Each model is an opinion of probable cost. Many decisions regarding material selection, system development and project parameters have yet to be defined. Market conditions, as always, are beyond the control of the architect or estimator and will vary over time. No guarantee is given or implied that costs will not vary from these models. It is imperative that additional estimates are prepared as the project is developed to ensure conformance with project budgets.

PROJECT AREA: 13,000 SF				
		Pre-Design Budget	Design Development	Comments
BUDGETED CONSTRUCTION VALUE		\$1,900,000.00	\$1,847,236.35	
Base Construction Costs		\$1,900,000.00	\$1,644,987.00	
Design Contingency		-	\$82,249.35	5%
Alternate #1 - 2nd Floor Manager Offices			\$120,000.00	
<b>FURNITURE &amp; EQUIPMENT (FFE) EXPENSES</b>		\$600,000.00	\$765,000.00	
Moving & Storage		\$5,000.00	\$5,000.00	Assume Library Self Move
Furniture		\$455,000.00	\$420,000.00	Includes new Mtg Furniture
АМН		\$140,000.00	\$340,000.00	
RFID Equipment & Conversion		Not Included	Not Included	
CONTINGENCY		\$250,000.00	\$208,978.91	
Project Contingency		\$250,000.00	\$208,978.91	8%
A/E Fees		\$250,000.00	\$250,000.00	
Owners Rep Fees	Budgetary	\$50,000.00	\$50,000.00	
Permits	Budgetary	\$39,050.00	\$37,994.73	
Technology Allowance	Budgetary	\$50,000.00	\$50,000.00	Meeting Room 2
TOTALS		\$3,139,050.00	\$3,209,209.99	
			\$70,159.98	





# Palatine Public Library flex AMH Final Design Proposal

Imagine what a library can be

DISCOVER



## **#** bibliotheca

# Why is it important to use Automated Materials Handling?

WE CONSIDER THE BIGGER PICTURE TO ENSURE SUCCESS

- Simplify processes for library staff
- Enhance experiences for library users
- Reduce touches



## **#**I bibliotheca



Libraries today

Tight Budgets + Limited Resources

**Increasing User and Community Expectations** 

Increased Demand for Social-based Services



# What problems are we trying to solve?



#### **BACK TO SHELF**

Reduce time taken to get returned books back on the shelf



#### **BORROW TIME**

Reduce time taken to update user accounts to facilitate new borrowing



#### **CUSTOMER SERVICE**

Increase time available for library staff to focus on customer service tasks

## **III** bibliotheca

# Sortation

WHAT MAKES UP AN AMH SYSTEM

- These units divert items to the appropriate bin based on instructions from the control system
- Equipment consists of sensors to track items
- Electronics to communicate with the control system
- Often e-stops are mounted near these modules for easy safety access





# **Solution Components**

MAXIMIZE SPACE AND USABILITY WITHIN EXISTING LOCATIONS, WITH THE FLEXIBILITY TO GROW IN THE FUTURE





# Return and induction units

WHAT MAKES UP AN AMH SYSTEM









#### **HARDWARE**

- Device that the library customers and staff use to return and check in an item to the library
- In bulk return scenarios, a series of conveyors with different speeds that pitch single items for the sorter



#### SOFTWARE

- Manages the check-in of the item and instructs the user when and how to insert items, provides receipts and communicates key logistical information to the sorter
- In bulk return scenarios, there is no customer-facing software, but staff-facing software allows staff to return items without disrupting library user experience on the front-end of system



# Conveyance

Many installations require additional conveyance to accommodate

Multiple entry points | Room configurations | Building obstructions | Serviceability and staff access.

Because of this, bibliotheca has developed a variety of modules to accommodate the most common configuration challenges







CONVEYANCE



LIFT GATES



CURVED CONVEYANCE BELTS



# Outputs

WHAT MAKES UP AN AMH SYSTEM?



