

Client:

Rio Grande River Associates

Location:

Dudley Square, Roxbury, MA

Services Provided:

- Site characterization
- Foundation design recommendations

Value Provided:

- Provided cost effective and technically feasible foundation design options for differing loading conditions
- Identified the presence of soil organic material that could significantly impact the amount of building differential settlement and therefore reduced potential risk to the client

Background & Project Challenges

A group of private investors, including the property owner, Rio Grande River Associates, have partnered to fund the construction of the Guscott Rio Grande.

The proposed project consists of the construction of a multi-story mixed-use commercial, office, and residential building, ranging from 9 to 18 stories in height, with two underground parking levels. The project site is located opposite of the Massachusetts Bay Transportation Authority Dudley Square T Station.

The challenge was to provide cost-effective foundation design considerations that would accommodate differential loading caused by the variation in proposed building heights and a deep basement located under a portion of the structure without causing excessive differential settlement. An additional complication was the potential incorporation of the two pre-existing historic structures into the new structure.



Geocomp Role & Accomplishments

Geocomp was hired as the project Geotechnical Engineer to conduct subsurface explorations and to submit foundation design recommendations for conceptual design of the proposed structure.

Geocomp conducted a subsurface exploration program that identified:

- site subsurface profile,
- depth to suitable foundation bearing material, and
- site soil and bedrock properties.

Geocomp summarized the findings in a technical report that included foundation design and construction recommendations. Geocomp provided several technically feasible foundation options for the client's consideration.