March 10, 2020

Ms. Shauna Little
U.S. Environmental Protection Agency
Office of Ecosystem Protection
EPA/OEP RGP Applications Coordinator
5 Post Office Square - Suite 100 (OEP06-01)
Boston, MA 02109-3912

Notice of Intent for Application of a Remediation General Permit
Cumberland Farms, Inc. Property #MA8427
64 Steven Street
Fall River, MA 02721

To Whom It May Concern:

Kleinfelder, on behalf of Cumberland Farms, Inc. (CFI), has prepared the enclosed Notice of Intent (NOI), included as Attachment A, for application of Remediation General Permit (RGP) for upcoming activities at Cumberland Farms, Inc. Property #MA8427, located at 64 Stevens Street in Fall River, Massachusetts. This NOI is for the discharge anticipated to be generated during temporary groundwater dewatering activities associated with the excavation required for the foundation of a 4,384 square foot convenience store, installation of a fuel dispenser area with a canopy structure, and installation of two 24,000 gallon compartmental underground storage tanks (USTs) containing either gasoline and/or diesel fuel. Refer to Attachment B for Figure 1 for a Site Location Plan, Figure 2 for a Site Plan and Proposed Construction Plan, and to Figure 3 for a NOI Extent Map.

Groundwater Characterization

Depth to water across the site has been gauged to be approximately 3.40 to 9.80 feet below ground surface. In preparation for groundwater dewatering activities, a representative groundwater sample was collected on February 7, 2020. The sample was submitted to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts for analysis of Volatile Organic Compounds (VOCs) via EPA method 624.1, Semivolatile Organic Compounds (SVOCs) via EPA method 625.1, Polychlorinated Biphenyls (PCBs) via EPA method 608.3, Metals (total and dissolved) via EPA methods 200.7, 200.8, and 245.1, phenol via EPA method 420.1, total petroleum hydrocarbons (TPH) silica gel treated HEM via EPA method 1664B, and conventional chemistry parameters (chloride, residual chloride, hexavalent chromium, pH, cyanide, ammonia, and total suspended solids). Groundwater temperature (36.7 degrees Fahrenheit) was recorded as part of groundwater sampling activities on February 7, 2020.

Based on the groundwater analytical results derived from the February 2020 groundwater sampling event, total suspended solids, total arsenic, total cadmium, total trivalent chromium, total iron, total lead, total nickel, and total zinc were detected above applicable Technology Based Effluent Limitations (TBEL) and/or Water Quality Based Effluent Limitations (WQBEL). Note that

concentrations of dissolved metals were either below applicable effluent limitations and/or laboratory detection limits.

Concentrations of total residual chlorine, total PCBs, and TPH were below laboratory reporting limits, however, the laboratory reporting limits exceeded applicable TBELs and/or WQBELs. Laboratory reporting limits for total residual chlorine and total PCBs also exceeded the applicable compliance level concentrations of 0.05 milligrams per liter (mg/L) and 0.5 micrograms per liter (ug/L), respectively. Results were reported to the method detection limits for these compounds, with the exception of total residual chlorine, and were not detected with method detection limits below TBELs, WQBELs and/or compliance levels. PCBs and total residual chlorine are not believed to be present within site groundwater. TPH is expected to be present based on previous soil and groundwater analytical data unrelated to RGP activities. Note that total residual chlorine has an elevated reporting limit due to matrix interference during laboratory analysis.

All appropriate groundwater analytical methodologies were implemented in conformance with Appendix VII of the Remediation General Permit (RGP). Groundwater analytical results from the February 2020 groundwater sampling event are included as Attachment C.

Receiving Water Characterization

Treated effluent will be discharged to the wetland area located at the eastern portion of the site. This area of wetland discharges to Quequechan River, located to the north.

The wetland/pond receiving water was sampled on February 7, 2020. The surface water sample was submitted to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts for analysis of total metals via EPA Method 200.7, 200.8, and 245.1, ammonia via SM19-22 4500 NH3 C, and conventional chemistry parameters (hexavalent chromium via SM21-22 3500 Cr B and pH). Temperature of the wetland/pond receiving water (35.4 degrees Fahrenheit) was measured as part of the February 7, 2020 sampling activities.

The unnamed wetland/pond receiving water eventually drains to Quequechan River, waterbody identification MA61-05, which is classified as a class B waterbody within the state of Massachusetts. Receiving water analytical results are included as Attachment D.

Proposed Treatment System

A Design Flow treatment system discharge rate of 150 gallons per minute (gpm) was used to evaluate the applicable RGP discharge standards. Extracted water from the excavation activities will be initially pumped into up to two 21,000-gallon fractionation tanks.

Following settling, extracted groundwater will be treated by passage through (at minimum) 50-micron particle filters, and through liquid-phase reactive carbon vessels. Flow will be measured using an in-line flowmeter and totalizer prior to the discharge into the wetland at the eastern portion of the property.

Kleinfelder anticipates that the dewatering system will operate from approximately June 2020 through April 2021. A Work Plan for the groundwater extraction and treatment systems satisfying the requirements of Section 2.5 of the RGP will be available at the Site prior to initiating dewatering activities. See Attachment B, Figure 4 for a Treatment System Schematic.

Notice of Intent
Preparation of this NOI has included a review of the literature pertaining to Areas of Critical Environmental Concern (ACECs), the Endangered Species Act, and the National Historic Preservation Act:

- Review of the Massachusetts Geographic Information Systems MassDEP Priority Resources Map (Figure 5) shows the Site is not within an ACEC.
- An "informal consultation" with the Fish and Wildlife Service resulted in a consistency letter stating that, although a threatened species may exist within the project site area (Northern Long-eared Bat or *Myotis septentrionalis*), groundwater discharge into the unnamed wetland/pond is "not likely" to result in unauthorized take of the threatened species. Furthermore, no critical habitats were found within the project defined area. The Fish and Wildlife Service consistency letter and official list of threatened and endangered species has been provided as Attachment E.
- According to the National Park Service's National Register of Historic Places and the Massachusetts Cultural Resource Information System (MACRIS), the 64 Stevens Street property located in Fall River, Massachusetts is located within the Quequechan Valley Mills Historic District and is a designated part of the Fall River Multiple Resource Area (Attachment F). Based on historical information reviewed including aerial photographs, Sanborn maps and topographic maps, provided in Attachment G, the 64 Stevens Street property historically contained a building utilized as part of a local textile mill, which was demolished between 2005 and 2008. The property was developed with a bank building in 1996 until it was demolished in 2019. Based on available records and visual observation, there are no aboveground historic mill building remains located within the 64 Stevens Street property. Considering the property's re-development history and the removal of a contributing historic building from the property, the discharge activities associated with temporary dewatering of groundwater for the installation of USTs and/or other structures for a proposed fueling station would not affect the Quequechan Valley Mills Historic District or the Fall River Multiple Resource Area. Research related to the site's historical and current uses can be found in Attachment F.

The proposed treatment system has been designed to reduce contaminants of concern below the applicable effluent limits. Effluent compliance monitoring will be conducted in compliance with the RGP. Additionally, the flow rate, pH, and temperature of the effluent will be monitoring in the field and recorded.

We appreciate your assistance in processing this Notice of Intent.

Should you have any questions regarding this correspondence, please do not hesitate to contact the undersigned at (617)497-7800.

Sincerely,
KLEINFELDER

Joseph Fontaine
Staff Professional

Emily M. Straley
Project Manager

cc: Mr. Matthew Young, Cumberland Farms, Inc. (file)
cc: John Brandt, Chairman, Fall River Conservation Commission (electronic)
cc: Cathy Vakalopoulos, Massachusetts Department of Environmental Protection, Surface Water Discharge Permit Program, One Winter Street, 5th Floor, Boston, MA 02108

Attachments:

Attachment A – RGP NOI Form
Attachment B – WQBEL Calculations
Attachment C – Groundwater Laboratory Analytical Data
Attachment D – Receiving Water Laboratory Analytical Data
Attachment E – Fish and Wildlife Service Consistency Letter and Official List of Threatened and Endangered Species
Attachment F – Historic Properties Information

Figure 1 – Locus Plan
Figure 2 – Site Plan and Proposed Construction
Figure 3 – NOI Map
Figure 4 – Treatment System Schematic
Figure 5 – MassDEP Priority Resource Map

ATTACHMENT A

RGP NOI Form

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="3">1. Name of site:
Proposed Convenience Store, Fuel Station, and Car Wash</td><td colspan="3">Site address: 64 Stevens Street
Street:</td></tr>
<tr><td>City: Fall River</td><td>State: MA</td><td>Zip: 02721</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td rowspan="4">2. Site owner
Robert G. Kfoury, as Trustee of RKG Realty Trust

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Robert G. Kfoury, as Trustee of RKG Realty Trustc/o Bruce A. Assad, Esq</td></tr>
<tr><td colspan="2">Telephone:</td><td>Email:</td></tr>
<tr><td colspan="3">Mailing address: 16 Bedford Street
Street:</td></tr>
<tr><td>City: Fall River</td><td>State: MA</td><td>Zip: 02720</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Cumberland Farms</td><td colspan="3">Contact Person: Matthew Young</td></tr>
<tr><td colspan="2">Telephone: 508-270-4477</td><td>Email: myoung@cumberlandfarms.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 165 Flanders Rd</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ■ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
☐ MA Chapter 21e; list RTN(s):
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Quequechan River	MA61-05	5

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ■ Yes ☐ No
If yes, specify: Receiving water includes a wetland

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. The Quequechan River (receiving water) is listed as Category 5, Waters requiring a TMDL. Impairments: Pollutants - Algae Dissolved Oxygen

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	N/A
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	No Dilution

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received:

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Ethylbenzene, m/p-xylene, o-xylene, iron, copper, arsenic, cadmium, chromium, lead, nickel, selenium, zinc, chloride, phenol, a	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): Wetland area	Outfall location(s): (Latitude, Longitude) 41°40'53.0"N 71°08'30.9"W
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge to wetland draining to receiving water ☐ A private storm sewer system ☐ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ☐ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: N/A Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): June 2020 - April 2021 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
■ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
■ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✔	1	SM19-22	0.048		0.12	Report mg/L	---
Chloride		✔	1	EPA 300.0	10000		200000	Report µg/l	---
Total Residual Chlorine	✔		1	SM21-22	1.0		<1.0 mg/L	0.2 mg/L	0.011 mg/L
Total Suspended Solids		✔	1	SM21-22	3.8		3100 mg/L	30 mg/L	---
Antimony	✔		1	EPA 200.8	1.0		<1.0	206 µg/L	640 µg/L
Arsenic		✔	1	EPA 200.8	0.80		13	104 µg/L	10 µg/L
Cadmium		✔	1	EPA 200.8	0.20		1.2	10.2 µg/L	0.3655 µg/L
Chromium III		✔	1	Tri-chrom			370	323 µg/L	120.1 µg/L
Chromium VI	✔		1	SM21-22	4.0		<4.0	323 µg/L	11.4 µg/L
Copper		✔	1	EPA 200.8	1.0		110	242 µg/L	13.2 µg/L
Iron		✔	1	EPA 200.7	50		44,000	5,000 µg/L	1000 µg/L
Lead		✔	1	EPA 200.8	0.50		84	160 µg/L	5.33 µg/L
Mercury	✔		1	EPA 245.1	0.10		<0.10	0.739 µg/L	0.91 µg/L
Nickel		✔	1	EPA 200.8	5.0		82	1,450 µg/L	73.5 µg/L
Selenium		✔	1	EPA 200.8	1.6		3.0	235.8 µg/L	5.0 µg/L
Silver	✔		1	EPA 200.8	0.20		<0.20	35.1 µg/L	7.6 µg/L
Zinc		✔	1	EPA 200.8	10		340	420 µg/L	168.9 µg/L
Cyanide	✔		1	SM21-22	0.005		<0.005 mg/L	178 mg/L	5.2 µg/L
B. Non-Halogenated VOCs									
Total BTEX		✔	1	624.1	0.13		1.05	100 µg/L	---
Benzene	✔		1	624.1	0.180		<0.180	5.0 µg/L	---
1,4 Dioxane	✔		1	624.1	22.5		<22.5	200 µg/L	---
Acetone	✔		1	624.1	0.00379		<0.00379 mg/L	7.97 mg/L	---
Phenol		✔	1	EPA 420.1	50		120	1,080 µg/L	300 µg/L

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		1	624.1	0.110		<0.110	4.4 µg/L	1.6 µg/L
1,2 Dichlorobenzene	✔		1	624.1	0.160		<0.160	600 µg/L	---
1,3 Dichlorobenzene	✔		1	624.1	0.120		<0.120	320 µg/L	---
1,4 Dichlorobenzene	✔		1	624.1	0.130		<0.130	5.0 µg/L	---
Total dichlorobenzene	✔		1	624.1	0.41		<0.41	763 µg/L in NH	---
1,1 Dichloroethane	✔		1	624.1	0.160		<0.160	70 µg/L	---
1,2 Dichloroethane	✔		1	624.1	0.410		<0.410	5.0 µg/L	---
1,1 Dichloroethylene	✔		1	624.1	0.320		<0.320	3.2 µg/L	---
Ethylene Dibromide	✔							0.05 µg/L	---
Methylene Chloride	✔		1	624.1	0.340		<0.340	4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	624.1	0.200		<0.200	200 µg/L	---
1,1,2 Trichloroethane	✔		1	624.1	0.160		<0.160	5.0 µg/L	---
Trichloroethylene	✔		1	624.1	0.240		<0.240	5.0 µg/L	---
Tetrachloroethylene	✔		1	624.1	0.180		<0.180	5.0 µg/L	3.3 µg/L
cis-1,2 Dichloroethylene	✔		1	624.1	0.130		<0.130	70 µg/L	---
Vinyl Chloride	✔		1	624.1	0.450		<0.450	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	625.1	53.6		<53.6	190 µg/L	---
Diethylhexyl phthalate	✔		1	625.1	1.1		<1.1	101 µg/L	2.2 µg/L
Total Group I PAHs	✔		1	625.1	0.856		<0.856	1.0 µg/L	---
Benzo(a)anthracene	✔		1	625.1	0.053		<0.053	As Total PAHs	0.0038 µg/L
Benzo(a)pyrene	✔		1	625.1	0.11		<0.11		0.0038 µg/L
Benzo(b)fluoranthene	✔		1	625.1	0.053		<0.053		0.0038 µg/L
Benzo(k)fluoranthene	✔		1	625.1	0.21		<0.21		0.0038 µg/L
Chrysene	✔		1	625.1	0.21		<0.21		0.0038 µg/L
Dibenzo(a,h)anthracene	✔		1	625.1	0.11		<0.11		0.0038 µg/L
Indeno(1,2,3-cd)pyrene	✔		1	625.1	0.11		<0.11		0.0038 µg/L

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs	✔		1	625.1	42.08		<42.08	100 µg/L	---
Naphthalene	✔		1	625.1	5.26		<5.26	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	608.3	0.611		<0.611	0.000064 µg/L	---
Pentachlorophenol	✔		1	625.1	1.1		<1.1	1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✔	1	1664	3.4		<3.4	5.0 mg/L	---
Ethanol	✔		1	624.1	0.0105		<0.0105	Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	624.1	0.250		<0.250	70 µg/L	20 µg/L
tert-Butyl Alcohol	✔		1	624.1	4.17		<4.17	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	624.1	0.140		<0.140	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH			1	SM21-22			6.3 pH Units		
Hardness			1	EPA 200.7	1400		150000		
Temperature			1	Thermome			36.7 degrees		

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.

Influent groundwater will first enter up to two 21,000 gallon fractionation tanks (in series if two). Groundwater will then flow through a series of (at a minimum) 50 micron size particle bag filters, then through granulated activated carbon (GAC) vessel(s). Treated groundwater will be discharged at the designated discharge location (adjacent wetland area). The volume of water being discharged will be tracked using a flow totalizer.

Identify each major treatment component (check any that apply):

■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ■ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):

☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: pump Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	150
Provide the proposed maximum effluent flow in gpm.	150
Provide the average effluent flow in gpm.	50
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive? (check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

☐ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

■ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ■ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ☐ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ☐ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

☐ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

■ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ☐ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:	I certify that a BMPP meeting the requirements of this general permit will be developed and implemented upon initiation of discharge
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ☐ No ☐ NA ■
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ☐ NA ■
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: Matthew D. Young	Date: 03/10/2020
Print Name and Title: Matthew D. Young	

ATTACHMENT B

Figures

SOURCE :
USGS 7.5' TOPOGRPAHIC MAP, FALL RIVER
MASSACHUSETTS QUADRANGLE LOCATON

KLEINFELDER
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www.kleinfelder.com

PROJECT NO.	MA8427
DRAWN:	JANUARY 2019
DRAWN BY:	CTH
CHECKED BY:	
FILE NAME:	MA8427_LOCUS.mxd

SUBJECT PROPERTY LOCATION MAP

CUMBERLAND FARMS INC. #MA8427
64 STEVENS STREET
FALL RIVER, MASSACHUSETTS

FIGURE

1

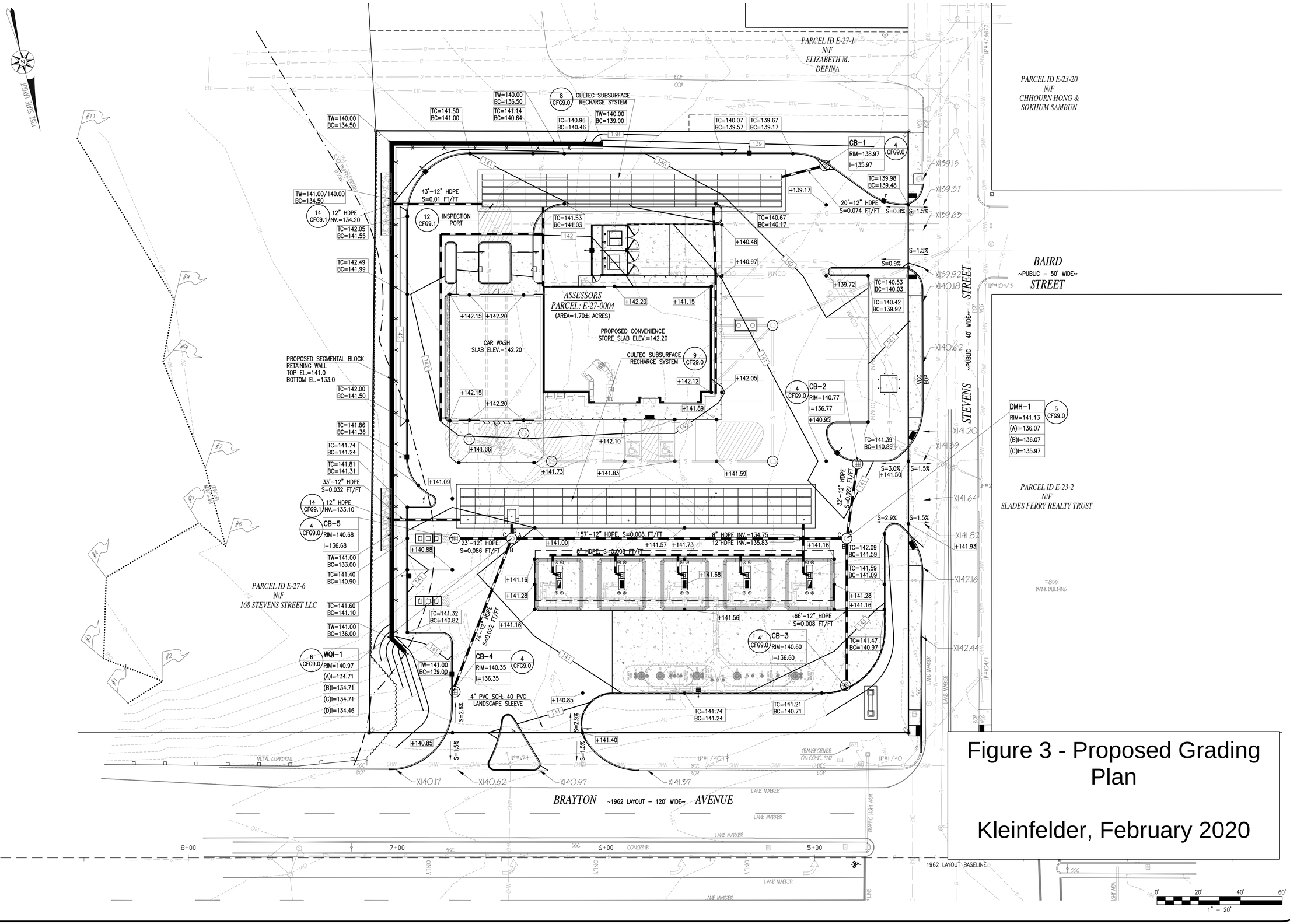

Figure 3 - Proposed Grading Plan

Kleinfelder, February 2020

REVISIONS

1	100419	PER REV. COMMENTS

COMMONWEALTH OF MASSACHUSETTS
CHRISTIAN ALBERT FARLAND
No. 47544
CIVIL
REGISTERED PROFESSIONAL ENGINEER

FARLAND CORP.
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401 COUNTY STREET
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OFFICES IN:
- TAUNTON
- MARLBOROUGH
- WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: JKM
CHECKED BY: CAF

SITE PLAN

64 STEVENS STREET
ASSESSORS PARCEL ID: E-27-4
FALL RIVER, MASSACHUSETTS

PREPARED FOR: T.M. CROWLEY & ASSOCIATES
14 BREAKNECK HILL ROAD, SUITE 101
LINCOLN, RI 02865

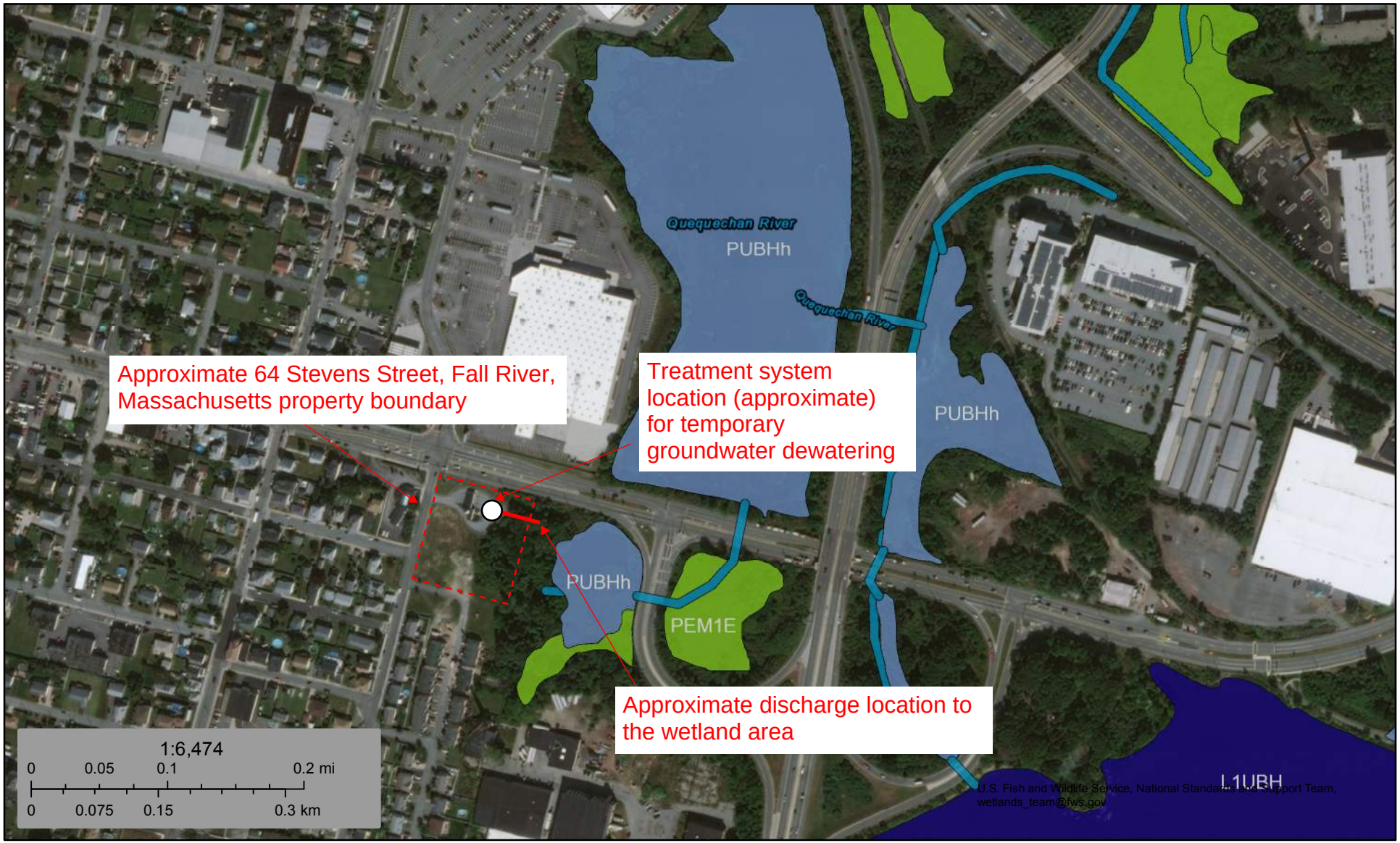
JULY 12, 2019
SCALE: 1"=20'
JOB NO. 16-162
LATEST REVISION: 100419

SITE DRAINAGE & GRADING PLAN

CFG05.0

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 3 - NOI Figure



March 4, 2020

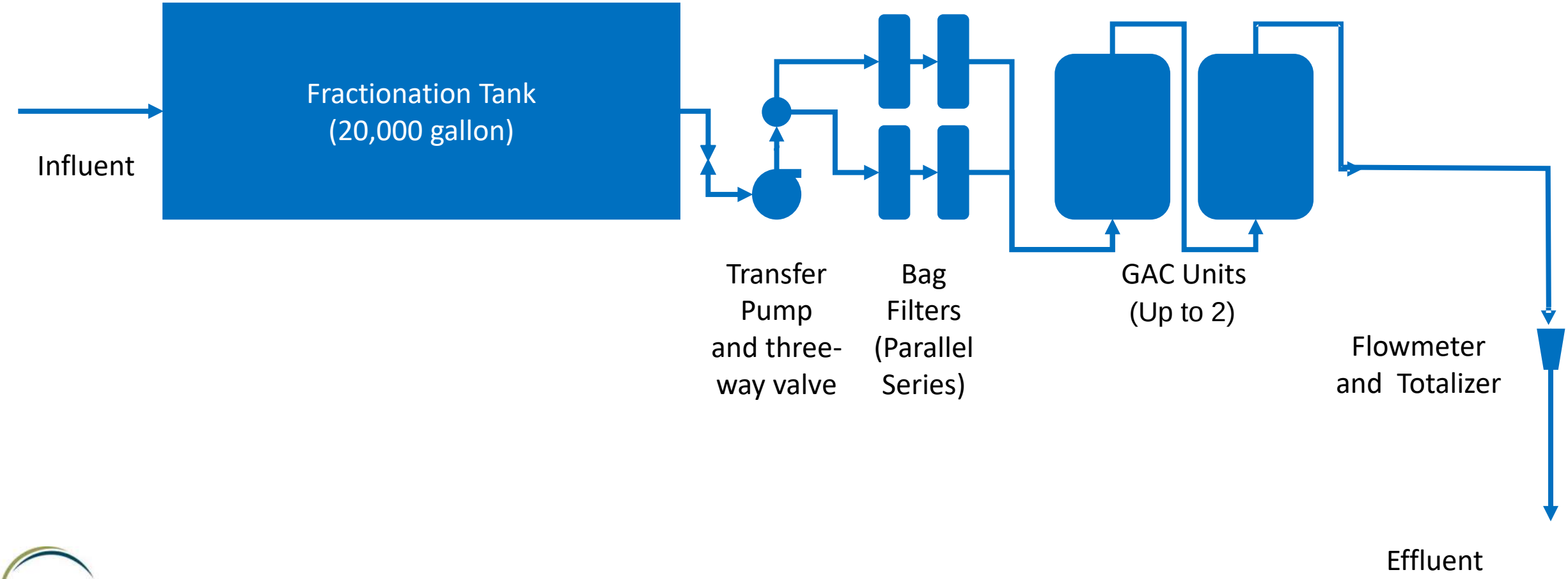
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Figure 4
Proposed Treatment System Schematic



KLEINFELDER
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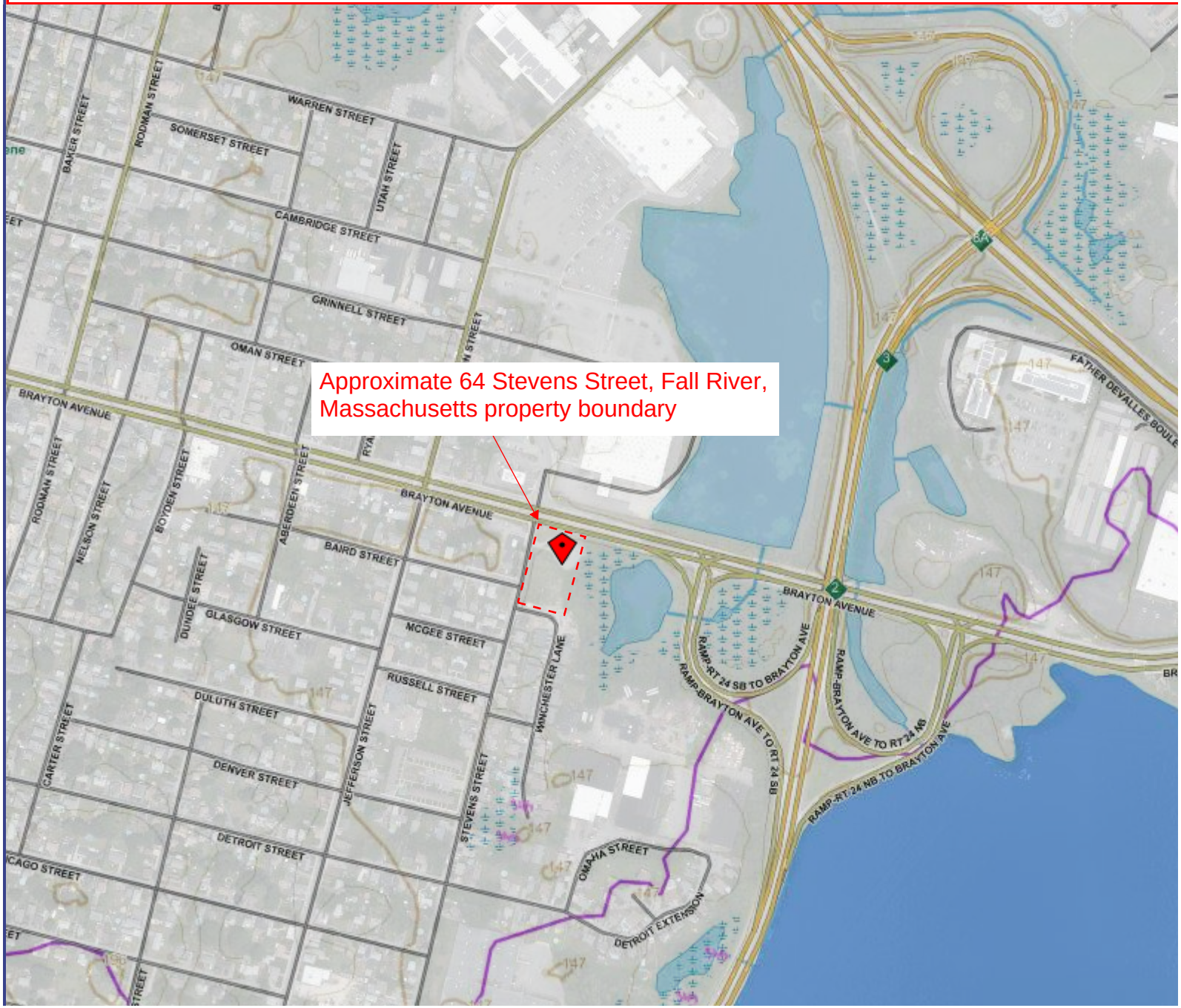
MassDEP Online Map Viewer

