses to Comments. The piecemeal response allowed comments to be restated with important issues missing, and to be addressed separately and narrowly, rather than in a large comprehensive way.*

*Comment G-73: We, and others, had raised issues about incorporating the results of the PIDP in the SEIS (or in this case the FEIS). Fisheries work relating to noise and other issues was summarized in a 181 page technical appendix (Appendix F). The only report on ambient noise monitoring was to say that the impact pile driver was 106 dBA at 50 feet (which is significantly higher than used in the DEIS analysis). There was no discussion of any important details, for example, methodology, location and height of monitoring, monitoring at multiple distances, how many occasions the monitoring was conducted, or whether attenuation rates over the water varied. This information is crucial to the conclusions in the FEIS should be provided. The impact pile driver is the noisiest piece of equipment by far and is the controlling factor as far as peak noise levels.*

*Comment G-74: We had raised the issue that L10 and Lmax should also have been addressed (Comment 18-96). The response, R 18-96, misses the point. The Leq descriptor, which was used in the DEIS and FEIS, may indeed be the single most utilized*

*descriptor, but it is not the only important or relevant descriptor. It is the easiest to calculate because of RCNM. However, Lmax, which is indicative of how loud the loudest, most intrusive and disruptive noises are, is also easy to calculate.*

*Presentation and discussion of Lmax levels would have assisted the reader in understanding exactly how intrusive the construction activities would be in their daily lives. It will likely be the peak noises (Lmax) that generate the most complaints from the adjacent residences. Because of that the Lmax levels that correspond to the modeled Leq values should be calculated and disclosed. In this way monitored Lma values can also be used to document the success of the noise mitigation program.*

*Comment G-75: L10 is also an important descriptor in that at 45 dBA L10 is a commonly used interior standard, which is used in New York City. The L10 issue will be further discussed in Comment T-1.*

*Comment G-76: An important aspect of an EIS is to “bound” the potential impacts. Bounding means to describe and disclose the worst case impacts. With noise that is related to maximum loudness and duration. The FEIS discusses worst case impacts (for a period of up to 6 months), but does not duration further. For example the NYC CEQR Technical Manual defines construction impacts of less than two years as short term and greater than two years as long term. The FEIS did not address the noise increases that would exist throughout the long term construction. For example, Table 18-25 reports a maximum increase in Leq of 10 dBA at 5 Edgewater Lane. This is described as a unmitigated noise impact that could occur for up to 6 months. The FEIS is silent on what happens beyond 6 months. We can only assume, therefore, that at all locations noise increases will be 3 dBA or less except for one six month period. Any increases more than 3 dBA outside the 6 month window are not analyzed or disclosed in the FEIS, and therefore not covered by the bounding. Any unmitigated noise impacts longer than 6 months would require additional mitigation and analysis in a Supplemental EIS.*

*Comment G-77: The issue of inadequate baseline noise monitoring raises additional issues. It is reported on page 18-61 of the FEIS that:*

*construction-related activities would be expected to produce noise levels at these five receptor sites (Sites 2, 3, 5, 6, and 7), and at locations near these receptor sites, which would be intrusive and noisy, and result in unmitigated noise impacts.*

*Site # 2, which is somewhere on Thruway property between The Quay and the Thruway, has a maximum noise increase of 10 dBA. Site # 1, which is somewhere in the Tappan Landing development, has a maximum increase of 3 dBA, which is barely perceptible and not an unmitigated impact. The Quay lies between these two*

*receptors. Can those residents expect increases of 3 dBA, which would not be an impact, or can they expect increases of 10 dBA which would be an impact?*

*Comment G-78: If The Quay or Salisbury, for example, wanted to independently verify during construction that the mitigation measures were working as represented in the FEIS there are no accepted (by the Authority) baseline values in the Quay or Salisbury to which to compare. In fact, no independent observer could do monitoring at any of the sites because we do not know the location at which the measurements were taken and the modeling performed.*

*Comment G-79: In fact, if the Authority were to attempt to do noise monitoring during construction in response to complaints there is not sufficient baseline noise monitoring. The noise and vibration monitoring at the 6 sites (3 in Westchester County and 3 in Rockland County) discussed in the Design Build Contract (see Comments G-20 to G-22) could partially solve this problem if noise monitoring were to start prior to construction. Will that be required to occur?*

