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**THE NORTH HAMPTON PUBLIC LIBRARY
OF
NORTH HAMPTON, NEW HAMPSHIRE**

**PHYSICAL PLANT NEEDS:
AN ASSESSMENT AND PROJECTION
FOR A NEW OR EXPANDED PUBLIC LIBRARY
BUILDING**

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DRAFT

**MAY, 2001
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SECTION ONE
EXECUTIVE SUMMARY

THE NORTH HAMPTON PUBLIC LIBRARY OF
NORTH HAMPTON, NEW HAMPSHIRE

PHYSICAL PLANT NEEDS:
AN ASSESSMENT AND PROJECTION
FOR A NEW OR EXPANDED PUBLIC LIBRARY BUILDING

EXECUTIVE SUMMARY

THE CURRENT STORY

In February of 2001, seven months before the pivotal incidents of 9/11, the Trustees and staff of the North Hampton, New Hampshire, Public Library determined that the library building was being used well and often for all of its services and facilities and was then simply too small to do the job that the Town and North Hampton residents individually were expecting of it.

Accordingly, they turned to a Library Building Consultant as part of deciding what to do. Following a site visit and meeting in March, 2001 and a carefully-reviewed draft report, a final report recommending the construction of a new North Hampton Public Library building of approximately 12,000 gross square feet was prepared. The Building Consultant's report was dated May, 2001.

In the spring of 2008, the North Hampton Public Library Trustees have appealed to the same Library Building Consultant to prepare this update of the now seven-years-old initial investigation.

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Seven years have passed. In the meantime, other Town departments have also asserted their lack of space.

What has been going on in North Hampton?

May, 2001 – initial library Needs Assessment by Library Building Consultant.

2001 – Architect Dennis Mires proposes a plan to construct a new library, consolidate Town Offices in the present library, expand the Safety Complex and construct a new Public Works facility.

2002 – Municipal Complex Committee reviews the Mires proposal and

recommends purchase of additional land.

Fall 2003 Petition Jan 2004 voted March 2004

2004 – The Town Meeting, upon the recommendation of the Selectmen, Planning Board, Budget Committee and Conservation Committee, agrees to purchase the one-acre parcel of land to the left of the library for an unspecified municipal complex purpose.

June, 2004 – Municipal Facilities Advisory Committee appointed by the North Hampton Planning Board compiles a survey of Town facility needs.

2005 – The Library Master Plan Update calls for more space once more.

March 6, 2006 - Capital Improvements Program, 2006 – 2012 approved by the Planning Board. This is a careful study of finances, but apparently makes no particular recommendation with regard to a larger library or other improved town facilities – beyond a recommendation that “the Board of Selectmen authorize [yet another] professional and comprehensive needs assessment...”

And what has been happening in the construction world in the seven years from 2001 to 2008?

Very briefly, the Chinese economy has been expanding at a breakneck pace, and much of world steel production, including that of the U.S. and Canada, has been purchased by the Chinese, causing a world price spiral for steel. On top of that, the destruction of large parts of New Orleans and the Mississippi coast have caused the shipment of quantities of plywood and other wood products to the South, along with yet another price spiral.

The Turner Construction Company has published an index of all this for over eighty years. According to the Turner Construction Cost index, the cost of construction in the U.S. has risen **37.3%** in the period, 2001 through 2007.¹ Marshall & Swift / Boekh, another national index, is citing a **44% increase** in construction costs, 2000-2008.²

Thus, delay has been very costly, and is likely to continue to be so. The current situation in North Hampton offers a window of opportunity for the Library and for the Town to break a logjam of committees and deliberations and planning.

¹ Turner Construction Company, <http://www.TurnerConstructionCo.com> June 5, 2008.

² Marshall & Swift / Boekh as quoted in the Boston Globe, June 7, 2008.