STANDARD, SMALL AND LARGE BINS

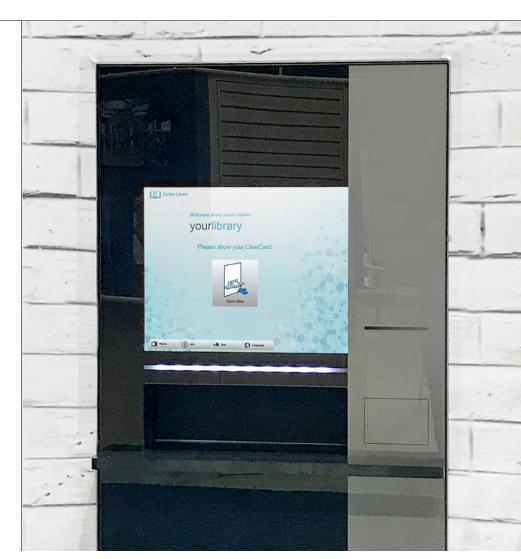
Built to handle large numbers of items. Easily transforms into a make-shift cart. Fits within existing library spaces

## #1 bibliotheca

# Reinforce your library's brand, even when the library is closed

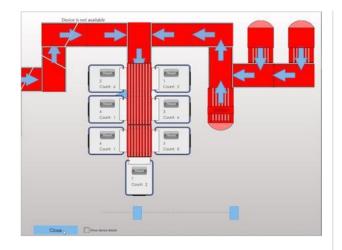


- Customize the welcome screen to offer a familiar look for patrons
- Compliment your library's brand and messaging with color, logo, background and layout changes

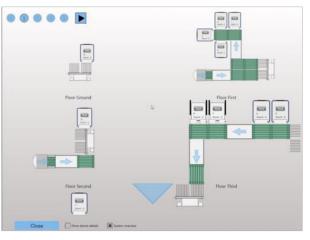




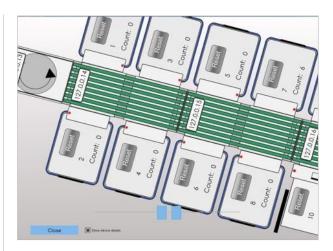
# Real-time updates that increase library efficiency and address issues easily



ADDRESS SYSTEM ISSUES QUICKLY



SEE MULTI-FLOOR SYSTEMS IN ONE VIEW



CHECK BIN COUNTS AND ASSESS NEEDS

View the health of your entire system and get status updates on the fly with flexVisualizer™, now integrated with libraryConnect devices

