



SITE REMEDIATION PROJECT EXPERIENCE

Raymark Superfund Site – Boundary and Existing Conditions Survey – Longbrook Avenue & Frog Pond Lane, Stratford, CT – Minuteman Design/ACOE/EPA/CT DEEP

The 17+ acre site consisted of two adjoining properties owned by the Town of Stratford and a private entity. Both contained contamination and the privately owned site was in the process of being taken by eminent domain for remediation purposes. ALPHA was a member of a design team preparing design plans for the future site remediation activity. ALPHA performed boundary research with the Town of Stratford Assessor, Engineering and Land Record Departments. Utility research was also performed, particularly for historic on-site documentation of underground utilities and a 'seepage easement area'. An extensive survey control network was established throughout the site and abutting streets and referenced to NAD83 and NAVD88. An existing conditions/topographic survey was performed of the entire site and abutting streets. The boundaries were calculated and reconciled with the monumentation located in the field. ALPHA prepared an Existing Conditions Survey in the ACOE template and CAD Standards and delivered the project in AutoCAD 2016 Civil 3D drawing file format along with an elevation model. A plan set stamped and signed by a Connecticut Registered Surveyor was also provided to the Client.

Environmental Land Use Restriction (ELUR) Survey, 101 & 175 Industrial Drive, Groton, CT – Woodard & Curran/CT DEEP

ALPHA provided survey support in the preparation of an existing industrial site where site remediation activities occurred. Boundary research was performed with the Town of Groton Engineering, Assessor and Land Record Departments. A boundary and existing conditions survey was performed in accordance with the CT DEEP requirements for the preparation of an ELUR. Multiple ELUR areas were created at various locations on the property, drafted onto the survey, and metes and bounds descriptions prepared for each. ALPHA worked closely with the client and DEEP to identify and review the existing encumbrances on the property with regards to the creation of the new restriction areas. Upon completion of the review, ALPHA provided a stamped and signed ELUR survey and final metes and bounds descriptions.

Phase 2 Remediation and Shoreline Stabilization Former Cos Cob Power Plant, Sound Shore Drive, Greenwich, CT - R C & D/Town of Greenwich, CT

Alpha provided survey services in support of construction activities for the site Remediation and Shoreline Stabilization at the former Cos Cob Power Plant on the Mianus River. Survey control was established by utilizing existing control referenced to the CT State Plain Coordinate System and based on the NAVD88 vertical datum. An existing conditions survey was performed prior to construction to be used as a basis for future volume calculations and to assist with further construction grading stakeout. The survey included the removal and reconstruction of approximately 1700 LF of revetment seawall, on-site drainage and re-grading to create a new park with walkways and future athletic fields. Alpha performed numerous interim as-built surveys to assist the client with volume calculations for determination of the amount of material removed and replaced. A final as-built is being prepared as the project nears completion.

Tank Farm #5 Naval Station Newport, Defense Highway, Newport, RI – Tetra Tech EC/Dept of the US Navy/EPA

Based on existing conditions/topographic and monitoring well location surveys performed for AECOM on this site, ALPHA provided Tetra Tech EC with survey support for their site remediation activities on this site of approximately 7 acres. The work included staking and grading of a 25-foot grid for three separate remediation areas, interim as-built surveys were performed as the ground was excavated and capped, and a final as-built survey was performed upon completion.

Lincoln Lace & Braid Remediation Project, Ponagansett Ave., Providence, RI - RC & D, Inc./City of Providence Parks Dept.

Survey services were provided in support of a remediation project at a former mill site bordering the Woonasquatucket River and a minor tributary stream. Alpha's services included the densification of the existing survey control, layout of the Limit of Work, and an existing conditions pre-construction survey prior to remediation activity. Preconstruction survey included location of existing pavement and building foundation, site grading and cross-sections of the minor tributary for future quantity take-off calculations. A post-construction survey was performed, volumes determined, and a final as-built plan was prepared. An Environmental Land Use Restriction (ELUR) location plan, and metes and bounds description, were also prepared for the site.

Site Remediation of 11 Areas throughout the Industrial Operations Area, Former Naval Air Station South Weymouth – Tetra Tech EC/Dept. of the Navy

ALPHA is in its fourth year of providing AECOM with survey services to layout and locate environmental soil testing and sampling sites throughout the un-redeveloped portion of the former Naval Air Station site. Survey support has included the location of hundreds of monitoring wells, soil sampling points, and related monitoring devices for AECOM. Building on the extensive site-wide control network established and referenced to NAD83 and NAVD88, ALPHA also provides survey support to Tetra Tech for site remediation activities. This work specifically focuses on the former Industrial Operations Area where there's soil remediation occurring on 11 separate 'Areas'. Beginning with existing conditions surveys, ALPHA continues to perform interim surveys to document depth of excavation, and then final as-built surveys as excavation is completed. The survey results are typically delivered in Excel spreadsheet format and/or AutoCAD Civil 3D drawing files.

