Building Program

Grimes Public Library

As Revised by the Board
May 24, 2018

Prepared with the Assistance of

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Program Overview

Guide to the Building Program

The building program document is a description in words and numbers of the service and operational requirements for the proposed library building. The program serves as the library's written instructions to the architect in beginning the design process. The program is concerned with how the building is to function rather than how it will look.

The architect will want to review the program with the library and consultant to insure a complete understanding of project requirements. Revisions may arise from that review. It is also possible that the library will revise its program requirements during the course of schematic design based on additional information, budget considerations, and/or new understandings resulting from the graphical representation of spaces. It is important that any revisions to the program be explicitly approved by the Library Board.

The estimated space requirements of the building program will be tested by the architect. The preparation of schematic plans including furnishing layouts should be the final arbiter of space requirements for the building.

The building program includes numerous sections grouped in three broad divisions:

Program Divisions

1. Program Overview
These sections provide overarching issues for the project and summary data. The Space and Seating Summary offers a quick summary of all space allocations.

2. Functional Area Descriptions
These sections provide the detailed description and requirements for each functional area of the building.

3. General Design Considerations
These are common library design requirements that should be considered in any library building project.

Specific Design Considerations

In preparing the program document a number of issues that affect the project across programmatic lines were identified. For this reason, these issues are called to the planning team's specific attention.

Service Population, Building Size, and Site
The growth of Grimes is significant and on-going. The most recent population projection prepared for the City by Fox Engineering in late 2017 identifies a Grimes' population of 45,381 by 2040. Those 22 years reflect the standard library building planning horizon of 20 to 25 years. A population of 45,381 suggests a library of between 55,000 to 60,000 square feet.

A phased approach is recommended that allows the library's building and the municipal population to grow together. This building program calls for a prudent yet responsive initial build-out of some 36,000 square feet with a plan for later expansion as circumstances warrant.

When considering sites for the library building it is only prudent to identify sites that will support an ultimate build-out of 60,000 square feet along with the parking and desired site amenities.

Interior Aesthetic – A light filled, uncluttered look is desired with definition given to individual functional areas rather than a "warehouse" look. Feature elements in both the Adult and youth portions of the library are desired to provide a special experience for residents, establish the library as a destination with character, and create a "wow" factor.

Public Computing, the Wireless Environment, and Device Re-Charging – The Building Program reflects the accelerating trend of customers bringing their own mobile device to the library to support their digital activities. The architects and their consultants are to make the building a welcoming environment for wireless data and communication applications. Provide power receptacles with both three-prong and USB ports for customer use at all public study and casual seats and at other convenient locations throughout the building.

Wayfinding and Signage - The layout of the building and services should support intuitive wayfinding. A comprehensive signage plan is also required. It should be recognized that sometimes less is more in a signage plan. A clutter of signage often results in signage that is ignored.

Storm Refuge - The architect is to identify a large area or areas of the building in which all staff and as many as 100 customers are to assemble in severe weather.

General Circulation Path – Provide a path from the receiving room and garage to all workrooms and public floors that will allow passage of a pallet jack and pallet. As a rule, provide 3'0" doors to all workrooms and key pathways.

Circulation Control and Theft Detection – Traditional bar code technology is now in use an may continue for some period of time. The library hopes to implement **RFID technology**. The design and configuration of theft detection equipment, building exits, circulation stations, check-in stations, and return chute locations should provide for both technologies.

Raised Floor – Explore the provision of plenum flooring in part or all of the building to facilitate the ubiquitous provision of power and data.

Sound Control – The architect is to provide treatments as appropriate throughout the building to minimize distracting noise.

Security – A building security system including a digital video camera system is required. Consult with staff to identify specific locations and requirements. A digital proximity key-pass system for exterior doors and to all staff areas is required.

Active Shooter Planning – The main public service desk should be located to allow staff a line of sight to all persons entering the building. Provide emergency exists at as many locations as needed to provide a means of escape from all portions of the building. Explore with staff a safe room strategy that "hardens" a space or spaces to provide this element of security.

Ergonomics - The architect is requested to consider people friendly solutions in selecting furnishings, fixtures, and finishes such as furnishings and millwork that allow for comfortably situated keyboards, monitors, and accessories that adjust to different users; floor treatments at public service desks that respond to staff spending many hours on their feet; and light sources that reduce monitor glare.

Daylighting - Provide generous daylighting for patron seating and staff work areas.

Public Art - Please identify locations for the display of public art and the relocation of any appropriate existing pieces.

Furnishings - Moveable furniture is generally preferred over fixed counters and cabinets.

Shelving - Shelving is to provide a sloped base shelf. Back-stops are desired for every shelf.

Book Baskets – Locate nesting patron book baskets at strategic / convenient locations among the public collections.

Trash and Recycling – Provide trash and recycling receptacles in all public and staff spaces.

Electrical System – Evaluate the implementation of an emergency generator system. Provide lightning protection for the building. Provide child safe outlets in all public spaces.

ADA Accessibility - The building should meet both the letter and the spirit of all ADA requirements.

Unassigned Space - Unassigned space includes areas of the building that are of common utility and do not serve a specific library purpose such as the entry and foyer, restrooms, general aisle space throughout the building, stairs, elevators, mechanical systems, and walls and partitions. Rates of 25%, 30%, and 35% of the total gross building size for the building's unassigned space requirement is included at the end of the Space/User Seating/Technology Summary found on the next two pages. This range is provided to allow for a number of building solutions, from a single floor of all new construction (25%), all new two-story construction (30%), and addition/renovation (30% to 35%).

Space, User Seating, and Public Technology Summary

Programmatic Area	Square Feet	Table Seating	Casual Seating	Technology Stations	Other Seating
Exterior Book/ Media Returns	40				
Entry/Vestibule/Lobby	unassigned				
Restrooms	unassigned				
Meeting Rooms	3,760				23 200
Public Service Desk Area	1,195			2 self-checks	
Popular Materials	1,905	8	4	2 catalog stations	4 benches
Young Adult	1,149	8	4	catalog station 3 computer stations 1 game station digital display	
Information Commons	2,480	24		20 computer stations	40
Adult Print Collections	5,880	36	18	4 catalog stations	25 benches
Youth Services	7,788	24	14	2 catalog stations 8 computer stations 1 self-check	105
Staff Workroom	1,280				
Staff Room Area	815				
Custodial Closets	60 + unassigned				
Friends Workroom / Storeroom	365				
General Storeroom	800				
Yard Room	150				
Net Program	**27,627**				
Unassigned Space **25% of Gross**	**9,209**				
Gross Space Requirement **25% of Gross**	**36,836**	**100**	**40**	**3 self-check stations** **9 catalog stations** **28 computer stations** **1 game station** **1 digital display**	**23** **200** **40** **105** **29 benches**

Note- the 25% grossing factor assumes a single-story building.

Relationship of Library Spaces

As a guide, the following core relationships are provided. Relationships within the individual spaces are described in the body of the narrative descriptions.

