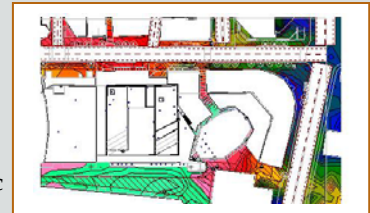


PROJECT: South Station Air Rights Development, Boston, MA

CLIENT: Hines Inc.

A detailed sound modeling study was done at a proposed large office and hotel complex to be built at Boston’s South Station. More than three dozen noise sources, including HVAC equipment, backup generators, and locomotive ventilation fans, were modeled using the Cadna/A noise modeling program. Results were computed at both individual receptors of interest, and as color-contours showing noise levels around the entire project area. Results were used to determine if the proposed project was in compliance with city and state noise regulations. Appropriate noise mitigation, including silencers and acoustic louvers, were recommended for the proposed equipment on the basis of the noise modeling results.



PROJECT: Residential Noise Barrier Study, Edgartown, MA

CLIENT: Fred Condon Real Estate



A site on Martha’s Vineyard was studied to determine the feasibility of noise barrier construction at a location where traffic noise was considered a problem. Using noise measurements and concurrently collected traffic counts of various types of vehicles on the adjoining roads, a computer noise model of the existing site was constructed using the FHWA’s TNM traffic noise model. The model incorporated highway vehicle types, volumes, and speeds, ground terrain elevations, and tree zones to accurately reproduce existing measured sound conditions. This model was then used to predict expected noise levels at the study location for ten possible barrier designs of various heights and layouts. A preferred noise barrier fence design was recommended to the client which optimized both acoustic and visual considerations at this location.

PROJECT: Wind Turbine Development, Savoy, MA

CLIENT: Minuteman LLC

Epsilon performed noise modeling for a proposed wind turbine installation in Savoy, Massachusetts. Noise was modeled using the WindPro wind turbine modeling system for five 2.5 MW wind turbines to be placed on top of a mountain ridge. The noise modeling calculations included corrections for terrain, vegetation, and wind speed. Noise level results were displayed as color contour levels around the area of the wind turbines. We compared the results to background noise levels measured at residences in the turbine area to show that noise levels from the proposed wind turbines would be well below current background noise levels at nearby residences and farms.