Priority Resource Map

Figure 5

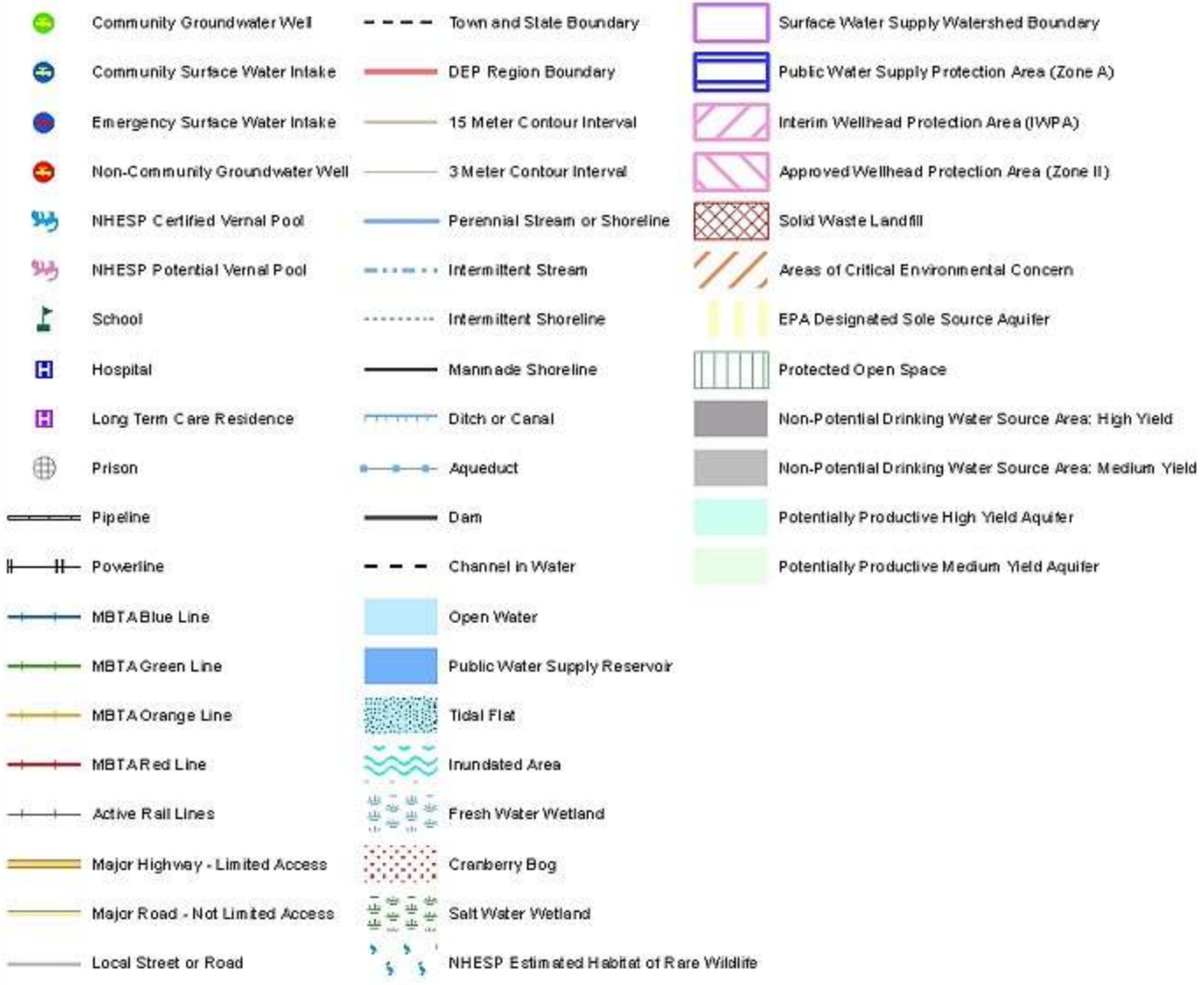


MassDEP Online Map Viewer

MassDEP

Massachusetts Department of Environmental Protection

Map Legend



ATTACHMENT C

Groundwater Laboratory Analytical Data

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

March 4, 2020

Emily Straley
Kleinfelder - Cambridge, MA
1 Beacon Street, Suite 8100
Boston, MA 02108

Project Location: 64 Stevens St. Fall River, MA
Client Job Number:
Project Number: 20192795.005
Laboratory Work Order Number: 20B0349

Enclosed are results of analyses for samples received by the laboratory on February 7, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

Table of Contents (continued)

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Kleinfelder - Cambridge, MA
1 Beacon Street, Suite 8100
Boston, MA 02108
ATTN: Emily Straley

REPORT DATE: 3/4/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 20192795.005

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20B0349

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 64 Stevens St. Fall River, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-101	20B0349-01	Ground Water		608.3	
				624.1	
				625.1	
				EPA 1664B	
				EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				EPA 300.0	
				EPA 420.1	
				SM19-22 4500 NH3 C	MA M-MA-086/CT PH-0574/NY11148
				SM21-22 2540D	
				SM21-22 3500 Cr B	
				SM21-22 4500 CL G	
				SM21-22 4500 CN E	MA M-MA-086/CT PH-0574/NY11148
				SM21-22 4500 H B	
				Tri Chrome Calc.	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED REPORT 03-04-20: The TPH result has been revised to report to the MDL.

SM21-22 4500 CL G

Qualifications:

DL-03

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

Chlorine, Residual
20B0349-01[MW-101], B251845-DUP1

R-04

Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

Analyte & Samples(s) Qualified:

Chlorine, Residual
B251845-BSD1

SM21-22 4500 H B

Qualifications:

H-05

Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

Analyte & Samples(s) Qualified:

pH
20B0349-01[MW-101]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	<3.79	50.0	3.79	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
tert-Amyl Methyl Ether (TAME)	<0.140	0.500	0.140	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Benzene	<0.180	1.00	0.180	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
tert-Butyl Alcohol (TBA)	<4.17	20.0	4.17	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Carbon Tetrachloride	<0.110	2.00	0.110	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,2-Dichlorobenzene	<0.160	2.00	0.160	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,3-Dichlorobenzene	<0.120	2.00	0.120	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,4-Dichlorobenzene	<0.130	2.00	0.130	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,2-Dichloroethane	<0.410	2.00	0.410	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
cis-1,2-Dichloroethylene	<0.130	1.00	0.130	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,1-Dichloroethane	<0.160	2.00	0.160	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,1-Dichloroethylene	<0.320	2.00	0.320	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,4-Dioxane	<22.5	50.0	22.5	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Ethanol	<10.5	50.0	10.5	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Ethylbenzene	0.140	2.00	0.130	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Methyl tert-Butyl Ether (MTBE)	<0.250	2.00	0.250	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Methylene Chloride	<0.340	5.00	0.340	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Tetrachloroethylene	<0.180	2.00	0.180	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Toluene	<0.140	1.00	0.140	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,1,1-Trichloroethane	<0.200	2.00	0.200	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
1,1,2-Trichloroethane	<0.160	2.00	0.160	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Trichloroethylene	<0.240	2.00	0.240	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
Vinyl Chloride	<0.450	2.00	0.450	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
m+p Xylene	0.430	2.00	0.300	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD
o-Xylene	0.480	1.00	0.170	µg/L	1		624.1	2/10/20	2/10/20 20:12	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.4	70-130		2/10/20 20:12
Toluene-d8	103	70-130		2/10/20 20:12
4-Bromofluorobenzene	93.6	70-130		2/10/20 20:12

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	<0.053	0.053	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Benzo(a)pyrene (SIM)	<0.11	0.11	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Benzo(b)fluoranthene (SIM)	<0.053	0.053	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Benzo(k)fluoranthene (SIM)	<0.21	0.21	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Bis(2-ethylhexyl)phthalate (SIM)	<1.1	1.1	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Chrysene (SIM)	<0.21	0.21	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Dibenz(a,h)anthracene (SIM)	<0.11	0.11	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Indeno(1,2,3-cd)pyrene (SIM)	<0.11	0.11	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW
Pentachlorophenol (SIM)	<1.1	1.1	µg/L	1		625.1	2/13/20	2/14/20 12:19	RMW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol (SIM)	46.5	15-110		2/14/20 12:19
Phenol-d6 (SIM)	39.2	15-110		2/14/20 12:19
Nitrobenzene-d5	78.4	30-130		2/14/20 12:19
2-Fluorobiphenyl	63.4	30-130		2/14/20 12:19
2,4,6-Tribromophenol (SIM)	84.8	15-110		2/14/20 12:19
p-Terphenyl-d14	65.3	30-130		2/14/20 12:19

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA | Sample Description: | Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 | Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Acenaphthylene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Anthracene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Benzo(g,h,i)perylene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Butylbenzylphthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Di-n-butylphthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Diethylphthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Dimethylphthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Di-n-octylphthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Bis(2-Ethylhexyl)phthalate	<10.5	10.5	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Fluoranthene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Fluorene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Naphthalene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Phenanthrene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB
Pyrene	<5.26	5.26	µg/L	1		625.1	2/13/20	2/14/20 17:15	KLB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	44.5	15-110		2/14/20 17:15
Phenol-d6	35.0	15-110		2/14/20 17:15
Nitrobenzene-d5	69.5	30-130		2/14/20 17:15
2-Fluorobiphenyl	88.0	30-130		2/14/20 17:15
2,4,6-Tribromophenol	62.6	15-110		2/14/20 17:15
p-Terphenyl-d14	92.5	30-130		2/14/20 17:15

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	<0.0929	0.101	0.0929	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1221 [1]	<0.0813	0.101	0.0813	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1232 [1]	<0.101	0.101	0.101	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1242 [1]	<0.0874	0.101	0.0874	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1248 [1]	<0.0960	0.101	0.0960	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1254 [1]	<0.0530	0.101	0.0530	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL
Aroclor-1260 [1]	<0.0990	0.101	0.0990	µg/L	1		608.3	2/12/20	2/13/20 17:08	WAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	55.6	30-150		2/13/20 17:08
Decachlorobiphenyl [2]	56.1	30-150		2/13/20 17:08
Tetrachloro-m-xylene [1]	71.6	30-150		2/13/20 17:08
Tetrachloro-m-xylene [2]	74.7	30-150		2/13/20 17:08

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Arsenic	13	0.80		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Cadmium	1.2	0.20		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Chromium	370	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Chromium, Trivalent	0.37			mg/L	1		Tri Chrome Calc.	2/11/20	2/12/20 20:32	MJH
Copper	110	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Iron	44	0.050		mg/L	1		EPA 200.7	2/11/20	2/12/20 15:32	MJH
Lead	84	0.50		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Mercury	ND	0.00010		mg/L	1		EPA 245.1	2/10/20	2/10/20 15:02	CJV
Nickel	82	5.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Selenium	3.0	5.0	1.6	µg/L	1	J	EPA 200.8	2/11/20	2/12/20 20:32	MJH
Silver	ND	0.20		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Zinc	340	10		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:32	MJH
Hardness	150	1.4		mg/L	1		EPA 200.7	2/11/20	2/12/20 15:32	MJH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Arsenic	ND	0.80		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Cadmium	ND	0.20		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Chromium	ND	1.0		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:56	MJH
Chromium, Trivalent	0.0			mg/L	1		Tri Chrome Calc.	2/12/20	2/18/20 10:41	QNW
Copper	2.7	1.0		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Iron	0.15	0.050		mg/L	1		EPA 200.7	2/14/20	2/17/20 15:18	TBC
Lead	ND	0.50		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Mercury	ND	0.00010		mg/L	1		EPA 245.1	2/13/20	2/14/20 13:39	AJL
Nickel	ND	5.0		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Selenium	ND	5.0	1.6	µg/L	1		EPA 200.8	2/12/20	2/12/20 19:56	MJH
Silver	ND	0.20		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH
Zinc	ND	10		µg/L	1		EPA 200.8	2/12/20	2/12/20 19:25	MJH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	200	10		mg/L	10		EPA 300.0	2/10/20	2/10/20 23:27	IS
Chlorine, Residual	ND	1.0		mg/L	50	DL-03	SM21-22 4500 CL G	2/7/20	2/7/20 20:32	AIA
Hexavalent Chromium	ND	0.0040		mg/L	1		SM21-22 3500 Cr B	2/7/20	2/7/20 20:50	KMV
pH @17°C	6.3			pH Units	1	H-05	SM21-22 4500 H B	2/7/20	2/7/20 21:00	DMC
Phenol	0.12	0.050		mg/L	1		EPA 420.1	2/10/20	2/11/20 11:29	LL
Total Suspended Solids	3100	3.8		mg/L	1		SM21-22 2540D	2/9/20	2/9/20 14:16	LL
Silica Gel Treated HEM (SGT-HEM)	ND	7.0	3.4	mg/L	1		EPA 1664B	2/17/20	2/17/20 7:35	LL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SM21-22 3500 Cr B	2/7/20	2/7/20 20:50	KMV

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0349

Date Received: 2/7/2020

Field Sample #: MW-101 Sampled: 2/7/2020 14:50

Sample ID: 20B0349-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ammonia as N	0.12	0.15	0.048	mg/L	2		SM19-22 4500 NH3 C		2/11/20 23:40	AAL
Cyanide	ND	0.005	0.001	mg/L	1		SM21-22 4500 CN E		2/11/20 14:36	AAL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3510C-608.3

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252084	990	5.00	02/12/20

Prep Method: SW-846 5030B-624.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251886	5	5.00	02/10/20

Prep Method: SW-846 3510C-625.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252133	950	1.00	02/13/20

Prep Method: SW-846 3510C-625.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252267	950	1.00	02/13/20

EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252359	200		02/17/20

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252019	50.0	50.0	02/11/20
20B0349-01 [MW-101]	B252019	50.0		02/11/20

Prep Method: EPA 200.7 Dissolved-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252315	50.0	50.0	02/14/20

Prep Method: EPA 200.8-EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252020	50.0	50.0	02/11/20

Prep Method: EPA 200.8 Dissolved-EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252079	50.0	50.0	02/12/20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: EPA 245.1-EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251903	6.00	6.00	02/10/20

Prep Method: EPA 245.1 Dissolved-EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252178	6.00	6.00	02/13/20

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251952	10.0	10.0	02/10/20

EPA 420.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251878	50.0	50.0	02/10/20

SM21-22 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0349-01 [MW-101]	B251868	130	02/09/20

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251850	50.0	50.0	02/07/20

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B252325	50.0	50.0	02/07/20

SM21-22 4500 CL G

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0349-01 [MW-101]	B251845	100	100	02/07/20

SM21-22 4500 H B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0349-01 [MW-101]	B251846	50.0	02/07/20

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: EPA 200.8-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0349-01 [MW-101]	B252020	50.0	02/11/20

Prep Method: EPA 200.8 Dissolved-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0349-01 [MW-101]	B252079	50.0	02/12/20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251886 - SW-846 5030B										
Blank (B251886-BLK1)				Prepared & Analyzed: 02/10/20						
Acetone	ND	50.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.500	µg/L							
Benzene	ND	1.00	µg/L							
tert-Butyl Alcohol (TBA)	ND	20.0	µg/L							
Carbon Tetrachloride	ND	2.00	µg/L							
1,2-Dichlorobenzene	ND	2.00	µg/L							
1,3-Dichlorobenzene	ND	2.00	µg/L							
1,4-Dichlorobenzene	ND	2.00	µg/L							
1,2-Dichloroethane	ND	2.00	µg/L							
cis-1,2-Dichloroethylene	ND	1.00	µg/L							
1,1-Dichloroethane	ND	2.00	µg/L							
1,1-Dichloroethylene	ND	2.00	µg/L							
1,4-Dioxane	ND	50.0	µg/L							
Ethanol	ND	50.0	µg/L							
Ethylbenzene	ND	2.00	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	2.00	µg/L							
Methylene Chloride	ND	5.00	µg/L							
Tetrachloroethylene	ND	2.00	µg/L							
Toluene	ND	1.00	µg/L							
1,1,1-Trichloroethane	ND	2.00	µg/L							
1,1,2-Trichloroethane	ND	2.00	µg/L							
Trichloroethylene	ND	2.00	µg/L							
Vinyl Chloride	ND	2.00	µg/L							
m+p Xylene	ND	2.00	µg/L							
o-Xylene	ND	1.00	µg/L							
Surrogate: 1,2-Dichloroethane-d4	*23.1*		µg/L	25.0		92.4	70-130			
Surrogate: Toluene-d8	*25.5*		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	*23.8*		µg/L	25.0		95.3	70-130			
LCS (B251886-BS1)				Prepared & Analyzed: 02/10/20						
Acetone	220	50.0	µg/L	200		112	70-160			†
tert-Amyl Methyl Ether (TAME)	20	0.500	µg/L	20.0		102	70-130			
Benzene	20	1.00	µg/L	20.0		101	65-135			
tert-Butyl Alcohol (TBA)	250	20.0	µg/L	200		126	40-160			†
Carbon Tetrachloride	20	2.00	µg/L	20.0		98.5	70-130			
1,2-Dichlorobenzene	20	2.00	µg/L	20.0		101	65-135			
1,3-Dichlorobenzene	21	2.00	µg/L	20.0		105	70-130			
1,4-Dichlorobenzene	20	2.00	µg/L	20.0		101	65-135			
1,2-Dichloroethane	19	2.00	µg/L	20.0		94.4	70-130			
cis-1,2-Dichloroethylene	22	1.00	µg/L	20.0		109	70-130			
1,1-Dichloroethane	22	2.00	µg/L	20.0		112	70-130			
1,1-Dichloroethylene	18	2.00	µg/L	20.0		89.5	50-150			
1,4-Dioxane	260	50.0	µg/L	200		130	40-130			†
Ethanol	230	50.0	µg/L	200		115	40-160			
Ethylbenzene	20	2.00	µg/L	20.0		98.5	60-140			
Methyl tert-Butyl Ether (MTBE)	21	2.00	µg/L	20.0		105	70-130			
Methylene Chloride	23	5.00	µg/L	20.0		114	60-140			
Tetrachloroethylene	20	2.00	µg/L	20.0		101	70-130			
Toluene	19	1.00	µg/L	20.0		96.2	70-130			
1,1,1-Trichloroethane	20	2.00	µg/L	20.0		99.2	70-130			
1,1,2-Trichloroethane	22	2.00	µg/L	20.0		112	70-130			
Trichloroethylene	19	2.00	µg/L	20.0		95.6	65-135			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251886 - SW-846 5030B										
LCS (B251886-BS1)				Prepared & Analyzed: 02/10/20						
Vinyl Chloride	18	2.00	µg/L	20.0		91.8	5-195			
m+p Xylene	38	2.00	µg/L	40.0		96.1	70-130			
o-Xylene	19	1.00	µg/L	20.0		96.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	*22.7*		µg/L	25.0		90.9	70-130			
Surrogate: Toluene-d8	*25.7*		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.0		96.9	70-130			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252267 - SW-846 3510C										
Blank (B252267-BLK1)				Prepared: 02/13/20 Analyzed: 02/17/20						
Benzo(a)anthracene (SIM)	ND	0.050	µg/L							
Benzo(a)pyrene (SIM)	ND	0.10	µg/L							
Benzo(b)fluoranthene (SIM)	ND	0.050	µg/L							
Benzo(k)fluoranthene (SIM)	ND	0.20	µg/L							
Bis(2-ethylhexyl)phthalate (SIM)	ND	1.0	µg/L							
Chrysene (SIM)	ND	0.20	µg/L							
Dibenz(a,h)anthracene (SIM)	ND	0.10	µg/L							
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.10	µg/L							
Pentachlorophenol (SIM)	ND	1.0	µg/L							
Surrogate: 2-Fluorophenol (SIM)	*86.0*		µg/L	200		43.0	15-110			
Surrogate: Phenol-d6 (SIM)	*69.1*		µg/L	200		34.6	15-110			
Surrogate: Nitrobenzene-d5	*70.6*		µg/L	100		70.6	30-130			
Surrogate: 2-Fluorobiphenyl	*59.6*		µg/L	100		59.6	30-130			
Surrogate: 2,4,6-Tribromophenol (SIM)	*147*		µg/L	200		73.6	15-110			
Surrogate: p-Terphenyl-d14	*66.4*		µg/L	100		66.4	30-130			
LCS (B252267-BS1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Benzo(a)anthracene (SIM)	39.7	1.0	µg/L	50.0		79.4	33-143			
Benzo(a)pyrene (SIM)	41.8	2.0	µg/L	50.0		83.6	17-163			
Benzo(b)fluoranthene (SIM)	44.8	1.0	µg/L	50.0		89.5	24-159			
Benzo(k)fluoranthene (SIM)	43.3	4.0	µg/L	50.0		86.5	11-162			
Bis(2-ethylhexyl)phthalate (SIM)	48.4	20	µg/L	50.0		96.8	8-158			
Chrysene (SIM)	40.3	4.0	µg/L	50.0		80.6	17-168			
Dibenz(a,h)anthracene (SIM)	44.5	2.0	µg/L	50.0		89.0	10-227			
Indeno(1,2,3-cd)pyrene (SIM)	45.4	2.0	µg/L	50.0		90.8	10-171			
Pentachlorophenol (SIM)	35.4	20	µg/L	50.0		70.7	14-176			
Surrogate: 2-Fluorophenol (SIM)	*95.1*		µg/L	200		47.6	15-110			
Surrogate: Phenol-d6 (SIM)	*80.0*		µg/L	200		40.0	15-110			
Surrogate: Nitrobenzene-d5	*77.9*		µg/L	100		77.9	30-130			
Surrogate: 2-Fluorobiphenyl	*72.3*		µg/L	100		72.3	30-130			
Surrogate: 2,4,6-Tribromophenol (SIM)	*185*		µg/L	200		92.6	15-110			
Surrogate: p-Terphenyl-d14	*64.4*		µg/L	100		64.4	30-130			
LCS Dup (B252267-BSD1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Benzo(a)anthracene (SIM)	41.2	1.0	µg/L	50.0		82.4	33-143	3.66	53	
Benzo(a)pyrene (SIM)	43.1	2.0	µg/L	50.0		86.2	17-163	3.11	72	
Benzo(b)fluoranthene (SIM)	46.2	1.0	µg/L	50.0		92.4	24-159	3.12	71	
Benzo(k)fluoranthene (SIM)	47.6	4.0	µg/L	50.0		95.2	11-162	9.51	63	
Bis(2-ethylhexyl)phthalate (SIM)	50.4	20	µg/L	50.0		101	8-158	4.09	82	
Chrysene (SIM)	41.7	4.0	µg/L	50.0		83.4	17-168	3.46	87	
Dibenz(a,h)anthracene (SIM)	46.0	2.0	µg/L	50.0		92.1	10-227	3.45	126	
Indeno(1,2,3-cd)pyrene (SIM)	46.9	2.0	µg/L	50.0		93.8	10-171	3.16	99	‡
Pentachlorophenol (SIM)	37.0	20	µg/L	50.0		74.1	14-176	4.64	86	
Surrogate: 2-Fluorophenol (SIM)	*102*		µg/L	200		51.2	15-110			
Surrogate: Phenol-d6 (SIM)	*87.0*		µg/L	200		43.5	15-110			
Surrogate: Nitrobenzene-d5	*84.3*		µg/L	100		84.3	30-130			
Surrogate: 2-Fluorobiphenyl	*75.9*		µg/L	100		75.9	30-130			
Surrogate: 2,4,6-Tribromophenol (SIM)	*196*		µg/L	200		98.2	15-110			
Surrogate: p-Terphenyl-d14	*66.3*		µg/L	100		66.3	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252133 - SW-846 3510C										
Blank (B252133-BLK1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Acenaphthene	ND	5.00	µg/L							
Acenaphthylene	ND	5.00	µg/L							
Anthracene	ND	5.00	µg/L							
Benzo(g,h,i)perylene	ND	5.00	µg/L							
Butylbenzylphthalate	ND	10.0	µg/L							
Di-n-butylphthalate	ND	10.0	µg/L							
Diethylphthalate	ND	10.0	µg/L							
Dimethylphthalate	ND	10.0	µg/L							
Di-n-octylphthalate	ND	10.0	µg/L							
Bis(2-Ethylhexyl)phthalate	ND	10.0	µg/L							
Fluoranthene	ND	5.00	µg/L							
Fluorene	ND	5.00	µg/L							
Naphthalene	ND	5.00	µg/L							
Phenanthrene	ND	5.00	µg/L							
Pyrene	ND	5.00	µg/L							
Surrogate: 2-Fluorophenol	*94.1*		µg/L	200		47.1	15-110			
Surrogate: Phenol-d6	*70.2*		µg/L	200		35.1	15-110			
Surrogate: Nitrobenzene-d5	*69.7*		µg/L	100		69.7	30-130			
Surrogate: 2-Fluorobiphenyl	*88.4*		µg/L	100		88.4	30-130			
Surrogate: 2,4,6-Tribromophenol	*134*		µg/L	200		67.0	15-110			
Surrogate: p-Terphenyl-d14	*79.1*		µg/L	100		79.1	30-130			
LCS (B252133-BS1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Acenaphthene	37.6	5.00	µg/L	50.0		75.3	47-145			
Acenaphthylene	36.5	5.00	µg/L	50.0		73.1	33-145			
Anthracene	38.9	5.00	µg/L	50.0		77.8	27-133			
Benzo(g,h,i)perylene	35.6	5.00	µg/L	50.0		71.1	10-219			
Butylbenzylphthalate	40.1	10.0	µg/L	50.0		80.2	10-152			
Di-n-butylphthalate	42.2	10.0	µg/L	50.0		84.3	10-120			
Diethylphthalate	35.0	10.0	µg/L	50.0		70.1	10-120			
Dimethylphthalate	35.7	10.0	µg/L	50.0		71.4	10-120			
Di-n-octylphthalate	38.6	10.0	µg/L	50.0		77.2	4-146			
Bis(2-Ethylhexyl)phthalate	40.0	10.0	µg/L	50.0		80.0	8-158			
Fluoranthene	41.9	5.00	µg/L	50.0		83.8	26-137			
Fluorene	36.4	5.00	µg/L	50.0		72.8	59-121			
Naphthalene	34.2	5.00	µg/L	50.0		68.4	21-133			
Phenanthrene	38.7	5.00	µg/L	50.0		77.4	54-120			
Pyrene	39.1	5.00	µg/L	50.0		78.2	52-120			
Surrogate: 2-Fluorophenol	*98.0*		µg/L	200		49.0	15-110			
Surrogate: Phenol-d6	*74.8*		µg/L	200		37.4	15-110			
Surrogate: Nitrobenzene-d5	*76.8*		µg/L	100		76.8	30-130			
Surrogate: 2-Fluorobiphenyl	*93.8*		µg/L	100		93.8	30-130			
Surrogate: 2,4,6-Tribromophenol	*139*		µg/L	200		69.4	15-110			
Surrogate: p-Terphenyl-d14	*82.1*		µg/L	100		82.1	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252133 - SW-846 3510C										
LCS Dup (B252133-BSD1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Acenaphthene	36.1	5.00	µg/L	50.0		72.2	47-145	4.23	48	
Acenaphthylene	35.3	5.00	µg/L	50.0		70.6	33-145	3.45	74	
Anthracene	37.7	5.00	µg/L	50.0		75.5	27-133	3.00	66	
Benzo(g,h,i)perylene	33.7	5.00	µg/L	50.0		67.5	10-219	5.28	97	
Butylbenzylphthalate	37.7	10.0	µg/L	50.0		75.4	10-152	6.14	60	
Di-n-butylphthalate	40.9	10.0	µg/L	50.0		81.8	10-120	3.06	47	
Diethylphthalate	33.3	10.0	µg/L	50.0		66.6	10-120	5.15	100	
Dimethylphthalate	34.8	10.0	µg/L	50.0		69.5	10-120	2.61	183	
Di-n-octylphthalate	36.4	10.0	µg/L	50.0		72.8	4-146	5.92	69	
Bis(2-Ethylhexyl)phthalate	37.6	10.0	µg/L	50.0		75.3	8-158	6.08	82	
Fluoranthene	41.2	5.00	µg/L	50.0		82.3	26-137	1.85	66	
Fluorene	35.4	5.00	µg/L	50.0		70.8	59-121	2.78	38	
Naphthalene	33.0	5.00	µg/L	50.0		66.1	21-133	3.54	65	
Phenanthrene	37.9	5.00	µg/L	50.0		75.8	54-120	2.17	39	
Pyrene	37.4	5.00	µg/L	50.0		74.8	52-120	4.44	49	
Surrogate: 2-Fluorophenol	*97.3*		µg/L	200		48.7	15-110			
Surrogate: Phenol-d6	*73.8*		µg/L	200		36.9	15-110			
Surrogate: Nitrobenzene-d5	*74.1*		µg/L	100		74.1	30-130			
Surrogate: 2-Fluorobiphenyl	*93.0*		µg/L	100		93.0	30-130			
Surrogate: 2,4,6-Tribromophenol	*139*		µg/L	200		69.7	15-110			
Surrogate: p-Terphenyl-d14	*79.3*		µg/L	100		79.3	30-130			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252084 - SW-846 3510C										
Blank (B252084-BLK1)				Prepared: 02/12/20 Analyzed: 02/13/20						
Aroclor-1016	ND	0.100	µg/L							
Aroclor-1016 [2C]	ND	0.100	µg/L							
Aroclor-1221	ND	0.100	µg/L							
Aroclor-1221 [2C]	ND	0.100	µg/L							
Aroclor-1232	ND	0.100	µg/L							
Aroclor-1232 [2C]	ND	0.100	µg/L							
Aroclor-1242	ND	0.100	µg/L							
Aroclor-1242 [2C]	ND	0.100	µg/L							
Aroclor-1248	ND	0.100	µg/L							
Aroclor-1248 [2C]	ND	0.100	µg/L							
Aroclor-1254	ND	0.100	µg/L							
Aroclor-1254 [2C]	ND	0.100	µg/L							
Aroclor-1260	ND	0.100	µg/L							
Aroclor-1260 [2C]	ND	0.100	µg/L							
Surrogate: Decachlorobiphenyl	*0.829*		µg/L	1.00		82.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.822*		µg/L	1.00		82.2	30-150			
Surrogate: Tetrachloro-m-xylene	*0.787*		µg/L	1.00		78.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.804*		µg/L	1.00		80.4	30-150			
LCS (B252084-BS1)				Prepared: 02/12/20 Analyzed: 02/13/20						
Aroclor-1016	0.433	0.200	µg/L	0.500		86.6	50-140			
Aroclor-1016 [2C]	0.463	0.200	µg/L	0.500		92.5	50-140			
Aroclor-1260	0.415	0.200	µg/L	0.500		83.0	8-140			
Aroclor-1260 [2C]	0.412	0.200	µg/L	0.500		82.5	8-140			
Surrogate: Decachlorobiphenyl	*1.50*		µg/L	2.00		75.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.50*		µg/L	2.00		74.9	30-150			
Surrogate: Tetrachloro-m-xylene	*1.57*		µg/L	2.00		78.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.61*		µg/L	2.00		80.5	30-150			
LCS Dup (B252084-BSD1)				Prepared: 02/12/20 Analyzed: 02/13/20						
Aroclor-1016	0.419	0.200	µg/L	0.500		83.8	50-140	3.27		
Aroclor-1016 [2C]	0.453	0.200	µg/L	0.500		90.5	50-140	2.18		
Aroclor-1260	0.421	0.200	µg/L	0.500		84.2	8-140	1.54		
Aroclor-1260 [2C]	0.424	0.200	µg/L	0.500		84.7	8-140	2.69		
Surrogate: Decachlorobiphenyl	*1.57*		µg/L	2.00		78.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.58*		µg/L	2.00		78.8	30-150			
Surrogate: Tetrachloro-m-xylene	*1.46*		µg/L	2.00		72.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.51*		µg/L	2.00		75.4	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251903 - EPA 245.1										
Blank (B251903-BLK1)				Prepared & Analyzed: 02/10/20						
Mercury	ND	0.00010	mg/L							
LCS (B251903-BS1)				Prepared & Analyzed: 02/10/20						
Mercury	0.00389	0.00010	mg/L	0.00400		97.2	85-115			
LCS Dup (B251903-BSD1)				Prepared & Analyzed: 02/10/20						
Mercury	0.00389	0.00010	mg/L	0.00400		97.2	85-115	0.0422	20	
Batch B252019 - EPA 200.7										
Blank (B252019-BLK1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	ND	0.050	mg/L							
Hardness	ND	1.4	mg/L							
LCS (B252019-BS1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	4.30	0.050	mg/L	4.00		107	85-115			
Hardness	28	1.4	mg/L	26.5		105	85-115			
LCS Dup (B252019-BSD1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	4.38	0.050	mg/L	4.00		109	85-115	1.82	20	
Hardness	28	1.4	mg/L	26.5		107	85-115	1.86	20	
Batch B252020 - EPA 200.8										
Blank (B252020-BLK1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	ND	1.0	µg/L							
Arsenic	ND	0.80	µg/L							
Cadmium	ND	0.20	µg/L							
Chromium	ND	1.0	µg/L							
Chromium, Trivalent	0.0		mg/L							
Copper	ND	1.0	µg/L							
Lead	ND	0.50	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.20	µg/L							
Zinc	ND	10	µg/L							
LCS (B252020-BS1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	495	10	µg/L	500		99.0	85-115			
Arsenic	501	8.0	µg/L	500		100	85-115			
Cadmium	510	2.0	µg/L	500		102	85-115			
Chromium	499	10	µg/L	500		99.9	85-115			
Copper	1000	10	µg/L	1000		100	85-115			
Lead	500	5.0	µg/L	500		99.9	85-115			
Nickel	521	50	µg/L	500		104	85-115			
Selenium	491	50	µg/L	500		98.2	85-115			
Silver	489	2.0	µg/L	500		97.7	85-115			
Zinc	993	100	µg/L	1000		99.3	85-115			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252020 - EPA 200.8										
LCS Dup (B252020-BSD1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	507	10	µg/L	500		101	85-115	2.36	20	
Arsenic	511	8.0	µg/L	500		102	85-115	2.06	20	
Cadmium	519	2.0	µg/L	500		104	85-115	1.91	20	
Chromium	506	10	µg/L	500		101	85-115	1.26	20	
Copper	1030	10	µg/L	1000		103	85-115	2.50	20	
Lead	513	5.0	µg/L	500		103	85-115	2.72	20	
Nickel	532	50	µg/L	500		106	85-115	2.11	20	
Selenium	505	50	µg/L	500		101	85-115	2.73	20	
Silver	499	2.0	µg/L	500		99.8	85-115	2.09	20	
Zinc	1000	100	µg/L	1000		100	85-115	1.06	20	

