

**Phase I
Phase I Environmental Site Assessment**

**Former Saint Johnsbury Armory
VT DEC Site #2010-4075
(SMAC September 7, 2010)
1249 Main Street
Saint Johnsbury, Vermont**

May 2012

**Prepared for:
VTDEC Sites Management Section
103 South Main Street
Waterbury, VT**



**ENVIRONMENTAL SCIENCE AND
ENGINEERING SOLUTIONS**

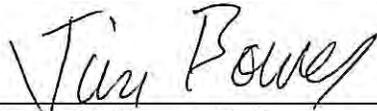
**PARTNERS FOR SMART THINKING
AND CREATIVE STRATEGIES**

Phase I Environmental Site Assessment Report
Former Saint Johnsbury Armory
Saint Johnsbury, Vermont

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR Part 312.

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

THE JOHNSON COMPANY, INC.



James R. Bowes, P.G.
Senior Geologist

Jeremy Matt, a Staff Engineer with The Johnson Company, Inc., assisted with the research and preparation of this report



Company ENVIRONMENTAL SCIENCE AND ENGINEERING SOLUTIONS

ph (802) 229-4600
fax (802) 229-5876
100 State Street, Suite 600
Montpelier, VT 05602
www.johnsonco.com

May 23, 2012

Ms. Jennifer Schwartz
Brownfields Response Program
Waste Management Division - DEC
103 South Main Street/West Office
Waterbury, VT 05671

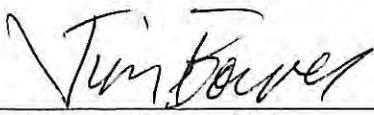
Re: Phase I Environmental Site Assessment Report
St. Johnsbury Armory Building Property,
1249 Main Street, St. Johnsbury, Vermont 05671

Dear Ms. Schwartz:

The Johnson Company is pleased to present you with this report of our findings of a Phase I Environmental Site Assessment (ESA) of the St. Johnsbury Armory Building property located at 1249 Main Street, Saint Johnsbury, Vermont. This ESA was conducted in accordance with the scope and limitations of the American Society for Testing and Materials' Standard Practice for Environmental Site Assessments (ASTM) E 1527-05 in conformance with 40 CFR Part 312, Standards and Practices for All Appropriate Inquiries.

We appreciate working for you on this project. Please call Jeremy Matt or myself if you have questions regarding any of the following information.

Sincerely,
THE JOHNSON COMPANY, INC.

By: 
James R. Bowes, P.G.
Senior Geologist

Attachment

cc: Peggy Pearl, St. Johnsbury History and Heritage Center
Dorrie Paar, US EPA Region I
Kathleen Castagna, US EPA Region I
Gail Aloisio, NVDA
Hugo Martinez-Cazon VTDEC

K:\3-2202-37\Phase I\052212_St J Armory_Phase_I CLL.doc

EXECUTIVE SUMMARY

The Johnson Company, Inc., of Montpelier, Vermont was retained by Vermont Department of Environmental Conservation (Brownfield Contract #16752) to conduct a Phase I Environmental Site Assessment (ESA) of the property referred to as the Saint Johnsbury Armory located at 1249 Main Street in Saint Johnsbury, Vermont (the Site).

This ESA was performed by personnel from The Johnson Company who meet the definition of Environmental Professional as defined in 40 CFR Part 312. This ESA included reviewing existing information including available aerial photographs and topographic maps, determining the regulatory status of the Site, contacting appropriate personnel regarding past and present uses of the Site, investigating the potential for past releases of petroleum products and/or hazardous substances at the Site, and conducting a site reconnaissance to visually inspect accessible portions of the Site to ascertain the presence of recognized environmental conditions (RECs) in the form of past, present or potential release(s) of hazardous substances or petroleum products.

Although the Site is listed by the VT DEC Sites Management Section as a hazardous site, its status is inactive (Sites Management Activity Complete letter dated September 7, 2010 issued by the VTDEC; Schwer, 2010). The Site is not included in the Federal Records System as a RCRA generator. The Site is not listed on the Federal National Priority List (NPL) as a Superfund Site. The Site is not listed as a hazardous waste site on the federal Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS). The Site is a former permitted underground storage tank (UST) facility which had a 1,000 gallon gasoline UST and a 6,000 gallon heating oil (#2 fuel oil) UST. Both USTs were permanently decommissioned and removed from the property in June 2010. According to previous investigation reports reviewed as part of this ESA, petroleum contaminated soil (PCS) associated with the fuel oil UST was transported off site and disposed in accord with State and Federal regulations. A confirmation soil sample was collected from the west end of the former heating oil UST by Horizons Engineering June 23, 2010 and no detectable concentrations of volatile organic compounds (VOCs) or total petroleum hydrocarbons (TPH) were reported above laboratory detection limits. Upon review of the documentation regarding off Site transport and disposal, and the confirmation sample, the VTDEC issued the SMAC letter.

The VT DEC and the United States Coast Guard National Response Center databases do not have any record of spills of hazardous substances or petroleum products occurring on the Site.

A Site reconnaissance conducted by The Johnson Company on April 26, 2012 included an inspection of the interior and exterior of portions of the Site. Photographs of Site conditions that day are included as Appendix 1 of this report.

The Johnson Company understands that the Saint Johnsbury History and Heritage Center wishes to assess the feasibility for redevelopment of the Site into a possible office headquarters, education, and museum space.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of the Saint Johnsbury Armory, 1249 Main Street, Saint Johnsbury, Vermont, the property. Any exception to, or deletions from, this practice are described in Section 8.1 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

HISTORICAL REC:

According to the July 21, 2010 Horizons Engineering (Littleton, NH) UST closure report, petroleum contaminated soils (PCS) were identified in June 2010 during the permanent closure and removal of a 1,000 gallon capacity gasoline and 6,000 gallon capacity fuel oil UST. Both USTs were observed to be in poor condition at the time of removal. No subsurface impact to underlying soil was observed with the gasoline UST and pump island ; however, elevated photo-ionization detector (PID) readings registering between 12 and 50 parts per million (ppm) were noted in the soils adjacent to piping area, the fill area and the west end of the fuel oil UST (Horizons Engineering, 2010). A total of 22 tons of PCS were removed. According to the Horizons report, following removal of the PCS, no registered PID readings were identified in excess of 10 ppm within the area of excavation. The PCS were transported off site for treatment and disposal to Environmental Soil Management Inc. (ESMI) in Loudon NH and a cleanup confirmation soil sample was collected from the base of the excavation at the west end of the UST by Horizon Engineering and submitted for laboratory analysis for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) using EPA Methods 8100, and 8260, respectively. The confirmatory soil sampling results revealed no detectable concentrations of VOC or TPH above method detection limits in the soil. A Sites Management Activity Complete (SMAC) designation was granted and the Site was removed from the SMS active hazardous waste site list.

Recommendation: No further action is recommended with respect to the former USTs. Following their discovery during the UST closure, the PCS were identified and managed per State and Federal guidelines such that an SMAC designation was assigned to the Site September 7, 2010.

RECS:

1. Three pits/floor drain structures were identified during the April 26th, 2012 Site reconnaissance effort:
 - a. A pit observed in the northeast corner of the Armory building basement was covered with a ¼ inch thick, removable, steel plate. There is a 6-inch diameter iron pipe

across the bottom of the pit with a vertical 'tee' section protruding upward in the middle of the pit. Standing water was observed in the vertical portion of "tee"; however, no sheens or odor were associated with this water.

- b. A filled-in structure (approximately 7 feet long by 1 foot wide) was observed in the floor of the basement, next to the vehicle access ramp located in the southwest portion of the Armory building basement (Figure 3). This structure has the appearance of a trench/floor drain that has been decommissioned. Jim Rust (Town of St Johnsbury) indicated to The Johnson Company that in years past when the building operated as the Armory, vehicles were stored in the basement of the Armory building, and floor drains were installed to convey surface water flow entering via the vehicle access ramp southwest corner of the building (Figure 3).
- c. A grated opening observed approximately 8-10 feet north of the aforementioned filled-in structure (in the west-central portion of the Armory building basement) which has an iron pipe (approximately 4-inches in diameter) in the base of the pit under the grated opening. Although not confirmed, the pipe may convey water from the pit toward a sump pump located approximately 5-10 feet to the north. The discharge pipe routed from the sump pump may be connected to the sewer line, although this is not confirmed.

Recommendation: The pit/floor drain structures should be further inspected for the presence of contamination and to better ascertain what they are connected to. According to Mr. Jim Rust, Town of St. Johnsbury, it was his understanding that the 6-inch iron pipe observed in the pit in the northeast corner is connected to pipe that conveys water from roof drains, however this was not confirmed. Attempts should be made to further ascertain the history of the filled-in structure in order to determine if this was indeed a former floor drain. This would entail review of additional building plans (if available), review of Town sewer lines records in the immediate vicinity of the Armory building (if available) and, attempt to identify and contact personnel with knowledge of the filling process regarding more specific information as to when the structure was filled, and what its purpose was. The follow-up review should be augmented with a dye-test to determine connectivity between the various water collection structures and ultimately an outlet point (if possible). Soil or sediment present or discovered (during additional investigation) in the pit/floor drain structures should be sampled and submitted for laboratory analysis for VOCs and TPH.

2. A pile of discarded paint cans and buckets (1 – 5 gallon nominal volume) was observed stacked under the roof of the access ramp located in the southwest corner of the Armory building. Although leaks, spills or other visual indications of release(s) from this pile of containers were not observed, there is possibility of surface water and groundwater impacts

should some or all of the containers contain residual potentially hazardous materials that could create an inadvertent spill or leak from this debris.

Recommendation: The pile of containerized potentially hazardous debris should be inventoried by a qualified environmental contractor, to quantify and better characterize the contents to determine appropriate management alternatives. Once debris is adequately characterized, the containers and their contents should be disposed of in accordance with State and Federal regulations.

3. A pole-mounted transformer was observed in the northwest corner of the Site. A call to CVPS, the electric service provider, indicated this unit was installed in 1973. CVPS did not have any information as to whether the oil in this unit contained PCBs. Although there were no visual indications that the transformer has leaked, the age of the transformer suggests the oil within it may contain PCBs.

Recommendation: CVPS should be contacted about replacing the transformer, or replacing the oil within the transformer with PCB-free oil.

4. Aged electrical components (electrical panel, capacitors, switches) were observed in the boiler room, in the basement of the Armory building. Additional, older-appearing, electrical components were observed in several rooms in the Armory building. PCB-containing fluorescent light ballasts may be present at the Site. Due to the age of the building, there is a potential for PCB-containing construction material to be present in the building as a component of window caulking, sealants, paints, floor adhesive/mastic.

Recommendation: A qualified hazardous waste inspector with expertise specific to PCB-containing electric equipment and construction material should sample this equipment and materials for PCBs. Particular attention must be made as to whether any of the components are leaking, or if any of the aforementioned building material have been disturbed creating a likelihood for release(s) of PCBs to underlying concrete or soil, if outside.

5. There is potential for heavy metals contamination, particularly lead, associated with use of the basement as a firing range. Powder generated from bullets and from shell casings at the firing range presents risk of metals contamination

Recommendation: More research to determine the location of the firing range in the Armory basement in the form of reviewing plans and blueprints if available; and identification and interview(s) with personnel who may have knowledge about the firing range operations. This research should be followed up with a preliminary lead inspection which may include collecting bulk concrete samples, collecting samples of any residual powder or sediment, and then screening using an XRF or similar type instrument. This sample screening effort could be combined with a lead-paint inspection (see RECs beyond ASTM 1527-05, below).

RECs beyond the Scope of ASTM 1527-05 and AAI

1. Given the age of the building, lead based paint may coat surfaces of interior and exterior walls at the Site. Also lead impacted paint chips may also be associated with the Site.

Recommendation: A lead paint inspection should be conducted by a certified lead paint inspector and a report should be generated outlining the findings.

2. Asbestos-containing materials (ACM) were documented with the Armory building by an ACM investigation performed by Crothers Environmental Group in October 2008 (Crothers, 2008). Of the 48 samples analyzed, six reported positive detections for ACM (2% or more Chrysotile Asbestos). The positive samples were all from plaster wall surfacing material located throughout the building interior. The report also identified the presence of 'Presumed' ACM consisting of non-fiberglass pipe and fitting insulation located in the basement and first floor; and, internal boiler gaskets, refractory and packing materials located in the basement boiler room (Crothers, 2008). A copy of the ACM sampling report is included as Appendix 5.

Recommendation: Although a previous ACM inspection has been performed (see Appendix 5), a follow-up inspection should be conducted in anticipation of soliciting formal ACM abatement quotes from licensed contractors. This follow-up inspection will confirm completeness of the previous inspection and identify any potential data gaps.

3. Based on information provided in the Environmental Questionnaire (Appendix 3) the Armory building has a mold problem due to constant moisture generated from leaking fire sprinkler lines. According to Peggy Phelps (SJHHC) a mold abatement project was in process to clean up the mold. A follow up call to the Town of St Johnsbury indicated that the project had been placed on hold due to increasing expenditures and no clear end in sight.

Recommendation: Follow up inspection/testing by a certified contractor should be performed to better delineate extent of mold damage. Following an initial inspection and receipt of results of the testing, a detailed cleanup plan should be presented along with estimated costs for completion.

TABLE OF CONTENTS

| | |
|--|-----------|
| 1.0 INTRODUCTION..... | 1 |
| 2.0 SITE DESCRIPTION..... | 2 |
| 2.1 SETTING AND SURROUNDING DEVELOPMENT | 2 |
| 2.2 HEATING, WATER AND SEWER | 2 |
| 2.3 GEOLOGY AND HYDROGEOLOGY..... | 3 |
| 3.0 SITE HISTORY AND REVIEW OF EXISTING INFORMATION..... | 3 |
| 3.1 HISTORICAL REVIEW | 3 |
| 3.1.1 Land Records | 4 |
| 3.1.2 U.S.G.S. Topographic Maps..... | 5 |
| 3.1.3 Aerial Photographs..... | 5 |
| 3.1.4 Sanborn Fire Insurance Maps | 5 |
| 3.1.5 Manning’s Street Directory..... | 5 |
| 3.1.6 Environmental Questionnaire | 7 |
| 3.2 INTERVIEWS..... | 7 |
| 3.2.1 Current Owner/Occupant | 7 |
| 3.2.2 Past Owner/Occupant..... | 7 |
| 3.2.3 State/Local Officials | 8 |
| 3.2.4 Neighboring or Nearby Property Owner/Occupant | 8 |
| 3.3 PRIOR INVESTIGATIONS..... | 9 |
| 3.3.1 June 2010 Underground Storage Tank Closure | 9 |
| 3.3.2 Asbestos and Mold Investigation/Abatement | 10 |
| 4.0 REGULATORY STATUS | 11 |
| 4.1 ENVIRONMENTAL LIENS..... | 11 |
| 4.2 FEDERAL REGULATORY FILES | 11 |
| 4.2.1 Federal National Priority List (NPL) | 11 |
| 4.2.2 Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List..... | 11 |
| 4.2.3 Federal Resource Conservation and Recovery Act (RCRA) Generators | 12 |
| 4.2.4 RCRA Treatment, Storage and Disposal (TSD) Facilities | 12 |
| 4.2.5 Federal Institutional Control/Engineering Registries | 12 |
| 4.2.6 Federal Emergency Response Notification (ERNS) List..... | 13 |
| 4.2.7 EPA On-scene Coordinator Program..... | 13 |
| 4.3 STATE/TRIBAL REGULATORY FILES..... | 13 |
| 4.3.1 Vermont Sites Management Section Hazardous Sites List..... | 13 |
| 4.3.2 Underground Storage Tank List..... | 15 |
| 4.3.3 Spills List | 15 |
| 4.3.4 Landfills | 15 |
| 4.3.5 Institutional Controls/Engineering Controls Registries | 15 |
| 4.3.6 Voluntary Cleanup Sites | 23 |
| 4.3.7 Brownfield Sites..... | 23 |

| | |
|--|-----------|
| 4.4 LOCAL REGULATORY FILES | 23 |
| 4.4.1 Fire Department | 23 |
| 4.4.2 Health Officer | 23 |
| 4.4.3 Local Electric Utility Company (Polychlorinated biphenyls) | 24 |
| 4.5 NON-AAI/ASTM SCOPE CONSIDERATIONS | 24 |
| 4.5.1 Asbestos and Lead Paint Issues | 24 |
| 4.5.2 Mold..... | 24 |
| 5.0 SITE RECONNAISSANCE..... | 24 |
| 5.1 EXTERIOR OBSERVATIONS | 25 |
| 5.2 INTERIOR OBSERVATIONS..... | 26 |
| 6.0 USER RESPONSIBILITIES | 28 |
| 7.0 CONCLUSIONS AND RECOMMENDATIONS..... | 29 |
| 8.0 DATA GAPS/LIMITATIONS..... | 33 |
| 8.1 DATA GAPS..... | 33 |
| 8.2 LIMITATIONS..... | 34 |
| 9.0 REFERENCES..... | 35 |

LIST OF TABLES

| | |
|---|----|
| Table 3-1 Summarized History of Ownership | 4 |
| Table 4-1 Hazardous Waste Generators near St. Johnsbury Armory | 11 |
| Table 4-2 Hazardous Waste Sites within 0.25 miles of St. Johnsbury Armory | 13 |
| Table 4-3 Hazardous Waste Sites within 0.25 and 1 Mile of St. Johnsbury Armory | 15 |
| Table 4-4 Inactive Hazardous Waste Sites within 0.25 and 1 Mile of St. Johnsbury Armory | 18 |
| Table 4-5 Registered USTs at or near St. Johnsbury Armory | 22 |

LIST OF FIGURES

| | |
|----------|--------------------------------------|
| Figure 1 | Site Location Map |
| Figure 2 | Orthophoto of Site and Host Vicinity |
| Figure 3 | Basement Site Sketch |

LIST OF APPENDICES

| | |
|------------|--|
| Appendix 1 | Resumes of Environmental Professionals |
| Appendix 2 | Sanborn Fire Insurance Maps |
| Appendix 3 | Environmental Questionnaire User’s Questionnaire |
| Appendix 4 | Asbestos Inspection Report by Crothers Environmental Group |
| Appendix 5 | Photographic Plates |
| Appendix 6 | User Questionnaire |

1.0 INTRODUCTION

The Johnson Company was retained by the Vermont Department of Environmental Conservation (VT DEC) to conduct a Phase I Environmental Site Assessment (ESA) of the building and property referred to as the Saint Johnsbury Armory, 1249 Main Street, Saint Johnsbury VT (the Site). The location of the Site is depicted in Figure 1.

The Site is located within a mixed-use, developed area of commercial land. The Site consists of an approximately 0.44-acre parcel which hosts one building that is comprised of a three-story masonry structure. The building is currently vacant. The Johnson Company understands that the Saint Johnsbury History and Heritage Center (SJHHC) is considering redevelopment of the Site for potential use as their main offices, educational use, and museum.

The purpose of the ESA was to identify recognized environmental conditions associated with the Site that indicate the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release associated with the property. This ESA included reviewing existing information made available and/or that was reasonably ascertainable regarding current and past usage of the property, determining the Site's regulatory status, contacting appropriate personnel regarding current and past uses of the Site, investigating the potential for past releases of petroleum products and/or hazardous substances on the Site, and conducting a reconnaissance to visually inspect the accessible portions of the Site.

This ESA was performed by personnel from The Johnson Company who meet the definition of Environmental Professional as defined in 40 CFR Part 312, in general conformance within the scope and limitations of ASTM E 1527-05 and in compliance with 40 CFR Part 312, Standards and Practices for All Appropriate Inquiries.

Credentials of The Johnson Company personnel involved with the preparation of this ESA are included as Appendix 1.

2.0 SITE DESCRIPTION

2.1 SETTING AND SURROUNDING DEVELOPMENT

The 0.44±-acre Site is located on the west side of Main Street, bounded on the north and west by the Saint Andrews Episcopal Church and the Grace Methodist Church, respectively; a dentist's office (Dr. Kozlowski) to the south; and, to the east, Main Street across from which are the Passumpsic Savings Bank, and several small businesses. The host vicinity, downtown Saint Johnsbury, is primarily commercial use. The Site itself is relatively flat but the topography slopes significantly, from Main Street towards the east. The Passumpsic River is located approximately 2,100 feet west of the Site. Figure 1 shows the location of the Site relative to its surroundings.

The Site, owned by Town of Saint Johnsbury, is currently vacant. There is one building on the Site. A Site Orthophoto for the property and the immediate vicinity has been provided as Figure 2. The basement level and exterior layout of the building is shown in Figure 3.

According to information obtained from an architectural study provided to The Johnson Company by Peggy Phelps (E.H. Danson Associates, 2009), the 16,700 square feet (sf) building has approximately 7,300 sf +/- basement space and approximately 2,100 sf +/- on the second floor. All exterior portions of the site are paved with the exception of a small area along the northeast corner of the building which is gravel-covered, and small lawn immediately east of the building between the building and Main Street.

2.2 HEATING, WATER AND SEWER

As of the date of this report, the main building is currently without heat. Historically the building was heated with a fuel-oil fired boiler and steam radiators. Steam for the entire building was generated by a single boiler in the Boiler Room; however, the boiler was disconnected when the underground storage tank providing fuel to the boiler was permanently closed in June 2010. The layout of the boiler room is shown in Figure 3. Electricity, water, and sewer services are provided to the Site by CVPS and the Town of Saint Johnsbury utility departments, respectively.

2.3 GEOLOGY AND HYDROGEOLOGY

The surficial geology at the Site is primarily categorized as glacial outwash sand and/or gravel Urban Land (60%)-Adams (15%)-Nichollsville (10%)Complex (NRCS, 2011). The Adams composition is described as sandy glaciofluvial deposits and Nichollsville is described as silty glaciolacustrine deposits. The bedrock in the area is mapped as Devonian-age Waits River Formation, described as “Gray quartzose and micaceous crystalline limestone weathered to distinctive brown earthy crust; interbedded and intergradational with gray quartz-muscovite phyllite or schist”. Where more metamorphosed, the limestones contain actinolite, hornblende, zoisite, diopside, wollastonite, and garnet, and the phyllite and schist, biotite, garnet, and locally andalusite, kyanite or sillimanite.” (USGS, 2006).

