

**City of Knoxville**

**Proposal to the  
Environmental Protection Agency**

**for**

**Brownfields Cleanup Grant Funds**

**for the**

**Former Sanitary Laundry and  
Dry Cleaning Facility  
Knoxville, Tennessee**

**December, 2015**

# CITY OF KNOXVILLE

MADELINE ROGERO, MAYOR



**William Lyons**  
Deputy to the Mayor  
Chief Policy Officer

December 16, 2015

Ms. Barbara Alfano  
Region 4 Brownfields Coordinator  
U.S. Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street  
Atlanta GA 30303-8960

Dear Ms. Alfano:

On behalf of the City of Knoxville, Tennessee, I respectfully submit this application to the Environmental Protection Agency (EPA) for \$200,000 in grant funding to assist in the proposed clean-up of the former Sanitary Laundry and Dry Cleaning facility in the City's Downtown North Redevelopment District. This is one of two Brownfield sites that the City is targeting for cleanup in this funding cycle. The other is the former McClung Warehouses property for which we have prepared a separate grant proposal.

Over the past several years, Knoxville has been active in dealing with the issues associated with economic decline in the neighborhoods both north and south of the downtown. The City recently completed environmental assessments, utilizing EPA Brownfields Assessment funding, of multiple properties in both its South Waterfront and Downtown North Redevelopment Areas, and is seeing various redevelopment projects occurring in both sectors. One of the properties recently assessed in Downtown North is the former Sanitary Laundry and Dry cleaning facility on which Phase I and Phase II Environmental Site Assessments were performed. The property has attracted the attention of a local developer but the current condition of the property presents a significant constraint to its redevelopment. The City acquired the property and intends to perform some clean-up activities on the site with the intent of making it more appealing to private investors.

If our application is successful, we will use the funds to remove impacted materials from the site, and for the design and implementation of a vapor mitigation system. Grant funding has enabled us to understand the environmental conditions on the site and what will be required to remediate it to the point of marketability. This application for funding is the next logical step towards that goal, and with a combination of funds from the EPA and the City of Knoxville, we believe we can accomplish that goal.

Sincerely,

William Lyons, Senior Director  
Department of Policy and Communications

Transmittal Letter page 1

## Applicant Information

- a. Applicant Identification: City of Knoxville  
400 Main Street  
Knoxville, Tennessee 37902
- b. DUNS Number: 042453530
- c. Funding Requested: i) Cleanup  
ii) \$200,000  
iii) Hazardous Substances
- d. Location: City of Knoxville, Knox County, Tennessee
- e. Property Information: Former Sanitary Laundry and Dry Cleaning Property  
625 North Broadway  
Knoxville, Tennessee 37917
- f. Contacts: i) Project Director:  
Anne Wallace, AICP, Associate ASLA  
Tel: 865-215-2543  
Fax: 865-215-3035  
awallace@cityofknoxville.org  
Room 656 City County Building  
400 Main Street, Knoxville, Tennessee 37902  
  
ii) Chief Executive:  
Mayor Madeline Rogero  
Tel: 865-215-2040  
Fax: 865-215-2085  
mayor@cityofknoxville.org  
400 Main Street, Knoxville, Tennessee 37902
- g. Date Submitted: December 16, 2015
- h. Project Period: Three years (2011 – 2014)
- i. Population: City of Knoxville – 184,281 (2014 est. US Census Bureau)
- j. Other Factors Checklist: Attached

### Appendix 3 Cleanup Other Factors Checklist

Name of Applicant: City of Knoxville

Please identify (with an **X**) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	Page #
<i>None of the Other Factors are applicable.</i>	<b>X</b>
Community population is 10,000 or less.	
Applicant is, or will assist, a federally recognized Indian tribe or United States territory.	
Targeted brownfield sites are impacted by mine-scarred land.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion by identifying amounts and contributors of funding in the proposal and have included documentation.	
Recent (2008 or later) significant economic disruption has occurred within community, resulting in a significant percentage loss of community jobs and tax base.	
Applicant is one of the 24 recipients, or a core partner/implementation strategy party, of a “manufacturing community” designation provided by the Economic Development Administration (EDA) under the Investing in Manufacturing Communities Partnership (IMCP). To be considered, <b>applicants must clearly demonstrate in the proposal the nexus between their IMCP designation and the Brownfield activities. Additionally, applicants must attach documentation</b> which demonstrate either designation as one of the 24 recipients, or relevant pages from a recipient’s IMCP proposal which lists/describes the core partners and implementation strategy parties.	
Applicant is a recipient or a core partner of HUD-DOT-EPA Partnership for Sustainable Communities (PSC) grant funding or technical assistance that is directly tied to the proposed Brownfields project, and can demonstrate that funding from a PSC grant/technical assistance has or will benefit the project area. Examples of PSC grant or technical assistance include a HUD Regional Planning or Challenge grant, DOT Transportation Investment Generating Economic Recovery (TIGER), or EPA Smart Growth Implementation or Building Blocks Assistance, etc. To be considered, <b>applicant must attach documentation.</b>	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

**City of Knoxville Brownfields Grant Proposal for Cleanup Funds**  
**Former Sanitary Laundry Property**  
**Narrative Proposal - Ranking Criteria**

**1. Community Need**

**a. Targeted Community and Brownfields (8 Points)**

Targeted Community Description

The City of Knoxville lies within the heart of Appalachia and is located in the eastern portion of Tennessee, in the valley between the Cumberland Mountains and the Great Smoky Mountains. Knoxville's industrial growth in the late 1800's sprang from its railroad connections – it was the region's busiest depot for freight and passenger traffic. North Knoxville, our target community and the area in which our target property is located, started to develop an industrial base around the railroad with textile mills, foundries, manufacturing and railroad maintenance facilities that provided employment to thousands. Tree-lined neighborhoods sprung up around this industrial area with a healthy mix of residents - professionals and laborers, families and transients, black and white. Business was flourishing, the social network was strong, hard work was rewarded, and life was good. The economic decline of North Knoxville started with the Great Depression. Many of the once thriving industries became idle and abandoned. Jobs became scarce, commercial businesses had a hard time surviving, houses fell into disrepair, and the level of poverty increased.

Demographic Information

Today, the North Knoxville neighborhood, known as Downtown North, is predominantly white, the minority population is less than the national level, and unemployment rates are reflective of state and national averages, but incomes are much lower and the poverty level is much higher, as is the disability rate, all of which is indicated in the following comparative data table. We used American Community Survey (ACS), 2008-2012, five year estimates, because those data drill to the census tract level and allow us to present as accurate a picture as possible.

Relevant Demographic Data			
	Target Area	Tennessee	U.S.
Population	3,273	6,353,226	309,138,711
Minority	16.2%	21.2%	25.8%
Unemployment *	5.3%	5.7%	5.1%
Median Household Income	\$25,435	\$44,140	\$53,046
Individuals Below Poverty Level	32.5%	17.3%	14.9%
Persons with a disability	21%	15%	12%
Education level – high school grad and beyond	80.4%	83.9%	85.7%

Source: 2008-2012 American Community Survey (ACS) 5-year estimates

\*Unemployment rate per Bureau of Labor Statistics – September, 2015 (Knoxville-Tennessee-U.S.)

Description of Brownfields

Our subject property occupies a one third-acre site in Downtown North, and includes a 15,000 sq. ft. vacant building formerly occupied by Sanitary Laundry and Dry Cleaning which operated on the property from 1926 until 1993. The facility employed anywhere from 100-200 people at various times and was one of the larger employers in the neighborhood. One dry cleaning solvent and two gasoline underground storage tanks (UST) were located on the property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but, based on the Phase I Environmental Site Assessment (ESA) performed in 2013, this UST remains on the property. Analyses, conducted during a Phase II ESA in 2014, identified soil

and groundwater contaminated with dry cleaning compounds, solvents, and petroleum products. Asbestos-containing materials and lead based paint are present in multiple areas of the building. The property was placed on the Tennessee Department of Environment and Conservation's (TDEC's) State Superfund List in 1994. The subject property is located close to other commercial establishments, residential housing and social services facilities, including homeless shelters and ministries, all within our target community.

An inventory of brownfield sites in our Downtown North target area, which spans approximately 541 acres, shows an estimated 80 brownfield properties (including our subject property), 51 of which are suspected of being hazardous substance sites, 19 petroleum sites, and 10 hazardous/petroleum sites. These sites span approx. 25% of the target community, and range in size from small commercial parcels to 20-acre sites. The area is heavily populated with former metals processing, textile mills, and auto repair shops, many of which have been there for decades and occupy facilities that are run down and in need of renovation.

Environmental dangers caused by site contaminants and their migration, groundwater impacts, surface runoff, or waste material dumped on sites, adversely impact the health, welfare and environment of people exposed to them through contact with soil, air and water. The inventory suggests that contaminants such as petroleum hydrocarbons including gasoline and diesel fuel, polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), lead-based paint, asbestos-containing materials, industrial chemicals such as chlorinated solvents, creosote, and various priority pollutant metals, are likely present in our target area. The abandoned, vandalized, and derelict structures pose a safety risk, not only because of their insecure condition and potential for site contaminants, but their unrestricted access attracts vagrants with substance abuse problems, and makes them an attractive nuisance to curious children.

#### Cumulative Environmental Issues

The industrial base that developed around the railroad industry hub in North Knoxville is largely long gone leaving a legacy of abandoned, derelict and polluted sites. However, some functioning heavy industrial facilities remain including a steel mill that processes scrap metal into steel, an asphalt manufacturing facility and a chemical processing plant. While these industries offer employment opportunities to area residents, the buildings they occupy are quite old and have been in the community for decades. The Sanitary Laundry Phase I ESA identified twelve historical auto stations and four historical cleaners within a quarter-mile of the site. Thirteen facilities within the ASTM minimum search distances were on TDEC's regulatory database, most recorded as containing Leaking USTs. Many vacant properties in our target area have become dumping grounds for all manner of trash, from discarded beer bottles to old and unwanted household furniture. Until this year Knoxville was designated a non-attainment area for ozone standards predominantly caused by vehicle pollution due to traffic volume on the network of interstates that intersect the region, (but is still non-attainment for particulates). Downtown North is bordered on one side by I-275 which carries close to 60,000 vehicles daily, and by I-40 on another with 100,000+ vehicles daily. Our subject property is on Broadway, a four-lane highway in the heart of our redevelopment area, which carries almost 9,000 vehicles per day. Vehicle pollution poses a real health threat in the neighborhood. In addition, several streams in Knoxville are listed as impaired by TDEC, including Second Creek which runs through the target area. Second Creek is on TDEC's 303d list and is posted for a water contact advisory. Surface runoff from unsecured former industrial properties have contributed to the contamination in Second Creek.

#### **b. Impacts on Targeted Community (5 points)**

Although the City of Knoxville is located in a region of particular scenic beauty, it has poor air quality and serious health concerns including a high obesity rate, and a ranking of #7 in the country on the list of the most challenging places to live with asthma (Asthma and Allergy Foundation of America - 2015 report). The

EPA released health risk data on the national-scale air toxics assessment (NATA) in 2005, which scales down to the census tract level. Air toxics are pollutants known or suspected of causing cancer or other serious health problems such as birth defects. The tracts that make up our target area are shown to have an elevated risk for cancer, neurological risks and respiratory disease. The EPA, Environmental Justice, EJView shows that women of child-bearing age in these same census tracts are at an elevated risk for low birth weight infants (who go on to have a lifetime of increased risk of health problems), and for increased infant mortality. Since this is a low income neighborhood with older houses, there are problems with lead-based paint, leading to an increased risk for neurological damage to resident children. ACS (2008-2012, 5-year estimates), shows 36.1% of housing in our target area is more than 65 years old compared to the rest of Tennessee at 6.7% and the national average of 13.7%. Based on a combination of age of housing and data on patients' blood lead levels over the past several years, the Knox Co. Health Dept. determined that the North Knoxville neighborhoods have the highest risk of elevated blood lead levels in Knoxville.

East Tennessee is located in the heart of Appalachia which has historically experienced a poverty rate higher than the national average and an education level lower than the national average. The demographic table shows our target neighborhood has an income level far below the state and national average. The target area has a disproportionate number of families receiving public assistance in food stamps/SNAP benefits – 23% vs. the national average of 11.4%, and while poverty and lower education levels do not create adverse health conditions, residents have limited access to preventive and pre-natal health care and medical services, in part due to limited transportation options to access these facilities. Downtown North is where most social service organizations are located and where the homeless congregate, which presents a safety concern for them and for others if they shelter in abandoned buildings that litter the neighborhood. There is far more likelihood of illegal activity, injurious trash and vandalism in these locations.

The property that will be cleaned up under this grant was first developed in the early 1900's and operated as a laundry and dry cleaning facility from 1926-1993. Its impacts on the surrounding community are many, including dry cleaning compounds and solvents detected in groundwater at concentrations that exceed USEPA primary drinking water maximum contaminant levels; evidence of one dry cleaning solvent UST on site; miscellaneous debris and containers of oil, paint and solvents that remain in the abandoned building; concentrations of volatile organic compounds (VOCs) that exceed residential and industrial regional screening levels; plus evidence of previous habitation by homeless individuals. Numerous old 55-gallon drums of oil and dry cleaning fluid were discovered by the Knoxville Fire Department in and around two of the buildings located on the site, while responding to small fires set by homeless individuals using the subject building for shelter. Several of the drums showed signs of leakage and the state contracted to have the drums removed. Since then, no further remedial activities have occurred on the subject property.

### **c. Financial Need (7 points)**

#### **i. Economic Conditions (3 points)**

Knoxville has invested heavily in community improvement projects and, like most cities of its size, there are multiple public improvement projects occurring at any given time. Just within the Office of Redevelopment, twelve neighborhood improvement projects are ongoing, and for these projects alone, the City has committed approximately \$45 million in funding. While the City recognizes the importance of providing funding for improvement projects, and has done so to the best of its fiscal ability, there is a limit on available funds as regular city services must be maintained despite fiscal constraints. Within the past few years, the Knoxville News Sentinel reports company closures in Knoxville have included ARC Automotive (51 jobs lost), Image Point (270 jobs lost), Brunswick Boats (765 jobs lost), RockTenn (88 jobs lost), PBR Automotive (225 jobs lost), Jewelry TV (150 jobs lost), plus many more smaller company layoffs. In

addition, two companies plan to close before the end of this year – Rocore (50 jobs) and Community Health Partners (148 jobs). Not only do these closures reduce tax income for the City, they adversely impact local retailers such as office supply stores, copier services, janitorial services etc. whose goods and services are no longer required at the closed businesses. As is typical in once-thriving, inner city areas, job losses from the closure of local facilities in Downtown North resulted in less money to spend on home maintenance, resulting in depressed property values and lower property tax revenue for the City. While the Knoxville economy is improving since the market crash in 2007, lending is still not up to pre-2007 levels which makes private developers cautious to invest. The City of Knoxville cannot afford to cover the complete cost of cleaning up its brownfields sites to satisfy developers. However, the City is willing to invest significant funding into brownfields cleanup as a partner in redevelopment, and therefore is looking to the EPA and other resources, including private investors, to partner in this cleanup and redevelopment initiative.

ii. Economic Effects of Brownfields (4 points)

The economic impact of Brownfields is evidenced by the sheer number of Brownfield properties – 80 identified in the recent inventory covering 25% of the target area – and lack of a corresponding thriving commercial business community, as well as the lack of upkeep to many of the homes in the surrounding neighborhoods. Downtown North was heavily populated with industrial and commercial properties. Closure of these productive facilities meant a large decrease in tax revenue, both from the standpoint of property taxes (if the property is abandoned with no evident owner) and sales tax revenue. Very few municipalities can sustain comprehensive services with less income. Downtown North is an older Knoxville community, and while there are several historic neighborhoods where homes have been bought by younger families who are attempting to restore them, the preponderance of homes around the more industrial parts suffer from a lack of maintenance. The fundamental reason for this is the lower incomes of most of the residents. As shown in our comparative data table, unemployment rates are reflective of the U.S. average (5.3% vs. 5.1%), but the median household income in our target area is less than half that of the U.S. (\$25,435 vs. \$53,046). The closure of local industries and their relocation to the City's urban fringes or to neighboring counties has resulted in job losses in the neighborhoods, and created an additional problem related to transportation. Knoxville has limited transportation options, which means that residents of Downtown North neighborhoods in many cases, have to rely on automobiles to get to work, which increases their burden of costs and contributes to air pollution. They face a similar situation for shopping and activities associated with normal daily activity. Too often the additional economic burden of transportation costs to reach the employment and commercial centers are more than a household income can tolerate. Additional income and poverty statistics from the ACS, Population and Housing Narrative Profile 2009-2013 indicate that 21% of Knoxville households had an income below \$15,000 per year, and 33% of related children under 18 were below the poverty level, plus 16% of all families and 43% of families with a female householder and no husband present had incomes below the poverty level. As mentioned this is a neighborhood where the homeless congregate and often use the abandoned buildings for illegal activities. The Knoxville police are called frequently for assistance for negative activities associated with homeless issues/predators of the homeless population (i.e. drug dealers, etc.) and they have increased patrolling for prostitution stings in the neighborhood, all of which increases policing costs and adversely affects the local economy.

**2. Project Description and Feasibility of Success**

**a. Project Description (15 points)**

i. Existing Conditions (5 points)

The former Sanitary Laundry and Dry Cleaning facility occupied two contiguous parcels containing approx. 0.70 acres located at 625 North Broadway and 750-760 Stone Street. The Stone Street parcels have been purchased by others and are undergoing redevelopment. This cleanup grant application addresses the 1/3-



acre portion of the property on North Broadway that is owned by the City of Knoxville which acquired the property through tax foreclosure. The target property is situated in the downtown North Knoxville area. The facility operated as a dry cleaner for 67 years. A 15,000 sq. ft. building that housed the laundry and dry cleaning operation remains on the property and is vacant. The building has a concrete floor, masonry walls and a basement. Metal beams and trusses support a central raised roof with clerestory windows. A portion of the building was likely used as offices. Staining of the concrete floor can be seen throughout the building. There is a loading dock on one side of the building, and a large boiler on another. There is an elevated concrete trough but its past use is unknown. Steam piping used in the dry cleaning process is throughout the building. Two gasoline USTs and one heating oil AST, plus a chlorinated solvent UST were located on the property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but remains onsite. Numerous 55-gallon drums of oil and dry-cleaning fluids were removed from the property in 1999. A Phase II ESA conducted in 2014 consisted of the collection and laboratory analysis of 34 passive soil vapor modules, subsurface soil samples, groundwater samples, soil gas samples and ambient air from the site. Groundwater samples were collected from two existing monitoring wells and from six piezometers installed during the Phase II ESA sampling. These investigations identified soil and groundwater contaminated with dry cleaning compounds, solvents and petroleum products. An asbestos and lead-based paint survey was conducted in 2014 and both contaminants were found in multiple rooms in the building.

Since the City of Knoxville acquired the property, its reuse has been the subject of much discussion, both in public forums and within the City's Office of Redevelopment. The building is potentially eligible for listing on the National Register of Historic Places and therefore, the City would prefer to preserve the basic building structure. Probable reuse scenarios are commercial, retail or residential. The City issued a Request for Proposals in the hope that a local developer would generate a vision and reuse plan for the former laundry facility but interest was limited because of the uncertainty of the structural integrity of the building and its contamination potential. So the City is expending funds to perform a structural evaluation of the building and to replace the existing roof which is in critical condition. If the City of Knoxville is successful in its grant application, it will use the \$200,000 in cleanup funds to remove contaminated materials from the site, and install a vapor barrier to prevent vapor intrusion through the existing concrete slab floor. By cleaning up the former Sanitary Laundry site, along with a structural report and a stable roof, the property, which is pivotal in Downtown North's redevelopment corridor, will be a far more palatable prospect for private investment, much of which has already occurred in the neighborhood.

Downtown North is the gateway to downtown Knoxville and includes the I-275 Corridor which has evolved over many years into an area that has experienced environmental degradation through the loss of viable industrial and commercial businesses. As a result of several planning studies and public support, the City embarked on a plan to renovate Downtown North into an integrated mixed use area with visual, pedestrian, vehicular and land use connections. Over the past several years, Downtown North has identified itself as a special place with a unique character, and local business owners and residents have embraced the idea that this area can be a thriving local community once again. Local developers have purchased several properties in the Downtown North redevelopment area and have transformed them from vacant or under-utilized structures into new retail establishments including craft brew and eateries, a bakery, a food co-op, plus an eclectic mix of retail shops. Our subject property is in the middle of this mix and its redevelopment will greatly enhance the ongoing revitalization of the neighborhood.

#### ii. Proposed Cleanup Plan (10 points)

The purpose of cleaning up the former Sanitary Laundry property is to encourage private investment in a property that is centrally located in the Downtown North Redevelopment Area. Cleanup planning includes

two important documents - an Analysis of Brownfields Cleanup Alternatives (ABCA) that outlines alternative methods under consideration, and a Brownfields Voluntary Agreement (BVA). The TDEC Division of Remediation (DOR) has been involved with the subject site for many years. In support of Knoxville's redevelopment efforts, and to ensure that site redevelopment is performed in accordance with applicable regulations, TDEC prepared a BVA which will be made a condition of sale of the property. The BVA lists the conditions under which the site can be developed such that it protects public health and safety, and the environment. These conditions include a DOR-approved Soil Management Plan (SMP) for characterization, handling and disposal of excavated materials as well as future management and maintenance of any covers and caps; the installation of a vapor mitigation system plus its continued care, operation and maintenance; and a Health and Safety Plan to ensure that all remediation activities are performed with strict adherence to the health and safety of the public and the environment. In addition, the BVA requires that any land use restrictions for safe future use of the property will be filed in accordance with state statute. The BVA is included as an Appendix to the ABCA.

