



SITE EVALUATION FOR REDEVELOPMENT AS PHILADELPHIA EAGLES' CORPORATE HEADQUARTERS AND TRAINING FACILITY PHILADELPHIA, PA

Client Philadelphia Industrial Development Corp.

Services Provided

Geotechnical, environmental evaluations, and design support of an approximately 30 acre athletic campus which formerly was a United States Navy Hospital.

Challenge

An evaluation needed to be done quickly, but was complicated by the need to negotiate an access agreement with the U.S. Navy. The site contained aboveground and underground tanks, potential environmentally impacted soils, buried debris, and asbestos-containing building materials. Available information had to be assimilated quickly and considered in final solution to reduce construction costs and tenant liability.

Solution

Duffield's engineers and scientists quickly accomplished a combined environmental and geotechnical evaluation in accordance with U.S. Navy Protocols, within tight budgetary constraints and an aggressive schedule.

The team produced a low-cost, managed risk approach to address regulatory agency requirements. As part of this effort, we advised our clients in negotiations with the U.S. Navy regarding site acquisition issues. Duffield Associates' geotechnical engineers developed cost sensitive recommendations for multiple alternative foundations to support the training facilities and multiple state-of-the-art indoor and outdoor practice fields.

Environmental characterizations were conducted by Duffield Associates on behalf of PIDC and the Philadelphia Eagles. The site was enrolled in the Land Recycling Program (Act 2) to address environmental conditions during site development, to perform remedial actions, and to seek a relief of liability under Act 2. Duffield Associates assessed existing information about the property by summarizing historic maps, site plans, and aerial photographs, reports completed by other environmental consultants, and regulatory agency files. We also completed soil and groundwater evaluations through the installation of groundwater monitoring wells, soil borings, and test pits. Using Act 2 procedures, including a Notice of Intent to Remediate (NIR), Duffield Associates developed a Soil Remedial Investigation Report (with Ecological Screening), a Soil Risk Assessment Report, a Groundwater Sampling and Analysis Plan, and a Final Report for Soil and Groundwater. The results indicate that no further action is necessary.

Athletic Fields Consultation

Duffield Associates assisted in evaluating various playing surfaces available for use on three outdoor and one indoor playing field. Considerations included user comfort/safety, durability, cost and compatibility with the formerly existing playing surface in Veteran's Stadium and also their new stadium that had not yet been constructed. Ultimately, natural grass playing surfaces were selected for two of the outdoor fields. A proprietary sectional composite synthetic/natural grass system was selected for the other exterior system and a synthetic system was selected for the indoor playing field. Duffield Associates worked with the manufacturer to develop specifications for the subgrade materials and preparation. We provided quality assurance review during the fields' construction. Subgrade preparation was complicated by the previous site development, which required the contractor to address abandoned tanks, utilities, existing pavements and small structures. A balanced solution consisting of a geosynthetic reinforced stabilization layer, which redundantly addressed field support, drainage and irrigation concerns against the high expense of fully removing undesirable subgrade soils was successfully implemented.

Projects