Building Area	Primary Relationship	Secondary Relationship
Exterior Book/Media Returns	Public Service Desk Check-in Area	
Entry/Vestibule/Lobby	Program Room Public Service Desk	New Books / Display
Restrooms **Public** **Family / Youth Services** **Staff**	Lobby, Meeting Rooms Youth Services Desk Staff Room, Staff Workroom	
Meeting Rooms	Lobby Restrooms	Youth Services
Public Service Desk Area	Lobby Exterior Book/Media Returns	Popular Materials
Popular Materials	Lobby	Public Service Desk Young Adult
Young Adult	Youth Services	Popular Materials
Information Commons	Public Service Desk	
Adult Print Collections	Young Adult Adult Collections	
Youth Services	Young Adult	Meeting Rooms
Staff Workroom	Public Service Desk	Staff Room
Staff Room Area	Staff Workroom	
Custodial Closet	Lobby Closet: Lobby Main Closet: None	
Friends' Storeroom	None	
General Storeroom	None	
Yard Room	Exterior	

Collection Size and Shelving Capacity

Collection:	Existing Number of Volumes	Projected Number of Volumes	% to shelve	Projected Volumes to Shelve	Projected Shelving Capacity
New Books	Included in other counts	Included in other counts	100.0%	1,100	1,100
Topical display	Included in other counts	Included in other counts	100.0%	120	120
Subtotal				1,220	1,220
YA					
Fiction	1,622	5,412	90.6%	4,903	5,040
Graphic	610	1,188	89.8%	1,067	1,200
Magazine	6 titles	15 titles	100.0%	15 titles	18 titles
Subtotal:	**2,232 + 6 titles**	**6,600 + 15 titles**		**5,970 + 15 titles**	**6,240 + 18 titles**
Media					
Blu, DVD	4,587	10,780	84.6%	9,120	9,120
Recorded books	1,136	3,850	89.3%	3,438	3,600
Video games	318	770	77.7%	598	600
Subtotal:	**6,041**	**15,400**		**13,156**	**13,320**
Adult Periodicals					
Magazine Titles	68 titles	125 titles	100.0%	126 titles	126 titles
Newspapers Titles	7 titles	15 titles	100.0%	15 titles	12 titles
Back Issue Newspapers	1 month	3 months	100.0%	3 months	3 months
Adult Books					
Large Print	985	2,706	90.4%	2,446	2,446
Fiction	5,651	20,572	90.4%	18,597	18,720
Inspirational	1,341	5,850	93.5%	5,470	4,572
Nonfiction and Reference	3,601	13,780	91.2%	12,589	12,600
Biography	384	2,255	93.0%	2,097	2,160
Graphic Novels	79	187	97.5%	182	240
Subtotal:	**12,401**	**45,350**		**41,381**	**40,738**

Collection:	Existing Number of Volumes	Projected Number of Volumes	% to shelve	Projected Volumes to Shelve	Projected Shelving Capacity
Children's					
Entry Zone					
New books	Included in other counts	Included in other counts	100.0%	740	740
Topical display	Included in other counts	Included in other counts	100.0%	120	120
Magazine Titles	11 titles	15 titles	100.0%	15 titles	18 titles
Subtotal	**11 titles**	**15 titles**		**860 + 18 titles**	**860 + 18 titles**
Young Child Zone					
Book with CD	106	225	81.1%	182	182
Puppets	98	100	100.0%	100	100
Board Books	831	2,537	76.9%	1,951	1,980
Pic books	4,091	12,685	77.1%	9,780	9,900
Easy Beg reader	1,412	3,383	69.5%	2,351	2,340
Subtotal	**6,538**	**18,930**		**14,364**	**14,502**
Elementary Zone					
Fiction	3,973	15,222	86.7%	13,197	13,248
Graphic Novels	699	1,269	88.6%	1,124	1,200
Nonfiction	3,045	6,342	90.0%	5,708	5,760
Biography	349	846	89.7%	759	768
Subtotal:	**8,066**	**23,679**		**20,786**	**20,976**
Closed Stacks					
Book club (storeroom)	235	1,100	100.0%	1,100	1,200
Video games in house (Children's desk)	23	25	100.0%	25	25
Kits, etc. (Children's desk)	46	141	100.0%	141	141
Subtotal:	**304**	**1,266**		**1,266**	**1,366**
Grand Total:	**35,222**	**111,225**		**99,005**	**99,222**

Public Shelving and Display Summary

Notes:
- All Young Child shelving to be like that used at Cedar Rapids PL.
- All other book shelving (FIC, INS, NF, JNF, B, JF, etc) to include one shelf per bay to be a 'face out' shelf.
- Adult shelving ranges 6 sections long or longer are to swap-out on shelving section for a patron bench. The space needed for this feature is shown separately in each functional area chapter.

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Adult							
New and Topical Display							
New Books	12	66"	4	10"		display shelves	144
Topical / Seasonal Display		Review requirements with design team					100
Total	**12**				**?**		**244**
Young Adult							
Fiction	42	66"	5	10"			504
Graphic Novels	8	66"	5	10"			96
Magazines	2	66"	3	10"		Mag Boxes	24
Total	**52**						**624**
Media							
DVDs, Blu rays	60	66"	5	6"		sloped, slotted shelves	720
Recorded Books	30	66"	5	6"		sloped, slotted shelves	360
Video Games	4	66"	5	6"		sloped, slotted shelves	60
Total	**94**						**1,140**
Adult Periodicals							
Magazines	14	66"	3	10"		Mag Boxes	168
Current Newspapers	2	66"	3	10"		Mag Boxes	24
Back-issues Newspapers	1	66"	3	10"			12
Total	17						204
Adult Books							
Large Print	20	72"	5	10"			240
Fiction	130	72"	6	10"			1,560
Inspirational	38	72"	6	10"			456
Nonfiction and Reference	105	72"	5	10"			1,260
Biography	18	72"	5	10"			216
Graphic Novels	2	72"	5	10"			24
Total	**313**						**3,756**

Public Shelving and Display Summary

Notes:
- All Young Child shelving to be specifically like that used at Cedar Rapids PL.
- All other book shelving (FIC, INS, NF, JNF, B, JF, etc) to include one shelf per section to be a 'face out' shelf.

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Children's							
Entry Zone							
New Books	8	66"	4	10"		display shelves	96
Topical Display			Review requirements				48
Magazines	2	66"	3	10"		Mag Boxes	24
Total	**10**				**?**		**168**
Young Child Zone							
Puppets					2	tubs	24
Books with CDs	1	48"	3	12"		Like CRPL	12
Board Books	11	48"	3	12"		Like CRPL	132
Picture Books	55	48"	3	12"		Like CRPL	660
Easy - Beginning Readers	13	48"	3	12"		Like CRPL	156
Total	**80**				**2**		**984**
Tween Zone							
Fiction	138	60"	4	10			1,656
Graphic Novels	10	60"	4	10			120
Nonfiction	60	60"	4	10			720
Biography	8	60"	4	10			96
Total	**216**						**2,592**
Closed Stacks							
Book club (storeroom)	10	72"	5	10			120
Video games in house (Children's desk)	.5	45"	3	10			6
Kits, etc. (Children's desk)	1.5	45"	3	10			18
Total	**12**						**144**

Parking and Exterior Site Features

Parking

The number of parking stalls are to be determined as part of the architectural planning phase. As a preliminary measure, it is suggested that a total of 130 public and staff parking stalls be considered. The architect is to review parking requirements with appropriate planning agencies, library staff, board, and consultant. Green space, berms, plantings, or other techniques should be employed to soften the harshness of the parking area while recognizing the need for ease of snow removal. Handicapped parking provisions are to be made per code requirements. Provide walkways between the trays of parking to provide safe pathways to the entry.