The ABCA provides an evaluation of cleanup alternatives for the former Sanitary Laundry site. The City and TDEC DOR assume that the site will be redeveloped for retail, commercial or residential purposes because this has been the pattern of infill redevelopment that is happening in the target area, and fits with the Downtown North vision for an integrated mixed-use area that brings community character back to this historic neighborhood. While there is not yet a specific site redevelopment plan, some general assumptions were made to complete the ABCA. Three alternatives were considered: (1) No action, (2) Redevelopment using existing foundations, and (3) Removal of some or all of the existing foundations, followed by construction of a new structure. The "no action" alternative is not considered viable because the subject property is currently in a state of disrepair and negatively impacts surrounding property values. Moreover, its condition presents a threat to public health and safety and the environment.

The second alternative - redevelopment using existing foundations - would be a viable option if the proposed use for the property would support this approach. Some demolition and removal of debris would be required, but this approach would limit subsurface disturbance to utility trenches or other limited areas where excavation would be needed to support redevelopment design. Soil removed from these areas would be screened for impacts, and based on the findings, handled in accordance with local, state and federal regulations. Any proposed site redevelopment must address the potential for subsurface vapors to migrate to ambient air thru the existing concrete slab, so site design would include a soil vapor mitigation system to protect future building occupants by breaking the exposure pathway for vapor migration. Two potential approaches for the soil vapor system include an impervious barrier, or a sub-slab depressurization system that creates a negative pressure beneath the slab and vents the vapors to the outdoor air. Additional evaluation of the existing structural integrity of the slab, and proposed site reuse, will assist in designing the appropriate vapor mitigation system. In addition to the SMP and vapor mitigation system design, this cleanup alternative would also warrant a land use restriction to document the vapor mitigation system details, establish that groundwater usage from the subject site is prohibited, and document the protocol for monitoring and maintenance of the vapor mitigation system.

The third alternative considered is the removal of some or all of the existing foundations. Depending on the final redevelopment plan and the results of a structural evaluation, demolition followed by new construction is a possibility. Assuming that some impacted soils and/or groundwater could potentially remain beneath the building following the removal of existing foundations, this cleanup alternative would also require a vapor mitigation system, an SMP, and filing of land use restrictions for the site. Should this alternative be selected, excavated foundations and impacted sub-slab materials would be characterized and handled in

accordance with local, state and federal regulations, and in accordance with the SMP. Material classified as special waste would be disposed of in a Subtitle D Landfill and, if encountered, hazardous waste would be taken to a permitted hazardous waste disposal facility, with appropriate documentation for the transportation and disposal. The ABCA, included as an Attachment to this grant proposal, discusses anticipated costs for each of the two action alternatives.

Given the building's historic element, the preferred alternative is redevelopment using existing foundations, however, a final alternative will be selected based on further site evaluation and public input.

## **b.Task Descriptions and Budget Table (10 points)**

### Task Descriptions

Community Outreach (\$5,300) - This task includes publicity, meetings, and distribution of information to the public as the project progresses. Public/neighborhood meetings will be held at the start and end of the project. We will produce a quarterly update to be included in existing community newsletters updating the cleanup's progress throughout the duration of the project (*8 @ \$250/newsletter = \$2,000*). Supplies needed for public meetings might include printed handout materials, etc. (*2 mtgs. @ \$150 = \$300*) and the contractor would be required to prepare visual presentations of progress reports and attend all meetings to discuss project procedures and answer technical questions (*2 staff/2mtgs. report preparation and presentation @ \$1,500/mtg. = \$3,000*)

Program Development & Management (\$4,000) – This task includes documenting guiding principles and procedures, establishing priorities for site remedial actions, and EPA-required performance reporting - e.g. quarterly reports, MBE-WBE reports, final cleanup and closeout reports and ACRES database reporting (*\$2,000*). Travel costs in this budget task would be used for attendance at regional Brownfields grantee workshops and the National Brownfields conference. (*2 staff @ \$1,000/conference = \$2,000*)

Remedial Planning and Design (\$24,000) – This task includes the outputs of finalizing the ABCA (*\$1,000*), coordinating with TDEC to finalize the Land Use Restrictions, Soil Management and Health & Safety Plans (*\$3,000*), inventory of the current building contents to determine if drums, containers or other materials need to be properly characterized and disposed of (*\$6,000*), and vapor mitigation system design (*\$14,000*)

Cleanup Activities (\$206,700) – This task includes anticipated contractor costs for removal and disposal of contaminated materials, lead-based paint and asbestos, and installation of engineering controls such as caps and barriers. For preliminary budgeting purposes, application of a commercially available impervious barrier costs approximately \$7/sq. ft. (excluding engineering design and monitoring) so for the approximately 15,000 sq. ft. subject building, the cost would be approximately *\$105,000*. While we cannot provide a cost for handling and disposal of excavated material until we know the extent of cleanup required for the future selected cleanup alternative, we can estimate fees for excavation, transportation and disposal of special waste to a Subtitle D Landfill at approximately \$75/ton, and material classified as hazardous waste to a permitted facility at approximately \$350/ton (*estimate \$26,700*). Also, a preliminary estimated budget in excess of \$100,000 for the lead-based paint and asbestos removal has been obtained. The City has committed to using their matching funds for this task to limit the expenditure of EPA funds for asbestos removal (*federal grant funds \$25,000 – city matching funds \$40,000*) but recognizes that additional City cleanup funds may be needed to complete the asbestos removal. This task also includes a final cleanup/project report and regulatory coordination regarding technical aspects of the project with TDEC and EPA throughout the cleanup effort (*Final Report and Regulatory Coordination \$10,000*).

## Budget Table

Budget for former Sanitary Laundry Cleanup Project					
Budget Categories	Project Tasks				
	Community Outreach	Program Development & Management	Remedial Planning and Design	Cleanup Activities	Total
Personnel					
Travel		\$2,000			\$2,000
Equipment					
Supplies	\$300				\$300
Contractual	\$5,000	\$2,000	\$24,000	\$206,700	\$237,700
Other					
<b>Total Federal Funding</b>	<b>\$5,300</b>	<b>\$4,000</b>	<b>\$24,000</b>	<b>\$166,700</b>	<b>\$200,000</b>
Cost Share				\$40,000	\$40,000
<b>Total Budget</b>	<b>\$5,300</b>	<b>\$4,000</b>	<b>\$24,000</b>	<b>\$206,700</b>	<b>\$240,000</b>

### **c. Ability to Leverage (5 points)**

The Office of Redevelopment oversees projects that contribute to the enhancement of community livability, and has worked diligently to leverage local dollars for a variety of state and federal funding sources as well as private investment. This effort has resulted in more than \$200 million in private investment from developers and business owners, and tens of millions of dollars in leveraged funding from federal and state sources. The City was successful in applying for a \$400,000 EPA Brownfields Assessment Grant to assess Downtown North properties and this funding, along with local funds being used for public infrastructure improvements, has led to investment from private developers into multiple property improvements in our target area. Of the six Phase II ESAs funded by the grant which closed out in 2014, one property (Historic Knoxville High School) is being redeveloped into 100 senior living apartments using public/private funding, one has been purchased by a local businessman for future mixed-use development, and four are being marketed for redevelopment, including our subject property. Private sector interest is strong and the City wants to capitalize on that interest and draw on available funding resources to spur redevelopment. Sanitary Laundry and Dry Cleaning will require some level of remediation before it can be redeveloped. The City issued a Request for Proposals to redevelop the property but the proposal submitted required a level of funding incentives that the City could not manage. One of the impediments to the building's redevelopment is the condition of the structure's roof which needs to be replaced at an estimated cost of \$800,000. If environmental cleanup of the site goes forward, we are confident that developer interest will be renewed. The City is prepared to invest Capital Improvement Program funds, and is currently working on leveraging additional funds, to replace the roof. With local developers having already purchased adjacent properties, the location of the Sanitary Laundry site, with a new roof and environmental cleanup, makes it prime for private investment and redevelopment.

Examples of a few recent Office of Redevelopment community improvement projects in the Downtown North area that have leveraged public and private funding include:

- North Central Street Transportation Improvement (Central St. intersects with Broadway) – \$2.5M project utilizing Department of Transportation, Surface Transportation Funds (STP) (80/20 match) – the City has committed \$825,000 for sidewalk repair, landscaping, and street resurfacing; and Knoxville Utilities Board (KUB) will fund \$750,000 for water line replacement; status - ongoing
- I-275 Business Park Access Improvements (I-275 borders our Downtown North redevelopment area) - \$5.5M High Priority Project utilizing DOT funding (80/20 match) - TDOT \$4.4M; City \$1.1M. This corridor study was initiated in 2007/2008; all plans, environmental reviews and final designs were completed by 2014; status - in Right of Way acquisition
- Cumberland Ave Corridor (adjacent to our Downtown North redevelopment area) \$17.5M streetscape + \$3.5M for design and right of way – STP funds (80/20 match); KUB will provide \$5M to upgrade gas, water and sewer lines; status - ongoing
- Façade Improvement Program – Eligible property owners in the redevelopment districts can receive up to \$50,000 for façade improvements to their buildings with the property owner providing a 20% match; status - ongoing (138 buildings since the program began, 30 of which are in Downtown North)

### **3. Community Engagement and Partnerships**

#### **a. Plan for Involving Targeted Community and Other Stakeholders; and Communicating Project Progress (5 points)**

The City of Knoxville makes every effort to engage local citizens in plans for projects in their neighborhoods in order to make full use of citizens' ideas and opinions in considering investment of public funds. Residents and business owners in Downtown North understand that environmental issues related to Brownfield sites, can have a detrimental effect on not only their individual health, but also on the economic health of their neighborhoods. They expressed their concerns in meetings and the City responded. The City took on the challenge of assessing the area's brownfield properties and, with the aid of EPA Brownfields grant funding, performed multiple ESAs. Throughout the assessment project, the City held quarterly public meetings to inform residents of the project's progress. Meetings were publicized on the City's website and held in a location central to the project area. The City engaged a minority firm to produce a quarterly newsletter providing details about the assessment activities which was published on the City's website, distributed to local libraries, and sent via email to interested citizens. If the City's grant application for cleanup funding is successful, the City will similarly involve the public, and in particular, the target neighborhood's residents, in the decision-making for the reuse of the site and its appropriate cleanup. Naturally, the area's residents will have concerns related to cleanup activities, particularly as they might affect sensitive populations. The City and its contractor will explain the measures that will be taken to provide health and safety protections to the neighborhood during cleanup and construction activities. If impacted materials or soil vapors are encountered during remedial activities, appropriate monitoring would be performed to document site conditions, and precautions taken to reduce exposure potential. The policy of the City is to ensure meaningful communication with persons that experience Limited English Proficiency. The primary language in the area is English, and the City has not been requested to communicate in another language. However, should that need arise there are available resources at the Center for International Education at the University of Tennessee, Knoxville, and also the Hispanic Chamber of Commerce, located in Knoxville.

#### **b. Partnerships with Government Agencies (5 points)**

Throughout the Brownfields Assessment projects that the City of Knoxville has successfully completed, the Tennessee Department of Environment and Conservation has been a strategic partner in lockstep with the City to aid in determining the extent of contamination of selected properties targeted for assessment. Funding for both hazardous and petroleum contamination sites required working closely with several TDEC personnel in the relevant local field offices, as well as the Brownfields Program Manager in TDEC's

Nashville headquarters, to make sure that all appropriate guidelines and rules were being followed. TDEC personnel attended public meetings and committee meetings and have been included in all correspondence related to the assessment projects. The former Sanitary Laundry site was placed on the State Superfund List in 1994. TDEC initiated emergency removal actions in 1994 to address underground storage tanks and two barrels of dry-cleaning fluid, and again in 1999 to remove numerous 55-gallon drums of dry cleaning fluids and oil. TDEC has worked with the City in preparing Brownfields Voluntary Agreements for properties identified and targeted for redevelopment. The former Sanitary Laundry facility is one such property and TDEC and the City have agreed that the BVA is to be made a condition of sale of the property. The terms of the BVA basically dictate that any proposed redevelopment activity, i.e. cleanup tasks and future site use, must adhere to strict standards set by the regulatory agency that protect public safety, health and the environment.

The Knox Co. Health Dept. is physically located in the target area and provides health services to neighborhood residents. The Health Dept. hosted several public meetings to engage the community in the redevelopment planning for the target area and will be a public site for project progress bulletins.

### **c. Partnerships with Community Organizations (5 points)**

While there are several community-based organizations that support the project, there are four that have already played a noteworthy role, and have committed to continuing their active involvement.

Knoxville's Community Development Corporation (KCDC) is the housing and redevelopment agency for the City. For nearly 70 years, KCDC has enhanced the quality of life for the citizens of Knoxville by providing safe, decent and affordable housing, advancing redevelopment initiatives, fostering self-sufficiency, and improving neighborhoods and communities. KCDC administers more than \$6 million annually in redevelopment and community and neighborhood revitalization, and is responsible for numerous neighborhood improvement projects including developing two new grocery stores, medical office complexes, and more than 100 new housing units. Working in conjunction with the Metropolitan Planning Commission, KCDC produced the Downtown North/I-275 Corridor Redevelopment and Urban Renewal Plan to address critical issues affecting Downtown North including: economic development, particularly on older, often vacant, industrial properties; conservation of historic resources, especially historic properties in the Downtown North neighborhoods; improving multi-modal transportation including a new access road along I-275, plus sidewalks and bicycle facilities; new land use opportunities on underutilized and vacant properties offering mixed-use development; and enhancement of environmental and recreational systems including the Second Creek greenway that runs through the area. KCDC will continue its role as redevelopment agency to support the implementation of the Downtown North Redevelopment Plan.

The Development Corporation of Knox County (TDC) is a non-profit organization committed to fostering the long-term, quality growth of the region's business environment. As the property owner and manager of six business parks located throughout Knox County, TDC is focused on maintaining a sufficient inventory and diversity of properties to meet the needs of new and expanding businesses. In 2004, Knox Co./TDC applied for, and received, an EPA Brownfields Assessment Grant to assess a 19.4-acre derelict property in Downtown North - the former Brookside Knitting Mill, which had become an attraction for indigent people, and presented a safety hazard in the community. EPA Brownfields funds were used to assess Brookside Mills, local government funds were used to clean up the property, and a Brownfields Voluntary Agreement with TDEC was enacted in 2007. The site was purchased and redeveloped by a local businessman and now houses the corporate offices of Holston Gases. TDC understands the role of Brownfields in industrial development and because the Downtown North area is in a major industrial corridor, TDC actively

promotes job creation opportunities for the area and partners with the City and Chamber of Commerce to market industrial properties. TDC's Executive Vice President served on the Knoxville South Waterfront and Downtown North Brownfields Committees and helped guide the City in the prioritization of brownfield sites for redevelopment. It is anticipated that he will perform a similar role for the Sanitary Laundry cleanup.

East Tennessee Community Design Center (ETCDC) is a non-profit organization that facilitates positive change in economically distressed communities through the pro bono contributions of area architects, landscape architects, planners, and other professionals. This network of community volunteers donates over 2,000 volunteer hours annually which leverage five times their value in improvements and services. ETCDC provides land use planning, landscape design, blight removal, visual enhancement programs, and neighborhood stabilization projects including parks, community centers, blighted property identification, housing rehab planning, adaptive reuse of historic properties, and community input visioning. ETCDC partnered with the City in the creation of its façade improvement program to provide incentives to business owners to renovate their building facades, and on a study for the adaptive reuse of abandoned Oakwood Elementary School which had fallen into disrepair. ETCDC led a public involvement process to gather input from the neighborhood regarding the old school's future use. The school has since been redeveloped into an assisted living facility. Currently, ETCDC is partnering with the City and the Broadway Corridor Task Force to develop an Enhancement Plan to consider ways to improve the corridor for businesses and adjacent neighborhoods in Downtown North. ETCDC hosted a design charrette in the neighborhood in November 2015 to gather input from all interested local businesses, residents and organizations, and will continue to work with the City as it moves forward with cleanup and redevelopment of blighted properties.

St. John's Lutheran Church is a historic Lutheran church located on Broadway. Individuals from the Church's Outreach Team volunteer their time to support several local programs including: Habitat for Humanity – church members provide labor and funding to build a house every other year. Family Promise of Knoxville and Knox Area Rescue Ministries - St. John's sends a team of volunteers to cook and serve meals to the poor and homeless families. The Senior Nutrition "Mobile Meals" Program - St. John's volunteers serve two of the routes within our target neighborhood and also check on the meal recipients, reporting any health or safety concerns to the Knoxville-Knox County Community Action Committee Office on Aging for follow-up. KIDS HOPE USA – trained volunteers develop mentor relationships with at-risk public school children spending one hour a week with carefully matched students at an elementary school in the target neighborhood. St. John's Lutheran Church provided meeting space at no charge to the City of Knoxville for quarterly public meetings held throughout the duration of the Downtown North Brownfields Assessment and will make its facility similarly available throughout the site cleanup project.

#### **4. Project Benefits**

##### **a. Health and/or Welfare and Environmental Benefits (10 points)**

###### **i. Health and/or Welfare Benefits (5 points)**

Pollutants from industrial waste and toxic chemicals are considered harmful to humans who are exposed to them through contact with soil, air and water. Sensitive populations such as children, pregnant women and the elderly are at particular risk as their immune systems may be less resistant. The property to be cleaned up under this grant was first developed in the early 1900's and operated as a laundry and dry cleaning facility for 67 years. The Phase II ESA identified soil and groundwater contaminated with dry cleaning compounds, solvents and petroleum products. Miscellaneous debris and small containers of oil, paint and solvents remain in the abandoned building. Concentrations of VOCs exceed residential and industrial regional screening levels as determined by ambient air sampling. Asbestos and lead-based paint are present in multiple rooms. These contaminants plus the evidence of previous habitation by homeless

individuals all combine to present a threat to the health and welfare of the neighborhood. This threat will be eliminated when the property is cleaned up, secured, and redeveloped into an asset for the community. Debris and detritus will be removed from the site, a new roof will replace the current unsafe structure, and the property will be secured to prevent unauthorized trespass. The terms and conditions, along with Land Use Restrictions set by TDEC in the Brownfields Voluntary Agreement, will ensure that future use of the site will not pose a danger to public health, safety, and the environment. Cleanup of the property will renew interest from private developers who have already shown interest in development options, especially since several adjacent properties have been redeveloped into successful commercial enterprises. Site cleanup and redevelopment will offer employment opportunities if the end use is for retail or commercial, and the opportunity for residents to walk to the new facility, encouraging exercise to promote a healthier lifestyle.

**ii. Environmental Benefits (5 points)**

The vapor barrier proposed in the ABCA will prevent vapor intrusion from migrating into any future structure or adaptive reuse of the current structure, and monitoring and maintenance of the vapor system will continue after its installation. Surface runoff from our property most likely contains pollutants such as soil, chemicals and oil which enters storm drains, and ultimately ends up in rivers and streams and can contaminate drinking water. While surface runoff will still occur, cleaning up the site will reduce the amount of pollutants entering the storm drains. Waste material dumped on the site breaks down over a period of time and can release chemicals into the soil and air. Removing waste material will remove this threat from the environment. Site cleanup will lead to redevelopment and most likely offer employment and dining or shopping opportunities for local neighborhood residents. Potentially, this will allow some of these residents to walk to work instead of having to drive, or walk to the retail establishments which in turn, reduces vehicle emissions that contribute to unhealthy air. All of these benefits contribute to a healthier environment.

**b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse (5 points)**

**i. Policies, Planning or Other Tools (2 points)**

At the beginning of her administration, Knoxville's Mayor Madeline Rogero outlined four major goals: ♦Strong, safe neighborhoods; ♦Living green and working green; ♦An energized downtown; ♦Job creation and retention. These goals guide the City's budget and operations. Its Energy & Sustainability Initiative has helped make Knoxville a greener city by embedding support for low-impact design and alternative transportation options into how it designs and manages public infrastructure, and integrates sustainability principles into street design, utility infrastructure planning and maintenance. The City is implementing sustainable development strategies such as: the Solar America Cities Program; Leadership in Energy and Environmental Design (LEED) certification for the new Downtown Transit Center; energy efficient building practices for low-income housing programs, and more. Wherever possible, existing utilities serve new facilities. As derelict buildings are demolished, the practice is to recycle demolition materials whenever possible so that useable materials are recovered rather than transported to a demolition landfill. The preferred cleanup alternative calls for the existing structure of our target property to remain intact, but should demolition be necessary for redevelopment, demolition materials will be reused or recycled whenever possible, as advocated in City policy.

**ii. Integrating Equitable Development or Livability Principles (3 points)**

The City has embraced the six livability principles established by The Partnership for Sustainable Communities and set up specific programs and/or plans to further equitable development. In 2015, City officials hosted representatives from Smart Growth America to introduce concepts related to transit oriented development, which ties into the renovation of Downtown North into an integrated mixed-use area with visual, pedestrian, vehicular and land use connections working together. Connecting currently disconnected



streets and enabling pedestrian, cycling, and public transit options for access to employment, schools, and shopping will decrease vehicular miles traveled, thus reduce greenhouse gas emissions and benefit health.

