



**Reading Public Library  
Library Building Assessment**

64 Middlesex Avenue  
Reading, MA

**Report**

September 15, 2008

**Adams & Smith LLC**

Architects/Consultants  
55 Thomas Road  
Swampscott, MA 01907

**Reading Public Library  
Existing Conditions Assessment Report**

Executive Summary	2
Building Envelope	4
o Roof	
o Masonry	
o Windows	
o Insulation	
Structural system	8
o Existing conditions	
o Capacity	
Mechanical Systems	10
o Fire protection	
o Plumbing	
Electrical Issues	12
o Lighting	
o Data network	
o Power	
o Security system	
Accessibility Issues	15
<del>Security Issues</del> —(removed from public version)	18
Library Planning	19
Appendix	
Drawings:	
o 1-4: Elevations	
o 5: Roof Plan	
o 6-8: Plans- Functional Issues	
o 9-11 Plans- Accessibility Issues	
o S-2 to 4 Structural plans	
Existing window conditions schedule	
Mechanical/Electrical Engineer’s report	

## Executive Summary

Adams & Smith LLC was engaged to assess existing building conditions in May of 2008. The assessment was conducted by Richard Smith of Adams & Smith, James Balmer of Boston Building Consultants, and Muzi Zade of Zade Partners LLC.

The existing building is a former elementary school, built in 1894, which was converted to a library in 1984. The building has limitations imposed by the planning and structure of the original construction, as well as by the approach to structural reinforcement of the 1984 renovations. It also has issues presented by the present age of the building systems installed in the conversions and by issues of accessibility compliance to code. Finally, it has issues generated by the changing nature of library functions and the impact of computerization on both library service and staff workspace requirements.

Certain components of the building envelope should be given a high priority for repair or replacement. They include:

- Masonry repair or reconstruction in the chimneys and the porte cochere on the Middlesex Avenue side.
- Correction of water infiltration at the west end of the basement, addressing gutters and downspouts, underground piping and grading against the building
- Replacement of windows in poor condition in many areas
- Repair of rotted wood and termite damage to exterior woodwork
- Replacement in kind of corroded downspouts.
- Restoration of insulation in the attic

Major accessibility issues that should be addressed include:

- Construction and condition of the ramp to the main entrance.
- Handrail and guard issues at the main stairs
- Clearances and dead end aisles in stack areas
- Plumbing fixtures and clearances at the first floor

Electrical and data system issues include:

- Lighting layout, coverage and efficiency
- Availability of power for library patrons using the wireless network
- An obsolete fire alarm system

Library planning and functional issues include:

- Functional planning issues in staff work areas, especially the circulation desk and backup spaces, the second floor staff offices, Technical Services, and the Children's Room.
- Overcrowding, poor lighting and lack of collections and program space for the Children's Room. Lack of quiet study and tutorial spaces.
- Need to replan the first floor browsing area
- Limitations on floor loading of the existing floor framing will limit stack height and spacing in many areas.
- Dysfunctional lighting and audio visual systems in the main meeting room
- Replanning and reuse of the former back periodicals area in the northeast corner of the basement.

## Building Envelope

The Reading Public Library is housed in the former Highland Elementary School, built in 1896. The construction is typical of schools of that period- unreinforced masonry bearing walls, wood floor joists and deck, and a wood roof structure supported by a heavy timber truss system that spans across the former classroom spaces. The building envelope exhibits many issues common in buildings of this period, and a number of areas require repairs or maintenance to prevent further deterioration and water penetration.