Vehicle Circulation Issues
- drop-off/pick-up lane at the front entry
- path for driver's side book return – avoid conflicts with pedestrians walking to the library entry
- provide a path and unloading location for semi-tractor/trailer units

Entry Area
- lighted flag pole
- racks for 20 bicycles
- 5 benches for those waiting for rides
- cigarette receptacles at an appropriate distance from the entry and in compliance with all other regulations

Trash Enclosure
Provide an efficient and attractive enclosure for the library's trash bins.

Site Landscaping and Lighting
Attractive but easily maintained plantings are desired. Lighting is required for public and staff safety at the public entry, site margins, and at the staff entry.

Reading Garden Patio and Stage (not included in building size)
A butterfly garden area provides a natural setting for reading or study and offers visual engagement from the building's interior. Provide a patio area to seat 8 or more customers. This patio should also be able to serve as a performance "stage" for outdoor programs with the public seated on the lawn. Provide exterior power and data receptacles. Confer with staff in development of design of this space.

Signage: Handicapped and staff parking stalls
                     Reading Garden

Adjacencies   Primary: Entry

Exterior Book/Media Return

40 square feet

Function and Design Issues

The library desires a driver's side, drive-up return, sheltered from the weather with an overhang. The path of vehicles to the return should avoid conflicts with pedestrians approaching the library entry.

The interior return room should be located as part of or as near as possible to the reshelving/check-in area. If possible, an exterior pavement level higher than the interior floor level facilitates increased capacity.

Two return slots are required, one each for book and media materials. The return slots should be prepped for RFID sensors. The height of the returns is to anticipate both SUVs and small sedans. Keyed return slots are required. The return room must be fire rated and have a floor drain.

Signage: Book Return, Media Return
Directional signage to guide customers to return location

Adjacencies: Primary: Public Service Desk Check-in Area

Entry/Vestibule/Lobby

Square feet - Unassigned

Function and Design Issues

This area provides a welcoming entry for the public to the library facility. The lobby serves both the library and meeting rooms independently. Provide for:

- Exterior and interior monitor displays for hours of service and event information
- on-demand openers
- people-counter
- walk-off system for shoe soil
- dedication plaque and donor recognition system for wall
- janitorial closet with mop sink, space for snow shovel and melt, broom, and mop bucket.
- exterior trash receptacles and cigarette disposal units
- 2 interior and 2 exterior benches for patrons waiting for rides
- bi-level drinking fountain with bottle-fill
- closet for wheelchair, stroller, and electric cart
- theft detection panels on library side of lobby
- 2 interior return slots, (print and media materials) that empty into the Circulation Check-in area may be located in the lobby or as patrons approach the Circulation area depending on schematic design.

Signage: Exterior posting venue for hours, Book and Media interior return slots

Adjacencies: Primary: Meeting Rooms, Public Service Desk
Secondary: Popular Materials

Restrooms

Square Feet: Unassigned

Function and Design Issues
- public restrooms (men, women, assisted/family) are to be located off the lobby for users of both the library proper and the meeting rooms.
- 2 assisted restrooms are located in the Youth Services department. Each is to include both a full-size and a "tot pot" sized toilet.
- 2 single-occupant staff restrooms are provided in proximity to the staff room area.

Restrooms should provide:
- bi-level drinking fountain with bottle-fill
- Views to the interiors of the restrooms are to be screened when the doors are opened
- The number of women's fixtures should reflect the high percentage of library users that are female
- Package shelves by sinks
- Automatic fixtures for sinks, toilets, urinals, lights, hand blowers, and paper towels by sink. Waste receptacles by sinks and door.
- Keyed deadbolts for all public restroom doors for use in periods of vandalism.
- Stalls should be spacious, well lit, and include coat hook and package shelf
- Changing tables in all public restrooms
- Sanitary product dispensers and disposal fixtures
- Tile floors and walls
- Floor drain
- Access panels to all valves located in wall cavities
- The Youth Services restrooms are to provide both an adult sized toilet and a "tot pot" sized toilet. Provide a step-up feature at the sink for young children. These restrooms should be visible from the Youth Services public service desk.
- A lactation room in the Youth Services area is to include a comfortable chair for mother and infant, a second chair for a toddler sibling, a sink, and a large vanity for mother's paraphernalia.
- Provide drinking fountains near, but not immediately adjacent to, the restrooms.

Signage: per ADA requirements

Adjacencies:
Public:	Lobby, Meeting Rooms
Family	Youth Services Desk
Staff	Staff Workroom, Staff Room

Meeting Rooms

3,760 square feet

Function and Design Issues

The meeting rooms provide space for library and community sponsored programming. The rooms should be able to operate independently from the library proper, allowing community sponsored events to start before and run past normal library operating hours. When the library is closed the meeting rooms should have access to restrooms, drinking fountain, pay telephone, public elevator, and other common amenities.

Pre-Assembly Space (400 sf – adjoins the lobby)
Space is needed for persons attending programs at the library to gather prior to the beginning of activities and during breaks in the programming. Space is also needed for the display of temporary artistic and informational displays. Confer with staff and consultant to further define this space. The program assigns an allowance of 600 square feet to this use.

Program Room (2,400 sf)
The room should seat 200 people in rows of chairs or 100 at tables and be rectangular in shape with a level floor.

The room is to divide into two portions (1/3, 2/3) for concurrent activities by the inclusion of rigid demountable partitions with pocket doors. This will require duplication of features in some circumstances. Plenum partition should be specified above a dropped ceiling for sound suppression when the room is divided. **Allow for all media and other support elements in each component of the room.**

Media - The room should provide a wide range of media and technology support. The architects and their electrical or media consultant are requested to carefully explore these requirements with the library staff.

- telephone, data, power, cable television outlets at frequent wall and flush floor locations
- public address system
- very large flat panel display(s) OR ceiling mounted digital projector and ceiling mounted projection screen
- sound system
- media control closet
- lighting controlled to allow for different levels and zones of illumination
- black-out shades

Other Support Elements
- coat rods and package shelves
- media and programming supply closet (keyed)
- storage for folding tables, stacking chairs, lectern, dollies and programming accessories
- kitchen with counter (with many electrical receptacles), full size refrigerator, microwave, cupboards, 2 deep sinks, one with a crane neck faucet to fill coffee urns, spray nozzle, and garbage disposal.

Conference Room (460 sf)

A room is needed to seat 15 at a conference table with power/data and 8 guest seats. A presentation board, recessed service counter, clock, and coat rack are required. Convenience outlets to enable small media presentations, a telephone outlet, and data outlets should be provided.

Signage: Sign each room

Adjacencies   Primary: Lobby, Restrooms
                  Secondary: Youth Services

Public Service Desk Area

1,195 square feet

Function and Design Issues

Library users come to the public service desk to check-out materials, return books and pay fines, register as a borrower, and ask for directions. Staff at this desk provide the central point of control for the entire library. A diverse collection of customer service features are provided near the public service desk.

Building Directory (30 sf)

- obvious to all entering the building and in a location to allow customers to have a general view of the building interior

Resource Center/ Friends Book Sale (200 sf)

- a recessed alcove
- copier
- handbaskets
- 4 sections of shelving for the Friends Book Sale
- 2 free-standing racks or bins for bulk materials
- keyed base cupboards to store copying supplies / handouts
- wall-mounted literature racks
- 2 large bulletin boards
- defibrillation unit

Public Reshelving Area or Recently Returned (100 sf)

Provide space and an attractive location for public access to 4 double-faced sections, 45 inches tall.

Self-Serve Reserves (50 sf)

Provide 4 single-faced sections of 66" shelving for patron reserves.

