

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Berks County Industrial Development Authority (BCIDA) Airport Tract: Lot 1 and Aviation Boulevard Corridor Bern Township, Berks County, Pennsylvania

Prepared for:

Blue Rock Construction, Inc.

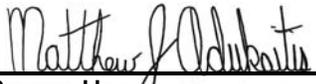
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1. EXECUTIVE SUMMARY

On December 16, 2014, Liberty Environmental, Inc. (Liberty) was authorized by Blue Rock Construction, Inc. to perform a Phase I Environmental Site Assessment (ESA) at Lot 1 of the Berks County Industrial Development Authority (BCIDA) Airport Tract located in Bern Township, Berks County, Pennsylvania. The subject property consists of active and former industrial areas, a former military barracks complex, spoil piles, wooded areas and a riparian corridor along the Schuylkill River. The Phase I ESA was performed in accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice E1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.2 and 2.3 of this report.

Based on the interviews, records research and site inspection activities conducted by Liberty as part of this Phase I ESA, the following recognized environmental conditions (RECs), as defined in Section 3.2.78 of ASTM Standard Practice E1527-13, have been identified at the subject property:

- Industrial Metal Plating, Inc. (IMP) is an industrial electroplating and metal fabrication facility located on the southern portion of the subject property. A fire occurred at this facility in 1986, which destroyed the majority of the building. Soils surrounding the facility were impacted by a mixture of industrial contaminants during the fire, and during the subsequent washout of fire suppression water. Limited cleanups were directed at the site by the Pennsylvania Department of Environmental Protection (DEP), which included the removal of approximately one foot of topsoil from visibly impacted areas. The DEP-directed soil removals appeared to be designed as interim remedial actions only, and were not performed for the purposes of fully evaluating the nature and extent of fire-related impacts to soil or groundwater. Accordingly, the data collected from the site in 1986 does not meet the current standards for site characterization or for the attainment of DEP's Statewide Health Standards, which were promulgated as part of the Land Recycling and Environmental Remediation Standards Act (Land Recycling Program) in 1995. For this reason, the potential presence of residual soil and groundwater impacts at the IMP facility has been identified as an REC and warrants further evaluation through a subsurface investigation within areas proximal to the

facility, as well as in areas south and southeast of the wastewater treatment plant outparcel, where building debris is believed to have been deposited.

- A former City of Reading Police Department pistol range is present on the western portion of the subject property. The pistol range reportedly operated from the late 1970s until approximately 2014. Bullets and casings are likely present in the berm located behind the former target area of the range, and the presence of these materials may have resulted in elevated concentrations of metals above applicable DEP Statewide Health Standards and/or waste management thresholds. The potential presence of impacts to subsurface soils at the pistol range area has therefore been identified as an REC, and warrants further evaluation through a surface and subsurface soils investigation.
- A concrete bunker surrounded by vegetated soil embankments is located on the western portion of the site near the adjacent Reading Regional Airport runways, situated at the end of a concrete taxiway and a concrete pad. According to site contacts with knowledge of the site's historical operations, the pad and bunker were used as a firing target for large-caliber rounds from aircraft-mounted guns during the airport's operations as a US Army Air Corps training base in the 1940s. The feature is colloquially termed the 'shooting-in butt' or 'firing-in butt'. A March 2010 site inspection report for the US Army notes that no munitions debris was observed in or around the target bunker at the time of the assessment. The report also states that Reading Airport personnel removed the sand from within the bunker and placed the sand on either side of the bunker in the 1960s or 1970s. As part of the March 2010 investigation, two surface soil samples were collected from the area of the bunker and analyzed for metals. No metals were detected above their respective DEP non-residential Statewide Health Standards (SHS), and the 2010 report concluded that no further response was necessary. However, based on a review of the location and number of soil samples described in the 2010 report, it is Liberty's opinion that the existing set of data is not sufficient to rule out the potential for impacts of metals or other contaminants at the target bunker. For this reason, this area has been identified as an REC and warrants further evaluation through a surface and subsurface soils investigation.
- An area of unnatural, mounded soils and low overgrowth is located along the western side of Aviation Boulevard, inside a curve formed by the road on the northeastern portion of the

property. This area appears as a cleared and/or disturbed area in several historical aerial photographs dating to the early 1990s, and generally coincides with the reported location of dumped construction debris as described by the site contact. For these reasons, the area of suspected dumping has been identified as an REC. As part of the site investigations recommended for the IMP, pistol range and target bunker described above, Liberty recommends a limited subsurface investigation of buried material in this area to determine if the debris poses a potential risk of impacts to underlying soils or groundwater, and/or waste management concerns.

- Subsequent to the closure of the military operations on the central portion of the property, several private commercial tenant operations were present in the former buildings on the complex. One such operation is listed as John Fesig Auto Body, which was reportedly active at 117 and 135 Wagner Lane. This facility is listed as having been a conditionally-exempt small-quantity generator (CESQG) of hazardous wastes under the federal RCRA program, however no records pertaining to this facility were identified in DEP files. Facilities of this type would typically generate and manage waste solvents and paints, and in the absence of any files or facility-specific data, the potential for impacts of solvents or metals in this area cannot be ruled out. Liberty recommends that, as part of the recommended site investigations as noted above, a limited subsurface evaluation be performed at this location to determine if any evidence of such impacts is present.
- A 10,000-gallon No. 2 heating oil underground storage tank (UST) is currently in use at the IMP facility, and was installed in October 1989. According to facility personnel, no releases, leaks, or spills are suspected based on maintenance and inventory/filling records and no reports of leaks or spills were identified on state databases. However, the presence and operation of the tank will continue to represent an REC which poses the potential for a release in the event of damage or an accidental release. The subsurface investigation that is recommended in this area to evaluate the 1986 fire impacts should also include soil borings located downgradient and/or proximal to the UST, as feasible, to determine if any evidence of petroleum impacts are present. If the UST is planned for continued use, periodic tightness testing of the tank should also be performed as part of regular facility maintenance to reduce the likelihood of an undetected release. At such time that the UST is not planned for future

use, the tank and associated piping should be properly closed by a licensed tank contractor in accordance with DEP regulations.

While not identified as RECs, the following business environmental risks (BERs) have been identified as defined in Section 3.2.11 of ASTM Standard Practice E1527-13, and pose a potential environmental management concern associated with the future use of the site:

- A 275-gallon heating oil aboveground storage tank (AST) and containers of gasoline, kerosene and machine oils are located within the Ron Machine & Tool Company building on the subject property. The tank and containers appeared to be in good condition at the time of the site inspection, with no evidence of leaks or spills. The tank and containers will continue to represent BERs which pose the potential for a release in the event of damage or an accidental release. Provided that proper maintenance and management practices continue to be performed at the site, the environmental risk associated with these features will be minimized. Liberty also recommends the installation of secondary containment around the tank, if feasible, to reduce the impact to the surrounding area in the event of a release.
- Several ASTs, process tanks, 55-gallon drums and containers of various chemicals are located within the Industrial Metal Plating, Inc. building. The tank and containers appeared to be in good condition at the time of the site inspection, with no evidence of leaks or spills. The tank and containers will continue to represent BERs which pose the potential for a release in the event of damage or an accidental release. Provided that proper maintenance and management practices continue to be performed at the site, the environmental risk associated with these features will be minimized.
- Miscellaneous trash and demolition debris were observed in wooded areas along the abandoned roads on the central portion of the subject property and concrete debris was observed at several locations within the clearing on the northwest portion of the subject property. No evidence of potential hazardous wastes, leaking fluids or soil staining was observed at the time of the site walkover. However, any materials of concern or associated impacts encountered during site development activities should be properly characterized and removed for off-site disposal or recycling by a qualified waste hauler. Upon removal of any such materials, an inspection of underlying soils should be performed to confirm that no staining or other impacts to the subsurface are present.

- Based on the age of the Ron Machine & Tool Company building and the original portions of the Industrial Metal Plating, Inc. building, some painted surfaces may contain lead-based paint. In addition, the presence of potential asbestos-containing materials (ACM) in various forms such as roofing material cannot be ruled out. Prior to any planned renovation or demolition of the buildings, an ACM survey should be performed by a Pennsylvania-licensed inspector. If the building is planned for future use as a residential building or for child occupancy of any kind, a lead-based paint survey should also be performed. All identified ACM or lead-based paint should be properly abated or managed in accordance with applicable state and federal regulatory requirements.

With the exception of the issues noted above, no other RECs or BERs have been identified on the subject property at this time.

2. INTRODUCTION

2.1 PURPOSE

The primary purpose of this study was to document the performance of all appropriate inquiries by the environmental professional for the subject property. Specifically, this document is intended to provide the “all appropriate inquiries” as referenced in CERCLA Section 101(35)(B), and as defined in 40 CFR Part 312 (*Standards and Practices for All Appropriate Inquiry – Final Rule, November 2005*). Such is applicable to persons seeking to qualify for (i) the innocent landowner defense pursuant to CERCLA Sections 101(35) and 107(b)(3); (ii) the bona fide prospective purchaser liability protection pursuant to CERCLA Sections 101(40) and 107(r); and (iii) the contiguous property owner liability protection pursuant to CERCLA Section 107(q). This report was not intended as part of the site characterization and assessment with use of a grant awarded under CERCLA Section 104(k)(2)(B). More specifically, the scope is intended to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products on, at, in, or to the subject property. These conditions are collectively defined as recognized environmental conditions (RECs).

2.2 SCOPE OF WORK

This investigation was performed in accordance with ASTM Standard Practice E1527-13: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Specifically, the scope of work for this Phase I ESA consisted of the following:

- A review of Federal and State environmental databases, made available through Environmental Data Resources, Inc. (EDR). These databases and search radii were in accordance with those specified under ASTM Standard Practice E1527-13 Section 8.2.1, include federal NPL, CERCLA, RCRA, ERNS, and brownfields/engineering control databases. State UST/AST/leaking tank databases, state equivalent NPL, CERCLA, solid waste, storage tank, brownfields, voluntary cleanup and engineering control databases were also included as part of this review.

- A review of physical setting sources, including USGS 7.5-minute topographic maps or equivalent, USGS or state agency bedrock/surficial geologic and hydrogeologic maps, and NRCS or other soil series maps, and other physical setting sources, as available.
- A review of historical property use and development information for the site and surrounding properties, through reasonably ascertainable sources dating to 1940 or the first developed use. These include one or more of the following: historical fire insurance maps or other historical map sources, aerial photographs, and tax assessment/recorded land title records, street or city directories, municipal zoning, code, building or fire department records, prior assessment reports, or other appropriate sources as warranted to ascertain land use to the dates described above.
- A review of available public records for activity and use limitations (AULs) or liens associated with environmental issues or activities at the subject property through the Berks County Recorder of Deeds, the Pennsylvania DEP AUL registry, or other publically available resources.
- A detailed site reconnaissance, with the objective of identifying past and present uses, features and condition of the subject property and adjoining properties, as they pertain to the identification of RECs. The site visit was limited to interior and exterior areas which could be physically and/or visually observed from within the boundaries of the subject property.
- Interviews with persons knowledgeable of the history of the site and surrounding area, including past and/or present site owners, occupants or key site managers, with first-hand knowledge of the subject site. For the subject property, these individuals were Mr. Terry Sroka, Reading Regional Airport manager, Mr. Jamey Maack, president of Industrial Metal Plating, Inc.; and Mr. Ron Glovenski, owner of Ron's Machine Shop.
- Interviews with state or local government officials knowledgeable of the history of the site and surrounding area, including environmental agency contacts, municipal code enforcement, or zoning officers, fire department inspectors or fire marshals, or other appropriate local contacts. On January 14, 2015, Liberty submitted a Right-to-Know request to Bern Township.

- Liberty reviewed environmental database records for evidence of listings associated with the subject property or properties immediately adjacent to the subject site, which would reflect conditions that would indicate the likelihood of Pennsylvania Department of Environmental Protection (DEP) program records for the properties. Following a review of the subject property and adjacent properties through the EDR Radius Map Report, Liberty submitted a file review request for subject property and eight adjacent properties. Liberty reviewed records at the DEP Southcentral Regional Office in Harrisburg, Pennsylvania on January 15 and February 2, 2015. The DEP file review is further discussed in Section 6.7.
- Completion of the User Questionnaire by the client, conforming to the format presented as Appendix X3 of ASTM Standard Practice E1527-13, which describes any user-provided information concerning known environmental issues affecting the subject property, its planned use, and the conditions of its purchase, as applicable.

The findings of the data collection tasks described above determined the potential presence of soil, groundwater, or vapor impacts on the subject property, which could be defined as RECs as set forth in ASTM Standard Practice E1527-13.

This Phase I Environmental Site Assessment report was prepared for, and may be relied upon, by Blue Rock Construction, Inc. and Berks County Industrial Development Authority, as well as their respective counsel and consultants. No other person or organization is entitled to rely on this report without the written authorization of Liberty.

This Phase I ESA was performed by Matthew Adukaitis, an environmental professional meeting the qualifications specified in the EPA's All Appropriate Inquiry Final Rule (40 CFR Part 312), Subpart B (312.10).

2.3 DATA GAPS

No data gaps or other deletions from the standard scope of work of ASTM Standard Practice E1527-13 were encountered during the completion of this report.

3. SITE SETTING

3.1 PROPERTY DESCRIPTION

The subject property is comprised of Lot 1 of the BCIDA Airport Tract, an irregular-shaped parcel approximately 155 acres in size (Berks County Parcel ID 4398-12-96-7019) as well as a 150-foot wide corridor extending south from Lot 1 along Aviation Road to its intersection with Bernville Road, which crosses land owned by the Reading Municipal Authority (Berks County Parcel ID 4398-11-56-9055). The property is located to the northeast and east of the Reading Regional Airport, with the majority of the property located to the south and west of Aviation Road (also known as Wagner Lane and Leisczs Bridge Road). Buildings and improvements on the subject property include a partial two-story industrial facility, a one-story machine shop, an out-of-use pistol range, and a concrete bunker structure. The remainder of the subject property consists of wooded and cleared land, and roads associated with of a former military training complex. The site is situated within a mixed-use area, consisting of commercial and residential properties and lies directly adjacent to the Reading Regional Airport. A wastewater treatment plant, operated by the Reading Regional Airport Authority (RRAA), is located within an outparcel on the northern portion of the subject site, but is not owned by BCIDA and is not part of the subject property of this Phase I ESA.

Liberty performed an inspection of the exterior portions of the subject property on December 19, 2014. Two occupied buildings are located on the property and include the Industrial Metal Plating, Inc. facility at 153 Wagner Lane and the Ron Machine & Tool Company at 699 Aviation Road. A bunker is present on the central portion of the property and was being used to store road salt for the Reading Regional Airport at the time of the site inspection. The bunker structure is constructed of concrete and is built into a large earthen embankment to the southeast of the adjacent airport runways. As further described in Section 6.3, this structure was originally used as a testing and target area for firing of ammunition rounds from military aircraft during the 1940s. An asphalt paved taxi-way and concrete slabs are located to the south and southwest of the bunker. A former pistol range is present along the western property boundary. The fenced area surrounding the pistol range has a paved asphalt surface and high berms on the north, east and west sides. A clearing with a vegetated berm was observed on the northwest portion of the

property. Concrete debris was observed at several locations within this clearing. Approximately 100 empty, green 55-gallon drums are staged in a smaller clearing to the east of the large clearing. Several drums were labeled as previously containing fruit punch concentrate. According to Mr. Terry Sroka, Director of the Reading Regional Airport, the drums are used as trash cans during the Mid-Atlantic Air Museum's annual World War II Weekend which is held at the adjacent Reading Regional Airport.

Miscellaneous trash and demolition debris, including tires, railroad ties, plastic buckets and bottles, concrete, asphalt, bottles, and rusted 5-gallon metals buckets, were observed in wooded areas along the abandoned roads within the former military training complex on the central portion of the property. The closed roads mark the former locations of several former one-story buildings dating to the early 1940s. These building were originally operated as a US Army Air Corps training base and a prisoner-of-war camp, and were later converted in for residential use, and subsequently to commercial use. Several clearings, level building pads and former utility poles mark the locations of former buildings, which were removed in 2013 and 2014 by the BCIDA. Pole-mounted transformers were also observed along the abandoned roads. No external markings regarding PCB content were observed on any transformer units. The transformers appeared in fair condition and no staining was observed. A stone-lined stormwater drainage swale originates along the western property boundary, south of the pistol range and flows northeast towards the off-site wastewater treatment plant. At the treatment plant, the swale turns east towards Aviation Road and drains toward the Schuylkill River. According to Mr. Sroka, stormwater catchbasins along the eastern portions of the airport runways discharge to the swale. A grass field is located on the northeastern portion of the subject property along Aviation Boulevard, and is used by a local drum and bugle corps (Reading Buccaneers Drum and Bugle Corp) as a practice facility. A shed, van and several empty blue plastic 55-gallon drums are located along the south side of the field. Two aboveground waste water pipelines extend across the northern portion of the site, and run to the wastewater treatment facility. No evidence of fluid spills or leaks was observed along the pipeline runs at the time of the site inspection.

Liberty performed a site inspection of the Ron Machine & Tool Company building on January 26, 2015. Mr. Ron Glovenski, the owner of Ron Machine & Tool Company, provided access to all portions of the building for inspection. The property was covered by approximately six inches of snow at the time of the inspection. The approximately 2,600 square foot building is of

slab-on-grade construction and has no basement. The facility is connected to public water, and has a sanitary sewer connection to the nearby Reading Regional Airport waste water treatment facility. The building is heated by an oil-fired furnace located in the interior of the building. A 275-gallon heating oil aboveground storage tank (AST) is located adjacent to the furnace. The AST appeared in good condition and no leaks or spills were observed. According to Mr. Glovenski, the AST has been located inside the building for at least 40 years. The vent pipe and fill port for the AST is located along the northeast exterior wall of the building. Mr. Glovenski stated that the building can also be heated by an electric heat pump. Portable electric and kerosene space heaters were also observed within the building.

Mr. Glovenski stated that the building is used for custom machine fabrication. Fabrication machinery and welding equipment are present in the shop areas of the building, staged over a concrete floor. Small containers of gasoline, kerosene, lubricating oil and cutting oils were observed throughout the shop area. The containers appeared to be in good condition, with no visible evidence of leaks or spills. According to Mr. Glovenski, used oils are collected and recycled off-site by the Reading Regional Airport. Piles of metal shavings are present on the floor around various fabrication machinery. The metal shavings are placed in a municipal waste dumpster located in the gravel parking area to the southwest of the building. Empty 55-gallon drums are staged in the building. According to Mr. Glovenski, the drums formerly contained kerosene. No visible evidence of spills or leaks were noted at the time of the site inspection.

Liberty performed a site inspection of the Industrial Metal Plating, Inc. facility on February 28, 2015. Mr. Jamey Maack, president of Industrial Metal Plating, Inc., provided access to all portions of the building for inspection. The property was covered by approximately six inches of snow at the time of the site inspection. The building is of slab-on-grade construction, has no basement and is connected to public water. Sanitary sewer connections are present, and discharge to an on-site wastewater treatment unit before being discharged to the Reading Regional Airport's nearby wastewater treatment facility. The building is heated by two No. 2 fuel oil-fired boilers as well as electric heaters. Fuel oil is stored in a 10,000-gallon underground storage tank (UST) located to the southwest of the building.

Mr. Maack stated that the facility was originally constructed in 1959 at the location of the former Reading Army Airfield mess hall. According to Mr. Maack, the majority of the building was

severely damaged by a fire in 1986 and the wastewater treatment area is the only original portion of the building. Mr. Maack stated that processes within the building include aluminum anodizing, chromate conversion, laser engraving and some assembly. The northeastern portion of the building includes a two-story office area and a one-story wastewater treatment facility. The first floor of the office area includes a lobby and reception desk, a sales office and a manager's office. The second floor of the office area includes a conference room, a kitchenette, two bathrooms, a sales office and the president's office with a bathroom.

Approximately 20 ASTs are present in the wastewater treatment area, ranging in size from 150 to 8,000 gallons. A flammable materials cabinet and 55-gallon drums of salt solution are staged on a spill containment pad. A 55-gallon drum of waste oil, a 55-gallon drum of sodium bisulfate, a 55-gallon drum of sodium hypochlorite, a 55-gallon drum of salt solution, an electric hot water heater, a dry transformer, and bags of calcium chloride and silica sand are also staged in the wastewater treatment area. Dry transformers do not contain potential PCB-containing oils or other dielectric fluids. The wastewater treatment area includes a subfloor trench system to collect liquids in the case of a leak or spill. The collection system includes an alarm that notifies personnel of a discharge to the trench. The trench system discharges to holding tanks in the wastewater treatment area. Solids are pressed out of the wastewater and disposed off-site by a private contractor.

A shipping area is located along the northern side of the building. Four manual overhead doors with air-powered load levelers are located along the northern wall. Storage shelves in the loading area contain raw aluminum products. A dry transformer was observed in this area. A chemical storage area along the eastern side of the loading dock contains 5-gallon buckets and 55-gallon drums containing liquid chromate conversion coating (Chromicoat L-25), caustic soda, sodium hypochlorite, sealers (Acticide CT, Anodal MS, Houghto-Seal A-620), nitric acid, caustic potash, acetic acid, sulfuric acid, ferric chloride, deoxidizing liquids (Houghto-Deox A-1745L), and etch additive liquids (Houghto-Etch AX-1888). The chemical storage area also contains powder and liquid inks and dyes, bags of aluminum sulfate and sodium acetate, and cardboard containers of cleaners (Isoprep 740 and Houghton A-733). Three empty plastic totes are staged on overhead racks and are used in the event that liquids need to be pumped from a drum or container. The chemical storage area is heated by ceiling-mounted electric heater and a steam heater. White staining was observed on the concrete floor; however, no active leaks, spills

or pooled liquids were observed at the time of the site inspection. The chemical storage area includes concrete curbing for spill containment. According to Mr. Maack, the floor is sloped to the east and any spilled liquids are collected and discharged to the facility's wastewater treatment facility.

A laboratory and offices are located to the south of the loading area. The laboratory included containers of ammonium sulfate, hydrochloric acid, sodium hydroxide, sodium thiosulfate, ammonium hydroxide, pH calibration liquids, powder coating, phosphoric acid and sulfuric acid.

The central portion of the building contains the main production area consisting of three rows of anodizing process tanks. A subfloor trench system is located throughout the production area. According to Mr. Maack, any spilled liquids are collected and discharged to the facility's wastewater treatment facility. Four 55-gallon drums of caustic soda, a 55-gallon drum of sulfuric acid, a 55-gallon drum of ferric chloride, a 55-gallon drum of sodium hypochlorite, 55-gallon drums of propylene glycol based heat transfer liquid (Thermal Star), a storage tank with a mixture of phosphoric acid and sulfuric acid (Phosbrite 174), two 1,000-gallon dye storage tanks, and several empty 55-gallon drums are staged in the production area. Dry transformers were noted throughout the production area.

A bulk storage room at the southeast corner of the building contains two 5,000-gallon tanks containing a mixture of phosphoric acid and sulfuric acid (Phosbrite 174). The masonry block walls of the bulk storage room are epoxy-lined to approximately 4 feet above the concrete floor.

An assembly room and maintenance room are located along the southern-central portion of the building. A tub sink, welding equipment, four dry transformers and three scrap metal dumpsters were observed in these areas. According to Mr. Maack, the scrap metal is recycled at an off-site facility. These areas are heated by ceiling mounted steam heaters.

A boiler room is located at the southwest corner of the building and contains two heating-oil fired boilers, which are fueled by the exterior UST. A floor drain was observed in the boiler room. Approximately ten 5-gallon buckets of epoxy mortar patch kit, two 55-gallon drums of boiler water treatment liquids, a 55-gallon drum of propylene glycol based heat transfer liquid (Thermal Star), a 5-gallon bucket of fibered aluminum coating, a 5-gallon bucket of synthetic lubricant and two dry transformers were observed in this area.

A compressor room, an electrical room, a printing room, bathrooms and locker rooms and a lunch room are located along the western side of the building. An air compressor, air holding tank and an air dryer are located in the compressor room. A floor drain, electric heater and electric hot water heater were observed in the printing room.

A diked tanker truck loading area is located along the southern exterior wall of the building. A drain was observed in the diked area. According to Mr. Maack, the drain contains a valve that is kept in the closed position. A cardboard dumpster and a municipal waste dumpster are staged in the diked area. Two air compressors and a 55-gallon drum labeled “oil and water” are located in a fenced area along the western exterior wall of the building.

The concrete UST pad for the facility’s oil-fired boilers is present to the southwest of the building. According to Mr. Maack, a 10,000-gallon heating oil UST is located beneath the concrete pad. Mr. Maack confirmed with the facility engineer that the UST is cleaned and pumped every two years, meter readings are checked every day and fuel levels are measured every three to six weeks by delivery personnel. The engineer stated that the facility maintains paper records of meter readings for the past 11 years. Mr. Maack and the facility engineer stated that no releases, leaks, or spills are suspected based on maintenance and inventory/filling records.

Three pole-mounted transformers were observed to the southwest of the Industrial Metal Plating building. No external markings regarding PCB content were observed on the transformer. The transformers appeared in fair condition and no staining was observed. A stormwater catchbasin was observed on the southern side of the Industrial Metal Plating building. According to Mr. Maack, the catchbasin discharges to the grassy area to the southeast of the building.

The study area of the Phase I ESA included a 150-foot wide corridor extending to the south along Aviation Boulevard, south of the BCIDA Lot 1 as described above. The majority of the roadway corridor consists of improved roadside grass embankments with traffic barriers along the eastern side of the road. The areas to the east of the road form steep wooded embankments that lead downward to the Schuylkill River. Areas to the west of the roadway include a stone-lined swale, and perimeter fencing that forms the boundary of the airport complex to the west, as well as cleared grass embankments leading to runway areas. An eight-bay storage building used by the Reading Regional Airport Authority for groundskeeping and maintenance is present to the

west of the road, approximately 800 feet northeast of its intersection with Bernville Road. The yards of single-family residences and a social club (Greenfields Social Club) extend along the southeastern side of the roadway corridor for a distance of approximately 1,000 feet northeast of its intersection with Bernville Road. No evidence of USTs or other features of concern were noted within visible areas directly adjacent to the roadway corridor, however the off-site properties were not entered for inspection.

A Site Location Map and Site Plan are included as Figures 3-1 and 3-2, respectively. Site photographs from the December 19, 2014 and January 26 and 28, 2015 site visits are provided as Appendix A.

3.2 SURROUNDING LAND USE

The following table summarizes the use of the properties surrounding the subject site.

Surrounding Land Use Summary	
North	The Reading Regional Airport Sewage Treatment Plant and wooded areas, with the Schuylkill River beyond.
East	Wooded areas, with the Schuylkill River beyond, and residential properties.
South	The Reading Regional Airport and State Route 183 (Bernville Road), with commercial and residential properties beyond.
West	The Reading Regional Airport.

3.3 SITE BACKGROUND/OPERATING HISTORY

According to site contact interviews, deed records, historical maps, and historical aerial photographs, the subject property was used for agricultural purposes (cattle grazing) in the early 1900s. Between 1943 and 1946, the subject property was developed and operated by the US Army Air Corps as part of the Reading Army Air Field (AAF), which included the adjacent airport. The AAF facilities on the subject property also included a prisoner of war camp. The AAF facility was transferred to the 11th Air Force and the 1st Wing of the Pennsylvania Air National Guard in 1947. The property was then transferred to the City of Reading between 1948 and 1949, and the Air National Guard remained at the Reading AAF until the mid-1960s. In 1958, the Reading Municipal Airport Authority was established and assumed property

responsibilities. After the AAF sold the property, the prisoner of war camp structures were converted into residential apartment units. The residential apartment structures were then converted into commercial and industrial buildings and a mobile home community was constructed on the central portion of the property. In 1959, the former prisoner of war camp mess hall was converted into an industrial facility occupied by Industrial Metal Plating. With the exception of Industrial Metal Plating building, the Ron Machine & Tool Company building, and the bunker/'shooting-in butt' structure, all of the former military buildings on the subject property have been demolished. The subject property was purchased by the Berks County Industrial Development Corporation (BCIDA) from Reading Regional Airport Authority in 2011.

3.4 VAPOR MIGRATION

An evaluation of potential vapor migration risks at the subject property has been performed as part of this Phase I ESA. The evaluation is based on available data and does not include a vapor screening as outlined in ASTM Standard Guide E2600-10: *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. Based on the interviews, records research, and site inspection activities conducted by Liberty as part of this Phase I ESA, potential vapor migration risks were identified associated with potential soil and groundwater impacts at the Industrial Metal Plating facility as a result of a fire in 1986, and within an area of dumped debris on the northeastern portion of the site, which may contain waste materials from the plating facility fire cleanup. The fire and subsequent remediation activities are further discussed in Sections 6.6 and 6.7.

3.5 TOPOGRAPHY AND DRAINAGE

According to the USGS 7.5-Minute Topographic Quadrangle Map for the site (Bernville, PA, 1999), the topography of the site slopes generally toward the north, northeast and east toward the Schuylkill River, located adjacent to the subject site. Elevations range from 310 to 230 feet above mean sea level. Stormwater runoff discharges through roof catchments, stormwater catchbasins located in paved and grass areas, and overland flow to the Schuylkill River. Constructed drainage swales also extend across the site and discharge to the Schuylkill River.

