

# PROJECT PROFILE

## 10<sup>TH</sup> & Broadway

### PROJECT INFORMATION

The 10<sup>th</sup> & Broadway project required a broad array of environmental assessment and remediation services at a multi-parcel brownfield property consisting of approximately 20 acres of land. Previous usage of the individual parcels included a paint and rubber cement factory, a chemical company, a gas station, a lumber yard, two auto salvage yards, an auto service and towing facility, a restaurant, a school, and several residential facilities. Adjacent properties included gasoline service stations, a metal salvage yard, railroad tracks/spurs, a tire recycling facility, and residential lots.

The property was purchased in the fall of 2000 by the East St. Louis School District 189 for the purpose of constructing the new Lincoln Middle School. PE was contracted in October of 2000 to assess and remediate the property prior to constructing the new school, scheduled for the fall of 2002. The work included investigations and field studies, the preparation of work plans, engineering support and remedial design, and response actions, removals, and operation and maintenance activities.

#### Investigations and Field Studies

Preliminary assessments were conducted on both the northern and southern halves of this property as access to the individual parcels became available. The assessments included a review of historical and physical setting information (Sanborn Maps, aerial photographs, street directories, historical maps, city permits, and geologic/hydrogeologic data), a review of environmental government databases, interviews, site reconnaissance activities, and preparation of final reports. Recognized environmental conditions were identified throughout the subject property as a result of these preliminary assessments.



Soil and Groundwater Sampling With a Push-Probe Drill Rig at the Subject Property

Field sampling and site characterizations were conducted based on results and recommendations of the preliminary assessments. The field activities included drilling and soil sampling of over 20 soil borings, the installation/development/sampling of over 20 groundwater monitoring wells and/or peizometers, 9 separate magnetometer surveys, trenching, the collection of numerous surface soil and trenching grab samples, a wetland investigation, analytical testing of soil, ground-water, sludge, and building materials for VOCs, SVOCs, metals, PCBs, hydrocarbons, asbestos, pH, chlorinated pesticides/herbicides, and geotechnical parameters. The data was evaluated and summarized in periodic status reports to the client and in a final report documenting activities and results along with conclusions and recommendations.

#### Work Plans

Work plans and cost estimates were prepared for the Phase II work as described above. The plans included statements of work with data quality objectives, summaries of previous work task results, health and safety issues, schedules for completion of work, and required personnel with estimated levels of effort.

In addition to the Phase II work plans, PE prepared a remedial action work plan for demolition and soil remediation activities on both the north and south portions of this property. The work plans were prepared in accordance with the state voluntary cleanup program.

#### Engineering Support and Remedial Design

After completing the work plans for the demolition and soil remediation activities, PE prepared performance specifications for the work. The specifications included contaminant characterization summaries, statements of work with data quality objectives, CADD drawings, conditions of work (use of site premises, coordination of activities with



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other contractors on site, proposed work schedules, available site access, required meetings, and submittal requirements), applicable engineering controls (medical surveillance requirements, personal exposure monitoring, area monitoring, employee education and training, type of equipment needed, site controls, respiratory protection, personal protective equipment, dust emissions, and standard operating procedures), required permits and licenses, key personnel with roles and responsibilities, and QA/QC practices. Other engineering support for this project included design analyses, cost estimates, participation in client and public meetings, permitting, and interfacing with the appropriate regulatory agencies. In February of 2003, PE conducted an SVE pilot test at this site. Currently, PE is assessing these test results and preparing a design for remediating remaining impacted soils on site.

### Response Actions, Removals, and O & M

Upon completing the assessment activities, PE removed 8 of the 9 underground storage tanks (USTs) that existed on site; approximately 250 cubic yards of contaminated soils was removed adjacent to one of the USTs. Releases were encountered and reported to the Illinois Environmental Protection Agency (IEPA) for a cluster of seven former gasoline tanks, a former heating oil tank, and a mixed gasoline/diesel spill that was discovered during Phase II assessment activities. Both 20- and 45-day reports documenting release responses and tank removal activities were submitted to the IEPA for the reported releases.



Gasoline UST Removals Conducted at 10<sup>th</sup> & Broadway

After completing work plans and specifications for demolition and soil remediation activities, PE assisted with the solicitation of the work, conducted the pre-bid job walks, answered submitted contractor questions, reviewed and evaluated contractor bids, and made recommendations for selection of two separate contractors. Upon selection of the contractors by the ESLSD189, PE prepared AIA contracts for the work (approximately \$0.75 million), conducted pre-construction kickoff meetings, and reviewed all required submittal documents.



Construction Field Oversight at 10<sup>th</sup> & Broadway

During demolition and soil remediation activities, PE provided oversight and construction management services to the ESLSD189. Specific duties included documentation of work, review of contractor submittals (change order requests, invoices, and schedule updates), meetings with regulators, the client, and contractors, permitting and notifications, waste sampling and landfill profiling, manifesting of waste materials, confirmation sampling of excavations and work areas, compaction testing of backfill materials, periodic status reports, and final closure reports to document all work conducted on site.

