

**TOWN OF FAIRFIELD
NON-RECURRING CAPITAL REQUESTS
SUBMITTED TO THE BOARD OF SELECTMEN
JANUARY 29, 2014**

TOWN

Department	Project	Amount
NON-RECURRING (UNDER \$1,000,000)		
PARK & REC	H.S.R. Bunker Renovation	\$100,000
DPW	Two 6-Wheel Dump Trucks	\$380,000
DPW	Old Town Hall Structural Improvement	\$300,000
DPW	10-Wheel Dump Truck	\$228,000
DPW	6-Wheel Asphalt Truck	\$224,000
DPW	John Deere 710 Back Hoe	\$192,000
DPW	Tree Bucket Truck	\$184,000
DPW	Refuse/Recycling Truck	\$147,000
DPW	Fairfield Center Streetscape	\$100,000
FIRE	Ladder Truck	\$775,000
SUBTOTAL NON-RECURRING CAPITAL:		\$2,630,000

BOARD OF EDUCATION

School	Project	Amount
NON-RECURRING (UNDER \$1,000,000)		
MILL HILL ELEM.	Partial Roof Replacement	\$461,614
N. STRATFIELD ELEM.	Replace two 1964 boilers	\$364,652
F. WARDE HIGH SCH.	Replace one 1971 boiler	\$152,500
SUBTOTAL NON-RECURRING CAPITAL:		\$978,766

GRAND TOTAL NON-RECURRING CAPITAL:

\$3,608,766

H. SMITH RICHARDSON

BUNKER RENOVATION

NON-RECURRING CAPITAL REQUEST



Town of Fairfield Golf Commission
Submitted December 18, 2013

1. Background:

In 2010 the Golf Commission presented a 10 year master improvement and financial plan for H. Smith Richardson Golf Course, to the First Selectman and the Board of Finance. This plan was accepted and implementation beginning in FY 2011. The plan calls for a \$1.0MM reinvestment in the golf course infrastructure. The plan spreads the necessary projects over a ten year period, prioritizing improvements and targeting an expenditure level of roughly \$100K each year. This request is for \$100,000 in order to continue that plan and the improvements to the course.

2. Purpose & Justification:

In the upcoming year, we will be renovating eleven bunkers; on holes #13,14 &15; many of the golf course bunkers are in very poor condition and are in need of renovation. The majority of the bunkers do not drain properly, hold storm water for days, are lacking sufficient sand, and are misshapen from years of wear and tear.

3. Detailed Description of Proposal

Eleven bunkers will be rebuilt and reshaped. This includes:

- removal of existing sand, reshaping and carving out of edges and base
- reshaping and compacting the bunker
- adding, compacting or replacing sand
- compacting or replacing soil and or sod
- installing four inch drainage pipe and 3/8" stone

The cost breakdown is as follows:

Bunkers

18,000sq ft x \$2.55 =	\$45,900.00 Labor
1,800 ft x \$13.75 =	24,750.00 Labor to install drainage
1800 ft of pipe x\$2.56/ft =	4,608.00
430 tons of bunker sand x \$48.50 =	20,855.00
9000 sq ft sod .30/sqft =	2,700.00
Contingency	<u>1,187.00</u>
	\$ 100,000.00

Total Project Cost **\$100,000.00**

4. Reliability of Estimated Cost

The cost estimate is made up of known prices for materials and labor and machine based on current bid.

5. Increase Efficiency or Productivity

These terms don't directly apply to this type of project but there are advantages. With these improvements it is expected that additional revenue would be generated as more rounds are to be expected as the golfing community realizes the improved conditions. We have seen an increase in revenue with the drainage improvements that were made the past two years, yielding an increase in cart revenue.

6. Additional Long Range Costs

There will be none except for the regular daily maintenance during the golf season, as the improvements being made will last 20 years.

7. Additional Use or Demand on Existing Facilities

We do expect additional use with these improvements however we do not anticipate additional burdens on the existing facilities as a result.

8. Alternatives to this request

The alternative discussed was to try to do the work with our present work force; however we do not have the manpower or the expertise to handle these large projects and still maintain the daily maintenance of the golf course. Should these improvements not be made we will see a reduction in revenue as golfers will play at courses with better conditions.

9. Safety & loss Control

The proposed renovations will make the playing of golf a safer environment. With the existing conditions of the bunkers there is a very good possibility of the golfer being injured by hitting rocks due to the wash out conditions.

10. Environmental Considerations

The Conservation Commission has approved all the drainage aspects associated with the renovations of the bunkers.

11. Insurance

Contractor will be required to carry insurance coverage.