Monitoring Well Locations, Former Texas Instruments MCP Site, Attleboro, MA – AECOM

Proj #15130 Fee: \$10,820 Contacts: Joel Meunier/Barbara Weir

The project included establishing survey control in NAD83 and NAVD88 for future work at the site. There were 67 monitoring wells distributed throughout the 130 acre site that were required to be located. Survey control was established and adjusted and the MWs were located and levels run through them to obtain casing, riser and ground elevations at each well. The data was delivered in Tabulated format in Excel, and digitally in an AutoCAD drawing file.

Hatheway & Patterson Superfund Site, 35 County Road, Mansfield/Foxboro – AECOM/EPA

The site is comprised of 44 acres and is generally divided north-south by the Rumford River, and east-west by a RR ROW. Additionally, the site lies in two different municipalities (Foxborough and Mansfield), and two different counties (Bristol and Norfolk). The purpose of the project was to support preparation of Institutional Controls and the anticipated preparation of a Notice of Activity and Use Limitation (AUL) by the EPA. The boundary was researched and a field survey performed. A 'Site Plan' (4-sheet set) was prepared in accordance with the MA Registry of Deeds Standards depicting multiple Capped/Consolidated areas, Restricted Areas, Excavated Areas. There were portions of the County Street that also were required to be identified on the plan. Metes and Bounds descriptions were prepared of the various areas requiring specific identification. In addition there were 14 monitoring wells throughout the site that were located and leveled through. A separate plan was prepared to depict the well data and locations.

Charter Environmental/ACOE Muddy River Flood Damage Reduction & Environmental Restoration Project (Ph 1) Project, Boston, MA

Alpha provided survey support for this +/- 3-year project from initial project control to final as-built surveys of the various project components. The horizontal and vertical survey control provided by the ACOE was densified for this 10+ acre urban site and adjusted by the Least Squares Method. Numerous surveys were performed for both pre-construction, interim and final as-built surveys including drilled shafts, culverts, temporary and relocated permanent traffic control devices, boring locations, and access improvements to the Landmark Center. A bathymetric pre-construction survey of the existing exposed section of Muddy River was performed by conventional means for preparation of interim dredge surveys.

Walton & Lonsbury Superfund Site, 78 North Ave, Attleboro, MA – AECOM/USEPA

The horizontal and vertical locations of 24 monitoring wells were established in the NAD83/NAVD88 datums. The elevation data for the ground, casing, and riser of each well was tabulated and delivered in Excel format.

Prospect House Assisted Living Facility (Soil Remediation), 420 Reservoir Ave, Revere, MA – Clean Harbors/Ransom Consulting, Inc./Prospect House

ALPHA performed layout of a remediation area and proposed drainage structures, staked and graded areas to be capped with asphalt or concrete. A final as-built was performed of the capped areas to determine volumes and square footage of capped and re-loamed areas.

Holt Road Landfill Cap Repairs, Holt Road, North Andover, MA – Clean Harbors/AECOM/Columbia Gas of MA

ALPHA provided layout and as-built services in support of the clients' cap repair activities. Multiple repair areas, including swales, drainage ditches, and areas of resodding, as well as an anchor trench were laid-out and graded. Upon completion of the work, a final as-built was prepared and submitted to the client.

Former Tyco Electronics Facility Site Remediation, 43 South Avenue, Burlington, MA – Clean Harbors/Shaw Environmental

ALPHA provided remediation layout and as-built services in support of the clients' cap repair activities. A pre-excavation survey was performed over an area covering 20 separate remediation areas. During excavation, interim surveys were performed to determine volume of material removed, and on completion of the project an as-built was performed of the remediated areas.

Restoration of Beaverdam Brook and former Settling Lagoon, Framingham, MA - Clean Harbors Environmental and Construction Services/Framingham Conservation Commission

Provided survey services supporting the restoration of approximately 1100 linear feet of Beaverdam Brook and an approximately one (1) acre lagoon. Cross-sectional surveys of the brook channel were performed at fifty (50) foot intervals before, during, and after restoration activity. The final as-built included the brook channel, rock transition structures, erosion control outfalls, and a topographic grid of the lagoon to define the final post-dredged state of the lagoon bottom and top and toe of banks. A topographic plan was prepared depicting the conditions before, during and after restoration.

Oak Island NRD Compensation Project, Oak Island, Route 1 & Diamond Creek, Revere, MA – RC&D/ARCADIS

Alpha provided survey support for a site comprised of a Natural Resource Damage (NRD) and Release Abatement Measure (RAM) Mitigation project. The project entailed the excavation and removal of sediment to restore salt marsh habitat, increase flood storage capacity, and provide feeder creeks through the marsh to increase tidal flow and flushing of the wetlands. Alpha established survey control and performed an as-built survey to obtain cross-section data of the area of removal and of the feeder creeks.