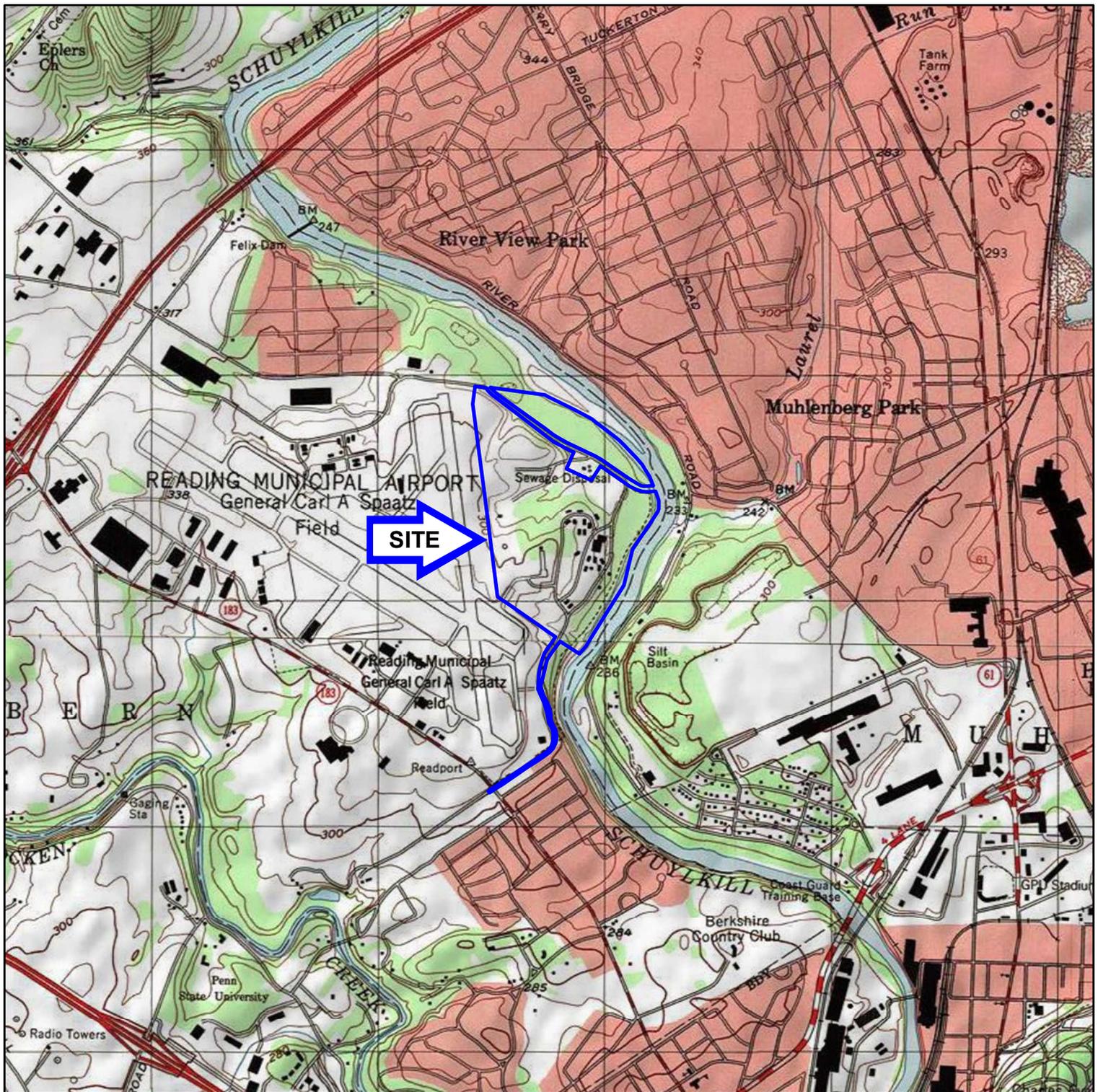
3.6 GEOLOGY AND SOILS

According to the Atlas of Preliminary Geologic Quadrangle Maps of Pennsylvania (Map 61, Pennsylvania Geologic Survey, 1980), the subject property is underlain by Allentown Formation, which is generally described as medium to medium-dark-gray, thick-bedded dolomite and impure limestone containing dark-gray chert stringers and nodules with some orange-brown-weathering calcareous siltstone at the base.

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NCRS) Web Soil Survey online database, the subject property is mapped primarily as Urban Land-Duffield complex with zero to eight percent slopes, which is generally described as being well drained with a moderately high permeability. Urban land indicates areas where the native soil horizon has been altered through filling, excavating, or construction.

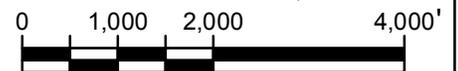
3.7 WETLANDS MAP REVIEW

According to the US Fish & Wildlife Service's National Wetlands Inventory (NWI) Digital Map data for the subject property, no mapped wetland areas are present on the subject property. Freshwater forested/shrub wetlands and a riverine (the Schuylkill River) are mapped adjacent to the north, northeast, and east of the subject property. Liberty performed a wetland delineation on the subject property in November 2014 and identified two wetland areas and two watercourses, as described in a report to the US Fish and Wildlife Service dated February 16, 2015.



SOURCE: USA TOPO MAPS - COPYRIGHT © 2013 NATIONAL GEOGRAPHIC SOCIETY, i-cubed.
 TEMPLE (SITE - 1999) AND READING (SITE - 1999), PENNSYLVANIA 7.5-MINUTE QUADRANGLES.

SCALE: 1" = 2,000'



50 N. Fifth St. 5th Floor
 Reading, PA 19601
 Phone: 610-375-9301
 Fax: 610-375-9302
 www.libertyenviro.com

Figure 3-1 - Site Location Map

BCIDA Airport Tract
 Bern Township, Berks County, Pennsylvania

PROJECT NO.: 130432.02

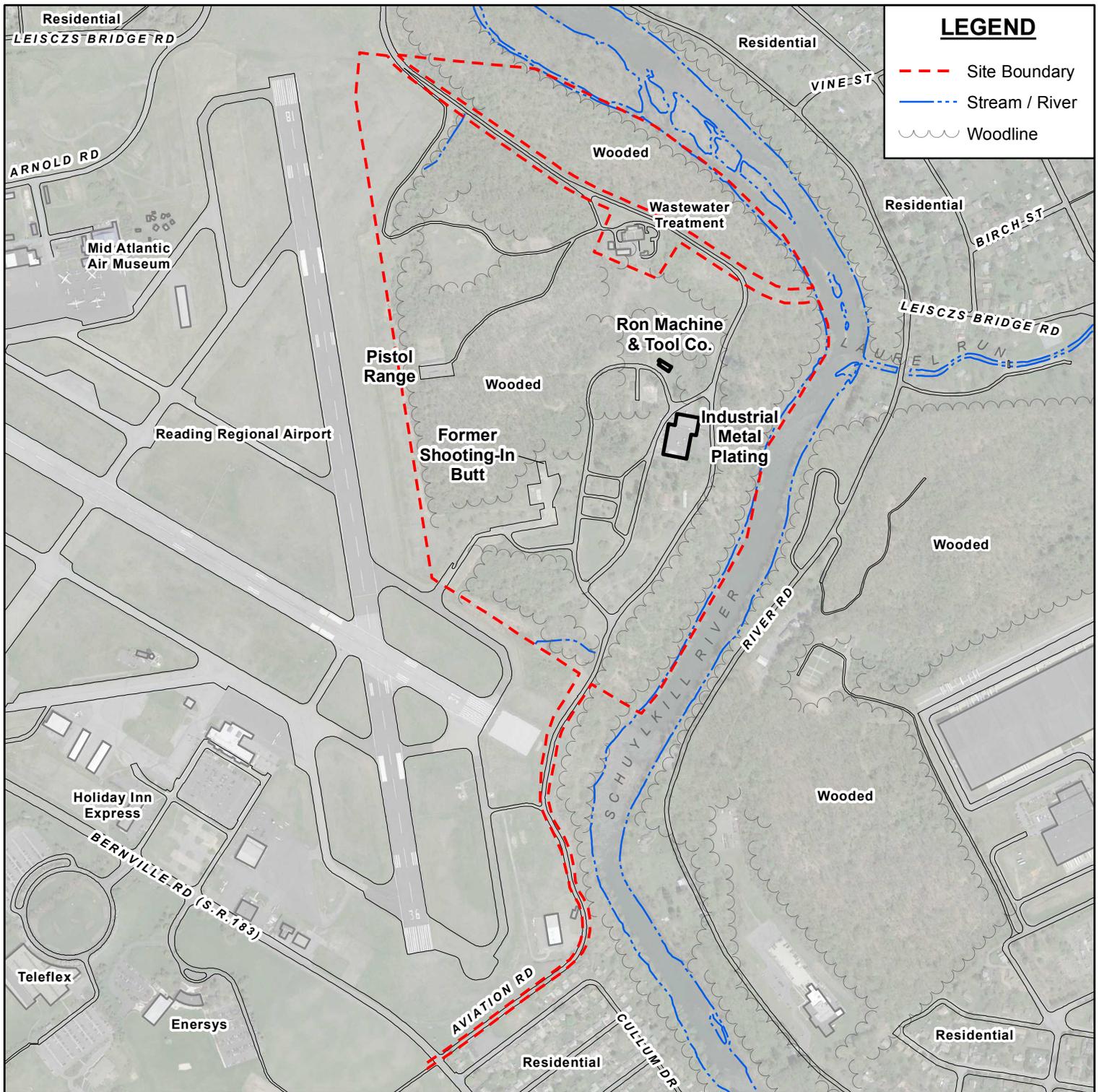
REV: 0

PREPARED BY: EMC

DATE: FEBRUARY 9, 2015

SCALE: 1" = 2,000'

APPROVED BY: MJA



LEGEND

- - - Site Boundary
- - - Stream / River
- Woodline

NOTE: THIS DRAWING INTENDED FOR ILLUSTRATIVE PURPOSES ONLY, AS PART OF A SITE CHARACTERIZATION. NOT TO BE USED AS A BASIS FOR ENGINEERING OR DESIGN.
IMAGERY SOURCE: GOOGLE EARTH, AERIAL PHOTO DATE: APRIL 24, 2013.



	<p>Liberty Environmental, Inc.</p>	Figure 3-2 - Site Diagram		
		<p>BCIDA Airport Tract Bern Township, Berks County, Pennsylvania</p>		
<p>50 N. Fifth St. 5th Floor Reading, PA 19601 Phone: 610-375-9301 Fax: 610-375-9302 www.libertyenviro.com</p>		<p>PROJECT NO.: 130432.02</p>	<p>REV: 0</p>	<p>PREPARED BY: EMC</p>
<p>DATE: FEBRUARY 9, 2015</p>		<p>SCALE: 1" = 800'</p>	<p>APPROVED BY: MJA</p>	

4. HISTORICAL RESEARCH

4.1 HISTORICAL AERIAL PHOTOGRAPH REVIEW

Liberty conducted a review of historical aerial photographs to investigate the development and land use history of the site. Aerial photographs for the years 1937, 1958 and 1971 were reviewed through the Penn Pilot online database. In addition to these photographs, aerial photographs from 1993 through 2013 were obtained through Google Earth. A copy of the 2013 photo is provided as Appendix B. A summary of the historical photograph review is presented in the table below.

Historical Photo Review	
Year	Observations
1937	The subject property appears as a series of cleared farm fields and pastures with small buildings including one structure on its northwest portion, approximately five structures on the eastern portion of the site near the Schuylkill River, and two structures near the western property boundary. The buildings appear to be small farmhouses or barns. The Reading Municipal Airport appears under construction on the adjacent property to the west and southwest. The Schuylkill River extends along the northern and eastern property boundaries. Bernville Road is visible to the south, with agricultural land beyond.
1958	The central portion of the subject property appears developed with the Reading Army Airfield buildings, including approximately 40 to 45 structures, several roads, and a taxi runway and a concrete pad (the bunker/'shooting-in-butt' firing area described in Section 3.1). A single building is visible on the northwest portion of the site. Manmade stormwater drainage swales extend across the northern, central and southern portions of the property. The Reading Municipal Airport waste water treatment facility is present on an outparcel on the northern portion of the subject property. Aboveground pipelines extend to the south and west of the treatment facility. The Reading Municipal Airport has been expanded on the adjacent property to the southwest and west. Residential properties are visible along the road extending to the south of the site, near Bernville Road.
1971	No significant changes are shown, with the exception that the structure on the northwestern portion of the property is no longer visible.
1993	Several of the former military structures on the southeastern portion of the subject property appear to have been removed. A pistol range has been constructed on the central portion of the site. Areas of disturbed soil appear on the northwestern and northeastern portions of the site. The Industrial Metal Plating facility is visible on the eastern portion of the property. The undeveloped portions of the subject property have become overgrown and wooded. Commercial development is shown to the south, across Bernville Road.

Historical Photo Review (Continued)	
Year	Observations
1999	Approximately five structures, which appear to be residential trailers, have been staged in a former clearing on the southeastern portion of the subject property near Aviation Boulevard.
2004 through 2010	A new area of disturbance is visible along Aviation Boulevard, near the northwestern portion of the subject property. Several of the former military buildings have been demolished.
2012 and 2013	The soil disturbance on the northwest portion of the subject property is covered with grass and brush. Several additional former military buildings have been demolished on the central portion of the site.
Source of Photographs: Penn Pilot (1937, 1958 and 1971); Google Earth (1993 through 2013).	

4.2 HISTORICAL MAP REVIEW

Liberty performed a search for historical maps of the site, including Sanborn Fire Insurance maps and USGS topographic map quadrangles covering the subject site through EDR, Inc. No Sanborn map coverage was available for the subject property; however, Liberty reviewed USGS topographic map quadrangles covering the site for several years between 1894 and 1999. Copies of the historical topographic maps are provided as Appendix C. A summary of the historical map review is presented in the table below.

Historical USGS Topographic Map Review	
Year	Observations
1894	The subject property is depicted as undeveloped land with two roads crossing its northern portion. The Schuylkill River is present to the north and east.
1915	Six small farm structures are shown on the subject property. Leicz's Bridge is present to the northeast.
1956 and 1968	The subject property is developed with approximately 30 structures on its central and eastern portions. A sewage disposal facility is labeled on the northern outparcel. The Reading Municipal Airport is labeled as General Carl A. Spatz Field on the adjacent property to the west.
1978, 1983 and 1999	No changes are depicted on the subject property. Increased development is shown on the adjacent property to the west, which is now labeled as the Reading Municipal Airport.
Source of Maps: USGS/EDR, Inc. (all maps).	

4.3 DEED OWNERSHIP RESEARCH

Liberty conducted a review of current and historical deeds for the subject property, in order to trace the historical ownership of the property. Liberty also reviewed the available deeds for liens, limitations and restrictions pertaining to environmental issues. Please note that this review did not constitute a formal title search and is limited to observable language on the traceable deed records only.

The review of deeds indicated that the property is owned by Berks County Industrial Development Authority, which acquired the property from Reading Regional Airport Authority on June 27, 2011. Reading Regional Airport Authority purchased the property from the City of Reading on November 22, 1957. No environmental limitations, restrictions or any other potential causes for environmental concern were observed in the current deed. A copy of the current deed for the site is provided in Appendix D.

4.4 LIEN AND ACTIVITY AND USE LIMITATIONS (AUL) REVIEW

Liberty performed a review through the Berks County Recorder of Deeds and the Pennsylvania DEP's activity and use limitation registry for the presence of liens and other activity and use limitations (AULs) associated with the subject property pertaining to environmental issues. Liberty also reviewed the available deeds for language pertaining to liens, limitations and restrictions associated with environmental issues only.

The review of publicly-available records did not identify the presence of any liens or AULs affecting the subject site. The review was limited to observable database records only and was not intended to constitute a formal title search for insurance purposes.

5. SITE RECONNAISSANCE

On December 19, 2014 and January 26 and 28, 2015, Liberty's representative conducted a visual inspection of the subject property. A detailed description of the subject site is provided in Section 3.1. The purpose of the inspection was to visually determine the presence of adverse environmental conditions on or near the subject property. A standard checklist was completed during the visit and is included below.

Inspector: **Matthew J. Adukaitis**

Findings:

Yes No

Drums/Barrels/Containers: Approximately 100 empty, green 55-gallon drums are staged in a smaller clearing to the east of the large clearing. Several drums were labeled as previously containing fruit punch concentrate. According to Mr. Terry Sroka, Reading Regional Airport Director, the drums are used as trash cans during the Mid-Atlantic Air Museum's annual World War II Weekend which is held at the adjacent Reading Regional Airport.

Containers of gasoline, kerosene, and lubricating and cutting oils were observed in the Ron Machine & Tool Company building.

Containers and/or 55-gallon drums of salt solution, waste oil, sodium bisulfate, sodium hypochlorite, liquid chromate conversion coating, caustic soda, sodium hypochlorite, sealers, nitric acid, caustic potash, acetic acid, sulfuric acid, ferric chloride, deoxidizing liquids, etch additive liquids, ammonium sulfate, hydrochloric acid, sodium hydroxide, sodium thiosulfate, ammonium hydroxide, pH calibration liquids, powder coating, phosphoric acid, sulfuric acid, a mixture of phosphoric acid, sulfuric acid, epoxy mortar patch kit, boiler water treatment liquids, fibered aluminum coating, and synthetic lubricant were observed in the Industrial Metal Plating building. With the exception of white staining observed on the concrete floor of the chemical storage area, no staining, leaks or spills were observed at the time of the site inspection.

Yes No

Waste Materials/Piles: Piles of metal shavings are present on the floor around fabrication machinery in the Ron Machine & Tool Company building. The metal shavings are placed in a municipal waste dumpster located in the gravel parking area to the southwest of the building. Used oils from the Ron Machine & Tool Company facility are reportedly recycled off-site by the Reading Regional Airport.

Solids are pressed out of the Industrial Metal Plating wastewater and disposed off-site by a private contractor. Three scrap metal dumpsters were observed in the maintenance room. According to Mr. Maack, the scrap metal is recycled at an off-site facility. A cardboard dumpster and a municipal waste dumpster are staged in a diked area to the south of the building.

Yes No

Construction/Demolition Debris: Miscellaneous trash and demolition debris, including tires, railroad ties, plastic buckets and bottles, concrete, asphalt, bottles, rusted 5-gallon metals buckets, were observed in wooded areas along the abandoned roads on the central portion of the property. Concrete debris was observed at several locations within the clearing on the northwest portion of the property. An area of unnatural fill and/or debris is located in a clearing along the western side of a curve in Aviation Boulevard, near the northeastern portion of the site.

Yes No

Discolored Soil:

Yes No

Spills/Leaks:

Yes No

Surface Staining:

Yes No

Odors:

Yes No

Leachate Seeps:

Yes No

Discolored Surface Water:

Yes No

Unnatural Soil/Fill: A large grass clearing, with a vegetated berm on its western side adjacent to the Reading Airport property, is located on the northwest portion of the property. This area coincides with a reported former soil staging area from an airport expansion project approximately 10 years ago. An area of unnatural fill and/or debris is located along the western side of a curve in Aviation Boulevard on the northeastern portion of the subject property.

Yes No

Ash/Blackened Areas:

Yes No

Storage Tanks: A 275-gallon heating oil AST is located inside the Ron Machine & Tool Company building.

A 10,000-gallon heating oil UST is located along the southern exterior wall of the Industrial Metal Plating building, near the southwest corner. Approximately 20 ASTs are present in the Industrial Metal Plating wastewater treatment area, ranging in size

from 150 to 8,000 gallons. Three empty plastic totes are staged on overhead racks in the chemical storage area and are used in the event that liquids need to be pumped from a drum or container. A storage tank with a mixture of phosphoric acid and sulfuric acid and two 1,000-gallon dye storage tanks are located in the production area. A bulk storage room at the southeast corner of the building contains two 5,000-gallon tanks containing a mixture of phosphoric acid and sulfuric acid

Yes No

Process Tanks: The Industrial Metal Plating building contains anodizing process tanks. A subfloor trench system is located throughout the production area. According to Mr. Maack, the president of Industrial Metal Plating, any spilled liquids are collected and discharged to the facility's wastewater treatment facility. No leaks or spills were observed at the time of the site inspection.

Yes No

Catchbasins/Floor Drains: Floor drains and linear trench drains were observed throughout the Industrial Metal Plating building. According to Mr. Maack, the drains discharge to the facility's wastewater treatment facility. A stormwater catchbasin was observed on the southern side of the Industrial Metal Plating building. According to Mr. Maack, the catchbasin discharges to the grassy area to the southeast of the building.

Yes No

Stressed Vegetation:

Yes No

Wells, Septic Systems:

Yes No

Springs/Seeps/Wetlands: Streams and vegetation patterns exhibiting potential wetlands characteristics were observed on the subject property. Liberty performed a wetland delineation on the subject property in November 2014 and identified two wetland areas and two watercourses, as described in a report to the US Fish and Wildlife Service dated February 16, 2015.

Yes No

Ponds/Lakes/Streams: A stream is located on the northwest portion of the property and a stream is present on the southern portion of the property. The Schuylkill River is located along the northern and eastern property boundaries.

Yes No

Pits/Sumps/Lagoons:

Yes No

Chemical/Petroleum Transfer Points: Chemical transfer points are located in the production area of the Industrial Metal Plating building, where liquids are transferred from 55-gallon drums to anodizing process tanks. Petroleum transfer points were observed at the locations of the fill ports for the Industrial Metal Plating

heating oil UST and the Ron Machine & Tool Company heating oil AST. No leaks or spills were observed in the areas.

Yes No

Yes No

Elevators/Hydraulic Lifts:

Transformers and Other PCB-Containing Equipment: Dry transformers were observed throughout the Industrial Metal Plating building. Dry transformers do not contain potential PCB-containing oils or other dielectric fluids. Pole-mounted transformers were also observed along the abandoned roads and three pole-mounted transformers were observed to the southwest of the Industrial Metal Plating building. No external markings regarding PCB content were observed on the transformer. The transformers appeared in fair condition and no staining was observed.

Yes No

Yes No

Surrounding Area Environmental Issues:

Other: A stone-lined stormwater drainage swale originates along the western property boundary, south of the pistol range, and discharges to the Schuykill River near the northeast corner of the property. Two aboveground waste water pipelines are located to the west and south of the airport waste water treatment facility.

6. DATABASE REVIEW AND INTERVIEWS

6.1 ENVIRONMENTAL DATABASE REVIEW

Liberty retained Environmental Data Resources, Inc. (EDR) to conduct a search of federal and state environmental databases in the vicinity of the subject site. The search included the list of federal and state environmental regulatory databases and search distances specified in Section 8.2.1 of ASTM Standard Practice E1527-13. The following is a list of databases that were searched as part of this review:

Federal Databases

- National Priority List (NPL) Proposed, Final, Delisted and Lien Sites
- Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Sites, including “No Further Action Planned” (NFRAP) Sites and consent decree/records of decision sites
- Resource Conservation and Recovery Information System (RCRIS) small and large quantity generators, treatment, storage and disposal facilities (TSDF) and corrective action sites (CORRACTS)
- Emergency Response Notification System (ERNS)
- US Environmental Protection Agency (EPA) Engineering Controls Sites List
- US Environmental Protection Agency (EPA) Institutional Controls Sites List
- US Environmental Protection Agency (EPA) Brownfields Sites
- Toxic Chemical Release Inventory System (TRIS)
- Toxic Substances Control Act (TSCA)
- Mines, PCB Activity, Materials Licensing Tracking, and general Facility Index System (FINDS) sites

State Databases

- Hazardous Sites Cleanup Act (HSCA) Sites
- Solids Waste/Landfill Sites, including historical landfill sites
- Regulated and Leaking Underground Storage Tanks (UST/LUST)
- Regulated and Leaking Aboveground Storage Tanks (AST/LAST)
- Archived UST/LUST and AST/LAST Sites

- Unregulated Leaking Tank sites
- Dry-cleaning facilities
- Voluntary cleanup program (VCP) sites, including engineering control and institutional control sites
- State Brownfields sites list
- Tribal Reservations
- Coal Gasification Sites

A copy of the EDR environmental database report is included in Appendix E. Detailed descriptions of each of the searched databases listed above are provided in the EDR report.

The results of the federal and state database searches are summarized in the following tables.

FEDERAL DATABASE LISTINGS

Database	Search Radius (mile)	Description	Distance (mile)	Direction
NPL	1.0	No sites listed	--	--
Delisted NPL	0.50	No sites listed	--	--
CERCLIS	0.50	No sites listed	--	--
CERC-NFRAP	0.50	No sites listed	--	--
CORRACTS	1.0	No sites listed	--	--
RCRIS-TSDF	0.50	No sites listed	--	--
RCRIS-LQG	TP and Adjoining	Industrial Metal Plating Inc.	TP	TP
RCRIS-SQG	TP and Adjoining	No sites listed	--	--
RCRIS-CESQG	TP and Adjoining	John Fesig Auto Body VF Corp. Hangar Bldg 514	TP 0.01	TP W
RCRIS-Non Gen	TP and Adjoining	Quaker Industrial Stripping Co. Cap Aviation Inc. Reading Municipal Airport	0.20 0.20 0.34	W W W
ERNS	TP	No sites listed	--	--
Engineering Controls	TP	No sites listed	--	--
Institutional Controls	TP	No sites listed	--	--
FUDS	0.25	Reading AAF	TP	TP

TP=Target Property

STATE DATABASE LISTINGS

Database	Search Radius (mile)	Description	Distance (mile)	Direction
SHWS	1.0	No sites listed	--	--
SWF/LF	0.50	No sites listed	--	--
LUST	0.50	Tower Aviation of Reading Allegheny Commuter Airlines FAA Reading RTR Fac. Reading Municipal Airport Paaring Reading Fac.	0.01 0.01 0.34 0.34 0.47	W W W W SSE
UNREG LTANKS	0.50	Reading Regional Airport	0.34	W
LAST	0.50	No sites listed	--	--
UST	TP and Adjoining	Tower Aviation of Reading	0.01	W
Archive UST	TP and Adjoining	No sites listed	--	--
AST	TP and Adjoining	Industrial Metal Plating Millennium Aviation Tower Aviation of Reading	TP 0.01 0.01	TP W W
Engineering Controls	TP	No sites listed	--	--
Institutional Controls	TP	No sites listed	--	--
AUL	0.50	No sites listed	--	--
VCP	0.50	No sites listed	--	--
Brownfields	0.50	No sites listed	--	--
HIST LF	0.50	No sites listed	--	--
ACT 2-Deed	0.50	No sites listed	--	--
Manifest	0.25	Industrial Metal Plating Inc.	TP	TP

TP=Target Property

EDR DATABASE LISTINGS

Database	Search Radius (mile)	Description	Distance (mile)	Direction
EDR Historical Auto Stations	0.25	135 Wagner Lane	TP	TP
EDR Historical Dry Cleaners	0.25	No sites listed	--	--
EDR Manufactured Gas Plant	0.25	No sites listed	--	--

The Industrial Metal Plating facility, located on the southern portion of the subject property, is listed under the federal Resource Conservation and Recovery Act (RCRA) Information System as a large quantity generator (LQG) of hazardous waste. This facility was also listed under state agency databases as an aboveground storage tank (AST) facility, which reports the presence of

two 5,500-gallon ASTs containing hazardous substances. Both ASTs were last inspected on August 10, 2012 and their registration is noted with an expiration date of June 4, 2015.

The subject property is also identified under the federal Formerly Used Defense Site (FUDS) database as the former Reading Army Airfield (AAF). No specific notation of releases or corrective action incidents, closure activities, or other environmental conditions are contained within the database listing.

An auto body shop, listed as the John Fesig Auto Body facility, appears under the federal RCRA database as a conditionally-exempt small-quantity generator (CESQG) of hazardous wastes, bearing the addresses of 117 and 135 Wagner Lane, which is located within the former AAF training complex on the central portion of the subject property. No violations were reported for the facility.

The VF Corporation Hangar Building 514 facility, located at 2401 Bernville Road and 0.01 mile south of the subject property, is listed under the RCRIS-CESQG of hazardous waste. No violations were reported for the facility.

The Allegheny Commuter Airlines facility, located 0.01 mile west of the subject property, is listed as a leaking underground storage tank (LUST) facility. According to the database listing, a release was reported on August 5, 1989. The facility status is listed as “cleanup completed” with a status date of March 5, 1996.

The Aerodynamics of Reading (Tower Aviation) located 0.01 mile west of the subject property, is listed as a LUST facility, UST facility, and an AST facility. According to the database listing, a release was reported on April 6, 2006. The facility status is listed as “interim remedial actions not initiated” with a status date of April 6, 2006. According to the UST and AST databases, two 12,000-gallon USTs are present on this nearby facility, which contain aviation gasoline and jet fuel respectively. One 500-gallon gasoline AST is also present. All three reported tanks are listed as in active use.

The Mark Fruchter Aviation (Millennium Aviation) facility, located at 2365 Bernville Road and 0.01 mile west of the subject property, is listed in the state AST database. According to the database, the facility contains two 12,000-gallon jet fuel ASTs two 5,000-gallon aviation gasoline ASTs, all of which are listed as active.

The Reading Regional (Municipal) Airport facility, located 0.34 mile west of the subject property, is listed as a leaking UST (LUST) facility under state databases and a federally-listed RCRA non-generator of hazardous waste. According to the database listing, a release was reported on August 5, 1989. The facility status is listed as “administrative close out (ACO)” with a status date of August 23, 2005.

The CAP Aviation facility, located 0.20 mile west of the subject property, is listed under the federal RCRA database as a non-generator of hazardous waste. No violations were reported for the facility.

The FAA Reading RTR facility, located 0.34 mile west of the subject property, is listed as a LUST facility. According to the database listing, a release was reported on August 5, 1989. The facility status is listed as “cleanup completed” with a status date of July 30, 1998.

The Quaker Industrial Stripping Corporation facility, located at Building 252 of the Regional Airport, is listed in the federal database under the RCRIS as a non-generator of hazardous waste. No violations were reported for the facility.

Based on the information contained within EDR Radius Map Report as summarized above, Liberty submitted a DEP file review for the facilities which are associated with the subject property (Industrial Metal Plating, Inc., Reading Army Airfield and John Fesig Auto Body). Reviews were also requested for nearby facilities including VF Corporation Hangar Building 514, Allegheny Commuter Airlines, Aerodynamics of Reading (Tower Aviation), Mark Fruchter Aviation (Millennium Aviation), Reading Regional Airport, CAP Aviation, FAA Reading RTR, Quaker Industrial Stripping Corporation. The DEP file review is further discussed in Section 6.7.

6.2 ORPHAN SITE SUMMARY

Orphan sites are properties which, based on limited site information, cannot be accurately depicted geographically within EDR’s available site mapping database. Five orphan sites were identified in the database report. Based on a search of available address and location information for each orphan site, none of the orphan facilities were found to be present within a default

distance of 0.5 mile from the site, and no sites are believed to pose environmental concerns to the subject property.

6.3 OWNER/OCCUPANT INTERVIEWS

6.3.1 Mr. Terry Sroka, Reading Regional Airport Director

During the January 26, 2015 site visit, Liberty interviewed Mr. Terry Sroka, Director of the Reading Regional Airport. Mr. Sroka has been an employee at the airport for approximately 40 years and has familiarity with the historical operations on the subject property, including its original association with the earliest operations of the Reading Airport. According to Mr. Sroka, the subject property and the land that currently operates as the Reading Regional Airport was originally agricultural land and pastureland. In the early 1940s, the central portion of the subject property was developed as the training facility for the US Army Air Corps to support operations in World War II. The complex was also used as a prisoner-of-war camp throughout the war. Mr. Sroka stated that the camp and training complex was converted into apartment buildings in the late 1940s and 1950s. Mr. Sroka stated that each building was heated by kerosene, which was stored in ASTs located to the exterior of the buildings. From the 1970s to the early 1980s, the buildings were reportedly converted into separate, small private commercial and industrial facilities, which included an auto body shop, carpenter shops, and various storage buildings.

According to Mr. Sroka, the pistol range located on the western portion of the site was built by the City of Reading in the late 1970s, and was recently closed within the past year. Mr. Sroka stated the stone swale located on the subject property was constructed to convey stormwater from the eastern portion of the airport runways to the Schuylkill River.

According to Mr. Sroka, the large clearing on the northwestern portion of the subject property was the former location of a soil stockpile during the 1980s, during a Reading Hospital construction project, and was later used as part of a runway expansion project. The removal of the soil stockpile created the clearing that remains today, according to Mr. Sroka.

Mr. Sroka was unaware of the presence of any aviation fuel storage tanks, or any USTs ever being present on the subject property. According to Mr. Sroka, building materials were regularly dumped in an area to the east of the waste water treatment facility until the mid-1980s, and that

the dumped material is believed to have consisted only of construction debris. Mr. Sroka stated that monitoring wells are believed to have once been installed in the vicinity of the former dump area, but was not familiar with the purpose of the well installation.

Mr. Sroka described the historical use of the concrete bunker and taxiway located on the western portion of the subject property, adjacent to the Reading Airport runways. The bunker was originally used as a testing and target area for firing of ammunition rounds from military aircraft during the 1940s, and was colloquially termed the ‘shooting-in butt’.

