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1.1 PROJECT OVERVIEW

Tighe & Bond, Inc. was retained by the Town of East Hampton to conduct an environmental site overview of potential brownfields sites located in the village center. The purpose of the overview is to identify sites for further environmental evaluation and to provide environmental data to be used in the site prioritization. The village center is located in the downtown area of East Hampton, CT. An illustration of the site locus is provided in Figure 1.

The Town of East Hampton was selected to receive an assessment grant from the United States Department of Environmental Protection Agency (USEPA). This rural town of 11,300 people sits on the Connecticut River, which is an American Heritage River. The town's economy shifted from shipbuilding to manufacturing during the 1800s, and East Hampton became a major industrial center of the Northeast. The probability of contamination at many sites has hindered economic development in the town. Per capita income is lower than state and county averages, and job growth recently has been only half the statewide rate. The assessment of high-priority brownfields will spur sustainable redevelopment of the town's industrial areas, remove blight, help preserve existing open space and river quality, and reduce potential health risks of people in targeted areas. Recently, the community identified the brownfields sites as a major impediment to removing East Hampton's blight and improving the economic base.

Tighe & Bond, Inc. and TPA Design Group were selected to work in partnership with the Town, local business owners, and the public to revitalize the Village Center area. To meet East Hampton's redevelopment goals, a prioritization matrix will be developed for 23 sites in the village center. The list of sites was originally developed by the Brownfields Steering Committee. As part of the scope of this project, Tighe & Bond and TPA Design Group amended the list. A revised property list is summarized in Table 1. The rationale for removing and adding properties is provided in Section 2.1. Consultation with Town officials will result in a final list of sites that, upon land redevelopment, will most effectively revitalize the village center.

1.2 WORK ORDER 1 - SITE OVERVIEW

The United States Environmental Protection Agency uses specific criteria to define a brownfields site:

Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Implicit within this definition is the potential presence of an environmental hazard. Many private site owners resist brownfields initiatives and are reluctant to reveal contamination potential due to liability fears. However, the key to a successful brownfields project is the participation of the entire community with special significance given to the private site owners. Therefore, every attempt will be made to clearly define the purpose of this program to the property owner and address any concerns that may arise.

This report provides the initial brownfields site overview (Work Order #1). All of the information presented in this report was obtained from public resources. The majority of information was obtained from the town level (i.e. East Hampton tax assessor's office) and the state level (i.e. State of Connecticut DEP records room). The information collected is provided on a per site basis in Appendix A.

This report represents an important step in improving the overall success rate of this brownfields project. By utilizing combinations of existing formal and informal public records, the Steering Committee can begin to develop a comprehensive brownfields profile. This profile allows the Steering Committee to become more knowledgeable about individual sites within the context of the entire redevelopment effort. This will assist in engaging the public and individual site owners. In addition, a community-wide brownfields profile will help reduce the stigma effect of suspected brownfields and further community-wide redevelopment efforts. If presented within the context of a larger redevelopment project, individual site owners may not feel "singled out". The construction of a brownfields profile, prior to contacting individual site owners, streamlines the planner's efforts.

This environmental site overview collected relevant environmental information on the past and present uses of the site and information that characterized the site's current environmental condition. Individual site visits or interviews with property owners were not part of the scope of this report. The information compiled in this report was derived from multiple public sources:

- Historic mapping (e.g. Sanborn Maps; topographic maps; aerial photographs)
- Tax assessor cards;
- Historic phone directories;
- Files at the CT Department of Environmental Protection (CTDEP);
- Electronic environmental file search utilizing FirstSearch services;
- Available environmental reports for the sites; and
- Windshield surveys of the sites.

A complete list of references consulted in this report is provided in Section 6.

2.1 SITE PROVIDED BY STEERING COMMISSION

Tighe and Bond, Inc. was provided an inventory of potential brownfields sites by the East Hampton Brownfields Steering Committee, on August 31, 2004, during the kick-off meeting. Members of the Steering Committee selected sites that met criteria established under the EPA brownfields definition and also were located in or near the Village Center area. This list provided an excellent starting point to begin focusing project resources and efforts.

Many of these sites were also selected by students at Central Connecticut State University. These students conducted research on potential East Hampton brownfields sites as part of their *Brownfields Initiative Program*. This report was completed and submitted to the town of East Hampton in the spring of 2004. This report was also provided to Tighe and Bond, Inc.

2.2 SITE INVENTORY REFINEMENT

The initial brownfields inventory, dated October 27, 2004, contained 22 sites for review. Based on information collected during this work order, the list has been refined as follows:

- **5 Skinner Street has been removed from consideration.**

The East Hampton tax assessor's office did not contain information on this site. Furthermore, review of tax assessor's maps and aerial photographs suggest that the site was incorporated into the site at 11 Skinner Street.