12. Financing

Bonded

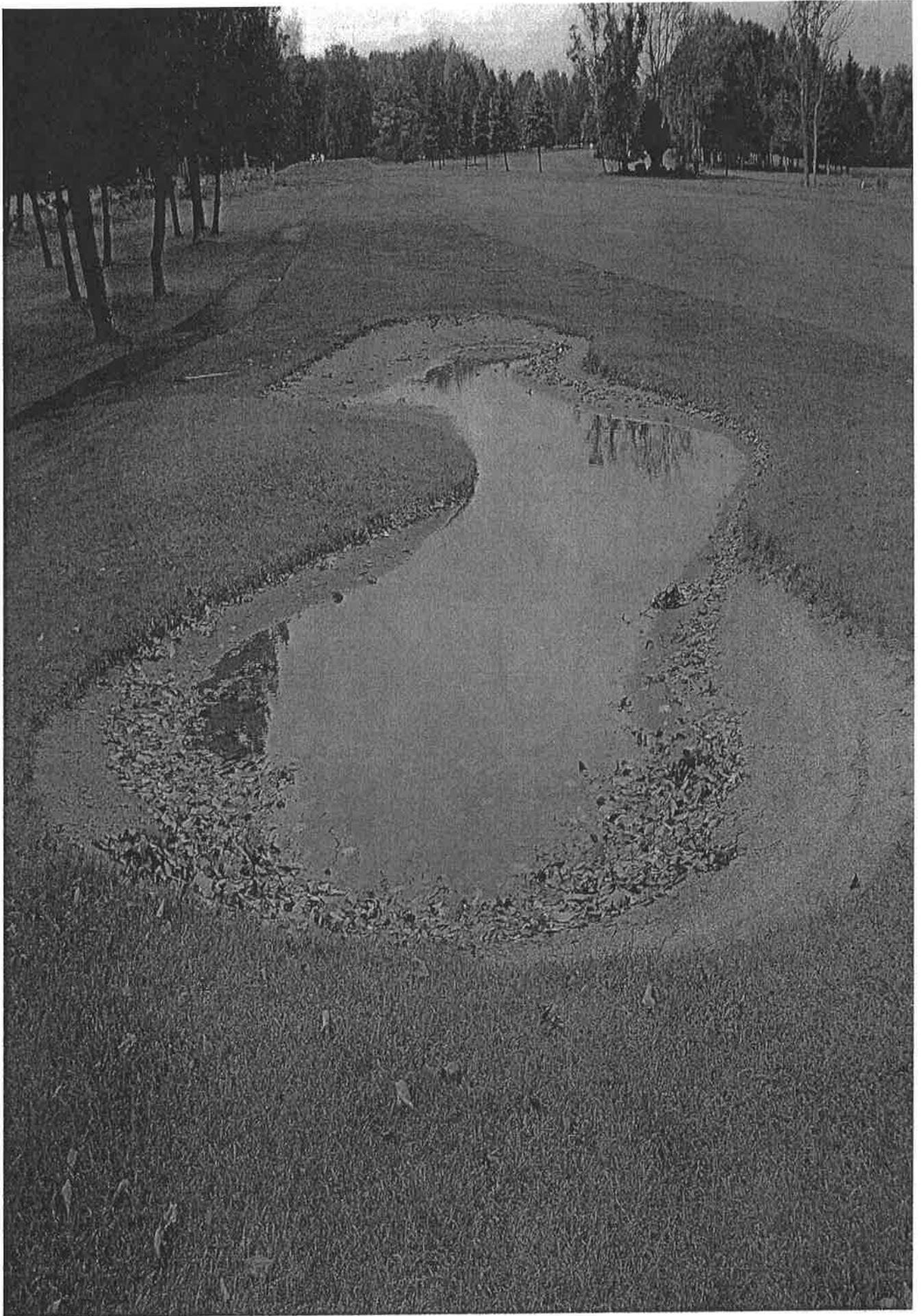
13. Other Considerations

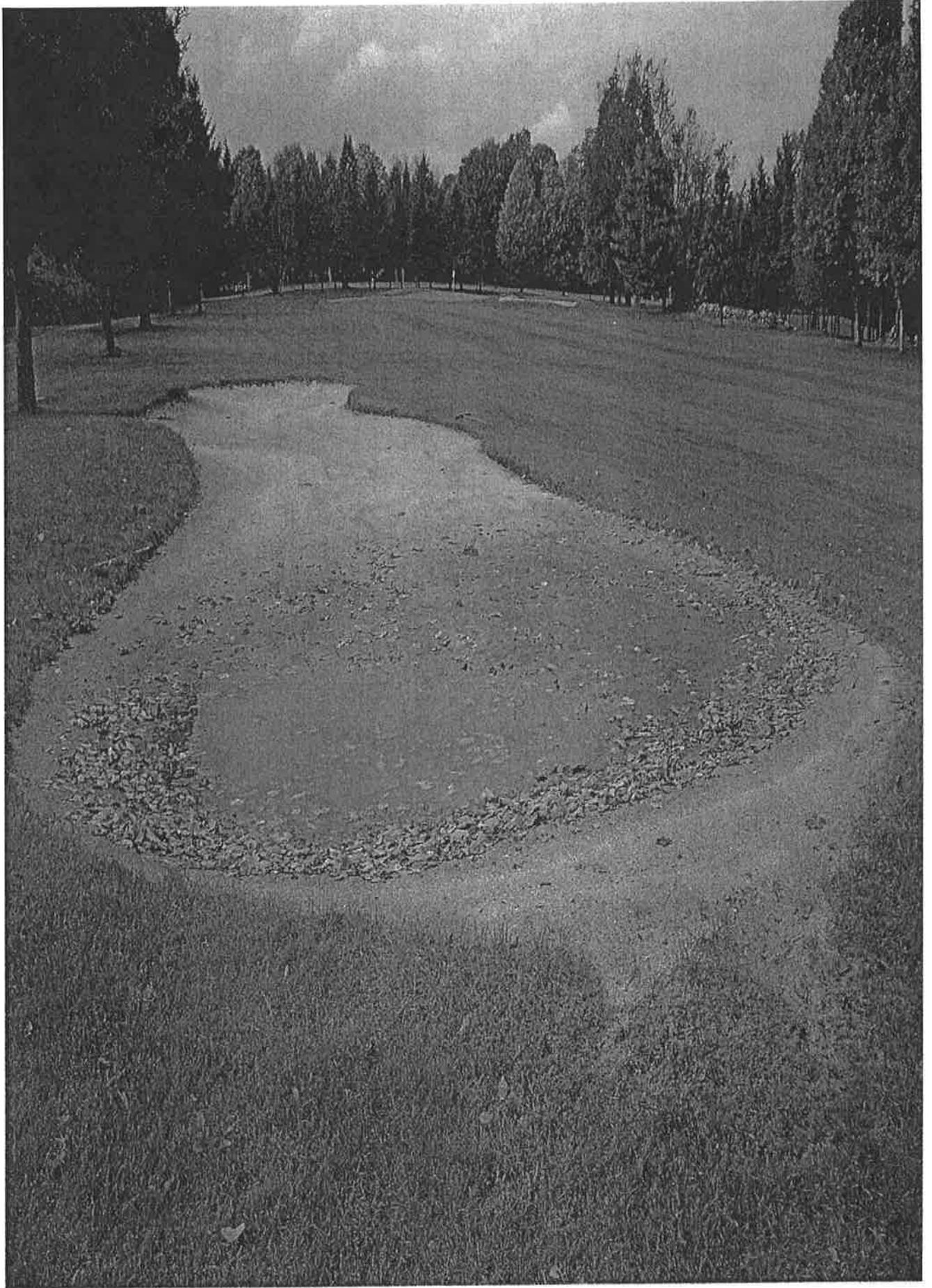
None

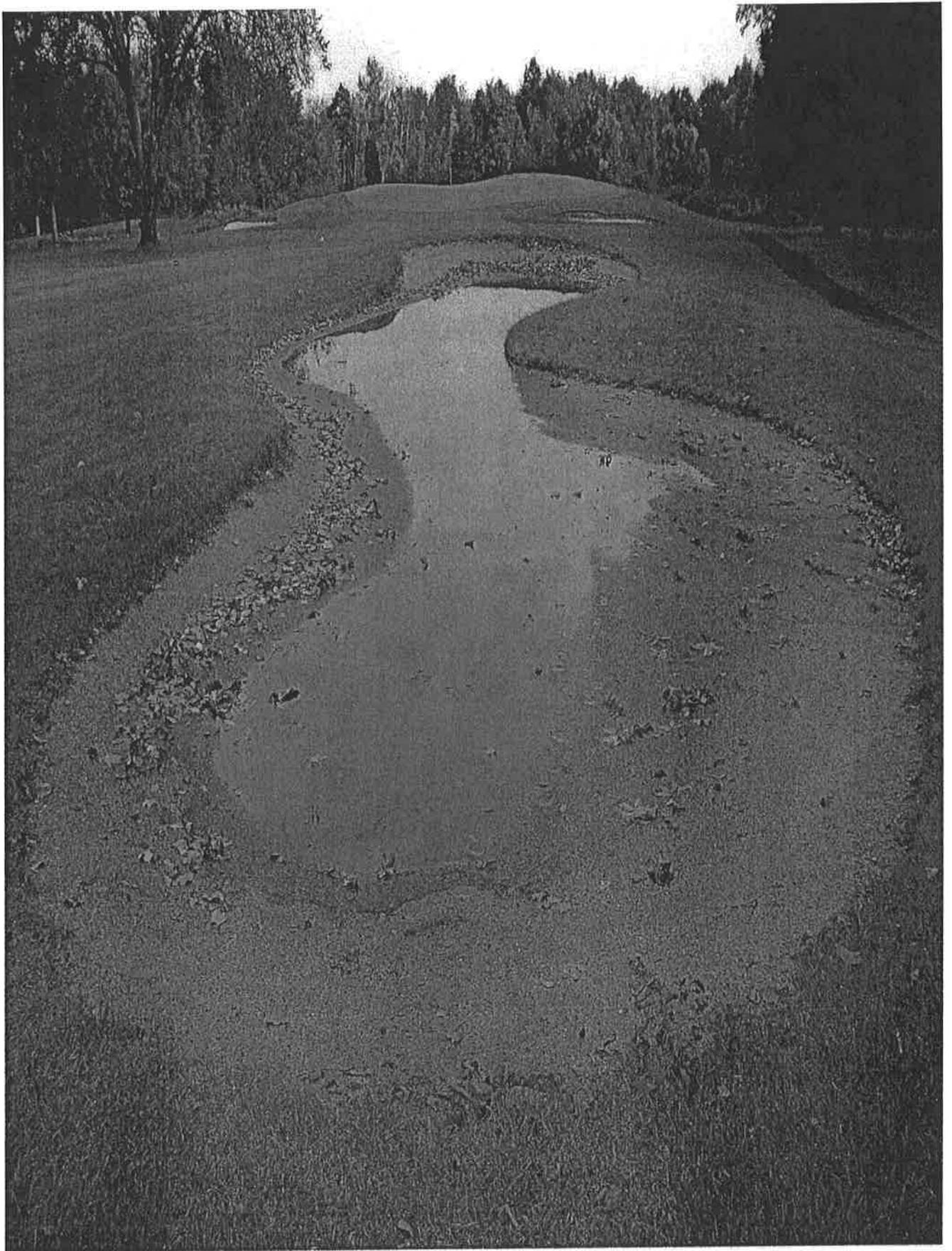
14. Other Approvals

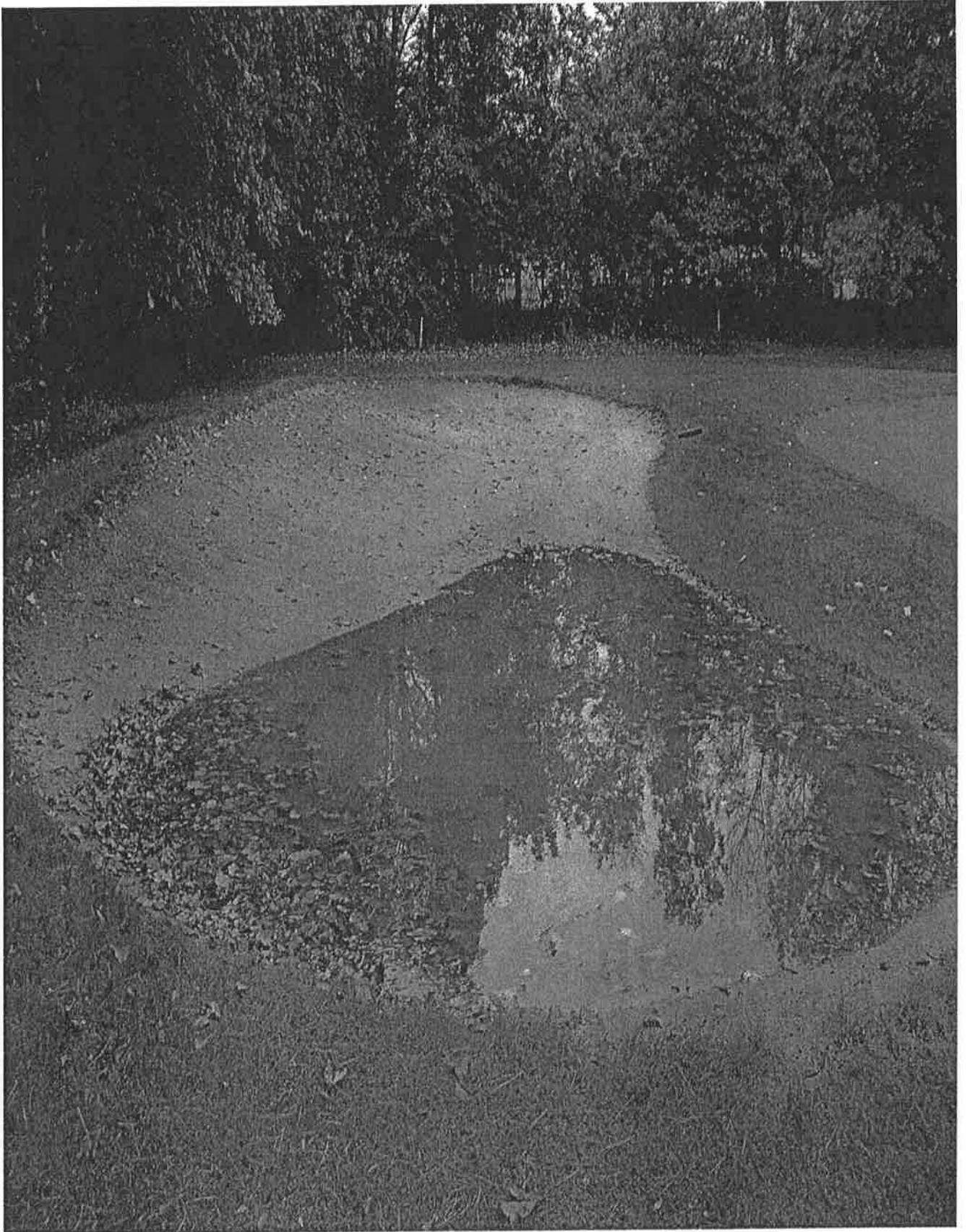
Board of Selectman
Board of Finance
RTM

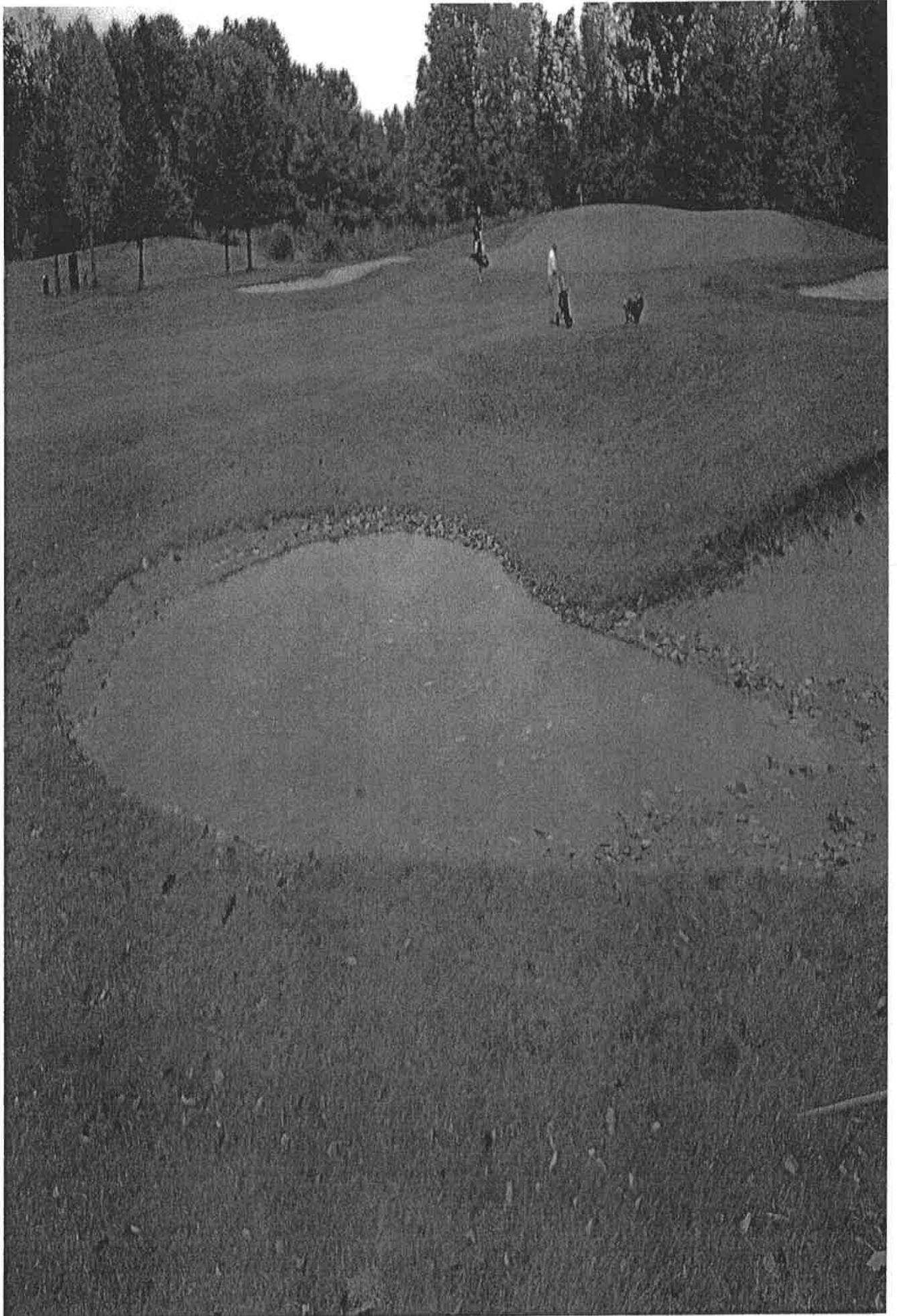


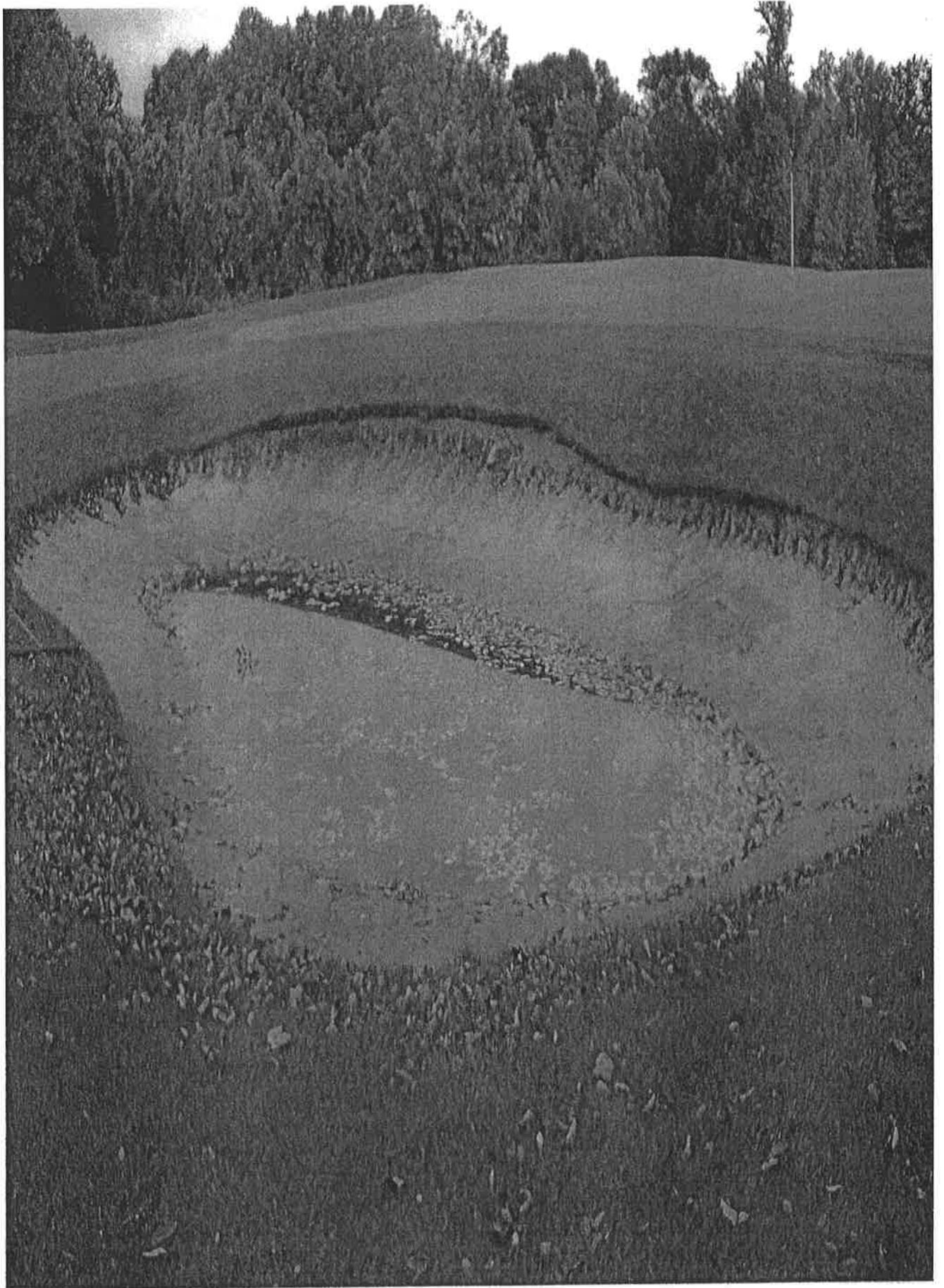












Two 6-Wheel Dump Trucks - \$380,000.00

1. Background- The heart of the Towns Public Works fleet are approximately 20 dump trucks which are in the 38,000 gross vehicle weight (GVW) range. Most of these trucks are equipped with dump bodies, which carry from 5 – 7 cubic yards. They are used for construction work, both removing excavated material from job sites and transporting stone & gravel to jobsites. These trucks are equipped for winter operations (snow & ice) and are front line trucks assigned to one of the Town's 27 plow routes.

2. Purpose and Justification- This will replace the following vehicles as front line trucks:

1994 Ford (#163) with 95,000 miles. Body & Frame has extensive rust. Truck and body parts are no longer available.

1995 Ford (#200) with 105,000 miles. Body & Frame has extensive rust. Truck and body parts are no longer available.

The above will be rotated out of the front line fleet and only used during breakdown of other trucks. The surplus vehicles which will be then sold at auction are a 1983 (#70) and a 1984 (#63), which are expected to return several thousand dollars each.

3. Detailed Description of Proposal- The truck body is "all-season", which has a built-in conveyor system that allows it to be used interchangeably for construction or spreading salt without any conversion necessary. The Truck will be purchased through a public bid process. The estimated price of \$380 (\$190K each) is from the following major components:

Truck Chassis -	\$95,000
All Season Body -	\$61,000
Plow & Pre-wet system -	\$34,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9.

5. Increased Efficiency and Productivity- This will allow us to continue to perform construction work. It will also allow us to successfully manage winter snow & ice operations.

6. Additional Long Range Costs- None.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- The existing trucks can continue to run, with costly maintenance repairs. If not approved, we would continue to nurse these trucks along. The fleet

does not get any younger, and we would only be deferring future truck purchases. Not replacing this truck would adversely affect the service levels of the department.

9. Safety- If not addressed, the truck will continue to deteriorate and will need to be taken off the road.

10. Environmental Considerations- Newer diesel trucks have elaborate emissions systems which are far superior to the previous generation of trucks.

11. Insurance- This type of item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photo 1: Existing 6 Wheel Dump Truck to be replaced as a front line vehicle (Note: This particular truck has a drop in "vee" sander unit.)

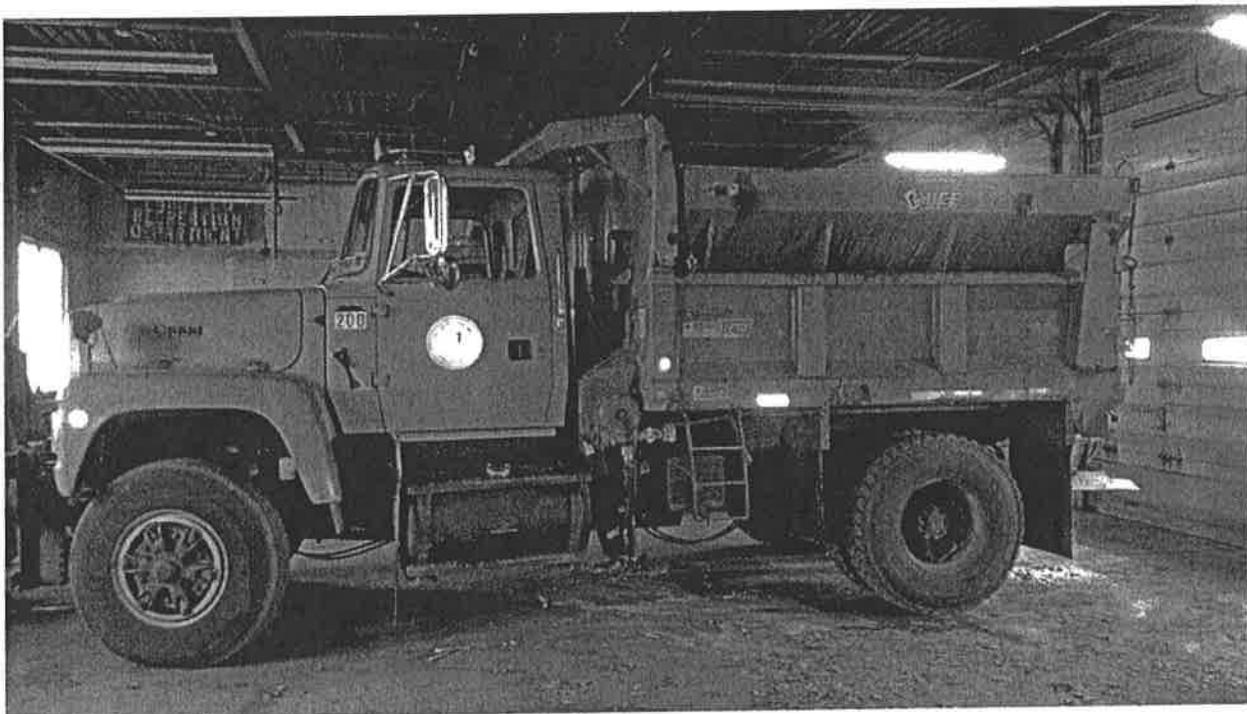


Photo 2: Existing 6 wheel Dump Truck to be replaced as a front line vehicle (Note: This particular truck has an all season body with a built-in sander.)



Old Town Hall Structural Improvement - \$300,000

1. Background-The oldest portion of the Old Town Hall Building is the main entrance and lobby area. This section is approximately 47' x 32'. The first floor beams and joists in this area are mostly from the original construction, and they were hand honed from trees approximately two centuries ago. Many of the first floor beams, joists, and first floor boards are showing severe signs of rotting and sagging. This is due to historical damage from termites and beetles, dry rot, and age. There is also rot apparent in the sill, especially along the front of the building (north side). There have been a series of newer lally type columns which have been continually added in the basement over the years to add support to the first floor areas. The worst portion of this building is a 35' X 5' section along the front entrance, and Town forces will need to make temporary repairs in advance of this structural project.

2. Purpose and Justification- As noted above, this historic building has structural issues in the basement which need to be addressed. Left unaddressed, the existing beams and joists will continue to deteriorate, and it will very soon jeopardize the oldest portion of this important and historic building.

3. Detailed Description of Proposal- The structural repair of the first floor will need to be evaluated by a structural engineer.

There are two possible methods to pursue for the repairs are:

1. To remove the structural members and the first floor decking and replace them with mostly new members. The first approach will enable us to remove most of the damaged material and replace it with new. This will require the lobby of the building to be closed off for a period of time.
2. To install new beams & joists to be used as bracing to support the existing older members. This will have less of an impact to the users of the building during the project. However, this will further reduce the height clearance of the building, and limit the storage and function of the basement. This will also hinder future building renovations efforts, when most of the electrical, plumbing, and mechanicals need to be replaced.

Cost Estimate:	Design:	\$ 30,000
	Environmental Abatement:	\$ 30,000
	Construction:	\$200,000
	Contingency (20% of construction)	\$ 40,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 7.0. Town staff has evaluated the structure, but we have yet to engage a structural engineer to prepare a conceptual design or formal cost estimate.

5. Increased Efficiency and Productivity- This will allow us to continue to utilize the Old Town Hall Facility. Without this work, this part of the building will deteriorate until it will be declared a safety concern, and will need to be closed off. The repair costs will be higher if the members are allowed to continue to rot.