### Roof

The existing roof is wood framed with a wood deck. It is a mansard roof with a low pitch membrane roof in the center, which sheets off onto the pitched roof on the south (main entrance) side of the building. The sloped portions of the main roof are covered with red asphalt shingles installed in 1998, and the flat portions are covered with an EPDM membrane roof installed in 1988. There is no evidence of current leaks in the attic, and the joint between the asphalt shingle roof and the flat roofs at the turrets appear to have been successfully sealed with the recent installation of elastomeric membrane roofs and flashings. In general, the roof is in good condition. The asphalt shingles are flat, with only isolated incidences of curling or cracking. Some granular material from the shingles was observed in the gutter on the west end of the north façade. The EPDM membrane also appears to be in good condition, with neoprene flashing turned up under existing copper or lead counterflashing. Some of this counterflashing is loose or bent, and this may contribute to the isolated incidences of water penetration at the masonry chimneys. There is also some bubbling visible in the flashing on the west side of the westernmost chimney, which should be repaired.

The porte cochere roof is slate, and this probably was the covering of the original main roof. The slate is in fair condition, but it is near the end of its service life.

The gutters and downspouts are copper. Most of them are intact, but at least two downspouts have serious leaks on the elbows and are damaging masonry below. The gutter above the entrance vestibule leaks in heavy rain, which may indicate blockages at the downspouts that should be cleared.

The fascia at the right hand turret on the south façade is loose and should be resecured.

### Exterior masonry

The exterior masonry was reviewed by Richard Smith of Adams & Smith and James Balmer of Boston Building Consultants in July 2008. The existing exterior walls are built of an oversized yellow brick above the water table, with red brick at the base. The foundation walls are rubble stone. No major areas of distress or displacement of the visible brick were observed, but cracks, mortar erosion, and minor displacement were noted in a number of areas.

- The last major repointing was done a number of years ago, and some areas not repointed are visible, probably once covered by no longer extant signs. These

typically can be seen at the corners of the building about 8-10 feet above the water table. These areas should be repointed.

- At the east and west ends of the north façade some bowing of masonry between the first and second floor windows was noted.
- Settlement and cracking of jack arches above windows was noted in several areas, especially on the east façade and the stair turrets on the south facade.
- The red brick at the base of the building was originally pointed with red mortar, which is visible in many places where later mortar has washed away. The next major repointing should restore this color, with mortar analysis to determine the original composition.
- The terra cotta egg and dart water table course below the first floor window sills was cut in several places for downspouts, and a corner is missing on the north facades. Any areas that allow water into the wall should be patched and sealed, and much of this course is in need of repointing. The second floor string course on the east façade is being stained by a rusting electrical conduit; this appears to not be in use and should be removed.
- The base of the porte cochere on the north façade is in poor condition, especially at the east end. The brickwork here should be completely reconstructed. Consideration should be given to adding bollards to protect the masonry from snow plows. Some rot is visible at the bases of the wood columns, especially on the west (right) side of the porte cochere.
- Mortar is eroded in a number of places by leaks from holes in downspouts. This is especially visible in two places to the right of the porte cochere, and these should be repaired in kind as soon as possible.
- There is a persistent problem with dampness at the west end of the basement, and particularly in the small storage room adjacent to the west main stair. Water infiltration is occurring through the rubble masonry. In addition to deteriorating mortar, potential sources include leaks from downspouts, blockage in underground piping from downspouts, blocked downspouts causing gutters to overflow (there is evidence of this on the ground on the west side of the building, and inadequate pitch on surface grading to direct water away from the building).
- Exterior woodwork at the eaves is generally intact. Woodwork at the porte cochere is in need of repainting, and some column bases show evidence of dry rot.
- Termite damage is visible on the east façade in the panel at the infill of the old entrance. The panel should be removed, the termites exterminated, and all damaged wood replaced. Given the vulnerability here, consideration should be given to replacement with PVC lumber material such as Azek.
- The chimneys at the roof are the most exposed elements of masonry in the building, and they exhibit the most evidence of deterioration of any of the masonry. The two chimneys closest to the center of the building are in the poorest condition, and they both exhibit past or current cracking and displacement in the masonry. The