Knoxville's housing programs target improvement and construction of affordable housing, homebuyer assistance, and repair and rehabilitation to reduce the number of substandard rental and owner-occupied properties. Components are: Downpayment Assistance Program - through federal grant funds, the City supports new construction and rehabilitation projects for affordable housing; Owner-Occupied Home Rehabilitation - funds are available for owners to rehabilitate substandard residential properties; Rental Rehabilitation Program - provides assistance to owners of substandard rental property. In return, property owners agree to long term rent and occupancy restrictions to keep the housing affordable to lower-income tenants; Blighted Property Redevelopment Program - provides short-term development and construction financing through subsidized loans to redevelop and renovate unoccupied residential dwelling units.

The City's Equal Business Opportunity Program is an outreach program aimed at increasing minority, women, and small businesses' participation in the City's procurement process for construction, goods and services. Every effort is made to encourage disadvantaged businesses to provide services on City projects.

Three Rivers Market, Knoxville's Community Food Co-op, is a customer-owned cooperative, and center of sustainable commerce that benefits members and the community by creating and nourishing a healthier environment, healthier people, and a healthier community. It strives to provide the very best local, organic, and healthy food available. The Co-op represents a three-million dollar investment in a former abandoned facility within a half-mile of our subject site and within walking distance of low income neighborhoods. The City provided gap financing to relocate and expand the business.

### **c. Economic and Community Benefits (long term benefits) (5 points)**

#### **i. Economic or Other Benefits (3 points)**

Economic benefits are being realized from new retail and commercial establishments that have turned former underutilized properties into successful business ventures and created employment opportunities for local residents. Those benefits will increase considerably when the Sanitary Laundry facility and other brownfield sites are cleaned up and become once again productive properties. An obvious benefit is the increased tax base for the City of Knoxville. A report titled *Reclamation and Economic Regeneration of Brownfields*, by E.P. Systems Group, cites a study of brownfield project economic features which found that cleanup costs averaged only 8% of total project costs, and each \$1 of public sector financing invested leveraged an additional \$2.48 in private dollars. The Development Corporation of Knox County estimates that 5-10 new jobs are created per acre of industrial property developed. The estimated 136 acres of developable brownfield properties in Downtown North, could lead to as many as 1,000 new employment opportunities for local citizens. An increase in employment generates an increase in spending. It means houses will be maintained which leads to money spent on supplies needed to make the improvements. It means disposable income to spend in retail establishments and restaurants in the neighborhood. It leads to neighborhood stability which is desperately needed in the Downtown North neighborhoods.

#### **ii. Job Creation Potential: Partnerships with Workforce Development Programs (2 points)**

Knoxville-Knox County's Community Action Committee (CAC) provides job training through its Workforce Connections, which is responsible for the development and operation of a variety of programs focused on employment assistance, related training and support. Of note are two programs that focused on environmental training. Eight unemployed workers were trained for 'green' jobs as weatherization auditors to perform energy audits of homes to find and correct deficiencies, e.g. sealing leaks around windows and

doors etc. Of the eight that were trained, five found permanent employment and two started their own businesses providing energy audits. The second training of note relates to the environmental cleanup of contaminated sites at the Department of Energy facilities in Oak Ridge, located 20 miles from Knoxville. Workforce Connections developed a program, conducted by the International Chemical Workers Union, to train environmental technicians in hazardous materials handling, Hazardous Waste Operator Training and Emergency Response certification, and Occupational Safety and Health Administration (OSHA) construction certification in asbestos, mold and lead. CAC is located in our target area and therefore well positioned to provide training to the underserved citizens of the Downtown North neighborhoods.

## **5. Programmatic Capability and Past Performance**

### **a. Programmatic Capability (12 points)**

The City of Knoxville's Office of Redevelopment employs a full-time Director of Redevelopment who is assisted by a Deputy Director and project management staff. The Deputy Director is Ms. Anne Wallace who has managed, and is currently managing, multiple community redevelopment projects. Ms. Wallace oversaw all technical, administrative and financial requirements of two recently-completed \$400,000 Community-wide Brownfields Assessment Projects funded by the EPA - the Knoxville South Waterfront and Downtown North. Ms. Wallace coordinated with the City's Law Department to develop an access agreement for Brownfields property owners, and with the Finance Department to facilitate drawdown of grant funds. She reviewed and approved all EPA-required reporting and all community outreach communications. Ms. Wallace maintained constant contact with the environmental consultant to remain fully engaged in every task associated with the projects. Under her management, both projects were successfully completed, and redevelopment is happening in both project areas – the South Waterfront is undergoing a very large, mixed-use development of the three-mile waterfront with approximately \$185M in private investment, while Downtown North is seeing infill development of specialty retail and commercial businesses in keeping with the character of the neighborhood. Ms. Wallace has been an invited speaker to give presentations on these project successes at several environmental conferences and workshops. She will manage the cleanup of the Sanitary Laundry property. The entire Redevelopment Office staff becomes involved in the various projects so that each is familiar with the project goals and milestones. If employee turnover should occur, another staff member will be knowledgeable enough to fill in until a replacement can be found. While Ms. Wallace will manage the project, the design and implementation of the appropriate remediation system will be contracted out to a qualified environmental consultant and contractor. The City has a standard procurement process in place through the City's Purchasing Department to hire the best qualified environmental consultant. The procurement includes a Request for Qualifications published in the local newspaper and on the Purchasing Department's website, a thorough panel review of all submitted qualifications packets, candidate firm interviews if appropriate, and subsequent contract negotiations.

### **b. Audit Findings (2 points)**

The City of Knoxville has been the recipient of multiple federal and state grants which it has administered successfully. The City's Department of Finance maintains strict adherence to grant compliance procedures so that all funds were drawn down and there were no adverse audit findings.

### **c. Past Performance and Accomplishments (6 points)**

#### **i. Currently or Has Ever Received an EPA Brownfields Grant (6 points)**

##### **1. Compliance with Grant Requirements (3 points)**

In 2009, the EPA selected the City of Knoxville for a \$400,000 community-wide hazardous substances and petroleum grant for the South Waterfront Redevelopment Area. The Work Plan consisted of five major tasks which proceeded smoothly and successfully so in 2011, the City was awarded an additional \$400,000

in EPA Assessment funds for a community-wide hazardous substances and petroleum grant in our target area of Downtown North. This Work Plan had four major tasks: (1) Project Management and Reporting; (2) Public Involvement and Engagement; (3) Site Inventory and/or Characterization; and (4) Cleanup Planning and Institutional Controls. EPA tagged the Downtown North grant to the South Waterfront grant so both were ongoing at the same time. Both projects were completed within the allotted performance period. All grant compliance activities were completed on time including quarterly reports, MBE-WBE reports, and ACRES online database reporting. All field work was completed, all reports finalized, and all relevant data entered into ACRES prior to the grant closeout deadline of September 30, 2014. All deliverables (Phase I & II Reports, QAPPs, Asbestos/Lead Based Paint Reports) were sent in electronic format to EPA and TDEC. In addition, all deliverables were sent to the EPA Project Manager as hard copies. Approximately \$4,200 of the \$800,000 grant funds were not drawn down.

## 2. Accomplishments (3 points)

South Waterfront Brownfields Assessment – An inventory of potential Brownfield sites was conducted. Thirty hazardous substance sites and twenty-one eligible petroleum-contaminated sites were considered for evaluation. After careful evaluation of each site's redevelopment potential, twelve were identified as the best candidate sites for redevelopment including six parcels that comprised the former Baptist Hospital campus. After negotiations with the property owners, Phase I ESAs were conducted on the twelve sites and subsequently, seven Phase II ESAs were performed. Of those seven sites, one is part of a new riverfront road construction, one is an extension of the Cityview Riverwalk whose construction is now complete, two are being marketed for development and the final three are former Baptist hospital parcels. The former hospital is currently undergoing redevelopment into restaurant, retail, office, commercial and residential use with a public plaza – a \$165M private investment. Regal Entertainment has also just announced that it will locate its new corporate headquarters on a portion of the former hospital site. Throughout the duration of the Brownfields Assessment project, the City published a quarterly newsletter updating area residents on all of the redevelopment activities proposed or happening on the South Waterfront.

Downtown North Brownfields Assessment – Prior to receiving the Brownfields Assessment Grant, the City had conducted an inventory of potential Brownfield sites that identified 80 Brownfields properties. Sixteen were considered as having the best redevelopment potential and after property owners were approached for access, seven Phase I and six Phase II ESAs were performed. Sanitary Laundry was one of the sites. Of the six sites assessed, one is currently being redeveloped into 100 units of independent living for senior citizens, one has been purchased by a local businessman for future mixed-use development and the remaining four are ready to be marketed for redevelopment. Quarterly update meetings were held in the neighborhood for the Brownfields Project Team and the public. A quarterly newsletter was distributed to local library locations and via email to interested citizens, as well as being posted on the City's website.

When a property in either South Waterfront or Downtown North was identified for assessment, it was entered into the ACRES database which was updated at project milestones. At the time of grant closeout, all relevant information pertaining to every property assessed was up-to-date. As further work is performed at the assessed properties, the ACRES database will be updated to reflect the progress.

In conclusion -- As this former Sanitary Laundry and Dry Cleaning property and other Brownfields properties are returned to productive use in the community, job opportunities will become available, income levels will rise, property values will increase, and the environmental health and dignity of the neighborhood will be restored. None of this will happen overnight, but it will happen -- by focusing on our Downtown North Brownfields Redevelopment Plan, one property at a time.

# Threshold Criteria

**Attachment A.**

**City of Knoxville Brownfields Grant Proposal for Cleanup Funds  
Former Sanitary Laundry Property  
Threshold Criteria**

**1. Applicant Eligibility**

**a. Eligible Entity**

The City of Knoxville is eligible as a General Purpose Unit of Local Government.

**b. Site Ownership**

The City of Knoxville holds fee simple title and is sole owner of the property identified for purposes of this cleanup proposal as the Former Sanitary Laundry and Dry Cleaning property. The Deed is recorded in the Knox County Courthouse, Register of Deeds, Deed #20140211-0047241. The City of Knoxville will retain sole ownership of this property throughout the performance period of the grant until all grant closeout activities have been completed.

**2. Letter from the State or Tribal Environmental Authority**

Please see the attached letter from Ms. Paula Larson with the Tennessee Department of Environment and Conservation (TDEC).

**3. Site eligibility and Property Ownership Eligibility  
Site Eligibility**

**a. Basic Site Information**

- |                    |   |
|--------------------|---|
| (a) Site Name:     | Former Sanitary Laundry and Dry Cleaning Property |
| (b) Address:       | 625 North Broadway, Knoxville, Tennessee, 37917   |
| (c) Current Owner: | City of Knoxville, Tennessee (the Applicant)      |
| (d) Acquisition:   | N/A – the Applicant owns the property             |

**b. Status and History of Contamination at the Site**

- (a) The site is contaminated predominantly by hazardous substances.
- (b) The site operated as a laundry and dry cleaning facility from 1926-1993, one tenant – Old City Lighting Company is listed in the City Directory in 2008. The property has been vacant since.
- (c) Environmental concerns include: soil and groundwater contaminated with dry cleaning compounds, solvents, and petroleum products; two gasoline USTs and one heating oil AST that were located on the property in the past; numerous 55-gallon drums of dry cleaning fluids and oil that were observed and removed from the property in 1999; two groundwater monitoring wells located in the courtyard area; evidence of one dry cleaning solvent UST that was observed, whose contents were reportedly removed in 1994; asbestos and lead-based paint in multiple rooms in the building; miscellaneous debris and detritus that can empty into storm drains through surface runoff.
- (d) The site housed a laundry and dry cleaning facility for 67 years. Dry cleaning compounds, solvents and petroleum products used in the operation of the cleaning process and related

equipment were stored in USTs and ASTs on the property. The USTs were removed in 1993 but corrosion holes in the tanks suggest there was potential release of some contents. Several of the 55-gallon drums of oil and dry cleaning fluids that were removed showed signs of leakage. Results of a Phase II ESA indicated arsenic concentrations detected in groundwater samples exceeded the corresponding EPA arsenic Tapwater Regional Screening Levels (RSL), lead concentrations detected in each groundwater sample exceeded the USEPA MCL; soil gas samples analyzed indicated Volatile Organic Compounds (VOCs) that exceeded Residential and Industrial RSLs; ambient air sampling indicated VOCs that exceeded Residential and Industrial RSLs.

**c. Sites Ineligible for Funding**

- (a) The site is not listed or proposed for listing on the National Priorities List.
- (b) The site is not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA.
- (c) The site is not subject to the jurisdiction, custody, or control of the United States government.

**d. Sites Requiring a Property-Specific Determination**

The subject site does not require a property-specific determination.

**e. Environmental Assessment Required for Cleanup Proposals**

A Phase II Environmental Site Assessment was conducted on the property in 2014 – the Report is dated September 12, 2014 – as part of an EPA grant-funded, Community Wide Brownfields Assessment Project. The Phase II ESA was conducted to determine the nature and extent of subsurface contamination resulting from past use of the property. The assessments conducted for this Phase II ESA consisted of installing and collecting 34 passive soil vapor modules, collecting 25 soil subsurface soil samples, six groundwater samples, eight ambient air samples, and eight soil gas samples based on field observations, accessibility and historical land use practices. The samples were subsequently submitted for laboratory analyses. The Phase II ESA Report provides details of the project approach, site characteristics and surrounding area description, sample collection procedures, sample analysis and data validation information, analytical results of individual media sampling, conclusions, and supporting data.

**Property Ownership Eligibility – Hazardous Substance Sites**

**f. CERCLA §107 Liability**

The City of Knoxville is not liable for contamination at the site under CERCLA §107 Liability. The City has not owned or operated the facility as a laundry or dry cleaning facility, was not an owner or operator of the facility at the time of disposal of a hazardous substance, was not a party that arranged for the treatment or disposal of hazardous substances, or a party that accepted hazardous substances for transport to disposal or treatment facilities at the site. The City of Knoxville is not a responsible party or “covered person” subject to liability under CERCLA §107 per the case of *Delaney v. Town of Carmel*, 55 F.Supp.2d 237 (United States District Court, S.D. New York, 1999), because the City acquired the property involuntarily

through tax delinquency and the City had not previously created, disposed of, stored, treated or handled waste in any manner at a site.

**g. Enforcement or Other Actions**

The Tennessee Department of Environment and Conservation conducted its primary activities to investigate, identify, contain, and clean up hazardous substances in 1993, 1994, and 1999. Other support-related activities were conducted before and after that time period. Specifically, a Notice of a Hazardous Substance Site lien was filed with the Knox County Register's Office on the Site in 1997. Currently, the lien secures \$76,483.51 in favor of the State of Tennessee. An Imminent, Substantial Danger Memorandum was issued by the Commissioner in 1999 due to the presence of multiple fifty-five (55) gallon drums of hazardous substances on the site. Access at the time was uncontrolled and there existed the potential for explosion and/or fire. TDEC initiated an emergency removal of the drums in October 1999. In order to support the redevelopment of the former Sanitary Laundry property, TDEC has determined that it will not pursue a claim under the lien against the City of Knoxville. This determination is documented in a letter from Mr. Steve Goins, Director of the Division of Remediation at TDEC. The letter is included as an attachment to this proposal. The former Sanitary Laundry and Dry Cleaning facility site is not subject to any known ongoing or anticipated environmental enforcement or other actions. Other than the actions just mentioned, the City of Knoxville is not aware of any inquiries or orders from federal, state or local government entities regarding responsibility of any party for the contamination or hazardous substances at the site. Even though the property was taken involuntarily due to the presence of delinquent taxes, delinquent taxes remain attached to the property as a lien and are still owed to the City of Knoxville and to Knox County, Tennessee in the amounts of \$49,957.19 and \$41,353.56 respectively.

**h. Information on Liability and Defenses/Protections**

**i) Information on the Property Acquisition**

1. The City of Knoxville acquired the subject property through tax foreclosure
2. The date of acquisition was January 2, 2013 (Deed recorded February 11, 2014).
3. The City of Knoxville owns the property in fee simple title
4. The property was acquired through a sell order by the Knoxville Chancery Court
5. The City of Knoxville has no familial, contractual, corporate or financial relationships or affiliations with prior property owners or other potentially responsible parties

**ii) Timing and/or Contribution Toward Hazardous Substances Disposal**

All disposal of hazardous substances at the site occurred before the City of Knoxville acquired the property. The City of Knoxville did not cause nor contribute to any release of hazardous substances at the site. The City of Knoxville has not, at any time, arranged for the disposal of hazardous substances at the site or transported hazardous substances to the site.

**iii) Pre-Purchase Inquiry**

1. A Phase I ESA was performed for the City of Knoxville, in accordance with ASTM E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The Phase I ESA Report is dated July 31, 2013.

2. The Phase I ESA was performed by S&ME, Inc. S&ME provides a broad range of environmental services, including site assessments for real estate transactions. Engineering News and Record recently ranked S&ME as one of the 200 largest environmental firms in the country. The Environmental Professional for this Phase I ESA was Mr. Timothy S. Schalk. Mr. Schalk has 19 years of environmental experience performing and managing Phase I and II Environmental Site Assessments.
3. The City of Knoxville became the owner of the Property as the result of a tax sale. The Property was auctioned off on October 23, 2012 pursuant to an order entered on February 6, 2012 in case # 177216-2 in Knox County Chancery Court in order to collect delinquent real property taxes owed to the City of Knoxville. Pursuant to Tennessee Code Annotated, § 67-5-2501(a), the City was required to make the first bid in the amount of taxes due. When no other bidders came forward, the City was stuck with the property. The order confirming the sale of the property was entered on January 2, 2013, and one year later on February 4, 2014, the Clerk and Master of the court issued a deed that conveyed title to the City. Prior to the date the property was conveyed to the City, the City had never created, disposed of, stored, treated or handled waste in any manner at the property nor managed or conducted any operations on the property. The Phase I ESA, conducted on the property in 2013, was part of a community-wide Brownfields Assessment project to evaluate its potential for redevelopment.

iv) Post-Acquisition Uses

Since the City of Knoxville took ownership of the property, it secured the site with new locks and has worked diligently to keep the property secured and eliminate elements of blight. The City's Public Service Department has worked to remove graffiti from the property by painting. As recently as the first week in November 2015, the Public Service Department has removed and replaced weathered OSB, painted the material and secured a piece of marble on the facade of the building. The only other activity on the site has been tasks associated with the Phase II ESA conducted in 2014.

v) Continuing Obligations

1. The work done by TDEC with a previous property owner in the 1990's addressed potential releases of hazardous materials on the site. Two gasoline USTs and one heating oil AST, as well as a chlorinated solvent UST were located on the property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but remains on the property. Numerous 55-gallon drums of dry cleaning fluids and oil were removed from the property in 1999. No hazardous materials were located at the site at the time the City of Knoxville took ownership of the property. No hazardous materials were being released to the environment at the time the City took ownership, therefore no actions were required to prevent any future release of substances.
2. The City of Knoxville and TDEC have structured a Brownfields Voluntary Agreement (BVA) pertaining to the future use of the site and the precautions to be taken to protect human health and the environment during site remediation and redevelopment. TDEC and the City have agreed that the BVA is to be made a condition of sale of the property. Any proposed site redevelopment must address the potential for subsurface vapors to migrate to ambient air thru the existing concrete slab in the building. As part of the site re-design for proposed use, a soil vapor mitigation system would be



required to protect building occupants. The goal of the soil vapor mitigation system would be to break the exposure pathway for vapor migration. Since the proposed activities limit subsurface disturbance to utility trenches or other limited areas where excavation would be needed to support the redevelopment design, the neighborhood would likely not be subjected to significant health and safety risks during these activities. Likewise, during installation of a soil vapor mitigation system, risk to surrounding building occupants would be minimal, as most of this activity would take place inside the Sanitary Laundry structure. If impacted materials or soil vapors are encountered during remedial activities, appropriate monitoring would be performed to document site conditions and take precautions if warranted to reduce exposure potential for the surrounding site occupants. During remedial and construction activities, site access will be restricted to qualified and trained workers.

3. The BVA requires a Soil Management Plan (SMP) to be submitted for TDEC's approval prior to the commencement of construction activities. The SMP will include, but not be limited to, characterization of any excavated materials, handling procedures to ensure that any offsite disposal of impacted media meets all State and Federal requirements, and, if needed, installation of a barrier or engineered cap. A Health and Safety Plan shall also be submitted to TDEC for review and comment.

The City of Knoxville makes the commitment to:

1. Comply with all land-use restrictions and institutional controls;
2. Assist and cooperate with those performing the cleanup and provide access to the property;
3. Comply with all information requests and administrative subpoenas that have or may be issued in connection with the property; and
4. Provide all legally required notices.

#### 4. Cleanup Authority and Oversight Structure

- a. The TDEC Division of Remediation has been involved with this site for many years. In an effort to support the City's redevelopment efforts, and to insure that site redevelopment is performed in accordance with applicable regulations, TDEC prepared a Brownfield Voluntary Agreement (Site No. 47-545). The BVA lists the actions to be taken during remediation and construction to ensure the cleanup is protective of human health and the environment. The City of Knoxville's Brownfields Project Manager will oversee and manage the overall cleanup project, but the design and implementation of the appropriate remediation system will be contracted out to a qualified environmental consultant and contractor. The City has a standard procurement process in place through the City's Purchasing Department to hire the best qualified environmental consultant. The procurement includes a Request for Qualifications published in the local newspaper and on the Purchasing Department's website, a thorough panel review of all submitted qualifications packets, candidate firm interviews if appropriate, and subsequent contract negotiations.
- b. Access to adjacent properties is not anticipated in order to conduct cleanup activities, however, if it is determined that access is needed for offsite sampling or monitoring, the City will work with adjacent property owners to obtain access to their properties.

