BARRE SUPERVISORY UNION DISTRICT #61

Barre City Elementary & Middle School / Barre Town Middle & Elementary School / Spaulding High School / Central Vermont Career Center

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Doing whatever it takes to ensure success for every child.

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Lauren May
Interim Early Education Coordinator

Jamie Evans
Director of Facilities

To: The Senate Education Committee
From: Jamie Evans, Director of Facilities, Barre Supervisory Union
Date: January 29, 2019
Re: Testimony on S.40, related to Lead Testing

Thank you for hearing my testimony, on behalf of the Barre Supervisory Union. In the 2017-2018 school year, Barre City Elementary and Middle School was selected to participate in sampling for lead in drinking water. The school partnered with the Vermont Department of Health, the Agency of Natural Resources, and the Agency of Education in this effort. As the Director of Facilities for the Barre Supervisory Union, I was involved with the testing in the school and interfaced with the school principal at the time, James Taffel. As Mr. Taffel retired, and the new co-principals at the school have limited information in the pilot testing, I expressed willingness to testify today.

Barre City Elementary and Middle School was built and began operation in the mid-1990s, so the school is currently around twenty-five years old. The school operates grades PreK through 8 and has an enrollment of approximately 900 students. The school has over 150 water taps, mostly active, and all taps were tested. Some of the details of the testing are shown below, and the report sent to the principal on March 9, 2018 is attached to this testimony. While the state paid for the test analysis, the school district paid for the labor cost to draw the samples and for the cost of any remediation. Because of the extensive number of taps tested, the testing was done over two weekends. Labor costs consisted of two maintenance staff for 13.5 hours each at overtime pay, just for the testing itself. This does not include the additional staff and administrative time for communicating with the state agencies, organizing testing, and communicating with all relevant stakeholders.

<u>Hourly labor cost:</u>
Labor spent for the collecting of tap samples, both first draw and 30 second flush draw:

Maintenance staff member #1: 13.5hrs. @ $35.06/hr. = $473.31

Maintenance staff member #2: 13.5hrs. @ $27.23/hr. = $376.05

Total labor expense to school district: $840.91

Summary of Results:

- 156 taps were tested for levels of lead – the vast majority showed results at less than 1 ppb.
- Room 206 – Two science room work table taps were found to be above the EPA's action level of 15 ppb as well as over the Vermont's Health Advisory level of 1 ppb. These two taps had been taken out of service by disconnecting them many years ago because they were not needed. For this test, the two taps were reconnected, samples were taken, and then the two taps were taken out of service again by the same means. After the results came back, the disconnected taps were then also tagged to note that they showed high levels of lead and should therefore not be reconnected.
- Kitchen sinks – Two of the sinks used for food prep showed lead levels below the EPA's action level of 15 ppb, but higher than Vermont's Health Advisory level of 1 ppb. The faucets for these two sinks have since been replaced with lead-free faucets as part of the resulting remediation efforts. The expense to install the new faucets was funded by the school budget.
- Bubbler/Fountains - Voluntary action to replace existing drinking fountains with new "Hydration Stations" is currently taking place, a process which started before the testing. The "Hydration Stations" are drinking fountains that are lead free, filtered and chilled drinking fountains. These new stations are also designed to fill refillable water bottles, and have been placed in the cafeteria and many high traffic areas throughout the building. The expense to install the new hydration stations is being funded by the school budget.
- The full test report is attached to this testimony.

Barre City Elementary and Middle School is one of three schools in our supervisory union. The other two school are or roughly similar size and contain a roughly similar number of taps, but are both more than fifty years old. They were not selected for testing last year.

Thank you for the opportunity to testify, and I am happy to answer any questions that you have.

Respectfully,
Jamie Evans

VERMONT

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Agency of Human Services

March 9, 2018

James Taffel
Barre City Elementary & Middle School
50 Parkside Terrace
Barre, VT 05641

Dear Principal Taffel,

Thank you for partnering with the Vermont Department of Health, Agency of Natural Resources (ANR), and Agency of Education to conduct sampling for lead in drinking water at your school.

On 02/03/18 and 02/10/18, a school designee sampled 156 taps that are commonly used for drinking and cooking and sent them to the Health Department Laboratory for analysis. A summary of these results is included with this report.