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252079 - EPA 200.8 Dissolved										
Blank (B252079-BLK1)				Prepared & Analyzed: 02/12/20						
Antimony	ND	1.0	µg/L							
Arsenic	ND	0.80	µg/L							
Cadmium	ND	0.20	µg/L							
Chromium	ND	1.0	µg/L							
Copper	ND	1.0	µg/L							
Lead	ND	0.50	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.20	µg/L							
Zinc	ND	10	µg/L							
LCS (B252079-BS1)				Prepared & Analyzed: 02/12/20						
Antimony	488	10	µg/L	500		97.6	85-115			
Arsenic	512	8.0	µg/L	500		102	85-115			
Cadmium	502	2.0	µg/L	500		100	85-115			
Chromium	496	10	µg/L	500		99.2	85-115			
Copper	949	10	µg/L	1000		94.9	85-115			
Lead	483	5.0	µg/L	500		96.6	85-115			
Nickel	493	50	µg/L	500		98.7	85-115			
Selenium	490	50	µg/L	500		98.0	85-115			
Silver	490	2.0	µg/L	500		98.0	85-115			
Zinc	991	100	µg/L	1000		99.1	85-115			
LCS Dup (B252079-BSD1)				Prepared & Analyzed: 02/12/20						
Antimony	502	10	µg/L	500		100	85-115	2.82	20	
Arsenic	525	8.0	µg/L	500		105	85-115	2.39	20	
Cadmium	515	2.0	µg/L	500		103	85-115	2.57	20	
Chromium	497	10	µg/L	500		99.3	85-115	0.129	20	
Copper	992	10	µg/L	1000		99.2	85-115	4.46	20	
Lead	494	5.0	µg/L	500		98.8	85-115	2.32	20	
Nickel	517	50	µg/L	500		103	85-115	4.73	20	
Selenium	495	50	µg/L	500		98.9	85-115	1.00	20	
Silver	504	2.0	µg/L	500		101	85-115	2.88	20	
Zinc	1010	100	µg/L	1000		101	85-115	1.96	20	
Batch B252178 - EPA 245.1 Dissolved										
Blank (B252178-BLK1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Mercury	ND	0.00010	mg/L							
LCS (B252178-BS1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Mercury	0.00379	0.00010	mg/L	0.00400		94.8	85-115			

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252178 - EPA 245.1 Dissolved										
LCS Dup (B252178-BSD1)				Prepared: 02/13/20 Analyzed: 02/14/20						
Mercury	0.00383	0.00010	mg/L	0.00400		95.7	85-115	0.965	20	
Duplicate (B252178-DUP1)		**Source: 20B0349-01**		Prepared: 02/13/20 Analyzed: 02/14/20						
Mercury	ND	0.00010	mg/L		ND			NC	30	
Matrix Spike (B252178-MS1)		**Source: 20B0349-01**		Prepared: 02/13/20 Analyzed: 02/14/20						
Mercury	0.00371	0.00010	mg/L	0.00400	ND	92.8	70-130			
Batch B252315 - EPA 200.7 Dissolved										
Blank (B252315-BLK1)				Prepared: 02/14/20 Analyzed: 02/17/20						
Iron	ND	0.050	mg/L							
LCS (B252315-BS1)				Prepared: 02/14/20 Analyzed: 02/17/20						
Iron	3.97	0.050	mg/L	4.00		99.3	85-115			
LCS Dup (B252315-BSD1)				Prepared: 02/14/20 Analyzed: 02/17/20						
Iron	4.04	0.050	mg/L	4.00		101	85-115	1.63	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes
Batch B251845 - SM21-22 4500 CL G											
Blank (B251845-BLK1)				Prepared & Analyzed: 02/07/20							
Chlorine, Residual	ND	0.020	mg/L								
LCS (B251845-BS1)				Prepared & Analyzed: 02/07/20							
Chlorine, Residual	1.1	0.020	mg/L	1.34		83.3	66.3-134				
LCS Dup (B251845-BSD1)				Prepared & Analyzed: 02/07/20							
Chlorine, Residual	1.3	0.020	mg/L	1.34		99.5	66.3-134	**17.8**	*	9.96	R-04
Duplicate (B251845-DUP1)	**Source: 20B0349-01**			Prepared & Analyzed: 02/07/20							
Chlorine, Residual	ND	1.0	mg/L		ND			NC		32.5	DL-03
Matrix Spike (B251845-MS1)	**Source: 20B0349-01**			Prepared & Analyzed: 02/07/20							
Chlorine, Residual	150	2.0	mg/L	100	ND	153	10-167				
Batch B251846 - SM21-22 4500 H B											
LCS (B251846-BS1)				Prepared & Analyzed: 02/07/20							
pH	6.03		pH Units	6.00		100	90-110				
Batch B251850 - SM21-22 3500 Cr B											
Blank (B251850-BLK1)				Prepared & Analyzed: 02/07/20							
Hexavalent Chromium	ND	0.0040	mg/L								
LCS (B251850-BS1)				Prepared & Analyzed: 02/07/20							
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		106	83.9-121				
LCS Dup (B251850-BSD1)				Prepared & Analyzed: 02/07/20							
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	83.9-121	2.42		10	
Batch B251868 - SM21-22 2540D											
Blank (B251868-BLK1)				Prepared & Analyzed: 02/09/20							
Total Suspended Solids	ND	2.5	mg/L								
LCS (B251868-BS1)				Prepared & Analyzed: 02/09/20							
Total Suspended Solids	198	10	mg/L	200		99.0	57.6-118				
Batch B251878 - EPA 420.1											
Blank (B251878-BLK1)				Prepared: 02/10/20 Analyzed: 02/11/20							
Phenol	ND	0.050	mg/L								

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251878 - EPA 420.1										
LCS (B251878-BS1)				Prepared: 02/10/20 Analyzed: 02/11/20						
Phenol	0.55	0.050	mg/L	0.500		109	72.4-125			
LCS Dup (B251878-BSD1)				Prepared: 02/10/20 Analyzed: 02/11/20						
Phenol	0.55	0.050	mg/L	0.500		109	72.4-125	0.00	11.1	
Batch B251952 - EPA 300.0										
Blank (B251952-BLK1)				Prepared & Analyzed: 02/10/20						
Chloride	ND	1.0	mg/L							
LCS (B251952-BS1)				Prepared & Analyzed: 02/10/20						
Chloride	5.0	1.0	mg/L	5.00		99.9	90-110			
LCS Dup (B251952-BSD1)				Prepared & Analyzed: 02/10/20						
Chloride	5.0	1.0	mg/L	5.00		100	90-110	0.0840	20	
Batch B252359 - EPA 1664B										
Blank (B252359-BLK1)				Prepared & Analyzed: 02/17/20						
Silica Gel Treated HEM (SGT-HEM)	ND	1.4	mg/L							
Blank (B252359-BLK2)				Prepared & Analyzed: 02/17/20						
Silica Gel Treated HEM (SGT-HEM)	ND	7.0	mg/L							
LCS (B252359-BS1)				Prepared & Analyzed: 02/17/20						
Silica Gel Treated HEM (SGT-HEM)	10		mg/L	10.0		105	64-132			
LCS (B252359-BS2)				Prepared & Analyzed: 02/17/20						
Silica Gel Treated HEM (SGT-HEM)	98		mg/L	100		97.6	64-132			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252325 - SM21-22 3500 Cr B										
Blank (B252325-BLK1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B252325-BS1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		106	83.9-121			
LCS Dup (B252325-BSD1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	83.9-121	2.42	10	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

608.3

LCS

Lab Sample ID: B252084-BS1 Date(s) Analyzed: 02/13/2020 02/13/2020

Instrument ID (1): ECD3 Instrument ID (2): ECD3

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.433	
	2	0.000	0.000	0.000	0.463	7.4
Aroclor-1260	1	0.000	0.000	0.000	0.415	
	2	0.000	0.000	0.000	0.412	1.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

608.3

LCS Dup

Lab Sample ID: B252084-BSD1 Date(s) Analyzed: 02/13/2020 02/13/2020

Instrument ID (1): ECD3 Instrument ID (2): ECD3

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.419	
	2	0.000	0.000	0.000	0.453	7.6
Aroclor-1260	1	0.000	0.000	0.000	0.421	
	2	0.000	0.000	0.000	0.424	0.9

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-03	Elevated reporting limit due to matrix interference.
H-05	Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
608.3 in Water	
Aroclor-1016	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1016 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
624.1 in Water	
Acetone	CT,NY,MA,NH
tert-Amyl Methyl Ether (TAME)	MA
Benzene	CT,NY,MA,NH,RI,NC,ME,VA
tert-Butyl Alcohol (TBA)	NY,MA
Carbon Tetrachloride	CT,NY,MA,NH,RI,NC,ME,VA
1,2-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,3-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,4-Dichlorobenzene	CT,NY,MA,NH,RI,NC,ME,VA
1,2-Dichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
cis-1,2-Dichloroethylene	NY,MA
1,1-Dichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
1,1-Dichloroethylene	CT,NY,MA,NH,RI,NC,ME,VA
1,4-Dioxane	MA
Ethanol	NY,MA,NH
Ethylbenzene	CT,NY,MA,NH,RI,NC,ME,VA
Methyl tert-Butyl Ether (MTBE)	NY,MA,NH,NC
Methylene Chloride	CT,NY,MA,NH,RI,NC,ME,VA
Naphthalene	NY,MA,NC
Tetrachloroethylene	CT,NY,MA,NH,RI,NC,ME,VA
Toluene	CT,NY,MA,NH,RI,NC,ME,VA
1,1,1-Trichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
1,1,2-Trichloroethane	CT,NY,MA,NH,RI,NC,ME,VA
Trichloroethylene	CT,NY,MA,NH,RI,NC,ME,VA
Vinyl Chloride	CT,NY,MA,NH,RI,NC,ME,VA
m+p Xylene	CT,NY,MA,NH,RI,NC
o-Xylene	CT,NY,MA,NH,RI,NC
625.1 in Water	
Acenaphthene	CT,MA,NH,NY,NC,RI,ME,VA
Acenaphthylene	CT,MA,NH,NY,NC,RI,ME,VA
Anthracene	CT,MA,NH,NY,NC,RI,ME,VA
Benzo(g,h,i)perylene	CT,MA,NH,NY,NC,RI,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
625.1 in Water	
Butylbenzylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
Di-n-butylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
1,3-Dichlorobenzene	MA,NC
1,4-Dichlorobenzene	MA,NC
1,2-Dichlorobenzene	MA,NC
Diethylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
Dimethylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
Di-n-octylphthalate	CT,MA,NH,NY,NC,RI,ME,VA
Bis(2-Ethylhexyl)phthalate	CT,MA,NH,NY,NC,RI,ME,VA
Fluoranthene	CT,MA,NH,NY,NC,RI,ME,VA
Fluorene	CT,MA,NH,NY,NC,RI,ME,VA
Naphthalene	CT,MA,NH,NY,NC,RI,ME,VA
Phenanthrene	CT,MA,NH,NY,NC,RI,ME,VA
Phenol	CT,MA,NH,NY,NC,RI,ME,VA
Pyrene	CT,MA,NH,NY,NC,RI,ME,VA
2-Fluorophenol	NC,VA
2-Fluorophenol	NC
Phenol-d6	VA
Nitrobenzene-d5	VA
EPA 200.7 in Water	
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Hardness	CT,MA,NH,NY,RI,VA
EPA 200.8 in Water	
Antimony	CT,MA,NH,NY,RI,NC,ME,VA
Antimony	CT,MA,NH,NY,RI,NC,ME,VA
Arsenic	CT,MA,NH,NY,RI,NC,ME,VA
Arsenic	CT,MA,NH,NY,RI,NC,ME,VA
Cadmium	CT,MA,NH,NY,RI,NC,ME,VA
Cadmium	CT,MA,NH,NY,RI,NC,ME,VA
Chromium	CT,MA,NH,NY,RI,NC,ME,VA
Chromium	CT,MA,NH,NY,RI,NC,ME,VA
Copper	CT,MA,NH,NY,RI,NC,ME,VA
Copper	CT,MA,NH,NY,RI,NC,ME,VA
Lead	CT,MA,NH,NY,RI,NC,ME,VA
Lead	CT,MA,NH,NY,RI,NC,ME,VA
Nickel	CT,MA,NH,NY,RI,NC,ME,VA
Nickel	CT,MA,NH,NY,RI,NC,ME,VA
Selenium	CT,MA,NH,NY,RI,NC,ME,VA
Selenium	CT,MA,NH,NY,RI,NC,ME,VA
Silver	CT,MA,NH,NY,RI,NC,ME,VA
Silver	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,RI,NY,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
EPA 245.1 in Water	
Mercury	CT,MA,NH,RI,NY,NC,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 245.1 in Water	
Mercury	CT,MA,NH,RI,NY,NC,ME,VA
EPA 300.0 in Water	
Chloride	NC,NY,MA,VA,ME,NH,CT,RI
EPA 420.1 in Water	
Phenol	CT,MA,NH,NY,RI,NC,ME,VA
SM19-22 4500 NH3 C in Water	
Ammonia as N	NY,MA,CT,RI,VA,NC,ME
SM21-22 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC
SM21-22 4500 CL G in Water	
Chlorine, Residual	CT,MA,RI,ME
SM21-22 4500 CN E in Water	
Cyanide	CT,MA,NH,NY,RI,NC,ME,VA
SM21-22 4500 H B in Water	
pH	CT,MA,RI

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332 20B0349
Fax: 413-525-6405
Email: info@contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

HAF

Company Name:	Kleinfelder
Address:	One Beacon St, Suite 8100, Boston, MA 02108
Phone:	617-497-7800
Project Name:	CFI Fall River
Project Location:	64 Stevens Street
Project Number:	20192795.005A
Project Manager:	Emily Straley
Con-Test Quote Name/Number:	20200205
Invoice Recipient:	Emily Straley
Sampled By:	A. Bayliss, J. Fontaine

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: X 5-DAY TAT

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: msoule@kleinfelder.com; estraley
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	~~Beginning~~ Date/~~Time~~	~~Ending~~ ~~Date~~/Time	Composite	Grab	[1] Matrix Code	Conc Code	Ammonia via method 350.1; Hardness via 200.7	Chloride-300.0; Total Residual Chlorine-4500-Cl G and E	Total Suspended Solids via SM25400	Total Metals via 200.7***	Dissolved Metals via 200.7***	USEPA VOCs via 624* + ethanol	PAHs & phenols via 625 SIM**	Total PCBs 608	TPH via 1664 SGT HEM	Cyanide via 335.4	pH, Cr6 via 3500
1	MW-101	2/7/20	1450		X	GW	U	X	X	X	X	X	X	X	X	X	X	X

	1/1	2	1	1	1	3	2	2	2	1	2	# of Containers
	N/S	I	I	N	N	H	I	I	S	X	I	[2] Preservation Code
	p/A	P	P	P	P	V	A	A	A	P	P	[3] Container Code

Dissolved Metals Samples
☒ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: * Report full RGP list.
and II PAHs, Napthalene, phenol, pentachlorophenol
Cd, Cr3, Cr6, Cu, Fe, Pb, Hg, Ni, Se, Ag, Zn. Hg by 245.1, Cr6 via 3500

**Group I
***Sb, As,

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 2/7/20 1530
Received by: (signature)	Date/Time: 2-7-20 1530
Relinquished by: (signature)	Date/Time: 2-7-20 1700
Received by: (signature)	Date/Time: 2/7/20 17:00
Relinquished by: (signature)	Date/Time: 2/7/20 6:15
Received by: (signature) 3.4	Date/Time: 2/7/20 1815

Detection Limit Requirements
MA
CT
Other: EPA NPDES RGP

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

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NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

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Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Kleinfelder

Received By MP Date 2/7/20 Time 1815

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____ Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 3.4 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? T Who was notified? Katie

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? Acid T 2 Base T 12

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	6	1 Liter Plastic	3	16 oz Amb.	
HCL-	3	500 mL Amb.		500 mL Plastic	2	8oz Amb/Clear	
Meoh-		250 mL Amb.	1	250 mL Plastic	6	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

ATTACHMENT D

Receiving Water Laboratory Analytical Data

con-test® ANALYTICAL LABORATORY
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February 14, 2020

Emily Straley
Kleinfelder - Cambridge, MA
1 Beacon Street, Suite 8100
Boston, MA 02108

Project Location: 64 Stevens St. Fall River, MA
Client Job Number:
Project Number: 20192795.005
Laboratory Work Order Number: 20B0350

Enclosed are results of analyses for samples received by the laboratory on February 7, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

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Kleinfelder - Cambridge, MA
1 Beacon Street, Suite 8100
Boston, MA 02108
ATTN: Emily Straley

REPORT DATE: 2/14/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 20192795.005

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20B0350

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 64 Stevens St. Fall River, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Wetland-01	20B0350-01	Surface Water		EPA 200.7	
				EPA 200.8	
				EPA 245.1	
				SM19-22 4500 NH3 C	MA M-MA-086/CT PH-0574/NY11148
				SM21-22 3500 Cr B	
				SM21-22 4500 H B	
				Tri Chrome Calc.	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM21-22 4500 H B

Qualifications:

H-05

Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

Analyte & Samples(s) Qualified:

pH

20B0350-01[Wetland-01], B251846-DUP1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0350

Date Received: 2/7/2020

Field Sample #: Wetland-01 Sampled: 2/7/2020 14:05

Sample ID: 20B0350-01

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Arsenic	ND	0.80		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Cadmium	ND	0.20		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Chromium	3.8	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Chromium, Trivalent	0.0038			mg/L	1		Tri Chrome Calc.	2/11/20	2/12/20 20:35	MJH
Copper	4.0	1.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Iron	0.87	0.050		mg/L	1		EPA 200.7	2/11/20	2/12/20 15:38	MJH
Lead	1.6	0.50		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Mercury	ND	0.00010		mg/L	1		EPA 245.1	2/10/20	2/10/20 15:04	CJV
Nickel	ND	5.0		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Selenium	ND	5.0	1.6	µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Silver	ND	0.20		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Zinc	55	10		µg/L	1		EPA 200.8	2/11/20	2/12/20 20:35	MJH
Hardness	34	1.4		mg/L	1		EPA 200.7	2/11/20	2/12/20 15:38	MJH

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Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0350

Date Received: 2/7/2020

Field Sample #: Wetland-01 Sampled: 2/7/2020 14:05

Sample ID: 20B0350-01

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040		mg/L	1		SM21-22 3500 Cr B	2/7/20	2/7/20 20:50	KMV
pH @20.7°C	6.9			pH Units	1	H-05	SM21-22 4500 H B	2/7/20	2/7/20 21:00	DMC

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Project Location: 64 Stevens St. Fall River, MA Sample Description: Work Order: 20B0350

Date Received: 2/7/2020

Field Sample #: Wetland-01 Sampled: 2/7/2020 14:05

Sample ID: 20B0350-01

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ammonia as N	0.109	0.075	0.024	mg/L	1		SM19-22 4500 NH3 C		2/11/20 23:41	AAL

con-test® ANALYTICAL LABORATORY
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Sample Extraction Data

Prep Method: EPA 200.7-EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0350-01 [Wetland-01]	B252019	50.0	50.0	02/11/20
20B0350-01 [Wetland-01]	B252019	50.0		02/11/20

Prep Method: EPA 200.8-EPA 200.8

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0350-01 [Wetland-01]	B252020	50.0	50.0	02/11/20

Prep Method: EPA 245.1-EPA 245.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0350-01 [Wetland-01]	B251903	6.00	6.00	02/10/20

SM21-22 3500 Cr B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20B0350-01 [Wetland-01]	B251850	50.0	50.0	02/07/20

SM21-22 4500 H B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0350-01 [Wetland-01]	B251846	50.0	02/07/20

Prep Method: EPA 200.8-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Date
20B0350-01 [Wetland-01]	B252020	50.0	02/11/20

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251903 - EPA 245.1										
Blank (B251903-BLK1)				Prepared & Analyzed: 02/10/20						
Mercury	ND	0.00010	mg/L							
LCS (B251903-BS1)				Prepared & Analyzed: 02/10/20						
Mercury	0.00389	0.00010	mg/L	0.00400		97.2	85-115			
LCS Dup (B251903-BSD1)				Prepared & Analyzed: 02/10/20						
Mercury	0.00389	0.00010	mg/L	0.00400		97.2	85-115	0.0422	20	
Batch B252019 - EPA 200.7										
Blank (B252019-BLK1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	ND	0.050	mg/L							
Hardness	ND	1.4	mg/L							
LCS (B252019-BS1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	4.30	0.050	mg/L	4.00		107	85-115			
Hardness	28	1.4	mg/L	26.5		105	85-115			
LCS Dup (B252019-BSD1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Iron	4.38	0.050	mg/L	4.00		109	85-115	1.82	20	
Hardness	28	1.4	mg/L	26.5		107	85-115	1.86	20	
Batch B252020 - EPA 200.8										
Blank (B252020-BLK1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	ND	1.0	µg/L							
Arsenic	ND	0.80	µg/L							
Cadmium	ND	0.20	µg/L							
Chromium	ND	1.0	µg/L							
Chromium, Trivalent	0.0		mg/L							
Copper	ND	1.0	µg/L							
Lead	ND	0.50	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.20	µg/L							
Zinc	ND	10	µg/L							
LCS (B252020-BS1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	495	10	µg/L	500		99.0	85-115			
Arsenic	501	8.0	µg/L	500		100	85-115			
Cadmium	510	2.0	µg/L	500		102	85-115			
Chromium	499	10	µg/L	500		99.9	85-115			
Copper	1000	10	µg/L	1000		100	85-115			
Lead	500	5.0	µg/L	500		99.9	85-115			
Nickel	521	50	µg/L	500		104	85-115			
Selenium	491	50	µg/L	500		98.2	85-115			
Silver	489	2.0	µg/L	500		97.7	85-115			
Zinc	993	100	µg/L	1000		99.3	85-115			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B252020 - EPA 200.8										
LCS Dup (B252020-BSD1)				Prepared: 02/11/20 Analyzed: 02/12/20						
Antimony	507	10	µg/L	500		101	85-115	2.36	20	
Arsenic	511	8.0	µg/L	500		102	85-115	2.06	20	
Cadmium	519	2.0	µg/L	500		104	85-115	1.91	20	
Chromium	506	10	µg/L	500		101	85-115	1.26	20	
Copper	1030	10	µg/L	1000		103	85-115	2.50	20	
Lead	513	5.0	µg/L	500		103	85-115	2.72	20	
Nickel	532	50	µg/L	500		106	85-115	2.11	20	
Selenium	505	50	µg/L	500		101	85-115	2.73	20	
Silver	499	2.0	µg/L	500		99.8	85-115	2.09	20	
Zinc	1000	100	µg/L	1000		100	85-115	1.06	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251846 - SM21-22 4500 H B										
LCS (B251846-BS1)				Prepared & Analyzed: 02/07/20						
pH	6.03		pH Units	6.00		100	90-110			
Duplicate (B251846-DUP1)	**Source: 20B0350-01**			Prepared & Analyzed: 02/07/20						
pH	6.8		pH Units		6.9			1.05	5	H-05
Batch B251850 - SM21-22 3500 Cr B										
Blank (B251850-BLK1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B251850-BS1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		106	83.9-121			
LCS Dup (B251850-BSD1)				Prepared & Analyzed: 02/07/20						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	83.9-121	2.42	10	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-05	Holding time was exceeded. pH analysis should be performed immediately at time of sampling. Nominal 15 minute holding time was exceeded.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 200.7 in Water	
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Hardness	CT,MA,NH,NY,RI,VA
EPA 200.8 in Water	
Antimony	CT,MA,NH,NY,RI,NC,ME,VA
Arsenic	CT,MA,NH,NY,RI,NC,ME,VA
Cadmium	CT,MA,NH,NY,RI,NC,ME,VA
Chromium	CT,MA,NH,NY,RI,NC,ME,VA
Copper	CT,MA,NH,NY,RI,NC,ME,VA
Lead	CT,MA,NH,NY,RI,NC,ME,VA
Nickel	CT,MA,NH,NY,RI,NC,ME,VA
Selenium	CT,MA,NH,NY,RI,NC,ME,VA
Silver	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
EPA 245.1 in Water	
Mercury	CT,MA,NH,RI,NY,NC,ME,VA
SM19-22 4500 NH3 C in Water	
Ammonia as N	NY,MA,CT,RI,VA,NC,ME
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NC
SM21-22 4500 H B in Water	
pH	CT,MA,RI

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332 2083050
Fax: 413-525-6405
Email: info@contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

KAF

Company Name:	Kleinfelder
Address:	One Beacon St, Suite 8100, Boston, MA 02108
Phone:	617-497-7800
Project Name:	CFI Fall River
Project Location:	64 Stevens Street
Project Number:	20192795.005A
Project Manager:	Emily Straley
Con-Test Quote Name/Number:	20200205
Invoice Recipient:	Emily Straley
Sampled By:	A. Bayles, J. Fontaine

Requested Turnaround Time
7-Day ☐ 10-Day ☐
Due Date: X 5-day

Rush-Approval Required
1-Day ☐ 3-Day ☐ (HB)
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like Data Pkg Required: ☐
Email To: msoule@kleinfelder.com; estraley
Fax To #:

Con-Test Work Order#	Client Sample ID / Description	~~Beginning~~ Date/~~Time~~	~~Ending~~ ~~Date~~/Time	Composite	Grab	[1]Matrix Code	Conc Code	Ammonia via method 350.1;	Hardness via 200.7	Total Metals via 200.7***	pH	Cr6 via 3500	~~pH, Cr6 via 3500~~	# of Containers
								KS	KW	N/I	I	I		[2] Preservation Code
								A	P	P	P	P		[3] Container Code
1	Wetland-01	2/7/20	1405		X	SW	U	X	X	X	X	X		1

ANALYSIS REQUESTED

Comments: ***Sb, As, Cd, Cr3, Cr6, Cu, Fe, Pb, Hg, Ni, Se, Ag, Zn. Hg by 245.1, Cr6 via 3500

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Date/Time:
Relinquished by: (signature)	2/7/20 1530
Received by: (signature)	2-7-20 1530
Relinquished by: (signature)	2-7-20 1700
Received by: (signature)	2/7/20 17:00
Relinquished by: (signature)	2/7/20 6:15
Received by: (signature) 3.4	2/7/20 18:15

Detection Limit Requirements
MA
CT
Other: EPA NPDES RGP

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

con-test ANALYTICAL LABORATORY www.contestlabs.com
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Kleinfelder

Received By MP Date 2/7/20 Time 1815

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____ Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 3.4 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? T Who was notified? Katie

Is there enough Volume? T

Is there Headspace where applicable? N/A MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? Acid T<2 Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.	1	250 mL Plastic	3	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

ATTACHMENT E

Fish and Wildlife Service Consistency Letter and Official List of Threatened and Endangered Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

IPaC Record Locator: 617-20529287 February 27, 2020

Subject: Consistency letter for the 'CFI Fall River MA8427' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Joseph Fontaine:

The U.S. Fish and Wildlife Service (Service) received on February 27, 2020 your effects determination for the 'CFI Fall River MA8427' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

CFI Fall River MA8427

2. Description

The following description was provided for the project 'CFI Fall River MA8427':

> The project involves dewatering for the construction of a new convenience store and service station with a car wash. Dewatering is expected to occur during the installment of new underground storage tanks.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/41.681251775473655N71.14192621201042W

Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule
This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   No

2. Will your activity purposefully **Take** northern long-eared bats?

   No

3. Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

   Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

6. Will the action involve Tree Removal?

   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: February 27, 2020
Consultation Code: 05E1NE00-2020-SLI-1564
Event Code: 05E1NE00-2020-E-04520
Project Name: CFI Fall River MA8427

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2020-SLI-1564

Event Code: 05E1NE00-2020-E-04520

Project Name: CFI Fall River MA8427

Project Type: DREDGE / EXCAVATION

Project Description: The project involves dewatering for the construction of a new convenience store and service station with a car wash. Dewatering is expected to occur during the installment of new underground storage tanks.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/41.681251775473655N71.14192621201042W

Counties: Bristol, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

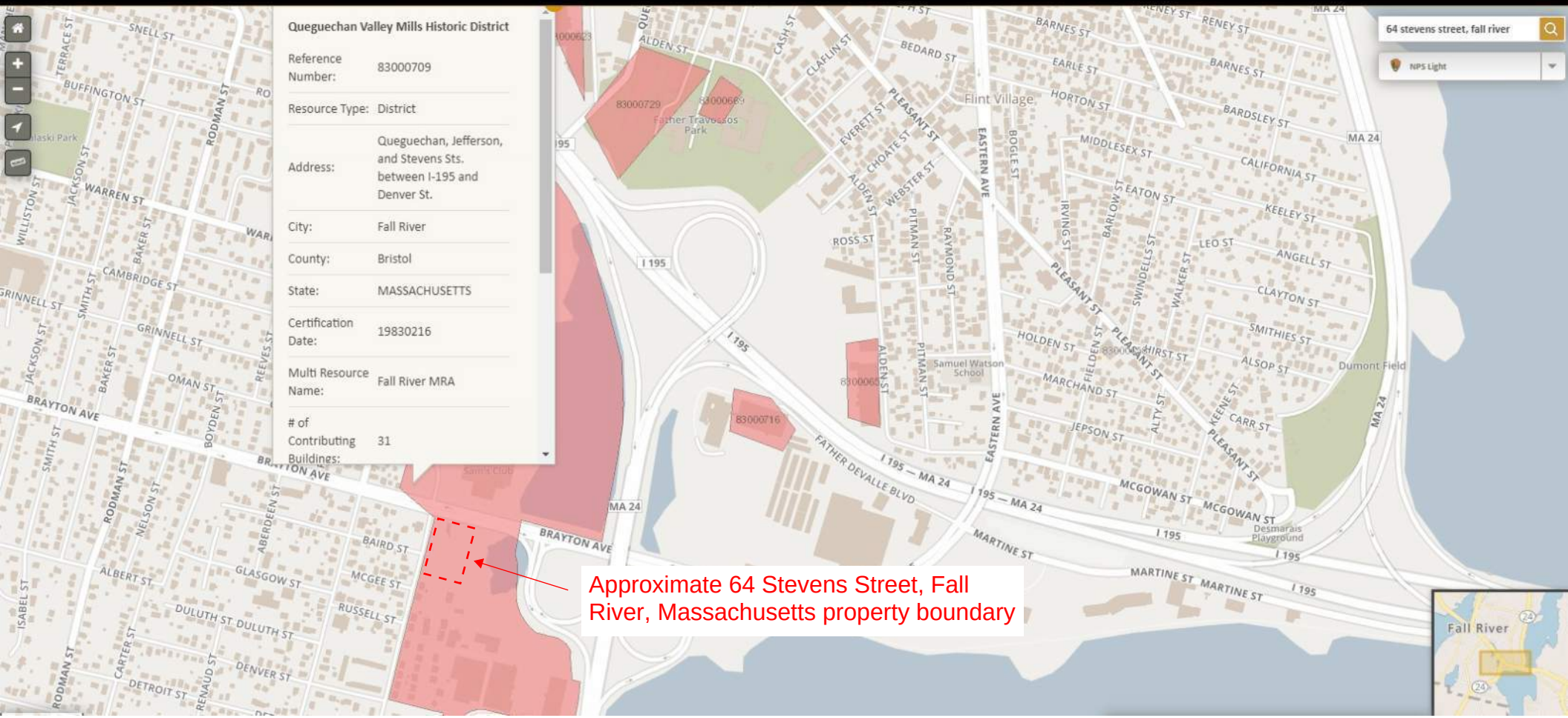
ATTACHMENT F

Historic Properties Information

National Register of Historic Places

Public, non-restricted data depicting National Register spatial data processed by the Cultural Resources GIS facility. Data last updated in April, 2014.