5. Statutory Cost Share

- i) The City of Knoxville will commit a 20% cost share match for grant funds awarded. City Council approved a Resolution **authorizing the Mayor to execute any and all documents necessary to apply for and, if awarded, accept a brownfield cleanup grant from the United States Environmental Protection Agency to provide funding in the total amount of \$200,000 with an additional City match of \$40,000 to carry out cleanup activities at the former Sanitary Laundry property located at 625 N. Broadway.** The funding source for the City's cost share will be Capital Improvement Funds.
- ii) The City of Knoxville is not requesting a hardship waiver.

6. Community Notification

The City of Knoxville placed a notice on its website, sent a media advisory to all local news stations (television, radio, and print), published in the City's Neighborhood Advisory publication and the Central Business Improvement District newsletter, and sent notice to approximately 150 residents of the area who have given email addresses for updates to inform the public of its intent to apply to the United States Environmental Protection Agency for a \$200,000 grant to clean up the former Sanitary Laundry and Dry Cleaning site located at 625 North Broadway. The notice informed the public of the availability of the draft grant application for review, along with a document outlining cleanup alternatives (the ABCA), and invited comments on the documents. A notice also invited the public to a meeting to be held on December 1, 2015 where the project would be discussed, the draft grant application and ABCA would be available for review, and comments from the public were welcome.

- A copy of the draft ABCA is attached to the proposal, and includes the Brownfields Voluntary Agreement.
- A copy of the public notice(s) is attached to the proposal.
- A copy of the public meeting sign-in sheet is attached to the proposal – *Note: representatives from the media did not sign in, however three TV stations covered the meeting – WBIR (NBC), WATE (ABC) and Knoxville's Community Television.*
- A summary of the comments received and corresponding responses is attached to the proposal.
- A summary of the public meeting is attached to the proposal (including the Presentation).

# **Attachments:**

- **Letter from the State Environmental Authority**
- **Letter from the Director of TDEC, Division of Remediation regarding a TDEC lien**
- **Draft ABCA (including Brownfields Voluntary Agreement)**
- **Letters of Commitment from Community Organizations (4)**
- **Documentation of Community Notifications (3)**
- **Public Meeting Sign-in sheet**
- **Public Comments & Responses**
- **Summary of Public Meeting (including the meeting Presentation)**



**TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION**  
DIVISION OF REMEDIATION  
WILLIAM R. SNODGRASS TENNESSEE TOWER  
312 ROSA L. PARKS AVENUE, 14<sup>TH</sup> FLOOR  
NASHVILLE, TENNESSEE 37243

December 4, 2015

Anne Wallace  
Deputy Director, Office of Redevelopment  
City of Knoxville  
400 Main Street, Suite 655  
Knoxville, TN 37902

Re: State letter of Acknowledgement  
City of Knoxville, TN for EPA Cleanup Grant for 625 N Broadway

Dear Ms. Wallace,

The Tennessee Department of Environment and Conservation (TDEC) is pleased to acknowledge your efforts to apply for a \$200,000 US EPA Brownfields Cleanup Grant to cleanup a key parcel of land at 625 North Broadway in Knoxville, TN, commonly known as the former Sanitary Laundry property.

If awarded, we understand that the city intends to use the funds to cleanup the property at 625 North Broadway. In cooperation with Region 4 EPA, the TDEC brownfields staff will provide technical support for your grant project to help make this project a success.

We greatly appreciate your efforts to address brownfields in Knoxville!

Sincerely,

A handwritten signature in black ink, appearing to read "Paula Larson", with a large, sweeping flourish at the end.

Paula Larson  
State of Tennessee Brownfields Outreach Coordinator  
Tennessee Department of Environment and Conservation



**TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION**  
DIVISION OF REMEDIATION  
WILLIAM R. SNODGRASS TENNESSEE TOWER, 14<sup>TH</sup> FLOOR  
312 ROSA L. PARKS AVENUE  
NASHVILLE, TENNESSEE 37243

December 5, 2015

Anne Wallace  
Deputy Director, Office of Redevelopment  
City of Knoxville  
400 Main Street, Suite 655  
Knoxville, TN 37902

RE: TDEC lien on 625 N Broadway

Dear Ms. Wallace,

The Division of Remediation is aware of the Tennessee Department of Environment and Conservation (TDEC) lien on the property at 625 N Broadway in Knoxville, TN. We understand that this property, commonly known as the former Sanitary Laundry property, is the subject of your application for an EPA Cleanup Grant application and fully support this endeavor.

In order to support the redevelopment of the former Sanitary Laundry Property, TDEC has determined that it will not pursue a claim under the lien against the City of Knoxville. Based on the criteria established in TCA 68-212-202(4)(E)(i) because the property was taken by the City for back taxes owed, TDEC would not consider the City of Knoxville a liable party.

We fully support and applaud your efforts to get this property back into productive reuse and wish you the best on your grant application. If you have further questions regarding this matter, please contact Paula Larson at (615) 532-0926.

Sincerely,

Steve Goins  
Director, Division of Remediation

cc: NCO  
KFO

**Analysis of  
Brownfield Cleanup Alternatives  
Former Sanitary Laundry Site  
625 North Broadway, Knoxville TN  
S&ME Project No. 4143-15-072**



Prepared for:  
**City of Knoxville**  
**Office of Redevelopment**  
**400 Main Street, Suite 655**  
**Knoxville, Tennessee 37902**

Prepared by:  
**S&ME, Inc.**  
**1413 Topside Road**  
**Louisville, TN 37777**

**September 10, 2015**



September 10, 2015

City of Knoxville  
Office of Redevelopment  
400 Main Street, Suite 655  
Knoxville, Tennessee 37902

Attention: Ms. Anne Wallace

Reference: **Analysis of Brownfield Cleanup Alternatives**  
**Former Sanitary Laundry Site, 625 North Broadway**  
Knoxville, TN  
S&ME Project No. 4143-15-072

Dear Ms. Wallace:

S&ME, Inc. (S&ME) has completed an Analysis of Brownfield Cleanup Alternatives (ABCA) for the Former Sanitary Laundry property located at 625 North Broadway in Knoxville, Tennessee. The purpose of the ABCA is to briefly summarize information about the site and contamination issues, cleanup standards, applicable regulatory requirements, cleanup alternatives considered, and proposed cleanup alternative(s). As part of the community notification requirements for an Environmental Protection Agency (EPA) Brownfield Cleanup Grant (grant), the City of Knoxville must allow the community an opportunity to comment on the draft grant proposal. Following your review and comment on this ABCA, a public meeting is to be held to present the proposal and the ABCA, and to solicit public comments. The ABCA, public meeting information and public comments are to be included in the grant application, if you elect to pursue this funding opportunity.

S&ME appreciates this opportunity to be of service to you. Please call if you have questions concerning this report or any of our services.

Sincerely,  
**S&ME, Inc.**

Elizabeth M. Porter, P.G., PMP  
Project Manager

James R. Bruce, P.G., CHMM  
Senior Reviewer



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## Appendices

Appendix I – Figures

Appendix II - BVA 47-545





## **1.0 Introduction**

S&ME, Inc. (S&ME) has completed an Analysis of Brownfield Cleanup Alternatives (ABCA) for the Former Sanitary Laundry property located at 625 North Broadway in Knoxville, Tennessee (Figure 1, Appendix I). The purpose of the ABCA is to briefly summarize information about the site and contamination issues, cleanup standards, applicable regulatory requirements, cleanup alternatives considered, and proposed cleanup alternative(s). The ABCA has been prepared to support an application for a United States Environmental Protection Agency (EPA) Brownfield Cleanup Grant, if the City of Knoxville (City) elects to pursue this funding opportunity.

## **2.0 Background Information**

Regulatory files available at the Tennessee Department of Environment and Conservation (TDEC) Knoxville Field Office (KFO) were reviewed by S&ME to compile this background information. In addition to the regulatory file review, using funds from an EPA Brownfields Assessment and Planning Grant, S&ME performed environmental services for the City on the former Sanitary Laundry and Dry Cleaning property at 625 North Broadway in Knoxville, Tennessee. The approximately 0.334-acre property is owned by the City of Knoxville, and is identified on the Knox County Tax Assessor's Tax Map as Tax Map 94D, Group P, Parcel 13 (Parcel ID 094—DP-013). S&ME generated the following reports to document the assessment activities:

- ◆ *S&ME Report of Phase I Environmental Site Assessment, Former Sanitary Laundry and Dry Cleaning Property, July 31, 2013*
- ◆ *S&ME Report of Phase II Environmental Site Assessment, Former Sanitary Laundry Property, September 12, 2014*
- ◆ *S&ME Report of Limited Asbestos and Lead-Based Paint Survey, 625 North Broadway Former Sanitary Laundry Facility, October 22, 2014*

Numerous additional reports and site-related documents are available in the extensive TDEC file. It is worthwhile to note that the reports referenced above and in the TDEC files include both the parcel at 625 North Broadway and the parcel at 750-760 Stone Street, located behind the subject property but also part of the former Sanitary Laundry operation. The parcel at 750-760 Stone Street contained the boiler house and a loading and vehicle maintenance building. The Stone Street parcel is currently owned by others and is excluded from this ABCA. The parcel addressed in this ABCA is shown in Figure 2, Appendix I.



The subject property at 625 North Broadway is occupied by an approximately 15,000 square-foot vacant building formerly occupied by Sanitary Laundry and Dry Cleaning. As summarized in the referenced reports and previous documentation available in TDEC files, historical resources reviewed indicate that Sanitary Laundry and Dry Cleaning operated on the subject property from 1926 until 1993. One dry cleaning solvent and two gasoline underground storage tanks (UST) utilized by the dry cleaner were located on the property or on the Stone Street parcel behind the building, which was also former Sanitary Laundry property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but based on observations made during the Phase I Environmental Site Assessment (ESA) site reconnaissance, this UST remains on the property, behind the building.

During a discussion regarding the site at the TDEC KFO on August 25, 2015, Dan Hawkins and Erin Sutton, both with the TDEC Division of Remediation (DOR), were asked about the status of USTs associated with the subject site. Ms. Sutton recalled that the dry-cleaning fluids tank was filled with concrete sometime in the 1990's. Neither Mr. Hawkins nor Ms. Sutton were aware of ongoing concerns associated with residual fluids in the site's USTs. TDEC records reviewed during preparation of this ABCA confirm that in 1994, the tank that previously held dry-cleaning fluids was emptied and subsequently filled with concrete.

Minor staining of the concrete floor was observed throughout the building during the Phase I ESA site reconnaissance. A loading dock was observed on the west side of the building. A large boiler was observed on the northeast portion of the building. An adjoining elevated concrete trough was also observed. The past use of this trough was not evident based on site observations. Steam piping used in the dry cleaning process was also observed throughout the building.

Soil and groundwater investigations have identified soil and groundwater contaminated with dry cleaning compounds, solvents, and petroleum products. The Phase I ESA documented evidence of recognized environmental conditions relative to current and former uses of the subject property. The recognized environmental conditions documented in the Phase I ESA include:

- ◆ The subject property operated as a dry cleaner from 1926 until 1993.
- ◆ The subject property was identified on multiple regulatory databases.
- ◆ Dry cleaning compounds and solvents at concentrations that exceed primary drinking water Maximum Contaminant Levels (MCLs) have been detected in groundwater.
- ◆ Two gasoline USTs and one heating oil aboveground storage tank (AST) have been located on or behind the subject property in the past (on the 750-760 Stone Street parcel).



- ◆ Evidence of one dry cleaning solvent UST was observed on the subject property. The contents of the UST were reportedly removed in 1994 but no soil testing was performed at that time.
- ◆ Numerous 55 gallon drums of dry cleaning fluids and oil were observed and removed from the Sanitary Laundry property in 1999.
- ◆ Two groundwater monitoring wells are located in the courtyard area west of the North Broadway building.
- ◆ One inground hydraulic lift was observed in the garage building behind the subject property (on the 750-760 Stone Street parcel).
- ◆ The subject property was placed on the State Superfund list in 1994.

In 1994, the subject property was added to the List of Inactive Hazardous Substance Sites by action of the Tennessee Solid Waste Disposal Control Board. The subject property was identified as Site No. 47-545, Sanitary Laundry and Dry Cleaners. A Notice of a Hazardous Substance Site was filed with the Knox County Register's Office in 1997. An Imminent, Substantial Danger Memorandum was issued by the TDEC Commissioner in 1999, due to the presence of multiple 55-gallon drums of hazardous substances onsite. TDEC initiated emergency removal actions in 1994, and again in 1999, addressing the underground storage tanks and two barrels of dry cleaning fluid in 1994, and implementing an emergency removal of the drums in 1999.

Based on the Phase I ESA findings, in 2014 S&ME conducted a Phase II ESA on behalf of the City to determine the nature and extent of subsurface contamination resulting from past use of the property. The Phase II ESA consisted of the collection and laboratory analysis of 34 passive soil vapor modules, subsurface soil samples, groundwater samples, soil gas samples and ambient air samples from the former Sanitary Laundry property, which included the subject site and the parcel to the west, behind the subject site. A Geoprobe® rig was used to obtain subsurface soil for field and laboratory analyses. Groundwater samples were collected from two existing monitoring wells and from six piezometers installed during the Phase II ESA sampling.

The analysis of soil samples revealed arsenic concentrations in 14 samples that exceeded the EPA May 2014 Residential Soil Regional Screening Level (RSL), and 13 samples that exceed the Industrial Soil RSL for arsenic. However, the reported arsenic concentrations did not vary significantly with depth or location and are therefore interpreted as naturally-occurring background. Of the volatile organic compounds (VOC) and polynuclear aromatic hydrocarbon (PAH) compounds detected in soil samples, only tetrachloroethylene and benzo(a)pyrene exceeded Residential Soil RSLs. None of the reported VOC or PAH concentrations exceed Industrial Soil RSLs.



Concentrations of petroleum hydrocarbons (EPH, TPH) that exceeded the TDEC Division of Solid Waste Management cleanup criteria of 100 milligrams per kilogram (mg/kg) were reported in soil samples collected from within the Sanitary Laundry building, the former auto repair building (behind the subject site) and the former UST locations (behind the subject site).

Arsenic concentrations detected in groundwater samples exceeded the corresponding arsenic Tapwater RSL. Lead concentrations detected in each groundwater sample exceeded the EPA drinking water MCL. Concentrations of benzene and the chlorinated solvents tetrachloroethylene, trichloroethylene cis-1,2-dichloroethene and vinyl chloride which exceeded the Tapwater RSLs and MCLs were detected in groundwater samples. Also notable is the detection of 1,2-dichlorobenzene, ethylbenzene, naphthalene, n-propylbenzene, the trimethylbenzene isomers, and xylenes that exceed the Tapwater RSLs.

The eight soil gas samples collected during the Phase II ESA reported concentrations of benzene, ethylbenzene, carbon tetrachloride, chloroform, tetrachloroethylene, trichloroethylene, 1,1-dichloroethane, 1,1-dichloroethene, and vinyl chloride that exceeded the respective Residential and/or Industrial RSLs. It is notable that tetrachloroethylene concentrations exceeded the Industrial Air RSL by up to three orders of magnitude in sub-slab samples within the three buildings located on the former Sanitary Laundry property. Tetrachloroethylene and trichloroethylene were observed in the soil gas below the building with maximum concentrations of 68,000 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 10,000  $\mu\text{g}/\text{m}^3$ , respectively.

Ambient air sampling resulted in concentrations of benzene, carbon tetrachloride, chloroform, chloromethane, ethylbenzene, tetrachloroethylene and trichloroethylene that exceed Residential and Industrial RSLs. The highest chloromethane, ethylbenzene, tetrachloroethylene and trichloroethylene concentrations were reported for air samples collected in the former Sanitary Laundry building, which occupies the subject property. A maximum concentration of tetrachloroethylene in ambient air was detected at 46  $\mu\text{g}/\text{m}^3$ , and trichloroethylene was detected at 6.4  $\mu\text{g}/\text{m}^3$ . Ambient air samples collected by TDEC on April 1, 2015 in the adjoining buildings tested positive for solvents, but at concentrations that TDEC indicated were "significantly below our risk based remedial goals." As a precautionary measure, TDEC plans to sample both adjoining properties a second time.

### 3.0 Applicable Regulatory and Cleanup Standards

The TDEC DOR has been involved with this site for many years. In an effort to support the City's redevelopment efforts, and to insure that site redevelopment is performed in accordance with applicable regulations, TDEC has prepared a Brownfield Voluntary Agreement (BVA) (Site No. 47-545). TDEC and the City have agreed that the BVA is to be made a condition of sale of the property. A copy of the BVA is included in Appendix II and should be reviewed for an understanding of the TDEC requirements for the subject property redevelopment. Some of the terms and conditions pertaining to property redevelopment are summarized herein:

- ◆ Prior to any part of the Property being used for a residence, domicile, daycare, school, or church, the Grantor, its successors, and/or assigns must notify TDEC DOR and must demonstrate to the satisfaction of TDEC DOR that any such proposed use listed above will not pose a danger to public health, safety, or the environment.
- ◆ Prior to the removal of soil at the Property, the Grantor, its successors, and/or assigns must notify TDEC DOR and must demonstrate to the satisfaction of TDEC DOR that any such proposed soil removal will not pose a danger to public health, safety, or the environment.
- ◆ The Grantor, its successors, and/or assigns must notify TDEC DOR prior to any invasive activity on the Property including soil borings or potable groundwater wells. The Grantor, its successors, and/or assigns must demonstrate to the satisfaction of TDEC DOR, through sampling and analysis approved by TDEC DOR, that any invasive activity will not pose a danger to public health, safety, or the environment.
- ◆ Any new building construction on the property shall incorporate an engineered vapor mitigation system designed to prevent subsurface vapor phase contamination from migrating into the structure at concentrations greater than applicable screening levels. Said vapor mitigation system plans shall be developed and certified by a professional engineer and provided to the TDEC DOR for review prior to construction. After installation, and within 90 days, the professional engineer shall submit a written report to the TDEC DOR documenting how the system was installed, any deviations from the plans the engineer provided to TDEC DOR, as-built drawings stamped by a professional engineer, and an Operation and Maintenance Plan identifying continued care, and operation and maintenance activities to be conducted to ensure the venting system is effective in

preventing subsurface vapor phase contamination from migrating into the structure at concentrations greater than applicable screening levels.

- ◆ The Grantor, its successors, and/or assigns shall be responsible for continued care, operation, and maintenance of the remedy. The Grantor, its successors, and/or assigns shall notify TDEC DOR in writing if the integrity of the remedy is compromised and take any steps necessary to eliminate the threat or potential threat to public health, safety, or the environment posed by the hazardous substance(s).
- ◆ The Voluntary Party agrees that criteria required in Tennessee Code Annotated (TCA) 68-212-206(d) shall be used in determining containment and cleanup actions, including monitoring and maintenance options to be followed under this Agreement.
- ◆ The Voluntary Party agrees to prepare a Soil Management Plan (SMP) for DOR approval prior to the commencement of construction activities. The SMP will include, but not be limited to, characterization of any excavated materials, handling procedures to ensure that any offsite disposal of impacted media meets all State and Federal requirements, and, if needed, installation of a barrier or engineered cap. A Health and Safety Plan shall be submitted to the DOR for review and comment.
- ◆ The Voluntary Party agrees to perform the work set forth in the SMP and the Voluntary Party shall submit a written report of its findings to the DOR within 90 days of completion of such work. The report shall include, but not be limited to, as-built drawings, details of any capping, and waste manifests for offsite disposal. The report shall also identify any areas where soil remains at the subject property that must be managed in the future to protect human health, safety, or the environment and requirements for future soil management and maintenance of any covers or caps.
- ◆ The Voluntary Party agrees that it will file any land use restriction identified by the DOR as necessary for the safe use of the property in accordance with TCA 68-212-225.

## **4.0 Evaluation of Cleanup Alternatives**

The City and TDEC DOR have provided input on the proposed cleanup alternatives for the subject property, assuming that the site will be redeveloped for retail, commercial or residential purposes. Some aspects of the cleanup alternatives are dependent on the specifics of the as-yet unidentified

redevelopment plan, but certain general assumptions have been made to complete this evaluation. Three alternatives have been considered for the purpose of this ABCA, including:

- ◆ No action,
- ◆ Redevelopment using existing foundations,
- ◆ Removal of some or all of the existing foundations, followed by construction of a new structure.

#### **4.1 No Action**

The “no action” alternative is not considered viable because the subject property is currently in a state of disrepair and therefore has the potential to negatively impact surrounding property values. The current redevelopment climate in Knoxville and the recent assessments using funds from the EPA Brownfields Assessment and Planning Grant have generated interest in the area. The City is interested in leveraging this interest into an opportunity to advance the redevelopment of the subject site.

#### **4.2 Redevelopment using existing foundations**

Redevelopment using existing foundations would be a viable option if the proposed use for the subject property would support this approach. Demolition as warranted, and removal of debris in accordance with local, State and Federal regulations would be required. One advantage of this approach would be to limit subsurface disturbance to utility trenches or other limited areas where excavation would be needed to support the redevelopment design. A SMP would be required to characterize and address potentially impacted material that may be encountered during these limited excavation activities.