6. Additional Long Range Costs- Old Town Hall is in need of a total renovation. Many of the spaces don't serve the needs of the busy Town offices with the most public contact. The electrical, plumbing, and mechanicals all need to be updated. The building can also be made more accessible for the handicapped. There is a \$3,000,000 placeholder in the waterfall schedule to address this future need.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- Town forces can continue to install 4" x 4" posts and lumber bracing to temporarily repair damaged areas. However, the structural elements will continue to rot and this approach will not suffice much longer.

9. Safety- If not addressed, areas of the first floor will eventually need to be closed off to public access. More areas will need to be temporarily repaired to keep this area open.

10. Environmental Considerations-Some of the pipe insulation and other material appear to have asbestos present. These will need to be relocated to accommodate new structural members, and some of this will need to be remediated.

11. Insurance- This type item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015.

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

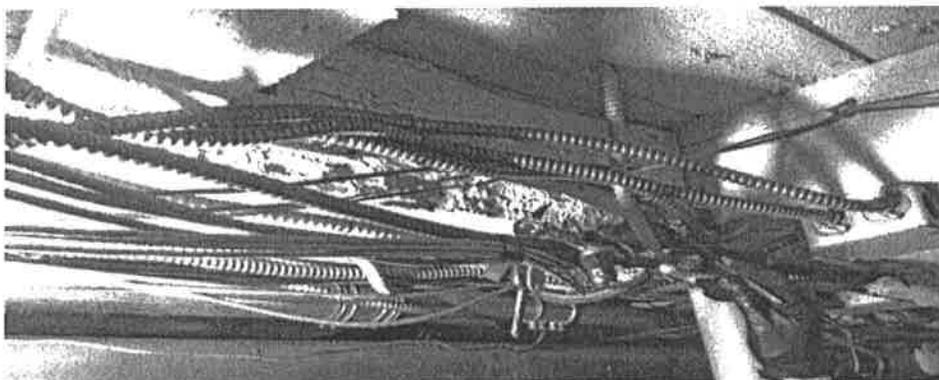


Photo 1: Rotting on a beam; notice numerous electrical utilities which makes any work challenging.

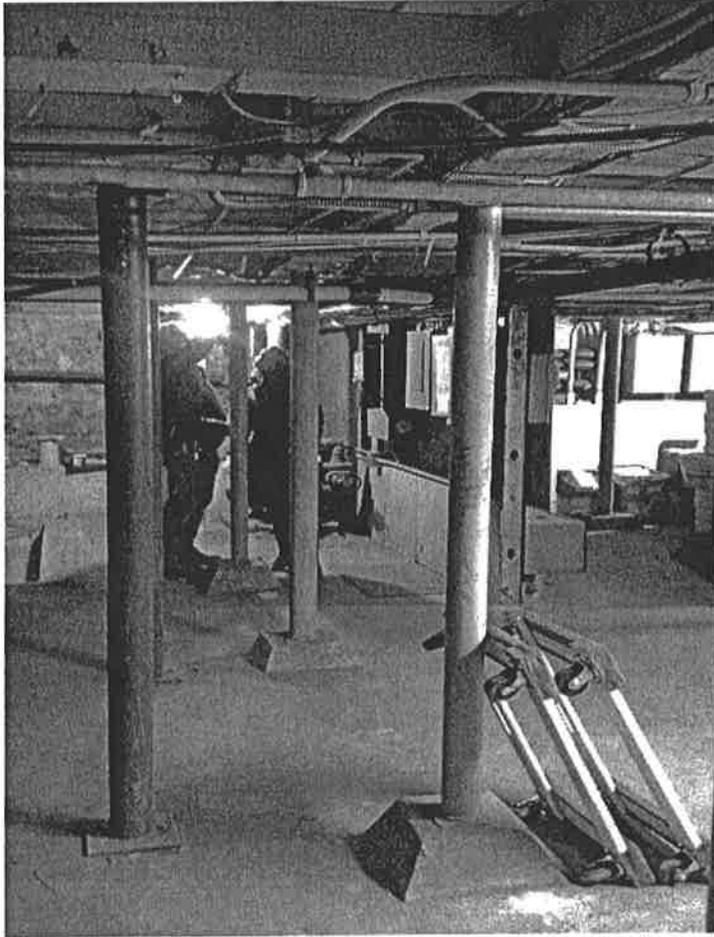


Photo 2: A series of columns have been added over the years to address the problems. The beams themselves have rotted to the point that this approach will no longer address the issue.

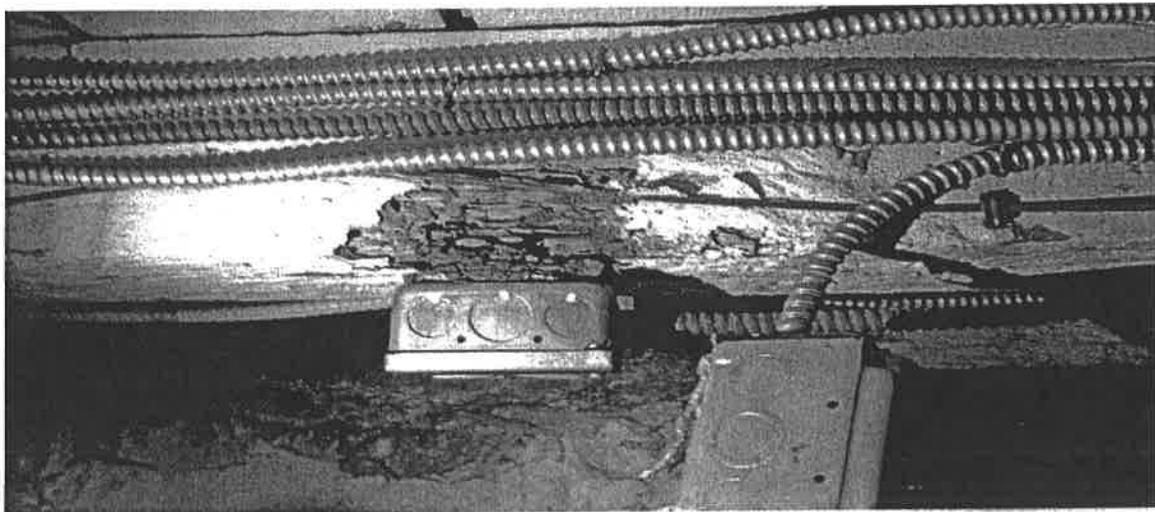


Photo 3: An example of the dry rot damage that will continue to become worse in the structural members.

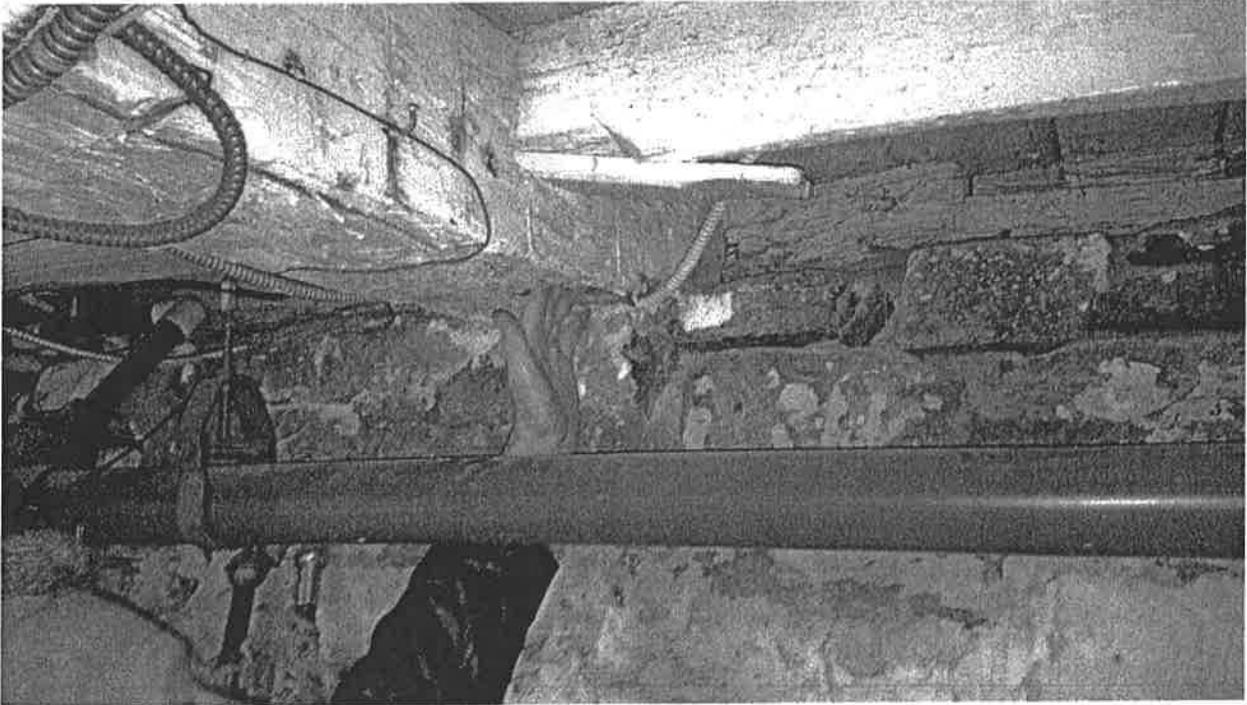


Photo 4: The void in the beam illustrates the rotting that has occurred. Notice the age of the material, the notching directly above this rot, and the type of construction along the sill.

10 - Wheel Dump Truck - \$228,000

1. Background- The Towns Public Works fleet has four larger 10 wheel (often referred to as Tandems) dump trucks, which are in the 60,000 gross vehicle weight (GVW) range. These trucks are equipped with dump bodies. The capacity of the truck is 11-14 yards, which is approximately twice as much as our standard 6 - wheel dump truck. The 10 Wheelers are used for large hauling of construction material, both removing excavated material from job sites and transporting stone & gravel to jobsites. Based on the size and scope of a particular project, the larger vehicle capacity can save numerous truck trips. The Truck will be equipped for winter operations (snow & ice) and is a front line truck assigned to one of the Town's 27 plow routes. The 10 Wheelers generally handle the Town's major collector and arterial roads. The larger capacity allows the truck to remain for longer periods on the road between trips to the Public Works yard to reload salt. The truck body is "all-season" which has a built in conveyor system which allows it to be used interchangeably for construction or spreading salt, without any conversion necessary.

2. Purpose and Justification- This will replace a 1984 Mack Truck (#38) with 207,000 miles. The truck body is completely rusted and rotted, and it is no longer able to dump loads. This limits the truck to snowplowing functions at this time. This vehicle will be sold at auction, and is only expected to return several thousand dollars.

3. Detailed Description of Proposal- The Truck will be purchased through a public bid process. The estimated price of \$228K is from the following major components:

Truck Cab & Chassis -	\$108,000
All Season Body -	\$56,000
Plow & Pre-wet system -	\$64,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9

5. Increased Efficiency and Productivity- This will allow us to continue to efficiently perform construction work. It will also allow us to successfully manage winter snow & ice operations.

6. Additional Long Range Costs- None.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- The existing truck can continue to run, but will require costly maintenance repairs. If not approved, we would continue to nurse this truck along for winter operations. The fleet does not get any younger, and we would only be deferring future truck purchases. Not replacing this truck would adversely affect the service levels of the department.

9. Safety- If not addressed, the truck will continue to deteriorate and will need to be taken off the road.

10. Environmental Considerations- Newer diesel trucks have elaborate emissions systems which are far superior to the previous generation of trucks.

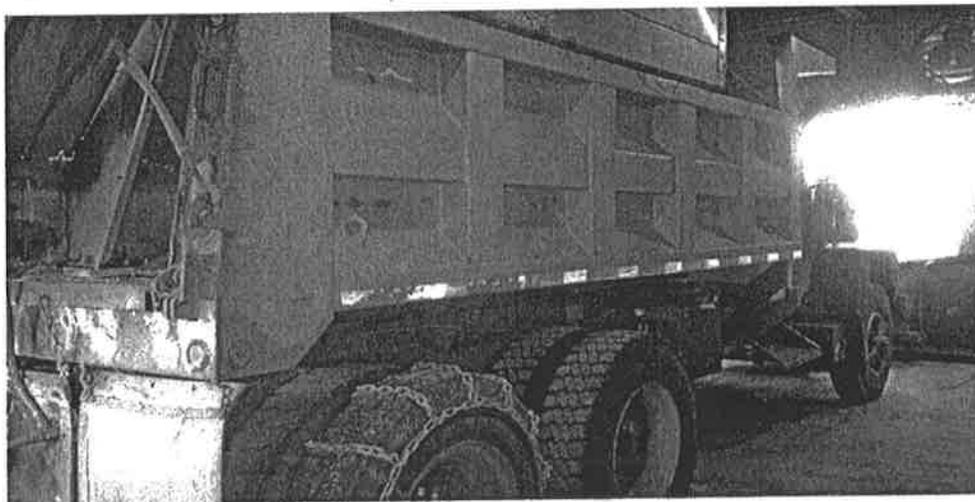
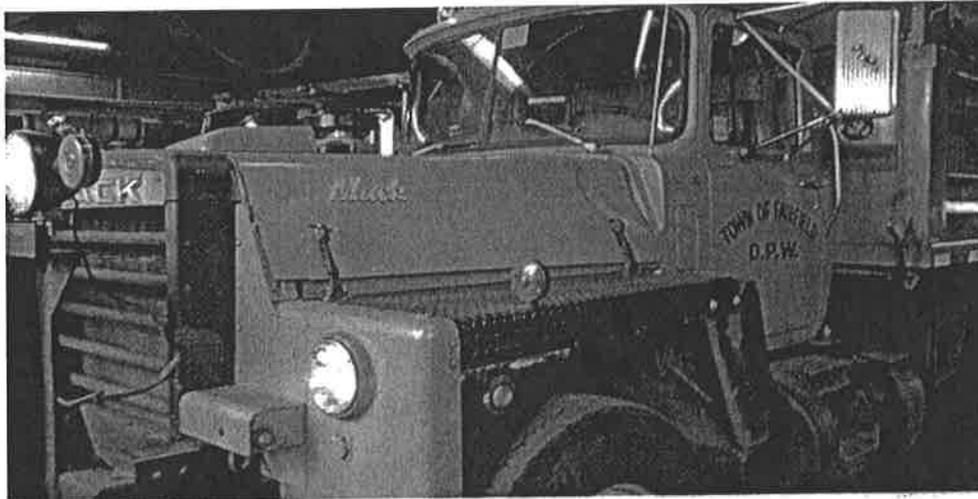
11. Insurance- This type of item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photos: 1984 10-Wheeler proposed for replacement:



6 -Wheel Asphalt Truck - \$224,000

1. Background- The heart of the Towns Public Works fleet are approximately 20 dump trucks which are in the 38,000 gross vehicle weight (GVW) range. Some of these trucks can be equipped with bodies specifically configured with fix mounted bodies to handle hot asphalt. The Public Works Department currently has three of these trucks. These are "vee" shaped with conveyors to discharge asphalt. They are used for asphalt pot hole patching and trench repair, asphalt curbing installation and sidewalk work. The truck body will have a chute to facilitate roadside lawn repairs. The Truck is equipped for winter operations (snow & ice) and is a front line truck assigned to one of the Town's 27 plow routes.

2. Purpose and Justification- To replace one of the 6 Wheel Asphalt Paving Trucks (#248), a 1990 GMC. This vehicle has 105,000 miles, and is no longer reliable. Replacement parts are no longer available. The engine burns an extensive amount of oil and is in need of an overhaul. Engine and transmission work on the existing truck would cost approximately \$20,000. If a new truck is approved, the existing truck will be sold at auction, and is not expected to be worth more than \$5,000.

3. Detailed Description of Proposal- The Truck will be purchased through a public bid process. The estimated price of \$224,000 is from the following major components:

Truck Chassis -	\$95,000
Asphalt body, conveyor & chute -	\$95,000
Plow & Pre-wet system -	\$34,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9

5. Increased Efficiency and Productivity- This will allow us to continue to perform asphalt related construction work. It will also allow us to successfully manage winter snow & ice operations.

6. Additional Long Range Costs- None.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- The existing truck is not worth rebuilding the engine, as it would exceed the value of the vehicle. If not approved, we would continue to nurse this truck along, but it would have to be put out of service in the very near future. Not replacing this truck would adversely affect the service levels of the department, and the amount of in-house asphalt work we can perform.

9. Safety- If not addressed, the truck will continue to deteriorate and will need to be taken off the road.

10. Environmental Considerations- Newer diesel trucks have elaborate emissions systems which are far superior to the previous generation of trucks.

11. Insurance- This type item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photo: Existing Asphalt Truck #248



John Deere 710 Backhoe - \$192,000

1. Background- A backhoe is one of the most versatile and important pieces of equipment for a Public Works Department. It is a workhorse machine that is used daily out on our roads. Some of its most important functions are to install storm drainage pipes, catch basins, cleanout drainage inlets, collect cut wood, and any other functions that require heavy lifting capabilities.

