

# City of Providence

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

## CHAPTER 1986-47

No. 523 **AN ORDINANCE** TO APPROPRIATE \$25,000,000 AND TO AUTHORIZE THE ISSUANCE OF NOT IN EXCESS OF \$25,000,000 GENERAL OBLIGATION BONDS FOR RENOVATIONS TO SCHOOLS.

*Approved* September 19, 1986

### *Be it ordained by the City of Providence:*

Section 1. The sum of \$25,000,000 is hereby appropriated for the purpose of making renovations to schools.

Section 2. The sum of not in excess of \$25,000,000 shall be borrowed for the purpose of financing the project described in Section 1. The City Treasurer, with the approval of the Mayor and the Committee on Finance, is authorized to accept and approve bids for not in excess of \$25,000,000 general obligation bonds, to determine and approve the manner of sale, denominations, interest rate, and other terms and conditions of the bonds, and to issue the bonds.

Section 3. The estimated maximum cost of the Project described in Section 1 hereof is \$25,000,000, which entire amount is being appropriated hereby.

Section 4. It is hereby determined that the period of usefulness of the Project described in Section 1 hereof is thirty years.

Section 5. It is hereby determined that the net debt of the City of Providence after the issuance of the bonds authorized hereby will be \$31,000,000.

Section 6. It is hereby declared that the bonds authorized hereby will be within all debt and other limitations prescribed by the Constitution and Laws of the State of Rhode Island.

Section 7. The City Council of the City of Providence, Rhode Island, is hereby authorized to cause the following question to be submitted to the Electors of the City of Providence at that General Election scheduled to be held on Tuesday, November 4, 1986: "Shall the City of Providence be authorized to issue bonds in an amount not exceeding Twenty-Five Million Dollars (\$25,000,000) for the Renovations to Schools?"

No.

CHAPTER

AN ORDINANCE

Section 8. Upon the adoption of this Ordinance by the City Council and its approval by His Honor the Mayor, the City Clerk is directed to transmit forthwith a duly certified copy of the same to the Secretary of State of Rhode Island, the Rhode Island State Board of Elections, and the Board of Canvassers and Registration of the City of Providence, Rhode Island and the Board of Canvassers and Registration shall certify to the Secretary of State a copy of the question stated in Section 7 hereof to be submitted to the Electors of the City of Providence at the General Election scheduled to be held on Tuesday, November 4, 1986.

Section 9. This Ordinance shall take effect upon its passage.

IN CITY COUNCIL  
SEP 15 1986

First Reading Read and Passed  
Referred to Committee on  
**FINANCE**

*Rose M. Mendonca* CLERK

IN CITY  
COUNCIL

SEP 18 1986  
FINAL READING  
READ AND PASSED

*Michael W. Eaton*  
PRESIDENT

*Rose M. Mendonca*  
CLERK

APPROVED  
SEP 19 1986  
*John L. Partridge*  
MAYOR

Rose M. Mendonca  
City Clerk

—  
Clerk of Council

—  
Clerk of Committees



DEPARTMENT OF CITY CLERK  
CITY HALL

Michael R. Clement  
First Deputy

—  
Grace Nobrega  
Second Deputy

September 19, 1986

Rhode Island State Board of Elections  
Mr. Joseph R. DiStefano, Chairman  
50 Branch Avenue  
Providence, Rhode Island 02904

Received of Rose M. Mendonca, City Clerk of Providence,  
Rhode Island a duly certified copy of an Ordinance of the City  
Council same being Chapter No. 1986 - 47, approved September 19,  
1986.

*Lucas J. Rao, adm/assistant*

Rose M. Mendonca  
City Clerk

—  
Clerk of Council

—  
Clerk of Committees



DEPARTMENT OF CITY CLERK  
CITY HALL

Michael R. Clement  
First Deputy

—  
Grace Nobrega  
Second Deputy

September 19, 1986

Board of Canvassers  
Mr. Laurence K. Flynn, Chairman  
City Hall  
Providence, Rhode Island 02903

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1986.

*Joseph R. Paolino*

Rose M. Mendonca  
City Clerk

—  
Clerk of Council

—  
Clerk of Committees



DEPARTMENT OF CITY CLERK  
CITY HALL

September 19, 1986

Michael R. Clement  
First Deputy

—  
Grace Nobrega  
Second Deputy

Honorable Susan L. Farmer  
Secretary of State  
219 State House  
Providence, Rhode Island 02903

1986 SEP 19 AM 10:02

Received of Rose M. Mendonca, City Clerk of Providence,  
Rhode Island a duly certified copy of an Ordinance of the City  
Council same being Chapter No. 1986 - 47, approved September 19,  
1986.

A handwritten signature in cursive script, appearing to read "Alfred O'Neill", written over a horizontal line.

1500 FLEET CENTER  
PROVIDENCE, RHODE ISLAND 02903  
401 274-2000

TELEX: 952039 HATS PVD-UD  
TELECOPIER: 401 277-9600

EDWARD M. WATSON  
ROBERT F. PICKARD  
BENTLEY TOBIN\*  
RICHARD F. STAPLES  
ROBERT W. SHADD  
RICHARD W. BILLINGS  
JACOBIM A. WEISSFELD  
JAMES A. JACKSON  
JOHN R. ALLEN  
EDWIN G. TORRANCE  
MICHAEL A. SILVERSTEIN  
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NOEL M. FIELD, JR.  
MALCOLM FARMER III  
STEPHEN J. CARLOTTI  
CHARLES S. SOKOLOFF\*  
JAMES E. KEELEY  
H. PETER OLSEN  
EDMUND C. BENNETT  
MICHAEL P. DEFANTI\*

BRIAN P. RICHARDS  
E. JEROME BATTY  
MATTHEW T. MARCELLO III  
DORIS JAMILICHT\*  
THOMAS R. COURAGE\*  
FREDERICK P. McCLURE\*  
HOWARD E. WALKER  
MARGARET D. FARRELL  
MERRILL W. SHERMAN  
MICHAEL B. NULMAN\*  
PAUL A. SILVER\*  
GREGORY L. BENIK  
ROBERT C. BRUNS  
RICHARD G. SMALL\*  
PAUL V. CURCIO\*  
DAVID J. TRACY\*  
WILLIAM R. GRIMM\*  
KRISTIN A. DeKUIPER\*  
JOSEPH P. CURRAN  
SCOTT E. COOPER\*  
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GORDON A. CARPENTER\*  
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ANITRA D. LANCZI ◊  
MARY LOU SAVAGE  
NANCY MAHONEY HARRIS ◊  
MARK S. NIZIAK ◊  
JEFFREY M. STOLER†  
JOHN R. COWELL, JR.\*  
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DANIEL A. LADOW  
NEIL A. CLARK  
TINA C. McINTYRE  
KAREN A. PELCZARSKI

COUNSEL  
THOMAS J. PAOLINO  
JOHN H. FANNING  
JAMES DIPRETE, JR.  
LEONARD S. LAKIN ◊  
MARK J. LEVINSON ◊  
ROBERT D. WILLIAMS ◊  
RICHARD A. CELLA ◊  
  
RETIRED  
STUART H. TUCKER  
NOEL M. FIELD  
THOMAS J. HOGAN

\* Also admitted in Massachusetts  
◊ Admitted in Massachusetts only  
† Admitted in Pennsylvania only

**HINCKLEY, ALLEN, TOBIN & SILVERSTEIN**

*Attorneys at Law*

September 11, 1986

Mr. John C. Simmons  
Director of Administration  
City Hall  
Providence, RI 02903

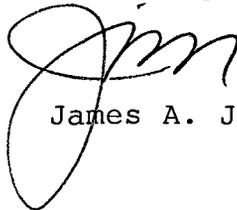
Re: \$25,000,000 Bond Issue For Renovations to Schools

Dear John:

Enclosed herewith is the ordinance for the proposed \$25,000,000 bond issue for renovations to the schools. If you have any question concerning this matter, please do not hesitate to call.

With best personal regards, I am

Sincerely,



James A. Jackson

JAJ:rf  
Enclosure

ANTICIPATED \$25 MILLION BOND SALE

BEGINNING F.Y.E. - 1988  
(000) Omitted

	<u>Principal</u>	<u>Interest</u>	<u>Total Payments</u>	
FYE 1988	\$6,697.	\$5,453.		Roll 1 BAN - 25m @
Add'l. 25m		1,938.	\$14,088.	1 yr. @ 7.75%
FYE 1989	\$6,330.	<sup>6 330</sup> \$4,964.		Roll 1 BAN-25m @
Add'l. 25m		<u>1,938.</u> <del>15,252</del>	\$13,232.	1 yr. @ 7.75%
FYE 1990	\$6,240.	\$4,487.		1 int. pmt. 6mos
Add'l.	1,250.	969.	\$12,946.	25m @ 7.75 notes converted to bond
FYE 1991	\$6,072.	\$4,000.		1 principal paymt.
Add'l.	1,250.	1,890.	\$13,212.	2 int. payments
FYE 1992	\$5,762.	\$3,517.		1 principal paymt.
Add'l.	1,250.	1,791.	\$12,320.	2 interest paymts.
FYE 1993	\$5,338.	\$3,041.		1 principal paymt.
Add'l.	1,250.	1,694.	\$11,323.	2 int. payments
FYE 1994	\$5,593.	\$2,594.		1 principal paymt.
Add'l	1,250.	1,598.	\$11,135.	2 interest paymts.

Payments continue through 2015

6330

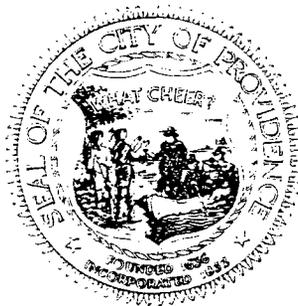
OWNER:

CITY OF PROVIDENCE

ADMINISTRATIVE AGENCY:  
PROVIDENCE DEPARTMENT OF PUBLIC PROPERTY  
FOURTH FLOOR - CITY HALL  
PROVIDENCE, RHODE ISLAND 02903

ARCHITECTS:

THE  
ROBINSON GREEN BERETTA  
CORPORATION  
2 JOHN STREET  
PROVIDENCE, RHODE ISLAND 02906



*September, 1986*

# PROVIDENCE SCHOOL SURVEY

PHASE I

F-51 D F 52 A B C

RGB

The Robinson Green Beretta Corporation  
2 John Street  
Providence, Rhode Island 02903  
401-772-1740

The Robinson Green Beretta Corporation

architecture  
engineering  
interior design

2 John Street  
Providence, R.I. 02906  
401 272-1730

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29 August 1986

Mr. Vincent Capuano  
Director of Public Properties  
City of Providence  
City Hall  
Providence, Rhode Island 02903

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Re: Providence School Survey  
RGB #3427-3

Dear Mr. Capuano:

It is with pleasure that we, herewith, submit the phase one report of the Providence Public School Survey. To date, every building has been visited and inspected, and preliminary determinations and estimates of work compiled. Individual briefs for many of the buildings are included, as is an overall estimated cost breakdown.