Results at or above EPA action level (15 ppb):

Two of the taps sampled had a result AT OR ABOVE the Environmental Protection Agency's action level for lead in public drinking water of 15 parts per billion (ppb). These classroom taps had been turned off and unused for an unknown period of time prior to sampling. These taps should be taken back out of service for drinking water use immediately. Additionally, the valves to these fixtures should be tagged in a manner that lets others know why the fixtures are turned off. ANR staff will reach out to you and work with your school to find the best possible solution to lower these lead levels. You may also contact Ben Montross from ANR directly at 802-498-8981.

Results below EPA action level (15 ppb) but above Vermont Health Advisory (1 ppb):

Some of the taps sampled had results below the Environmental Protection Agency's action level, but above the Vermont Health Advisory of 1 ppb. Because there is no safe level of lead in the body, you are encouraged to work with ANR staff to find solutions to further reduce levels of lead in the drinking water for these taps as well. In the short-term, for classroom and workroom sinks that had lead levels in this range, students and staff should be encouraged to drink water from the fountains/ fill stations rather than from the classroom/workroom sinks. In order to reduce levels of lead in the cooking water, the Deli Prep Sink and the Left Pot Sink

should be flushed for 30 seconds prior to each use until a long-term fix can be implemented. As you can see from the test results, flushing these taps for 30 seconds is an effective way to reduce the lead levels in the school cooking water.

The Health Department encourages you to share these results with the school community as soon as possible, but no later than 10 business days after receiving this report. We have provided a sample letter to use when communicating the results to your community. This letter is not required to be used, you can edit it as you feel appropriate.

Thank you for taking this important step in creating a healthy school environment.

Sincerely,

Michelle Thompson

Michelle Thompson, MPH
Public Health Industrial Hygienist
Vermont Department of Health – Division of Environmental Health
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CC John Pandolfo, Superintendent
Jamie Evans, Director of Facilities
Sonya Spaulding, School Board Chair
Steven Micheli, Water System Operator

Summary of Lead in Drinking Water Results for Barre City Elementary & Middle School[1]

Sample Location	First-Draw Result[2] ppb	Flush Result[3] ppb	Comments
012 Sink	<1	<1	
100 Fountain	<1		
100 Sink	<1	<1	
102 Fountain	<1		
102 Sink	<1	<1	
103 Fountain	<1		
103 Sink	<1	<1	
104 Fountain	<1		
104 Sink	<1	<1	
105 Fountain	<1		
105 Sink	<1	<1	
107 Fountain	<1		
107 Sink	<1	<1	
108 Fountain	<1		
108 Sink	<1	<1	
109 Fountain	<1		
109 Sink	<1	<1	
110 Fountain	<1		
110 Sink	<1	12	Consider resampling.
111 Fountain	<1		
111 Sink	<1	<1	
112 Fountain	<1		
112 Sink	<1	<1	
114 Fountain	<1		
114 Sink	<1	<1	
115 Fountain	<1		
115 Sink	<1	<1	
116 Fountain	<1		
116 Sink	<1	<1	
117 Fountain	<1		
117 Sink	<1	<1	
118 Fountain	<1		
118 Sink	<1	<1	
120 Fountain	<1		
120 Sink	<1	<1	
121 Fountain	<1		
121 Sink	<1	<1	

Sample Location	First-Draw Result[2] ppb	Flush Result[3] ppb	Comments
122 Fountain	<1		
122 Sink	<1	<1	
123 Fountain	<1		
123 Sink	<1	<1	
124 Sink L	<1	<1	
124 Sink R	<1	<1	
125 Fountain	<1		
125 Sink	<1	<1	
126 Fountain	<1		
126 Sink	<1	<1	
127 Fountain	<1		
127 Sink	<1	<1	
128 Fountain	<1		
128 Sink	<1	<1	
129 Fountain	<1		
129 Sink	<1	<1	
132 Fountain	<1		
132 Sink	<1	<1	
133 Fountain	<1		
133 Sink	<1	<1	
134 Fountain	<1		
134 Sink	<1	<1	
135 Fountain	<1		
135 Sink	<1	<1	
136 Fountain	<1		
136 Sink	<1	<1	
137 Fountain	<1		
137 Sink	<1	<1	
138 Fountain	<1		
138 Sink	<1	<1	
139 Fountain	<1		
139 Sink	<1	<1	
2 Fountain	<1		
2 Sink	<1	<1	
200 Fountain	<1		
200 Sink	<1	<1	
201 Fountain	<1		
201 Sink	<1	<1	
202 Fountain	<1		