2. Purpose and Justification- The Town currently has 3 backhoes. This would replace a 1997 John Deere 710 (#169). The current backhoe has 13,000 hours on it, and it is well beyond the normal 10,000 hour projected life. Beyond this period, backhoes generally need a thorough overhaul of most of the major components. This is the largest backhoe the Town owns with a $\frac{3}{4}$ cubic yard capacity. The other two backhoes are a 2012 and 2001 John Deere 310 with $\frac{1}{2}$ cubic yard capacities. These three backhoes leave us somewhat underserved for a municipality of our size and a Public Works Department with our responsibilities. The town also owns an old excavator and a 1997 Ford backhoe, but this is in disrepair and ready for the salvage yard. The 1997 Backhoe will be sold at auction.

3. Detailed Description of Proposal- This will replace the existing Backhoe with a similar sized piece of equipment. The new backhoe will be purchased through a public bid price. The estimate is based on consultation with vendors and other municipalities.

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9.

5. Increased Efficiency and Productivity- This will allow us to continue to perform the construction and maintenance function on our Town roads and properties.

6. Additional Long Range Costs- None.

7. Additional Use or Demand-Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- The cost of an overhaul to the current 1997 John Deere 710 is approximately \$50k. There is a 12 month warranty, but other portions of the machine can also fail.

9. Safety- If not replaced, the backhoe will eventually need to be placed out of service.

10. Environmental Considerations- None.

11. Insurance- This type item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015.

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photos: 1997 John Deere 710 for proposed replacement



Tree Bucket Truck - \$184,000

1. Background- The Town currently has two trucks which are used for tree work. These are a 2001 International and a 1989 GMC. There is always at least one tree crew working on a daily basis, and they utilize the front line truck. A second crew can be placed into service after storm events, and often for maintenance tree trimming of roads during non-construction seasons.

2. Purpose and Justification- The 1989 GMC truck has a boom lift that is in poor condition, and will no longer pass an annual lift inspection. The chipper body on this truck also has extensive rust. The truck will be sold at auction and is expected to yield less than \$5,000. A new tree truck with a 70' boom will allow town crews to address the substantial amount of work and requests for service that this division receives. The 2001 only has a 55' boom which limits some of the trees that we can address with Town staff. This truck will be rotated to the second line, and serve as a standby truck when the new truck is being serviced. The new truck will also allow the Town to operate a second tree crew during peak demands.

3. Detailed Description of Proposal- The Truck will be purchased through a public bid process. The estimated price of \$228,000 is from the following major components:

Truck Cab & Chassis -	\$95,000
Chipper body, boom & hoist	\$89,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9.

5. Increased Efficiency and Productivity- This will allow us to continue to address the amount of tree requests on a timely basis. Privatized crews are best utilized for complete take downs of larger trees. The town still will need to utilize private contractors, but our own trucks and personnel allows us to best manage the overall demands (pruning, trimming, & some takedowns) on a daily basis.

6. Additional Long Range Costs- None.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- The Town can continue to utilize the 2001 truck and operate one full time tree crew. The lack of a second truck limits the amount of work that can be done in house. It also affects our capability to respond to storms and peak demands for tree work.

9. Safety- The existing 1989 boom is no longer safe to operate.

10. Environmental Considerations- Newer diesel trucks have elaborate emissions systems which are far superior to the previous generation of trucks.

11. Insurance- This type item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015.

13. Other Considerations- A comprehensive tree maintenance program will promote energy reliability issues.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photo: 1989 with inoperable 55' boom.



Refuse & Recycling Truck - \$147,000

1. Background- The Town utilizes our own personnel to collect individual garbage cans in Town parks, beaches, Town Center, and other locations. There are a total of 350 containers around Town. Stops vary from twice per week, 3 times per week, and up to 7 days per week. The busiest seasons are April through November, but periodical collections are necessary even during the winter months. The Truck is configured to pack refuse in the rear, and recyclables just behind the cab. The truck is also equipped with a lifting arm for heavier containers.

2. Purpose and Justification- A new Refuse and Recycling (Garbage) truck is proposed to replace #279 a 2001 Mitsubishi with 200,000 miles. This truck is used seven days a week for most of the year for refuse & recycling pickup in cans at the parks and beaches. The truck body is worn out and needs replacement, as well as very high in mileage. The existing truck will be sold at auction. The Town utilizes private contractors for dumpster collection at many locations. The amount of cans collected makes privatization impractical. Many of these barrels are often half full, and while collecting these Town crews also provide functions such as general cleanup of the grounds, opening up and servicing restrooms, and other functions at the various facilities.

3. Detailed Description of Proposal-

Cab & Chassis	\$78,000
Refuse Body	\$69,000

4. Reliability of Cost Estimate- On a scale of 1 to 10, the reliability of this estimate is a 9.

5. Increased Efficiency and Productivity- This will allow us to continue maintain our Town properties to the high standards that are expected.

6. Additional Long Range Costs- None.

7. Additional Use or Demand- Addressing this issue would not create any additional demand or usage.

8. Alternatives To This Request- We can't continue to utilize the existing truck. It has outlived its service life and will not last much longer. Privatization of this function would be difficult to manage, and Town personnel would still need to visit these locations for other activities.

9. Safety- If not addressed, the truck will continue to deteriorate.

10. Environmental Considerations- Newer trucks have elaborate emissions systems, which are far superior to the previous generation of trucks.

11. Insurance- This type item is not covered by insurance.

12. Financing- Project bonded as part of non-recurring capital budget for 2015

13. Other Considerations- None.

14. Approvals- Board of Selectmen, Board of Finance, RTM

Photos: Existing Refuse & Recycling Truck:



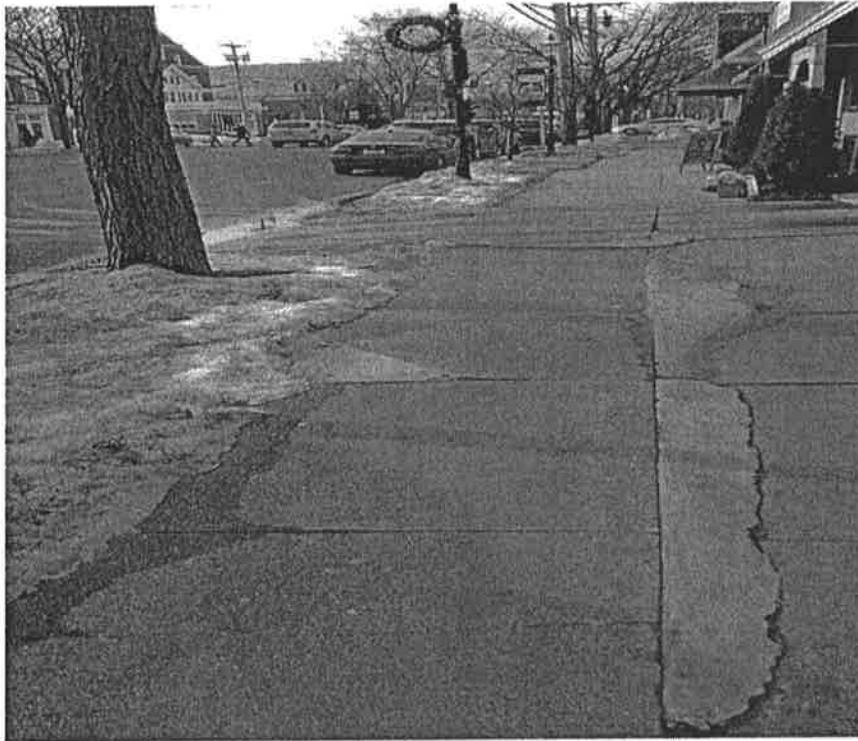
FAIRFIELD CENTER STREETScape - \$100,000

- 1. Background:** As part of previous Downtown Revitalization and Economic Development Enhancement projects, the Town installed streetscape improvements along the Post Road (US-1) with spur sections extending out onto side streets. This streetscape was constructed in the early 1980's and is now showing signs of decay in certain areas. Street corners, street trees, benches, and well-traveled areas have already experienced general wear and tear, uneven sidewalks, and brick pavers popping out. Most of the concrete sidewalk deterioration is attributed to age. The brick pavers have been dislodged largely due to tree growth. They have outgrown the original space given for the street trees. Periodic spot repairs have been performed by DPW over the years. However, the amounts of sections needing repair and the number of complaints have both increased significantly over the past few years. Funding has been requested to "catch up" on proposed repairs by repairing larger sections at a time versus isolated and individual repair panels. It is anticipated that funding would provide the Town to go out to bid to perform large section repairs. Engineering and DPW will provide in house design and specifications.
- 2. Purpose and Justification:** The purpose of the project is to repair larger sections of aging streetscape. There are several areas of existing sidewalk and brick paver areas that are uneven and in poor condition. Repairing brickwork sections and sidewalks will provide the traveling public safer access to commercial buildings and other points of interest in the center of Town. Repairs may reduce trips and falls, liability risks, and may encourage more walking. Main reconstruction components are repairing concrete sidewalks, replacing brick pavers, providing ADA compliant Handicap Ramps, and providing/improving street tree locations for future growth.
- 4. Detailed Description of Project:** Repairs to Fairfield Center Streetscape will consist of repairing and replacing several sections of damaged or uneven sidewalk, brick pavers, and other amenities associated with the original 1980's streetscape. Work may also include replacing street trees, benches, curbs and other pedestrian amenities.
- 5. Reliability of Estimated Costs:** The \$100,000 cost to the Town represents the anticipated amount for substantial repair of Fairfield Center Streetscape. This will not cover the entire area, but will provide enough funds to repair significant sections that need repairs the most. Cost estimates have been performed by Fairfield DPW and Engineering Department based on recent repair contracts and State DOT cost estimates, and can be considered very accurate. It is estimated that 4,000 square feet of brick pavers and 1,000 linear feet of 5 ft. wide sidewalk can be repaired with the funding requested. Approximately \$10,000 would be reserved for Police traffic control, installing ADA ramps, performing tree work, and repairing streetscape/utility fixtures. This would represent about 15 % of the entire Fairfield Center Streetscape. These areas are the most susceptible due to location adjacent to street trees, tight radius at busy intersections, ramped areas, and locations experiencing

development/utility work. The entire Fairfield Streetscape consists of approximately 50,000 sf concrete sidewalk and 30,000 sf of brick pavers set in concrete pad.

5. **Efficiencies:** This project may increase alternate modes of transportation and make it safer for pedestrians by reducing or eliminating potential tripping hazards. The Town may realize better pricing by replacing larger sections to achieve economies of scale.
6. **Additional Long Range Costs:** The Town would continue to pay for maintenance costs for the project: sidewalk, brick pavers, street trees, and streetscape amenities which it currently performs already. By repairing significant sections of sidewalks and brick pavers, the Town will reduce short term and medium term costs significantly.
7. **Additional Use or Demands:** None.
8. **Alternates:** The sidewalks and brick pavers will continue to crack and decay increasing accident potential. The only alternate is to do nothing or continue performing repairs on an as need basis. This would be done with Town personnel. Material would need to be funded from the operating budget. The work would compete with other requests for Town services on other sidewalks, roads, parks, and Town buildings. Outside funding is not available at this time. The majority of State type grants cover new proposals and not the maintenance or in-kind repair of older sections of streetscape.
9. **Safety and Loss Control:** Repairs will increase pedestrian safety.
10. **Environmental Considerations:** No significant environmental impacts are expected.
11. **Insurance:** Town and State Contract procedures require the Contractor to have a license, if required, bonds and insurance.
12. **Financing:** Capital non-recurring account.
13. **Other Considerations:** N/A.
14. **Approvals:** Board of Selectmen, Board of Finance, R.T.M.

Photos: Representative sample of streetscape sidewalks in need of repair:



Photos: Representative sample of streetscape sidewalks in need of repair:





Fairfield Fire Department

140 Reef Road
Fairfield, Connecticut 06824-5997

Administrative Office

(203) 254-4713
(203) 254-4720
FAX (203) 254-4724

Non-Recurring Capital Project

December 16, 2013

Ladder Truck-\$775,000

1. Background- Fire apparatus are specialized vehicles designed for specific firefighting functions and are required to meet various national safety standards. The reliability of fire apparatus and the equipment installed directly impacts the fire department's ability to accomplish our mission of saving lives and property. The department is requesting the replacement of Ladder 1, a 1995 Simon Duplex/LTI Ladder Truck. Following the previously recognized long term apparatus replacement program,(attached) this replacement is overdue. The current vehicle, Ladder 1, has 112,000 miles and over 11,500 engine hours in operation. (Differing from standard vehicles, fire apparatus often operate at emergency scenes for many hours under less than ideal conditions. A generally accepted manufacturer's recommendation is that 1 hour equals 50 road miles to account for wear and tear. Based on this calculation, Ladder 1's engine hours are the equivalent of 575,000 road miles) The manufacturer, Simon Duplex/LTI, is no longer in business, making replacement parts difficult to obtain. Recent repairs have required that custom parts be fabricated by third party vendors resulting in extensive delays and inflated costs commensurate with custom fabrication.

2. Purpose and Justification-As noted above, this vehicle is 19 years old. The cost of replacement parts over the past 4 years has been approximately \$52,000 and because parts often had to be custom fabricated, the equipment was often out of service for several weeks at a time. The reserve apparatus is a rescue truck that does not carry ground ladders, which significantly alters the department's response capability. With changes in building height due to FEMA regulations in the flood prone area that this vehicle serves, it is imperative that adequate ground ladders are available in this district for rescue operations. In addition, the current ladder truck is many revisions out of compliance with NFPA apparatus standards, which includes critical safety features such as anti-lock brakes and passenger compartment airbags.

Fire apparatus are custom designed vehicles based on very specific criteria with the manufacturing process taking up to 1 year from the time the bid is awarded. This delay requires planning and the best possible adherence to the replacement schedule to avoid a shortage of reliable apparatus.

3.Detailed Description of Proposal-The department's apparatus committee has developed basic specifications for a replacement vehicle to meet the long term needs of the organization. Our proposal is for a hybrid design that will combine the function, modern safety features and equipment of both ladder and rescue vehicles, including over 112' of ground ladders to service the needs of an increasing number of elevated homes to meet the current FEMA requirements in the beach area, where Ladder 1 is typically one of the first responding units. This vehicle will not include a fixed aerial device (100' hydraulic ladder). In adapting to the needs of the specific community that we serve, the elimination of a fixed aerial device drastically lowers the cost of this apparatus. The department still maintains high rise rescue capability with Ladder 2, a 107' aerial device.

Cost Estimate, including design and ancillary equipment: \$775,000

4.Reliability of Cost Estimate-On a scale of 1 to 10, the reliability of this estimate is a 9.0. Based on manufacturer's estimates as well as past history of this industry, the cost of fire apparatus increases at a rate of approximately 5% annually.

5.Increased Efficiency and Productivity-Our proposed Ladder Truck will be lighter and more maneuverable than the current equipment, resulting in increased fuel efficiency and less wear and tear on the vehicle, a common problem with large aerial devices. The truck will be designed so as not to require additional staffing beyond the 3 members currently assigned.

6.Additional Long Range Costs-Maintenance costs will be significantly reduced from the current apparatus. Traditional aerial devices, or ladder trucks, with sophisticated hydraulic systems to raise a large aerial device, are by far the most costly pieces of equipment in the fleet to maintain. With no hydraulic operating system to raise a ladder or high volume water pump as is designed into our engine/pumpers, this equipment will be the most cost effective apparatus in the fleet from a maintenance standpoint.

7.Additional Use or Demand-Based on our design criteria, this vehicle will better meet the needs of the department by accommodation additional technical rescue equipment that is not presently carried on our current apparatus, insuring the rescue tools are immediately available without delay at confined space, high angle and HAZ MAT incidents.

8.Alternatives To This Request-An alternative to this request would be to purchase a conventional ladder truck, estimated at approximately \$1,300,000. The current door height at Station 1 would restrict the compartment space on current conventional aerial designs and would require costly modifications to the building.

9.Safety-As stated under justification, the current Ladder 1 is out of compliance with NFPA standards for fire apparatus. Requirements for new apparatus include anti-lock brakes, passenger air bags, improved seat belt systems, additional safety marking and several structural changes to the design and construction of this equipment. Recent changes in winter road treatments have a significant impact on the structural, electrical and cosmetic components of all vehicles. The older vehicles in our fleet are experiencing increased corrosion and failures, creating additional maintenance issues.

10.Environmental Considerations-New diesel engines must comply with significantly more stringent rules governing exhaust emission than the current equipment.