We trust that the information included, herein, will prove useful to your office. A section is also included with general remarks covering our first impressions. If you have any questions, or require further information, please do not hesitate to call on us.

Very truly yours,



Frederick R. Love, AIA  
Project Architect

FRL/amp

Enclosures

RGB

## GENERAL COMMENTARY

In reviewing the conditions of 31 Providence school buildings we found severe problems caused by poor maintenance and long-term neglect. This report itemizes specific findings on each building. We have informed City officials that in some cases a long-term policy of neglect may have compromised the integrity of school buildings in Providence and, if allowed to continue will present a danger to the health and safety of students and teachers.

Oliver Hazard Perry School is the worst case example of damage caused by the City's delayed response to necessary repairs. Badly clogged roof drains and severely deteriorated flashings have allowed water to slowly, over a long period of time, seep into exterior masonry walls above the main entrance to the building. This may present a serious structural problem and a potentially dangerous situation. It is obvious that inadequate repairs were attempted making an already bad situation worse. In this case the results of neglect were enhanced by ill-advised and improper maintenance procedures. Sealants that are incompatible with terra cotta were used on Oliver Hazard Perry's terra cotta veneer. Consequently, water was trapped in the wall system, and subsequent freezes and thaws laterally displaced the terra cotta. Stagnant water and seeping stimulated the growth of green organic matter on the terra cotta veneer.

Trapped water then followed a path of least resistance and caused severe structural damage to the building entrance. Water seeped beneath the entrance and froze, displacing entrance pavers. The water has over the years penetrated the building's structural concrete slab supporting the entire main entrance stair. Ultimately the water forced the reinforcing bars away from the central stair support member and badly corroded those bars. This is a potentially dangerous situation.

This condition has existed for many years, and has been enhanced by the implementation of insufficient and improper maintenance procedures as well as neglect.

Also at Oliver Hazard Perry School, we observed massive and unusual stair tread deterioration which has forced the closing of exit doors at the northwest corner of the building. These doors are now inoperative because of the collapse of a stone stair tread leading from the exterior platform to the adjacent grade. The stone tread which has severed in pieces and crumbled now lies within the foundation that was designed to support the stone on a compacted gravel fill base. Because of the severe deterioration of this portion of the building, water has entered the foundation through the affected stair construction. This has resulted in settling of

the supporting fill and the subsequent total collapse of the stone tread. It is our considered and professional opinion that this damage has been caused over a period of years through the neglect of a basic maintenance program. This must be corrected.

While Oliver Hazard Perry represents an example of one of the more seriously damaged buildings most of the buildings surveyed suffer from prolonged neglect and have begun to show signs of structural deterioration similar to Perry. If the City does not immediately begin to rectify these potentially dangerous situations many of the schools we evaluated will require major structural repairs. We, therefore, recommend immediate maintenance procedures for all school buildings to reverse a long-term policy of neglect. We strongly urge the Mayor and all city officials to take immediate action to implement the recommended repairs.

It should be emphasized that much of the damage we observed could have been prevented if professional maintenance procedures were observed as ongoing administrative policy. If this policy is changed, the process of deterioration can be reversed. We have observed that the existing maintenance staff throughout the system maintain flawless building interiors. However, our evaluation shows that insufficient manpower and time have been spent on the maintenance of the exterior shell of buildings.

At Nathanael Greene Middle School, a roof hatch has been opened for so long that its wooden support structure has rotted and the corresponding ceilings below were severely damaged. Copper flashings at many schools have been removed by theft or vandalism and have not been replaced. In our opinion, these problems and the resulting damage could have been avoided through proper maintenance procedures.

In general, damage to all school buildings is the result of:

Neglect - We believe that the City did not adequately provide for sufficient professional maintenance required to maintain the permanent structural integrity and safety of the buildings.

The Elements - The hostile Rhode Island climate with wide temperature variations enhanced problems caused by poor maintenance and neglect.

Vandalism and Theft - Access to many school's roofs has been gained through exhaust piping and fencing intended for security. Damage caused by vandals has gone unrepaired and has allowed the damage to result in more extensive deterioration of the buildings.

Thermal Shock - Energy conservation programs implemented during the energy crisis of the late 70's and early 80's have reduced building ambient temperatures during normally colder months. This reduction in temperature combined with other problems and water infiltration and other problems caused by poor maintenance may have enhanced the deterioration process. The total effect of thermal shock will be studied and recorded in our final report.

School buildings visited during this study varied in age from 100 years plus or minus (Asa Messer School) to 15 plus or minus years (R.F. Kennedy Addition and Martin Luther King). All were well constructed employing the best materials available at the time of their design. Many of the older structures are updated to contemporary standards with new lighting systems, energy efficient windows, etc. All represent a substantial investment by the City in the educational process with replacement value possible approaching 250 million dollars.

When the weathering integrity of a building or buildings has been restored, a policy of preventative maintenance should be immediately employed to obviate a reoccurrence of the conditions observed during this survey. With proper care, these buildings can be modified to suit changing educational standards and should serve the City for the foreseeable future.

## CONCLUSION

It is our opinion that the damage and deterioration we observed was preventable. Necessary preventative maintenance over the past decade and beyond was either non-existent or, at best, insufficient to maintain the integrity of the buildings. It can be said that in the past, the City failed to perform necessary maintenance to protect the buildings from deterioration caused by use, time, weather, theft, and vandalism.

As a result, the City is confronted with undertaking extraordinary measures to preserve the weathering and structural integrity of school buildings in Providence. A massive initial commitment of resources is required to rectify the mistakes of the past, and ongoing revised maintenance policies and programs are required to ensure the future safety of the buildings we have evaluated.

PROVIDENCE SCHOOL SURVEY PRELIMINARY BUDGET SUMMARY

NOTE:

Figures used include work on roofs and walls, and include General Contractor's fees (where appropriate) of 10%, Professional Service Fees of 10%, and a Contingency Allowance of 10%. In future compilations, all figures will be refined and the percentages used may change. The budgets do not include amounts to repair internal water damage.

<u>SCHOOL</u>	<u>NUMBER</u>	<u>ESTIMATED REPAIR AMOUNT</u>
Central High	1	\$ 361,000.
Central Heating Plant	2	58,600.
Classical High	3	931,000.
Hope High	4	1,930,700. *
Mount Pleasant	5	1,694,000. *
George West	6	863,900.
Gilbert Stuart	7	1,379,500.
Nathan Bishop	8	810,400.
O.L. Perry	9	1,252,600.
Roger Williams	10	818,800.
Bridgham	11	253,400.
Asa Messer	12	299,400.
Windmill Annex	13	224,500.
Broad Street	14	443,300.
Asa Messer Annex	15	227,600.
Camden Avenue	16	107,100.
Flynn	17	541,600.
Fox Point	18	654,000.
Lauro Memorial	19	691,100.
Laurel Hill	20	396,200.
M.L. King	21	231,900.
Pleasant View	22	136,100.
Reservoir Avenue	23	140,300.
Kennedy	24	268,000.
Webster Avenue	25	249,900.
D'Abate	26	93,300.
Windmill	27	983,000.
Administration Building	28	474,500.
Nathaniel Greene	29	1,705,100.
Fogarty	30	330,100.
Sackett Street	31	127,400.
Miscellaneous Related Repairs		<u>6,321,700.</u>
PRELIMINARY BUDGET TOTAL . . . . .		\$25,000,000.

\* Refer to General Commentary



Building Number: One

Building Name: CENTRAL HIGH SCHOOL

Address: 70 Fricher Street

I. ROOF CONSTRUCTION:

Built Up Roof on concrete deck with limestone ornamentation and a combination of copper and roll asphalt flashings.

Overall Condition: Fair

Description of Conditions:

The roof membrane is in good condition and requires repair. The accessories, however, are in poor condition. Copper and tar paper coverings on various structures are disintegrating and are at the end of their useful life. Base flashings are ruptured in many areas and allow considerable water penetration. Clogged drains and broken skylight glass add to water problems and are in need of immediate attention. Rusty ladders are a safety hazard as are the broken stone parapet blocks.

Recommended Repairs:

The roof membrane requires spot repair, but most copper and roll roofing flashing should be replaced with new neoprene rubber materials. Two skylights over now unused stairwells should be removed and closed. Roof ladders should be repaired and painted. Recent storm damage should be immediately repaired.

Building Number: One

Building Name: CENTRAL HIGH SCHOOL

Address: 70 Fricher Street

II. WALL CONSTRUCTION:

Brick with limestone ornamentation.

Overall Condition: Good

Description of Conditions:

The brickwork of the main walls is in excellent condition. The brick joints were scrubcoated within the past two years. Small areas of brickwork accessible from the roof are eroded deeply and apparently were not treated.

Recommended Repairs:

The major need for repairs is limited to the stone joints of the decorative parapet coping and the stone end joints of belt courses and sills. Some spot pointing is needed in limestone at the entrances. All limestone requires cleaning to remove atmospheric dirt and rust staining. Small areas of brickwork at the cornice line should be scrubcoated.



Building Number: Two

Building Name: CENTRAL HIGH SCHOOL - HEATING PLANT

Address: 70 Fricher Street

I. ROOF CONSTRUCTION:

Built Up Roof on concrete grid slab with lightweight fill providing the slope to drains.

Overall Condition: Poor

Description of Conditions:

The roof does not slope to the drains allowing a ponding condition to exist. Large blisters have formed and the membrane is failing.

Recommended Repairs:

We recommend complete removal of the existing roof, flashings, and substrate. New tapered insulation and an EDPM roof and accessories should be installed.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Two

Building Name: CENTRAL HIGH SCHOOL - HEATING PLANT

Address: 70 Fricher Street

II. WALL CONSTRUCTION:

Brick and cast-in-place concrete. Chimney construction is cast-in-place concrete.