- **41 and 51 Skinner Street have been removed from consideration.**

The East Hampton tax assessor's office did not contain information on these sites. The original list described both sites as containing the remnants of industrial buildings. However, these locations could not be determined by review of aerial photographs or assessor's maps.

The site was not listed on the tax assessor's map and could not be located with the assessor's map. It is possible that this location has been consolidated with an adjacent site. The adjacent sites, 1 Watrous Street and 13 Watrous Street, are included in this report. Consolidated Plastech, Inc. is listed in several files as having an address at 3 Watrous Street. However, this business was actually located at 17 Watrous Street.

- **Two town-owned sites, 103 Main Street and 13 Watrous Street, have been added to the site overview.**

The Town of East Hampton will be performing additional environmental assessments on these sites. These sites have known historic uses that qualify them as brownfields sites.

- **Sites with identical addresses have been corrected.**

The original site selection list had Veazey & White Bell Co located at 10-12 Summit Street and Nesci Enterprises, located at 12-14 Summit Street. Tax assessor's records indicate that Veazy & White Bell Co. was located at 10 Summit Street and Nesci Enterprises is located at 12-14 Summit Street.

- **Five additional properties were included for review:**

- 85 Main Street – EMS Mailing
- 26 Skinner Street – The Lyon and Billard Company
- 5 Barton Hill Road – Train Station Motors
- 90 Main Street
- Walnut Avenue – East Hampton Bell Company

These five properties were included in this report based on their proximity to the Village Center area and their potential qualification under the Brownfields definition.

Twenty-three sites remain after this refinement process. The addresses and names of the sites are provided in Table 1 – Site Inventory List and are depicted in Figure 2.

3.1 DATABASE CREATION

All of the research gathered during this process was compiled into a Microsoft Access database. There are many advantages to creating a database of this type:

- Information in the database can be shared easily;
- The database can be queried for specific information;
- The data can be updated quickly;
- The information can be integrated with a Geographic Information System (GIS) to display information spatially; and
- Future site-priority matrices can be easily weighted and quantified in a database format.

The majority of the information contained in the database has been provided in report format in Appendix A.

Several quality control procedures were implemented prior to inclusion into this report. These quality control measures included:

- Cross-referencing information with existing town records;
- Comparing data provided in electronic file searches with existing documentation at the CT DEP file room;
- Reviewing current and historic maps to verify historic use of properties;
- Comparing information contained in the database with previous environmental assessments;
- Verifying building locations and site use through windshield surveys;
- Draft review by steering committee; and
- Final review by project manager.

The information contained in the database will be updated as new information becomes available.

3.2 GEOGRAPHIC INFORMATION SYSTEMS

An ArcView GIS database was created for this report. The site boundaries were reproduced from digitized tax assessor's maps. The site boundaries were then georectified using 2001 SBC Aerial Photographs. The sites have been projected into Connecticut State Plane – 1983 North American Datum. Each site boundary contains an

ID field that can be merged with the Access Database. It is important to note that the site boundaries are approximate.

SECTION 4 INITIAL ENVIRONMENTAL CONCERNS Tighe&Bond

4.1 COMPONENTS OF THE ENVIRONMENTAL SITE OVERVIEW

There were three components to this environmental site screening: records review, aerial reconnaissance, and report generation. An ASTM Phase I Environmental Site Assessment, however, is composed of four components:

- Records review;
- Site reconnaissance;
- Interviews with current owners and occupants; and
- Report.

Therefore, this environmental screening should not be interpreted as meeting the requirements of a Phase I environmental site assessment.

4.2 IDENTIFYING ENVIRONMENTAL CONDITIONS

One of the stated goals of the records review was to identify information that characterized the site's current environmental condition. The term environmental condition is defined by ASTM as:

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

Table 2 provides the information collected on each site's environmental condition. The following is a description of the table's three column subheadings:

Spills/ Releases

There are two primary sources for the information in this column. The first source is the Connecticut Department of Environmental Protection Agency's (CTDEP) database of emergency response actions and spill releases maintained by the Oil and Chemical Spill Response Division of the Bureau of Waste Management. The second source is the CTDEP's database of leaking underground storage tanks maintained by the Underground Storage Tank Enforcement Program of the Bureau of Waste Management.

- G&S Gas Service Inc. – Site Number 17

Two spills were reported. The first spill occurred in 1998 with the release of 100 gallons of diesel fuel from a leaking UST. The second, in 1999, spilled an unknown amount of diesel fuel from an UST. The tank and contaminated soil was removed.

- Carpenter-Hayes Paper Box – Site Number 11

An unknown oil substance was found in the groundwater during the installation of a 9-foot dug well. A spill of #2 heating oil (~ 500 gallons) was documented on site.

- Clark and Watrous Company – Site Number 3

A spill notification was made in 2001 when 100 gallons of #2 fuel oil was spilled during filling operations. No state registered ASTs or USTs are listed for this site. Also, no fill pipes were visible during the windshield survey.