The proposed site redevelopment must address the potential for subsurface vapors to migrate to ambient air thru the existing concrete slab. As part of the site re-design for the proposed use, a soil vapor mitigation system would be required to protect building occupants. The goal of the soil vapor mitigation system would be to break the exposure pathway for vapor migration. Two potential approaches for the soil vapor system include an impervious barrier or a sub-slab depressurization system that creates a negative pressure beneath the slab and vents the vapors to the outdoor air. Additional evaluation of the existing structural integrity of the slab, taking into consideration the proposed site re-use, would be helpful in designing the appropriate vapor mitigation system. For preliminary budgeting purposes, application of a commercially available impervious barrier such as Retro-Coat™ has recently been quoted at a cost of up to \$7/square foot for application, excluding engineering, design and monitoring costs. For an approximately 15,000 square-foot structure (size referenced in the TDEC files, but not verified for this document), this would require \$105,000 to apply the impervious barrier.

If a sub-slab depressurization system could be used, the cost might be substantially lower, but the effectiveness would need to be evaluated thru testing to determine the connectivity of sub-base aggregate beneath the slab. Information regarding this connectivity would be needed to determine the number and positioning of vents and fans, and the specifications for vapor barriers that might need to be incorporated into the design to separate the depressurization system from ambient air.

In addition to the SMP and vapor mitigation system design, this cleanup alternative would also warrant a land-use restriction to document the vapor mitigation system details, establish that groundwater usage from the subject site is prohibited, and to document the established protocol for monitoring and maintenance of the vapor mitigation system.

#### **4.3 Removal of some or all of the existing foundations**

Removal of some or all of the existing foundations, followed by construction of a new structure, may be warranted depending on the proposed plans for redevelopment and a structural evaluation based on those plans. Assuming that some impacted soils and/or groundwater could potentially remain beneath the building following the removal of existing foundations, this cleanup alternative would require the same measures presented in Section 4.2, including a SMP, a vapor mitigation system, and filing of a land use restriction document for the site. In addition, this alternative would require that the excavated foundations and impacted sub-slab materials be characterized and handled in accordance with local, State and Federal regulations, and in accordance with the SMP. The estimated cost for this approach cannot be provided at this time, as it would depend on factors such as the extent of foundation demolition proposed, the width and depth of existing foundations, and the level of impacts encountered in the underlying soils. For comparison purposes, if the underlying material is classified as special waste that can be disposed at a Subtitle D Landfill, fees for excavation, transportation and disposal might be on the order of \$75/ton. If some or all of this material is classified as hazardous waste, excavation, transportation and disposal fees could increase to approximately \$350/ton.

Due to these potential fees associated with addressing excavated material, redevelopment under this scenario would likely incur additional site characterization and regulatory negotiation fees, as it would be in the developer's best interest to obtain a thorough understanding of the existing foundation and soil conditions in the vicinity of the proposed excavation areas to the extent practicable before excavation is initiated.



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#### 4.4 Changing Climate Concerns

EPA requires that the ABCA includes an evaluation of the resilience of the remedial option in light of reasonably foreseeable changing climate conditions. This includes a discussion of the observed and forecasted climate change conditions for Knoxville and the associated site-specific risk factors. In order to evaluate changing climate concerns, S&ME researched the following websites on September 4, 2015:

- ◆ <http://nca2014.globalchange.gov/report/regions/southeast#intro-section-2>
- ◆ [http://toolkit.climate.gov/climate-explorer/?tp=g\\_a&center=-9355279.1,4519567.9&zoom=4&p=L&layers=aag:1,aac:1,aad:1,abp:1,aak:1,aam:1](http://toolkit.climate.gov/climate-explorer/?tp=g_a&center=-9355279.1,4519567.9&zoom=4&p=L&layers=aag:1,aac:1,aad:1,abp:1,aak:1,aam:1)

Due to the location of the site and the surrounding area, rising sea levels, changes in flood zones, increased salt water intrusion or increased risk of wildfires potentially associated with climate change would not be expected to have an impact on the proposed cleanup alternatives. Projected increases or decreases in temperature or precipitation or extreme weather events would also likely not impact the future site use, as it is located in a highly urbanized area surrounded by well-established buildings, roads and paved parking lots.

Changing dates for ground thaw/freezing or higher/lower groundwater tables could potentially impact the soil vapor concentrations. Proposed vapor mitigation systems are typically designed to be protective under a worst-case scenario based on known site conditions. Since the dry-cleaning operations have been out of service for over 20 years, and the former dry-cleaning fluid tank was filled with concrete in the 1990's, natural attenuation of organic contaminants of concern present at this site is likely occurring, and remedial design using recently documented site conditions seems to be a prudent approach for site redevelopment, irrespective of potential future fluctuations in groundwater table or thaw/freeze cycles.

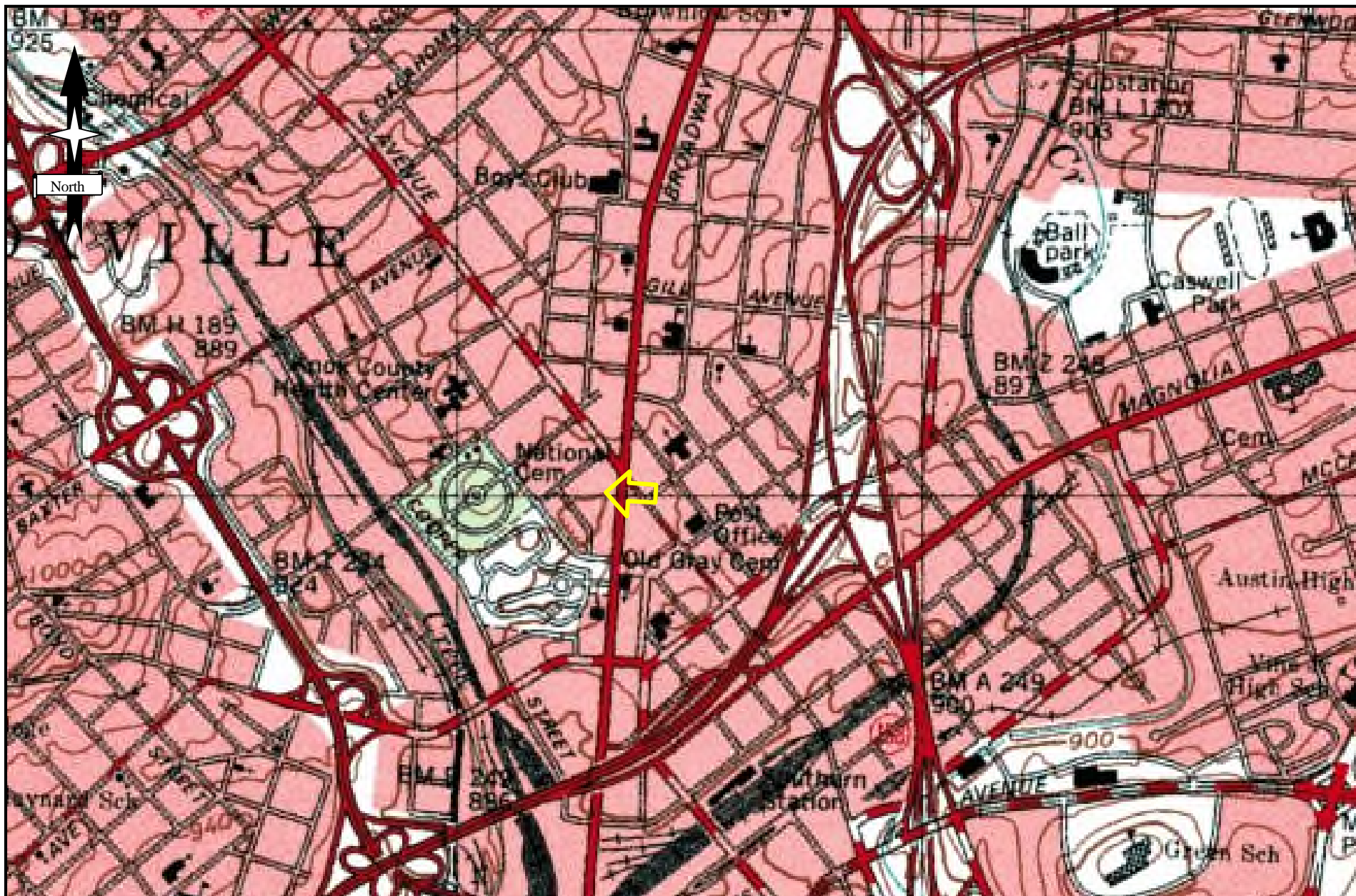
Based on the databases researched and the projected climate change impacts, S&ME does not anticipate that modification to the proposed cleanup alternatives would be warranted to address changing climate conditions.


## **Appendices**

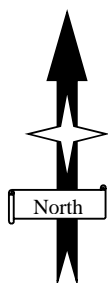
## **Appendix I – Figures**

Figure 1 – Site Vicinity Map

Figure 2 – ABCA Site Map



Topo Map Name: Knoxville, TN	Approx. Scale: 1"=1000'	<div><div></div><div>Subject Property Boundary</div></div> <div></div>	<div>Site Vicinity Map</div> <div>Sanitary Laundry &amp; Dry Cleaning</div> <div>625 North Broadway</div> <div>Knoxville, Tennessee</div>	<div>Figure</div> <div>1</div>
Topographic Map Date: 1979	Checked By: EMP			
Topographic Map Revision: None	Drawn By: TSS		<div>Project No: 4143-15-072</div>	
Contour Interval: 20 feet	Date: 08-21-15			



Photograph from Google Earth

— Subject Property

Scale: As Shown

Checked By: EMP

Date: 08/21/15



ABCA Site Map  
Sanitary Laundry & Dry Cleaning  
625 North Broadway  
Knoxville, Tennessee

Project No.: 4143-15-072

Figure

2

## **Appendix II – BVA 47-545**

**STATE OF TENNESSEE**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF REMEDIATION**  
**BROWNFIELD VOLUNTARY AGREEMENT**

**RE: Sanitary Laundry – 625 Broadway, Knoxville**

**SITE NUMBER: 47-545**

**INTRODUCTION**

This Brownfield Voluntary Agreement (hereinafter “AGREEMENT”) is made and entered into as of \_\_\_\_\_, 201\_, by and between[among] the Tennessee Department of Environment and Conservation (hereinafter “Department”), and \_\_\_\_\_, a \_\_\_\_\_ [e.g., organized under and existing pursuant to the laws of the State of Tennessee] (hereinafter [collectively] “Voluntary Party”) for the purpose of addressing a 0.4 acre portion of the above-referenced site (hereinafter “Site”), which has the real or perceived threat of the presence on the Site of hazardous substances, solid waste, or any other pollutant.

Robert J. Martineau, Jr. is the duly appointed Commissioner of the Department. Robert A. Binford, Director of the Department’s Remediation Division, has been delegated the authority to enter into these Agreements.

Pursuant to Tennessee Code Annotated § 68-212-224, the Commissioner is authorized to enter into an Agreement with a party who is willing and able to conduct an investigation and remediation of a hazardous substance site or Brownfields Project and who did not generate, transport or release the contamination that is to be addressed at the Site.

**REQUIREMENTS**

**A. SITE LOCATION**

The Site is located at 625 Broadway, Knoxville, Knox County, Tennessee and is shown in Exhibit A. The Site is approximately 0.4 acres in size and has a Knox County Parcel



Identification of Parcel 094DP013. A legal description of this tract is contained in Deed Book \_\_\_\_\_ Page \_\_\_\_\_ and is attached hereto as Exhibit B.

## **B. ELIGIBILITY**

As required by T.C.A. § 68-212-224, a summary description of all known existing environmental investigations, studies, reports or documents concerning the Site's environmental condition has been submitted to the Department by the Voluntary Party.( A copy of the Summary is attached hereto as Exhibit C). On the date of entering into this AGREEMENT, the Department has determined that the Site is not listed or been proposed for listing on the federal National Priorities List by the United States Environmental Protection Agency (EPA). By entering into this AGREEMENT, the Voluntary Party certifies to the best of the Voluntary Party's knowledge that the Voluntary Party did not generate, transport or release contamination that is to be addressed at this site.

## **C. FINANCIAL REQUIREMENTS**

Tennessee Code Annotated § 68-212-224 requires consideration of a fee to enroll in the Voluntary Cleanup Oversight and Assistance Program. The Commissioner has determined that a fee of three thousand dollars (\$ 3,000.00) DOLLARS is appropriate for the Site. This payment must accompany this AGREEMENT when it is signed on behalf of the Voluntary Party and returned to the Department. The Commissioner has set the following schedule of additional fees that apply to all sites working in cooperation with the Department to recover the expense of oversight. These fees are in place of hourly time charges and normal travel costs during the first 150 hours of oversight for the project.

Program Entry	\$ 750
Site Characterization	\$ 2,000
Remediation	\$ 2,500
Risk Assessment	\$ 2,000
Site Specific Ground Water Classification	\$ 2,000
Remedy Requirement Institutional Controls	\$ 500
Annual O&M Review	\$ 500



In addition to the fees identified previously, an annual longevity fee of \$3,000 will be charged to the Site on the anniversary of the date the site entered the program until a letter requiring no further action has been issued or this AGREEMENT has been terminated.

Upon reaching 150 hours of oversight, the Site will be charged the current hourly rate (e.g. seventy-five dollars (\$75.00) per hour for FY 2009-2010) per hour of oversight in addition to the fee schedule listed above. This amount includes the current hourly rate and pro rata portion of benefits for the Department's employees actively employed in oversight of work under this AGREEMENT, including preparation for and attendance at meetings, mileage, and the current State overhead rate. Additionally, any out-of-pocket expense, mileage, lab expense and costs including the State's current overhead rate, costs billed by State contractor(s) who are actively performing oversight or other unusual costs to the Department shall be billed to and paid by the Voluntary Party.

Fees must be paid to remain in the Voluntary Cleanup Oversight and Assistance Program and to receive a letter of no further action under Section H of this AGREEMENT.

#### **D. IDENTIFICATION AND DOCUMENTATION OF CLEANUP**

Based on the information submitted to the Department by or behalf of the Voluntary Party, and the Department's own review and investigation of the Site, the Parties hereto agree that the following environmental conditions are to be addressed under this AGREEMENT:

Sanitary Laundry and Dry Cleaning Company operated a dry cleaning facility at the site for approximately 60 years in the 1900's. During this time, petroleum products and dry cleaning fluids were stored in aboveground storage tanks, underground storage tanks, and drums. These materials were actively used for dry cleaning, laundry, and delivery vehicle fuel supply during the time of operation.

Investigation in 1993 indicated surface soil and groundwater on the Site were contaminated with hazardous substances including, but not limited to, petroleum hydrocarbons and chlorinated solvents. Impacts were the result of leaks from storage tanks and drums, as well

as, spills resulting from improper material handling. Two underground storage tanks used for petroleum products were subsequently removed in 1993.

The Site was added to the List of Inactive Hazardous Substance Sites by action of the Tennessee Solid Waste Disposal Control Board in 1994 and became Site #47-545, Sanitary Laundry and Dry Cleaners. TDEC initiated an emergency removal action in 1994 that containerized and disposed of the contents of an underground storage tank and two barrels of dry cleaning fluid, one of which was leaking. The underground storage tank contained fluid primarily consisting of water with trace levels of benzene, trichloroethene, and other hydrocarbons. A Notice of a Hazardous Substance Site was filed with the Knox County Register's Office on the Site in 1997. An Imminent, Substantial Danger Memorandum was issued by the Commissioner in 1999 due to the presence of multiple fifty-five (55) gallon drums of hazardous substances on the site. Access at the time was uncontrolled and there existed the potential for explosion and/or fire. TDEC initiated an emergency removal of the drums in October 1999.

The City of Knoxville, through an EPA Brownfields Assessment Grant (BF-95443509-1) completed additional investigation of the Site. The results of this study show there to be a continued presence of hazardous substances in the groundwater, soil, and air that include, but are not limited to, petroleum hydrocarbons and chlorinated solvents. Tetrachloroethylene and trichloroethylene were observed in the soil gas below the building with a maximum concentration of  $68,000 \mu\text{g}/\text{m}^3$  and  $10,000 \mu\text{g}/\text{m}^3$ , respectively. These constituents also exceeded the EPA Regional Screening Levels for industrial facilities in the ambient air within the structure; a maximum concentration of tetrachloroethylene in ambient air was observed at  $46 \mu\text{g}/\text{m}^3$  and trichloroethylene at  $6.4 \mu\text{g}/\text{m}^3$ .

#### **E. AGREED LIABILITY RELIEF**

T.C.A. § 68-212-224(a)(5) provides that, TDEC is authorized to limit the liability of a participant in a voluntary agreement or consent order entered into pursuant to T.C.A. § 68-212-224. Such voluntary agreement or consent order may limit the liability of such participant to the obligations set forth therein and exempt the participant from any further liability under any

statute administered by TDEC for investigation, remediation, monitoring, and/or maintenance of contamination identified and addressed in the voluntary agreement or consent order. TDEC may extend this liability protection to successors in interest or in title to the participant, contractors conducting response actions at the Site, developers, future owners, tenants, and lenders, fiduciaries or insurers (collectively "Successor Parties").

In accordance with the above referenced authority, TDEC agrees that other than with respect to the obligations set forth in this AGREEMENT, the Voluntary Party and Successor Parties (as hereinafter defined) shall bear no liability to the State of Tennessee under any statute administered by the Department for investigation, remediation, monitoring, treatment and/or maintenance of contamination identified in and addressed in this AGREEMENT (collectively referred to as the "*Matters Addressed in this Agreement*"); provided, however, that to the extent that the Voluntary Party or Successor Parties (as hereinafter defined) has or maintains an interest in the Site, or possesses and/or controls all or a portion of the Site, its liability protections hereunder are contingent upon its continued adherence and enforcement of any land use restrictions imposed pursuant to or as a result of this AGREEMENT, adherence to the soil management plan, and vapor mitigation system operation and maintenance described the Section H Agreed Actions to be Taken. Nothing in this AGREEMENT shall be construed as limiting the liability or potential liability of the Voluntary Party for contamination occurring after the effective date of this AGREEMENT. This liability protection and all other benefits conferred by this AGREEMENT are extended to all future "Successor Parties" conditioned upon performance of the obligations contained in this AGREEMENT, compliance with the Land Use Restrictions (hereinafter defined); provided and adherence to the soil management plan, and vapor mitigation system operation and maintenance described the Section H Agreed Actions to be Taken, that such liability protection to other persons does not apply to liability to the extent that such liability arose prior to the effective date of this AGREEMENT.

**F. ADMINISTRATIVE SETTLEMENT; THIRD PARTY LIABILITY (include first sentence below for inactive hazardous substance sites (including hazardous waste sites) only)**

This AGREEMENT also constitutes an administrative settlement for purposes of Section 113(f) of CERCLA, 42 U.S.C. §9613(f), pursuant to which the Voluntary Party and Successor

Parties (as hereinafter defined) have, as of the effective date of this AGREEMENT, resolved their liability to the State of Tennessee for *Matters Addressed in this Agreement*.

The Voluntary Party shall not be liable to third parties for contribution regarding *Matters Addressed in this Agreement*; provided that, the Voluntary Party gave the third party actual or constructive notice of this AGREEMENT, and the third party was given an actual or constructive opportunity to comment upon this AGREEMENT. The Voluntary Party has demonstrated to the Department that constructive notice was accomplished by publishing a summary of this AGREEMENT in the Knoxville News Sentinel at least thirty (30) days prior to the Effective Date of this AGREEMENT. Nothing in this AGREEMENT shall impair the rights of third parties with respect to tort liability claims for damage to person or property arising from the contamination addressed by the voluntary agreement.

#### **G. LAND USE RESTRICTIONS**

Upon acquiring the Site, the Voluntary Party agrees that said property will be restricted as follows:

1. Prior to any part of the Property being used for a residence, domicile, daycare, school, or church, the Grantor, its successors, and/or assigns must notify TDEC Division of Remediation and must demonstrate to the satisfaction of TDEC Division of Remediation that any such proposed use listed above will not pose a danger to public health, safety, or the environment.
2. Prior to the removal of soil from the Property, the Grantor, its successors, and/or assigns must notify TDEC Division of Remediation and must demonstrate to the satisfaction of TDEC Division of Remediation that any such proposed soil removal will not pose a danger to public health, safety, or the environment.
3. The Grantor, its successors, and/or assigns must notify TDEC Division of Remediation prior to any invasive activity on the Property including soil borings or potable groundwater wells. The Grantor, its successors, and/or assigns must demonstrate to the satisfaction of TDEC Division of Remediation, through sampling

and analysis approved by TDEC Division of Remediation, that any invasive activity will not pose a danger to public health, safety, or the environment.

4. Any new building construction on the property shall incorporate an engineered vapor mitigation system designed to prevent subsurface vapor phase contamination from migrating into the structure at concentrations greater than applicable screening levels. Said vapor mitigation system plans shall be developed and certified by a professional engineer and provided to the TDEC Division of Remediation for review prior to construction. After installation, the professional engineer shall submit a written report to the TDEC Division of Remediation documenting how the system was installed, any deviations from the plans the engineer provided to TDEC Division of Remediation, as-built drawings stamped by a professional engineer, and an Operation and Maintenance Plan identifying continued care, and operation, and maintenance activities to be conducted to ensure the venting system is effective in preventing subsurface vapor phase contamination from migrating into the structure at concentrations greater than applicable screening levels. .
5. The Grantor, its successors, and/or assigns shall be responsible for continued care, operation, and maintenance of the remedy. The Grantor, its successors, and/or assigns shall notify TDEC Division of Remediation in writing if the integrity of the remedy is compromised and take any steps necessary to eliminate the threat or potential threat to public health, safety, or the environment posed by the hazardous substance(s).