The direction of groundwater flow was not measured as part of this ESA. The Site is located approximately 2,100 feet west of the Passumpsic River, which flows in a southerly direction towards the Connecticut River. Based on the location of the Passumpsic River and the surrounding terrain, groundwater likely flows in an easterly direction across the site (UNH, 2007; Google, 2010), although flow direction may be localized at the Site.

According to the Vermont ANR Environmental Interest Locator, there are no rare, threatened, or endangered species located within 0.4 mile of the Site. The Vermont Significant Wetlands Inventory, accessed through the ANR Interest Locator on March 22, 2012, lists one Class 2 wetland located 2,400 feet west of the Site, with a total acreage of approximately 15-acres (VT DEC1, 2012). The wetland is located along the west shore of the Passumpsic River and at a lower elevation from the Site.

3.0 SITE HISTORY AND REVIEW OF EXISTING INFORMATION

3.1 HISTORICAL REVIEW

The armory building was constructed around 1916 (Caledonian Record, 2012). This is the earliest known use of the Site as the Armory. The property is believed to have been used as residences prior to construction of the Armory (Caledonian Record, 2012). During review of the

land records, no record of property transactions were identified earlier than 1861 which suggests 1861 may be the earliest known development of the property. Sanborn Fire Insurance Maps covering the immediate vicinity depict the Armory on a 1919 edition, and four separate dwellings on earlier editions (see Section 3.1.4).

3.1.1 *Land Records*

A search of the Land Records at the St. Johnsbury Town Clerk’s office was conducted by Jim Bowes (JCO) on April 26, 2012. Table 3-1 is a summary of the ownership history for the Site as determined from the April 26th review.

| Table 3-1 Summarized History of Ownership | | | | |
|--|-------------------------|-------------------------|------------------|------------------|
| Deed Type | Grantee | Grantor | Book/Page | Date |
| Quitclaim Deed | Town of Saint Johnsbury | State of Vermont | 151/1 | January 21, 1975 |
| Warranty Deed | State of Vermont | Town of Saint Johnsbury | 56/253 | July 10, 1916 |
| Warranty Deed ¹ | G.L. Barney | M.E. Associates | 17/199 | May 13, 1861 |
| ¹ This covers only a portion of the parcel described in the July 1916 deed, and represents the oldest record document reviewed in the land record describing ownership. | | | | |

No further information was able to be determined in the land record for property beyond the May 13, 1861 transaction of a portion of the Site. An article in the Caledonian Record (March 28, 2012 edition) by Peggy Pearl, Director of the SJHHC documents that the Town of St. Johnsbury purchased the property from Burnham circa 1916 and deeded it to the State (Caledonian Record, 2012); however there is no information in the land records that documents this transaction. Wording on the 1861 Deed states that “...no building is to be constructed within 66 feet of the street...”. Although it is not clear from information on the 1861 Deed that other buildings already existed on the Site, this may represent first developed use of the Site. A data gap exists with respect to determining earliest developed use since it is not clear how ownership was transferred to the Town before it was sold in 1916. A copy of a map of downtown Saint Johnsbury dated 1855 is mounted on the wall of the land records office. Based on review of the 1855 map, there does not appear to have been any structures on the current parcel location at that time.

3.1.2 U.S.G.S. Topographic Maps

The 1943 (15-minute) and 1949 (15-minute) Saint Johnsbury, Vermont Quadrangle United States Geological Survey (USGS) topographic quadrangle maps were reviewed as part of this ESA (UNH, 2007). The 1943 and 1949 maps are very similar and show what appears to be the building structure that is associated with the Site, and neighboring buildings. The USGS 7.5 x 15 -minute topographic map from 1983 for the Saint Johnsbury quadrangle was also reviewed. This map, provided as Figure 1, shows the Site in its current configuration and adjacent buildings in the general vicinity of the Site.

3.1.3 Aerial Photographs

A State of Vermont low-altitude aerial photograph (VT-62-L 8-256) of the Site from 1962 and digital orthophotos from 1998, 2003, 2006, 2008, 2009, and 2011 (GoogleEarth, 2012) were reviewed as part of this ESA. The 2012 orthophoto has been used as a base map for Figure 2. The Site appears in its current configuration in the all of the reviewed orthophotos.

3.1.4 Sanborn Fire Insurance Maps

The Sanborn Maps specific to the Site were purchased from Environmental Data Resources (EDR) and reviewed. Maps from 1964, 1958, 1943, 1927, 1919, 1912, 1905, 1900, 1895, 1889, and 1884 were evaluated. The Site appears in its current configuration on the maps beginning with the 1919 edition identified as “C.O.D. 1st Infantry V.N.G. Armory. The Sanborn maps are included with this report as Appendix 2. The Sanborn map editions from 1882 to 1912 show the Site was occupied by four separate dwellings, with liquor store, and a “Tailor Shop” being depicted in the east-center dwelling on the 1884 and 1889 editions. The neighboring properties comprised primarily of churches, a livery stable, and merchants.

3.1.5 Manning’s Street Directory

The Manning’s Street Directories for St. Johnsbury, available at the Vermont Law Library, were reviewed for the years between 1931 and 1989. This resource provides a chronological operational history for a particular address. The Site address was 50 Main Street

between the years of 1931 and 2000; after 2000 the address was listed as 1249 Main Street. A summary of the results is provided below (note that for many years multiple entities were listed at the Site.

1931: *State Armory*
 1933: *State Armory*
 VT 172nd Machine Gun Battalion
 1935: *State Armory*
 VT 172nd Machine Gun Battalion
 US Re-employment Service
 1938: *State Armory*
 VT 172nd Machine Gun Battalion
 White Pine Blister Rust Control USDA
 1939: *State Armory*
 VT 172nd Machine Gun Battalion
 White Pine Blister Rust Control USDA
 St J Tax Collector (village and town)
 1941-1948: *State Armory*
 VT State Guard (Company M)
 1950: *State Armory*
 VT National Guard (Company M)
 Selective Service System Local Board
 1954-1966: *State Armory*
 1967-1976: *Vermont Army National Guard Armory*
 1977-1978: *Equifax, Inc*
 St Johnsbury Police Dept.
 St J Dept. Civil Defense
 St J Dept. Parks & Recreation
 1979-1984: *St Johnsbury Police Dept.*
 St J Dept. Civil Defense
 St J Dept. Parks & Recreation
 1988-1989: *American Red Cross Caledonia Lower Essex Chapter*
 REACT Caledonia County 2424 Metro
 St Johnsbury Police Dept.
 St. Johnsbury, Town of

No Manning's directories were available after 1989, but the telephone book entries for the Town of St. Johnsbury municipal offices between 1991 and 2006 were reviewed. According to the telephone books, the St. Johnsbury Police Department was located at the Site between the years of 1991 and 2000. The St. Johnsbury Department of Parks & Recreation is intermittently

listed at the Site between the years 1991 and 2006, so it is reasonable to assume that the department was located at the Site during these years. The St. Johnsbury Domestic Violence Task Force was listed at the Site between 2003 and 2006. It is not known if other, non-municipal, entities were located at the Site between 1991 and 2006 because only the municipal entries were inspected. The telephone books were not reviewed beyond a reasonable search.

3.1.6 Environmental Questionnaire

The Johnson Company's standard environmental questionnaire was completed by Ms. Peggy Pearl, Director of the Saint Johnsbury History and Heritage Center (SJHHC) on April 11, 2012. A copy of the questionnaire has been included as Appendix 3.

3.2 INTERVIEWS

3.2.1 Current Owner/Occupant

The current owner of the building is the Town of Saint Johnsbury. Mr. Jim Rust with the Town of Saint Johnsbury was interviewed by Jim Bowes (JCO) April 26, 2012 regarding the Site. Mr. Rust confirmed that the current status of the Site is vacant and the building is unheated. The building has been without heat since the 6,000 gallon fuel oil UST that fueled the boiler was permanently closed in 2010. Mr. Rust also indicated that since the Town has owned the property occupation has been limited to recreational use of the gymnasium located in the west half of the building, and/or office space (Bowes, 2012a). With the exception of underground storage tank activities associated with the Site (described in detail in Section 3.3.1 of this report) Mr. Rust was unaware of any spills or releases of hazardous materials or petroleum products.

3.2.2 Past Owner/Occupant

The past owner of the property was the State of Vermont in 1916. For the purposes of this Phase I ESA, no attempt to contact the past owner/occupant was made.

3.2.3 State/Local Officials

Ms. Jenny Schwartz with the VTDEC Brownfields Response Program was contacted April 2, 2012 via e-mail by Jim Bowes (JCO) for available information in the State files related to the 2010 UST closure. Ms. Schwartz provided digital files for review regarding the 2010 UST closure at the Site, and a 1993 UST Closure at the Saint Johnsbury Municipal Office (Schwartz, 2012)..

Captain Bradley Reed, Saint Johnsbury Fire Chief was contacted on March 21, 2012 and asked if he recalled the Saint Johnsbury Fire Department responding to any incidents associated with spills or releases of hazardous waste or petroleum products on Site (Bowes, 2012b). Captain Reed provided a fax copy the incident reports for 1249 Main Street. Of the incidents listed, the only one related to spills or releases of hazardous material or petroleum was a report filed June 17, 2002 which was listed as a vehicle leaking gas on the property, however, upon arrival, the respondents reported no vehicle and no odors of gas (Bowes, 2012b). No further information and/or description of follow-up action were provided.

The Town Health Officer, Mr. Tim Angel was contacted on March 23, 2012 regarding hazardous materials incidents at the Site (Bowes, 2012c). Mr. Angel was not aware of any incidents above and beyond the UST Closure (Section 3.3.1) at the Site. He added he was not familiar with the Site. He did recall that at one time during usage as the Armory, (date range not specifically indicated,) portions of the basement of the Site building may have been used as a firing range.

3.2.4 Neighboring or Nearby Property Owner/Occupant

The neighbor to the west-abutting Methodist Church, Pastor Kirk Thompson was interviewed during the Site Reconnaissance. April 26, 2012. Pastor Thompson has been the Pastor for approximately 1 ½ years, and he has no knowledge of any spills releases or emergency responses to the Armory property.

3.3 PRIOR INVESTIGATIONS

3.3.1 *June 2010 Underground Storage Tank Closure*

The St. Johnsbury Armory was listed as a hazardous waste site (SMS #: 20104075) under the name “St J Recreation Dept.” as a result of contamination encountered during removal of two USTs which occurred on June 23, 2010 (VT DEC1, 2012). A UST Closure Report prepared by Horizons Engineering (Littleton, NH) documented the closure and removal process (Horizon Engineering, 2010). The USTs consisted of a 1,000 gallon gasoline UST with an associated dispenser pump, and a 6,000 gallon heating oil UST. Both USTs were observed to be in poor condition at the time of removal. No subsurface impact to underlying soil was observed with the gasoline UST and dispenser; however, elevated PID readings registering between 12 and 50 parts per million (ppm) were noted in the soils adjacent to the piping area, the fill area and the west end of the fuel oil UST (Horizons Engineering, 2010). A total of 22 tons of petroleum contaminated soil (PCS) were removed from the top and west end of the heating oil UST. According to the July 2010 report prepared by Horizons Engineering (Littleton, NH), following removal of the PCS, no registered PID readings were identified in excess of 10 ppm within the area of excavation. The PCS were transported off site for treatment and disposal to Environmental Soil Management Inc. (ESMI) in Loudon, NH and a cleanup confirmation soil sample was collected from the base of the excavation at the west end of the UST by Horizon Engineering and submitted for laboratory analysis for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) using EPA Methods 8100, and 8260, respectively. The confirmatory soil sampling results revealed no detectable concentrations of VOC or TPH above method detection limits in the soil.

The PCS were transported off site for treatment and disposal to Environmental Soil Management Inc. (ESMI) in Loudon NH. According to a letter dated September 7, 2010 from VTDEC Sites Management to the Town of Saint Johnsbury, a sensitive receptor survey was performed during the UST closure and no sensitive receptors were identified other than the PCS that were removed (Schwer, 2010). A Sites Management Activity Complete (SMAC) designation was granted and the Site was removed from the SMS active hazardous waste site list.

According to the ANR interest locator and the VT DEC Waste Management Interactive Database (WM-ID), no other USTs are located at the Site (VT DEC1, 2012; VTDEC 3, 2012).

3.3.2 *Asbestos and Mold Investigation/Abatement*

Peggy Pearl, Director of the Saint Johnsbury History and Heritage Center (SJHHC), provided The Johnson Company with a copy of an asbestos sampling report dated November 1, 2008 by Crothers Environmental Group LLC (Crothers, 2008). The report provided a list of samples collected which were submitted for analysis for presence of asbestos containing materials (ACM). Of the 48 samples tested, six were returned positive for ACM (2% or more Chrysotile Asbestos). The positive samples were all from plaster wall surfacing material located throughout the building interior. The report also identified the presence of ‘Presumed’ ACM consisting of non-fiberglass pipe and fitting insulation located in the basement and first floor; and, internal boiler gaskets, refractory and packing materials located in the basement boiler room (Crothers, 2008).

These findings mandate that prior to renovations, any ACM that would be disturbed by renovations, must be properly removed under a Certified Asbestos Abatement Entity. A copy of the November 2008 asbestos inspection report is included with this report as Appendix 4.

According to information filled out in the Environmental Questionnaire by Peggy Pearl (SJHHC) there is a mold abatement project underway in the Armory Building. This work was being done for the Town of St. Johnsbury. A call was placed April 30, 2012 to Mr. Jim Rust of the Town regarding the status of the mold abatement. Mr. Rust informed Jim Bowes that the project was currently “on hold” due to increasing expenditures incurred on the project with no clear end in sight (Bowes, 2012e). At present, no further information is available other than the fact that the mold abatement is unfinished.

4.0 REGULATORY STATUS

4.1 ENVIRONMENTAL LIENS

A search of the files at the Saint Johnsbury Town Clerk's office on April 26, 2012 revealed no environmental liens on the property.

4.2 FEDERAL REGULATORY FILES

4.2.1 Federal National Priority List (NPL)

According to the Environmental Protection Agency's (EPA) website, which provided information extracted on March 8, 2012, the Site is not listed on the National Priority List (NPL; also known as Superfund) as an active site, nor is any property within a 1-mile search radius from the nearest property boundary of the Site (EPA1, 2012).

4.2.1.1 *Delisted NPL sites*

Neither the Site nor any other properties within the 0.5-mile search radius from the nearest property boundary are delisted or partially delisted NPL sites (EPA2, 2012).

4.2.2 Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List

The Site does not appear on the CERCLIS list. The Fairbanks Morse Foundry site (EPA Registry ID: 110009259765, SMS ID: 870029) is located approximately 2,390 feet to the south west of the Site (EPA1, 2012; VT DEC1, 2012). See Section 4.3.1 for additional details.

4.2.2.1 *No Further Remedial Action Planned (NFRAP) Site List*

Neither the Site nor any properties within a 0.5-mile search radius from the nearest property boundary are listed as CERCLIS designated sites with a no further remedial action planned (NFRAP) status (EPA3, 2012).

4.2.3 Federal Resource Conservation and Recovery Act (RCRA) Generators

According to the Agency of Natural Resources (ANR) Environmental Interest Locator No hazardous waste generators are shown on the Site or adjoining properties (VT DEC1, 2012) but the Waste Management Division generator list, the WM-ID, and the EPA Envirofacts Warehouse list one generator on adjoining properties (VT DEC2, 2010; VT DEC3, 2012; EPA5, 2010). The Site is not listed as a RCRA generator by either the Waste Management Division or the EPA. Table 4-1 below summarizes the RCRA generators near the Site (EPA5, 2012; VT DEC1, 2010; VT DEC2, 2010; VT DEC3, 2010).

| Table 4-1 Hazardous Waste Generators near Saint Johnsbury Armory | | | |
|---|----------------------------|----------------|------------------------------------|
| Handler ID | Name | Address | Environmental Interest Type |
| Adjoining Properties | | | |
| VTR000504852 | DR RICHARD S KOZLOWSKI DDS | 1229 MAIN ST | CE SQG (ACTIVE) |
| Notes: CE - Conditionally Exempt SQG - Small Quantity Generator | | | |

4.2.3.1 RCRA Corrective Action Sites (CORRACTS) List

The Site is not on the list of RCRA Corrective Action sites for EPA Region 1, nor is any property within a 1-mile search radius from the nearest property boundary of the Site (EPA6, 2012).

4.2.4 RCRA Treatment, Storage and Disposal (TSD) Facilities

There are no non-CORRACTS transportation and disposal (TSD) facilities listed within a 0.5-mile search radius from the nearest property boundary of the Site (EPA5, 2010).

4.2.5 Federal Institutional Control/Engineering Registries

As of the date of this report, the EPA was developing the Institutional Controls Tracking System, and the system had not yet been implemented (EPA7, 2010).

4.2.6 Federal Emergency Response Notification (ERNS) List

As of March 25, 2012, there were no spills or releases of hazardous materials or petroleum products at the Site listed on the ERNS list (NRC, 2012).

4.2.7 EPA On-scene Coordinator Program

The EPA On-scene Coordinator (EPA OSC) program performs rapid responses to remove direct contact risks by trespassers or the general public. As of March 23, 2012, no sites within a one mile radius from the nearest property boundary are listed on the EPA OSC website (EPAOSC, 2012).

4.3 STATE/TRIBAL REGULATORY FILES

There are no recognized tribal or American Indian-owned lands within Vermont; therefore, no tribal files were searched during this ESA.

4.3.1 Vermont Sites Management Section Hazardous Sites List

The Site is currently listed as an “Inactive Site” with VTDEC Sites Management Section (SMS); SMS Site file, 2010-4075 (see the bold row in Table 4-2). Section 3.3.1 provided additional details regarding the Site conditions and activities associated with SMS# 2010-4075. A review of the SMS’ Waste Management Interactive Database (WM-ID) indicates there are 60 Vermont listed hazardous waste sites located within 1 mile from the nearest property boundary of the Site, 36 of which are inactive with Sites Management Activity Closed (SMAC) or No Further Action Planned (NFAP) designation. The SMAC or NFAP status indicates that environmental assessment and/or management has been performed on a property to the extent that the VTDEC does not see a need for additional management activity at the time the designation letter was issued. A total of 17 (5 inactive and 12 active) of the 60 sites listed are located within 0.25 miles of the Site (VT DEC1, 2012). Table 4-2 below summarizes the hazardous wastes sites located within 0.25 miles of the Site.

| Table 4-2 Hazardous Waste Sites within 0.25 miles of the St Johnsbury Armory | | | |
|---|-------------|-------------------------------|---------------------|
| St Johnsbury Armory | | | |
| Site Number | Priority | Site Name | Address |
| Active Sites | | | |
| 900570 | LOW | Brightlock Apartments | 14 Summer St |
| 962030 | LOW | Gossco Inc (Goss Tire) | 37 Summer St |
| 900513 | MED | Doanne & Ruggles | Rt 2 |
| 911157 | MED | St Johnsbury Water & Sewer | Western Ave |
| 20063498 | MED | Canterbury Inn | 46 Cherry St |
| Inactive Sites | | | |
| 870091 | NFAP | St Johnsbury Trucking | n/a |
| 20104075 | SMAC | St J Recreation Dept. | 1249 Main St |
| 900584 | SMAC | Caledonia Records | 25 Federal St. |
| 931390 | SMAC | Palmer's Dry Cleaners | 72 - 78 Eastern Ave |
| 931398 | SMAC | St Johnsbury Municipal Bldg. | Main St |
| 931434 | SMAC | Fairbanks Museum | 81 Main St |
| 951769 | SMAC | Main St Citgo | Main St |
| 20002803 | SMAC | former St Johnsbury House | 44 Main St |
| 20012925 | SMAC | former Sears Building | Pearl St |
| 20023016 | SMAC | Frank Adams School | 481 Summer St |
| 20063478 | SMAC | Grace United Methodist Church | 36 Central St |
| 20002834 | SMAC | Laperle Property | 105 Summer St |

The nearest adjacent listed site is an Inactive Site, the Grace Methodist Church, which is the west-abutting property (SMS #20063478). The Site was listed due to a release in 2006 of heating oil from a UST. Impact to the subsurface soils was severe enough to warrant an active soil vapor extraction system to recover vapor phase petroleum. Although the Site was host to an active remediation system, groundwater testing revealed little to no impact to groundwater, which was determined to flow in a southeasterly direction away from the Church property (Ross Environmental, 2006). Subsequent monitoring was performed on the Grace Methodist Church site, and the site was designated with SMAC status in 2008.

Hazardous Sites between 0.25 and 1 mile of the Site

Table 4-3, provided on the following pages, summarizes the active hazardous waste sites located between 0.25 and 1 mile of the Site. Similarly, Table 4-4, provided after Table 4-3, summarizes the inactive hazardous waste sites located within the same distance range. With the

exception of the “Contaminant” column all data were extracted without edits from the WM-ID (VT DEC3, 2012). Where available, the “Contaminant” entries are from the WM-ID; where not available, the “Contaminant” entries have been inferred from other fields such as “Source of Contamination” (UST-Gasoline, UST-Heating Oil, etc.) and “Project Status”.

4.3.2 Underground Storage Tank List

As described in Sections 3.3.1 on June 23, 2010 two USTs (one 1,000-gallon gasoline UST and one 6,000-gallon heating oil UST) were removed from the Site. See Section 3.3.1 for additional details regarding the UST closures. Other than these two tanks, there are no other known USTs present at the Site (VT DEC1, 2012; VT DEC3, 2012). There are no records of any other UST removal efforts at the Site. Table 4-5 below summarizes the registered USTs at the Site and on adjacent properties. The formerly registered USTs that were on Site are shown in bold and shaded text on Table 4-5, below.