*Comment G-80: Even if it does occur at those 6 sites how will the Authority respond to complaints from residents not adjacent to those 6 monitoring locations?*

*Comment G-81: It would seem appropriate for the Authority, in consultation with the affected municipalities, to establish a more comprehensive set of baseline monitoring data to which future compliance is compared. More detailed examples of the lack of sufficient site specific baseline noise monitoring is presented in both the Tarrytown and Salisbury comments. We recommend that the Authority and interested parties agree to monitoring protocols that could be followed by any interested party to confirm that mitigation measures are being implemented and mitigate noise levels as represented in the FEIS.*

*Comment G-82: If compliance noise monitoring at 50' is within the limits specified, but the ambient monitoring shows unmitigated impacts that are greater in intensity or duration than disclosed in the FEIS, what will the Authority's response be? Enhanced mitigation? A Supplemental EIS? How quickly will the response be implemented?*

*Comment G-83: We previously commented that Cadna/A would have been a more appropriate construction noise model than RCNM (Comment C 18-92). The response was: The RCNM 1.1 model used for the construction noise analysis is the model recommended and approved by FHWA and NYSDOT for this type of analysis. The*

*Cadna A model is not a model that has been approved by FHWA and NYSDOT for this use.*

*The response is not totally correct. Yes RCNM 1.1 is used and approved by FHWA and NYSDOT, but it not exclusive. As per FHWA's Construction Noise Handbook [http://www.fhwa.dot.gov/environment/noise/construction\\_noise\\_handbook/handbook06.cfm](http://www.fhwa.dot.gov/environment/noise/construction_noise_handbook/handbook06.cfm)*

*More recently there have been very sophisticated noise prediction model programs commercially available such as SoundPLAN (by SoundPLAN LLC of Shelton, WA), Cadna/A (by DataKustik of Munich, Germany), and the Environmental Noise Model (ENM by RTA Technology of Australia). These programs are able to display the predicted noise levels in formats that **provide much more information**, when compared to spreadsheet models, by **graphically displaying results as equivalent noise contour lines**. In doing so, noise levels at any receptor location of interest can quickly be estimated by interpolating the results between adjacent noise contour lines. Moreover, the construction equipment types and working locations can be changed fairly easily in these models, and new noise results can be computed much more quickly than could be done with discrete receptor point models. These sophisticated models also allow for some evaluation of noise reduction effects from various mitigation measures and/or man-made or natural barriers.*

*There is a clear acknowledgement by FHWA that Cadna/A is a more sophisticated model for use in more complex environments. In fact, we question whether Figures 18-13 and 18-14 in the FEIS were developed with Cadna/A. Since RCNM 1.1 could not have been used to generate the contours to develop those figures, the model, methodology, assumptions and input parameters should be disclosed and discussed.*

*Comment G-84: There were several comments on the DEIS on the enhanced transmission of sound over water and at multiple meetings with the Authority. The response that the models account for that is not correct.*

*A recent (2010) noise study by DOE reported that modeled noise levels at a distance of 4.83 km (3.0 mi) modeled over water are 16 dBA higher than modeled at that distance over land. The report citation is:*

*USDOE Report PNNL- 20015  
Offshore Wind Turbines  
Estimated Noise from Offshore Wind Turbine,  
Monhegan Island, Maine  
Environmental Effects of Offshore Wind Energy Development  
November 2010*

*The explanation in the report is quoted as follows:*

*The noise level calculated using the Swedish overwater model is much larger than that calculated with the two land-based models. This is due to the manner in which the model treats the geometric divergence of the acoustic signal. While both land models assume spherical wave spreading throughout the entire region, the Swedish overwater model assumes spherical wave spreading for the first 200 m and then transitions to cylindrical spreading. For spherical wave spreading the sound pressure levels decrease 6 dB with every doubling in distance, while with cylindrical spreading there is a 3 dB reduction with every doubling in distance.*

*The approximate width of the Hudson River at the crossing is 3 mi. This means that pile driving on the Westchester side of the river will be about 16 dBA louder on the Rockland side than the FEIS acknowledges. This also means that pile driving in the center of the River would be about 11 dBA higher on both shores than the FEIS represents in its modeling. Thus, the potential for unmitigated noise impacts extending for greater than 6 months is great and must be addressed. This supports the reasonableness and need for receptor controls to mitigate construction and operation noise.*