Public Service Desk (560 sf)

Provide a subliminal queuing mechanism so that customers intuitively and cooperatively form a single line to approach the public service desk stations. The public service desk is composed of 2 self-check stations and 2 public service stations. Provide a variable-height service desk to allow a portion of the desk to lower as needed to provide appropriate ADA access. Provide a "panic" button that shuts and locks all doors to the staff workroom. Locate the building security panel in the check-in room so it is convenient to this area.

When considering the design of the public service desk area it is important to note the need to control clutter. Public service stations should provide shielding of all cabling and equipment. The desk design should prevent the public coming behind the desk or in the staff workroom but also allow for the movement of staff and book carts from behind the desk to the public floor. Floor treatment should reflect long hours spent by staff standing behind the desk.

Each station is to include:

- microcomputer
- monitor, adjustable
- keyboard, adjustable
- bar code scanner / RFID pad
- receipt printer
- security system desensitization equipment if needed

- task chair or wheeled stool
- knee space for sitting staff
- telephone with public address function
- shared cash register to serve all stations
- wheeled pedestals for shelves/storage
- under-counter cable management system (desk continued next page)

An **island workstation** behind the public service desk should provide:
- 2 sitting height staff workstations with computer, barcode scanner/RFID sensor, receipt printer and telephone
- supply storage drawers and under-counter cupboards

Check-in Area/Room (255 sf)
- This is to be a adjoining room to separate noise and clutter from the public service desk.
- 2 standing-height **check-in stations** with wheeled stools are required. Each station should provide space for a microcomputer, barcode scanner, receipt printer, wheeled stool, a wall telephone, and adjacent space for one book truck and a large depressible bin. Staff will remove materials from the depressible bin to the work surface, check-in the material, and place the material on a book cart.
- Adjacent to the check-in stations provide 10 book carts for rough sorting of returned materials, 3 sections of shelving, and 2 depressible bins from return slots.
- 2 walk-up material return slots should deposit into the reshelving area into large castered book bins. Similarly, the after-hours drive-up return, fire rated receiving closet would be best located in this area if schematically feasible. (See also the lobby and exterior return sections of this document).

Signage   Building Directory, Resource Center / Friends Book Sale, Circulation, Reserves or Holds, Recently Returned

Adjacencies   Primary: Entry/Lobby, Exterior Book/Media Return

              Secondary: Popular Materials

Popular Materials

1,905 square feet

Function and Design Issues

The Popular Materials area creates a mélange of high demand adult collections and space in which patrons relax, converse, and refresh. The layout of Popular Materials should blur boundaries between the customer lounge, the new materials, and media to create a relaxed, welcoming environment where patrons are comfortable browsing, greeting friends, and enjoying the space.

Arrange the collections so that patrons can flow through the new books and media in an inviting and casual fashion.

Customer Lounge (380 sf)
The customer lounge provides space for customer relaxation and enjoyment of light refreshments, broadening and enhancing the library experience. The lounge creates a casual environment where customers may engage in quiet conversation and reading or seek a break from on-going study/research.
- 4 casual chairs with side tables
- 4 two-place café tables
- 1 beverage station
- 2 upscale vending machines
- waste receptacles
- flat panel monitor
- charging station for patron devices

New Books / Topical Displays (275 sf)
- collection shelving
- 1 catalog station – slim profile, end of range style
- 2 browser benches

Media Collection (1,170 sf)
- collection shelving, group by format
- 1 catalog station – slim profile, end of range style
- 2 browser benches

Feature Element (80 sf)
Establish an appropriate setting for a three-dimensional art work, water feature, interior plant scaping, or some other significant feature element that will create a sense of wonder or appreciation.

Collection Shelving

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Adult							
New and Topical Display							
New Books	12	66"	4	10"		display shelves	144
Topical / Seasonal Display	Review requirements with design team						100
Total	**12**				**?**		**244**
Media							
DVDs, Blu rays	60	66"	5	6"		sloped, slotted shelves	720
Recorded Books	30	66"	5	6"		sloped, slotted shelves	360
Video Games	4	66"	5	6"		sloped, slotted shelves	60
Total	**94**						**1,140**

Signage: customer lounge, each collection grouping, individual collections, range guides

Adjacencies: Primary: Entry/Lobby
                              Secondary: Public Service Desk, YA

Young Adult Services

1,149 square feet

Function and Design Issues

Young Adult Services are to be located in a separate room with lots of glass so that the space may advertise itself as well as allow both teens and staff to see and be seen. The room should create an identifiable space with a bright, open, relaxed atmosphere. Furnishings should be moveable to allow for reconfiguration by the teens.

Elements that might be used in crafting this effect include signage, graphic art, banners, display pieces, overhead pieces, and furniture style. The architect and interior design team will want to explore these issues with teen customers, the staff and consultant.

Collections and Seating
- magnetic white board
- collection shelving
- 1 catalog station – end panel style
- 4 two-place study tables or café tables, powered
- 4 comfortable seats
- 3 computer stations
- digital display
- Gaming Area – space for participants bench, flat panel monitor, console/controller, speakers, and storage of ancillary equipment.

Collection Shelving

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Young Adult							
Fiction	42	66"	5	10"			504
Graphic Novels	8	66"	5	10"			96
Magazines	2	66"	3	10"		Mag Boxes	24
Total	**52**						**624**

Signage: Teens, range guides

Adjacencies: Primary: Youth Services
                Secondary: Popular Materials

Information Commons

2,480 square feet

Function and Design Issues
Computers are provided on the public floor to ensure equipment availability and to provide an alternative to a lab environment. Collaborative spaces provide an environment for sharing and discussion as well as individual quiet pursuits. A maker space / classroom provides the opportunity for library patrons to explore and create using a wide variety of methods and technologies.

Reference Desk (250 sf)
- 2 seated staff stations each with computer, telephone, pencil/box/file drawers, circulation equipment, and cash drawer.
- back counter with multifunction printer and 4 sections of 45" shelving
- controls for study room door strikes
- easy egress for staff to get to public floor

Public Floor Computing (840 sf)
- 20 computer stations in clusters of 4 to 6 stations
- print release station, multi-function printer/copier, and payment station

Collaborative Spaces (590 sf)
- 4 two-place glazed rooms – use a two-placed table not a counter
- 2 eight-place glazed rooms each with flat-panel monitor for group input
- power, data ports at tables in each room
- sound-proofing between rooms

Maker Space / Classroom (800 sf)
The maker space offers members of the community an opportunity to learn, create, and engage with others. The maker space is a flexible workshop that houses a changing array of equipment and furnishings to support a wide range of disciplines and activities. One month the space may be given over to technical creations with circuits, displays, and software. The next month a ceramics studio may inhabit the space. The room should be heavily glazed and the entry should be able to open widely to invite in the curious.

The maker space must provide a robust infrastructure – lots of power, data, counter with 2 deep sinks, supply storage, venting, controlled lighting, media presentation. Provide an instructional cooking feature that may be secured when not in use. The furnishings must be adaptable, moveable, and storable. Resilient flooring and a closet for storage of equipment and furniture is needed. Provide closet for tables, chairs, and equipment.

The room will also serve as a classroom/meeting space to seat 40 as maker space programming allows. Confer at greater length with staff to more completely capture their vision for this space and to identify appropriate furnishings and equipment.