## Windows

The windows of the old school were largely left in place in the 1984 library conversion. They are single glazed wood windows, with wood frames and brick molds at the exterior. Conditions vary- there has been some refurbishing of windows on the south façade, but the frames and sash on the east and west facades exhibit deterioration and peeling paint typical of exterior woodwork that is exposed to hot summer sun and winter cold. Some windows also have interior storm windows, and some are glazed with inappropriate or deteriorating glazing. It is our understanding that the Reading Historic Commission has made an agreement with the town to do replacement windows in kind as mostly wood sash, and that a gradual replacement of windows over a period of years is planned. While this reduces the impact on the annual town budget, it may prevent the town from realizing the cost benefit of larger scale replacement window orders. A schedule of existing window conditions follows as an appendix in this report. Some particular issues are as follows:

- The most severely deteriorated windows are basement windows almost at grade on the north façade. They have been severely impacted by uncontrolled water from leaking downspouts as noted previously and from snow removal and piling of snow against the building. Replacement with aluminum windows with historic panning profiles is planned- all profiles and sash, muntin and brick mold dimensions should match the existing windows. The sample window frame is thermally broken, which is typical for modern installations. No sash sample was available. Glazing, due to the height off grade, must be tempered, and consideration should be given to making them laminated tempered glass for safety and vandalism resistance.
- Other basement windows include a patchwork of replacement sash in varying conditions and deteriorated frames. Given their relatively low visibility and vulnerability to various forms of damage, aluminum historic replacement sash would be an appropriate choice for these windows as well.
- Many windows could have their lives extended with a repair program to scrape, reglaze and repaint the sash and trim and repair hardware. This does not, however, address the need for insulating glass and better weatherstripping and is probably a temporary measure.
- The windows at the old stair turrets were built with curved sash to fit into the curved walls. Conditions vary, and some frames and brick molds are in poor condition. These should be evaluated by a custom wood window fabricator to see whether replacement or consolidation and rebuilding is the best course.
- The replacement windows that have been installed on the second floor are good matches for the existing windows. They certainly meet all historic criteria, but as the program progresses there is likely to be some repair needed to the existing frames and brick molds.

The window schedule in the appendix following describes existing conditions and ranks the windows in priority groups for replacement.

## **Insulation**

The building envelope consists of solid masonry bearing walls, windows as discussed in the preceding section, and attic floor framing with insulation between the joists. The masonry walls offer little opportunity for adding insulation without furring walls out into the useable space. The attic is insulated with blown in insulation between the joists. This insulation has been removed over the picture book room in the Children's Room.

## **Building envelope recommendations:**

### *Roof:*

- Repair/replace in kind downspouts and elbows with holes; clear blockages at downspouts. Check and clean underground piping. Priority- very high
- Repair bubbled flashing at west side of west chimney. Priority- high
- Resecure loose fascia at right turret on south façade. Priority- high
- Repair/ replace slate roof at porte cochere. Priority- moderate
- Periodic monitoring of rubber membrane and shingle condition

### *Masonry*

- Rebuild two center chimneys. Priority- high
- Repair brick masonry at outer wall of porte cochere. Repair rotted wood column. Priority- very high
- Local repointing of deteriorated areas and filling of holes in brick and water table courses Repoint chimneys, especially where leaks are visible. Priority- high
- Replace wood panels at former entrance and exterminate termites. Priority- high
- Repoint masonry at former sign locations. Priority- moderate
- Repoint red brick masonry at base with original color. Priority- low

### *Windows*

- Replace basement windows on north side. Priority- high
- Replace basement windows on east and west sides. Priority- high
- Replace first and second floor windows. See chart for priority levels.

### *Insulation*

- Restore insulation over Picture Book Room. Priority- high

## Structural System

Our review of the existing conditions structural condition of the building consisted of a walk thru of the interior spaces, including the attic, and a detailed review of the structural drawings, prepared by Maurice A. Reidy, Engineers, in 1983 for the conversion of the building from a school to a library.