4.3.3 Spills List

According to the WM-ID no spills have been reported at the Site (VT DEC3, 2010). The WM-ID does list a spill (spill number WMD033) of fuel oil on January 23, 2006 at the Grace United Methodist Church (located at 36 Central Street); Grace United is on an adjoining parcel. Additional details regarding this incident and the resulting investigation are provided in Section 4.3.1.

4.3.4 Landfills

There are no certified landfills within a 0.5-mile search radius from the nearest property boundary of the Site (EPA8, 1995; VT DEC3, 2012; VT DEC4, 2006).

4.3.5 Institutional Controls/Engineering Controls Registries

An investigation of the records available at the Saint Johnsbury Town Clerk’s office revealed that no institutional and/or engineering controls had been filed in the Land Records for the Site as of April 26, 2012.

Table 4-3 Active Hazardous Waste Sites 0.25 to 1 miles of

| St Johnsbury Armory | | | | | |
|----------------------------|-----------------|---|---------------------|---|---|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 890433 | LOW | Railroad St Texaco | 490 Railroad Street | Gasoline | Additional groundwater monitoring needed. Request sent 06/2010. |
| 931549 | LOW | Windshield World | Railroad St | Gasoline | 09/10: Annual monitoring continuing. Considering whether enhanced bioremediation would be beneficial in the vicinity of MW-4. |
| 982421 | LOW | High Street Transfer Station | High St | VOCs | Groundwater contaminants in two wells are over standards for volatile organic compounds (EPA Method 8260). Also, the most downgradient well, MW-2S, contains lead in excess of standards. The site will be monitored on a semi-annual basis for two years to determine if it is then eligible for a SMAC. |
| 972205 | LOW | Former Portland Street Mini Mart | 81 Portland St | Gasoline | Annual groundwater monitoring ongoing. Persistent groundwater contamination in one area of the site. Potential for vapor migration to impact adjacent building will be evaluated in next annual report. |
| 921244 | LOW | Lawrence Sangravco | Bay St | VOCs/Lead | No Further Action Until Investigation Complete @ Northern Petro,91-1169 |
| 870029 | MED | Fairbanks Morse Foundry/Colt Industries | High St | Heating Oil | GW pump & treat product recovery ongoing, EPA SIP done 2/95, Combined with site #770079. 10,258 gal total since 10/86 |
| 911169 | MED | Northern Petroleum - St J | 492 Bay St | Gasoline | Remediation Ongoing- passive product recovery |
| 20053397 | MED | Northern Petroleum Bulk Facility | 521 Bay St | Diesel, Gasoline, Heating Oil, Kerosene | Petroleum contamination likely due to historical use as a bulk facility. Free product present in several wells. ECS will continue groundwater monitoring. SMS instructed ECS to submit a corrective action feasibility investigation for potential treatment of the most contaminated areas. Contamination does not appear to be migrating downgradient of the property boundary. |

Table 4-3 Active Hazardous Waste Sites 0.25 to 1 miles of

| St. Johnsbury Armory | | | | | |
|-----------------------------|-----------------|-----------------------------|-------------------|----------------------------------|--|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 931524 | MED | Depot Square Apts | Railroad St | Gasoline | Contaminated soils are stockpiled on the property of Scott Construction, Inc. in Newport, Vt. Soils were supposed to be monitored on a quarterly basis, but no testing has been done, and there has been no activity in this file since August 8th, 1996. This was a letter requesting a response to a previous letter dated June 22, 1994. (7/28/99) |
| 951844 | MED | Former Ralston Purina Plant | 40 Bay St | Gasoline | Contamination found during removal of gasoline UST. Monitoring well installed in the tank pit showed elevated levels of VOCs in 2005. Additional compliance monitoring necessary to determine current contaminant levels. |
| 20012904 | MED | Northern Auto | 125 Railroad St | Heating Oil | Underground storage tank removed. Contamination found. Investigation needed. Formerly Bond Auto Parts |
| 20073728 | MED | Former House of Pizza | 250 Hastings Hill | Chlorinated Solvents/Heating Oil | Underground storage tank removed. Contamination found during tank assessment, which was conducted long after the UST removal. No significant petroleum-related substances detected on the property, though chlorinated substances were detected. It appears that the source of this contamination is an historic auto repair shop. A soil vapor survey was conducted using Gore sorber technology. This survey showed that the contamination is concentrated in the parking lot in front of the motel and adjacent to the pool. Groundwater monitoring will continue on a regular basis to ensure that contamination continues to degrade and dissipate. |
| 982484 | MED | Lewis Oil Company | Bay Street | Diesel, Gasoline, Heating Oil | March 00: Approved work plan for additional monitoring wells. Drilling is scheduled for April 00. Sampling will follow two weeks later. Surfactant flush pilot test scheduled for December 2006. Significant amount of FP localized on site. 2011 - Have an approved CAP (high vacuum extraction) at site, however having difficult time coordinating with RP and property owner (VTrans). |

Table 4-3 Active Hazardous Waste Sites 0.25 to 1 miles of

| St Johnsbury Armory | | | | | |
|----------------------------|-----------------|---------------------------|-----------------------------|---|---|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 921261 | MED | C N Brown | 51 Portland St | Gasoline | Soil Stockpiled Off-site. Quarterly Monitoring. 5/2002 3' FP off site. 4 of 5 MWs above VGES spring 2004, 2005 Chemical oxidation injections, 11/09 3 of MWs above VGES, semi-annual sampling additional chemox to be performed |
| 770080 | MED | St Johnsbury Dump | High Street | Industrial & Household Waste | EPA contractor report completed. Site assigned low priority. |
| 982356 | MED | St Johnsbury Rail Yard | Rt 5 and Bay St | Diesel | Nov 01: Based on soil samples collected throughout the central yard, no remediation is required to address PAHs in soil under current use. Additional samples were requested to define the degree and extent of arsenic in surface soils and to determine if chromium VI is present in the soils. |
| 972178 | MED | St Johnsbury Town Storage | Almshouse Rd | Diesel, Gasoline, Other Metals, Other Petroleum | 07/02: Awaiting work plan in response to SMS letter and site meeting in June for further characterization, including installing at least one monitoring well.; 10/05: sent letter requesting work plan for supplemental site investigation. April 2006 - performing additional site characterization. Sent email to PRP and KAS on 1/23/07 requesting site status update. |
| 941579 | MED | St Johnsbury Trucking | 385 Portland St | Gasoline | Last contact with owner was a 5/5/94 letter requesting further sampling and a workplan for soil treatment/disposal. As of this update there has been no further activity in file. (7/29/99). Sent another letter to RP in January 2006. Fourth request sent May 2010. |
| 982451 | MED | Cumberland Farms #4012 | Portland St and U S Route 2 | Gasoline | Annual GW monitoring |

Table 4-4 Inactive Hazardous Waste Sites 0.25 to 1 miles of the St. Johnsbury Armory

| St Johnsbury Armory | | | | | |
|---------------------|----------|--------------------------|-----------------|-------------|---|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 900536 | NFAP | St. Johnsbury, WWTF | Bay St | Gasoline | Ust Contamination Found. Soils Stockpiled. |
| 880179 | NFAP | Northern Petroleum | n/a | Gasoline | Site Closed |
| 20023017 | SMAC | former Lyndon Motors | 7 Passumpsic St | Gasoline | 3 abandoned USTs removed. Contam found. Investigation completed. No impact to GW. SMAC |
| 20083789 | SMAC | CVPS - Rte 5 | Rte 5 | Heating Oil | Heating oil overfill at CVPS facility. Irving Oil is RP and is paying for cleanup. 46 tons PCS excavated. 128.6 gals oil unaccounted for. post excavation ISI complete, confirmatory GW sampling completed. 5/2010 no more impact to GW |
| 972187 | SMAC | Carlet Gilson And Hurley | 50 Bay Street | Heating Oil | Groundwater below standards; soil sample taken from basement below RBC Table levels; soil sample taken from suspected discharge location of sump free of contaminants. |
| 20063582 | SMAC | Black Bear Tavern | 205 Hastings St | Heating Oil | Underground storage tank removed. Contamination found. 27 cubic yards of contaminated soil removed from tank grave. Confirmatory soil samples indicated that the full extent of contamination had been defined. Soils were properly disposed of at ESMI in Loudon, NH. All properties in the vicinity of the former tank are served by municipal utilities. Indoor air of the onsite building was screened and showed no evidence of contamination. |
| 20023066 | SMAC | A D Sanel Parts | 684 Portland St | Heating Oil | UST removed. Contam found. Investigation complete. 1 MW below VGES, 3 MWs ND VOCs. 1 MW, above VGES, site paved, SMAC. |
| 20104049 | SMAC | 2-8 Bay Street | 2-8 Bay Street | Waste Oil | Older industrial area of St. Johnsbury. Only building foundations remain. Phase 1 ESA found 3700 ppm TPH soil in floor drain at maintenance garage. Investigation complete. No contamination found above standards. |
| 921202 | SMAC | CVPS-St Johnsbury | Bay St | Gasoline | Site Closed |
| 20002791 | SMAC | Gold Crown Lanes | 212 Hastings St | Heating Oil | UST filled in place. Contamination found. Investigation completed. No impact to groundwater. SMAC |

Table 4-4 Inactive Hazardous Waste Sites 0.25 to 1 miles of the St. Johnsbury Armory

| St Johnsbury Armory | | | | | |
|---------------------|----------|------------------------------|-------------------------|----------------------|--|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 20093901 | SMAC | Irving Oil Mainway | 142 Railroad St | Gasoline | Minor contamination discovered during the removal of several gasoline USTs and one diesel UST. Site is being taken out of service as a bulk storage facility. Most PID readings were below action level of 20 ppm. No significant VOCs or TPH detected in laboratory samples. No groundwater or bedrock encountered during subsurface activities. Water is supplied by the municipal system. |
| 941711 | SMAC | 13 Portland St | 13 Portland St | Chlorinated Solvents | Groundwater free of contaminants. |
| 921237 | SMAC | Mike's Automotive | 20 Passumic Street | Gasoline | Invest Complete, Awaiting Results |
| 20012883 | SMAC | Yankee Traveler Motel | 342 Portland St | Heating Oil | UST removed. Contamination found. 4 MWs installed, 2/8/02 1 ND, 3 dry. 4/24/02 4 MWs ND, SMAC |
| 911016 | SMAC | St. Johnsbury Schools | St. Johnsbury Center St | Heating Oil | Landfarm Completed |
| 972277 | SMAC | Party Tyme | 157 Railroad St | Gasoline | Ust Removed. Contamination Found. Soils stockpiled. 6/28/00 soils screened clean. SMAC |
| 20012857 | SMAC | Portland Street School | 510 Portland St | Heating Oil | UST removed. Contamination found. Investigation completed. 4/13/01 1 MW above, 3 MWs below VGES, 10/19/01 4 MWs below VGES, SMAC |
| 770188 | SMAC | Pratt-read (old True Temper) | Portland St | Non-petroleum | No Contamination To Groundwater |
| 20012929 | SMAC | Rent Way | 429 Railroad St | Heating Oil | UST removed. Contamination found. Investigation completed. 4 soil borings ND for VOCs, no GW found. SMAC |
| 992584 | SMAC | River Street Homes | River Street | Gasoline | Recurring vapors in homes from sewer since 2/98. SMS has used the Site Investigation Contract to monitor vapors over several months; however, no vapors were detected during the monitoring events. From 1999 to 2009, no complaints were received by either the St. Johnsbury Fire Department or the Waste Management Division. Exact source was never found. |

Table 4-4 Inactive Hazardous Waste Sites 0.25 to 1 miles of the St. Johnsbury Armory

| St Johnsbury Armory | | | | | |
|----------------------------|-----------------|----------------------------|------------------|---|---|
| Site Number | Priority | Site Name | Address | Contaminant | Project Status (Verbatim from the WM-ID) |
| 921223 | SMAC | Rodd Roofing | 2 Perkins Street | Gasoline | Soil Contamination Found During Ust Removal. No GW contamination identified. Soils treated and thinspread on site. |
| 962032 | SMAC | St Johnsbury Middle School | 24 Western Ave | Gasoline | Contamination Limited To Ust Area. Site Closed. |
| 931459 | SMAC | Wayne Ford-Chrysler | Route 5 N | Gasoline, Non-Petroleum, Other Petroleum, Waste Oil | UST removed. Soils excavated. 3 MWs installed. No VGES exceedances. Paint thinner found in oil drum storage area. 10/11/00 3 new MWs required. Soil contamination found. 1 MW below VGES, 2 ND. 11/03 contamination soil excavated during UST replacement. SMAC |
| 20073751 | SMAC | Menut & Parks | 50 St Marys St | Gasoline, Heating Oil | 3 underground storage tanks removed. Contamination found. 4 monitoring wells installed on the property. November 08 water quality exhibited exceedances of VOC concentrations in MW-4. Bi-annual water quality monitoring in place. June 09 sampling shows decreasing levels of contamination. The source area well, MW-4 still exhibits groundwater enforcement exceedance for Naphthalene at 30.8 ppb. Instructed to dismantle monitoring wells in preparation for site closure. Site closed on 9/7/2010. |

Table 4-5 Registered USTs at or near St Johnsbury Armory

| St Johnsbury Armory | | | | | | | | | | | | |
|---|--------------------------------|------------------|----------|-------------|-------------|--------|--------|----------|----------------|--------------|-----------|-----------|
| Facility ID | Facility Name | Facility Address | VT SMS # | Permit Exp. | Permit Exp. | Tank # | Status | Capacity | Year Installed | Year Removed | Substance | Condition |
| 815 | St. Johnsbury Community Center | 1249 Main Street | 20104075 | NA | NA | 1 | Pulled | 6000 | 1971 | 2010 | 24 | Poor |
| | | | | | | 1 | Pulled | 1000 | Unknown | 2010 | GS | Poor |
| 1659 | Colonial Apartments | 17 Church Street | NA | NA | NA | 1 | Active | 4000 | 1978 | NA | 24 | NA |
| | | | | | | 2 | Active | 10000 | 1986 | NA | 24 | NA |
| 2204 | St Johnsbury House | Central Street | 20002803 | NA | NA | 1 | Pulled | 3000 | Unknown | 2000 | 24 | Fair |
| | | | | | | 2 | Pulled | 1000 | Unknown | 2000 | UN | Poor |
| | | | | | | 3 | Pulled | 2000 | Unknown | 2000 | UN | Good |
| 2233 | Fairbanks Museum | 81 Main Street | 931434 | NA | NA | 1 | Active | 3000 | 1993 | NA | 24 | NA |
| | | | | | | 2 | Pulled | 3000 | Unknown | 1993 | 24 | Fair |
| Notes: 24 - #2 or #4 heating oil DZ – Diesel Fuel GS – Gasoline UO – Used Oil UN – NA – Not Applicable or Not Available | | | | | | | | | | | | |

4.3.6 Voluntary Cleanup Sites

Vermont does not specifically have a voluntary cleanup program, but the Brownfield Reuse Environmental Liability Limitation Act (BRELLA, effective July 1, 2008), acts as one for non-responsible parties. Prior to BRELLA the Vermont Redevelopment of Contaminated Properties Program (RCPP) acted as a voluntary cleanup program for Brownfield sites. The Site is currently not considered a Brownfield Site.

4.3.7 Brownfield Sites

As of the date of this report, the Site is not listed as a Brownfield property on the VTDEC database. According to the ANR Interest Locator, no other Brownfield sites are located within 0.5 miles from the nearest property boundary of the site (VT DEC1, 2012; VT DEC2, 2010; VT DEC3, 2012).

4.4 LOCAL REGULATORY FILES

4.4.1 Fire Department

According to Captain Bradley Reed (Saint Johnsbury Fire Chief) the Saint Johnsbury Fire Department has only one incident listed on their “Incident Activity Log” associated with the Armory that involved hazardous materials: a vehicle reported to be leaking gas on June 17, 2002. According to Captain Reed, the on-duty staff responding to the incident reported that upon their arrival, there was neither a vehicle on site, or gasoline odors (Bowes, 2012a).

4.4.2 Health Officer

The Town Health Officer, Mr. Tim Angel was contacted on March 23, 2012 regarding hazardous materials incidents at the Site (Bowes, 2012b). Mr. Angel was not aware of any incidents above and beyond a UST Closure (Section 3.3) at the Site. He added he has very little familiarity with the Site due to it being vacant for some time. He did recall that at one time (not specifically indicated) the basement of the Site building may have been used as a firing range.

4.4.3 *Local Electric Utility Company (Polychlorinated biphenyls)*

One transformer was identified on a power pole (Pole #1-2) located in the northwest corner of the Site. A call was placed by Jim Bowes (JCO) April 27, 2012 to Central VT Public Service Company who is the service provider. Mike Sullivan of CVPS reviewed the database and informed JCO that the transformer is dated 1973, but CVPS did not have any records available that stated whether the transformer oil in this unit contained PCBs (Bowes, 2012d). This suggests that oil inside the transformer may contain PCBs (PCBs were generally eliminated from transformers circa 1975). The overall appearance of the transformer was intact, and it did not appear to be leaking, however, due to its age, there is a chance that the unit may be filled with oil that contains PCBs.

4.5 NON-AAI/ASTM SCOPE CONSIDERATIONS

4.5.1 *Asbestos and Lead Paint Issues*

An asbestos and lead paint assessment was not performed as part of this ESA. Section 3.3.2 of this report describes the findings of an ACM inspection effort that was performed in October 2008 by Crothers Environmental Group (Crothers, 2008). Painted surfaces were observed throughout the interior of the Armory building. Given the age of the building, it is likely some of the paint may contain lead.

4.5.2 *Mold*

Through course of conducting this ESA, The Johnson Company has learned that a mold abatement project was underway in the Armory Building. Section 3.3.2 provided additional details regarding the current status of the mold abatement.

5.0 SITE RECONNAISSANCE

A Site reconnaissance was conducted on April 26, 2011 by Jim Bowes of The Johnson Company, Inc. Mr. Bowes was accompanied by Ms. Peggy Pearl, Director SJHHC, and Mr. Bob DeRochers, Fairbanks Mill, who is on the Board of Directors, SJHHC. The weather conditions

on the day of the Site visit were partly cloudy with a temperature of approximately 50 degrees Fahrenheit. Site conditions on the day of the Site visit are documented in the photo plates included as Appendix 5 of this report.

The Site reconnaissance included an inspection of the interior and exterior portions of the Site, where accessible. The Site walkover was a non-intrusive investigation that focused on identifying signs of an existing or potential risk to human health or the environment.

5.1 EXTERIOR OBSERVATIONS

The Site consists of the Armory building and a parking lot. The Armory building is a three-story (basement, first and second floors) building with a flat membrane roof in the east portion and slate-roof over the western portion. The entire building is brick masonry construction. A small lawn exists at the front of the building, between the sidewalk along Main Street and the Armory building (see Plate 1 in Appendix 5). A narrow grassy area abuts the south and west walls of the building. All other portions of the Site are either paved, graveled (parking lot outside the northeast corner of the Armory building), or within the footprint of the building itself. Numerous scratch marks were observed on the paved portion of the parking lot immediately north of the building (Plate 3, Appendix 5). Mr. DeRochers indicated these marks are likely attributed to the Town's maintenance of ice accumulations along the north wall of the building; i.e.; the thick ice accumulations shed off the steep roof needed to be scooped away from the building with an excavator bucket to avert water seeping into the building. Other than the numerous scratch marks, the pavement appears to be in good condition and no evidence of storage, spills or releases of hazardous materials or petroleum products was observed.

An automobile access ramp is located in the southwest portion of the Armory building. Numerous paint cans and buckets were observed piled in a heap within the access ramp (see Plate 5 in Appendix 5). No indication of spillage or releases from any of the containers was

observed, however, some housekeeping is required in the form of removal and proper disposal of the containers.

The former location of the removed USTs (now covered with gravel) was visually observed, and no indication of spills, releases, or olfactory evidence of petroleum products were indicated (Plate 2, Appendix 5). The former USTs are a historical REC (see Section 3.3.1).

The Grace Methodist Church is an Inactive Site listed with the SMS (SMS#20063478) and is directly west of the Armory. The portion of the Methodist Church property that was subject to prior environmental actions was visually inspected from the Site and no evidence of residual stained soils and/or stressed vegetation was observed. The adjacent property to the north is the Saint Andrews Episcopal Church and to the south, a dentist's office (Dr. Kozlowski). The site is bound to the east by Main Street, across from which are the Passumpsic Savings Bank, and assorted small businesses.

A telephone pole with a transformer was observed in the far northwest corner of the Site. The transformer was observed to be in good condition, with no visual indication of leaks. Further information on the age and condition of the transformer was made available through correspondence with CVPS personnel (see Section 4.4.3).