Adjacencies: Primary: Adult Collections
                   Secondary: Young Adult

Signage: identify each study room, public floor computing, Maker Space

Adult Print Collections

5,880 square feet

Functional Description
This area provides for the public's reflective reading and quiet study while using the periodical, nonfiction, fiction, genre, and large print collections.

Design and Layout Issues

Periodicals (944sf)
- collection shelving
- 6 two-place tables- mix of low tops and high tops
- 12 lounge chairs with occasional tables
- Fireplace - two-sided

Nonfiction and Graphic Novels (3,056 sf)
- collection shelving. Use the seating to create breaks in the block of shelving.
- 12 two-place tables- mix of low tops and high tops
- 2 public catalog stations – slim profile, end of range style.
- Splice-in a bench seat integral to each shelving range of 6 double-face sections or longer.

Fiction, Genre, and Large Print (1,880 sf)
- collection shelving. Use the seating to create breaks in the block of shelving.
- 6 lounge chairs scatted among the collections
- 2 public catalog stations– slim profile, end of range style
- Splice-in a bench seat integral to each shelving range of 6 double-face sections or longer.

Collection Shelving

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Adult Periodicals							
Magazines	14	66"	3	10"		Mag Boxes	168
Current Newspapers	2	66"	3	10"		Mag Boxes	24
Back-issues Newspapers	1	66"	3	10"			12
Total	17						204
Adult Books							
Large Print	20	72"	5	10"			240
Fiction	130	72"	6	10"			1,560
Inspirational	38	72"	6	10"			456
Nonfiction and Reference	105	72"	5	10"			1,260
Biography	18	72"	5	10"			216
Graphic Novels	2	72"	5	10"			24
Total	**313**						**3,756**

Signage: Sign each collection area, range guides

Adjacencies: Primary: Information Commons

Youth Services Collections, Services, and Workroom

7,788 square feet

Function and Design Issues

The Youth Services department provides the collections and services designed for library users from birth through early middle school as well as parents, teachers, and other care givers. The Youth Services staff provide reader's guidance, reference, and programming services sought by these users. The workroom provides space for program preparation, collection development, and completion of other off-desk duties.

The Youth Services department should have a sense of identity and a sense of separation from the adult portions of the library. The seating and collections are to be grouped in three major zones; Entry, Young Child, and Elementary.

Outdoor Program Area (sf - not applicable)

A controlled exterior door should lead directly from the Youth Services department to this space. This space should be flexible to accommodate the wide range of activities spanned by Youth Services programming, from storytelling to more physical activities.

Entry Zone (844 sf)
- Public Service Desk
    - 2 seated staff stations each with circulation equipment, computer, telephone, cash drawer
    - back counter with LAN printer, fax, and 4 sections of 45" shelving
    - room for 3 book carts
    - desk to back-up to staff workroom
- public reshelving **-** 4 double-faced sections, 45 inches tall.
- 1 self-check station
- a "tinker" station that allows students to explore a changing array of equipment, arts, and other engaging activities – confer with the director for details
- collection shelving
- 4 computer workstations, seating at each workstation should allow two users.
- print station
- 2 public catalog stations
- Feature Element **-** **e**stablish an appropriate setting for a significant three-dimensional art work, nature installation, or some other significant feature element that will create a sense of wonder or appreciation.
- Visible wall feature – provide a plexiglass cut-out of a wall segment to allow children to view the building infrastructure
- family restrooms
- clock

Young Child Zone (1,724 sf)
- collection shelving
- 4 AWE computer stations, seating at each workstation should allow two users.
- 2 four-place child-height tables
- 4 two-place lounge chairs for parent and child seating
- An emergent literacy area for very young children is visible from the public service desk and is part of the department's open landscape and includes:
  - small puppet theater and puppet storage
  - educational manipulative discovery pieces (examples - light table, Lego table) and some wall-mounted manipulative pieces too
  - 2 small tables for game and puzzle activity with storage/display of same
  - 6 moveable imaginative seating pieces
  - window seats and child seating nooks

The Elementary Zone (3,112 sf)
- collection shelving
- 1 catalog station
- 4 lounge chairs
- 4 two-place study tables
- 1 four-place study table
- something fun to enliven the space

Youth Services Workroom (458 sf)
- Locate in view of the children's public service desk
- 3 staff workstations each with task chair, circulation equipment, computer, telephone, drawers and shelves.
- Multi-function copier/printer
- lateral file
- 1 standing-height work table
- counter with sink and room for a paper cutter and laminator
- full sized refrigerator
- 4 sections of shelving
- white board
- 4 book carts
- Clock
- Provide passage to storeroom and program room

Youth Services Program Room (1,350 sf)
The room should seat 75 children and caregivers and concurrently provide room for 5 tables for craft activities. The program room is to be directly accessible from the public floor and from the Youth workroom / storeroom. Provide the following features:

- The face of room is to open widely to the open floor area of the Children's Department allowing for overflow seating.
- coat pegs outside the room
- ½ carpet, ½ resilient floor covering
- exterior windows
- telephone, data, power, cable television outlets at frequent wall and flush floor locations
- public address system
- LARGE flat screen monitor for digital presentations
- lighting controlled to allow for different levels and zones of illumination

- a counter with cupboards and two sinks for clean-up after crafts, one sink at adult height, one sink at child height
- closet for table/chair storage
- craft supply storage

Storeroom (300 sf)

A storeroom for craft supplies and display pieces is to be located with **connecting doors to both the staff workroom and the program room**. The room is to include

- 16 sections of industrial shelving
- 100 square feet of floor space for storage of larger objects and carts

Collection Shelving

Collection	Number of Single-Face Sections	Height	Shelves per Section	Depth of Shelf	Other Storage Units	Notes	Square Feet
Children's							
Entry Zone							
New Books	8	66"	4	10"		display shelves	96
Topical Display			Review requirements				48
Magazines	2	66"	3	10"		Mag Boxes	24
Total	**10**				**?**		**168**
Young Child Zone							
Puppets					2	tubs	24
Books with CDs	1	48"	3	12"		Like CRPL	12
Board Books	11	48"	3	12"		Like CRPL	132
Picture Books	55	48"	3	12"		Like CRPL	660
Easy - Beginning Readers	13	48"	3	12"		Like CRPL	156
Total	**80**				**2**		**984**
Tween Zone							
Fiction	138	60"	4	10			1,656
Graphic Novels	10	60"	4	10			120
Nonfiction	60	60"	4	10			720
Biography	8	60"	4	10			96
Total	**216**						**2,592**
Closed Stacks							
Video games in house (Children's desk)	.5	45"	3	10			6
Kits, etc. (Children's desk)	1.5	45"	3	10			18
Total	**12**						**144**

Signage: Youth Services, Young Child, Elementary/Tween areas, service desk, program room, each collection, range guides

Adjacencies: Primary: Young Adult
                     Secondary: Meeting Rooms

Staff Workroom

1,280 square feet

Function and Design Issues
The general workroom and office provide for the general operation of the Library.

- **Receiving / Staff Entry -** An exterior door, well-lit and sheltered from the elements, provides for delivery services with an unobstructed passage to the receiving room. This door with lite will also serve as the staff entry. An exterior call box or buzzer is required for delivery personnel, a keyless entry system is needed for staff entry. The receiving area should include 2 sections of industrial shelving, 25 square feet of floor space for boxes.

- **1 Outreach workstation** with task chair, microcomputer, telephone; pedestal drawers and files, room to accommodate 4 book trucks, and 3 sections of deep shelving for delivery bins.