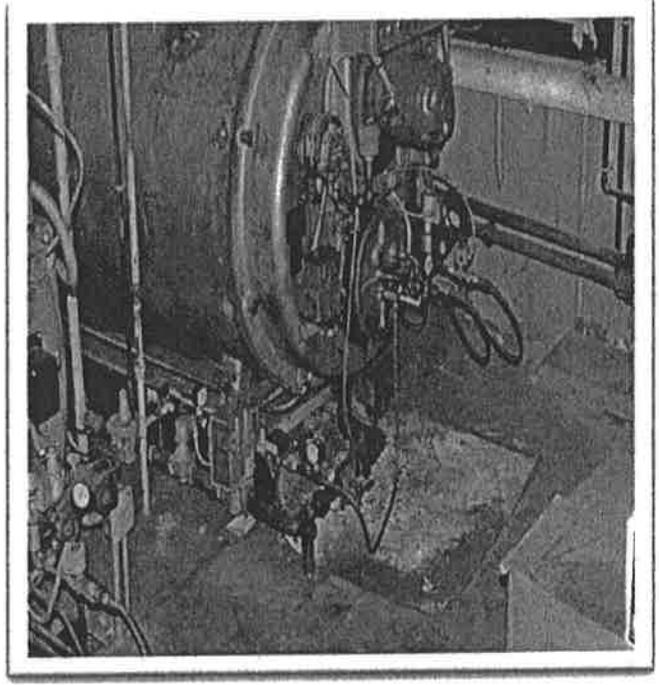
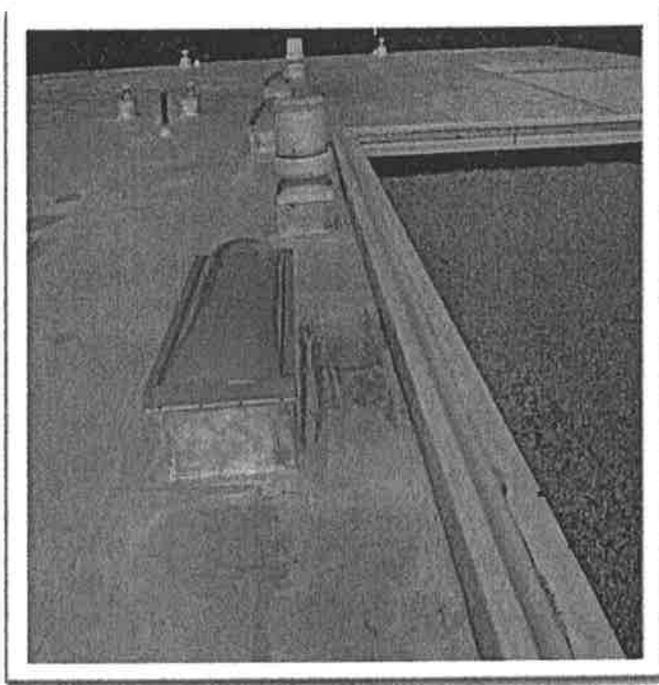
11.Insurance-No significant change.

12.Financing-Project bonded as part of non-recurring capital budget for 2015.

13.Other Considerations-none.

14.Approvals-Board of Selectmen, Board of Finance, RTM.

Fairfield Board of Education Proposed Capital Non-Recurring Projects 2014 - 2015



December 10, 2013

Dear Board of Education Members:

For our 2014-2015 Capital Non-Recurring Projects we provide an overview of all the proposed projects in this booklet format. We hope that this information and format will provide sufficient backup material for every request. The format is based on the "14 points" document used in Fairfield and from many public meetings where this information has been requested.

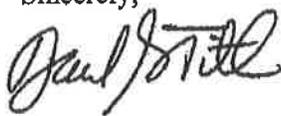
Two of these projects, the Mill Hill partial roof replacement and the North Stratfield boilers, have long been part of the facilities planning updates we have provided to the Board and the Town over the past two years. The third project, the Warde boiler, was originally scheduled for replacement in 2016-2017. However, that boiler recently failed earlier than anticipated and a temporary patch is in place to make it through this winter. Therefore, we have moved the funding request to 2014-2015.

Each project request includes:

1. Justification and background information.
2. Cost proposal estimate that brings together information from previous projects, verbal quotations, and/or written proposals.
3. Photographs of projects in existing conditions and, in most cases, photographs showing new conditions from previous projects to provide a side-by-side comparison.

We hope you find this information helpful and we are confident it will answer many of your questions as we begin the budget discussions. Thank you for your continued support.

Sincerely,

A handwritten signature in black ink, appearing to read "David G. Title". The signature is written in a cursive style with a large initial "D".

David G. Title

Fairfield Public Schools
Capital Non-Recurring Project Overview 2014-2015

<u>Location</u>	<u>Project</u>	<u>Estimated Cost</u>	<u>Page</u>
Mill Hill Elementary	Partial Roof Replacement	\$ 461,614	1
North Stratfield Elementary	Replace two 1964 boilers	364,652	12
Fairfield Warde High School	Replace one 1971 boiler	<u>152,500</u>	18
	Total	\$ 978,766	

Mill Hill Elementary School

Partial Roof Replacement

\$ 461,614

Background: Four roof areas are at the end of their useful lives and in need of replacement. The roofs are original to the 1991 installation and are out of warranty as of 2001. This request is for funding the replacement of these roofs.

Purpose & Justification: The condition of these roof areas is declining and leaks are increasing in frequency and severity. Replacement of these roofs now will prevent the need to replace them as an emergency thus preventing disruption to the school's learning environment.

Detailed Description: The expenditure would cover the total cost and removal of the four roof areas down to the existing roof deck and installation of a new roofing system. These funds would also cover design, bidding and construction administration costs as well as a contingency for unforeseen conditions that might be uncovered during the construction activities.

Estimated Cost: The cost of this funding request is \$461,614. This number is based on similar replacement projects undertaken in the system and estimates provided by contractors.

Long Range Costs: Roof replacements will reduce maintenance costs on the old roofs as well as produce energy savings through the use of a better insulated roof system. This roof replacement is part of the Fairfield Public Schools Facilities Plan 2011-2015 and the anticipated life of this upgrade is 20+ years.

Demand on Existing Facilities: This project would reduce the maintenance costs for roof repairs and increase energy efficiency in the building.

Security, Safety and Loss Control: This project would enhance safety and loss control by drastically reducing the risk of a roof failure while school is in session.

Environmental Considerations: This project would greatly reduce greenhouse gases by increasing the energy efficiency of the building thus reducing energy consumption.

Funding, Financing & SDE Reimbursement: This project would not proceed without funding approval. There are no State or Federal regulations that require this project to be undertaken. This project is eligible for reimbursement through the State Department of Education, Bureau of School Facilities.

Schedule, Phasing & Timing: The schedule is to have work done this summer.

Other Considerations: The work will be bid out by the Town Purchasing Department and will be performed by outside contractors.

Alternates to the Request: The alternate to this request is to do nothing. This alternative will delay this needed replacement and further delay other similar projects scheduled in the BOE future planning.

Mill Hill Elementary School

Partial Roof Replacement

\$ 461,614.00

Details

Licensed contractor to provide labor and materials
Tecta America

Breakdown:

Set-up safety for our associates to perform their scope of work, and to protect the occupants of the property.

Remove the existing roofing system down to the existing metal deck.

Confirm and/or secure the existing metal deck per Factory Mutual guidelines 1-28 specifications.

Install new pressure treated wood blocking to the height of the new perimeter edges.

Install new Polyisocyanurate insulation including 1/4" per foot tapered system with an average R-25 value to be in compliance with 2014 ASHRAE guidelines.

Install new two ply SBS Modified Bitumen roofing membrane system in cold applied adhesive with a granulated cap sheet. (Roofing system meets the current code for uplift pressures - FM 1-90 approved system.)

Install all flashings per manufacturer's specification.

Remove and replace existing drain bowl assemblies.

Install new extruded metal edges with Kynar coated color cover plate that has been pre tested and approved per ANSI -SPRI ES-1 specifications. (Color will be selected by owner from standard color selections.)

Install new expansion joints to replace existing.

Fabricate and install new counter flashings as needed for proper termination.

Clean up and dispose of all debris from the above scope of work.

Provide owner with a 20 year No Dollar Limit (NDL) warranty that includes the cost of both labor and material to repair any leaks or material failures during the warranty period.

\$ 424,964.00

Consultant for Professional Services
Hoffmann Architects

Breakdown:

Hoffmann Architects will provide the following professional services related to the scope of work described in this proposal:

Review original Contract Documents and previous reports as such documents relate to conditions described in the Scope of Work and are supplied to Hoffmann Architects by the Town of Fairfield Public Schools.

Visit the site to verify existing conditions and construction details. Coordinate with a Contractor retained by The Town of Fairfield Public Schools to perform exploratory openings so as to examine concealed conditions.

Based upon the results of Hoffmann Architects' field verification activities and the established scope of work, provide a proposed roof replacement system and scope of work for review and approval by the Town of Fairfield Public Schools.

Meet with the Office of School Facilities for a pre-review evaluation meeting to review requirements for submission of the project.

Based on the agreed upon scope of work, prepare Contract Documents consisting of drawings and specifications, setting forth in detail the requirements for construction of the project.

Meet with the Office of School Facilities to review the 100% Contract Documents (Plan Completion Test) for comments and approval.

Respond to Office of School Facilities comments as required.

Assist in the preparation of the necessary bidding information, bidding forms, conditions of the Contract and Form of Agreement between Owner and Contractor.

Assist the Town of Fairfield Public Schools in obtaining bids.

Prepare an agenda for a pre-bid conference at the site.

Conduct a pre-bid conference at the site.

Prepare minutes from the pre-bid conference.

Respond to contractor questions and prepare addenda, as necessary.

Assist the Town of Fairfield Public Schools in evaluating bids and in awarding construction contract.

Conduct a meeting with a representative from the Town of Fairfield Public Schools and the Contractor prior to the commencement of the work, to review the Contractor's proposal for compliance with the requirements of the Contract Documents.

Review and take appropriate action on Contractor's submittals such as shop drawings, product data and samples, to establish their conformance with the design concept expressed in the Contract Documents; forward to the Town of Fairfield Public Schools, for review and record, written warranties and related documents required by the Contract Documents and assembled by the Contractor.

Visit the site four (4) times during construction to become familiar with the progress and quality of work and to determine if the work being performed is in general compliance with the Contract Documents.

Conduct meetings in conjunction with site visits to assess the progress of the work. Prepare field observation reports following site visits to document progress and quality of the Contractor's work.

Authorize minor changes in the work if they are necessary and do not involve adjustment to the contract sum or extension of the contract time.

Review and certify amounts due the Contractor.

Visit the site to develop a punch list and again to conduct a final inspection with the manufacturer's representative.

Determine the date of final completion.

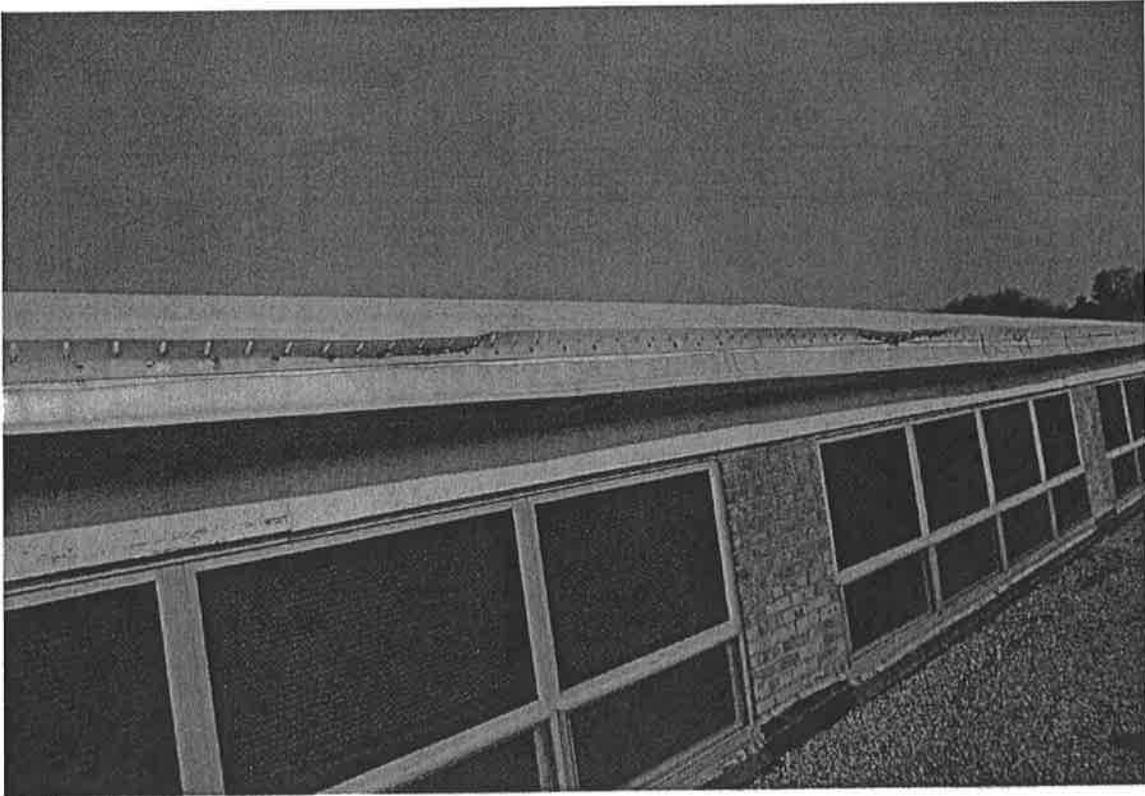
Certify Contractor's requisition for Final Payment based upon the final inspection indicating the work is in general compliance with the requirements of the Contract Documents.