These drawings indicate that many areas of interior bearing walls were removed to make larger open areas. These bearing walls were replaced with structural steel framing, new columns, and new footings under the columns. Most of the walls that were removed seemed to be wood stud bearing walls along at the former first floor corridor, and demising walls between the classrooms in the east and west wings.

The structural drawings also indicate that certain areas of the first floor (the present fiction collection) were reinforced to support heavier loads from book stacks. This reinforcement consisted of installing additional posts and footings under the first floor wood beams, between the existing masonry piers, as well as additional lines of support under the first floor joists to reduce the span by one half.

Most of the re-structuring was done in a clever way that allowed the installation of the new supporting members before the old bearing elements were removed. This eliminated the need for temporary shoring of the floors.

The drawings provided detailed information regarding the size and spacing of the existing floor framing, but since all of the floor framing is now concealed, no exploratory openings were made at this time to confirm the actual condition of the framing. Our analysis of the existing floor capacities are therefore based on the conditions assumed from the 1983 drawings.

Our analysis of the existing framing assumed an allowable bending stress of 1500 psi for the original wood framing, and a yield stress of 36 ksi for the structural steel elements. Live load capacities on the first floor were generally limited by stress, while at the second floor framing, live load was limited a deflection limit of  $1/360^{\text{th}}$  of the floor span. The deflection limitation, while a standard design practice is not currently a code requirement, but will be required with the 7<sup>th</sup> edition of the State Building Code.

The first floor is generally framed with 2"x11-3/4" floor joists, spaced at 16" on center. The joists were originally supported on 7-3/4"x 11-3/4" floor beams running over brick piers. The span of the first floor joists is no longer than 16 feet. Minimum live load capacity of the first floor is 100 psf., with many areas having 125 psf capacity due to reduced spans. At the east wing, floor joist spans were reduced to about 8 feet by the installation of additional supports. Allowable live loads in these areas is at least 200 psf.

The first floor framing was shown to be flush framed to the original wood beams. The actual capacity may be limited by the capacity of the joist to beam connection. If the anticipated loading in areas will increase, it would be prudent to make an exploratory opening to confirm the connection capacity.

The second floor framing at the corridor areas matched the first floor. The classroom framing consisted of 3"x15" joists at 12" on center, to span over the first floor classroom areas. The second floor live load capacity is limited to 100 psf throughout, based on joist deflection limitations.

The attic level was framed to clear span the second floor classrooms. Attic joists generally only support ceiling loads, and live load capacity is limited to 20 pounds per square foot, which is light weight storage. The joists span to timber "rod and block" type wood trusses. These trusses have their bottom chords at the ceiling level to support the ceiling, and the top chords, somewhere between the roof and ceiling levels. As a result there are a number of trusses where the top chord is laterally unbraced and is potentially unstable. Additional lateral bracing should be installed as part of any renovation, even if there is no modification to the attic or roof.

### **Library Live Loads**

The current and previous versions of the State Building Code required a minimum live load of 60 psf for reading areas, and a minimum of 150 psf for stack areas, but not less than the loading based on stack having a density of 40 lbs. per cubic foot to account for multiple level stacks, and compact shelving.

The ASCE 7-02, Minimum Design Loads for Buildings and Other Structures, which is the reference standard for the next, 7<sup>th</sup>, edition of the Code, clarifies that the 150 psf loading is limited to areas with double faced shelves not more than 90 inches tall, with a shelf depth not more than 12", and a minimum aisle of 36 inches between shelves.

These criteria could be used to allow areas that do not have the 150 psf live load capacity, to be used for lower capacity (height) shelves with a wider spacing. Areas with 125 pound per square foot capacity, for example, could carry 5 tier shelving instead of 7 tier, and 100 pounds per square foot could carry four tier shelving five feet on center or five tier shelving six feet on center. Also the placement of shelves, can improve the floor performance as well. Placing the row of shelves perpendicular to the joist framing allows better load distribution to the floor system, compared with having a line of stacks directly over a joist.