- **1 Circulation Workstation** with task chair, microcomputer, bar code scanner, telephone; pedestal drawers and files, and room to accommodate 1 book truck.

- **1 Public Service Workstation** with task chair, microcomputer, bar code scanner, telephone; pedestal drawers and files, and room to accommodate 1 book truck.

- **1 Technical Services Workstation** with task chair, microcomputer, bar code scanner, telephone; pedestal drawers and files, and room to accommodate 1 book truck.

- **1 Processing/Mending Work Table** with task chair and room for a paper cutter and a working quantity of supplies (such as book jackets on pull-out shelves, glue, tape, media containers) stored convenient to the work surface.

- **1 Administrative Assistant's Workstation** with task chair, microcomputer, bar code scanner, telephone; pedestal drawers and files, side chair, 2 sections of shelving, and room to accommodate 1 book truck.

- **Assistant Director's office** should provide a workstation to accommodate a microcomputer, printer, telephone, and an additional work surface. The office also includes a three-drawer lateral files, 1 side chair, 2 sections of shelving, and bulletin board.

- **Director's office** should provide a workstation to accommodate a microcomputer, printer, telephone, and an additional work surface. The office also includes 1 three-drawer lateral files, 1 side chair, project table with 4 chairs, 2 sections of shelving, and bulletin board.

- **Shared workroom equipment**
  - 10 sections of shelving
  - 2 free-standing supply cabinets
  - 2 bulletin boards
  - room for 8 book carts
  - counter with sink and cupboards
  - 1 shared printer/copier/scanner/fax
  - 3 four-drawer lateral files
  - large laminator
  - mail station and staff mail boxes

- **Server closet with** 2 server racks with access to the rear of the racks for cable servicing. Telephone board and telephone system equipment should also be located here. Provide a voice telephone set in the room.

Signage: Staff Workroom

Adjacencies   Primary: Public Service Desk
                    Secondary: Staff Room

Staff Room Area

815 square feet

Function and Design Issues

These spaces provide for the personal needs of staff.

Break Room
- counter with above and below cupboards
- sink with disposal and spray nozzle
- full size refrigerator
- stove
- microwave
- dishwasher
- 3 four-place tables
- 4 lounge chairs
- two-place sofa
- magazine rack
- magnetic white board
- cable television outlet
- occasional tables/lamps
-

Quiet Room / Lactation Room – a separate room in the staff room area offers a reclining chair with occasional table, lamp, sink with counter.

Coat/Locker Room - coat rack, 30 large package lockers, bench, place for wet boots/umbrellas, and full-length mirror

Staff Restrooms - described earlier in the program document - the restrooms should not open to the staff room proper. One restroom should include a shower.

Signage: Staff Room

Adjacencies   Primary: Public Service Desk, Staff Workroom
                  Secondary:

Custodial Closets

60 square feet + unassigned

Design and Layout Issues

The custodial closets provide storage for the custodial service supplies and equipment.

There should be 2 custodial closets, one primary closet plus 1 in the lobby.

Main Closet (60 sf)
- 2 sections of industrial shelving
- trash cart
- vacuum
- wheeled mop bucket
- mop sink
- open floor space for storage of equipment/supplies
- a sealed concrete floor

Lobby Closet (sf – unassigned – part of lobby)
- wheeled mop bucket
- mop sink
- open floor space for storage of equipment/supplies such as shovel, snow melt, broom
- a sealed concrete floor

Signage: Custodial

Adjacencies   Primary: Lobby closet – Lobby
                            Main closet - none

Friends Workroom / Storeroom

365 square feet

Function and Design Issues

This space provides space for receiving, sorting, and storage of book sale donations. Provide two work tables, 8 double-faced sections of shelving, 200 square feet for boxes of books, and 3 book carts.

Also include a workstation with task chair, pedestal drawers and files, and the ability to support a microcomputer and telephone.

Signage: Friends Workroom

Adjacencies   Primary: none
                     Secondary:

General Storeroom

800 square feet

Function and Design Issues

This space provides space for clean storage of supplies, equipment, parts, shelving parts, seasonal displays, and other items not needed for current use. The storeroom is to provide a work table and shelving as specified. Also provide a small washer and dryer for cleaning puppets, towels, rags, and other fabric items.

Signage: Storeroom

Adjacencies   Primary: none
                  Secondary:

Yard Room

150 square feet

Function and Design Issues

The yard room is unfinished space with a double-leaf exterior door. Shelving is provided for supplies, tools and parts. A tool hanging strip, electrical service, and an exterior hose bib are required. The yard room is to be rated for flammable storage.

Types of equipment that will be stored:

Gas powered vacuum	Fertilizers and seeds
Trimmer	Lawn chemicals
Rakes, shovels, brooms	Irrigation supplies
Gasoline and oil	Snow removal equipment
Hoses	Salt and ice melt
Ladders	Exterior lighting supplies

Signage: None

Adjacencies   Primary: exterior
                          Secondary:

General Building Design Considerations

This section provides recommendations regarding specific design considerations, building components, and equipment requirements.

- The public library provides an array of services to a varied constituency. The library service paradigm and service methods can be expected to change with some frequency, now and in the future. An open, flexible structure that can respond to changing needs is very important.

- Public libraries in urban settings are utilizing creative ways with layout and design of facility and services to minimize potentially disruptive areas. The building's design should incorporate the best elements of urban design that are appropriate for the community.

- Public libraries also present a number of very specific programmatic requirements. Building design must respond to these needs to allow effective, efficient operation of the library.

- The public library is a significant and permanent representation of a community's values. The building's design should engender a sense of permanence and pride. A warm atmosphere should invite the public to enter and feel at ease using the services and resources provided.

- Even though aesthetics are very important, the actual function of the facility must be the overriding consideration. Programmatic needs and operational costs must be a constant concern. Durability and ease of maintenance justify a higher initial investment to reduce ongoing operational costs.

- The building and its furnishings shall comply will all applicable codes, laws, ordinances and other legal requirements. Particular attention should be called to the Americans with Disabilities Act, which has very specific requirements and general requirements applicable to public libraries. The architect is responsible for ensuring strict compliance with both the letter and the spirit of the ADA as enacted and as subsequently interpreted.

Exterior Issues

Aesthetics
The building should reflect the community's sensibilities and be compatible with the context of its location.

Public Access
The entrance should be highly visible from all approaches. Approaches should be provided for users arriving by automobile or motorcycle, bicycle, by foot, and for drop-off traffic. Curb cuts must be provided from parking areas and public streets. A ground-level entrance assures ease of access for all users and facilitates staff functions.

Parking
There will be on-site automobile and motorcycle parking for public and staff. There should be signed designation of handicapped parking as required by code. The parking lot should be included in the landscape plan. Green space, berms, plantings, or other techniques should be employed to soften the harshness of the parking area while recognizing the need for ease of snow removal. Racks for bicycles will be provided near the entrance. Racks should be located so as not to impede pedestrian traffic. A drop-off area, set back from traffic flow, should provide for the short term parking of two vehicles.

Landscaping
The landscape plan should provide a pleasant setting for the building. The plan should be simple in layout and in the number of varieties specified. All plant varieties are to be hardy and requiring a minimum of care. Approaches to the building and the parking lot should be an integral part of the landscape plan.

Low maintenance-ground cover is preferred to stones, gravel, or other hard, loose material. The landscape plan should provide for the screening of exterior mechanical and refuse areas.