Overall Condition: Good

Description of Conditions:

The concrete surface was blasted with abrasive to attain texture. A corollary result is increased weather exposure and tendency to absorb. One vertical crack was found in the east wall of the chimney near the base. This crack was approximately ten feet long.

Recommended Repairs:

The concrete should be waterproofed with a suitable material to inhibit water absorption and, thereby, protect the internal reinforcing steel from further corrosion.



Building Number: Three

Building Name: CLASSICAL HIGH SCHOOL

Address: 770 Westminster Street

I. ROOF CONSTRUCTION:

Built Up Roof on concrete waffle grid with lightweight fill providing the slope to drains. Stair towers have metal batten type roofing.

Overall Condition: Poor

Description of Conditions:

The many roof areas are all in the mid to late stages of failure. The accessories presently leak, or soon will and moisture is contained in the insulation. Most drains do not have strainers and are clogged with a variety of vegetable matter and other debris including the ballast stone. Skylights, flashings, hatches, etc., are all deteriorating due to the elements and neglect. Complete replacement of all roofs and repair of safety related items are recommended.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Three

Building Name: CLASSICAL HIGH SCHOOL

Address: 770 Westminster Street

## II. WALL CONSTRUCTION:

Brick with precast and cast-in-place concrete.

Overall Condition: Good

### Description of Conditions:

The concrete surfaces were blasted with abrasive to achieve texture. A corollary result is increased weather exposure and increased tendency to absorb water. Some initial corrosion of reinforcing steel has occurred and minor spalling of the concrete surface is evident. A structural crack exists on the concrete soffit facing Broad Street, some very fine web cracking on the southeast corner and small expansion cracks in the concrete along the east wall of the lower cafeteria building. A larger movement crack exists in the east wall where a building joint was constructed and rust staining is resulting from corroding window screens. Some of the cracks are leaking. This is evidenced by deposits of carbonate salts at these locations.

### Recommended Repairs:

The concrete should be cleaned where soiled areas or graffiti exist and then waterproofed to protect against continued water absorption. Existing sealants require only spot repairs.

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Building Number: Four

Building Name: HOPE HIGH SCHOOL

Address: 324 Hope Street

I. ROOF CONSTRUCTION:

Built-Up Roofing, asphalt shingle, flood coated bituminous fabric and metal on concrete deck. All drains are internal. Monumental tower and ventilators are steel framed with wood or copper sheathing.

Overall Condition: Fair to poor

Description of Conditions:

The majority of roof surfaces have been renewed or replaced within 10 years. The membranes and asphalt shingles are in average to good condition. Wide gutter/washways have been flood coated recently, but their joints and outer edges have failed and a substantial amount of moisture is entering the interior. All original cap flashing has failed and extensive wall damage can be observed.

Roof accessories (ventilators, skylights, parapet flashings) are in poor condition. Some items show evidence of recent repair, however, the green house has only 40% or less of its glass remaining and major damage has commenced in adjacent rooms. The main stack liner has fallen to the bottom of the stack. The upper portion of the stack and fly loft are badly deteriorated.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Four  
Building Name: HOPE HIGH SCHOOL  
Address: 324 Hope Street

Recommended Repairs:

The asphalt shingles require minor repair as does the built-up roof membrane. However, all edge conditions and gutters must be rebuilt, using a rubber membrane system. Remaining exposed metals (flashing, dormers, ventilators, etc.) must be coated with protective marine type coatings. Small area of roof should be completely replaced. The main tower woodwork should be repaired and painted again. Skylights should be repaired, and the main classroom greenhouse either repaired or removed.

II. WALL CONSTRUCTION:

Brick with limestone trim elements.

Overall Condition: Poor

Description of Conditions:

Extensive leakage exists which shows up inside the building during most storms. A major cause is the absence of cap flashings over much of the building. The original copper has been cut away leaving the base flashings open to funnel the water into the walls.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Four  
Building Name: HOPE HIGH SCHOOL  
Address: 324 Hope Street

Brick joints are eroded and also leak. Crumbling plaster is caused by leakage from this source.

Cracks have formed in the brickwork at many corners of the building parapets as well as in the corners of the lower main walls.

A portion of the top of the main wall facing Hope Street has bulged outwards to such an extent that it appears to constitute a hazard to anyone walking at the base of the wall.

Limestone joints are all in need of repair. Much of the limestone has been stained by corroding steel.

Recommended Repairs:

The stone trim should be cleaned to allow full assessment of the damage. Pointing/repair/replacement are all necessary. Similar work should occur with the damaged brick masonry. Some areas should be dismantled and rebuilt, while others require only scrubcoating.



Building Number: Five

Building Name: MOUNT PLEASANT AVENUE SENIOR HIGH SCHOOL

Address: 434 Mount Pleasant Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck. Wall copings, parapets and trim are limestone with copper and bituminous fabric flashing.

Overall Condition: Fair

Description of Conditions:

In general, the roof membrane is in good condition. However, all the parapet flashings, base flashings, connections with equipment, etc. have exceeded their service life. Extensive, long term water damage is evident in many areas, caused by moisture entry at flashings. Skylights and rooftop mechanical equipment are damaged and have been in that condition for some time, leading to internal moisture penetration and damage.

Recommended Repairs:

Replace 20% of the roof membrane and totally replace or renew all flashings, copings, wall sheathing etc. Cover or close over damaged and non-functioning mechanical equipment. Remove, repair and renew, in thermal type glazing, skylights and reinstall the outer protective mesh.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Five  
Building Name: MOUNT PLEASANT AVENUE SENIOR HIGH SCHOOL  
Address: 434 Mount Pleasant Avenue

II. WALL CONSTRUCTION:

Brick with limestone ornamentation.

Overall Condition: Very poor

Description of Conditions:

Leakage from extensive areas of deeply eroded brick joints has caused numerous cracks in the masonry. Most were noticed at the north end and rear walls. Other results of this leakage is cracking and deep spalling of limestone window lintels. Other spalling of limestone has been caused by corrosion and rust expansion of steel cramps installed originally to hold the limestone in place. Corrosion of window lintels is causing brick displacement at window openings. The cracking of brickwork and deterioration of limestone, due to leakage through the brickwork, are conditions which will lead eventually to serious structural damage to the building.

Building Number: Five  
Building Name: MOUNT PLEASANT AVENUE SENIOR HIGH SCHOOL  
Address: 434 Mount Pleasant Avenue

All limestone joints at the parapets, pier heads, towers and belt courses are open and receptive to water. Leakage at the pier heads has caused displacement and loss of limestone.

Leakage at the pier water tables has begun to cause cracks and deep mortar failure in the brickwork below. Moss deposits on limestone and limestone erosion attest to the long-term persence of moisture in these units.

Recommended Repairs:

The limestone trim should be cleaned to ascertain the real extent of the damage. Individual blocks should be replaced/repared/reset as required, and all open joints pointed. Limited areas of brickwork should be taken down and rebuilt, pointing all open joints. Much of the previous sealant repairs to open joints should be cleaned out and redone.

Investigation of water penetration damage to masonry joints in the bell tower interior must be continued in the next phase of this work.

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Building Number: Six

Building Name: GEORGE J. WEST SCHOOL

Address: 145 Beaufort Street

I. ROOF CONSTRUCTION:

Built-Up Roof on reinforced concrete deck, sloped to internal drains. Masonry vents, skylights and parapet walls are metal flashed. Pavilion type plan generates multiple levels and areas.

Overall Condition: Good to poor

Description of Conditions:

The multiple area roof has been partially replaced over time. All the roofs are similar in construction and no mixture of materials and systems has occurred. Some areas of the older sections are beginning to fail, particularly at the edges. Over time, some sections of cornice and skylight flashing has been replaced with ferrous materials, and severe galvanic corrosion has occurred. Damage to interior finishes is occurring at skylights due to some leaking and condensation. Protective grilles at skylights are missing.

Building Number: Six  
Building Name: GEORGE J. WEST SCHOOL  
Address: 145 Beaufort Street

Recommended Repairs:

Replacement of 20% of the existing roof with a rigid insulation board and rubber membrane system is needed now. Total replacement of the flashings is required. The larger skylights should be replaced with an insulating acrylic system (protected with metal mesh) and several smaller lights closed over with roofing. All roof ladders should be repaired and painted. All roof hatches should be replaced with new units.

II. WALL CONSTRUCTION:

Brick with ornamental precast concrete trim.

Overall Condition: Fair to poor

Building Number: Six  
Building Name: GEORGE J. WEST SCHOOL  
Address: 145 Beaufort Street

Description of Conditions:

Although the brickwork of the building has been leaking, the extent has not been enough to cause any serious cracks. Some displacement of brick masonry has taken place near the top of the walls at outside corner. Noted at corner of Mt. Pleasant Avenue and Beaufort Street.

Leakage through the walls, i.e. through the brickwork, precast concrete joints and joints separating precast from the brick masonry, is causing extensive deterioration of the precast elements. The precast was repaired at some time in the past and most of these patched areas are failing again. The precast contains steel reinforcement, and corrosion has caused spalling of precast window trim elements.

Portions of the brickwork were scrubcoated in the past, but these areas have eroded since that work was completed.

Building Number: Six  
Building Name: GEORGE J. WEST SCHOOL  
Address: 145 Beaufort Street

Repairs to the precast joints at the main entrance were improperly done and the joints have deteriorated.

Precast should be patched when practical or replaced. All precast should be cleaned and then waterproofed to protect the steel reinforcement from corrosion.

Recommended Repairs:

Areas of brickwork should be rebuilt and painted. The entire building should be cleaned and scrubcoated. The condition of the precast trim is of great concern and the material must be patched/replaced and pointed. The caulking at the window frames has failed and should be replaced.



Building Number: Seven

Building Name: GILBERT STUART MIDDLE SCHOOL

Address: 188 Princeton Avenue

I. ROOF CONSTRUCTION:

Not included in RGB scope of work per instructions from City of Providence.

II. WALL CONSTRUCTION:

Brick with terra cotta and limestone trim elements.

Overall Condition: Fair to poor.

Description of Conditions:

The majority of the parapet coping has been removed and the top of the walls covered with a lead coated copper flashing. Where this has not occurred, the terra cotta coping is covered with asphaltic material. Although the copper appears to have been a practical remedy, the building's appearance suffers from the loss of this masonry.