National Park Service
U.S. Department of the Interior



Massachusetts Cultural Resource Information System
MACRIS

MHC Home | MACRIS Home

For more information about this page and how to use it, click here.

Inventory No: FLR.1944
Historic Name: Stevens Manufacturing Company
Common Name:
Address: Stevens St
City/Town: Fall River
Village/Neighborhood: Flint Village
Local No: D
Year Constructed: 1892
Architect(s): Sears, Chauncey H.
Architectural Style(s): Not researched
Use(s): Industrial Complex or District; Other Manufacturing; Textile Mill Cotton; Textile Mill Other
Significance: Architecture; Industry
Area(s): INV NR FLR.D: Quequechan Valley Mills Historic District
NR cs FLR.AS: Fall River Multiple Resource Area
Designation(s): Nat'l Register District (02/16/1983); Nat'l Register MRA (02/16/1983)
Building Material(s): Wall: Brick; Granite

Digital Photo Not Yet Available

There is no form for this resource. Information can be found on the FLR.D form and/or the appropriate area forms listed below.

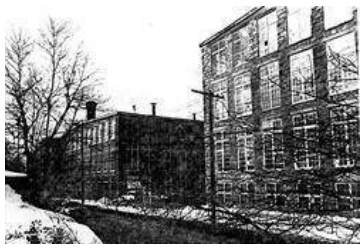
New Search Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	FLR.D
Historic Name:	Quequechan Valley Mills Historic District
Common Name:	
Address:	
City/Town:	Fall River
Village/Neighborhood:	Flint Village
Local No:	
Year Constructed:	
Architect(s):	
Architectural Style(s):	
Use(s):	Industrial Complex or District; Textile Mill
Significance:	Architecture; Industry
Area(s):	
Designation(s):	Nat'l Register MRA (02/16/1983); Nat'l Register District (02/16/1983)
Building Materials(s):	

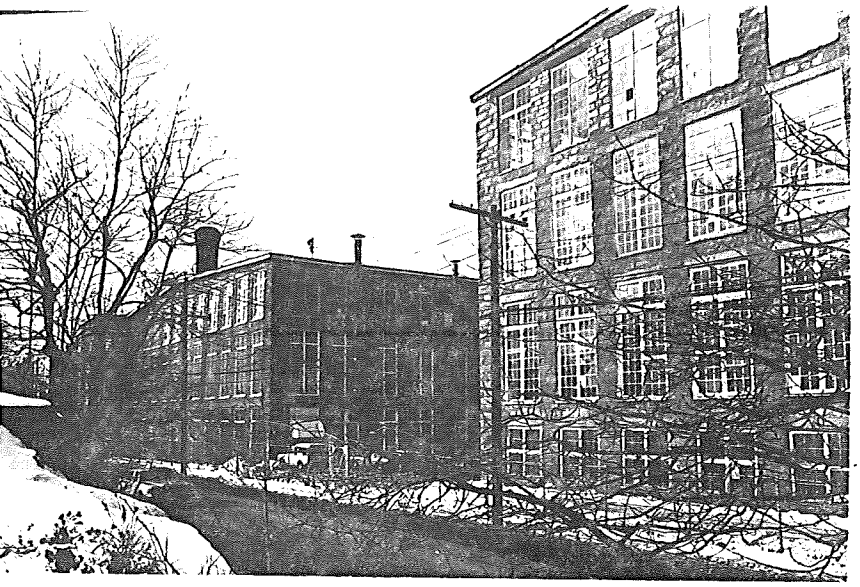


Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

FORM A - AREA

MASSACHUSETTS HISTORICAL COMMISSION
294 Washington Street, Boston, MA. 02108

Form numbers in this area	Area letter
See Owners' List	D



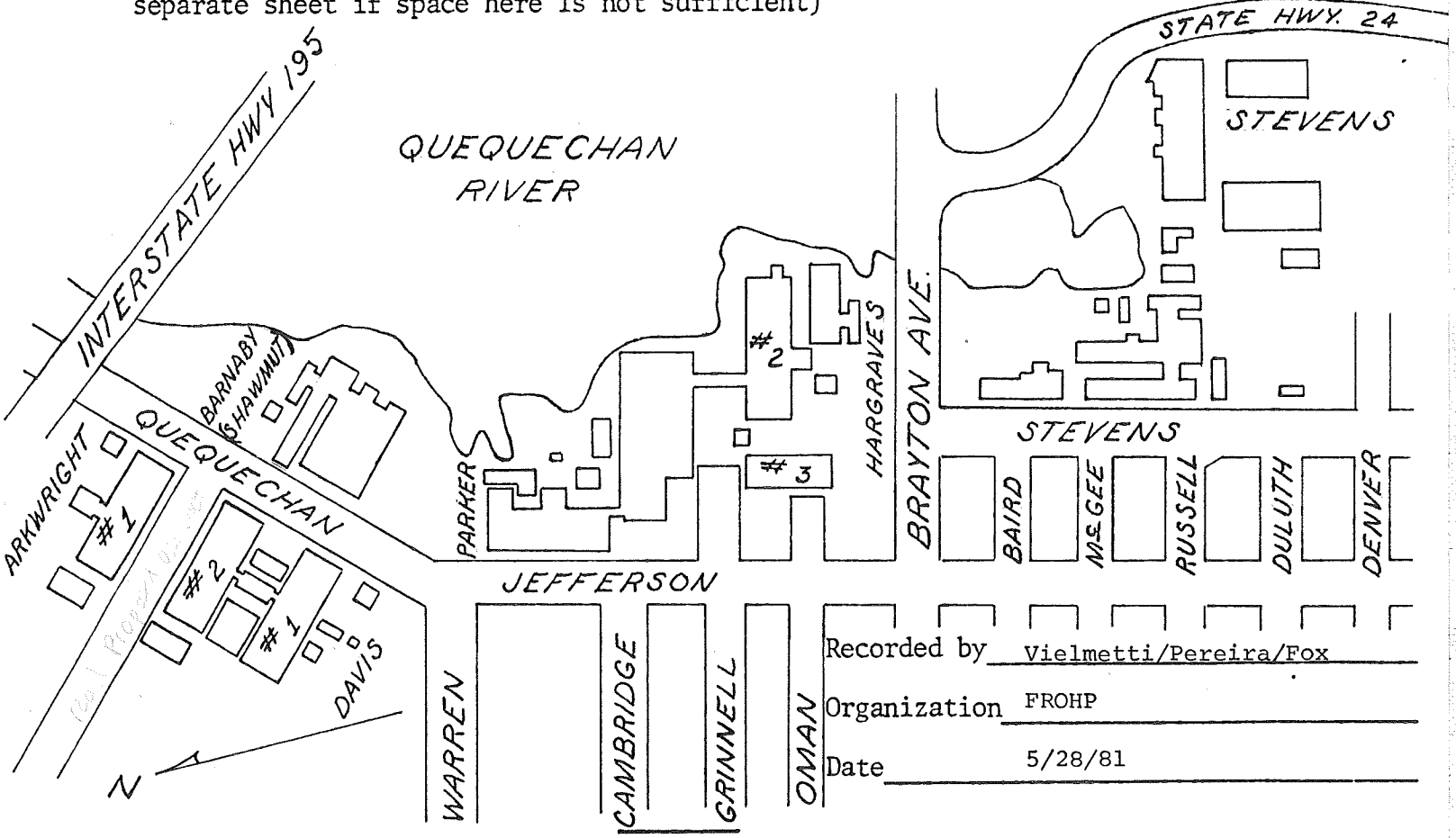
NRDIS NRMRA 02/16/1983 [FLR.AS]

Town Fall River, Mass.

Name of area (if any) Quequechan Valley Mills Historic District

General date or period 1882-1908

Sketch map. Draw a general map of the area indicating properties within it. Number each property for which individual inventory forms have been completed. Label streets (including route numbers, if any) and indicate north. (Attach a separate sheet if space here is not sufficient)



Recorded by Vielmetti/Pereira/Fox

Organization FROHP

Date 5/28/81

(Staple additional sheets here)

ARCHITECTURAL SIGNIFICANCE of area. (Describe physical setting, general character, and architecturally significant structures).

The six large mill complexes which comprise the Quequechan Valley Mills Historic District are located along the west shore of the Quequechan River as it flows into South Watuppa Lake. The mills date between 1882 and 1908 and are constructed of granite except for the large brick Stevens complex at the southern edge of the district.

Of principal architectural significance are the four mills on either side of Quequechan Street in the northern part of the district--the Barnaby (1882), Parker (1895), Arkwright (1897) and Davis (1902 and 1908). Although simple and utilitarian in design, they achieve a monumentality because of their dense grouping, large scale, rough granite block construction and cohesiveness as an ensemble. This part of the district is partially landscaped and the buildings are largely intact and well-maintained. Two one-story tan brick offices located at each end of the Arkwright-Davis plants have also survived and are notable for their detailing and contrasting small scale. (CONTINUED)

HISTORICAL SIGNIFICANCE of area. (Explain development of area, what caused it, and how it affected community; be specific).

The Quequechan Valley Mills Historic District was the last major area in Fall River to be developed for industrial use and contains the city's largest concentration of late 19th and early 20th century mills. These mills are notable because of their large spindle capacity and specialized product line and also because they remained in use for textile manufacturing longer than most of the city's mill facilities.

The flat, dry land along the west bank of the Quequechan River near South Watuppa Lake was the last area along the river to be utilized for mill construction. Despite its remoteness from the city center, the location was attractive by the late 19th century because large tracts were still available close to water supplies and convenient to the Old Colony Railroad, which ran spur lines to many of the mill complexes. The area was also close to Flint Village, an already dense residential area from which mill operatives could be drawn.

The first mill to locate here was Fall River Spool and Bobbin, a small specialty company organized in 1875. No significant structures remain intact from this once prosperous firm. The first of the district's six large mill complexes was the Barnaby Manufacturing Company (later the Shawmut), which erected its two granite mills in 1882. The 1883 Atlas shows only the Barnaby, Fall River Spool and Bobbin, the A. J. Davis and Brothers Wholesale Provision Dealers, and three houses.

Development activity intensified during the period 1890-1910, the last major phase of mill building in Fall River. Within two decades, the city nearly doubled (CONTINUED)

BIBLIOGRAPHY and/or REFERENCES

City of Fall River, Office of Historic Preservation (Inventory Files)

Corporate Millyard Plans (1920) - Available for the Stevens, Arkwright, Shawmut, Davis, Hargraves #2 & #3, and Parker

Fall River City Directories

Fenner, Henry M. History of Fall River, Mass., compiled for the Cotton Centennial (Fall River, 1911)

(CONTINUED)

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community: Fall River, Mass.	Form No: See Owners' List
Property Name: Quequechan Valley Mills Historic District	

Indicate each item on inventory form which is being continued below.

ARCHITECTURAL SIGNIFICANCE (Continuation)

The granite mills are all fine examples of late 19th and early 20th century mill architecture in Fall River. Their straightforward design and lack of ornamentation can be attributed to increased economic competition and more stringent fire and safety regulations, which favored the use of mill specialists or engineers rather than architects in the design process. Characteristic features include the low-pitched roofs and wide overhanging cornices with single wooden brackets. Granite blocks are generally rough cut and are set in random courses with parged joints. More finished blocks are used only for corner quoins and lintels except in the case of the Barnaby, where the street ends of the two main buildings are constructed of finished blocks set in courses.

The mills illustrate a trend toward wider mills, which allowed for better placement of machinery and more efficient operation. Like most mills of the 1860's and 70's, the early (1882) Barnaby Mill #1 is only 72' wide. In contrast, the 1892 and 1893 Hargraves mills are 127' wide, the Parker (1895) is 150' wide, the Arkwright (1897) 125' wide, and the two Davis Mills of 1902 and 1908 are a full 160' wide.

Also typical of the period is the trend toward larger windows which were needed to allow light into the increasingly wide mills. The earliest mill, the Barnaby, illustrates the change from the 12/12 double-hung sash favored in earlier years to a newer sash type, the T-cross, in which heavy mullions divide the window into four parts. In the even larger T-cross windows of the Hargraves, Parker, Arkwright and Davis, openings have between 6/15 and 6/24 small panes on each side of the center mullion--or a total of as many as 60 panes per window--with the upper stories generally having smaller openings. The contrast between the thin white wooden sash muntins and the rough granite walls is an important part of the mill aesthetic, and the Quequechan Valley district is notable for the large proportion of buildings in which the original sash has remained in place.

Two of the four granite mills in the northern part of the district, the Arkwright and Davis, are the work of the same contractor, Chauncy H. Sears, a mason and builder who specialized in mills. Their parallel siting and similarity of scale and style contribute to the cohesiveness of the site.

Sears also designed the 1901 portion of the Stevens Mill, a complex which merits attention as an excellent example of 1890's brick mill architecture. Characteristic features include the large segmental-arched windows with brick relieving arches, wide bracketed cornices and low-pitched roofs. The Stevens complex includes a large number of low-scale one- and two-story buildings spread out over a large parcel, and in terms of the number of buildings and the acreage is one of the largest in Fall River. The buildings are generally intact except for the sash.

The Quequechan Valley Mills Historic District represents Fall River's largest concentration of late 19th and early 20th century mills, in the last major area developed for industrial use, and for the monumentality and intactness of its functional granite construction. The District meets criteria A and C of the National Register.

Staple to inventory form at bottom

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community: Fall River, Mass.	Form No: See Owners' List
Property Name: Quequechan Valley Mills Historic District	

Indicate each item on inventory form which is being continued below.

HISTORICAL SIGNIFICANCE (Continuation)

its spindle capacity. Of the eight large new textile complexes built during those twenty years, four were located within the Quequechan Valley Mills Historic District: the Stevens (1892), Parker (1895), Arkwright (1897), and Davis (1902). In addition, the Hargraves Company, established in 1888 on the north side of the river, chose to expand into this area and erected two massive new mills, #2 and #3, in 1892 and 1893. By 1910 the spindle capacity of the six mills in the district was approximately 293,000, or 8% of the city's total of 3,665,864.

The period 1890-1920 was one of increasing specialization within the Fall River textile industry, as the city yielded to southern competition in the area of simple print cloth production. The trend away from plainer and courser goods to the production of finer fabrics is exemplified by the output of the Quequechan Valley District mills. The Arkwright manufactured cotton cloth and also "specials," the Barnaby "fine ginghams," the Hargraves and Parker "fine cotton goods," the Davis "fine cottons and fancy goods," and the Stevens--the most specialized of the group--produced satins, marseilles and crochet quiltings and cotton and linen damask.

Despite increasing competition, the years following World War I brought great prosperity to Fall River. In the early 20's, companies reached record levels of production, wages, employment and profits. In 1923, the year before the mills began to close, the city's output was estimated at 2,000 miles of cloth daily, with the industry employing 30,000. In 1920 the spindle capacity of the six Quequechan Valley mills was 438,385, or 11% of the total. Of the six, the largest by far was the Davis, which with 130,368 spindles was the fifth largest single mill company in Fall River.

The decline of the textile industry in the mid-1920's has been attributed to a number of factors including a decrease in cotton exports, increase in the cost of raw materials, a dull domestic market, and competition from southern mills, which had more efficient machinery, lower labor costs and fewer union problems. After the stock market collapse in 1929, many plants which had survived the mid-20's were liquidated. In 1936 for the first time in 65 years, the city's total number of spindles was less than 1,000,000. By the end of the Depression, there were only 17 textile plants still in operation.

Although all of the Quequechan Valley mills were eventually reorganized or taken over by other companies, they continued in textile-producing use longer than most. The Parker took over the Hargraves Mills in 1922 and in 1931 became part of Berkshire Fine Spinning Associates, a horizontal merger of five New England fine goods mills in several states. In the late 1920's, Berkshire, in conjunction with United Merchants and Manufacturers, also formed the General Cotton Corporation, which took over the Davis Mills in 1930. In the late 1920's Arkwright became part of United Merchants and Manufacturers. In 1917 the Barnaby was taken over by the newly organized Shawmut Company, which continued in operation until the early 1940's. The Stevens remained in operation as the Stevens Manufacturing Company until the early 1950's.

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community:	Form No:
Fall River, Mass.	See Owners' List
Property Name: Quequechan Valley Mills Historic District	

Indicate each item on inventory form which is being continued below.

INVENTORY (Listed Alphabetically by Mill Name)

Arkwright Mill

The company was incorporated in 1897 with a capital of $450,000 for the production of cotton cloth, odd goods and specials. Original officers included Joseph A. Bowen, president, and John P. Bodge, treasurer. The capacity of the mill when it opened in 1898 was 36,000 spindles and 900 looms, a number which increased to 68,432 spindles and 1,451 looms in 1920. The company was reincorporated in the late 1920's as the Arkwright Corporation under the United Merchants and Manufacturing Company. The single 4-story granite mill was constructed in 1897 by contractor C. H. Sears and has the large scale, wide proportions (395' X 125') and large windows (6/18 and 6/21 T-cross sash) characteristic of the later granite mills.

Barnaby Manufacturing Co. (later Shawmut Mills)

The Barnaby Manufacturing Co., incorporated in 1882, was the first mill to be established within this district. It was capitalized at $300,000, produced fine ginghams, and had as officers Simeon B. Chase, president, and Stephen B. Ashley, treasurer. In 1883 the mill had 15,000 spindles and 500 looms. It was taken over in 1917 by the Shawmut Mills and in 1920 had 10,000 spindles for the production of tire fabric yarn. The major buildings in the complex are of granite and include the main mill of 1882 (290' X 72'), Mill #1A for storage (1882) (160' X 40'), Mill #2 (1882) (270' X 200'), and the rear finishing building (1888) (100' X 120').

Davis Mills

The Davis Mills was incorporated with $500,000 capital in 1902 for the manufacture of fine cottons and fancy goods. Original officers included Leontine Lincoln, president (also president of the Parker Mills) and J. Bion Richards, treasurer. In 1903 the single mill had 40,000 spindles and 1,000 looms. The second mill was erected in 1908 and in 1913 capacity had risen to 130,368 spindles and 2,442 looms. In 1920 the Davis was the fifth largest single mill company in Fall River. After 1905, capital was $2.5 million. The plant was acquired in 1930 by the General Cotton Supply Corporation. The two impressive 3-story granite mill buildings were erected by contractor C. H. Sears and are similar in style to the 1897 Arkwright mill, also by Sears. They are large in scale and have the wide proportions (355' X 160' and 435' X 160') and large windows (6/18 and 6/24 T-cross sash) characteristic of the later granite mills.

Hargraves Mills #2 and #3

The Hargraves mills was organized in 1888 with $400,000 capital, an amount increased to $800,000 in 1892. The original president was Reuben Hargraves and first treasurer was Benjamin B. Read. The company produced fine cotton goods. The original 1888 mill is located on Quarry Street outside the district and originally had 36,000 spindles. Mills #2 and #3 were constructed in 1892 and 1893 and the company reached a peak capacity of 116,498 spindles and 2,901 looms about 1920. The mill was taken over by Parker in 1922. The two Hargraves mills within the district are large, 3-story granite structures measuring 480' X 127' (#2) and 310' X 127' (#3). They have large windows with 6/15 T-cross sash. Mill #3 is unusual in having a brick end facing Brayton Avenue.

Staple to Inventory form at bottom

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community:	Form No:
Fall River, Mass.	See Owners' List
Property Name: Quequechan Valley Mills Historic District	

Indicate each item on inventory form which is being continued below.

Parker Mills

The Parker Mills was incorporated in 1895 for the production of fine cotton goods. The original capital of $450,000 was eventually increased to $2,750,000. The first president, Leontine Lincoln, was also president of the Davis Mills; the first treasurer was Seth A. Borden. The original capacity of 45,160 spindles and 1,000 looms increased to 48,968 spindles and 1,088 looms by 1920, not counting those at the Warren, Rhode Island plant built in 1899. In 1922 Parker Mills took over Hargraves, and in 1931 the merged company was acquired by the Berkshire Fine Spinning Associates. The main granite building of 1895 was a combination mill and weave shed, divided into 2- and 3-story sections measuring 400' X 150' in total. The 1895 auxiliary buildings and later granite cloth room also remain.

Shawmut Mills (incorporated in 1917) See Barnaby.

Stevens Manufacturing Company

The Stevens Manufacturing Company was incorporated in 1892 with $250,000 capital, an amount later increased to $1.2 million. The company produced satins, marseilles and crochet quiltings and cotton and linen damask. The spindleage in the first 1892 buildings was about 8,000, which by 1913 had increased to 23,000. Frank Stevens served as first president and George H. Hills as first treasurer. The 1892 buildings included 3 mills (66' X 200', 73' X 170' and 73' X 85') and six auxiliary buildings, generally of brick. The company added a second group of seven buildings, also mostly brick, in 1901, with C. H. Sears as contractor. These included the two-story preparation building (276' X 144') as well as a weave shed, storehouse, bleachery, and finishing house (266' X 95'). The Stevens is one of the largest complexes in the city in number of buildings, although they are generally low-scale and spread out over a large parcel. The principal buildings have the characteristic arched windows, with brick relieving arches, wide overhanging bracketed cornices, and low-pitched roofs.

INVENTORY FORM C TINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community: Fall River, Mass.	Form No: See Owners' List
Property Name: Quequechan Valley Mills Historic District	

Indicate each item on inventory form which is being continued below.

BIBLIOGRAPHY (Continuation)

Hurd, Hamilton, History of Bristol County, Mass. (Philadelphia, 1883) p. 323

Map of the City of Fall River (Sampson & Murdock Co., 1925)

Phillips, A. S., The Phillips History of Fall River (1944-46), Fascicle II, pages 130-132

Rosebrock, Ellen, Historic Fall River, (Fall River, 1978)

Smith, Thomas Russell, The Cotton Textile Industry of Fall River, Massachusetts, (N. Y., King's Crown Press, 1944)

Staple to Inventory form at bottom

QUEQUECHAN VALLEY MILLS

HISTORIC DISTRICT

LEGAL DESCRIPTION

Beginning at a point which forms the north corner of the intersection of Warren and Quequechan Streets, thence running west, northwesterly 592.16 feet to a point, thence running northeasterly 467.50 feet to a point, thence running north, northeasterly 969.57 to a point, thence running east, southeasterly 388 feet to a point of intersection with the southern property line of Interstate Highway 195, thence following the property line running south, southeasterly 378 feet to a point, thence running east, southeasterly 80.99 feet to a point, thence running south, southeasterly 481.44 feet to a point forming the west property line of Quequechan Street, continuing across Quequechan Street and still running in the highway property line southeasterly and south for approximately 1,260 feet to the intersection of the Quequechan River, Channel Line, thence running in the Channel Line southwesterly for approximately 1240 feet to a point forming the north property line of Brayton Avenue, thence running west, northwesterly 528.20 feet in the north line of Brayton Avenue to a point opposite the west property corner of Route 24 Easterly Connector Highway Ramp, thence crossing Brayton Avenue in a south, southwesterly direction to the above described property corner, thence following the west and south property line of Route 24 along a reverse curve pattern for 919.49 feet to a point intersecting with a stone wall, thence following the stone wall southeasterly 175.52 feet to a point, thence following the same stone wall and imaginary extension line southerly 363.49 feet to a point, thence running southwesterly 224 feet to a point forming the southeast corner of Assessor's Plat #E-27-2, thence running westerly 302 feet to a point, thence running north 18 feet to a point, thence running west 845 feet to a point being the east side property line of Stevens Street, thence running north, northeasterly 1,046.33 feet to a point being the south property line of Brayton Avenue, thence running on a west, northwesterly line across Brayton Avenue to a point being the north boundary line of Brayton Avenue,202.73 feet east of the northeast corner of the intersection of Brayton Avenue and Jefferson Street, thence running north northeasterly 563.58 feet to a point being the south boundary line of Grinnell Street, thence running east, southeast 43.04 feet to a point, thence crossing Grinnell Street and running north, northeasterly 145.95 feet to a point, thence west northwesterly 248.23 feet to a point being the east side boundary line of Jefferson Street, thence

running north, northeasterly 569.39 feet to a point being the east side terminus of Jefferson Street and the start of Quequechan Street,thence crossing the intersection of Jefferson, Quequechan and Warren Streets on a north plane to the starting point and encompassing all land, property and water lying within the above described boundaries, containing 4,338,603 square feet of private property or 99.6 acres.

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

For HCRS use only
received
date entered

NAME: Quequechan Valley Mills Historic District

LOCATION: Fall River, Mass.,
Quequechan Street between Interstate Rte 195 and Warren Street,
and Jefferson Street bet. Warren & Denver Streets

OWNERS:

* F-4-20 (Hargraves Mills #2 & #3)
Providence Pile Fabric Corp.
719 River Street
Woonsocket, R. I.

ACREAGE: Approx. 15.002 acres or 653,477 sq. ft.

* F-1-1/3 (Davis Mills #1 & #2) 10/6 letter #1 added 1/81
United Merchants Mfg., Inc,
1407 Broadway
New York, N. Y. 10021

ACREAGE: Combined: approx. 17.585 acres or 765,998 sq. ft.
F-1-1: 677,717 sq. ft.
F-1-3: 88,281 sq. ft.

* F-3-1/2/3 (Parker Mills)
Providence Pile Fabric Corp.
719 River Street
Woonsocket, R. I.

ACREAGE: F-3-1: 605,423 sq. ft,
F-3-2/3: 332,768 sq. ft.
Total: 938,191 sq. ft. or approx. 21.538 acres

* F-1-2 (Arkwright #1)
United Merchants Mfg., Inc.
1407 Broadway
New York, N. Y. 10021

ACREAGE: 22,566 sq. ft. or 0.518 acres

* F-2-1/2/3 (Barnaby Mills)
Frito-Lay, Inc.
c/o George McElroy Associates
1011 Stermmons Towers
Dallas, Texas 75207

ACREAGE: F-2-2: 246,464 sq. ft,
F-2-3: 174,365 sq. ft.
Total: 420,829 sq. ft. or approx. 9.66 acres

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

For HCRS use only
received
date entered

Continuation sheet 28 Item number 7 Page

Quequechan Valley Mills Historic District (continued)

* E-27-1/2/3/10 (Stevens Mfg. Co.)
Leonard M. Ansin et al, Trustee
38 Lovett Road
Newton, Mass.

ACREAGE:

E-27-1:	157,514 sq. ft.
E-27-3/10:	98,738 sq. ft.
Total:	256,252 sq. ft. or 5.88 acres

* E-27-2/8/6/5/7/9/11 (Stevens Mfg. Co.)
Edward J. Capuano, Jr.
168 Stevens Street
Fall River, Mass.

ACREAGE:

E-27-2/8:	377,345 sq. ft.
E-27-6:	128,030 sq. ft.
E-27-5/7/9:	279,410 sq. ft.
E-27-11:	116,525 sq. ft.
Total:	901,310 sq. ft. or approx. 20.69 acres

DESCRIPTION: See Area Form - attached

DATES: 1882-1908

SIGNIFICANCE: See Area Form - attached

ACREAGE: Approx. 99.6 acres or 4,338,603 sq. ft.

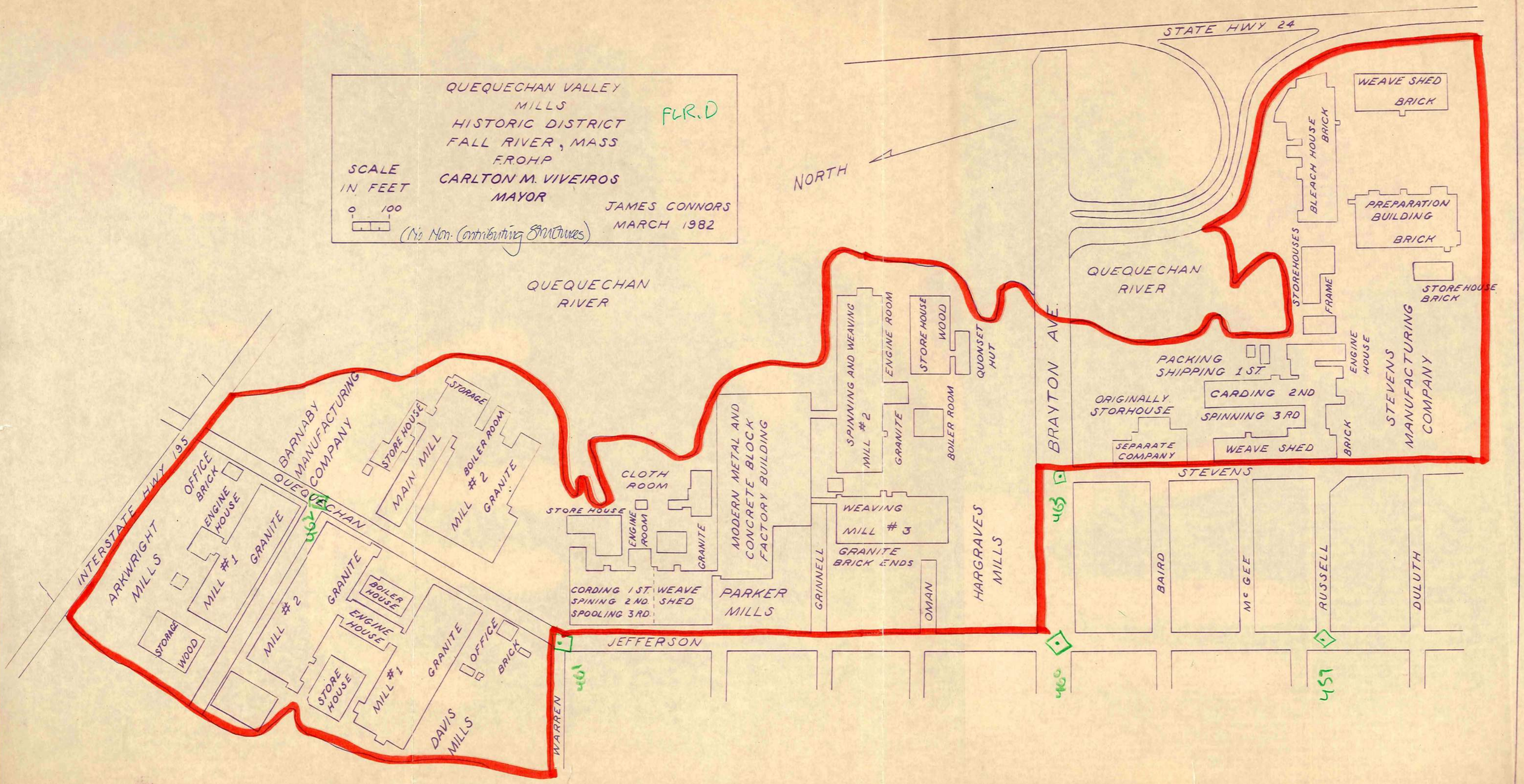
VBD: See attached pages

Boundary Justification: The boundaries of the district are the same as the exterior property lines of the six mill complexes included therein.

