V.   Special Concerns

<u>Renovation/Addition or New Facility</u>
<u>Options:</u>
1.   Renovate the existing library, constructing an addition on the existing lot and the abutting lot.
2.   Raze the existing library, replacing it with a new facility, using the abutting lot as well.
3.   Construct a new building on another site, retaining the existing building for another purpose.
4.   Renovate another building in Town, if one exists in Town Center.

Option 1	Advantages	Disadvantages
Addition/Renovation	Provides additional interior space needed. Good central location; close to schools. Provides "anchor" to downtown. Retains style of the old building.	Two levels would be necessary. Purchase of additional land may be necessary. There may be a lack of sufficient parking.
Option 2		
New facility on present site.	Opportunity to design a functional building at a highly visible central location.	Building is in the Historic District so may be impossible to raze.
Option 3		
Construct a new building on another site.	Opportunity to design a functional building with adequate space. Parking can be plentiful. Present building retained for other uses. A suitable site is critical.	Gives up highly visible location. Possible public protest at giving up present building.
Option 4		
Renovate another building in Town, if such a building exists in the Town Center.	A building already exists, is centrally located, and is owned by the Town. Parking area can be used for other purposes such as Town Government. Town Government Offices could be located here also. Multi-uses could bring in more library users.	Multiple organizations could compete for the same available space.

<u>Recommendation</u>
In looking at the options, one can immediately eliminate Option 2 for political, historical and financial reasons. Razing the existing building would be unlikely to be approved.

Option 1, adding to the existing building or buildings, would, in effect, be adding a third building to the two already there. Integrating them all into a functional, aesthetically pleasing, building would be difficult.

Option 4, renovating another building owned by the Town, would be an excellent solution if such a building, with adequate square footage and parking, could become available for the Library.

Option 3, constructing a new building on another site seems to be the most feasible, if a suitable site could be obtained. This option would fulfill all of the requirements for an effective public library. (See site selection below.) The present highly visible site would have to be replaced by an equally advantageous site and be large enough for future expansion and parking to make this option workable.

It is recommended that the Hopkinton Public Library undertake the construction of a new building at another suitable site.

If a new facility is selected the following guidelines should be used in selecting a site.

<u>Site selection </u>is extremely important to the planning process. The usage of any library is tied to where the library is located. Acquiring the best site will pay off in terms of life-cycle costs and public use. Selecting a library site uses the same criteria as selecting one for a retail business.

There are several key factors to be considered:
1. Site should have a visible, prominent location.
2. Accessibility by car and some pedestrians is necessary; plenty of parking should be available.
3. Visual quality of the neighborhood should be assessed.
4. Traffic patterns should naturally converge at the site.
5. The library should be compatible with the present and future neighborhood.
6. There should be the capacity to accommodate required parking, expansion, setbacks, zoning and landscaping.
7. Legal restrictions should be minimal.
8. Utilities should be in place, or will be in place by the start of construction.
9. Geographical and topographical considerations for the comfort of users and longevity of collections are necessary.
10. Site-related costs should be considered last, especially if two sites are being equally considered.

Single Level Building
An open flexible space on one floor is the most cost effective use of space. Separate functions may be delineated by arrangements of shelving, seating or display panels. Some functions such as Children's Services, Quiet Rooms, Meeting Rooms will have separate rooms.

Transport of materials from one area to another can be accomplished easily on one floor. Building maintenance for a single level eliminates the care of stairs, stair rails, elevators, second level outside maintenance. One level encourages optimal relationships between collections, users and staff requirements.

If a multilevel addition and renovation is selected, the following factors should be considered:

- Handicapped accessibility must be addressed. Each level will be able to be reached by an elevator large enough for a gurney and book trucks. Emergency systems and assistive technology will be installed.
- The parking area for 60 spaces should take approximately 21,000 sq. ft. The area should be nestled close to the building for ease of entry and conservation of space. Handicapped spaces should be provided per ADA.
- The building should be aesthetically pleasing and very functional. A multilevel building will be an interesting challenge to the architect.
- Scarce land area will be optimally used. Parking will take .48 acre. If it is an 11,687 sq. ft. footprint, .26 acre will be used for the building. The rest of the grounds may be lawn, garden and access walks.