\$ 36,650.00

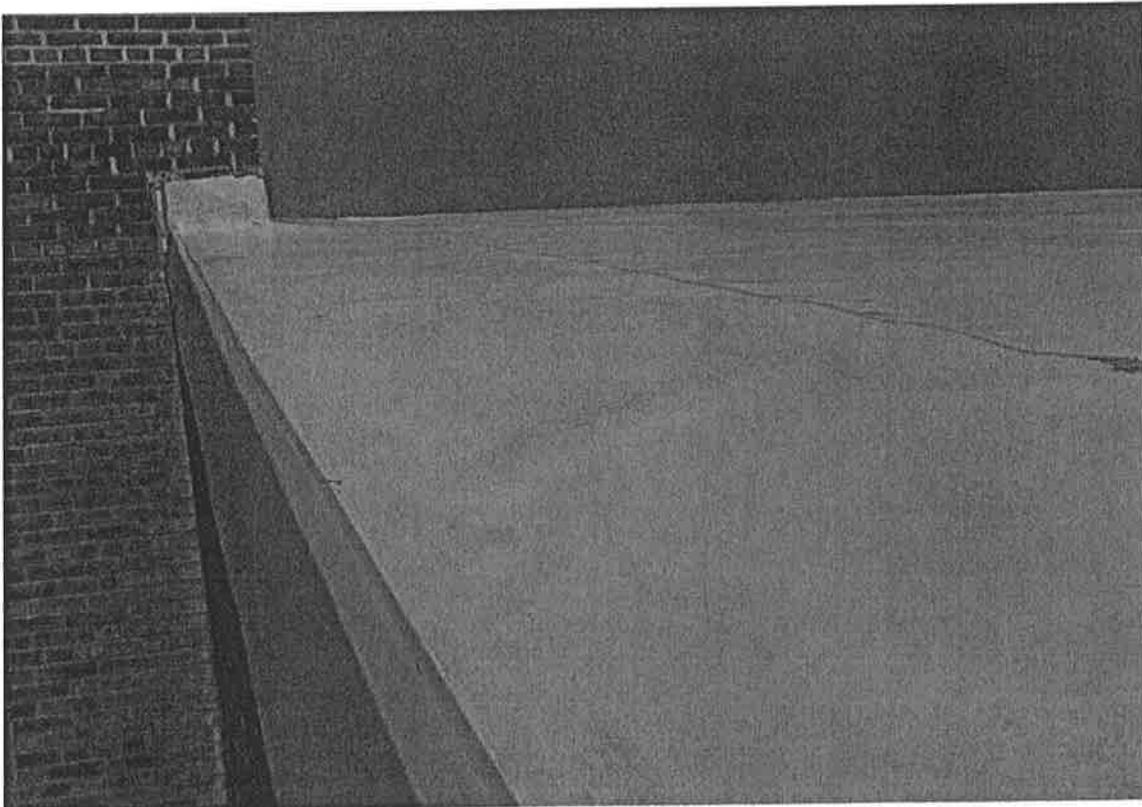


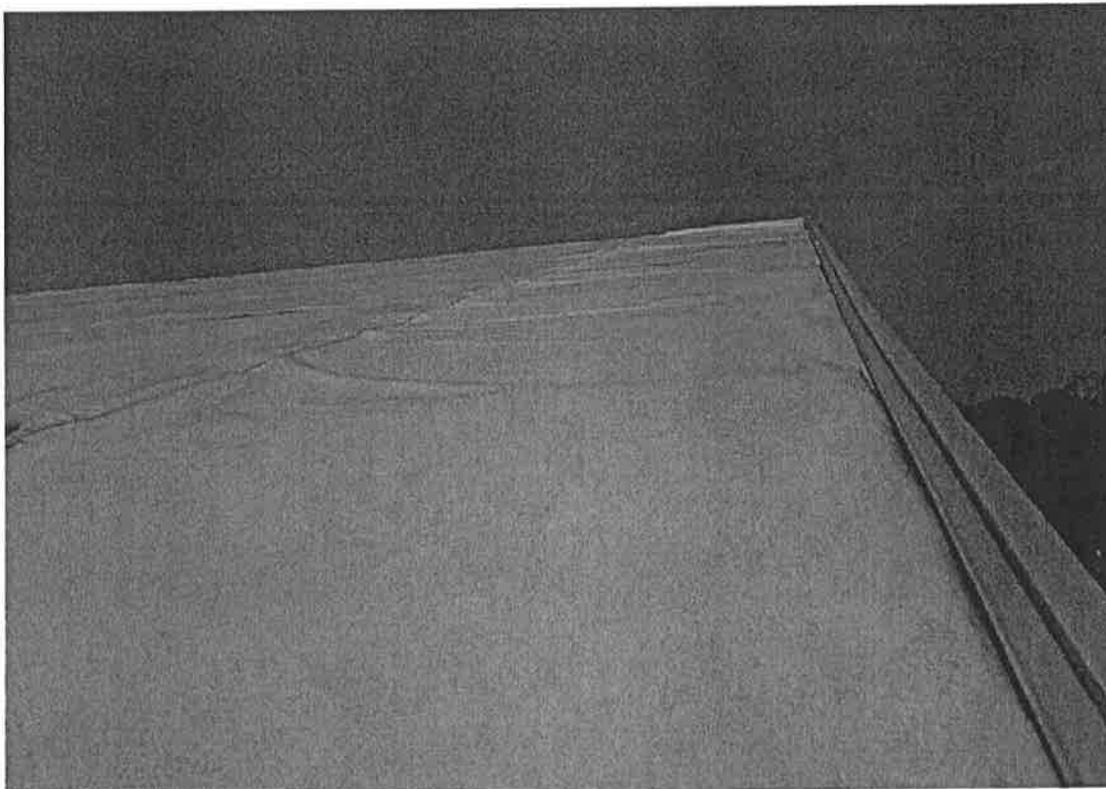
Total

\$ 461,614.00



Old 1991 roof system showing failures



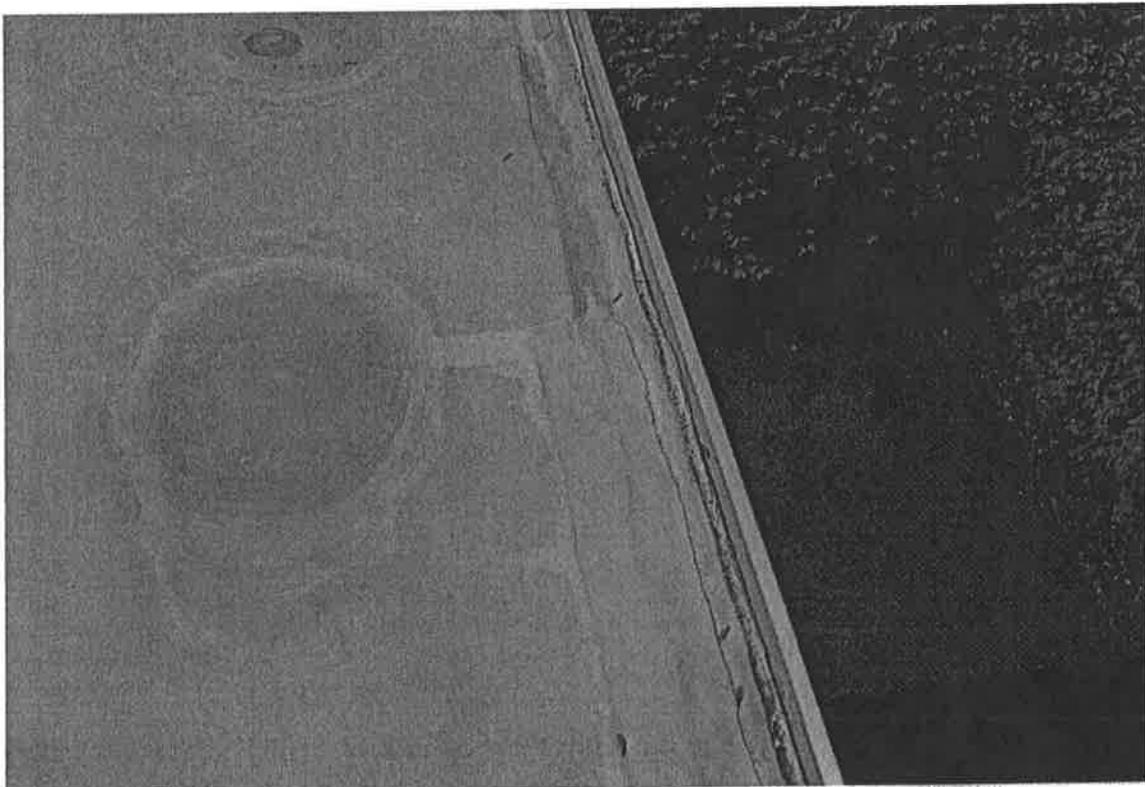


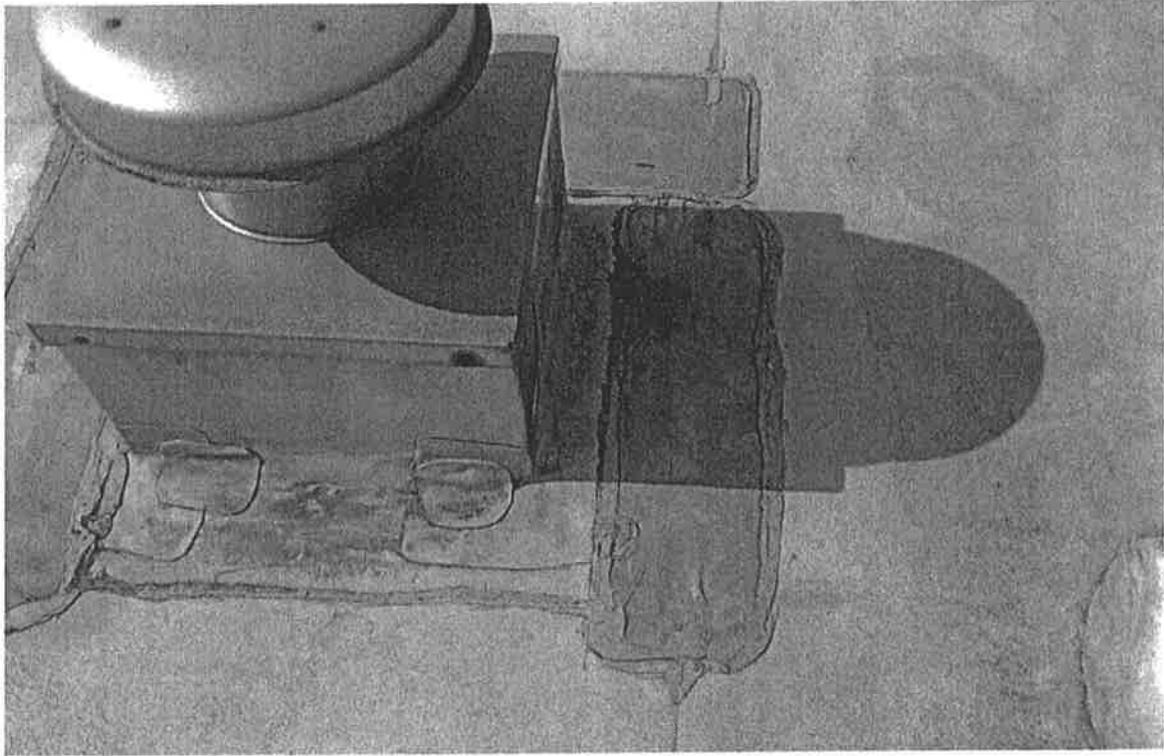
Roof membrane failures and patches around skylight



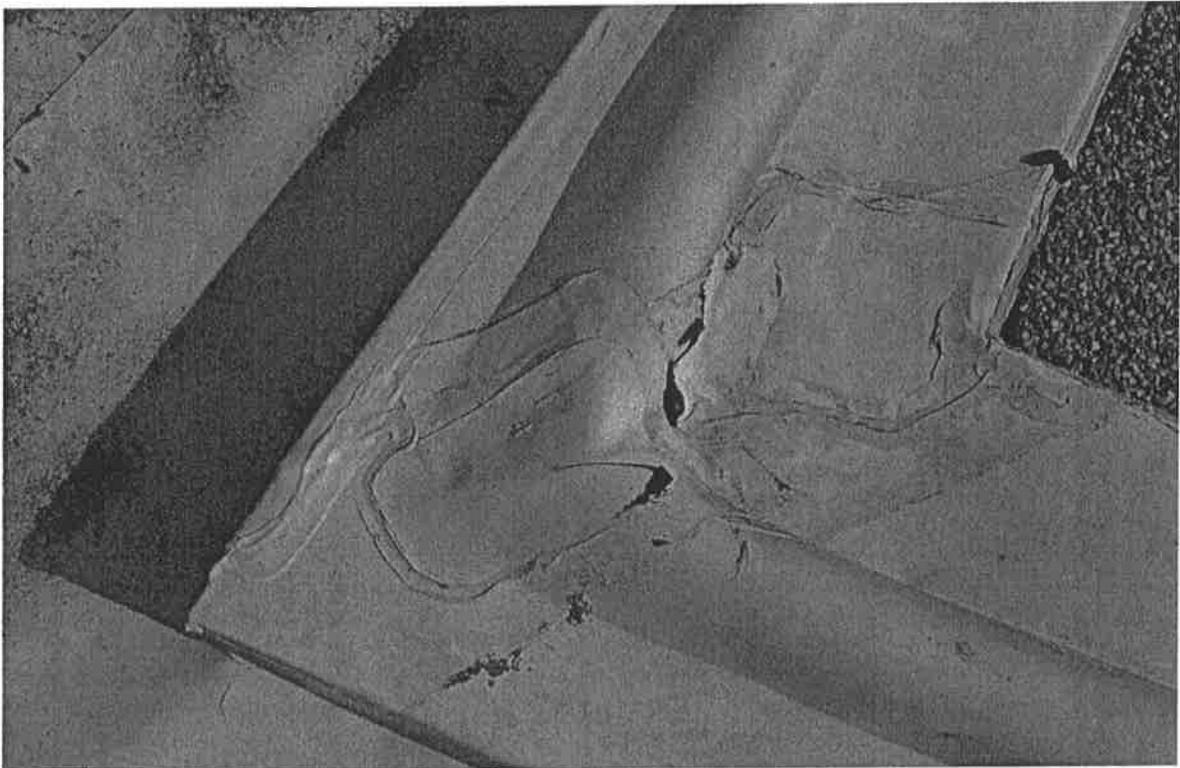


More roof patches and ponding of water failures





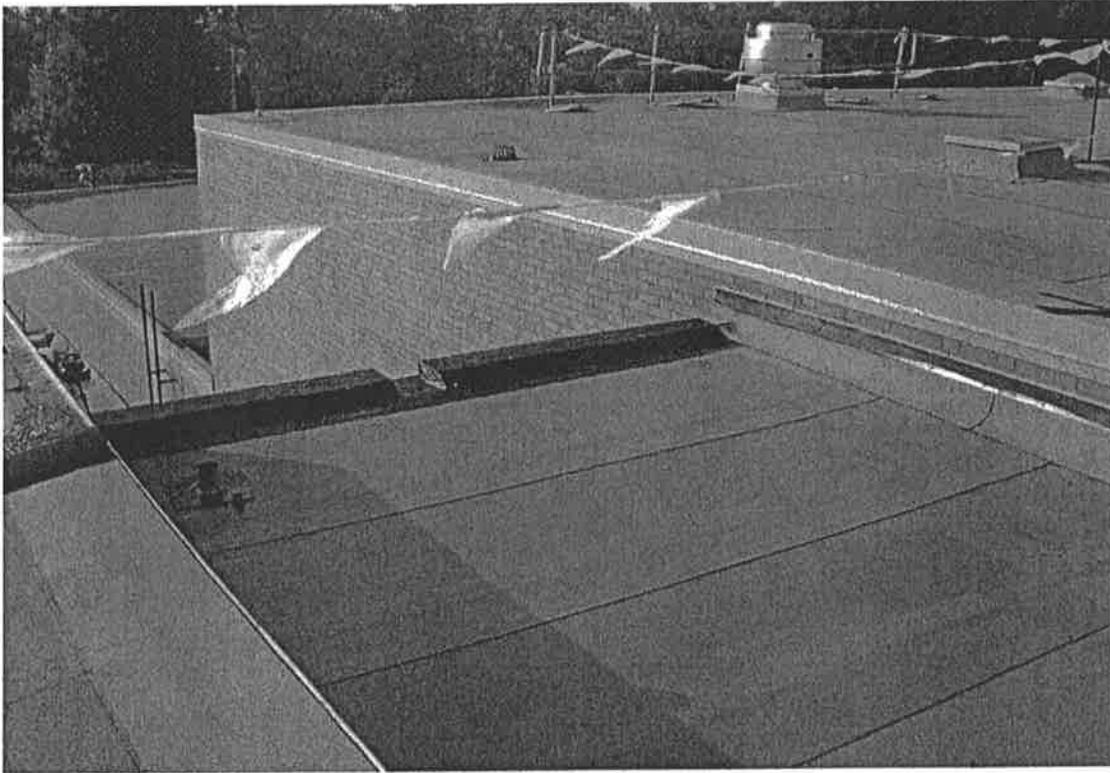
More roof patches and corner patches failures





New 2013 roof system at Fairfield Warde High School





New 2013 roof system at Fairfield Warde High School



North Stratfield Elementary School

Boiler Replacement

\$ 364,652

Background: The boilers to be replaced are original from 1964 and are well into their useful lives. This request is for funding the replacement of both existing boilers with new, dual fuel, higher efficiency Viessman Boilers.

Purpose & Justification: The condition of the boilers is poor and new boilers would provide a much higher efficiency rating for the school building and prevent emergency boiler failure.

Detailed Description: The expenditure would cover the total costs for demolition and removal of old boilers, asbestos abatement, new burners, associated piping and peripheral components and purchase and installation of two new boilers.

Estimated Cost: The cost of this funding request is \$364,652. This number is based on similar boiler replacement projects undertaken in the system and estimates provided by contractors. This includes abatement and air sampling consultant/monitoring.

Long Range Costs: Boiler replacements will reduce maintenance costs on the old as well as produce energy savings through the use of higher efficiency units. We anticipate the life of this upgrade is 30+ years.

Demand on Existing Facilities: This project would reduce the maintenance costs of older boiler repairs and increase energy efficiency in the building.

Security, Safety and Loss Control: This project would enhance safety and loss control by drastically reducing the risk of boiler failure during a peak cold weather period.

Environmental Considerations: This project would greatly reduce the hazardous materials (asbestos) in the boiler room area. Cleaner burning boilers would improve emissions from the boilers into the air.

Funding, Financing & SDE Reimbursement: This project would not proceed without funding approval. There are no State or Federal regulations that require this project to be undertaken. This project is not eligible for reimbursement through the State Department of Education, Bureau of School Facilities.

Schedule, Phasing & Timing: Approval of this funding will allow completion of the work before the next heating season.

Other Considerations: The work will be bid out by the Town Purchasing Department and will be performed by outside contractors.

Alternates to the Request: The alternate to this request is to do nothing. This alternative will delay this needed replacement and further delay other similar projects scheduled in the BOE future planning.

North Stratfield Elementary School

Boiler Replacement

\$ 364,652.00

Details

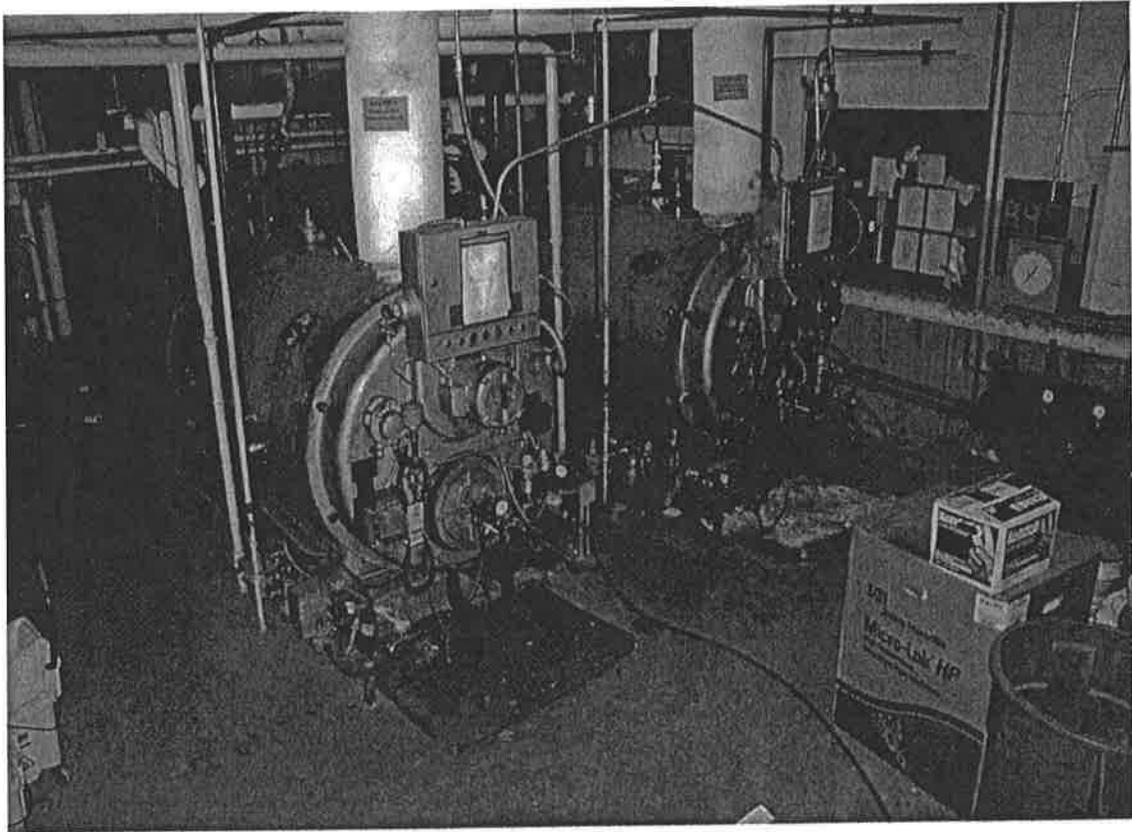
Licensed contractor to provide labor and materials
Controlled Air, Inc.