UTM:

Fall River

A 19/321700/4617300
B 19/321880/4617050
C 19/321820/4615920
D 19/321560/4616130
E 19/321590/4616460
F 19/321450/4616520
G 19/321560/4616900
H 19/321385/4616950


QUEQUECHAN VALLEY
MILLS
HISTORIC DISTRICT
FALL RIVER, MASS
F.R.O.H.P
CARLTON M. VIVEIROS
MAYOR
JAMES CONNORS
MARCH 1982
FLR.D
SCALE
IN FEET
0 100
(No Non-Contributing Structures)
NORTH
STATE HWY 24
QUEQUECHAN
RIVER
QUEQUECHAN
RIVER
INTERSTATE HWY 195
ARKWRIGHT
MILLS
OFFICE
BRICK
ENGINE
HOUSE
MILL #1
GRANITE
STORAGE
WOOD
BARNABY
MANUFACTURING
COMPANY
STORE HOUSE
MAIN MILL
STORAGE
BOILER ROOM
MILL #2
GRANITE
MILL #2
GRANITE
BOILER
HOUSE
ENGINE
HOUSE
MILL #1
GRANITE
STORE
HOUSE
DAVIS
MILLS
GRANITE
OFFICE
BRICK
WARREN
CLOTH
ROOM
STORE HOUSE
ENGINE
ROOM
GRANITE
CORDING 1ST. WEAVE
SPINING 2ND. SHED
SPOOLING 3RD.
MODERN METAL AND
CONCRETE BLOCK
FACTORY BUILDING
PARKER
MILLS
SPINNING AND WEAVING
MILL #2
ENGINE ROOM
GRANITE
STORE HOUSE
WOOD
BOILER ROOM
QUONSET
HUT
WEAVING
MILL #3
GRANITE
BRICK ENDS
GRINNELL
OMAN
HARGRAVES
MILLS
BRAYTON AVE.
QUEQUECHAN
RIVER
WEAVE SHED
BRICK
BLEACH HOUSE
BRICK
PREPARATION
BUILDING
BRICK
STOREHOUSES
FRAME
STOREHOUSE
BRICK
ENGINE
HOUSE
BRICK
STEVENS
MANUFACTURING
COMPANY
PACKING
SHIPPING 1ST.
CARDING 2ND
SPINNING 3RD
WEAVE SHED
ORIGINALLY
STORHOUSE
SEPARATE
COMPANY
STEVENS
BAIRD
McGEE
RUSSELL
DULUTH
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NPS Form 10-900
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EXP. 10/31/84

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

[redacted] 83

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic ~~Historic Resources of Fall River, Massachusetts~~ Multiple Resource MRA

and/or common (Partial Inventory: Historic and Architectural Properties)

2. Location

street & number The incorporated limits of Fall River, Massachusetts NA not for publication

city, town Fall River NA vicinity of ~~congressional district~~ 4th District

state Massachusetts code 021 county Bristol code 005

3. Classification

Category	Ownership	Status	Present Use	
X district	___ public	X occupied	___ agriculture	X museum
X building(s)	___ private	X unoccupied	X commercial	X park
X structure	X both	X work in progress	X educational	X private residence
X site	**Public Acquisition**	**Accessible**	___ entertainment	X religious
X object	___ in process	X yes: restricted	X government	___ scientific
* Multiple Resource	NA being considered	X yes: unrestricted	X industrial	___ transportation
		X no	X military	___ other:

4. Owner of Property

name Multiple Ownership; see individual entries and district owners' lists

street & number

city, town ___ vicinity of state

5. Location of Legal Description

courthouse, registry of deeds, etc. Bristol County Registry of Deeds

street & number 441 North Main Street

city, town Fall River state Massachusetts

6. Representation in Existing Surveys

title see continuation sheet has this property been determined eligible? X yes X no

date X federal X state ___ county X local

depository for survey records

city, town state

Representation in Existing Surveys:

1. Inventory of the Historic Assets of the Commonwealth 1977-1979. 456 structures were identified; this survey was the basis for the Book Historic Fall River (1978).

2. Inventory of the Historic Assets of the Commonwealth 1980-1982. Comprehensive city-wide survey; nearly 7,000 properties were surveyed.

3. HABS - The New England Textile Mill Survey, 1971, Selected mills.

4. Properties already listed in the National Register:

Battleship Cove, including U.S.S. Massachusetts, U.S.S. Lionfish, and U.S.S. Joseph Kennedy, Jr. - entered September 30, 1976.

BMC Durfee High School, 289 Rock Street, entered June 11, 1981.
Fall River Water-Works, Bedford Street, entered December 7, 1981.
Academy Building, 102 South Main Street, entered July 2, 1973.
Carr-Osborn House, 456 Rock Street, entered April 4, 1980.

Lafayette-Durfee House, 94 Cherry Street, entered April 14, 1982.
Unitarian Society, 309 North Main Street, entered May 18, 1982.

Properties deemed eligible:

A. J. Borden Building, 91-111 South Main Street, deemed April 1, 1981.
Barnard Mills, 641-657 Quarry Street, deemed March 11, 1982.

Properties nominated as part of a Thematic Nomination:

Borden Flats Lighthouse.

7. Description

Condition		Check one	Check one
X excellent	X deteriorated	X unaltered	X original site
X good	X ruins	X altered	X moved date See original entries
X fair	___ unexposed		

Describe the present and original (if known) physical appearance

Location

Fall River is a city of nearly 34 square miles located in Bristol County in southeastern Massachusetts. The city overlooks the Taunton River and Mount Hope Bay on the west. It is bordered on the north and east by Freetown, Mass., and on the south by Tiverton, Rhode Island and Westport and Dartmouth, Mass.

Topography

The city is situated on a steep granite rise overlooking the Taunton River. The terrain is rolling, with a north-south orientation; soils are generally sandy to gravelly. North and South Watuppa Ponds almost completely divide the city, with principle drainage via the Quequechan River. The Quequechan once flowed steeply from its origin in the Watuppa Ponds over a series of falls into Mount Hope Bay; unfortunately, Interstate Route 195 now bisects the city and conceals most of the river, which is depressed into a pipe under the road.

Political Boundaries

The town of Fall River was incorporated in 1803 from part of Freetown. Known as Troy from 1804 to 1834, Fall River was incorporated as a city in 1854. Its only boundary changes have been the addition of Globe Village and Newville by an 1861 Massachusetts/Rhode Island boundary resolution.

Historic Overview

Local topography profoundly influenced Fall River's growth and informed its physical development. The steep slopes hindered land transport from the town to the Bay, precluding Fall River's development as a major port in the 18th and early 19th centuries. The same steep slopes, however, created a series of falls which made the city an ideal location for the early textile mills of the 19th century. Thus, though the river is no longer generally visible, the vast number of mills on either side of the highway -- the majority constructed of Fall River granite -- testify to the importance of this feature in determining the city's history and configuration.

Fall River's location on Mount Hope Bay became enormously significant as steam power replaced water power in the decades immediately before and after the Civil War. Coal to fire the steam engines could be shipped much more quickly and less expensively to a coastal city like Fall River than to inland Lawrence, Lowell, or Manchester. Moreover, the overnight connection to New York via the Fall River Line permitted Fall River to establish close ties to the burgeoning New York market.

While decay, demolition, and the Western Expressway (Route 79) have by and large removed all traces of Fall River's busy late 19th and early 20th century port activity, much of the rest of the city retains its turn-of-the-century character and configuration. The most intense development (downtown Fall River)occurs between the Taunton River/Mount Hope Bay and the Watuppa Ponds, focusing on the Quequechan River. Over 50 mill complexes dominate this central spine, while a small scale central business district lies near its western end. Dense residential neighborhoods overlay most of the rest of downtown Fall River. Steep Brook, the original town center, is a still-rural village in northwestern Fall River, and land east of the Watuppa Ponds remains lightly developed.

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Settlement Patterns

Native settlement of the Fall River area occurred around the Watuppa Ponds and along the eastern edges of the Taunton and Quequechan Rivers, primarily because of their value as food sources and transportation routes. The latter function continued during the colonial period, augmented by the laying out of the first major thoroughfares, North and South Main Streets and Bedford Street, c.1700-25.

Eighteenth century settlement concentrated in the western portion of the present city, as the land east of the Watuppa Ponds was set aside for woodlots, meadowland, and an Indian reservation. Although Steep Brook (near the present Freetown line) emerged as a village center early in the 18th century, homes were also scattered along North and South Main Streets during the colonial period, and small mills were established on the Quequechan River. Population figures for this period are not isolated for the area which presently constitutes Fall River; however, the number of residents here at the turn of the 19th century was probably less than 300.

After incorporation in 1803, the focus of settlement shifted almost completely to the Quequechan River. By 1830 intense industrial development was established along the banks of the river, and residential and commercial development had settled in a primitive grid north of the river and east of North Main Street. This pattern continued throughout the 19th century and became increasingly urbanized. Industrialization was accompanied by astounding population growth: 320% between 1810 and 1830 (1296 residents to 4158), 644% between 1830 and 1870 (4158 to 26,766), and 366% between 1870 and 1900 (26,766 to 104,863); the foreign born segment comprised as much as 49% of the total (1885).

Development of discrete socio-ethnic neighborhoods (all textile oriented) began during this period and intensified as the century progressed. The upper and middle class residential districts moved northward away from the Quequechan, and workers' neighborhoods were established closer to the mills, along and south of the river. The central business district was well defined by the late 19th century, coalescing after a disastrous 1843 fire.

By the early 20th century, almost all of the structures presently standing in Fall River had been built. Population peaked (128,993 in 1925) and then began to decline as the textile industry moved south in the 1920s. Although this decline precluded much new residential and industrial construction, destruction of the central business district again by fire in 1928 resulted in an unusually large number of new commercial buildings. Today's population stands at about 100,000 people, with the largest ethnic groups being the Portuguese and French Canadians.

Architectural Development: Introduction

Fall River's architecture is a physical reflection of the city's history. The agricultural economy of the 18th and early 19th centuries was very limited in scale and is well represented by a small collection of vernacular domestic structures in the northern half of town. The first stage of the new textile wealth began in the mid 19th century, illustrated by a limited but impressive number of

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Greek Revival and early Italianate structures -- both modest and elaborate -- scattered along the rivers, North Main Street, and the Highlands.

Late in the 19th century, as development and accompanying population growth exploded, most of the present downtown was filled in with later Victorian style buildings: the Highlands with elegant suburban mansions in the Italianate, Mansard, Queen Anne, Stick, and Shingle styles; areas around North Park and Oak Grove Cemetery with middle-class, single and two-family houses, in similar styles but more modest designs; and the central business district with impressive new commercial and institutional structures in the High Victorian Gothic and Romanesque styles.

The turn of the century saw development of Globe Village to the east and the entire area south of the Quequechan River with dense, more utilitarian multi-family housing (tenements and three-deckers), followed by simple Colonial Revival suburbanization in the far northern section of downtown. A few contemporary examples of early 20th century commercial blocks complete Fall River's architectural evolution.

Fall River is essentially a city of the late 19th century. Its period of greatest prosperity and construction occurred in the quarter century after the Civil War, an era which did more to establish Fall River's present appearance than any other. By 1890 the city's character, pattern, and scale were well defined, and (with the exception perhaps of the triple decker) its most significant architectural forms had been introduced.

Foremost among these are the mills that dominate the city. The sprawling complexes, in their homogeneity and ubiquity, testify to the role of cotton textiles in Fall River's history and immediately distinguish the city from other industrial communities. Most of the mills are built of granite, a rare feature in American factory construction; thus Fall River's extensive collection is particularly notable. Because of the profound distinctions between the mills and other building forms, the architectural description which follows is divided into two sections: industrial architecture and non-industrial architecture (residential, commercial, and institutional).

Architecture: Residential, Institutional, Commercial

Almost all of the pre-industrial buildings surviving in Fall River (approx. 12-18) are located in the northern half of town, along North Main Street and at Steep Brook. They are evenly divided between cottages and houses and are, with one exception, (#275) center chimney structures of five bays' width. Most have very simple detailing confined to entrance surrounds with pediments or straight entablatures. Although these buildings are clearly colloquial expressions, given the small number of houses dating from the period, it is remarkable that as many examples have been preserved (#56, 131, 274, 275, 276, 283, 287, 288). The earliest institutional buildings in Fall River -- including three churches and the first and second town halls (1805, Steep Brook, and 1825, a mile south on North Main Street) -- are no longer extant.

As the textile industry became established in Fall River, a great number of houses, churches, and stores were built, especially after 1850. Workers' housing from the

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early industrial period (approx. 1820-70) ranged from a few Greek Revival double cottages to Greek Revival and Italianate two-family houses with both sidehall plans and center entrances, numbers of which were built across the city in the 1850s and 60s. Sidehall plan Greek Revival and Italianate single-family houses are also fairly common. Most of the period's workers' and modest-sized single-family housing follows the Taunton River along North Main Street and the Quequechan River along Rodman Street (#73, 530; Corky Row, Area A).

There are relatively few stylish houses for the first years of the early industrial period, but their number rapidly increased during this era; these are best seen collected in the Highlands District (Area C). Although they are not numerous, a few important Greek Revival houses survive in Fall River: several temple front buildings with porticos along North Main Street (#265, 266, 313), and at least one example (Carr-Osborn House, #369) by Russell Warren in the Highlands District (Area C). Most of these Greek Revival structures are similar to the Carr-Osborn House, with an end chimney and double pile plan, although some do not incorporate a full portico (#268) and others feature the small frieze windows common in coastal Bristol County(#530,536).

Many well detailed Italianate and high Victorian Italianate villas of the late 1850s and 60s are preserved in Fall River. Most of these are four-square plan, end chimney houses with low hip roofs and belvederes (#529; Highlands District, Area C). A few houses were built of granite (451 Rock Street: Highlands District, Area C). In general, these residences feature standard Italianate details, such as arched windows, bracketed cornices, and entrance porches or hoods.

One of the most important institutional buildings of the period (which does not survive) was the Town Hall of 1845-46, a 2½ story brick Greek Revival structure. At least a dozen churches were built during the mid 19th century -- notable indications of Fall River's increasing diversity. However, only four survive: one vernacular Greco-Gothic Revival structure at Steep Brook (#501) and three notable examples of early Gothic Revival ecclesiastical architecture (the Unitarian Church, #263; First Baptist Church, #259; St. Mary's Church, #499). The only other known surviving public buildings from this period are the N. B. Borden School, 1868, a 2½ story brick Second Empire style structure (#221), and Engine Company #3, 1843, a wood frame Greek Revival fire station (#491).

The earliest commercial buildings of note were constructed in the mid 19th century, primarily near North Main and Bedford Streets. The earliest surviving structure, located in the Downtown District (Area B) is the Mount Hope Block (c. 1845), a four-story, brick Greek Revival building. The most outstanding commercial building to survive is the Fall River Savings Bank, a two-story brick Romanesque Revival building (1867), also in the Downtown District (Area B).

Building construction, which had been on the rise since the mid century, increased dramatically in the late industrial period (1870-1915). Most striking was the increase in the number of multiple-family houses built. The area of dense settlement expanded

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from the areas directly along the Taunton and Quequechan Rivers south to the Rhode Island border and east nearly to North Watuppa Pond.

Multiple-family tenements were the innovative building type of this period, with most of the surviving examples constructed probably between 1870 and 1890. Three-story Italianate tenements and 2½ story Mansard blocks with polygonal bays are typical of this building type in Fall River; numbers of these are found east of North Main Street and in the Corky Row District (Area A). An unusual Queen Anne style block of rowhouses is located across from Kennedy Park (#219). Smaller 1½ story, sidehall plan, single-family houses in the Queen Anne and late Italianate styles are interspersed in these same neighborhoods (#125). In the 1880s and 1890s, large new areas of construction began to develop: at Flint and Globe Villages, blocks of hip-roofed Queen Anne and large Italianate three-deckers were interspersed with single and two-family houses.

More ambitiously detailed designs were also constructed in Fall River in this period, largely in the northern section of town. Suburban neighborhoods of elaborate Second Empire and Stick Style single-family homes were built in the Highlands District (Area C) in the 1880s and 90s, accompanied by substantial Queen Anne, Shingle, and Colonial Revival style single-family houses, which spilled over into areas northward and eastward as well (#70, 142,264). In addition to these single-family houses, many well detailed Shingle Style and Colonial Revival two-family houses were built in the eastern half of town. By the turn of the century, however, the number of such elaborate houses being built had dropped considerably from the peak years of c. 1868-80.

Fall River retains a splendid collection of late 19th century churches and municipal buildings, in particular an outstanding group of four High Victorian Gothic fire stations (1873) by the Boston firm of Hartwell and Swazey (#114,492, and Highlands District, Area C). Other individually notable institutional structures -- innovative in style and monumental in scale -- include the Fall River Waterworks, 1873-75, a Ruskinian Gothic complex (#22; NR 1981); the Bristol County Courthouse, 1895-1910, a granite Richardsonian Romanesque building (#254); the Fall River Public Library, 1898, a well detailed Renaissance Revival building (Downtown District, Area B); the Fall River Armory, 1895, a crenellated Romanesque Revival structure of massive proportions (Downtown District, Area B); and the B. M. C. Durfee High School, 1886, a lavishly appointed Renaissance Revival building (Highlands District, Area C). An interesting group of more modest but contemporary school buildings was also constructed during this period; these are Renaissance and Romanesque Revival inspired structures built of brick (#493, 494, 495,531).

Among the many notable churches dating from this period are: the Central Congregational Church, 1875, a well detailed Ruskinian Gothic church (#353); the First Congregational Church, 1911-13, a very fine rock-faced granite ashlar Gothic Revival structure (Highlands District, Area C); three Victorian Gothic Catholic churches by Patrick C. Keeley (#497, 498,499), and two Catholic churches by a noted local designer, Louis G. Destremps (#233,535)

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Fall River's central business district was briskly developed in the period, with three and four story brick commercial buildings dating from the 1880s and 90s constructed along North Main Street from Bedford to Pine Street and later on South Main Street. Among the finest of these architecturally are the Borden Block (a.k.a. Academy Building; NR 1973), 1875-76 (#534); the Durfee Block, 1887, and the Fall River National Bank, c.1890 (both are included in the Downtown District, Area B), and a flat-iron plan building in Corky Row (Area A). Other three and four story brick commercial buildings were constructed in the period at Flint Village on Pleasant Street (#527).

New construction in general slowed during the early 20th century, but maintained a steady pace; styles were usually more restrained, reflecting the city's faltering economy.

Residential development in this century was extended northward from President Avenue to Mount Pleasant Street and eastward to North Watuppa Pond. Most of these structures are single-family Colonial Revival and Craftsman houses, with some bungalows interspersed. Multiple-family (both two-families and triple deckers) in simple Colonial Revival or Craftsman designs continued to be built in the neighborhoods to the south and east of the central business district (#1). Simple single-family cottages and bungalows were built in small numbers within and at the edge of these neighborhoods.

Institutional construction dropped off sharply in the early 20th century, and the focus shifted from ecclesiastical to school buildings. Among the notable buildings from this period are the Doran School, 1926; the Fall River Technical High School, 1929 (Highlands District, Area C); the Fall River School Administration building, c.1915; the Bradford Durfee Textile School, c.1895-1930; and the Y.M.C.A., c.1920. Most of these are restrained Renaissance or Colonial Revival structures of masonry construction, 2½ stories in height with flat roofs. The most outstanding institutional building of the period is the U. S. Post Office and Custom House, 1929, a handsome two-story neoclassical structure (Downtown District, Area B).

Commercial construction at the city center continued at a steady pace through the 1920s, reflected in three and four story masonry and steel constructed stores with Renaissance and Colonial Revival detailing. Among the best of these -- all located in the Downtown District (Area B) -- are the Burke Block, c.1929, a Renaissance Revival structure with elaborate terracotta trim; the Union Savings Bank, 1928, a neoclassical style building; the Moore Building, c.1929, a yellow brick building with Chicago windows and pressed metal trim; and the Citizens Savings Bank, 1928, a four story Renaissance Revival building faced with ashlar limestone. In addition to these large commercial buildings in the central business district a few smaller, one story commercial buildings are located along North Main Street, Plymouth Street, Pleasant Street, and at neighborhood corner locations; these are comparatively few in number and are mostly frame buildings of the turn of the century.

Very little of the exuberance and creativity evident in Fall River's 19th century buildings can be attributed to professional architects. In fact, most of the residential building stock was designed and built by local carpenter-builders, guided

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by precedent and the prevailing clients' taste. A small number of mill owners' houses were professionally designed, but most of the architects' commissions were for public buildings, churches, and schools. The list of locally, regionally, and nationally known architects who worked in Fall River (see individual entries) includes Russell Warren and Angell & Swift from Providence; Nathaniel J. Bradlee, George Clough, Cram, Wentworth and Goodhue, Hartwell and Swazey, William Emerson, and Shepley, Rutan and Coolidge from Boston; and Patrick C. Keeley from New York.

Of all the building types, the ecclesiastical commissions stand out, with major examples of the work of Patrick C. Keeley (New England's foremost designer of early Catholic Churches; #497, 498, 499) and Shepley, Rutan and Coolidge (Boston; First Congregational Church; Highlands District, Area C) being the most notable. It is also among the churches that one finds the best work of the major local architects, Josiah Brown (#259) and Louis Destremps (#233,535). Public building commissions, especially schools, seem to have been evenly divided between local and outside architects. Although many of the mills were architect-designed, most of the late 19th century mill architects were closer to being engineers, more concerned with function than aesthetics.

Architecture: Mills

By the 1860s and 1870s, Fall River's textile mills had settled into a fairly standard form. Each mill housed a combination of processes whose location relative to each other and to the rate of work were carefully balanced to assure a smooth flow of materials. Stephen Davol's 1846 designs for the Pocasset Mill (no longer standing) were the first to plan the mill as an organic whole, identifying the location of belting, shafting, and material in advance of construction. Such a comprehensive approach to mill design was sufficiently unusual to bring foreign manufacturers to study both the mill and its design.

The first mills -- dating before the 1843 fire -- were usually small, narrow (40 to 50 feet wide), two to three story structures; the only surviving remnant of this type of construction is Oliver Chace's Thread Mill (#17). In contrast, the post-fire mills were usually 300 feet long, 72 feet wide, and five to six stories high (#477, etc). Elaborate stair towers, often at the center of the building but frequently at either end, provided both access and architectural relief to the facades (#77,474,505, inter alia).

With a capacity of 30,000 spindles and 800 looms, each mill employed approximately 325-350 workers and used about 3,500 bales of cotton per year to produce nine million yards of print cloth annually. Typically, the first and second floors of the mills were used for weaving, the third for carding, and the fourth and fifth for spinning. The engines were generally placed in an ell, while the main driving wheel -- from which led all the belts transmitting power to the various departments -- was placed in the basement, thus bringing the source of transmission as close as possible to its work.

Conscious attempts were made to minimize potential fire damage to buildings that had interior wood framing and oil-soaked wooden floors. Floor joists were few and

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large in section to expose minimum surface area to fire and to slow the combustion rate. Joist ends were so shaped that, in the event of collapse due to fire, they would not pull the masonry walls down with them. Sprinklers were installed in the mills as early as 1872. A fire in 1874 at the Granite Mill (#482), which claimed 23 lives, resulted in a major change in Fall River mill construction. Because that mill was built with the usual pitched roof, the workers in the attic were unable to reach the stair tower. After this fire, new mills were built with nearly flat roofs which allowed fire escapes to be built around all sides of even the top story of the mills.

By the mid 1870s, mansard roofs (although still popular for houses) were also being discouraged by the Factory Mutual Insurance Companies because of high fire risks. The newer, nearly flat, slightly pitched roof was in universal use in Fall River mills by the 1880s. These roofs were made possible by the introduction of coal tar coatings or tar paper coatings, with tin or gravel, which effectively made the roof watertight (Quequechan Valley Mills District, Area D, inter alia).

The last variation of mill construction, dating to the early 20th century, produced mills which are clearly identifiable and "modern" in appearance. These mills are even wider than previous ones, have less ornamentation, and are marked by significantly larger windows, often in a T-cross division, to let in additional light (#473, 506, 516, etc.).

Mill complexes could number up to three main mills, each with separate engine, picker and cloth houses and occupying 18 acres or more (Border City, #485; Sagamore, #517 and 518; Hargraves: Quequechan Valley Mills District, Area D; and Durfee, #480). With their associated housing, stores, and schools, they made up and continue to make up the dominant form of Fall River's built environment.

Methodology

The properties included in the Fall River Multiple Resource Nomination reflect the civic, architectural, and industrial development of the city over the past 250 years. While it can be said that the entire fabric of the city illustrates this development, the four districts (Downtown Fall River, Corky Row, the Highlands, and the Quequechan Valley Mills District), 39 mill complexes (nine within districts), 15 churches (three within districts), and 49 other individual structures, complexes, and sites nominated herein have been singled out because of their historical associations, quality and integrity of design, and visual character. The judgement that these properties best represent the significant aspects of the economic, social, and cultural development of Fall River is based on the results of an in-depth, comprehensive historical and architectural inventory of the city (1980-82).

Survey Base and Evaluation

A previous survey (Preservation Partnership, 1977) identified 496 of the most outstanding structures. Over 6,000 additional properties were inventoried in 1980-82, many of which were investigated through primary sources. Work was concentrated on

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surveying and researching all public buildings, churches, schools, mills, and significant commercial structures. Several neighborhoods were researched intensely, resulting in district nominations for the Highlands (Area C), Corky Row (Area A), and Downtown (Area B). Steep Brook (Fall River before 1813) was also surveyed; a district was not appropriate, but six of the most intact houses were nominated to represent pre-industrial settlement.

Although notable workers' and middle-class housing was built in abundance and has been surveyed, the comparatively short project period made impossible a thorough evaluation of such structures individually. Thus, the present nomination intentionally under-represents a significant category of Fall River's housing stock.

Like the survey, this nomination concentrates heavily on the mills, churches, and public buildings and a few key areas of development which best symbolize the city. Those parts of the city not included in the nomination consist primarily of a string of multi-family workers' housing settlements and neighborhood commercial areas, organized around the increasingly dispersed factories.

Although a large number of the mill complexes survive, the adjoining residential neighborhoods have generally lost their continuity and architectural integrity through demolition and alteration. While the bulk of their surviving building stock is undistinguished, these areas -- like the French Canadian Flint neighborhood, Niagara,and parts of the North and South Ends -- do reflect the expansion of the city in the 1880s and 1890s, when immigration and productivity were at a peak. These neighborhoods are distinguished architecturally by their civic structures: Victorian schools (#221, 493, 494, 495, 496, 531), churches (#128, 233, 497, 498, 499, 524, 525), and firehouses (#114, 492), most of which survive intact. Corky Row (Area A) is the most cohesive workers' neighborhood left, although it has also suffered from change.

Organization and Personnel

The Fall River Survey and Multiple Resource Nomination has been undertaken by the Fall River Office of Historic Preservation (William Hargraves, Jr., City Preservation Officer) and funded by the city's Community Development Agency. The Office of Historic Preservation was created in December 1979, and shortly thereafter hired ACT for Massachusetts to prepare a survey methodology and work program for the inventory. In September 1980, Vivienne Lasky was hired as Preservation Planner to direct the project. The survey project was unique in that it was a collaborative venture: most of the staff support came from the local CETA program, which provided 17 researchers/surveyors, while a matching grant from the Massachusetts Historical Commission provided the monies to hire the preservation planner.

Architect files were started, a cataloguing and retrieval system for the survey was set up, and the archives increased. The Fall River Office of Historic Preservation now has a complete run of the city directories, all the relevant atlases, many city documents, and copies of most of the books that constitute the Fall River bibliography.

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Two of the original CETA surveyors -- Bruce Bombadier and Patricia Giza -- were subsequently hired as research assistants. In February 1982, an additional Preservation Consultant, Pamela Fox, was hired in order for the project to be completed within the time frame, She was responsible for the industrial survey and for writing the inventory forms for two districts and a number of individual properties. The high standards and superb quality of the maps is due to Giles Callahan (also a member of the original CETA team) and James Connors, and the bulk of the National Register photographs to Pamela Shields, a student intern from Roger Williams College. Without the 40 people who worked so diligently for two years, this Multiple Resource Nomination would not have been possible.

Other Preservation Activities

The nomination is not, however, the only product. The archives already serve the public, and the survey has generated a good deal of community support. The Fall River Historical Society and the Fall River Preservation Society both shared resources with the Office of Historic Preservation, and a new preservation partnership has been forged. The Fall River Historical Commission has also supported the survey, and its input has been invaluable.

Monthly public hearings have resulted in the placement of close to 400 properties on the Fall River Register of Significant Structures, which affords protection through the use of a demolition ordinance. Thus, many of the properties included in this nomination have already been protected from demolition and their owners made aware of their significance and value.

8. Significance

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	X community planning	X landscape architecture	X religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	X sculpture	
___ 1600–1699	X architecture	X education	___ military	X social/ humanitarian	
X 1700–1799	X art	___ engineering	___ music	___ theater	
X 1800–1899	X commerce	___ exploration/settlement	___ philosophy	___ transportation	
X 1900–	___ communications	X industry	X politics/government	___ other (specify)	
		___ invention			

Specific dates see individual entries **Builder/Architect** see individual entries

Statement of Significance (in one paragraph)

Introduction

With its sprawling granite mills, distinct working and upper class residential neighborhoods, and compact central business district, Fall River presents one of the country's best preserved textile manufacturing centers; its story is emblematic of American urban history.

A small agricultural village in 1813, by the end of the 19th century Fall River produced 70% of all the print cloth manufactured in the United States. The vast array of architecture which resulted from this phenomenal growth represents generations of human inventiveness and technological progress, foreign immigration and hard work, capital formation and social unrest. Because the city's built environment so clearly spells out the transformation of the Industrial Revolution in America, it is considered of national importance.

The Multiple Resource Area of Fall River retains integrity of setting, location, design, materials, workmanship, feeling and association; it meets criteria A, B, and C of the National Register. This nomination includes four districts, two individual parks, two burial grounds, and 92 other individual nominations. Nine of these properties are already listed on the National Register, while another is still pending final approval.

Community Development: Agricultural Settlement (c.1700-1810)

The very characteristics which later encouraged Fall River's industrial growth hampered its early development: the granite ledges limited agriculture, the steep grade to the water and unprotected harbor discouraged the trade that characterized other Taunton Valley communities, and the Watuppa Ponds and Mount Hope Bay precluded easy access to Newport, Providence, or New Bedford. The only important highway that passed through Fall River was the Boston to Newport Turnpike. Paralleling the Taunton River, it survives today as North and South Main Streets.

The villages of Fall River (located at the Quequechan Falls) and Steep Brook (near the present Freetown line) were set off from Freetown in 1803 at their own request. The mother town was more than eight miles long, and the villagers in the southwest part found it difficult to get to town meetings. In recognition of its relative importance, the new town hall (no longer extant) was located in Steep Brook, where it remained until 1825. The independent spirit of the age resulted in a fleeting name change for Fall River, which was known as Troy from 1804 to 1834.

The town's limited agrarian economy was supplemented by seaborn commerce. In the early Federal period, "every farmer of importance was a ship carpenter and had his own vessel, usually a sloop of 35 - 40 tons . . . in which he and his family made their trips to Providence, Newport, and even New York." [1]

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[1]Fenner, Henry M. A History of Fall River (New York, 1906), p.12.

