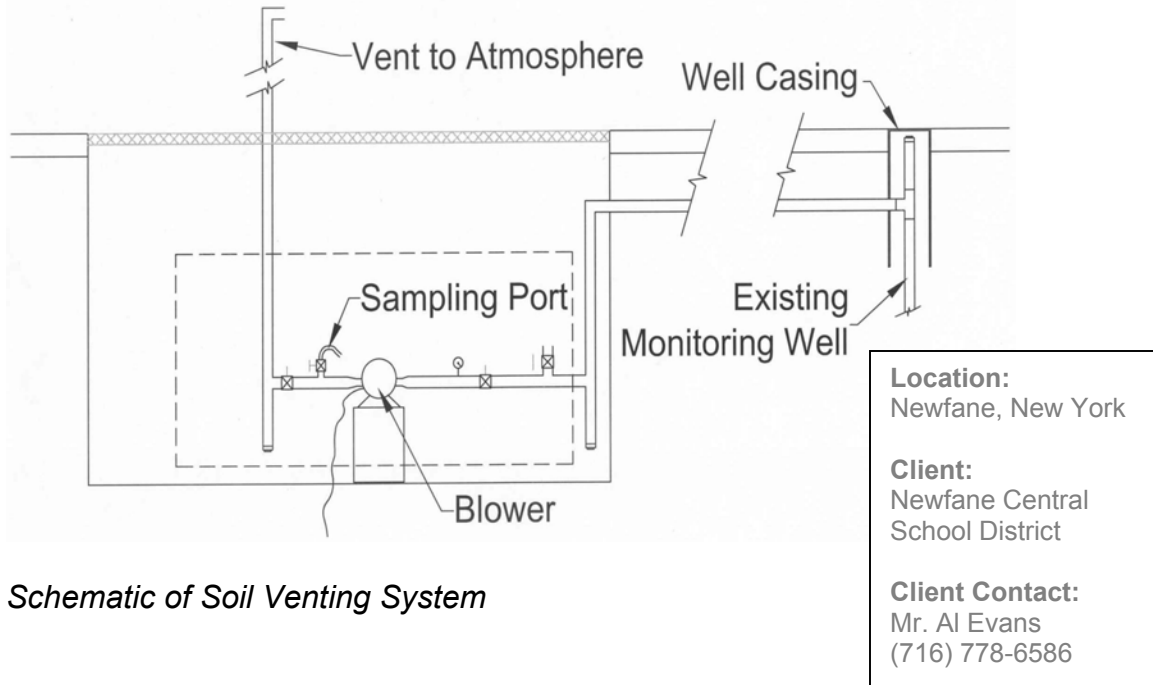


PROJECT DESCRIPTION

Newfane Central School District



Schematic of Soil Venting System

McMahon & Mann Consulting Engineers, P.C. (MMCE) served as the project's geo-environmental engineering consultant for the identification and remediation of petroleum contaminated soils at the Newfane Middle School in Newfane, New York. The contaminated soils, located in the vicinity of an underground fuel tank, were encountered during the construction of a school addition.

MMCE developed a work plan to identify the extents of petroleum impacted soil in the vicinity of the tank. This work plan included exploring the subsurface conditions with test borings in the vicinity of the tank, collection of soil samples, and laboratory testing selected sample for volatile and semi-volatile organic compounds.

Following the identification of the extents of contamination, MMCE developed a remediation program that included the excavation of impacted soils and used a soil venting system to remediate soils that remained beneath the school foundation. The soil venting system operates by creating a vacuum in a monitoring well installed within the contaminated soil zone. Air is drawn across the adjacent soil, through the well screen and is discharged into the atmosphere through a vent pipe. This system has been continuously operating since its installation in the summer of 2001.

MMCE developed a monitoring program to periodically test the groundwater in the monitoring wells to assess the effectiveness of the soil venting system. To date, the data show that the concentrations of volatile organic compounds have consistently decreased since the construction of the soil venting system and are currently approaching levels acceptable to the New York State Department of Environmental Conservation. Further, the data do not indicate that groundwater migration of the compounds has occurred.