CITY OF SOMERVILLE, MASSACHUSETTS
Department of Purchasing
JOSEPH A. CURTATONE
MAYOR

To: Prospective Applicants

From: Angela M. Allen, Purchasing Director

Date: August 14, 2014

Re: Request for Qualifications (RFQ) #15-05 Design and Construction Administration Services for Renovations to the West Branch Library

Addendum #1 – Response to Questions

Please acknowledge receipt of this Addendum by signing below and including this form in your proposal package. Failure to do so may subject the proposer to disqualification.

X _____

Name of Authorized Signatory
Title of Authorized Signatory

1. Has there been an historic structures report done on the building? If so, is it available for review?

   A report (104 pages) from 1999 is attached to this addendum.

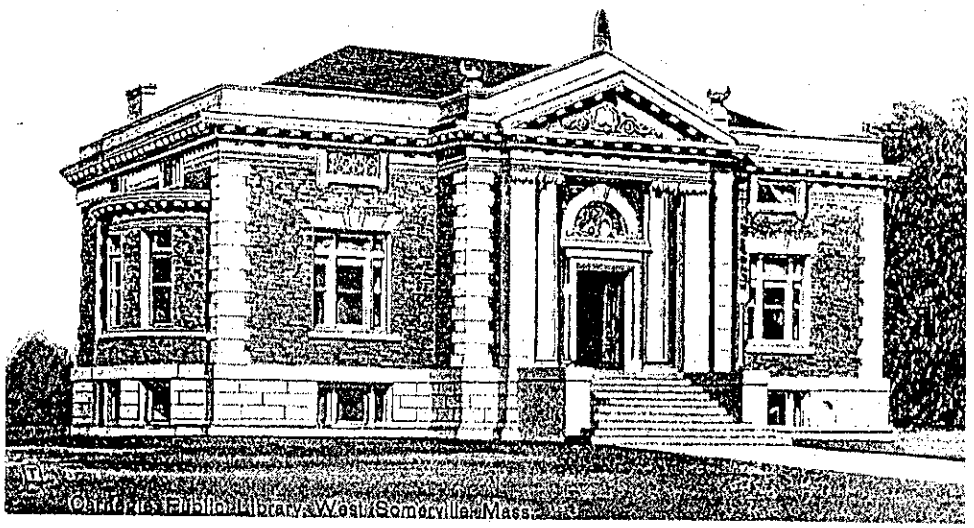
2. Under Section 2.2, item 4 Design Team, the RFQ includes in the categories of work: "Sustainable/Green Design/Renewable Energy Consulting" and "Building Commissioning" but I don't see that the project needs to be LEED certified and/or sustainable anywhere in the scope. Is LEED certification or a green/sustainable project--and our experience with those types of projects--requirements that we should respond to in our proposal?

   The City is not trying for LEED certification, but we want the designers to incorporate sustainability and energy efficiency in their work.

Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 3400 • TTY: (617) 666-0001 • Fax: (617) 625-1344
www.ci.somerville.ma.us

Historic Structure Report

West Branch Library



Early postcard of the library possibly from rendering by architect' McLean & Wright.

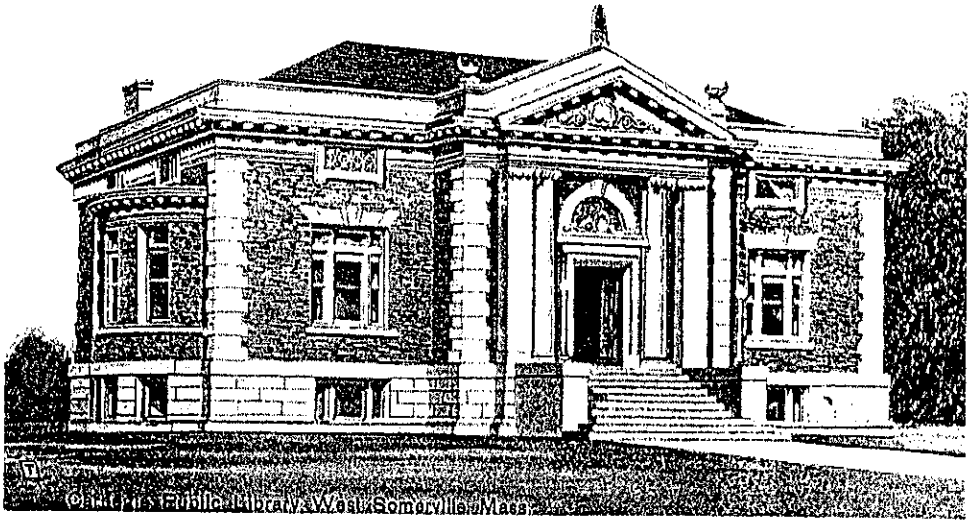
for the
City of Somerville
Somerville, Massachusetts

McGinley Hart & Associates LLP
77 North Washington Street
Boston, MA 02114
617-227-2932

February 20,1999

Historic Structure Report

West Branch Library



Early postcard of the library possibly from rendering by architect' McLean & Wright.

for the
City of Somerville
Somerville, Massachusetts

McGinley Hart & Associates LLP
77 North Washington Street
Boston, MA 02114
617-227-2932

February 20,1999

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The objective of this report has been to document and verify the history, evolution and existing conditions of the West Branch Library in Somerville, Massachusetts. This historic structure report is also intended to provide the information necessary in order to plan for the short and long-term preservation, restoration and updating of access and related systems and facilities. The report should serve as a tool providing the basis for plans for the continuing use of this educational facility well into the twenty-first century.

In 1908, the mayor and the advisory council held an open competition for architects to design a branch library building for West Somerville. The committee and mayor selected the plans drawn by McLean & Wright, Boston architects, who executed the commission using funds provided by a gift from Andrew Carnegie, the famous library philanthropist. The building, constructed by contractor Charles H. Belledue, was described as "beautiful and commodious" upon its completion and dedication May 26, 1909. The West Branch Library opened to the public the next day under branch librarian Miss Nellie M. Whipple.

The West Branch Library is located in the center of a lot facing southeast on College Avenue near Davis Square, opposite Morrison Street. The building is constructed in the Classical Revival style, of buff-colored Roman-shaped brick, with limestone qūoins, sills, and door and window lintels. The cornices and entry pediment are of carved wood, with two-semi detached Ionic columns flanking the entry door. The walls are of buff brick trimmed with granite and limestone columns.

Remaining largely intact as planned, the interior of the building has several notable original features. The front stair hall with its mosaic floor, has a graceful Colonial Revival winding stairway with twist-turned balusters and newels reminiscent of that in John Hancock's House in Boston. The stairs on the right lead up to a second-floor auditorium, with stage and ante-rooms, and those on the left descend to a basement

Children's Library. The front vestibule opens into the library hall, with a reading room on one side for adults, on the other originally intended for children. The reference desk located in the hall supervises the two side rooms with small curved bays and the former radiating stack space, presently a work area in the rear.

The old stack area is lit by a long, curved bay with windows, but most stacks have been removed. The interior woodwork throughout the first floor is hardwood in natural color, while on the second floor softwood trim was painted ivory white. The floors were of hardwood and pine. The ceilings of the main floor retain traces of original historic decoration, including stenciled borders and plaster medallions, as well as some remaining old light fixtures. The second-floor Hall (originally lit by a large skylight, now closed) seated approximately fifty persons, with a stage, a rear emergency stair, and three ante-rooms. This room is currently a stack and study area and its floor structure is also in need of some further evaluation and potential reinforcement depending upon its final use.

The basement space, originally designated as a periodical room, also has two general rooms for storage and a utility room. Later renovated as a children's area, the walls are presently covered with contemporary murals, which, like much of the rest of the building's interior wall finishes, are peeling due to moisture infiltration.

The present goal is to plan for repairs to existing deterioration that has occurred over the years, principally due to moisture infiltration and weathering. Downspouts are presently disconnected and there is extensive damage to both modern finishes and historic stenciled surfaces visible beneath the peeling paint on the interior. The roof of the building has been repaired over the years, but continuing problems led to plans for its restoration. The roof structure, which is in a weakened condition, needs additional analysis in order to further evaluate the roof structure and make repair recommendations ensuring its stability. This detailed inspection will help determine the best method for correcting the cracking, shearing and deflection in the ceiling and walls. In addition to a roof inspection, the chimneys need to be straightened and the caps replaced. It may also be

necessary to conduct a second floor analysis in order to determine the final load capacity. Ultimate use decisions regarding the potential use of the stage, skylight and meeting room will determine the final load capacity as well as access and egress requirements necessary.

Recommended work would include exterior masonry repairs with new roofing including the possible re-activation of the original skylight closed up when the building was renovated later in this century. The masonry structure needs minor cleaning, repairs and repointing to match the original jointing. Repairs need to be made to the front steps that have become disjointed and need resetting. The metal gate from the front walk to the side yard was incorrectly repaired, has damaged components and needs to be remedied in order to function.

Accessibility issues are also a major focus of the projected work. An accessible entrance recommended off the rear parking area in conjunction with accessible parking spaces. Access from the front would not be possible without adverse effects on the principal historic features of the front and primary interior spaces. Upgrading of access would also include an elevator and the systems of the building, electrical and mechanical need updating as well.

Careful repair and interpretation of this locally significant historic landmark will ensure its long-term use, accessibility, resulting in extended use and appreciation by future generations.

ADMINISTRATIVE DATA

This Historic Structure Report was produced for the City of Somerville, Historic Preservation Commission, Planning Department and Office of Community Development. Liaison for the city of Somerville was Eric Breitkreutz, SHPC. The report is the product of the Office of McGinley Hart & Associates, LLP, historic preservation architects and planners. Representing McGinley Hart was David M. Hart, Principal administering the contract, with Frederic C. Detwiller, Historical Architect and Stacey Wetstein, who assisted with historical research, writing and editing. Olga Bachilova prepared and analyzed the mortar samples. The Massachusetts Archives, Public Safety Collection provided the base drawings for the report. Consultant John Wathne, P.E. of Structures North Consulting Engineers, provided structural analysis of the building. The authors wish to acknowledge the assistance of the City Archivist, Dora St. Martin and Karen Kramer, the Librarian at the West Somerville Branch Library. We also wish to thank Librarian Richard Kaplan and the staff at the Massachusetts Archives for their assistance in locating and reproducing the historic drawings documenting the building.

For future renovation plans, certain administrative procedures must be followed. The Massachusetts Preservation Projects Fund (MPPF) requires compliance with guidelines outlined in its application that has procurement, documentation and review requirements as well as a required preservation restriction. The Secretary of the Interior's Standards govern the mitigation of any potential adverse effects of the other code requirements such as the alteration of significant historic features and spaces. Needs of ADA and other requirements need to be weighed against the historical significance of the features proposed to be altered. The State Historic Preservation Officer would need to be consulted for review on any alterations affecting a National Register listed Historic Property funded by the MPPF, as would the local historic preservation commission.

PART 1 - DEVELOPMENTAL HISTORY

Historical Background and Context

Originally part of Charlestown, Massachusetts, the city of Somerville was founded in 1842 and quickly began to flourish. Somerville evolved as a "streetcar suburb" of Boston, experiencing tremendous growth towards the end of the nineteenth century. The population, 1,103 at the time of its incorporation in 1842, had escalated to 60,000 by the turn of the twentieth century.[1]

The Somerville library system has grown steadily since its start in the early 1860's when the first library was located in City Hall. The West Branch Library, on College Avenue, is the first of three Carnegie sponsored libraries in Somerville. The other two libraries are the Central Library (1914) and the East Somerville Branch (1918).

The issue of expanded library facilities for the residents of West Somerville was first addressed in the 1903 City of Somerville Annual Report. By 1906, this section of the City had grown rapidly due to the extension of electric lines and steam railroads. Three of the six branch library agencies, spaces in busy shops reserved for the library, were located in West Somerville and conducted about 70% of all the agency business. The West Somerville agency in Davis Square was unsatisfactorily housed in a store where the clerks had other duties and could not lend the proper assistance and attention to the patrons. [2] In the 1906 Annual Report, the trustees of the public library wrote,

> "...[we] are unanimous in recommending that a separate room be hired in the vicinity of Davis Square and properly fitted up, in which shall be placed

[1] Sanmarco, Anthony. *Images of America - Somerville.* New Hampshire: Arcadia Publishing, 1997.
[2] "City of Somerville, Massachusetts Annual Report 1906". Somerville Journal Print, 1907. Page 249.

magazines, papers, and such a stock of books as shall seem to be advisable, and the room be put in charge of a regular assistant."[3]

The citizens of West Somerville, however, wished to have a special building erected, not just a reading room with an assistant. The subject was first discussed by the West Somerville board of trade on September 10, 1906, when a committee was appointed to arrange a public meeting. The public meeting was held on October 25, 1906 where it was voted, "that it is the unanimous sense of the community that we should have a branch library properly housed in West Somerville."[4]

At the September 10th meeting, the idea of asking Andrew Carnegie to give a library building had been informally discussed, but did not meet with the approval of the majority. Andrew Carnegie (1835-1919), the famous steel baron and self-made millionaire, had a personal interest in establishing free public libraries for everyone to use as a means of self-education. In 1881 he began to promote his idea and at his death in 1919, had given over $56 million to build 2,509 libraries throughout the English-speaking world.[5]

John F. Foster, a well-respected former state representative (1901-1902) and a Somerville resident[6], however, believed that securing the aid of Carnegie was a good idea and quietly began to work toward that end. Foster spoke and wrote to agents of Carnegie asking for a gift to the City of Somerville for a branch library. After an exhaustive inquiry into the facilities of the City and the needs of West Somerville, the private secretary of Mr. Carnegie wrote on April 9, 1907:

---

[3] Ibid., Page 250.
[4] "Thirty-seventh Annual Report of the Trustees of the Public Libraries of the City of Somerville, Massachusetts for the Year 1909." Somerville Journal Print, 1910. Page 24.
[5] "Andrew Carnegie and His Philanthropies." Carnegie Corporation of New York. http://www.carnegie.org/philanth.htm
[6] "John Foster Dies." *Somerville Journal*, Thursday, March 24, 1949. Page 1 and 5.

> "...if the city agrees by resolution of council to maintain a branch library at a cost of no less than $2,500 a year, being additional to the gross amount now spent on the central library, and procures a suitable site for the branch building, Mr. Carnegie will be glad to give $25,000 for the erection of a branch library building for the City of Somerville."[7]

A public meeting was held on June 12, 1907 to consider Mr. Carnegie's proposal. On October 24, 1907, the Board of Alderman approved the gift by a vote of 11 to 7. Alderman Newcomb, who voted against the it, thought that the gift was "misleading" and that the branch library was a luxury that would cost more to maintain than the City could afford. From the opposite viewpoint, Alderman Theall felt that West Somerville needed a facility larger than a reading room and that the gift was not a luxury, but an education.[8]

At the January 14, 1908 meeting of the mayor and the advisory council, it was decided to hold an open competition for architects to design a building. On March 17, 1908 the same group met to examine the thirty-five plans submitted. At the third meeting, the committee chose the best five plans. Finally, the mayor selected the plans drawn by McLean & Wright, Boston architects, "which was generally admitted to embrace the best features exteriorly and interiorly, and at the same time could be carried out within the amount of the gift."[9] The building contract was awarded to Charles H. Belledue and ground was broken on July 9, 1908. The completed and furnished building was dedicated on May 26, 1909.

McLean & Wright designed the new library building in the Classical Revival style based on the Beaux-Arts tradition (Fig. 1). The Beaux-Arts style (1890-1920) was based on the study of Greek and Roman structures, composition and symmetry as taught at the Ecole des Beaux-Arts in Paris. The early years of Beaux-Arts architecture, often used for large

[7] Ibid. Page 25.
[8] "Carnegie Gift Accepted." *Somerville Journal.* Friday, October 25, 1907. Page 1.
[9] "Thirty-seventh Annual Report." Page 26.

public buildings, was characterized by monumental symmetrical compositions, large arched openings, classical ornament, monumental columns, etc. Around 1900, however, those Beaux-Arts embellishments gave way to the more sedate and refined designs of the Classical Revival style (1900-1920). Although still based on the classical principles of symmetry, Classical Revival buildings focused on a more academic, simplified interpretation of the ancient Greek orders and lacked much of the decorative moldings, large arches and other ornamentation. During this time, most public commissions went to architects trained in Beaux-Arts tradition and who created designs based on classical models. [10]

The Classical Revival facade of the West Branch Library was built of buff-colored Roman-shaped brick. The library was accented by limestone quoins, sills, and door and window lintels. The cornices and entry pediment were carved wood and surrounding the entry door were two-semi detached Ionic columns. The original plans called for gray brick trimmed with Deer Isle granite and terra cotta the color of limestone for the columns.[11] The introduction to the dedicatory exercises in the "Thirty-seventh Annual Report" describes the interior of the building as follows:

> "The building was placed in the centre of the spacious lot on College Avenue, formerly occupied by the Lincoln schoolhouse, and faces southeasterly. From the front stairway hall of this beautiful and commodious building stairs rise on the one side to a spacious auditorium, with stage and ante-rooms, and descend on the other to a well-lighted basement. From the vestibule we enter the library proper--a hall, with reading room on one side for adults, on the other for children, occupying the front part of the wings. In this hall space the delivery desk is placed as to command the two side rooms and the radiating stacks in the rear."[12]

[10] Lee, Antoinette and Richard Wagner, "Architectural Styles." *Landmark Yellow Pages*, 1993. Pages7,9.
[11] "Carnegie Library Plan Chosen." *Somerville Journal.* Friday, July 3, 1908. Page 1.
[12] Ibid. Page 26.

The radiating stacks, which held up to 1,500 volumes, were lit by a long, curved bay window. The interior finishes throughout the first floor were specified to be of red birch in natural color, while the second floor would be finished in white wood painted ivory white. The floors were of red birch and rift hard pine. The upstairs Hall had a seating capacity of approximately 50 and a rear emergency stair, in addition to the stage and three Ante-Rooms. The plan designated the basement space as a periodical room, two general rooms for storage, and a heating apparatus room.[13]

The West Branch Library opened to the public on May 27, 1909, with branch librarian Miss Nellie M. Whipple, and three assistants, Ethel M. Nute, Bessie S. Cobb, and Annie M. Currie (Fig. 2). The attendant was Ronald Moore and the janitor was John J. Kilty.[14] The librarian staff worked on a schedule of 52 hours per week; library hours were from 1 to 9 PM on the weekdays and 9 to 9 on Saturday.

The library acquired approximately 1,406 new books and had a total of 6,880 books. This total was a result of the addition of duplicate volumes from the main library and transferred books from the two other West Somerville agencies, which were closed in anticipation of the new library.[15] The total circulation of the West Branch library during its first year was 109,147, with the total books 7,456. Each book was estimated to have been checked out an average of 14 times during the year. The number of card holders at the branch library at the end of the year was 5,388, with only 291 previously registered. The library closed for two weeks in 1909 during a scarlet-fever epidemic, which lessened the circulation by about 2,000.[16]

The West Branch Library operated steadily until about 1991 when both the West and East Branch Libraries had to close for a short period due to lack of funding.[17] A short time

[13] "Carnegie Library Plan Chosen." 1908.
[14] "Thirty-seventh Annual Report, " 1909. Page 4.
[15] "Thirty-seventh Annual Report, " 1909. Page 11.
[16] "Amazing Development of West Somerville Library." *Somerville Journal.* Friday, July 1, 1910.
[17] "Branch Libraries to Close Friday." *Somerville Journal.* Thursday, June 20, 1991. Page 1, 13.

later they reopened with more restricted hours, until the library was finally able to open five days a week. Currently the library is open Monday, Wednesday and Thursday from 10 AM to 9 PM, Tuesday from 10 AM to 6 PM, and Friday from 2 to 6 PM. The circulation of the West Branch Library for the 1997-1998 fiscal year was 40,954 and its holdings for the 1996-1997 fiscal year were 29,449. During the 1997-1998 year, 15,118 books were checked out by adults, 14,017 by young adults, 9,197 by children and the remaining were audio visual materials. The Library sponsors several children's programs, including story hour, pre-school crafts and a toddler playtime; there is an adult book discussion group

Period of Significance

The National Register Bulletin 16A published by the U.S. Department of the Interior in 1991 defines the period of significance for a property as beginning "with the date when significant activities or events began giving the property its historic significance..."[18] Following these guidelines, the period of significance for the Somerville West Branch Library is therefore the date of the library building's construction and first year of operation from 1909-1910. This period of significance reflects the tremendous growth in the population of Somerville at the turn of the century, the necessity of the residents of this area to have their own branch library, and the recognition of this need by the city leaders. The popularity of the library during this period was shown in the circulation card holder numbers generated in the first year of operation (Fig. 3).

The West Branch Library design by McLean & Wright used the later Beaux-Arts / Classical Revival symmetry and simple classical ornamentation to produce a stately and solid public building (Fig. 4). This unpretentious, yet noble-looking building may have been what the Somerville leaders were attracted to when they chose this design for their new public library. Their choice reflected not only the preferred public building style in Boston and other large cities that were constructing Carnegie libraries, but the importance

[18] National Register Bulletin 16, "Guidelines for Completing National Register of Historic Places Forms." U.S. Department of the Interior, National Park Service, 1991. Page 42.

and impact that this branch library was to have in the West Somerville area. The architectural style of the library reflects the most common and popular form of public building styles during this period. The important design elements that contribute its architectural significance are the symmetrical arrangement of the front facade and side wings, the fluted Ionic limestone columns, the Greek ornamentation and leaded fanlight over the door. The interior spaces reflect the symmetrical design of the exterior. The building has had only a few utilitarian alterations, which are of little historic significance, although some, such as the closure of the skylight, may be considered to have an adverse effect on its significance.

Chronology of Development and Use

The West Branch Library has been continuously used as a branch library for the City of Somerville since its formal dedication on May 26, 1909. Both the exterior and interior have undergone some modifications, but have not been irrepairably altered (see Physical Description section).

The original plans show the library much as it was built, although terra cotta was indicated for all the contrasting exterior elements, including the watertable, columns, quoins, lintels and sills, but was replaced with limestone (Fig. 4). The original hipped slate roof, which was clearly visible above the cornice and wood entrance pediment, was replaced in the early 1990's with modern asphalt shingles. The original wood doors and windows remain intact, as well as the classical wood pediment and cornice. The windows have had modern metal storm windows installed on the exterior. The ornamentation details of the original plans are consistent with the built conditions, except for the change in materials from terra cotta to limestone. The two current lampposts on the granite steps have replaced the original lampposts, which had a round glass globe over the lights. Although the lampposts are not indicated on the original drawings, they are in a postcard view possibly made from the architect's rendering and a photograph from the time of the library opening (Figs. 1 & 4).

The interior has had more modifications than the exterior. In 1974 a feasibility study was prepared which resulted in minor renovations and repairs, including making previously unused sections of the basement accessible to the public. The large front room and raised rear room, originally the Periodical Rooms, were converted into children's spaces with bright murals painted on the walls. Drawings resulting from this 1974 study show designs for a proposed toilet room in the west corner of the rear basement and a wheelchair lift, public bathroom and second lift in the storage spaces of the northeast side. These drawings were never implemented. The original toilet room in that area was kept for use as a staff bathroom and modern public bathroom was installed next to it in an empty space. Carpet was installed at some point over the concrete floor.

The roof skylight, which is shown on the original plans and is a significant element of the interior (Fig. 6), has been covered, the ceiling filled in and fitted with fluorescent lighting. The second floor Hall space has been converted to a reading room, possibly at the time of the 1974 feasibility study. The walls, which were finished in white wood according to the original drawings, were covered in plywood paneling and the hard pine floor was covered with yellow carpeting. All the original brown cypress doors by the stage still remain, except for the west door, which was converted to a fire door. Although there are no photographs showing the second floor entrance doors, the plans indicate that there were two glazed doors with glass sidelights on either side, the same as the current doorway configuration. The stage, another significant element of the second floor, remains intact and is not currently being utilized.

The layout of the main floor remains the same, reflecting the symmetry shown on the exterior, and many significant original features are intact, including the six Ionic red birch finished wood columns, wood entry doors, fireplaces, built-in book shelves and the staircase. The original drawings indicate a terrazzo floor in a diamond-in-circle pattern for the original Delivery Room and simple terrazzo diamond for the vestibule. In the

building as constructed, this was changed to small green and white tiles with a large white field and a border of green and white fretwork patterns.

The original red birch finished bookshelves still remain in the original Children's Room, Reading Room and Reference Room (Figs. 7 & 8). However, over the years, the walls and ceiling have been painted over, concealing the original decorative stencils shown in the historic photographs (Figs. 9 & 10). Some traces of these original stencils have been revealed in areas where later paint has peeled away. Some later over-painting of earlier decorative motifs remains on ceilings (gold leaf designs), particularly borders around edges and centerpieces. The ceiling has also been redone with fluorescent lights, covering the ceiling stenciling and removing the original hanging pendant light fixtures. However, the original two-branch sconces on the Ionic columns remain, although the original glass globes have been replaced. The original radiating stacks have been removed, as well as all of the original furniture including the reference desk (Fig. 11).

Physical Description (Please also refer to drawings in Appendix)

Existing Conditions

Site

The West Branch Library is located at 50 College Avenue in Somerville, MA. It is set back approximately 25 feet from the street with a grass lawn on either side of the center walkway. The lawns either side of the building are bordered by bushes and trees and surrounded by a metal fence that is not original. A gate in this fence was incorrectly installed and needs to be repaired. Other sections of fence on either side of the driveway, are bent, rusted or dislodged and need to be repaired and painted. The main entrance faces southeast (to be called east) and a narrow driveway on the along the southwest side runs from the street to a small parking lot at the rear of the building. A depressed walkway leads to the rear basement entrance. Concrete walks and curbs need some repairs as does the bituminous parking lot pavement which is in only fair condition.