5.2 INTERIOR OBSERVATIONS

All three floors of the building interior as well as the roof top in the east half of the building were visually inspected for indications of storage or releases of hazardous materials or petroleum products. The building consists of a wood-floor gymnasium in the west half of the building, two floor levels with numerous rooms in the east half, and a full basement. Several stained areas of what appeared to be water were observed on the first and second floors. According to Peggy Pearl, there had been a problem with burst pipes in the previous winter due to no heat in the building. No evidence of spills or releases of hazardous materials or petroleum

were observed. Given the current vacant state of the building, the general upkeep of the interior portions of the building was in good repair, particularly in the basement, where floors were dry, and the concrete was in good condition (Plate 8, Appendix 5). Evidence of the mold abatement work is indicated in the stripped down walls in the north-central portion of the basement (details in Section 3.3.3; Plate 8 Appendix 5). The photos in Appendix 5 document conditions observed. The following items were observed that may provide likelihood of potentially hazardous materials:

- A steel plate approximately 3 feet by 3 feet in dimension was observed in the northwest corner of the basement. The steel plate was removed, underneath which a concrete lined vault, approximately 2 feet deep was observed (see Figure 3 of this report and Plate 13, Appendix 5). A 6-inch diameter cast iron pipe was observed on the bottom of the vault which was covered with fiberglass-like insulation. The pipe crosses the pit in an east- west direction and exits to the east, presumably to the outside, given the location of the pit along the exterior wall. There is an approximate 4-inch high vertical ‘tee’ in the middle of the pipe which is open-ended and with standing water observed in the pipe. No petroleum/solvent sheens or odors were associated with the water.
- A filled-in structure (approximately 7 feet long by 1 foot wide) was observed in the floor of the basement, next to the vehicle access ramp (Figure 3; photo in Appendix 5). The shape of the filled-in structure suggests it may have been a floor drain.
- A grated opening approximately 1 foot by 2 feet in dimension is located approximately 8-10 feet north of the filled-in structure (Plate 10, Appendix 5). The grated opening is not filled in, and an approximate 4-inch diameter iron pipe was observed penetrating the south side of the pit. An abundance of dirt and debris was observed in the bottom of the opening, but no visual or olfactoral indications of spills or releases of hazardous materials or petroleum was indicated. The pipe appears to be oriented toward a sump pump located approximately 5-10 feet further north (Figure 3, and Plate 11, Appendix 1). The sump is approximately 1-1.5 feet deep with an electric submersible pump fitted inside. The discharge pipe routed from the sump pump is plumbed into other piping which may be connected to the sewer line, but was not confirmed.
- An out of service boiler is located in the basement in the northeast corner of the basement. (Plate 12, Appendix 1). The boiler is suspected to host asbestos containing materials (ACM).

- Pipe insulation was observed on piping associated with the boiler. The insulation is suspected ACM.
- An electric panel was identified in the Armory building, in the boiler room. Other older-appearing electrical components were observed in several rooms in the Armory building. The equipment associated with this panel appeared dated and therefore may have been manufactured during an era that used PCBs in this type of equipment. Similarly, PCB containing fluorescent light ballasts may be present at the Site.
- Caulking was observed on the windows of the Armory building. The windows viewed during the Site walkover appeared to be undisturbed condition, but it is not clear whether these are original fixtures or if they have replaced the originals. In the event the windows are of older construction, there is a likelihood that they may contain PCBs.
- Painted surfaces were observed throughout the building. Given the age of the building, any paints should be suspected of containing lead.

Although not directly observed during the Site walkover, the Saint Johnsbury Health Officer indicated that a firing range may have at some point been set-up in the basement of the Armory building, and there is also a reference to a “..shooting range in the basement..” in an article in the Caledonian Record (2012). Particular care was made during the April 26th Site walkover to identify area(s) in the basement that may have been associated with a firing range, however no readily identifiable features were observed. The occurrence of a firing range presents a likelihood of heavy metals contamination, particularly lead, from bullets and/or shell casings.

6.0 USER RESPONSIBILITIES

In order to qualify for one of the Landowner Liability Protections (LLP) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the user must provide the following information (if available) to the environmental professional:

1. Environmental cleanup liens that are filed or recorded against the Site;

2. Activity and land use limitations that are in place on the Site or that have been filed or recorded in a registry;
3. Specialized knowledge or experience of the person seeking to qualify for the LLPs;
4. Relationship of the purchase price to the fair market value of the property if it were not contaminated;
5. Commonly known or reasonably ascertainable information about the property;
6. The degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation.

All of the information listed above was addressed by Ms. Peggy Pearl, Director SJHHC and provided to The Johnson Company. A copy of a completed User Questionnaire pertaining to the Site has been included with this report as Appendix 6. Because this property has the potential to be involved in the Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) the VTDEC should also be considered a User of this ESA.

7.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of the Saint Johnsbury Armory, 1249 Main Street, Saint Johnsbury, Vermont, the property. Any exception to, or deletions from, this practice are described in Section 8.1 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

HISTORICAL REC:

According to the July 21, 2010 Horizons Engineering (Littleton, NH) UST closure report, petroleum contaminated soils (PCS) were identified in June 2010 during the permanent closure and removal of a 1,000 gallon capacity gasoline and 6,000 gallon capacity fuel oil UST. Both USTs were observed to be in poor condition at the time of removal. No subsurface impact to underlying soil was observed with the gasoline UST and pump island ; however, elevated photo-

ionization detector (PID) readings registering between 12 and 50 parts per million (ppm) were noted in the soils adjacent to piping area, the fill area and the west end of the fuel oil UST (Horizons Engineering, 2010). A total of 22 tons of PCS were removed. According to the Horizons report following removal of the PCS, no registered PID readings were identified in excess of 10 ppm within the area of excavation. The PCS were transported off site for treatment and disposal to Environmental Soil Management Inc. (ESMI) in Loudon NH and a cleanup confirmation soil sample was collected from the base of the excavation at the west end of the UST by Horizon Engineering and submitted for laboratory analysis for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) using EPA Methods 8100, and 8260, respectively. The confirmatory soil sampling results revealed no detectable concentrations of VOC or TPH above method detection limits in the soil. A Sites Management Activity Complete (SMAC) designation was granted and the Site was removed from the SMS active hazardous waste site list.

Recommendation: No further action is recommended with respect to the former USTs. Following their discovery during the UST closure, the PCS were identified and managed per State and Federal guidelines such that an SMAC designation was assigned to the Site September 7, 2010.

RECS:

1. Three pits/floor drain structures were identified during the April 26th, 2012 Site reconnaissance effort:
 - a. A pit observed in the northeast corner of the Armory building basement was covered with a ¼ inch thick, removable, steel plate. There is a 6-inch diameter iron pipe across the bottom of the pit with a vertical ‘tee’ section protruding upward in the middle of the pit. Standing water was observed in the vertical portion of “tee”; however, no sheens or odor were associated with this water.
 - b. A filled-in structure (approximately 7 feet long by 1 foot wide) was observed in the floor of the basement, next to the vehicle access ramp located in the southwest portion of the Armory building basement (Figure 3). This structure has the appearance of a trench/floor drain that has been decommissioned. Jim Rust (Town of St Johnsbury) indicated to The Johnson Company that in years past when the building operated as the

Armory, vehicles were stored in the basement of the Armory building, and floor drains were installed to convey surface water flow entering via the vehicle access ramp southwest corner of the building (Figure 3).

- c. A grated opening observed approximately 8-10 feet north of the aforementioned filled-in structure (in the west-central portion of the Armory building basement) which has an iron pipe (approximately 4-inches in diameter) in the base of the pit under the grated opening. Although not confirmed, the pipe may convey water from the pit toward a sump pump located approximately 5-10 feet to the north. The discharge pipe routed from the sump pump may be connected to the sewer line, although this is not confirmed.

Recommendation: The pit/floor drain structures should be further inspected for the presence of contamination and to better ascertain what they are connected to. According to Mr. Jim Rust, Town of St. Johnsbury, it was his understanding that the 6-inch iron pipe observed in the pit in the northeast corner is connected to pipe that conveys water from roof drains, however this was not confirmed. Attempts should be made to further ascertain the history of the filled-in structure in order to determine if this was indeed a former floor drain. This would entail review of additional building plans (if available), review of Town sewer lines records in the immediate vicinity of the Armory building (if available) and, attempt to identify and contact personnel with knowledge of the filling process regarding more specific information as to when the structure was filled, and what its purpose was. The follow-up review should be augmented with a dye-test to determine connectivity between the various water collection structures and ultimately an outlet point (if possible). Soil or sediment present or discovered (during additional investigation) in the pit/floor drain structures should be sampled and submitted for laboratory analysis for VOCs and TPH.

2. A pile of discarded paint cans and buckets (1 – 5 gallon nominal volume) was observed stacked under the roof of the access ramp located in the southwest corner of the Armory building. Although leaks, spills or other visual indications of release(s) from this pile of containers were not observed, there is possibility of surface water and groundwater impacts should some or all of the containers contain residual potentially hazardous materials that could create an inadvertent spill or leak from this debris.

Recommendation: The pile of containerized potentially hazardous debris should be inventoried by a qualified environmental contractor, to quantify and better characterize the contents to determine appropriate management alternatives. Once debris is adequately characterized, the containers and their contents should be disposed of in accordance with State and Federal regulations.

3. A pole-mounted transformer was observed in the northwest corner of the Site. A call to CVPS, the electric service provider, indicated this unit was installed in 1973. CVPS did not have any information as to whether the oil in this unit contained PCBs. Although there were no visual indications that the transformer has leaked, the age of the transformer suggests the oil within it may contain PCBs.

Recommendation: CVPS should be contacted about replacing the transformer, or replacing the oil within the transformer with PCB-free oil.

4. Aged electrical components (electrical panel, capacitors, switches) were observed in the boiler room, in the basement of the Armory building. Additional, older-appearing, electrical components were observed in several rooms in the Armory building. PCB-containing fluorescent light ballasts may be present at the Site. Due to the age of the building, there is a potential for PCB-containing construction material to be present in the building as a component of window caulking, sealants, paints, floor adhesive/mastic.

Recommendation: A qualified hazardous waste inspector with expertise specific to PCB-containing electric equipment and construction material should sample this equipment and materials for PCBs. Particular attention must be made as to whether any of the components are leaking, or if any of the aforementioned building material have been disturbed creating a likelihood for release(s) of PCBs to underlying concrete or soil, if outside.

5. There is potential for heavy metals contamination, particularly lead, associated with use of the basement as a firing range. Powder generated from bullets and from shell casings at the firing range presents risk of metals contamination

Recommendation: More research to determine the location of the firing range in the Armory basement in the form of reviewing plans and blueprints if available; and identification and interview(s) with personnel who may have knowledge about the firing range operations. This research should be followed up with a preliminary lead inspection which may include collecting bulk concrete samples, collecting samples of any residual powder or sediment, and then screening using an XRF or similar type instrument. This sample screening effort could be combined with a lead-paint inspection (see RECs beyond ASTM 1527-05, below).

RECs beyond the Scope of ASTM 1527-05 and AAI

1. Given the age of the building, lead based paint may coat surfaces of interior and exterior walls at the Site. Also lead impacted paint chips may also be associated with the Site.

Recommendation: A lead paint inspection should be conducted by a certified lead paint inspector and a report should be generated outlining the findings.

2. Asbestos-containing materials (ACM) were documented with the Armory building by an ACM investigation performed by Crothers Environmental Group in October 2008 (Crothers, 2008). Of the 48 samples analyzed, six reported positive detections for ACM (2% or more Chrysotile Asbestos). The positive samples were all from plaster wall surfacing material located throughout the building interior. The report also identified the presence of 'Presumed' ACM consisting of non-fiberglass pipe and fitting insulation located in the basement and first floor; and, internal boiler gaskets, refractory and packing materials located in the basement boiler room (Crothers, 2008). A copy of the ACM sampling report is included as Appendix 5.

Recommendation: Although a previous ACM inspection has been performed (see Appendix 5), a follow-up inspection should be conducted in anticipation of soliciting formal ACM abatement quotes from licensed contractors. This follow-up inspection will confirm completeness of the previous inspection and identify any potential data gaps.

3. Based on information provided in the Environmental Questionnaire (Appendix 3) the Armory building has a mold problem due to constant moisture generated from leaking fire sprinkler lines. According to Peggy Phelps (SJHHC) a mold abatement project was in process to clean up the mold. A follow up call to the Town of St Johnsbury indicated that the project had been placed on hold due to increasing expenditures and no clear end in sight.

Recommendation: Follow up inspection/testing by a certified contractor should be performed to better delineate extent of mold damage. Following an initial inspection and receipt of results of the testing, a detailed cleanup plan should be presented along with estimated costs for completion.

8.0 DATA GAPS/LIMITATIONS

8.1 DATA GAPS

The history of property ownership/transactions for the Site could not be completely traced at the St. Johnsbury land records beyond 1861. The 1861 transaction described only a portion of the property that the Site is situated on. No records of specific uses or activities at the Site prior to 1861 were identified. As such, it is not possible to absolutely identify earliest developed usage of the Site. Although this is a data gap, it should not be considered a data failure, since it can be approximated when the Site was first developed based on review of an

1855 map of Saint Johnsbury which depicts the area believed to be where the Armory is located as undeveloped. Therefore it can be assumed that the Site was developed at some point between 1855 and 1861.

No key site manager was available during the conduct of this ESA. A key site manager is typically someone who has good knowledge of the uses and physical characteristics of a property, such as a property manager, chief physical plant supervisor or chief maintenance person. Due to the fact that this property has been vacant since 2010, no such personnel were available. A key site manager may have been able to provide insight as to several environmental issues associated with the property such as the location of the firing range in the basement of the armory, and history of activities which have occurred which could provide better basis as to the connection(s) of the floor drains and pits, and age of some of the building materials such as window caulking observed in the building.

8.2 LIMITATIONS

The conclusions of this ESA were arrived at based upon information obtained and made available to The Johnson Company from the following sources: Saint Johnsbury Town Clerk; the Saint Johnsbury Health Officer; the VT DEC; the Federal EPA; Mr. Jim Rust, Town of Saint Johnsbury, Mr. Bob DeRochers, Board Member with Saint Johnsbury History and Heritage Center, Ms. Peggy Pearl, Director, Saint Johnsbury History and Heritage Center, Captain Bradley Reed, Saint Johnsbury Fire Department and from information gathered during the Site reconnaissance. This information has been intended for the sole use of Vermont Department of Environmental Conservation for specific application to the Saint Johnsbury Armory Building, 1249 Main Street in Saint Johnsbury, Vermont. No other uses, expressed or implied, are warranted. The design of the investigation was based on sound scientific techniques and experience with similar investigations. Should additional information become available pertaining to environmental concerns that may be associated with the Site, the information should be made available to The Johnson Company so that we may re-evaluate our conclusions.

9.0 REFERENCES

- Bowes, J., 2012a, Telephone conversation with Mr. Jim Rust, Town of St. Johnsbury, April 26, 2012.
- Bowes, J. 2012b, Telephone conversation with Captain Bradley Reed, Fire Chief, Saint Johnsbury Fire Department March 21, 2012.
- Bowes, J. 2012c, Telephone conversation with Health Officer Tim Angel, Town of Saint Johnsbury March 22, 2012.
- Bowes, J., 2012d, Telephone conversation with Mike Sullivan, CVPS , April 27, 2012.
- Bowes, J., 2012e, Telephone conversation with Mr. Jim Rust, Town of St. Johnsbury, April 30, 2012.
- Crothers, 2008, Letter report RE: Saint Johnsbury Community Center, 1249 Main Street, St. Johnsbury, VT, Interior Asbestos Inspection Limited, November 1, 2008. Doll, Charles, 1961. Centennial Geologic Map of Vermont, State of Vermont Geologist's Office. 1961.
- EPA1, 2012. http://www.epa.gov/enviro/html/cerclis/cerclis_query.html, "Superfund (CERCLIS) Query Form", Office of Emergency Remedial Response, U.S. Environmental Protection Agency. March 8, 2012.
- EPA2, 2012. <http://www.epa.gov/superfund/sites/npl/status.htm>, "NPL Site Status Information", U.S. Environmental Protection Agency. March 2, 2012.
- EPA3, 2012. <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>. "Superfund Site Information", U.S. Environmental Protection Agency. March 23, 2012.
- EPA5, 2012. www.epa.gov/enviro/html/rcris/rcris_query_java.html, RCRA Information System, U.S. Environmental Protection Agency. March 13, 2012.
- EPA6, 2012. www.epa.gov/ne/cleanup/rcra/, "Waste Site Cleanup and Reuse in New England", Region 1, U.S. Environmental Protection Agency. March 23, 2012.
- EPA7, 2010. <http://www.epa.gov/oswer/onecleanupprogram/>, Solid Waste and Emergency Response, Environmental Protection Agency. September 15, 2010.
- EPA8, 1995. <http://www.epa.gov/epawaste/nonhaz/municipal/landfill/section3.pdf>, "List of Municipal Solid Waste Landfills", United States Environmental Protection Agency. January 1995.

- EPAOSC, 2012. EPA OSC Region I website, available:
http://www.epaosc.org/site/region_list.aspx?region=1. March 23, 2012
- E. H. Danson Associates, 2009, Building Evaluation/Accessibility Assessment St. Johnsbury Community Center, St. Johnsbury, VT, February 28, 2009.
- Google, 2010. Google Maps Terrain Layer & Orthophoto Layer. [available online]
<http://maps.google.com>. October 27, 2010
- Horizons Engineering, 2010. Underground Storage Tank Closure Report, Saint Johnsbury Recreation Department, 1249 Main Street, Saint Johnsbury, Vermont. July 21, 2010.
- NRC, 2012. <http://www.nrc.uscg.mil/foia.html>, National Response Center, United States Coast Guard. March 25, 2012.
- NRCS, 2010. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, "Web Soil Survey", National Resource Conservation Service. November 5, 2010.
- Ross Environmental, 2006, Initial Site Investigation and Emergency Corrective Action Report, Grave United Methodist Church, 36 Central Street, St. Johnsbury, Vermont 05819, March 20, 2006.
- Schwartz, J., 2012, E-mail dated April 3, 2012 re; VTDEC Sites Management Section files 931398 and 20104075 made available on VTDEC FTP site.
- Schwer, 2010. Letter from Charles Schwer, VT SMS, to Jim Fitzgerald, Town of Saint Johnsbury RE: Site Management Activity Complete. September 7, 2010.
- Stewart, D.P. and MacClintock, P., 1970. Surficial Geologic Map of Vermont, State of Vermont. 1970.
- UNH, 2007. <http://docs.unh.edu/nhtopos/nhtopos.htm>, Government Documents Department, University of New Hampshire. May 5, 2007.
- USGS, 1995. Aerial Photograph. Accessed at <http://msrmaps.com/Default.aspx>. U.S. Geological Survey. May 9, 1995.
- USGS, 2006. Preliminary Integrated Geologic Map Databases for the United States: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, Rhode Island, Vermont. United States Geological Survey. 2006.
- VT DEC1, 2012. http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/launch.jsp, Environmental Interest Locator, Vermont Agency of Natural Resources, Department of Environmental Conservation. March 22, 2012.

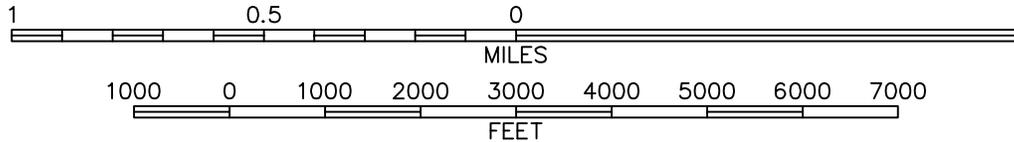
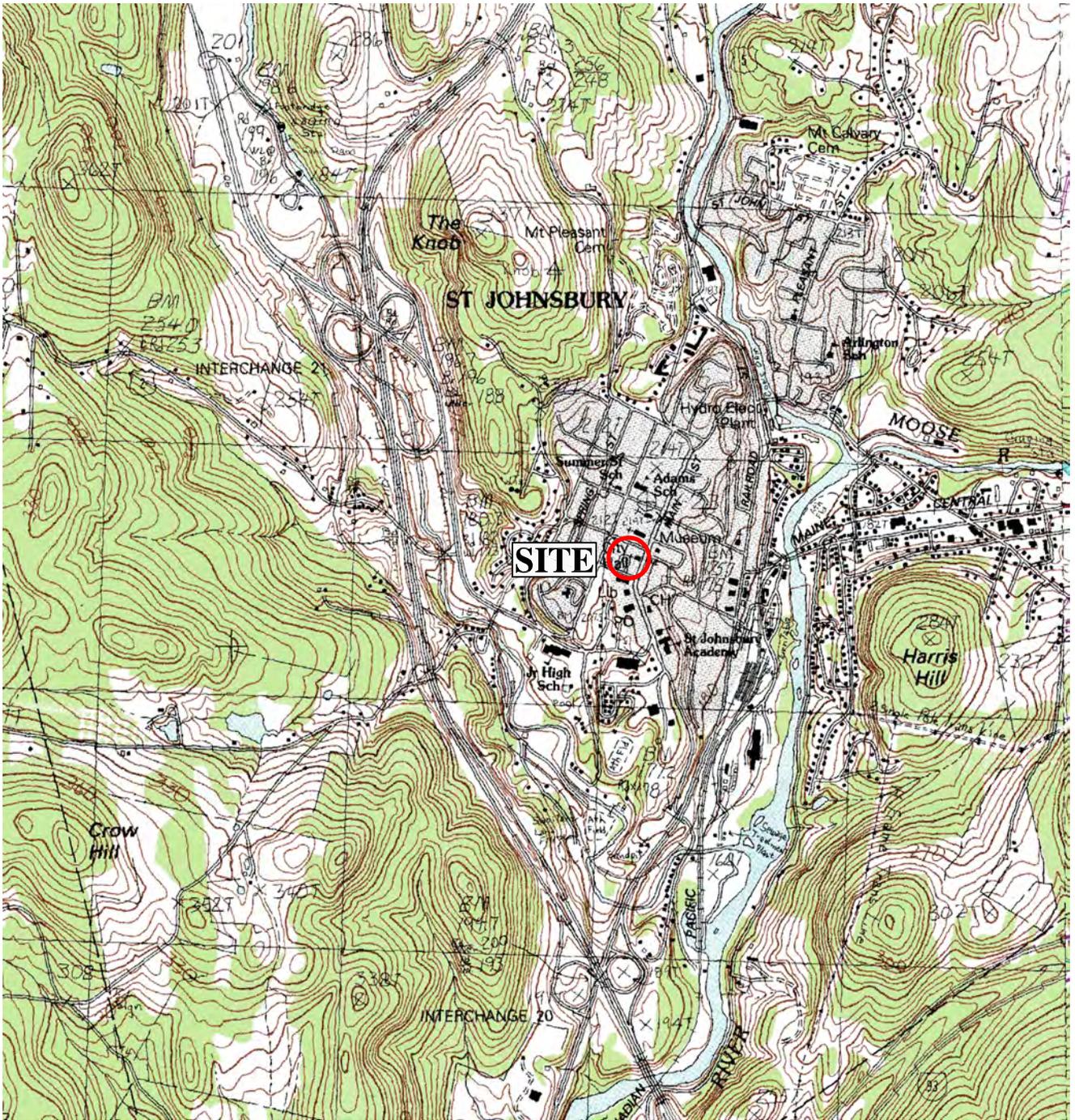
VT DEC2, 2010. www.anr.state.vt.us/dec/wastediv/rcra/pubs/allVTGen.pdf, “All Vermont Generators, (Active IDs Only)”, Vermont Agency of Natural Resources, Department of Environmental Conservation. August 13, 2010.