The census of 1810 reported that the town of Fall River had more than 1,000 inhabitants; in comparison, New Bedford's population then exceeded 5,000. A map of 1812 records a near-rural community, with perhaps 20 buildings clustered around the junction of Main and Bedford Streets at the village of Fall River (#131), a still distinct village at Steep Brook (#274, 276, 283, 287, 288), and a thin scattering of houses and barns surrounding the two (#56). A few of those very early Fall River houses still stand today; they date from the mid 18th to early 19th centures, and their owners had family names like Borden, Brightman, Hathaway, Durfee, and Davol (#56, 275, Area H).

Early Industrialization (c1810-1843)

The 1810s saw a shift in the traditional patterns of local development. The maritime trade that previously sustained New England was stagnated by the War of 1812, after which New York began to overshadow New England commercially. Meanwhile, new attempts at manufacturing began to spur development in places where potential water power sufficient to operate machinery existed. With this shift, the village of Troy/Fall River -- where the Quequechan River dropped more than 130 feet in half a mile -- gained the advantage over neighboring towns and the village of Steep Brook.

Although small grist, saw, and fulling mills were established on the Quequechan by 1703, these operated solely for local consumption as part of the agrarian economy. Fall River's character changed in 1813 with the founding of the first great granite textile mills, the Fall River Manufactory and the Troy Cotton and Woolen Company. The former was organized primarily with local capital and relied on the expertise of Dexter Wheeler and David Anthony, who had worked with Samuel Slater at the nation's first successful cotton mill in nearby Pawtucket, Rhode Island. Because of this close relationship to Pawtucket, the Fall River Manufactory (built in 1814) was one of the first mills in America to install cotton-picking machines; in 1817 practical power looms were installed.

The Troy Company was established by Oliver Chace and investors from Swansea, located just across Mount Hope Bay. Its immediate success led the same investors to establish the Pocasset Company, a water power company which rented out space in its mill to a number of cloth manufacturers, including Andrew Robeson, whose Fall River Print Works became the first calico print works in the city. The Pocasset also gave birth to Fall River's first separate textile-machine building firm, Harris and Hawes (1823).

Thus, the pattern of Fall River's industrial development emerged almost from the beginning. A tight-knit group of local families -- early investors, landowners whose property and water rights were utilized, and technical experts with ties to the pioneers in textile manufacturing -- formed the business and social elite who were to control the city's destiny for almost a century. Their names -- Durfee, Davol, Borden, Anthony -- are still part of the city, emblazoned on banks, schools, and mills. As opposed to Lawrence or Lowell, Fall River was developed by local capital which retained control of the means of production.

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The 1820s initiated a period of building and prosperity for Fall River. In 1821 Richard Borden and Bradford Durfee joined members of the Wilkinson family manufacturers in Pawtucket to establish the Fall River Iron Works. Its products included hoops, nails, rolled iron, and castings to serve both the shipbuilding and textile industries. The Iron Works was crucial in the development of Fall River, controlling capital, real estate, and an intensified machinery industry, all important adjuncts to the development of the textile industry. Another important catalyst to development was the Watuppa Reservoir Company (1826). When its dam was completed in 1832, water stored behind it at night could be used during factory hours.

By 1832, Fall River contained 14 cotton manufacturing companies; the largest mill was the Iron Works-controlled Annawan Mill (1825, no longer standing), which supplied over half the print cloth of the Fall River Print Works. A year later, Borden interests built their own plant, the American Print Works, which by the late 19th century, would be the largest in the country (#477).

In order to capitalize the developing textile industry, manufacturers established two banks in Fall River during the 1820s. The Fall River Bank (1825; now located at 49-50 North Main Street, Area B) was first led by David Anthony. also the founder of the Fall River Manufactory, followed by Col. Richard Borden, a principle organizer and treasurer of the Fall River Iron Works. The Fall River Savings Bank (1828; presently at 141 North Main Street, Area B) engaged as its first president Micah H. Ruggles, who also served as agent for the Pocasset Mills.

Two new civic structures symbolically recognized this new economic pattern: in 1825 Town Hall moved halfway to Troy from Steep Brook (no longer extant) and in 1834 the custom house was moved from Dighton to Troy (renamed Fall River at that time).

Fall River's population began to increase steadily during the 1820s, and the residential area northeast of the old town core, at the four corners of Bedford and Main Streets, built up quickly with handsome houses of the late Federal period. A number of these houses from the earliest days of industry remain today, concentrated around Cherry, Rock, and June Streets (#131).

Since the start of its industrial growth, Fall River expanded too rapidly for its own population to satisfy the need for labor. Workers came to Fall River from surrounding towns and from abroad -- mostly England, Scotland, and Ireland at first. In 1840 the population of Fall River was 6738; a third of these were employed in manufacturing (893 in eight cotton manufacturing firms, 100 in the woolen factory, 730 in the three calico printing companies, 250 in the Iron Works Co., and about 90 in the building and repair of machinery). By 1842 Fall River citizens were complaining to the state legislature that they could not compete with the increasing foreign population, which was willing to work in the mills for wages lower than local laborers would accept.

By the early 1840s, Fall River surpassed in importance neighboring Taunton, Freetown, and Somerset -- all greater and wealthier during the earlier agricultural-

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maritime-commercial era. Unfortunately, little remains of this first phase of Fall River's expansion. In July of 1843 "the great fire" consumed 20 acres between Borden and Franklin Streets in the heart of the village. While only one factory was destroyed, the customs house and post office, three churches, two hotels and banks, about 75 mechanics' shops, and 95 houses were lost.

Urban Expansion (1844-c.1870)

With resilience typical of the mid 19th century, though, the Fall River merchants and manufacturers quickly rebuilt the burnt district, raising blocks of brick and stone more substantial and elegant than the pre-fire wooden buildings they replaced. Regrettably, most of those post-fire blocks from the mid 1840s have been lost, some through demolition, the rest in two major 20th century fires. (The third Town Hall, a handsome Greek Revival structure remodelled with a prominent tower and cupola in 1872, was demolished in 1962.) One of the few surviving structures is the Mount Hope Block of 1845 (91-105 North Main Street, Area B), which housed one or more hotels until 1915.

As a result of the post-fire rebuilding, the highest south-facing part of the city became the home of Fall River's newly wealthy mill owners (Highlands District, Area C). The move to a strictly residential neighborhood in the early 1840s was in marked contrast to the pattern a decade earlier, when owners lived close to the factories clustered at the falls and in the heart of downtown. In the lower sections of the Highlands and on the fringe of downtown along North Main Street, substantial temple-fronted mansions (c.1844) stand as the most elegant physical manifestation of the new-found wealth of the mill owning elite (#265, 266, 313, 369). Retardataire and frequently misdated because of their post-fire construction, these houses may be attributable to Russell Warren, the region's most important architect of the period.

In contrast, workers' and middle class housing remained traditionally close to the mills. Modest mid 19th century housing stands in three important areas: near Border City on North Main Street (#73), along the Quequechan on Bedford and Pleasant Streets (#530), and south of the Quequechan in Corky Row (Area A). The latter neighborhood, whose predominant character is created today by the multi-family houses of the late 19th century, retains a good many smaller houses of the late Federal and Greek Revival styles from the 1830s and 40s.

By 1845, the closely knit town consisted of cotton manufacturing supported by a cloth-printing industry, an iron industry, and the beginning of the textile machinery industry. Two technological changes -- in transportation and in power -- propelled growth in the two decades before the Civil War. Integration within the wider New England transportation network became important to the previously inaccessible town. The Fall River Railroad (1845) connected the town to nearby Berkley and thence to Taunton and New Bedford, while the development of port facilities led to the organization of the famous Fall River Line (1847), connecting the town to Providence and New York. Col. Richard Borden

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of the Iron Works comglomerate was a major promoter of both ventures.

Steam overtook water power between 1840 and 1844, with the erection of a new steam-powered plant on the waterfront by the American Print Works, and with the construction of the first steam cotton mill in Fall River, the Massasoit (1843). The city's bayside location gave it an edge over inland cities in obtaining the coal necessary to produce steam power relatively speedily and inexpensively.

The transition to steam resulted in a significantly altered settlement pattern for the city. Mills scattered throughout Fall River to Mechanicsville, Laurel Lake, and the South Watuppa Pond, while mill houses, tenements, schools, and churches clustered around the new mills. The city developed many of the overall patterns -- the general layout of streets, relative locations of industrial, commercial, and residential sections -- which remain as the historical and visual framework of contemporary Fall River. In 1854, Fall River obtained a city charter.

In contrast to other textile centers, Fall River prospered during the Civil War, for two reasons: because the Fall River mills had made substantial cotton purchases prior to the outbreak of war (in anticipation of the short crop in 1861), and because most Fall River mills produced print cloth, whose sale price rose along with the skyrocketing price of raw cotton, keeping constant the margin between the costs of raw materials and finished products, upon which mill profits were based. Not only did the city come through the war years without devastation, but some new mills actually started up. The Union Mills (#479), opened a new factory during the period (1859; 1865), and the Granite Mill, organized in 1863, began operation in 1865 (#482).

Major advances were made in a number of other Fall River industries as well, particularly in textile machinery. These included the introduction (1838) and building of the self-acting spinning mule by Marrel, Davol and Co., development of the Fall River Loom (1845-46) by the Watuppa Co., and construction of a major new loom works in 1868 by Lincoln, Kilburn and Co.

Cultural Dynamism (c.1879 -1920)

It was the decades following the war, however, that saw Fall River's expansion into the pre-eminent textile city in America. Pent-up demand deferred during the war, and the development of the national railroad network expanded the potential market exponentially. Subscription drives to raise new capital resulted in over fifteen new textile companies formed in 1871-72; 20 new mills were built and more than half a million spindles were added, increasing the number by almost 100%. This was the peak of new mill construction and represents Fall River's greatest prosperity. At the same time, clear weaknesses in the economic structure also emerged.

Print cloth dominated production, 90% of the spindles in the city being devoted to this product. The city's first fine goods mill, the King Philip, was completed

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in 1871 (#513), and finishing capacity was increased in 1872 by the organization of the Fall River Bleachery, which took advantage of the pure water of South Watuppa Pond (#507). (The quality of water for manufacturing, rather than drinking, was a prime concern in the construction of the Fall River Water-Works [#22] in 1873.) Indeed, a million spindles a decade were added between 1865 and 1885, so that by 1892 the city of Fall River contained more than 15% of all the spindles in the United States.

Numerous mills remain from this period (see Area D and individual inventory forms for mills). An Englishman's description at the turn of the century reads:

> "The cotton mills are the chief attraction of Fall River. There are eighty-one of them, owned by forty-one companies, or corporations as they are called in New England. These mills are dotted all over the city. Some of them abut on to the principle business streets. Many of them are on the shores of the lakes and the river. The mills have made the city, and their presence in all parts of it is a continual reminder of the fact that the city has grown up about the mills.
>
> "All the mills are built of light grey granite, the formation which underlies the whole of the city. They are as handsome in appearance as mill buildings could possibly be, and, generally speaking, are six or seven storys high. The walls of many of them are overgrown with Japanese ivy. There are no weaving sheds, as there are in Lancashire. All the departments are under one roof, the two lower floors being usually set apart for weaving. The windows on these floors are very high and of double width. One-story, skylighted rooms would not be possible in the climate of New England. In the summer, when the temperature in the sun is often at 120° to 130°, weaving sheds of the Lancashire type would be unbearably hot, while in the winter, for weeks at a time, the skylights would be covered with two feet of snow. When a mill company is engaged only in weaving, the mills are two storys high, with flat gravelled roofs. All the New England cotton mills are built after this style. The new mills are so wide, high, and well lighted that, although there are twelve or thirteen alleys in the weaving rooms, it is lighter in the middle alleys than in the second or third from the windows in the older mills. All the newer mills have one or two towers, according to the length of the mill. The stairways are in these towers, and the tower rooms serve as the landing or entry for each floor. The towers rise above the mill buildings to afford a place for the belfry." [2]

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[2]Edward Porritt, "The Cotton Mill Towns of New England," The Co-operative Wholesale Societies England and Scotland Annual for 1900. (Manchester and Glasgow, 1900), pp.198-199.

Real estate values skyrocketed as the new corporations sought great, level parcels for mills and mill-related housing. No longer did the mills need to be sited on flowing water. Now that steam was in use, ponds or even wells could satisfy the demands of industry. Thus, the mills of the 1870s altered the shape of Fall River, giving its present elongated shape and diversity of neighborhoods (#77, 479, 508, 510, etc.). The "era of new mills" laid the foundations for three major new residential areas now very tightly built: Mechanicsville (#77),(in the northwestern part of town), Globe Village (south of Kennedy Park), and The Flint (in the east). These are sprawling areas of quickly built, generally plain, multi-family housing with small commercial strips. Concurrently, development of the smaller, elite Highlands area (Area C) intensified, resulting in a splendidly preserved catalogue of innovative Victorian styles.

The energy of this milieu is also represented in a rich array of public and institutional structures, most of which were designed by prominent architects. The decades between 1870 and 1900 witnessed a burst of handsome and often monumental new schools, fire stations, governmental buildings, waterworks, and churches. The majority of buildings of this type still survive, notable exceptions being the Romanesque Revival style post office and railroad station (see inventory forms for Public Buildings and Churches). Banks, hotels, and commercial blocks followed suit, with substantial Victorian blocks remaining on North and South Main Streets near the present Government Center (#401, 534; Downtown District, Area B). Several landscaped parks and social and charitable institutions complete the picture of the popular culture of this era (#341, 526, 528; Areas E, F, G).

During the period 1870 to 1900, while the number of spindles was increasing from 550,000 to 3,000,000, the number of people in Fall River increased from 27,000 to 105,000. The tripling of the population in 30 years was accomplished largely by immigration. In 1900, fewer than 4% of the city's population were of American parentage. While there were Irish before industrialization, their immigration began in earnest in the 1850s, and by 1875 there were about 9000 of Irish descent in the city. That number more than doubled to 20,000 in 1885. Corky Row, as its name suggests, was the first Irish neighborhood and chronicles the rise of that ethnic group in the labor movement and politics (Area A).

The number of people of English birth or parentage was about 8700 in 1875; 13,000 in 1885; and 22,000 in 1895. French Canadians began arriving in large numbers during the expansion years of 1870 to 1875. In 1875 they numbered 5000; in 1885, 8200; in 1895, 17,000; and in 1911, 36,000. Although there were only 1200 Portuguese in Fall River in 1895, by 1911 there were 10,000. While Poles, Italians, Syrians, Armenians, and Jews arrived during the last wave of immigration before the Immigration Act of 1924, the Portuguese constitute the largest ongoing ethnic immigration.

The life of the typical immigrant mill worker was not an easy one. Though some descendants of early immigrants (notably Irish and English) thrived as small-scale entrepreneurs, the majority worked long hours in difficult conditions for low wages. As mills spread beyond the center city and the number of immigrant

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operatives sky-rocketed, the mill companies constructed more tenement housing for workers. Companies which owned tenements required their hands to live in them, and rents were not cheap.

In 1875 an incomplete tally showed that 21 of the 33 mill corporations owned in excess of 12,000 dwelling units. As late as 1911, only 1.3% of the population surveyed owned their dwellings. The housing provided by the mills was built hastily without much regard to the inhabitants and, as early as 1883, housing conditions were notorious enough to merit attention from the U. S. Senate, whose visit and report were not encouraging.

The City of Fall River was so overwhelmed by the large influx of new workers that its social services could not help in difficult times. Poor working conditions, fluctuations in the economy resulting in cyclical unemployment, and the leadership of militant British union organizers contributed to worker unrest. Employers' cuts in wages, in response to weakened financial positions, led to major strikes in 1870, 1875, and 1879. After the bitter 1879 strike, the State of Massachusetts' Bureau of Statistics of Labor examined the history of strikes in the state and found them to be more frequent and more severe in Fall River than anywhere else in the state.

Fall River did not measure up to early Lawrence or Lowell in terms of financial practices, housing policies, health standards, or work conditions. The Bureau of Statistics attributed the city's problem to the rapid and uncontrolled expansion of Fall River industry in the 1870s. The Bureau cited the interwoven character of the corporate community as the cause of questionable financial practices, resulting in erratic economic conditions,while outside agitators were seen to rouse the workers against the excessively stubborn mill owners. When Congress in 1883 conducted a national investigation into the relations between labor and capital, Fall River's prominence both as an industrial center and as a center of discontent resulted in considerable testimony from the city's public health officials and laborers.

A major turning point in Fall River industrial relations was reached in 1886 when the mill owners, in implicit recognition of the workers' right to organize themselves, met with labor leaders to negotiate an agreement tying wages for textile workers to the price of raw cotton and cotton cloth. This agreement has been cited as a significant breakthrough in labor relations by linking labor costs to a "rational recourse to statistics." By 1900, the skilled laborers of Fall River had won significant concessions from their employers; the conditions of unskilled labor remained more equivocal.

The period from 1890 to 1920 was one of increasing specialization within the Fall River textile industry, as the city yielded to southern competition in the area of simple print cloth production. Labor costs in the non-unionized South were substantially lower than those in Fall River. In addition, use of the Northrop loom (introduced in 1895) permitted Southern print cloth production to compete

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successfully with that of Fall River, where mill owners content to speculate in cotton prices and sale of cloth were reluctant to invest in new equipment. Even when, to cut costs, Fall River manufacturers finally replaced skilled workers with new equipment, this only gave more work to each remaining weaver and precipitated further labor problems. Wages were reduced, resulting in 1904 in one of the largest strikes up to that time, involving 25,000 workers for half a year. It was Fall River's last general strike and presaged the city's decline.

In a last ditch attempt to recapture their supremacy in cotton textiles, Fall River's mills made some efforts to diversify into fine goods production. Between 1907 and 1911, the city's last major period of mill construction produced eight new fine goods mills (#473, 516, inter alia). Although more utilitarian in appearance, these structures complete the full range of mill architecture which is one of Fall River's most striking features.

Fortunately for Fall River, the war years of 1916-1918 temporarily reversed its ebbing fortunes. Military requirements and lack of foreign cloth generated a heavy demand for Fall River's cotton fabrics (#509). By 1920 the city, with more than 100 mills and a population at an all-time high of around 130,000, was the largest concentrated area of textile manufacture in the world: it was a gargantuan industrial center too big to sustain itself.

The optimism of the 1910s produced more mill-related housing than ever before, most of it the characteristic three-storied, multi-balconied apartment houses known as triple-deckers. In every residential neighborhood these handsome, much-maligned houses went up to provide enlightened, comfortable quarters for the workers who poured into the city for jobs. In fact, Fall River is now noted for one of the country's richest concentrations of this particular architectural form (#1). Unfortunately for the triple-deckers, as for their occupants, the optimism that produced them was short-lived, and within a few years they had become the depression-era homes of thousands of disillusioned, unemployed people. Many have since been altered.

Economic Collapse (c1920-present)

The post-war collapse of prices and intensified Southern competition (overtaking Fall River in plain print cloths, to which the manufacturers had reverted during the war years) signalled Fall River's imminent collapse. The crash in Fall River came in the early 1920's. In June 1924, the New Republic reported, "Today Fall River is a city of misery, want, unemployment, hunger and hopelessness." Of the 111 mills in the city, less than a dozen were operating full-time. In the next four years--all before the great national depression -- Fall River lost more than 1,000,000 or 25% of its spindles.

The Great Depression ended any hopes for short-term recovery. Employment in the mills declined from 32,300 in 1920 to 13,700 a decade later. By 1936, the number of spindles in Fall River had dropped to below a million for the first time since 1871 -- a loss of 75% of the city's textile capacity. By 1939, 73 mills had closed.

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As a consequence of this dramatic decline, the city defaulted into bankruptcy in November, 1930. Fall River's business elite encouraged the State to establish a finance board which virtually governed the city for the next ten years. To cut government costs, city services were pared drastically, with proportionately greatest impact on the poor. The 1934 shutdown of the American Print Works and the 1937 closing of the Fall River Line were symbolic of the depths to which the city had fallen.

To this day, Fall River has had difficulty improving its image as a place to do business and to live, although a modest economic revival was soon evident. Commercial blocks -- though smaller and more restrained than their 19th century predecessors -- sprang up after the disastrous downtown fires of 1916 and 1928 (Downtown District, Area B).

During the Depression, the presence of inexpensive industrial space and cheap labor, as well as a convenient location between New York and Boston, generated employment for piecework garment workers. Apparel production and such related trades as dyeing and finishing today employ about half of the city's industrial population. The old American Print Works plant was converted to a Firestone Rubber Plant in 1937 and employed over 3000 during World War II; after its closing in 1971, the building was occupied by a number of smaller firms, with part of the complex destroyed by fire shortly after the closing. Such a fate has been typical for a number of mills. Despite occasional appearances, the mills of Fall River are not abandoned; they are simply significantly underutilized.

Summary

Fall River is a city with a unique and distinguished past. In 170 years, it has witnessed all the changes, indeed in extremis, which constitute the American experience with industrialization and urban development. The city rose to prominence as the cotton capital of America during the period when textiles were the nation's leading industry. In this context, Fall River provides graphic evidence of the great technical and economic contrasts of the era: where before the Industrial Revolution machines served as the tools of workers, gradually the workers became more the appendages of machines. The change from individualism to mass culture permitted enormous growth and transformed the city in a multiplicity of ways. The architectural legacy of Fall River today forms an impressive and clearly legible record of our past.

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See Continuation Sheet

10. Geographical Data

Acreage of nominated property See individual entries

Quadrangle name Fall River Quad **Quadrangle scale** 1:25,000

UMT References Fall River East Quad; Assonet Quad

See Individual Entries

	Zone	Easting	Northing		Zone	Easting	Northing
A				B			
C				D			
E				F			
G				H			

Verbal boundary description and justification

See individual entries

List all states and counties for properties overlapping state or county boundaries

state	NA	code	county	code
state		code	county	code

11. Form Prepared By

name/title Wendy Frontiero, Preservation Planner, with Vivienne Lasky, Peter Stott, and Sarah Zimmerman

organization Massachusetts Historical Commission **date** Aug. 26, 1982

street & number 294 Washington Street **telephone** (617) 727-8470

city or town Boston **state** Massachusetts

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national X state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature Valerie Ann Talmage

title Acting State Historic Preservation Officer **date** Dec. 23, 1982

For NPS use only

I hereby certify that this property is included in the National Register

date

Keeper of the National Register

Attest:

date

Chief of Registration

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FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
DISTRICTS				
A	Corky Row H.D. Plymouth Ave, Second St., et al.	1800-1910 A, C	Object: 8 (of 435 Owners)	Eligible
B	Downtown Fall River H.D. North Main St. et al.	1845-1931 A, C	Object: 8 (of 27 owners)	Eligible
C	The Highlands H.D. Rock, Winter, Cherry, Lincoln Sts., Highland Ave., et al.	1840-1925 A, B, C	Object: 5 Concur: 5 (of 322)	Eligible; reduce boundaries
D	Quequechan Valley Mills H.D., Jefferson St., Quequechan St., et al.	1882-1908 A, C	Objects: 1 (of 8 owners)	Eligible
OPEN SPACE				
E	Kennedy (South) Park South Main St.	1868 A, C		Eligible
F	Ruggles Park Seabury St.	1868 A, C		Eligible
G	Oak Grove Cemetery 765 Prospect St.	1855 A, B, C		Eligible
H	North Burial Ground North Main St.	1810 A, B, C		Eligible
INDIVIDUAL PROPERTIES/COMPLEXES				
Public Buildings				
903	U.S.S. Massachusetts Battleship Cove			NR 9/30/76
904	U.S.S. Lionfish Battleship Cove			NR 9/30/76
905	U.S.S. Joseph Kennedy, Jr. Battleship Cove			NR 9/30/76
532	B.M.C. Durfee High School 289 Rock St. (in proposed Highlands H.D.)			NR 6/11/81

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Public Buildings (Continued)				
22	Fall River Water Works Top of Bedford St.			NR 12/7/81
Lighthouse #5	Borden Flats Lighthouse Mount Hope Bay (part of thematic lighthouse nomination)		Concur: 1 Sole Owner	NR pending
254	Bristol County Courthouse and Registry of Deeds 441 North Main St.	1889, 1930 A, C		Eligible
491	Cataract Engine Co. #3 116 Rock St.	1843 A, C		Eligible
114	Massasoit Fire House #5 83 Freedom St.	1873 A, C		Eligible
492	Pocasset Fire House #7 1058 Pleasant St.	1873 A, C		Eligible
221	NB Borden School 43 Morgan St.	1867-1868 A, C		Eligible
493	Coughlin School 1975 Pleasant St.	ca. 1893 A, C		Eligible
494	Davol School 112 Flint St.	1892-1894 C		Eligible
495	Osborn Street School 160 Osborn St.	1893 A, C		Eligible
496	Pine Street School 880 Pine St.	ca.1876 A, C		Eligible
531	Connell School 650 Plymouth Ave.	1893 A, C		Eligible
902	Rolling Rock Eastern Ave. at County St.	dedicated 1930 A		Not Eligible
900 Returned	Prince Henry the Navigator (statue) Eastern Ave. at Pleasant St.	1940 A	Concur:1	Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
901 Returned	The Hiker (statue) Pleasant St. at Plymouth Ave.	1930 A		Not Eligible
Churches				
263	Unitarian Society 309 North Main St.			NR 5/13/82
497	St. Joseph's Church 1355 North Main St.	1880 A, C		Eligible
498	St. Patrick's Church 1588 South Main St.	1881-1889 A, C		Eligible
499	St. Mary's Cathedral and Rectory 407 Spring St. (Church) 327 Second St. (Rectory)	1852-1856 A, C		Eligible
353	Central Congregational Church, 100 Rock St.	1875, 1891 A, C		Eligible
128	Former Brayton Methodist Church, 264 Griffin St.	1897 A, C		Eligible
259	First Baptist Church 200-228 North Main St.	1850 A, C		Eligible
500	Church of the Ascension 160 Rock St.	1875, 1910 A, C		Eligible
501	North Christian Congregational Church 3538 North Main St.	ca. 1842 A, C		Eligible
233	St. Anne's Church and Parish Complex 780 South Main St.(Church) 818 Middle St.(Rectory) 37 Park St. (Convent)	1891-1905 A, C	Objects: 1 (of 3 owners)	Eligible
535	Jesus Marie Convent 138 Saint Joseph's Street	1887; A & C		Eligible
537	Saint Joseph's Orphanage Saint Joseph's Street	1892; A & C		Eligible
538	Notre Dame School 34 Saint Joseph's Street	1889; A & C		Eligible
524	Santo Cristo Church 240 Columbian Street			Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number		Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Churches (Continued)					
525		St. Louis Church 440 Bradford Ave.	1885 A, C		Eligible
Commercial Buildings					
534		Academy Building 102 South Main St.			NR 7/2/73
527		Greany Building 1270-1288 Pleasant St.	1891 C		Eligible
401		A. J. Borden Building 91-111 South Main St.	1889 A, C		DOE 4/1/81
Mill Complexes					
		Barnard Manufacturing Co. (in Barnard Mills Complex)			DOE 3/11/82
502		Algonquin Printing Bay St.	1891-1912 A, C	Object: 1 (of 3 owners)	Eligible
477		American Printing Co. Anawan St.	1847-1906 A, C		Eligible
503	DOE	Ashworth Brothers Globe Mills Ave.	1891-1916 A, C	Object: 1 Sole Owner	Eligible
504		Barnard Mills 641-657 Quarry St.	1874, 1896 A, C		Eligible
485	DOE	Border City Mills #1,2,3 Weaver St. and West St.	1872-1889 A, C	Objects: 3 (of 3 owners)	Eligible
505		Chace Mills Lewiston St. and Salem St.	1872-1920 A, C		Eligible
473		Charlton Mill 109 Howe at Crawford St.	1911 A, C		Eligible
506		Cornell Mills Alden St.	1890 A, C		Eligible
474		Crescent Mill 30 Front St.	1872 A, C		Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number		Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Mill Complexes (Continued)					
480		Durfee Mills 359-479 Pleasant St.	1866-1904 A, C		Eligible
507		Fall River Bleachery Jefferson St.	1872-20th cen. A, C	Object: 1 (of 9 owners)	Eligible
508		Flint Mills Alden St.	1883-1909 A, C		Eligible
509		Foster Spinning Co. Cove St.	1916-1919 A, C		Eligible
510		Globe Yarn Mills Globe St.	1881-1886 A, C		Eligible
482	DOE	Granite Mills Bedford St.	1871-1893 A, C	Objects: 3 (of 4 owners)	Eligible
511		Hargraves #1 Mill Quarry St.	1888 A, C		Eligible
512	DOE	Kerr Thread Mills Martine St.	1890-1920 A, C	Objects: 2 (of 3 owners)	Eligible
513		King Philip Mills Kilburn St.	1871-1892 A, C		Eligible
514	DOE	Laurel Lake Mills 951 Broadway	1882-1895 A, C	Objects: 1 Sole Owner	Eligible
77		Mechanics Mill 1082 Davol St.	1868-1889 A, C		Eligible
515		Narragansett Mills 1567 North Main St.	1872-1895 A, C		Eligible
17		Oliver Chace's Thread Mill 505 Bay St.	ca. 1840 A, C	Objects: 1(of 2 owners)	Eligible
516		Pilgrim Mills 847 Pleasant St.	1911 A, C		Eligible
517		Sagamore Mills, #1 and #3 Ace St.	1881-1907 A, C	One Objection Retracted Mill #3	Eligible
518		Sagamore Mill #2 1822 North Main St.	1881 A, C		Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number		Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Mill Complexes (Continued)					
519		Sanford Spinning Co. Globe Mills Ave.	1887-1920 A, C	Objects: 1 (of 2 owners)	Eligible
520		Seaconnet Mills East Warren St.	1884-1894 A, C		Eligible
521		Stafford Mills County St.	1872-1896 A, C		Eligible
479		Union Mills Pleasant St.	1859-1890 A, C	Objects: 1 (of 2 owners)	Eligible; recommend deleting cotton storehouse
522		Wampanoag Mills Quequechan St.	1872, 1879 A, C	Objects: 1 (of 5 owners)	Eligible
523	DOE	Wyoming/Marshalls, Inc. 110 Chace St.	1879-1910 A, C	Objects: 1 Sole Owner	Eligible
Residential					
369		Carr-Osborn House 456 Rock St. (in proposed Highlands H.D.)			NR 4/4/80
56		Lafayette-Durfee House 94 Cherry St.			NR 4/15/82
313		James D. Hathaway House 311 Pine St.	ca.1843 A, C		Eligible
266		John Mace Smith House 399 North Main St.	ca.1844 A, C	Concur 1	Eligible
265		William Lindsey House 373 North Main St.	1844 A, C		Eligible
268		Nathan Read House 506 North Main St.	ca.1849 A, C		Eligible
274		Squire Wm. B. Canedy House 2634 North Main St.	ca.1806 A, C		Eligible
275		Borden-Winslow House 3063 North Main St.	ca.1740 A, C		Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Residential (Continued)				
276	Ashley House 3159 North Main St.	ca.1790-1800 A, C		Eligible
283	William Collins House 3775 North Main St.	ca.1800 A, C		Eligible
287	Valentine-French House 5105 North Main St.	ca.1769 A, C		Eligible
288	Luther Winslow, Jr. House 5225 North Main St.	ca.1795 A, C		Eligible
237, 238	Chase-Hyde Farm 1281-1291 New Boston Rd.	1879-1897 A, C		Eligible
264	David Anthony House 368 North Main St.	ca.1875 C		Eligible
142	William C. Davol, Jr. House 252 High St.	1876 C		Eligible
131	Barnabus Blossom House 244 Grove St.	ca.1800 A, C		Eligible
125	Ariadne and Mary Borden House 92 Globe St.	1882 A, C		Eligible
529	John M. Earle House 352 Durfee St.	ca.1870 C		Eligible
341	The Children's Home 427 Robeson St.	1894 A, C		Eligible
219	A.B. Chace Row Houses 655-685 Middle St.	ca.1877 C		Eligible
1	Boguslavsky Triple Deckers 53-87 Albion St.	1916 C		Eligible
73	Hathaway Brightman House 205 Crescent St.	ca.1858 C		Eligible
530	108 Quarry St.	ca.1850 C		Eligible
70	Israel Picard House 690 County St.	1897 C		Eligible