Exterior (See also Engineer's Report attached)

The exterior of the West Branch Library is a two-story Classical Revival (with Beaux-Arts influences) building of solid, multi-wythe load bearing construction (Fig. 12). It has not been significantly altered since its construction in 1909. The exterior cladding is composed of buff-colored Roman brick and limestone, which has become dirty and stained over the years (Fig. 13). All elements designated as terra cotta in the original drawings, such as window lintels and columns, were changed to limestone, as shown by the evidence of shells and other lime materials in the stone. The full-height basement is separated from the raised first floor by a limestone watertable line (Fig. 14). The base of the building is rusticated granite. The steps up to the first floor are granite and shifted, separated and spread outward due to the deterioration of the supporting brick below and behind them.

The symmetry of the principal facade (Dwg. A-1) is a significant element, reflecting the Beaux-Arts, Neo-Palladian tradition. The center element is a projecting Palladian pavilion with pediment and recessed entrance vestibule with flanking columns in antis reached by the granite steps. The original double wood door has leaded glass transoms. Above an ornamental limestone cornice with an oval cartouche, is a semi-circular leaded glass fanlight and limestone keystone (Fig. 15). One of the glass panes of the fanlight is covered, indicating that it is either missing or broken and dirt has gathered behind the cartouche. On either side of the door is an Ionic limestone column supporting the painted wood pediment above the entrance. The column capitals and stone below are stained with dirt (Fig. 16). Inside the tympanum is a wood open book and leaf ornament showing some evidence of original polychrome paint (Fig. 17). There is a limestone acroterion ornament at the peak of the entry pavilion pediment and limestone oil lamps of learning at the corners. The paint on the pediment and bracketed wood cornice is severely peeling and has exposed the wood underneath (Fig. 18). In addition, the engineer's report noted that the dentil cornice soffit is sagging and several joints need to be filled or caulked. The cause of the sagging will need to be investigated further.

The symmetrical facade has large double-hung windows with limestone lintels and sills on either side of the entrance (Fig. 19). Above these windows are the small, second floor windows with decorative wood grilles that are surrounded by painted wood frames. The paint around these windows is also peeling. The small window frames at the basement need to be repainted. According to the engineer's report, there has been limited outward movement at the cornice line and diagonal cracks over the windows, beginning at the top of the keystones and ascend to the bottom of the window grilles on the second floor. Due to the spreading of the wall, the southern window keystone and entire northern window arch have dropped vertically. Additional verticals cracks appear in the joints between the walls of the main facade and entrance, at the southeast corner quoins and a switchback crack between the northern first floor window and the top of the basement window below it. The engineer's report suggests that this cracking may be due to an overall forced outward movement (horizontal growth) of the wall near the top.

The southwest (south, Dwg. A-3) and northeast (north, Dwg. A-4) sides of the building have an identical composition (Figs. 20 & 21). Both have a rounded bay window that stops at the second floor. At the second floor level above the bay is another window with a wood grille (Fig. 22). Next to the bay window is another grouping of small basement windows with large first floor double-hung sash with transoms and second floor windows. The bracketed cornice ends at the projecting quoins, marking the end of the formal facades. On the south facade there is a medium sized window, which lights a stairwell, at the upper end of the first floor. On the north facade there is a medium sized window at the regular first floor height, which brings light into the original Cataloging Room. As with the main facade, the brick is dirty and the wood cornice and window frames are peeling paint. There is graffiti on the western-most basement window of the north facade. The engineer's report noted that there are "switchback" cracks between the first and second floor windows in the west corners of both facades and small cracks in the quoins at the tops of the east corners. Random vertical cracks occur in the joints of the water table and there is a vertical crack at the back edge of the northern bay window that

runs the entire height of the facade (Fig. 23). There is also some unpointed exposed brickwork at the foundation of the south bay window.

The west (rear, Dwg. A-2) facade is dominated by a rounded eight-bay wall consisting of large triple-hung windows that provide sunlight to the original stack area of the library (Fig. 24). Below these windows, are corresponding double-hung windows at the basement level. Three pairs of narrow "attic" windows with single glass lights at the second floor level give light to the former Ante-Rooms, now unused. At the southwest corner of the rear facade is an modern emergency exit door, while at the northwest corner is a below-grade door leading into the basement and a window at the first floor. The door is boarded and in poor condition. There are vertical cracks at the intersections between the flat wall and bay window and other diagonal cracks at the top of the windows. All the exterior cracks that are visible at the top have corresponding cracks in the interior. The conditions of the water table and cornice are the same as other elevations (Fig. 25).

According to the engineer's report, the low-hipped roof is self-supporting with no interior supports, so that each roof surface was designed to intersect at angles to support the whole structure (See Section, Dwg. A-5 & Roof Plan, A-9). The engineer's report notes that there is some wall deflection and cracking that are related to an improper roof design. The hipped roof was redone in the early 1990's, retaining the original configuration, but replacing the slate with modern materials (Figs 26-28). The large chimneys on the south and north sides have a radical outward lean, which may, according to the engineer, follow the actual lean of the top portions of the supporting walls. The stone chimney caps have severely weathered and crystalline growth around each chimney (Fig. 29).

Interior

The basement (Dwg. A-6) has been remodeled from the original Periodical Room into a Children's area. The exposed brick walls, which are the building foundations, have been plastered below the windows and painted with decorative children's murals (Fig. 30). The brick at and above the window line is painted dark red. The paint and plasterwork are peeling and cracking due to water infiltration on the surfaces (Fig. 31). Efflorescence was found behind the north and south bay windows. Pink industrial grade carpeting has been placed on the floor over the concrete. The ceiling has been plastered with an antique finish and fitted with fluorescent lighting. The original entrance into the rear room remains the same with an arched entry opening and two arched windows on either side (Fig. 32). Behind the opening are three steps to the left and right, which lead up to the raised floor of this room. A low brick wall separates the raised floor from the stairs. Currently there is an iron fence on this low wall, probably to keep children from falling off it. The boiler room and rear stair hall to the west and the bathroom and storage spaces to the east are both accessed by arched openings in the brick walls on either side of the rear room (Figs. 33 & 34). Opposite the north rear door is the original staff bathroom, located at the bottom landing of the stairs from the librarian's offices on the first floor (Fig. 35) and is still used in that capacity. It retains an original heating register on the wall.

On the first floor (Dwg. A-7), the stairs and entrance vestibule, both significant interior elements, have remained unchanged. The floor, which is similar to the circulation hall, floor has a white tile field with a green and white tile simple geometric fret pattern border. Although it is partially covered by a modern rubber mat, is in fair condition with cracking and staining (Fig. 36). The walls of the vestibule have narrow slat wainscoting with plaster walls above. The curved stairs to the north lead up to the second floor, while the curved stairs to the south go down to the basement. The finish of the treads worn off over the years and is in fair condition. The newel post at the bottom stair is a thick, intricately carved spiral (Fig. 37). The plaster walls above the stair wainscoting that leads to the basement is painted with modern children's stories. This curved staircase and

decorative railing is an excellent example of the Classical Revival / Beaux-Arts tradition. The original double wood doors with center glass panels, glass sidelights and transoms lead into the first floor center hall space (Fig. 38).

The center hall where the circulation desks are currently located, was originally the Delivery Room and retains the original green and white tile flooring with a geometric fret border. This floor is in fair condition with some large cracks. On the ceiling of the hall is a large circular ornamental plaster medallion for the chandelier, which may or may not be the original chandelier (Fig. 39). The ceiling has been repainted, covering the original border stenciling. Six Ionic columns flanking corner pilasters are located in the corners of the Delivery Room; two in the west corners and one each in the east corners. The red birch wood still shines with its original luster. Attached to the inner west columns are original two-sconce light fixtures.

From the Delivery Room, the librarians were able to monitor the Children's Room to the north; the Adult Reading Room, a mirror of the Children's Room, to the south; the Reference Room behind it; and the Stack Room in the rear. Today, the Adult and Children's rooms have been converted to general reading rooms and the Stack Room into an additional reference and work area (Figs. 40 & 41). The Reference Room continues to be used in its original capacity. The Reading Room, Children's Room and Reference Room all retain the original built-in shelving in the same dark finish as the Ionic columns. Both the Reading Room and Children's Room have the original fireplaces in the west walls (Fig.42). These matching fireplaces are significant interior elements. They are finished in the same dark color as the bookshelves and columns and have simple, classical elements including the keystone, which reflects the exterior elements over the windows. The slip is of dark green marble and there is the original metal fender at the bottom. On either side of the fireplaces are arched alcoves with a door into the Reference Room in the south arch and a decorated modern mural in the north arch. The door in the north arch of the Children's Room leads into the Librarian's office. Both of these wood doors have the same dark finish and are original.

The original wood flooring in the reading rooms and reference areas remain in good condition. Throughout the entire first floor, the walls and ceilings have been repainted. The walls of the original Reference Room have been painted with murals. As in the basement, water infiltration has occurred throughout the first floor, causing the plaster and paint layers to peel away (Fig. 43). In the southeast corner of the south reading room, the water damage has exposed a section of the original ceiling stencil. This stenciling has green leaves with a pink geometric line threading through the leaves (Fig. 44). Efflorescence has occurred on the north and south walls and there is evidence of diagonal cracks in the walls.

The original Librarian's Room is still used by the library staff and for additional storage space. As with the other rooms, the walls have been painted over, covering the original stenciling shown in the historic photos. The main entrance into this room is from the original Stack Room. This original door has a solid center panel and is flanked by two glass sidelights. A fireplace set against the east wall backs against the fireplace in the original Children's Room. This fireplace has a dark wood mantle also with classical detailing and a unique green glazed brick or tile slip. The original metal check is still in place (Fig. 45). The fireplace is flanked to the north with a door that leads into the Children's Room and a built-in cabinet with shelves and drawers to the south. Currently in the north doorway is the original library safe from E. R. Morse Safe Co., Boston, MA. In the northwest corner of the west wall is a small closet with an original porcelain sink. The closet is currently used for storage. In the southwest corner of the west wall is a door that leads into a small hallway space. The hall contains a door to the south that leads into the Stack Room; a door to the north opens down to the stairs that lead to staff bathroom and basement; a door to the west leads into the original Cataloging Room in the north corner of the first floor. This room is now a lunch space and has an additional glass-paneled door into the Stack Room. As with the rest of the first floor and basement, there is evidence of efflorescence and peeling paint where water has infiltrated from the outside and cracks that correspond to cracks visible on the exterior.

The second floor Hall (Dwg. A-8), originally used as an auditorium space with room for up to 50 people, has been converted into an additional stack / reading room. Two major elements of this interior space are the stage and the skylight. The stage remains, although it is unused (Fig. 46), while the skylight has been covered. The ceiling has been remodeled with fluorescent lighting. Behind the stage are three original Ante-Rooms, which are locked and empty. All the original wood doors to the Ante-Rooms remain, although the south door, which leads to the south rear stairs, has been converted to a fire exit. The current stacks in the main space are not original to the library, but most likely come from the main Somerville library. There is a yellow carpet covering the original wood floor and plywood paneling over the walls (Fig. 47).

There are diagonal cracks in the walls separating the Ante-Rooms and cracks on the inside surfaces of the exterior walls (Figs. 48 & 49). According to the engineer's report, these cracks suggest either a backward shear of the roof with respect to the floor, and/or a downward deflection of the inner floor with respect to the adjacent wall. The ceiling also has numerous scattered cracks in the plaster suggesting some structural movement. The ceiling of the stage area has deflected and cracked and the north and south walls have an outward lean of more than 1" in 4 feet. The engineer also states that the floor of the Hall would have been built to support live loads of 100-150 pounds per square foot (psf) and that with the installation of stacks, there has been an increase in floor load that may exceed current code limits. Stack loads should be moved to the perimeter rather than concentrated at the middle of the structure. Currently the code contains provisions that require certain upgrades and changes in the current configurations, particularly stairs, door sizes and hardware. These are primarily the egress requirements and are discussed below under code issues.

Code Issues

Accessibility

There are several factors of concern with respect to code issues for safety, access and egress. Of prime concern are the uneven and various riser heights both on the exterior and certain interior stairs. The front entrance stair does not have riser and tread heights or configuration (ratio and nosing detail) to conform with current code, however they do not have to be reworked extensively if only repaired. On the interior, some sets of steps in the basement between Children's areas in the front and the mezzanine in the back half of the building have widely varying riser heights of between four and eight inches in the same set of steps. In addition, the rear exit door at the northwest corner is blocked by box storage and does not have adequate egress signage or hardware. The same is true of most hardware elsewhere in the building. Double doors at the front entrance, although having panic bars, are not of regulation width (which may be acceptable in an historic building if other means of HP access and egress are available) and lack emergency signage and lighting.

Fire and Smoke Detection

Fire detection is done principally by heat detectors in a system which is operating but outdated. A more suitable smoke detection system is preferable and should be installed. The emergency lighting and warning systems are obsolete or non-existent, do not meet current codes and should be replaced. A firer suppression system would be necessary in any potential kitchen area, however not mandatory throughout the library.

Electrical. (See Engineer's Report attached)

The existing entrance service to the building appears adequate for the present uses. If the upper floor areas are subject to more intense use demanding possible air conditioning, stage lighting and high-demand appliances, then the service will have to be increased in size. The distribution of electricity throughout the building is a mixture of inadequate two wire cables and outlets and Code-permitted three wire cables and outlets. The two-wire cabling should be replaced by three-wire cables. Associated outdated non-conforming switches and outlets should be replaced with code-approved devices along with additional outlets as necessary.

In some cases, historic light fixtures are shown in early views of the exterior and interior in the reading rooms and other areas, for example the front exterior lamp posts and the twin-armed sconces attached to the columns (Figures 1, 4, 7, 8). Some of these remain in their historic locations although their globe shaped shades have been replaced with different shades (Figure 40). Inappropriate fluorescent lighting covers original decorative stenciling in some areas and merits upgrading with more sensitivity to the original design that had ceiling pendant fixtures which have been removed. The exterior ornamental lamp posts may have their globes updated with new lamps, subject to their limited potential effect on the historic ambience.

Fire detection as previously mentioned, is done principally by smoke detectors in a system, which is operating but outdated. An updated smoke detection system would include code-approved emergency lighting, warning systems and signage which is required and should be installed.

Mechanical. (See Engineer's Report attached)

Heat. Heating for the building is provided by a steam system. The boiler produces steam, which is distributed by a combination one and two-pipe steam system throughout the building. There are few devices in the system that control the distribution of the heat, since the first and second floors are all on a single zone. The basement has been updated with a hot water coil that uses baseboard units. Some of the piping is inapproriate and could be re-routed for aesthetic reasons. The present condition is one where some areas receive little heat, while others are overheated. The system is, however, judged to be usable and still has life in the present situation. Individual room and area controls can be added at some significant cost to the system that should ensure that all of the various spaces are heated adequately and uniformly. Heat pipes in public and administrative rooms and areas need to have permanent protection to prevent burns. Ceiling fans or ducted HVAC systems may replace the outdated steam system to provide better climate control and ventilation. Some insulation of the attic area would improve heat retention.

Plumbing. City water enters at the street side in the basement. Service and piping is conventional and appears to be adequate for the tasks of providing water and septic service to the lavatories and rest room facilities. If an interior fire control sprinkler system is installed, service will probably have to be upgraded. Additional toilet fixtures may be required by code if intensified use for the second floor hall for assembly use is contemplated, with some additional lavatories and drinking fountains also suggested.

Gas. Service is provided at the College Avenue side, basement level, through a 1" diameter pipe. It should be adequate for the tasks of the gas-fired boiler located in the boiler room. Although hot water heat is adequate by electric, it may be converted to gas.

Ventilation. Other than opening windows and a minimal duct system, there is little existing mechanical ventilation in much of the building beyond the obsolete vent duct system in the second floor hall and bathrooms. This system needs significant

improvement, especially in the administrative, public reading and children's basement areas. This system would be upgraded in the process of other renovations. Bathrooms which do not have operable exhaust fans other than the existing vent system must also be upgraded as soon as possible to meet modern standards. The roof ventilator, which is near the proposed elevator location, would have to be adapted for an updated system.

Air Conditioning. The building has no central unit, only window-mounted units for air conditioning, however full or partial installation of a central air system should be considered to improve climate control. Since the roof is already structurally inadequate, the best potential location for an air conditioning chiller unit would be subject to careful study, however a split system with an exterior ground-mounted chiller and interior fan unit would probably be most feasible. Chilled liquid could then be circulated to fan coil units located inside, possibly in a utility space in the basement. Ducts could circulate the chilled air from there to the public and office areas. Air conditioning of the Reading Room is desirable for a library along with humidity control. The basement Children's areas below grade are all capable of having air conditioning installed, but less likely to require it. If it is anticipated that the second floor Hall will be used intensively, the air conditioning and ventilation of that space should be strongly considered.

PART 2 - TREATMENT AND USE

Ultimate Treatment and Use

The West Branch Library is to continue as a branch library for the residents of West Somerville. Therefore, it is essential that the library facilities not only be upgraded and repaired, but the essential special historic character of the library retained. With all historic buildings it is essential that the building be made weather tight and the large problems be corrected. The site fencing, paving and access concerns should be addressed.

The most urgent need is to conduct a detailed roof inspection and analysis in order to determine the roof structure and stability. This detailed inspection will help determine the best method for correcting the cracking, shearing and deflection in the ceiling and walls. In addition to a roof inspection, the chimneys need to be straightened and the caps replaced. It may also be necessary to conduct a second floor analysis in order to determine the book load capacity. Ultimate use decisions regarding the potential use of the stage, skylight and meeting room will determine the final load capacity as well as access and egress requirements necessary. Any proposed elevator installation would affect both the structure and its operating systems and will need to be incorporated at an early stage into renovation plans.

The next step is to repair the exterior walls, including crack excavation and injection, selected repointing and arch reconstruction. In addition to the masonry work, there will be stripping, repainting and repairing the wood window frames and grilles, and pediment and cornice areas. The front steps will need to be reconstructed and the front finial straightened. The final and least urgent step is to waterproof the foundation wall.

After the exterior is made weather tight and all water infiltration cracks etc. have corrected, the interior will need to be repaired. New plasterwork repairs to deteriorated

areas should be done and then be painted with historically appropriate paint colors. The original ceiling stenciling in the southwest reading should be restored. The tile flooring needs to be repaired where it has cracked over the years. Inappropriate interior finishes in the basement, second floor and auxiliary areas need to be removed. In areas where moisture deterioration has been a problem, more permanent finishes other than paint, such as tile or other water resistant surface should be considered. In conjunction with repairs to interior finishes, mechanical, electrical and plumbing systems and fixtures need to be upgraded. Code violations of access, egress and alarm systems need to be corrected as described in previous sections and as detailed in the engineers' reports attached.

Requirements for Treatment

There are various code requirements that must be satisfied in the renovation of the library. These include fire safety, access and egress requirements as well as ventilation, plumbing and parking issues that are currently under review.

The question of accessibility must be addressed to meet current American Disabilitaies Act (ADA) requirements and those of the Architectural Access Board (AAB). A previous study was made which proposed an elevator lift installed with an accessible restroom in the northeast corner. This access could be achieved by adapting the current northwest basement entrance with a ramp from the parking area. Access from the front would be difficult due to major level changes and the potential adverse impact to principal historic features and spaces.

The Secretary of the Interior's Standards govern the mitigation of any potential adverse effects of the other code requirements such as the alteration of significant historic features and spaces. Needs of ADA and other requirements need to be weighed against the historical significance of the features proposed to be altered. The State Historic Preservation Officer would need to be consulted for review on any alterations affecting a National Register listed Historic Property, as would the local historic preservation commission.

The degree of systems and finishes upgrades can also be a variable based upon budget considerations. In every case, however, the system or finish alternatives to be considered should take into account the historic appearance of the building. For example, large ducts should not run through historic spaces, and inappropriate in expensive finishes should not be substituted for the originals, particularly components such as decorative plasterwork or woodwork.

Alternatives for Treatment

Alternatives for accessibility improvements and the potential for restoration of significant features of the building such as the skylight on the second floor are currently under study and discussion. The accessibility options are limited for several reasons: The principal spaces at the front of the building could not accept an elevator without severe adverse effects to the features which give the structure its significance. The front entrance, as previously mentioned, is raised well above street level (9 risers, about 72 inches). In order to provide an exterior ramp, the ramp would need rise about six feet at a 1:12 pitch (maximum allowed by code). This would result in an excessively lengthy ramp 72 feet long, and with a maximum run of thirty feet between landings would have three runs.

A second option for access at the front would be a lift. An exterior lift would require code variances, since enclosures are normally required, and any enclosed elevator on the front of the building would likewise be a severe adverse effect. Even if an unenclosed lift were allowed, any location at the entry area would intrude on the interior stair, if an opening were added to either side of the front entrance pavilion. There is no usable landing platform at the top of the entry steps, and the only way to create a five foot required landing would be to entirely rebuild and extend the front steps, an expensive option which would also affect the original appearance adversely.

The third option seems the most viable, both functionally and philosophically, from a preservation viewpoint, although it does not utilize the front entrance as desired by accessibility advocates. This alternative would use an existing entrance off the parking lot, which could also accommodate a handicapped-accessible parking space, also required by code. This would be reached from the right front of the building via a new pathway (from the gate in the iron picket fence) which would lead through the landscaped yard to the northwest corner ramp. In addition, it would lead by a relatively short, unobtrusive ramp to the upper mezzanine level of the basement Children's Reading area. This is at the northwest corner of the basement in the most logical location for an interior elevator.

The proposed use of the second floor Hall and restoration of the skylight is one area where there are alternatives for treatment. Any significant increase in public use will require upgrading all systems to code, particularly for assembly use. Alternative use proposals may affect the question of the skylight restoration and both sound amplification and light control devices will be a consideration for any planned multi-media or staged theatrical or conference-oriented, lecture or educational events. The room would be a significant feature of the building if restored and made accessible for public use, other than simply as a reading or stack area.

PART 3 - WORK PLAN

Approach

The best approach to the building's preservation would be to initiate exterior repairs from the top down and from the exterior to the interior; site work, although listed first, may be undertaken at any time. Improved access and code issues are an important consideration for this building that would require site work for an accessible entrance.

Significant Elements

Significant defining components of the original design, which should not be altered, include the following features:

- Exterior:
  - All decorative elements including acroterion, lamps of learning, decorative tympanum, leaded fanlight over door, wood entrance door and transom.
  - All original wood window sashes and second floor decorative wood grilles
  - Granite steps.
- Interior:
  - Entrance vestibule floor tiles, heating register, wood doors and transoms into main library area.
  - Up and down front staircases with decorative newel posts, balusters and rails, wainscoting, wood treads and risers.
  - First floor symmetrical design layout as a defining original feature.
  - First floor circulation area floor tiles, original wood flooring, decorative columns and sconce light fixtures, built-in bookcases and shelving, fireplaces and mantels, any original wood doors and knobs, safe and closet sink in Librarian's Room.

- Second floor stage with decorative trim and moldings, light fixtures and Ante-Room doors; rear staircase (lesser significance than front); decorative wood window grilles; and skylight.
- Basement layout with arched masonry openings and windows separating upper and lower sections; rear staircase (lesser significance than front); entrance doors into basement.

In order of priority, the work may be undertaken in the following order:

Site (May not necessarily be first, but should be done to upgrade access and egress)
The concrete paving of the rear parking area, curbs and walks around the building needs repairs to cracked and settled areas. The adaptability of the rear basement entry for an accessible entrance needs to be explored and design issues addressed prior to during repairs. When the pavement is to be repaired ramp alternatives need to be finalized prior to installation, depending on historical significance of affected features. The landscape needs to be pruned and maintained, with fencing and gates repaired and made operable.

Roof
Historic roofing material should be retained and or restored wherever possible or replaced with visually compatible materials. A new roof duplicating the historic appearance of the old slate roof, with the original skylight restored, would be preferred. Original roofing and flashing materials remaining under the existing one should serve as prototypes.

Structure
The roof structure which appears to have some deflection due to inherent weakness, needs to be further investigated to determine final condition and repair details. In addition, the second floor structure which is serving as a stack area converted from its original use as a meeting hall and stage area needs to be further evaluated. The present concentrated stack loads in the middle of the room should be moved to the perimeter.

Detailed observations on the structure as a whole are included elsewhere (see Engineer's Report, attached).

Drainage

Drainage issues need to be addressed including re-activation of the downspouts; it is necessary to decide upon the question of whether surface drainage or in-ground drains (to dry wells shown on the basement plan) are preferable.

Walls

The exterior wall damage should have appropriate repointing repairs made with materials to match the original. Other areas, notably by the entrance steps, should also have repairs including rebuilding, resetting and repointing where stones are loosened and disjointed. Mismatched mortar repairs also should be repointed with lime-based mortar and jointing similar in composition and appearance to the original. (see Engineer's Report, and Materials Analysis, attached).

Metalwork

The existing metal gate and fence on the front walk should have minor repair to permit its proper operation with piece, preparation and painting to match the original color. Damaged, missing, or inappropriately repaired components need to be repaired or replaced. In addition, a lock mechanism should be installed to control access if necessary.

Finishes

Exterior painting needs to be done on the basis of careful match to original colors to duplicate the building's historic appearance. Most door, window and trim elements have in various degrees of weathering.