One portion of copper flashing at the southeast corner has either blown off the wall or was vandalized, leaving approximately 60 feet of parapet masonry exposed.

The coping at the top of the fly loft tower is mostly intact. The brick masonry of this structure however, has cracked extensively at the corners. This condition is typical of the large schools of this design. The northeast corner of the fly loft tower is displaced at a large crack.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Seven

Building Name: GILBERT STUART MIDDLE SCHOOL

Address: 188 Princeton Avenue

Vertical cracks exist on the south facing walls of the light wells extending from the top relieving angle down to the first row of windows.

Leakage through the cornice has caused deterioration of several cornice units. The majority of this problem exists where the cornice was previously repaired.

Graffiti is a major problem at this building. Both brick and limestone have been damaged from removal of graffiti by sandblasting. Areas of brickwork at the base of the building are now painted to discourage our budding artists.

In the main walls, particularly at the corners, cracks have occurred at the corners of some of the window openings - indicative of leakage and freezing moisture inside the masonry. All brick joints are uniformly eroded.

Building Number: Seven

Building Name: GILBERT STUART MIDDLE SCHOOL

Address: 188 Princeton Avenue

Recommended Repairs:

The solution already in use at Roger Williams Middle School is recommended here. Remove all existing terra cotta cornice caps and rebuild the walls using precast concrete cornice blocks. This should occur when the parapet flashings are being reviewed to achieve a proper detail. The upper corners of the fly loft walls should be dismantled and rebuilt as has occurred previously at Oliver Hazard Perry Middle School. Cracks in the lower masonry walls should be cut out and treated as an expansion joint. Areas of eroded mortar should be scrubcoated to minimize water penetration. Grafitti should be approached in two ways: First chemically clean the building of all paint and markings (do not sandblast), and treat the reachable areas with an anti-grafitti coating that will allow soap and water removal of future art work; We also suggest providing paintable surfaces with some organizational control where the "artists" might display their work.



Building Number: Eight

Building Name: NATHAN BISHOP MIDDLE SCHOOL

Address: 101 Sessions Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck. Wall copings, trim and other ornamentation is terra cotta and limestone. Flashings are copper and roll asphalt.

Overall Condition: Fair to poor.

Description of Conditions:

The roof membrane is in good to poor condition, depending on location and age of the work. All architectural metal work is effected by atmospheric corrosion and galvanic reaction. Where copper has been removed, it has been replaced with roll roofing and other bituminous fabrics. Remaining copper indicates metal fatigue and corrosion caused by asphalt patching compounds.

Recommended Repairs:

Removal of all metal flashing and its replacement with bituthane and neoprene rubber products. New access hatches and metal mesh over all remaining skylights. Approximately 40% of the roof membrane requires replacement with a rubber membrane roof system, and if the remainder of the roof begins to cause leakage problems, it should be replaced with the same rubber membrane roof system.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Eight

Building Name: NATHAN BISHOP MIDDLE SCHOOL

Address: 101 Sessions Street

II. WALL CONSTRUCTION:

Brick with terra cotta cornice. All other trim and ornamentation is limestone.

Overall Condition: Fair to poor.

Description of Conditions:

Portions of the parapet, particularly the corners, are displaced because of leakage and freezing action. Most of the parapet has been repointed but it appears to have been hastily done.

The parapet is capped with a flashing instead of a coping as is typical with other similar buildings. This flashing is poorly detailed and is open at the top of the wall in many locations.

The cornice has stood up well over the years, having lost very few of its original elements, except for the attic over the main entrance. This is due to a cap flashing which covers most of the cornice ledge.

Building Number: Eight

Building Name: NATHAN BISHOP MIDDLE SCHOOL

Address: 101 Sessions Street

Corrosion from the original steel windows and the existing ornamental iron has stained adjacent limestone.

Leakage through stone joints has caused erosion and cracks in the limestone window lintels.

The lower brickwork was scrubcoated at some time in the past, however, most of the grout has weathered away. Most evidence of long term damage in the lower walls was found to originate in the stone work or the cornice area. More recently, leakage has been occurring through the brick joints of the main walls. This is evidenced by deep, freeze-thaw cycling in some of the brick joints and deterioration of some of the limestone corner elements.

Recommended Repairs:

The walls should be treated with a scrubcoat process again and approximately ten to fifteen percent of the parapet must be rebuilt. The cap and cornice flashing should be repaired/replaced.



Building Number: Nine

Building Name: OLIVER HAZARD PERRY MIDDLE SCHOOL

Address: 370 Hartford Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck, wall copings trim and other ornamentation is terra cotta. Flashings and accessories are copper and roll asphalt. Roof drains are internal.

Overall Condition: Fair

Description of Conditions:

The roof membrane is in good to poor condition; depending on location and age of the work. Most metal work shows the effects of galvanic and atmospheric corrosion. The bituminous and asphalt flashings are beyond their useful life span. Parapet wall flashing, hatch covers, through wall flashings etc. are damaged or missing. Many skylights are broken and/or in poor condition with protective grilles missing.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Nine  
Building Name: OLIVER HAZARD PERRY MIDDLE SCHOOL  
Address: 370 Hartford Avenue

Recommended Repairs:

Remove all fabric and roll type flashings and replace with bituthane and neoprene rubber products. Replace fly loft roofs with rubber membrane systems. Remove small and unused skylights and roof over. Replace several large units with insulating polycarbonate type glazing systems. Repair damaged vent covers. Ladders and other safety appliances should be repaired and painted.

II. WALL CONSTRUCTION:

Tapestry brick with terra cotta trim elements.

Overall Condition: Fair to poor

Description of Conditions:

Structural cracks exist in the corner brickwork of the fly loft tower. Portions of these corners and walls were rebuilt at some time in the past. Brickwork of other upper walls accessible from the roofs has been repointed in localized areas. Many areas of eroded joints exist. Large areas of upper brickwork were scrubcoated years ago by the masking process.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Nine  
Building Name: OLIVER HAZARD PERRY MIDDLE SCHOOL  
Address: 370 Hartford Avenue

Coping end joint sealant has been repaired with new sealant at certain portions of the parapets. Over two-thirds of the coping joints have failed and are leaking. In the lower main walls, most of the terra cotta is in good condition. Leakage from the brickwork has caused only little of the terra cotta to crack and in a few isolated instances, to fall away. No cracks were noticed in the brickwork of the main walls. Serious deterioration of terra cotta exists at the entrances. Here large amounts of terra cotta were used and long-term leakage has taken a severe toll.

Specific instances of terra cotta deterioration include displacement at the ornamental towers over the front entrance due to joint failure; saturation, staining and joint failure at the front entrance due to a leaking porch roof; spalling and loss of protective glaze at the secondary entrances due to leakage from porch roofs and terra cotta joints.

A granite tread has collapsed into the foundation areas at the Northeast entrance. Concrete sills at the roof penthouse have cracked and spalled due to leakage around the old steel windows and corrosion of steel reinforcement.

Building Number: Nine  
Building Name: OLIVER HAZARD PERRY MIDDLE SCHOOL  
Address: 370 Hartford Avenue

Recommended Repairs:

Dismantlement and reassembly of some areas is necessary. All types of fabric are involved in this: Brickwork, terra cotta, stone trim, etc. When complete, the entire building should be scrubcoated. Certain areas should receive anti-graffiti and waterproofing coatings.



Building Number: Ten

Building Name: ROGER WILLIAMS MIDDLE SCHOOL

Address: 278 Thurbers Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck sloped to internal roof drains. Parapet walls are copper sheathed and terra cotta copings.

Overall Condition: Fair

Description of Conditions:

Membranes are in good condition, perimeter flashings appear to have been recently replaced so internal damage may be misleading. Copper sheathing at gravity ventilator hoods was replaced with roll asphalt which has blown loose. Considerable damage exists at stage area fly loft roof and parapets.

Recommended Repairs:

Spot roof replacement at fly loft. Portions of flashing require renewal. Cover all terra cotta copings with rubber membrane system. Miscellaneous repairs include access ladders, minor skylight work and new hatches.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Ten  
Building Name: ROGER WILLIAMS MIDDLE SCHOOL  
Address: 278 Thurbers Avenue

## II. WALL CONSTRUCTION:

Brick with terra cotta copings and cornices. All other ornamentation is limestone.

Overall Condition: Fair to poor

### Description of Conditions:

Brick joints are deeply eroded with occasional voids into the walls.

The parapets were scrubcoated some time ago and most of this material has weathered away. The parapet coping end joints are open and leakage down onto the through-wall flashing keeps the bed joints wet for long periods of time, as some moss is growing here.

Cracks were noted at the east end of the building near the corners extending down from the masonry window openings. This same type of crack exists on the west end at the upper northwest corner. A diagonal crack can be seen at the upper southwest corner just beneath the cornice. At the rear of the building, cracks have formed over the arched windows in the fly loft tower.

Building Number: Ten  
Building Name: ROGER WILLIAMS MIDDLE SCHOOL  
Address: 278 Thurbers Avenue

Some isolated instances of spalling terra cotta are likely due to rusting of steel cramps. Other evidence of leakage through the brickwork is exfoliating limestone in the lower belts.

On the front of the building several modillions have been partially lost from the cornice. These have been patched. The limestone joints in the front entrance portico were repaired some time ago but all of the joint sealant has failed.

Graffiti is a problem at the lower rear brickwork and at all of the entrances. Sandblasting has been used to remove this but it always reappears with fresh originality.

Much of the limestone is stained by the original steel window system and by the rusting ornamental ironwork on the balconies.

Recommended Repairs:

The building should be cleaned to allow for assessment of all masonry damage. Areas should be covered with anti-graffiti coatings, brickwork scrubcoated, and areas of upper walls rebuilt/repointed. All terra cotta and stone trim require joint work. The rear deck over the boiler room should have a traffic bearing membrane installed to stop its deterioration and water entry of lower spaces.



Building Number: Eleven

Building Name: SAMUEL W. BRIDGHAM MIDDLE SCHOOL

Address: 1655 Westminster Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete substrate. Flashings are aluminum, copper, fabric and rubber membrane. Stair tower roofs are standing seam metal.

Overall Condition: Fair

Description of Conditions:

Despite the recent date of construction, the entire roof is showing symptoms of distress. Minor leaks are increasing each season according to the staff. Blisters are evident and extensive. Apparently the seams of the multiple-ply roof have opened, as in some areas the blisters form ridges following the seams. Condition of most vents and skylights is fair to excellent.