BREAKING THE LOGJAM

RECOMMENDATIONS:

- 1) The library trustees should negotiate with the Selectmen and the various responsible boards for the opportunity to plan a new library building on the new land next to the existing library building.
- 2) The library trustees must set a deadline and encourage the library staff to finalize the present library Needs Assessment by completing the rest of the Library Building Program document, with Area Descriptions for each functional area of the library, using the Consultant's draft spreadsheet as a template. The consultant can review these for accuracy and consistency.
- 3) After approving the Library Building Program, the Library Trustees should retain an architect to design an approximately 12,500 – 13,000 gross square foot one-story library building and parking lot for the corner site, with a shared site plan to address the needs of the existing library building and the original library building for septic, parking and landscaping requirements. The architect's directive should be to establish a visual anchor for the municipal complex and streetscape, using related themes from the surrounding town and the complex itself.
- 4) With the completed Library Building Program, a site plan, a library design and a cost estimate in hand, the Library Trustees will be in a position to appoint a Fund-Raising Committee, in recognition of the fact that a public library has the most potential of any municipal facility for a capital fund drive.
- 5) With the assistance of the New Hampshire Charitable Foundation and the resources of the Concord Public Library and the Manchester City Library, the library staff and Trustees should also actively pursue funding grants for the project from both New Hampshire statewide and local foundations.

When the private and foundation fundraising efforts have borne significant fruit, it will be time to seek assistance and funding from Town Meeting.

The advantage of this plan is that, once a new library has been constructed, the existing library's 5,000 gross square feet of space will be available for conversion to Town Hall and meeting functions, and the Public Safety Building will be emptied for full use as a Police/Fire facility. Septic systems, parking and landscaping for both the existing library building and the antique library building will have been resolved – or at least designed – as part of the library project.

THE MATH

The new one-acre parcel of land would offer 43,560 gross square feet of space.

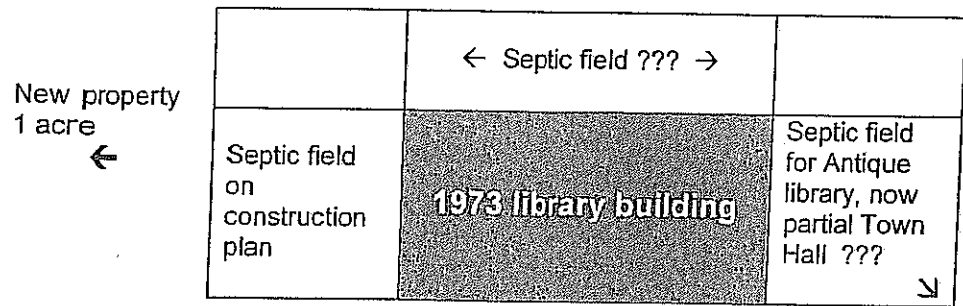
The library needs approximately:

- 13,000 gross square feet for a building
- +11,300 gross square feet for 32 library parking spaces
- 24,300 gross square feet of land for library
- +12,150 gross s.f., (plus 50%) for setback, septic system, aesthetics, etc.
- 36,450 gross square feet total land needed for the library.

The remainder, in this example, would be 7,110 gross square feet of land. At 350 square feet per parking space, this ought to be enough space for about 20 additional cars.

SEPTIC SYSTEMS AND THE LIKE

Back in 2001, there was talk of a town-wide sewer extension. This has proven to be problematic, and nothing has come of it. Accordingly, much more needs to be known about the septic system(s) that have been installed around the 1973 library building. The 1970's plan shows a septic field to the left of the library building, but it is also thought that there may be a septic system for the antique building, to the right of the library – or even that there is a possible septic system to the rear of the 1973 building.



In the 35 years since the construction of the present library building, and in particularly in the seven years since the initial investigation, both Federal and

State regulations with regard to septic systems and the environment have changed profoundly. Much more stringent environmental controls now apply. In addition, a new library building with a multipurpose room to seat 80 or so is likely to be required to have additional rest rooms, as a public meeting place.

It is recommended that the septic system story around this 1973 building as well as the antique building be fully investigated and understood, in the light of what will be required for the two buildings, plus a third new building located to the west of the existing 1973 building.

The implications of this issue for the size and siting of any new building and its ancillary facilities (parking, septic system, etc.) are likely to be crucial determining factors. Further information should be sought from the sources listed in the Appendix to this document.