On the interior, the moisture damage evidence to plaster walls is evident and repairs need to be made throughout the building. Old finishes including stencils should be preserved

On the interior, the moisture damage evidence to plaster walls is evident and repairs need to be made throughout the building. Old finishes including stencils should be preserved and restored when finds allow. Humidity control, if the building is important to retain the painted finishes in the building. Floors also would benefit from appropriate refinishing, and as previously mentioned, terrazzo floors need some repair due to cracking.

Security

Additional lighting and an upgraded fire/burglar alarm with code-approved interior and exterior warning systems should be added to provide improved protection for the building.

Accessibility

Factors of concern with respect to code issues for safety, access and egress should be addressed as soon as possible. Uneven and various riser heights both on the exterior and interior stairs need to be corrected. The steps in the basement between Children's areas in the front and the mezzanine in the back half of the building are a hazard and should be rectified. The rear exit-door at the northwest corner should have adequate egress signage and hardware installed along with most hardware in public areas of the building. The doors at the front entrance need emergency signage and lighting and hardware upgrade.

Fire and Smoke Detection

Fire detection should consist of an upgraded smoke detection system that should be installed along with emergency lighting, exterior and interior warning systems. A fire suppression system should be included in any potential kitchen or kitchenette area.

Electrical. (See Engineer's Report attached)

The existing entrance service to the building although adequate for the present uses, should be upgraded if the upper floor areas are subject to more intense use demanding possible air conditioning, stage lighting and high-demand appliances. The inadequate

two wire cables and outlets should be upgraded to code-permitted three wire cables and outlets with required GFI outlets in bathroom areas. Associated outdated non-conforming switches and outlets should also be replaced with code-approved devices. Historic light fixtures shown in early views of the exterior and interior in the reading rooms and other areas, particularly the front exterior lamp posts and the twin-armed sconces attached to the columns should have their globe shaped shades restored. Inappropriate fluorescent lighting, although marginally adequate, covers original decorative stenciling and should be replaced with fixtures more appropriate to the original design such as ceiling pendant fixtures.

Mechanical. (See Engineer's Report attached)

Heat. The present system consists of both a one and a two-pipe system with both the first and second floor on a single zone. The steam system may be adapted and upgraded at significant cost with individual room and area controls can be added to the system that should ensure that all of the various spaces are heated adequately and uniformly. The system has been partially adapted with a coil in the system to provide hot water for heating the basement areas with baseboard hot water heat. Heat pipes in public and administrative rooms and areas should have non code-conforming insulation removed and new permanent protective insulation installed. Ceiling fans or ducted HVAC systems could also augment or replace the outdated steam system to provide better ventilation and climate control.

Plumbing. Service and piping appears to be adequate for the tasks of providing water and septic service. If an interior fire control sprinkler system were to be installed, service would probably have to be upgraded. Rest room facilities will need upgrading for handicapped persons' accessibility along with needed elevator access. Additional toilet fixtures and related facilities such as drinking fountains will undoubtedly be necessary if intensified use for the second floor hall for assembly use is contemplated.

Gas vs. Oil. It might be necessary to at some future date, due to unforeseen conditions, to change from gas to oil-fired heat in which case the existing oil tanks could remain in place.

Ventilation. This system should be upgraded, particularly in the second floor hall, bathrooms and in the administrative, public reading and children's basement areas. This work should be done in conjunction with other renovations. Bathrooms without operable exhaust fans must be upgraded as soon as possible to meet modern requirements. The roof ventilator, which is near the proposed elevator location, should be adapted for an updated system in the course of any anticipated elevator installation as well.

Air Conditioning. The building's window-mounted units for air conditioning should be replaced if possible with a less intrusive central air system to improve climate control. As previously mentioned, due to the weakened roof, the best solution for an air conditioning chiller unit might be a split system with an exterior ground-mounted chiller and interior fan unit. Fan coil units should be located inside in a utility space in the basement. Ducts, carefully located to avoid historic features, would circulate the chilled air from there to the public and office areas. Air conditioning of library spaces is desirable along with humidity control. The basement Children's areas and second floor Hall if used intensively, should be strongly considered for improved ventilation and air conditioning.

Use and Interpretation

The building's history as a library should continue its use as originally designed. Some reference to the history of the building would assist in making its user's aware of its significance of an excellent example of a small Beaux Arts Neo-Classical Library of the turn-of-the-century. The question of re-activating the second floor meeting room and making it accessible to the general public should be explored as part of the Library's future plans.

Technical Data

Mortar Analysis

At the time of the preliminary inspections, six mortar samples for the brick and limestone masonry were taken.

- Four samples from south elevation:
  1. Bedding mortar for limestone masonry;
  2. Repointing mortar for limestone masonry;
  3. Repointing mortar for brick masonry;
  4. Mortar between foundation stones.
- Two samples from front elevation:
  5. Repointing mortar for brick masonry (behind column);
  6. Repointing mortar between limestone and stairs.

Sample #1 (bedding mortar) is very soft and deteriorated in exposed areas, contains lime with considerable part of ash. Sand is light-colored (yellowish-white) very fine with (10%) of coarse sand, containing some sea shells and mica flakes.

Sample #2 (repointing for lime stone) is 3/16 "depth, harder, better preserved, contains lime and cement, no ash. Sand is identical to sample #1, but its color appears to be whiter.

Sample #3 (repointing for brick) is hard, well preserved, contains lime and cement, no ash. Sand is identical to sample #2.

Sample #4 (foundation mortar) is soft contains lime and cement, no ash. Sand is almost white contains very fine and (50%: 50%) coarse sand, containing some sea shells and mica flakes.

Sample #5 (repointing for brick) is soft, contains large proportion of lime with little or no cement. Sand is identical to sample #1, but contains more coarse sand.

Sample #6 (repointing between limestone and stairs) is most hard, contains considerable proportion of cement. Sand is identical to samples #2 and #3.

Conclusion:

Mortars in samples #1, #4 and #5 seem to be original (high lime with little or no cement), samples #2 and #3 are probably also original, sample #6 looks more like a later repointing, but could be original use of a hard mortar with hard granite steps.

Structural Analysis

Please refer to the appended structural engineer's report for data on the condition and proposed repairs to the structure.

BIBLIOGRAPHY

Books, Pamphlets, and Other

"Andrew Carnegie and His Philanthropies," Carnegie Corporation of New York. http://www.carnegie.org/philanth.htm

"City of Somerville, Massachusetts Annual Report, 1906," Somerville, MA: Somerville Journal Print, 1907.

"City of Somerville, Massachusetts Annual Report, 1907," Somerville, MA: Somerville Journal Print, 1908.

"City of Somerville, Massachusetts Annual Report, 1908," Somerville, MA: Somerville Journal Print, 1909.

Dwight, Pamela, General Editor. *Landmark Yellow Pages.* Washington, DC: The Preservation Press, 1993.

"Thirty-seventh Annual Report of the Trustees of the Public Library of the City of Somerville, Massachusetts for the Year 1909," Somerville, MA: Somerville Journal Print, 1910.

Karen Kramer, Phone Interview. 10/7/98.

Newspaper Articles

"Amazing Development of West Somerville Library," Somerville Journal, Friday, July 1, 1910.

"Carnegie Gift Accepted," Somerville Journal, Friday, October 25, 1907.

"Carnegie Library Plan Chosen," Somerville Journal, Friday, July 3, 1908.

"Carnegie Library Opens," Somerville Journal, May 28, 1909.

Stahl, Eric M. "Branch Libraries to Close Friday," Somerville Journal, Thursday, June 20, 1991.

"John Foster Dies-- Colorful Political Figure in City," Somerville Journal and Somerville Press, Thursday, March 24, 1949.

APPENDICES

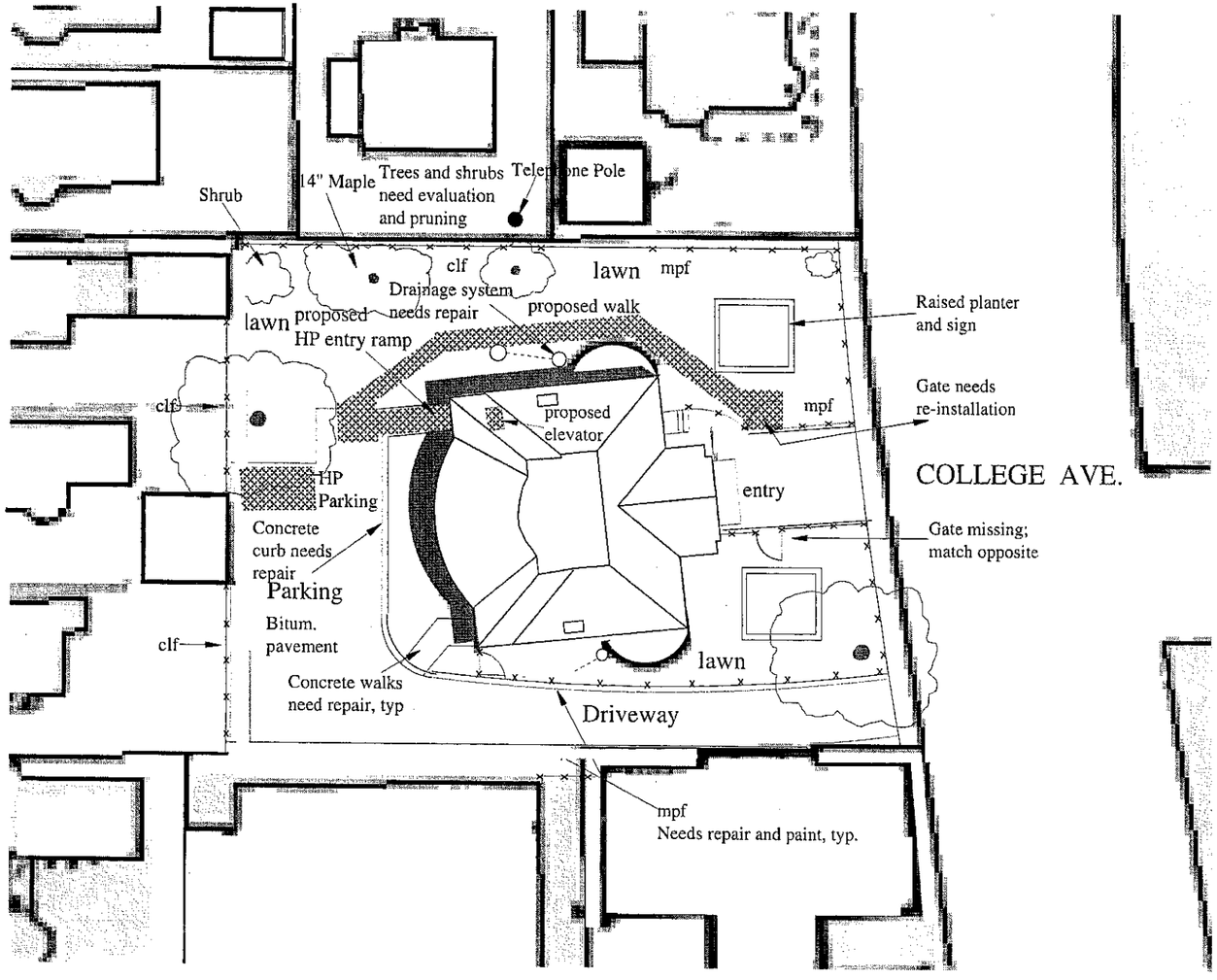
Drawings

Photographs

Engineers' Reports

Drawings

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



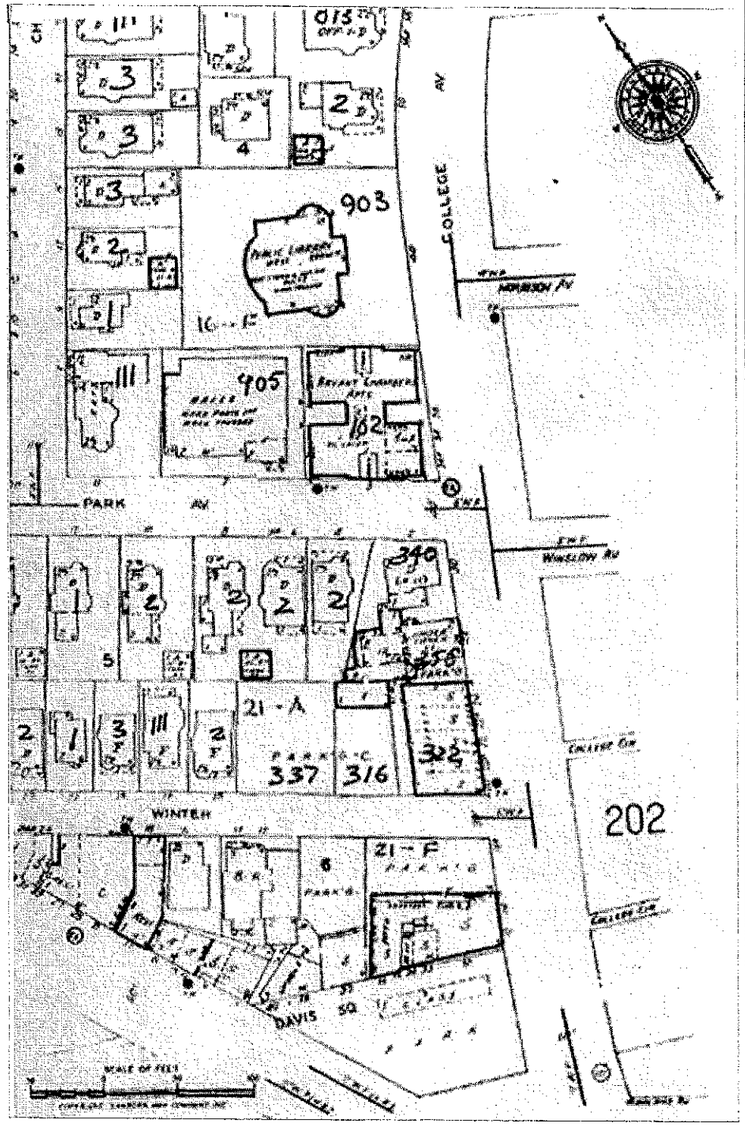
0 50 100

Scale of Feet

West Branch Library

SITE PLAN

clf = chain link fence
mpf = metal picket fence



LOCATION PLAN

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

Location Plan and Site Plan

Scale: as noted

Date: 12/29/1998
Revised: 1/25/99

Drawn By: FCD

Chkd. By: DMH

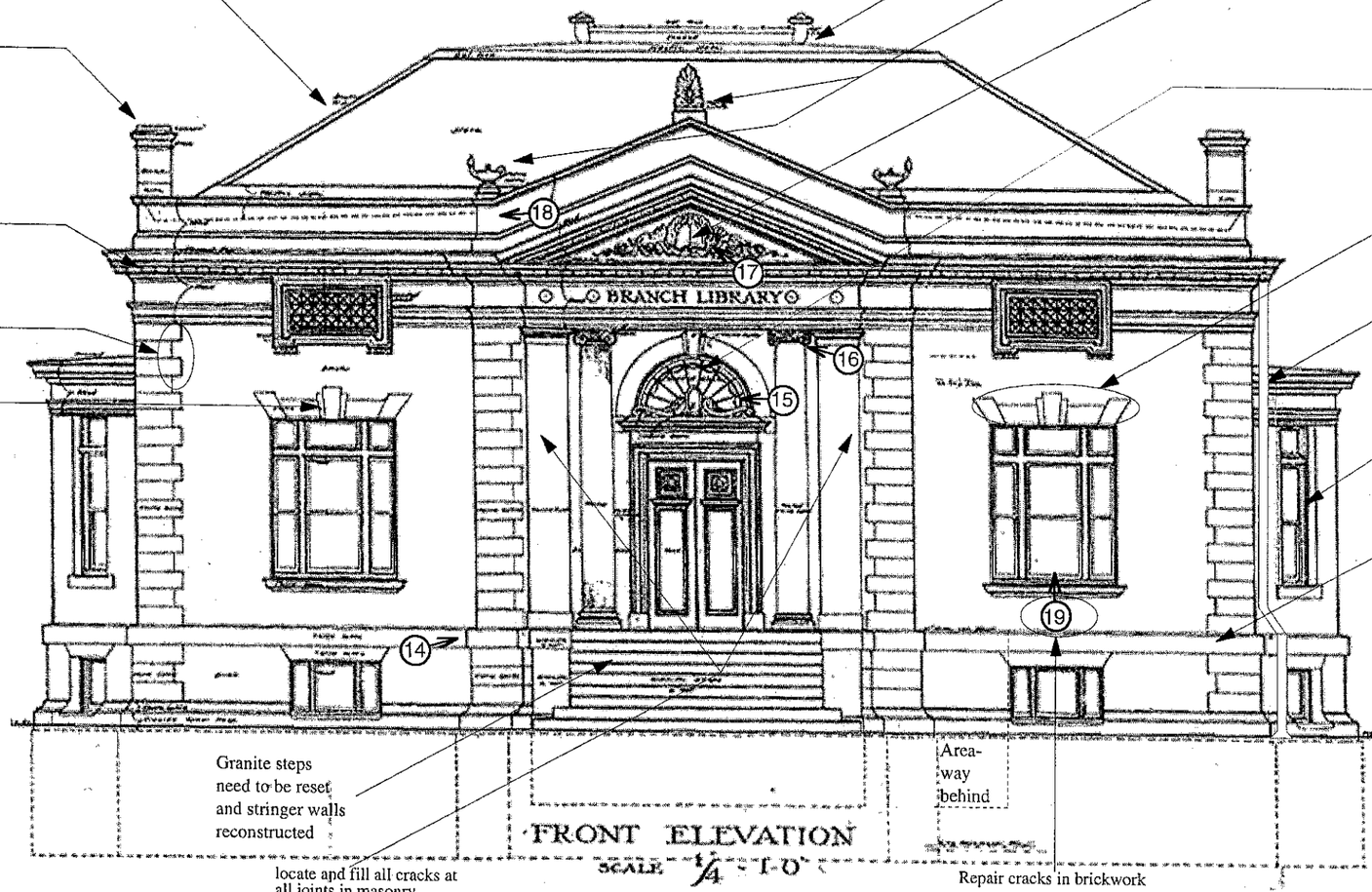
S1

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



Roof structure inspection and analysis recommended; suggest slate roof restoration if permissible by re-analysis if feasible

Chimney cap replacement and chimney straightening

Dentil cornice soffit needs to be repaired to fix sag, joints need to be filled or caulked

Repair cracks

Reset keystone, repair cracks

General Notes:
(1) Masonry needs minor cleaning, repairs, and repointing (13)

(2) Concrete paving of rear parking area, curbs and walks need minor repairs of cracked and settled areas

(3) Cracking in walls need to be further investigated

Recommend re-opening original skylight

Investigate, resupport andt straighten finial; preserve acroteria, lamps of learning and other significant ornamental features

Ornamental pediment carving paint needs color analysis, prep and repaint

Preserve leaded fanlight, wood door and metal window infill and trim as significant components of original design

Reset jack arch and repair cracks

Downspouts need repair, in-ground system needs repair or replacement, typ.

All wood sash doors and trim need prep and paint, typ.

Fill joints in watertable and coping with mortar

Note: Building needs accessible entrance and hardware

Granite steps need to be reset and stringer walls reconstructed

Area-way behind

locate and fill all cracks at all joints in masonry between materials

Repair cracks in brickwork

(12)

Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

Front Elevation

Scale: as noted

Date: 11/24/1998
Revised:

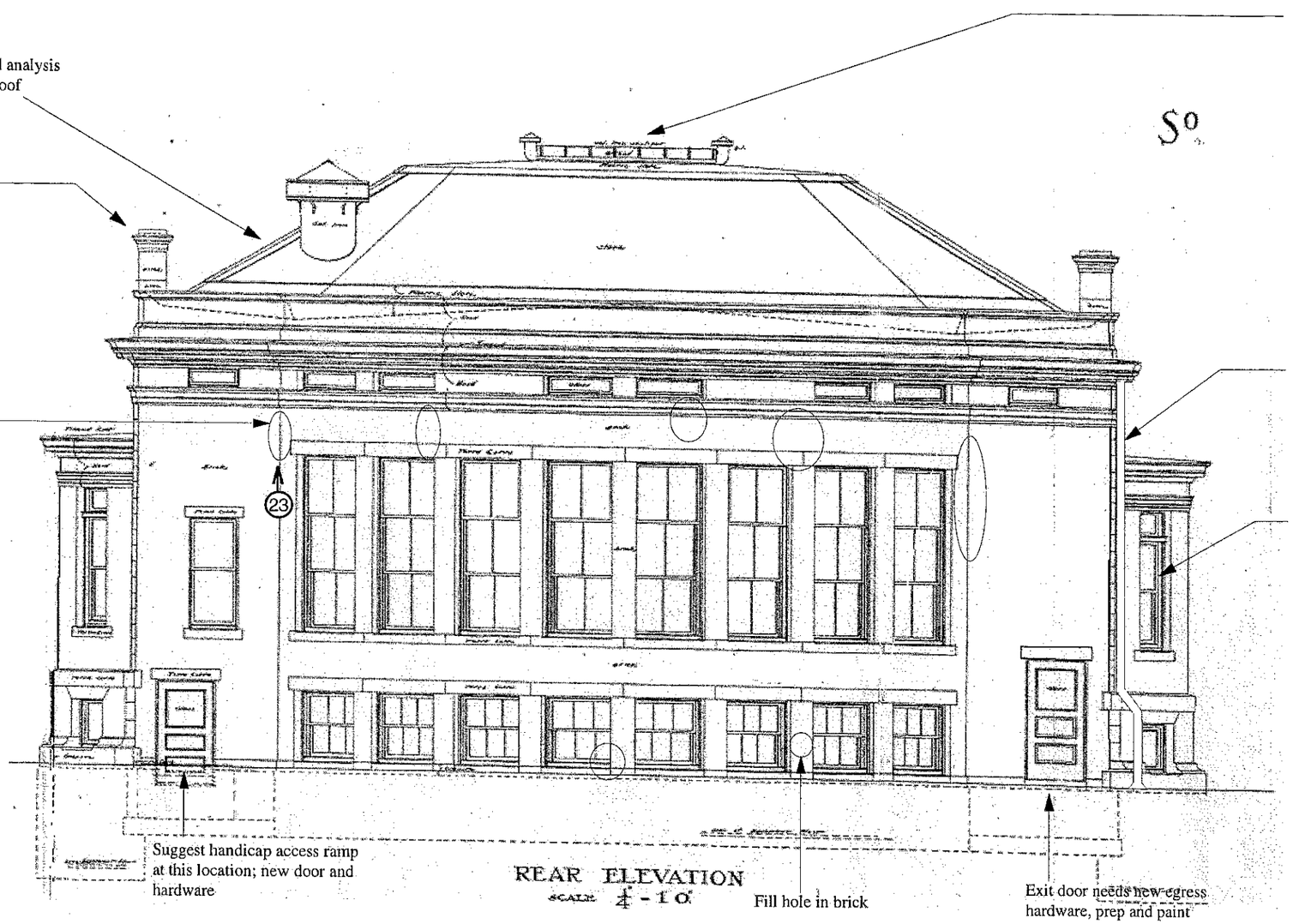
Drawn By: SJW

Chkd. By: FCD

A-1

McGinley Hart & Associates LLP
77 N.Washington St.
Boston, MA 02114
Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



REAR ELEVATION
SCALE 1/4" - 1'-0"

General Notes:
(1) Masonry needs minor cleaning, repairs, and repointing

(2) Concrete paving of rear parking area, curbs and walks need minor repairs of cracked and settled areas