VT DEC3, 2012. www.anr.state.vt.us/WMID/HazSites.aspx, “Waste Management Interactive Database (WM-ID)”, Vermont Agency of Natural Resources, Department of Environmental Conservation. Accessed on March 22, 2012.

VT DEC4, 2006.
www.anr.state.vt.us/dec/wastediv/solid/pubs/Vermont.Solid.Waste.Facilities.pdf,
“Vermont Solid Waste Management Facilities”, Vermont Agency of Natural Resources,
Waste Management Division, Solid Waste Management Program. July 25, 2006.

VCGI, 2007. 1:5000 (0.5 meter) Black & White Vermont orthos, flown May 2007. Vermont Center for Geographic Information. May 2007

FIGURES



CONTOUR INTERVAL 6 METERS



MAP LOCATION

BASE MAP: USGS 7.5 Minute Topographic Quadrangle Saint Johnsbury, Vermont 1983

FIGURE 1: SITE LOCATION MAP
SAINT JOHNSBURY ARMORY PROPERTY
SAINT JOHNSBURY, VERMONT



100 State Street, Suite 600
Montpelier, VT 05602

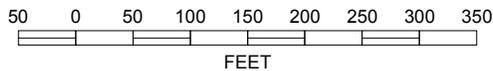
| | |
|-----------------|--------------------|
| Drawn by: TJK | Date: 03/21/12 |
| Chk'd by: JRB | Date: 03/21/12 |
| Scale: As Shown | Project: 3-2202-37 |



Legend

St. Johnsbury Parcels (2007)

 Parcel Boundaries  St. Johnsbury Armory



SOURCE: 1:40000 (1 meter) True Color Vermont orthos, flown July and August 2009. Vermont Center for Geographic Information. Posted April 8, 2010.

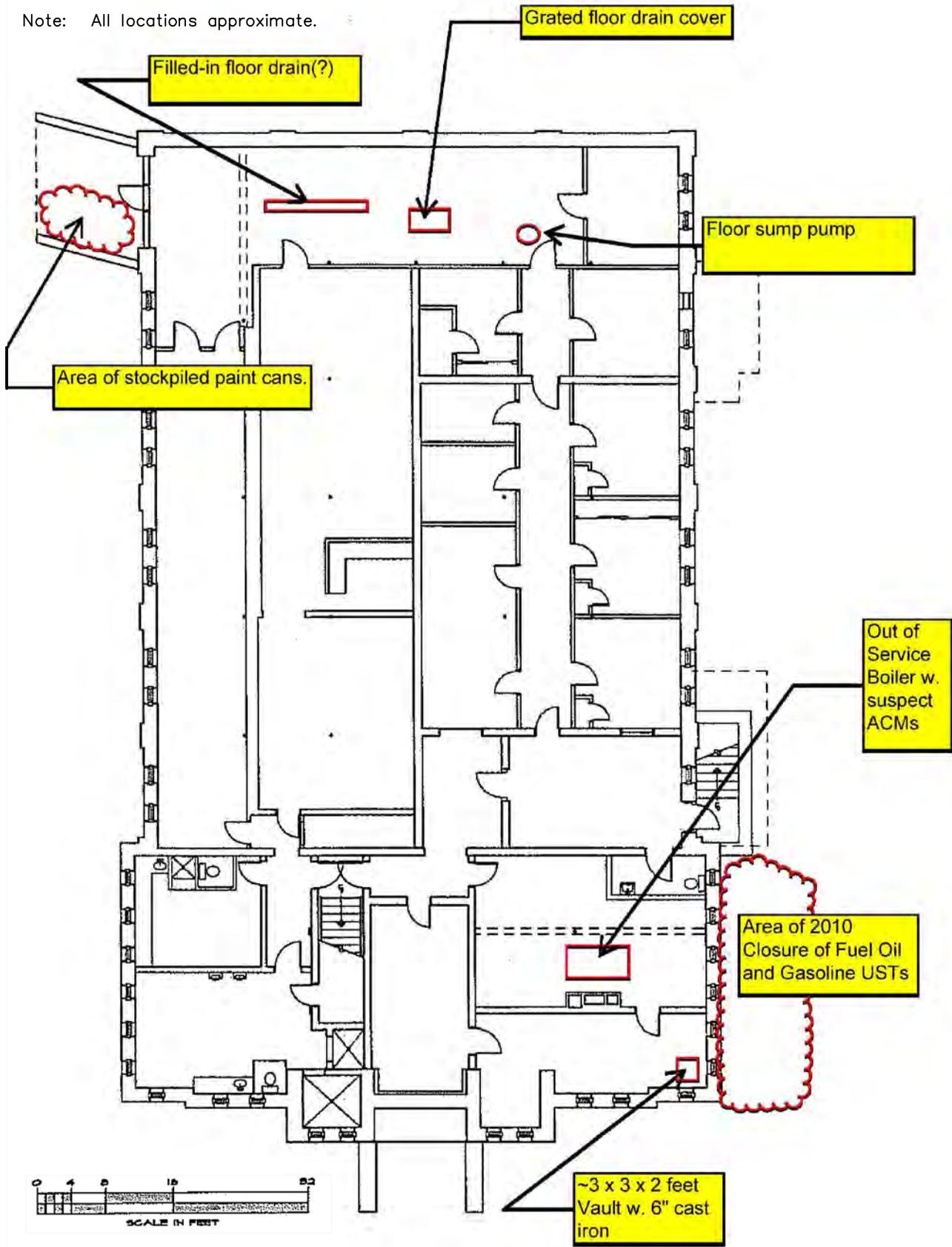
**FIGURE 2: ORTHOPHOTO
SAINT JOHNSBURY ARMORY PROPERTY
SAINT JOHNSBURY, VERMONT**



100 State Street, Suite 600
Montpelier, VT 05602

| | |
|-----------------|--------------------|
| Drawn by: JEM | Date: 3/23/11 |
| Chk'd by: JRB | Date: 3/24/11 |
| App'd by: JRB | Date: 3/24/11 |
| Scale: As Shown | Project: 3-2202-37 |

Note: All locations approximate.



**FIGURE 3: ARMORY BUILDING BASEMENT FLOOR PLAN
SAINT JOHNSBURY ARMORY PROPERTY
SAINT JOHNSBURY, VERMONT**



100 State Street, Suite 600
Montpelier, VT 05602

Drawn by: TJK Date: 05/08/12
Chk'd by: JRB Date: 05/08/12

Scale: As Shown Project: 3-2202-37

APPENDIX 1

RESUMES OF ENVIRONMENTAL PROFESSIONALS



JAMES R. BOWES, B.S., C.P.G., P.G.
Senior Geologist/Scientist

Mr. Bowes, a Certified Professional Geologist, and Professional Geologist licensed in New Hampshire, has 24 years of environmental consulting experience working on project locations including Switzerland and throughout New England, New York, Texas, Georgia, Ohio, Illinois and Canada. Mr. Bowes's expertise includes remedial investigations, remedial actions, Phase I, II, and III environmental site assessments, facility environmental audits, and hazardous and solid waste permitting. Specialties include environmental site assessments pursuant to ASTM (E-1527-05) and All Appropriate Inquiry standards, design and implementation of soil and groundwater investigations including fractured bedrock aquifers, development and implementation of remedial actions including remedial action project oversight, expert witness review and testimony, and programming/instrumentation of automated environmental monitoring systems, including remote telemetry systems. Mr. Bowes is licensed as a Professional Geologist (NH) and is The Johnson Company's Quality Assurance/Quality Control Officer. Prior professional expertise includes six years of experience as a Mining Geologist throughout the western U.S.

Selected Experience Summary

- **Remedial Investigations** - Designed and implemented remedial investigations including petroleum, chlorinated solvents, metals and PCB sites, ranging from shallow water table to fractured bedrock aquifer environments. Proficient in negotiations with state and federal regulators related to investigation technique selection and site closure.
- **Remedial Actions** - Implemented remedial action ranging from residential fuel spill sites to large-scale oil bunker cleanup next to a river at an industrial facility. Utilized oxygen injection technology at a former bulk fuel plant in New Hampshire. Remediation technology experience includes oxygen injection, thermal desorption, polyencapsulation, soil vapor extraction, excavation and non-aqueous phase liquid removal in Vermont, New Hampshire, New York and Ohio.
- **Environmental Site Assessments** - Technical review and investigations on more than 250 Phase I ESAs performed pursuant to the ASTM and Brownfields standard on facilities ranging from printing press manufacturing plants in Chicago and Toronto, paper mills in New York, to cell tower siting programs, and commercial real estate transactions throughout Vermont and New Hampshire. Performed Phase II and Phase III ESAs throughout Vermont, New Hampshire, New York and Ohio.
- **Land Application Permitting and Compliance Monitoring** - Managed solid waste projects including permitting, monitoring and compliance of land application programs for biosolids, as well as non-sewage (dairy) waste disposal.

Education

- B.Sc., Geology, Boise State University, 1979
- Graduate Course work in Hydrogeology, Wright State University, 1988, 1989, 1996

Note: Long version available upon request



JEREMY E. MATT, B.S., E.I.T.
Staff Engineer

Mr. Matt has 4 years of experience including: environmental investigations and remediation projects; sediment transport; AutoCAD drafting; MATLAB programming; Visual Basic programming; and data management and analysis. He has also volunteered in the Peace Corps and was the recipient of numerous academic awards during his undergraduate studies at the University of Vermont.

Selected Experience Summary

- **Brownfields Investigation and Redevelopment** – Prepared investigation reports for a variety of contaminated sites. Developed the technical aspects of a QAPP for high volume (greater than 4,000 m³) dioxin air sampling. Conducted groundwater, sediment, macroinvertebrate, soil, soil vapor, and bulk concrete sampling at a variety of contaminated sites. Provided oversight of monitoring well installation. Familiar with direct-push and sonic soil coring techniques. Assisted with monitoring well closure and logging of soil core and test pit soil lithology at multiple contaminated sites.
- **Remediation and Construction Oversight** – Provided construction oversight on a 30 million dollar remediation effort in a National Park for the US Department of the Interior. Duties included ensuring compliance with the work plan and preparation of daily reports detailing progress and any problems encountered during the day.
- **GIS and AutoCAD** – Integrated various graphical data into GIS and AutoCAD models to analyze the spatial distribution of contamination in soils, surface water, groundwater, soil gas and other media. Produced site plans, potentiometric maps, contaminant plume cross-sections, and other graphics for numerous assessments and remediation initiatives of hazardous waste sites.
- **Data Management & Analysis** – Designed relational database structures and queries for the quality assurance, management, analysis, and reporting of environmental data. Compiled and developed databases for several assessment and remediation projects. Wrote multiple Visual Basic scripts to automate repetitive data management tasks, increasing accuracy and efficiency.
- **Sediment Management** – Researched and developed a sediment management plan for a small hydroelectric dam. Tasks included: 1) researching and utilizing a set of applicable, generally accepted sediment transport relationships to quantify the sediment transport potential of the river for particular flow rates; 2) collecting the required hydraulic and geomorphic data field data; and 3) organizing and writing the plan, including development of simplified example scenarios to illustrate the analytical techniques used.

Education

B.S., Electrical Engineering, University of Vermont, 2002

B.S., Civil Engineering, University of Vermont, 2008

Note: Long version available upon request

APPENDIX 2

SANBORN FIRE INSURANCE MAPS

St Johnsbury Armory

1249 Main Street

Saint Johnsbury, VT 05819

Inquiry Number: 3291566.2

March 28, 2012

Certified Sanborn® Map Report



440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

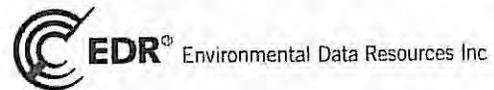
3/28/12

Site Name:

St Johnsbury Armory
1249 Main Street
Saint Johnsbury, VT 05819

Client Name:

The Johnson Company
100 State Street
Montpelier, VT 05602



EDR Inquiry # 3291566.2

Contact: Jeremy Matt

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by The Johnson Company were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: St Johnsbury Armory
Address: 1249 Main Street
City, State, Zip: Saint Johnsbury, VT 05819
Cross Street:
P.O. # 3-2202-37
Project: St Johnsbury Armory
Certification # A5B2-4772-81B8



Sanborn® Library search results
Certification # A5B2-4772-81B8

Maps Provided:

| | |
|------|------|
| 1964 | 1905 |
| 1958 | 1900 |
| 1943 | 1895 |
| 1927 | 1889 |
| 1919 | 1884 |
| 1912 | |

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

The Johnson Company (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2012 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1964 Source Sheets



Volume 1, Sheet 2



Volume 1, Sheet 5



Volume 1, Sheet 6



Volume 1, Sheet 7

1958 Source Sheets



Volume 1, Sheet 2



Volume 1, Sheet 5



Volume 1, Sheet 6



Volume 1, Sheet 7

1943 Source Sheets



Volume 1, Sheet 2



Volume 1, Sheet 5



Volume 1, Sheet 6



Volume 1, Sheet 7

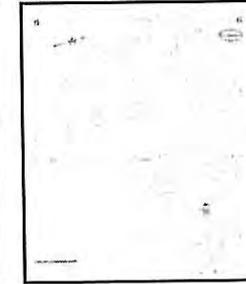
1927 Source Sheets



Volume 1, Sheet 2



Volume 1, Sheet 5

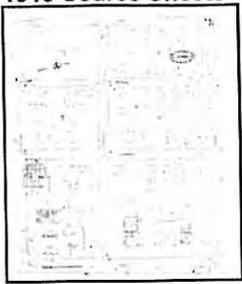


Volume 1, Sheet 6



Volume 1, Sheet 7

1919 Source Sheets



Volume 1, Sheet 7



Volume 1, Sheet 8



Volume 1, Sheet 10



Volume 1, Sheet 11

1912 Source Sheets



Volume 1, Sheet 9



Volume 1, Sheet 10



Volume 1, Sheet 12



Volume 1, Sheet 13

1905 Source Sheets



Volume 1, Sheet 8



Volume 1, Sheet 9



Volume 1, Sheet 11



Volume 1, Sheet 12

1900 Source Sheets



Volume 1, Sheet 8

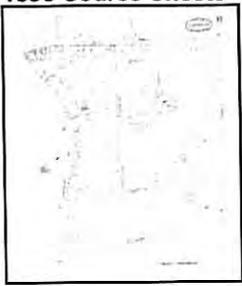


Volume 1, Sheet 9

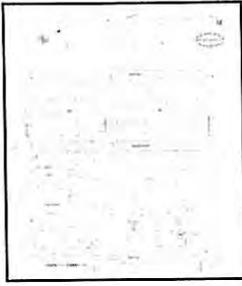


Volume 1, Sheet 10

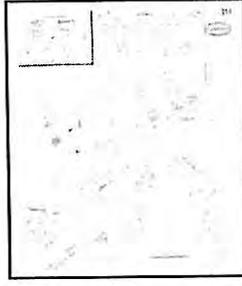
1895 Source Sheets



Volume 1, Sheet 8



Volume 1, Sheet 9



Volume 1, Sheet 10

1889 Source Sheets



Volume 1, Sheet 2

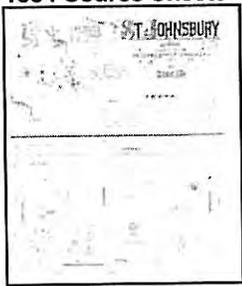


Volume 1, Sheet 3



Volume 1, Sheet 9

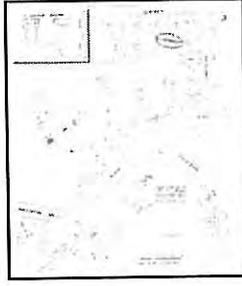
1884 Source Sheets



Volume 1, Sheet Keymap/Sheet 1

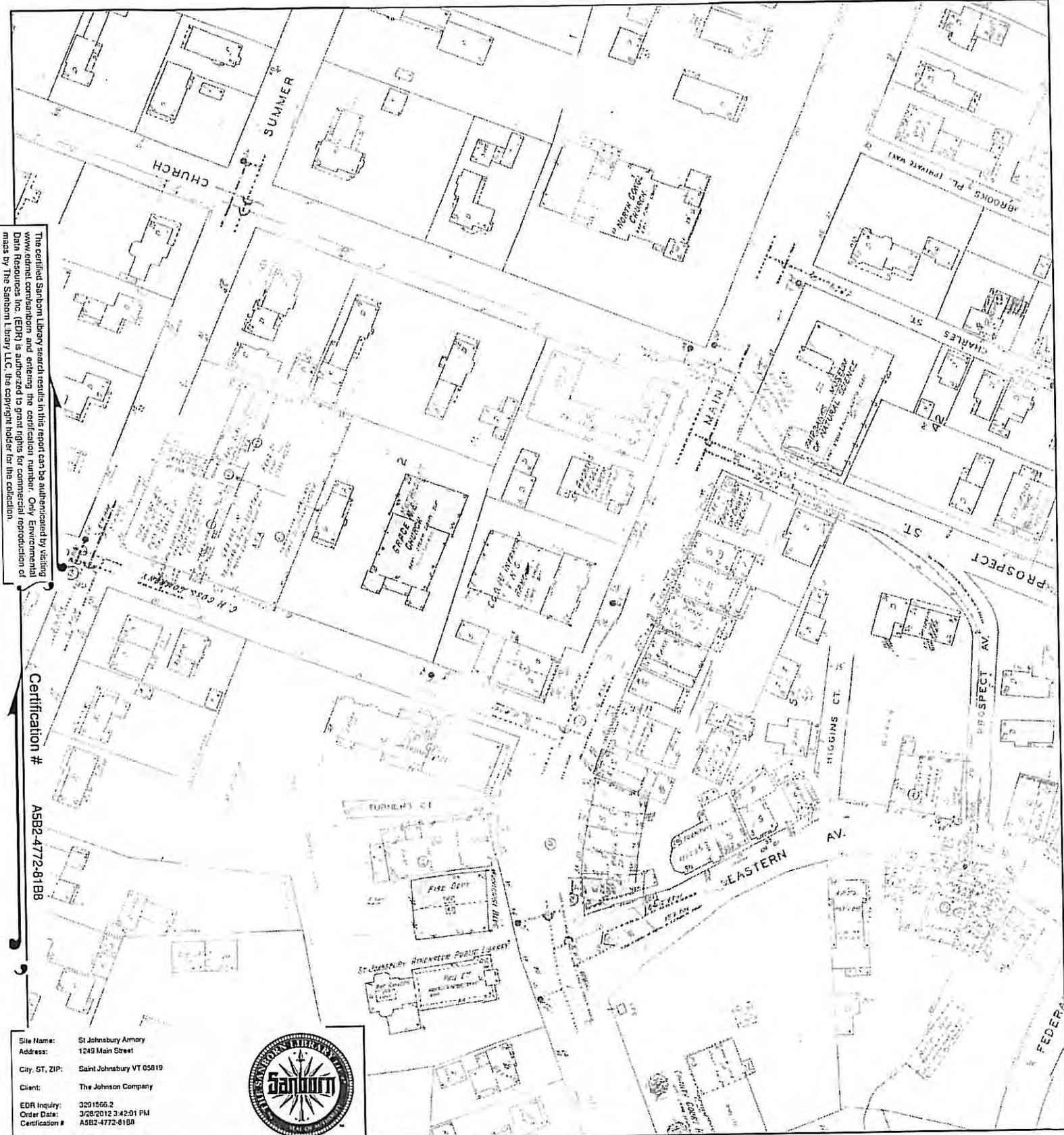


Volume 1, Sheet 2



Volume 1, Sheet 3

1964 Certified Sanborn Map



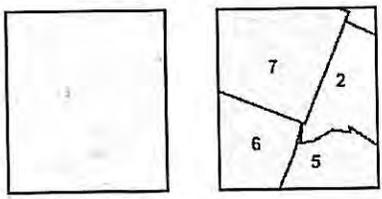
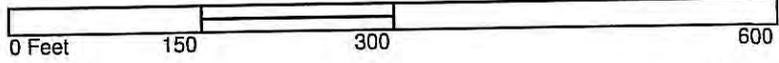
The certified Sanborn search results in this report can be authenticated by visiting www.edr.com and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # ASB2-4772-81B8

Site Name: St Johnsbury Amory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDR Inquiry: 3291566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: ASB2-4772-81B8