ASTs/USTs

The primary source for this information is the CTDEP's database of registered underground storage tanks maintained by the Underground Storage Tank Enforcement Program of the Bureau of Waste Management. Additional sources included previous environmental site assessments and historic fire insurance maps.

- G&S Service Inc. – Site Number 17

This site has 3 registered USTs. All three are currently in use to store gasoline. There are two 8,000 gallon tanks and one 4,000 gallon tank. Anecdotal information was provided suggesting that the removal of underground storage tanks occurred in 2004 (personal communications, Terry). Review of CTDEP database did not provide any supporting information.

- J.C. Barton Machine Shop – Site Number 20

This site has 3 USTs registered with the state. Two were removed in 1990. One 10,000 gallon tank remains on site. All three tanks stored gasoline.

Other

This column included additional information that indicated the presence of on site hazardous materials. Sources of this information included the EPA databases of industries that create more than 100 kg of hazardous waste per month. These facilities are referred to as large/small quantity generators. Another federal database referenced for this report included the Toxic Release Inventory System (TRI). This database is maintained by the EPA and catalogs all facilities that have had or may be prone to toxic material release. The final source of information for this category included the CTDEP's database of known and suspected waste sites maintained by the Bureau of Waste Management.

- Bevin Brothers Manufacturing – Site Number 1

Bevin Brothers is a former large/small quantity generator. Its reporting status was changed in 1996 to a Conditionally Exempt Small Quantity Generator. It was also required to report to the federal government under the TRI program. It was required to report the annual storage and handling of copper on premises. CT DEP file review noted the historic use of trichloroethylene (TCE) and perchlorethylene (PCE) on site.

A 10,000-gallon buried oil tank was noted on the 1918 Sanborn Map.

- SNET – Site Number 19

This site is listed as a state site under the CTDEP Inventory and Suspected Waste Site. However, no further information was provided as to the nature of the designation. A fill pipe was observed in the parking lot of during the windshield survey. The CTDEP's database of registered underground storage tanks did not contain a record of the tank.

- Brookside Industrial Complex – Site Number 21

The tenant, Pressure Pak Container Company Inc., was granted a change of status from a large/small quantity generator to a Non Handler of Hazardous Waste. Approval of the change in reporting status occurred in 1991. It is not known how long they were a large/small quantity generator. An environmental audit of Pressure Pak Container Company, located on site, documents the use of 1,1,1-Trichloroethane.

- NESCI Enterprises – Site Number 4

NESCI Enterprises was granted a change of status from a large/small quantity generator to a Non Handler of Hazardous Waste in 1991. The site is listed as a state site under the CTDEP Inventory and Suspected Waste Site for the use of solvents.

A buried tank is noted on the 1925 Sanborn Map west of the building along Watrous Road.

- Summit Thread – Site Number 2

The former tenant, Fox's Cleaners, was required to report as a large/small quantity generator.

- Clark and Watrous Company – Site Number 3

Clark and Watrous Company was required to report as a large/small quantity generator.

- Carpenter-Hayes Paper Box – Site Number 11

A 50-gallon gasoline tank was noted on the 1925 Sanborn Map. The tank was labeled "not in use".

- J.C. Products – Site Number 7

Consolidated Plastech, Inc, formerly located at 17 Watrous Street, was listed as a state site under the CTDEP Inventory and Suspected Waste Site.

4.3 HISTORIC LAND USE

4.3.1 Overview

Two very important physical features governed the historic development of the Village Center area of East Hampton - access to fresh water and railroad transportation.

Historically, these were appealing reasons to make East Hampton the site of a new industrial center.

The Air Line Railroad was built to connect Boston with New York City in virtually a straight line - the shortest route possible. The location of the route was drawn “through the air” via the city of New Haven. By 1873, this railroad was functioning from New Haven to Willimantic. At these points, the Air Line was able to link with other rail lines to connect New York and Boston in the shortest way possible. This railroad provided a means for the industries to receive supplies and to ship their products. The railroad traversed the Village Center in an east-west direction running parallel to Walnut Avenue. The area is now preserved as the Air Line Trail.

Pocotopaug Lake and Creek provided a convenient access to fresh water. This water was used as a means to generate electricity, cool industrial processes, and discharge waste. Within the last one-hundred years, the shape and volume of the Pocotopaug Creek has been altered. In particular, there were several ponds numbered sequentially from the north to the south. These ponds were joined by the Pocotopaug Creek. First Pond, as referenced on historic maps, is the location of Bevin Pond. The pond was expanded in 1860 with the building of a dam slightly north of the current Bevin Brothers location. Historic maps and aerial photographs indicate the volume of this pond has not been altered substantially since the 1860’s. Second Pond is located due east of 13 Summit Street. Historic maps and aerials indicate that the pond was much larger than its current volume. Third Pond was positioned at the corner of Summit Street and Watrous Street. The pond no longer exists and is currently the site of parking for 12 Summit Street. Review of an aerial photograph taken in 1934 demonstrates the existence of the pond. Fourth Pond has also been completely drained. It formerly occupied a large area south of Walnut Street and east of Main Street. Examination of 1934 aerial photography indicated the pond had been substantially drained prior to that photograph.