Mr. Sroka stated that the 55-gallon drums located on the northwestern portion of the subject property are used as trash cans during the Mid-Atlantic Air Museum’s annual World War II Weekend, which is held at the adjacent Reading Regional Airport. The drums have never been used to store chemicals, oils, or industrial waste, to Mr. Sroka’s knowledge.

6.3.2 Mr. Ron Glovenski, Owner of Ron Machine & Tool Company

During the January 26, 2015 site visit, Liberty interviewed Mr. Ron Glovenski, owner of Ron Machine & Tool Company. Mr. Glovenski stated that he has operated at his current location within the former Reading AAF training complex for approximately 40 years. According to Mr. Glovenski, the building is heated by an oil-fired burner fueled by a heating oil AST. Mr. Glovenski stated that the AST has been staged inside the building for as long as he has been at the facility. Mr. Glovenski was unaware of any leaks or spills from the AST or the fill port.

6.3.3 Mr. Jamey Maack, President of Industrial Metal Plating, Inc.

During the January 28, 2015 site visit, Liberty interviewed Mr. Jamey Maack, President of Industrial Metal Plating, Inc. Mr. Maack stated that his family has owned Industrial Metal Plating since operations began in 1959, and that he has been a full-time employee at the facility since 1995. According to Mr. Maack, the building was constructed at the location of the mess hall for the former military base on the subject property. Mr. Maack stated that operations include aluminum anodizing, chromate conversion, laser engraving and some assembly.

Mr. Maack stated that a fire occurred at the facility in 1986, which destroyed the majority of the building. According to Mr. Maack, soils surrounding the building were impacted by a mixture

of chemicals and fire suppression water. Under the supervision of the Pennsylvania DEP, approximately one foot of topsoil was reportedly removed from the impacted areas.

No additional remedial action or other activities pursuant to the fire incident have been performed since that time, according to Mr. Maack. Mr. Maack stated that heating oil for the facility is stored in a 10,000-gallon UST located to the southwest of the building.

Mr. Maack conveyed information from the facility's plant engineer that the UST is cleaned and pumped every two years, meter readings are checked every day, and fuel levels are measured every three to six weeks by delivery personnel. The engineer stated that the facility maintains paper records of meter readings for the past 11 years. Mr. Maack and the facility engineer stated that no releases, leaks, or spills are suspected based on maintenance and inventory/filling records. Mr. Maack was unaware of any spills or leaks from the various ASTs and process tanks located inside the building, since the reconstruction of the facility after the fire incident in 1986. Mr. Maack also provided specific operational descriptions of the Industrial Metal Plating facility, as presented in Section 3.1.

6.4 LOCAL OFFICIAL INTERVIEW

Right-to-Know Request – Bern Township

On January 14, 2015, Liberty submitted a Right-to-Know request to Bern Township. The submittal requested information pertinent to the environmental conditions of the site, including (but not limited to) emergency response or spill incidents, current or former tank systems, wastes, or other issues of potential concern. At the time of the report finalization, no response had been received from Bern Township regarding the request for information.

6.5 USER-QUESTIONNAIRE

Pursuant to Section 6 of ASTM Standard Practice E1527-13, Liberty provided a User Questionnaire to the client for completion. The information provided on the Questionnaire conforms to the format presented as Appendix X3 of E1527-13 and includes information pertaining to known cleanup liens, activity and land use (AUL) restrictions, purchase price comparison to fair market value, and other relevant information known to the User. The completed Questionnaire is provided as Appendix F.

Please also note that in addition to the lien information request noted in the User Questionnaire, Liberty performed a review of available deed records for liens and deed restrictions for the subject property as part of its records review, as described in Section 4.3 of the Phase I ESA.

6.6 PRIOR ENVIRONMENTAL REPORTS

Phase I Environmental Site Assessment, Reading Regional Airport Parcel 1: STV, Inc.; September 2007

In September 2007, STV Incorporated (STV) prepared a Phase I ESA for Parcel 1 of the Reading Regional Airport for BCIDA. The area of study for the 2007 Phase I ESA generally corresponds with the subject property of this Phase I ESA; however, the 2007 ESA included the Reading Regional Airport Wastewater Treatment Facility and did not include the supplemental Aviation Boulevard corridor to the south. At the time of the 2007 ESA, the property was developed with several active and abandoned structures. Active and inactive tenant-operated businesses included Industrial Metal Plating, Reading Police Firearms Range, Threeway Pattern, Marilyn Firing Draperies, Ron's Machine Shop and Captain Clog.

According to the report, aboveground storage tanks, mounded soils, stained soils, abandoned 55-gallon drums, discarded batteries, discarded gas cylinders, demolition debris and potential lead-based paint and asbestos-containing materials were observed during the site reconnaissance.

The report documented that a fire occurred at the Industrial Metal Plating facility in 1986. Various chemicals were reportedly released as a result of the fire, which impacted surrounding soils and groundwater, and the Schuylkill River. STV recommended that a soil investigation be performed in the reported areas of soil impact resulting from the 1986 fire incident.

The report stated that discarded 55-gallon drums of unknown content were found in and around several abandoned buildings. In addition, various 4-gallon and smaller containers of fuel, cleaning fluid and unknown content were found within the buildings and on the property. Discarded batteries, mounded soils, stained soils and several areas of miscellaneous construction debris were found within the wooded areas. STV recommended that the contents of each container be properly characterized, removed and that any impacted areas be appropriately characterized and remediated as required.

Several ASTs of unknown content were observed surrounding the buildings. Most were reportedly in poor condition with evidence of corrosion, staining and discolored soils observed. STV recommended the characterization of the contents of the ASTs, and removal and disposal of the ASTs and their contents at an appropriate waste facility, and that any potentially contaminated surface soils identified during the tank removals be appropriately characterized and remediated.

The report stated that impacts of lead or other hazardous materials may be present in soils at the locations of the Reading Police Firearms Range and firing buttress near the airport runways (the 'shooting-in-butt' facility described in Section 3.1). STV recommended soil sampling at these areas.

Site Inspection Report for Reading Army Air Field, March 2010

In March 2010, Alion Science and Technology prepared a *Site Inspection Report for Reading Army Air Field* for the U. S. Army Engineering and Support Center and the U.S. Army Corps of Engineers. The site inspection was performed in March 2009 at the 807-acre former Reading Army Airfield tract as a whole, which includes the subject property of this Phase I ESA. According to the report, the Department of Defense (DoD) established a Military Munitions Response Program to address potential munitions and explosives of concern and munitions constituents remaining at Formerly Used Defense Sites (FUDS). The purpose of the site inspection was to determine if further evaluation was warranted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and to evaluate former munitions response sites (MRS). The scope of work did not include an evaluation of potential releases of hazardous, toxic or radioactive wastes not associated with ammunition.

The Firing-In-Butt (also referred to as the 'shooting-in-butt' in this Phase I ESA Report) was the only MRS identified on the subject property of this Phase I ESA. According to the report, the concrete firing pad and target bunker structure were still intact at the time of the site inspection; however, no munitions debris (small arms bullets) was observed in or around the target bunker. According to the report, the only munitions-related materials observed at the Reading Army Airfield since military operations ended were 0.50 caliber bullets found by local residents at the bunker structure. The report also documented that Reading Airport personnel removed the sand

from within the bunker and placed the sand on either side of the bunker in the 1960s or 1970s. The airport personnel reportedly observed .50 caliber bullets within the sand during this activity.

Three surface soil samples were collected at the target bunker. One sample was collected at the concrete firing pad, and two surface samples and one duplicate sample were collected on either side of the bunker. The report states that the list of constituents potentially associated with munitions used in this area included the explosive compounds dinitrotoluene (DNT) and nitroglycerin (NG) and the non-explosive constituents antimony, copper, lead and nickel. The analyses for explosive compounds and their breakdown constituents was only performed at one of the three surface soil samples collected at the target bunker. The results indicated no detections above laboratory quantitation limits.

Copper and nickel were detected at concentrations above background soil concentrations. The analysis for these metals was only performed at two of the three surface soil samples collected in the investigation area. No metals were detected above their respective DEP non-residential Statewide Health Standards (SHS).

In addition, three background soil samples were collected along the western portion of the subject property and analyzed for metals and polycyclic aromatic hydrocarbons (PAHs). No metals or PAHs were detected above their respective PA DEP non-residential SHSs.

The prior environmental reports are included in Appendix G.

6.7 DEP FILE REVIEW

As noted in Section 6.1, Liberty submitted a DEP file review request for the records associated with the subject property (Industrial Metal Plating, Inc., the Reading Army Airfield and the John Fesig Auto Body facility), as well as VF Corporation Hangar Building 514, Allegheny Commuter Airlines, Aerodynamics of Reading (Tower Aviation), Mark Fruchter Aviation (Millennium Aviation), Reading Regional Airport, CAP Aviation, FAA Reading RTR, and Quaker Industrial Stripping Corporation. Liberty performed the records review at the Pennsylvania DEP Southeastern Regional Office in Norristown, Pennsylvania on January 13, 2015 and February 2, 2015.

Industrial Metal Plating, Inc.

The available records for this facility included a report of a fire incident that occurred on the evening of March 7, 1986. According to a Hazardous Waste Spill Report dated March 21, 1986, contaminated rinse water was released from several ASTs within the building. The water mixed with fire suppression water and was released to the exterior of the building. The report documented that approximately 126 cubic yards of soil were excavated with 48 hours of the fire. Preliminary test results for EP Toxics and heavy metals indicated the contamination was captured in the upper 6 to 8 inches of soil, which was excavated.

According to a Spill Response document dated May 6, 1986, B.E.S. Environmental Specialists, Inc. was contracted to oversee the cleanup operations from the releases. The document states that 4,000 gallons of contaminated rinse water, and 10,000 gallons of waste water and cyanide solution were removed from inside the building on March 9, 1986. According to the document, 20 samples were collected from various areas inside and outside the building. The eight exterior sample locations included a background sample, two samples from an area on the eastern side of Aviation Boulevard opposite the building (one sample from the upper soil layer and one sample after removal of approximately 6 inches of soil), and five areas to the rear (west and north) of the building. Approximately 6 to 10 inches of material was removed from an area along the eastern side of Aviation Boulevard, at the location of a stormwater outfall. Possible areas of contamination were also documented to the south of the waste water treatment area. The samples were analyzed for waste disposal parameters and no analytical results were provided in the document.

Additional DEP records pertaining to the Industrial Metal Plating facility included tank registration forms, tank integrity testing and inspection records, hazardous waste inspection reports, and Preparedness, Prevention, and Contingency (PPC) Plans. According to the most recent PPC Plan reviewed (dated May 6, 2014), raw materials such as fuel oil, various acids, and mixed dyes are stored in ASTs, totes, drums, and bags. Waste materials such as wastewater and polymers are stored in ASTs ranging in size from 150 gallons to 8,000 gallons.

Reading Army Airfield

According to a DEP letter dated March 26, 2010, the DEP agreed with the Reading AAF Site Investigation recommendation for No Department of Defense Action Necessary at the former

FUDS site following an investigation of former munitions areas on the subject property. The site investigation report is discussed in Section 6.6 above.

John Fesig Auto Body

No RCRA inspection records, corrective action records, program violations, or other documents for the John Fesig Auto Body facility were identified in DEP records.

VF Corporation Hangar Building 514

No DEP files were found for the VF Corporation Hangar Building 514 facility.

Allegheny Commuter Airlines

No files were found for the Allegheny Commuter Airlines facility. According to the EDR database listing, a release was reported on August 5, 1989. The facility status is listed as “Cleanup Completed” with a status date of March 5, 1996.

Aerodynamics of Reading (Tower Aviation)

The available records for this facility included the registration of two 12,000-gallon USTs, which contain jet fuel and aviation gas, dated February 5, 1990. A release from the remote fill line of the 12,000-gallon jet fuel UST was discovered during an inspection on March 27, 2006. In a letter dated May 24, 2006, the DEP concurred with the findings of a May 16, 2006 report documenting that impacted soils were removed from below the remote fill line and appropriate post-excavation soil samples were collected.

Mark Fruchter Aviation (Millennium Aviation)

The available records for this facility included former UST registration forms and a Closure Report from 1991. According to the Closure Report, Commonwealth Air, Inc. removed five USTs ranging in size from 600 to 10,000 gallons from two separate tank areas in April 1991. In a letter dated June 11, 1991, the DEP approved the closures and stated that no further action was required. Additional DEP records pertaining to the subject site included AST registration forms, tank integrity testing records for the current AST's, and a Spill Prevention Response Plan that was reviewed and approved by the DEP on October 18, 1999.

Reading Regional Airport

The available records for this facility included former UST registration forms, UST closure/removal reports, a Site Investigation Report, notifications of releases, UST inspection reports, and correspondence letters with the DEP.

According to a Site Investigation Report dated March 25, 2004 and prepared by Spotts, Stevens & McCoy, Inc. (SSM), a baseline environmental site assessment was performed at the Reading Regional Airport to evaluate potential environmental impacts as part of an expansion and construction project. The assessment included the installation of a five groundwater monitoring wells across the airport property. Monitoring wells MW-3, Mw-4A and MW-5 were located in close proximity to the western boundary of the subject property of this Phase I ESA. During well installation, potential petroleum odors and stationing were noted in the soils at the location of MW-4A, which was located to the east of the fire company building. No visual or olfactory evince of impacts were noted in the soils at the locations of MW-3 and MW-5. The analytical results of soil samples collected from these three well locations indicated no exceedances of PA DEP Act 2 medium specific concentrations (MSCs).

Groundwater samples were collected from the monitoring wells on February 5 and May 1, 2003. Groundwater was encountered at depths ranging from 53 to 78 feet below ground surface. No separate phase liquids were observed during sampling. The analytical results of groundwater samples collected from wells MW-3, MW-4a and MW-5 indicated exceedances of DEP MSCs for several metals at each location. SSM recommended additional groundwater sampling and the analysis of samples for dissolved and total metals analyses.

CAP Aviation

No files were found for the CAP Aviation facility.

FAA Reading RTR

The available records for this facility included an Underground Storage Tank Closure Form dated February 27, 1998 and DEP correspondences dated March 9 and July 30, 1998.

Quaker Industrial Stripping Corporation

No files were found for the Quaker Industrial Stripping Corporation facility.

A review of the physiographic setting of the subject property has indicated that the off-site facilities noted above are at a sufficient distance, and/or are topographically situated cross-gradient or downgradient of the subject property, or are located across hydraulic divides which would form barriers to direct migration of groundwater impacts. Although DEP files did not contain any records for certain of these sites, the physical setting reviews have indicated that none of the nearby listed facilities is believed to pose an environmental concern to the subject property.

The records associated with two of the three facilities located within the subject property (Industrial Metal Plating and Reading AAF) have indicated conditions which warranted further investigation at the site, as described in Sections 1 and 7. No records were identified for the John Fesig Auto Body facility, and in the absence of additional documentation this on-site facility has also been identified as a recognized environmental concern (REC), which warrants limited further evaluation.

Copies of the reviewed DEP records are provided as Appendix H.

7. CONCLUSIONS

Liberty Environmental, Inc. has completed a Phase I ESA at Lot 1 of the Berks County Industrial Development Authority (BCIDA) Airport Tract located in Bern Township, Berks County, Pennsylvania. The Phase I ESA was performed in accordance with the scope and limitations of ASTM Standard Practice E1527-13. Any exceptions to, or deletions from, this practice are described in Sections 2.2 and 2.3 of this report.

Based on the interviews, records research and site inspection activities conducted by Liberty as part of this Phase I ESA, the following recognized environmental conditions (RECs), as defined in Section 3.2.78 of ASTM Standard Practice E1527-13, have been identified at the subject property:

- Industrial Metal Plating, Inc. (IMP) is an industrial electroplating and metal fabrication facility located on the southern portion of the subject property. A fire occurred at this facility in 1986, which destroyed the majority of the building. Soils surrounding the facility were impacted by a mixture of industrial contaminants during the fire, and during the subsequent washout of fire suppression water. Limited cleanups were directed at the site by the Pennsylvania Department of Environmental Protection (DEP), which included the removal of approximately one foot of topsoil from visibly impacted areas. The DEP-directed soil removals appeared to be designed as interim remedial actions only, and were not performed for the purposes of fully evaluating the nature and extent of fire-related impacts to soil or groundwater. Accordingly, the data collected from the site in 1986 does not meet the current standards for site characterization or for the attainment of DEP's Statewide Health Standards, which were promulgated as part of the Land Recycling and Environmental Remediation Standards Act (Land Recycling Program) in 1995. For this reason, the potential presence of residual soil and groundwater impacts at the IMP facility has been identified as an REC and warrants further evaluation through a subsurface investigation within areas proximal to the facility, as well as in areas south and southeast of the wastewater treatment plant outparcel, where building debris is believed to have been deposited.
- A former City of Reading Police Department pistol range is present on the western portion of the subject property. The pistol range reportedly operated from the late 1970s until

approximately 2014. Bullets and casings are likely present in the berm located behind the former target area of the range, and the presence of these materials may have resulted in elevated concentrations of metals above applicable DEP Statewide Health Standards and/or waste management thresholds. The potential presence of impacts to subsurface soils at the pistol range area has therefore been identified as an REC, and warrants further evaluation through a surface and subsurface soils investigation.

- A concrete bunker surrounded by vegetated soil embankments is located on the western portion of the site near the adjacent Reading Regional Airport runways, situated at the end of a concrete taxiway and a concrete pad. According to site contacts with knowledge of the site's historical operations, the pad and bunker were used as a firing target for large-caliber rounds from aircraft-mounted guns during the airport's operations as a US Army Air Corps training base in the 1940s. The feature is colloquially termed the 'shooting-in butt' or 'firing-in butt'. A March 2010 site inspection report for the US Army notes that no munitions debris was observed in or around the target bunker at the time of the assessment. The report also states that Reading Airport personnel removed the sand from within the bunker and placed the sand on either side of the bunker in the 1960s or 1970s. As part of the March 2010 investigation, two surface soil samples were collected from the area of the bunker and analyzed for metals. No metals were detected above their respective DEP non-residential Statewide Health Standards (SHS), and the 2010 report concluded that no further response was necessary. However, based on a review of the location and number of soil samples described in the 2010 report, it is Liberty's opinion that the existing set of data is not sufficient to rule out the potential for impacts of metals or other contaminants at the target bunker. For this reason, this area has been identified as an REC and warrants further evaluation through a surface and subsurface soils investigation.
- An area of unnatural, mounded soils and low overgrowth is located along the western side of Aviation Boulevard, inside a curve formed by the road on the northeastern portion of the property. This area appears as a cleared and/or disturbed area in several historical aerial photographs dating to the early 1990s, and generally coincides with the reported location of dumped construction debris as described by the site contact. For these reasons, the area of suspected dumping has been identified as an REC. As part of the site investigations recommended for the IMP, pistol range and target bunker described above, Liberty

recommends a limited subsurface investigation of buried material in this area to determine if the debris poses a potential risk of impacts to underlying soils or groundwater, and/or waste management concerns.

- Subsequent to the closure of the military operations on the central portion of the property, several private commercial tenant operations were present in the former buildings on the complex. One such operation is listed as John Fesig Auto Body, which was reportedly active at 117 and 135 Wagner Lane. This facility is listed as having been a conditionally-exempt small-quantity generator (CESQG) of hazardous wastes under the federal RCRA program, however no records pertaining to this facility were identified in DEP files. Facilities of this type would typically generate and manage waste solvents and paints, and in the absence of any files or facility-specific data, the potential for impacts of solvents or metals in this area cannot be ruled out. Liberty recommends that, as part of the recommended site investigations as noted above, a limited subsurface evaluation be performed at this location to determine if any evidence of such impacts is present.
- A 10,000-gallon No. 2 heating oil underground storage tank (UST) is currently in use at the IMP facility, and was installed in October 1989. According to facility personnel, no releases, leaks, or spills are suspected based on maintenance and inventory/filling records and no reports of leaks or spills were identified on state databases. However, the presence and operation of the tank will continue to represent an REC which poses the potential for a release in the event of damage or an accidental release. The subsurface investigation that is recommended in this area to evaluate the 1986 fire impacts should also include soil borings located downgradient and/or proximal to the UST, as feasible, to determine if any evidence of petroleum impacts are present. If the UST is planned for continued use, periodic tightness testing of the tank should also be performed as part of regular facility maintenance to reduce the likelihood of an undetected release. At such time that the UST is not planned for future use, the tank and associated piping should be properly closed by a licensed tank contractor in accordance with DEP regulations.

While not identified as RECs, the following business environmental risks (BERs) have been identified as defined in Section 3.2.11 of ASTM Standard Practice E1527-13, and pose a potential environmental management concern associated with the future use of the site:

- A 275-gallon heating oil aboveground storage tank (AST) and containers of gasoline, kerosene and machine oils are located within the Ron Machine & Tool Company building on the subject property. The tank and containers appeared to be in good condition at the time of the site inspection, with no evidence of leaks or spills. The tank and containers will continue to represent BERs which pose the potential for a release in the event of damage or an accidental release. Provided that proper maintenance and management practices continue to be performed at the site, the environmental risk associated with these features will be minimized. Liberty also recommends the installation of secondary containment around the tank, if feasible, to reduce the impact to the surrounding area in the event of a release.
- Several ASTs, process tanks, 55-gallon drums and containers of various chemicals are located within the Industrial Metal Plating, Inc. building. The tank and containers appeared to be in good condition at the time of the site inspection, with no evidence of leaks or spills. The tank and containers will continue to represent BERs which pose the potential for a release in the event of damage or an accidental release. Provided that proper maintenance and management practices continue to be performed at the site, the environmental risk associated with these features will be minimized.
- Miscellaneous trash and demolition debris were observed in wooded areas along the abandoned roads on the central portion of the subject property and concrete debris was observed at several locations within the clearing on the northwest portion of the subject property. No evidence of potential hazardous wastes, leaking fluids or soil staining was observed at the time of the site walkover. However, any materials of concern or associated impacts encountered during site development activities should be properly characterized and removed for off-site disposal or recycling by a qualified waste hauler. Upon removal of any such materials, an inspection of underlying soils should be performed to confirm that no staining or other impacts to the subsurface are present.
- Based on the age of the Ron Machine & Tool Company building and the original portions of the Industrial Metal Plating, Inc. building, some painted surfaces may contain lead-based paint. In addition, the presence of potential asbestos-containing materials (ACM) in various forms such as roofing material cannot be ruled out. Prior to any planned renovation or demolition of the buildings, an ACM survey should be performed by a Pennsylvania-licensed

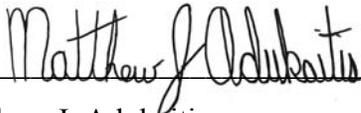
inspector. If the building is planned for future use as a residential building or for child occupancy of any kind, a lead-based paint survey should also be performed. All identified ACM or lead-based paint should be properly abated or managed in accordance with applicable state and federal regulatory requirements.

With the exception of the issues noted above, no other RECs or BERs have been identified on the subject property at this time.

8. ENVIRONMENTAL PROFESSIONAL STATEMENT

This Phase I ESA was performed by Matthew J. Adukaitis, an environmental professional meeting the qualifications specified in the EPA's All Appropriate Inquiry Final Rule (40 CFR Part 312), Subpart B (312.10).

I declare that, to the best of my professional knowledge and belief, I meet the definition of the Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Matthew J. Adukaitis
Liberty Environmental, Inc.

4/20/15

Date

9. LIMITATIONS

This Phase I Environmental Site Assessment has been conducted using applicable professional industry standards, including but not limited to, ASTM Standard Practice E1527-13: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The assessment is limited to those areas that were readily accessible during the site reconnaissance, and those environmental conditions that can be detected by normal visual inspection. As set forth in Section 13.1 of ASTM Standard Practice E1527-13, this assessment does not address naturally-occurring conditions. Liberty has used information provided by interviewees to formulate its conclusions and recommendations, and assumes no responsibility or liability for inaccurate or incomplete data. Comments regarding the condition of the site do not represent a warranty that all areas within the site or surrounding areas are of the same condition as may be inferred from observable site conditions and readily available site background data. There is no guarantee, either expressed or implied, that the site and surrounding areas are free of hazardous substances or petroleum products.

Except as otherwise described herein, the observations noted in the Phase I ESA are not intended to represent or replace the following surveys, searches or inspections:

- Soil or groundwater sampling;
- An asbestos-containing materials (ACM) survey by a licensed asbestos inspector;
- Quantitative lead-based paint survey by a qualified inspector;
- A wetlands delineation or presence/absence survey by a qualified wetlands biologist;
- A full title search for insurance purposes;
- A hazardous building materials survey;
- Microbial matter or mold/mildew evaluation;
- Quantitative vapor intrusion evaluation; and
- Quantitative radon testing.

APPENDIX A
SITE PHOTOGRAPHS, DECEMBER 19, 2015; JANUARY 26 AND 28,
2015



Photo 1: Exterior of the Industrial Metal Plating facility on the southern portion of the site, from Aviation Boulevard looking north.



Photo 2: Interior of a process fluids room within the Industrial Metal Plating facility.



Photo 3: Exterior of the Ron Machine Shop building on the central portion of the site.



Photo 4: Interior of the Ron Machine Shop building, showing various machining tools and equipment.



Photo 5: Typical scattered trash and debris in the clearings and along the roads of the former military base area in the center of the subject property.



Photo 6: Unused road within the former military base area on the center of the subject property.



Photo 7: Typical former building clearing, with scattered building debris within the former military base area on the center of the subject property.



Photo 8: Cleared and graded area on the western portion of the subject property, adjacent to the Reading Regional Airport runway.



Photo 9: Former taxiway leading to the staging pad and firing bunker ('shooting-in butt') on the western portion of the subject property.



Photo 10: Former firing bunker ('shooting-in butt') located adjacent to the taxiway on the western portion of the subject property.



Photo 11: Cleared marching band practice field on the eastern portion of the site, adjacent to Aviation Boulevard.



Photo 12: Former Reading/Berks County Police pistol range on the northern portion of the property.

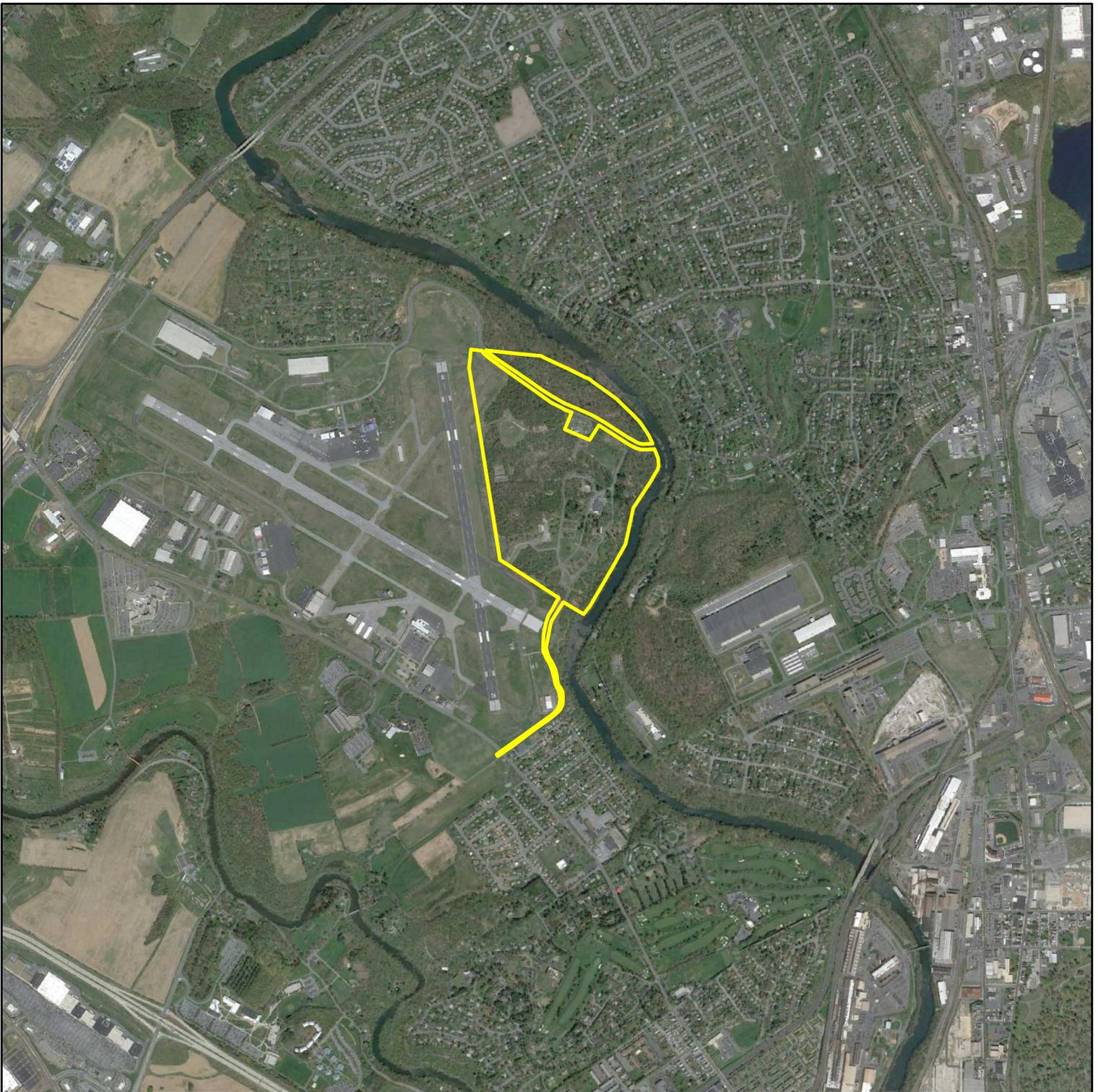


Photo 13: Large clearing (former soil stockpile area) on the northwestern portion of the property, adjacent to the Reading Regional Airport runway.



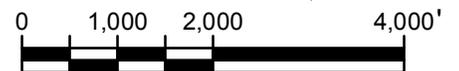
Photo 14: Metal 55-gallon drums (former fruit juice drums used as trash cans) stacked along an access path near the northwest clearing.

APPENDIX B
2013 AERIAL PHOTOGRAPH



IMAGERY SOURCE: GOOGLE EARTH, AERIAL PHOTO DATE: APRIL 24, 2013.