(3) Cracking in walls need to be further investigated

24

Photo Key Number
##

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

Rear Elevation

Scale: as noted

Date: 11/24/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

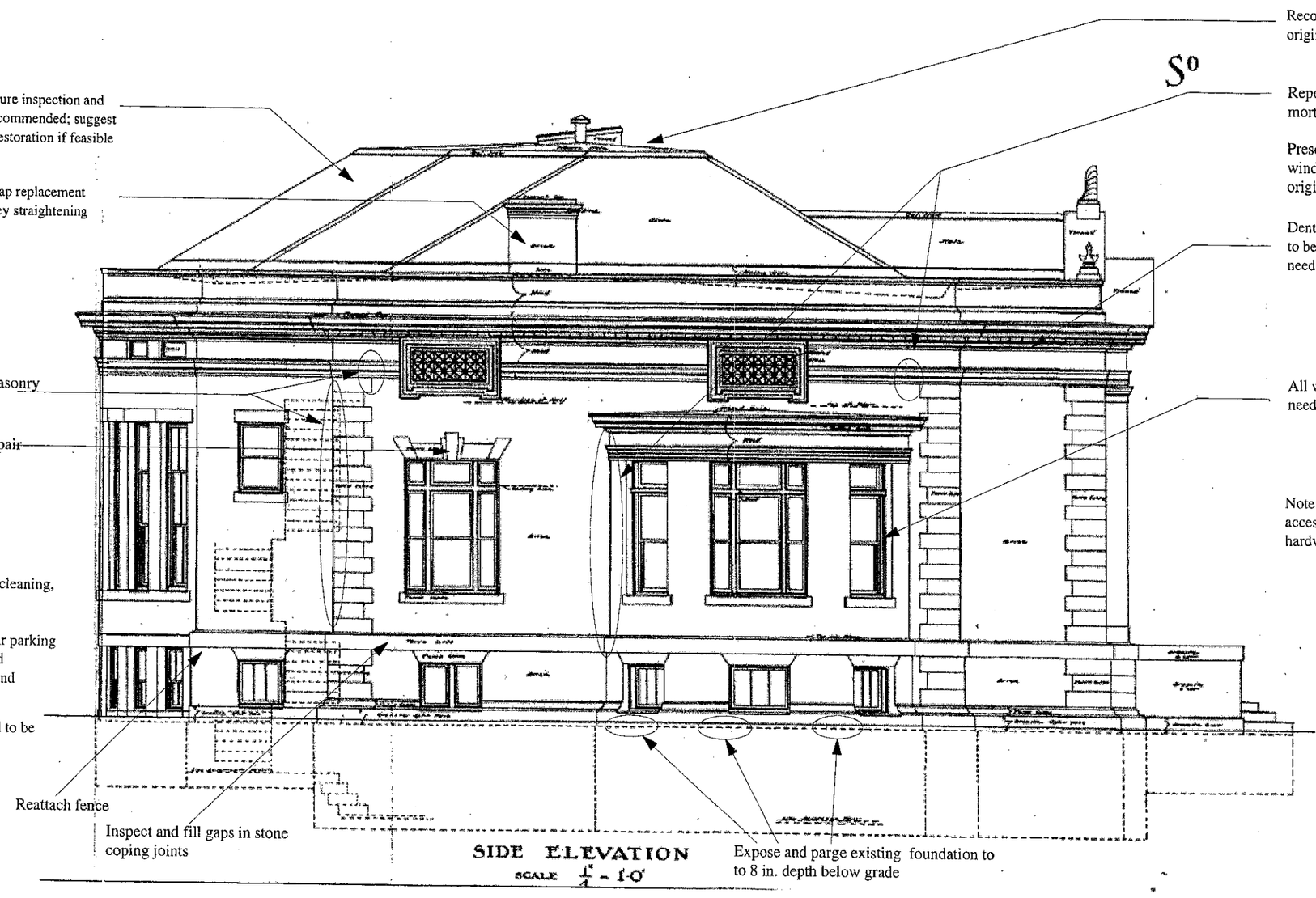
A-2

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



SIDE ELEVATION
SCALE 1/4" - 1'-0"

General Notes:
(1) Masonry needs minor cleaning, repairs, and repointing

(2) Concrete paving of rear parking area, curbs and walks need minor repairs of cracked and settled areas

(3) Cracking in walls need to be further investigated

21

Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

South Side Elevation

Scale: as noted

Date: 11/24/1998
Revised:

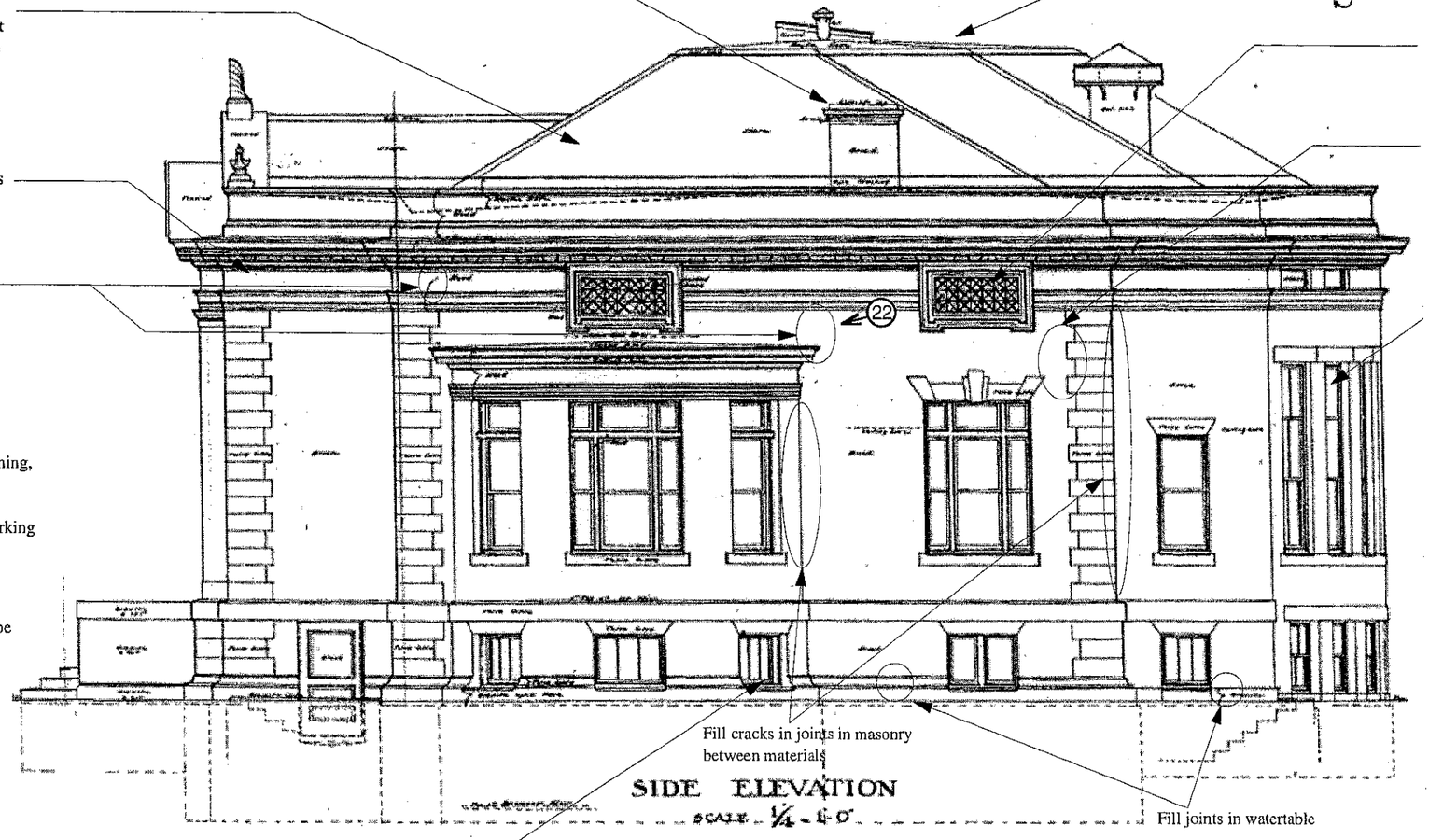
Drawn By: SJW

Chkd. By: FCD

A-3

McGinley Hart & Associates LLP
77 N.Washington St.
Boston, MA 02114
Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
Those drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



SIDE ELEVATION
SCALE: 1/4" = 1'-0"

General Notes:
(1) Masonry needs minor cleaning, repairs, and repointing

(2) Concrete paving of rear parking area, curbs and walks need minor repairs of cracked and settled areas

(3) Cracking in walls need to be further investigated

Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

North Side Elevation

Scale: as noted

Date: 11/24/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

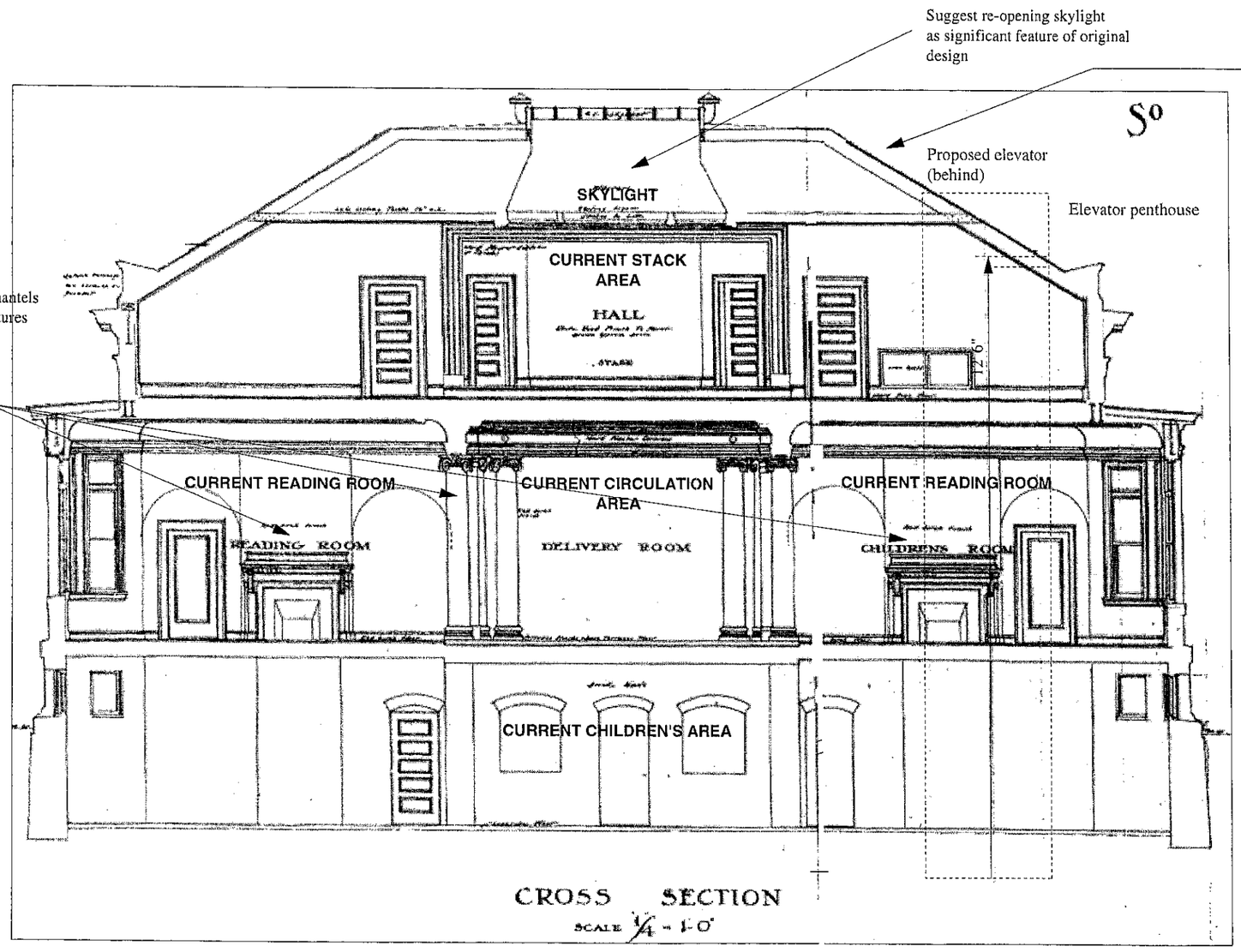
A-4

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • **617 227-2932**
Fax • **617 227-8316**

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

Cross Section

Scale: as noted

Date: 12/8/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

A-5

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • **617 227-2932**
Fax • **617 227-8316**

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.

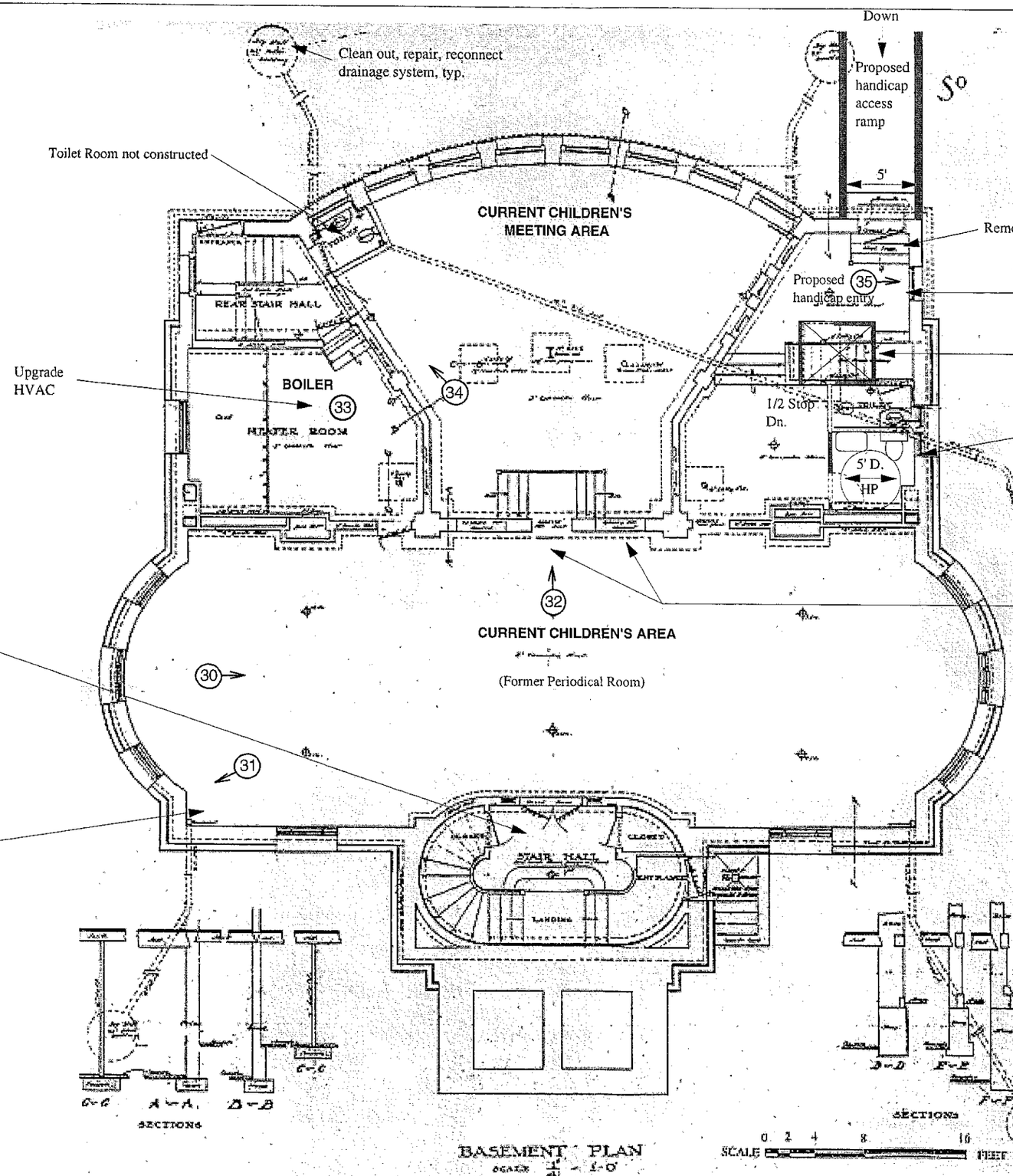


Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

Basement Plan

Scale: as noted

Date: 12/8/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

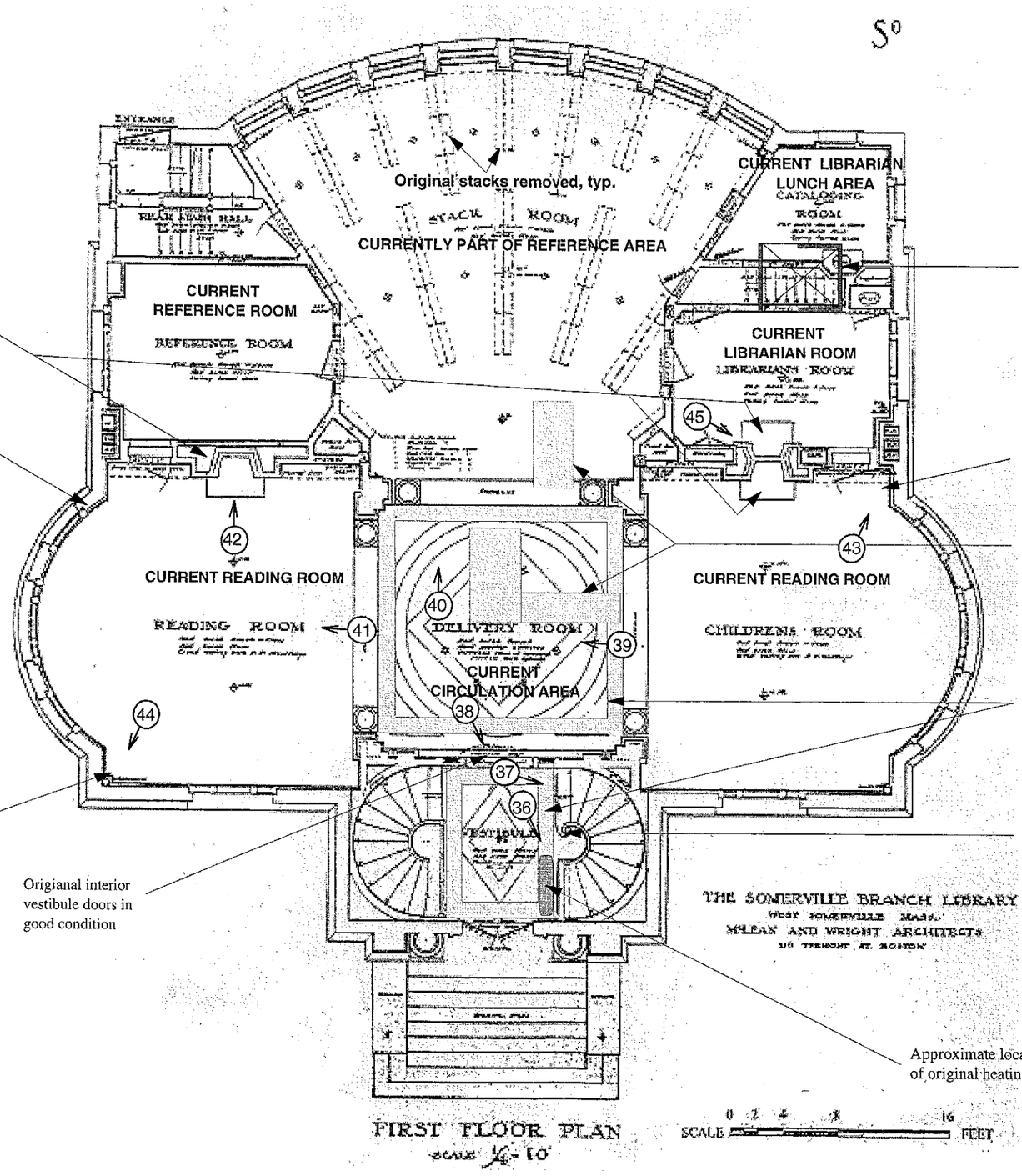
A-6

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



Preserve original mantels as significant original design elements

Typical water damage; Note existing original recessed bookshelves in Reading Room, Reference Room and Children's Room (Fig. 21)

Typical paint and plaster deterioration due to moisture penetration; repaint and repair finishes

Preserve and restore wall and ceiling stencil decoration evidence as significant design component, typ.

Origianal interior vestibule doors in good condition

Proposed elevator; Remove stair, sink

Typical paint and plaster deterioration due to moisture penetration; repaint and repair finishes

Approximate location of current circulation desks

Original tiles on floors with fretwork border; reset tiles and repair cracking where necessary; Preseve as significant design feature

Original stairs and decorative newel post; repair stair treads; Preserve and repair stairs, newels, railings baluster as important original design feature

Approximate location of original heating register

Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library

Somerville, MA

First Floor Plan

Scale: as noted

Date: 12/8/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

A-7

McGinley Hart & Associates LLP

77 N.Washington St.
Boston, MA 02114

Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.

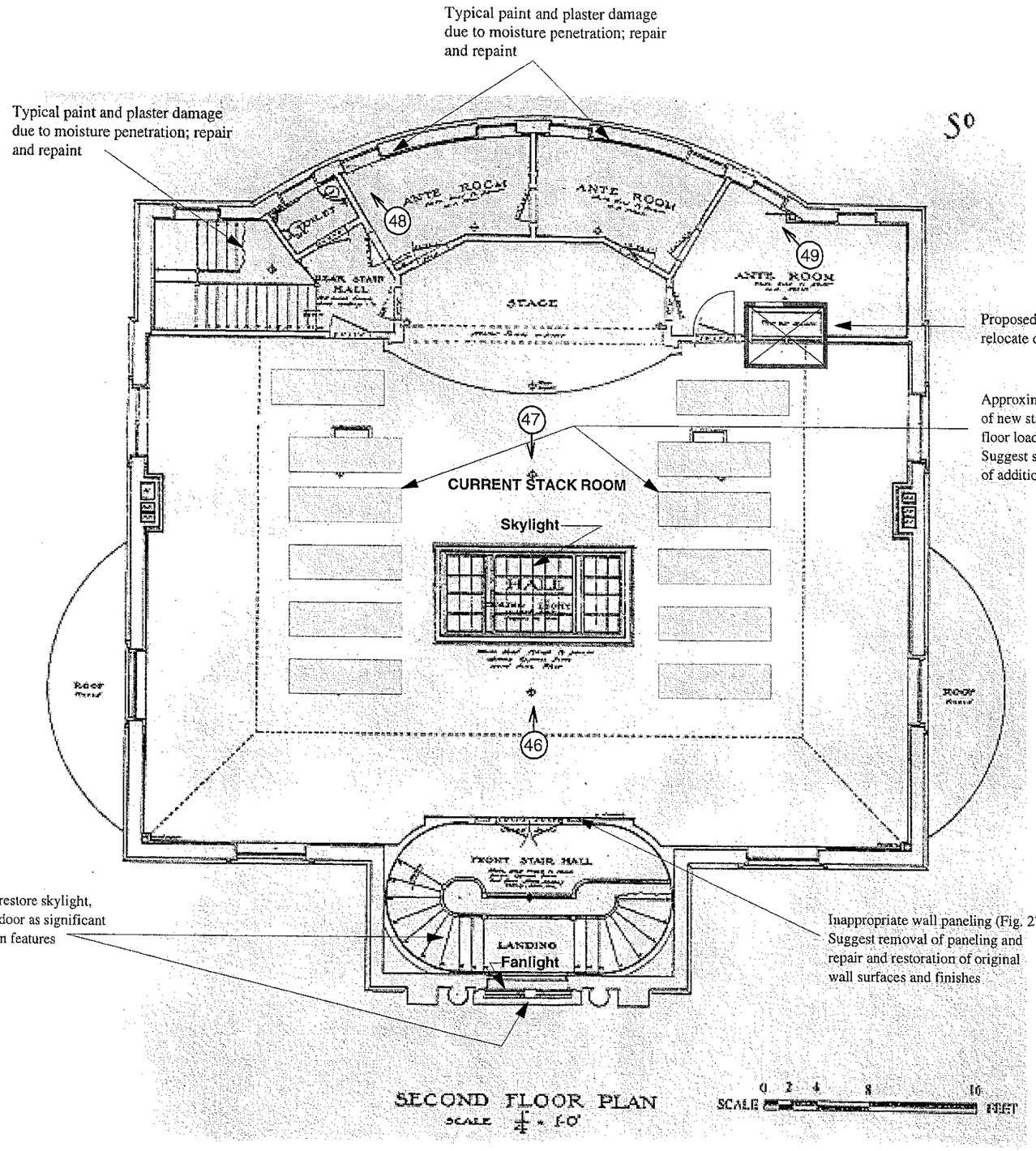


Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library
Somerville, MA

Second Floor Plan

Scale: as noted

Date: 12/8/1998
Revised:

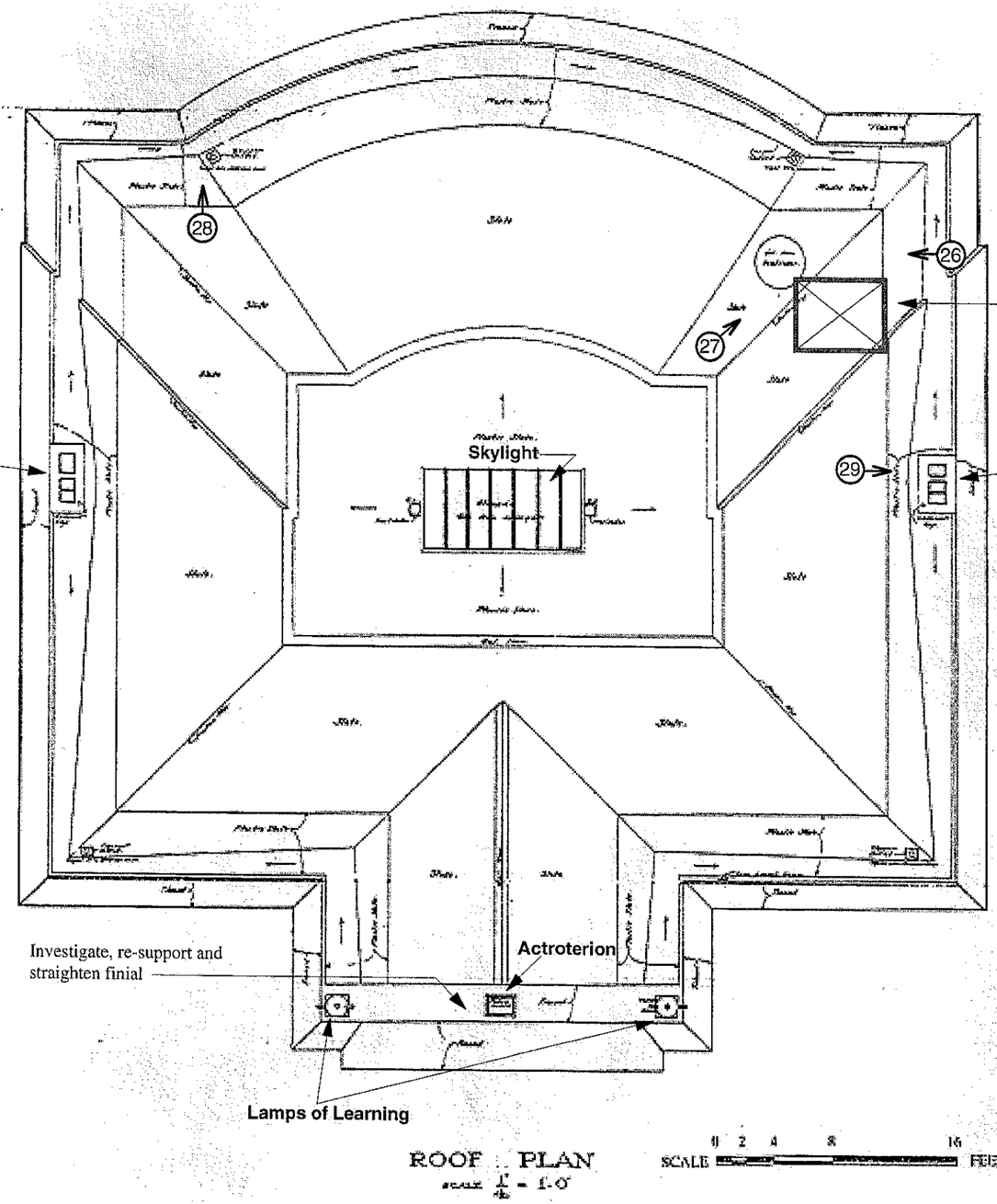
Drawn By: SJW

Chkd. By: FCD

A-8

McGinley Hart & Associates LLP
77 N.Washington St.
Boston, MA 02114
Telephone • 617 227-2932
Fax • 617 227-8316

NOTE:
These drawings approximate the building conditions, however, the Contractor must verify all dimensions and conditions at the site and notify the Architect of any discrepancies in writing prior to proceeding with the work. All work shall be to applicable codes and regulations.