The Voluntary Party agrees that it will file any land use restriction identified by the Department as necessary for the safe use of the property in accordance with T.C.A. 68-212-225. Any Party receiving liability protection under this AGREEMENT that seeks approval for restricted uses or seeks to cancel or make a Restriction less stringent shall be responsible for any costs incurred by the Department in the review and oversight of work associated with the restriction modification. Upon filing, a copy of this notice shall be mailed to all local governments having jurisdiction over any part of the subject property.

#### **H. AGREED ACTIONS TO BE TAKEN**

1. The Voluntary Party agrees to send notification of this AGREEMENT by certified mail to all local governments having jurisdiction over any part of the subject property and to all owners of adjoining properties. The Voluntary Party shall provide adequate documentation to demonstrate that public notice has been accomplished.
2. The Voluntary Party agrees that criteria required in TCA 68-212-206(d) shall be used in determining containment and cleanup actions, including monitoring and maintenance options, to be followed under this Agreement.
3. The Voluntary Party agrees to equip all building structures with an engineered vapor mitigation system designed to prevent subsurface vapor phase contamination from migrating into the structure at concentrations greater than applicable screening levels. The Voluntary Party will provide plans certified by a professional engineer for the vapor mitigation system to the Department for review prior to construction. Within 90 days following completion of the system, the Voluntary Party shall submit a written report documenting that the system was installed. The report shall include as-built drawings stamped by a professional engineer and an Operation and Maintenance Plan identifying activities that must be conducted to ensure the venting system is operated in an effective manner consistent with its design specifications.
4. The Voluntary Party agrees to prepare a Soil Management Plan for Department approval prior to the commencement of construction activities. The soil management plan will include, but not be limited to, characterization of any excavated materials, handling procedures to ensure that any offsite disposal of impacted media meets all State and Federal requirements, and, if needed, installation of a barrier or engineered cap. A Health and Safety Plan shall be submitted to the Department for review and comment.
5. The Voluntary Party agrees to perform the work set forth in the Soil Management Plan and the Voluntary Party shall submit a written report of its findings to the Department within 90 days of completion of such work. The report shall include, but not be limited to, as-built drawings, details of any capping, and waste manifests for

offsite disposal. The report shall also identify any areas where soil remains at the Site that must be managed in the future to protect human health, safety, or the environment and requirements for future soil management and maintenance of any covers or caps.

6. Upon completion of all tasks set forth in this AGREEMENT, the Department shall issue to the Voluntary Party a letter stating the requirements of this AGREEMENT have been fulfilled and no further action is required of the Voluntary Party concerning contamination identified and addressed in this AGREEMENT. Upon the request of the Voluntary Party from time to time, the Department shall issue an interim status letter identifying what specific obligations remain to achieve completion of the work under this AGREEMENT. Issuance of a no further action letter shall not relieve the Voluntary Party of any responsibilities for operation and maintenance activities or continued adherence to and enforcement of land use restrictions, if any, pursuant to T.C.A. § 68-212-225. The Department reserves the right to require additional action for contamination caused by the Voluntary Party occurring after the date of this AGREEMENT or for contamination not identified and addressed under this AGREEMENT, if any. Each Voluntary Party or successor in title to the Site shall be responsible for compliance with the requirements of this AGREEMENT during the period in which such person owns an interest in the Site, or possesses and/or controls all or a portion of the Site.

## **I. ADDITIONAL REQUIREMENTS**

1. The Voluntary Party may request a time extension for any deadline included in this AGREEMENT prior to the deadline. The time extension may be granted through mutual consent for good cause shown.

2. The Voluntary Party shall be responsible for the following obligations during periods when it owns the Site:

- (a) Comply with land use restrictions;
- (b) Do not impede effectiveness or integrity of institutional controls;
- (c) Provide cooperation, assistance and access;

- (d) Whether or not permits are required for onsite cleanup activities, such activities shall meet the standards that would apply if such permits were required.

**J. SITE ACCESS**

During the effective period of this AGREEMENT, and until certification by the Department of completion of all activities under this AGREEMENT, the Department and its representatives or designees shall have access during normal business hours to the Site. Nothing herein shall limit or otherwise affect the Department's right of entry, pursuant to any applicable statute, regulation or permit. The Department and its representative shall comply with all reasonable health and safety plans published by the Voluntary Party or its contractor and used by Site personnel for the purpose of protecting life and property.

**K. SUBMISSION OF INFORMATION, REPORTS, OR STUDIES**

Any information, reports, or studies submitted under the terms of this AGREEMENT shall contain the following notarized statement:

"I certify under penalty of law, including but not limited to penalties for perjury, that the information contained in this document and on any attachment is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violation."

**L. RESERVATION OF RIGHTS**

1. This AGREEMENT shall not be construed as waiving any right or authority available to the Commissioner to assess responsible parties other than the Voluntary Party for liability for civil penalties or damages incurred by the State, including any natural resource damage claims which the Department or the State of Tennessee may have under Section 107 of CERCLA or any other statute, rule, regulation or common law.
2. Nothing in this AGREEMENT shall be interpreted as limiting the Voluntary



Party's right to preserve the confidentiality of attorney work product or client-attorney communication. T.C.A. § 68-212-202 et seq. contains no provisions for confidentiality or proprietary information. Therefore, records, reports, test results, or other information submitted to the Department under this AGREEMENT shall be subject to public review. Any and all records, reports, test results or other information relating to a hazardous substance site or the possible hazardous substance at the Site submitted under this AGREEMENT may be used by the Department for all purposes set forth in T.C.A. § 68-212-201 et seq.

3. Voluntary Parties or Successor Parties may terminate this AGREEMENT as it pertains to them at any time upon written notice to the Department during the time period that they own the site and/or conduct operations at the site. Upon such termination, the Voluntary Party shall have no further obligations hereunder other than payment of oversight costs accrued to the date of notice of termination and adherence to any notice of land use controls filed under TCA 68-212-225; provided, that both Parties shall have and retain all authority, rights and defenses as if this AGREEMENT had never existed.
4. The Department may terminate this AGREEMENT by written notice to the Voluntary Party in the event that the Department receives timely comments from third-party contribution claim holders pursuant to the notice sent under Section F of this AGREEMENT, if any, and such comments disclose facts or considerations that indicate that this AGREEMENT is inappropriate, improper or inadequate; provided, however, absent fraud or intentional misconduct, that in such event the Voluntary Party may elect to waive the protections set forth in Section F hereunder and the remainder of the terms and conditions of this AGREEMENT shall continue to be in full force and effect. The Department's notice of termination must be made within thirty (30) days of the end of the 30-day notice period required by Section F. The Voluntary Party's waiver notice must be made within fifteen (15) days after receipt of the Department's termination notice.
5. The Department reserves the right to terminate this agreement if the Voluntary

Party fails to timely pay fees and other financial requirements specified in Section C Financial Requirements. For the purpose of this AGREEMENT, timely payment means the Department receiving payment from the Voluntary Party within 120 days of the first billing of a financial requirement or according to a payment plan agreed in writing between Voluntary Party and the Department.

- 6. If any provision of this AGREEMENT is held to be invalid or enforceable by a court of competent jurisdiction, then the remaining provisions of this AGREEMENT will remain in full force and effect.
- 7. Nothing in this AGREEMENT shall be interpreted as limiting the liability for the improper management and/or disposal of contaminated material removed from the site.

The individual(s) signing below on behalf of the Voluntary Party **[represent that they have the authority or are]** [represents that he is a] duly authorized agent(s), capable of entering into a binding AGREEMENT on behalf of the Voluntary Party. By entering into this AGREEMENT, **[these individuals certify ]**[this individual certifies] that the Voluntary Party did not generate or did not cause to generate, transport or release contamination that is to be addressed at this site.

The Effective Date of this AGREEMENT is the thirtieth (30th) day after the publication of the notice described in Section F of this AGREEMENT.

Date	Robert A. Binford Program Administrator Division of Remediation	Date	Voluntary Party:
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Arthur W. Cate Jr., Executive Director/CEO

901 Broadway, N.E. • Knoxville, TN 37917-6699  
865.403.1100 • Fax 865.403.1117  
800.848.0298 (Tennessee Relay Center)  
[www.kcdc.org](http://www.kcdc.org)

November 20, 2015

Ms. Barbara Alfano  
Region 4 Brownfields Coordinator  
U.S. Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960

Dear Ms. Alfano,

Knoxville's Community Development Corporation (KCDC) is the housing and redevelopment agency for Knoxville and Knox County. Since 1936, KCDC has been dedicated to improving the quality of life for the citizens of Knoxville by creating opportunities for better housing, jobs, and community revitalization.

On behalf of the City of Knoxville, KCDC has accomplished several redevelopment projects and numerous neighborhood improvement projects in downtown Knoxville over the past decade. To date, KCDC has developed over twenty-one redevelopment and urban renewal plans and also executed sixteen Tax Increment Financing (TIF) notes for the rehabilitation of several downtown buildings. KCDC has also successfully completed a \$40 million HOPE VI Project which was a federally funded program through the Department of Housing and Urban Development.

In 2002, KCDC developed a redevelopment and urban renewal plan for the Jackson Avenue/Depot Redevelopment District to help the area achieve its full potential as a unique historic district. Additionally, in 2007, working with the Metropolitan Planning Commission, KCDC developed the Downtown North I-275 Corridor Redevelopment and Urban Renewal Plan which created a vision to turn this old industrial area into a thriving business district that provides economic opportunities and neighborhood stability. The City of Knoxville has implemented several revitalization projects stemming from the plans, and both Jackson Avenue and Downtown North have begun to benefit from these improvements.

KCDC understands the need to perform environmental cleanup on both the Former McClung Warehouses on Jackson Avenue and the Former Sanitary Laundry in Downtown North so that these properties can be readied for redevelopment. Our agency supports the City in this effort, and we will continue to work closely with the City as this project moves forward.

We are excited about the opportunity to redevelop this area and committed to conducting environmental cleanup to ensure that residents and visitors to these neighborhoods will enjoy living, working and relaxing in a safe and healthy environment.

Sincerely,

Art Cate  
Executive Director/CEO

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KNOXVILLE'S COMMUNITY DEVELOPMENT CORPORATION

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December 1, 2015

Ms. Barbara Alfano  
Region 4 Brownfields Coordinator  
U.S. Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960

Dear Ms. Alfano:

The Development Corporation of Knox County (TDC) has been pleased to have worked closely with the City of Knoxville for many years to promote economic development. TDC, the City's Industrial Development Board, the Knoxville Chamber, and the City of Knoxville were all involved in working together to redevelop a former brownfield site in the Downtown North Area which resulted in the location of a major food distribution facility which initiated revitalization of the area. Additionally, TDC has been closely involved in Brownfields Assessment projects within the Downtown North Area. In 2004, TDC was the managing agency for an EPA Brownfields Assessment grant awarded to Knox County, Tennessee. This grant helped to facilitate the transformation of a once abandoned industrial site into the headquarters operation of one of the nation's largest independent suppliers of industrial, medical, propane, and beverage gases.

Through visioning and planning over the past several years, the City of Knoxville has demonstrated its commitment to revitalizing the core of the City and areas north of its downtown. Our organization has played, and will continue to play, an active role in this effort. TDC supports the business environment in the area to encourage the creation of jobs, and we see the City's intention to perform environmental cleanup, as a much needed step towards creating a healthy economy in this area.

TDC fully supports the City in its effort to secure EPA Brownfields funding to perform cleanup grants for both the former McClung Warehouses site in Downtown and the former Sanitary Laundry building in the Downtown North area. TDC will continue to work with the City towards the success of this community development project and the anticipated economic benefit it will bring to the area's residents, as well as to the entire region.

Sincerely,

Todd A. Napier  
President & CEO







EAST TENNESSEE  
**COMMUNITY**  
DESIGN CENTER  
*Envision. Inspire. Improve.*

Board Officers:

Jan Evridge

President

Bob Williams

1st Vice President

Rick Blackburn

2nd Vice President

Katharine Pearson Criss

Treasurer

Sheryl Ely

Secretary

Mary Holbrook

Past President

November 13, 2015

Ms. Barbara Alfano

Region 4 Brownfields Coordinator

U.S. Environmental Protection Agency

Sam Nunn Atlanta Federal Center

61 Forsyth Street

Atlanta GA 30303-8960

Dear Ms. Alfano:

Directors:

Barbara Apking

Mark Brodd

Gayle Bustin

Ryan Chinn

Hollie Cook

Diane Davidson

Randy Fields

Richard A. Foster, AIA,

LEED AP

Julie Graham

Nathan Honeycutt, AIA, PMI

Daryl Johnson, AIA

Sharon Johnson

Garry Menendez, ASLA

Clayton Pangle, II

Dr. Steven Smith

Susanne Tarovella, AIA,

LEED AP

Ex-Officio Directors:

Joshua DeField Wright, AIA

American Institute  
of Architects

Ken McMahon

City of Knoxville

Jeff Welch

Metropolitan Planning  
Commission

Marleen K. Davis, FAIA

UT College of Architecture  
and Design

Emeritus Directors:

Gideon Fryer\*

Dr. Joseph E. Johnson

Bruce McCarty, FAIA\*

Douglas H. McCarty, AIA

John A. Walker, Jr. Esq.

Wayne Blasius

Executive Director

The East Tennessee Community Design Center (ETCDC) is a 501(c)(3) non-profit organization that provides planning and design services to community development groups, through the volunteer time of local professional architects, planners, landscape architects, interior designers and others in the design community. We have been providing these services for the past 45 years to facilitate community development projects in the inner city of Knoxville and the surrounding rural communities. During any given year, we average 20-50 projects and more than one thousand volunteer hours. The ETCDC is always alert for ways to work with other respected agencies and organizations in neighborhood improvement projects that create community pride, and raise property values. By partnering with other agencies, the ETCDC has helped to create new methods for providing inner-city housing, and reducing the level of blighted property. In some instances the ETCDC has assisted governments and municipalities with design and planning services. Those services, even though provided at the request of a governmental agency, are provided as a method of protecting the public domain.

The East Jackson Avenue Streetscapes plan had its beginnings when The City of Knoxville contracted with the East Tennessee Community Design Center to conduct a series of charrettes to determine common community desires in the Historic Old City. As a result of this work, a contract was awarded to develop construction plans for the portion of E. Jackson Avenue from the eastern most ramp on E. Jackson Street to Patton Street. These plans detail the complete streetscape including street lighting and sidewalk replacement. In Downtown North, ETCDC is partnering with the City of Knoxville's Community Development Department and the Broadway Corridor Task Force to develop a Broadway Corridor Enhancement Plan to consider ways to improve the corridor for businesses as well as adjacent neighborhoods. We recently held a Design Charrette to gather input from all interested local businesses, residents and organizations in the neighborhood.

ETCDC supports the City's efforts to redevelop these important historic parts of the Knoxville community. We believe that cleaning up former industrial and commercial properties will encourage new ownership and stimulate growth, and we will continue to provide our services where appropriate, to promote sustainable community development in the Jackson Avenue and Downtown North Redevelopment Areas.

Sincerely,

Wayne Blasius  
Executive Director

\*In Memoriam





## ST. JOHN'S LUTHERAN CHURCH

**Stephen Misenheimer**  
Senior Pastor

**Amy C. Figg**  
Pastor of Faith Formation and  
Leadership Development

**John Tirro**  
Pastor of Campus Ministry

**Chris Clay**  
Ministry Coordinator

**Deborah Dunne-Sousa**  
Minister of Music

**Krista Lee**  
Christian Education Director

**Isaac Taylor**  
Youth Ministry

**Toni Denton**  
Senior Administrative Assistant

**Thea Peterson**  
Kids Hope USA Director

**Mary Elizabeth Peterson**

**Lisa Minton**  
Nursery Assistants

**Lisa Foxwell**  
**Darrell Murrell**  
**Stephen Douglas**  
Custodian

**544 N. Broadway**  
**Knoxville, TN 37917**

**865-523-3330**  
Phone

**865-524-7895**  
fax

**www.sjlcknox.org**  
**info@sjlcknox.org**

December 1, 2015

Ms. Barbara Alfano  
Region 4 Brownfields Coordinator  
U.S. Environmental Protection Agency  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960

Dear Ms. Alfano,

St. John's Lutheran Church is a historic Lutheran church located on North Broadway in Knoxville, Tennessee; the congregation originally formed in 1888. The church building was completed and dedicated in 1913 in the Gothic Revival style. We are an inclusive, welcoming community of faith seeking through fellowship and evangelism to create Christ connections with our neighborhood, the city of Knoxville, and the world with a mission to "go and make disciples."

To accomplish this mission, individuals from the Church's Outreach Team volunteer their time to support several local programs including: Habitat for Humanity – church members provide labor and funding to build a house every other year. Family Promise of Knoxville - St. John's sends a team of volunteers to cook and serve meals to homeless families. Knox Area Rescue Ministries - St. John's sends a team of volunteers to cook and serve lunch to the poor and homeless. The Senior Nutrition "Mobile Meals" Program - St. John's volunteers serve two of the routes within our target neighborhood and also check on the meal recipients, reporting any health or safety concerns to the Knoxville-Knox County Community Action Committee Office on Aging for follow-up. KIDS HOPE USA – trained volunteers develop mentor relationships with at-risk public school children spending one hour a week with carefully matched students at Christenberry Elementary School in the target neighborhood.

St. John's Lutheran Church also provided meeting space at no charge to the City of Knoxville for quarterly public meetings held throughout the duration of the Downtown North Brownfields Assessment Grant from EPA and will make its facility similarly available throughout the cleanup projects.

St. John's Lutheran Church understands the need to perform environmental cleanup on both the Former McClung Warehouses on Jackson Avenue and the Former Sanitary Laundry in Downtown North so that these properties can be redeveloped into an assets instead of blighting elements of our community. Our Church supports the City in this effort.

Sincerely,

Reverend J. Stephen Misenheimer  
Senior Pastor





Nov. 23, 2015

Contact: Eric Vreeland  
865.215.3480 Office  
865.258.3431 Cell

### **MEDIA ADVISORY**

**What:** Public meeting to review the City's brownfield cleanup grant applications to the Environmental Protection Agency for properties on Jackson Avenue and Broadway

**When:** 5:30 p.m. Tuesday, Dec. 1, 2015

**Where:** All Occasion Catering, 922 N. Central St.

**Who:** Representatives from the City of Knoxville Office of Redevelopment and consultants from S&ME will host a public meeting to discuss Environmental Protection Agency brownfield cleanup grant applications for City-owned properties.

Specifically, the applications seek brownfield cleanup grants of up to \$200,000 for:

- The former McClung Warehouses and associated properties on West Jackson Avenue between Gay Street and Broadway; and
- The Former Sanitary Laundry Property at 625 N. Broadway.

The presentations will include a brief overview of the properties, the environmental issues associated with each property, the plan for cleanup activities and the grant application.

Anyone needing a disability accommodation to attend the meeting should contact the City's ADA Coordinator, Stephanie Cook, by Nov. 25 at [scook@knoxvilletn.gov](mailto:scook@knoxvilletn.gov) or 865-215-2034.

For an English interpreter, contact Joshalyn Hundley, Title VI Coordinator, at 865-215-3867 or at [jhundley@knoxvilletn.gov](mailto:jhundley@knoxvilletn.gov).

###

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[City of Knoxville](#) » [Government](#) » [City Departments & Offices](#) » [Redevelopment](#) » **EPA Cleanup Grant Applications**

## **EPA Cleanup Grant Applications**

## **Redevelopment Director**

Dawn Michelle Foster  
[dmfoster@knoxvilletn.gov](mailto:dmfoster@knoxvilletn.gov)  
(865) 215-2607

400 Main St.,  
Room 655  
Knoxville, TN  
37902



There will be a public meeting held Dec. 1 at 5:30 p.m to review the City's brownfield cleanup grant applications to the Environmental Protection Agency for properties on Jackson Avenue and Broadway.

The meeting will be held at All Occasion Catering, 922 N. Central St.

Representatives from the City of Knoxville Office of Redevelopment and consultants from S&ME will host a public meeting to discuss Environmental Protection Agency brownfield cleanup grant applications for City-owned properties.

**Specifically, the applications seek brownfield cleanup grants of up to \$200,000 for:**

- The former McClung Warehouses and associated properties on West Jackson Avenue between Gay Street and Broadway; and
- The Former Sanitary Laundry Property at 625 N. Broadway.

## **PUBLIC MEETING DECEMBER 1:**

[Presentation from Public Meeting \[PDF\]](#)

## **BROWNFIELD CLEANUP GRANT APPLICATIONS:**

**Former Sanitary Laundry  
at 625 N. Broadway**  
[Draft Application \[PDF\]](#)  
[Analysis of Brownfield  
Cleanup Alternatives  
\[PDF\]](#)

**Former McClung  
Warehouses at W. Jackson  
Ave.**  
[Draft Application \[PDF\]](#)



The presentations will include a brief overview of the properties, the environmental issues associated with each property, the plan for cleanup activities and the grant application.