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name/ Address	Date/ Criteria	Owner Comment	Staff Recommendation
Residential (Continued)				
536	John Young House 34 Franklin St.	ca.1845 A, C		Eligible
Institutional				
526	Quequechan Club 306 North Main St.	1861-1922 A, C		Eligible
528	Woman's Club of Fall River 542 Walnut St.	1897, 1925 A, C		Eligible

Index by Alphabetized Street Address

FALL RIVER MULTIPLE RESOURCE AREA

	Property Address	Property Name	Inventory Number
	Ace Street	Sagamore Mills, #1 and #3	517
	53-87 Albion Street	Boguslavsky Triple Deckers	1
	Alden Street	Cornell Mills	506
	Alden Street	Flint Mills	508
	Anawan Street	American Printing Company	477
	Battleship Cove	U.S.S. Joseph Kennedy, Jr.	905
	Battleship Cove	U.S.S. Lionship	904
	Battleship Cove	U.S.S. Massachusetts	903
	Bay Street	Algonquin Printing	502
	505 Bay Street	Oliver Chace's Thread Mill	17
	Bedford Street (top)	Fall River Water Works	22
DOE	Bedford Street	Granite Mills	482
	440 Bradford Avenue	St. Louis Church	525
DOE	951 Broadway	Laurel Lake Mills	514
DOE	110 Chace Street	Wyoming/Marshalls, Inc.	523
	94 Cherry Street	Lafayette-Durfee House	56
	240 Colombia Street	Santo Christo Church	524
	County Street	Stafford Mills	521
	690 County Street	Israel Picard House	70
	Cove Street	Foster Spinning Company	509
	205 Crescent Street	Hathaway Brightman House	73
	1082 Davol Street	Mechanics Mill	77
	352 Durfee Street	John M. Earle House	529
	East Warren Street	Seaconnet Mills	520
Ret.	Eastern Avenue at Pleasant St.	Prince Henry the Navigator (statue)	900
	112 Flint Street	Davol School	494

Index by Alphabetized Street Address

FALL RIVER MULTIPLE RESOURCE AREA

	Property Address	Property Name	Inventory Number
	34 Franklin Street	John Young House	536
	83 Freedom Street	Massasoit Fire House #5	114
	30 Front Street	Crescent Mill	474
	Globe Street	Globe Yarn Mills	510
	92 Globe Street	Ariadne and Mary Borden House	125
DOE	Globe Mills Avenue	Ashworth Brothers	503
	Globe Mills Avenue	Sanford Spinning Company	519
	264 Griffin Street	Former Brayton Methodist Church	128
	244 Grove Street	Barnabus Blossom House	131
	252 High Street	William C. Davol, Jr. House	142
	109 Howe at Crawford Street	Charlton Mill	473
	Jefferson Street	Fall River Bleachery	507
	Jefferson Street, Quequechan Street, et al.	Quequechan Valley Mills Historic District	D
	Kilburn Street	King Philip Mills	513
	Lewiston and Salem Streets	Chace Mills	505
DOE	Martine Street	Kerr Thread Mills	512
	655-685 Middle Street	A. B. Chace Row Houses	219
	43 Morgan Street	N. B. Borden School	221
	Mount Hope Bay	Borden Flats Lighthouse (NR Pending; part of thematic lighthouse nomination)	Lighthouse #5
	1281-1291 New Boston Road	Chase-Hyde Farm	237, 238
	North Main Street, et al.	Downtown Fall River Historic District	B
	North Main Street	North Burial Ground	H
	200-228 North Main Street	First Baptist Church	259

Index by Alphabetized Street Address

FALL RIVER MULTIPLE RESOURCE AREA

Property Address	Property Name	Inventory Number
306 North Main Street	Quequechan Club	526
309 North Main Street	Unitarian Society	263
368 North Main Street	David Anthony House	264
373 North Main Street	William Lindsey House	265
399 North Main Street	John Mace Smith House	266
441 North Main Street	Bristol County Courthouse and Registry of Deeds	254
506 North Main Street	Nathan Read House	268
1355 North Main Street	St. Joseph's Church	497
1567 North Main Street	Narragansett Mills	515
1822 North Main Street	Sagamore Mill #2	518
2634 North Main Street	Squire William B. Canedy House	274
3063 North Main Street	Borden-Winslow House	275
3159 North Main Street	Ashley House	276
3538 North Main Street	North Christian Congregational Church	501
3775 North Main Street	William Collins House	283
5105 North Main Street	Valentine-French House	287
5225 North Main Street	Luther Winslow, Jr. House	288
160 Osborn Street	Osborn Street School	495
311 Pine Street	James D. Hathaway House	313
880 Pine Street	Pine Street School	496
Ret. Pleasant Street at Plymouth Avenue	The Hiker (statue)	901

Index by Alphabetized Street Address

FALL RIVER MULTIPLE RESOURCE AREA

Property Address	Property Name	Inventory Number
Pleasant Street	Union Mills	479
359-479 Pleasant Street	Durfee Mills	480
847 Pleasant Street	Pilgrim Mills	516
1058 Pleasant Street	Pocasset Fire House #7	492
1270-1288 Pleasant Street	Greany Building	527
1975 Pleasant Street	Coughlin School	493
Plymouth Avenue, Second Street, et al.	Corky Row Historic District	A
650 Plymouth Avenue	Connell School	531
765 Prospect Street	Oak Grove Cemetery	G
Quarry Street	Hargraves #1 Mill	511
108 Quarry Street	------	530
641-657 Quarry Street	Barnard Mills (Barnard Manufacturing Co. in complex, DOE 3/11/82)	504
420 Quequechan Street	Wampanoag Mills	522
427 Robeson Street	The Children's Home	341
Rock, Winter, Cherry, Lincoln Streets, Highland Avenue, et al.	Highlands Historic District	C
100 Rock Street	Central Congregational Church	353
116 Rock Street	Cataract Engine Company #3	491
160 Rock Street	Church of the Ascension	500
289 Rock Street	B. M. C. Durfee High School (in Highlands Historic District)	532
456 Rock Street	Carr-Osborn House (in Highlands Historic District)	369
34 Saint Joseph's St.	Notre Dame School	538
56 Saint Joseph's St.	Saint Joseph's Orphanage	537
138 Saint Joseph's St.	Jesus Marie Convent	535
Seabury St.	Ruggles Park	F

Index by Alphabetized Street Address

FALL RIVER MULTIPLE RESOURCE AREA

Property Address	Property Name	Inventory Number
South Main Street	Kennedy (South) Park	E
91-111 South Main Street	A. J. Borden Building	401
102 South Main Street	Academy Building	534
780 South Main Street (church) 818 Middle Street (rectory) 37 Park Street (convent)	St. Anne's Church and Parish Complex	233
1588 South Main Street	St. Patrick's Church	498
407 Spring Street (church) 327 Second Street (rectory)	St. Mary's Cathedral and Rectory	499
542 Walnut Street	Woman's Club of Fall River	528
DOE Weaver Street and West Street	Border City Mills #1, #2, #3	485

Index by Inventory Number

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name	Property Address
A	Corky Row Historic District	Plymouth Avenue, Second Street, et al.
B	Downtown Fall River Historic District	North Main Street, et al.
C	The Highlands Historic District	Rock, Winter, Cherry, Lincoln Streets, Highland Avenue, et al.
D	Quequechan Valley Mills Historic District	Jefferson, Quequechan Streets, et al.
E	Kennedy (South) Park	South Main Street
F	Ruggles Park	Seabury Street
G	Oak Grove Cemetery	765 Prospect Street
H	North Burial Ground	North Main Street
1	Boguslavsky Triple Deckers	53-87 Albion Street
Lighthouse #5	Borden Flats Lighthouse (NR pending; part of thematic lighthouse nomination)	Mount Hope Bay
17	Oliver Chace's Thread Mill	505 Bay Street
22	Fall River Water Works	Top of Bedford Street
56	Lafayette-Durfee House	94 Cherry Street
70	Israël Picard House	690 County Street
73	Hathaway Brightman House	205 Crescent Street
77	Mechanics Mill	1082 Davol Street
114	Massasoit Fire House #5	83 Freedom Street
125	Ariadne and Mary Borden House	92 Globe Street
128	Former Brayton Methodist Church	264 Griffin Street
131	Barnabus Blossom House	244 Grove Street
142	William C. Davol, Jr. House	252 High Street

Index by Inventory Number

FALL RIVER MULTIPLE RESOURCE AREA

Inventory Number	Property Name	Property Address
219	A. B. Chace Row Houses	655-685 Middle Street
221	N. B. Borden School	43 Morgan Street
233	St. Anne's Church and Parish Complex	780 South Main Street (church) 818 Middle Street (rectory) 37 Park Street (convent)
237, 238	Chase-Hyde Farm	1281-1291 New Boston Road
254	Bristol County Courthouse and Registry of Deeds	441 North Main Street
259	First Baptist Church	200-228 North Main Street
263	Unitarian Society	309 North Main Street
264	David Anthony House	368 North Main Street
265	William Lindsey House	373 North Main Street
266	John Mace Smith House	399 North Main Street
268	Nathan Read House	506 North Main Street
274	Squire William B. Canedy House	2634 North Main Street
275	Borden Winslow House	3063 North Main Street
276	Ashley House	3159 North Main Street
283	William Collins House	3775 North Main Street
287	Valentine-French House	5105 North Main Street
288	Luther Winslow, Jr. House	5225 North Main Street
313	James D. Hathaway House	311 Pine Street
341	The Children's Home	427 Robeson Street
353	Central Congregational Church	100 Rock Street
369	Carr-Osborn House	456 Rock Street (in Highlands H.D.)
401	A. J. Borden Building	91-111 South Main Street
473	Charlton Mill	109 Howe at Crawford Street

Index by Inventory Number

FALL RIVER MULTIPLE RESOURCE AREA

	Inventory Number	Property Name	Property Address
	474	Crescent Mill	30 Front Street
	477	American Printing Company	Anawan Street
	479	Union Mills	Pleasant Street
	480	Durfee Mills	359-479 Pleasant Street
DOE	482	Granite Mills	Bedford Street
DOE	485	Border City Mills #1,2,3	Weaver Street and West Street
	491	Cataract Engine Company #3	116 Rock Street
	492	Pocasset Fire House #7	1058 Pleasant Street
	493	Coughlin School	1975 Pleasant Street
	494	Davol School	112 Flint Street
	495	Osborn Street School	160 Osborn Street
	496	Pine Street School	880 Pine Street
	497	St. Joseph's Church	1355 North Main Street
	498	St. Patrick's Church	1588 South Main Street
	499	St. Mary's Cathedral and Rectory	407 Spring Street (church) 327 Second Street (rectory)
	500	Church of the Ascension	160 Rock Street
	501	North Christian Congregational Church	3538 North Main Street
	502	Algonquin Printing	Bay Street
DOE	503	Ashworth Brothers	Globe Mills Avenue
	504	Barnard Mills (Barnard Mfg. Co. in complex, DOE 3/11/82)	641-657 Quarry Street
	505	Chace Mills	Lewiston Street and Salem Street
	506	Cornell Mills	Alden Street
	507	Fall River Bleachery	Jefferson Street

Index by Inventory Number

FALL RIVER MULTIPLE RESOURCE AREA

	Inventory Number	Property Name	Property Address
	508	Flint Mills	Alden Street
	509	Foster Spinning Company	Cove Street
	510	Globe Yarn Mills	Globe Street
	511	Hargraves #1 Mill	Quarry Street
DOE	512	Kerr Thread Mills	Martine Street
	513	King Philip Mills	Kilburn Street
DOE	514	Laurel Lake Mills	951 Broadway
	515	Narragansett Mills	1567 North Main Street
	516	Pilgrim Mills	847 Pleasant Street
	517	Sagamore Mills, #1 and #3	Ace Street
	518	Sagamore Mill #2	1822 North Main Street
	519	Sanford Spinning Company	Globe Mills Avenue
	520	Seaconnet Mills	East Warren Street
	521	Stafford Mills	County Street
	522	Wampanoag Mills	Quequechan Street
DOE	523	Wyoming/Marshalls, Inc.	110 Chace Street
	524	Santo Christo Church	240 Columbia Street
	525	St. Louis Church	440 Bradford Avenue
	526	Quequechan Club	306 North Main Street
	527	Greany Building	1270-1288 Pleasant Street
	528	Woman's Club of Fall River	542 Walnut Street
	529	John M. Earle House	352 Durfee Street
	530	---	108 Quarry Street
	531	Connell School	650 Plymouth Avenue
	532	B. M. C. Durfee High School	289 Rock Street (in Highlands H.D.)

Index by Inventory Number

FALL RIVER MULTIPLE RESOURCE AREA

	Inventory Number	Property Name	Property Address
	534	Academy Building	102 South Main Street
	535	Jesus Marie Convent	138 Saint Joseph's Street
*	537	Saint Joseph's Orphanage	56 Saint Joseph's Street
	536	John Young House	34 Franklin Street
Ret.	900	Prince Henry the Navigator (statue)	Eastern Avenue at Pleasant Street
Ret.	901	The Hiker (statue)	Pleasant Street at Plymouth Avenue
	903	U.S.S. Massachusetts	Battleship Cove
	904	U.S.S. Lionfish	Battleship Cove
	905	U.S.S. Joseph Kennedy, Jr.	Battleship Cove
*	538	Notre Dame School	34 Saint Joseph's Street

FALL RIVER MULTIPLE RESOURCE NOMINATION

Accompanying Graphics

MAPS

City Locator Map

Corky Row Historic District Map

Downtown Fall River Historic District Map

Highlands Historic District Map

Quequechan Valley Mills Historic District

Oak Grove Cemetery Plan

USGS Quads

PHOTOS (102 Photos)

Corky Row Historic District (A)

See Area Form (15 photos)

Also 12 8 X 10 photos

3 general views: 1) John Street
2) Third Street
3) Fourth Street

4) Mill Tenement, 24-30 John Street

5) Jeremiah Shea House, 486 Fourth Street

6) Estes 'Flat-Iron' Building, 872-892 Second Street and 899-917 Plymouth Avenue

7) Estes Tenements, Plymouth Avenue

8) Mill House, 270-278 Morgan Street

9) Brownell Double House, 202-204 Fourth Street

10) Andrew J. Borden House, 230-234 Second Street

11) Benjamin Covel House, 825 Second Street

12) Cook Borden House (The Minden), 158 Fourth Street

Downtown Fall River Historic District (B)

See Area Form (21 photos)

Also 1 8 X 10 photo

1) General View of North Main and South Main Streets

The Highlands Historic District (C)

See Area Form (28 photos)

Also 14 8 X 10 photos

1) General View - Rock Street between Walnut and Locust Streets
2) Fall River Historical Society, 451 Rock Street
3) Anawan Fire Station, 1151 North Main Street
4) Griffitts Haffards House, 682 Rock Street
5) Former Quequechan Fire House, 330 Prospect Street
6) E. M. Hawkins House, 106 Highland Avenue
7) Arnold B. Sanford House, 218 Lincoln Avenue
8) Abraham Newell House, 430 High Street
9) First Congregational Church, 282 Rock Street
10) Remington-Borden House, 511 Rock Street
11) Church-Tory House, 96 French Street
12) Charles H. Robbins House, 140 Highland Avenue
13) Harriet Cobb House, 221 Lincoln Avenue
14) Union Methodist Church, 600 Highland Avenue

Quequechan Valley Mills Historic District (D)

See Area Form

Also 3 8 X 10 photos

1) Arkwright Mill #1, Jefferson Street
2) Arkwright Mill #1 and Davis Mills
3) Hargraves Mills #2 and #3, Jefferson Street

Individual Properties (37 Photos)

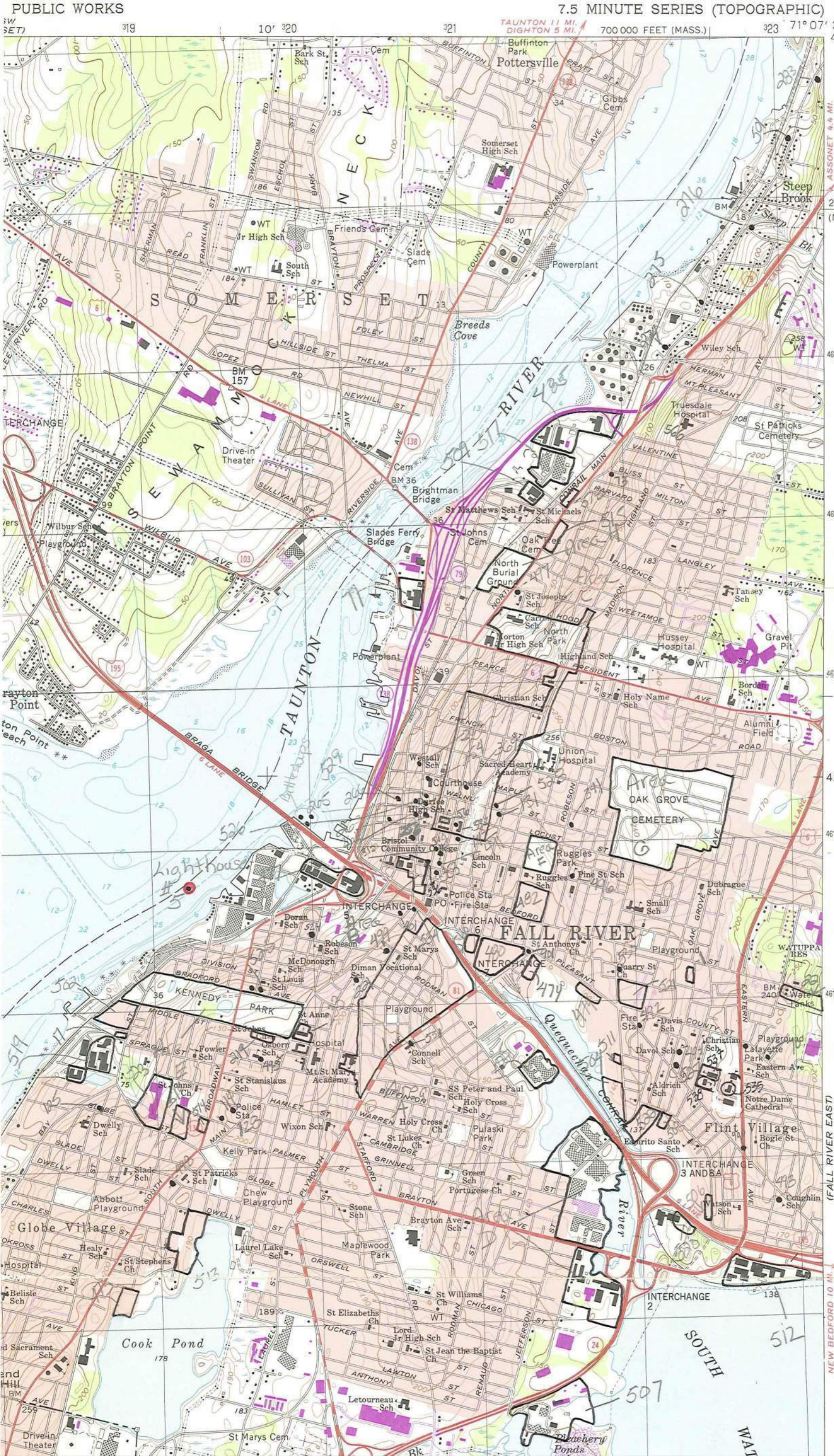
Unitarian Church
A.J. Borden Building
Bristol County Registry of Deeds
Bristol County Superior Court House
Pocasset Fire House
Pine Street School
St. Patrick's Church

St. Mary's Cathedral
Central Congregational Church
Former Brayton Methodist Episcopal Church
First Baptist Church
North Christian Congregational Church
St. Anne's Church
Notre Dame Church
James D. Hathaway House
John Mace Smith House
William Lindsay House
Nathan Reed House
Squire William B. Canedy House
Borden - Winslow House
Ashley House
Barnard Mills
Border City Mills
Charlton Mills
Cornell Mills
Durfee Mills
Durfee Mills
Flint Mills
Kerr Mills
Laurel Lake Mills
Mechanics Mills
Seaconnet Mills
Saint Louis Church
Chace - Hyde Farm
Woman's Club of Fall River
The Children's Home
William M. Connell School

F MASSACHUSETTS
PUBLIC WORKS

FALL RIVER QUADRANGLE
MASSACHUSETTS—RHODE ISLAND
7.5 MINUTE SERIES (TOPOGRAPHIC)

FALL RIVER, MASS. MRA
For UTM references, see inventory forms



NPS Form 10-900-a
(3-82)

OMB No. 1024-0018
Exp. 10-31-84

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

For NPS use only
received 1/5/83
date entered

Continuation sheet | Item number | Page # of 10

Multiple Resource Area
Thematic Group

dnr-11

Name Fall River Multiple Resource Area
State Massachusetts Bristol County

Nomination/Type of Review			Date/Signature
1. Algonquin Printing Co.	Substantive Review	Keeper	2/16/83 Barbara Wyatt
		Attest	
2. American Printing Co. and Metacomet Mill	Entered in the National Register	for Keeper	Melvin Byers 2/16/83
		Attest	
3. Anthony, David M., House	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
4. Ashley House	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
5. Ashworth Brothers Mill	[illegible]	Determined Eligible Keeper	2/16/83 Barbara Wyatt
DOE/OWNER OBJECTION		Attest	
6. Barnard Mills	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
7. Belmont Club/John Young House	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
8. Blossom, Barnabus, House	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
9. Boguslavsky Triple-Deckers	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	
10. Borden, A. J., Building	Entered in the National Register	for Keeper	2/16/83 Melvin Byers
		Attest	

NPS Form 10-900-a
(3-82)

OMB No. 1024-0018
Exp. 10-31-84

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

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date entered

Continuation sheet | Item number | Page 2 of 10

Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
11. Borden, Ariadne J. & Mary A., House	Substantive Review	Keeper	2/16/83
		Attest	
12. Border City Mills	Nomination Returned DOE/NATIONAL REGISTRATION	Keeper	12/11/83
		Attest	
13. Borden, N. B., School	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
14. Borden-Winslow House	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
15. Brayton Methodist Episcopal Church	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
16. Brightman, Hathaway, House	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
17. Bristol County Superior Court	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
18. Cadedy, Squire William B., House	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
19. Cataract Engine Company No. 3	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
20. Central Congregational Church	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

	Nomination/Type of Review			Date/Signature
21.	Chace Mills	Substantive Review	Keeper	2/16/83
			Attest	
22.	Chace, A. B., Rowhouses	Entered in the National Register	Keeper	2/16/83
			Attest	
23.	Chace's, Oliver, Thread Mill	Entered in the National Register	Keeper	2/16/83
			Attest	
24.	Charlton Mill	Entered in the National Register	Keeper	2/16/83
			Attest	
25.	Chase-Hyde Farm	Entered in the National Register	Keeper	2/16/83
			Attest	
26.	Children's Home	Entered in the National Register	Keeper	2/16/83
			Attest	
27.	Church of the Ascension	Entered in the National Register	Keeper	2/16/83
			Attest	
28.	Collins, William, House	Entered in the National Register	Keeper	2/16/83
			Attest	
29.	Connell, William M., School	Entered in the National Register	Keeper	2/16/83
			Attest	
30.	Cornell Mills	Entered in the National Register	Keeper	2/16/83
			Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
31. Coughlin School	[illegible]	Keeper	2/16/83
		Attest	
32. Crescent Mill	Entered in the National Register	for Keeper	2/16/83
		Attest	
33. Davol School	Entered in the National Register	for Keeper	2/16/83
		Attest	
34. Davol, William C., Jr., House	Entered in the National Register	for Keeper	2/16/83
		Attest	
35. Downtown Fall River Historic District	Entered in the National Register	for Keeper	2/16/83
		Attest	
36. Durfee Mills	Entered in the National Register	for Keeper	2/16/83
		Attest	
37. Earle, John M., House	Entered in the National Register	for Keeper	2/16/83
		Attest	
38. Fall River Bleachery	Entered in the National Register	for Keeper	2/16/83
		Attest	
39. First Baptist Church	Entered in the National Register	for Keeper	2/16/83
		Attest	
40. Flint Mills	Entered in the National Register	for Keeper	2/16/83
		Attest	

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date entered

Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
41. Foster Spinning Co.	Substantive Review	Keeper	2/16/83 Bruce Sundberg
		Attest	
42. Globe Yarn Mills	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
43. Granite Mills	~~Substantive Review~~ OWNER OBJECTION	Determined Eligible Keeper	2/16/83 Bruce Sundberg
		Attest	
44. Greany Building	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
45. Hargraves Mill #1	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
46. Hathaway, James D., House	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
47. Highlands Historic District	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
~~48.~~ Hiker, The, (statue)	~~Substantive Review~~	Keeper	RS
		Attest	
49. House at 108-112 Quarry Street	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	
50. Jesus Marie Convent	Entered in the National Register	for Keeper	2/16/83 Delores Byrne
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
51. Kennedy Park	Substantive Review	Keeper	2/16/83
		Attest	
52. Kerr Thread Mill	Substantive Review	Determined Eligible Keeper	2/16/83
	DOE/OWNER OBJECTION	Attest	
53. King Philip Mills	Entered in the National Register	Keeper	2/16/83
		Attest	
54. Laurel Lake Mills	DOE/OWNER OBJECTION	Determined Eligible Keeper	2/16/83
		Attest	
55. Lindsey, William, House	Entered in the National Register	Keeper	2/16/83
		Attest	
56. Massasoit Fire House #5	Entered in the National Register	Keeper	2/16/83
		Attest	
57. Mechanics Mill	Entered in the National Register	Keeper	2/16/83
		Attest	
58. Narragansett Mills	Entered in the National Register	Keeper	2/16/83
		Attest	
59. North Burial Ground	Entered in the National Register	Keeper	2/16/83
		Attest	
60. North Christian Congregational Church	Entered in the National Register	Keeper	2/16/83
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
61. Notre Dame School	Substantive Review	Keeper	2/16/83
		Attest	
62. Oak Grove Cemetery	Entered in the National Register	for Keeper	2/16/83
		Attest	
63. Osborn Street School	Entered in the National Register	for Keeper	2/16/83
		Attest	
64. Picard, Israel, House	Entered in the National Register	for Keeper	2/16/83
		Attest	
65. Pilgrim Mills	Entered in the National Register	for Keeper	2/16/83
		Attest	
66. Pine Street School	Entered in the National Register	for Keeper	2/16/83
		Attest	
67. Pocasset Firehouse #7	Entered in the National Register	for Keeper	2/16/83
		Attest	
68. Prince Henry The Navigator (statue)	Substantive Review	Keeper	RS
		Attest	
69. Quequechan Club	Entered in the National Register	for Keeper	2/16/83
		Attest	
70. Quequechan Valley Mills Historic District	Entered in the National Register	for Keeper	2/16/83
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
71. Read, Nathan, House	Substantive Review	Keeper	2/16/83 Bruce Chandler
		Attest	
72. Ruggles Park	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
73. Sagamore Mill No. 2	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
74. Sagamore Mills #1 and #3	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
75. Sanford Spinning Co.	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
76. Santo Christo Church	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
77. Seaconnet Mills	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
78. Smith, John Mace, House	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
79. St. Anne's Church and Parish Complex	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	
80. St. Joseph's Church	Entered in the National Register	for Keeper	2/16/83 Deloris Byers
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review			Date/Signature
81. St. Joseph's Orphanage	Substantive Review	Keeper	2/16/83
		Attest	
82. St. Louis Church	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
83. St. Mary's Cathedral and Rectory	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
84. St. Patrick's Church	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
85. Stafford Mills	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
86. Union Mills	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
87. Valentine-French House	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
88. Wampanoag Mills	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
89. Winslow, Luther Jr., House	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	
90. Woman's Club of Fall River	Entered in the National Register	Keeper	2/16/83 Delores Byrne
		Attest	

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Multiple Resource Area
Thematic Group

Name Fall River Multiple Resource Area
State MA

Nomination/Type of Review		Date/Signature
91. Wyoming Mills	Substantive Review	Keeper Determined Eligible 2/6/87
	DOE/OWNER OBJECTION	Attest
92. Corky Row Historic District	Entered in the National Register	for Keeper Helen Byers 6/23/83
		Attest
93. Lower Highlands Historic District	Entered in the National Register	Keeper Helen Byers 4/10/84
		Attest
94. Bernard's Folly	Substantive Review	Keeper
		Attest
95. Truesdale Hospital	Entered in the National Register	for Keeper William B. Bushong 4/15/86
		Attest Betty L. Savage 4-15-86
96. Manley, William M., House	Entered in the National Register	for Keeper Helen Byers 6/26/86
		Attest
97. Sacred Heart School	Entered in the National Register	for Keeper Helen Byers 3/9/87
		Attest
98. Border City Mill No. 2	Entered in the National Register	Keeper 6/28/90
		Attest
		Keeper
		Attest
		Keeper
		Attest

United States Department of the Interior
National Park Service

Substantive Review

Prince Henry the Navigator (statue) (Fall River MRA)
Bristol County
MASSACHUSETTS

Working No. 1/15/83-15
Fed. Reg. Date:
Date Due: 2/3/83 – 2/19/83
Action: ___ ACCEPT
✓ RETURN 2/16/83
___ REJECT
Federal Agency:

___ resubmission
___ nomination by person or local government
___ owner objection
___ appeal
Substantive Review: ___ sample ___ request ___ appeal ✓ NR decision

Reviewer's comments:

THE STATUE HAS NOT BEEN SHOWN TO BE ELIGIBLE FOR THE NATIONAL REGISTER BECAUSE CRITERIA CONSIDERATION F HAS NOT BEEN TAKEN INTO ACCOUNT AND IT HAS NOT BEEN SHOWN TO BE OF EXCEPTIONAL SIGNIFICANCE. EVEN THOUGH THE GROUP IT MEMORIALIZES IS SIGNIFICANT TO THE COMMUNITY A STATUE CANNOT CONVEY THAT ASSOCIATION. IT EITHER NEEDS TO BE SHOWN TO BE OF ARTISTIC SIGNIFICANCE OR HAVE ACHIEVED SIGNIFICANCE IN ITS OWN RIGHT SINCE IT WAS CREATED.

Recom./Criteria RETURN
Reviewer Mike Devlin
Discipline ARCHITECTURAL HISTORY
Date 2/16/83
___ see continuation sheet

Nomination returned for: ___ technical corrections cited below
X substantive reasons discussed below

1. Name

2. Location

3. Classification

Category	Ownership	Status	Present Use
	Public Acquisition	Accessible	

4. Owner of Property

5. Location of Legal Description

6. Representation in Existing Surveys

has this property been determined eligible? ___ yes ___ no

7. Description

Condition		Check one	Check one
___ excellent	___ deteriorated	___ unaltered	___ original site
___ good	___ ruins	___ altered	___ moved date ___
___ fair	___ unexposed		

Describe the present and original (if known) physical appearance

___ ✓ summary paragraph
___ ✓ completeness
___ ✓ clarity
___ ✓ alterations/integrity
___ ✓ dates
___ X boundary selection THE BOUNDARY IS NOT CLEAR. IF IT IS THE TRAFFIC ISLAND (CONTINUED IN #10)

8. Significance

Period | Areas of Significance—Check and justify below

Specific dates | Builder/Architect

Statement of Significance (in one paragraph)

IF THE PROPERTY IS ELIGIBLE UNDER CRITERION C IT WOULD NEED TO BE SHOWN TO BE EXCEPTIONALLY SIGNIFICANT AS A PIECE OF SCULPTURE, EITHER IN THE CONTEXT OF WORK OF ITS PERIOD OR THE WORK OF THE ARTIST (IF HE CAN BE SHOWN TO BE SIGNIFICANT). IF IT IS ELIGIBLE UNDER A, THE EVENT OF ~~BUILDING~~ ERECTING THE MONUMENT OR THE SYMBOLIC VALUE WHICH IT HAS ACCRUED WOULD NEED TO BE SHOWN TO BE OF EXCEPTIONAL SIGNIFICANCE. (SEE ALSO THE DRAFT HOW TO APPLY THE NATIONAL REGISTER CRITERIA FOR EVALUATION.)