See annotated framing plans for allowable live loading in various areas of the building, based on our analysis. Some areas, particularly on the first floor framing may have less capacity than noted if the floor joist connection is notched or just toe-nailed to the supporting floor beam. This should be investigated later if the floor area usage is changed.

## Mechanical Systems

The building mechanical and electrical systems were reviewed in the field by Muzi Zade of Zade Partners LLP and Richard Smith in August 2008. A summary of their observations follows; the Zade report is in the appendix.

### Fire protection system

The sprinkler system was installed in the building in the 1984 conversion. This is required by the Massachusetts Building Code for this occupancy. The issues with the installation include:

- The piping in the attic is part of a wet (water filled) system with black iron pipe. Because all piping contains water, unit heaters are required to heat the attic to keep pipes from freezing. The attic is uninsulated, which makes this a significant energy drain.
- As this piping ages, it will develop leaks. Catastrophic leaks are probably uncommon; more likely there will be small leaks at joints in various places over time.

### Plumbing system

The present plumbing system is part of the 1984 renovations. Issues with plumbing include the following:

- A persistent smell has been reported in the basement in areas formerly occupied by toilets for the elementary school. It seems likely that the old sanitary piping was not capped and sealed properly in the conversion.
- Some plumbing fixture installations present accessibility issues with clearances or mounting heights. See accessibility section following.
- The first floor drinking fountain does not have dual level fountains for accessibility, and the lack of a backsplash on the wall has resulted in some damage from water splashing.

### Heating, Ventilating and Air Conditioning System

This system was installed in the 1984 renovation and has been repaired and modified several times since then. It is now a two pipe fan coil system with a separate ventilation system; this requires spring and fall changeovers from heating to cooling mode and back. Currently it appears to be operating satisfactorily. Issues with this system include:

- Awkward placement of fan coil units, which causes accessibility clearance issues in several places.

- Homemade deflectors were required to control air flow in the meeting room
- The boiler twenty five years old. It appears to be in good condition, but more modern equipment is more efficient. When it does get replaced, a high efficiency boiler should be installed in its place.
- Ventilation system ductwork in the attic is uninsulated, which results in inefficiency and energy losses.
- The Historical Collection has air conditioning, but not climate control, which would control humidity levels.
- The second floor toilet rooms ventilate poorly.

### **Mechanical System Recommendations**

- Attic sprinkler piping:
- Sprinkler piping (general): monitor for leaks; replace as required
- Identify and seal odor producing pipes in basement
- Replan and rebuild fixtures and piping in first floor handicapped toilet
- Replace first floor drinking fountain with code compliant design
- Relocate fan coil units for handicapped clearances
- Replace top discharge fan coil cabinets in meeting room with front discharge cabinets
- Replace boiler at the end of its service life
- Insulate ductwork in attic
- Evaluate the cost and feasibility of installing climate control for the Historical Room.

## Electrical Issues

### Lighting

The existing lighting in the library was part of the 1984 renovations. The system has many deficiencies, both in the adequacy and the quality of light provided, and after 24 years it is approaching the end of its service life. Since 1984, there have been many advances in lighting systems, both in design and efficiency. Replacement and augmentation of the existing lighting could improve the interior environment of the facility. Ceiling heights are generous, which makes the use of suspended direct/indirect lighting systems feasible in much of the first and second floors.