Sample Location	First-Draw Result[2] ppb	Flush Result[3] ppb	Comments
202 Sink	<1	<1	
203 Fountain	<1		
203 Sink	<1	<1	
204 Fountain	<1		
204 Sink	<1	<1	
205 Fountain	<1		
205 Sink	<1	<1	
206 Office Sink	2	<1	
206 Sink 1	<1	<1	
206 Sink 2	1	4	Inferred Sampling location for Flush sample (it was blank)
206 Sink 3	25140	46	Sink Valve was turned off prior to sampling
206 Sink 4	<1	<1	
206 Sink 5	3137	5	Sink Valve was turned off prior to sampling
206 Sink 6	<1	<1	
207 Fountain	<1		
207 Sink	<1	<1	
208 Fountain	<1		
208 Sink	<1	<1	
209 Fountain	<1		
209 Sink	<1	<1	
210 Fountain	<1		
210 Sink	<1	<1	
211 Fountain	<1		
211 Sink	<1	<1	
212 Fountain	<1		
212 Sink	<1	<1	
214 Fountain	<1		
214 Sink	<1	<1	Inferred Sampling location for Flush sample (it was blank)
215 Fountain	<1		
215 Sink	<1	<1	
216 Fountain	<1		
216 Sink	<1	<1	
217 Fountain	<1		
217 Sink	<1	<1	

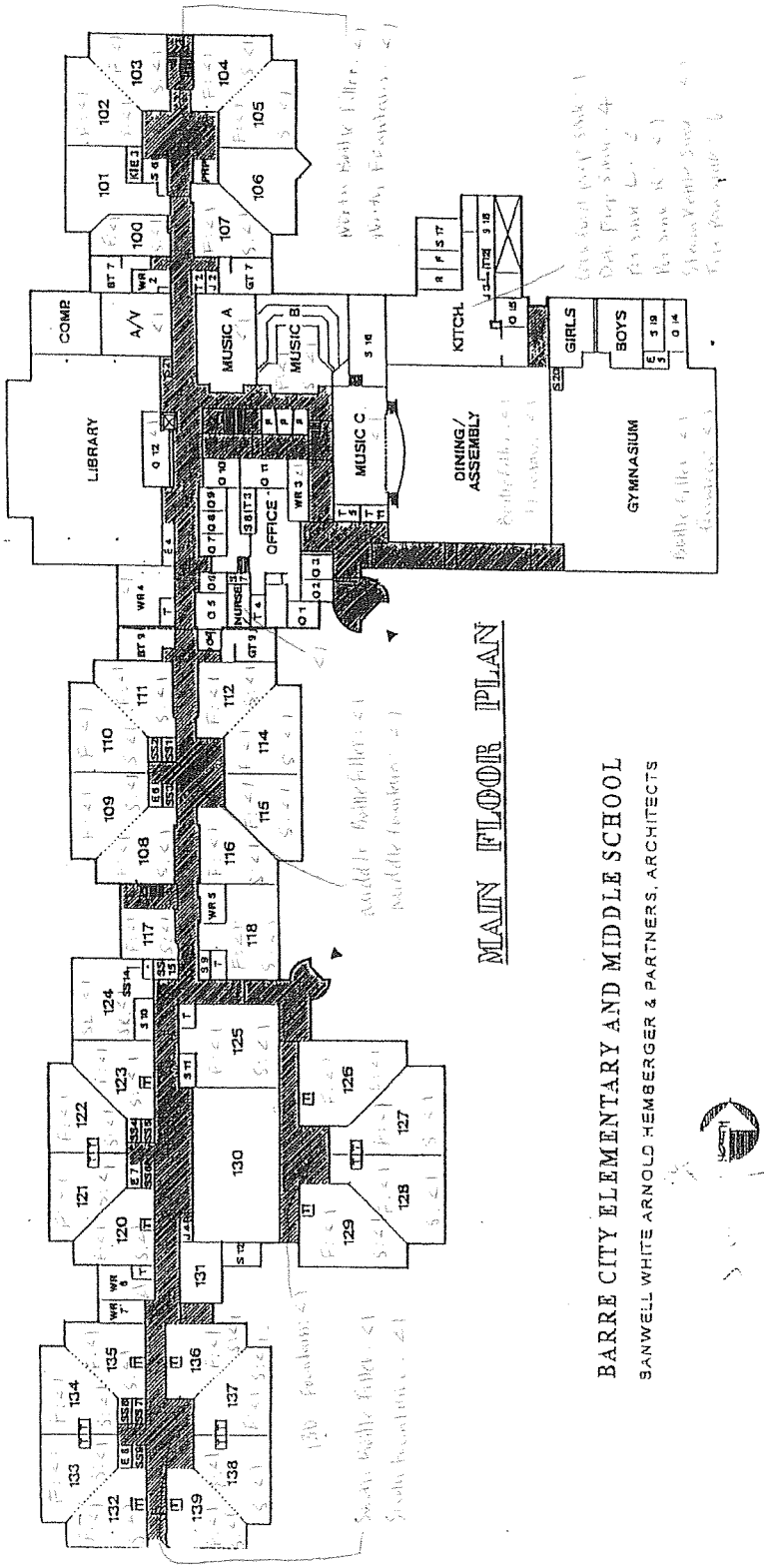
Sample Location	First-Draw Result[2] ppb	Flush Result[3] ppb	Comments
218 Fountain	<1		
218 Sink	<1	<1	
3 Fountain	<1		
3 Sink	<1	<1	
4 Fountain	<1		
4 Sink	<1	<1	
5 Fountain	<1		
5 Sink	<1	<1	
7 Fountain	<1		
7 Sink	<1	<1	
8 Sink L	<1	<1	
8 Sink R	<1	<1	
8B Fountain	<1	<1	
A/V Sink	<1	<1	
Cook Food Prep Sink	1	<1	
Deli Prep Sink	4	<1	
Dining Bottler Filler	<1		
Dining Fountain Water Cooler	<1	<1	
Fountain near 130 Water Cooler	<1	<1	
Gym Bottle Filler	<1		
Gym Fountain Water Cooler	<1	<1	
Middle Bottle Fill Water Cooler	<1		
Middle Fountain Water Cooler	<1	<1	
Music A Sink	<1	<1	
Music B Fountain	<1		
Music B Sink	<1	<1	
Music C Sink	<1	<1	
North Bubbler Fountain	<1	<1	
North Water Cooler Bottle Filler	<1		
North Water Cooler Fountain	<1	<1	
Nurse Sink	<1	<1	
Pot Sink L	2	<1	
Pot Sink R	<1		
S5 Bubbler Fountain	1	<1	
Shop Sink	<1	<1	
South Bubbler/Fountain	4	5	Inferred Sampling location for Flush Sample (it was blank). Consider resampling.