The majority of historic industrial development in East Hampton occurred along Pocotopaug Creek. To understand the historic industrial use of the Village Center it is necessary to reference them to current locations. However, many of the historic streets have been altered in name and location. Before discussing individual historic sites, it is necessary to clarify some of these discrepancies.

- Abell Avenue was the name of the road that looped from Main Street to Summit Street. The street has since been divided into Walnut Avenue and Watrous Street.
- Older Sanborn Historic Maps (1908) refer to Summit Street as Mill Street.
- Bevin Court was formerly named Lake Street.

Starr Place was formerly named Summit Avenue.

4.3.2 Historic Industrial Sites

Bevin Brothers Bell Shops

Current reference location: The site still manufactures bells and is located at site 1 on Figure 2.

Bevin Brothers Bell Shop manufactured many types of bells including advertisement bells, patio bells, hand bells, cow bells, door bells, fog bells, fund-raising bells, sleigh bells, shop keeper bells, call bells, patio bells, barbecue bells, tea bells, Christmas bells, and souvenir bells. Abner and Chauncey Bevin started their business in 1832. The 2 ½ story, 32' x 20, building, with gable roof and vertical-board siding, was originally located at the former outlet of Bevin's Pond, several hundred yards northwest from its present site. When the pond was expanded in the mid-1860s with the building of a new dam downstream on Pocotopaug Creek, the frame shop was relocated adjacent to the factory on the new outlet (Society for Industrial Archeology).

New construction in 1880 and 1904-1910 replaced the 1860s building. Brick structures erected in 1880 include a 2 ½ -story factory, 188 ft x 48 ft with gable roof, a 1 ½ story foundry, 161 ft x 31 ft with (present) near-flat roof, and two smaller buildings for tumbling, finishing, packing and storage (Society for Industrial Archeology).

Review of the 1903 Sanborn Map depicts a spill way from Bevin's Pond running through the center of the property (Pocotopaug Creek). There is a turbine located in the center of the plant between the factory and foundry building. A penstock is shown conveying water from the First Pond (Bevin's Pond) to the turbine. The Sanborn Map lists the power for the plant as water, steam, and gasoline. Heat is listed as steam; fuel is listed as coal. Two furnaces are referenced on the map, one located in the foundry, and the second in a building to the east of the foundry. Moving slightly east of the foundry was the location of sand, coal, and charcoal storage. A plating area, whitening room, boxing room, and an engine room housing a 15-horse power engine were located in the center of the complex, adjacent to the spill way. A japanning area is shown on the south side of the complex adjacent to Pocotopaug Creek.

The firm added two 2-story brick factories (83 ft x 72 ft and 98 ft x 37 ft) in 1904. In 1905, the 1880 brick factory gained a 1-story, 172 x 26 ft wing made of poured concrete (Society for Industrial Archeology). Reviewing the 1908 Sanborn Map, the area located to the east of the foundry has the designation of scrap melting. In addition, metal shavings are stored in the area north of the newly constructed metal plating and polishing machine shop.

The 1925 Sanborn Map no longer depicts the spillway traversing the building. However, Pocotopaug Creek is depicted at the southern portion of the complex. An enameling area is also shown adjacent to the Creek on the southern end of the property. The Sanborn Map lists lighting as electric, heat as steam, and power as water, gas, and electric. A 10,000-gallon buried oil tank is depicted north of factory building. Water

was supplied throughout the complex from pipes routed from an 80,000-gallon water tank. This tank is still visible from Summit Street.

Summit Thread Mills

Current reference location: Remnants of the Summit Thread Mill exists at 13 Summit Street, 1 Watrous Street and 13 Watrous Street. Their site numbers are 2, 3, and 5 on Figure 2, respectively. 13 Summit Street is the location of the former west mill. 1 Watrous Street is the location of the former east mill. 13 Watrous is the location of the former Summit Thread Mills powerhouse.

Merrick and Connant Manufacturing Company, makers of silk thread, built the major portion of this plant but occupied it only two years. Summit Thread Company bought the property in 1882. Summit made cotton and silk thread that was sold on ready-wound bobbins for Singer-type sewing machines. By 1900 the firm was also making sewing machines attachments, such as tension regulators and bobbin sheaths, for use with its ready-wound bobbins. The 1880 plant featured two brick mills on opposite sides of Summit Street.

The 3-story west mill, 174 ft x 47 ft, has a near-flat roof and central stair tower. The 1903 Sanborn Map describes the first floor as a storage and engine room, the second floor as a winding area, and the third floor used for spooling and dressing. To the north of the building was a two floor addition that housed the carpenter and machine shop. Further north, attached to this building, was an area designated for a blacksmith. Attached to this building was a generator. A covered tail race brought water from the building to the Third Pond (no longer exists). This tail race provided water for the turbine engine. A second covered tail race is illustrated emanating from a building designated for shipping and box storage. This building was located east of the west mill. To the north of this building are depicted two additional buildings, a store house and an engine room. A penstock water leads from the Second Pond to the engine room.

