To: Governor Ned Lamont, Commissioner Joseph Giulietti, via First Selectman Fred Camillo and State Representative Stephen Meskers Re: Project 0056-0316 Date: August 31, 2021



The Greenwich Tree Conservancy is a non-profit group of over 1000 supporters whose mission is to preserve and enhance Greenwich's urban forest to benefit the community. We are writing to underscore the need for a mix of hard and natural sound barriers and a documented vegetation plan to be adopted before road work commences on this project.

CTDOT has a responsibility to do no further harm, and to work with the Town of Greenwich and community stakeholders to mitigate the damage to our roadside forests that has been done in recent years. A century ago, a Connecticut native Gifford Pinchot was named the first Director of the National Forest Service, and he founded the first American Forestry School at Yale. In those early days, it was recognized that trees offered a sense of place, an appeal to tourists and increased property values. We need to apply those criteria to the Greenwich Gateway to Connecticut.

Unfortunately, clear cutting, whether for maintenance or road improvements, has been the favored vegetative management strategy along transportation corridors throughout the State. This management approach is inconsistent with the goals of the recent Governor's Council on Climate Change report: **Taking Action on Climate Change and Building a More Resilient Connecticut for All**, which recognizes the importance of protecting and enhancing our forests for both climate mitigation and adaptation/resiliency benefits.

Trees provide many ecosystem and health benefits including purifying air, filtering water which flows into Long Island Sound, the sequestration of atmospheric carbon, enhanced nutrient cycling that promotes biodiversity, and also road noise reduction. Trees act as noise barriers through a **phenomenon called sound attenuation**, which is the damping of sound. Trees attenuate noise by absorption, deflection, refraction, and masking. Tree parts such as stems, leaves, branches, and wood absorb sound waves. Broadleaf trees are most effective at deflecting sound. However, when broadleaf trees drop their leaves in winter, the sound barrier is lost. Evergreen trees provide a consistent buffer against sound because they keep their needles or leaves across seasons. Evergreens are also fast-growing and can be planted close together, which creates a denser vegetation barrier. So, layering a mix of various species will provide long-term noise reduction results.

The Federal Highway Administration's (FHWA) **<u>Roadside Revegetation: An Integrated Approach to</u> <u>Establishing Native Plants 2007</u>** manual presents a thorough guide and notes:

Where modification and increased capacity are needed, ecological health, safety, and efficient transport should not be seen as mutually exclusive goals. Understanding roadside environments, how they interface with adjoining lands, and how to minimize environmental impacts has become a key focus of the Federal Highway Administration (Fekaris 2006). Given political will and proper levels of attention, **integration of environmental concerns with transportation can result in significant gains.**

https://highways.dot.gov/federal-lands/design/library/roadside-revegetation

We urge you to apply the same strong leadership to ensure that State actions on state land are consistent with climate change adaptation and mitigation strategies. Successful vegetation management mitigates risk while ensuring that our urban forests are conserved, restored, and made more resilient. Many residents speak to their experience of moving to Connecticut because of the beauty they have seen in their daily commutes, removing this vegetation undermines this quality of life.

The Greenwich Tree Conservancy agrees that there are various methods of noise abatement and this project may require sound barriers, combining hardscape and greenscape solutions. We need to take a multilayered approach in Connecticut to increase the benefits of a "No-Net-Loss" healthy natural roadside environment.

As CTDOT develops its landscape design specs we would like to include the following requests:

- <u>REVIEW MANUAL</u>: CTDOT should review the FHA U.S. DOT <u>ROADSIDE REVEGETATION AN INTEGRATED</u> <u>APPROACH TO ESTABLISHING NATIVE PLANTS Manual</u>. <u>https://highways.dot.gov/sites/fhwa.dot.gov/files/docs/federal-lands/design/library/26841/roadside-revegetation-manual.pdf</u>
- **<u>REVIEW SITE PLANS</u>**: Based on the UTC results, the I-95 reforestation plan should be completed, and reviewed by the Town of Greenwich before work begins, to ensure the plans are consistent with both Greenwich and Connecticut's current environmental goals and standards.
- **DETERMINE SOIL QUALITY**: Soil samples must be included in the planting plans to determine soil quality. Based on the soil findings, the appropriate fertilizer must be used to ensure trees will thrive.
- **<u>DBH & HEIGHT</u>**: Trees should have a minimum DBH of 3-4 inch caliper.
- NOISE REDUCTION PLANT SPECIES: Year-round noise reduction requires a mix of evergreen, deciduous, and broadleaf trees, and a combination of evergreens such as arborvitaes, spruces, pines and hollies. To be effective sound barriers, these trees must have foliage that reaches to the ground. Trees must be densely planted in staggered rows to decrease noise.
- <u>ABUTTING NEIGHBORS & NEIGHBORHOODS</u>: Trees should be planted in front of sound barriers to further decrease noise and create a sense of place, and behind sound barriers to provide larger canopies that can provide lush skyscapes and shade for abutting and sometimes under-resourced residents and property owners.
- <u>SETTING CANOPY GOALS</u>: "Establishing a Tree Canopy goal is crucial for communities seeking to improve their green infrastructure. A Tree Canopy assessment is the first step in this goal-setting process, providing estimates for the amount of tree canopy currently present in a municipality as well as the amount of tree canopy that could theoretically be established."
- <u>SURVIVAL AND REPLANTING</u>: Monitoring and management is required to assess the effectiveness of the revegetation project. Monitoring the density of live plants following the first and third year after planting will determine if they have survived and whether the site will need to be replanted.
- **<u>VISIONARY DESIGN</u>**: A visionary design for the CT Gateway must emphasize the rich environmental assets that we have here in our beautiful state while protecting the quality of life for our residents.

The Federal Highway Administration Revegetation manual notes: "As roads are modified or updated section by section, a tremendous opportunity presents itself to remedy the oversights of the past, mitigating environmental impacts and improving conditions for healthy ecosystems.

Connecticut is filled with beauty, let travelers see trees and vegetation that store carbon, clean our air, provide flood control, provide pollinator pathways, respite for migrating birds, and mitigate noise. The repair project on I-95 is an opportunity create a vision for our State's future by rebuilding better, together!

Thank you, JoAnn Messina, Executive Director Francia Alvarez, Board Member and Advocacy Chair Greenwich Tree Conservancy greenwichtreeconservancy@gmail.com www.greenwichtreeconservancy.org