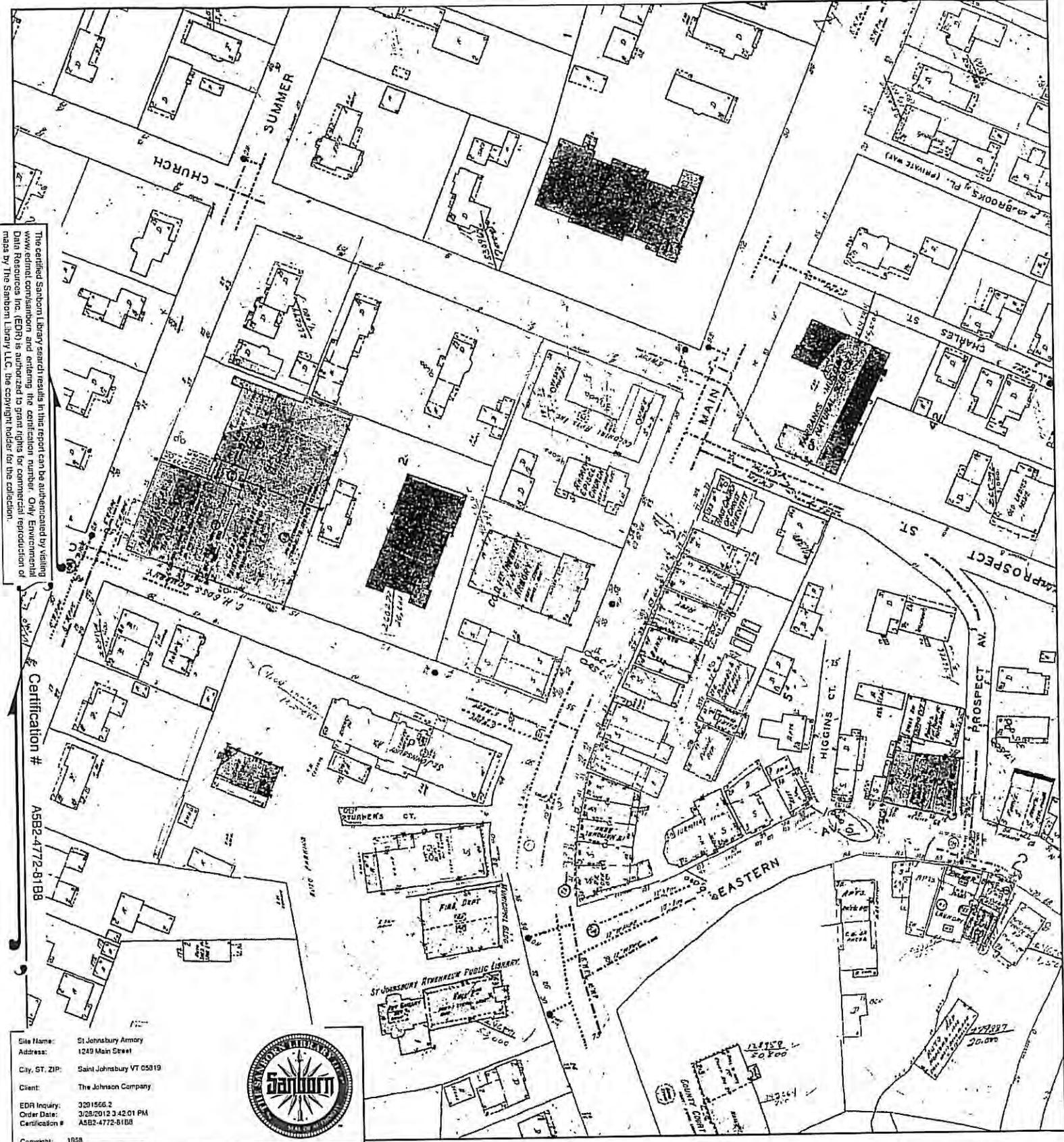
This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



- Volume 1, Sheet 2
- Volume 1, Sheet 5
- Volume 1, Sheet 6
- Volume 1, Sheet 7



1958 Certified Sanborn Map



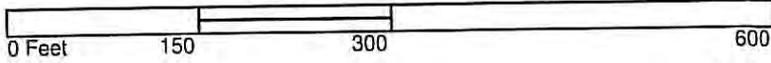
The certified Sanborn Library search results in this report can be authenticated by visiting www.edri.com/conversion and entering the certification number. Only Environmental Data Resources Inc. (EDRI) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification #
A5B2-4772-81B8

Site Name: St Johnsbury Armory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDRI Inquiry: 3/29/1566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: A5B2-4772-81B8



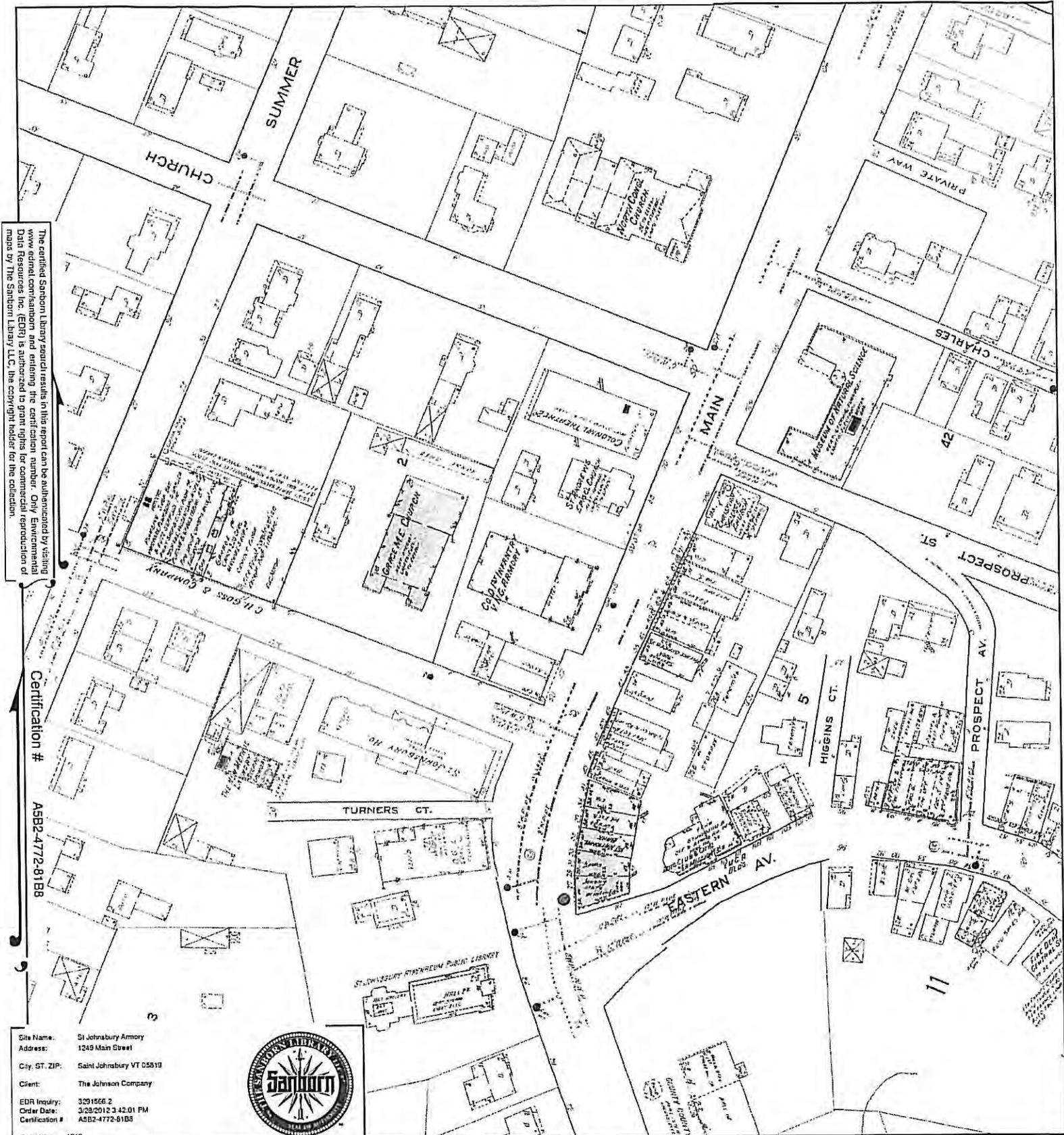
Copyright: 1958
 This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



- Volume 1, Sheet 2
- Volume 1, Sheet 5
- Volume 1, Sheet 6
- Volume 1, Sheet 7



1919 Certified Sanborn Map



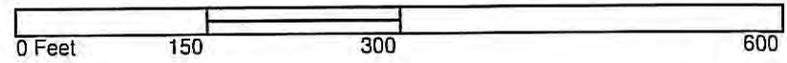
The certified Sanborn Library search results in this report can be authenticated by visiting www.edr.com/sanborn and performing the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification #
A5B2-4772-81B8

Site Name: St Johnsbury Amory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDR Inquiry: 3291566 2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: A5B2-4772-81B8
 Copyright: 1919



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



- Volume 1, Sheet 7
- Volume 1, Sheet 8
- Volume 1, Sheet 10
- Volume 1, Sheet 11



1912 Certified Sanborn Map

The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection.

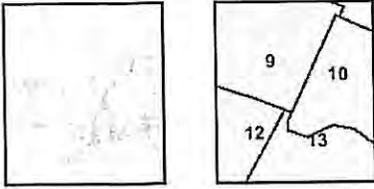
Certification # ASB2-4772-81B8

Site Name: St Johnsbury Amory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05613
 Client: The Johnson Company
 EDR Inquiry: 3291566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: ASB2-4772-81B8

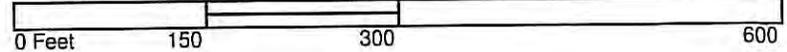


Copyright: 1912

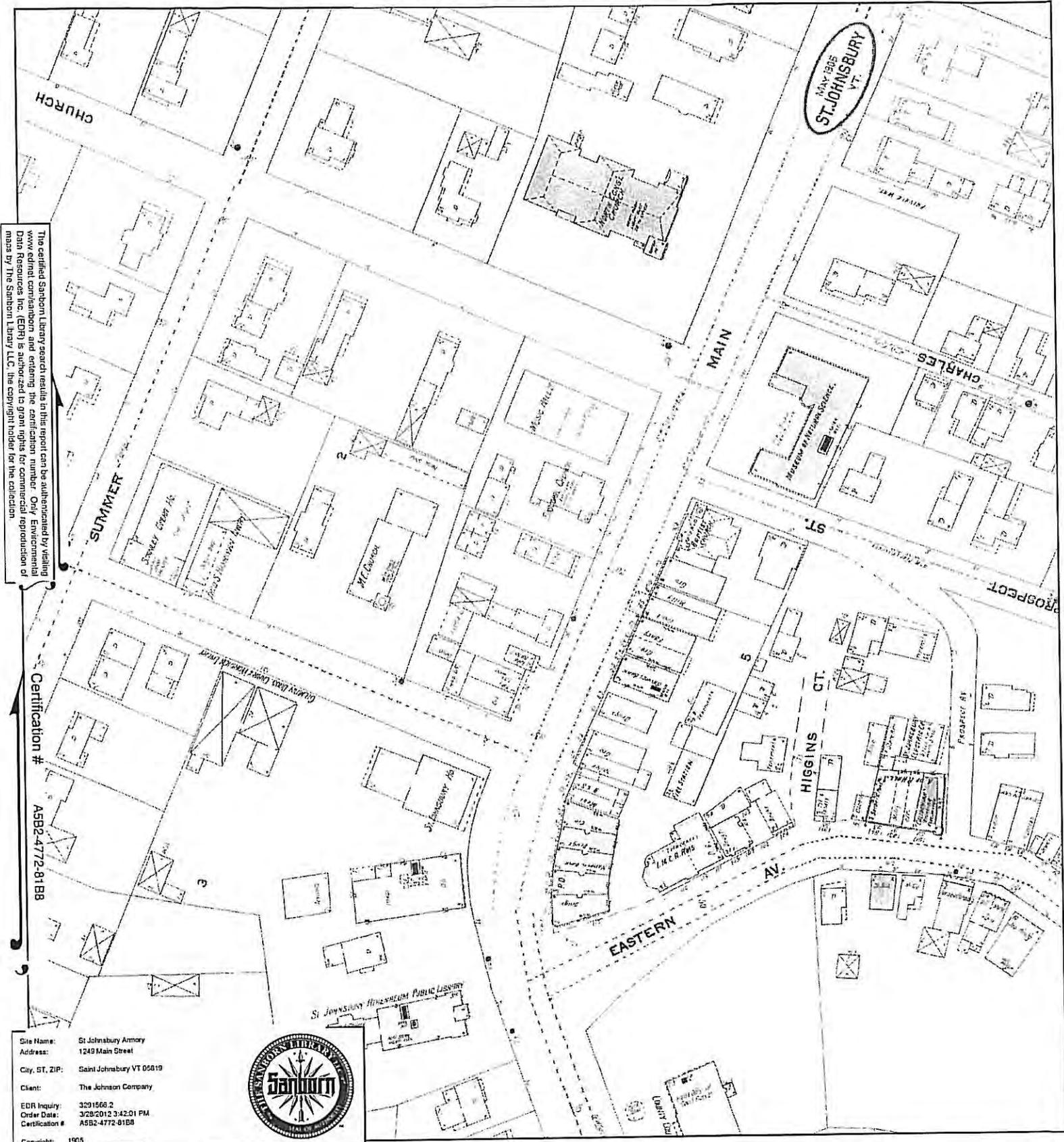
This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



- Volume 1, Sheet 9
- Volume 1, Sheet 10
- Volume 1, Sheet 12
- Volume 1, Sheet 13



1905 Certified Sanborn Map



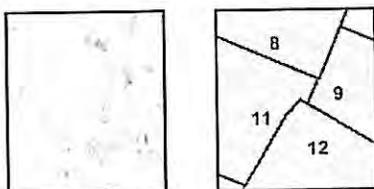
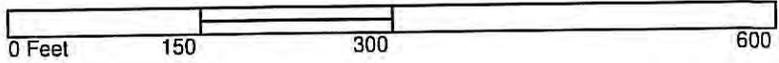
The certified Sanborn Library search results in this report can be authenticated by visiting www.edr.com, contacting Environmental Data Resources Inc. (EDR) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # ASB2-4772-81B8

Site Name: St Johnsbury Amory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05619
 Client: The Johnson Company
 EDR Inquiry: 3291566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: ASB2-4772-81B8



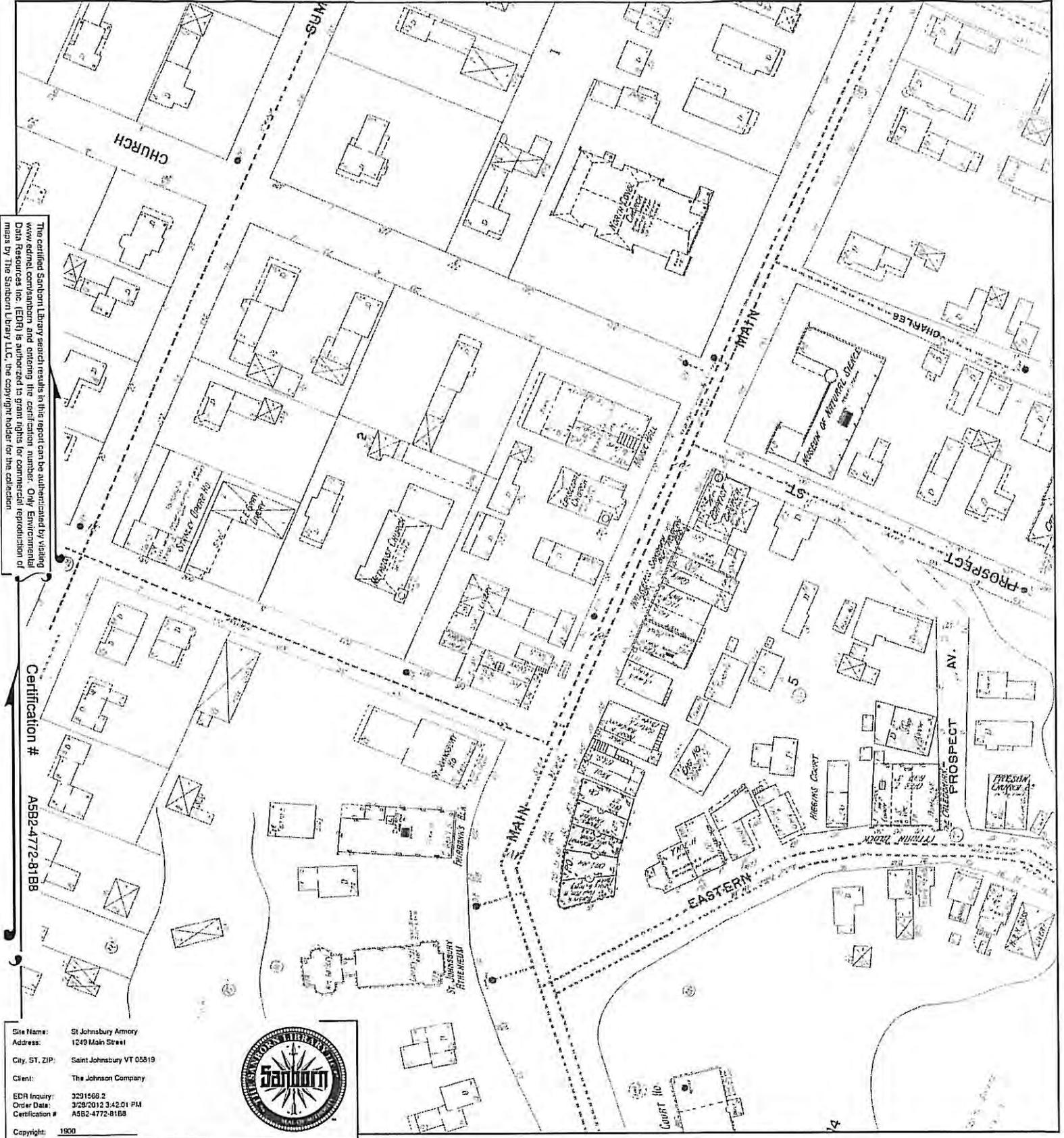
This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



- Volume 1, Sheet 8
- Volume 1, Sheet 9
- Volume 1, Sheet 11
- Volume 1, Sheet 12



1900 Certified Sanborn Map



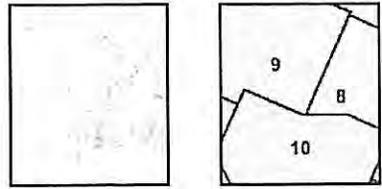
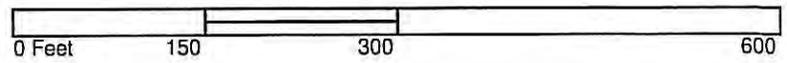
The certified Sanborn Library search results in this report can be authenticated by visiting www.edr.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDRI) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # A5B2-4772-81B8

Site Name: St Johnsbury Armory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDI Inquiry: 3291566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: A5B2-4772-81B8
 Copyright: 1900



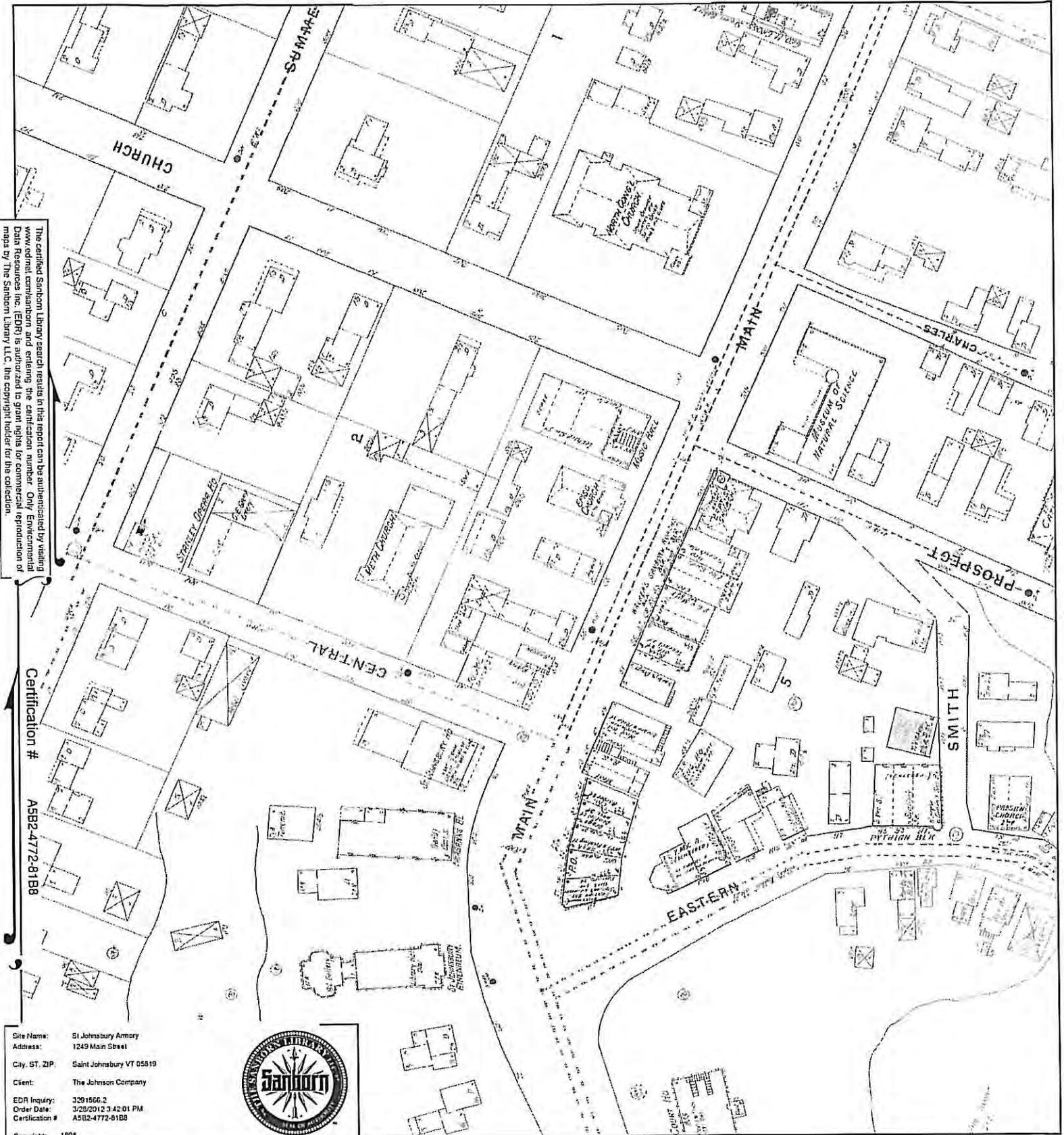
This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 8
 Volume 1, Sheet 9
 Volume 1, Sheet 10