Exterior Signage
Consistent with local ordinances and requirements, provide an illuminated sign to announce the library's presence and a lighted hours of operation/message board at the building entrance. Signs should be provided to identify the book and media returns. All signage will be designed by the architect with final approval by library staff, or under the firm's direction for inclusion in the general contract.

Provide locations for prominent banners or other temporary signage in highly visible locations to promote library services and programs.

Exterior Materials
All exterior building materials should have a permanent or durable finish as to not require frequent painting, staining, or other maintenance. The use of wood should be kept to a minimum.

Exterior Lighting

The parking lot, public entrance, staff entrance, service and emergency exits should be well lit at dusk and at night. All exterior lighting should be controlled by photocells. Fixtures specified should use LED or long-life lamps. Any bollard lamps employed should be vandal-resistant and parts should be available locally or through a regional distributor.

Utility Outlets

Keyed outlets for water and electricity should be located on all sides of the building. Hose bibs should be self-draining.

Security

The landscape, building, and lighting plans should seek to reduce vandalism and to enhance the personal safety of public and staff. Closed circuit cameras should be considered. Card or key pad lock sets are preferred.

Interior Issues

Design Structure

The building should be designed on the module principle consistent with 42" shelving aisles. The bay must be as large as the budget allows and must reflect the three foot standard library shelving module. Some program areas such as the entrance area or meeting room may call for bays different from the standard module.

No interior load-bearing walls will be accepted. Interior walls must allow for flexibility in the future configuration of services. When necessary, interior columns should be placed for minimum interference with circulation, visibility, and furnishing layouts. All floors must be capable of supporting fully-loaded book stacks. Minimum floor loading must provide for 150 pounds per square foot.

Lighting

Lighting levels in public libraries are a significant issue that must be systematically addressed by the architect. A considered combination of controlled natural lighting and artificial lighting should provide appropriate, glare free illumination for the standing browser and seated reader. Special care is to be taken to prevent veiled reflection or glare in areas where monitors or microform equipment is in use.

Lighting levels should be as follows:

> Public study areas - 30 to 40 foot candles measured horizontally at desk top level. Ambient lighting may be augmented by task lighting where appropriate.

> Public service counters/desks - 50 foot candles measured horizontally at work surface.

> Shelving ranges - 6 foot candles minimum measured vertically at 12" off the floor and 30 foot candles maximum measured vertically at any height to achieve approximately a 5 - 1 maximum to minimum ratio across the entire stack face. Stacks should incorporate lighted shelving that is motion activated when appropriate.

> Microfilm, video viewing areas – review with library staff.

> Staff workrooms/offices - 50 foot candles average measured horizontally at desk height.

> Conference or study rooms - 30 to 40 foot candles measured horizontally at desk top level.

> Large meeting rooms - 40 foot candles average with all lights on, separate controls for lighting of podium area at front of room. Lighting should be controlled or switchable to produce 2 foot candles for note taking during media presentations. Note-taking light should not spill onto projection screen or monitors.

LED fixtures and lamps should be used generally throughout the building. Occupancy sensors should be considered for infrequently used spaces. Special effect lighting is only appropriate for display areas. The variety of fixtures and lamps must be kept to a minimum to simplify the supply, inventory, and maintenance processes. Incandescent fixtures are only appropriate for closets and similar applications.

Fixture layout in the public areas should, whenever possible, provide the required lighting level regardless of shelving or seating arrangements. Independence of lighting levels and furnishing layouts is a desired goal. Ease of lamp replacement is important. All fixtures should be easily accessible using ladders.

Twenty-four hour path lighting should be provided in all major areas of the building. Emergency lighting is to be provided in all areas of the building to meet or exceed code requirements. A master switching panel is to

be located after consultation with the staff. Use of circuit breakers for this purpose is not appropriate. Each major area of the building is to be separately controlled and the controls permanently labeled. A master switch should provide that the entire building's lights may be switched with ease. Individual rooms must have switched lighting.

Electrical Service

The number and location of all electrical outlets will be reviewed with the library planning team to determine adequacy. Adequate electrical service will be provided for both present and future configurations of equipment. Wall, counter, and floor outlets should be provided to create maximum flexibility in public seating areas, work rooms, public service desks, technology/media areas, and program spaces. Outlets should offer both three-prong and USB ports.

Raised, plenum flooring in specific building zones should be discussed with the library planning team as an option to consider.

Electrical service to the systems room for digital equipment closet should be provided from a grounded, independent breaker panel. Uninterrupted power supply equipment will be provided as necessary by the library.

Architects should review with the library planning team to identify equipment that may require special fixtures or power requirements. Theft detection system electrical service and wiring conduit should be provided at the public service desks and the entrance/lobby.

All supply and breaker panels shall be permanently labeled. Breaker panels shall be keyed.

Heating/Ventilation/Air-conditioning

Adequate heating and air conditioning with proper control is essential, with particular attention to quiet operation. Controls, vent locations and other mechanical elements must not conflict with the complete flexibility of the furnishing layout. Review all locations with the library planning team.

Thermostats must provide zoned control for all public areas and independent control for individual rooms. Thermostats in public areas must be secure from tampering. Special attention should be paid to small spaces such as study rooms or conference rooms.

No license shall be required to operate any of the mechanical equipment. All equipment, panels, pumps, and supply piping shall be permanently labeled. All mechanical service, hardware, and mechanical equipment should be locally available.

Entrances

The public entrance should at ground level with no barriers to those with disabilities. On-demand door openers shall be provided. If more than one entry is required they should be situated to allow a single staff location to provide control.

Doors and Pathways

All exterior doorways should have an overhang with proper drainage to keep snow and rain from the immediate area. They should comply with all ADA requirements and be at ground level, with flush thresholds, and present no obstacle to personal egress and wheeled carts. All interior doors should be at least 36" wide. Closer, kick-plates, and hold-back hardware for all doors should be reviewed with the library planning team. All passage doors shall have a lite for safety.

Provide a path from the receiving room and back-of-house areas to all workrooms and public floors that will allow passage of a pallet jack and pallet.

Windows

Window location must not affect layout and use of shelving, furniture, and equipment. Selected windows in all public and staff areas should open to allow ventilation in the event of mechanical failure. Window hardware should allow only staff operation. Windows should be located if possible to admit winter sun and be shaded from the summer sun. Glare from sunlight is to be avoided. Window lites should be non-glare or tinted and should be insulated or triple glazed. All frames should include a thermal break design.

Materials/Finishes/Colors

Public libraries are high traffic buildings and, like other public buildings, subject to some abuse. Libraries also have little money for maintenance and replacement. Because of this dichotomy the materials and finishes selected during construction should emphasize durability, long life, and low maintenance. Any higher initial costs may be justified by the reduction in operating costs as well as the aesthetics.

A holistic approach should be used in selecting colors used in the building to include building fixtures, furnishings, carpeting, and all other surfaces. This is most easily accomplished by including the project's interior designer in all of these discussions. All materials, finishes, and colors selected must be reviewed by the library planning team.

Doors, counter fronts, outside corners, and so on will take a beating and should be protected by caps, moldings, plates, or other hardware.

Counter tops receive significant wear and should be surfaced with extremely durable materials.

Children will climb on, knock over, run into, or pull down any furnishings and fixtures to which they have access. Stability and rounded corners are required characteristics in furnishings and fixtures.

Carpeting should be considered for the entire building except in the entry, restrooms, mechanical and store rooms, custodial areas, and any extremely high traffic areas.