Library as a Town Common, or, Community Place
The library is an important institution in a community because it serves all people, no matter their age, or level of ability. The library provides a place for social interaction and community involvement. The library should present programs and events that engage the minds and hearts of people of the community. The library should strive to remain relevant to the lives of all and provide knowledge, education and social opportunities in an environment that all will cherish. The Hopkinton Public Library is the only place in Hopkinton for people of all ages to gather, either informally or in a public meeting.

The library can be the Town's living room, an intellectual common, and a place willing and able to share space with other Town Departments. The library is not an isolated entity, but part of the network of interrelated municipally supported institutions. The Hopkinton Public Library can truly be a Community Place.

A "Green" Library
"Well designed green buildings cost less to operate and maintain than conventionally constructed buildings. They use less energy and natural resources. They are better integrated into their sites and communities. They are more comfortable, enjoy more daylight, and are more attractive to customers and employees. They are also less likely to

contribute to health problems and more likely to enhance productivity and learning." (*Library Journal*, Dec. 2003, p. 61.)

According to the U.S. Green Building Council, buildings account for 30-40% of total energy use, 50-60% of electricity, 35-40% of solid waste, 25-30% of wood and raw materials, and 25% of water consumption. Americans spend 90% of our time indoors, and some of that is spent in libraries. Libraries can be central to the green effort, providing information and leading by example. All design decisions in a building project are, however, interrelated and requires early collaboration among design disciplines and the community.

The Hopkinton Public Library can be a model for the Town, creating a sustainable building for the community. One of the ways the Library can proceed is through the U.S. Green Building Council. The LEED Green Building Rating System provides standards for environmentally sustainable construction, evaluating projects within six categories: site development, water efficiency, energy efficiency, materials selections, indoor environmental quality, and innovation in design. LEED certification is available in four levels – certified, silver, gold, and platinum. (See www.usgbc.org)

If, after due consideration, the Library decides not to follow the LEED program, there are measures that can be taken to make the Library as sustainable as possible such as:

- Maximize open space on the site. Limit staging areas in order to limit compaction during construction.
- Reduce the amount of heat-absorbing and radiating materials on site and the roof.
- Pave as little as possible, shade as much as possible.
- Park underground or make a pervious surface to absorb water and not retain heat.
- Reduce roof temperatures – reduce rain runoff. Construct a green or vegetated roof. It could be a public green space.
- Store storm water for use in landscaping, flushing.
- Reduce exterior lighting, control indoor light.
- Use native plants in landscaping.
- Install waterless urinals, sensor faucets, gray water plumbing.
- Have alternative wastewater treatment on site.
- Design glass to make maximum use of the type of light and solar gain you want to benefit from and eliminate that which you do not want.
- Possible use of a displacement ventilation system – relies on creating layers of temperature with low velocities of air pushed by a mechanical system.
- Use daylighting with daylight sensors to control lights in daylit spaces. Ballasts dim in response to ambient light levels.
- There should be waste management during construction and during operation of the building.
- Use rooftop solar panels, sun louvers and deflectors.
- Use recycled materials in construction.
- Use Energy Star-certified products.

- One of the most important priorities should be the effective delivery of fresh air to the interior of the building.

An "Eco Charrette" could be convened at the beginning of the design phase. It is a meeting to exchange ideas/solutions, brainstorm, and set goals. The owner, architect, engineers, landscape architect, contractor, government representatives, public utilities, etc. are the participants. (See *Environmental Design Charrette Workbook*, AIA Press, 1996., and www.betterbricks.com/printdetail.)

Sources:
Sustainable Library Design	www.librisdesign.org/docs
by Johanna Sands, AIA, Libris Design Project	
U.S. Green Building Council	www.usgbc.org
LEED	www.leedbuilding.org
Natural Step U.S.	www.thenaturalstep.org
Triple Bottom Line	www.sustainability.com
McDonough Braungart Design Chemistry	www.mbdc.com
Sustainable Products Corp.	www.sustainableproducts.org
Building Green Publishers	www.buildinggreen.com
ASU College of Architecture and Environmental Design	www.caed.asu.edu
Great Buildings Collection	www.greatbuildings.com

Everything is movable, portable
Libraries must be prepared for change. In order to do this the library space is always flexible. Furniture and equipment are movable. The design should take into account the ease of transition from one function to another, from one use to another.

Meeting Room/Exhibit Space/Kitchen, seating 150
The Hopkinton Public Library, as a "Community Place", should provide a multipurpose meeting room/art exhibit space. A room, seating up to 150 people, could be used by community groups as well as for library programs. It could serve as a unifying focal point for the Town. This room could be used when the library is closed, because of separate keying capability, when there is adequate supervision.