1895 Certified Sanborn Map



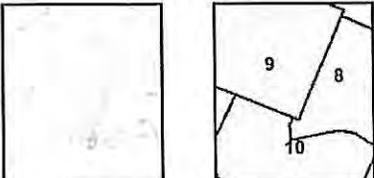
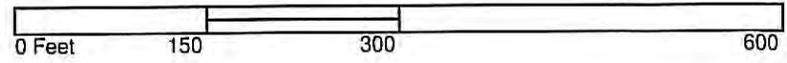
The certified Sanborn Library search results in this report can be authenticated by visiting www.edri.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDRI) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # A582-4772-81B8

Site Name: St Johnsbury Armory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDRI Inquiry: 3291566-2
 Order Date: 3/29/2012 3:42:01 PM
 Certification # A582-4772-81B8
 Copyright: 1895



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 8
 Volume 1, Sheet 9
 Volume 1, Sheet 10



1889 Certified Sanborn Map



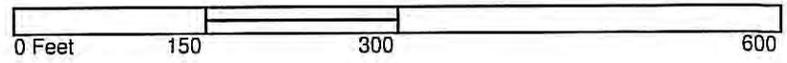
The certified Sanborn Library search results in this report can be authenticated by visiting www.edr.com and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # A582-4772-8188

Site Name: St Johnsbury Ambury
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDR Inquiry: 3291566-2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: A582-4772-8188
 Copyright: 1889



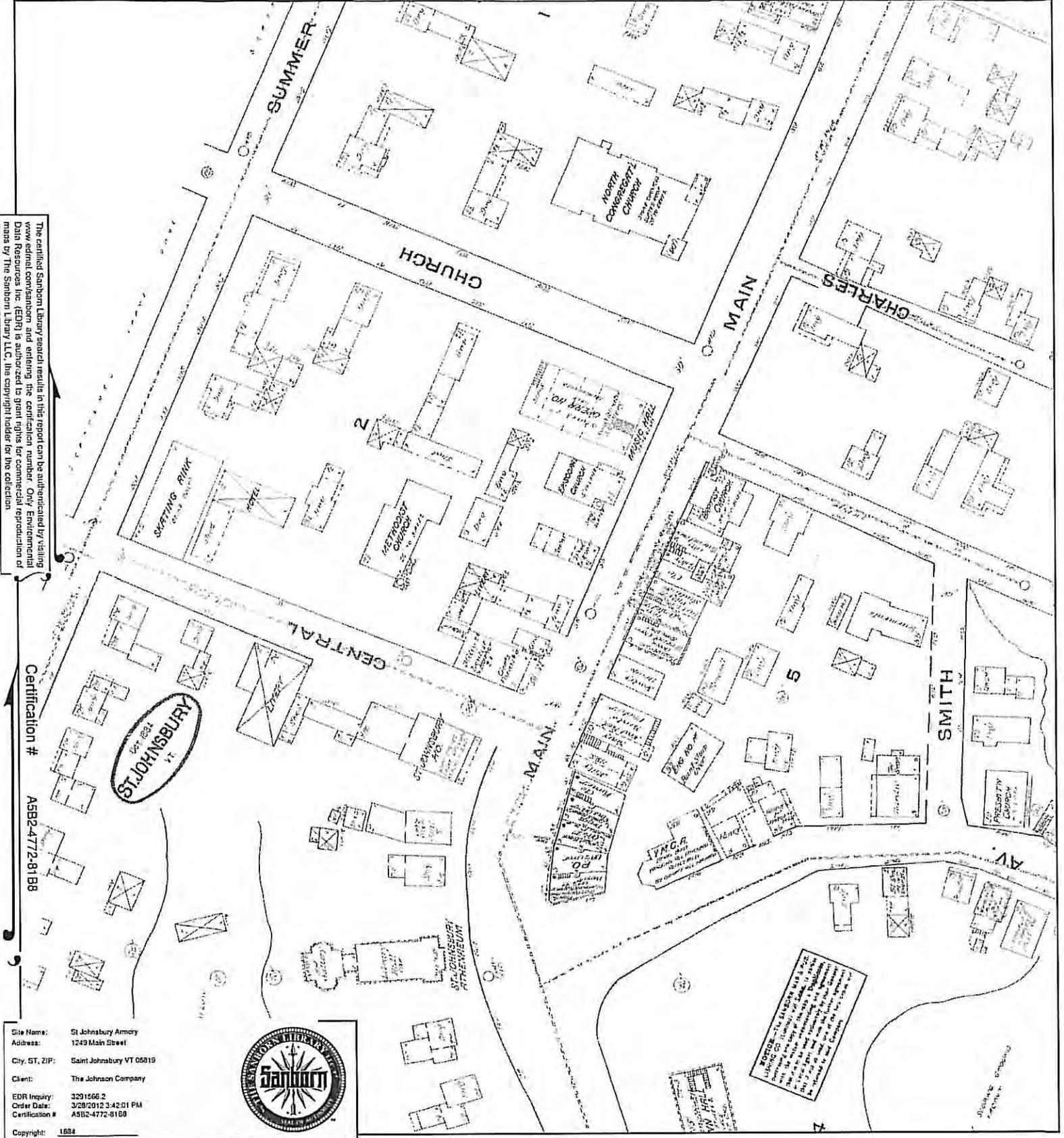
This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 2
 Volume 1, Sheet 3
 Volume 1, Sheet 9



1884 Certified Sanborn Map



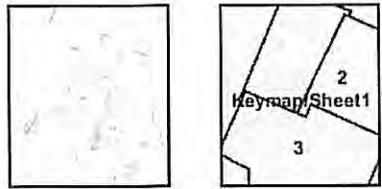
The certified Sanborn Library search results in this report can be authenticated by visiting www.edri.com and entering the certification number. Only Environmental Data Resources Inc. (EDRI) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # ASB2-4772-8188

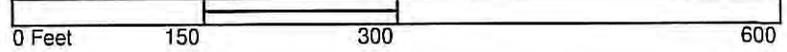
Site Name: St Johnsbury Amory
 Address: 1249 Main Street
 City, ST, ZIP: Saint Johnsbury VT 05819
 Client: The Johnson Company
 EDR Inquiry: 3291566.2
 Order Date: 3/28/2012 3:42:01 PM
 Certification #: ASB2-4772-8188
 Copyright: 1884



This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



Volume 1, Sheet Keymap/Sheet1
 Volume 1, Sheet 2
 Volume 1, Sheet 3



APPENDIX 3

ENVIRONMENTAL QUESTIONNAIRE

ENVIRONMENTAL QUESTIONNAIRE

INSTRUCTIONS: Please complete the following questionnaire. If you have any questions about how to answer the question, answer to the best of your ability, and indicate your question. If additional pages are necessary to fully respond to the question, please mark each page and attach them to this questionnaire. Also, please attach copies of any requested documents. If copies cannot be made, please indicate that, and have the originals available for review during our visit to your Facility.

I. GENERAL BACKGROUND INFORMATION:

1. Address of Facility: 1249 Main Street
St. Johnsbury, Vt 05819

(Telephone) 802-424-1090 - St. Johnsbury History & Heritage Center

2. Name and position of person responding to this Questionnaire:
Peggy Paul - director of St. Johnsbury History & Heritage Center

3. To the best of your knowledge, provide an operational and ownership history of the site.

| Name of Facility | Owner/ Operator | Year (s) Owned or Operated | | Process | Current Address |
|------------------|-----------------|----------------------------|----|---------|-----------------|
| | | from | to | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Owned by the Town 1917 - present

4. Describe the general character of the Facility site and the surrounding area (including terrain, location of wetlands, coastlines, rivers, streams, lakes, springs, drinking water wells, roads, water intake and discharge structures, landmarks, flood plains, etc.):

On the Main Street of St. Johnsbury bounded on the South by a Dentist's office ; the North - Episcopal Church.

5. Describe all known former uses of the Facility, whether carried out under the current ownership, or any prior ownership: *Armory for National Guard; Police Station; polling place; Recreational Center.*

6. Does any person, firm or corporation other than the owner occupy the site or any part of it? If yes, identify them and describe their use of the property.

NO - building not in use

7. Have there been any spills, releases, or unpermitted discharges at or near the Facility (including neighboring properties)? If so, describe; and attach any incident reports and the results of any investigations:

NOT to our knowledge

8. Has the Facility ever been the subject of any enforcement actions by any federal, state, or local government entities, or does the Facility have knowledge of any contemplated enforcement actions? If so, state the results of the enforcement action (consent order, penalties, no action, etc.) and describe the circumstances:

NO

9. Is the Facility now under any state, federal or local agency orders or consent decrees? If so, attach them to this response.

NO

10. Have there been any formal or informal citizen complaints regarding the Facility? If so, did they result in the filing of a notice of citizen suit, or a civil complaint, or other administrative or criminal procedure? If so, describe in full detail:

NO

11. Provide the Facility's RCRA number, if applicable.

NO

12. Provide the Facility's SIC number, if applicable.

NO

13. Describe past/present building/facility heating system.

Came cast iron converted stoker boiler. Well over 50+ years old. NOT USED

14. Name of architectural/engineering firm or contractors that erected and/or remodeled the facility.

Some renovations made in 1958 - don't know who made them

15. Has the site ever been used for excavation or fill operations?

NO

16. Are there, or have there ever been, any buildings, storage sheds, or other structures on the property?

If so, how many? Where are they, how big are they, how old are they, and what are they used for?

NO

17. Describe the circumstances of the transaction that has made the present ESA necessary.

Transaction type:

Q Sale Q Foreclosure Q Re-financing Q Other

Identify the following:

Owner Town of St. Johnsbury, Vt

Operator/tenant NOT in use

Buyer St. Johnsbury History + Heritage Center

Financing Institution —

Real Estate Agent —

II. SOLID AND HAZARDOUS WASTES:

18. Does the facility generate any solid or hazardous wastes? If so, provide the Facility's EPA (or State) identification number NO.

19. Does the facility have any RCRA Hazardous Waste Permits? If so, please attach to this questionnaire.

- NO
- a) Generator
 - b) Transporter
 - c) Treatment, Storage, Disposal Facility

20. Have any of the Facility's solid or hazardous wastes been analyzed? If so, attach the results of any analyses done on those wastes.

NA

21. Identify the transporter of any hazardous wastes, and attach a copy of the transporter's permits and invoices from the last two years for the transport of wastes.

NA

22. Identify the solid or hazardous waste disposal or treatment facilities which receive the Facility's wastes, and attach a copy of the applicable permits and invoices from the last two years.

NA

23. Does the Facility treat or dispose of any wastes on site (including without limitation incineration, reclamation, neutralization or recovery)? If so, describe in full, and attach any applicable permits.

NO

24. Attach copies of the hazardous waste manifests for the last two years and all annual/biennial reports on hazardous wastes.

NA

25. Does the Facility transfer, incinerate, process, or store any non-hazardous solid wastes or hazardous wastes, other than refuse-derived fuel or waste oil, which is generated off-site? If so, describe:

NO

26. Does the Facility accumulate and store any hazardous wastes on site for disposal for longer than 90 days? If so identify the substance, the quantity and describe how it is stored:

NO

27. Identify all hazardous wastes generated at the facility, and as to each, state its hazardous characteristics (toxicity, reactivity, corrosivity, ignitability) and whether it is a listed hazardous waste:

NO

III. SURFACE WATER/WATER QUALITY/DISCHARGE TO MUNICIPAL SEWAGE TREATMENT PLANT:

28. Identify and attach all permits at the Facility relating to all Facility discharges to water, including discharges of wastewater, process water, contact or non-contact cooling water, storm water, as well as water from cafeterias and restrooms.

Town

29. Has the Facility tested the groundwater at or around its Facility? If so, attach all analytical results.

NO

30. If any questionnaires have been completed and submitted to any federal, state, or local agencies relating to water, including industrial pretreatment questionnaires, please attach them.

NO

31. Is any waste deposited in or near surface or groundwaters? If so, describe in detail, including not only the receiving water's classification, but a description of the type and quantity of the wastes.

NO

32. Attach copies of the Facility's Discharge Monitoring Reports for the last two years, if the Facility is required by regulation to complete such reports.

33. Provide the Facility's NPDES number.

34. Are there any drinking water wells, or other wells, on the property? If so, give location.

NO

IV. AIR POLLUTION:

35. Are there any air emission sources that emit contaminants from the Facility? If so, describe each source, including whether it is a stationary combustion installation, process source, exhaust or ventilation system, incinerator, or other source:

only partial ventilation system in the basement.

36. Are any of the sources permitted? If so, attach a copy of each permit.

37. Describe past/present process ventilation system.

NO ventilation system on first 2 floors

V. SPILLS AND UNDERGROUND STORAGE TANKS (USTs):

38. List and describe all above and below ground storage tanks used to store petroleum or gasoline products, or other chemicals or wastes, including the contents and capacity of each tank. For all USTs, provide corresponding notification and permit numbers, dates, and material. Are said tanks double lined? Do they have cathodic protection? Provide any tank tightness test results for the on-site tanks.

underground tanks removed after 2008

39. List and locate ALL past/present underground storage tanks on site, even if they are not now in service, and state whether any notification has been filed with the local, state or federal government concerning existence of those tanks.

40. Have there been any leaks, spills, releases or other discharges (including loss of inventory) associated with any of these tanks? If so, give full details, including the response taken, all analytical results or reports developed through investigation (whether internal or external), and the agencies which may have become involved.

41. Is there a septic system, leach field, or dry well, etc., on the property; or to the best of your knowledge, has there ever been such a system on the property? If yes, please locate.

NO - Town

If so, where is it?

42. Have any underground storage tanks ever been removed from the property? If so, please give dates and copies of State reports, if available.

See # 38

43. Are there any floor drains in the facility? If yes, please locate.

Where do the floor drains go (choose one)?

- A. Are they connected to municipal sewer system?
- B. Do they drain into a septic system, leach field or dry well?
- C. Do they drain into a stream?
- D. Do they drain onto the ground surface?
- E. Other? Please explain.

VI. POLYCHLORINATED BIPHENYLS ("PCB'S") AND ASBESTOS:

44. Provide any records the Facility has concerning any on-site PCBs or PCB equipment, whether used or stored, and whether produced as a byproduct of the manufacturing process or otherwise. (PCBs are generally associated with transformers or capacitors, circuit breakers, voltage regulators, switches or cables.)

?

45. Have there been any PCB spills, discharges or other accidents? If so relate all the circumstances:

46. Does the Facility have any asbestos containing materials, including materials used to construct the building? If yes, please list locations:

see report

47. Does the facility have any UREA formaldehyde foam containing materials, including materials used to insulate the building? If so, list:

SUBMITTED BY:

Peggy Pearl

(Firm/Company Name/Corporation)

(Date)

4-11-2012

St. Johnsburg History & Heritage Center

(BY)

Director

(Title)

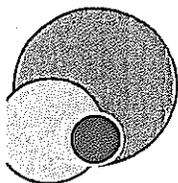
Peggy Pearl

(Signature)

* 2011-2012 The armory has had issues with mold due to frozen drain pipes that burst & spread water throughout. The issues were not dealt with in a timely fashion and there has been a rather large outbreak of mold. Some of the problem problems have been dealt with this past fall.

APPENDIX 4

**ASBESTOS INSPECTION REPORT BY
CROTHERS ENVIRONMENTAL GROUP**



Crothers Environmental Group, LLC

24 Langdell Road
Morrisville, Vermont 05661
Phone 802-888-1936
info@crothersiaq.com

November 1, 2008

Michael Welch, Town Manager
Town of St. Johnsbury, Vermont
1187 Main Street
St. Johnsbury, Vermont 05819

RE: St. Johnsbury Community Center – 1249 Main Street – St. Johnsbury, Vermont
Interior Asbestos Inspection, Limited

Dear Mr. Welch,

Per your request, we conducted an inspection for the presence of asbestos-containing materials (ACM) at the St. Johnsbury Community Center located at 1249 Main Street in St. Johnsbury, Vermont.

The findings in this report are based on visual observations made during the inspection and analytical results of the collected bulk samples. The following materials are confirmed to contain greater than 1% asbestos as discovered by laboratory analysis or are presumed to contain asbestos:

- **Plaster walls and ceilings, throughout**
- **Pipe & fitting insulation (non-fiberglass) – Basement and partial 1st floor**
- **Internal boiler gaskets, refractory and packing materials**

A suspect material is a building material that is presumed to contain asbestos (PACM). A homogeneous area is defined as a thermal system insulation (mechanical insulation - known as "TSI"), surfacing material (building material that is trowel applied or spray applied), or miscellaneous material (all other materials). A homogeneous area (material) is uniform in texture and appearance, was installed at the same time, and is unlikely to consist of more than one type or formulation of material. The Inspector grouped building materials into homogeneous areas. Bulk sample collection points were selected randomly in a manner that was representative of the sampling area. Each bulk sample was made up of a core that fully penetrated the suspect ACM.

ASBESTOS BULK SAMPLING & LABOATORY ANALYSIS

Forty-eight (48) bulk samples were collected on October 29, 2008 and delivered to EMSL Analytical, Inc. Proper chain-of-custody procedures were followed during transport of samples. EMSL Analytical, Inc. is a Vermont Licensed and US EPA Accredited Laboratory. All samples, unless noted, were analyzed by Polarized Light Microscopy “PLM” in accordance with EPA test method 40 CFR Part 763, Subpart F. The analyst visually estimates the percentagcs of identified asbestos.

The following table provides asbestos bulk sampling information:

BULK SAMPLE INVENTORY & ANALYTICAL RESULTS

| Sample Number | Homogeneous Material | Sample Location | Analytical Result |
|---------------|--|---|--------------------------|
| 78261-1 | Boiler insulation, exterior gray skim coat (Thermal system insulation) | Basement boiler room, north side of boiler | No asbestos detected NAD |
| 78261-2 | Boiler insulation, exterior gray skim coat (Thermal system insulation) | Basement boiler room, west side of boiler | NAD |
| 78261-3 | Boiler insulation, exterior gray skim coat (Thermal system insulation) | Basement boiler room, south side of boiler | NAD |
| 78261-4 | Boiler insulation, block type with blue tint (Thermal system insulation) | Basement boiler room, north side of boiler | NAD |
| 78261-5 | Boiler insulation, block type with blue tint (Thermal system insulation) | Basement boiler room, west side of boiler | NAD |
| 78261-6 | Boiler insulation, block type with blue tint (Thermal system insulation) | Basement boiler room, south side of boiler | NAD |
| 78261-7 | Vermiculite boiler refractory debris (Miscellaneous Material) | Basement boiler room, on floor along southeast side of boiler | NAD |
| 78261-8 | Vermiculite boiler refractory debris (Miscellaneous Material) | Basement boiler room, on floor along southwest side of boiler | NAD |
| 78261-9 | Vermiculite boiler refractory debris (Miscellaneous Material) | Basement boiler room, on floor along northwest side of boiler | NAD |
| 78261-10 | Ceiling joint compound (Miscellaneous Material) | Basement boiler room, ceiling west side | NAD |
| 78261-11 | Sheetrock ceiling (Miscellaneous Material) | Basement boiler room, ceiling west side | NAD |
| 78261-12 | Ceiling joint compound (Miscellaneous Material) | Basement boiler room, ceiling east side | NAD |
| 78261-13 | Sheetrock ceiling (Miscellaneous Material) | Basement boiler room, ceiling east side | NAD |
| 78261-14 | Sheetrock wall, outer layer (Miscellaneous Material) | Basement boiler room, north wall | NAD |
| 78261-15 | Sheetrock wall, inner layer (Miscellaneous Material) | Basement boiler room, north wall | NAD |

BULK SAMPLE INVENTORY & ANALYTICAL RESULTS

| Sample Number | Homogeneous Material | Sample Location | Analytical Result |
|---------------|---|---|-------------------------------|
| 78261-16 | Sheetrock ceiling panels, 4' x 4' (Miscellaneous Material) | Basement, room south of boiler room, east side of ceiling | NAD |
| 78261-17 | Sheetrock ceiling panels, 4' x 4' (Miscellaneous Material) | Basement, room south of boiler room, west side of ceiling | NAD |
| 78261-18 | Decorative ceiling coating (Surfacing Material) | Basement, women's bathroom, east side of ceiling | NAD |
| 78261-19 | Decorative ceiling coating (Surfacing Material) | Basement, women's bathroom, center of ceiling | NAD |
| 78261-20 | Decorative ceiling coating (Surfacing Material) | Basement, women's bathroom, west side of ceiling | NAD |
| 78261-21 | Sheetrock ceiling (Miscellaneous Material) | Basement, women's bathroom, center of ceiling (above decorative coating) | NAD |
| 78261-22 | Yellow carpet glue (pliable) (Miscellaneous Material) | Basement, television room | NAD |
| 78261-23 | Yellow carpet glue (brittle) (Miscellaneous Material) | Basement, hallway outside women's bathroom | NAD |
| 78261-24 | Yellow carpet glue (pliable) (Miscellaneous Material) | Basement, large meeting room (board game room) | NAD |
| 78261-25 | 2'x4' lay-in ceiling tile, white with worm & pin holes (Misc. Material) | Basement, television room, center of ceiling | NAD |
| 78261-26 | 2'x4' lay-in ceiling tile, white with worm & pin holes (Misc. Material) | Basement, large meeting room, center of ceiling | NAD |
| 78261-27 | Ceiling joint compound (Miscellaneous Material) | Basement, farthest west room (north of women's bathroom), center of ceiling | NAD |
| 78261-28 | Sheetrock ceiling (Miscellaneous Material) | Basement, farthest west room (north of women's bathroom), center of ceiling | NAD |
| 78261-29 | Wall joint compound (Miscellaneous Material) | Basement, large meeting room north side of wall | NAD |
| 78261-30 | Sheetrock wall (Miscellaneous Material) | Basement, large meeting room north side of wall | NAD |
| 78261-31 | Plaster wall (Surfacing Material) | 1 st floor, west storage closet, west wall | 2% Chrysotile Asbestos |
| 78261-32 | Plaster wall (Surfacing Material) | 1 st floor, southeast room, west wall | 2% Chrysotile Asbestos |
| 78261-33 | Plaster ceiling (Surfacing Material) | 1 st floor, southwest room, west side of ceiling | 2% Chrysotile Asbestos |
| 78261-34 | Brown fiberboard ceiling panel (Miscellaneous Material) | 1 st floor, gymnasium ceiling, west side | NAD |
| 78261-35 | Brown floor sheeting, old (Miscellaneous Material) | 1 st floor, west storage closet floor | NAD |