ROOF PLAN
scale 1/4" = 1'-0"

SCALE 0 2 4 8 16 FEET

General Notes:
(1) Roof structure inspection and analysis recommended

(2) Suggest slate roof restoration if feasible

Photo Key Number
(##)

TOWN OF SOMERVILLE

West Branch Library
Somerville, MA

Roof Plan

Scale: as noted

Date: 12/8/1998
Revised:

Drawn By: SJW

Chkd. By: FCD

A-9

McGinley Hart & Associates LLP
77 N.Washington St.
Boston, MA 02114
Telephone • **617 227-2932**
Fax • **617 227-8316**

Photographs

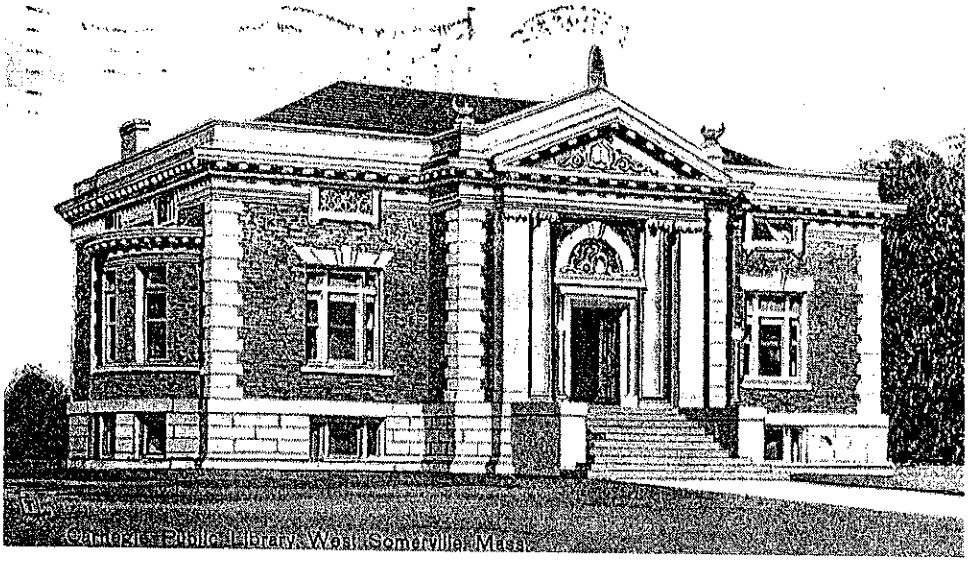


Figure 1 **Illus.Date** N.D.

Early postcard of the library possibly from rendering by architect' McLean & Wright. Note lamposts at entry.

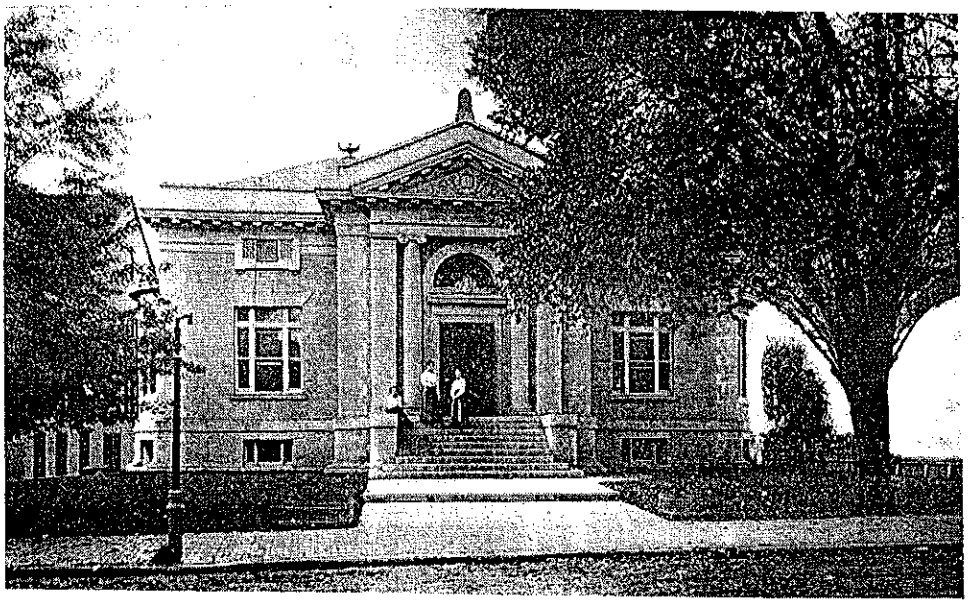


Figure 2 **Illus.Date** c. 1909

Photograph taken around the opening of the library. The three women are the librarians. Note the lack of construction to the northeast and no lamps on stairs.

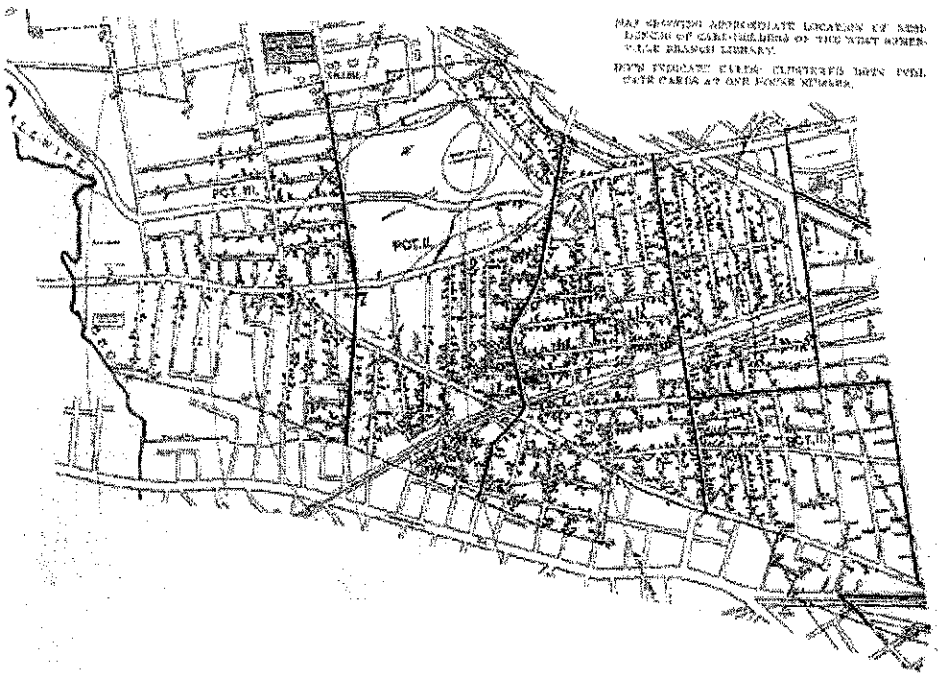


Figure 3 **Illus.Date** 1910

Map outling number of card holders in the West Somerville area at the time of the new library.

Figure 4 **Illus.Date** N.D.

Photograph taken at a later date. Note visible construction to the northeast and lamps added not visible in 1909 view.

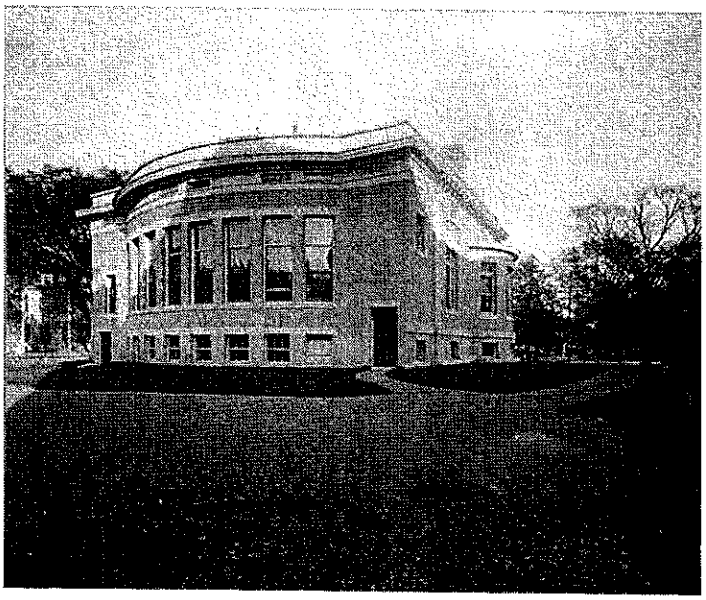


Figure 5 **Illus.Date** c. 1909

Rear of building showing large windows of Stack Room. Photograph taken at the time of library opening.

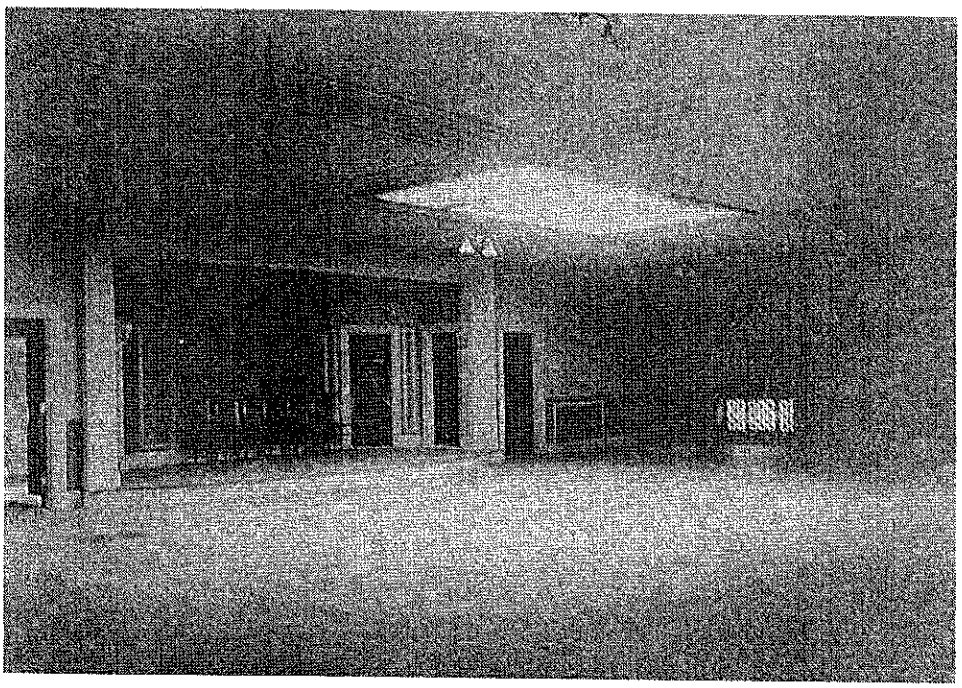


Figure 6 **Illus.Date** c. 1909

View of orignal second floor Hall space with ceiling stenciling, open skylight and stage area.

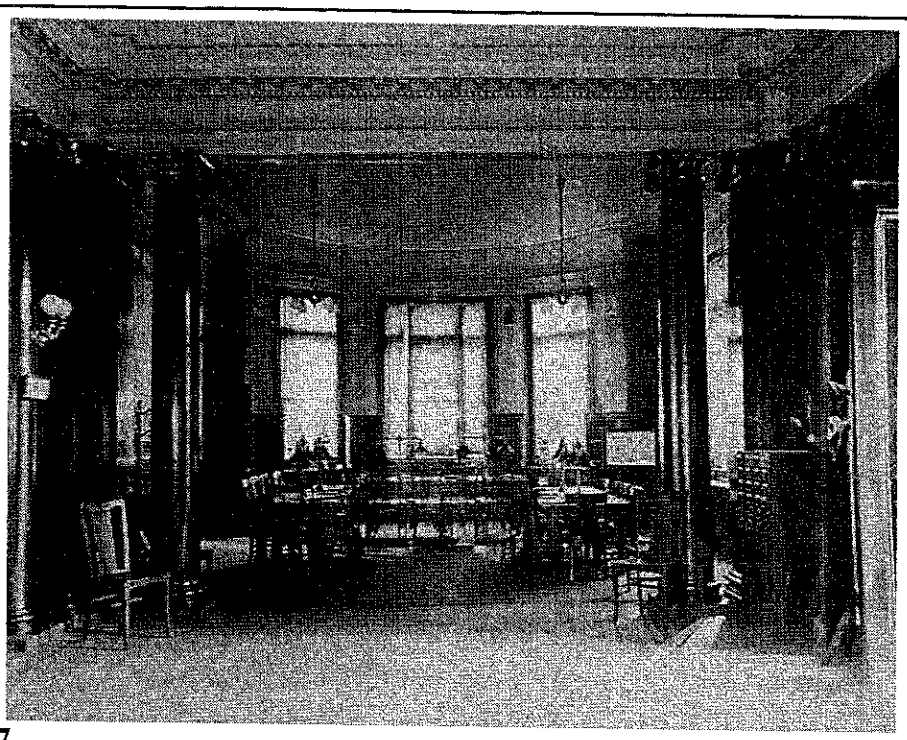


Figure 7 **Illus.Date** c. 1909

Interior view of original Children's Room to the northeast. Taken shortly after opening.

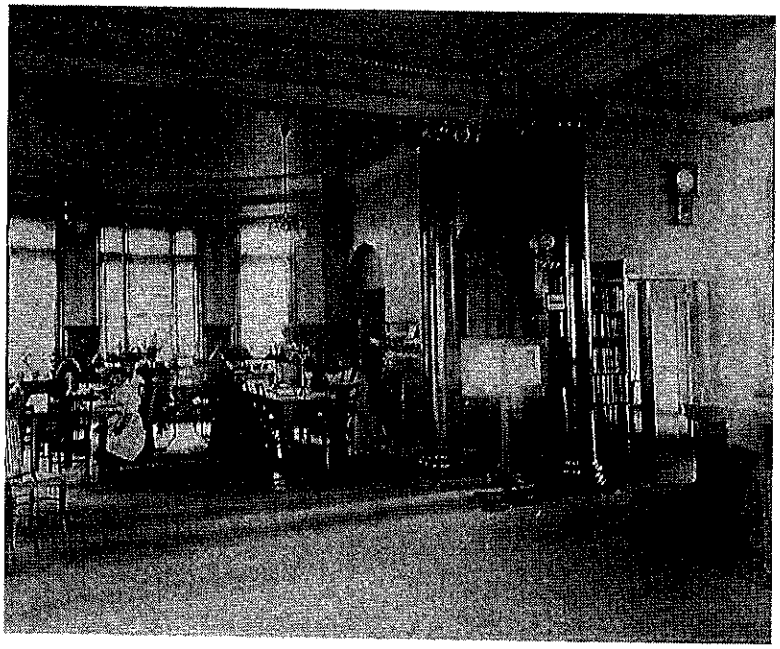


Figure 8 **Illus.Date** c. 1909

View of Reading Room in southwest side of building. Taken at time of library opening.

Figure 9 **Illus.Date** c. 1909

View of original Librarian's Room. Taken at time of library opening.

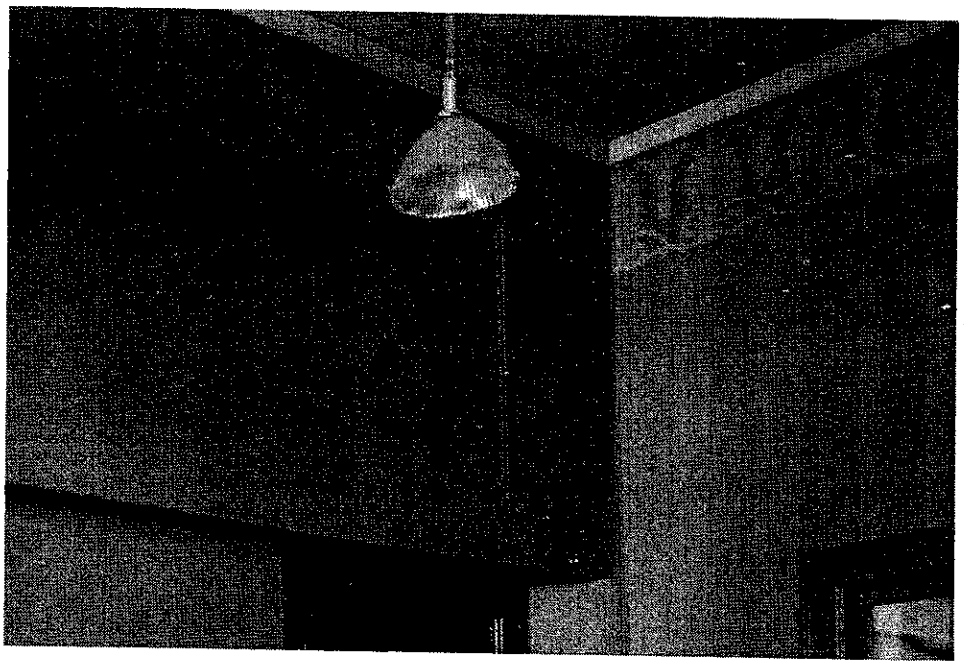


Figure 10 **Illus.Date** c. 1909

Detail view of stenciling in Librarian's Room.

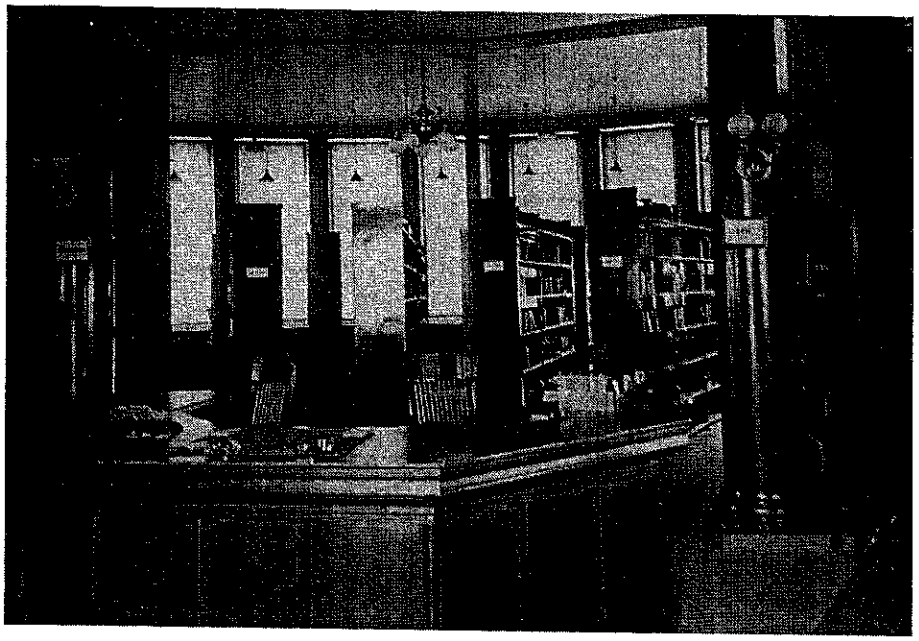


Figure 11 **Illus.Date** c. 1909

Interior view of reference desk and rear stack room. Note: columns with light fixtures still exist.

Figure 12 **Illus.Date**

Front facade of West Branch Library, Somerville, MA. View looking north.

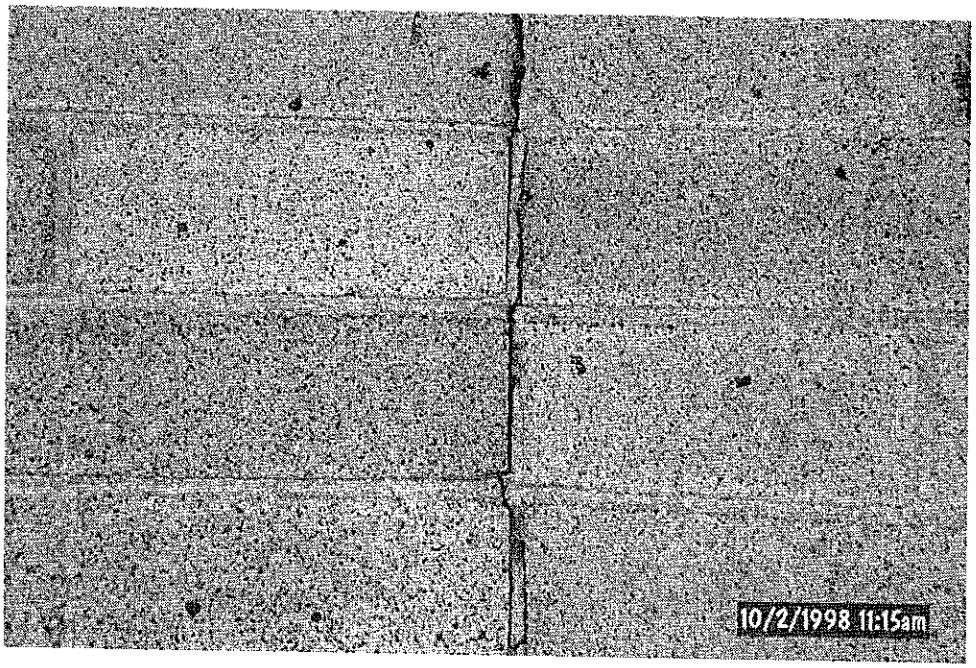


Figure 13 **Illus.Date**

Detail of Roman brick. Note staining on brick and cracking in mortar joint.

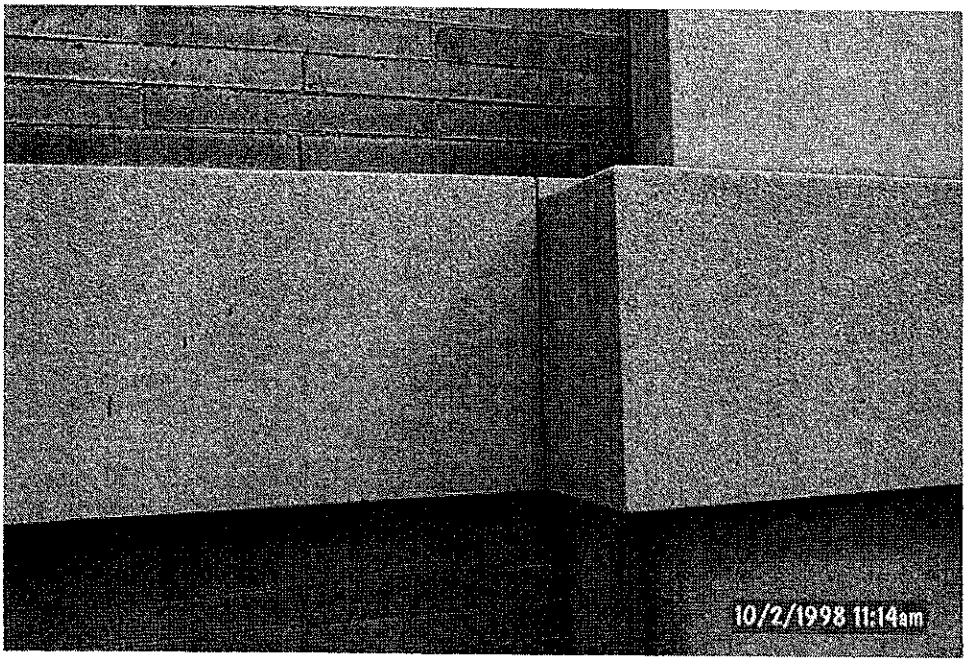


Figure 14 **Illus.Date**

Limestone watertable line above raised basement.