*Comment G-85: We raised the issue of receptor controls (Comment C 18-101). The Response (R 18-101) stated:*

*It is not FHWA and NYSDOT policy to fund receptor abatement measures (i.e., building envelope improvements, such as soundproofing or the installation of better quality windows to reduce noise impacts for residents), and NYSTA has no plans to install a bubble over the pool for noise abatement.*

*To say that it is not FHWA policy to fund receptor abatement measures is confusing at best and wrong at worst. It is FHWA's Construction Noise Handbook (2006) that specifically discusses receptor noise abatement measures. Also, other FHWA projects (e.g. the Boston Central Artery) have included receptor noise abatement measures such as replacement windows.*

*A direct quote from the following paper supports and explains this point.*

**Construction noise control program and mitigation strategy at the Central Artery/Tunnel Project** (Received 1999 December 15; revised 2000 July 21; accepted 2000 August 04) Erich Thalheimer

*Acoustical window treatments to improve the noise reduction qualities of residential window openings represents a proven successful means to implement receptor noise control. In general, window openings are the weak link in a*

*structure's external facade allowing noise infiltration into the building. When properly specified and installed, window treatments can provide for a significantly quieter interior noise environment, particularly in multi-story buildings with upperfloors that may not benefit from typical noise barriers.*

*Because (1) construction noise impacts have been understated in duration and (2) difficulties with respect to compliance monitoring and enforcement, there must be consideration of receptor controls as an appropriate means of noise mitigation.*

*Comment G-86: It is insufficient and inadequate to say that it is not NYSDOT to fund receptor abatement measures. Policies are developed on the basis of past practice and must be re-evaluated as new information becomes available. It was likely Massachusetts DPW's old policy not to fund receptor abatement, as construction was started on the Central Artery without such a program. The policy was obviously amended to permit it, and it was successfully incorporated into the project. NYSDOT should re-evaluate their policy.*

*Comment G-87: A very important question, to which we did not see answered in the Design Build documents, or explained in the FEIS is: what are the consequences to the contractor of non-compliance with the noise mitigation plan?*

*Comment G-88: The FHWA Construction Noise Handbook speaks to this point in Section 7.8: On those projects where construction noise impacts require a significant level of physical and operational mitigation, the ability to successfully monitor construction noise is closely tied to the commitment to meet the requirements detailed in the contract specifications and special provisions. To be able to successfully enforce any project's construction noise requirements, it is essential that the project's specifications and special provisions embody the following:*

- Empowerment of staff;*
- Clearly defined consequences; and*
- Dispute resolution mechanism.*

*We believe that these points should be explicitly addressed in the contract documents.*

*Comment G-89: Another recommendation in the FHWA Construction Noise Handbook, Section 7.3.4 is:*

*Another technique worthy of consideration involves the inclusion of incentives and/or disincentives in the contract specifications to encourage contractors to*

*participate in the mitigation program and to make the contractors more accountable for impacts.*

*Can incentives and disincentives be included in the contract? If not, why not?*

### Village of Tarrytown Noise Comments

*Comment T-1: The potential construction noise impacts to the communities (the Irving neighborhood, The Quay, and the Tappan Landing neighborhood) along the Hudson River (and the Amtrak/MetroNorth rail line) are understated because of the inclusion of the rail noise in the background noise values. We do not know by how much because the number of diesel and electric trains were not counted during the noise monitoring. The peak noise from the diesel trains is a far louder than the traffic noise; however, it only occurs for short periods of time (less than 4 minutes of any hour). It is loud enough to measurably raise the Leq, but is not off long enough duration to raise the L10 (because the diesel train noise is far less than 10% of the total time). The diesel trains could easily raise the monitored Leq by 4 to 6 dBA or more. Thus, a projected 3 dBA increase over 1 hour could in reality be a 9 dBA increase for 56 minutes of that hour. There should be disclosure of the monitored L10 and Lmax values in the supplemental noise studies. Should new impacts be uncovered as a result of this disclosure a focused Supplemental EIS (SEIS) should be prepared. Additional mitigation should be analyzed and proposed.*

