

The Duke



PROJECT LOCATION
Alexandria, VA

PROJECT TYPE
Condominium

ARCHITECT
Architectural Design
Group

OWNER/DEVELOPER
Van Metre / Marquis
Custom Homes



PROJECT DESCRIPTION

The Duke (Fannon Property) – This project is a residential project consisting of three separate townhome groups for a total of 18 units and one 4-story condominium building, all located over 1 level of below grade parking. The condominium building is constructed of 8" thick post-tensioned slabs. The plaza level is a conventionally reinforced concrete slab. The townhomes are constructed of pre-fabricated wood floor and roof trusses on wood walls.

The project required special attention due to the fact that it was formerly an oil depot. As such, the soil was contaminated with various petroleum products, which necessitated a dual below-grade drainage system and a vapor interceptor system. Headroom in the garage was reduced in order to limit the amount of excavation required, and topping slabs were used above the main slab to provide insulation for the floors.

Additionally, the project was founded on a layer of very soft soils, not sufficient for the loads of this building. Auger cast piles were drilled and installed and used to support pile caps and grade beams which, in turn, supported the entire building.