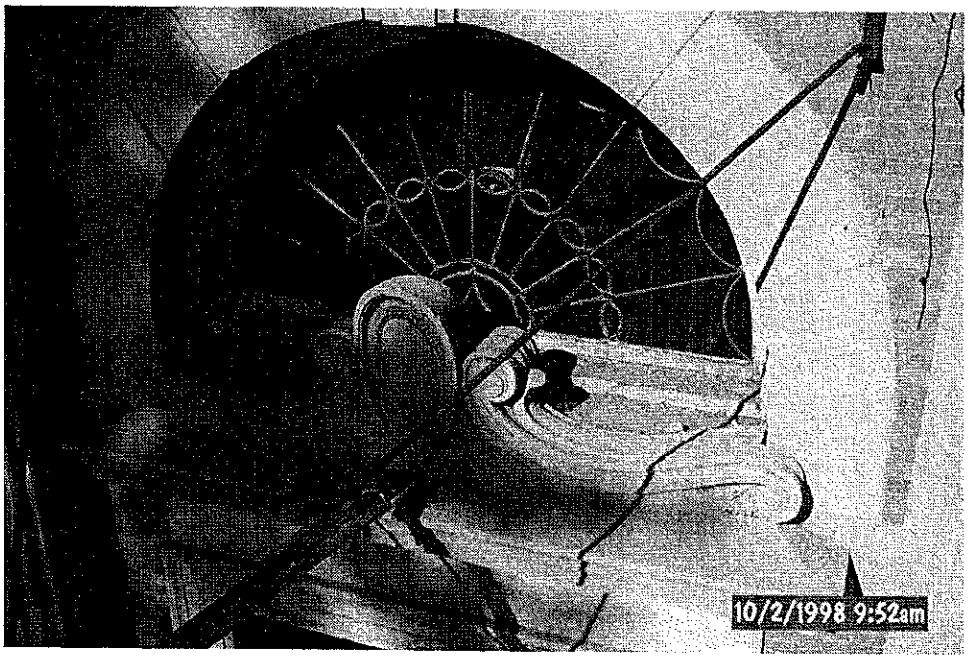


Figure 15 **Illus.Date**

Detail of limestone ornament and semicircular fanlight over entrance.

Figure 16 **Illus.Date**

Staining underneath column capitals.

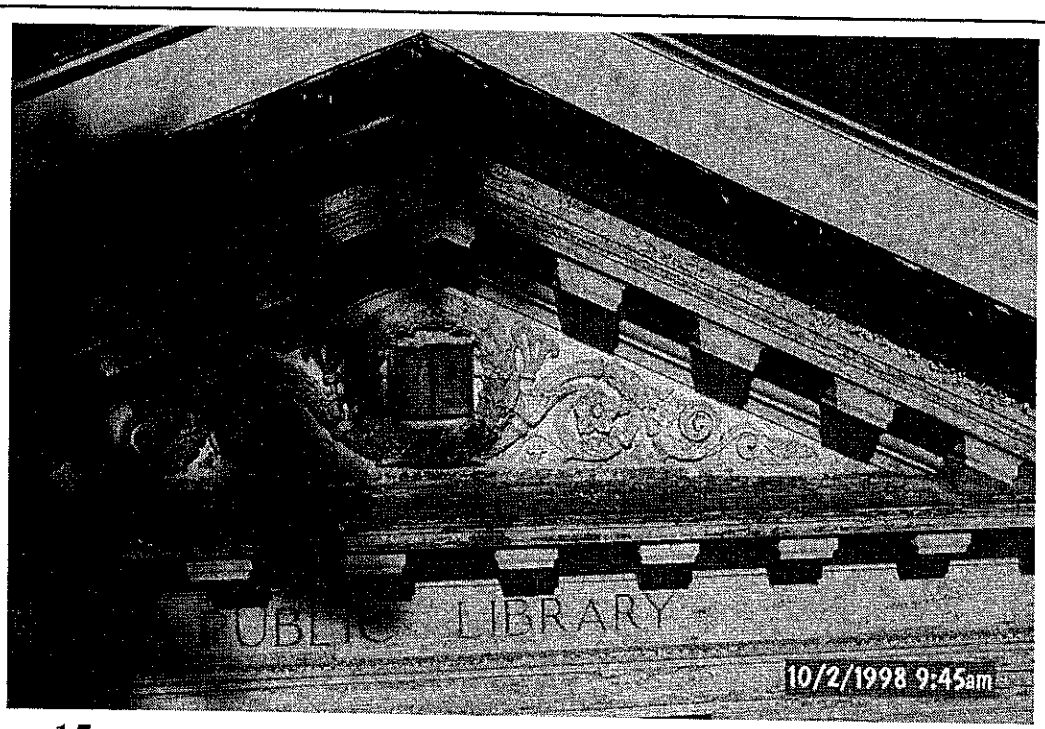


Figure 17 **Illus.Date**

Detail view of wood ornament in tympanum, originally painted in polychrome colors.

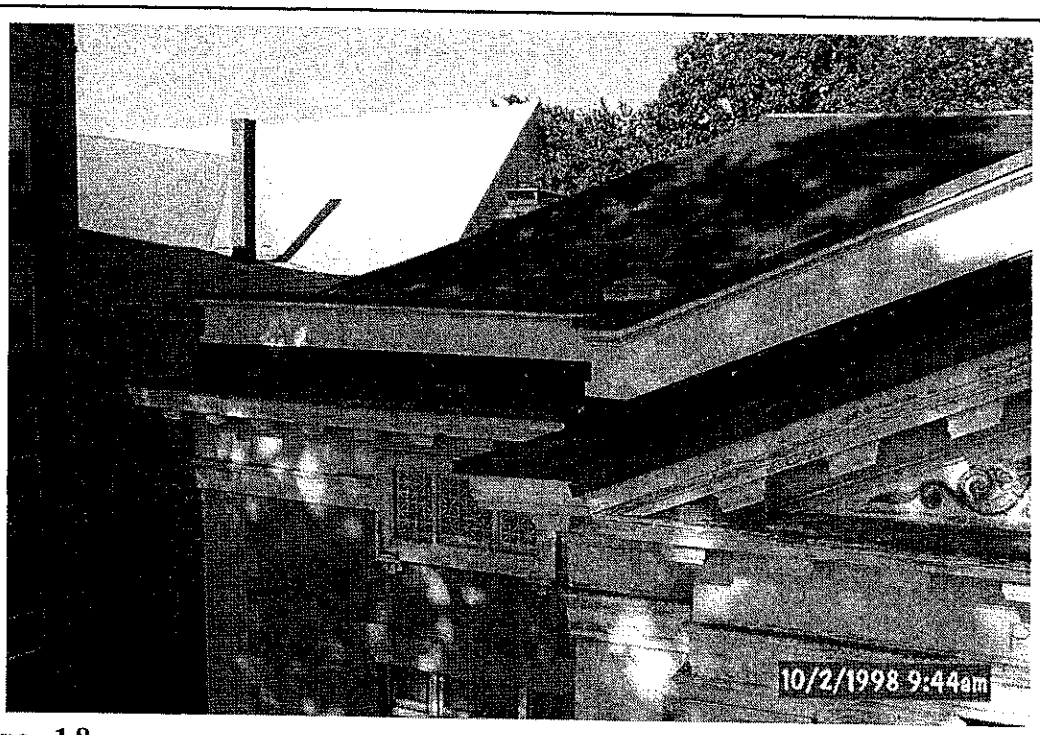


Figure 18 **Illus.Date**

Cornice line and roof detail of front facade. View looking southwest.

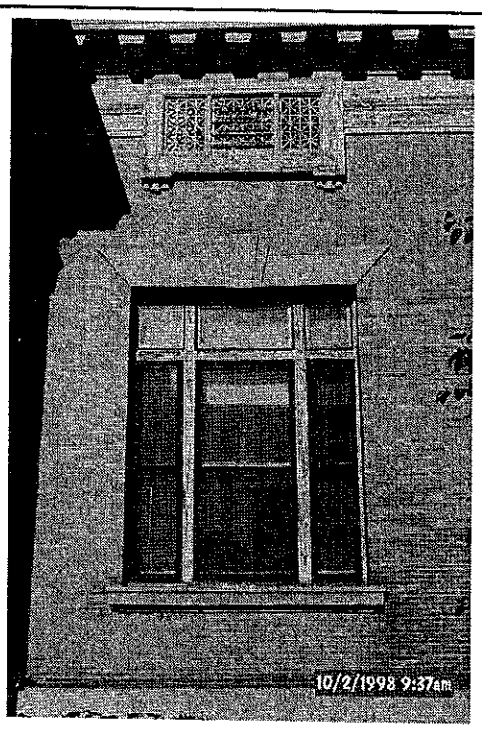


Figure 19 **Illus.Date**

Detail of windows with limestone lintel and wood grilles. Note peeling paint.

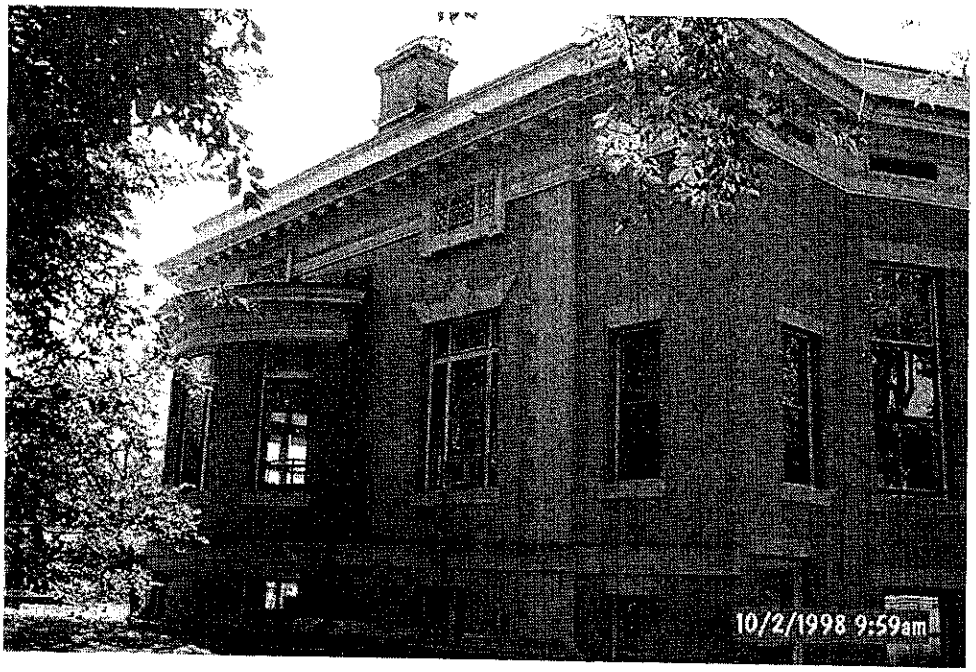


Figure 20 **Illus.Date**

North facade of West Branch Library, Somerville, MA. View looking south.

Figure 21 **Illus.Date**

South facade of West Branch Library, Somerville, MA. View looking northwest.

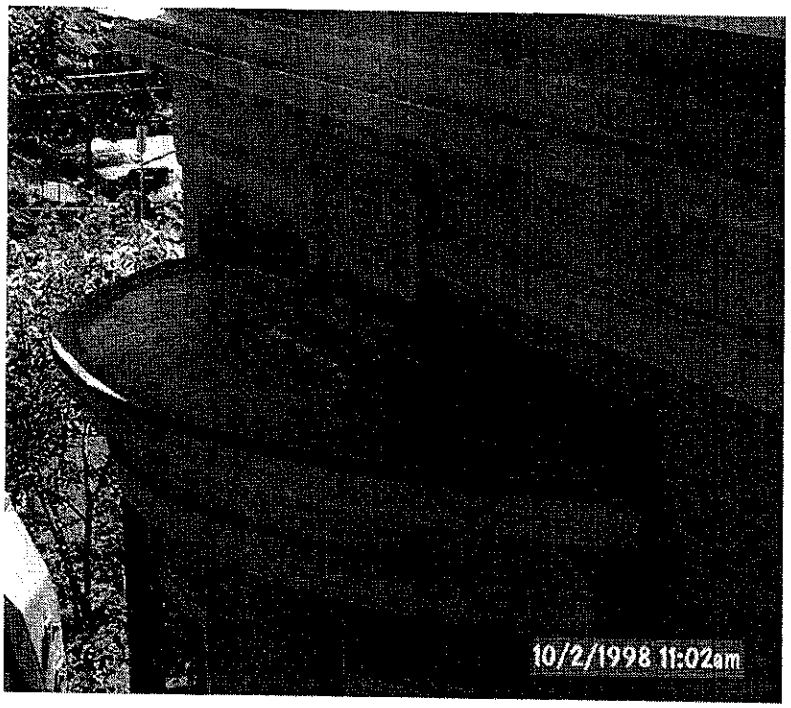


Figure 22 **Illus.Date**

Window grille and top of bay window on north facade.

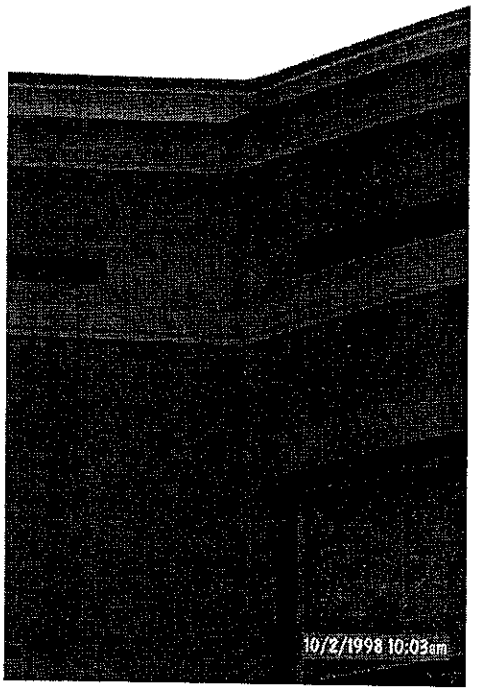


Figure 23 **Illus.Date**

Detail of connection between north side bay window and wall.

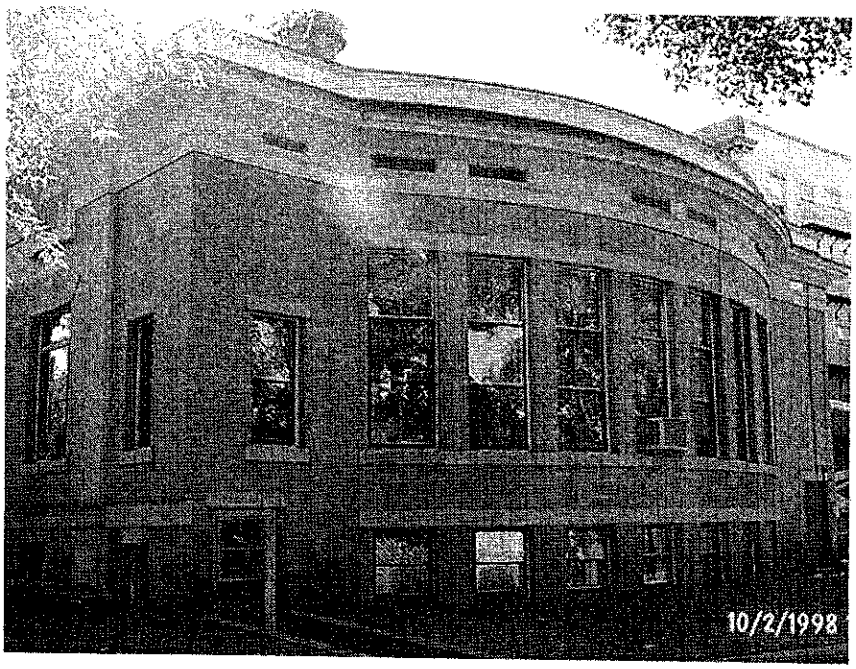


Figure 24 **Illus.Date**

Rear facade of West Branch Library, Somerville, MA. View looking east.

Figure 25 **Illus.Date**

View of cornice and parapet at rear west corner.

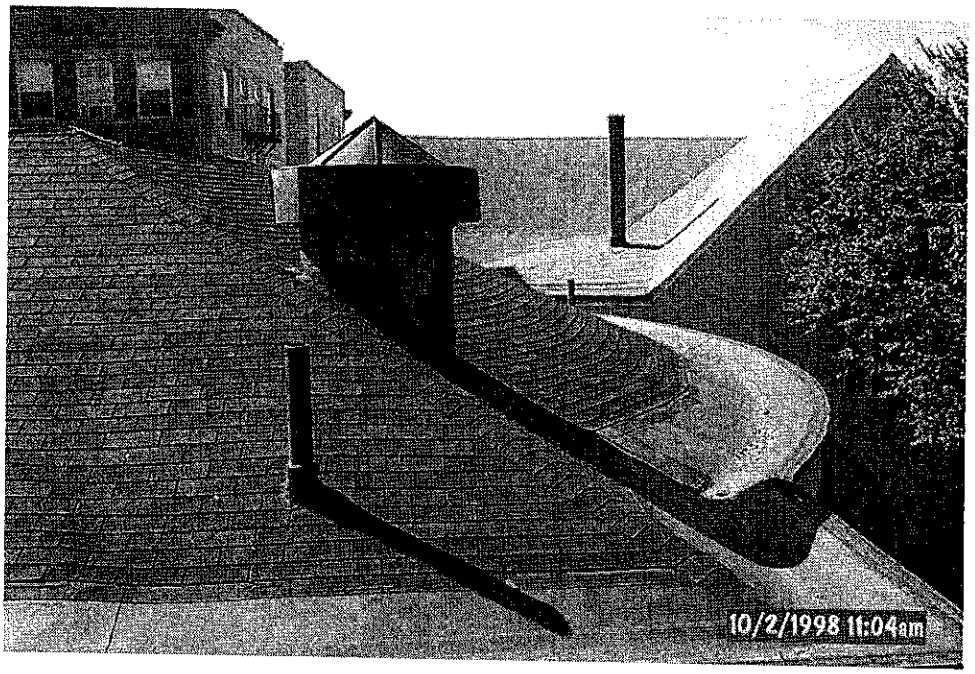


Figure 26 **Illus.Date**

Hipped roof extending over rear bay window. View looking southwest.

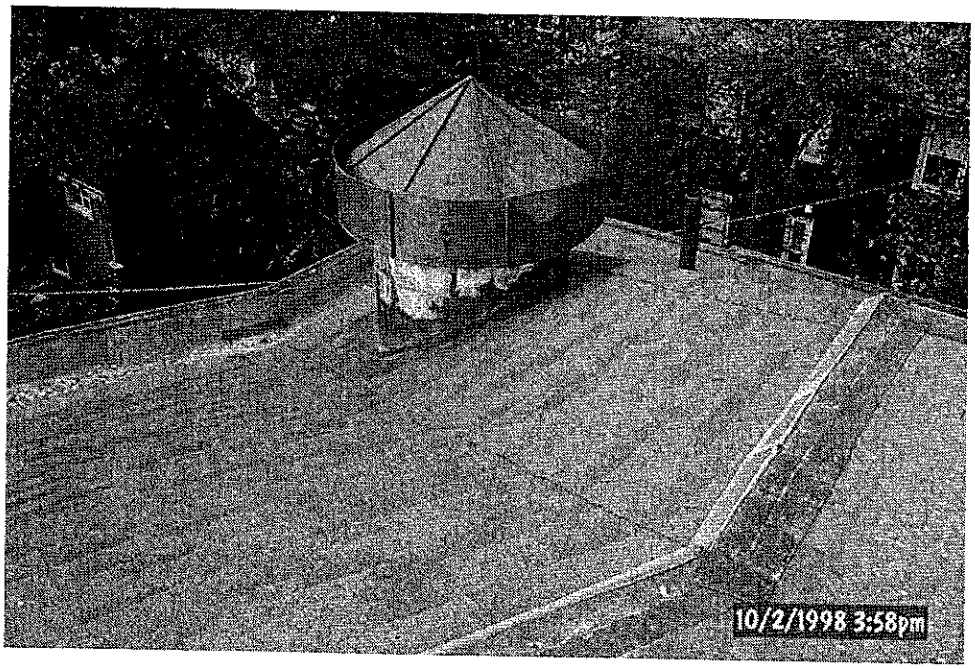


Figure 27 **Illus.Date**

View of roof at rear of building with original vent.

Figure 28 **Illus.Date**

View of roof at rear bay window. Note debris gathered behind parapet.

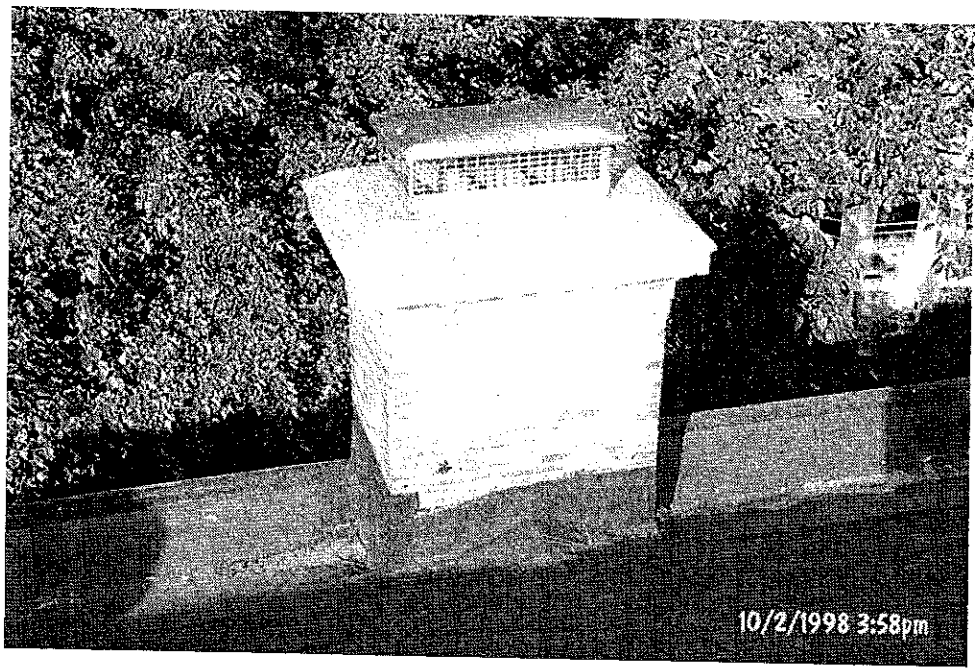


Figure 29 **Illus.Date**

View of chimney, flashing and cap.

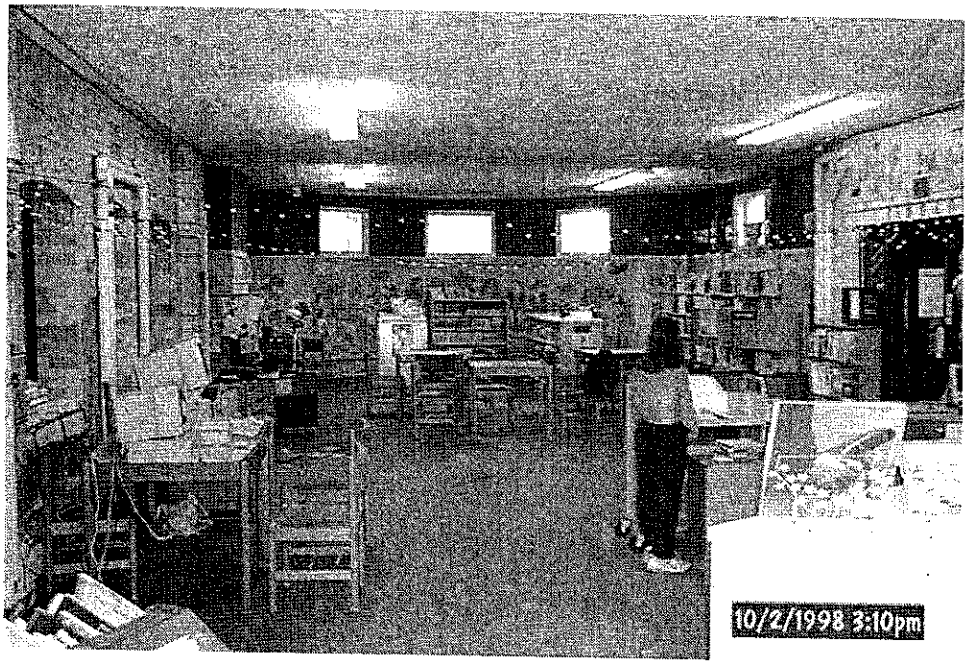


Figure 30 **Illus.Date**

Full height basement, originally part of the Periodical Room, remodeled into the children's room. View looking southwest.

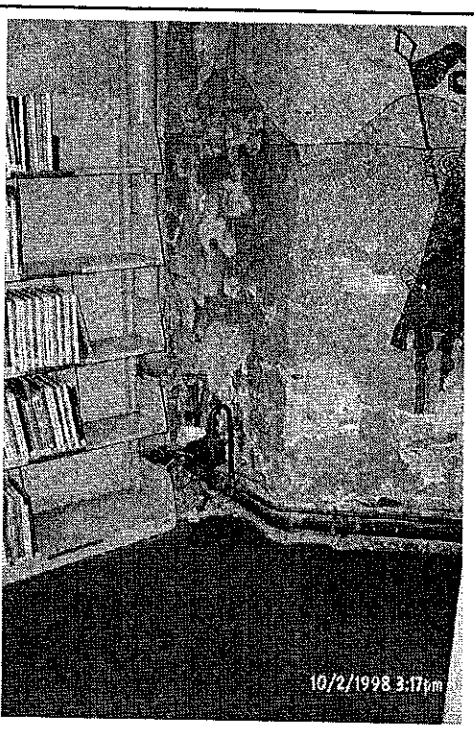


Figure 31 **Illus.Date**

Detail of deteriorating plaster in basement in south corner.