Carpet specified should be a high quality, commercial grade of high density. Carpet for computer rooms should be anti-static. Materials and colors should be selected for low maintenance and the ability to mask soiling. If carpet tiles are used the adhesive employed should allow lifting and replacement of tiles.

Examples of appropriate floor coverings for non-carpeted areas:

- Entrance, restrooms – resilient, ceramic, stone flooring, or equal
- Custodial, storage, mechanical, receiving, garage- sealed concrete
- Storage closets, service corridors - resilient tile

Telephone

Telephone service to the building and its terminating block should be located in an area suitable for the siting and installation of a local telephone system processor. Two duplex electrical outlets should be provided at this location. The library may select and acquire a telephone system processor and telephone sets separately but all internal wiring for telephone service throughout the building is to be included in the general contract. The architect must review with the library planning team locations specified for telephone service.

Public Address

A public address system will serve all areas of the building, both public and staff accessible through telephone system.

Local Computer Systems

Network Systems Room

- A closet will be provided to house central computing equipment. It will be sized to provide room for a network equipment rack(s) on each floor, centrally located, appropriate in size to house patch panels and hubs or switches defined by the number of planned computer installations in the building
- It will be located with consideration to cabling requirements
- This closet will be placed on a separate, grounded electrical circuit
- It will have cable management equipment to control cable from entry point to patch panel
- The closet will have a locking door, appropriate ventilation and lighting
- It will be composed of non-conductive materials
- It should be environmentally controlled so as not to exceed a temperature of 80 degrees Fahrenheit, and humidity level of 60%. Supply air to the room should be filtered.

Cabling Backbone

- Fiber Optic Cable will be used as a "Backbone" to connect installations on multiple floors of one building, in connected buildings, or when cable runs exceed. 300 feet.

Cabling

- Category 6 (minimum), unshielded twisted pair (UTP) cabling shall be used. Plenum cable will be provided as needed based on construction characteristics of the planned building.
- Cabling will be warranted for 10 years from installation
- All cable troughs or other support will provide for cable to be supported by permanently attached supports at intervals close enough to ensure no visible sag. All equipment attached to walls must be secured properly.
- Cabling will be terminated in the Communications closet at a patch panel.
  - Patch panel will be flat faced with RJ-45 Cat6 jacks and will support at least a 25% increase in connections to have room for growth.
  - Patch panels will be provided in multiples of 24, to support the number of cable drops specified in building plan + 20% to allow for expansion
- Cabling will be terminated in wall-mounted plates with space for numbering of outlets.
- Floor mounted outlets will be terminated in such a way as to be flush to the floor with cover or gate to shield plug from kicking or other damage
- Outlets to be terminated in pre-wired furnishings will be done to the specification of the furnishing manufacturer
- Cable terminations and Patch Panel terminations will be numbered in a consistent way. The workstation terminations will be color-coded using orange to indicate a data outlet.
- 2 copies of a cable map showing locations and number of each cable drop will be provided at completion of the project
- Cables will be tested to meet the Gigabit over Ethernet standard. Documentation of all tests will be provided at the completion of the project.

Emergency Systems

A comprehensive security system should provide detectors on all external doors and motion detectors in strategic internal locations. The system should be tied to the Police or security service panel as appropriate. An external arm/disarm control should be located at the staff entrance. The main system panel should be able to indicate which device or zone has been activated.

A fire alarm system should be provided and tied to the Fire Department's panel if possible. Product of combustion and heat sensing devices should be located as appropriate. The main panel should be located in an area selected in consultation with library staff and safety officials and be able to indicate which device or zone has been activated.

Emergency exit doors should be equipped with either exit alarms or electromagnet devices that hold the doors closed except when released by the fire alarm's activation or when specifically overridden. The electromagnets can be wired not only to the fire alarm system but also to the burglar alarm panel so that the panel's zone bypass switches can be used to switch the electromagnets as well.

Signage/Graphics

Signage should be utilized throughout the building to provide direction and to identify major service areas, individual offices, and specific functions or features. Digital signage/monitors should be incorporated for the general building directory, promotion of services and programs and for meeting room schedules. Signage for each shelving range is also included in the project's scope. The signage should be attractive, legible, and an integral part of the interior design. Signage selected should allow the signage to be serviced or produced locally. Library staff must provide final approval on all signage systems to ensure compatibility with branding.

Clocks

Clocks should be provided in all general staff workrooms, staff room, meeting room, and in general public areas as necessary for easy visibility. A central clock system is preferred.

Furnishings

The architect should work with the library planning team to determine the type and quantities of existing furnishings that may be used in the new facility, especially workrooms and storage areas. Moveable furniture is preferred. Service desks and areas utilizing RFID technology should minimize the use of metal to avoid interference with RFID signals.

Shelving

The ability of the public to find materials can be enhanced by the layout and appearance of the shelving. Shelves should be at a height and of a style that is appropriate for both the user group and the material format. Shelving layout should maximize sight lines and natural light.

Welded metal frames with wood end panels are recommended. Sloped bottom shelves allow for easier viewing of those materials. Back-stop bands are required when appropriate. Canopy tops should only be installed in situations where there are views of shelving from above or structurally required.

The architect should work with the library planning team to determine the type and quantities of existing shelving that may be used in the new facility to minimize costs.

Shelving must be arranged to provide the public a logical sequence and flow for each collection. Shelving must be arranged to provide staff at the primary public service desks a clear line of sight and the maximum visual supervision of aisles in the shelving layout. This is to aid both patron assistance and security.

Shelving ranges should generally be at least 15 feet in length (5 sections) and no more than 21 feet in length (7 sections). Double faced, free-standing ranges are preferred over single-faced, wall-mounted shelving in public areas. Single-faced shelving is most useful in an office or workroom setting. Main aisles should be 60 inches wide and side aisles 42 inches in width.

Millwork

Custom millwork should be kept to a minimum. Standard furniture and furnishings available in modular units should be used whenever possible to enable response to changing service needs and future expansion. Storage cabinets and counters in staff workrooms should be free-standing and modular. They should be able to be moved without major disruption to the walls whenever possible.

Furniture

Furniture selection should emphasize durability and maintenance as well as appearance. Strength of construction and the ability to replace components should be a prime consideration. Standard, stock items should be given preference. Table and chairs should be of durable, commercial-grade construction. Upholstery that can be removed on site is advantageous for periodic cleaning. Partitions used in office landscaping should be standard, modular units rather than custom units. Moveable furniture and equipment must be equipped with carpet casters. The library planning team should be allowed to inspect and evaluate furnishing selections prior to approval.

Attic Stock

Budget permitting, a small inventory of replacement parts and materials should be included in the specifications. It is helpful to provide this additional stock so that replacements will be from the dye lots or manufacturing runs. The following items and amounts are recommended:

Wall Coverings	3 percent
Ceiling Tile	3 percent
Carpet	3 percent
Vinyl Tile	3 percent
Wall Base Trim	3 percent
Ceramic Tile	3 percent
Paint	5 percent

Equipment

The library will independently acquire through its own purchasing procedures media, circulation, computer and office equipment and these costs are part of the total project budget. The architect will be responsible for the provision of the necessary space, power, cable pathways, and related furniture.

Locks

A digital proximity key-pass system for exterior doors and to all staff areas is preferred. Physical keys should be minimized and a zoned master and grand master keying system, as simple as possible, should be developed in consultation with the library planning team. A key case and key management system should be provided.

Display Fixtures

Public bulletin boards and brochure racks should be flush-mounted or recessed, wall mounted units.