The 1903 Sanborn Map depicts the 175 ft x 38 ft 2-story east mill. The first floor was used as a dye room and the second floor was used for drying. To the south of this building a railroad extension from the New York, New Haven, and Hartford Railroad is shown. A steel frame bridge connected the two mills across Summit Street (formerly Mill Street). This bridge is visible in 1970's aerial photographs but not in the 1986 pictures. The power source for the complex is noted as water and steam, the heat is listed as steam, the fuel is listed as coal, and the lighting is listed as electric.

The 1908 Sanborn Map reveals little change from the 1903 map. The 1914 Sanborn Map portrays the addition of a 40,000-gallon water tank with water pipes distributed throughout both mill complexes. A fire pump (750 gallons per minute) was situated near the Second Pond at the northern extent of the property.

The 1925 Sanborn Map illustrates the new boiler powerhouse. The powerhouse is located at the current location of 17 Watrous Street. The building is described as an independent electric powerhouse providing power to the Summit Thread Company. A large portion of the building is dedicated as an open coal pocket. South of the coal pocket area is the boiler house. Little description is provided about the boiler house except for the steel roof trusses and concrete floor. South of the boiler house is the power house area. A fire pump is shown on the west side of the building. The pump was capable of generating 750 gallons per minute.

Franco-American Thread Company

Current reference location: 17 Watrous Street is the former location of the Franco-American Thread Company site, number 7 on Figure 2.

The Franco-American Thread Company is visible in the 1925 Sanborn Map. The single building had a distinctive set of six wire glass sky lights in the ceiling. The heat was noted as steam, the light and power provided by electricity. A water pipe from the Third Pond provided water in the event of a fire. Steel trusses are also noted on the map.

The Starr Brothers Bell Company

Current reference location: 12 Summit Street is the former location of the Starr Brothers Bell Company, site number 4 on Figure 2. 10 Summit Street is the former location of the Starr Net and Twine Company site number 6 on Figure 2.

The original owners of the property were Veazy and White who established their business in 1840. They manufactured thread and machine silk. The Starr Brothers Bell Company established their business in 1882. The Starr Brothers Bell Company manufactured all kinds of door gongs, house bells, sleigh bells, and bicycle bells of all varieties. Also a separate business on the property, The Starr Net and Twine Company was organized in 1886. The company manufactured various kinds of fish nettings (Society for Industrial Archeology).

The 1903 Sanborn Map depicts several buildings south of the former Third Pond. The industry straddled Pocotopaug Creek and used a water wheel to generate electricity. The map lists the heat source as steam, the fuel source as coal, and the light source as electricity. A 2½ story building ran perpendicular to the Creek. The first floor of the building was used for plating and rolling, and the second floor was used for finishing and office space. Attached to this building, adjacent to the stream, was the water wheel and buffing room. To the south and west, two 2-story buildings were present. The first building used the bottom floor as a machinery and press room with the upper floor used for general storage. The second building used the bottom floor for shipping and the second floor for general storage. To the east of the Pocotopaug Creek, a long and narrow foundry was built that ran parallel to the Creek. The foundry was divided into two parts. The upper (northern) part was dedicated as a brass foundry and the lower

(southern) part was dedicated as an iron foundry. Adjacent to this building was a sand storage shed.

The 1908 Sanborn Map, covering this area, is very similar to the one drawn in 1903. The only relevant changes occurred with the addition of a whitening area located next to the Creek. Also, the area formerly labeled “sand shed” now included charcoal storage. No changes were noted during review of the 1914 Sanborn Map.

The 1925 Sanborn Map shows the existence of the A.M. Starr Manufacturer of Fish Netting. The building is displayed as a two-story square building with frontage to Summit Street. The current location of this building is 10 Summit Street. The heat for the building is listed as furnace, the light is listed as electric, and the power is listed as electric. The floor is described as concrete with wood posts. Also, the location of a buried oil tank is referenced to the west of the factory building adjacent to Watrous Road. It is immediately south of the fire department. It is not known if this tank has been removed.

East Hampton Bell Company

Current reference location: The intersection of Walnut Avenue and Watrous Street is the former location of the East Hampton Bell Company site number, 10 on Figure 2. The water tower and newer buildings are still visible.