BULK SAMPLE INVENTORY & ANALYTICAL RESULTS

| Sample Number | Homogeneous Material | Sample Location | Analytical Result |
|---------------|--|--|-------------------------------|
| 78261-36 | Wall joint compound (Miscellaneous Material) | 1 st floor, former recreation office, west wall | NAD |
| 78261-37 | Sheetrock wall (Miscellaneous Material) | 1 st floor, former recreation office, west wall | NAD |
| 78261-38 | Wall joint compound (Miscellaneous Material) | 1 st floor, dining area (by kitchen), south wall | NAD |
| 78261-39 | Sheetrock wall (Miscellaneous Material) | 1 st floor, dining area (by kitchen), south wall | NAD |
| 78261-40 | Plaster wall (Surfacing Material) | 2 nd floor, east bathroom, south wall | NAD |
| 78261-41 | Plaster wall (Surfacing Material) | 2 nd floor, southwest room, south wall | 2% Chrysotile Asbestos |
| 78261-42 | Plaster wall (Surfacing Material) | 2 nd floor, west central room closet, east wall | 2% Chrysotile Asbestos |
| 78261-43 | Plaster wall (Surfacing Material) | 2 nd floor, northeast room, north wall | 2% Chrysotile Asbestos |
| 78261-44 | Wall joint compound "patch" (Miscellaneous Material) | 2 nd floor, stair area, north wall | NAD |
| 78261-45 | 2'x4' lay-in ceiling tile, orange fiber filler (Misc. Material) | 2 nd floor, southeast room, center of ceiling | NAD |
| 78261-46 | Vinyl floor sheeting, tan (Miscellaneous Material) | Basement, Community Justice Center area, kitchen floor | NAD |
| 78261-47 | 2'x4' lay-in ceiling tile, horizontal worm holes & pins (Misc. Material) | Basement, Community Justice Center area, kitchen, center of ceiling | NAD |
| 78261-48 | 2'x4' lay-in ceiling tile, horizontal worm holes & pins (Misc. Material) | Basement, Community Justice Center area, main lobby, center of ceiling | NAD |

INVENTORY OF CONFIRMED ASBESTOS-CONTAINING MATERIALS

| Homogeneous Area | Material Type | Material Condition | Material Location | Analytical Result | Approximate Quantity |
|----------------------------|----------------------|----------------------------|---|----------------------------------|----------------------|
| Plaster walls and ceilings | Surfacing Friable | <10% Distributed damage | Throughout 1 st floor and 2 nd floor (possible hidden basement locations) | 2% Chrysotile Asbestos | Not quantified |

INVENTORY OF PRESUMED ASBESTOS-CONTAINING MATERIALS

| Homogeneous Area | Material Type | Material Condition | Material Location | Approximate Quantity |
|---|--------------------------------------|--------------------|---|--|
| Non-fiberglass pipe & fitting insulation | Thermal system insulation Friable | Damaged | 1) Basement, above Community Justice Center ceilings 2) Basement, former Evidence Room 3) 1 st floor, south east storage room 4) 1 st floor, former recreation office 5) 1 st floor, storage closet 6) 1 st floor, large west room (debris underneath black rubber pipe insulation 7) Possible hidden locations in other sections of basement | ~ 75 linear feet ~ 30 linear feet ~ 23 linear feet ~ 12 linear feet ~ 10 linear feet ~ 10 linear feet |
| Internal boiler gaskets, refractory and packing materials | Miscellaneous Friable | Unknown | Basement boiler room - | <10 square feet |

The following is a list of building materials that were sampled and not found to contain asbestos:

- Sheetrock and joint compound
- Suspended ceiling tiles
- Sheetrock and fiberboard ceiling panels
- Decorative ceiling coatings
- Vinyl floor sheeting
- Carpet adhesives
- Insulation on the exterior of the boiler (internal components presumed to contain asbestos)

RENOVATION REQUIREMENTS

Friable ACM or PACM is an asbestos-containing material that when dry can be crumbled, pulverized, or reduced to powder by hand pressure, or a non-friable material that has been made friable by actions such as, but not limited to, sanding, grinding, sawing, abrading, and etc. The following regulatory agencies have regulations in effect when removing/disturbing friable ACM:

Vermont Department of Health - Vermont Regulations for Asbestos Control “VRAC” - V.S.A. Title 18, Chapter 26, requires that all friable ACM that will be disturbed by renovation or demolition activities be properly removed prior to disturbance. VRAC requires the use of Vermont Certified Asbestos Abatement Entities to remove these materials. The work must be performed in accordance with VRAC Section 2.4.2. **The Asbestos Abatement Entity must notify the Vermont Department of Health in writing 10 working days prior to commencing removal activities and obtain a Project Permit.**

Occupational Safety & Health Administration - Title 29 Code of Federal Regulations (“CFR”) 1926.1101 *Asbestos Standard for the Construction Industry* considers these materials Class I asbestos work (thermal system insulation). With the exception of respiratory protection, VRAC has more stringent requirements when removing friable ACM.

U.S. Environmental Protection Agency - Title 40 CFR Part 61 *National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule* regulates the removal of friable ACM whenever 1) a “facility” will be demolished or 2) a “facility” being renovated will disturb quantities of regulated asbestos-containing materials (RACM) in excess of 160 square feet or 260 linear feet. VRAC has more stringent requirements when removing friable ACM. **The USEPA Region 1 office must be notified in writing 10 working days (from the date of postmark) prior to commencing removal activities.**

HAZARD COMMUNICATION REQUIREMENTS

This section applies to the communication of information concerning asbestos hazards in construction & general industry to facilitate compliance with OSHA 1926.1101 (construction) and 1910.1001 (general industry). Building owners are often the only and/or best sources of information concerning the presence of previously installed ACM. Therefore they, along with employers of potentially exposed employees, are assigned hazard communication duties.

Building and/or facility owners must notify the following persons of the presence, location and quantity of ACM or PACM, at the work sites in their buildings and facilities. Notification shall be either in writing, or shall consist of a personal communication between the owner and the person to whom notification must be given or their authorized representatives:

- **Prospective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;**
- Employees of the owner who will work in or adjacent to areas containing such material;
- On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing such material; and
- **Tenants who will occupy areas containing such material.**

Disclaimers:

All samples, unless noted, were analyzed by Polarized Light Microscopy “PLM” in accordance with EPA test method 40 CFR Part 763, Subpart F.

Some suspect materials may be present in locations such as behind walls, in chases, above rigid ceilings, inside crawl spaces, etc. that were not visible or accessible to the Inspector. In the event suspect materials not identified in this report are discovered through demolition/renovation activities, the discovered material must be presumed as asbestos-containing and treated accordingly.

Please call our office at 802-888-1936 if you have any questions regarding this report or if you need further information.

Thanks for allowing us to conduct this inspection for you.

Best regards,

R. Chris Crothers, Principal
Vermont Licensed Asbestos Consulting Entity #CE468388 (expiration date 4/6/08)

enclosures: Laboratory Analysis Sheets
Asbestos Inspector & Laboratory Licenses

cc:  CEG78261

ASBESTOS CONSULTING ENTITY

CROTHERS ENVIRONMENTAL GROUP
24 LANGDELL ROAD
MORRISVILLE VT 05661

Vermont Department of Health
Drawer 30
P.O. Box 70
Burlington, VT 05402

LICENSE: CE468388

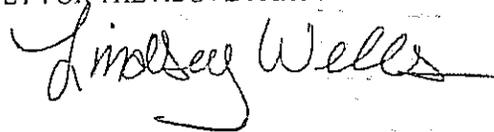
EXPIRES: Monday, April 06, 2009

CERTIFICATE OF LICENSE
VERMONT ASBESTOS REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED
OR VOIDED BEFORE THAT TIME.

THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

THIS CERTIFICATE IS FOR OFFICE USE ONLY.



ASBESTOS INSPECTOR/MANAGEMENT PLANNER

R. CHRIS CROTHERS
CROTHERS ENVIRONMENTAL GROUP 24 LANGDELL ROAD
MORRISVILLE VT 05661

Vermont Department of Health
Drawer 30
P.O. Box 70
Burlington, VT 05402

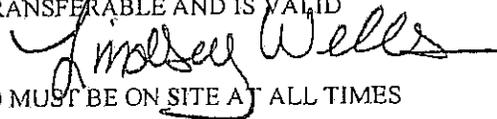
LICENSE: MP015509

EXPIRES: Sunday, April 26, 2009

CERTIFICATE OF LICENSE
VERMONT ASBESTOS REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED
OR VOIDED BEFORE THAT TIME. THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID
ONLY FOR THE ABOVE PARTY.

THIS CERTIFICATE IS FOR OFFICE USE ONLY. PHOTO ID CARD MUST BE ON SITE AT ALL TIMES





EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936 -

Project: **78261/ST. JOHNSBURY RECREATION CENTER**
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|---------------------------|---|----------------------------------|---------------|-------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-1 040828045-0001 | BASEMENT BOILER ROOM - N. SIDE OF BOILER | Gray Fibrous Heterogeneous | 20% Min. Wool | 80% Non-fibrous (other) | None Detected |
| 78261-2 040828045-0002 | BASEMENT BOILER ROOM - W. SIDE OF BOILER | Gray Fibrous Heterogeneous | 25% Min. Wool | 75% Non-fibrous (other) | None Detected |
| 78261-3 040828045-0003 | BASEMENT BOILER ROOM - S. SIDE OF BOILER | Gray Fibrous Heterogeneous | 25% Min. Wool | 75% Non-fibrous (other) | None Detected |
| 78261-4 040828045-0004 | BASEMENT BOILER ROOM - N. SIDE OF BOILER | Blue Fibrous Heterogeneous | 10% Synthetic | 90% Non-fibrous (other) | None Detected |
| 78261-5 040828045-0005 | BASEMENT BOILER ROOM - W. SIDE OF BOILER | Blue Fibrous Heterogeneous | 10% Synthetic | 90% Non-fibrous (other) | None Detected |
| 78261-6 040828045-0006 | BASEMENT BOILER ROOM - S. SIDE OF BOILER | Blue Fibrous Heterogeneous | 20% Synthetic | 80% Non-fibrous (other) | None Detected |

Analyst(s)

Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (056) 858-4000 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax:
Project: **78261/ST. JOHNSBURY RECREATION CENTER**
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA-600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|----------------------------|---|---|---------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-7 040828045-0007 | BASEMENT BOILER ROOM - S.E. SIDE OF BOILER | Various Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-8 040828045-0008 | BASEMENT BOILER ROOM - S.W. SIDE OF BOILER | Various Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-9 040828045-0009 | BASEMENT BOILER ROOM - N.W. SIDE OF BOILER | Various Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-10 040828045-0010 | BASEMENT BOILER ROOM WEST SIDE OF CEILING | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-11 040828045-0011 | BASEMENT BOILER ROOM WEST SIDE OF CEILING | Brown/White Fibrous Heterogeneous | 30% Cellulose | 70% Non-fibrous (other) | None Detected |
| 78261-12 040828045-0012 | BASEMENT BOILER ROOM EAST SIDE OF CEILING | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |

Analys(s)
Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936
Project: **78261/ST. JOHNSBURY RECREATION CENTER**
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|----------------------------|--|---|---------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-13 040828045-0013 | BASEMENT BOILER ROOM EAST SIDE OF CEILING | Brown/White Fibrous Heterogeneous | 45% Cellulose | 55% Non-fibrous (other) | None Detected |
| 78261-14 040828045-0014 | BASEMENT BOILER ROOM NORTH WALL OF CEILING | Brown/White Fibrous Heterogeneous | 40% Cellulose | 60% Non-fibrous (other) | None Detected |
| 78261-15 040828045-0015 | BASEMENT BOILER ROOM NORTH WALL OF CEILING | Gray Fibrous Heterogeneous | 25% Cellulose | 75% Non-fibrous (other) | None Detected |
| 78261-16 040828045-0016 | BASEMENT ROOM SOUTH OF BOILER ROOM, E. SIDE | Brown/White Fibrous Heterogeneous | 40% Cellulose | 60% Non-fibrous (other) | None Detected |
| 78261-17 040828045-0017 | BASEMENT ROOM SOUTH OF BOILER ROOM, W. SIDE | Brown/White Fibrous Heterogeneous | 45% Cellulose | 55% Non-fibrous (other) | None Detected |
| 78261-18 040828045-0018 | BASEMENT WOMENS BATHROOM, EAST SIDE | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |

Analyst(s)

Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #1D1048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontashlab@EMSL.com

Attn: Chris Crothers
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936
Project: 78261/ST. JOHNSBURY RECREATION CENTER
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Table with 6 columns: Sample, Location, Appearance, % Fibrous, % Non-Fibrous, Asbestos % Type. Rows include samples 78261-19 through 78261-25 with details on location (e.g., BASEMENT WOMENS BATHROOM) and appearance (e.g., White, Yellow, Gray).

Analyst(s)
Erica Valent (48)

Signature of Stephen Siegel
Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4808 Fax: (856) 858-4960 Email: westmontashlab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936
Project: 78261/ST. JOHNSBURY RECREATION CENTER
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|----------------------------|--|--|--------------------------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-26 040828045-0026 | BASEMENT - LARGE MEETING ROOM - CENTER | Gray Fibrous Heterogeneous | 45% Cellulose 30% Min. Wool | 25% Non-fibrous (other) | None Detected |
| 78261-27 040828045-0027 | BASEMENT - FAR WEST ROOM - CENTER | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-28 040828045-0028 | BASEMENT - FAR WEST ROOM - CENTER | White Fibrous Heterogeneous | 35% Cellulose | 65% Non-fibrous (other) | None Detected |
| 78261-29 040828045-0029 | BASEMENT - LARGE MEETING ROOM - N. WALL | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-30 040828045-0030 | BASEMENT - LARGE MEETING ROOM - N. WALL | White Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (other) | None Detected |
| 78261-31 040828045-0031 | 1ST FLOOR - WEST STORAGE CLOSET - WEST WALL | Gray/White Fibrous Heterogeneous | 15% Cellulose | 82% Non-fibrous (other) | 3% Chrysotile |
| 78261-32 040828045-0032 | 1ST FLOOR - S.E. ROOM, EAST WALL | Gray/White Fibrous Heterogeneous | 15% Cellulose | 83% Non-fibrous (other) | 2% Chrysotile |

Analyst(s)

Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (056) 858-4800 Fax: (056) 858-4960 Email: westmontashlab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045
EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Fax: Phone: (802) 888-1936
Project: **78261/ST. JOHNSBURY RECREATION CENTER**
BUILDING - ST. JOHNSBURY, VT

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|----------------------------|--|---|---------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-33 040828045-0033 | 1ST FLOOR - S.W. ROOM, WEST SIDE OF CEILING | Gray/White Fibrous Heterogeneous | 15% Cellulose | 83% Non-fibrous (other) | 2% Chrysotile |
| 78261-34 040828045-0034 | 1ST FLOOR - GYM CEILING, WEST SIDE | Brown/White Fibrous Heterogeneous | 75% Cellulose | 25% Non-fibrous (other) | None Detected |
| 78261-35 040828045-0035 | 1ST FLOOR - WEST STORAGE CLOSET | Brown Fibrous Heterogeneous | 75% Cellulose | 25% Non-fibrous (other) | None Detected |
| 78261-36 040828045-0036 | 1ST FLOOR - REC OFFICE, WEST WALL | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-37 040828045-0037 | 1ST FLOOR - REC OFFICE, WEST WALL | Pink Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (other) | None Detected |
| 78261-38 040828045-0038 | 1ST FLOOR - DINING AREA - SOUTH WALL | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-39 040828045-0039 | 1ST FLOOR - DINING AREA - SOUTH WALL | White Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (other) | None Detected |

Analyst(s) _____

Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontlab@EMSL.com

Attn: **Chris Crothers**
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936
Project: **78261/ST. JOHNSBURY RECREATION CENTER**
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

| Sample | Location | Appearance | Non-Asbestos | | Asbestos |
|----------------------------|---|--|---------------|--------------------------|---------------|
| | | | % Fibrous | % Non-Fibrous | % Type |
| 78261-40 040828045-0040 | 2ND-FLOOR -EAST BATHROOM - SOUTH WALL | Gray Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-41 040828045-0041 | 2ND FLOOR SW ROOM - SOUTH WALL | Gray/White Non-Fibrous Heterogeneous | | 98% Non-fibrous (other) | 2% Chrysotile |
| 78261-42 040828045-0042 | 2ND FLOOR WEST CENTRAL ROOM CLOSET - EAST WALL | Gray/White Non-Fibrous Heterogeneous | | 98% Non-fibrous (other) | 2% Chrysotile |
| 78261-43 040828045-0043 | 2ND FLOOR NE ROOM - NORTH WALL | Gray/White Non-Fibrous Heterogeneous | | 97% Non-fibrous (other) | 3% Chrysotile |
| 78261-44 040828045-0044 | 2ND FLOOR STAIR AREA - NORTH WALL | White Non-Fibrous Heterogeneous | | 100% Non-fibrous (other) | None Detected |
| 78261-45 040828045-0045 | 2ND FLOOR SE ROOM | Brown Fibrous Heterogeneous | 95% Cellulose | 5% Non-fibrous (other) | None Detected |
| 78261-46 040828045-0046 | BASEMENT, KITCHEN | Tan/Gray Fibrous Heterogeneous | 20% Cellulose | 80% Non-fibrous (other) | None Detected |

Analyst(s) _____

Erica Valent (48)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontashlab@EMSL.com

Attn: Chris Crothers
Crothers Environmental Group
24 Langdell Road
Morrisville, VT 05661

Customer ID: CROT30
Customer PO:
Received: 10/30/08 9:30 AM
EMSL Order: 040828045

Fax: Phone: (802) 888-1936
Project: 78261/ST. JOHNSBURY RECREATION CENTER
BUILDING - ST. JOHNSBURY, VT

EMSL Proj:
Analysis Date: 10/31/2008
Report Date: 11/1/2008

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Table with 7 columns: Sample, Location, Appearance, % Fibrous, % Non-Fibrous, % Type. Contains two rows of data for samples 78261-47 and 78261-48.

CERTIFICATION #PB647790

Analyst(s)

Erica Valent (48)

Handwritten signature of Stephen Siegel

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10672

APPENDIX 5

PHOTOGRAPHIC PLATES



Plate 1 Armory Building, 1249 Main Street, Saint Johnsbury VT. April 26, 2012



Plate 2. Close up of Armory exterior area where USTs were removed. Former UST area is covered with gravel.



Plate 3. North side of Armory building. Note striations on pavement. These are presumably related to Town's maintenance of ice buildup along exterior wall in winter.



Plate 4. South side of Armory building. Front of access ramp roofing visible left front.



Plate 5. Southwest corner of Armory building. Covered access ramp with discarded paint containers.



Plate 6. Interior Armory building. First floor gymnasium.



Plate 7 Interior of Armory Building April 26, 2012. 2nd floor. Note water on floor from leaks.



Plate 8 Interior view Armory building. Basement level, south center of building.



Plate 9. Interior Armory building, basement level, west center. Note filled-in structure suggests former floor drain location.



Plate 10. Grated opening approximately 8-10 feet north of filled-in structure in west center of basement.



Plate 11. Floor sump pump in northwest portion of Armory building basement.



Plate 12. Out of Service boiler with suspect ACMs in northeast portion of basement.



Plate 13. Approximate 3 ft. x 3 ft. x 2 ft vault (steel cover lifted off) with 6" iron pipe inside. Located in northeast corner of Armory building basement.

APPENDIX 6

USER'S QUESTIONNAIRE

USER QUESTIONNAIRE¹

A. GENERAL BACKGROUND INFORMATION:

1. Name and Address of Facility:

(former) St. Johnsbury Recreation Center
(former) National Guard Armory
1249 Main Street (used to be 50 Main)
St. Johnsbury, Ut 05819
(Telephone)

2. Name and position of person responding to this Questionnaire:

Peggy PEARL - Director of St. Johnsbury History & Heritage Center

B. USER SUPPLIED INFORMATION

(1.) **Environmental Cleanup liens that are filed or recorded against the Site (40 CFR 312.25).**

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

NO

(2.) **Activity and land use limitations that are in place at the site or that have been filed or recorded in a registry (40CFR 312.26).**

Are you aware of any AULs such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal tribal, state or local law?

NO

¹ In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments") the User must provide the above-listed information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).

As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemical and processes used by this type of business?

NO

(4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

NO + NO

(5.) Commonly known or reasonable ascertainable information about the property (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example as user:

(a.) Do you know the past uses of the property?

National Guard Armory; Recreation Center;
Community Center; Police Department

(b.) Do you know the specific chemicals that are present or once were present at the property?

oil + gasoline tanks

(c.) Do you know of spills or other chemical releases that have taken place at the property?

NO

(d.) Do you know of any environmental cleanups that have taken place at the property?

underground storage tank removal

(6.) **The degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence of likely presence of contamination at the property?

NO

SUBMITTED BY:

St. Johnsburg History & Heritage Center
(Firm/Company Name/Corporation)

March 27, 2012
(Date)

Peggy Pearl
(BY)

Director
(Title)

Peggy Pearl
(Signature)