**Comments or questions can be sent to Anne Wallace at [awallace@knoxvilletn.gov](mailto:awallace@knoxvilletn.gov) until Dec. 11.**

[Analysis of Brownfield Cleanup Alternatives \[PDF\]](#)

*These documents will also be available for review by the general public at the Reference Desk of the Lawson McGhee Library (the downtown branch) until December 11.*

#### News

December 04, 2015  
[Anticipate Temporary Road Closures for 3 Christmas Parades](#)

#### Events

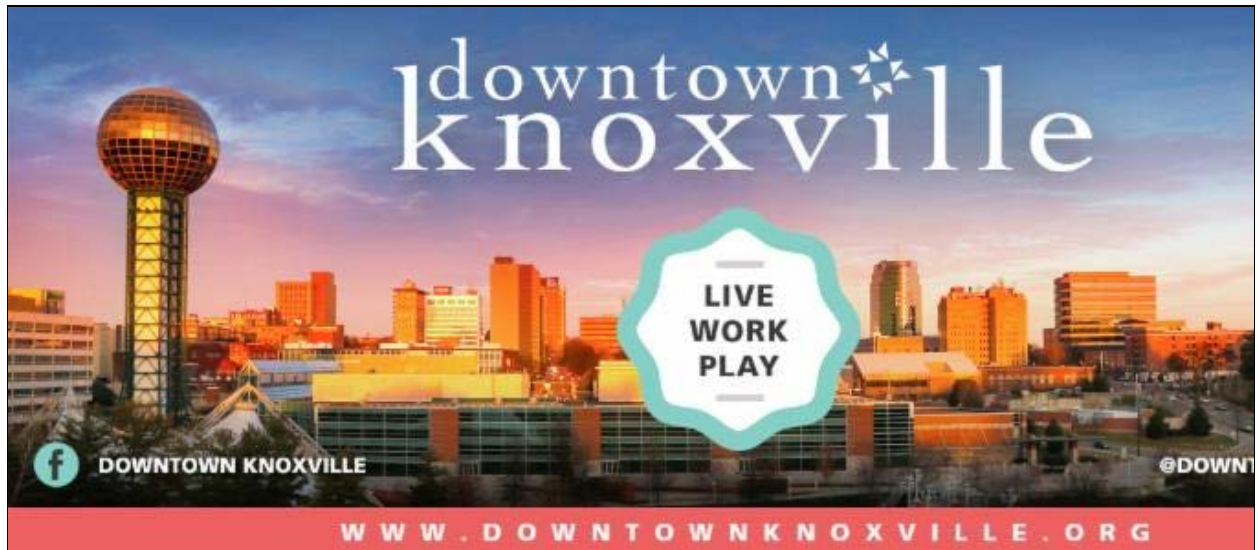
December 06, 2015  
[Caring Santa for Special Needs Children](#)

#### City Services

**3-1-1**  
Dial for City Services

#### Contact

© City of Knoxville  
400 Main Street  
Knoxville, TN 37902  
[View Map / Site Map](#)



Christmas in the City is here with dozens of events to bring holiday cheer! Here are some of the holiday events happening in Downtown Knoxville. Visit the [City of Knoxville Special Events](#) site for details on these and other events happening around the city.

Celebration of Lights  
**Friday, November 27, 6pm to 9pm**

### Sign Up to Receive

Downtown Knoxville News

Interested in receiving a copy of the Downtown Knoxville newsletter? It's easy! Join our list and we'll keep you posted on events and news about downtown.

### Upcoming CBID Meetings

Meetings are held at the CBID offices, 17 Market Square, unless otherwise noted.

Please visit the [Upcoming Meetings](#) page on the CBID website for updates.

Residential Meeting

Dec 7, 2015 - 5:45pm

Topic: Community Building

December Board Meeting

Dec 14, 2015 - 11:30am

Enjoy live music, carolers, train rides, pictures with Santa, face painting, and marshmallow roasting, along with the lighting of the new 42' tree in Krutch Park Ext.

The lighting of the tree ceremony begins at 6pm.

[WDVX Holiday Ho-Ho-Hoedown](#) will be on the Bill Lyons Pavilion in Market Square from 6:30pm to 9pm. Market Street will have local businesses with crafts for children, stop by Home Depot's Little Elves Workshop, make a card to send to our soldiers with American Red Cross 'Cards for Heroes,' and check out the miniature train set!

Holidays on Ice  
November 27 through January 18

Enjoy the outdoor ice skating rink in Market Square. Extended to mid-January, this year skate under Christmas lights and stars. The rink will be closed on Christmas Day and during inclement weather. Admission includes entry fee, skate rental, and unlimited time on the ice! [Click here](#) for details on dates, times, and ticket information.

Window Wonderland  
November 27 through December 17

Take a downtown tour to see holiday windows with festive displays coinciding with the Christmas in the City theme of 'How the Grinch Stole Knoxville' or other creative décor. [Download a Map](#) of participating merchants and restaurants.

Christmas Parade  
Friday, December 4, 7pm

A Christmas Parade AND 1st Friday. Bands, dancers, lighted floats, characters and Santa Claus parade down Gay Street from Church Ave to Jackson Ave bringing fun holiday spirit to all!

Tour de Lights  
Friday, December 18  
Departs from Market Square at 7pm

Fun, free bike parade through Downtown Knoxville, 4th & Gill, and Old North Knoxville. Decorate your bike with lights, garland, and decorations. Costumes are also encouraged. The route is 5 miles long and takes less than an hour. Free bike safety checks and

January Board Meeting  
Jan 25, 2016 - 5:30pm

**For details  
on more events...**

To see more events in the downtown area, visit the [Events Calendar](#) of Visit Knoxville.



Wander through a magical forest of more than 350 designer items, including beautifully decorated trees, holiday accessories, fireplace mantels, door designs, table centerpieces and "Adopt-a-Trees" decorated by local school children. All priced to sell.

November 25 through 29 at the Knoxville Convention Center.

Visit the [Fantasy of Trees](#) website for details on times, tickets, volunteers, sponsors, and entertainment.



judging for the decorating contests begin at 6pm. [Click here](#) for more information.

New Years on the Square

**Thursday, December 31**

Bring in 2016 with your friends and family on Market Square. Music on the Square begins at 11pm with a big screen showing events from 2015. Countdown begins at 11:59pm with ball drop and fireworks at midnight. Holidays on Ice skating rink will be open from 1pm until midnight.



### Market Square Holiday Market

The peak growing season may be over, but many root crops, hearty greens, hydroponic vegetables/herbs, meat, honey, eggs, dairy and more can still be found from 12pm to 3pm by the stage on Market Square. From 12pm to 6pm, craft and artisan food vendors will be set up along Market St and Union Ave.

Saturday, December 5

Saturday, December 12

Saturday, December 19

noon to 6pm

[marketsquarefarmersmarket.org](http://marketsquarefarmersmarket.org)

**Christmas Lantern  
Express**  
Nov 27 through Dec  
22

Christmas Trains are especially magical! This trip, on an historic steam engine train, begins in Downtown Knoxville. Enjoy hot



**Thursday, November 26**

Bring the family and join the fun before you sit down to your turkey dinner and give thanks for your blessings. 5K Race and One Mile Kids Run.

Visit the [Knoxville Track Club](#) website for details on registration, volunteers, and team competition.



Share your gently-worn, clean coats, jackets, sweaters, gloves, hats, and even blankets, so others can be more comfortable this winter. Drop them off at [Mast General Store](#) before November 30th. Donations will go to Knoxville Area Rescue Mission.



The Holiday Canstruction sculptures, made out of full cans of food, are on display through December 3 at the Knoxville Convention Center. At the end of the exhibit, all food goes to Second Harvest Food Bank.

People's Choice Award [online voting](#) continues through Monday, Nov 30 at 5pm.

**First Presbyterian Church  
Open House**  
Friday, December 4

chocolate, Christmas decor, and a visit from a special guest as you go along the Tennessee River.

Gather round to hear local celebrity readers presenting "A Christmas Lantern." Feel free to wear your Christmas PJ's and settle in for the 90-minute trip along the Tennessee River.

For details, tickets, and complete schedule, visit [Three Rivers Rambler](#).

### **Are You a Downtown Resident? Residential Meeting Monday, December 7, 5:45pm**

The next downtown residential meeting will be held Monday, December 7 at the Knoxville Chamber offices, 17 Market Square. The topic will be Community Building and the importance of a strong downtown community.

Join us at 5:45 for a social time, including light hors d'oeuvres and an opportunity to meet your fellow downtown residents.

The meeting will start promptly at 6:15 with a panel discussion including:

- how the newly created RiverHill Gateway Neighborhood Association was formed
- how the established 100 Block of Gay Street Association stays active
- David Massey with the City of Knoxville's Office of Neighborhoods will discuss how other communities and HOAs have pulled together to build a stronger community.

The meeting will be over promptly by 7:00pm. For more information, please contact Michele Hummel, [mhummel@downtownknoxville.org](mailto:mhummel@downtownknoxville.org).

Here's a list of a few events at the Tennessee Theatre over the next few weeks.

Keyboards at Christmas  
Sunday, November 29, 6:30pm



First Presbyterian Church, 620 State Street, would like to share a glimpse of what's going on with the church construction.

Join them for an open house on Friday, December 4, between 5:30pm and 9:30pm. Drop by before or after the Christmas Parade for tours, cider and sweets, and an opportunity to shop at the Mission Market.

For construction updates, visit the church [website](#).



### **Ice Bears Home Schedule**

There are several opportunities to catch a home game over the next few weeks.

Fri, Nov 27 - RiverKings at 7:35

Thurs, Dec 3 - Peoria at 7:05

Sat, Dec 5 - Hunstville at 7:35

Fri, Dec 18 - Hunstville at 7:35

Sat, Dec 19 - Fayetteville at 7:35

Tues, Dec 29 - Macon at 7:05

Fri, Jan 1 - RiverKings at 7:35

Tickets and complete season schedule are available at [knoxvilleicebears.com](http://knoxvilleicebears.com).



Enjoy music on the mighty Wurlitzer organ and five Steinway Grand pianos. Nine accomplished musicians will present music for the whole family. This event is a benefit for "Mission of Hope".

It's a Wonderful Life

Sunday, December 13, 1pm and 5pm

A free screening of the classic holiday film "It's a Wonderful Life" presented by Home Federal Bank.

Broadway at the Tennessee Theatre

The Sound of Music

December 15 through December 20

A brand new production of "The Sound of Music," directed by three-time Tony Award® winner Jack O'Brien. This lavish new production launched at the Ahmanson Theatre in Los Angeles and will arrive in Knoxville mid-December. Tickets are available.

Moscow's Ballet Great Russian Nutcracker

Wednesday, December 23, 3pm and 7pm

Feel the spirit of Christmas with the whole family this holiday! Marvel at the astonishing 40 world-class dancers, watch the kids giggle at the playful puppets, and delight at the splendor of the enchanting Snow Forest.

For a complete schedule of events, times, and tickets, visit the [Tennessee Theatre](#) website.

A few special holiday events at the Bijou Theatre include:



Knoxville Symphony Orchestra  
presents Classical Christmas  
Sunday, November 29, 2:30pm

This festive Chamber concert includes holiday highlights such as Mozart's arrangement of Sleigh Ride, Greensleeves, It Came Upon a Midnight Clear, and many recognizable carols. The concert features the Chamber Orchestra and Knoxville Chamber Chorale, conducted by KSO Resident conductor James Fellenbaum.

Knoxville Gay Men's Chorus presents Christmas Comes Anew  
Saturday, December 12, 8pm and Sunday, December 13, 2pm



Saturday December 12  
Worlds Fair Park

The Jingle Bell Run is a fun and festive way to kick off the holidays. Wear a holiday-themed costume, tie jingle bells to your shoelaces. Raise funds to help find a cure for arthritis.

Visit the [website](#) for details on sponsorships, donations, volunteers, and registration.



A Visit with Santa  
Sunday, December 13

Santa will be at [Mast General Store](#) on Sunday, December 13 from 1pm to 5pm.

Bring your camera. All photos are free.

## Reporting Crime

In order for downtown to be a safe place for us all to work, live, and play, it's important to report any illegal activity, crime, or aggressive panhandling. Please call 911 in an emergency or call the KPD

The Knoxville Gay Men's Chorus has planned a music fest featuring both traditional carols and secular holidays themes. The 50 member chorus will be under the direction of the new artistic director, Dr. Alan Stevens. The concert will be a celebration of warmth and winter and light-hearted numbers to warm the hearts and spirit of the audience.

Find a complete schedule of all events, and information on times and tickets, by visiting the [Bijou Theatre](#) website.

### Public Meeting

**Tuesday, December 1, 5:30pm**

**All Occasions Catering, 922 N. Central St**

Representatives from the City of Knoxville Office of Redevelopment and consultants from S&ME will host a public meeting to discuss Environmental Protection Agency brownfield cleanup grant applications for city-owned properties.

Specifically the applications seek brownfield cleanup grants of up to \$200,000 for:

- the former McClung Warehouses and associated properties on W. Jackson Ave between Gay Street and Broadway; and
- the former Sanitary Laundry property at 625 N. Broadway

Presentations will include a brief overview of the properties, the environmental issues associated with each, the plan for cleanup activities, and the grant application.

### Downtown Knoxville CBID

The core mission of the Central Business Improvement District is to enhance downtown's existing assets and bring more people to Downtown Knoxville to live, work, and play.



CBID relies upon the energies and vision of community volunteers to develop and execute its plans and programs. An active board of directors and standing committees focus on five areas: development, marketing, recruitment and retention of business, residential, and quality of life.

If you're interested in getting involved, please contact us at [info@downtownknoxville.org](mailto:info@downtownknoxville.org).

non-emergency number at 865.215.4010.

And remember...  
**FREE PARKING**

You can park FREE on weekends and FREE when you enter after 6pm every night in over 5,500 spaces in the following municipal garages and lots:



Locust Street Garage  
Market Square Garage  
State Street Garage  
Promenade Garage  
Walnut Street Garage  
Dwight Kessel Garage  
Jackson Ave Surface Lot - corner of Gay & Jackson  
Viaduct Surface Lot - under the interstate off E. Jackson

So come visit!

### Get CONNECTED!

Click the icons to follow  
Downtown Knoxville on social media!

Contact Us

(865) 246-2654

[info@downtownknoxville.org](mailto:info@downtownknoxville.org)



# EPA CLEANUP GRANTS

## PUBLIC MEETING

December 1, 2015

### CITY OF KNOXVILLE

NAME & ADDRESS	NAME & ADDRESS OF AREA BUSINESS YOU ARE ASSOCIATED WITH (IF APPLICABLE)	DAYTIME PHONE NUMBER	E-MAIL ADDRESS
Justin Fisher	TDEC	865-594-5466	Justin.Fisher@tn.gov
Paula Larson	TDEC	615-532-0926	PAULA.LARSON@TN.GOV
Sharon McKee	S&ME	865-330-9319	smckee@smeinc.com
Mike Stomen	S&ME	865-970-0003	mstomen@smeinc.com
Mike Steely	Knox Focus	865-599-5206	steelym@knoxfocus.com
ART CATE	KCDC	<del>865</del> 403-1116	
George Wallace	City Council	414-7102	gwallace@cbur.com
Rick Emmett	WIC	715-3837	RickEmmett@tn.gov
Rick Bruce	S&ME, INC.	865-970-0003	rbruce@smeinc.com
Anne Wallace	City of Knoxville	865-215-2644	awallace@knoxville.tn.gov
DAWN MICHELLE FOSTER	City of Knoxville	865-215-2607	DAWFOSTER@KNOXVILLE.TN.GOV
Miles (staff)	All Occasions Catering	865-521-1300	

PLEASE PRINT





CITY OF KNOXVILLE

# EPA CLEANUP GRANTS

## PUBLIC MEETING

December 1, 2015

NAME & ADDRESS	NAME & ADDRESS OF AREA BUSINESS YOU ARE ASSOCIATED WITH (IF APPLICABLE)	DAYTIME PHONE NUMBER	E-MAIL ADDRESS
<del>Frederick Samuel</del>	<del>Crown</del>		
Regis Ann Borsaw	Vested CO	865-696-8482	regisb9@cs.com
Terence Davis	Mid/Mod Collective 1621 N. Central	865-607-0210 also -	tdavis@QE2LLC.com (Quantum Environmental)
JIM HAGEMAN	COK 400 MAIN STREET	865-215-2087	JHAGEMAN@KNOXVILLETN.GOV

PLEASE PRINT

## City of Knoxville – Brownfields Cleanup Proposal - Public Comments

### Questions/Comments/Answers

Q. Who will do the cleanup?

A. The City will be responsible for the cleanup as the grantee. The City will hire experienced contractors to perform the cleanup work and will coordinate presenting information to the public about the cleanup progress through meetings and notifications.

Q. What is the timeline for the (McClung) project?

A. The City will submit the grant applications to meet the December 18 deadline. We anticipate award announcements in the spring – probably April/May, and the performance period to complete the project will be 3 years. If the cleanup is completed and the project is closed out with EPA prior to the 3-year period, the City will be able to market and sell the property at that time.

Q. How will the City prevent re-contamination on the (McClung) site? *Note – there will be a roadway construction project happening at the same time and the question relates to the heavy equipment being used for that project*

A. Heavy equipment (for the roadway project) will access via a paved parking lot and an alleyway at the rear of the McClung site so it will not be on the portion of the site that will be cleaned up.

Q. Is the parking area on Jackson Avenue available to the public during the project? *Note – the parking lot is used when accessing a banquet hall and other establishments across the street from the project site.*

A. Approximately half of the current parking spaces (100) will still be available during the project.

## **City of Knoxville**

### **Cleanup Grant Applications – former Sanitary Laundry Facility and former McClung Warehouses**

#### Summary of the Public Meeting held on December 1, 2015

The public meeting was held at a downtown location central to the redevelopment areas in which the two subject properties are located.

The attendees represented both the public and private sectors including local public officials, businesses, local residents and the media.

Attendees were given a presentation on the City's intent to submit grant applications to the EPA for the two subject properties. It included an overview of the City's vision for its redevelopment areas, planning studies that have been done for those areas, ongoing development activities, and proposed development activities. The presentation also provided an overview of the EPA's Brownfields Grant Program. In addition, the presentation explained the assessments that were performed on the two properties targeted for cleanup, and the potential contaminants associated with the properties, as well as the proposed cleanup methods outlined in the ABCAs.

Drafts of the two cleanup proposals and the corresponding ABCAs, as well as copies of the Phase I and Phase II Environmental Site Assessments for each of the subject properties were available for the attendees to review. Some of the attendees remained after the presentation to discuss the projects. Several questions were asked and answered during the meeting.

Included is a copy of the presentation that was given at the meeting.