The East Hampton Bell Company was founded in 1851 by David Watrous. The company was located slightly north of Walnut Avenue along Pocotopaug Creek. Review of the 1903 Sanborn Map depicts a row of industrial buildings running perpendicular to the Creek. On the western side, a three-story building appears to straddle the watercourse. The first floor was used for buffing, the second for leather cutting, and the third for storage. To the east of this building was a two-story building approximately twice the size. This building was used for turning on the first floor and storage on the top floor. There was an engine room that utilized the water from the flowing Creek to generate energy. Moving further east, the next building contained a blast furnace on the first floor. This floor was used as a foundry. The second floor was used for turning, assembling, varnishing, and baking. To the east of this building were two small buildings used for office space and storage. To the south, closest to Walnut Avenue, two additional buildings are shown. The first building was used for assembling and the second for charcoal storage. Two additional charcoal storage areas are located at the northern extent of the property.

No significant structural changes are noted on the 1908 or 1914 Sanborn Maps. The 1925 Sanborn Map depicts the addition of a 50,000 gallon water tower that is still present on the property. Review of the 1970 aerial photograph portrays all of the original buildings with two additional buildings located to the north of the water tower. The 1986 aerial photograph only depicts the new buildings with the remaining industrial

buildings removed. Currently, the property looks much the same as it did in 1986. Only the water tower and the two recent buildings remain.

Gong Bell Company

Current reference location: Site number 11 on Figure 2 incorporates the former location of the Gong Bell Company.

The Gong Bell Company was located directly across Walnut Avenue from the East Hampton Bell Company. The 1903 Sanborn Map references the building as the National Novelty Corporation – The Gong Bell Manufacturing Company Branch. The National Novelty Corporation was based in New Jersey and was in existence from 1903-1907. The corporation was a trust or consortium of over 30 leading manufacturers of cast-iron and wood toys, formed to cut costs and stifle competition. Poorly managed, the "Toy Trust" soon failed (The Connecticut Magazine). The 1914 and 1925 Sanborn Maps refer to the property as The Gong Bell Manufacturing Company. Presumably the name change occurred during the dissolution of the National Novelty Corporation.

Review of the 1903 Sanborn Map shows three main buildings associated with the industrial operations. From east to west, the first building was one-story and was used for storage. The next building was also one-story and used to store lumber. The third building was 2 ½ stories. The first floor was used for storage, box making, and painting. The second floor was used for assembling and packing. The attic was used for additional storage. The Sanborn Map also depicts a large pond (Fourth Pond) surrounding the property. The power for the industry is listed as water, the heat was derived from coal and wood stoves, and electricity was used for the lighting.

The 1925 Sanborn Map depicts the consolidation of the three buildings into one long building with frontage to Walnut Street. An equally long addition was constructed onto the western side of the building. This new edition was designated as a stock room. The Sanborn Maps also shows the Fourth Pond as greatly reduced in volume. It is likely that the pond was reduced, in part, to accommodate the building addition.

The 1970 aerial photograph portrays a large industrial growth around the area. An industrial complex was built slightly south of the former Gong Bell Company. Based on current property boundaries, these recent industrial buildings were part of 101 and 103 Main Street. During this period, the BSR Corporation Sheet Metal Company occupied this address. By 2001, the northern buildings associated with 103 Main Street were removed. Also, the former Gong Bell Manufacturing Company has been incorporated into the Carpenter-Hayes Paper Box Company.

M.L. Carpenter

Current reference location: The Carpenter-Hayes Paper Box is still in operation and located on 8 Walnut Avenue, site number 11 on Figure 2.

In 1903, the location of the M.L. Carpenter Paper Box Company was occupied by the burnt ruins of a plating factory. The location was just south of the intersection of Walnut Avenue and Watrous Street. The Sanborn Map describes only the location of a foundation. By 1914, the foundation had been changed into the L.S. Carpenter and Son Paper Box and Rubber Stamp Making Company. The Sanborn Map describes a 50-gallon gasoline tank (not in use) located to the south west of the building. The heat used in the building was coal, the power source was also coal, and the lighting was provided by electricity. Little detail is provided in the 1925 Sanborn Map. The only changes from the 1914 Sanborn Map were the name of the company – the M.L. Carpenter Manufacturer of Paper Boxes. The 1970 aerial photograph shows a slightly larger building. Also, the building seems to be attached to the former Gong Bell Manufacturing Building. The 2001 aerial photograph show the removal of a portion of the Gong Bell Manufacturing Building. The Carpenter-Hayes Paper Box Building is more clearly defined and occupies portions of the former Gong Bell buildings.

The N.N. Hill Bell Factory

Current reference location: The current location is the Brookside Industrial Complex 11-29 Skinner Street, site number 21 on Figure 2. The historic buildings associated with the N.N. Hill Bell Factory are still present in the southern section of the industrial complex.

N.N. Hill worked in East Hampton's bell shops before starting his own company in 1889. He apparently derived impetus for his venture from the growing popularity of bicycles, bells for which was Hill's major product. In 1901 Hill introduced the Sterling Continuous Ringing Chimes, similar to the handlebar-mounted thumb bell widely used on bicycles today. He also refined the techniques of stamped bell production, which largely supplanted casting in the 20th century (Connecticut Magazine). Hill owned the property from Main Street down to Niles Street. This property, the eastern side of Summit Street, included much of the Pocotopaug Creek.