SCALE: 1" = 2,000'



50 N. Fifth St. 5th Floor
 Reading, PA 19601
 Phone: 610-375-9301
 Fax: 610-375-9302
 www.libertyenviro.com

Appendix B

BCIDA Airport Tract
 Bern Township, Berks County, Pennsylvania

PROJECT NO.: 130432.02

REV: 0

PREPARED BY: EMC

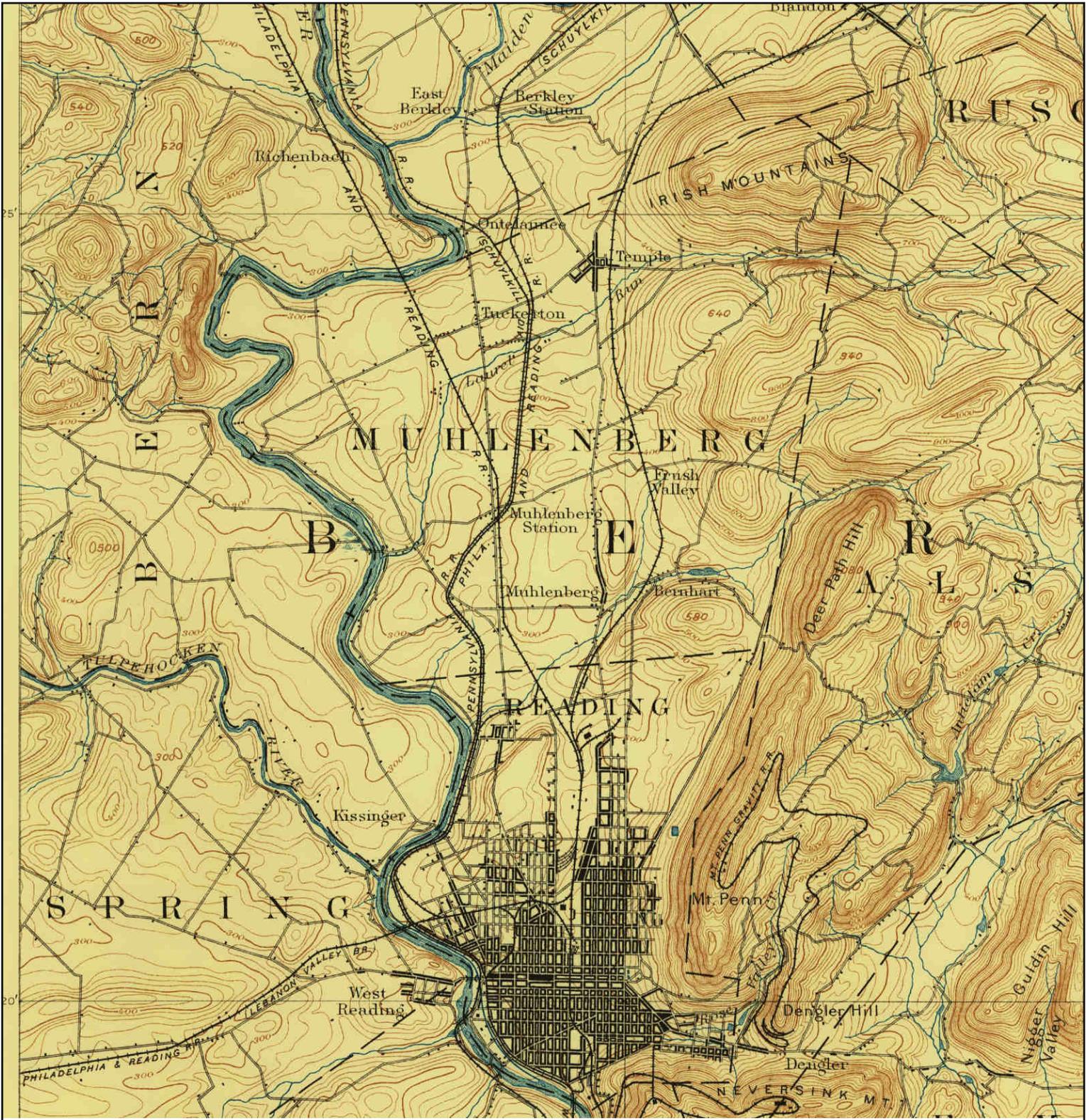
DATE: FEBRUARY 9, 2015

SCALE: 1" = 2,000'

APPROVED BY: MJA

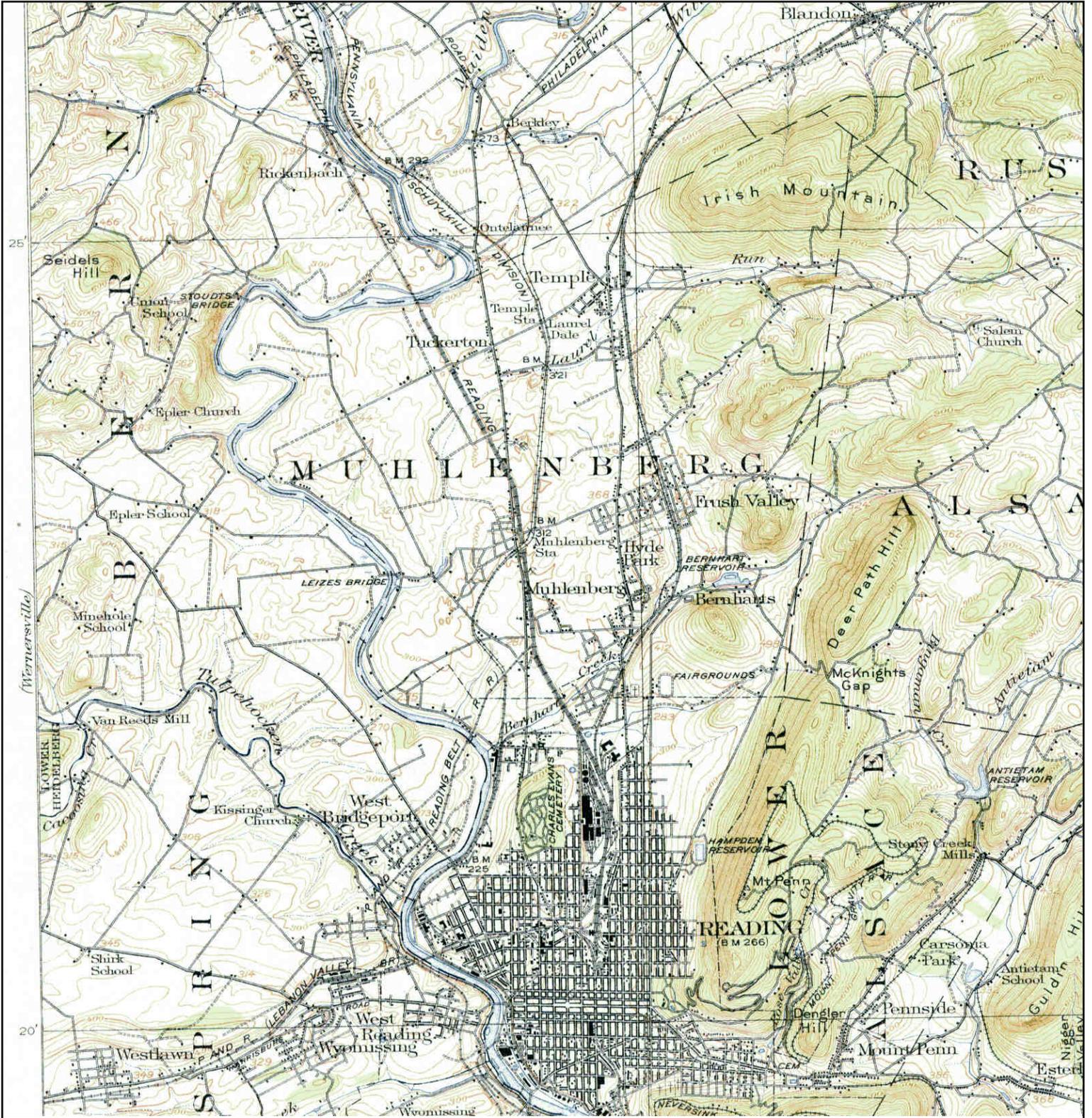
APPENDIX C
HISTORICAL TOPOGRAPHIC MAPS

Historical Topographic Map



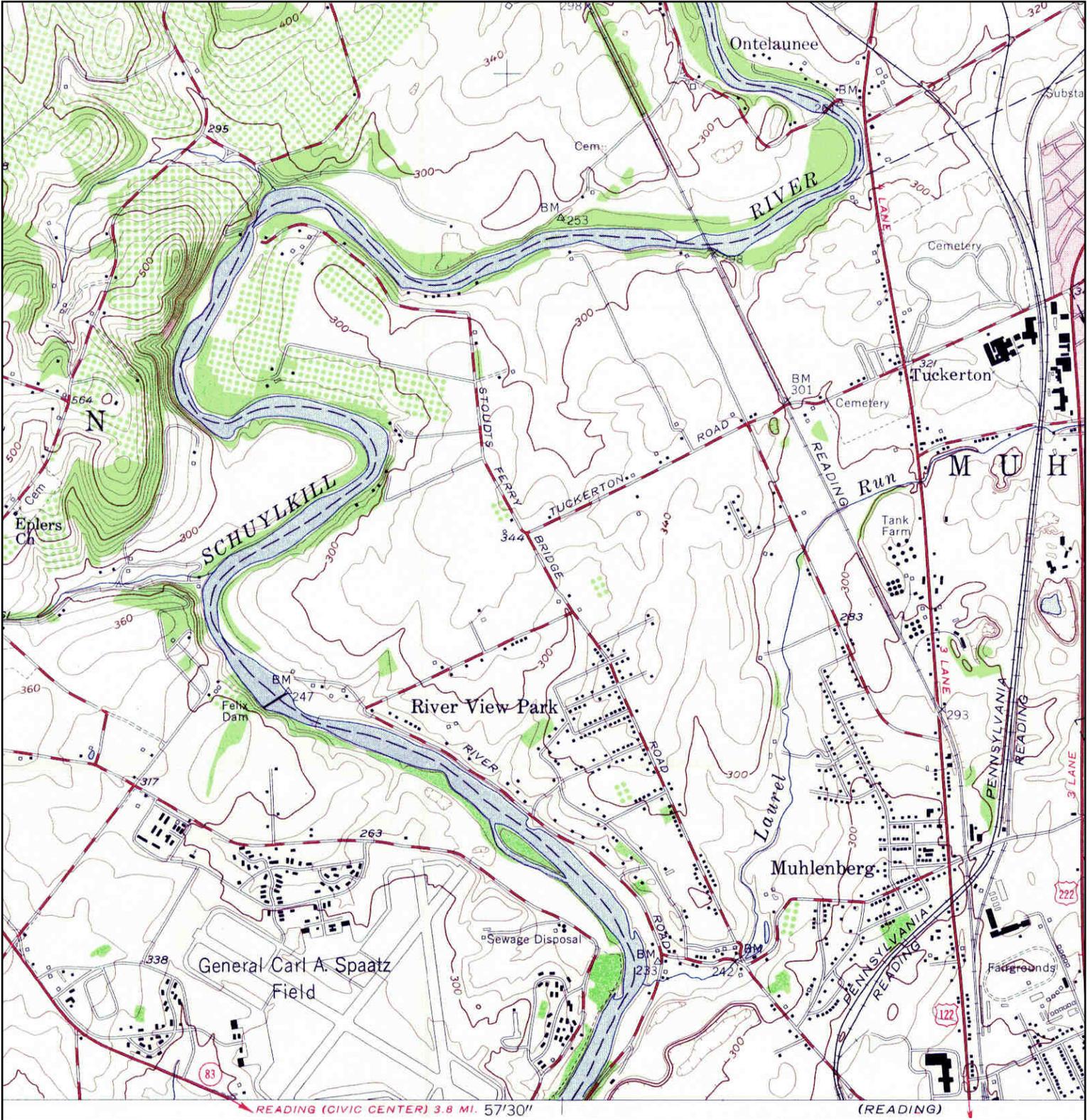
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	MAP YEAR: 1894	Reading, PA 19605	INQUIRY#: 4168077.4
	SERIES: 15	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SCALE: 1:62500		

Historical Topographic Map



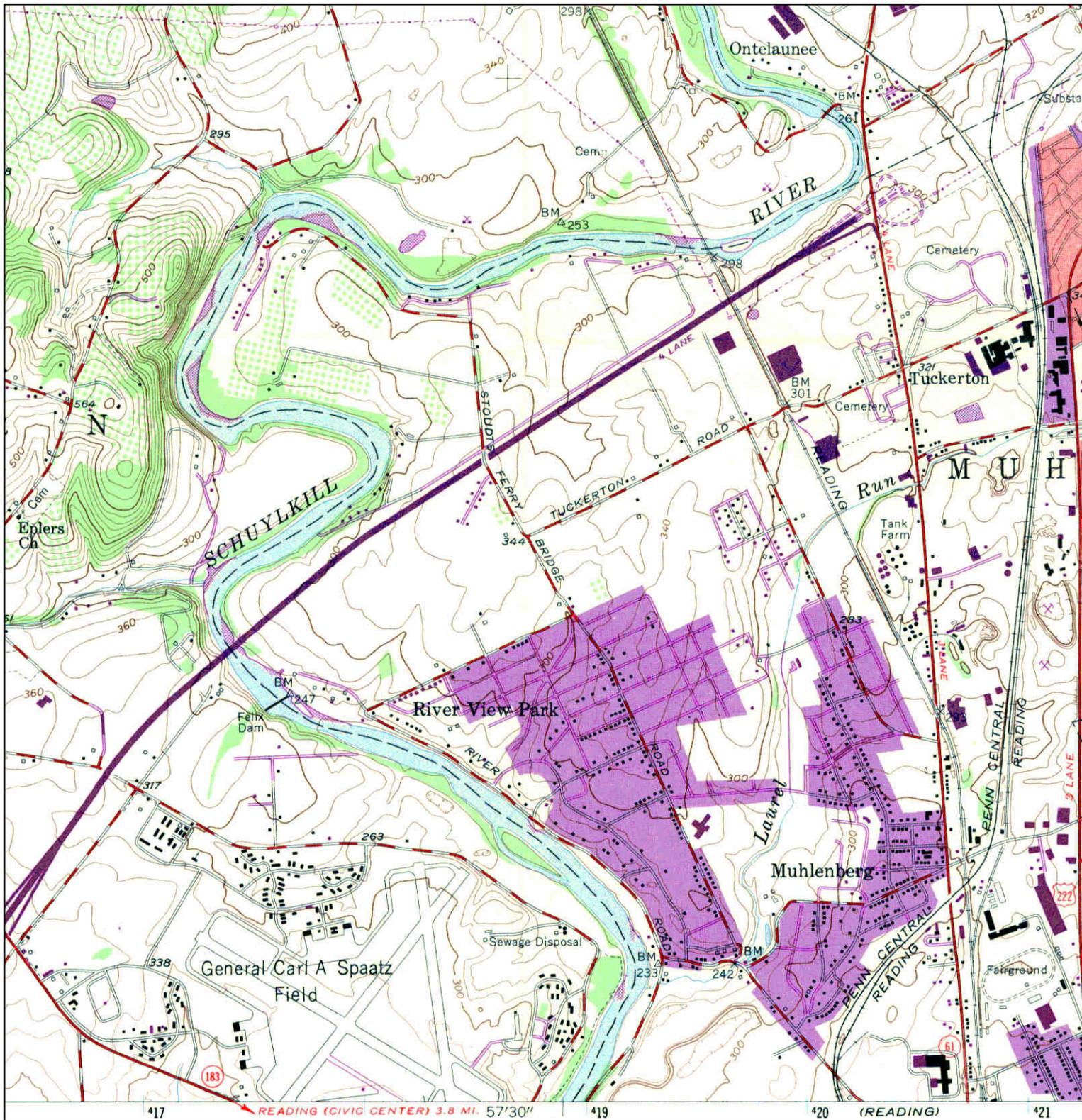
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	NAME: READING	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis	
	MAP YEAR: 1915	LAT/LONG: 40.38 / -75.9562	INQUIRY#: 4168077.4	RESEARCH DATE: 12/23/2014
	SERIES: 15			
	SCALE: 1:62500			

Historical Topographic Map



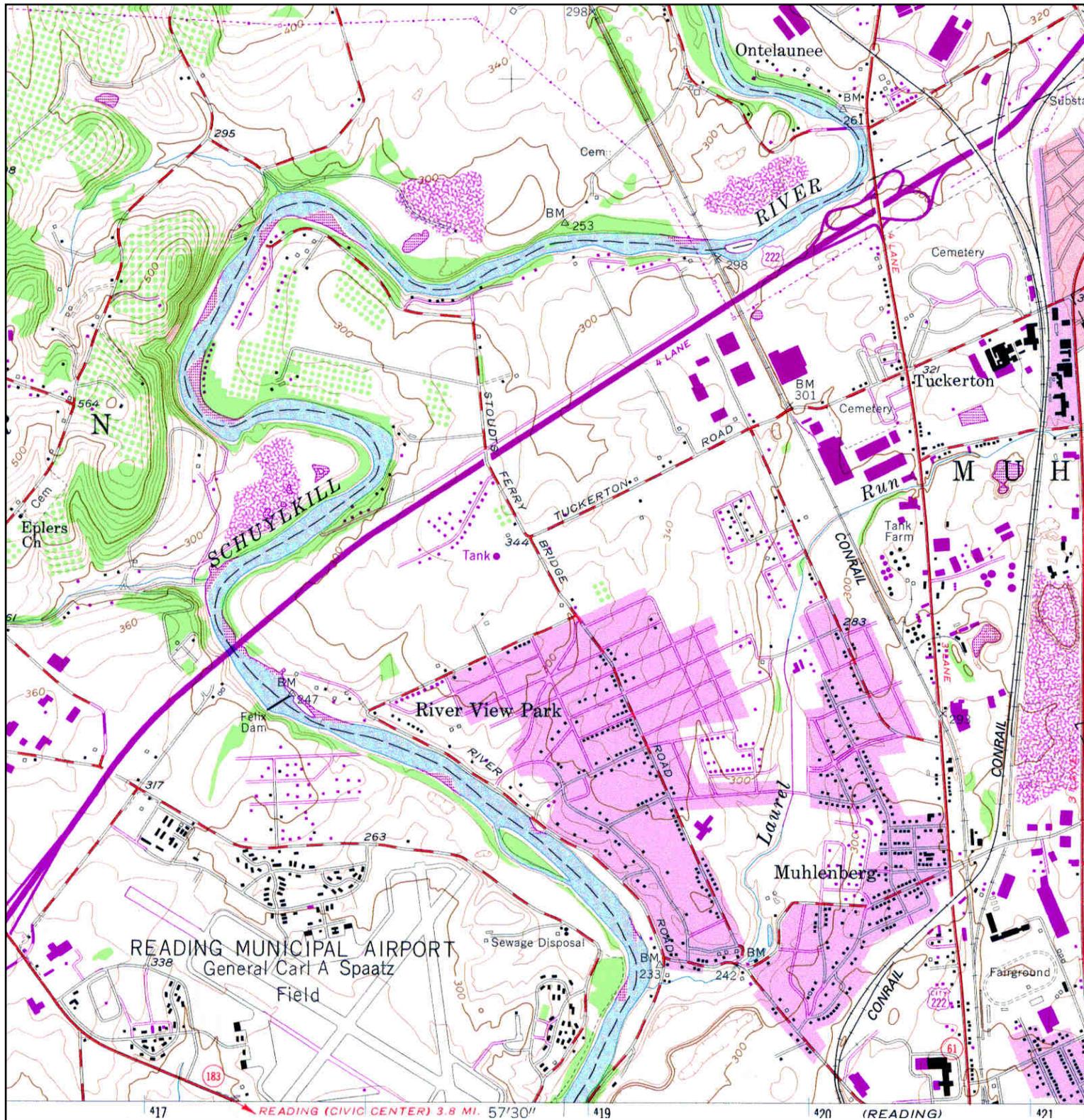
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	NAME: TEMPLE	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1956	LAT/LONG: 40.38 / -75.9562	INQUIRY#: 4168077.4
	SERIES: 7.5		RESEARCH DATE: 12/23/2014
	SCALE: 1:24000		

Historical Topographic Map



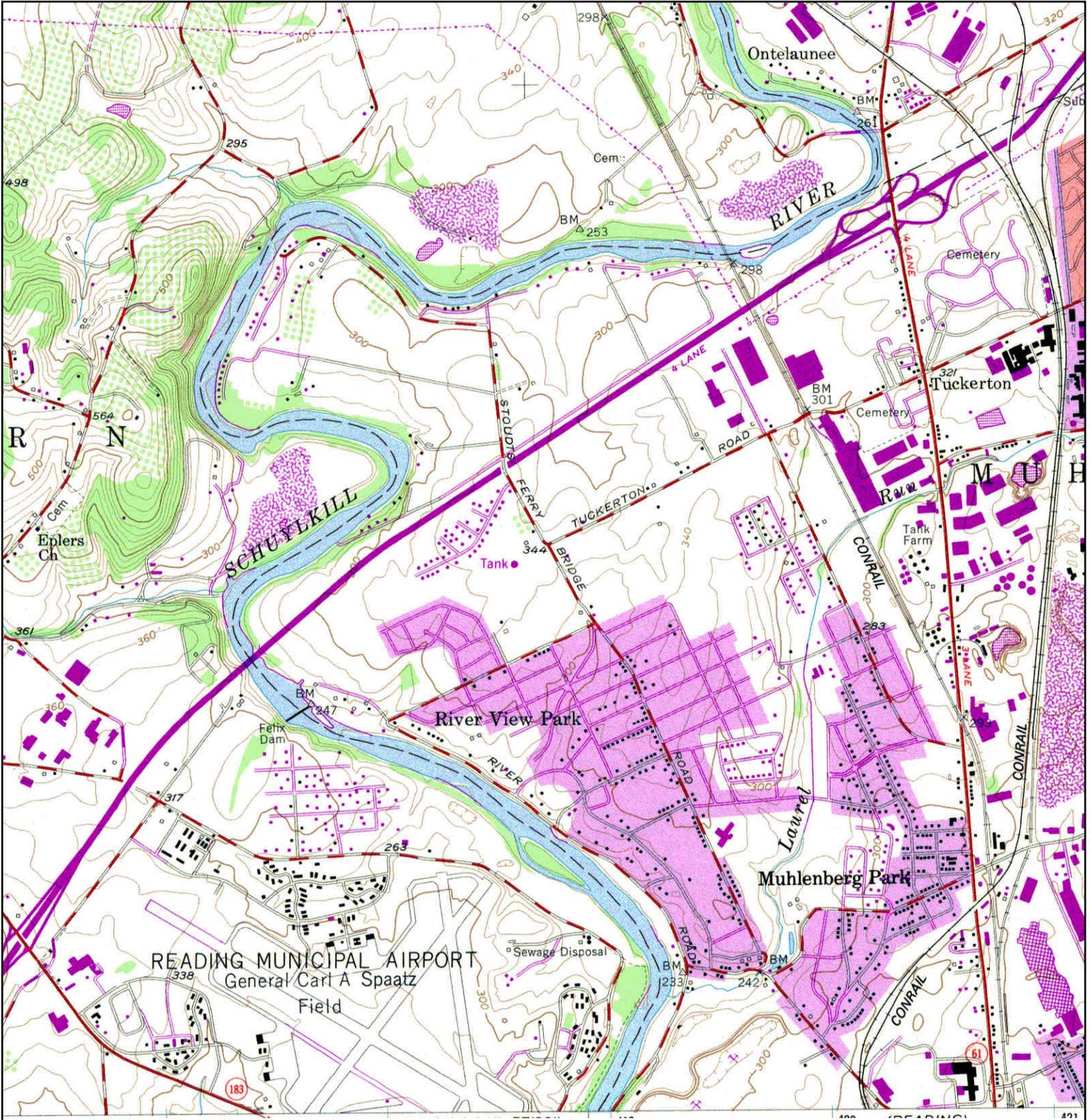
<p>N ↑</p>	TARGET QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: TEMPLE	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1968	Reading, PA 19605	INQUIRY#: 4168077.4
	PHOTOREVISED FROM :1956	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



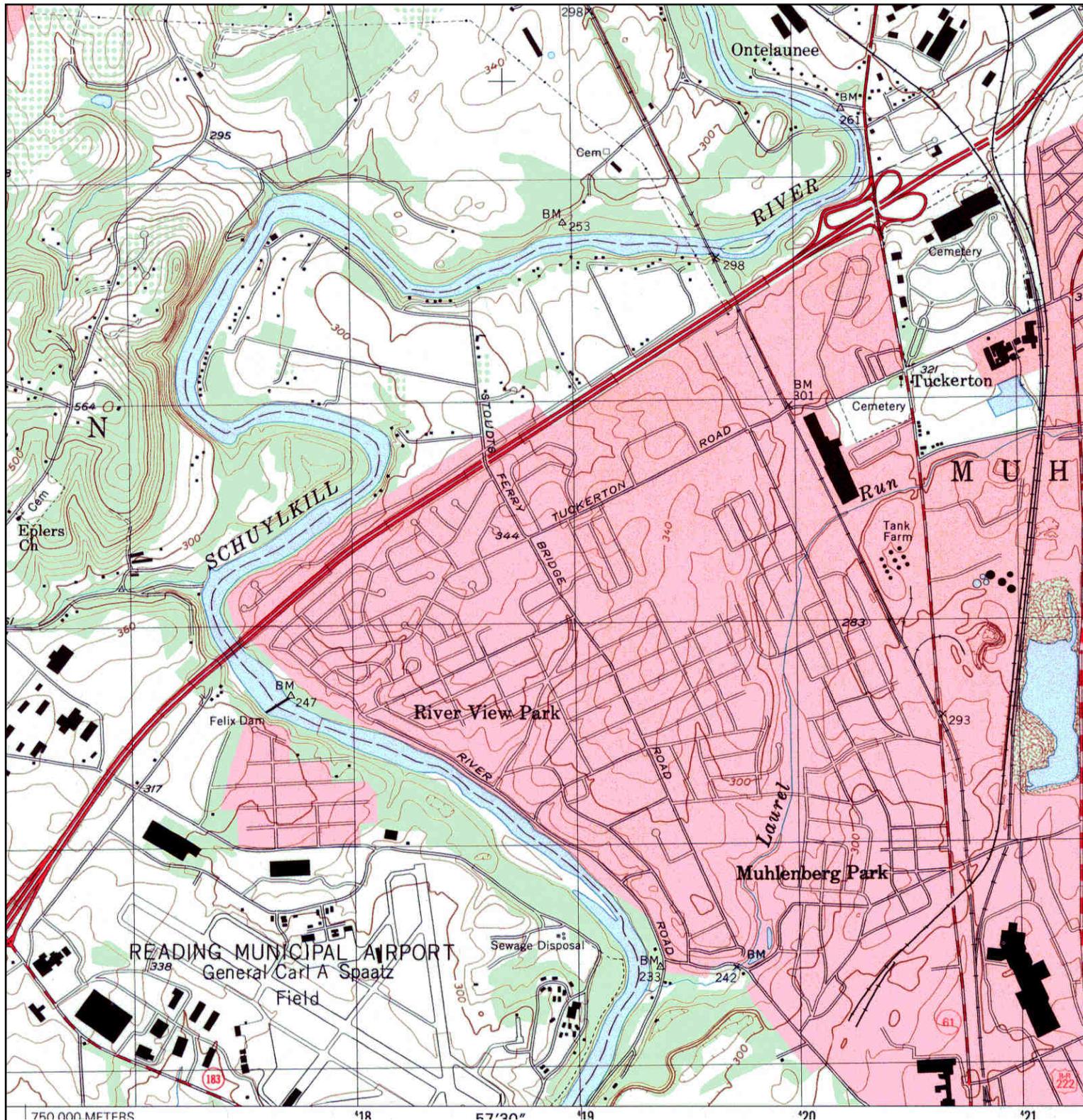
<p>N ↑</p>	TARGET QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: TEMPLE	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1978	Reading, PA 19605	INQUIRY#: 4168077.4
	PHOTOREVISED FROM :1956	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



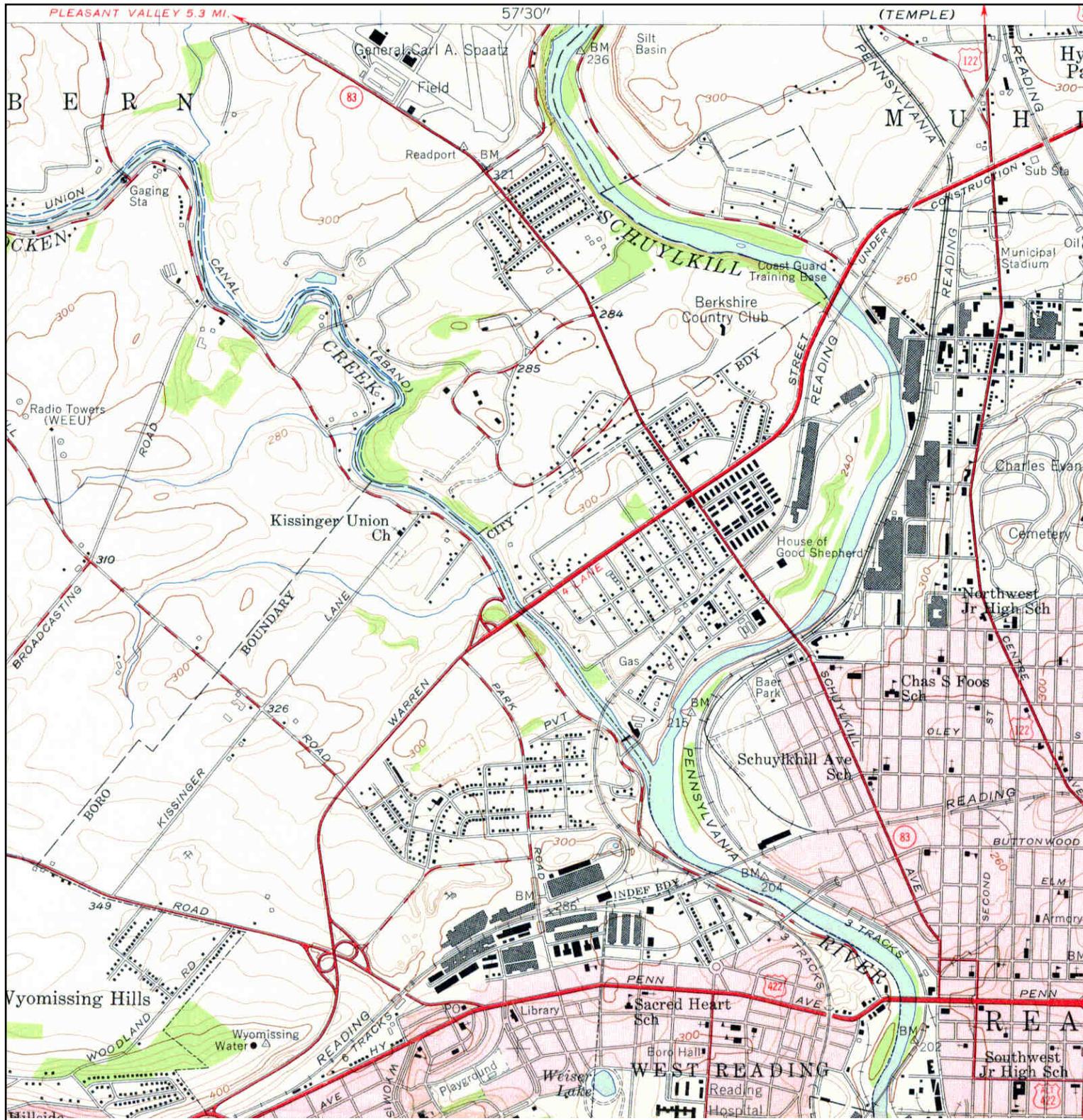
<p>N ↑</p>	TARGET QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: TEMPLE	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1983	Reading, PA 19605	INQUIRY#: 4168077.4
	PHOTOREVISED FROM :1956	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



