

PROJECT DESCRIPTION

Newfane High School Addition



Location:
Newfane, New
York

Client:
Trautman
Associates

Client Contact:
Mr. Robert P.
Stelianou, P.E.,
716-883-4400

Settlement Plates on the Subgrade During Construction of a Working Platform

MMCE drilled test borings throughout the proposed high school addition footprint and found a deposit of loose sand that, if left untreated, would require large footings due to the low allowable bearing pressure. MMCE recommended a program to densify the loose sand to increase the allowable bearing pressure and improve liquefaction resistance.

MMCE designed a program to improve the loose sand deposit by using a heavy vibratory roller. The first step was to build a working platform of crushed stone on the subgrade and to place settlement platforms on the subgrade to measure the response of the loose sand from the vibrations.

Once the working platform was in place, the contractor made repeated passes over the subgrade with the vibratory roller while MMCE measured the elevation of the settlement platforms. The contractor continued operating the vibratory roller over the working platform until the monitoring data from the settlement platforms showed no additional settlement to the subgrade surface