



CLINTON TOWNSHIP SCHOOLS • Clinton Township, Michigan

CHALLENGES

- Unknown subsurface conditions
- Unstable fill soils at ground surface on several sites

SOLUTIONS

- Soil borings & laboratory testing to determine physical properties of the soils
- design shallow foundations extending through fill materials to bear on suitable native soils

SERVICES

- Geotechnical investigation
- Foundation design

Geotechnical investigation and foundation design for four elementary school additions and renovations

G2 Consulting Group was retained by Chippewa Valley Schools and architectural firm DiClemente Siegel Design Inc. to perform geotechnical investigations at four existing elementary schools in Clinton Township.

Each school was slated for additions – including conference rooms, computer rooms and a gymnasiums – as well as rehabilitation or replacement of existing pavements on the site.

G2 performed geotechnical investigations to obtain the subsurface information necessary to provide recommendations for subgrade preparation, foundation type, construction considerations and pavement recommendations.

Soil borings were performed within the proposed building additions and the existing or proposed pavement locations. Two of the schools had fill soils present at the ground surface, extending to depths of approximately 3-½ feet. In general, however, soil conditions consisted of native cohesive and granular soils.

G2 provided laboratory testing to evaluate the physical properties of the soil. Tests conducted in G2's in-house lab included unconfined compressive strength, dry density and natural moisture content determinations.

Based on the existing subsurface conditions and estimated loading conditions, we recommended the proposed additions be supported on shallow foundations extending through the fill materials to bear on suitable native soils.