SECTION TWO:

LIBRARY BUILDING NEEDS
ASSESSMENT

THE NORTH HAMPTON PUBLIC LIBRARY: A NEEDS ASSESSMENT

THE SETTING

The New Hampshire Seacoast town of North Hampton is located on U.S. Route 1, about 5 miles south of Portsmouth and 47 miles north of Boston. The population of North Hampton has been increasing steadily in recent years. In 1970, the population was 3,259, and rose only to 3,637 by 1990. In 2000, the population was 4,200, according to the 2000 U.S. Census.. By 2006, the population had reached 4,553.

The Little River Watershed Project, a regional planning group, projects that there are no more than 500 buildable lots remaining in the Town. The 2001 Town Meeting approved an article for \$4 million to purchase about one half of the currently available acreage in the Town as open space, so the potential for future growth will be somewhat limited. According to the New Hampshire Office of Energy and Planning, a population of 5,360 is anticipated by the year 2030. ¹

The municipal center of North Hampton is located about a quarter¹ mile east of Route 1, along the north side of Route 111, with the public library, Town Offices (housed in the former public library), police department, fire station, unused Old Town Hall and the Department of Public Works all sharing a very small and densely-built site. *Town offices are above the Police Station*

THE LIBRARY AS A BUILDING

Until 1973, the North Hampton Public Library was housed in the historic building that now houses ^{Clerk's office} Town Hall. In 1973, a new library building was constructed to the left and rear of the original building. The "new" library, now 35 years old, was designed by architect Edward Benton Miles of Exeter. At the time it opened, the building represented a major step forward in library service to the three thousand or so residents of North Hampton in the mid-1970's. The one-story building measures 75' by 75', or 5,625 gross square feet.

Public library planning is traditionally done with a planning horizon of twenty years. At the time it opened, the building offered about 1.72 square feet per resident. In 2008, it offers less than 1.23 square feet per capita.

¹ New Hampshire. Office of Energy and Planning (OEP). Municipal Population Projections. 2005 to 2030. January, 2007.

LIBRARY SERVICE IN THE YEAR 2008

The North Hampton Public Library is a municipal library, governed by an elected three-member Board of Trustees. At the time of this writing, the Library Directorship is shared by two co-directors, one of whom is a candidate for a Master's Degree in Library Science while the other is also serving as the long-time Children's Librarian. There are ^{9/08} ~~two additional~~ full-time staff and three ^{occasional} part-time staff, plus a part-time custodian. In addition, support is provided by up to six volunteers on a regular basis. ^{now has degree}

The library is open forty-five hours a week as follows:

Monday	10:00 A.M. - 8:00 P.M.
Tuesday	10:00 A.M. - 5:00 P.M.
Wednesday	10:00 A.M. - 8:00 P.M.
Thursday	10:00 A.M. - 5:00 P.M.
Friday	10:00 A.M. - 5:00 P.M.
Saturday	10:00 A.M. - 2:00 P.M.

Three full-time
1 part-time
4 per Diem

What has been happening in the world and in library service since 1973, when the library building was opened? In the early 1970's, Richard Milhous Nixon was President and the Vietnam War was in high gear. The United States was heading downward into a "baby dearth", which would culminate in 1976 and 1977 with an abrupt drop in the birth rate to the lowest rate since the Depression. In the world of 1973, computers were unknown, except in large corporations. The VCR and videotapes were only a "futuristic" notion. Only the New York Times and Reader's Digest were available in large print. The Americans With Disabilities Act and its consequent regulations were not even a concept. There were no fax machines and few small public libraries could even dream of offering a photocopier, since they were large, cantankerous and very, very expensive.

Over time, the North Hampton Public Library has been trying to cope with the changes. Book collections have mushroomed. Shelving has been added and at least three tables have been removed to make space for the new shelves. There is a photocopier now, and a fax machine. A new lounge area, with easy chairs, has been set up by the front window. There are ~~six~~ public access computers plus a laptop, and ~~four~~ for staff use, including circulation. A growing videotape and DVD collection, a large and well-used audiotape (books-on-tape or CD) collection, and a large print collection that would offer more selection if there were space have all been crowded in. A small Young Adult area has been established. The library in 2008 is open longer hours and full-time staff are working longer hours, with no place for a break out of public view. Children's

programs and services are flourishing in a space that is just too small and noisy when more than one or two families arrive at the library at the same time.