Recommended Repairs:

Full membrane replacement is recommended. Other methods could be attempted but will probably not work. The insulation appears dry and may remain. The entire roof should be resurfaced with a membrane system.

Building Number: Eleven  
Building Name: SAMUEL W. BRIDGHAM MIDDLE SCHOOL  
Address: 1655 Westminster Street

II. WALL CONSTRUCTION:

Brick. Soffits are constructed with an insulated exterior wall system incorporating a polymer mortar stucco finish.

Overall Condition: Excellent

Description of Conditions:

The soffits have developed superficial cracks in the exterior finish. These do not appear to be causing a problem. A fine vertical crack exists at the southwest corner.

Recommended Repairs:

Some spot sealant replacement is required where the original material has been picked out of the joint. Graffiti removal is required.



Building Number: Twelve

Building Name: ASA MESSER SCHOOL

Address: 158 Messer Street

I. ROOF CONSTRUCTION:

Asphalt shingles on wood substrate. A Built-Up Roof covers the high deck and lower roofs. The former tower location is covered with roll asphalt roofing.

Overall Condition: Poor

Description of Conditions:

Built for a slate surface, the substrate is heavy wood framing with wooden sheathing. A flat deck at the apex was previously metal covered and presently has a gravel built-up roof in fair but worn condition. The accessories on the deck are damaged and the skylight is broken. The former tower location is now covered with rolled asphalt roofing and the seams are open.

The pitched roof surfaces have asphalt shingles in poor condition with some areas totally exposed. Vents were installed midway up the slopes but they are not totally effective. Copper gutters are in fair condition with some limited damage. Leaders are damaged or missing.

The flat porch entry roofs are in poor condition with exposed areas. Old, spongy and ponding, they are causing extensive damage below.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twelve  
Building Name: ASA MESSER SCHOOL  
Address: 158 Messer Street

Recommended Repairs:

The entire roof should be removed and replaced. While the ballasted upper deck might remain, its need for spot repair and marginal expected life span make it a candidate for replacement. The skylight, now no longer lighting the assembly hall below (the hall had been divided into classrooms with a lower ceiling), should be closed with artificial illumination installation in the attic. New vents should be installed to prevent heat build-up in the attic and prolong the life of the roof materials. New leaders and gutter repairs are also required.

II. WALL CONSTRUCTION:

Brick with brownstone and terra cotta belt courses.

Overall Condition: Good

Description of Conditions:

Although old, the brickwork has been scrubcoated not too long ago and the walls appear weather tight. An exception to this is just below the roof edge where the brick is covered by the metal gutter system. All coping stone joints are open.

Building Number: Twelve  
Building Name: ASA MESSER SCHOOL  
Address: 158 Messer Street

A prior application of scrubcoat material was not properly removed at some portions of the wall. The only serious masonry condition is an area of saturated and cracked brickwork at the main entrance. Here leakage exists at a roof drain which passes through the wall overhead.

The iron fire escapes are damaged and unsafe.

Recommended Repairs:

The entire building should be cleaned and some areas rebuilt, painted and/or scrubcoated. All the trim, stone, and terra cotta joints need attention. All the fire escapes should be repaired/rebuilt and painted.



Building Number: Thirteen

Building Name: WINDMILL ANNEX INTERMEDIATE SCHOOL

Address: 425 Branch Avenue

I. ROOF CONSTRUCTION:

Built-Up Roofing on wood deck, sloped to internal drains. Single main rectangular roof with porch/entrys. Flashings are copper.

Overall Condition: Fair

Description of Conditions:

The roof membrane is approaching the end of its useful life. Several 'patched' areas were noted. The patches are strips of roll-roofing, cemented in place and flood coated. These now show evidence of embrittlement as well. The metal work is in good condition. Some loose joints and pin holes were noted. Only in the areas of past repairs does galvanic corrosion and lexanite appear. The copper and iron ventilator structures have missing bolts, apparently due to galvanic reactions. Roof hatches have broken glass and are worn.

REPAIR PRIORITY NO. \_\_\_\_\_

Recommended Repairs:

The rate of repair to the roof as a whole will soon dictate major work. We recommend that total renewal occur as soon as possible. A new rubber membrane should be installed, with matching flashings. New roof hatches and metal access ladders are recommended. The single skylight/vent assembly should be replaced with several ventilators and the opening closed. The interior should have artificial lighting installed to replace the loss of natural light. The lower porch roofs (3) should be treated similarly.

II. WALL CONSTRUCTION:

Brick with precast concrete cornice, window surrounds, entrance trim, and water table.

Overall Condition: Fair

Description of Conditions:

All brickwork is generally eroded deeply. Vertical cracks were found at the southeast corner but no other evidence of leakage was found.

Recommended Repairs:

A few precast cornice sections have failed and require replacement. All stone joints require repairs and all stonework should be treated to prevent water penetration.

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Building Number: Fourteen  
Building Name: BROAD STREET SCHOOL  
Address: 1450 Broad Street

I. ROOF CONSTRUCTION:

Constructed in three phases, the building is in two basic sections: An older section with steep pitched roofs, and the newer section with flat roofs. The oldest portions are of heavy timber framing with wood sheathing. Originally covered with slate, it now has black asphalt shingles. The flat top deck is covered with lead coated copper.

The lower, newer roof is flat and is a built-up type with stone ballast. The parapet walls are covered with well vented copper sheathing.

Overall Condition: Good

Description of Conditions:

All roof surfaces are old and servicable. The copper deck is worn with some pinholes. The asphalt shingles could give five more years service. Some minor deterioration of flashings is evident in the newer building. The ornamental copper cornice and its internal wood framing is failing. Some areas have been previously repaired. Birds are living in it, exacerbating the problem. Leaders are damaged or missing.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Fourteen  
Building Name: BROAD STREET SCHOOL  
Address: 1450 Broad Street

The roofs over the secondary entrances cannot drain and are leaking into the entrance vestibules causing extensive plaster failure.

The newer addition is constructed of brick with ornamental limestone and terra cotta elements. Leakage into the brickwork is causing cracks in the lower limestone belt course on the south side of the addition. Brick joints were scrubcoated years ago and have eroded since then. This should be done to the original building as well. All unit masonry end joints should be cut out and filled with rubber-like sealant.

Three of the nine chimneys at the roof have open joints and failing brickwork. Two of these have been leaking extensively and one appears to have been struck by lightning.

Recommended Repairs:

The entire building should be cleaned to remove the accumulated grime and expose all the damaged joints. Various areas of brickwork and chimneys require rebuilding. The terra cotta and limestone trim needs to be repointed. The complete building should be scrubcoated to seal hairline cracks. Sealants at doors and windows should be renewed.

Building Number: Fourteen  
Building Name: BROAD STREET SCHOOL  
Address: 1450 Broad Street

Recommended Repairs:

The cornice, wooden substructure and gutters should be repaired. New leaders (not copper) should be installed. All of the exposed copper and iron on top of the old roof deck should be resoldered as required and coated with marine type coatings. Missing screens on skylights should be replaced. Base flashings on the flat roof should be renewed in rubber membrane. Porch roofs should be replaced with rubber membrane systems and proper drainage provided.

II. WALL CONSTRUCTION:

Brick with terra cotta belt courses, watertable and window sills. Ornamental cornice is sheet copper fastened to wood substructure.

Overall Condition: Fair

Description of Conditions:

Brick joints are deeply eroded in localized areas. Leakage through brickwork is causing deterioration of the middle terra cotta belt course. Leakage is also causing damage to the interior walls at the southwest corner.



Building Number: Fifteen

Building Name: ASA MESSER ANNEX

Address: 245 Althea Street

I. ROOF CONSTRUCTION:

Asphalt shingles on wood substrate. A large hip shape with copper ventilator structure and copper gutters. Small entry porches have built-up roofs.

Overall Condition: Fair

Description of Conditions:

Built for a slate surface, the substrate is heavy wood framing with a wood deck. Hip-shaped, a single hatch at the peak gives access to the roof. Black asphalt shingles were previously installed and they are near the end of their useful life. Vents are installed midway up the slopes, but they are not effective. Limited shingle areas at the peak have disintegrated. The roof hatch was a wood structure sheathed in copper, but a job-built acrylic piece covers the opening at present. A large copper ventilator structure with roll asphalt roof deck stands at the roof peak. In good shape, some seams have opened and its wooden eaves have not been painted recently.

Building Number: Fifteen  
Building Name: ASA MESSER ANNEX  
Address: 245 Althea Street

Copper lined gutters at the roof edge are built into the wooden cornice, which appear worn but tight. Several leaders are missing. Abandoned television antennas are hanging in parts causing damage as they react to the wind.

The lower roofs are in poor condition.

Recommended Repairs:

Replace all roof surfaces. Repair loose and open copper joints. Coat all copper work with protective paint to extend its life. A modified venting system for the attic would prolong the life of a new roof.

II. WALL CONSTRUCTION:

Brick with limestone and terra cotta trim elements.

Overall Condition: Fair to good

Building Number: Fifteen  
Building Name: ASA MESSER ANNEX  
Address: 245 Althea Street

Description of Conditions:

Brick joints are generally eroded. Localized areas of deep erosion exists and this has resulted in some spalling of the brickwork.

Open mortar joints at the top of the chimney evidence leakage at this location. The top of the chimney is displaced and must be rebuilt.

Recommended Repairs:

Clean and scrubcoat the walls. Rebuild and repoint localized areas of brick and stone.

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Building Number: Sixteen  
Building Name: CAMDEN AVENUE SCHOOL  
Address: 60 Camden Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on cement and wood fiber composition decking with internal and external drains. Roll asphalt and metal flashings throughout.

Overall Condition: Good

Description of Conditions:

Basically in good condition, the work has many useful years left. One area of serious leakage is in the corner of the "L" plan, where no provisions for building expansion or movement were made. The skylights were/are a problem and many have been removed.

Recommended Repairs:

Remove and replace all edge flashings with a compatible neoprene membrane system. Remove and close the remaining skylights with suitable augmentation of interior lighting. Introduce a roof expansion joint at this inside corner. Replace missing rainwater leaders.

Building Number: Sixteen  
Building Name: CAMDEN AVENUE SCHOOL  
Address: 60 Camden Avenue

## II. WALL CONSTRUCTION:

Brick, limestone window sills, cast-in-place concrete.

