F&R CONNECTION

OFFICES IN VIRGINIA, MARYLAND, AND THE CAROLINAS FALL 2004

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F&R's Extensive Military Project Experience in the Greater Hampton Roads area and in Eastern North Carolina

Story and Images by Frank DeMascio, P.E.

Chesapeake, VA - F&R has a long history of providing geotechnical, environmental, and construction materials testing services for a wide variety of projects at every military installation in the greater Hampton Roads area and also in eastern North Carolina. We have provided cost-effective solutions for projects located in challenging Coastal Plain geological settings, poorly constructed manmade landmass areas or sites with strict environmental constraints.

F&R has successfully teamed with architects, engineers and contractors to meet the needs of the region's military installations. We have the necessary accreditations to perform testing services on military projects, and our offices are strategically located to provide the local resources to deliver quick, efficient and cost effective services.

Faced with changing global situations and military reorganization, the future presents many unique challenges for our region's military installations. F&R stands poised to meet these challenges. Our wealth of experience and qualifications are valuable assets to any firm pursing military projects.

Our military project experience includes:

- Fuel Storage Tanks
- Fuel Delivery Systems
- Utility Systems
- Weapons Storage Facilities
- Pier & Bulkhead Structures
- Aircraft Hangar/Maintenance/Traffic Control
- Runways & Pavement Structures
- Housing & Barracks
- Office & Training Facilities

F&R is proud to serve our Armed Forces on foreign and domestic projects.

Revitalization of Downtown Richmond's 14th Street Parking Deck

Story and Images by Ron Etter, CHMM

The revitalization of downtown Richmond, Virginia has created numerous construction projects requiring demolition and extensive site work. When an environmental issue, such as contaminated soil, is encountered, it can lead to work delays and substantial increases in the project costs. A quick and accurate plan to address any environmental concerns would minimize the impact of environmental issues on a project. In order to be successful the plan has to meet the Virginia Department of Environmental Quality's (VDEQ) requirements. The VDEQ has instituted many programs to aid in this process including the construction site pollution prevention plan, brownfields initiative, voluntary remediation program and departmental policies which encourage open communication between the regulated community and VDEQ personnel. When contaminated soil was encountered at the 14th Street Parking Deck Site, the Virginia Department of General Services hired F&R to manage the contaminated soil.

The Virginia's Department of General Services decided to construct the 14th Street parking deck, which will occupy the block bordered by 14th Street, Main Street, Franklin Street and 15th Street, to provide much needed parking in downtown. This project has a very aggressive completion schedule. It is scheduled for completion in September 2005. The parking deck will provide 1,500 spaces, which among other things will provide parking for State and City employees. There is also the possibility that the deck will be used to provide public parking for the State Capitol.

The use of this site required the demolition of the old Division of Consolidated Laboratory Services Building. During the course of demolition, concerns were raised about potentially contaminated soil at the site. Preliminary sampling and analysis revealed the presence of formaldehyde, petroleum, and metals contamination on the site.

F&R was retained to prepare a Soil Management Plan for the site and to coordinate with the VDEQ and disposal facilities for the acceptance of the contaminated soil. The goal of the Soil Management Plan was to assist the State in the proper handling and disposal of contaminated soil, while maintaining the construction schedule and controlling costs. Due to the limited space available at the site, contaminated soil had to be directly loaded in dump trucks for transport to the disposal facility.

Sampling and analysis of the site soils was conducted to determine the levels and locations of the contaminants. Based on the results of the laboratory analysis, the site was segregated by contaminants and procedures were developed to handle each specific area. Once complete, the Plan was presented to the VDEQ for approval. The VDEQ agreed with our plan, which determined that the petroleum and formaldehyde contaminated soil could be handled as a special waste. The plan also addressed hazardous lead levels in one area.

By carefully delineating the vertical and lateral depths and concentrations of the various contaminants found at the site, it was possible to minimize the amount of soil requiring hazardous waste disposal thus dramatically reducing the costs. The soil management plan allowed the project to proceed with minimal disruption to the construction schedule.

By methodically characterizing soils at the site, we were able to delineate, manage and dispose of the contaminated soils, meeting VDEQ and USEPA protocols, while minimizing impacts to the project.