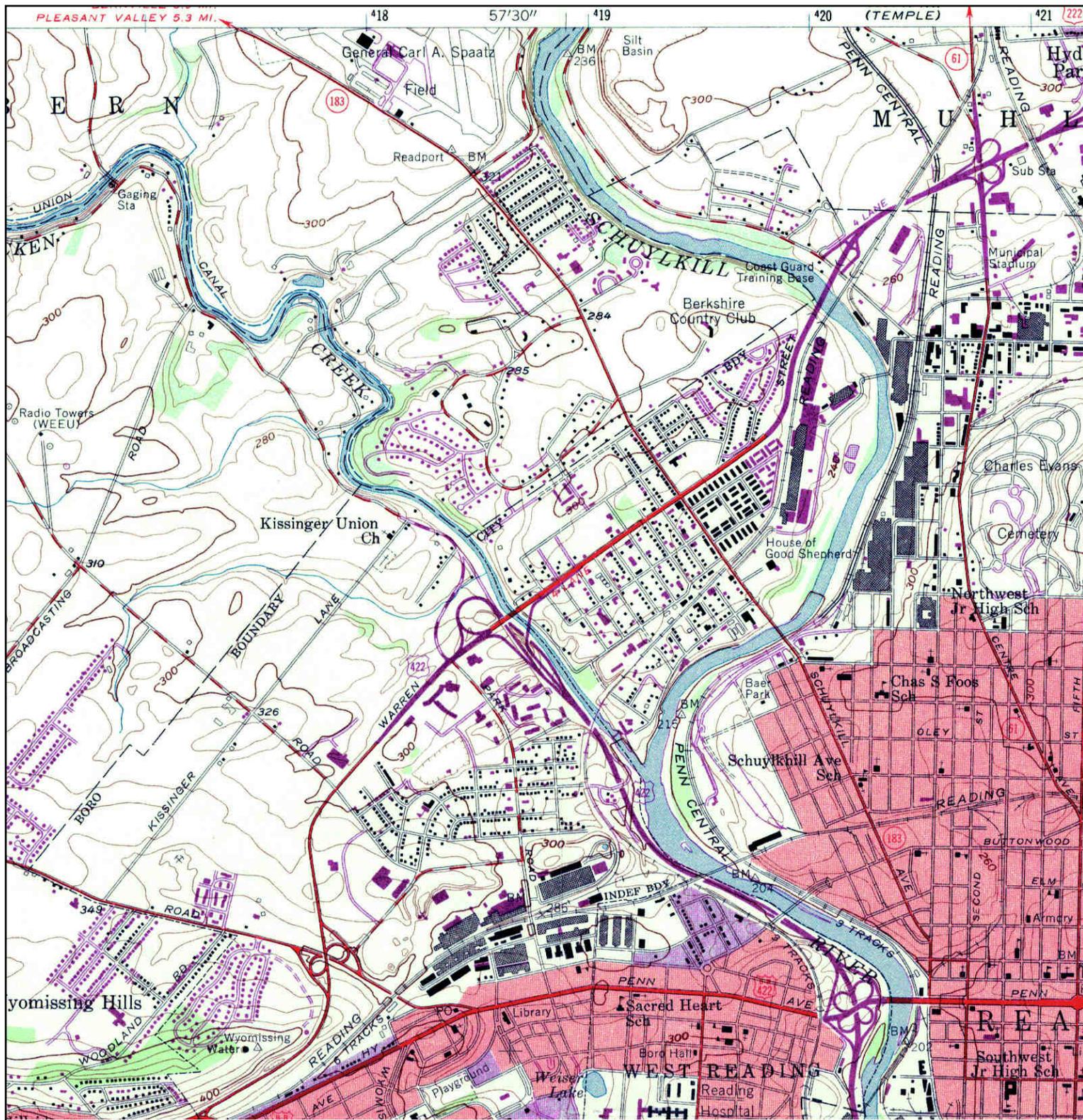
	TARGET QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: TEMPLE	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1999	Reading, PA 19605	INQUIRY#: 4168077.4
	SERIES: 7.5	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SCALE: 1:24000		

Historical Topographic Map



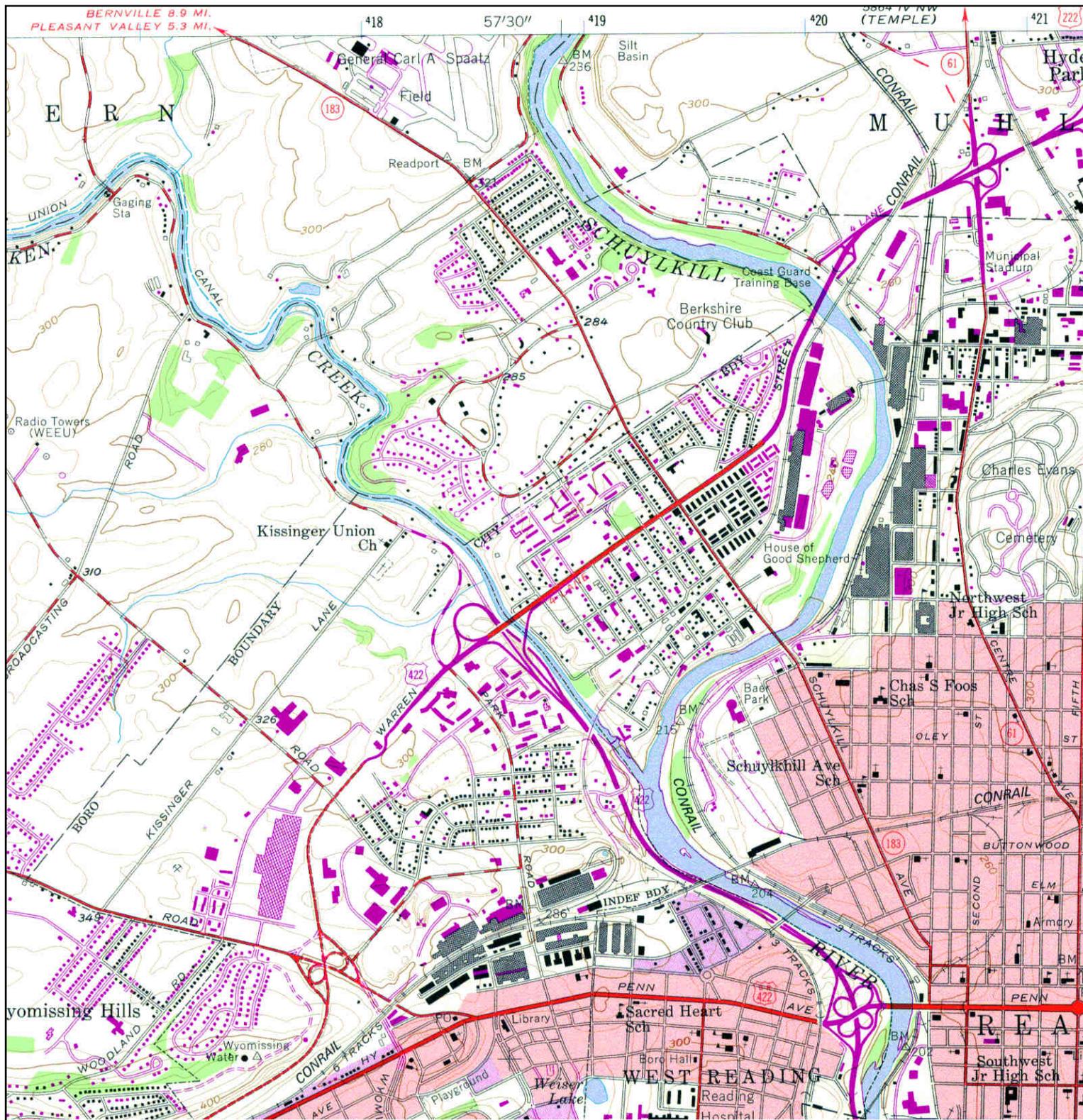
	ADJOINING QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: READING	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1956	LAT/LONG: 40.38 / -75.9562	INQUIRY#: 4168077.4
	SERIES: 7.5		RESEARCH DATE: 12/23/2014
	SCALE: 1:24000		

Historical Topographic Map



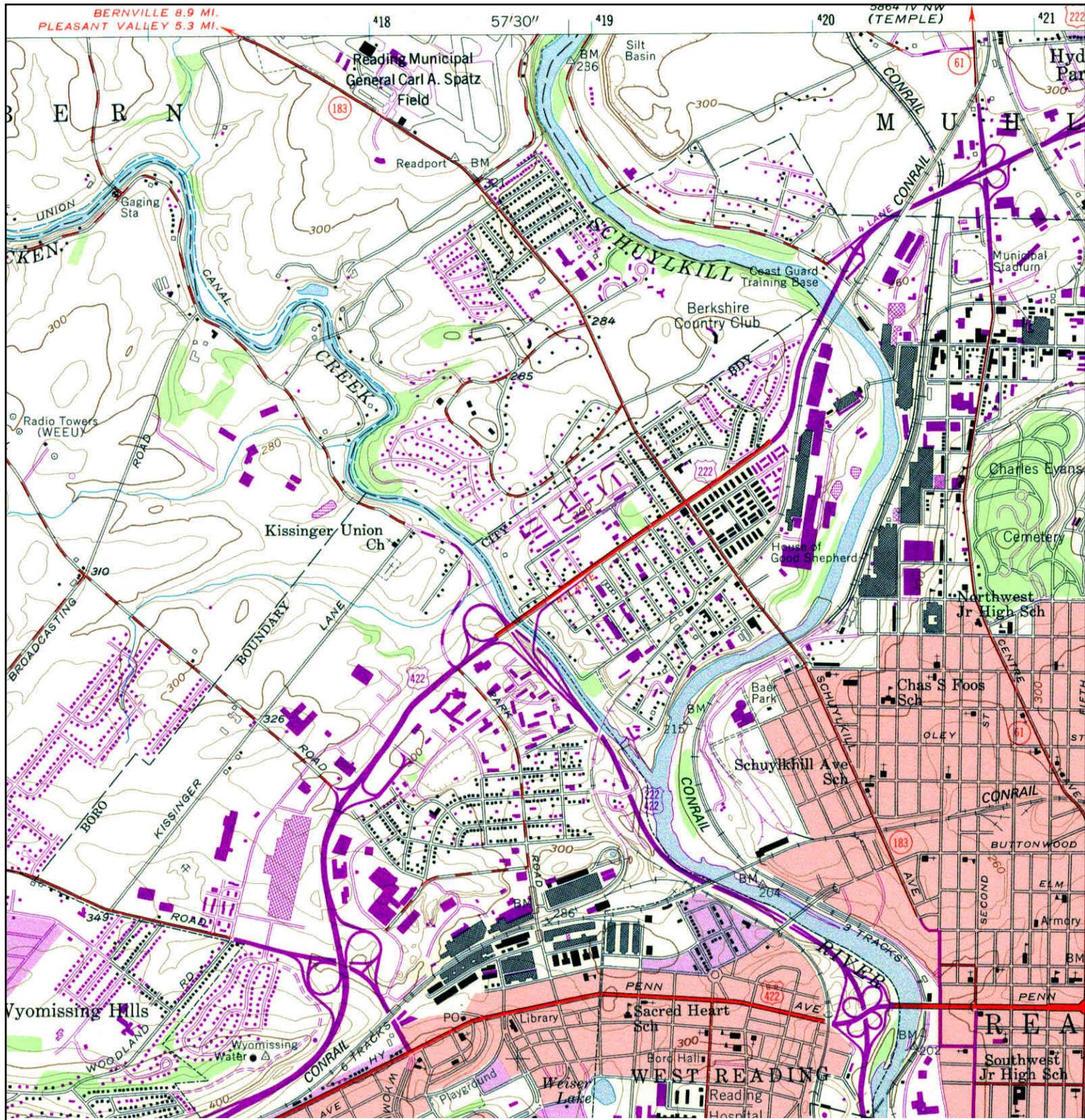
<p>N</p>	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: READING	Airport Tract	Liberty Environmental, Inc.
	MAP YEAR: 1968	ADDRESS:	CONTACT: Matt Adukaitis
	PHOTOREVISED FROM :1956	Reading, PA 19605	INQUIRY#: 4168077.4
	SERIES: 7.5	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SCALE: 1:24000		

Historical Topographic Map



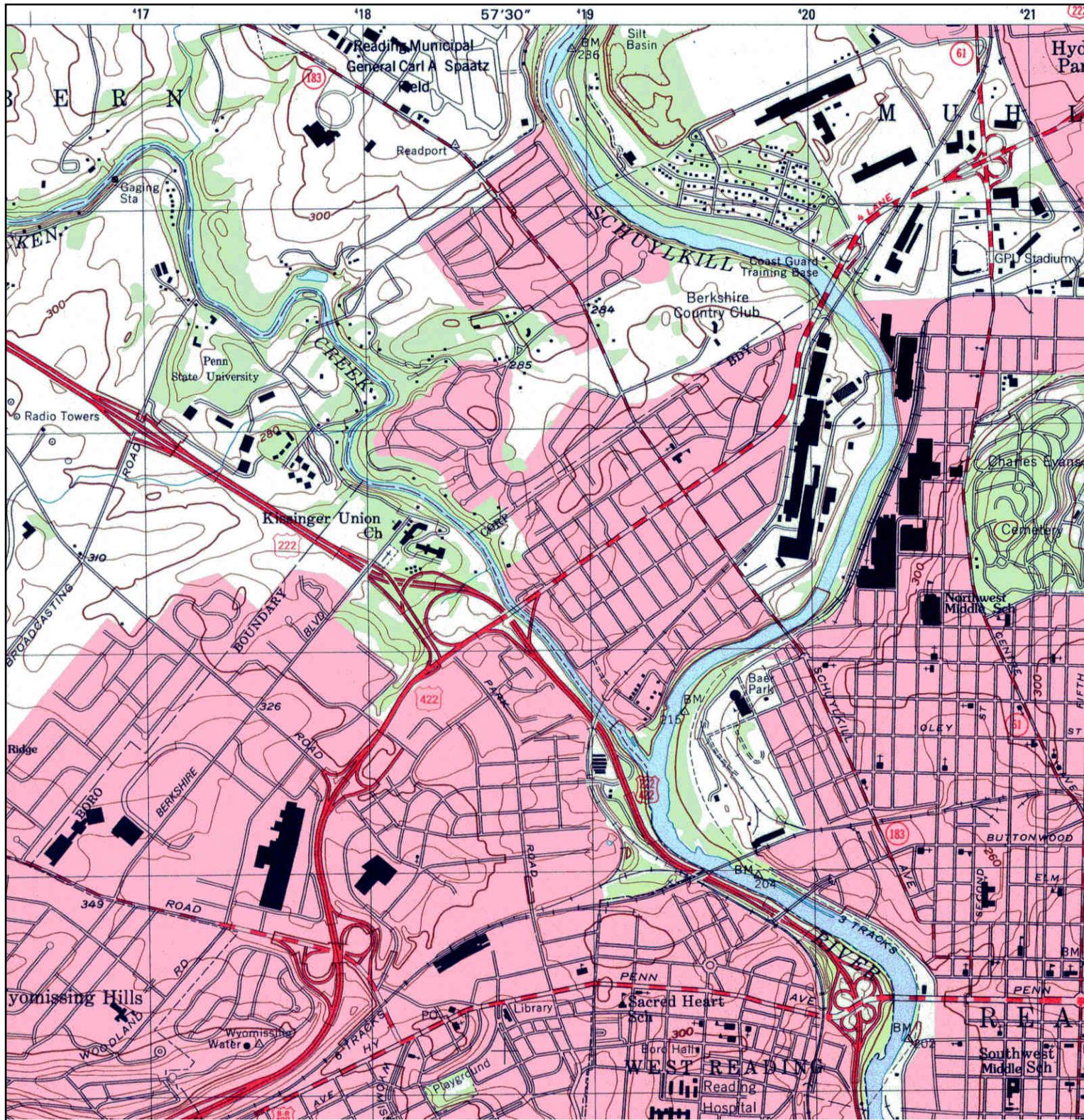
	ADJOINING QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: READING	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1974	Reading, PA 19605	INQUIRY#: 4168077.4
	PHOTOREVISED FROM :1956	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



<p>N</p>	ADJOINING QUAD	SITE NAME: Airport Tract	CLIENT: Liberty Environmental, Inc.
	NAME: READING	ADDRESS: Aviation Road	CONTACT: Matt Adukaitis
	MAP YEAR: 1983	Reading, PA 19605	INQUIRY#: 4168077.4
	PHOTOREVISED FROM :1956	LAT/LONG: 40.38 / -75.9562	RESEARCH DATE: 12/23/2014
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



	ADJOINING QUAD						
	NAME:	READING		SITE NAME:	Airport Tract	CLIENT:	Liberty Environmental, Inc.
	MAP YEAR:	1999		ADDRESS:	Aviation Road Reading, PA 19605	CONTACT:	Matt Adukaitis
	SERIES:	7.5		LAT/LONG:	40.38 / -75.9562	INQUIRY#:	4168077.4
	SCALE:	1:24000				RESEARCH DATE:	12/23/2014

**APPENDIX D
CURRENT DEED**



Frederick C. Sheeler
Berks County Recorder of Deeds

Berks County Services Center 3rd Floor
 633 Court Street
 Reading, PA 19601
 Office: (610) 478-3380 ~ Fax: (610) 478-3359
 Website: www.countyofberks.com/recorder

INSTRUMENT # 2011025946

RECORDED DATE: 07/13/2011 08:51:39 AM



3966394-0008+

Document Type: DEED

Transaction #: 4094889
Document Page Count: 6
Operator Id: dsylvester

RETURN TO: (Pick Up)
 FIRST AMERICAN TITLE INSURANCE CO - WYOMISSING
 955 BERKSHIRE BLVD
 SUITE 100
 WYOMISSING PA
 19610

SUBMITTED BY:
 FIRST AMERICAN TITLE INSURANCE CO - WYOMISSING
 955 BERKSHIRE BLVD
 SUITE 100
 WYOMISSING, PA 19610

* **PROPERTY DATA:**

Municipality: BERN TOWNSHIP
School District: SCHUYLKILL VALLEY

** PLEASE SEE DOCUMENT OR INDEX FOR ADDITIONAL PROPERTY DATA

*** ASSOCIATED DOCUMENT(S):**

CONSIDERATION/SECURE AMT:	\$2,655,000.00
TAXABLE AMOUNT:	\$0.00
FEES / TAXES:	
RECORDING FEES: DEED	\$14.50
AFFORDABLE HOUSING FEE	\$11.50
RECORDS IMPROVEMENT FUND	\$5.00
JUDICIAL FEE	\$23.50
WRIT TAX	\$0.50
ADDITIONAL PAGE FEE	\$4.00
ADDITIONAL PAGE FEE (AFF)	\$4.00
Total:	\$63.00

INSTRUMENT #: 2011025946
Recorded Date: 07/13/2011 08:51:39 AM

I hereby CERTIFY that this document is recorded in the Recorder of Deeds Office in Berks County, Pennsylvania.



Frederick C. Sheeler

Frederick C. Sheeler
Recorder of Deeds

OFFICIAL RECORDING COVER PAGE

Page 1 of 7

PLEASE DO NOT DETACH

THIS PAGE IS NOW PART OF THIS LEGAL DOCUMENT

NOTE: If document data differs from cover sheet, document data always supersedes.
*COVER PAGE DOES NOT INCLUDE ALL DATA, PLEASE SEE INDEX AND DOCUMENT FOR ANY ADDITIONAL INFORMATION.

Berks County Recorder of Deeds

Instrument # 2011025946

Page 2 of 7

07/13/2011 08:51:39 AM

6

⑤ **PIN:** part of **4398-11-56-9055**

Prepared by: Edwin L. Stock, Esquire
Roland Stock, LLC
627 N. Fourth Street
P.O. Box 902
Reading, Pennsylvania 19603

Return to: Edwin L. Stock, Esquire
Roland Stock, LLC
627 N. Fourth Street
P.O. Box 902
Reading, Pennsylvania 19603

Property Address: Township of Bern
County of Berks
Commonwealth of Pennsylvania

W1760390

DEED

THIS DEED made the 27th day of June, 2011

BETWEEN

READING REGIONAL AIRPORT AUTHORITY, a Pennsylvania municipal authority, with an address of 2501 Bernville Road, Reading, Berks County, Pennsylvania,

party of the first part, hereinafter called **GRANTOR**,

AND

BERKS COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY, a Pennsylvania industrial development authority, with an address of 633 Court Street, 14th Floor, City of Reading, County of Berks, Commonwealth of Pennsylvania, 19601,

party of the second part, hereinafter called **GRANTEE**.

WITNESSETH, that, Grantor, in consideration of the sum of TWO MILLION SIX HUNDRED FIFTY-FIVE THOUSAND and 00/100 DOLLARS (\$2,655,000.00) and other valuable consideration, receipt of which Grantor hereby acknowledges, grants and conveys to Grantee, its successors and assigns,

1

ALL THAT CERTAIN piece, parcel and tract of land situated in the Township of Bern, County of Berks and Commonwealth of Pennsylvania, and being further known as Lot #1 of the Reading Regional Airport Authority Subdivision, bounded and described as follows, to wit:

BEGINNING at a point on the westerly bank of the Schuylkill River; thence along other lands of Reading Regional Airport Authority, North 57 degrees 00 minutes 58 seconds West, a distance of one thousand four hundred forty six and fifty seven one-hundredths feet (1446.57') to a monument set for a corner; thence continuing along the same, the following two courses and distances, 1.) North 08 degrees 59 minutes 08 seconds West, a distance of two thousand eight hundred thirteen and eight one one-hundredths feet (2813.81') to a point; 2.) North 06 degrees 24 minutes 50 seconds East, a distance of two hundred seventy and seventy three one-hundredths feet (270.73') to a point in the centerline of a 80 foot wide right-of-way of Bernville Boulevard; thence leaving the centerline going a bearing of South 83 degrees 35 minutes 10 seconds East, a distance of one thousand seventy four and seventy four one-hundredths feet (1074.74') to a point on the southwesterly bank of the Schuylkill River; thence following the southwesterly bank of the Schuylkill River, the following eleven courses and distances:

- 1.) South 64 degrees 11 minutes 28 seconds East, a distance of seven hundred ten and three one-hundredths feet (710.03');
- 2.) South 54 degrees 00 minutes 02 seconds East, a distance of five hundred and seventy-one one-hundredths feet (500.71');
- 3.) South 44 degrees 54 minutes 01 seconds East, a distance of four hundred seventy-five and twenty-seven one-hundredths feet (475.27');
- 4.) South 33 degrees 29 minutes 19 seconds East, a distance of two hundred thirty-two and sixty-eight one-hundredths feet (232.68');
- 5.) South 22 degrees 25 minutes 19 seconds East, a distance of three hundred forty-seven and thirty-one one-hundredths feet (347.31');
- 6.) South 04 degrees 39 minutes 01 seconds East, a distance of ninety and sixty-three one-hundredths feet (90.63');
- 7.) South 09 degrees 44 minutes 06 seconds West, a distance of sixty-six and eighty-one one-hundredths feet (66.81');
- 8.) South 32 degrees 05 minutes 21 seconds West, a distance of six hundred seventy-one and ninety-nine one-hundredths feet (671.99');
- 9.) South 12 degrees 21 minutes 49 seconds West, a distance of five hundred thirty-five and forty one-hundredths feet (535.40');
- 10.) South 29 degrees 53 minutes 51 seconds West, a distance of one thousand and forty-one and five one-hundredths feet (1041.05');
- 11.) South 39 degrees 51 minutes 45 seconds West, a distance of one hundred forty-two and seventy-seven one-hundredths feet (142.77') to a point of beginning.

EXCEPTING THEREOUTOF LOT #5:

ALL that certain piece, parcel and tract of land situated in the Township of Bern, County of Berks and Commonwealth of Pennsylvania, and being further known as Lot #5 of the Reading Regional Airport Authority Subdivision, bounded and described as follows, to wit:

BEGINNING at a point in the centerline of a 80 foot wide right-of-way of Bernville Boulevard; South 49 degrees 40 minutes 35 seconds East, a distance of one thousand seven hundred seventy-four and forty one-hundredths feet (1774.40') to a point of beginning; thence North 23 degrees 21 minutes 45 seconds East, a distance of two hundred sixty-seven feet (267.00') to a point on the southerly side of 60 foot right-of-way of Aviation Road; thence continuing along the southern right of way of Aviation Road the following three courses and distances:

- 1.) South 66 degrees 38 minutes 15 seconds East, a distance of two hundred fifty-six and fifty-eight one-hundredths feet (256.58');
- 2.) by a tangent curve bearing to the right, having a radius of seven hundred ninety feet (790.00'), a central angle of 09 degrees 17 minutes 25 seconds, and an arc distance of one hundred twenty-eight and nine one-hundredths feet (128.09');
- 3) South 57 degrees 20 minutes 50 seconds East, a distance of fifty-five feet (55.00'), to a point:
thence leaving the sixty foot (60.00') right of way, South 32 degrees 39 minutes 10 seconds West, a distance of two hundred fifty-one and five one-hundredths feet (251.05') to a point, thence North 66 degrees 38 minutes 15 seconds West, a distance of three hundred ninety-seven and eighty-seven one-hundredths feet (397.87') to a point of beginning.

LOT #5 CONTAINING 2.54 acres of land, more or less.

LOT #1 CONTAINING 154.93 acres of land, more or less.

PIN NO. part of **4398-11-56-9055**

BEING PART OF THE SAME PREMISES, which the City of Reading conveyed to the Reading Municipal Airport Authority by Deed dated November 22, 1957 and recorded in Deed Book 1286, page 60, Berks County records.

AND the Reading Municipal Airport Authority is now known as the Reading Regional Airport Authority.

The within conveyance is a transfer to a nonprofit industrial development authority and is therefore tax exempt.

TOGETHER with all and singular the buildings, improvements, woods, ways, rights, liberties, privileges, hereditaments, and appurtenances, to the same belonging, or in any wise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and of every part and parcel thereof: And also all the estate, right, title, interest, property, possession, claim and demand whatsoever, both in law and equity, of the said party of the first part, of, in and to the said premises, with the appurtenances.

TO HAVE AND TO HOLD the said premises, with all and singular the appurtenances, unto the said party of the second part, its successors and assigns, to the only

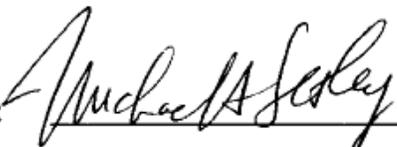
proper use, benefit and behoof of the said party of the second part, its successors and assigns forever.

AND the said party of the first part, for itself, its successors, executors and administrators, do by these presents, covenant, grant and agree to and with the said party of the second part, its successors and assigns forever, that it, the said party of the first part, and its successors all and singular the hereditaments and premises herein above described and granted, or mentioned and intended so to be, with the appurtenances, unto the said party of the second part, its successors and assigns, against the said party of the first part and its successors and assigns, and against all and every other person or persons whomsoever lawfully claiming or to claim the same or any part thereof, by, from or under him, her, them, or any of them, SHALL and WILL SPECIALLY WARRANT and forever DEFEND.

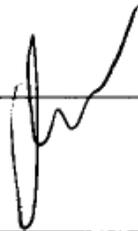
IN WITNESS WHEREOF, the said party of the first part to these presents have hereunto set its hands and seals. Dated the day and year first above written.

GRANTOR

READING REGIONAL AIRPORT AUTHORITY

By:  (seal)
Name: MICHAEL A. SETLEY
Title: CHAIRMAN

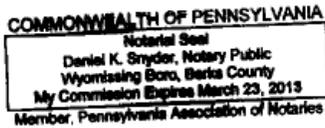
Signed, sealed and delivered
in the presence of:



COMMONWEALTH OF PENNSYLVANIA :
: SS.:
COUNTY OF BERKS :

On this, the 27th day of June, 2011, before me, the undersigned officer, personally appeared Michael A. Settle, who is known to me (or satisfactorily proven) to be the Chairman of the READING REGIONAL AIRPORT AUTHORITY whose name is subscribed to the within instrument, and acknowledged that she executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.



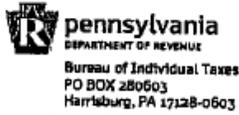
[Signature]
Notary Public

(seal)

The address of the within named
Grantee is: 633 Court St., 14th Floor
Reading, PA 19601

[Signature]

REV-183 EX (04-10)



REALTY TRANSFER TAX STATEMENT OF VALUE

RECORDER'S USE ONLY

Table with 2 columns: Recorder's Use Only, Date Recorded

See reverse for instructions.

Complete each section and file in duplicate with Recorder of Deeds when (1) the full value/consideration is not set forth in the deed, (2) the deed is without consideration or by gift, or (3) a tax exemption is claimed.

A. CORRESPONDENT - All inquiries may be directed to the following person:

Name: Edwin L. Stock, Esq. Telephone Number: (610) 372-5588. Mailing Address: 627 N. Fourth St., P.O. Box 902, Reading, PA 19603.

B. TRANSFER DATA

Grantor(s)/Lessor(s): Reading Regional Airport Authority. Mailing Address: 2501 Bernville Road, Reading, PA 19605.

C. Date of Acceptance of Document

Grantee(s)/Lessee(s): Berks County Industrial Development Authority. Mailing Address: 633 Court Street, 14th Floor, Reading, PA 19601.

D. REAL ESTATE LOCATION

Street Address: Aviation Road & Leisch's Bridge Road. City, Township, Borough: Township of Bern. County: Berks. School District: Schuylkill Valleev. Tax Parcel Number: part of 1908-11 68 0055.

E. VALUATION DATA - WAS TRANSACTION PART OF AN ASSIGNMENT OR RELOCATION? [] Y [X] N

Table with 3 columns: 1. Actual Cash Consideration (2,655,000.00), 2. Other Consideration (+0.00), 3. Total Consideration (= 2,655,000.00), 4. County Assessed Value (Not assessed), 5. Common Level Ratio Factor (x 1.43), 6. Fair Market Value (= N/A).

F. EXEMPTION DATA

Table with 3 columns: 1a. Amount of Exemption Claimed (2,655,000.00), 1b. Percentage of Grantor's Interest in Real Estate (100), 1c. Percentage of Grantor's Interest Conveyed (100).

Check Appropriate Box Below for Exemption Claimed.

- Will or intestate succession.
Transfer to a trust.
Transfer from a trust.
Transfer between principal and agent/straw party.
Transfers to the commonwealth, the U.S. and instrumentalities by gift, dedication, condemnation or in lieu of condemnation.
Transfer from mortgagor to a holder of a mortgage in default.
Corrective or confirmatory deed.
Statutory corporate consolidation, merger or division.
Other (Please explain exemption claimed.) Transfer to an industrial development authority.

Under penalties of law, I declare that I have examined this statement, including accompanying information, and to the best of my knowledge and belief, it is true, correct and complete.

Signature of Correspondent or Responsible Party: [Signature]. Date: 06/27/11.

FAILURE TO COMPLETE THIS FORM PROPERLY OR ATTACH REQUESTED DOCUMENTATION MAY RESULT IN THE RECORDER'S REFUSAL TO RECORD THE DEED.