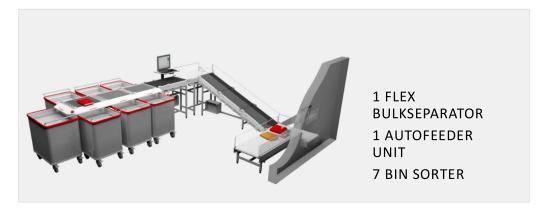


# System designs



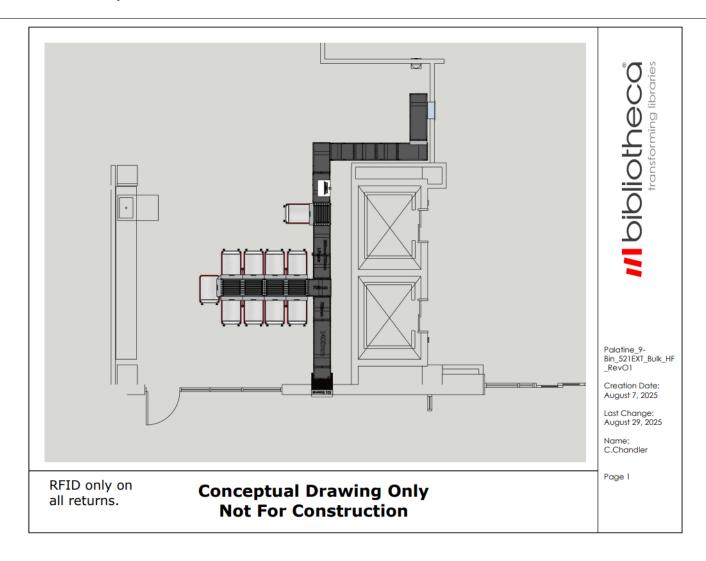


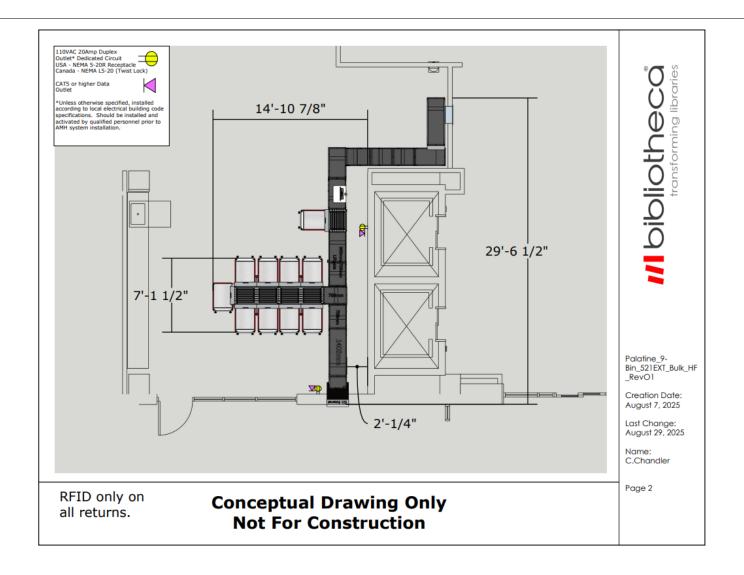




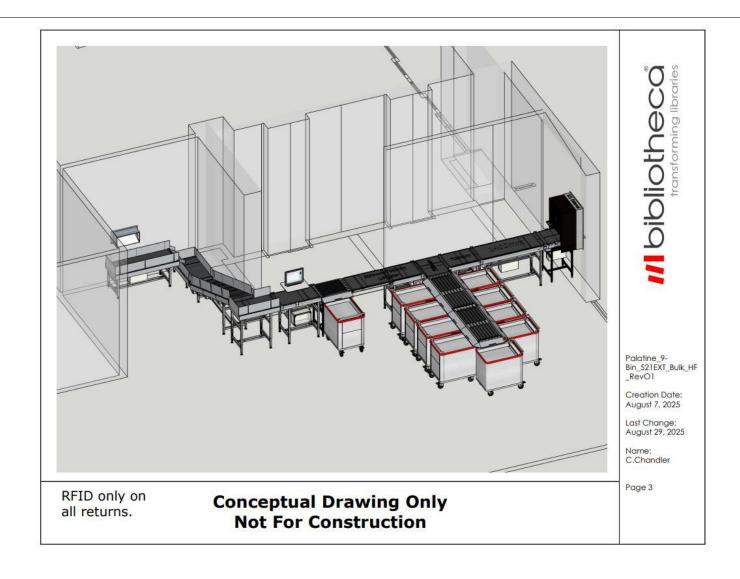
# **Final Sortation Layout**

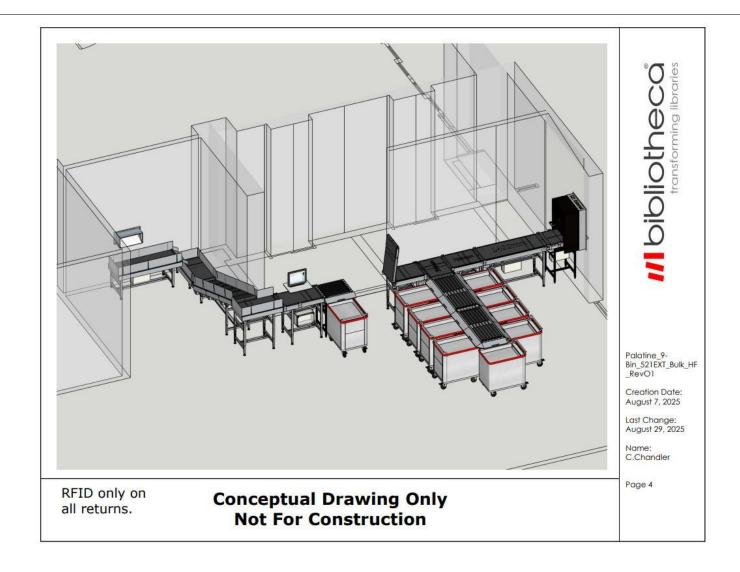


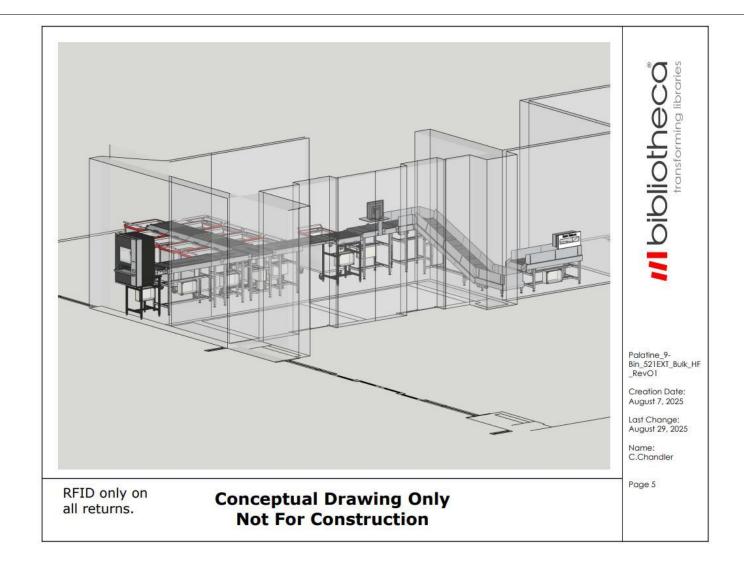




## **#**I bibliotheca







## **#** bibliotheca



bibliotheca return + sorting installations globally

Over 20 years of experience with AMH

500+ sites installed since 2009 in North America

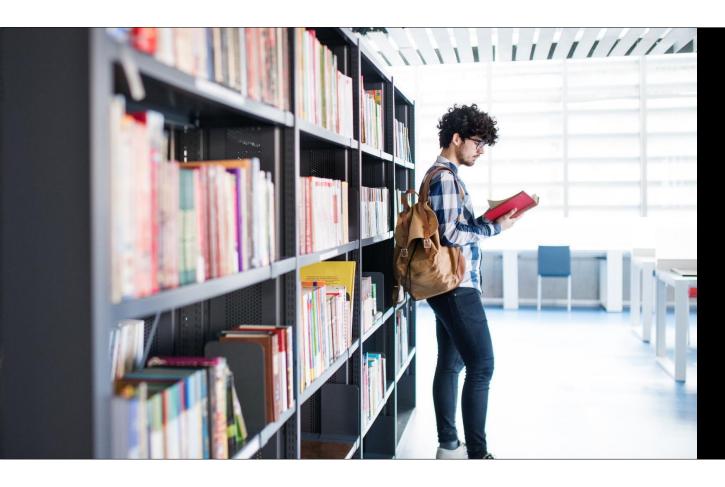
Over 900 installs globally

# Cost Breakdown



	LEASE-TO-OWN		NEW w/ ANNUAL CONTRACT		PURCHASE w/ PREPAID		
		Budget Normalization		Traditional Purchase		Capital Surplus	
Year	Current M&S	Lease	Difference	New	Difference	New with Prepaid	Difference
2025	\$0.00	\$76,610.00	\$76,610.00	\$265,446.00	\$265,446.00	\$338,946.00	\$338,946.00
2026	\$0.00	\$76,610.00	\$76,610.00	\$18,375.00	\$18,375.00	\$0.00	\$0.00
2027	\$0.00	\$76,610.00	\$76,610.00	\$19,293.75	\$19,293.75	\$0.00	\$0.00
2028	\$0.00	\$76,610.00	\$76,610.00	\$20,258.44	\$20,258.44	\$0.00	\$0.00
2029	\$0.00	\$76,610.00	\$76,610.00	\$21,271.36	\$21,271.36	\$0.00	\$0.00
TOTALS	\$0.00	\$383,050.01	\$383,050.01	\$344,644.55	\$344,644.55	\$338,946.00	\$338,946.00

<b>Budget Normalization</b>	Traditional Purchase	Capital Surplus		
Lowest Upfront Investment	Procurement Friendly	Lowest Overall Cost		
Budget Normalization	Buyboard Compatible	Operational Cost Reduction		
Obsolescence Protection	Moderate Upfront Investment	Highest Upfront Investment		



# Thank you.

"Imagining future library potential, engineering real library solutions"

**D** 











1.800.328.0067



www.bibliotheca.com

#### 6—Library Facilities

#### 6-1 Disaster Plan

The Palatine Public Library District (the Library) maintains a disaster plan that is reviewed annually regularly and updated as needed. (Approved 9-9-09; Last Revised 5-18-21, Effective 6-1-21)

#### 6-26-1 Emergency PlanManual

The Library maintains an emergency manual that is reviewed annually and updated as needed. (Approved 9-9-09; Last Revised 5-18-21, Effective 6-1-21, Last Revised 9-17-24, Effective10-1-24)