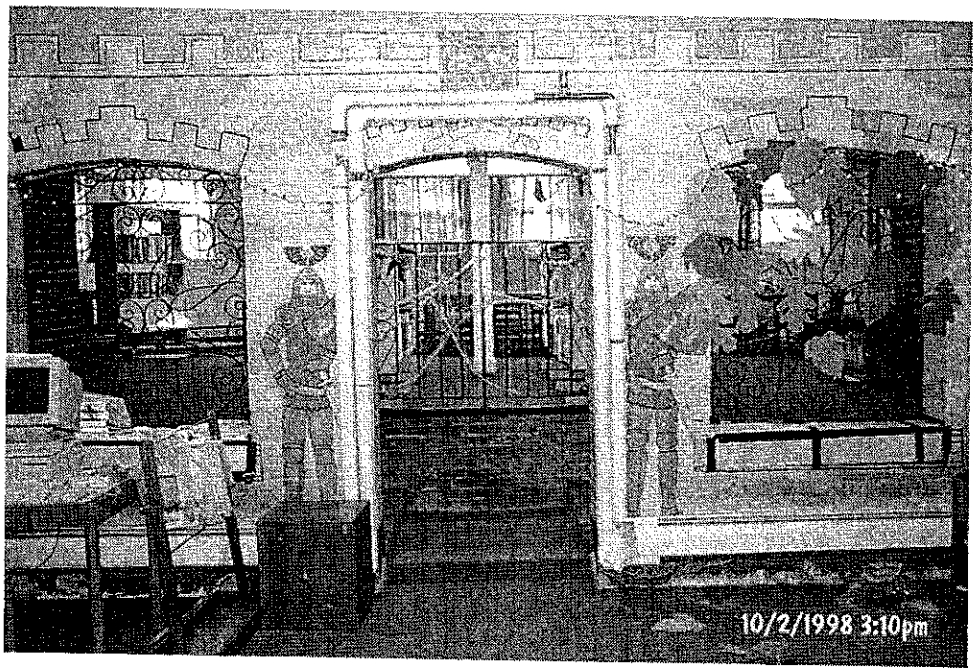


Figure 32 **Illus.Date**

Original door and window openings into slightly raised room of Periodical area. Note inappropriate wall murals. View looking northwest.

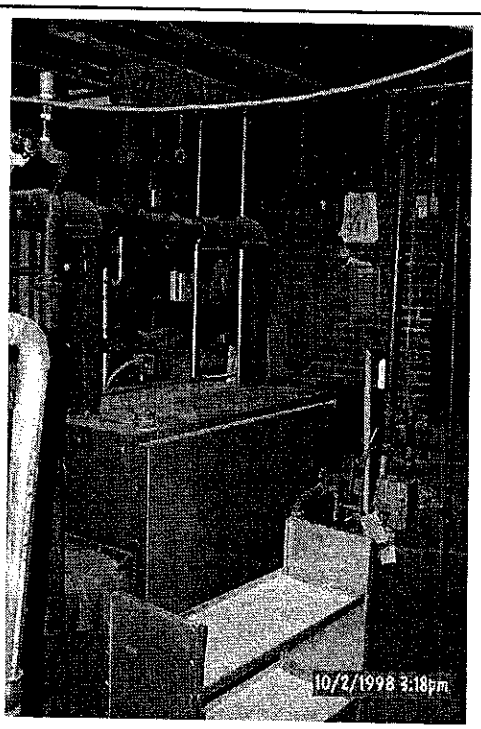


Figure 33 **Illus.Date**

Original boiler room area in southwest corner of basement.

Figure 34 **Illus.Date**

Original brick arch openings in southwest wall of basement. Note original stairway. View looking west.

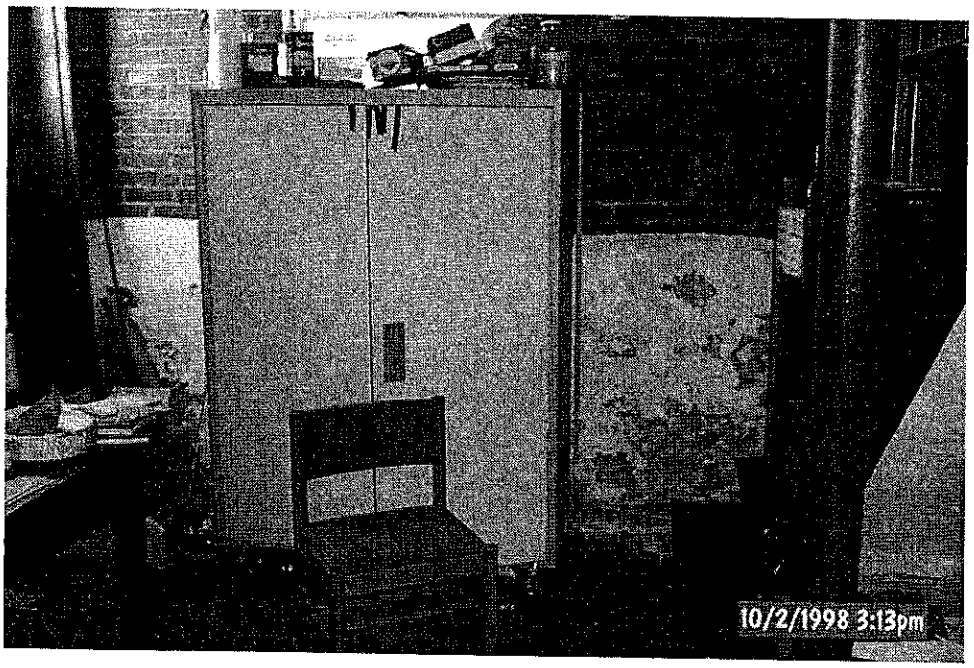


Figure 35 **Illus.Date**

Open space in north corner of basement. Door to outside on photo left. Note original Staff Stair that lead to Circulation Room on photo right. View looking northeast.

Figure 36 **Illus.Date**

White and green tile in vestibule area near north stairs. Note cracking and missing tiles.

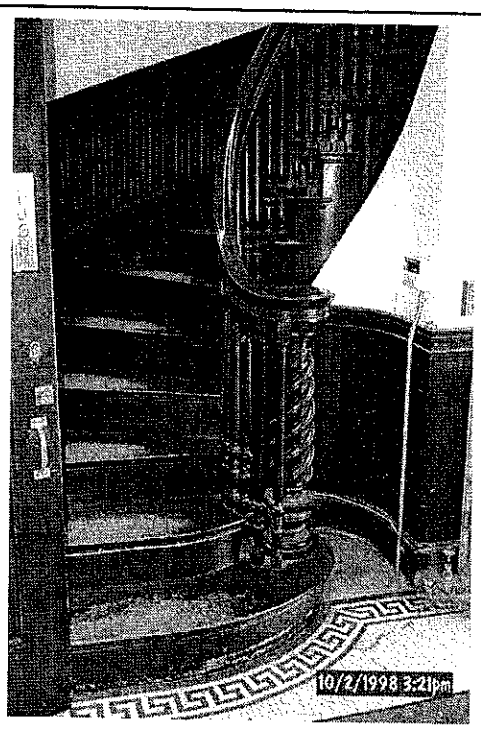


Figure 37 **Illus.Date**

Original decoratively carved circular stair leading to second floor. Note original green and white floor tiles.

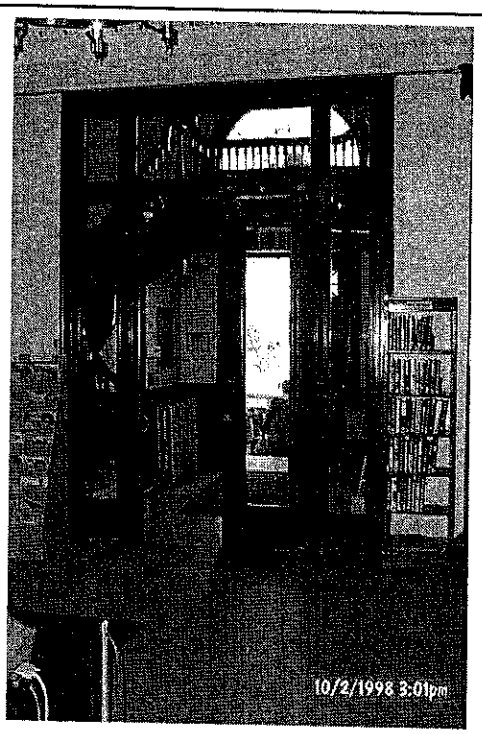


Figure 38 **Illus.Date**

Original wood and glass inner vestibule door leading into circulation desk area. View looking southeast.

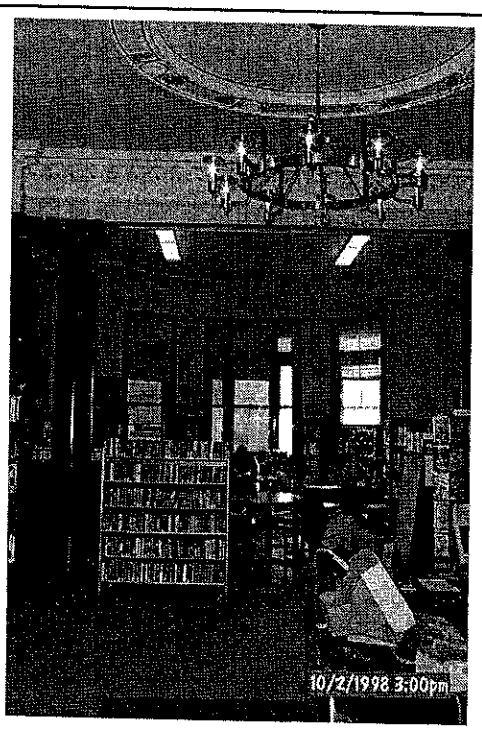


Figure 39 **Illus.Date**

Adult Reading Room with view of original columns. Looking southwest from circulation area.

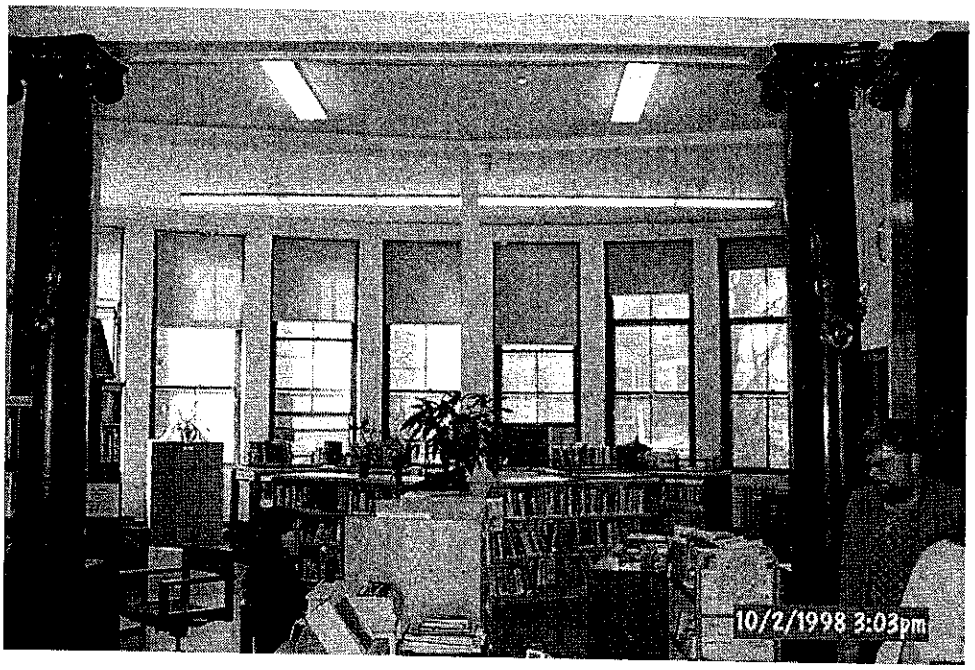


Figure 40 **Illus.Date**

Original Stack Room, currently part of the reference area. Note original wood ionic columns and light fixtures. View looking northwest.

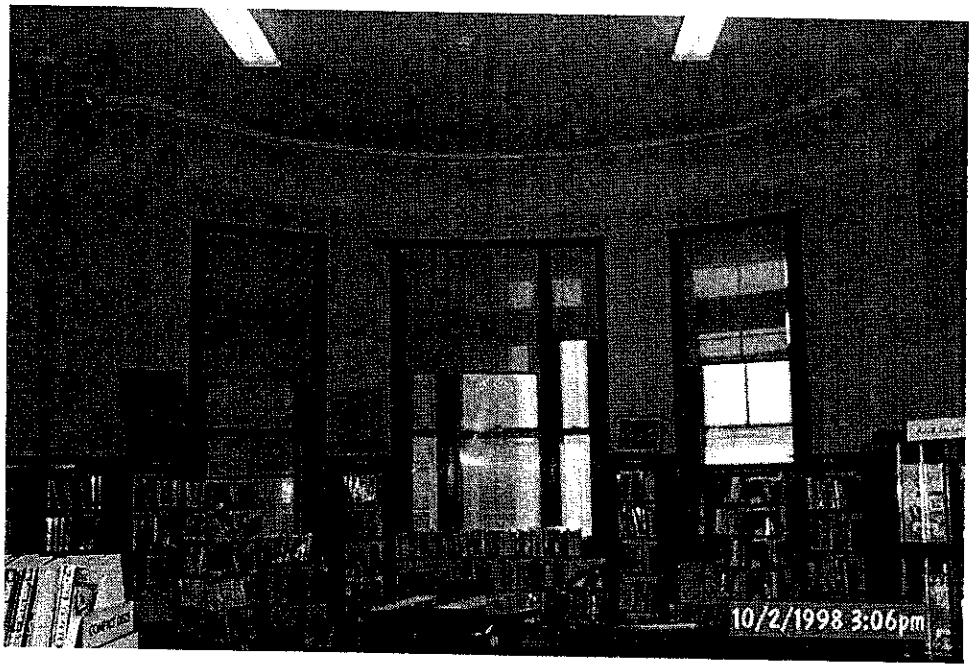


Figure 41 **Illus.Date**

Original Adult Reading Room in south side. Note the original built-in shelving. View looking southwest.

Figure 42 **Illus.Date**

Original fireplace in south Reading Room. Note marble facing, dark finish of wooden mantel with carved molding and keystone detail.

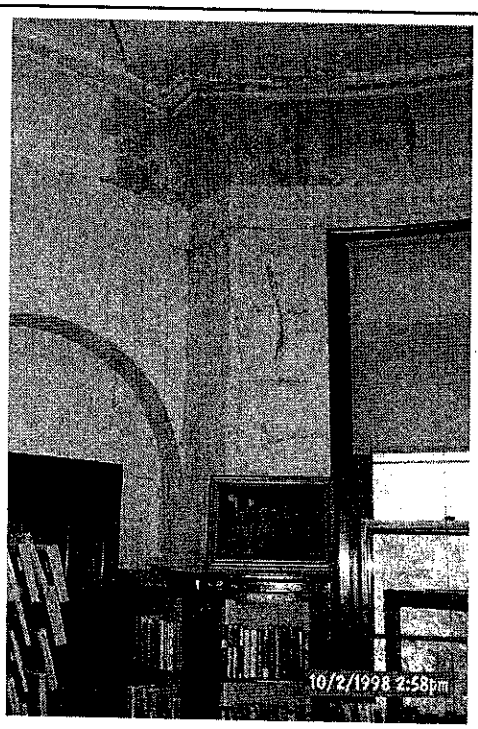


Figure 43 **Illus.Date**

Interior deterioration due to water infiltration at ceiling and walls in north reading room.

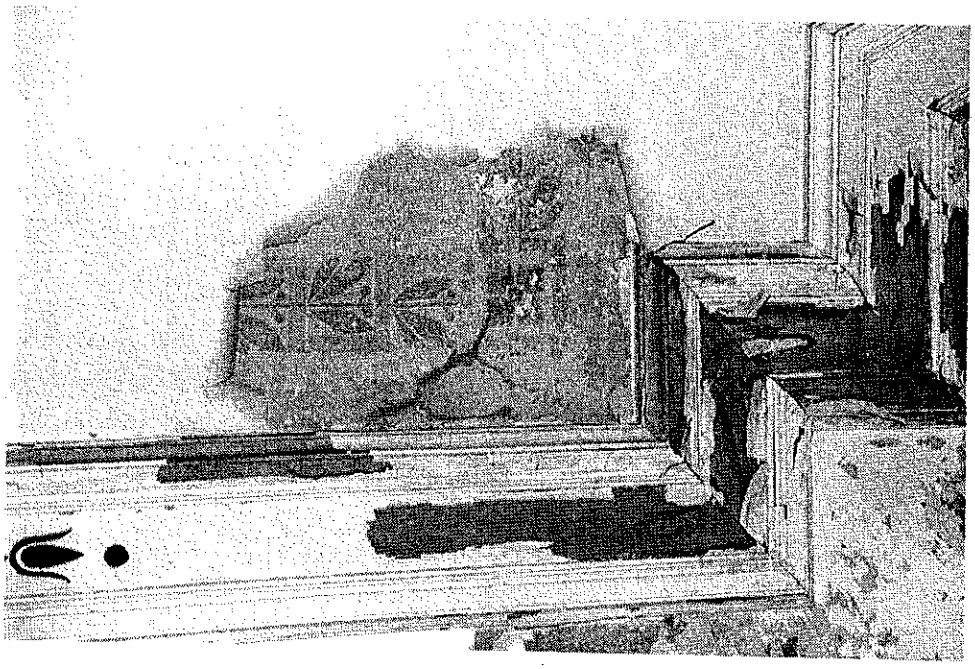


Figure 44 **Illus.Date**

Original ceiling stenciling in southwest reading room. Stenciling with retoration potential exposed due to water damage affecting later painting.

Figure 45 **Illus.Date**

Original fireplace in Librarian's Room. Note original green tile, cast iron fire grille and classical detail of wooden mantel.

Figure 46 **Illus.Date**

Original Hall, currently used for additional book stacks and reading area. Note inappropriate carpet and covering of original skylight. View looking northwest.

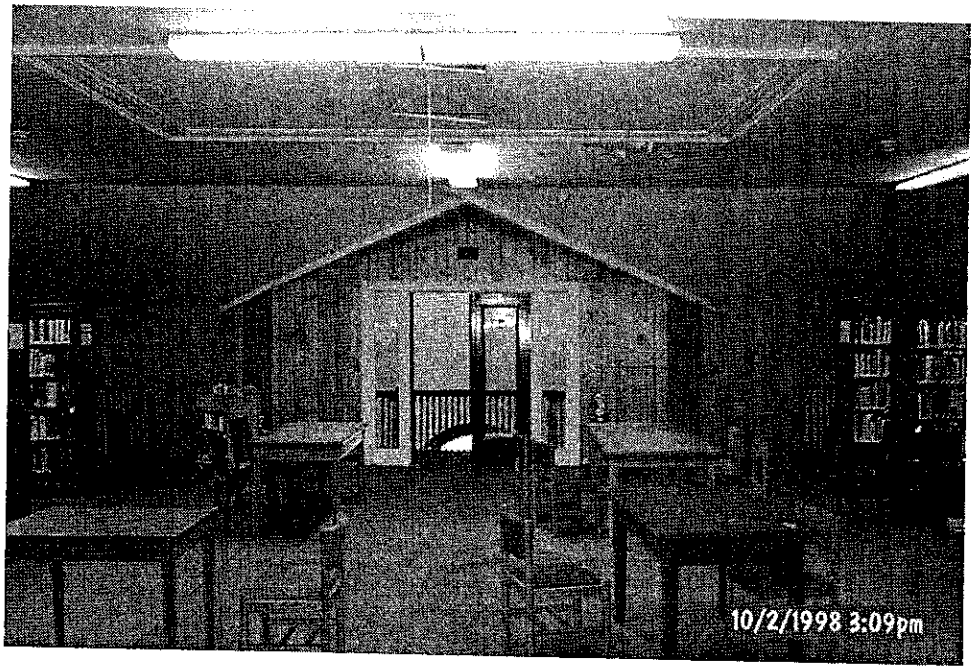


Figure 47 **Illus.Date**

Upstairs reading room. Note inappropriate wall covering surrounding the original door. View looking southeast.

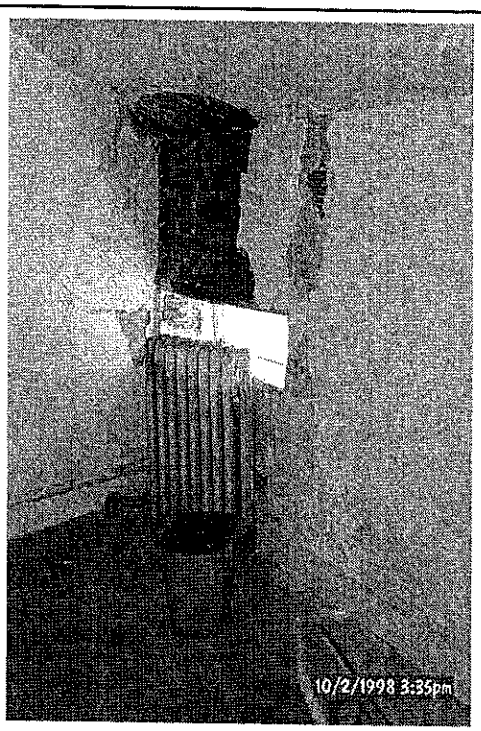


Figure 48 **Illus.Date**

Original Ante Room behind stage, currently unused. Note severe deterioration of plaster on ceiling and walls.

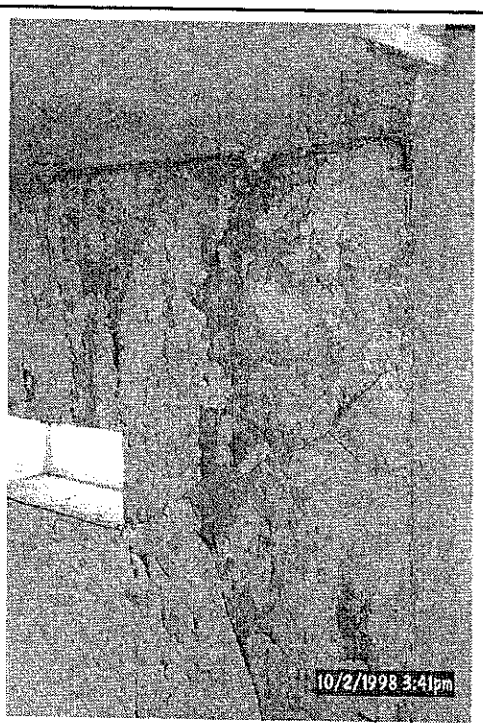


Figure 49 **Illus.Date**

Detail of wall and ceiling damage in second floor rear Ante Rooms.

APPENDICES

Drawings

Photographs

Engineers' Reports: Structural, Mechanical, Electrical

Structural Engineer's Report

Updated Draft January 14, 1999

McGinley Hart Associates
77 North Washington Street
Boston, MA 02114

Attention: Mr. David Hart

Reference: West Branch Library
Somerville, MA

Dear David:

On October 3, 1998 and on January 11, 1999 I visited the West Branch Library in Somerville, MA to perform a general inspection of the building structures. What follows is a description of my findings and recommendations.

General Description

The Somerville West Branch Library is a three story brick and stone masonry structure with wood framed floors and roof that includes an occupied full basement, a high bayed first floor and a third floor within the roof and eaves of the structure. The Library was built around 1910 to 1920 through funding from the Carnegie Foundation. For this report, the entrance of the Library which actually faces east-northeast will be considered to face due east.

The exterior walls are clad with exposed brick and dressed limestone and backed up with solid, multi-wythe load bearing brick construction. The exterior surfaces of the walls are finished with a wood cornice and capped flashing that is part of the roof and scupper system (there is typically no parapet).

The floors are of wood joist and deck construction. This spans between the exterior load bearing brick masonry walls and a combination of interior load bearing walls and structural steel beams and columns. The framing within the front half of the building is rectilinear in layout and the framing at the rear of the building is assumed to follow a fanned layout to accommodate the curved lines of a large bow window that forms most of the rear of the building.

The basement is currently being used as a children's library, the front half of the first floor is currently used as reading rooms and the rear half of the first floor continues to be a stack room.

Most of the second floor consists of a large open space that was once a theater and faces a raised stage to the west, toward the curved wall above the bow window. Between the stage and the curved wall are several small, empty rooms that were once anterooms for

stage performances.

The roof of the library is a low hip and is mostly self-supporti... ...ough its own geom... Other than the walls that separate the stage and anterooms, ...re no points of int... support for the roof. There is the vestige of a once grand sky... ...n the center of the f... floor space that has been filled in and replaced with a residen... ...le pull-down ladder ... roof scuttle.

The front steps of the library are constructed of stone slabs ... ...rest upon three par... stepped brick walls that act like stringers.

The library has two cast stone capped brick chimneys near the centers of the north a... south elevations. These have terra cotta flue liners galvanized steel flue covers that ha... been added.

Conditions and Recommendations

Front Exterior Wall, Vestibule and Steps:

Because this building was constructed during use of Portland cement in mortar, its mortared joints have not undergone the same degree of weathering that is common in many older structures. Increasing amounts of cement have been used in mortars through recent years, making them ever harder and more durable. Mortars with a higher lime content tend to soften as they age and are repeatedly wetted and dried by the elements. At the same time they are more flexible for small building movements where they allow small changes in shape and dimension to occur without cracking. The higher cement mortars weather better but tends to crack more with building movements. Because of this, I did not note many locations where weathering had occurred, however, I noted a relatively large number of cracks. Because of the brittle but durable nature of this mortar, the cracks can be assumed to directly correspond to movements in the building structure that have caused them.