Hill's first shop burned in 1890 and he began construction of the extant brick-pier factory, 3-story and 100 ft x 35 ft with stair tower and near-flat roof. The 1-story brick foundry, 128 ft x 30 ft with monitor roof, and 2-story brick office e with hip roof also date from 1890. Hill added a 3-story brick pier wing, 100 ft x 41 ft, to the factory around 1910 (Society for Industrial Archeology).

The 1903 Sanborn Map depicts the NN Hill industrial complex centered on the Pocotopaug Creek. The name of the industrial complex is listed as National Novelty Corporation N.N. Hill Brass Company. This is the same toy consortium as Gong Bell Company. The foundry is illustrated running perpendicular to the Creek with a blast furnace and chimney located inside the foundry. A cupola was located to the southwest of the building. Presumably, the cupola was used for remelting metals, usually iron, before casting. To the east of the foundry, north of the Creek, the 3-story brick pier factory is shown. The first floor was used as a machine shop. A dynamo is located in

the northeast corner of the building. The second floor was used for assembling. The third floor was used for plating and buffing. A stock house is located south of the river. This two-story storage facility kept wood shavings and boxing on the first floor with unknown storage on the second floor. The remaining building was a two-story brick office building and storeroom. This building was to the north and adjacent to Skinner Street. The power for the complex was listed as water and electric, the heat was provided by steam, lights by electricity, and power was provided by coal. There was a coal pile and iron storage area located near Pocotopaug Creek.

The 1908 Sanborn Map details virtually the same features as the 1903. The name of the building has been changed to the Hardware and Woodenware Manufacturing Company N.N. Hill Brass Company Branch. After the dissolution of the National Novelty Corporation, many toy manufactures joined the Hardware and Woodenware Manufacturing Company. Similar to its predecessor, this consortium dissolved shortly after its creation. The 1925 Sanborn Map shows a virtually unchanged industrial complex. The name of the industry is now N.N. Hill Brass Company Manufacturer of Brass Goods. There is a building, located to the south of the Creek, dedicated to tumbling processes. Review of the 1934 aerial photograph shows the buildings as mostly the same configuration.

4.4 ENVIRONMENTAL SETTING

4.4.1 Site Geology/Hydrogeology

The United States Geological Survey *Surficial Materials Map of Connecticut* (Stone, et al, 1992) indicates the surficial geology of the quadrangle is composed of thin till. This is described as areas where till is generally less than 1-10 feet thick and including areas of bedrock outcrop where till is absent. The upper till is loose to moderately compact, generally sandy, and commonly stony.

According to the USGS *Bedrock Geological Map of Connecticut* (Rogers, 1985), the bedrock is classified as Brimfield Schists. The bedrock type consists of a gray, rusty weathering, medium to coarse grained, interlayered schists and gneiss. Schists are described as light silvery to dark, coarse to very coarse grained, strong to very strongly layered metamorphic rock, whose layering is typically defined by parallel alignment of micas. Primarily composed of mica, quartz, and feldspar; occasionally spotted with conspicuous garnets. Gneiss are described as light and dark, medium to coarse-grained metamorphic rock characterized by compositional banding of light and dark minerals, typically composed of quartz feldspar, and various amounts of dark minerals; occurs with a variety of compositions and is a characteristic of the uplands. The depth of the bedrock ranges from 55 to 65 feet.

Based on the general topography of the area, groundwater flow within the surficial unit is inferred to flow in a general southeasterly direction. The direction of groundwater flow is influenced by a number of conditions. Therefore, the local groundwater flow may vary throughout the area.

The quality of groundwater beneath the subject area is classified by the Connecticut Department of Environmental Protection as “GA, GAA may not meet current standards” Such groundwater may not meet the GA or GAA water quality standards, which presume that groundwater is suitable for drinking without treatment. However, CTDEP’s goal is to restore groundwater in this area to background quality.

In November 2004, the Maguire Group completed the Initial Water Supply Plan for the Town of East Hampton. This plan identified the area as impacted volatile organic compound (VOCs) contamination. A conversation with Vincent Susco, Public Utilities Administrator of the Colchester East Hampton WPCF, confirmed the presence of these chemicals in the groundwater proximate to the area.

The nearest aquifer protection area is the Glastonbury Road Wellfield in the Town of Portland. The East Hampton Village Center is over 5 miles to the southeast of the aquifer protection area (Environmental GIS Data for Connecticut, 2003).

4.4.2 Surface Water Classifications

Based on a review of the Natural Drainage Basins in Connecticut Map and Leachate and Wastewater Discharge Sources for the Connecticut River Major Basin Map, the area is located within the Pine Brook Drainage Basin (#4709). Drainage from the area would eventually discharge to the Pine Brook, located approximately three miles south of the area. The Pine Brook has been designated by the CTDEP as having a Class B surface water classification. The B classification indicates that the water body is suitable for bathing and other recreational purposes. It may also be suitable for agricultural or industrial processes and cooling.