- Lighting at the exterior has issues with the adequacy of lighting on the ramp and the missing light at the main entrance steps. This fixture is no longer made and may be impossible to replace to match the other three fixtures. Step or bollard lighting should be added along the ramp, and replacement fixtures should be found for the steps, possibly combining two post lamps at the top of the steps with lower bollard or step lights at the bottom of the steps.
- The first floor is lighted with linear fluorescent fixtures, about 6 inches square in section, and 2 foot square recessed parabolic fluorescent fixtures. The cutoffs on the lighting are sharp and harsh due to the parabolic louvers, and the contrasting color of the suspended fixtures makes them stand out against the white ceilings above. The typical fixture for this application today has a much larger uplighting component, with a wide distribution and soft cutoffs. Downlights at the entrance and over the circulation desk are standard compact fluorescent lamps in porcelain sockets; they are inefficient and not appropriate for this application. Recessed parabolic square troffers on 8-10 foot centers are not an effective way to light full height bookstacks. The reference desk area is poorly lighted.
- The second floor has many of the same lighting issues as the first floor. Illumination is poor in many bookstack areas in the main Children's Room, and the wall mounted fixtures in the Picture Books room have a poor distribution pattern. Uplighting on soffits is relatively inefficient, utilizing bare utility strips with no reflectors to optimize the distribution of light output.
- The quality of lighting in the second floor main meeting room is poor, with recessed parabolic troffers with no provision for dimming. Replacement of fixtures and addition of wall washing fixtures with dimming would improve the quality of the environment and enhance the multifunctionality of the space.
- Staff offices on the second floor suffer from uneven distribution and the sharp cutoffs characteristic of parabolic louvers.
- The basement has surface applied linear fixtures over stack aisles. While this is an inexpensive approach, it puts enough light on the ceiling plane to avoid the dark cave environment that is created by recessed parabolic fixtures, and this environment appears relatively bright. The spacing of the fixtures, however, is wider than is recommended for this application. The age of the fixtures suggests

that they predate modern high efficiency ballasts, and replacement could cut energy consumptions by 10%(?) per fixture.

- Lighting is simply inadequate in the main entrance area, the west end of the browsing area, quiet study carrels in the basement, and the main stairs.

## **Data Distribution**

The data system in the library takes two forms: a hard wired system for fixed public and staff computer stations, and a wireless network serving laptop users with wireless cards. The wireless network has been upgraded recently, and its capacity and coverage appear to be working well for the library. The primary issue, as noted below, is the provision of power for these laptops.

## **Power Distribution**

The library main power panels have been upgraded, and there is now a 1200 amp main supply. This is more than adequate for present uses, and there is extra capacity that can serve added distribution. Since the library has good coverage with its wireless data system throughout the building, there is increasing demand from library patrons bringing their own laptops into the building. Adding power receptacles at reading and quiet study areas would improve service to those patrons and to patrons borrowing the laptops the library makes available for use in the building. Power should be added in the reference area, at quiet study carrels in the basement, the Historical Collection, seating areas in Browsing, the Children's Room, and the east end of the basement. Where possible, wired furniture with outlets on the table should be used to minimize cords trailing across the floor and creating tripping hazards.

The staff workroom on the second floor has poor power provisions for the number of computers, printers and other equipment typical of a modern office. A power pole has been installed to bring power and data down from the ceiling plenum. One approach would be to replace the existing furniture with an office furniture system that incorporates power and data wiring channels. Another approach would be to add a low partition in the center that incorporates power and data distribution to the central equipment and work stations that cannot be served from the walls.

## **Fire Alarm system**

The fire alarm system panel is old and obsolete. A number of signal devices are not ADA compliant, and there is not inadequate coverage with signal devices in some areas. Deficiencies were also noted in the emergency lighting system, which does not fully cover egress routes.

## Electrical Recommendations

### *Lighting:*

- Add exterior lighting at ramp. Priority- high
- Add lighting at underserved areas in browsing, quiet study areas, and circulation desk. Priority- high
- Replace lighting system on the first and second floors with modern direct/indirect lighting with higher efficiency and better distribution.
- New lighting at main meeting room, including dimmable wall wash downlights.
- Add emergency lighting to underserved areas.

### *Power:*

- Add 25-30 receptacles for laptop computer users in the reference area, quiet study areas on the ground floor, the Historical Collections, and the browsing area. Add furniture with built-in wireways.
- Add plugmold strip along the walls of the Reference area computer room for flexibility in uses of the space.
- Improve power distribution at the second floor staff offices with either:
  - A low partition in the center of the room with wiring
  - Purchase of office systems furniture incorporating wireways

### *Fire alarm*

- Replace main panel with a unit meeting current standards
- Replace non-ADA compliant signal devices with compliant devices. Extend coverage to areas not currently meeting code on this.