This room would be a welcome addition for many of Hopkinton's community groups and activities. While there are very few alternate sites in town for meetings, they often require fees for use and have limitations on availability.

Conference Room, seating 25
This room will be open to small groups and will have multi-uses as a group study room, conference room and a space for the Board of Trustees to meet. Wiring cabling, data outlets, recessed screen will be available.

Historical Room
This room is a repository for the local history and genealogy collection of the Library. A microfilm reader/printer and a computer will be available. Students and researchers

wishing to study will have the tools they need. Humidity control will preserve the Library's valuable collection. Security of the collection is addressed using lockable, grilled cabinets.

Children's Room
The location and size of the Children's Room should reflect the current and anticipated future usage and holdings statistics.
- Children's circulation is 44.3% of the total.
- The children's collection is 39% of the whole.
- There were a total of 100 children's programs with an attendance of over 1,500 in FY07.

The design should be light and airy with enough room for defined areas for different functions and ages, yet not fragmented. The space should be safe for children of all ages. The space should be separated enough from adult areas so that the sound of children speaking naturally will not carry into those areas.

The space should have "cozy" areas with a small program room and a family bathroom nearby. Comfortable and spacious seating should be provided. There should be no area where children cannot be viewed by the staff.

Children's Program Room, seating 25
Located next to the Children's Room, this room, seating 25, is primarily for children's programs such as Preschool Story Hours or craft programs, but could be used for other meetings or programs. Youth groups, parent organizations, day care providers or other small groups could meet here.

Quiet/Tutoring Rooms, 2, seating 2 each
These two quiet rooms will be available for individuals seeking quiet space, or for tutors and their clients. The rooms will be equipped with white boards, data connections, electrical outlets. The doors will be lockable with windows.

Young Adult Room
Young Adults (grades 7-12) should find a welcoming environment in their own space in the Library. This is a collaborative area. Their information needs are provided for as well as their need to socialize. Sound dampening materials and durable furniture should be used. Close supervision should be possible through proximity to staff service points.

Homework Area
Special attention will be paid to the homework needs of students from grades 7 to 12. Two dedicated computer work stations with appropriate software will be available. The space will be located next to, or be part of, the Reference/Study Area of the Library.

Gallery/Exhibit Space
Hopkinton has a vital art community so providing space for fine art would be a needed public service. Space for art should be provided throughout the Library, as well as space in the meeting rooms. Picture rails, track lighting should be installed in appropriate places to display local art. The permanent art collection, and the grandfather clock must be carefully cared for during renovation and placed in the new building under the direction and counsel of the Director and Board of Trustees.

Exhibit space for new books and other material should be provided in at the entrance and in other appropriate areas.

Social/Coffee Space, seating 6
This attractive, cozy area, located near the Entrance, Circulation Desk and Meeting Room, should be one which encourages socializing as part of the library as "Community Place". The area should contribute to the "experience" of coming to the Library. There should be space for three tables seating two each. This area should be easily maintained and supervised. A Friends' area for the ongoing book sale could be located in or near this area.

Efficient Use of Staff
The design should afford an efficient use of staff. Clear unobstructed views to multiple areas should be the rule.

Efficient Use of Space
Adaptable spaces, particularly in the main areas of the library should be high priority. Any area should be able to accommodate overflow from other areas with little line of demarcation.

Storage
There should be plentiful storage areas throughout the building; in particular, Custodial Area, Children's Room, Circulation/Technical Services Room, Meeting Rooms, Staff Room, Kitchen.

VI.   General Characteristics of the New Facility

The Building Must Serve All Residents

The public library is the only institution in a community which has the mission to serve *all* its citizens. A barrier-free building, programs and services which can be used by every level of society, by every age and by the broadest spectrum of abilities must be created. Ease of use, from exterior traffic patterns and parking design, to interior traffic flow and logical arrangement of spaces and collections will serve most users well.

Widely differing points of view presented by the collections should serve as broad a segment of society as possible. The Library should provide programs and services for children, from toddlers through high school, which can include story hours, author appearances, arts and crafts, computers, the latest teen paperbacks, music CDs, DVDs and any other appropriate format currently used.

The public library should provide convenient hours for students of all ages to access information outside of their more formal educational institutions. There should be evening programs and business materials for working adults The Library should provide services for seniors including large print books, daytime programs, and a completely accessible building.