APPENDIX E
EDR RADIUS MAP REPORT



Airport Tract

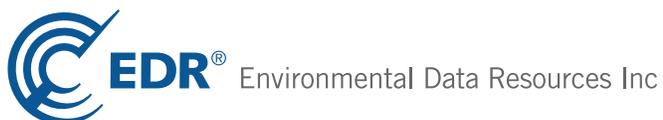
Aviation Road

Reading, PA 19605

Inquiry Number: 4168077.2s

December 23, 2014

EDR Summary Radius Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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 <u>GEOCHECK ADDENDUM</u>	
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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

AVIATION ROAD
BERKS County, PA 19605

COORDINATES

Latitude (North): 40.3800000 - 40° 22' 48.00"
Longitude (West): 75.9562000 - 75° 57' 22.32"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 418830.5
UTM Y (Meters): 4470163.0
Elevation: 270 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: TP
Source: USGS 7.5 min quad index

Target Property: S
Source: USGS 7.5 min quad index

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20100704
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 AVIATION ROAD
 , PA 19605

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
A1	IND METAL PLATING	153 WAGNER LN	AST	Lower	1 ft.
B2	MILLENNIUM AVIATION	READING REG AIRPORT	AST	Higher	1 ft.
A3	INDUSTRIAL METAL PLA	153 WAGNER LN	RCRA-LQG, MANIFEST, US AIRS	Lower	1 ft.
A4	INDUSTRIAL METAL PLA	153 WAGNER LANE	MANIFEST, EFACTS	Lower	1 ft.
B5	TOWER AVIATION OF RE	READING AIRPORT HANG	LUST, UST, AST, EFACTS	Higher	1 ft.
B6	READING MUNICIPAL AR	LEISZS BRIDGE RD 1 M	RCRA NonGen / NLR	Higher	1 ft.
B7	ALLEGHENY COMMUTER A	READING REGIONAL AIR	LUST, EFACTS	Higher	1 ft.
B8	VF CORP HANGAR BLD	READING REGIONAL AIR	RCRA-CESQG, FINDS	Higher	1 ft.
9		135 WAGNER LN	EDR US Hist Auto Stat	Lower	32, SSE
10	INDUSTRIAL METAL PLA	153 WAGNER LN	MANIFEST	Lower	45, SSE
11	JOHN FESIG AUTO BODY	117 WAGNER LANE	RCRA-CESQG, FINDS	Lower	49, South
C12	QUAKER INDUSTRIAL ST	READING AIRPORT BLDG	RCRA NonGen / NLR, FINDS	Higher	1063, West
C13	CAP AVIATION INC	READING AIRPORT	RCRA NonGen / NLR, FINDS	Higher	1063, West
14	READING AAF		FUDS	Higher	1563, WSW
D15	FAA READING RTR FAC	READING MUNICIPAL AI	LUST, EFACTS	Higher	1772, West
D16	READING REGIONAL AIR	2501 BERNVILLE RD	UNREG LTANKS	Higher	1772, West
D17	READING MUNICIPAL AI	2501 BERNVILLE RD	RCRA-CESQG, FINDS, NPDES, LUST, ARCHIVE UST,...	Higher	1772, West
18	PAARNG READING FAC	2601 RIVER RD	LUST, AST, MANIFEST, EFACTS	Lower	2483, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 06/10/2014 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>INDUSTRIAL METAL PLA</i>	<i>153 WAGNER LN</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>A3</i>	<i>8</i>

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 06/10/2014 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>VF CORP HANGAR BLD</i>	<i>READING REGIONAL AIR</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>B8</i>	<i>9</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>JOHN FESIG AUTO BODY</i>	<i>117 WAGNER LANE</i>	<i>S 0 - 1/8 (0.009 mi.)</i>	<i>11</i>	<i>10</i>

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 09/16/2014 has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>TOWER AVIATION OF RE</i>	<i>READING AIRPORT HANG</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>B5</i>	<i>8</i>
<i>ALLEGHENY COMMUTER A</i>	<i>READING REGIONAL AIR</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>B7</i>	<i>9</i>

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>FAA READING RTR FAC</i>	<i>READING MUNICIPAL AI</i>	<i>W 1/4 - 1/2 (0.336 mi.)</i>	<i>D15</i>	<i>10</i>
<i>READING MUNICIPAL AI</i>	<i>2501 BERNVILLE RD</i>	<i>W 1/4 - 1/2 (0.336 mi.)</i>	<i>D17</i>	<i>11</i>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PAARNG READING FAC</i>	<i>2601 RIVER RD</i>	<i>SSE 1/4 - 1/2 (0.470 mi.)</i>	<i>18</i>	<i>11</i>

UNREG LTANKS: A review of the UNREG LTANKS list, as provided by EDR, and dated 04/12/2002 has revealed that there is 1 UNREG LTANKS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
READING REGIONAL AIR Closed: 3/13/1997	2501 BERNVILLE RD	W 1/4 - 1/2 (0.336 mi.)	D16	11

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 08/01/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>TOWER AVIATION OF RE</i>	<i>READING AIRPORT HANG</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>B5</i>	<i>8</i>

AST: A review of the AST list, as provided by EDR, and dated 08/01/2014 has revealed that there are 3 AST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MILLENNIUM AVIATION	READING REG AIRPORT	0 - 1/8 (0.000 mi.)	B2	8
<i>TOWER AVIATION OF RE</i>	<i>READING AIRPORT HANG</i>	<i>0 - 1/8 (0.000 mi.)</i>	<i>B5</i>	<i>8</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
IND METAL PLATING	153 WAGNER LN	0 - 1/8 (0.000 mi.)	A1	8

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/10/2014 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target

EXECUTIVE SUMMARY

property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
READING MUNICIPAL AR	LEISZS BRIDGE RD 1 M	0 - 1/8 (0.000 mi.)	B6	9
QUAKER INDUSTRIAL ST	READING AIRPORT BLDG	W 1/8 - 1/4 (0.201 mi.)	C12	10
CAP AVIATION INC	READING AIRPORT	W 1/8 - 1/4 (0.201 mi.)	C13	10

FUDS: A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
READING AAF		WSW 1/4 - 1/2 (0.296 mi.)	14	10

MANIFEST: A review of the MANIFEST list, as provided by EDR, and dated 12/31/2013 has revealed that there are 3 MANIFEST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
INDUSTRIAL METAL PLA	153 WAGNER LN	0 - 1/8 (0.000 mi.)	A3	8
INDUSTRIAL METAL PLA	153 WAGNER LANE	0 - 1/8 (0.000 mi.)	A4	8
INDUSTRIAL METAL PLA	153 WAGNER LN	SSE 0 - 1/8 (0.009 mi.)	10	9

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

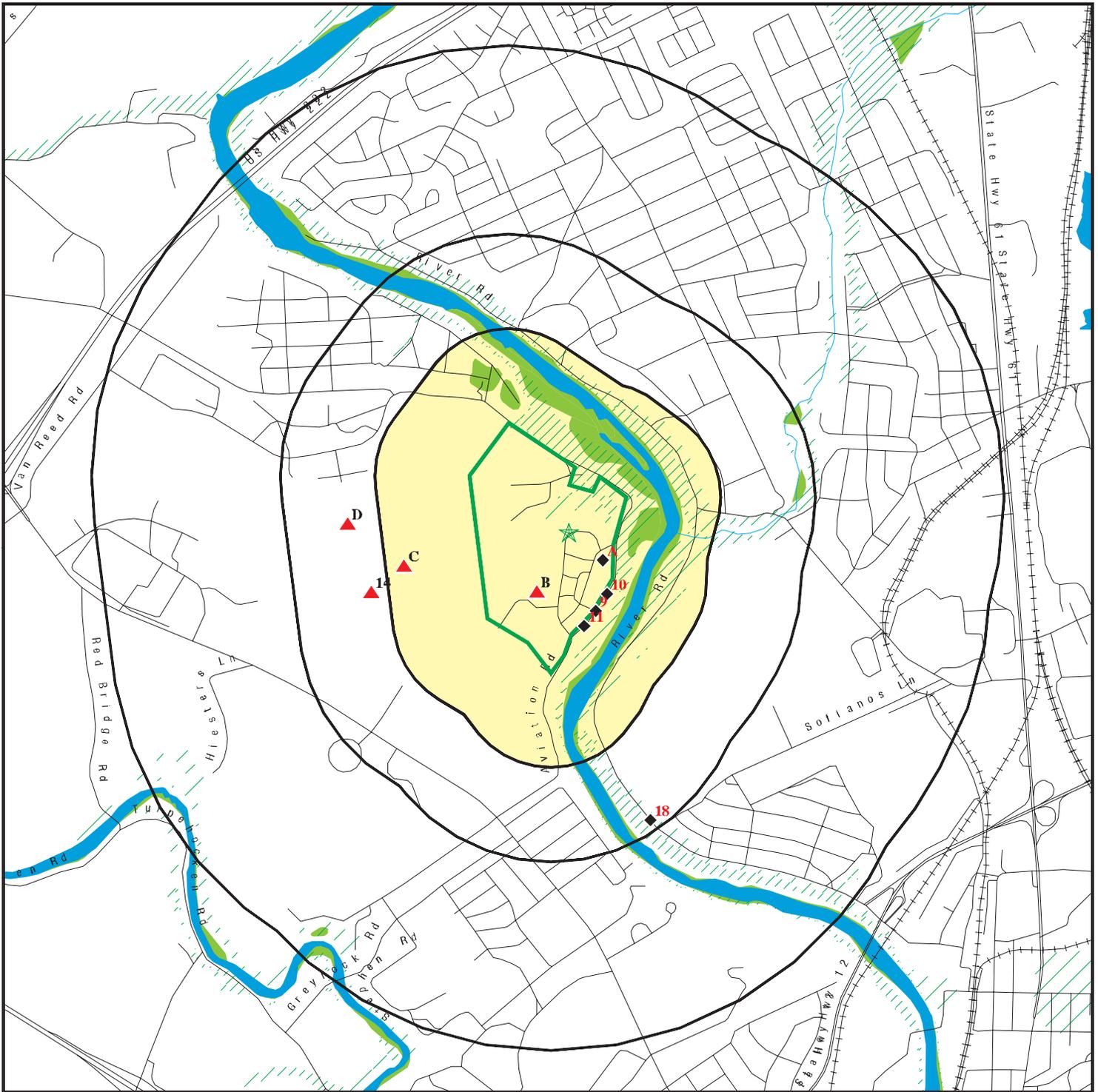
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	135 WAGNER LN	SSE 0 - 1/8 (0.006 mi.)	9	9

Count: 5 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BERKS COUNTY	S115913957	BROWNS BATTERY BREAKING	FISHER LN		SHWS, EFACTS
LAURELDALE	S115934717	MUHLENBERG SCH DIST HSCA CLEANUP	BELLEVUE AVE, KUTZTOWN RD	19605	SHWS, EFACTS
READING	S116498457	BUTTONWOOD GATEWAY COMPLEX	W BUTTONWOOD TULPEHOCKEN & GOR	19601	VCP
READING	S109507705	READING IRON CO PA LINES LLC RAILS	W OF CLINTON ST N & S OF RIVER	19601	ACT 2-DEED, VCP, EFACTS
READING	S109507703	READING IRON CO MET ED CO PARCEL F	RIVER RD	19601	ACT 2-DEED, VCP, EFACTS

OVERVIEW MAP - 4168077.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

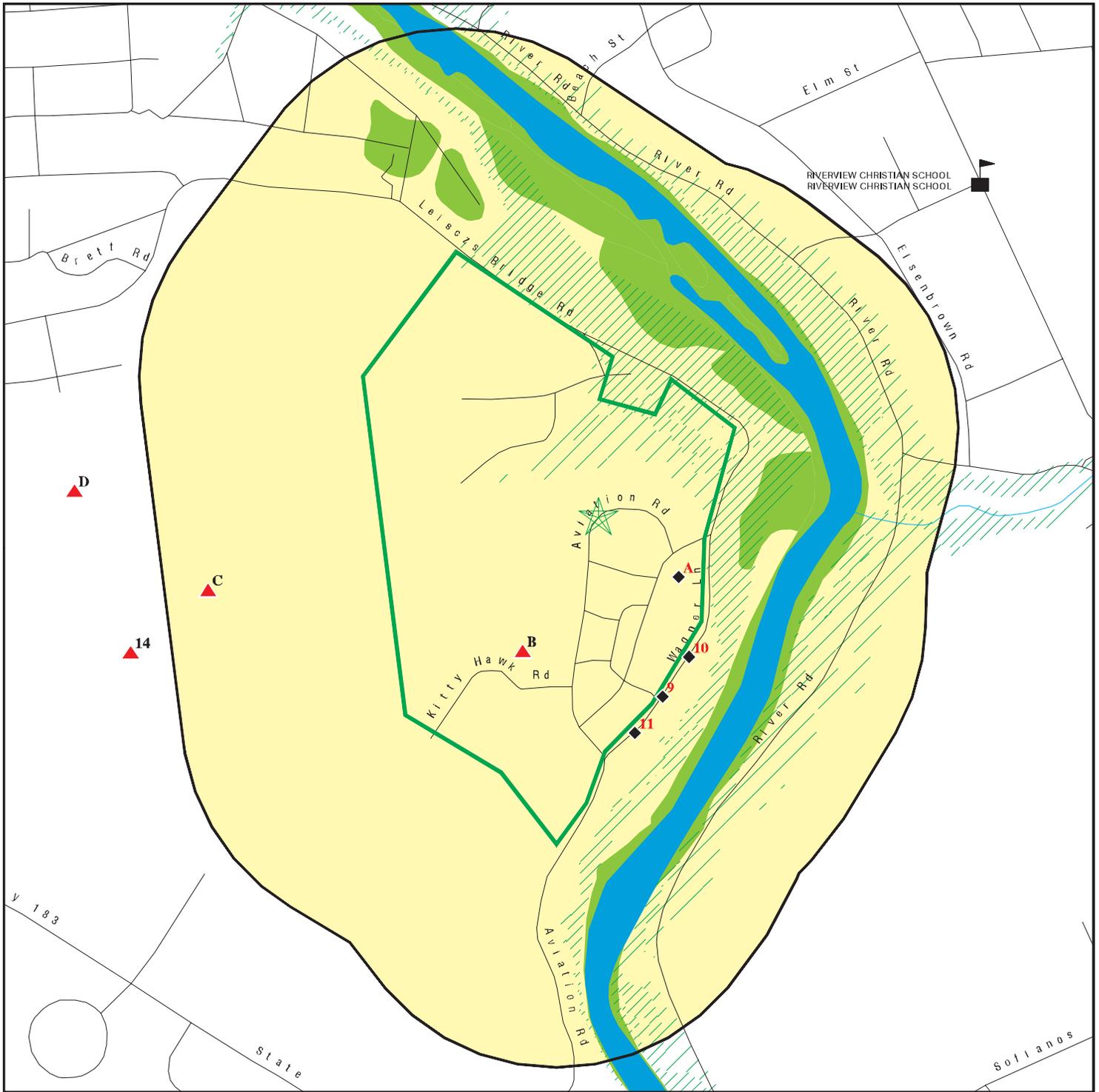


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Airport Tract
 ADDRESS: Aviation Road
 Reading PA 19605
 LAT/LONG: 40.38 / 75.9562

CLIENT: Liberty Environmental, Inc.
 CONTACT: Matt Adukaitis
 INQUIRY #: 4168077.2s
 DATE: December 23, 2014 12:42 pm

DETAIL MAP - 4168077.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Oil & Gas pipelines from USGS
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Airport Tract
 ADDRESS: Aviation Road
 Reading PA 19605
 LAT/LONG: 40.38 / 75.9562

CLIENT: Liberty Environmental, Inc.
 CONTACT: Matt Adukaitis
 INQUIRY #: 4168077.2s
 DATE: December 23, 2014 12:43 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		2	0	NR	NR	NR	2
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
SHWS	1.000		0	0	0	0	NR	0
HSCA	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		2	0	3	NR	NR	5
UNREG LTANKS	0.500		0	0	1	NR	NR	1
LAST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		3	0	NR	NR	NR	3
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
ARCHIVE UST	0.250		0	0	NR	NR	NR	0
ARCHIVE AST	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
ACT 2-DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	2	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	1	0	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
MANIFEST	0.250		3	0	NR	NR	NR	3
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
EFACTS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	0	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST	TP		NR	NR	NR	NR	NR	0
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A1 < 1/8 1 ft.	IND METAL PLATING 153 WAGNER LN READING, PA 19601	AST	S106020240 N/A
Relative: Lower	Click here for full text details		
B2 < 1/8 1 ft.	MILLENNIUM AVIATION READING REG AIRPORT READING, PA 19605	AST	A100247148 N/A
Relative: Higher	Click here for full text details		
A3 < 1/8 1 ft.	INDUSTRIAL METAL PLATING INC 153 WAGNER LN READING, PA 19601	RCRA-LQG MANIFEST US AIRS	1000428110 PAD002334142
Relative: Lower	RCRA-LQG EPA Id: PAD002334142		
A4 < 1/8 1 ft.	INDUSTRIAL METAL PLATING INC 153 WAGNER LANE READING, PA 19601	MANIFEST EFACTS	S110049729 N/A
Relative: Lower	Click here for full text details		
B5 < 1/8 1 ft.	TOWER AVIATION OF READING READING AIRPORT HANGAR 402 READING, PA 19605	LUST UST AST EFACTS	U003996839 N/A
Relative: Higher	LUST Facility Id: 579904		
	UST Tank Status: Currently In Use		

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance		Database(s)	
Elevation	Site		

B6 < 1/8 1 ft.	READING MUNICIPAL ARPRT LEISZS BRIDGE RD 1 MI S OF READING, PA 19605	RCRA NonGen / NLR	1000189451 PAD048593404
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Relative: [Click here for full text details](#)
 Higher
 RCRA NonGen / NLR
 EPA Id: PAD048593404

B7 < 1/8 1 ft.	ALLEGHENY COMMUTER AIRLINES READING REGIONAL AIRPORT READING, PA 19605	LUST EFACTS	S105801275 N/A
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Relative: [Click here for full text details](#)
 Higher
 LUST
 Facility Id: 580428

B8 < 1/8 1 ft.	VF CORP HANGAR BLDG 514 READING REGIONAL AIRPORT READING, PA 19605	RCRA-CESQG FINDS	1004772242 PA0000094409
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Relative: [Click here for full text details](#)
 Higher
 RCRA-CESQG
 EPA Id: PA0000094409

9 SSE < 1/8 0.006 mi. 32 ft.	135 WAGNER LN READING, PA 19601	EDR US Hist Auto Stat	1015212299 N/A
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Relative: [Click here for full text details](#)
 Lower

10 SSE < 1/8 0.009 mi. 45 ft.	INDUSTRIAL METAL PLATING INC 153 WAGNER LN READING, PA 19601	MANIFEST	S116737711 N/A
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Relative: [Click here for full text details](#)
 Lower

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
11 South < 1/8 0.009 mi. 49 ft.	JOHN FESIG AUTO BODY 117 WAGNER LANE READING, PA 19601	RCRA-CESQG FINDS	1004772602 PA0000557975
Relative: Lower	Click here for full text details RCRA-CESQG EPA Id: PA0000557975		
C12 West 1/8-1/4 0.201 mi. 1063 ft.	QUAKER INDUSTRIAL STRIPPING CORPORAT READING AIRPORT BLDG 252 READING, PA 19605	RCRA NonGen / NLR FINDS	1000268905 PAD980830632
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA Id: PAD980830632		
C13 West 1/8-1/4 0.201 mi. 1063 ft.	CAP AVIATION INC READING AIRPORT READING, PA 19605	RCRA NonGen / NLR FINDS	1000103457 PAD084870633
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA Id: PAD084870633		
14 WSW 1/4-1/2 0.296 mi. 1563 ft.	READING AAF READING, PA	FUDS	1010309652 N/A
Relative: Higher	Click here for full text details		
D15 West 1/4-1/2 0.336 mi. 1772 ft.	FAA READING RTR FAC READING MUNICIPAL AIRPORT READING, PA 19605	LUST EFACTS	S105801313 N/A
Relative: Higher	Click here for full text details LUST Facility Id: 580008		

MAP FINDINGS

Map ID Direction Distance Elevation		Database(s)	EDR ID Number EPA ID Number
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D16 West 1/4-1/2 0.336 mi. 1772 ft. Relative: Higher	READING REGIONAL AIRPORT 2501 BERNVILLE RD BERN TWP., PA Click here for full text details UNREG LTANKS Closed: 3/13/1997	UNREG LTANKS	S105801367 N/A
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D17 West 1/4-1/2 0.336 mi. 1772 ft. Relative: Higher	READING MUNICIPAL AIRPORT 2501 BERNVILLE RD READING, PA 19605 Click here for full text details	RCRA-CESQG FINDS NPDES LUST ARCHIVE UST MANIFEST EFACTS	1007371600 PAR000510677
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RCRA-CESQG
EPA Id: PAR000510677

LUST
Facility Id: 580003

ARCHIVE UST
Facility Id: 06-22084
Facility Id: 06-28896

18 SSE 1/4-1/2 0.470 mi. 2483 ft. Relative: Lower	PAARNG READING FAC 2601 RIVER RD READING, PA 19605 Click here for full text details	LUST AST MANIFEST EFACTS	S102733801 N/A
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LUST
Facility Id: 579810

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
PA	ACT 2-DEED	Act 2-Deed Acknowledgment Sites	Department of Environmental Protection	04/23/2010	04/28/2010	04/30/2010
PA	AIRS	Permit and Emissions Inventory Data	Department of Environmental Protection	12/31/2013	07/22/2014	09/17/2014
PA	ARCHIVE AST	Archived Aboveground Storage Tank Sites	Department of Environmental Protection	08/01/2014	09/18/2014	11/18/2014
PA	ARCHIVE UST	Archived Underground Storage Tank Sites	Department of Environmental Protection	08/01/2014	09/18/2014	11/18/2014
PA	AST	Listing of Pennsylvania Regulated Aboveground Storage Tanks	Department of Environmental Protection	08/01/2014	09/18/2014	11/18/2014
PA	AUL	Environmental Covenants Listing	Department of Environmental Protection	10/21/2014	10/23/2014	11/18/2014
PA	BROWNFIELDS	Brownfields Sites	Department of Environmental Protection	10/17/2014	10/22/2014	11/18/2014
PA	DRYCLEANERS	Drycleaner Facility Locations	Department of Environmental Protection	09/25/2014	09/25/2014	11/18/2014
PA	EFACTS	EFACTS Database	Department of Environmental Protection	11/03/2014	11/04/2014	11/19/2014
PA	ENG CONTROLS	Engineering Controls Site Listing	Department of Environmental Protection	05/15/2008	05/16/2008	06/12/2008
PA	HIST LF ALI	Abandoned Landfill Inventory	Department of Environmental Protection	01/04/2005	01/04/2005	02/04/2005
PA	HIST LF INACTIVE	Inactive Facilities List	Department of Environmental Protection	12/20/1994	07/12/2005	08/11/2005
PA	HIST LF INVENTORY	Facility Inventory	Department of Environmental Protection	06/02/1999	07/12/2005	08/11/2005
PA	HSCA	HSCA Remedial Sites Listing	Department of Environmental Protection	09/30/2013	04/25/2014	05/05/2014
PA	INST CONTROL	Institutional Controls Site Listing	Department of Environmental Protection	05/15/2008	05/16/2008	06/12/2008
PA	LAST	Storage Tank Release Sites	Department of Environmental Protection	09/16/2014	09/18/2014	11/18/2014
PA	LUST	Storage Tank Release Sites	Department of Environmental Protection	09/16/2014	09/18/2014	11/18/2014
PA	MINES	Abandoned Mine Land Inventory	PASDA	10/02/2014	10/29/2014	11/19/2014
PA	NPDES	NPDES Permit Listing	Department of Environmental Protection	03/28/2014	06/12/2014	08/05/2014
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2013	07/21/2014	08/25/2014
PA	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department Environmental Protection		07/01/2013	12/30/2013
PA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department Environmental Protection		07/01/2013	01/10/2014
PA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department Environmental Protection		07/01/2013	12/30/2013
PA	SHWS	Hazardous Sites Cleanup Act Site List	Department Environmental Protection	10/21/2014	10/23/2014	11/19/2014
PA	SPIILLS	State spills	DEP, Emergency Response	10/28/2014	10/30/2014	11/19/2014
PA	SWF/LF	Operating Facilities	Department of Environmental Protection	08/26/2014	08/27/2014	11/18/2014
PA	UIC	Underground Injection Wells	Department of Environmental Protection	09/23/2014	09/24/2014	11/18/2014
PA	UNREG LTANKS	Unregulated Tank Cases	Department of Environmental Protection	04/12/2002	08/14/2003	08/29/2003
PA	UST	Listing of Pennsylvania Regulated Underground Storage Tanks	Department of Environmental Protection	08/01/2014	09/18/2014	11/18/2014
PA	VCP	Voluntary Cleanup Program Sites	Department of Environmental Protection	10/03/2014	10/17/2014	11/18/2014
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	11/11/2011	05/18/2012	05/25/2012
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Sleam-Electric Plan Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2013	01/24/2014	02/24/2014
US	CORRACTS	Corrective Action Report	EPA	06/10/2014	07/02/2014	09/18/2014
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	09/29/2014	10/08/2014	11/17/2014
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/30/2014	10/01/2014	11/06/2014
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	07/31/2014	10/29/2014	11/06/2014
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	05/20/2014	06/10/2014	08/22/2014
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	07/30/2014	08/12/2014	08/22/2014
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	11/03/2014	11/05/2014	11/17/2014
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	10/06/2014	10/29/2014	11/17/2014
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	05/22/2014	08/22/2014	09/18/2014
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	11/04/2014	11/07/2014	11/17/2014
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	03/01/2013	03/01/2013	04/12/2013
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	05/20/2014	06/10/2014	08/15/2014
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	07/30/2014	08/12/2014	08/22/2014
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	11/03/2014	11/05/2014	11/17/2014
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	10/06/2014	10/29/2014	11/06/2014
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	08/20/2014	08/22/2014	09/18/2014
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	11/04/2014	11/07/2014	11/17/2014
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	08/14/2014	08/15/2014	08/22/2014
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	06/04/2014	06/12/2014	07/28/2014
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	08/29/2014	10/09/2014	10/20/2014
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	07/22/2013	08/02/2013	11/01/2013
US	NPL	National Priority List	EPA	09/29/2014	10/08/2014	11/17/2014
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	09/29/2014	10/08/2014	11/17/2014
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	06/10/2014	07/02/2014	09/18/2014
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	06/10/2014	07/02/2014	09/18/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/10/2014	07/02/2014	09/18/2014
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/10/2014	07/02/2014	09/18/2014
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/10/2014	07/02/2014	09/18/2014
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2006	09/29/2010	12/02/2010
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/22/2014	09/23/2014	10/20/2014
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	07/25/2014	09/09/2014	10/20/2014
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/04/2014	09/04/2014	10/20/2014
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	07/25/2014	09/09/2014	10/20/2014
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/05/2014	09/04/2014	11/17/2014
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	07/30/2013	08/19/2013	10/03/2013
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2011	07/19/2012	08/28/2012
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	11/01/2014	11/05/2014	11/24/2014
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2013	07/15/2014	08/13/2014
VT	VT MANIFEST	Hazardous Waste Manifest Data	Department of Environmental Conservation	06/24/2014	08/22/2014	11/04/2014
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2013	06/20/2014	08/07/2014
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
PA	Daycare Centers	Sensitive Receptor: Child Care Facility List	Department of Public Welfare			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
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STREET AND ADDRESS INFORMATION

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APPENDIX F
USER QUESTIONNAIRE

APPENDIX G
PRIOR ENVIRONMENTAL REPORTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Conducted at:

READING REGIONAL AIRPORT
2501 BERNVILLE ROAD
READING, PENNSYLVANIA

Prepared for:



Berks County Industrial Development Authority
Berks County Services Center
633 Court Street – 14th Floor
Reading, PA 19601-3540

*STV has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-05 of the subject property named above, the property. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. **This assessment has revealed evidence of recognized environmental conditions in connection with the subject property.***



Peter Gaskins
Environmental Scientist



Wendy Schellhamer, LEED[®] AP
Environmental Scientist

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B ENVIRONMENTAL DATABASE REPORT
C ASTM E1527-05
D INTERVIEW RECORDS
E TITLE
F REGULATORY RECORDS
G RESUMES

EXCERPT

EXECUTIVE SUMMARY

The Berks County Industrial Development Authority (hereinafter referred to as BCIDA) requested STV Incorporated (STV) to perform a Phase I Environmental Site Assessment (ESA or Assessment) of select parcels at the Reading Regional Airport Authority (RRAA) located at 2501 Bernville Road, Reading, PA. The objective of this ESA is to identify, to the extent feasible pursuant to the processes described within ASTM E1527-05, recognized environmental conditions in connection with the subject property.

To perform this Assessment, STV conducted a site reconnaissance, an environmental database review, state and federal regulatory records review, interviews with appropriate property owner representatives, municipal officials, and other persons having knowledge of the subject and surrounding properties, and conducted a review of historical aerial photographs, maps, and secondary source information. For the purpose of this report, the term “subject property” shall refer to the area of land defined as Parcel 1; Parcel 1 is approximately 150 acres.

The subject property currently hosts several active RRAA support facilities, including the RRAA Wastewater Treatment Facility, and a number of active and inactive tenant-operated businesses, including:

- Industrial Metal Plating (IMP)
- Reading Police Firearms Range
- Threeway Pattern
- Marilyn Firing Draperies
- Ron’s Machine Shop
- Captain Clog

According to the RRAA facility manager Terry Sroka, previous uses of the subject property included military housing (barracks), residential housing, small business, light industrial business, open space, and agriculture (cattle grazing).

Potential recognized environmental conditions identified per site reconnaissance, personnel interviews, and reviews of secondary source information are identified in the following section.

FINDINGS AND RECOMMENDATIONS

The *findings* and *recommendations* of this Assessment are:

- The site assessment database identified several sites of environmental interest within the search radius prescribed by ASTM standards, but not within or adjacent to the subject property. The facility-encompassing database report based on the approximate geographic center point of the RRAA facility was developed in order to accommodate federal and state mandated search criteria levels. All of the sites identified were found to be located at a geographic distance away from the subject property, and/or at such a level of remediation so as to be unlikely to adversely affect the subject property.
- STV conducted a thorough reconnaissance of the subject property on April 13 and April 20, 2007. During the site visits STV visually observed several recognized environmental conditions in connection with the subject property. Among those items identified were: aboveground storage tanks, mounded soils, stained soils, abandoned 55-gallon drums, discarded batteries, discarded gas cylinders, demolition debris and construction debris, and potential lead-based paint and asbestos-containing materials within subject property buildings.
- The IMP facility, located at 153 Wagner Lane, was destroyed by a structure fire in 1986. The ignition and release of various in-house chemicals occurred as a result of the fire; subsequent contamination of surrounding soils and groundwater, the RRAA Wastewater Treatment Facility, and Schuylkill River was confirmed. Further, prior to the 1986 fire, and following the reconstruction of the IMP facility, the unauthorized release of hazardous materials to the RRAA Wastewater Treatment Facility was documented. As a result, proximal soils and groundwater may contain hazardous materials in concentrations exceeding permissible limitations. A subsurface investigation is warranted to determine whether materials used and discharged by IMP (heavy metals and industrial chemicals) and/or other hazardous materials exist in subject property groundwater and soils. Materials should be characterized by sampling and analysis, remediated as required, and handled accordingly.

