



## BRIEF OVERVIEW AND RELEVANCE

The NSF Carderock wastewater laboratory has an adjacent Underground Storage Tank (UST) Farm with five regulated oily water tanks and one unregulated wastewater tank. In support of the Naval Support Activity (NSA) Washington Fuel Storage Tank Program, Jacobs is providing design, engineering, surveying services, detailed construction planning engineering documents, and associated support (post-construction award services consultation) for the conversion of the UST Farm to an Aboveground Storage Tank (AST) Farm to meet research and development needs and comply with applicable regulations.

### Teaming Partner(s) Involved:

Austin Brockenbrough & Associates, LLC - Design and engineering services



## Building 60 Wastewater Laboratory UST Farm Conversion, NAVFAC Washington

Naval Support Facility (NSF) Carderock, MD

## PROJECT SCOPE

- Site Plan
- Demolition Plan (Current UST Farm)
- Design Details and Specifications (New AST Farm)
- Grading and Site Utility Plan
- Topographic Survey
- Erosion and Sediment Control Plan
- Demolition and Construction Cost Estimates

## CHALLENGES

- Design the AST farm to fit within a very condensed 5,000 ft<sup>2</sup> concrete pad footprint and achieve compatibility with varying concentrations of oil, fuel, simulated seawater, sewage, soaps, and detergents.
- Remain flexible adjusting from traditional rigid UFC requirements for design of petroleum storage tank fueling systems to less prescribed requirements suitable for a research and development facility.

## KEY ACCOMPLISHMENT

In the Concept Development phase, the team worked closely with the client to develop and present several alternatives that blended their requirements, wants, and budget to find a "Best Fit" solution. This successful approach, developed through cooperative planning and compromise, ensured the project satisfied the client the first time with minimal design changes.