Sample Location	First-Draw Result[2] ppb	Flush Result[3] ppb	Comments
South Water Cooler Bottle Filler	<1		
South Water Cooler Fountain	<1	<1	
Steam Kettle Sink	<1	<1	
Tilt Pan Sink	6	<1	
WR 1 Sink	<1	<1	
WR 6 Sink	<1	<1	
WR 8 Sink	<1	2	
WR3 Sink	<1	3	
WR4 Sink	<1	<1	
WR9 Sink	<1	<1	

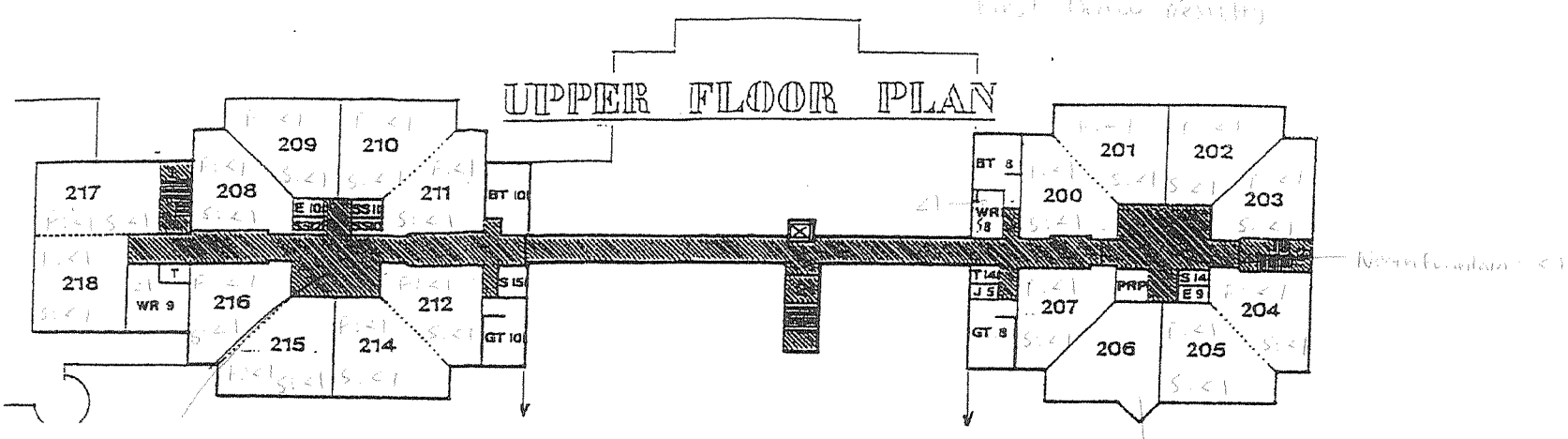
Notes:

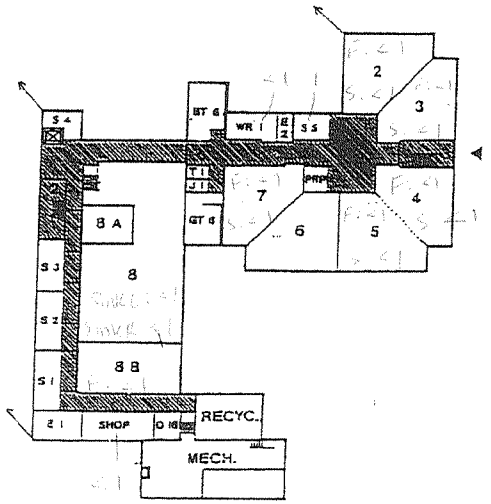
1. The Environmental Protection Agency's action level for lead in public drinking water is 15 parts per billion (ppb). The Vermont Health Advisory for lead in drinking water is 1 ppb.
2. A first draw sample collects the first water to come out of the tap after a period of inactivity, typically 8-18 hours. A high first draw result may indicate that faucets and fixtures are the likely source of lead.
3. A flush sample is taken after running cold water for 30 seconds, which tests water further upstream in the plumbing. A high flush result may indicate that plumbing is the likely source of lead.