*Comment T-2: There is one monitoring site in the Irving neighborhood (#4). Site 4 is projected to have a maximum construction noise increase of 1 dBA, which is not an impact. Reliance on this modeling would indicate that the Irving neighborhood will not be subject to ANY construction noise impacts for ANY period of time. It would seem logical that one of the three Westchester noise and vibration monitoring sites should be located in the Irving neighborhood. If future monitoring showed any increases over 3 dBA then a supplemental noise analysis and additional mitigation would be required as part of a focused SEIS.*

*Comment T-3: The sole temporary access road to the Westchester Bridge Staging Area in the River is to be constructed immediately to the north of the Irving neighborhood. How this road can be constructed, used, and demolished all while not increasing noise levels in the Irving neighborhood needs to be clarified. To the extent that this clarification needs to be postponed until the Design Build contractor is selected, a Supplemental Noise Analysis needs to be conducted and released for public review at that time. If new noise impacts are identified this should be circulated as a focused Supplemental EIS that considers additional mitigation measures.*

*Comment T-4: This construction road, once it crosses the railroad tracks and gets to the river bank, will turn to the north paralleling the river to get to the staging area access point. As indicated in the DEIS, and clarified in subsequent meetings with the Authority, this portion of the access road may require pile driving. If this is the case, the Supplemental noise analysis discussed above should include this activity.*

*Comment T-5: There is one monitoring site in the Tappan Landing neighborhood (#1). Site 1 is projected to have a maximum construction noise increase of 3 dBA, which is not an impact. Reliance on this modeling would indicate that the Tappan Landing neighborhood will not be subject to ANY noise impacts for ANY period of time. It would seem logical that one of the three Westchester noise and vibration monitoring sites should be located in the Tappan Landing neighborhood. If future monitoring showed any increases over 3 dBA then a supplemental noise analysis and additional mitigation would be required as part of a focused SEIS.*

*Comment T-6: The temporary access road, the Westchester Bridge Staging Area, and direct access to it are immediately adjacent to or directly off-shore from it. Once the Design Build contractor is selected a Supplemental Noise Analysis needs to be conducted and released for public review. If new noise impacts are identified, this should be circulated as a focused Supplemental EIS that considers additional mitigation measures.*

*Comment T-7: There are no current monitoring sites in The Quay. It would seem logical that one of the three Westchester noise and vibration monitoring sites should be located in the Tappan Landing neighborhood. However, it is currently unclear what construction noise impacts the FEIS is disclosing for The Quay. The residential location just to the north (Site 1) indicates that there would be NO noise impacts during construction. The non-residential site just to the south (Site 2) indicates that maximum construction noises increases of 10 dBA for up to 6 months are possible. Since the FEIS elected not to clarify this point, it is reasonable to take the most conservative assumption that Site 1 is representative of all the units in The Quay. This means that there are no projected construction noise impacts at The Quay disclosed in the FEIS. If it determined that there would be impacts (i.e. increases of more than 3 dBA) then a SEIS should be prepared with additional mitigation analyses.*

*Comment T-8: The temporary access road, the Westchester Bridge Staging Area, and direct access to it are immediately adjacent to or directly off-shore from The Quay. Once the Design Build contractor is selected a Supplemental Noise Analysis needs to be conducted and released for public review. If new noise impacts are identified, this*

*should be circulated as a focused Supplemental EIS that considers additional mitigation measures.*

*Comment T-9: The FEIS currently represents that with mitigation as proposed there will not be ANY noise impacts (i.e. no noise level increases of more than 3 dBA Leq at ANY of the residences in Tarrytown. Should future studies by the Design Build contractor, or future monitoring demonstrate that there are or would be impacts then a focused SEIS must be prepared with additional mitigation measures evaluated. These additional mitigation measures should consider receptor controls.*

*Comment T-10: The Authority should clarify that the noise walls on the Westchester Bridge Staging Area will also be on the north side so that the marina and Losee Park will be protected.*

Should you have any questions please do not hesitate to contact me at 732-616-4557 or via email at [brooke@mackassociatesllc.com](mailto:brooke@mackassociatesllc.com).

Sincerely,  
MACK Associates, LLC



Brook Crossan, Ph.D., P.E.  
President

Copy:  
Michael Blau, Village of Tarrytown