As Chart I illustrates, the library is clearly undersized to do the job it is doing today. The collection of 35,863 items, 23 seats for the public, six public access computers, and a meeting room for 50 would be housed adequately in a facility of roughly 9,283 gross square feet. Since the present building is only 5,625 gross square feet, the space deficiency for the services being offered today is roughly 3,658 square feet, without any increase in seating or services.

CHART I: THE NORTH HAMPTON, NEW HAMPSHIRE PUBLIC LIBRARY				
<i>The Physical Plant in 2008: How is it being used? What minimum space would actually be necessary to house these services adequately, with NO increase in collections or seating?</i>				
AREA	PRESENT FACILITY	SQUARE FEET AS MEASURED	STANDARD FORMULA	EXPECTED BY STANDARD FORMULA
Collections	35,863 volumes 30,814		10 vols/sq ft.	3,586 sq.ft.
Seating - adult	8 seats		30 sq.ft./	240 sq.ft.
Seating - children	14 seats+		25 sq.ft./	375 sq.ft.
Public computers	5/4		40 sq.ft./	240 sq.ft.
Meeting Room	50 ±	609 square feet	10 sq.ft./ + 30%	650 sq.ft. ±
Local History/Conference Rm	1 - seats 8	264 square feet	25 sq. ft./seat + 20% + shelves	350 sq.ft.
Circulation Desk	1	75 square feet	200 square feet	200 sq.ft.
Photocopier	1	Placed in Library in Local History Rm	50 square feet	50 sq.ft.
Children's Service Desk, office & storage	storage only	50 square feet	250 square feet	250 sq.ft.
Director's Office	1	97 square feet	150 square feet	150 sq.ft.
Staff & volunteers workroom	4 stations	471 square feet	average 100 per station	600 sq.ft.
Periodical & other storage	none			300 sq.ft.
Staff lunch room	none		150 sq.ft	150 sq.ft.
SUBTOTAL				7,141 sq.ft.
			30% unassigned	+ 2,142 sq.ft.
GRAND TOTAL REQUIRED FOR 2008 HOLDINGS & FACILITY		<u>actual: 5,625 gross sq.ft</u>		<u>9,283 gross square feet</u>
Deficiency in 2008				<u>minus approx. 3,658 gross square feet</u>

The library circulated 41,388 items in Fiscal Year 2007, or slightly over 9 items per capita. When only book circulation is considered, children's titles comprise slightly more than 50% of total book circulation. Circulation of audiobooks and videotapes represents about 29.5% of total circulation, up from 11.6% back in 2001.

Children's programs and a summer reading program are offered on a regular basis by the Children's Librarian. The library held 125 programs for children, and 86 for adults in 2007, as well as hosting 70 non-library community meetings during the same year. The total of this activity represents an average of about 5.4 programs and meetings per week, plus smaller and casual meetings held in the Local History room.

↓
look
at
S.M.P.E
report
#15??

BUILDING ASSESSMENT

North Hampton's library building is extremely well laid out. Indeed, for its time, it was extraordinary. The efficiency of this flexible, square floor plan for a small staff cannot be overstated, and it has served the library and the Town very well. However, the 1973 design for a town of 3,000-plus is posing a number of difficulties thirty-five years later that necessitate a remedy in the near future.

- The restrooms are not handicapped accessible. They cannot be made accessible because the toilet facilities are surrounded by concrete-block alcoves shaped by the former meeting room storage closet on the other side of the wall. This closet in the meeting room has been converted into a furnace room and now houses the furnace installed in a conversion from electric heat to oil.
- The entry vestibule is not deep enough for a patron in a wheelchair to be able to open both sets of doors.
- The circulation desk does not have the lower section required by the Americans With Disabilities Act for wheelchair access. A lower section would also be more effective for use with children. *there is one - not used*
- As the collection has grown, several ranges of shelving have been added, eliminating at least three study tables. The library is now offering only eight seats for adults, ten for school-age children, four for preschoolers, and two for Young Adults. *8? 2 tables w/ 1 area*
- There is no space to increase any of the collections. Shelves are completely full. When a new item is added, one must be discarded, whether or not it is still a valuable title.

