

DRAFT Analysis of Brownfields Cleanup Alternatives (ABCA)
Former Earl M. Witt School
20 Hyde Park Road
Stafford, Connecticut

I. Introduction & Background

This Draft Analysis of Brownfields Cleanup Alternatives (ABCA) has been prepared to evaluate cleanup alternatives for the former Earl M. Witt School building, located at 20 Hyde Park Road in Stafford, Connecticut. The ABCA is a condition of the Town of Stafford's application for a United States Environmental Protection Agency (EPA) Site-Specific Brownfields Cleanup Grant.

As identified in the Town of Stafford's EPA Brownfields Assessment Grant application, the former school building's ultimate reuse is an essential part of the downtown's revitalization. While the former Witt School no longer serves a productive purpose as an educational facility, the building's reactivation - envisioned with new market-viable uses - will help to activate Hyde Park and generate economic benefits that extend well beyond the property itself.

1. Site Location

The Site consist of two adjoining parcels of land located at 20 Hyde Park Road and 21 Hyde Park Road in Stafford, Connecticut. The approximate 9-acre, 20 Hyde Park Road property (Parcel ID: 70-82) is currently improved with a vacant, two-story plus basement approximate 20,200 square-foot, brick, former school building. The majority of the building is slab-on-grade with portions below grade. The building was reportedly originally constructed in 1939 with additions in 1953 and 1991.

The remainder of this parcel also contains tennis courts and ballfields. The Town currently uses this land for Town functions such as concerts and festivals including the construction of amphitheater sometime after 2012. The 148-acre, 21 Hyde Park Road property (Parcel ID: 67-12) consist of a separated 4,700 square foot building constructed in 1900, a small pond known as the "Hyde Park Duck Pond" with an adjacent asphalt paved parking lot, and undeveloped woodlands.

2. Forecasted Climate Conditions

EPA requires that the ABCA consider potential impacts due to climate concerns. Specifically, this discussion addresses observed and forecasted climate change conditions for the area of the project and associated site-specific risk factors. Stafford, Connecticut is located approximately 30 miles northeast of Hartford. Stafford is located within 70 miles of the Atlantic coast and portions of the Town are located along tributaries to the Willimantic River.

The northeastern United States, including Stafford, includes warm and often humid summers and cold winters. Rainfall can be severe with summer thunderstorms common and severe weather resulting from regional nor'easter anticyclone storms and/or hurricanes. Winter conditions can also be severe with ice storms and heavy snow common. Snowfalls of 2-3 feet in one event are not uncommon.

Portions of the Town of Stafford located near rivers/streams are within the 100-year flood plain; however, due to its location and elevation, the Site is currently located in a Zone B flood plain (areas between limits of 100-year flood and 500-year flood). However, the buildings are not in or close to the flood plain.

According to the US Global Change Research Program website (<http://www.globalchange.gov/explore/northeast>), as a result of climate change, the northeast region can expect increased temperatures and temperature variability and extreme precipitation events. The website states that “Heat waves, coastal flooding, and river flooding will pose a growing challenge to the region’s environmental, social, and economic systems. This will increase the vulnerability of the region’s residents, especially its most disadvantaged populations. Infrastructure will be increasingly compromised by climate-related hazards, including sea level rise, coastal flooding, and intense precipitation events.”

3. Previous Site Use(s) and Any Previous Cleanup / Remediation

According to the Town's Assessor's Department, the property was acquired by the town in 1911 and the building was constructed in 1939; with renovations and/or additions to the structure occurring in 1953 and 1991.

Following construction, the property was used as the Stafford High School until 1968 when another high school was built in Town. This property was then converted into the Stafford Middle School. In 1985, the school was renamed the Earl Witt Intermediate School which remained operational until 2008. The property has been vacant since that time.

In June 2015, an unsecured fill pipe caused heating oil in an underground storage tank (UST) to be displaced by rainwater. The displaced heating oil impacted localized soils and the nearby pond. Fire department used booms to contain the oil on the pond and an environmental contractor (ESI) was contracted to assist with spill containment and cleanup.

ESI removed oil from the pond and the remaining oil and water from the UST into a frac tank for disposal. ESI estimated up to 200-gallons of oil was removed from the pond and UST. ESI subsequently excavated to remove the UST and impacted soils on June 5, 2015. Impacted soils were staged on plastic and stored across the street on the parking lot near the duck pond until the Town could figure out means for paying for the project. According to the Connecticut Department of Energy and Environmental Protection (CTDEEP) field report, ESI also collected confirmatory soil samples from the tank grave. A copy of the formal UST closure documentation report was not available for review at CTDEEP.

II. Site Assessment Findings

Hazardous Building Materials (HBM) surveys of the Site structure were performed by Brooks Safe and Sound in 1991 and Fuss & O’Neill EnviroScience, LLC (EnviroScience) in 2010. The surveys included sampling of building materials for asbestos-containing materials (ACMs), lead-based paint (LBP), and poly-chlorinated biphenyls (PCBs). Numerous ACMs and LBP building components were noted during the survey. Additionally, window caulking and glazing compounds present at the Site

were sampled for PCB content. PCBs were not detected in any of the samples, however some of the reporting limits were greater than one milligram per kilogram (>1 mg/kg), which are presently considered a regulatory limit, as discussed below.