## Library planning

Library operations and planning considerations have changed dramatically since the conversion of this building in 1984. Computerization, growth of non-print media, interlibrary loan programs, and changing staff roles, to name a few drivers, have all impacted library planning and placed strains on the existing Reading Library facility. Current planning issues include the following:

- The Technical Services office in basement in the basement is disorganized and lacking in provision for computers and wiring.
  - Server could move into closet, but ventilation and wiring connections would have to be addressed.
- Reactivation of old front entrance: this has been discussed as a way to reconnect to Middlesex Avenue and enhance access for pedestrians
  - ADA issues: The long flight of steps requires either a variance to use this entrance as is or addition of a wheelchair lift- also a variance issue.
  - Security issues: A second entrance could be monitored by the information desk. It would, however, split the present Historic Collection space in two and create book security issues for this collection unless a less sensitive use could be placed here.
- Circulation desk and office: The interlibrary loan function is growing, and handling of materials is placing a strain on the present layout. There is a lack of space for holds, and computer provisions are improvised.
- Sorting room: this area handles returned and discharged books. The current planning is inefficient and puts a strain on staff.
- Browsing area: This area is in need of replanning and updating. Noise from the Teen area adjacent is sometimes disruptive for newspaper readers.
- NE corner basement: The back periodicals collection is shrinking, and this space should be considered for other uses. Could this become a new study area or after school homework center? Library needs not currently being met include tutoring spaces and quiet study rooms
- Fiction collection: this is locked in the northeast corner of the first floor and has no room to grow. Large print is opposite by the Circulation Office. In between, the CD and DVD collection was relocated from the basement recently.
- Quiet study areas in basement: These are not monitored by library staff. They are also poorly lighted and lacking in provision for computer use.
- Children's Room: This area has numerous issues. They include lack of space for collections, lack of backup for the librarian's service desk, poor lighting of collection shelving, lack of provision for different age groups, and lack of dedicated space for children's programs. There is no space available for quiet study or tutorial meeting rooms, and the parents' collection is outside the Children's Room in the

stair. There is no baby changing table in the Children's Room toilet. Safety issues with fire stair access and the corridors outside the Children's Room are also a concern.

- Second floor office area: The planning of this area predates the computer era, with little provision for computers and other office equipment requiring power or data. It also functions as office space for the Children's Room staff, yet it has no sight lines into the Children's Room and cannot function as a backup space for the Children's Room desk.
- Staff room: There is no provision for handicapped employees. Also, there is no dedicated staff toilet.
- Finishes: The carpet has been replaced recently through much of the first floor. The ceiling tile, however, is showing its age, and many walls are due for repainting.

### **Library planning recommendations**

- Staff work areas should be replanned to improve function and efficiency
- The circulation desk area, including the sorting room and circulation office, should be replanned for function, ergonomics and modern equipment. Lighting should be redesigned.
- The browsing area should be replanned to improve displays of material and improve patron seating, including better provision for internet access and use of wireless network. Acoustic separation from the teen area adjacent should be made. Improved lighting should be part of this upgrade.
- The Children's Room should be replanned to improve collection capacity, provide backup to the Children's Room desk, provide more effective lighting, and better computer provisions.
- Consider making the main meeting room divisible to create smaller space suitable for children's programming with provision for crafts and story time events. At the same time, the lighting and A/V provisions should be updated.
- Consider use of security camera to monitor hidden areas in the basement. This may also be needed to monitor the Children's Room desk from the second floor staff office area and the corridor at the adult public toilets.
- Develop reuse plan for the northeast corner of the basement to address unmet library functional needs.
- Develop a schedule for replacement of deteriorated ceiling tile and repainting.