incorrect

- 4
- Six computers are now available to the public. No doubt more will be needed in the near future. ~~The double-sided computer tables in front of the circulation desk can accommodate only one additional computer.~~ This is a very congested area when all the machines are in use. It is very public – close to the Circulation Desk and the passage to the Children's space and the Meeting Room. There is no space to place several computers in a quieter area for concentration, lengthy research or privacy. There is no space to set up an area for computer instruction.
 - ~~The introduction of the computers has necessitated removal of the public photocopier to the Local History room, where the public must interrupt small meetings or quiet study to make a simple photocopy.~~ *in Reference area*
 - New formats have arrived. Videotapes and books on tape have been squeezed in, but there is no area to display them effectively - and no space for these collections to grow. *DVD's & CD*
 - There is no separate children's room. Any activity in the children's area - even a shout of joy or a crying infant - disturbs the entire library.
 - There is no public service desk in the children's area and no space to add one. The children's librarian has a desk hidden in the workroom. This limits her availability and makes her job much more difficult. The children's librarian is functioning at a professional level and ought to have a small private office as well, for desk work and conferences with patrons or their parents.
 - There is no space for quiet study, group study or tutoring, except for the *will be a reading room (Fall 2008)* local history room, which is in constant use and now houses the ~~photocopier—a guaranteed interruption.~~
 - There is no staff lunch room, away from public eyes.
 - The staff toilet opens into the workroom and is not private. *Some* Most staff decline to make use of it. It also is not handicapped accessible.
 - There is no storage in the Multipurpose Room for chairs, tables and supplies. The one storage closet has been used for an oil furnace to replace the original electric heating system, which was of course prohibitively expensive to operate.
 - The new oil furnace is separated from the Multipurpose Room only by louvered doors. There is no firewall or fire door between the furnace and people gathered in the Multipurpose Room. This is an unorthodox and

potentially dangerous configuration, even if furnace fumes are satisfactorily vented up through the roof. The space above the closet, which provides for a chimney for the furnace, is uninsulated and thus a source of cold air. Yet this space probably should not be blocked without a careful countermeasure, such as a proper chimney.

- Access to the library's only storage area, in the attic, is by a hazardous spiral staircase, in violation of the *Americans With Disabilities Act* and current building codes. This limits storage and access to storage. Structural constraints limit the loads that can be stored in the attic. It is recommended that boxes of books for the book sale be stacked no more than three units high and that they not be concentrated in one area of the attic.

THE LIBRARY'S FUTURE

Back in 2001, a community survey and a staff brainstorming session emphasized the elements that should be included in the North Hampton Public Library. These included: requests for the following elements:

- | | |
|---|--|
| <ul style="list-style-type: none"> A separate children's room A separate quiet study room or area for adults A "computer room" A larger meeting room More parking More space for larger collections - books, periodicals and media A new circulation desk with a lower portion for children and the handicapped, and space for two terminals. Larger children's space, with a preschool area and an area for computers and quiet study for children More computers, with larger work space at each computer Handicapped accessibility, particularly rest rooms, and a changing area in the rest rooms Public desk for children's librarian | <ul style="list-style-type: none"> More general storage, more storage for children's programming and crafts A separate Young Adult area. An area for after school snacks (which could be used for adults with their coffee as well) Computers for each library staff member A reference area with a reference desk. A larger work room to accommodate both staff and volunteers A community information area, which could include space for tax forms as well as for local town groups and meeting announcements A separate staff lunch room and adjacent rest room. Present staff rest room is too public to be usable. More meeting space (larger meeting space/more flexible meeting spaces) Chair and table storage for meeting room (former storage area is now the furnace room) |
|---|--|

A full library building program should be developed in order to determine the precise space needs. However, library planning guidelines lead us to the following points for discussion even at an early stage:

- In classic library planning, the rule is to plan a library facility to serve the community for twenty years into the future, in this case to the year 2028.
- Since population growth for the area is not projected to be significant, we can assume that the service population will remain at about 5,000 - 6,000.
- However, it is to be noted that there is a commuting population in the area to be served, plus a modest summer population; that telecommuting and home schooling may take an ever larger role in the lives of residents, and that the library needs to continue its a larger role as a community center for information and recreation and as an important resource for children, particularly young preschool children.

What should the North Hampton Public Library look like right now? As stated earlier, in order to house the present collections and services adequately, the library would need about 9,283 gross square feet, or 3,658 gross square feet more than the library presently has. Chart I (above) demonstrates this situation clearly.