According to IMP-RRAA correspondence records, circa 1984, a sinkhole of unknown dimension was identified behind (west) of the IMP facility. The correspondence stated IMP must remediate the sinkhole immediately. RRAA personnel interviewed were uncertain of the historical details related to the sinkhole; however, no evidence of existing sinkholes was identified during STVs site reconnaissance or secondary source records review.

- Discarded 55-gallon drums of unknown content were found in and around several abandoned buildings on the subject property. Shipping labels were affixed to several of the drums; however, content identification was missing. Various four-gallon and smaller containers of fuel, cleaning fluid, and unknown content were found within the buildings and on the subject property. Discarded batteries, mounded soils, stained soils, and several areas of miscellaneous construction debris were found within the lightly wooded area adjacent to the subject property buildings. The contents of each container should be characterized by either product identification or sampling and analysis, removed from the

subject property, and disposed of at an appropriate waste facility. Stained soils should be appropriately characterized, remediated as required, and removed.

- Several ASTs were observed surrounding the buildings, the contents or status of which are unknown. Most ASTs identified were in poor condition, with marked corrosion and staining, and discolored surface soils. ASTs should be characterized and identified by sampling and analysis, removed from the subject property, and disposed of at an appropriate waste facility. Any potentially contaminated soils should be appropriately characterized, remediated as required, and removed.
- Floodplain dominates the northern-most portion of the subject property. STV is currently developing a Feasibility Study to address potential reclamation of floodplain areas within the subject property.

Although the following items do not require further investigation under ASTM E 1527-05, the assessment did reveal the following concerns in connection with the subject property:

- The Reading Police Firearms Range and shooting-in-butt facility were identified as sites indicative of cumulative impacts as a result of the historic use of lead ammunition. Soil sampling and appropriate assessment efforts within the range areas is warranted to determine whether lead or other hazardous materials exist within these areas.

Lead-based paint may be present within subject property buildings. Paint containing any amount of lead is regulated by the Occupational Safety and Health Administration (OSHA), and should be characterized and removed in accordance with applicable OSHA standards prior to structure demolition. Demolition waste containing lead paint may need to be characterized before being removed from the subject property.

- Asbestos-containing material (ACM) may be located on the subject property. Potential ACM visually observed by STV includes insulation material and floor tile within vacant structures, as well as those currently occupied by various tenants. These materials should be practically delineated and removed by an appropriate licensed asbestos removal and disposal contractor prior to any demolition or renovation activities to subject property structures.
- PCB-containing light ballast and mercury-containing fluorescent lamps may be located within subject property buildings. In the event that PCB-containing transformers were used and releases of PCBs are confirmed, the concrete foundations and surrounding soil should be characterized by sampling and analysis, remediated as required, and disposed of at an appropriate waste facility.

STV has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of the subject property at Parcel 1, RRAA, Reading, PA. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment has revealed evidence of recognized environmental conditions in connection with the subject property. **A Phase II ESA is recommended for the subject property.**

1. INTRODUCTION

1.1 Purpose

The BCIDA requested STV to perform a Phase I ESA of select parcels on property owned by the RRAA. The BCIDA intends to purchase RRAA property for development opportunities, including a Reading/Berks Research and Technology Center. Total project area encompasses approximately 206 acres of developed and undeveloped land across five select parcels. The BCIDA is in need of evaluation of proposed purchase properties in order to determine the potential presence or absence of recognized environmental conditions. Assessment activities designed to address these needs were carried out for specific parcels within RRAA property. This assessment is site-specific for the subject property, Parcel 1.

This Assessment was performed in accordance with the American Society for Testing and Materials (ASTM) – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-05). The purpose of this Assessment report is to identify recognized environmental conditions at the subject property. The ASTM E 1527-05 defines *recognized environmental conditions* as:

“...the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property, or into the ground, groundwater, or surface water of the property.”

1.2 Special Terms and Conditions

There were no special terms or conditions for this assessment. For a complete list of definitions, descriptions of terms, and acronyms for many of the words used in the ASTM E 1527-05 and in this report, refer to Appendix C.

1.3 Limitations and Exceptions of Assessment

The ASTM E 1527-05 practice used for this report is site specific in that it relates to assessment of the environmental conditions on a specific parcel of land. As such, this practice does not address many additional issues raised in transactions that may well involve environmental liabilities pertaining to other properties currently or previously owned or operated by the property owner, or other off-site environmental liabilities. Additional clarification on use of this ASTM practice is provided on page 9 of Appendix C. This Assessment was limited to a Phase I Environmental Site Assessment.

Qualified environmental professionals performed the work and prepared the report for this Assessment. Varying amounts of professional judgment and opinion were required of the environmental professionals to produce sound, defensible conclusions and recommendations.

While no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions, performance of this Assessment was intended to reduce that uncertainty.

1.4 Methodology

STV performed this Assessment in accordance with appropriate ASTM standards and guidelines outlined in Appendix C, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-05). Using these standards and guidelines, STV performed a thorough review of land use history, of the site operations and of the physical setting. STV personnel also performed a field visit to identify current site conditions.

This Assessment consists of the following components:

- Site Reconnaissance
- Records Review
- Interviews
- Report Writing

1.5 Site Identification

TABLE 1: SITE IDENTIFICATION	
Site Name	Parcel 1 – Reading Regional Airport
Site Address	2501 Bernville Road Reading, PA 19601
Site Coordinates (approximate center)	N 40° 22' 47.27" Latitude W 75° 57' 26.46" Longitude
Current Property Owner	Reading Regional Airport Authority Mr. Terry Sroka - Manager

1.6 Date of Study, Report Author(s), and Client Contact

This assessment report was prepared by Peter Gaskins, Environmental Scientist with STV. Mr. Gaskins performed a site reconnaissance on April 13 and April 20, 2007. Professional credentials for Mr. Gaskins can be found in Appendix F. Mr. Gaskins can be contacted at:

STV Incorporated
205 West Welsh Drive
Douglassville, PA 19518
610-385-8200

The client contact is Mr. Tom McKeon, Executive Director for the BCIDA. Mr. McKeon can be contacted at:

Berks County Industrial Development Authority
Berks County Services Center
633 Court Street, Floor 14
Reading, PA 19601
610-478-6341

2. CURRENT SITE AND AREA CHARACTERISTICS

2.1 Site Description and Operations

The subject property consists of Parcel 1, an approximately 150-acre lot located on the northeast corner of the RRAA facility. The subject property houses several active tenant businesses, inactive tenant buildings, the RRAA Wastewater Treatment Facility, Reading Police Firearms Range, and airport-affiliated communications and infrastructure equipment and structures. The subject property is characterized by lightly undulating topography and a gently northwest trending slope grading away from the relatively level Schuylkill River floodplain. Aviation Road/Bernville Boulevard roughly denotes the Schuylkill River floodplain-upland line to the north-northeast. The majority of the subject property is uninhabited grass-covered and lightly wooded areas, marked by asphalt and stone-covered roads and access lanes. Figure 1 depicts the site location on U.S.G.S. 7½-minute topographic quadrangles for Reading, PA and Temple, PA.

Tenant-affiliated businesses have historically operated out of former military barracks on the subject property, particularly along Mitchell Road, Langley Road, and Wagner Road. The majority of the businesses identified have since relocated, or are in the process of relocating, equipment and materials off site. As of the date of this report, several tenants continue to maintain operations on the subject property (IMP, Ron's Machine, Threeway Pattern, Captain Clog).

Several concrete pad foundations are located adjacent to and east and west of Aviation Road; the concrete pads reveal the subject property's former residential trailer area. The trailers were erected in the mid-1960s, the majority of which have recently been demolished; some of the concrete pad foundations still remain in place. Scattered miscellaneous construction debris was noted around the former trailer areas. According to Mr. Sroka, some of the trailers were equipped with heating oil ASTs. Evidence indicating the presence of spills, releases or other potentially hazardous activities associated with the trailers' ASTs was not observed.

An approximate 300 foot by 300 foot soils stockpile is located on the subject property north of the firearms range. The soils, rocks, brick, sections of asphalt paving, and other roadway-related materials originated from nearby land development work associated with S.R. 222 improvements. According to Mr. Sroka, the stockpiled soils and material debris are situated atop the former airport salvage yard, a military equipment storage area. Mr. Sroka stated that the RRAA has initiated plans to remove the stockpiled soils from the subject property as soon as possible (fall, 2007).

The Reading Police Department currently utilizes a 100-meter small-arms firing range (range) on the subject property. Officer David Bucks, Rangemaster, was interviewed in order to gather relevant range history and current site information. The approximate 200 foot by 300 foot fenced range includes a baffled outdoor firearms range, firearms training and services building, and access and parking area. The range is bounded to the north, east, and west by earthen berms.

The shooting-in-butt facility is a historic WWII-era firing range facility formerly employed for the use of aircraft-mounted weapons target practice. The facility is currently used for road-salt storage.

Figure 2 features the current Parcel 1 setting. Figure 3 depicts areas recognized as those which represent potential environmental concern.

2.2 Properties within a 1,000 Foot Radius

<i>North</i>	<i>South</i>	<i>East</i>	<i>West</i>
The Schuylkill River and wooded floodplain.	RRAA runway and taxiways.	Runway right-of-way and runway 18-36 parallel the western subject property lot line.	The Schuylkill River and wooded floodplain.

2.3 Site Reconnaissance

The following is a summary of information gathered during the site reconnaissance on April 13 and April 20, 2007.

2.3.1 Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs)

One UST and five ASTs were identified on the subject property. A description of each is provided below.

- According to personnel interviewed, one 10,000-gallon heating oil UST is located on the west side of the IMP facility. No history of spills or leaks is associated with this UST.
- One 275-gallon heating oil AST is currently used at Building 130. The tank was in poor condition (corroded), however no soil staining, odors, or stressed vegetation were observed near the tank. Correspondence with the building tenant (Ron's Machine) revealed that no history of leaks or spills is associated with this AST.
- Two 275-gallon ASTs of unknown content (if any) were located along the northern face of Building 123; one 275-gallon AST was located along the east face of Building 123. All three tanks were in poor condition (corroded). Staining and stressed vegetation were observed around the base of the 'east' tank.



Building 123 AST.

- One abandoned storage tank of unknown volume or content was located in a wooded area west of Building 128. No stressed vegetation or odors were observed, however, dark-stained soils were observed in the area around the abandoned tank.

Evidence indicating the presence of seven former septic tanks was observed on the RRAA facility layout mapping, circa 1943. The septic tanks were located adjacent to the following buildings: 104 (one), 116 (one), 119 (one), 120 (one), 122 (three). Site reconnaissance of the former septic tank areas did not reveal evidence of existing septic systems, including pipe vents or drain fields. Mr. Sroka is uncertain as to the status of the removal of the septic tanks; however, the buildings affiliated with the septic tanks' underwent demolition activities during the mid-1980s.

2.3.2 55-Gallon Drums and Other Containers

Several 55-gallon drums were discovered during the site reconnaissance adjacent to the east face of Building 128. No staining or leaks were observed, however, the conditions of the drums ranged from fair to poor (corrosion). The content of the drums was unknown. An unknown number of four-gallon and smaller containers of unknown contents were observed within the abandoned Building 123.

Six gas cylinders of varying size were identified during the site reconnaissance: one outside Building 128, and five within Building 123. All the gas cylinders identified were not labeled. It is unknown as to whether these cylinders still contain compressed gases. The cylinders appeared to be in fair condition. No odors were revealed from the gas cylinders.

2.3.3 Nonhazardous Solid Waste

Evidence of nonhazardous solid waste was prevalent throughout the subject property. Various dumpsters, insulation, piping, wiring, and other miscellaneous trash and debris were observed within and around the exterior of the majority of the abandoned buildings.

2.3.3 Historical Land Use

Site use history for the subject property was determined via review of historical aerial photographs, mapping, RRAA facility reports and schematics, and an interview with property owner representatives. Refer to Section 3.0, Site and Area History for a detailed representation of resource findings.

2.3.4 Potential Off-site Sources

No off-site sources were found within proximal location, or in such condition to pose a significant potential to adversely affect environmental conditions on the subject property.

2.3.5 Other Items

In accordance with ASTM practices for non-scope considerations and the scope of work for this project, visual assessments for asbestos-containing material (ACM), lead-based paint, and mercury in lighting fixture ballasts were to be conducted. Due to the age of the buildings, ACM may be present in wiring, insulation, and floor tiles, lead may be present in paint, and mercury may be present in light fixtures.

2.3.6 Water Supply

According to Mr. Terry Sroka, water is currently supplied to the subject property via public utility.

2.4 Soils, Geology and Surface Water

2.4.1 Soils

According to the Soil Survey of Berks County, soil types the within the subject property predominantly consist of a mix of Urban land-Duffield complex, (UmB); Berks-Weikert complex (BkC); and Gibraltar silt loam (Gc). UmB soils are comprised of well-drained silt loams and silt clays, whose permeability is moderate. BkC and Gc soils are characterized by well drained silt loams. Floodplain area soils within Parcel 1 consist of Gibraltar silt-loam.

2.4.2 Geology

According to the Geologic Map of Pennsylvania the subject property is underlain by sections of the Maiden Creek Member of the Allentown Formation.

2.4.3 Hydrogeology

Based upon underlying geologic characteristics, it is assumed groundwater in the vicinity of the subject property tends to flow east towards the Schuylkill River.

2.4.4 Surface Water Flow

Subject property surface water flow is channelized via storm water drainage. Subject property location and topography suggests surface water ultimately flows in a general easterly direction towards the Schuylkill River.

3. SITE AND AREA HISTORY – 1947 TO DATE

3.1 Historical Aerial Photographs

STV examined historical aerial photographs acquired from Environmental FirstSearch (FirstSearch), dated 1947, 1958, 1964, 1981, 1999, and 2005. Also reviewed were the 7 ½-minute U.S.G.S. topographic maps for Temple and Reading, PA (1955 and 1956, respectively); the Berks County Soil Survey (1970); and various complementary online mapping sources. Further, STV consulted Mr. Terry Sroka, RRAA facility manager in order to develop a comprehensive history based upon Mr. Sroka's familiarity with the RRAA facility.

Environmental FirstSearch photos featured:

Section X.1.8 (Exclusion of Certain Constituents of Potential Environmental Concern from CERCLA), ASTM 1527-05, describes various constituents of potential environmental concern that are not necessarily covered by CERCLA's "all appropriate inquiry". ASTM 1527-05 references radon, asbestos, lead-based paint and lead in drinking water as several of these elements and states:

As a preliminary matter, it should be noted that an environmental site assessment that does not address substances excluded from CERCLA (whether those substances are excluded because they are petroleum products or by virtue of other characteristics) but that otherwise constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" should nevertheless entitle the user to the LLPs, assuming that other requirements of the provisions are met.

- 1947: Overall layout of historic barracks and supporting military housing facility buildings, along with street and access roads, appear relatively unchanged compared with present conditions. The shooting-in-butt target range, wastewater treatment facility, and historic salvage yard area are visible. The subject property is clear of forested areas as maintained grass dominates nearly all surface area within Parcel 1. Forested floodplain areas and the Schuylkill River are depicted adjacent to and north and east of the subject property. RRAA runway and taxiway areas lie to the south and west.
- 1958: Additional buildings are depicted just east of the shooting-in-butt area. The current Reading Police Firearms Range area appears as a cleared, structure-free vacant lot. The salvage yard area is now visible. The IMP facility appears is now visible. Increased tree cover is shown throughout the subject property. No discernible changes to surrounding adjacent properties from the previous photograph.
- 1964: No discernible changes to surrounding adjacent properties from the previous photograph. Increased tree cover is shown throughout the subject property.
- 1981: Current Reading Police Firearms Range area has been cleared; several structures appear on the periphery of the firearms range area. Industrial Metal Plating facility is visible in this photograph (prior to fire). Increased tree coverage is scattered across the subject property. Former north-south trending runway has been removed.
- 1999: Post-fire Industrial Metal Plating (IMP) is visible in this photograph. Some additional structures appear south of IMP. The stockpiled soils area is delineated as a triangular-shaped clearing just north of the firearms range. Dense tree coverage is seen across the majority of the undeveloped subject property.
- 2005: Subject property and surrounding areas are depicted on this photograph similar to present conditions.

3.2 Interview Information

STV conducted interviews to obtain information concerning land use, property history, recognized environmental conditions in connection with the property, and to verify background information. Information from these interviews is found throughout this Assessment. People interviewed, either in person or via telephone were:

Terry Sroka – RRAA Manager
Scott Haupt – Greenfields Fire Co. Fire Chief
David Bucks – Rangemaster, Reading Police Department
Gregory Maack – President, Industrial Metal Plating
Jamey Maack – Plant Manager, Industrial Metal Plating
Ron Wagner – Ron’s Machine Shop
Scott Hunter – Threeway Pattern
Barry Miltenberger – Building 129, no response
Scott Levan – Captain Clog, no response
Marilyn Firing Draperies – no response

Terry Sroka, Manager - RRAA

Parcel 1 originally housed military barracks and support facilities in conjunction with historic WWII-era airport operations. Additional information from interviews with Mr. Sroka is found throughout this assessment report.

Scott Haupt, Fire Chief – Greenfields Fire Company

Chief Scott Haupt, Greenfields Fire Company, located at 2301 Bernville Road, Reading, PA (adjacent to the RRAA), cited a 1986 response to a structure fire and ensuing hazardous materials release to the IMP facility, located on the subject property. Mr. Haupt stated various chemicals used by IMP were released in both liquid and gaseous form; he was unsure of ensuing clean-up measures carried out at the site.

David Bucks – Rangemaster, Reading Police Department

The firearms range has operated in its current location on the subject property since 1981. Officer Bucks (Rangemaster since 1991) stated that he was unsure of the land usage prior to the construction of the range. Earthen berms envelop the range to the north, east, and west. The north berm, which receives the majority of the munitions' impacts, along with the ranges baffle system, is in poor condition. Officer Bucks stated that no structural reinforcing, maintenance, or soils-capping has been provided to the berms since the range's construction. Further, no soils have ever been removed from the berms or range area. The range is structured for handgun, shotgun, and rifle training.

Gregory Maack – President, Industrial Metal Plating

The Industrial Metal Plating, Incorporated (IMP) facility is an anodizing and metals-finishing company, located at 153 Wagner Lane. The facility has operated at the subject property since 1959. IMP president Mr. Gregory Maack referenced the 1986 facility fire and resulting release of hazardous chemicals. Following the fire Pennsylvania Department of Environmental Protection (PADEP), formerly PA Department of Environmental Resources (DER), conducted thorough site inspections to include soils and groundwater testing. DER concluded that there was contamination as a result of the fire and instituted cleanup and monitoring activities to attain a remedial level of acceptance. Mr. Maack stated that IMP received a 'clean bill of health' as related to soils and groundwater contamination cleanup stemming from the 1986 fire.

Mr. Maack stated that the fire necessitated the reconstruction of an entirely new facility, during which time IMP imposed industry standard mandated spill control measures and source materials safety methodology. IMP currently employs 24-hour monitoring of in-house chemicals storage and effluent product; daily and weekly testing is also conducted to ensure effluents remain below categorical regulatory standards.

One 10,000-gallon heating oil UST is currently in use on the facility. No history of spills or leaks is associated with this UST.

Ron's Machine Shop

Ron's Machine (Building 130) has leased Building 130 for approximately 40 years. STV questioned the owner of the facility, which provides small machine repair and parts-retrofitting services to area business, whether chemicals used in business operations may have resulted in the release, or are indicative of the threat of release, of hazardous chemicals. The owner stated that there is no history of leaks, spills, or releases of any chemicals or hazardous materials as a result of business operations. Past use of Building 130 was a military barracks. One 275 gallon

heating oil AST is currently used by Ron's Machine. No history of spills or leaks is associated with this AST.

Dave Hunter – Threeway Pattern

Building 124 and Building 128 has been under lease agreement with Threeway Pattern for approximately 28 years. Mr. Hunter indicated that to the best of his knowledge, there have never been any incidents resulting in the release, or potential release, of hazardous chemicals or materials as a result of business operations. Threeway Pattern is a manufacturer of textile fabric and thread and yarn product. However, Buildings 124 and 128 have primarily been used for storage. Both buildings appeared vacant at the time of the site reconnaissance.

Barry Miltenberger

Barry Miltenberger was contacted via telephone regarding the history of the rental unit on the subject property (Buildings 129). According to Mr. Terry Sroka (RRAA) Building 129 was used for storage. As of the date of this report, STV has not received a response. Upon receiving a response, information pertinent to the subject property will be provided as an Addendum to this report. Building 129 appeared vacant at the time of the site reconnaissance.

Marilyn Firing Draperies

As of the date of this report, STV has not received a response from Marilyn Firing Draperies (Building 124). Upon receiving a response, information pertinent to the subject property will be provided as an Addendum to this report. Building 124 was vacant at the time of the site reconnaissance.

Scott Levan – Captain Clog

As of the date of this report, STV has not received a response from Mr. Levan. Upon receiving a response, information pertinent to the subject property will be provided as an Addendum to this report.

3.3 Past Uses Of/Operations on the Subject Property

Mr. Sroka indicated that the subject property been under ownership of the RRAA since 1956. Prior to 1956, the airport property was owned by the City of Reading (1939). The airport was leased by the Department of War in 1942 and RRAA reacquired ownership of the airport in 1945.

According to information gathered from interviews, RRAA facility plans and engineering schematics, and aerial photographs dating back to 1947, past use of the subject property has primarily been for military personnel housing. Recently, tenant-owned, light industrial businesses have occupied the historic barracks and structures.

3.4 Spills, Releases, and Other Hazardous Materials (OHMs) Used, Stored, or Disposed of on the Subject Property

Based upon regulatory database information, review of historical aerial photography, and interviews with site personnel, evidence indicating spills, releases, or other hazardous materials disposed of on the subject property has been revealed. Further, the presence of spills, releases, or the use, storage or disposal of OHM's on the subject property was observed during STV's site reconnaissance (see Section 2.3).

Industrial Metal Plating

Following an in-house filtering process, IMP releases limited chemical effluent to the RRAA Wastewater Treatment Facility (WWTF). Heavy metals used in metal plating operations have historically been discharged to the RRAA WWTF. Materials discharged include: aluminum, cadmium, chromium, copper, nickel, lead, and zinc. RRAA records regarding IMP operations indicate that the discharges have historically exceeded allowable heavy metal and chemical limits, prior to and following the 1986 facility fire. Available RRAA documentation reviewed revealed the following correspondence between RRAA and IMP, in connection with IMP inspections, violations, and WWTF operations based on managing contaminants of concern from IMP effluent:

1984

- A ‘large amount’ of oil based product was accidentally dumped by IMP over a period of two days. The product discharged into the RRAA WWTF; subsequent sampling indicated the substance owned a pH of 15.
- RRAA contacted IMP to address the ‘sinkhole’ that was discovered behind the IMP facility.

1985

- Documentation and analysis results of RRAA WWTF sludge samples were ‘not recommended for cropland application’ due to exceptionally high levels of heavy metals and other trace elements.
- RRAA personnel observed a red color in wastewater and treatment units at the WWTF. The source of the red color was traced to a dye discharge from IMP. Follow-up testing by PADER revealed elevated pH and heavy metals exceeding acceptable facility guidelines.

1986

- Facility fire (March) resulted in the documented contamination of the RRAA WWTF and Schuylkill River.

1987

- IMP instituted revised effluent methodology and sampling program in conjunction with reconstructed facility.

1988

- High concentrations of acids were revealed in WWTF sampling; IMP reported an undetermined volume of acid was inadvertently dumped into the sewer line.

1989

- Semi-annual analysis revealed select heavy metals (aluminum) exceeded permitted limitations.

1990

- Semi-annual analysis revealed select heavy metals (nickel) exceeded permitted limitations.

1991

- Semi-annual analysis revealed select heavy metals (nickel) exceeded permitted limitations.

STV was unable to obtain post-1991 records or correspondence indicating IMP practices and operations.

Firearms range/Shooting-in-butt facility

Cumulative impacts to area soils from the use of lead ammunition at the Reading Police Firearms Range area and shooting-in-butt facility area are considered a potential hazardous materials source. According to Environmental Protection Agency (EPA), authority exists under RCRA to compel remediation where an imminent and substantial endangerment to health or the environment (e.g., contamination of a sensitive habitat or a drinking water supply) may have been created by munitions fragments at the firing range. Soils and range materials impacted by hazardous concentrations of lead will require special management practices during any excavation and/or disposal practices.

Storage Tanks

Subject property ASTs identified and investigated revealed the potential for petroleum products contamination at the site of the storage tanks on the subject property.

Debris/mounded soil/stained soils

Construction debris, miscellaneous debris, and mounded and stained soils encountered during subject property reconnaissance activities were identified as potential environmental conditions associated with potential dumping or filling on the subject property.

3.5 Land Title Records

STV's review of a title search for the subject property revealed no documentation of any environmental liens or activity and use limitations for the subject property.

4. SITE AND AREA REGULATORY INFORMATION

4.1 Environmental Database Review

For this Assessment, STV reviewed the Environmental FirstSearch, Inc. (FirstSearch) database for the subject property to identify existing or abandoned sites of environmental interest or concern within the search radius prescribed by ASTM standards. The radius was expanded to one mile to search certain databases beyond the subject property.

In order to satisfy ASTM guidelines governing environmental record source search criteria, STV developed a facility-encompassing database report based on the approximate geographical center point of the RRAA facility. While not 'parcel-specific', the database footprint fully encompassed Parcel 1. The database provided practically reviewable information as related to pertinent environmental conditions at the RRAA facility.

Section 8.2.2 (Additional Environmental Record Sources) of ASTM 1527-05 describes various supplemental measures STV employed while developing the baseline conditions summary for Parcel 1 and states: *Additional Environmental Record Sources: To enhance and supplement the standard environmental record sources in 8.2.1, local records and/or additional state or tribal records shall be checked when, in the judgment of the environmental professional, such additional records (1) are reasonably ascertainable, (2) are sufficiently useful, accurate, and complete in light of the objective of the records review and (3) are generally obtained, pursuant to local good commercial or customary practice, in initial environmental site assessments in the type of commercial real estate transaction involved.*

Various facilities adjacent with RRAA operations were identified by the database report, including: LUST sites, registered UST and AST sites, Emergency Response Notification System (ERNS) sites, and Resource Conservation and Recovery Act (RCRA) sites. Based upon a

comprehensive evaluation of these sites, it has been determined that these sites do not have the potential to significantly impact the subject property.

Due to discrepancies in the location of some facilities in the databases arising from incorrect or incomplete addresses some facilities may be listed as un-mappable. No un-mappable facilities were observed to be within the ASTM minimum search distance of the subject property. For a complete description of each database and pertinent information regarding each site identified, refer to Appendix B. A review of the regulatory information from the database search for possible recognized environmental conditions (RECs) within the ASTM approximate minimum search distance is provided in the Federal and State sections below.

4.1.2 Federal Environmental Records

TABLE 2: Federal Records		
Record Source	Within Property	Adjoining Properties
<i>National Priorities List (NPL) Facilities</i>	None	None
<i>Delisted NPL Facilities</i>	None	None
<i>CERCLIS Facilities</i>	None	None
<i>CERCLIS NFRAP Facilities</i>	None	None
<i>RCRA CORRACTS TSD Facilities</i>	None	None
<i>RCRA Non-CORRACTS TSD Facilities</i>	None	None
<i>RCRA Generators</i>	None	None

4.1.3 State Environmental Records

TABLE 3: State Records		
Record Source	Within Property	Adjoining Properties
<i>Hazardous Waste Sites</i>	None	None
<i>Equivalent NPL Facilities</i>	None	None
<i>Equivalent CERCLIS Facilities</i>	None	None
<i>Landfill/Solid Waste Disposal Sites</i>	None	None
<i>Leaking Underground Storage Tanks</i>	None	None
<i>Registered Storage Tank</i>	None	None
<i>Institutional/Engineering Control</i>	None	None
<i>Voluntary Cleanup Sites</i>	None	None
<i>Brownfield Sites</i>	None	None

4.2 U.S. Environmental Protection Agency Records Review

STV submitted a Freedom of Information Act request for the subject property. Due to the required deliverable date for this ESA however, no records have been forwarded to STV for review. Documentation regarding the request is included in Appendix F.

5. REFERENCES

The following maps, resources, or other publications may have been used in the preparation of this report.

- American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-05).
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“CERCLA” or “Superfund”), as amended by Superfund Amendments and Reauthorization Act of 1986 (“SARA”) and Small Business Liability Relief and Brownfields Revitalization Act of 2002 (“Brownfield Amendments”), 42 U.S.C. §§9601, et. seq.
- Resource Conservation and Recovery Act, as amended (RCRA), 42 U.S.C. §6901, et. seq.
- Federal Emergency Management Agency, National Flood Insurance Program, Flood Insurance Rate Maps; Map Numbers: 42011C0364F, 42011C0501E, 42011C0502F.
- United States Department of Agriculture, Soil Conservation Service, Berks County Soil Survey.
- United States Geological Survey, 7½-minute Topographic Maps, Reading and Temple, PA.
- United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Maps, Reading and Temple, PA.

5.1 Summary of Previous Reports

STV reviewed the report entitled “Environmental Assessment for the Extension and Reconstruction of Runway 18-36, Prepared for the Reading Regional Airport Authority, May 2005” (DMJM Aviation, Philadelphia, PA) in order to identify recognized environmental conditions that may impact the subject property. Also reviewed was the “Airport Master Plan for the Reading Regional Airport Authority, December 2004” (TriState Planning & Engineering, P.C.). While neither report indicated the presence or absence of potential environmental conditions on the subject property itself, the 2005 Environmental Assessment indicated a comprehensive groundwater investigation was conducted for the RRAA in 2003. Overall results of soils and water tested revealed benign conditions.

Available RRAA records and documentation were also reviewed for pertinent historical waste handling manifests, records of decisions regarding sites of potential concern, and current and

historic analytical testing results as related to related to the release of hazardous waste materials characterization.

6. CONCLUSION AND RECOMMENDATIONS

STV has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-05 for the subject property designated as Parcel 1, RRAA, Reading, PA. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. STV has identified the presence of recognized environmental conditions in connection with subject property operations. **Supplementary site characterization activities, including a Phase II ESA is recommended for the subject property.**

It is STV's professional opinion that the impacts on the subject property are as a result of existing and historic recognized environmental conditions identified in respective sections of this report. STV recommends that the additional investigation be conducted to delineate and characterize potential hazardous substances or petroleum products and provide a greater certainty regarding the identified recognized environmental conditions on the property. In particular, the following sites on the subject property are recommended areas to which additional services to include a broader scope of assessment and evaluation techniques should be included.

IMP Facility: fire, sinkhole, contaminants of concern historically discharged to RRAA Wastewater Treatment Plant.

Reading Police Firearms Range: lead-based ammunition usage at the range necessitates characterization and sampling activities of soils and baffles-system in order to: 1. evaluate worker health and safety exposure to potential contaminants of concern and to identify agency-mandated soil management and reuse criteria for contaminated materials, and 2. determine if additional soil characterization analyses are necessary to delineate the horizontal and vertical extent of contamination.

Shooting-in-butt facility: historic lead-based ammunition usage at the WWII-era target facility necessitates soil characterization analyses to delineate the potential horizontal and vertical extent of lead contamination.