Overall Condition: Fair

### Description of Conditions:

Little joint erosion has taken place. Some cracks caused by rusting window lintels indicates that areas of brickwork are leaking.

The most noticeable condition is cracking of masonry joints at several window openings. These indicate movement, perhaps due to settling. Another cause of some of these cracks is thermal expansion. It would be safest to treat all of these as cracks in periodic movement.

Thermal expansion has caused certain masonry deficiencies. The long rear wall of the classroom building facing the swimming pool has one control joint placed at its midpoint. The joint is squeezed shut by the expanded brickwork. More control joints are needed here.

Another example can be found in the continuous concrete window lintel in the same wall. This lintel has no provision for expansion and contraction and is cracked at fairly regular intervals for its entire length.

Specific locations of cracks in brickwork are:

- at the Southeast corner of the classroom building level with the top of the first floor windows (caused by rusting steel)
- at the top Northeast corner of the gymnasium
- at the top of the East gymnasium wall next to the folding wall closet
- at the corners of the classroom building by the playing field
- in the concrete foundation of the classroom building

Recommended Repairs:

the creation of new expansion joints is critical. Minor repairs to the masonry as well as renewal of all the perimeter window sealants. Waterproofing some particularly exposed wall areas. Replace missing vent grilles and trim painting.



Building Number: Seventeen

Building Name: EDMUND W. FLYNN SCHOOL

Address: 220 Blackstone Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck, sloped to internal drains with scuppers leading onto lower roofs. Metal and fabric flashing.

Overall Condition: Poor,

Description of Conditions:

The many roof areas are in the mid to late stages of failure. It was reported that one area over the kitchen was renewed after the Health Department closed the facility due to the leaks. Internal damage was noted in the auditorium, stage and band rooms. The wood floor in the gym has buckled and frozen a moveable divider in a half-open position. Two ponds apparantly never dry. Roof water ponding on the southern most roof area, over four classrooms, has clear water, supporting organic matter and bird nests. Additional ponding over an office area in the courtyard is filled with algae (leading us to believe it has existed for quite some time). The main roof over the classroom wing exhibits evidence of long term ice build-up damage.

Building Number: Seventeen

Building Name: EDMUND W. FLYNN SCHOOL

Address: 220 Blackstone Street

Large areas of the membrane have been scrubbed clean of ballast, and the fabric flashings at all roof projections, equipment, vents, skylights, etc. are cut through approximately one inch above the deck. We believe that winter snow and slush remains long enough to melt and freeze here, forming sheet ice, which moves the ballast, scours the roof, and cuts the flashings.

Other conditions noted are graffiti on the upper walls, evidence of unauthorized access from the ground, and settlement of the Blackstone Street entry canopy. This curved structure has two roof drains which, while they probably require cleaning, are above the pond level. A great deal of plant debris was also noted on this and other roofs. Many trees and shrubs in the courtyard and on the grounds have seasonally dropped leaves, branches and other debris on the roofs. Drainage problems are largely attributable to this debris being allowed to remain. The strainers, where they are in place, become coated with a layer of foreign matter that will not allow water to pass. In other locations, the missing strainers have allowed the drain lines to fill and become blocked by the debris.

Building Number: Seventeen

Building Name: EDMUND W. FLYNN SCHOOL

Address: 220 Blackstone Street

Recommended Repairs:

A new roof is recommended. We believe the existing insulation is water saturated and should be replaced. A new insulation board underlayment would allow steeper roof pitches in areas with poor to non-existent drainage.

II. WALL CONSTRUCTION:

Brick

Overall Condition: Fair

Description of Conditions:

Brick joints show little weathering mainly because of the generous roof overhang. The only exceptions to this are the brick wall areas which are exposed on two sides. This is a detail found at certain areas of the building corners and at dividers at the rear walls where the classrooms are located.

Evidence of water run-down on the brickwork was found under cracks which had formed in the overhanging concrete roof eaves.

Building Number: Seventeen

Building Name: EDMUND W. FLYNN SCHOOL

Address: 220 Blackstone Street.

All window perimeter caulking has dried and cracked.

The only structure with a more serious masonry problem is the chimney. Here there are many spalled bricks and many cracks.

Recommended Repairs:

Dismantling and reconstruction of the chimney, small areas of pointing and scrubcoating, and renewal of window sealants are recommended.



Building Number: Eighteen

Building Name: FOX POINT ELEMENTARY SCHOOL

Address: 455 Wickenden Street

I. ROOF CONSTRUCTION:

Built-Up Roof with internal drains on concrete and wood plank substrates.

Overall Condition: Poor

Description of Conditions:

Multiple floor levels generate many individual roof areas. All the cast iron drains, strainers, and internal piping are in distress. The marine environment often deposits salt on the roofs, which is attacking all ferrous and aluminum work. Membranes are in poor condition. The large gym/cafeteria roof has deflected and allows large ponds to form. The many trees growing in the courtyard are too close to the building and branches are physically eroding the membrane. Leaves are clogging drain lines.

Recommended Repairs:

Cut back the plant materials. Remove the entire roof system and internal drain lines. Replace them with new work to compensate for the roof deformity and the high salt/moisture environment.

Building Number: Eighteen  
Building Name: FOX POINT ELEMENTARY SCHOOL  
Address: 455 Wickenden Street

## II. WALL CONSTRUCTION:

Brick, concrete post and beam with glass block and precast concrete infill. Polished granite trim at auditorium.

Overall Condition: Fair to poor

### Description of Conditions:

At the terraced roofs, the ends of several low brick walls have developed cracks. It is possible that these were caused by thermal movement of these south-facing sections of masonry.

Leakage through the brick joints of the boiler room and chimney is causing initial lifting of the masonry in these structures.

At the west wall of the gymnasium, leakage has caused corrosion of lintels over two ventilator openings. This has begun to displace the brickwork adjacent to these openings. A stepped movement crack has also formed in this wall. Another more advanced corrosion and displacement exists over a window facing Wickenden Street. These conditions are due to leakage through brick joints.

Building Number: Eighteen  
Building Name: FOX POINT ELEMENTARY SCHOOL  
Address: 455 Wickenden Street

All of the joints in the granite trim at the auditorium need to be repaired, both the end joints and the joint separating the stone from the brickwork.

The most outstanding problem is the poor condition of the glass blocks. These comprise a large portion of the wall surfaces. Large areas are broken and have been filled with mortar as a stop-gap repair measure. At the west side, the entire wall of glass block has been covered with stucco.

Recommended Repairs:

Brick damage, pointing and stone joints all need repair/repointing. All the window sealants are brittle and should be renewed. The glass block work should be repaired and the stucco removed.

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Building Number: Nineteen

Building Name: CARL G. LAURO MEMORIAL SCHOOL

Address: 99 Kenyon Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck with various trim elements, including terra cotta, stone and sheet copper on wooden forms. All drains are internal.

Overall Condition: Fair

Description of Conditions:

The roof membrane is in good condition, several sections appear to have recently been replaced. However, the copper and roll asphalt flashings are uniformly deteriorated with corrosion, stress cracks and torn joints. Roof accessories are in good to fair condition. Skylights appear to be recent construction. Several sections of the exterior protective grilles at skylights are missing.

Recommended Repairs:

Remove and replace all membrane edge flashing with rubber membrane system. Rebuild limited areas of copper cornice. Replace missing sections of skylight grilles and paint access ladders.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Nineteen  
Building Name: CARL G. LAURO MEMORIAL SCHOOL  
Address: 99 Kenyon Street

## II. WALL CONSTRUCTION:

Brick with trim elements of various materials as follows: Precast concrete cornice, sheet metal cornice (wood structure), limestone freeze, limestone and precast sills and water table.

Overall Condition: Fair to poor

### Description of Conditions:

The copper sheathing for the cornice of the west wing has been torn in several places allowing water to penetrate into the wood cornice structure. The woodwork was not accessible.

One of the two large chimneys was rebuilt some time ago. The other chimney is displacing at the top.

The upper brickwork of the east wing is ornately corbelled. Brick joints in this area are badly eroded and substantial leakage is evidenced by initial spalling of the brick surfaces. On the east facing wall of this wing, the area of damaged brick extends one-third of the way down from the top. At the south end of the wall approximately 14 feet from the corner, a vertical crack extends between the 2nd and 4th floors.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Nineteen  
Building Name: CARL G. LAURO MEMORIAL SCHOOL  
Address: 99 Kenyon Street

At the top of the south facing wall on the west wing, large areas of deeply eroded and open brick joints are prevalent. Spalling brick at this location tell of extensive leakage.

A vertical crack was noted below the water table facing America Street.

All stone joints, precast and limestone are open.

Recommended Repairs:

Significant areas of the copper cornice should be repaired and/or rebuilt. Brickwork should be cleaned to allow for damage inspection, limited areas rebuilt and pointed. Upper areas of the corbelled walls should be scrubcoated and waterproofed. All trim stone/terra cotta should be pointed.



Building Number: Twenty

Building Name: LAUREL HILL AVENUE SCHOOL

Address: 85 Laurel Hill Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck, sloped to internal roof drains. Parapet walls are topped with terra cotta copings with pinnacles. Vertical surfaces are sheathed in vented copper.

Overall Condition: Fair to poor

Description of Conditions:

The membrane is in good condition. The edges at the flashings are deteriorated. Wall tops are exposed and water is entering the structure. The upper masonry is damaged. Copper ventilator covers are damaged and in poor condition. Several cracked skylight lights may soon cause problems.

Recommended Repairs:

Cover all perimeter parapet tops with rubber membrane to stop moisture penetration. Lower flashings should receive the same treatment. Repair damaged vent tops and skylights.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty  
Building Name: LAUREL HILL AVENUE SCHOOL  
Address: 85 Laurel Hill Avenue

II. WALL CONSTRUCTION:

Brick with terra cotta trim elements.

Overall Condition: Poor

Description of Conditions:

At the rear of the building, the upper brickwork is leaking and this has caused cracks to form in the upper corners. The entire rear parapet has lifted back because of freezing moisture. The presence of moss in the brickwork testifies to the long-term presence of moisture.

Areas of brickwork in the rear of the building have been damaged by sandblasting to remove graffiti.

Brick joints are uniformly eroded over most of the building. One portion in the rear was scrubcoated and other areas were spot pointed, but this work appears to have been done poorly.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty  
Building Name: LAUREL HILL AVENUE SCHOOL  
Address: 85 Laurel Hill Avenue

Leakage into the terra cotta is causing spalling of the protection glaze.