The front façade exhibits signs of a limited outward growth at the cornice line. There are diagonal cracks running through the brickwork over the two windows that flank the entrance. These cracks begin at the tops of the first floor windows and step toward the center (toward the entrance) as they ascend to the bottoms of window grilles at the second floor level. Above the window grilles is a surface applied wooden cornice that is more forgiving and does not exhibit signs of movement as obviously. It should be noted that the wall cracks pass through the keystone locations of the jack arches that cross the windows. A keystone is actually a wedge that holds an arch together by exerting spreading forces surrounding wall in order to wedge itself and the arch that it restrains into position. It is logical that a vertical crack in the wall would pass through these localized points of

horizontal stress concentration.

With the spreading that has taken place in the wall, the keys[illegible] of the southern window and the entire jack arch of the northern window have dropped [illegible]ically. There is also a diagonal "switchback" crack in the masonry between the bot[illegible] of the northern first [illegible]or window and the top of the basement window below.

There are also vertical cracks in the inside corner joints betwe[illegible]n the sidewalls of the entry vestibule and the main front building wall, a vertical joint in th[illegible]p of the front wall of the vestibule along the edge of the south pilaster, and a vertical joint along the top of the quioning at the southeast corner of the building. There are several other joints in the stonework, including those of the watertable watertable that have opened and need to be repointed.

All of this cracking suggests that there is an overall forced horizontal growth of the wall that is the greatest near the top. This condition needs to be investigated further to determine whether the movement has stopped, and then the wall needs to be repaired.

I also noted that the dental cornice soffit is sagging along much of its length. Other than for the sag and for the fact that several joints needed to be filled and/or caulked, the wood for most part appeared to be in a solid and well-maintained condition. The sag should be checked to determine its cause, and any unsound wood within the cornice should be exposed and replaced.

The cast stone face of the entrance vestibule's pediment as well as the three stone castings atop the pediment seem, individually, to be in good condition. The outer acroteria castings are plumb whereas the finial casting has a pronounced backward lean. This is either due to deterioration of the supporting masonry or the possibility that it is jointly supported by the masonry front wall of the pediment and the wooden roof framing behind. The roof framing may have shrunken, deflected or rotted, causing the drop in the back of the casting. The construction below the base of the casting should be exposed and the condition corrected.

The stone slabs of the front steps have shifted, separated and spread outward due to the deterioration of the brick walls that support them below. The steps must be carefully disassembled and the stringer walls reconstructed with brick or replaced with concrete. Replacement with concrete would be the preferred solution.

The tops and front edges of the steps are chipped and I understand that this has happened during ice removal.

North and South Exterior Walls:

The north and south exterior walls are essentially mirrors of each other and both exhibit signs of horizontal, longitudinal growth as well as an outward, out-of-plane bow above the second floor. Because the great amount of out-of plumbness in the exterior walls creates a tendency for these walls to topple outward, the connection between the walls and the second floor and roof structures should be checked and reinforced if necessary to at least make up for the reduction in out-of-plane stability.

There is a diagonal "switchback" crack between the top of the first floor window and the bottom of the second floor window grille above it at the southwest corner of the building (on the south façade). There is also a corresponding crack in the north façade, however, this one seems to stop and restart and is more horizontal in nature. The crack at the south elevation continues through the jack arch of the first floor window.

I noted either some weathering or a small crack along the quoins at the tops of the east ends of both the north and south facades and randomly occurring vertically cracked joints in the watertables of both elevations. There is also a vertical crack at the back edge of the window bow in the north façade that runs the entire height of the brick wall. At the south façade this location has been scoured by water leaking from a disconnected downspout.

There is some rough, unpointed brickwork exposed from the foundation at the bow window of the south elevation that appears to be very porous and is presumably prone to water infiltration. This was probably never intended to be exposed and should be properly tuck pointed and sealed, and the grade raised to protect it.

As in the front of the building, the wooden cornice appeared to be in generally sound condition with the need for some occasional flexible sealant and/or filler.

The chimneys of both elevations have a radical outward lean, perhaps following the actual lean of the top portions of the supporting walls which is not as noticeable because of the wooden cornice. The cast stone caps of the chimneys have severely weathered and their aggregate protrudes as much as 3/8". There is a crystalline growth around each chimney, several courses below the cap, that may either be precipitated ash or tar or a very dense lichen.

Because of the large amount of outward lean in the chimneys and the poor condition of their caps, these should be reconstructed in the plumb position.

Rear Exterior Wall and Bow Window:

The rear exterior wall is dominated by the large bow widow that crosses nearly all of its

width. This has also been effected by what appears to be the outward growth of the top of the building.

There are vertically oriented cracks at the intersections of the bow and the flat wall sections at either end, in addition to diagonal cracks through the top of the bow near its quarter points. There is also a short vertical crack at the southern third point of the top of the bow. The cracks at the bow's ends each grow from 0" at the bottom of the structure to more than ½" in width at the top of the structure. The quarter point and third point cracks are not as wide.

The crack at the north end of the bow starts near the bottom and then ends at the side of the first floor window (which becomes part of the crack) and re-starts at the top, running around the stone lintel and up to the cornice. The crack at the south end of the bow runs directly and continuously upward between the intersecting surfaces. The quarter point cracks each step diagonally upward in the northerly direction.

All of the exterior cracks that are visible on the outside at the top of the bow have corresponding cracks that are mirrored on the interior surface of the bow. The interior cracks do not line-up directly with the exterior cracks, probably because of slippage between the multiple thicknesses of the brick and stone wythes and the interior finishes. There is visible water damage related to most of the interior cracks.

I also noted the same conditions with the watertable and the wooden cornice as at the other elevations (needing repointing and sealant and/or filler, respectively). In addition, I noted a loose piece of wooden molding at the southern third point of cornice and a drilled hole in the brickwork that needs to be filled at the second basement window pier from the south bow window end. The wooden head casings of some of the first floor windows in the bow are sagging and need to be replaced.

Basement and Foundation:

Other than for the few courses of brick that have been exposed where the earth has been washed away, the foundation of the building is totally covered by earth on the outside. The inside surface of the foundation is exposed in much of the basement and appears to constructed of tuck pointed stonework that has been parged and painted.

An inspection of the basement revealed signs of water infiltration on nearly every foundation wall surface. The most noticeable efflorescence was found behind the north and south bow windows. The foundation walls should be exposed, re-tuck pointed and sealed and a foundation drain should be provided if the water infiltration is to be totally eliminated. Negative side (inside surface applied) waterproofing systems also can work if the inside surface of the walls is exposed and made sound but are not as effective or

long lasting.

I also noted some small cracks in the plaster finishes of the walls below the basement window sill of the rear window bow and a vertical crack in the center of an archway in the interior brick wall near the north rear entrance. This should be repaired by injection and the adjacent masonry that restrains this arch should be closely examined for movement.

First Floor:

The interior spaces of the first floor are under the uses and live loading that the floor was originally designed for. I could find nothing that would suggest that the floor structure was in anything but sound condition.

There are diagonal cracks in many of the plaster walls of the first floor level and these are may be either due to lateral building movements between the first and second floors or long term deflection (creep) of the wooden members that support them. I also noted that the floor of the central "delivery room" vibrates perceptibly under foot. Vibration susceptibility is usually not related to strength but is more related to the dead weight of the given floor. Considering the age of the structure and its successful record of safely sustaining its original design loads, I would not be concerned about these movements or vibrations.

Much of the inner surfaces of the exterior walls had efflorescent plaster and peeling paint where water was undoubtedly coming in from the outside. The worst conditions were at the north and south facades. I also noted cracks on the inside of the walls that roughly correspond to cracks that are visible on the outsides of the walls.

Second Floor:

The second floor was originally designed as a "hall" with a stage. The floor of the hall and the stage would have been constructed to support live loads of 100 psf (pounds per square foot) and 150 psf, respectively. The second floor space is no longer used for performances or lectures and presently contains a limited number of relatively sparely placed book shelves, thus qualifying as a "stack room". If this were to actually be considered a library stack room, it would by code need to support a 150 psf live load.

The ceiling below the second floor has numerous scattered cracks in the plaster suggesting that there has been some structural movement.

The apparent increase in floor load of 50 psf is something that should be investigated further. If this were a new condition, the load increase would typically not be permitted. Given that this is a pre-existing condition, the actual loading created by the bookshelves

should be evaluated and compared against the original live load. Shelves must then be removed or re-spaced as may be necessary to meet the original live load limits, or additional support should be provided.

There are cracks on many of the inside surfaces of the exterior walls that correlate to cracks on the outsides of the walls. The ceiling of the former theater area is deflected and cracked, and the north and south walls have an outward lean of more than 1" in 4 feet.

There are diagonal cracks in the walls that separate the anterooms. These cracks descend toward the outside of the building, suggesting either a backward shear of the roof with respect to the floor or a downward deflection of the inner floor with respect to the adjacent exterior wall. A combination of both is probably the actual cause.

There are at least two stained locations within the interior of the ceiling below this floor. The causes of these stains should be determined and then remedied.

Roof Structure:

The roof structure of the West Branch Library was originally constructed to span between the exterior walls with no interior support. This being the case, each flat roof surface was designed to intersect at angles that would be sufficient to support the whole like a four-sided house of cards. Each surface leaned inward on an opposing surface and was to be restrained at the base.

The attic was not accessible without creation of a hole in the second floor ceiling or in one of the walls of the former light well.

In simple hip roof construction, the bases of the rafters are nailed into the attic or top floor structure and restraint is provided by this direct tie, consisting or floor joists or floor boards, between the opposing sides of the roof. In the case of this structure, the top (second) floor does not occur at the bases of the rafters, and the horizontal restraint must instead be provided by three methods: (1) the lateral restraint of the ceiling framing that causes the rafters to bend between the outside support and the ceiling, (2) the in-plane stiffness of the roof decking to transfer the outward shear loads from the sides of each surface to the corner "hip rafters" and (3) whatever lateral bending capacity that the exterior wall system may have.

From the conditions and the type of construction that I have seen, it appears that the first two modes have been engaged to support the roof and by the amount of wall deflection that I have seen, the third mode does not seem to be very effective on the north, west and south elevations, however, the projecting entry vestibule gives the east wall considerable stiffness. One additional mode of resistance is the horizontal shear capacities of walls

between the anterooms, which seems to have been fully engaged and then exceeded considering the amount of diagonal shear cracks in these walls.

There are diagonal cracks in the ceiling that radiate from the center and end toward the corners. There is also a radical outward bow that can be detected in the eave lines of the north and south exterior walls and the flat portion of the ceiling slopes toward the middle with a slope of approximately 1 ½" in four feet. The sloping surfaces of the roof are in many places concave, these being most extreme above the points where the ceiling and roof intersect. These are also the locations where the bending moments in the rafters are the highest.

Based upon what I have seen, it appears that the roof may not have been properly designed and constructed for the amount of snow loading that has been placed upon it. The downward deflection of the middle of the roof and the outward bowing and longitudinal growth of the walls are directly related.

On January 11 we gained access to space above the attic ceiling to inspect the framing of the roof. From this inspection I was able to access all of the ceiling framing and all of the roof framing above the elevation of the ceiling. I was also able to look down into the spaces between many of the roof rafters over the sloping part of the ceiling.

I found that all of the rafters run parallel to the roof slope, as would be expected. The rafters at the rear bow are fanned and land on the bow wall at right angles.

I also found that what from the outside appears to be a flat area the top of the roof is actually a shallow hip that has deflected to a flattened shape. This roof framing surrounds a partly filled opening of a former skylight that was replaced by the present roof scuttle. This surface is bounded by heavier beams that appear to be framed to span between the hips of the roof which appear to have been assumed to act as support points in the design. The typical rafter size is 2" x 7 ½" with the spacing varied to suit the loading and the span.

The ceiling is framed with front-to-back running 2" x 7 ½" joists that support the plaster and wooden lath on 1" nominal strapping that runs between the side surfaces of the roof. These are suspended at at least three points by 1x5 strap hangers that attached to the rafters.

The ceiling joists are butt-spliced in the middle of the attic and lap nailed with 1 x 5's to allow them to act as tension members. These are also lap nailed to the rafters of the front roof but miss most of the rafters of the back roof due to the fact that the rafters are fanned. Because of this, front-to back truss action is reduced because of the softness of the rear rafter connections. As a result, the front rafters, which are in a state of bending due to this truss action have deflected by as much as 3", whereas the back rafters are nearly straight,

indicating that they are not resisting truss action in the other direction because of the softness of the rafter-ceiling joist connections. This one-sided truss effect has resulted in the backward movement of the roof and associated spreading of the bow and side-walls as it has resulted in a westerly shear on the roof structure that is resisted by the diaphragm rigidity of the roof surfaces on the sides and by a limited amount of north-south truss action.

The ceiling strapping acts as a marginal tension resisting truss element in the perpendicular, north-south direction. Even though the strapping elements are not directly connected to the rafters, these are connected in sufficiently close proximity to the rafters that they at least partly help restrain the roof in a limited fashion.

The rafters on the north roof surface have deflected by more than two inches whereas the rafters to the south have deflected less than one inch. This is partly due to the fact that the valley rafter from the south side of the front entry gable continues up to the top roof surface and puts an unbalanced reaction on the north front corner of the high roof as a result of the asymmetrical geometry.

The beams that bound the top roof have deflected to an alarming extent and appear to be undersized for the loads that they support. These members have deflected by as much as 4". To further compound the situation, the top roof boundary beam on the east side of the structure has a longitudinal check that is ½" to ¾" wide at its mouth and penetrates more than half of the member's depth over more than half of its length.

Based upon what I have seen, it is obvious that the roof was not framed in a sufficient manner and is in an overloaded and distressed state. I recommend that the structure be analyzed by a structural engineer and reinforced using tie-rods, rafter sisters and blocks. This reinforcement would include the direct attachment of the ceiling joists to the fanned rafters and direct tension resistance in the north-south direction.

Until this work is done, I also recommend that significant snow accumulation (more than 6" to 10") be removed from the roof on a continuing basis.

Grounds:

There is a recessed, sloping ramp that runs to the back door of the building at the northwest corner. The drain at the low point of the ramp is clogged and the railings of the retaining walls along each side of the ramp are missing.

The concrete curb and walkway at the rear parking lot are chipped.

West Branch Library
Somerville, MA

Updated Draft January 14, 1999
Structures North

Budgetary Estimate

Please see the "Schedule of Items and Values on the last sheet of this report.

The cost figures that are shown have been provided for general budgetary guidelines only, not for allocation of construction funds.

I trust that the preceding information will be useful in understanding the condition of the Library and establishing the scope of required rehabilitation and maintenance work. Please contact me if you have any questions or comments.

Respectfully Yours,

Structures North Consulting Engineers, Inc.
John M. Wathne, P.E., President

West Branch Library
Somerville, MA

Updated Draft January 14, 1999
Structures North

Schedule of Items and Values

Item / Location	Relative Urgency			Budget
	High	Mod	Less	Estimate
Exterior Wall Restoration (crack excavation/ injection, selected repointing, arch reconstruction).		X		$65,000 to $85,000
Foundation Wall Waterproofing (negative side cheaper, positive side more expensive).			X	$25,000 to $60,000
Front Step Reconstruction.		X		$40,000 to 60,000
Front Finial Straightening.		X		$10,000 to $20,000
Second Floor Analysis and Book Shelf Rearrangement (if necessary).	X			$3,000 to $15,000
Second Floor Reinforcement (optional alternate).	N/A	N/A	N/A	$0 to $80,000
Roof Inspection and Analysis.	X			$5,000 to $8,000
Roof Reinforcement (if required).	X			$35,000 to $60,000
Chimney Cap Replacement, Chimney Straightening.	X			$5,000 to $15,000
Investigation and Bracing of Exterior Walls.		X		$5,000 to $30,000
Miscellaneous Sitework.		X		$10,000 to $20,000
Implement Snow Removal Program.	X			N/A
Repair Cracked Arch in Basement.		X		$1,500 to $2,000
Total Estimated Budgetary Cost				$204,500 to $455,000

Mechanical Engineer's Report

DRAFT

BARSTOW ENGINEERING, INC. CONSULTING ENGINEERS 401 COMMONWEALTH AVENUE BOSTON, MASSACHUSETTS 02215-2317 617-262-0420

ROBERT J. BARSTOW, P.E.

WEST BRANCH LIBRARY - SOMERVILLE, MASSACHUSETTS

REPORT OF MECHANICAL SYSTEMS - - - FEBRUARY 18, 1999

PART I - EXISTING CONDITIONS

1. HEATING:

A. Source of heating energy is an H.B.Smith Co., Mills, Model No. 20, gas-fired, sectional-cast-iron, steam boiler.

B. The boiler was formerly fired with No. 2 fuel oil; two, abandoned, 275-gallon fuel oil tanks remain, exposed in the boiler room.

C. Steam is distributed to two-pipe, two-valve cast iron radiators in the front of the building, one-pipe cast iron radiators in the rear, and two ventilating systems located at the basement ceiling. There is also an accelerating radiator in the exhaust duct on the second floor.

D. There is a below-the-water-line-type heat exchanger in the boiler which is used for two zones of hot water, baseboard-type, radiation in the basement. A time switch changes this system over from "occupied" to "unoccupied".

E. A five-gallon electric water heater is located in the boiler room and used for heating domestic water.

2. VENTILATION:

A. The basement toilet room has a ceiling combination light/exhaust fan; the fan does not work, and the room smells badly.

B. There is an original ventilation system consisting of two sheet metal boxes at the basement ceiling which contain cast iron radiators which originally provided heated fresh air to a register in each of the first floor front reading rooms, and two floor grilles in the second floor space.

FAX 617-262-5839 E-MAIL - BARSTOWENG@AOL.COM

3. AIR CONDITIONING:

A. There are two, window-type, package air conditioning units, one in the first floor rear room, and one in the south reading room.

PART II - COMMENTS ON EXISTING SYSTEMS

1. HEATING:

A. The source of heat is a good choice. The boiler is fairly new and should give many years of service.

B. The existing fuel oil tanks can remain in place. It is possible a return to oil firing could happen in the future. I assume they have been drained of all fuel oil.

C. The cast iron radiator system is satisfactory, except that it is all on one zone serving the first and second floor. The accelerating radiator is turned off, and should remain so.

D. The indirect water heater providing forced hot water heating for two zones of heat in the basement is a good idea. The unsightly pipes could be re-routed.

E. The small electric water heater is a good choice for the minor use of hot water.

2. VENTILATION:

A. The basement toilet room exhaust fan should be repaired or replaced.

B. I could not determine if the two fresh air ventilating systems are functioning. If not, they could be refurbished.

C. The existing gravity ventilation systems could be replaced with new heating and ventilating units.

D. Mechanical exhaust fans could be added for ventilation

3. AIR CONDITIONING:

A. The air conditioning units could remain as is, or a new central system could be installed.

PART III - RECOMMENDATIONS

1. HEATING:

A. The entire heating system could remain as is.

B. It would be nice to have more zones of control i.e. a zone for each reading room on the first floor and a separate zone for the second floor. This would be quite costly as the system would have to be altered to permit installation of automatic valves on this type of steam system.

2. VENTILATION:

A. The existing ventilation system could be refurbished and continue as a gravity system. If so, it should have automatic motorized dampers to prevent fresh air from being heated during unoccupied periods. It could also be replaced with a fan-operated forced ventilation system. The steam system would have to be altered to change to automatically-controlled heating and ventilating units.

3. AIR CONDITIONING:

A. If the window air conditioning units are too unsightly and/or too noisy, a central system could be installed. I recommend three zones (units), one for each floor.

PART IV - GENERAL

1. There is a plain, wood paneled door to the boiler room from a children's reading room.

2. There is no building insulation. The roof space is accessible and could be insulated.

PART V - COST ESTIMATES

1. If it is desired to replace the steam heating system with a forced hot water system ..... $75,000.
2. Provide existing steam system with four zones on control ..... $12,000.
3. New, automatically-controlled heating and ventilating units ..... $20,000.
4. Refurbish existing fresh air ventilating system ..... $ 5,000.
   (assuming the heating system is altered for automatic control valves)
5. Repair or replace basement toilet exhaust fan ..... $300.
6. Provide general ventilation exhaust fan(s) ..... $3,000.
7. Provide central air conditioning ..... $85,000.

END

Electrical Engineer's Report

JOHNSON ENGINEERING AND DESIGN, INC.
256 Marginal Street
East Boston, Massachusetts 02128

Telephone: (617) 567-2910 Facsimile: (617) 567-3330

February 17, 1999 JE-456

Mr. Richard Detwiller
McGinley Hart & Associates
77 North Washington Street
Boston, MA 02114

RE: West Branch Library – Somerville

Dear Richard:

Attached is our report for the West Branch Library in Somerville. Please contact us should you have any questions.

~~Very~~ truly yours,

Eric D. Johnson, PE
Principal

EDJ/kam

Attachment

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 4

To Richard Detwiller	From Eric Johnson
Co. McGinley Hart	Co. JEDI
Dept.	Phone # 617-567-2910
Fax #	Fax # 617-567-3330

JOHNSON ENGINEERING AND DESIGN, INC.
256 Marginal Street
East Boston, Massachusetts 02128

Telephone: (617) 567-2910 Facsimile: (617) 567-3330

February 17, 1999 JE-456

ELECTRICAL SURVEY

West Branch Library
50 College Avenue
Somerville, MA

Background

On February 10, 1999, at the request of McGinley Hart Architects, Johnson Engineering & Design, Inc. made a site visit of surveying the existing electrical system. The following report describes the existing electrical system and identifies areas of the system which require upgrading to meet present day code requirements.

In addition, we have identified systems where we felt improvements may be desired but are not mandated by code. The report identifies and separates code required items from aesthetic items.

1. Service

The existing service is rated 120/240 volts, single phase, 200 amp. Power to the building is fed below grade to a cable termination box within the boiler room. From this point, cables extend to a 200 amp fused switch, through an electric meter and into the building's main electrical panel. A second distribution panel is also located within the room.

Upgrade of the electrical distribution system is not required by code; however, it will be required to increase the capacity of the electrical system to support an air conditioned building and new elevator installation.

Our price estimate for service upgrade includes removal of the existing main panel, meter and main disconnect. New below-grade conduit, wire, metering and panelboard are included to upgrade the service to 120/208 volts, 3 phase, 4 wire, 400 amp.

2. Branch Circuit Wiring

In selected areas where remodel and other corrective work requires removal of interior walls, new branch circuit wiring should be included. Because this is an undefined scope at this time, we have chosen to allocate approximately 25% of all branch circuit wiring to be replaced. This quantity and associated budget price should be revisited as the scope of work is more clearly defined. In addition, receptacles on each floor appear to be sparsely located. We have included additional quantities and branch circuit wiring for upgrading, especially of the main reception desk area.

3. Telephone System

As part of the remodeling, we would route new telephone wiring within walls. This is not a code requirement but an improvement to enhance the appearance by concealing all telephone wiring.

4. Emergency Lighting/Exit Signs

The existing system does not meet present codes with regard to requirements for illuminated exit signs and adequate quantities of egress lighting. New illuminated exit signs are required throughout and increased quantities of emergency lighting fixtures are needed. These code required improvements are included within the budget pricing for this line item.

5. Fire Alarm System

Improvements to the fire alarm system are required to meet code. The basic system including the fire alarm annunciator in the front vestibule and the main addressable fire alarm panel, as manufactured by Fire-Lite Alarms, Inc., are in good condition. Smoke detector placement, for the most part, appears to adequately protect the building. New HVAC units will need the addition of duct smoke detector and the existing ceiling mounted horn/strobe units do not meet present codes. All horn strobe units should be wall mounted at a height not to exceed 80 inches. Strobes need to be added in all public restrooms. A weatherproof rotating beacon should be installed on the building exterior to replace the existing horn light unit.

6. Lighting

General illumination levels appear adequate. Lighting fixtures, for the most part, are 2 lamp, surface mounted, acrylic wrap-around fixtures. Recent upgrading to T-8 energy efficient lamps has been accomplished. Under this line item, we recommend an upgraded, more decorative fixture be used throughout the first level and retain the existing fixtures on the second floor and in the basement. This is an optional cost item.

We recommend refurbishing and retaining the front lobby pendant fixture and wall sconces.

7. Exterior Decorative Poles

As an optional item, we recommend removal of the two existing exterior front entrance lighting fixtures but retaining the iron poles. New metal halide pole top fixtures could be installed to improve visibility of the library.

8. Clocks

We recommend new quartz, battery powered wall clocks.

9. CATV

We recommend removal of the large coil of CATV cable on the exterior of the building.

10. Sound System

Should the library wish to activate and have a fully functional stage on the second floor, a sound system may be desired. This is an optional item.

Budgetary Pricing

1. Service – upgraded service to 400 amps, 3 phase.....$30,000.00
2. Branch Circuit Wiring.....$10,000.00
3. Telephone System.....$ 2,000.00
4. Emergency Lighting and Exit Signs.....$10,000.00
5. Fire Alarm System.....$ 3,000.00
6. Lighting.....$ 8,000.00
7. Exterior Decorative Poles.....$ 1,000.00
8. Clocks.....$ 500.00
9. CATV – removal of coil on building exterior by utility company..... 0 –
10. Sound System.....$ 2,000.00