In the subsequent 10 years following the survey, changes to PCB regulations have been enacted. The CTDEEP now regulates PCBs in concentrations >1 mg/kg in building materials and, despite the not detected sample results obtained previously, the laboratory reporting limits for the samples were 1.7 mg/kg. Per CTDEEP regulation, the samples are considered >1 ppm and thereby regulated by CTDEEP and would require removal of the bulk material and possibly the surrounding substrate. PCB's are also regulated under EPA's PCB regulations found in the Code of Federal Regulations, Chapter 40, Part 761 (40 CFR Part 761).

Weston & Sampson performed a supplemental HBM survey at the Site on behalf of the Town of Stafford Community Development Department (the Town) in December 2020. The HBM assessment and limited sampling of building materials was conducted to identify ACMs, lead paint/coatings, PCBs and other hazardous materials (OHMs) at the Site, as well as to support the property redevelopment and reuse and contribute to the economic revitalization of the surrounding area.

Based on the results of the inspection, sampling, field-screening and laboratory analyses, the majority of contamination at the Site is associated with ACM associated with the above-ground structure. The following is a summary of the HBM survey results:

- ACM has been identified in the building, including floor tiles and mastics, plaster surfaces, various types of thermal system insulation, window glazing and roofing materials/sealants.
- ACM thermal insulation has been identified in above-ground pipes in the buildings. This material appears to have impacted soil in the crawlspace of the basement. The survey did not include an evaluation of underground asbestos cement water/sewer piping, below-grade damp-proofing or underground steam lines that may be present at the Site.
- Various types and colors of suspect PCB materials (i.e., window caulk, window glazing and paint) were identified within the property and a total of 11 samples were collected for PCB analysis. Window glazing compound sampled by Weston & Sampson at the Site was found to contain concentrations above 1 ppm. CTDEEP guidance documents require the removal of PCB containing building materials at concentrations >1 mg/kg (i.e., 1 ppm). The guidance also requires the removal of building substrates in contact with the tested materials if PCB concentrations are >1 mg/kg (i.e., the window sashes and glass in contact with the glazing compound).
- Weston & Sampson collected three (3) air samples to screen indoor air for the presence of PCBs. Indoor air results indicated that sources of PCBs in the building exist and will need to be addressed prior to occupancy to reduce the risk posed to potential future building users.
- While several varied painted surfaces were determined to contain lead, the majority of painted surfaces in the building do not contain lead at levels considered to be hazardous. The Occupational Health and Safety Administration (OSHA) Lead in Construction Standard 29

CFR 1926.62 considers any detectable level of lead to be a potential for exposure if dust is generated from disturbances of surfaces coated with paint containing lead.

- Fluorescent light ballasts and bulbs, Other Hazardous Materials (OHMs) that will require special handling and disposal prior to building renovation / demolition activities were identified throughout the building. These materials do not necessarily represent a hazard but cannot be disposed of in a regular landfill.

III. Project Goal

Stafford's overarching goals are to preserve the attractiveness of the community, increase growth of employment and tax base, and improve the overall quality of life of its residents. According to the *2012 Plan of Conservation and Development (POCD)*, commercial development is encouraged in the downtown where many underutilized buildings are present.

As part of Stafford's Brownfields Initiative, the Town has an active community survey garnering more than 300 responses that provide feedback on community development needs and ideas for redevelopment uses of the former Witt School. The town also issued a Request for Interest, Ideas, and Innovation to prospective developers. The most favored redevelopment scenarios derived from community input included improving access to food, public recreational amenities, and affordable senior housing. The project is a mixed-use, mixed-income building utilizing the bottom floors to create a permanent farmers/cooperative market, including a farm-to-table dining experience by reutilizing the commercial kitchen. This vision appeals to Stafford's rich agricultural heritage and robust farming community, while generating a hub for social activity to promote economic growth. Given that Stafford Springs is a USDA-designated food desert, the suggested reuse would ameliorate the desert conditions by providing access to affordable and nutritious food. The proposed mixed-use space retains the existing gymnasium and kitchen, developing space for much-needed recreation and entertainment opportunities while providing a legal space for farmers and entrepreneurs to pursue certified food ventures. In addition, and partnership with the Stafford Housing Authority, the upper floor would be converted into affordable senior housing with an adult day care center. Up to 25 units of affordable housing for seniors is envisioned, with shared access to the gymnasium and kitchen to augment activities for the adult day care center.