A vertical crack was noted at the top of the front wall.

Graffiti removal at the front entrance by sandblasting has destroyed most of the protective glazing at this location. Graffiti has continued to be a major problem.

Recommended Repairs:

Local areas of the building should be cleaned (do not sandblast) and treated with anti-graffiti coatings. All the brickwork should be scrubcoated, and stone trim painted and repaired.

REPAIR PRIORITY NO. \_\_\_\_\_



Building Number: Twenty-One

Building Name: DR. MARTIN LUTHER KING ELEMENTARY SCHOOL

Address: 35 Camp Street

I. ROOF CONSTRUCTION:

Built-Up Roof with gravel ballast on rigid insulation board on concrete deck. Certain areas are wood plank deck.

Overall Condition: Poor

Description of Conditions:

The built-up roof is the original on most of the roof area and it has lived beyond its normal service life. The mild slopes and icing conditions have combined to move the ballast stone exposing the membrane beneath. Enough water is now penetrating to rot the wood eave trim, but to date, the concrete deck itself has prevented direct moisture entry to the interior.

Building Number: Twenty-One  
Building Name: DR. MARTIN LUTHER KING ELEMENTARY SCHOOL  
Address: 35 Camp Street

Recommended Repairs:

Complete removal of all roof membranes and insulation board. Installation of new insulation and a non-ballasted rubber membrane and accessories. All perimeter wood trim should be replaced with new in a rot resistant species.

II. WALL CONSTRUCTION:

Brick

Overall Condition: Very Good

Description of Conditions:

All expansion joint sealant is old and inflexible. Openings exist along side the sealant and the sealant should be replaced. There was no exterior evidence of leakage through these joints.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-One  
Building Name: DR. MARTIN LUTHER KING ELEMENTARY SCHOOL  
Address: 35 Camp Street

It is likely that very little abusive weather reached the walls of this building complex due to the generous roof overhang at all eaves and gables. The brickwork appears to have weathered very little. Other factors that contribute to the excellent condition of the masonry are, provision of expansion joints at regular intervals and at every corner, and the absence of large masonry openings interrupting the integrity of veneer brickwork.

The only condition of a serious nature was saturated brickwork in a screen wall at the southeast corner of the complex where a loading dock is located. This appears to be caused by leakage from a small flat roof overhead.

Recommended Repairs:

Replacement of all expansion joint sealants. Minor brick repair and pointing. Waterproofing compound should be applied in two limited areas suffering from wash down from the roofs.



Building Number: Twenty-Two

Building Name: PLEASANT VIEW SCHOOL

Address: 50 Obadiah Brown Road

I. ROOF CONSTRUCTION:

Built-Up Roof on rigid insulation. Substrates are wood plank, metal corrugated deck, and reinforced concrete. Drains are both internal and external. Flashings are metal and fabric.

Overall Condition: Good

Description of Conditions:

The entire roof is less than three years old according to the staff. There are no leaks or apparent deficiencies at present. Some of the roofs do not slope to drainage points. Splash blocks are deteriorated or missing. In our opinion, several low parapet walls were not properly flashed, but no damage or deterioration was apparent. Many items of mechanical equipment appear non-functional or neglected.

Recommended Repairs:

The heavy plant growth is beginning to overshadow the roofs. Cutting back some of this growth would avoid future problems. Rebuilding some of the flashings would again avoid future problems.

Building Number: Twenty-Two

Building Name: PLEASANT VIEW SCHOOL

Address: 50 Obadiah Brown Road

II. WALL CONSTRUCTION:

Concrete Block with a stucco finish.

Overall Condition: Fair

Description of Conditions:

Vertical exterior cracks exist at many outside and inside corners. These appear to be caused by thermal movement. Many other hairline cracks are visible, which follow the block joints behind the stucco. These do not seem to be causing other problems.

The chimney is disintegrating.

A horizontal crack has formed approximately 30 inches below the roof line of the building at the rear of the complex near the playing field.

Patching repairs are needed at the tops of several corners where cracks have formed.

Plants are growing in the joint between the sidewalks and base of the building.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Two

Building Name: PLEASANT VIEW SCHOOL

Address: 50 Obadiah Brown Road

Recommended Repairs:

Dismantle and rebuild the chimney. Remove the encroaching plants. Miscellaneous stucco and expansion joint repair. Apply waterproofing coating to some stucco areas.

REPAIR PRIORITY NO. \_\_\_\_\_



Building Number: Twenty-Three

Building Name: RESERVOIR AVENUE SCHOOL

Address: 156 Reservoir Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck, sloped to internal roof drains. Flashings are metal and roll roofing products.

Overall Condition: Fair

Description of Conditions:

The membrane is in good to excellent condition, with many years of life left. The two skylights were rebuilt 10 - 15 years ago and are in good condition. Most metal work is in good condition. However, in many locations, the outer copper edge flashing has broken due to a combination of thermal expansion and lack of expansion joints. These have been repaired with rubber membrane patches, but several have torn. Some edge leakage is occurring shown by peeling paint on third floor ceilings and lime deposits outside.

Recommended Repairs:

Reconstruct the edge condition with new, compatible neoprene, and repair of several accessory flashings at the access hatch and vents are recommended.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Three  
Building Name: RESERVOIR AVENUE SCHOOL  
Address: 156 Reservoir Avenue

## II. WALL CONSTRUCTION:

Brick with precast concrete trim.

Overall Condition: Fair to poor

### Description of Conditions:

Deterioration of the precast coping is the result of leakage at the roof edge. Many sections of the coping must be cut out and repaired or replaced. All joints are open. The brickwork below the water table has been sandblasted and has been treated with an anti-graffiti compound. This shiny repellent substance was applied over poor masonry. At the south end of the building the brickwork below the water table was painted. Much of the brick has a haze from incomplete removal of scrubcoat when this work was done long ago. The chimney is deteriorating.

### Recommended Repairs:

Repair and pointing of the coping stones. Selected areas of brickwork must be cut out of the chimney and relayed. A thorough cleaning of the exterior is needed. Areas of the sandblasted lower walls need reconstruction and repair.



Building Number: Twenty-Four

Building Name: ROBERT F. KENNEDY SCHOOL

Address: 195 Nelson Street

I. ROOF CONSTRUCTION:

Original section: Built-Up Roof sloped to internal drains on wood deck. Flashings are metal and roll roofing. Newer and latest additions: Built-up roof on concrete deck, sloped to internal drains with metal and fabric flashings.

Overall Condition: Fair

Description of Conditions:

As in many of the other buildings, the roof membrane is in good condition, but the flashings, joints, etc. are failing, which affects the membrane. The higher and two oldest roofs are in the best condition. Some edge flashing damage on the southernmost side is allowing some leakage into the stairwell. One drain strainer is clogged and will not allow drainage. The exposed fabric flashings are cracked and deteriorated. The new, lower roof has an improper flashing detail at all edges, including the connection with the older buildings. All sides are leaking. We believe the rigid insulation has become saturated. A series of skylights in the gymnasium/cafeteria were roofed over and are leaking.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Four  
Building Name: ROBERT F. KENNEDY SCHOOL  
Address: 195 Nelson Street

Recommended Repairs:

The older sections should have all edge conditions reconstructed now as a preventative measure (except the south side leak). The newer section should be stripped to the deck and re-roofed.

II. WALL CONSTRUCTION:

Concrete block with brick facing, brick with precast concrete, cast-in-place concrete and metal-sheathed wood entablature at the original building.

Overall Condition: Fair

Description of Conditions:

At the roof level, the chimney brick joints are eroded but the chimney appears to be sound.

The two brick ventilator shafts over the newer half of the original building are capped with a copper clad roof. This is supported by vertical angles which are anchored into the flue masonry. Corrosion of this steel has begun to crack and displace the exterior masonry.

Building Number: Twenty-Four

Building Name: ROBERT F. KENNEDY SCHOOL

Address: 195 Nelson Street

The perimeter of the new addition is formed by a heavy concrete curb. This cast-in-place curb has cracked at several locations because of thermal movement. Leakage is occurring at these cracks as evidenced by the staining of the underlying masonry.

The newer brickwork is in good condition. The older brickwork is leaking at the corners of the building and this is causing exfoliation of some of the brick faces.

Recommended Repairs:

The courtyard walls should be reconstructed. The metal cornice needs repair and paint. Portions of the older buildings should be scrubcoated.

The construction joints between the buildings should be prepared and finished to function as expansion joints. The existing joint material has failed.



Building Number: Twenty-Five

Building Name: WEBSTER AVENUE SCHOOL

Address: 191 Webster Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on wood deck with copper gutters and flashings.

Overall Condition: Fair

Description of Conditions:

The membrane is in excellent condition. The copper gutter linings are extensively damaged causing deterioration of the ornamental wood cornice and interior finishes. Large copper ventilators are in good condition however metal is eroding due to chemical reactions with the atmosphere. The lower roof has similar gutter and cornice problems. The ventilator has new neoprene flashing on its base.

Recommended Repairs:

Reconstruction and repair of the gutter/cornice assembly. The missing leaders should be replaced to prevent further damage to the walls below.

Building Number: Twenty-Five

Building Name: WEBSTER AVENUE SCHOOL

Address: 191 Webster Avenue

II. WALL CONSTRUCTION:

Smooth faced brick with brownstone trim and wooden cornice.

Overall Condition: Fair

Description of Conditions:

Generally, the brick joints are eroded. This condition is worst at the locations of the conductor pipes where these have been removed, permitting the water to run down the brickwork.

The stonework is dirty but with some exceptions at the entrances where it has been vandalized, it is in good condition.

Portions of the wood cornice have weathered from gutter leaks, and all the woodwork has deteriorating paint.

Recommended Repairs:

Joints in both stone and brickwork require repair and pointing. Areas of the walls should be scrubcoated.

REPAIR PRIORITY NO. \_\_\_\_\_



Building Number: Twenty-Six

Building Name: WILLIAM M. D'ABATE MEMORIAL SCHOOL

Address: 60 Kossuth Street

I. ROOF CONSTRUCTION:

Built-Up roof on rigid insulation sloped to internal drains, scuppers and exterior leaders. Substrate is gypsum plank on steel bar joists and concrete slab.