Breakdown:

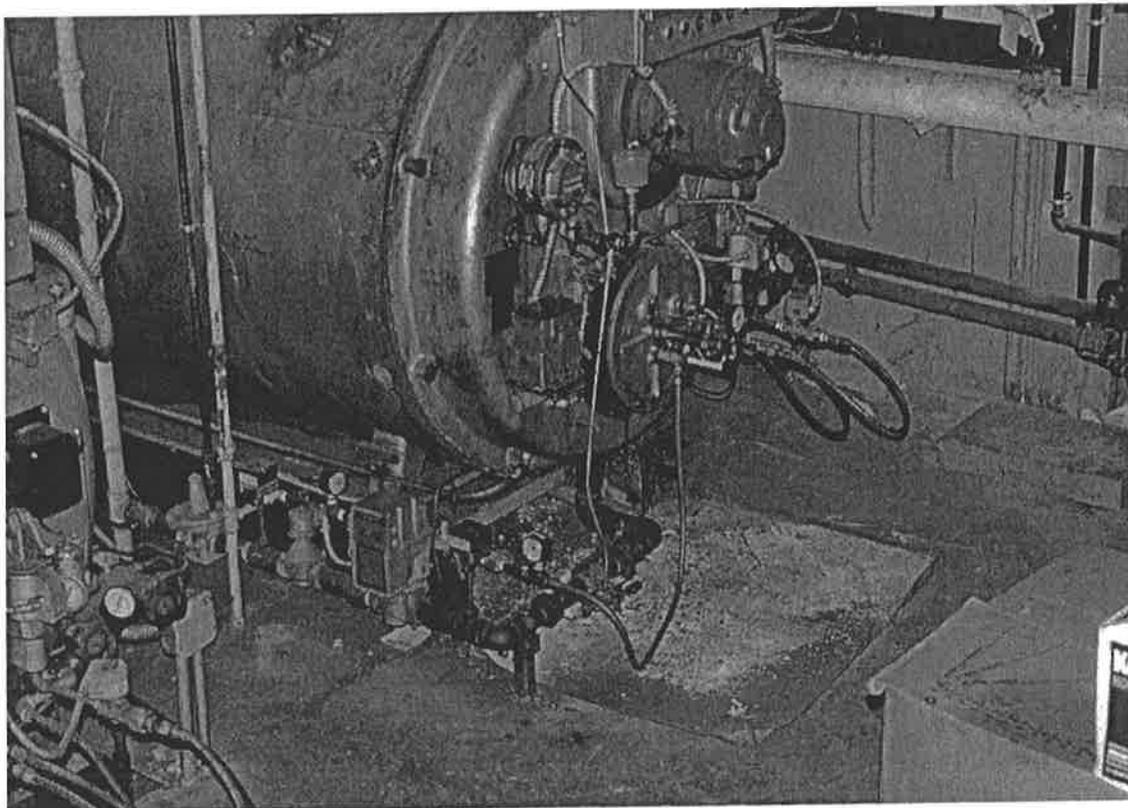
Disconnect existing piping, electrical and flue.
Asbestos abatement of mechanical room.
Mechanical demolition to remove existing boiler, pumps and tanks.
Mount boilers on new concrete pads.
Furnish and install two (2) new Viessman non-condensing boilers with dual fuel burner.
Demo old flue and cap at chimney.
Furnish and install two (2) 12" Metal-Fab PIC boiler flues. New flues to go through roof.
Install two (2) expansion tanks and one (1) air separator.
Furnish and install two (2) primary pumps and connect to existing piping.
Furnish and install VFDs on primary pumps.
Furnish and install new oil booster pumps and connect to existing oil piping.
Furnish and install one (1) A.O. Smith hot water heater with auxiliary water storage tank and connect to existing piping.
Gas piping to new boiler units. Includes new regulators.
Hot water piping from new boilers and connect to existing 6" header/Mains. All piping 3" and larger to be welded steel.
Piping insulation on new, existing, and abated pipe.
Controls and control wiring; based on Johnson Controls.
Electrical as required. Based on tying into existing boiler and pump feeds.
Roofing work for two new boiler flues through roof.
Provide core boring through concrete roof for flue.
Structural steel as required for roof penetrations.
Rigging of equipment.
Start-up and testing of units.
One year warranty.
Permits as required.