- ____ summary paragraph
- ____ completeness
- ____ clarity
- ____ applicable criteria
- ____ justification of areas checked
- ____ relating significance to the resource
- ____ context
- ____ relationship of integrity to significance
- ____ justification of exception
- ____ other

9. Major Bibliographical References

→ WHAT ARE THE SOURCES FOR DEMONSTRATING THE SIGNIFICANCE IN THE FIELD OF ART HISTORY OF THIS MONUMENT? WHAT ARE THE SOURCES FOR EVALUATING HISTORICAL SIGNIFICANCE.?

10. Geographical Data

Acreage of nominated property _____

Quadrangle name _____

UMT References

Verbal boundary description and justification

WHY SHOULD THE ENTIRE ISLAND BE NOMINATED IF THE STATUE IS ONLY AT ONE END? PLEASE REDUCE ~~BOUND~~ THE NOMINATED AREA IF IT CANNOT BE JUSTIFIED AS RELATING TO THE SIGNIFICANCE OF THE PROPERTY. WOULD NOT A MORE REASONABLE BOUNDARY BE ONLY THE END WHERE THE STATUE IS LOCATED?

11. Form Prepared By

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national ___ state ___ local

State Historic Preservation Officer signature

title date

13. Other

- ____ Maps
- ____ Photographs
- ____ Other

Questions concerning this nomination may be directed to BRUCE MacDONALD

Signed _____ Date 2/16/83 Phone: 202 272-3504

Comments for any item may be continued on an attached sheet

ted States Department of the Interior
ional Park Service

Substantive Review

Hiker, The, (statue) (Fall River MRA)
Bristol County
MASSACHUSETTS

Working No. 1/5/83-15
Fed. Reg. Date:
Date Due: 2/3/83 - 2/19/83
Action: ___ ACCEPT
✓ RETURN 2/16/83
___ REJECT
Federal Agency:

___ resubmission
___ nomination by person or local government
___ owner objection
___ appeal
Substantive Review: ___ sample ___ request ___ appeal ✓ NR decision

Reviewer's comments:

CRITERIA CONSIDERATION F IS NOT ADDRESSED. ALSO, THE PROPERTY IS LESS THAN 50 YEARS OLD, SO IT WOULD NEED TO BE SHOWN TO BE EXCEPTIONALLY SIGNIFICANT

Recom./Criteria RETURN
Reviewer MAC ODUGAL
Discipline A. HISTORY
Date 2/16/83
___ see continuation sheet

Nomination returned for: ___ technical corrections cited below
✓ substantive reasons discussed below

1. Name

2. Location

3. Classification

Category	Ownership	Status	Present Use
	Public Acquisition	Accessible	

4. Owner of Property

5. Location of Legal Description

6. Representation in Existing Surveys

has this property been determined eligible? ___ yes ___ no

7. Description

Condition		Check one	Check one
___ excellent	___ deteriorated	___ unaltered	___ original site
___ good	___ ruins	___ altered	___ moved date ___
___ fair	___ unexposed		

Describe the present and original (if known) physical appearance

___ summary paragraph
___ completeness THE DESCRIPTION IS VERY WEAK. NO DESCRIPTION OF THE BASE IS PROVIDED. IF THE TRAFFIC ISLAND IS BEING NOMINATED SHOULD IT NOT ALSO BE DESCRIBED. WHAT WAS ITS APPEARANCE (THE ISLAND) HISTORICALLY?
___ clarity
___ alterations/integrity
___ dates
___ boundary selection WHY SHOULD MORE THAN JUST THE STATUE BE NOMINATED? DOES IT RETAIN INTEGRITY OF SETTING? THE FORM INDICATES IT WAS →

8. Significance

Period | Areas of Significance—Check and justify below

Specific dates | Builder/Architect

Statement of Significance (in one paragraph)

- ✓ summary paragraph
- X completeness
- ✓ clarity
- X applicable criteria
- X justification of areas checked
- X relating significance to the resource
- ____ context
- ✓ relationship of integrity to significance
- XX justification of exception
- ____ other

THE NATIONAL REGISTR CRITERIA GENERALLY EXCLUDES PROPERTIES WHICH ARE COMMEMORATIVE IN NATURE. PLEASE JUSTIFY THIS NOMINATION IN LIGHT OF THIS CRITERIA CONSIDERATION. IN ADDITION, THE PROPERTY IS LESS THAN 50 YEARS OF AGE AND WOULD NEED TO BE SHOWN TO BE OF EXCEPTIONAL SIGNIFICANCE.

THE MONUMENT HAS NOT BEEN SHOWN TO BE SIGNIFICANT UNDER CRITERION A. UNDER CRITERION C, IS IT AN IMPORTANT WORK OF A MASTER OR AN EXCEPTIONALLY SIGNIFICANT DESIGN? IF AN ADEQUATE CASE IS TO BE MADE UNDER CRITERION C MORE CONTEXT ABOUT THE ARTIST, HER SIGNIFICANCE AND HOW THIS WORK COMPARES TO HER OTHER WORKS WOULD BE NECESSARY OR IT WOULD NEED TO BE SHOWN TO BE AN IMPORTANT WORK OF SCULPTURE FOR ITS PERIOD. SEE ALSO THE DRAFT HOW TO APPLY NATIONAL REGISTER CRITERIA FOR EVALUATION.

9. Major Bibliographical References

10. Geographical Data

Acreage of nominated property _____

Quadrangle name _____

UMT References

Verbal boundary description and justification

(CONTINUE #7) MOVED. PLEASE JUSTIFY THE BOUNDARIES

11. Form Prepared By

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

____ national ____ state ____ local

State Historic Preservation Officer signature

title date

13. Other

- ____ Maps
- ____ Photographs
- X Other

IF THEODORA ALICE RUGGLES KITSON IS A "QUITE WELL KNOWN" SCULPTOR WHY ARE THERE NO SCHOLARLY STUDIES OF HER WORKS CITED? IF THE MONUMENT IS TO BE SHOWN TO BE THE WORK OF A MASTER, A CONVINCING ARGUMENT ABOUT HER IMPORTANCE TO FALL RIVER AND/OR TO THE ART WORLD IN GENERAL WOULD BE NECESSARY.

Questions concerning this nomination may be directed to BRUCE MacDOUGALL

Signed Bruce MacDougall Date 2/16/93 Phone: 202 272-3504

Comments for any item may be continued on an attached sheet

Cumberland Farms MA8427
64 Stevens Street
Fall River, MA 02721

Inquiry Number: 5495728.3
November 27, 2018

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

11/27/18

Site Name:

Cumberland Farms MA8427
64 Stevens Street
Fall River, MA 02721
EDR Inquiry # 5495728.3

Client Name:

Kleinfelder, Inc.
4 Technology Dr Suite 100
Westborough, MA 01581
Contact: Madeline Soule

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. 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. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 9E5D-4401-92D9

PO # NA

Project MA8427

Maps Provided:

1976
1950
1933
1905
1893

Sanborn® Library search results

Certification #: 9E5D-4401-92D9

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others 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

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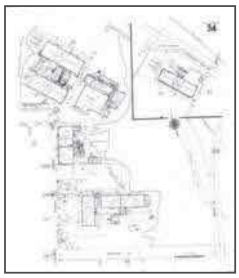
Sanborn Sheet Key

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

1976 Source Sheets



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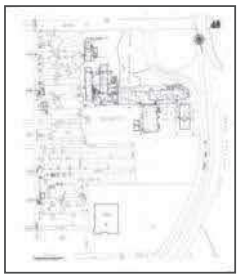
1976



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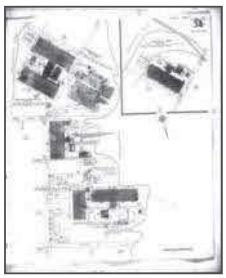
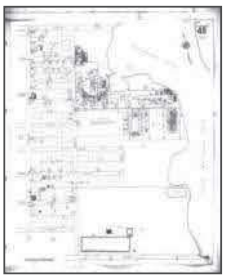
1976

1950 Source Sheets

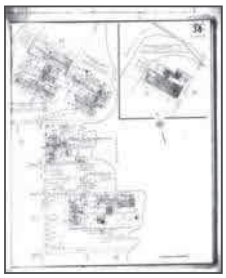


Volume 1, Sheet 34
1950

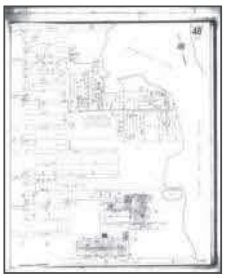


Volume 1, Sheet 48
1950

1933 Source Sheets

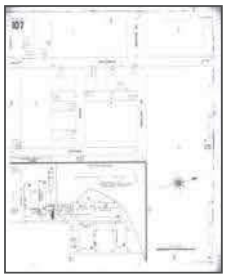


Volume 1, Sheet 34
1933



Volume 1, Sheet 48
1933

1905 Source Sheets

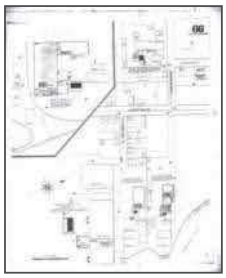


Volume 1, Sheet 107
1905

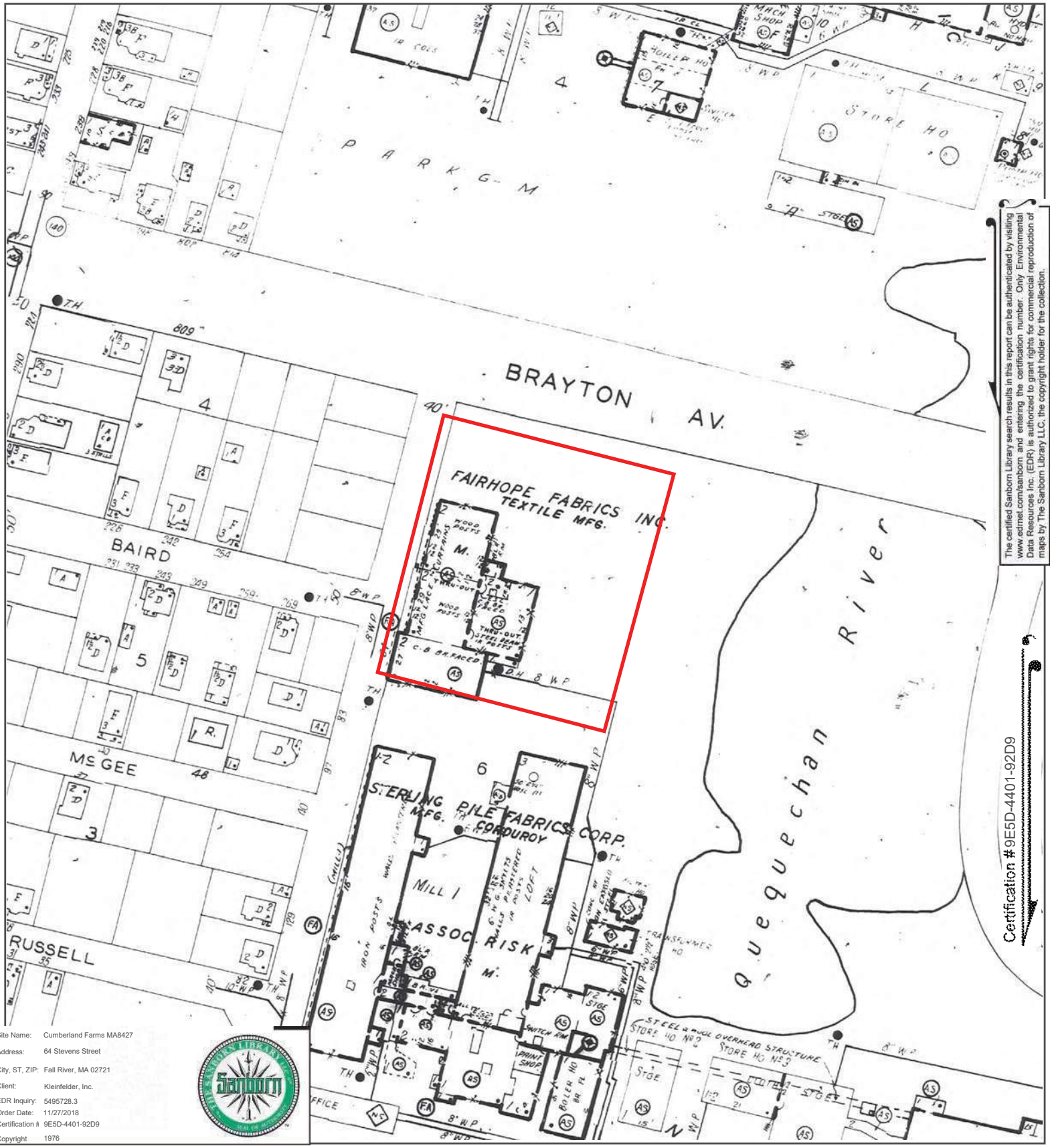
Sanborn Sheet Key

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

1893 Source Sheets



Volume 1, Sheet 66
1893



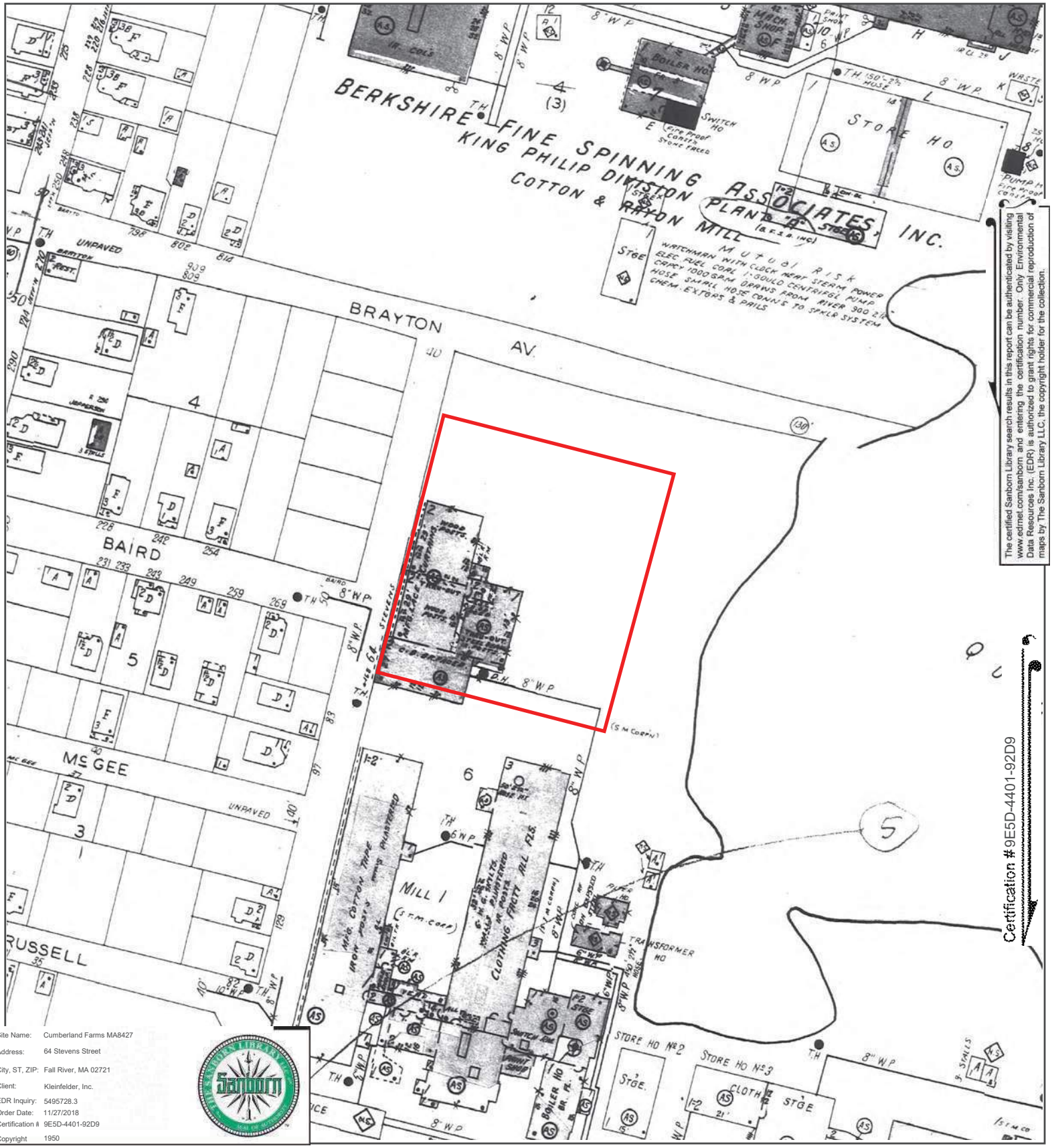
Site Name:	Cumberland Farms MA8427
Address:	64 Stevens Street
City, ST, ZIP:	Fall River, MA 02721
Client:	Kleinfelder, Inc.
EDR Inquiry:	5495728.3
Order Date:	11/27/2018
Certification #	9E5D-4401-92D9
Copyright	1976

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

0 Feet 150 300 600

Volume 1, Sheet 48
Volume 1, Sheet 34

N



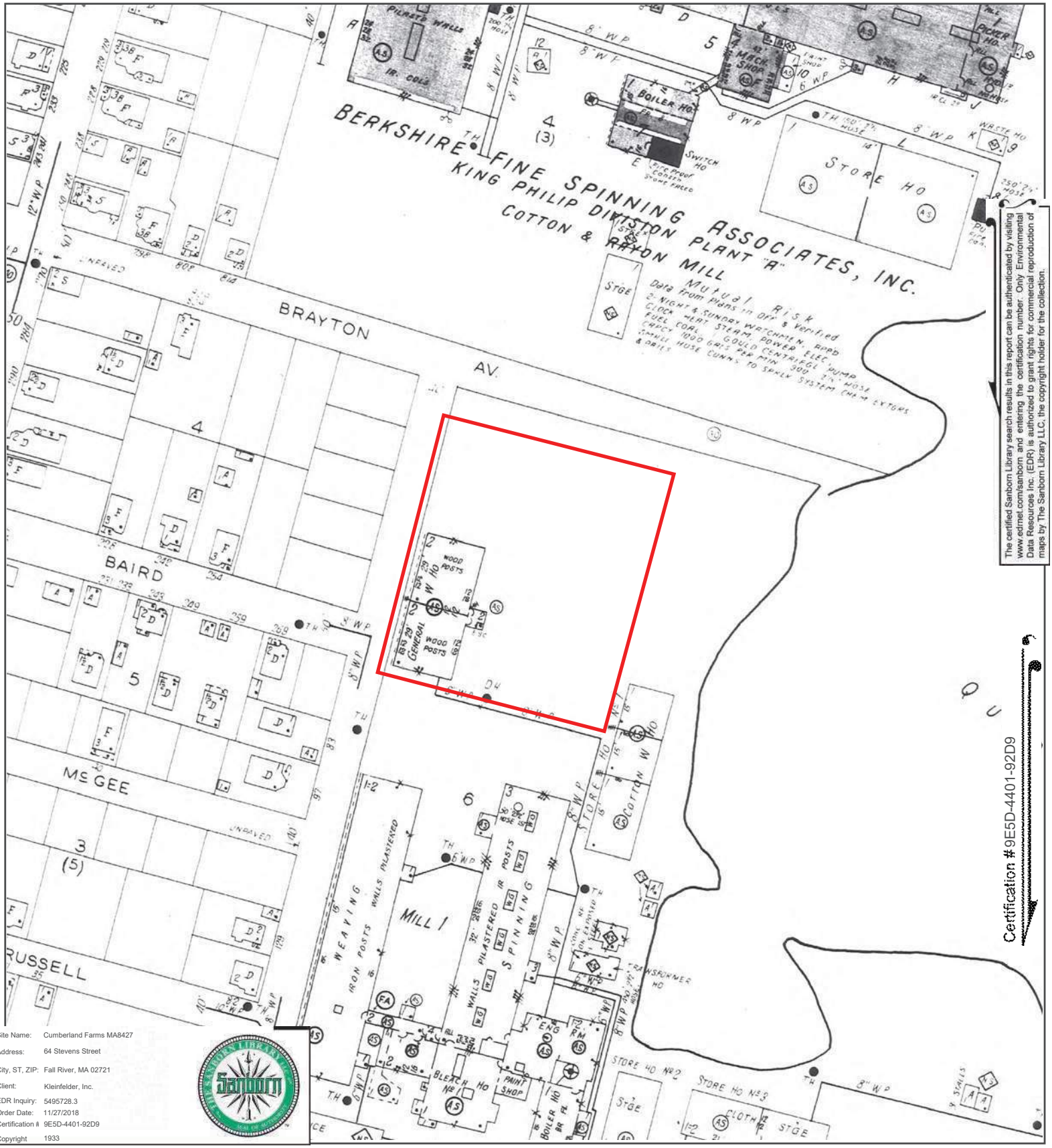
Site Name:	Cumberland Farms MA8427
Address:	64 Stevens Street
City, ST, ZIP:	Fall River, MA 02721
Client:	Kleinfelder, Inc.
EDR Inquiry:	5495728.3
Order Date:	11/27/2018
Certification #	9E5D-4401-92D9
Copyright	1950

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

0 Feet 150 300 600

Volume 1, Sheet 48
Volume 1, Sheet 34

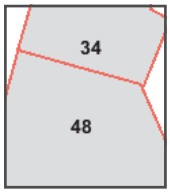
N



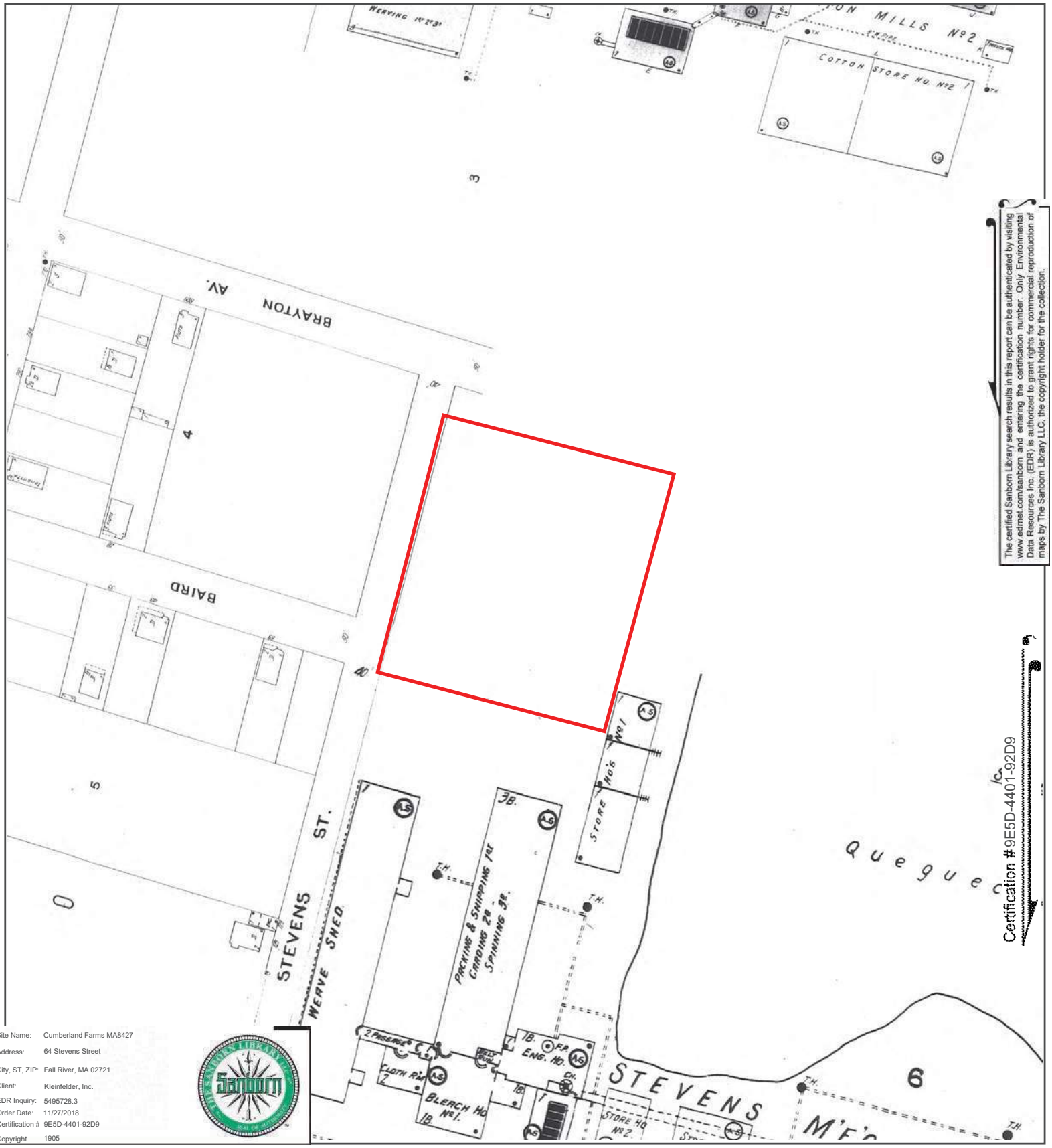
Site Name:	Cumberland Farms MA8427
Address:	64 Stevens Street
City, ST, ZIP:	Fall River, MA 02721
Client:	Kleinfelder, Inc.
EDR Inquiry:	5495728.3
Order Date:	11/27/2018
Certification #	9E5D-4401-92D9
Copyright	1933

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

0 Feet 150 300 600



Volume 1, Sheet 48
Volume 1, Sheet 34



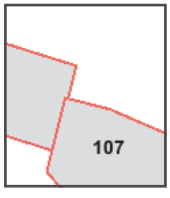
Certification #9E5D-4401-92D9

Site Name:	Cumberland Farms MA8427
Address:	64 Stevens Street
City, ST, ZIP:	Fall River, MA 02721
Client:	Kleinfelder, Inc.
EDR Inquiry:	5495728.3
Order Date:	11/27/2018
Certification #	9E5D-4401-92D9
Copyright	1905

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

0 Feet 150 300 600

Volume 1, Sheet 107



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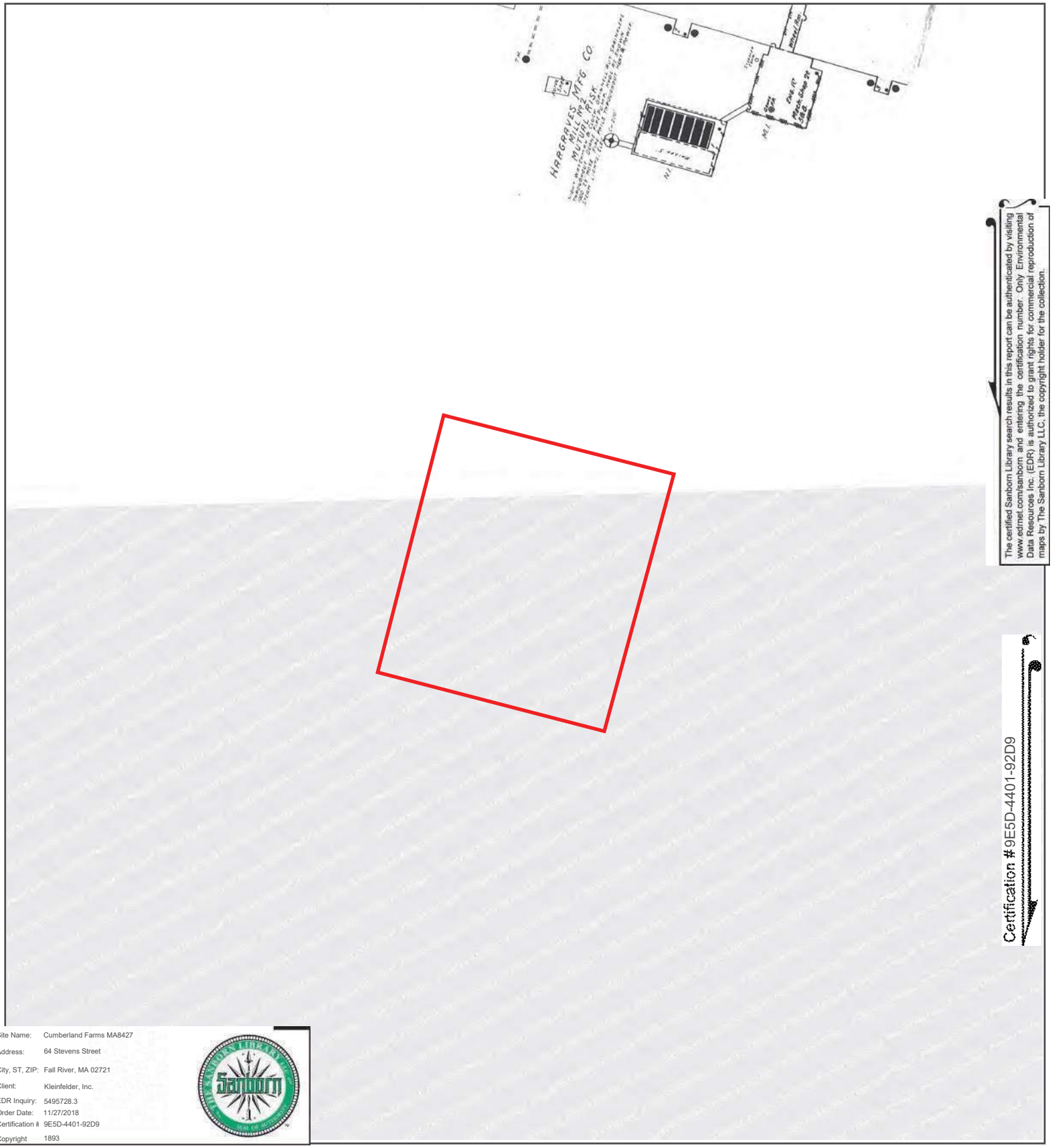
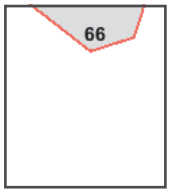


Certification #9E5D-4401-92D9

Site Name: Cumberland Farms MA8427
Address: 64 Stevens Street
City, ST, ZIP: Fall River, MA 02721
Client: Kleinfelder, Inc.
EDR Inquiry: 5495728.3
Order Date: 11/27/2018
Certification #: 9E5D-4401-92D9
Copyright: 1893

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



Volume 1, Sheet 66

0 Feet 150 300 600

N

Cumberland Farms MA8427

64 Stevens Street

Fall River, MA 02721

Inquiry Number: 5495728.8

November 28, 2018

The EDR Aerial Photo Decade Package

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

EDR Aerial Photo Decade Package

11/28/18

Site Name:

Cumberland Farms MA8427
64 Stevens Street
Fall River, MA 02721
EDR Inquiry # 5495728.8

Client Name:

Kleinfelder, Inc.
4 Technology Dr Suite 100
Westborough, MA 01581
Contact: Madeline Soule

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1995	1"=500'	Acquisition Date: March 29, 1995	USGS/DOQQ
1991	1"=750'	Flight Date: April 04, 1991	USGS
1986	1"=500'	Flight Date: March 30, 1986	USDA
1981	1"=500'	Flight Date: April 13, 1981	RIGIS
1975	1"=500'	Flight Date: April 30, 1975	USGS
1970	1"=500'	Flight Date: October 06, 1970	USDA
1966	1"=500'	Flight Date: February 22, 1966	USGS
1952	1"=500'	Flight Date: October 12, 1952	USDA
1939	1"=500'	Flight Date: May 10, 1939	RIGIS

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INQUIRY #: 5495728.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 5495728.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 5495728.8
YEAR: 2008
= 500'
N
EDR


INQUIRY #: 5495728.8
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 5495728.8

YEAR: 1995

= 500'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5495728.8

YEAR: 1991

= 750'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5495728.8

YEAR: 1986

= 500'

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EDR

INQUIRY #: 5495728.8

YEAR: 1981

= 500'

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EDR

INQUIRY #: 5495728.8

YEAR: 1975

= 500'

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EDR

INQUIRY #: 5495728.8

YEAR: 1970

= 500'

N

EDR

INQUIRY #: 5495728.8

YEAR: 1966

= 500'

N

EDR


INQUIRY #: 5495728.8
YEAR: 1952
= 500'
N
EDR


INQUIRY #: 5495728.8
YEAR: 1939
= 500'
N
EDR