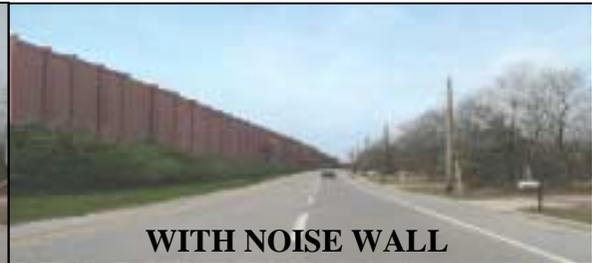


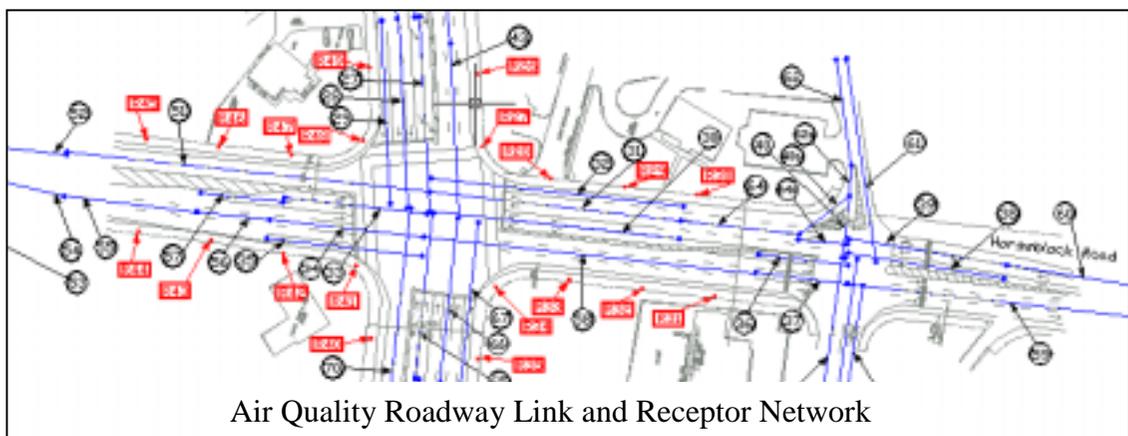
Noise Barriers Meeting NYSDOT Acoustic and Cost Effectiveness Criteria



BEFORE



WITH NOISE WALL



Air Quality Roadway Link and Receptor Network

AIR QUALITY AND NOISE ANALYSIS FOR NYSDOT

As a subcontractor to Fay Spofford and Thorndike, Konheim & Ketcham analyzed the noise and air quality impacts of the reconstruction of a six-mile segment of the Long Island Expressway, Exits 63-67. The noise analysis included community noise measurements at 20 sites, computer modeling of existing and future noise levels at 440 receptor locations, and the design and evaluation of 25 noise barriers serving ten neighborhoods. The air quality analysis included screening of 14 intersections according to NYSDOT Environmental Procedure Manual guidelines and dispersion modeling using CAL3QHC to determine carbon monoxide levels at sidewalk receptors near signalized intersections. K&K has performed similar air quality and noise analyses for two nearby roadways, a six-mile segment of Route 25 (also as a subcontractor to Faye Spofford and Thorndike) and a three-mile segment of Route 112 (as a subcontractor to the LiRo Group).

For the Route 25 project, 19 intersections were analyzed for air quality impacts, noise measurements were taken at 16 locations, and computer modeling of noise levels was performed at 224 receptor locations. For the Route 112 project, eight intersections were analyzed for air quality impacts, noise measurements were taken at 15 locations, and computer modeling of noise levels was performed at 116 receptor locations. Since air quality and noise analysis methods are both technically complex and continuously evolving, K&K maintains currency in state of the art procedures and regulatory requirements through participation in modeling workshops and seminars and active involvement in the Air Quality and Transportation Noise Committees of the Transportation Research Board (TRB). Through its participation in public meetings for NYSDOT projects, K&K has become adept at explaining complex air quality and noise issues to the public in straightforward and understandable terms.