Building Floor Plan with Results

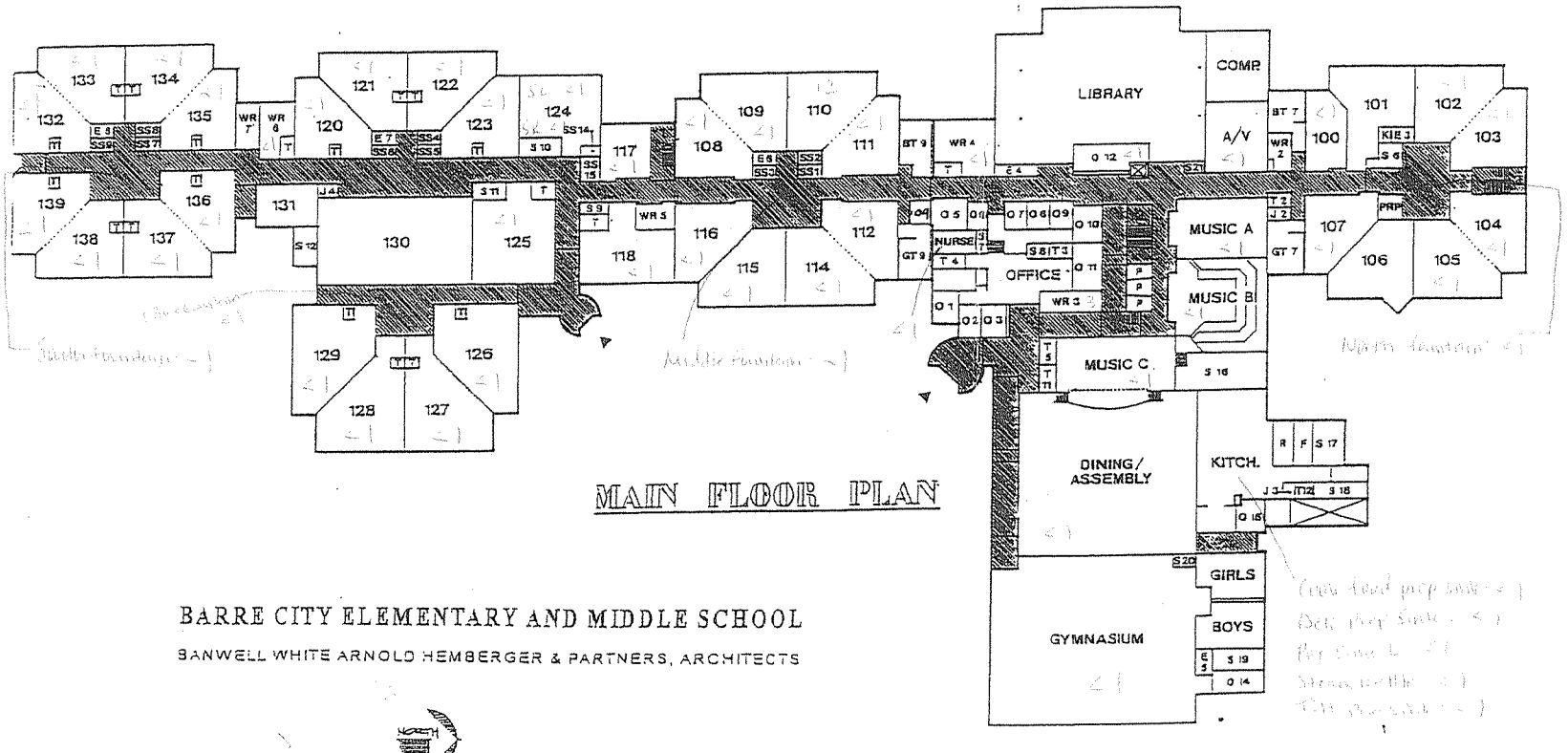


UPPER FLOOR PLAN





LOWER FLOOR PLAN

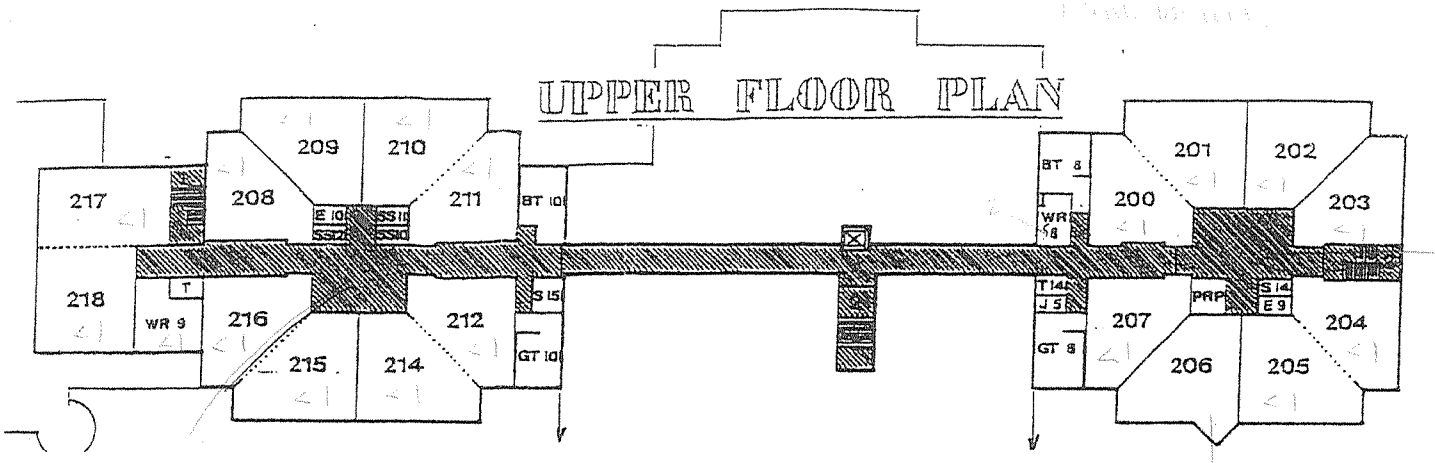


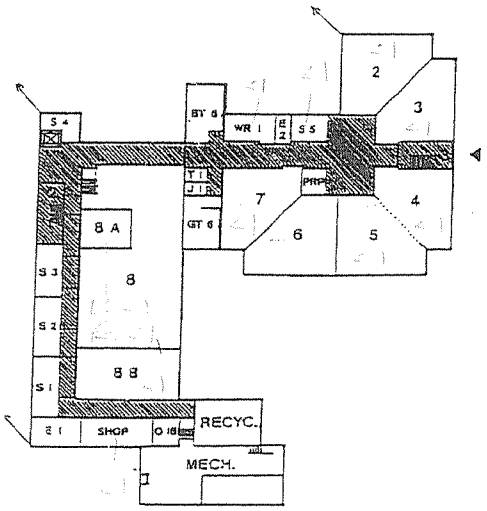
MAIN FLOOR PLAN

BARRE CITY ELEMENTARY AND MIDDLE SCHOOL

SANWELL WHITE ARNOLD HEMBERGER & PARTNERS, ARCHITECTS

UPPER FLOOR PLAN





LOWER FLOOR PLAN