Overall Condition: Fair

Description of Conditions:

Roof membranes are in fair to good condition. Accessories are poor. Damaged skylights have been temporarily repaired. Some drains are clogged/damaged. Position of chain-link security fence allows easy roof access and vandal related damage. Overhanging trees in courtyard and grounds are contributing to drain clogging and ponding. Edges are exposed fabric flashing, which is badly eroded and may leak soon.

Recommended Repairs:

Remove and replace all edge flashing and leaders. Repair or remove skylights. We recommend the relocation of the chain-link security fence on Kossuth Street to prevent access to the roof by unauthorized individuals.

Building Number: Twenty-Six

Building Name: WILLIAM M. D'ABATE MEMORIAL SCHOOL

Address: 60 Kossuth Street

II. WALL CONSTRUCTION:

Brick with aluminum window wall infill.

Overall Condition: Fair to good

Description of Conditions:

Some cracks have formed at the corners of walls accessible from the roofs. This condition may be due to thermal movement.

Areas of brick joints near the tops of the walls are eroded. The chimney shows mortar cracking and displacement.

Graffiti is a severe problem and, where this has been cleaned off by sandblasting, the removal has not damaged the brick faces significantly.

All of the window perimeter caulking is cracked and no longer functions as intended.

Exterior grading is a problem, as erosion or adjacent work has allowed piping meant to be covered by 24-36" of soil, to become exposed.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Six

Building Name: WILLIAM M. D'ABATE MEMORIAL SCHOOL

Address: 60 Kossuth Street

Recommended Repairs:

Brick areas at wall tops and the chimney require pointing and repair. The window wall systems need new sealants. Low areas require new fill and grading.

REPAIR PRIORITY NO. \_\_\_\_\_



Building Number: Twenty-Seven

Building Name: WINDMILL STREET SCHOOL

Address: 110 Paul Street

I. ROOF CONSTRUCTION:

Built-Up Roof on a concrete roof deck, sloped to internal drains. Accessories, vents and skylights are all copper clad.

Overall Condition: Poor

Description of Conditions:

The ballasted built-up roof membrane is old and worn. Numerous areas exhibit blisters, cracks, and no ballast. Several areas have recently been replaced and these appear in good condition. All the bituminous fabric flashing at eaves, parapets, skylights, vents and walls are worn and broken. The roof hatches are in poor condition. The metal work exhibits galvanic corrosion in many locations. Several areas of metal roofing and flashing have blown loose and have gone unrepaired causing the wood deck beneath to rot in some locations. Several of the ventilators have been wind damaged and allow water to enter.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Seven  
Building Name: WINDMILL STREET SCHOOL  
Address: 110 Paul Street

Recommended Repairs:

50% of the roof membrane should be removed and replaced. All the flashings should be replaced with a compatible neoprene rubber system. Roof hatches should be replaced and new roof ladders installed. Damaged ventilators should be repaired or closed. The main skylight should be replaced with an insulating system, or, if the program no longer warrants it, closed and roofed.

II. WALL CONSTRUCTION:

Brick with limestone coping, pier caps, sills and water table.

Overall Condition: Poor

Description of Conditions:

Extensive leakage has caused many cracks in the exterior brickwork. Corrosion of steel columns is the suspected cause of cracks at corners and piers.

Corrosion of steel cramps caused by leakage through the brickwork is causing spalling of limestone at the watertable. This leakage saturates the limestone and is causing exfoliation and erosion of the stonework.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Seven  
Building Name: WINDMILL STREET SCHOOL  
Address: 110 Paul Street

Upper brickwork at decorative brick panels is bulging and requires extensive rebuilding.

Leakage down into the masonry from the roof edge has caused displacement of brickwork at interior corners facing the play yard.

The chimney has many cracks and many individual bricks that are damaged.

The concrete pavement at the front entrance is breaking up, allowing water into the storerooms below.

Recommended Repairs:

Extensive areas of brick parapet walls should be dismantled and rebuilt. New relieving joints should be cut into the walls, and most of the upper walls should be scrubcoated. Stone/precast trim joints should be pointed and individual units repaired. The weather deck at the main entrance should be removed and replaced.



Building Number: Twenty-Eight

Building Name: ADMINISTRATIVE OFFICES

Address: 480 Charles Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck with terra cotta trim and a combination of metal and roll asphalt flashings.

Overall Condition: Fair

Description of Conditions:

The built-up roof has been recently replaced/ repaired and appears to be good. However, all metal and fabric flashings are old and near the end of their service life. Water penetration on a small scale is evident and, if allowed to continue, will soon damage the new roof membrane. Skylights are missing their protective grilles and show evidence of metal fatigue at the joints. Parapet flashings have open joints and the terra cotta shows evidence of water penetration damage.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Twenty-Eight  
Building Name: ADMINISTRATIVE OFFICES  
Address: 480 Charles Street

Recommended Repairs:

Remove and replace all flashing, parapet wall and skylight base sheathing. New neoprene membrane, compatible with the existing built-up roof should be used. Several small skylights should be removed and closed, while the larger ones should have their glazing replaced with an insulating polycarbonate system. New drains, strainers, repaired ladders and old antenna removal are included in miscellaneous work.

II. WALL CONSTRUCTION:

Brick with upper ornamentation of terra cotta and lower ornamentation of precast concrete.

Overall Condition: Fair to poor

Building Number: Twenty-Eight  
Building Name: ADMINISTRATIVE OFFICES  
Address: 480 Charles Street

Description of Conditions:

Portions of the terra cotta cornice have begun to lose protective glazing due to water absorption and freezing. Many of the cornice brackets are missing.

Brick joints are eroded. Many individual cracked brick must be replaced to repair cracks in the masonry and the chimney must be rebuilt.

Individual units of ornamental precast over the entrances have crumbled away and must be replaced.

Rusting of the existing protective screens is staining the masonry.

Recommended Repairs:

The entire building should be cleaned to allow full damage inspection. Portions of the walls and chimney should be dismantled and rebuilt. Damaged areas of terra cotta and precast concrete should be replaced/rebuilt, and waterproofing compound applied to retard moisture penetration.



Building Number: Twenty-Nine

Building Name: NATHANIEL GREENE MIDDLE SCHOOL

Address: 721 Chalkstone Avenue

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete deck, wall copings, trim and other ornamentation are terra cotta, limestone, and precast concrete. Flashings are copper and roll asphalt. Roof drains are internal.

Overall Condition: Fair to poor

Description of Conditions:

The roof membrane is in good to poor condition, depending on location and age of the work. All remaining architectural metal work is effected by atmospheric corrosion and galvanic action. The bituminous and asphalt flashings are beyond their useful life span. Accessories are damaged or missing (hatch covers).

Recommended Repairs:

Removal of all fabric and roll type flashings and replacement with bituthane and neoprene rubber products. Replacement of the fly loft roofs, and new accessories.

Building Number: Twenty-Nine  
Building Name: NATHANIEL GREENE MIDDLE SCHOOL  
Address: 721 Chalkstone Avenue

II. WALL CONSTRUCTION:

Brick with ornamental terra cotta at copings, cornices, watertable, buttresses and window surrounds. Most of the copings have been replaced with precast concrete layed over a thru-wall flashing.

Overall Condition: Fair to good

Description of Conditions:

Leakage through the brickwork has begun to damage the terra cotta at the windows. Leakage through terra cotta joints has caused cracks and displacement to occur. This leakage is also causing damage to the underlying brick joints. Deep brick joint erosion exists at the tops of the walls. Some of the brickwork has been scrubcoated in the past. These areas are in the best condition. All of the brickwork should be treated in this manner.

Structural cracks have occurred at the corners of the fly loft. One of these corners appears to have been rebuilt.

Building Number: Twenty-Nine  
Building Name: NATHANIEL GREENE MIDDLE SCHOOL  
Address: 721 Chalkstone Avenue

Leakage through the roof over the main entrance is filling the terra cotta beneath with water. Continuation of this will eventually destroy the terra cotta at this location.

Recommended Repairs:

Cleaning the entire building to fully assess the damage. Complete scrubcoating and limited brickwork reconstruction. Trim repair/reconstruction/renewal.





Building Number: Thirty-One

Building Name: SACKETT STREET SCHOOL

Address: 159 Sackett Street

I. ROOF CONSTRUCTION:

Built-Up Roof on concrete slab, sloped to internal roof drains. Flashings are copper with repairs of tarpaper with wood battens.

Overall Condition: Fair

Description of Conditions:

The membrane and most flashings are in good condition with little evidence of leakage. However, some of the copper flashing at the vent shafts is missing, and a tarpaper with wood batten repair substituted. This may prove useful as a temporary repair. The stairwell skylight's broken lites have been repaired with lexanite and are leaking. A new satellite dish had been recently installed prior to the inspection. We could not determine if the hold down bolts had been waterproofed properly.

Recommended Repairs:

To correct the present and prevent future leaks, we recommend a new neoprene rubber flashing system for the entire roof. The damaged skylights do not appear to have been vandalized. We recommend reglazing with a polycarbonate insulating system.

REPAIR PRIORITY NO. \_\_\_\_\_

Building Number: Thirty-One  
Building Name: SACKETT STREET SCHOOL  
Address: 159 Sackett Street

II. WALL CONSTRUCTION:

Brick with terra cotta and precast concrete trim.

Overall Condition: Fair to good

Description of Conditions:

At the top of the building, the upper four feet of the chimney is in poor condition. The building walls adjacent to the roofs are in good condition, however, the wood windows in these walls require proper painting and maintenance.

Cracks in the cornice bed joints show evidence of leakage into the terra cotta at the end joints or through the copper cap that covers the cornice or at the roof perimeter.

Excepting a few localized areas of joint erosion, the brickwork is in good condition. The walls were scrubcoated at some time in the past and the joints have not weathered significantly. Brick joint deterioration was found below the building cornice. It is suspected that the source of leakage is the cornice area or at the perimeter of the roofs.

Building Number: Thirty-One  
Building Name: SACKETT STREET SCHOOL  
Address: 159 Sackett Street

All window sills and lower ornamentation is of precast concrete which replicates the terra cotta. Deep, open joints in the precast over the girl's and boy's entrances has resulted in spalling of adjacent brick, failure of brick joints, and initial failure of precast.

Small vertical cracks exist at the lower corners of the large masonry window openings.

Recommended Repairs:

Limited masonry areas should be waterproofed and the deteriorated entrance trim repaired and flashed. The painted areas should be cleaned and anti-graffiti compounds applied. Some masonry repair and reconstruction is necessary.