# EPA CLEANUP GRANT APPLICATIONS

***December 1, 2015***

*Anne Wallace, Deputy Director, Office of Redevelopment*

*Sharon McKee, S&ME Inc.*

*Rick Bruce, S&ME, Inc.*





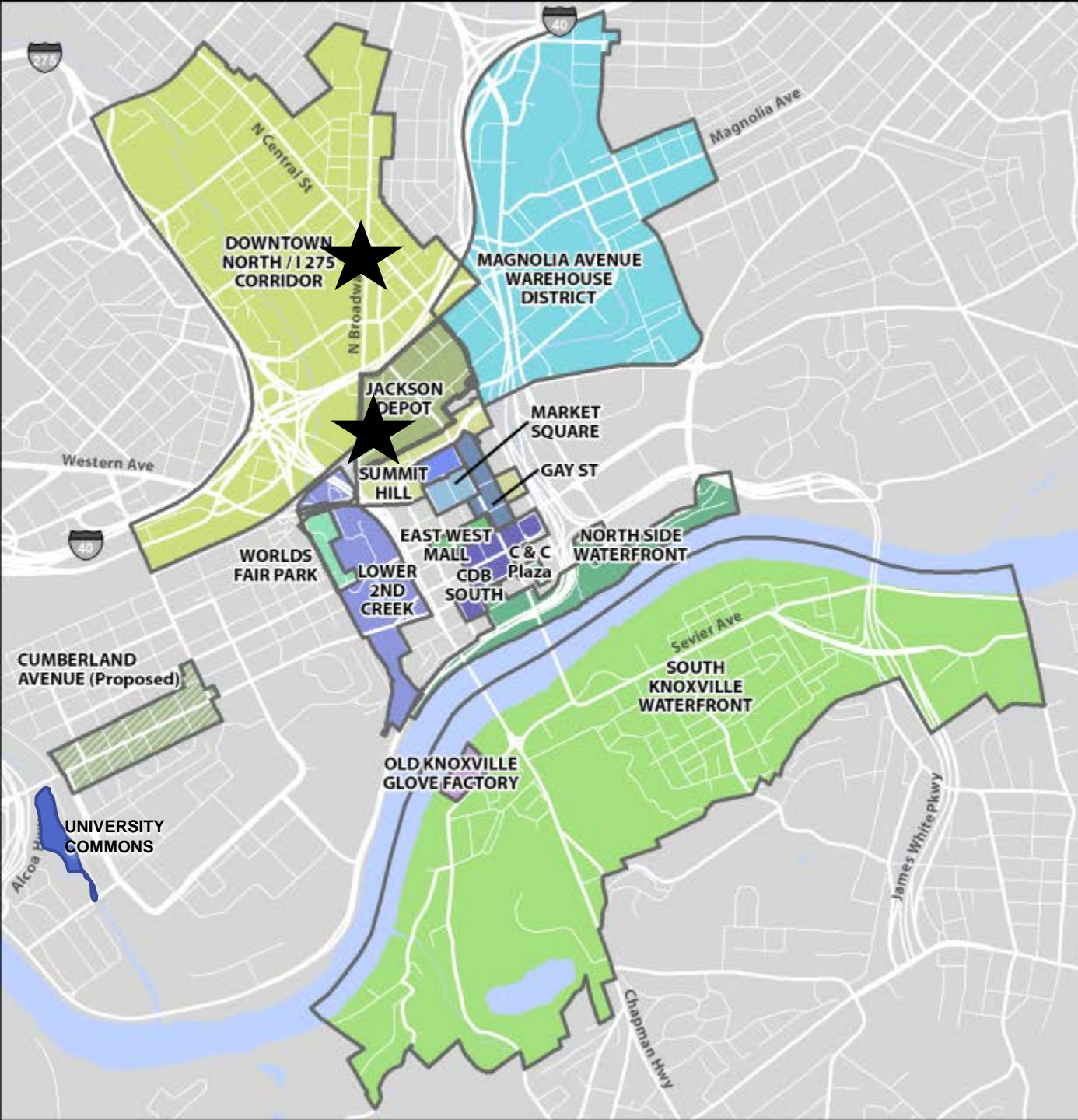
# Knoxville's Strategy

## ► Vision for Brownfield Redevelopment:

Appropriate redevelopment to bring vitality and livability back to those parts of the community that have seen economic decline – and create safe, secure, healthy neighborhoods where mixed-use development thrives



# Core Redevelopment Areas



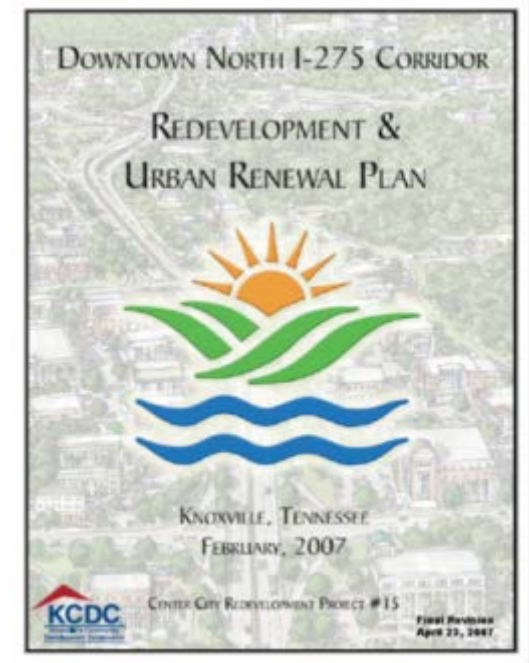
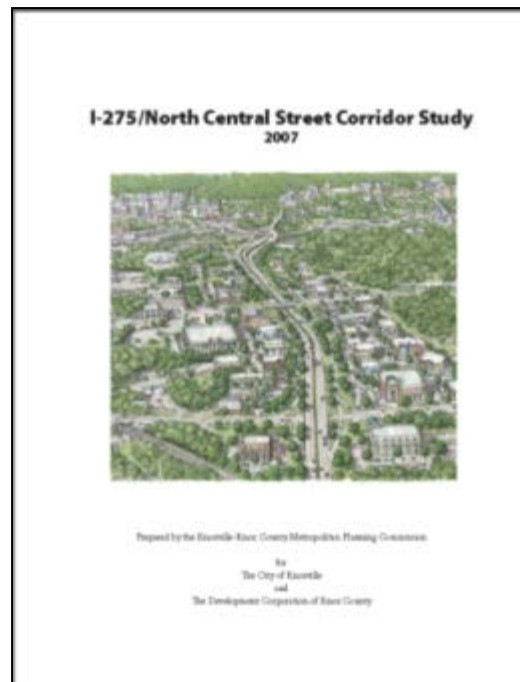
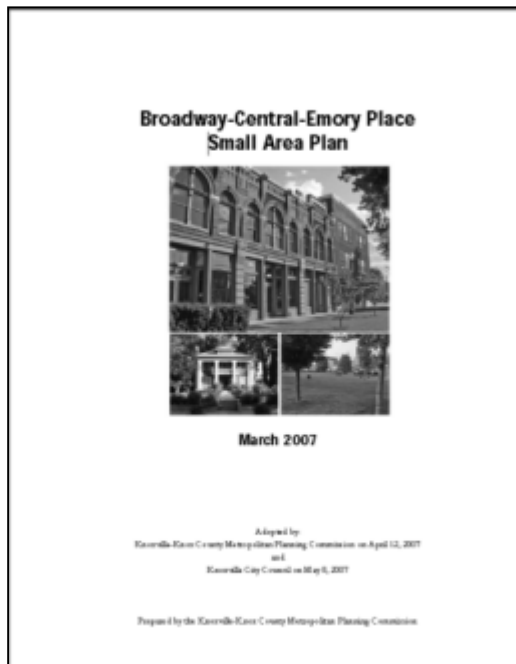
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# Downtown North – Context

- ▶ 2007 Planning Process
- ▶ Adoption of the Redevelopment and Urban Renewal Plan
- ▶ Focus on vacant and blighted properties



# Downtown North – Grant Information

- ▶ 2010 Application for petroleum and hazardous assessments
- ▶ 2011 Awarded \$400,000 for both types of assessments
- ▶ Community outreach – Newsletter, media releases & coordination with property owners
- ▶ Utilized existing area inventory to identify sites
- ▶ Selected 7 sites for Phase I ESA
- ▶ Performed 6 Phase II Assessments







Potential Assessment Candidate Sites

Downtown I-275 North Central Corridor

### Know the "Top Names"

[illegible]

## REVISIONS

1000

10

1

FIGURE NO:  
1

# Downtown North – Selected Sites

- ▶ **Sanitary Laundry** – a 0.7-acre site formerly housing a laundry and dry cleaning facility.
- ▶ **Lindsay Texaco** – a 0.25-acre site formerly housing a gasoline retail outlet
- ▶ **Southern Linen** – a 1.2-acre site that was formerly residential, office, and possibly dry cleaning. Currently used to store salvage building materials.
- ▶ **Auto Sales and Service** – a 0.48-acre site whose former use was residential, retail, and automobile sales and repair service. Previously used to store salvage building materials.
- ▶ **Historic Knoxville High School** – a 1.9- acre site that was formerly residential, a high school, and education offices.
- ▶ **Knox Tenn Rental, Central St.** – a 0.4- acre site of which a portion of the property was formerly residential, the rest was a fueling operation for more than 50 years.
- ▶ **Knox Tenn Rental, Irwin St.** – a 0.5-acre site formerly housing an equipment rental facility that included equipment washing and storage.
- ▶ **Knox Tenn Rental, Bernard Ave.** – a 0.5- acre site that was formerly residential, then used as a construction-related equipment storage and maintenance facility for the past 40 years.



# Jackson Avenue – Context

- ▶ Former McClung Warehouses site – approximately 5 acres
- ▶ City purchased property in November of 2013 (2 major fires)
- ▶ 2014 ULI Recommendation:
  - ▶ Consider a master-developer approach to ensure successful and contextual redevelopment
- ▶ COK Initial Responses:
  - ▶ Top priority
  - ▶ Begin process to select master developer
  - ▶ Challenge of developing 1 parcel or several – master developer may be able to allow both
- ▶ Update:
  - ▶ EPA Targeted Brownfield Assessment
  - ▶ Broadway Viaduct Replacement



# Broadway Viaduct – Replacement



## **Project Contact**

Andrea R. Hall, P.E.  
Transportation Manager 2  
p. 865-594-2496  
[andrea.hall@tn.gov](mailto:andrea.hall@tn.gov)

- ▶ TDOT Project – current status
  - ▶ Appraisal and acquisition
  - ▶ Coordination with railroad
  - ▶ Move-prior utility work
- ▶ Earliest Letting - May 2016
- ▶ Bridge will be closed during construction (approx. 2-3 years)
- ▶ Some lane closures and intersection closures may be necessary at times
- ▶ Demo first, utilities, then rebuilding
- ▶ COK plans to address environmental issues at Jackson Ave during Viaduct replacement

# Next Steps for Knoxville

- ▶ Targeted Brownfield Cleanup Sites
  - ▶ Former Sanitary Laundry
  - ▶ Former McClung Warehouses/Jackson Ave
- ▶ Productive reuse of key sites
  - ▶ Market studies
  - ▶ Request for proposals
  - ▶ Work with Master Developers
- ▶ Continue investment from a strong city core outward





# EPA Brownfields Grant Program

---

- ▶ **What is a Brownfield?**
- ▶ **EPA Definition** – real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutants, or contaminant.
- ▶ **500,000** – sites nationwide. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and protects the environment.



# EPA Brownfields Grant Program

---

- ▶ **Competitive** – EPA anticipates awarding 60 cleanup grants nationwide
- ▶ **Up to \$200,000 per site** – City has to match at 20% (up to \$40,000)
- ▶ **Who is eligible?** – municipalities, tribes, non-profits. Private individuals are not eligible
- ▶ **Before you can apply** – Phase I & II ESAs, ABCA
- ▶ **Factors for Consideration** – environmental, economic, community vision, partnerships

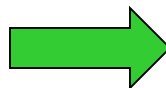


# EPA Brownfields Grant Program

- ▶ **Benefits** – mitigate potential health risks, revitalize brownfields properties, restore economic vitality



**BEFORE**



**AFTER**



# Sanitary Laundry Site – 625 North Broadway

- ▶ Property Details
  - ▶ Approximately 0.3 acres
  - ▶ 15,000 square foot building
  - ▶ Currently vacant



# Sanitary Laundry Site – 625 North Broadway

- ▶ Former Dry Cleaner
  - ▶ Operated from 1926 until 1993
  - ▶ Dry cleaning solvent tank
  - ▶ Two gasoline tanks
- ▶ Current Status
  - ▶ Two gas tanks removed in 1993
  - ▶ Solvent tank emptied and filled with concrete in 1994
  - ▶ Lead based paint and asbestos in the building



# Sanitary Laundry Site – 625 North Broadway

- ▶ Soil, Groundwater, Soil Gas and Ambient Air Sampled



Soil Vapor



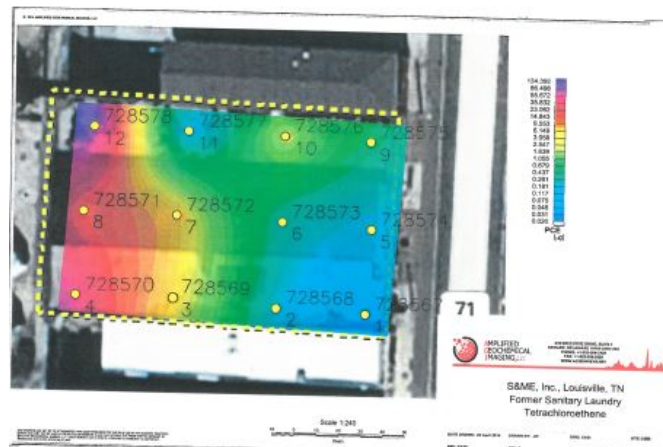
Ambient Air



Soil Samples



Sub-slab Gas



Example of Findings



# Sanitary Laundry Site – 625 North Broadway

- ▶ Assessment Findings
  - ▶ Drums of dry cleaning fluids removed in 1999
  - ▶ Dry cleaning compounds and solvents detected
  - ▶ City and TDEC have negotiated a Brownfield Agreement



# Sanitary Laundry Site – 625 North Broadway

- ▶ Analysis of Brownfield Cleanup Alternatives
  - ▶ Removal and disposal of containers
  - ▶ Lead-based paint and asbestos removal





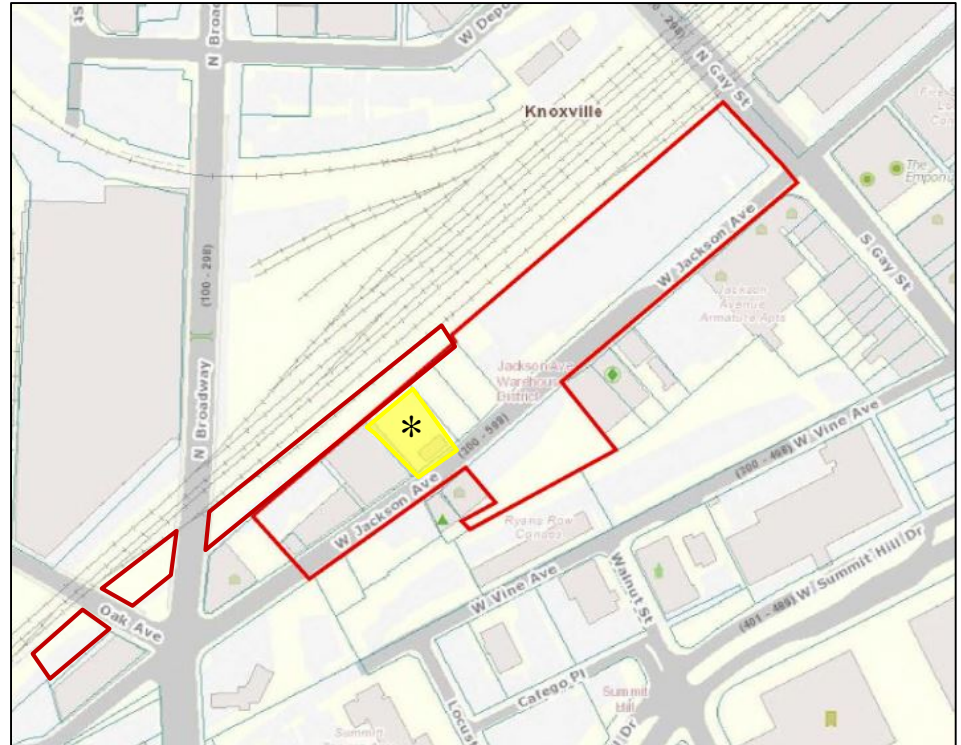
# Sanitary Laundry Site – 625 North Broadway

- ▶ Analysis of Brownfield Cleanup Alternatives
  - ▶ Soil Vapor Mitigation System



# McClung Warehouse Sites – Jackson Avenue

- ▶ Property Details
  - ▶ 8 parcels, approximately 5 acres
  - ▶ Variety of former businesses
    - ▶ Automobile garage
    - ▶ Woodworking shop
    - ▶ Freight shipping
    - ▶ Freight storage
  - ▶ Currently vacant



\* Property not owned by the City of Knoxville



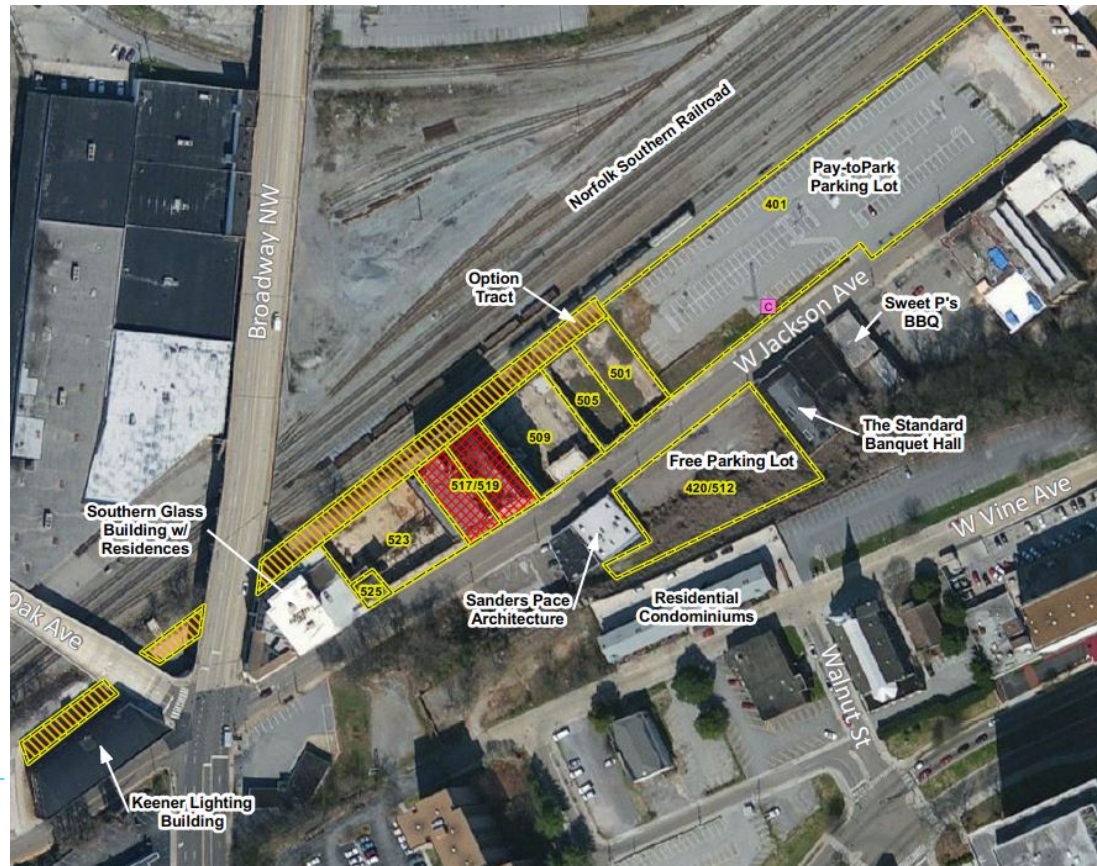
# McClung Warehouse Sites – Jackson Avenue

- ▶ Proposed mixed-use complex
- ▶ Possible commercial and residential use



# McClung Warehouse Sites – Jackson Avenue

- ▶ Tetra Tech performed Targeted Brownfield Assessment
- ▶ Phase I and Phase II ESA
- ▶ Sampled soil, groundwater, soil gas and suspect asbestos containing material





# McClung Warehouse Sites – Jackson Avenue

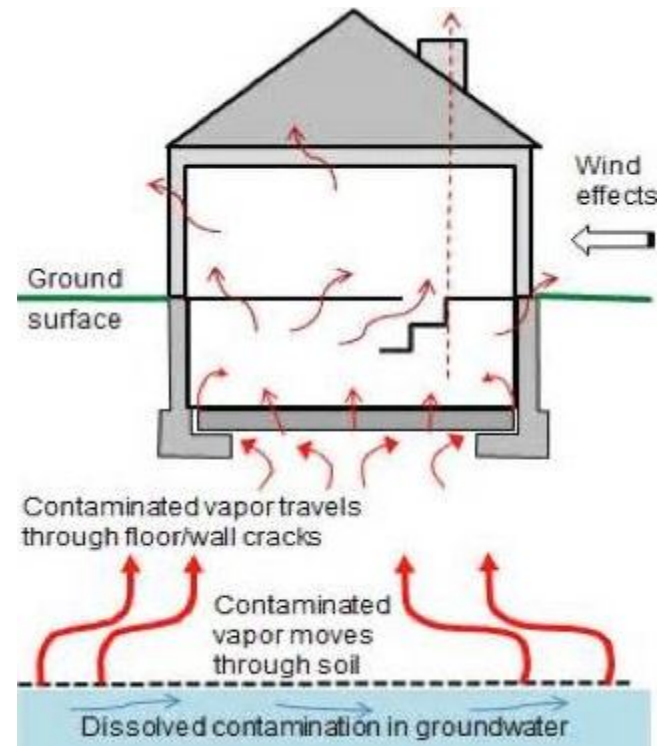
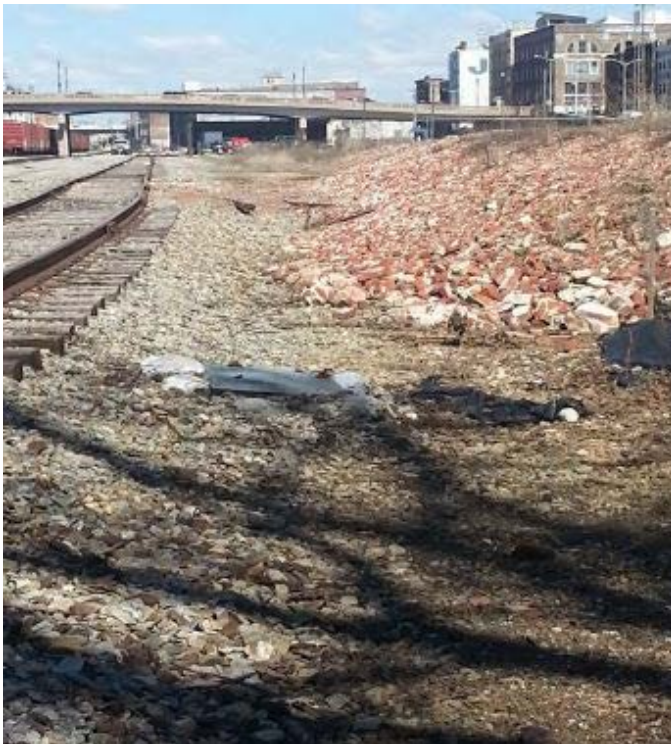
## ► Assessment Findings

- Metals detected above EPA screening levels (Arsenic, lead, cobalt, manganese and thallium)
- Asbestos Containing Material (ACM)
- Benzene in soil gas exceeds residential screening levels



# McClung Warehouse Sites – Jackson Avenue

- ▶ Analysis of Brownfield Cleanup Alternatives
  - ▶ Asbestos removal
  - ▶ Remove soils with elevated metals and replace with clean fill
  - ▶ If residential use is proposed, address potential vapor intrusion





# Questions & Comments

For more information please visit our website:

[www.knoxvilletn.gov/cleanupgrants](http://www.knoxvilletn.gov/cleanupgrants)

Send comments to Anne Wallace at [awallace@knoxvilletn.gov](mailto:awallace@knoxvilletn.gov)

Comments will be received until C.O.B. December 11th