The Spreadsheet in Section Three represents a very preliminary outline of what the North Hampton Public Library will need to meet the needs of a population of 5,500 people for the next twenty years. In order to determine the actual square footage, a full building program should be developed.

The Trustees should begin to develop a vision for a new library building of up to 12,513-13,013 gross square feet on one level, with a book capacity of 35,000 volumes, seating for 60 patrons, provision for up to twelve computers, a separate and distinctive children's space, and a multipurpose room for 80 to serve for both children's and adult programming as well as quiet study space and space for tutoring. A building of 13,013 gross square feet should have at least thirty parking spaces, with two additional handicapped spaces and provision should be made for parking to be doubled in the future. When planning an expanded library, it is also prudent to plan for the building to eventually double in size in the distant future. This is achieved by frugal use of land and careful location of utilities and the septic system. The architect should actually be required to show how the proposed building could be expanded.

To test the assumptions of the preliminary space projections in Section Three and to develop the details of a library building to meet the needs of the

community for the next twenty years, a library building program should be prepared.

CONSULTANT'S COMMENTS ON OTHER POSSIBILITIES FOR BUILDING EXPANSION:

The North Hampton Library, indeed, the whole municipal complex, is located on a very tight site. On a recent weekday afternoon, there were ten [town or library employee] cars in the library parking lot, with only seven additional spaces available for patrons, while there were twenty-nine additional cars and two snow plows in the lot between the Police/Fire station and Town Hall. This is a delicate balance, especially since each of the town facilities must be serviced by a septic system.

THE TWO-STORY OPTION: WHAT GOES WHERE?

can't go up - structurally

One possibility that must be addressed is that of "adding a second floor onto the library." This concept introduces two kinds of issues:

Management Issues: In a two-story library, the question is always which elements should be placed on the second floor. If public space is placed on the upper level, it must be staffed at all times, which means additional employees. For purposes of discussion, here are some of the options in broad outline:

LEVEL		Elevator & machine room, two fire stair-cases, one of them a public staircase 700 square feet		
Second Floor 6,500 gross square feet	Children's services 3,500 sq.ft. Children's Desk & Office		Meeting Room 1,100 sq.ft. Local history room 400 sq. ft. 2 restrooms	Director's Office, Staff lunch room, staff toilet, storage 800 sq.ft.
Main Level 6,500 gross square feet	Adult & YA collections & services 5,200 sq.ft.		furnace room, 2 restrooms	Circ desk & workroom 600 sq.ft.

These components can be switched around in a number of ways, of course. But the basic concept won't change. And the necessity of placing public service staff on the second floor - and thus the additional staff costs - cannot be avoided in a two-story library. Too, the elevator, staircases, rest rooms and additional thickness of walls will require a larger building overall.

Conventional library authorities advise, for all of these reasons, that a library of under 18,000 gross square feet be designed as a one-level building.

CONSTRUCTION PROBLEMS

The feasibility of adding a second floor to the existing 1973 building needs to be professionally evaluated by an architect and /or a structural engineer and a cost estimate should be prepared. Generally speaking, such a project would involve drilling through the concrete slab and below the frost line to pour footings to support a number of steel columns to the second floor and perhaps through to the new roof. Since building codes require libraries to be constructed to a specification of 150 pounds per square foot, "live load," this would mean quite a few columns. Too, New England is in an earthquake zone, which compels extra reinforcement for old buildings. In almost every instance where such a project has been contemplated, it has proven cheaper to demolish the existing building completely and construct an entirely new building. (A recent example is the Burlington, Massachusetts, Public Library, a 1967 building of similar style, which was demolished to make way for a two-story building on a slightly larger footprint.)

Another option to be discussed would be to enlarge the library on one floor as discussed above and provide a second floor for the addition that would serve some other municipal purpose, such as expanded town offices, with a separate entrance. At first blush, this might be a good use on a tight site. However, a careful design would be necessary to ensure the security of the library and the town offices separately, particularly on Saturdays and at night, when the Town Hall is closed but the library is open.

Such a configuration would raise the same basic issues as the police station/Town Hall, probably at high cost. Since the library alone is hosting 281 meetings per year, there would be little possibility of shared meeting space with Town Hall.