Miscellaneous debris/storage tanks/stained soils: construction and miscellaneous debris associated with recently razed subject property buildings, abandoned ASTs, and stained soils.

Lead and asbestos bearing materials: potential lead based paint and asbestos bearing materials in and around subject property buildings.

7. DISCLAIMER

STV concludes, based on our best professional judgment and the applicable professional practices used in surveying and assessing this property that data gaps exist with respect to past waste handling and disposal practices at the subject property and within the surrounding areas adjacent to the site. In view of the rapidly changing status of environmental laws, regulations, standards, and guidelines, STV does not assume responsibility for other environmental issues that may arise after the study has been completed and that may affect the subject property.

This report was prepared for the BCIDA and is based in part on third party information not within the control of STV. While it is believed the third party information contained herein is reliable, under the conditions and subject to the limitations set forth herein, STV does not guarantee the accuracy of that information.

8. QUALIFICATION STATEMENT

STV Incorporated has prepared this Phase I ESA Report for the BCIDA in accordance with the ASTM “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (E1527-05).

STV’s environmental professionals have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. STV has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The Assessment Report was completed by Peter Gaskins, Environmental Scientist, and reviewed by Wendy Schellhamer, Environmental Scientist, both with STV. Ms. Schellhamer has fifteen years experience in environmental sciences, including ten years in site assessments, and has taken a course in “Performing Phase I Environmental Inspections.” Mr. Gaskins has six years experience in environmental sciences and has completed numerous Phase I Assessments, and has taken a course in “Gearing Up For the Next Phase: Vapor Intrusion & Due Diligence Challenges in the Real World; Environmental Data Resources, Inc..

Resumes for Ms. Schellhamer and Mr. Gaskins are attached in Appendix G.

APPENDIX H
DEP FILE REVIEW DOCUMENTS

**APPENDIX I
RESUMES**



Qualifications Summary

- *Over 13 years of experience in environmental management consulting for land development and private industry.*
- *Over 2 years of experience in air emissions testing for private industry and government.*
- *Managed multi-phase environmental investigations, remedial programs, and monitoring programs for various utility/ industrial/commercial clients throughout the Mid-Atlantic U.S.*
- *Performed over 175 real estate due diligence and advisory projects for private lenders, attorneys, and private industrial, commercial and residential developers*

Fields of Competence

Mr. Adukaitis has over fifteen years of experience in the environmental field, including thirteen years in the environmental consulting industry and two years in air emissions testing. He has acted as a field technician, environmental scientist, task manager, and project manager. As a due diligence project manager, he is responsible for the daily management of real estate due diligence, including Phase I environmental site assessments, Phase II site investigations, and specialized evaluations for lender, attorney, and developer clients. As a project manager, Mr. Adukaitis also has experience in the planning and performance of soil and ground water remediation, monitoring and recovery well installation, test boring and subsurface soil sampling, aquifer testing, surface water and sediment sampling, and LNAPL recovery system installation and operation. He has supervised and coordinated the field activities of remediation, drilling, geophysics, site preparation and surveying subcontractors, and field sampling teams for investigations and remediations in New Jersey, Pennsylvania, Delaware, Maryland, and Virginia. He has performed project plan development, cost estimating and tracking, subcontracting, oversight of field operations, and technical report preparation. He provided environmental services for the demolition of two coal-fired electric generating units. He performed land surveying to support water distribution design.

As an air quality scientist and project manager in air emissions testing, Mr. Adukaitis has experience in performing relative accuracy test audits and certification tests for a variety of industries, such as power generating stations, resource recovery units, brick refractories, pharmaceutical plants, and cement kilns. He has prepared testing protocols, analyzed samples, managed and interpreted data, and generated reports submitted to clients and state regulatory agencies.

Credentials

B.A. Environmental Studies, Denison University (1999)

Training and Associations

OSHA 40 Hour Worker Training

Property Condition Assessment (PCA) Training – August, 2010

Key Projects

Real Estate Due Diligence

Performed over 175 Phase I assessments, real estate transaction screens, and preliminary assessments at commercial, residential, and industrial facilities, and development tracts throughout the Mid-Atlantic United States. Performed all aspects of field reconnaissance, research, and report preparation for environmental real estate assessments of industrial, commercial, and agricultural properties. Interface with state and local government, environmental, health, and emergency agencies.

Performed over 30 Phase II site investigations at commercial, residential, and industrial facilities. Performed all aspects of site investigation including preparing proposals; providing management and technical oversight of subcontractors, field investigations, and report preparation. Managed field tasks, including borehole drilling, monitoring well installation, and sampling soil borings with surface and subsurface soil sampling.

Site Investigation and Remediation

Deepwater Generating Station ISRA Remediation, Pennsville, New Jersey: Served as staff scientist, project scientist, senior project scientist, and task manager for the remediation of a coal-, natural gas-, and oil-fired electric generating station. Project responsibilities included preparing project workplans and cost estimates; providing management and technical oversight of subcontractors, field investigations, and report preparation. Managed field tasks, including borehole drilling, monitoring well installation, hydrogeologic studies, sampling soil borings with surface and subsurface soil sampling, and soil excavation. Work was performed in accordance with New Jersey Industrial Site Recovery Act (ISRA).

Former Manufactured Gas Plant, Shippensburg, Pennsylvania: Served as senior project scientist and task manager for the investigation and remediation of a former manufactured gas plant. Project responsibilities included soil investigations to determine extent of contamination, soil and ground water waste characterization sampling, and hydrogeologic studies. Prepared pre-design evaluation report and remedial action workplan documents. Oversaw remedial activities including the excavation and removal of 4,800 tons of impacted soil and concrete and the demolition of a belowgrade gas holder foundation.

Former Manufactured Gas Plant, Ashland, Pennsylvania: Served as senior project scientist and task manager for the investigation and remediation of a former manufactured gas plant. Project responsibilities included soil investigations to determine extent of contamination, soil and ground water waste characterization sampling, and hydrogeologic studies. Prepared pre-design evaluation report and remedial action workplan documents. Oversaw remedial activities including the excavation and removal of over 14,500 tons of impacted soil and masonry material and the demolition of two belowgrade gas holders. Oversaw the construction and operation of an on-site water treatment system which pumped and treated over 298,000 gallons of water.

Sunoco Chemicals LNAPL Recovery System, Philadelphia, Pennsylvania: Served as staff scientist, project scientist, and senior project scientist for the operation and maintenance of a free product

recovery system. Project responsibilities included periodic inspections, trouble-shooting and maintenance, and site-wide ground water level measurements. Developed power point training manual for plant personnel.

Pepco Holdings, Inc (PHI) Substations Investigation and Remediation, Various Sites in New Jersey, Delaware, Maryland, and Virginia: Served as staff scientist for spill investigation and waste characterization. Project responsibilities included soil investigations to determine potentially contaminated areas surrounding several types of electrical equipment including transformers, potential transformers, oil-filled and gas-filled breakers, regulators, capacitor banks, and communications towers. Conducted delineation and site investigations to determine extent of contamination. The work was performed following the requirements of the USEPA, Toxic Substance Control Act, Delaware Department of Natural Resources and Environmental Control, Maryland Department of the Environment, Virginia Department of Environmental Quality, and the New Jersey Department of Environmental Protection.

Oxford Valley Landfill Methane Monitoring, Falls Township, Pennsylvania: Served as staff scientist, project scientist, senior project scientist, and project manager for monitoring methane levels at a closed landfill. Project responsibilities include measuring methane concentrations from monitoring wells installed as part of an active and passive methane venting system. Submitted quarterly reports to Pennsylvania Department of Environmental Protection.

Abington Shopping Center Dry Cleaner, Abington, PA: Served as a staff scientist for obtaining relief from liability for soil and ground water under Pennsylvania Act 2 Site Specific Standards at a dry cleaning facility. Project responsibilities included quarterly ground water sampling and completing Act 2 final report.

PSEG Electrical Equipment Spill Management, Various Sites in New Jersey: Served as a staff scientist for emergency response to electrical equipment spills. The spills occurred at electric generating stations, electric switching yards, electric substations, distribution poles, and customer locations. The equipment involved included various sized transformers and capacitors, formerly containing petroleum liquids with and without PCBs. Project responsibilities included responding to spill site to observe spill contractor remedial actions and collect surface and sub-surface soil samples from open excavations. Submitted reports summarizing spill cause, equipment involved, contractor's actions, and the results of compliance sampling.

Indian River Power Plant Free Product Recovery, Millsboro, Delaware: Served as a staff scientist for the recovery of free product that had leaked from underground lines associated with an aboveground storage tank (AST). Project responsibilities included overseeing the installation of ground water monitoring wells, ground water recovery wells, and a total phase extraction system. Conducted quarterly ground water sampling, collected ground water elevation measurements, conducted hydrogeologic studies, and monitored a free product recovery system. Work was performed in accordance with Delaware Risk-Based Corrective Action Program.

Vienna Generating Station, Vienna, Maryland: Served as staff scientist for the remediation of free product. Project responsibilities included hydrogeologic studies.

Demolition Oversight

Martins Creek Demolition Oversight, Martins Creek, Pennsylvania: Served as project scientist for environmental oversight of the demolition of two coal-fired eclectic generating units. Project responsibilities included oversight of demolition activities to ensure they were completed in accordance with normal industry practices and procedures, material is segregated for processing or disposal, processed material is recycled or reused, and waste material is properly transported and disposed. Observed job site safety for appropriate practices, procedures, and personnel protective equipment. Other responsibilities included develop daily field reports; providing photographic documentation of significant events or activities; completing transport vehicle logs for each type of material; completing material summaries by type, with actual or estimated quantities; signing non-hazardous waste bills of lading as client's agent, provide periodic updates to client on project progress, and monitoring contractor activities to prevent spills or releases of materials.

Environmental Compliance

Tier II Chemical Inventory Report, Bethlehem, Pennsylvania: Served as project scientist for submitting a Tier II chemical inventory report. Project responsibilities included inventorying chemical stored at an electric generating station and submitting the Tier II report to the client.

Residual Waste Report, Bethlehem, Pennsylvania: Served as project scientist for submitting a residual waste report. Project responsibilities included verifying residual waste removed from an electric generating station and submitting waste report to the Pennsylvania Department of Environmental Protection (PADEP).

Survey and Water Main Renewals

Sharon Downtown Transmission Main, Sharon, Pennsylvania: Served as project scientist on a project for replacement and reinforcement of 15,000 feet of 24" transmission main on various streets in downtown Sharon. Project includes two directional drilling crossings of the Shenango River, two state highway bores, three railroad bores, more than 30 fire hydrant renewals, 43 system tie-in locations (1" to 30"), and 125 service renewals (3/4" to 8"). Located field objects utilizing wheel and tape.

Water Main Renewal and Reinforcement Project, Delaware County, Pennsylvania: Served as project scientist for water main project on MacDade Boulevard in Ridley Park Township and Borough of Glenolden. Located field objects utilizing wheel and tape. Gathered utility information from the water company, and gas, electric, sanitary sewer, and storm sewer information from other utilities and municipalities. Developed base plans, proposed plans, and final plans interactively.

Four Water Main Renewal and Reinforcement Projects, Bucks, Chester, and Montgomery Counties, Pennsylvania: Served as project scientist for four water main projects on Hazelhurst Ave and Old Gulph Road in Lower Merion Township, on Horseshoe Pike in East and West Brandywine Township (project divided into three phases), and on various streets in the Bristol Township and Borough of Bristol. Located field objects utilizing wheel and tape.

Three Water Main Renewal and Reinforcement Projects, Chester and Delaware Counties, Pennsylvania: Served as project scientist for three water main projects on Downingtown Pike in East Bradford Township (24" Transmission Main), in various streets in the Newtown Square section of Newtown Township (over 20,000 feet, project divided into two phases), and in various streets in the Paoli/Malvern section of Willistown Township. Located field objects utilizing wheel and tape.

New Water Main Installation Project, Gilbertsville, Pennsylvania: Served as project scientist for a water main project on Route 73 in Douglas Township. Located field objects utilizing land surveying techniques.

Four Water Main Renewal and Reinforcement Projects, Chester and Delaware Counties, Pennsylvania: Served as project scientist for four water main projects on various downtown streets in Ridley Park Borough (two phases), various downtown streets in Prospect Park borough, Old Lancaster Road in Easttown and Tredyffrin Townships, and Conestoga Road in Easttown Township. Located field objects utilizing land surveying techniques.

Three Water Main Renewal Projects, Chester County, Pennsylvania: Served as project scientist for three water main projects on Ravine Road in East Whiteland Township, Strasburg Road (three phases) in East and West Bradford Townships, and Scennellstown Road in East Bradford Township. Located field objects in field utilizing land surveying techniques.



Qualifications Summary

- *Over 20 years of experience in environmental management consulting for land development, private industry, and government.*
- *Managed multi-phase environmental investigations, remedial programs, and monitoring programs for various industrial/commercial clients at over 100 facilities throughout the eastern U.S. and the Caribbean*
- *Managed over 500 real estate due diligence and advisory projects for private industrial, commercial and residential developers*
- *Designed and managed water resources projects including stormwater management, sewer planning, wastewater disposal feasibility, open-channel flow and dam breach modeling projects at sites throughout Pennsylvania*
- *Performed ongoing environmental compliance and permitting services for stormwater, industrial pretreatment, wastewater, and contingency planning for industrial clients throughout the eastern United States*
- *Committee Member of ASTM E50 for development of Phase I ESA Standard E1527-05 and related environmental assessment standard practices*

Fields of Competence

Mr. Coyne has over twenty-two years of managerial and technical project experience in the performance of groundwater and soil assessments, investigations, and remedial programs, as well as water resources and surface water studies for industrial and commercial clients throughout the eastern United States and the Caribbean. Mr. Coyne's professional area of expertise is in real estate environmental advisory services, including complex due diligence evaluations and environmental decision making for industrial or commercial property transactions. Mr. Coyne also has advanced academic and professional experience in water resources engineering, stormwater management, surface water and watershed modeling systems, dam breach flow analyses, and urban stormwater design. Mr. Coyne has designed and executed a standard protocol for the assessment of arsenic and other residual agricultural chemicals at development tracts, and has authored several short papers on the subject. He has also authored articles and short publications related to the application of groundwater and surface water environmental assessment services within the real estate market, and the key elements of successful stormwater management for land development projects.

Credentials

Institute of Professional Environmental Practice (IPEP) Qualified Environmental Professional (QEP)
Pennsylvania Department of Environmental Protection (DEP) Qualified Consultant for NPDES Stormwater Permitting
M.S. Water Resources and Environmental Engineering, Villanova University (2000)
Post-Graduate Certificate, Urban Water Resource Design, Villanova University (2001)
B.A. Earth/Environmental Science, Boston University (1992)

Training and Associations

American Society for Testing and Materials (ASTM) Member, Committee E50 (Environmental Assessments)
Institute of Professional Environmental Practice (IPEP) Qualified Environmental Professional (QEP)
Board of Directors, Schuylkill River Greenway Association (SRGA)
Associate Member, American Society of Civil Engineers (ASCE)
OSHA 40-Hour Hazwoper and Worker Supervisory Training

Key Projects

Real Estate or Pre-Development Due Diligence

Key client manager and project leader for environmental consulting, advisory and due diligence services for several major eastern US lending institutions, commercial and residential developers, investment trusts, and civil engineering firms. Services include ESAs and other due diligence assessments, soil and groundwater investigations, specialized technical or regulatory reviews, land development feasibility studies, and other advisory services real estate decision making. Managed and coordinated over 500 Phase I assessments, real estate transaction screens, and preliminary assessments at commercial, residential, and industrial facilities, and development tracts throughout the eastern United States.

Former Industrial Protective Wear Manufacturer, Warrington, Pennsylvania: Designed and executed a comprehensive soil and groundwater investigation at the subject property on behalf of a prospective purchaser, to further evaluate a potential on-site source of chlorinated solvent impacts. The work uncovered a previously unidentified on-site source of groundwater impact and a complex soil-to-groundwater transport mechanism below the site. These observations resulted in the seller's agreement to remediate the site to Act 2 Standards as part of the purchase agreement.

Motel Complex, West Reading, Pennsylvania: Managed and performed due diligence ESA and Phase II site investigations at a motel complex slated for redevelopment by the County of Berks. Work included evaluation of options for the demolition of existing structures, asbestos-containing materials management, waste materials characterization and placement of on-site fill material. Outcomes of the project also included considerations of remedial options under Pennsylvania's Act 2 (Land Recycling Program) for various site re-use options.

Mushroom Production Facilities, Temple, Pennsylvania: Managed and performed environmental site assessments and subsequent site investigation activities at seven mushroom production facilities on behalf of a prospective purchaser of the site. The tasks included the removal of several USTs and associated subsurface assessments, as well as investigative tasks. The findings of the assessments were used to develop various remedial strategies and associated cost estimates.

Former Vacuum Pump Manufacturing Complex, City of Philadelphia, Pennsylvania: Performed a comprehensive series of due diligence evaluations at a vacant, 200,000-square foot former vacuum pump manufacturing complex on behalf of a prospective purchaser, which planned the site for re-use as an industrial assembly facility. The evaluations included standard ASTM-defined Phase I ESA tasks, as well as additional planning and evaluation activities including Act 2 planning and remedial scope reviews.

Farm Dump Investigation and Removal, Coopersburg, Pennsylvania: Planned, coordinated and executed studies of a 600-ton (250-cubic yard) dump site in an abandoned quarry pit at a farm tract proposed for residential development. The investigation of the dump included the evaluation of naturally-occurring, elevated arsenic concentrations in weathered bedrock. The project culminated in the excavation and removal of the deposited debris, which included coordination with DEP and

permitted disposal facilities, segregation of materials, and proper disposal of three separate waste streams.

Bank Branch Acquisitions, 84 Sites, Pennsylvania and New Jersey: Managed a series of due diligence assessments and follow-up site investigations at a set of bank properties in ten Pennsylvania and New Jersey counties surrounding Philadelphia. The properties were evaluated on behalf of a prospective purchaser of the sites as a single portfolio, resulting from the merger of two large Eastern US lending institutions. Additional due diligence evaluations subsequent to the initial assessments included asbestos surveys and soil and groundwater investigations.

Planned Golf Course and Residential Development, Lederach, Pennsylvania: Managed due diligence site assessments and site investigation activities for a set of five agricultural parcels totaling approximately 500 acres, which were planned for a golf course and residential development complex. Project tasks included Phase I environmental site assessments with subsequent ESA and parcel add-on assessments as well as soil and groundwater investigations at identified potential areas of concern, including agricultural chemicals application, farm dumps, and underground storage tanks (USTs).

Industrial Waste Landfill, Quakertown, Pennsylvania: Performed a Phase I environmental site assessment that resulted in the identification of a previously-unidentified, large-volume industrial waste landfill within a wooded area on an active farm property. The operation had been suspected and searched for by EPA and DEP officials based on anecdotal evidence in prior years but had not been previously located or investigated. The assessment was performed on behalf of a prospective purchaser, which used the newly discovered information to exercise its termination clause in the agreement of sale. Subsequent studies by the EPA have resulted in the designation of this facility as a National Priority List (NPL) site.

Agricultural Soils Evaluations, Various Counties, Pennsylvania: Designed and performed a cost-effective screening evaluation for the presence of residual concentrations of agricultural chemicals in shallow soils at farm and orchard tracts in several Pennsylvania counties, including Chester, Bucks, Montgomery, Berks, Lancaster, Lehigh, Northampton, Schuylkill, Franklin, and York. The investigations were performed in conjunction with other real estate due diligence activities at farm tracts planned for residential development. At certain sites, the screening investigations were followed by comprehensive, vertical delineations of specific agricultural contaminants (arsenic, lead, and specific organochlorine pesticides and chlorinated herbicide compounds).

Former Glass Manufacturing Complex, Glassboro, New Jersey: Managed and completed a comprehensive Phase I assessment for a large former glass manufacturing complex undergoing planned industrial redevelopment. Performed additional assessment services pertaining to former and ongoing remedial activities as part of New Jersey's ISRA program requirements.

Development-Phase or Industrial Compliance and Permitting

Wetlands and Stream Mitigation Area Monitoring, Berks Park 78 Project, Bethel Township, Berks County, Pennsylvania: Liberty was retained to perform the mitigation area monitoring tasks for compensatory wetland and stream mitigation tasks required as part of the approved DEP/USACE Joint Permit at the Berks Park 78 development tract. The compensatory and mitigation activities

included the restoration of previously-drained wetlands and reconstruction of stream channels had been impounded by farm ponds. Liberty supervised and monitored the mitigation activities during the entire period of construction, and remains responsible for monitoring and DEP/USACE reporting of the mitigation conditions on a semiannual and annual basis. The scope of work has also included the completion of a post-construction as-built report, regular agency correspondence and project updates to DEP and USACE on behalf of the project's general contractor and the county's Industrial Development Authority.

Automobile Manufacturer, Spring Hill, Tennessee: Conducted studies, regulatory reviews, calculations and reports as part of a Combined Wastestream Formula (CWF) Technical Reporting Package at a major automobile manufacturing and assembly plant. The project included the determination of the regulatory applicability for various process-related wastestreams, and the categorical limits defined by 40 CFR Parts 431 through 438. New effluent limits for several permitted wastestreams were established as a result of the CWF calculations.

Office Products Manufacturing Facilities, Southern and Eastern U.S.: Reviewed and evaluated environmental management and compliance data for a chain of seven manufacturing facilities located in the southern and eastern United States (Kentucky, Texas, South Carolina, North Carolina and Oklahoma). Reviews included auditing of each facility's complete environmental management systems, record-keeping practices, permit conditions, and compliance status. The audit was used in concert with a series of environmental due diligence projects for the facilities prior to a divestment of assets that included the manufacturing facilities.

Electronics and Precision Machine Manufacturing Facility, Allentown, Pennsylvania: Responsible for industrial wastewater permitting and compliance services for a manufacturer of precision mail sorting machines for four years as an ongoing project. Compliance services have included reviewed and coordination of sanitary sewer pretreatment permit documents, preparation of Spill Prevention and Control Plans and Toxics Management Plans, and other related services (client representation and advocacy) as part of Borough and State industrial permit compliance efforts.

Metal Products Manufacturer, West Chester, Pennsylvania: Responsible for a series of annual industrial compliance auditing and permitting tasks as part of federal and state reporting requirements. Project tasks include stormwater management, sampling, reporting and permit inspections, and waste generation and materials inventory reporting tasks. Responsibilities have also included ongoing consultative auditing and general industrial permitting oversight.

Multiple Industrial Facilities, Eastern U.S.: Performed environmental compliance audits in concert with Environmental Site Assessments for due diligence purposes at more than 50 industrial facilities throughout the mid-Atlantic and northeastern U.S. Projects typically included a review and evaluation of facility permitting programs; internal environmental management (i.e. communication and training) systems; waste generation, tracking and removal systems; and specific reporting practices as they apply to local, state and federal regulatory requirements for each facility.

Site Investigation and Remediation

Performed comprehensive investigative and remedial services, including Pennsylvania Act 2 and New Jersey ISRA programs, at industrial and commercial properties throughout the Mid-Atlantic region. These included over 150 site investigations and cleanups at sites in connection with property transaction assessments, remedial investigations, and baseline/preliminary assessments throughout the northeastern United States, Puerto Rico, and the U.S. Virgin Islands. Managed multi-phase remedial programs and monitoring programs for a large-scale petrochemical contract involving over 50 facilities in the mid-Atlantic U.S. region.

Gasoline Station and Convenience Market, City of Reading, Pennsylvania: Designed and constructed a high-vacuum, high-volume soil vapor extraction (SVE) system at an active gasoline station with gasoline impacts affecting soils within the unsaturated zone. The treatment system was designed to remediate soils within two discrete zones of impact (shallow and deep), with design elements which allowed for isolated treatment both vertically and horizontally within each zone. The system construction included the required permitting, zoning approvals, electrical and other infrastructure improvements.

Wire Manufacturing Facilities, Plainfield and Piscataway, New Jersey: Conducted Preliminary Assessments (PAs) and Site Investigations (SIs) at two active wire plating facilities as part of planned facility closures, in accordance with New Jersey ISRA program requirements. Projects included identification of areas of concern, subsequent site investigation of potential subsurface chemical impacts, and PA/SI reporting under ISRA.

Former Scrap Metal Recycling Yard, Trenton, New Jersey: Conducted a comprehensive Remedial Investigation and Remedial Action at a former recycling yard planned for redevelopment, under the New Jersey Voluntary Cleanup Program. Project activities included delineation of metals and volatile organics impact to soils, as well as excavation of areas of impacted material, subsurface piping, and buried demolition debris. Project resulted in the determination of “No Further Action” from the NJDEP, which allowed for the sale of the property.

UST/AST System Projects, Multiple Sites: Managed more than 25 underground and aboveground storage tank (UST and AST) system removal projects, including regulatory compliance monitoring and reporting.

Chlorinated Solvent Impact Site, West Springfield, Massachusetts: Managed remedial system design, construction and operation at a former dry cleaning facility where chlorinated solvent impact to groundwater had occurred. System components included soil vapor extraction of chlorinated solvents in soil and groundwater resulting from prior dry cleaning operations. Also, performed remedial system operations and upgrades, installed deep bedrock wells for expanded groundwater delineation, and provided oversight of indoor air monitoring of nearby structures and risk-based attenuation estimation.

Multiple Development Tracts, Chester, Bucks, Berks and Montgomery Counties, PA: Performed and managed several test pit and soil boring investigations of potential or suspected areas of waste deposition, hydrocarbon impact, chemical storage, and other potential issues of concern at multiple

planned development sites. Performed services as part of additional investigation requirements stemming from prior initial Phase I assessments.

Former Aggregate Processing Site, Fort Washington, Pennsylvania: Managed a Pennsylvania Land Recycling Program (Act 2) project for a former industrial site planned for multi-use redevelopment as a regional rail parking facility and commercial complex. The project included the oversight of UST system removals and impact investigations, impacted soil removals, comprehensive soil and groundwater site investigations, and demonstration of attainment under regulatory program guidelines. Project work resulted in the receipt of an Act 2 Release of Liability for the site.

Former Service Station/Retail Gasoline Facility and Adjacent Properties, St. Thomas, U.S. Virgin Islands: Planned and conducted multiple phases of field investigation activities for potentially responsible parties (PRPs) associated with an EPA-mandated regional aquifer investigation involving chlorinated solvent impact to groundwater. Performed bedrock coring and well installation, aquifer testing, comprehensive groundwater monitoring program, UST system removals, and remedial design.

Airport Bulk Fuel Terminal, San Juan, Puerto Rico: Planned and conducted field soil and groundwater impact investigation activities as part of a multi-phase investigation associated with hydrocarbon impact. Installed temporary soil and groundwater monitoring points, and performed soil sampling, field screening, and well-point aquifer testing.

Chemical Manufacturing Lagoon Site, Ambler, Pennsylvania: Managed and conducted a soil and groundwater assessment on a site associated with suspected chemical impact from an adjacent pesticide/herbicide manufacturing plant. Identified potential impact pathways and issues of concern, and conducted a comprehensive soil investigation with analysis for multiple chemical parameters, identified and installed groundwater monitoring wells, and coordinated and communicated with local community organizations.

Former Railcar Manufacturing Complex, Wilmington, Delaware: Managed and completed a comprehensive soil and groundwater investigation and remediation project at a former railcar manufacturing facility located within a waterfront industrial area. Scope of work included expanded Phase I assessments, a comprehensive Phase II soil and groundwater investigation, and subsequent removal of hydrocarbon-impacted soils from the site.

Former Commercial Dairy and Farm Complex, Montgomeryville, PA: Managed and completed a multiple-phase assessment and remedial project at a 180-acre former dairy farm complex planned for commercial and residential development. Performed multiple stages of assessment reporting for lending purposes, identified areas of concern, oversaw removal of UST systems and subsequent soil remediation, groundwater well installation, soil bioremediation, and the removal of a 2,000-cubic yard farm dump.

Stormwater Design and Surface Water Modeling

Golf Course Reservoir, Upper Dublin, Pennsylvania: Conducted an evaluation of the flood flow in the event of a theoretical failure of a 5-acre reservoir located on a golf course, directly upstream of several dozen new residences. The project was completed as part of a hazard evaluation on behalf of

the Upper Dublin Township and the PADEP, and involved the modeling of various breach scenarios and the downstream flow effects using numerical and computational methods, including the HEC-1 and HEC-RAS models. The results were presented to the PADEP and used to develop a plan for the removal of the reservoir through a controlled breach and streambank reconstruction.

Scouting Camp Dam Site, Pike County, PA: Conducted a Hazard Potential Evaluation on a 20-acre dammed lake. The project was conducted as part of the structures' permitting requirements under the PADEP Division of Dam Safety, on behalf of a large private institutional owner. The project included the delineation of the drainage area and the development of unit hydrographs to estimate typical and theoretical maximum precipitation inputs to the lake. Development of the watershed hydrological parameters included the use of the HEC-HMS modeling package. Using a series of precipitation events, theoretical breach scenarios were also modeled using the HEC-1 computational model to determine the downstream flooding effects of a dam break or overtopping under a range of conditions. The results were used to plan future dam improvements and management plans under the permitting program requirements.

Stormwater Infiltration Evaluations, Various Counties, Pennsylvania: Designed and managed in-situ, quantitative field testing for stormwater infiltration rates at commercial and residential development tracts in several Pennsylvania counties, including Chester, Montgomery, Berks, Schuylkill, and Delaware. Projects consisted of the measurement of vertical permeability at the location and depth of planned stormwater management features such as infiltration basins and subsurface seepage beds. Testing was performed in accordance with DEP's Stormwater Best Management Practices (BMP) Manual, and were incorporated into stormwater management designs for each facility.

Vacant Farm Tracts, Chester and Bucks Counties, Pennsylvania: Designed and managed field evaluations of soil suitability for wastewater application at several farm tracts in Chester and Bucks counties, planned for residential development. Project work included on-site field screening for general soil suitability, limiting zones, bedrock depth, and water table conditions. Testing was performed in accordance with DEP's Chapter 73 requirements for on-lot sewage systems, and the results of the evaluations were included in the due diligence planning for sewerage feasibility at each site.

Materials Recycling Facility, Hamburg, Pennsylvania: Managed a sewer connection feasibility evaluation and preliminary design project for a recycling client as part of a plan to phase out an on-site sanitary septic system and to eliminate the need for containerization and off-site disposal of collected wash waters. Project tasks include the evaluation of various public sewer tie-in configurations and associated costs, regulatory reviews and local municipal authority coordination, and the development of preliminary designs for on-site pretreatment and lateral tie-ins with existing infrastructure.

Publications

Web and Printed Articles, 1999-2015; "One Size Doesn't Fit All: Evaluating Alternate Forms of Environmental Due Diligence"; "The Potential Liabilities of Nearby Environmentally Impacted Sites," "Sources of Public Funds for Environmental Assessments and Cleanups," "Environmental Insurance

DAVID S. COYNE, M.S., QEP
Principal

PROFESSIONAL PROFILE

Products vs. Traditional, Professional Due Diligence,” “Waste Management Issues and Phase I ESAs,”
“Phase I Updates As Valuable but Inexpensive Refinancing Tools,” “Addressing Agricultural
Chemicals in Property Assessments.”