



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



William Cass, P.E.
Commissioner

Andre Briere
Deputy Commissioner

December 20, 2022

Eric B. Eby, P.E.
City Engineer - Parking, Transportation and Planning
City of Portsmouth Public Works Department
680 Peverly Hill Road
Portsmouth N.H. 03801

Re: Portsmouth 43760 – I-95 Soundwalls

Dear Mr. Eby,

Thank you for your September 14, 2022 letter to Commissioner Cass regarding alternative privacy fence options in the area of the New Franklin School. As the project manager for the Portsmouth I-95 Soundwall project (Portsmouth 43760), Commissioner Cass has asked that I provide a response to your questions regarding the extent of the structural efforts necessary to install the proposed privacy fence adjacent to the New Franklin School and if this privacy fence could be enhanced using City funds to provide a soundwall consistent with those which have been proposed at other locations within the project area.

While the details of the New Franklin School privacy fence are still being developed, the main purpose of this privacy fence will be to provide a visual screen between the highway and the school. Privacy fences typically involve the installation of a ground mounted post attached to a lightweight panel which provides approximately 6-8 feet of visual protection. Privacy fences do not require extensive foundations and structural components as they are relatively lightweight and low in height. Soundwalls on the other hand, must be dense enough and tall enough to provide the necessary noise reductions to meet the noise abatement requirements. As such, soundwalls require much more extensive foundation and structural elements than privacy fences. As privacy fences and soundwalls are two very different structures with different purposes, any structural efforts associated with the design and construction of the proposed New Franklin School privacy fence will not be consistent with those associated with the proposed soundwalls.

Your letter requested information regarding the difference between the cost to construct the proposed privacy fence and the potential costs associated with the construction of a noise barrier adjacent to the New Franklin School. While the costs of the various potential privacy screening options are currently being evaluated, the cost associated with constructing a minimal length noise barrier in this location can generally be estimated. A minimal length noise barrier in this location would need to extend at least 200 feet beyond the school property in both directions, resulting in a total length of at least 1,200 feet. Given the topography in this area, it is estimated the height of the barrier would need to be approximately 22 feet, resulting in a barrier that would total approximately 26,400 square feet. The

cost to construct a noise barrier in this location is currently estimated to be approximately \$55 per square foot, resulting in a total estimated cost of approximately \$1.5 million.

While the City's desire to contribute funds to facilitate the construction of a barrier in this location is understood, for reasons of equity and social justice, Federal law prohibits the use of third-party funding to subsidize a noise barrier that would not otherwise meet the Department's Noise Policy. The City of Portsmouth/New Franklin School could however construct a noise barrier at their own cost, outside the Department's right-of-way.

I realize this is not the answer that the City of Portsmouth and the New Franklin School community wanted to hear, however this is in keeping with the applicable Federal regulations necessary to fund construction of this project. Should you have any additional questions, please feel free to contact me.

Sincerely,

Sam Newsom

Sam Newsom, P.E.
Project Manager
NH Department of Transportation – Bureau of Turnpikes

SBN:jae

CC.

W. Cass, NHDOT (via e-mail)
J. Evans, NHDOT Environment (via e-mail)

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