PARKING:

The library has about 17 spaces right now. These are also used for Town Hall purposes. As a general rule of thumb, a public library will require about one parking space for every 400 square feet of building. Thus, a 13,013 square foot library would need 32 parking spaces plus two handicapped spaces. The local Planning Board might require even more parking, depending on the size of the meeting room and the availability of adjacent parking for overflow crowds.

COLLECTION MANAGEMENT

The library has arrived at a crossroads. No more shelving and only a few seats can be added. Until the facility can be enlarged, it is recommended that the Trustees and staff consider the following:

- ✓ Plainly stated, the library should discard a minimum of 400 books for every computer station that is added. One double-faced section of shelving should then be taken down to make way for a computer station.

It is recommended that the library staff, with the support and full knowledge of the Trustees, continue to assess and weed the collections, withdrawing books that have not circulated within three to five years, regardless of whether or not the books are still "good." Weeding activity should be coordinated with the collections of other libraries in the area, to ensure that titles being discarded will still be available somewhere in the system.

In undertaking the weeding, one motivation can be found in the following concepts:

- * On average, 10 volumes can be housed in one square foot of space.
- * Assume that one square foot of space costs \$250 to construct.
- * Therefore, the cost of constructing the space for the volume you are holding in your hands is \$25.00. In order for this volume to be retained, it should be timely, essential and appropriate to the library's mission - and in excellent condition. It also should have circulated within a predetermined period of time, such as the past two years or the past five years.

And further:

- * One computer station takes up the space of 400 volumes (40 square feet).
- * A lounge seat takes up the space of 350 volumes (35 square feet).
- * A table for four takes up the space of 1,000 to 1,200 volumes (100 - 120 square feet).

In space planning for a new building, these same formulas obtain in considering children's collections, where the books are thinner, because shelving for children should be lower (46" to 54" high, or three to four shelves), with wide aisles in the preschool area, while shelving for adults can be higher (84" high, or seven shelves).

In addition, trends in circulation for the library should be carefully examined by Dewey category. Nationally, non-fiction circulation has been dropping. The obvious explanation is patron use of the Internet for general information. This can be a useful insight, but will have implications only for certain sections of non-fiction and is probably not a universal trend. It may have implications only for retention decisions on older titles in certain subject areas, not for current acquisitions which, of course, is the other face of collection development.

A FINAL ALTERNATIVE

In a library where no other options exist and the collection has been well-weeded, the multipurpose room can be converted to library space, with only a small space (250 square feet or so) to be retained as a story hour room/conference room. Children's services could be placed near the entrance, with adult collections and services located in the present multipurpose room and children's area. This would be only a minimally satisfactory option for a library building that was really quite perfect on opening day. The loss of the multipurpose room would be damaging to the library's mission as a community center, but this option needs to be put forth and given serious consideration as a short-term solution.

For further Consultant's recommendations, see Section 1: Executive Summary.

SECTION THREE
PRELIMINARY PROGRAM SUMMARY
CHART

**NORTH HAMPTON PUBLIC LIBRARY, NORTH HAMPTON, NEW HAMPSHIRE
PROGRAM SUMMARY CHART**

SPACE NEEDS BY DEPARTMENT Page 1											
June, 2008	DRAFT	EST. NET SQ. FT.	Volumes	AV Items	Periodicals	Public Computers	Reader Seating Total	Tables for 4	Tables for 2	Lounge Seating	Group Seating
Entrance & Lobby		200					4		2		
Circulation Desk		250									
Workroom		350									
Director's Office		150									
Photocopier		50									
New Bks & Display		150	1,500								
A/V Materials		350		3,000							
Reference		800	400								
Local History		300	1,000			10	12	3			
Periodicals		220			50		8	2			8
Adult Nonfiction		800	7,000				4			4	
Adult Fiction & L.P.		1,200	13,000				4	1			
Adult Total		4,820	22,900	3,000	50	10	34	6	2	2	6
Young Adult Area		360	2,000		6	4	8	1	1	2	
Children's Room											
Toddlers		650	4,000								
Youth Services		2,060	10,000		6	4	6	1		2	
Children's Desk & workroom/storage		300						4		4	
Children's Craft / Story Hour room		500									
Children's Total		3,510	14,000		6	6	26	5		6	20
PAGE TOTAL		8,710	38,900	3,000	62	20	68	12	3	14	