The Hopkinton Public Library must be a diverse, broad-based institution able to serve *all* the residents of Hopkinton.

The Building Must Reflect the Public Service Commitment

The Hopkinton Public Library is committed to serving the public in its present building and will continue to do so in the new building. "Since citizens come to the library to satisfy a wide variety of individual intellectual, cultural and emotional needs, the design should be flexible enough so that users feel that they control their library experiences; users can make the library do what they want, not the other way around." (Nolan Lushington and James Kusak, *The Design and Evaluation of Public Library Buildings*, 1991.)

The design should be able to respond to changing services, be cost effective without sacrificing aesthetics and provide for future expansion.

VII.   Exterior Considerations

The Hopkinton Public Library is an integral part of the life of the community. The new facility must reflect that importance and be a landmark to residents and visitors alike.

The building should make a statement about the quality of life in this community. The existing library coordinates with other architecture of the Town. The new library must continue this visual tradition.

The Site
Wherever the eventual location of the Library is, the site should have the following attributes:
- Ample size – able to accommodate the building, parking, landscaping, expansion and zoning requirements.
- A visible, prominent location. It could be seen as part of a Town Government Campus.
- Excellent vehicular access from every part of Town.
- The proposed Library should be in keeping with the visual quality of the neighborhood.

Planners should keep in mind the local climatic conditions and consider proper protection from the elements, possibly passive solar energy design criteria. That is, the position of the building on the site should take advantage of sun, vegetation and land characteristics in order to save energy (lighting and cooling), light the interior and melt snow on walkways, parking areas and driveways.

The Landscape Design
As many trees as possible should be retained. A tree maintenance program should be developed as soon as possible. The landscape design should enhance any green spaces; i.e., landscaping should include sitting areas with benches with backs. Any gardens or public art should be visible from the windows of the Library. A sprinkler system for any planted trees should be considered. Use native plants as much as possible. Pave as little as possible, shade as much as possible. Stored storm water could be used for irrigation.

The Secured Bicycle Racks
Secured bicycle racks near the entrance should have room for twenty bicycles.

The Indoor Book Drop
The built-in indoor book drop should be located on an outside wall near the entrance. The book drop area and the mobile, depressible book truck should be large enough for at least four days collection. There should be a separate A/V drop. The area should be protected from precipitation; be moisture proof, fire proof and sheltered.

The Drive-up Book Drop
This book drop should be large enough for four days collection and be located in an area which will not interfere with the regular traffic patterns of the library.

VIII. Interior Considerations

Ambience
The interior space should be welcoming with a sense of orientation and organization. There should be a light and airy feel to the building. The intimacy and charm of the present library should be balanced with supervisory considerations in the new building.

Flexible Space
Flexible space is necessary for present and future space management. The Library should be ready to face changing functions and priorities by maintaining as much flexibility as possible. The "warehouse" look, however, should be avoided. Cozy spaces may be created through arrangements of seating, shelving or display panels. All space should be utilized to the fullest possible extent. There should be adaptable spaces so that areas can accommodate overflow from other areas with little line of demarcation. The public should be encouraged to serve themselves through effective signage.

Integration of Art
The Library should be planned to incorporate original and recommended local art for the interior or exterior. Consideration should be given to art forms for both children and adults.

Supervision
Visual supervision of all reading and study areas by Library Staff at the Circulation Desk is a necessity. A clear view of multiple areas should be the goal. "Nooks" should seem private, but be easily seen by staff. Shelving should be arranged so that the aisles are easily supervised by staff. Separate rooms should have windows or glass panels to facilitate supervision.

Easily Maintained
The Hopkinton Public Library should be designed with easy maintenance in mind.
Materials should be durable and of good quality. Wall coverings in high traffic areas should be made of washable material. Waxed finishes, brass and other materials needing polishing should be avoided. Material should be conducive to quiet and comfort in addition to being environmentally safe. Cleaning materials should be environmentally safe as well. A central vacuum system should be installed.

Energy Efficient
- Energy conservation and efficiency should take high priority in the choice of systems.
- Investigation should be done to look into a system to capture and recirculate heat generated by lighting fixtures and people in the building.
- Periodic energy audits should be undertaken to monitor conditions on HVAC and suggest ways to improve efficiency.
- Windows should be operable and of energy efficient glass in all parts of the building.
- UV rays should be screened out for protection of materials.
- Double doors, creating a vestibule, for the public entry should be constructed.