Since the Site, but not the building, is currently located in a flood plain, the suggested redevelopment will align with the allowable land-uses for the area. Stafford is a small town that takes pride in agricultural history yet lacks an outlet to express that passion and pride. This development allows for the parking lot, which is attached to the Witt School, to stay intact for other uses within the park. The intended mixed-use facility also offers the opportunity for a minimalistic redevelopment plan, which would be cost-effective. An enhanced facility will breathe new life into the former Witt School while bridging access to healthy food, affordable housing, and recreation amenities. The project encourages entrepreneurship, sustainability and will significantly enhance the quality of life in Stafford.

IV. Applicable Regulations and Cleanup Standards

1. Cleanup Oversight Responsibility

The Town of Stafford, as the current property owner, will undertake responsibility to remediate contaminated building materials prior to building renovation. Abatement and monitoring of hazardous building materials will be conducted under state certified and licensed personnel.

2. Cleanup Standards

The Connecticut Department of Energy and Environmental Protection (CTDEEP) is the state authority that regulates releases of OHMs and PCBs, while the Connecticut Department of Public Health regulates asbestos containing materials. Reportable releases require response actions under the Connecticut's Remediation Standard Regulations (RSRs); Title 22a-133k. RSR response actions are managed by a Licensed Environmental Professional (LEP), licensed by the State of Connecticut.

The Site is currently not regulated under the RSRs; however, asbestos abatement actions would require notification to and coordination with the Connecticut Department of Public Health (CT DPH). ACM abatement will be in accordance with CT DPH rules and regulations.

3. Laws and Regulations

Abatement of contaminated building materials prior to building renovation and/or demolition must be conducted pursuant to Remediation Standard Regulations (RSRs) adopted by the Commissioner pursuant to section 22a-133k of the Regulations of Connecticut State Agencies (RCSA). Off-Site disposal of contaminated media will be conducted pursuant to the aforementioned regulations and the Connecticut Hazardous Waste Management Regulations [22a-446d]. Additional applicable local, state and federal regulatory requirements will also be adhered to.

V. Evaluation of Cleanup Alternatives

1. Cleanup Up Alternatives Considered

EPA requires that this ABCA includes the evaluation of three (3) remedial alternatives. To address the abatement of hazardous building materials at the Site, the following three (3) alternatives were considered, including:

- Alternative #1: No Action
- Alternative #2: Abatement and Renovation
- Alternative #3: Abatement and Demolition

2. Cost Estimate of Cleanup Up Alternatives

To satisfy EPA requirements, the effectiveness, implement ability, and cost of each alternative must be considered prior to selecting a recommended cleanup alternative.

Effectiveness

- Alternative #1: “No Action” is not effective in controlling or preventing the exposure of potential receptors to contamination at the Site.
- Alternative #2: Abatement and disposal of hazardous building materials is an effective option, since the contaminant source is removed, and redevelopment may be accomplished. This alternative also offers long term sustainability.
- Alternative #3: Abatement, demolition and disposal of hazardous building materials is an effective option since the contaminant source is removed.

Implementability

- Alternative #1: “No Action” is easy to implement, as no actions will be conducted.
- Alternative #2: Abatement and disposal of hazardous building materials as part of redevelopment is a feasible remedial option, but will require additional design and planning, and is therefore moderately easy to implement.
- Alternative #3: Abatement, demolition and disposal of hazardous building materials is a feasible remedial option since removal of contaminated building materials must be accomplished prior to demolition. However, this option is moderately difficult to implement. This alternative requires coordination to maintain environmental controls (e.g., dust suppression and monitoring) during cleanup and demolition activities and greater short-term disturbance to the community (e.g., trucks transporting waste). For these reasons, this alternative is considered the most difficult to implement with the highest impact (truck traffic) to the neighborhood. Additionally, this alternative does not line up with EPA's green cleanup goals and objectives.

Cost

- Alternative #1: *No Action*: There are no costs associated with this alternative; however the building would not be viable for redevelopment until HBM were abated.
- Alternative #2: *Abatement and Renovation*: The approximate cost to perform asbestos abatement at the building due to the redevelopment and construction plans which require disturbance and removal of these materials ranges from approximately \$780,000 to \$925,900.
- Alternative #3: *Abatement and Demolition*: The estimated cost to abate and demolish the Former Witt School ranges from \$1,550,000 to \$1,900,000.

3. Recommended Cleanup Up Alternatives

The recommended cleanup alternative for hazardous building materials is Alternative #2: Abatement and Renovation. Alternative #1: No Action, cannot be recommended because it does not address Site risk. Alternative #3: Demolition, while effective at remediating hazardous building materials, comes at an implementation cost of approximately 2.75 to 3 times more than the cost of controlling the exposure risks in Alternative #2. Additionally, Alternative #3 will require many more trucks, will increase impacts to the neighborhood, and will produce additional waste that will take up more space in landfills. Alternative #2 is a more sustainable approach more in line with EPA's Clean and Green Cleanup guidelines.

Therefore, Alternative #2: Abatement and Renovation is the most cost effective alternative capable of reducing risk while having the smallest impact on the surrounding community and the environment. For these reasons, the recommended cleanup alternative is Alternative #2: Abatement and Renovation.