SECTION FOUR

APPENDIX

SOURCES OF INFORMATION ON SEPTIC SYSTEM REQUIREMENTS

1. Richard Mabey, North Hampton Building Inspector
Stephen Fournier, North Hampton Health Officer
2. Rockingham Planning Commission
Jill Robinson Ph.D., Regional Planner, (jrobinson) jrobinson@rpc-nh.org
3. NH Department of Environmental Services
<http://www.des.nh.gov>
29 Hazen Drive, P. O. Box 95
Concord, NH 03302-0095
(603) 271-3503
4. NH Office of Energy and Planning
57 Regional Drive
Concord, NH 03301
(603) 271-2155
<http://www.state.nh.us/oepl/>

NET SQUARE FEET AND GROSS SQUARE FEET - WHAT? AND WHY?

A standard Library Building Program applies standard net-square-foot formulas for each library area. However, these formulas can only produce an estimate of the total net square footage required for library service. They are not designed to predict an actual building configuration. Until an actual design has been presented by an architect, the precise capacities and ultimate gross square footage of the library building cannot be calculated.

At the programming stage, in order to obtain a preliminary estimate of the total gross square footage required in the actual future building, a factor of 25% - 35% must be added. This factor recognizes that, until the building is actually designed, it is impossible to forecast whether the building will be one-story or multiple stories, requiring an elevator and multiple fire stair cases. The height of shelving, the length of a range of shelving and the actual configuration have yet to be determined. Pre-design, it is unknown whether there will be a basement or an attic in which to house heating and air conditioning equipment and some storage. The added factor also makes allowance for lobbies, vestibule and entrance space, public staircases, emergency exits, corridors, rest rooms, closets, storage, furnace, airconditioning unit, electrical rooms, "circulation" (moving around) space, and the thicknesses of both exterior and interior walls. To put it another way, it can be said that the gross area of any building can be determined by the exterior measurements, (like a tape measure around the outside), multiplied by the number of stories.

The "efficiency" of a particular building design is ultimately the ratio of net square feet to gross square feet. Thus, a design that provides 8,000 net square feet for library services may actually require the construction of, say, 10,500 gross square feet ($8,000 \div 10,000 = 76\%$ efficiency), or 11,000 gross square feet (72.7% efficiency), or 11,500 gross square feet (69.56% efficiency). This depends on the design and whether the building is to be single-story or multi-story.

Only when an actual design is available to be analyzed can the actual square footage of the building be determined, by the real dimensions of the building. The

capacity of the shelving shown on the drawings can also be estimated, once the heights of shelving and the configuration of shelving are known. The Building Program comes into play once more at this stage, to be used as a yardstick or checklist to be certain that all of the desired elements are actually present in the desired amounts, in the design.

In past decades, some writers have discussed a building efficiency of up to 80%. This would be a warehouse-style structure, with no interior walls and minimal details such as vestibules or hallways or rest rooms. Most architects assert that it is no longer possible to design a library building that is 80% efficient. Some factors that prevent such a design include:

- new requirements (since 1991) of the Americans with Disabilities Act for minimum space between ranges of shelving and around furniture, just as they do in rest rooms, etc.
- earthquake requirements that add extra columns and structure and increase the dimensions of columns
- walls that are now thicker because of insulation, wiring, heating and air ductwork, and fireproofing
- additional rest rooms and egress corridors required by modern building codes
- electrical and computer needs, including closets
- site limitations
- an addition to an existing building.

At the programming stage, it is prudent to think at the very outset in terms of a realistic estimate of the library's size by using the standard formulas, then adding 25% - 30%. It will then be a pleasant surprise if the eventual design can be smaller because it is also very efficient. Likewise, a particular design may be larger because it includes a special feature that the building itself requires, such as a grand central staircase or a two-story clerestory or an outsize lobby, an elevator, multiple egress stairs - or simply because the layout is inefficient. A particular design can often be modified to increase efficiency. At the programming stage, particularly in the case of an addition/renovation of an existing or historic building or a difficult site, it may be wiser to propose a range of ratios, and thus a range of gross square feet.