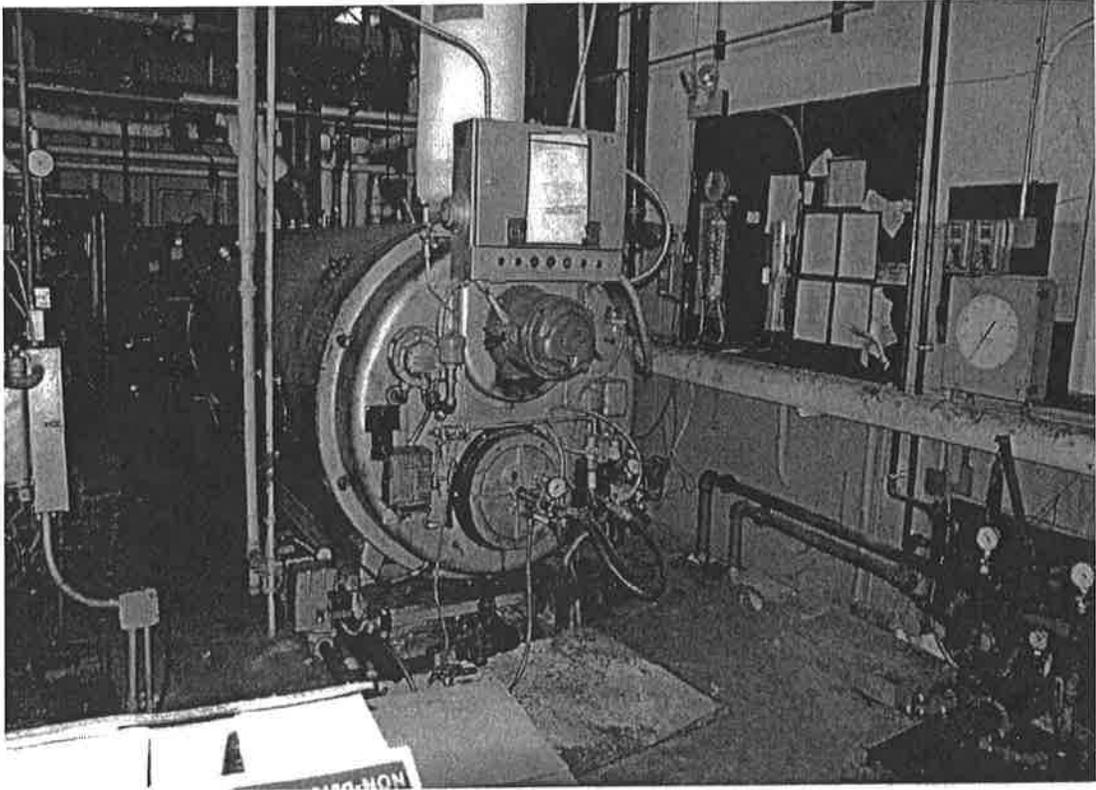
Total

\$ 364,652.00

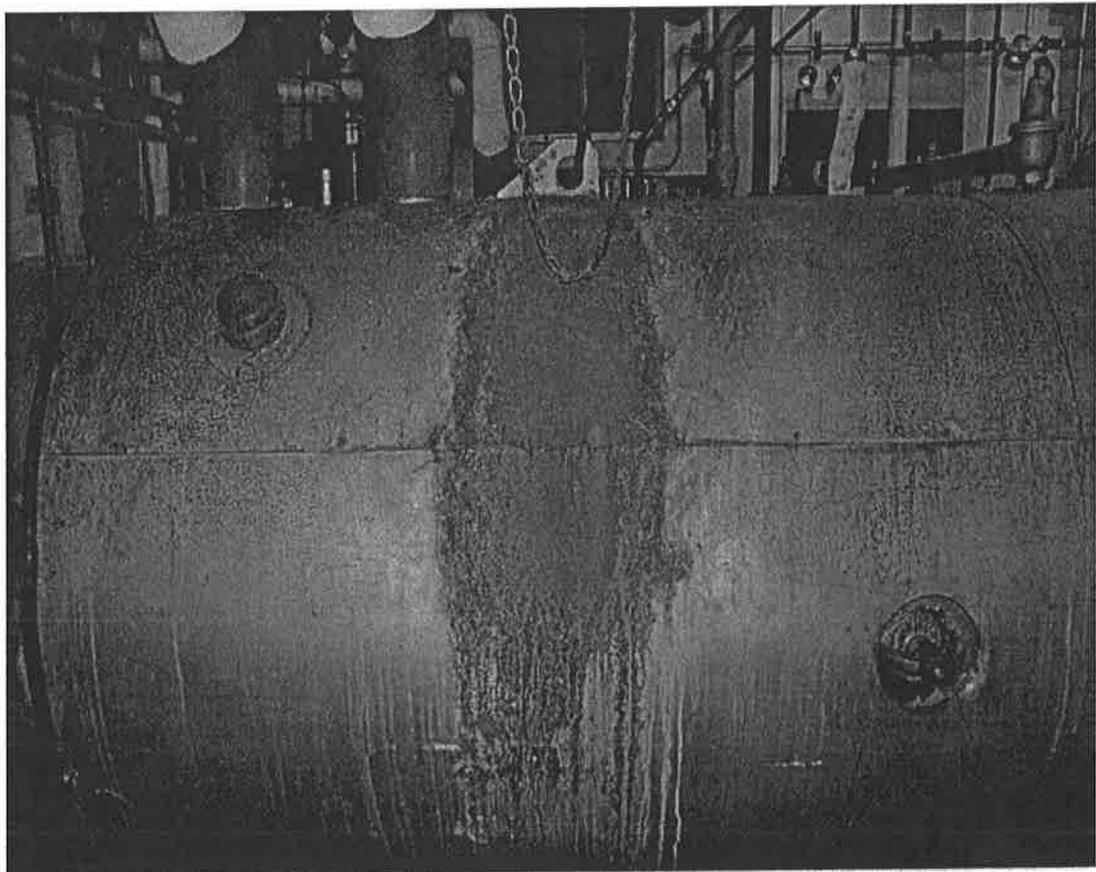


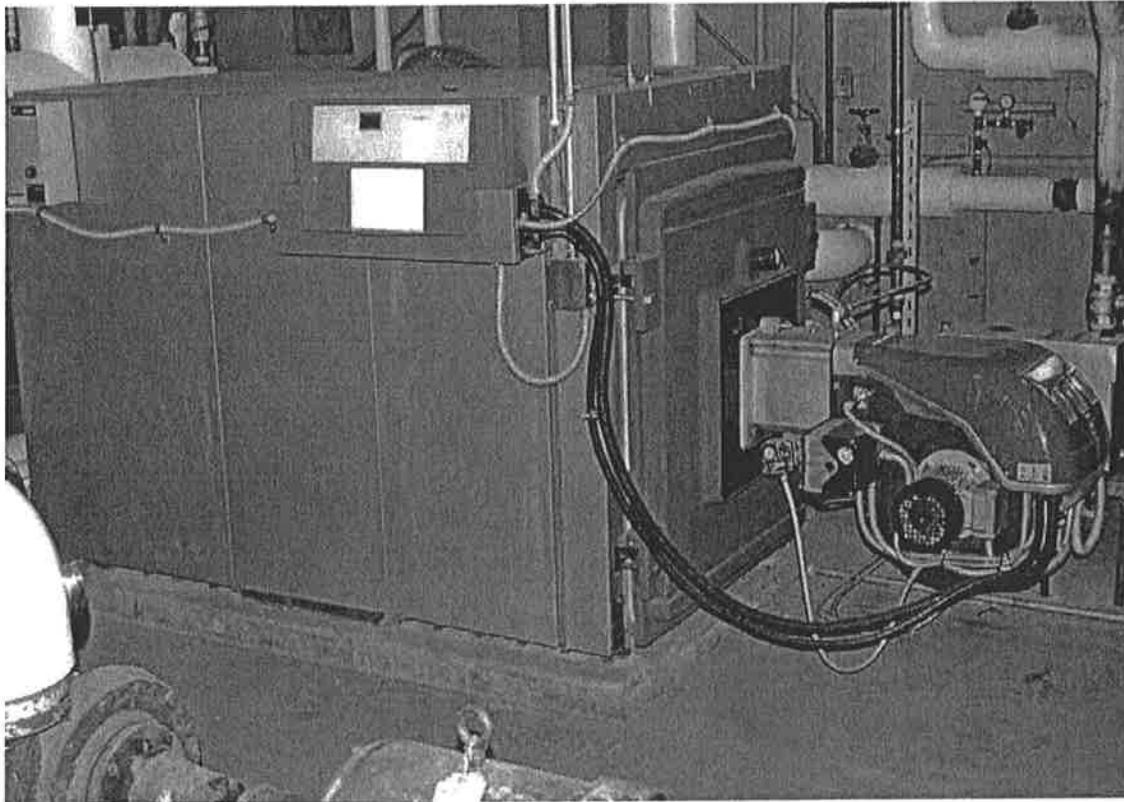
Old 1964 boilers showing age and leaks



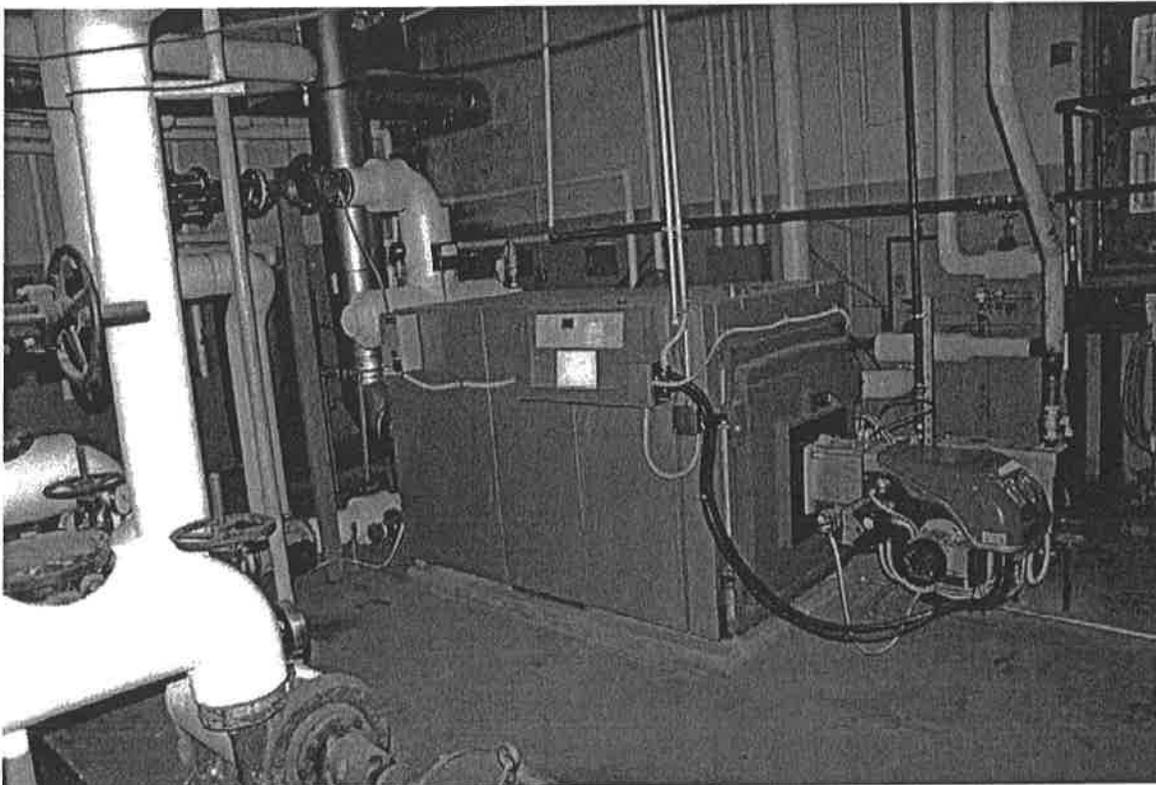


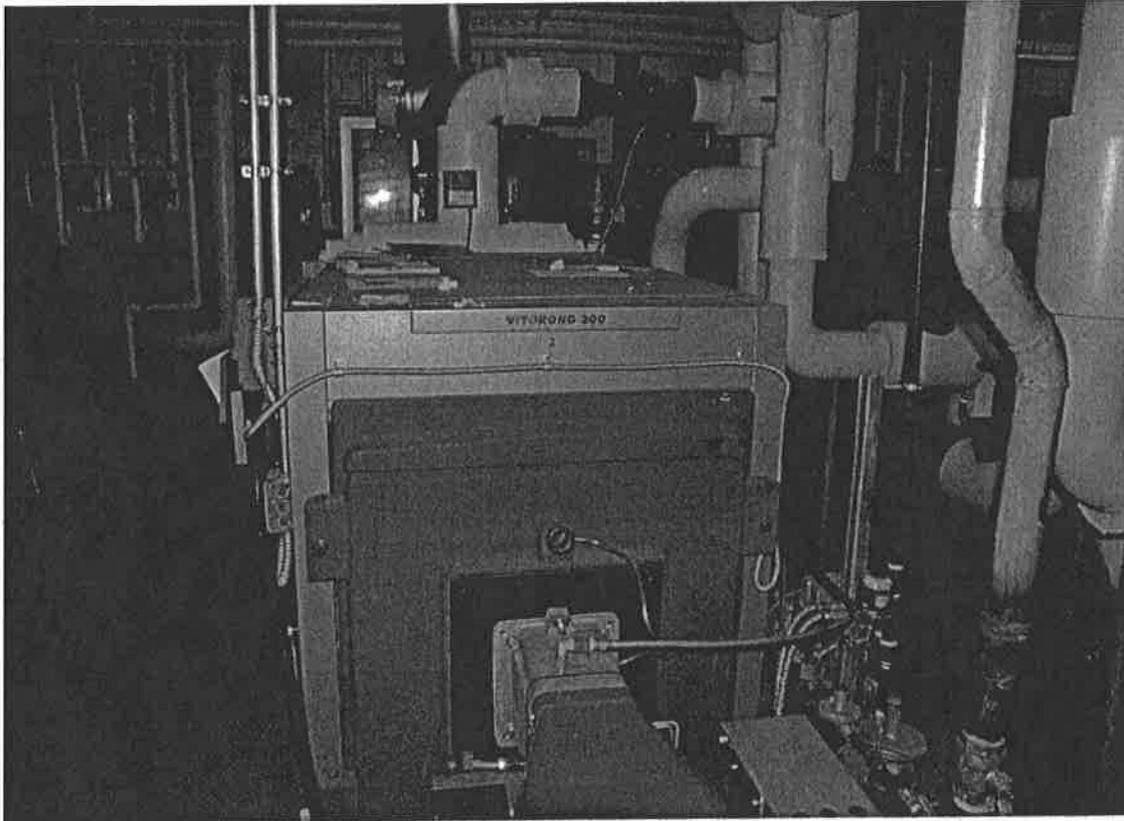
Notice oil catching mat and rusting





New 2012 boilers at Dwight Elementary School





Close up of boiler at Dwight Elementary School

Fairfield Warde High School

Boiler Replacement

\$ 152,500

Background: The boiler to be replaced is original from 1971 and is well into its useful life. This request is for funding the replacement of one existing boiler with a new, dual fuel, higher efficiency Easco Boiler. This boiler replacement was scheduled for 2016-2017. This past year it failed inspection and cannot be fired. We were able to provide a \$20,000.00 temporary fix to get us through the winter.

Purpose & Justification: The condition of the boiler is poor, failed inspection, and a new boiler would provide a much higher efficiency rating for the school building and prevent emergency boiler failure.

Detailed Description: The expenditure would cover the total costs for demolition and removal of the old boiler, asbestos abatement, new burner, associated piping and peripheral components and purchase and installation of one new boiler.

Estimated Cost: The cost of this funding request is \$152,500. This number is based on similar boiler replacement projects undertaken in the system and estimates provided by contractors.

Long Range Costs: Boiler replacement will reduce maintenance costs on the old as well as produce energy savings through the use of a higher efficiency unit. We anticipate the life of this upgrade is 30+ years.

Demand on Existing Facilities: This project would reduce the maintenance costs of older boiler repairs and increase energy efficiency in the building.

Security, Safety and Loss Control: This project would enhance safety and loss control by drastically reducing the risk of boiler failure during a peak cold weather period.

Environmental Considerations: A cleaner burning boiler would improve emissions from the boiler into the air.

Funding, Financing & SDE Reimbursement: This project would not proceed without funding approval. There are no State or Federal regulations that require this project to be undertaken. This project is not eligible for reimbursement through the State Department of Education, Bureau of School Facilities.

Schedule, Phasing & Timing: Approval of this funding will allow completion of the work before the next heating season.

Other Considerations: The work will be bid out by the Town Purchasing Department and will be performed by outside contractors.

Alternates to the Request: The alternate to this request is to do nothing. This alternative will delay this needed replacement and further delay other similar projects scheduled in the BOE future planning.

Fairfield Warde High School

Boiler Replacement

\$152,500.00

Details

Licensed contractor to provide labor and materials
Ratick Combustion, Inc.

Breakdown:

Remove existing Power Flame burner from boiler and all related piping and controls.
Cut up and remove from premises existing boiler.
This work will involve torch cutting.
Scope of work does not include removal or testing of asbestos.

Furnish and erect in the boiler room a new EASCO 250 h.p. low pressure steam firetube boiler.

Boiler will be welded together in the boiler room.

Boiler to be equipped with the following:

- a. new steam controls
- b. two low water cut-off valves
- c. relief valves
- d. man hole cover
- e. six hand hole covers
- f. gauge glass with tricocks
- g. 12 gauge boiler tubes
- h. burner mounting plate
- I. saddles which boiler will rest on to match height of other boilers

Mount existing Power Flame burner on the new boiler.

Complete refractory work for front wall of burner mounting plate.

Complete tie-in of oil and gas piping from existing lines into existing burner, mounted on new boiler.

Install new safety and operating controls for the boiler including piping and wiring.

Wiring will be tied into existing service.

Pipe new relief valves to 6" above floor.

Pipe in gauge glass and water column.

Fabricate and install breeching transition piece to tie new boiler into existing breeching.

Furnish, weld and install supply and return piping tying into existing lines.

Pipe in feed water lines tying into existing service.

Boil out boiler prior to putting into service.

Start up burner and set up.

This installation is a total turn key job.

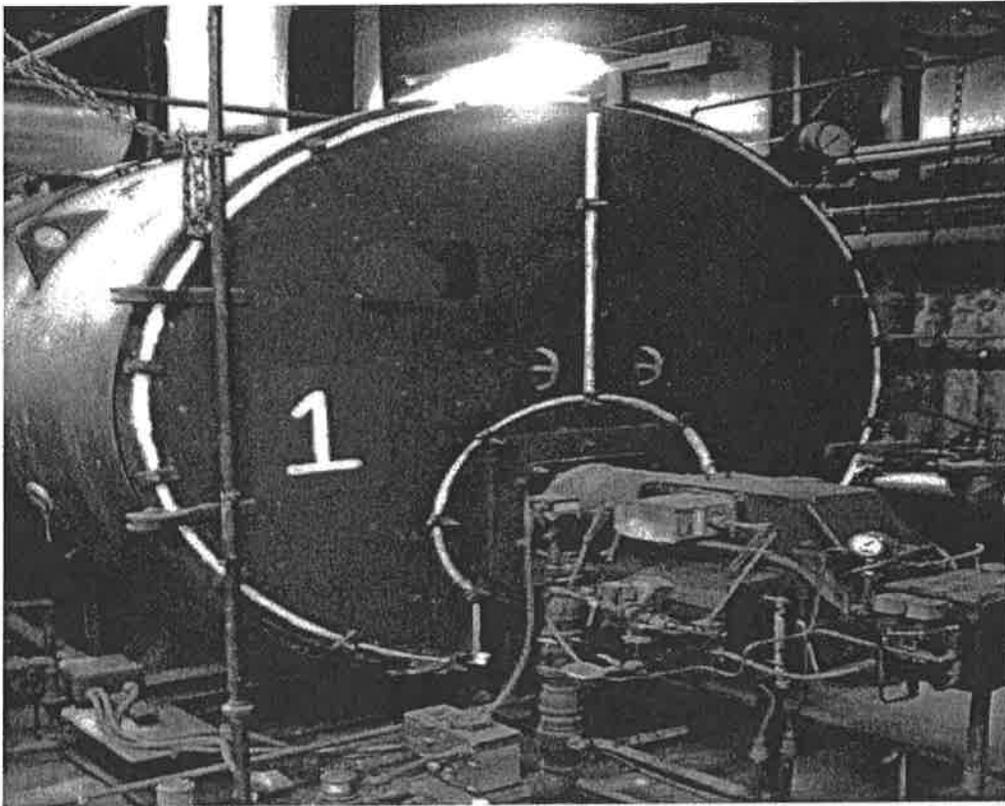
Modification or installation of combustion air is not included in our scope of work.

Furnish Town of Fairfield permit (no permit cost should be charged because this is a Town building.)

Our pricing is based on the project being prevailing wage.

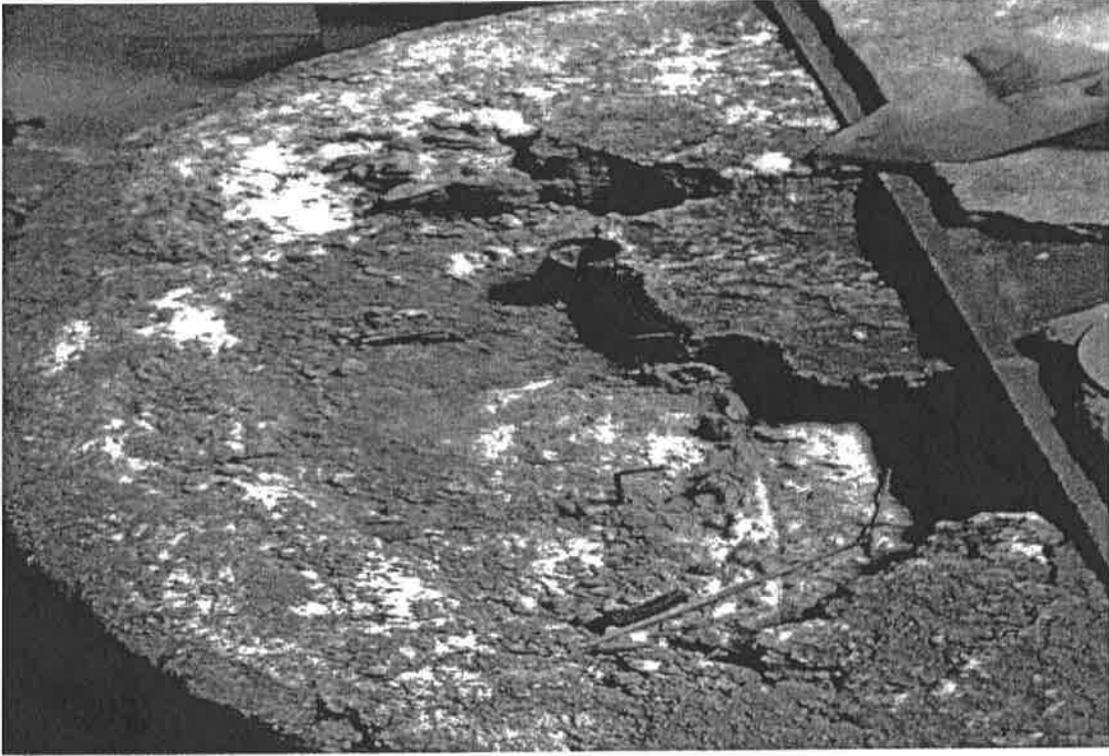
Total

\$ 152,500.00

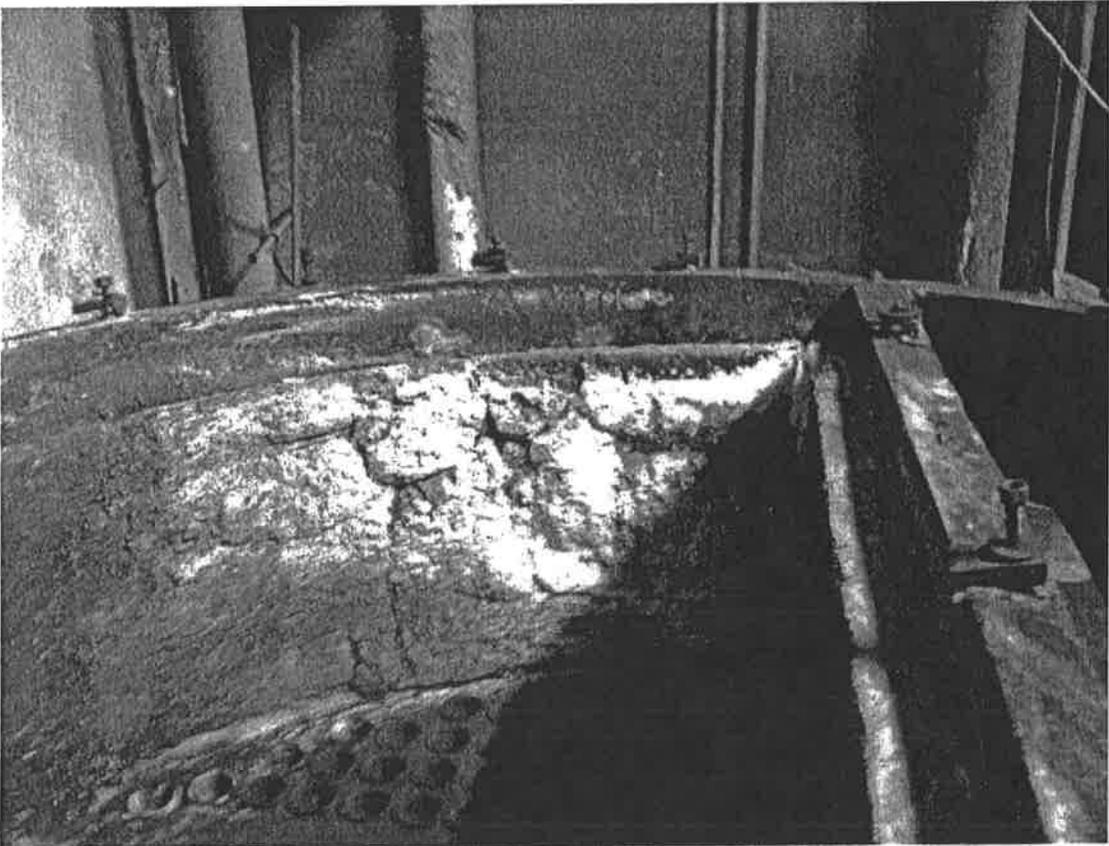


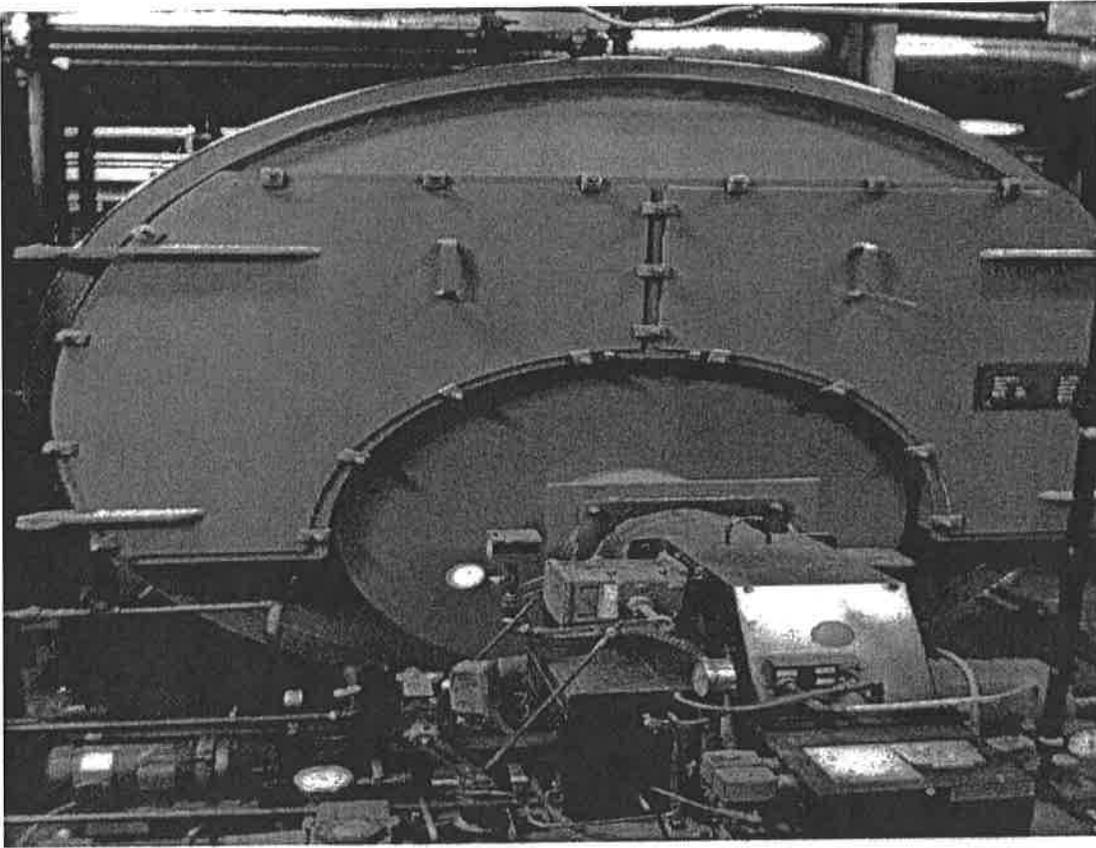
Old 1971 boiler #1 showing age and fractured wall section





Close up of fractured sections





New 2012 boiler #2 at Fairfield Warde High School