The majority of the sites included in this report are located adjacent to the Pocotopaug Creek. Historic maps indicate that many of the former industrial complexes used the Creek for power generation and waste discharge. The Pocotopaug Creek is classified by the State of Connecticut as C/B. Inland surface waters classified by the CTDEP as C/B are those that, due to point or non-point sources of pollution, currently do not meet certain Class B Water Quality Criteria for one or more designated uses. The water quality goal is achievement of Class B criteria and attainment designated uses.

4.4.3 Potential Area Receptors

It was not within the scope of this report to perform a comprehensive receptor survey. However, it is important to note several important receptors within immediate proximity to the subject area.

The Center School is located on 7 Summit Street. Two bedrock wells are located on the property. These wells provide source water to the Village Center Water System. The wells are owned and operated by the Town of East Hampton. Volatile organic compounds, including trichloroethylene and MTBE, have been detected in these wells. Treatment technologies are employed to remove these contaminants prior to distribution. In 1990, a 3000-gallon heating oil tank was removed from the Center School. A 4,000-gallon heating oil tank was subsequently installed on the property.

The community water system has been providing water for the village center since 1992. At the present time, it is unknown if there are individual supply wells in the village center or if all the property owners have connected to the community water system. Residential supply wells are likely located outside of the village center. A receptor survey would be required to identify all possible water supply well receptors.

This work order provides an important initial step in the East Hampton Brownfields redevelopment project. This report provides important environmental data characterizing the environmental condition of the selected sites. Secondly, by utilizing GIS, it depicts the spatial distribution and scope of the project. Finally, it establishes the structure for information collection and storage. The results of this report will provide a foundation for the next stages of the project, site prioritization.

Public engagement efforts will dovetail the site prioritization work. Involving property owners and the general public will ultimately determine the success of the project. The research provided in this document will be shared with the property owners and interested parties. It is hoped that this document will serve as a starting point in the dialogue between the Steering Committee and the public.

The next step in this project will include all appropriate inquiries (AAI) into two town-owned properties-13 Watrous Street and 103 Main Street. These properties were included in the original EPA Assessment Grant. Additional AAIs will be performed on properties targeted for redevelopment by the committee. An EPA fact sheet defining AAI is provided in Appendix E.

Topographic Maps

United States Geological Survey, 1992, Middle Haddam Quadrangle Connecticut-Middlesex County, 7.5-Minute Series Topographic Map: United States Department of the Interior, U.S. Geologic Survey, 1968, Photo revised 1992.

United States Geological Survey, 1992, Moodus Quadrangle Connecticut-Middlesex County, 7.5-Minute Series Topographic Map: United States Department of the Interior, U.S. Geologic Survey, 1968, Photo revised 1992.

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- Middle Haddam 1945 (Surveyed in 1942 and 1943)
1952 (Surveyed in 1942, 1943, and 1952)
- Moodus 1946 (Surveyed in 1942 and 1943)
1952 (Surveyed 1941 (aerial photographs), 1942, 1943, 1952 (revised))

Geologic Maps

Connecticut Department of Environmental Protection. “Surficial Materials Map of Connecticut” .Stone, et al. 1992.

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Aerial Photography

University of Connecticut Map and Geographic Information Center and Connecticut State Library, 1934 Fairchild Aerial Survey of East Hampton.

University of Connecticut Map and Geographic Information Center, 1970 and 1986, digitized aerial photographs provided courtesy of Bill Miller, University of Connecticut, Map and Geographic Information Center.

Connecticut Department of Environmental Protection, 1990, Environmental and Geographic Information Center, United States Geological Survey Digital Orthophoto Quarter Quadrangles, 2003 Edition.

SBC Aerial Photography, April 2001, East Hampton Village Center and surrounding area.

Historic Hazard Mapping

Connecticut State Library, 1903, 1908, 1914, 1925, Sanborn Fire Insurance Maps (Sanborns), Library of Congress Map Collection.

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Historic Phone Directories

The Price and Lee Company, 1967, East Hampton, CT Phone Directory

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Fuss and O'Neill Design/Build Services, 2003, LLC, Phase I Site Assessment Former Allied Metal Finishing, 10 Summit Street, East Hampton, CT., Provided by East Hampton Brownfields Steering Committee.

EnviroScience Consultants Inc., 2001, Phase I Environmental Site Assessment, 11 Skinner Road, East Hampton, CT., Provided by East Hampton Brownfields Steering Committee.

Texts

The Connecticut Magazine," The Town of Chatham". Israel Foote Loomis Volume 5. June 1899.No 6. p. 303-319.

Society for Industrial Archeology, "Connecticut an Inventory of Historic Engineering and Industrial Sites" Michael Roth. 1981. P.134, 145-146.