#### 6-36-2 Safety Drills

The Library has plans of action in case of fire, tornado, <u>lockdown,active-shooters</u>, and other emergencies. To prepare staff for emergencies, the Library willhold a minimum of two safety drills per year. (Approved 4-12-82; Last Revised 6-16-20, Effective 7-1-20)

#### 6-46-3 Bomb Threats

The safety and well-being of visitors and staff are the primary consideration if a bomb threat occurs. The administration and staff will follow procedures established with fire and law enforcement agencies. These procedures are located in the Library's emergency <u>planmanual</u>. (Approved 8-13-86, Last Revised 5-18-21, Effective 6-1-21, <u>Last Revised 9-17-24</u>, Effective 10-1-24)

#### 6-56-4 Smoking

All Library facilities are designated as smoke-free. No person may smoke or vape in any area of Library facilities or garages, including in vehicles in the garage. Smoking is prohibited within 15 feet of any entrance. (Approved 8-8-90, Reapproved 5-11-16, Last Revised 9-17-24, Effective 10-1-24)

#### 6-66-5 Building Cleaning

Library property should be clean and well-maintained at all times. The Executive Director will see that the facilities and grounds are cleaned and maintained according to an established maintenance schedule. All damage and repair needs should be reported to the Executive Director or designee. (Approved 8-13-86, Last Revised 6-16-20, Effective 7-1-20)

#### 6-76-6 Bloodborne Pathogens

Bloodborne pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Normal library operations are not likely to involve circumstances exposing employees and visitors to bloodborne pathogens. However, the Board recognizes that in extraordinary circumstances employees may potentially encounter bloodborne pathogens while fulfilling their duties. The Illinois Department of Labor has published minimum requirements for protection of employees in these instances. The Board accepts these standards and directs managerial staff to implement adequate procedures and training designed to prevent and minimize the occupational exposure of employees to bloodborne pathogens and other potentially infectious materials. (Approved 12/14/05; Last Revised 6-16-20, Effective 7-1-20; Last Revised 9-17-24, Effective 10-1-24)

#### 6-86-7 Airborne Pathogens

Normal library operations are not likely to pose substantial risk to employees and visitors from airborne pathogens. However, the Board recognizes that in extraordinary circumstances airborne pathogens such as the coronavirus that causes COVID-19 may require extreme measures. During such times, the Library will follow requirements and restrictions from the State of Illinois set forth by the Illinois Department of Public Health, the Illinois Department of Commerce and Economic Opportunity, and other state and local agencies. (Approved 6-16-20, Effective 7-1-20, Last Revised 9-17-24, Effective 10-1-24)

#### 6-96-8 Noise Zones

Noise zones are designated and posted throughout areas of the Main Library. The purpose of these designated zones is to indicate conversation and activity levels patrons may expect in various areas of the library. Information about zone locations and explanations of each are found in Appendix 6A. (Approved 1-12-11, Reapproved 5-11-16, <u>Last Revised 9-17-24</u>, <u>Effective 10-1-24</u>)

#### 6-106-9 Space Needs Assessment of Library Facilities

Periodically, and not less than every 10 years, an assessment of the space needs of the Library's facilities is conducted to respond to the evolving needs of the community. (Approved 9-9-09; Last Revised 5-9-18, Effective 6-1-18)

Policy 6 Comprehensive Review: Adopted 4-12-82; Last Revised <del>5-18-21</del><u>9-17-24</u>, Effective <del>6-1-21</del>10-1-24.

#### **APPENDIX 6A—Noise Zones**

The Library Board believes that all visitors have the right to read, work, and socialize at the Library without unnecessary disturbance or distraction. In an effort to better serve our visitors, the Main Library designates zones that permit different noise levels and activities. Visitors are asked to choose the zone that is appropriate for their needs and to be considerate of others.

The Social/Green Zone is designated for those who wish to talk openly, yet in a manner considerate of others:

- · audible and frequent conversations
- considerate audible cell phone usephone usecalls
- no music or media noticeable audible to others
- aactive visitor patron area

The Moderate/Yellow Zone is designated for those who wish to work or read with a minimal disturbance:

- minimal, brief, and low-volume conversations
- no music or media audiblenoticeable to others
- considerate minimal, brief, low-volume cell phone usephone usecalls

The Quiet/Red Zone is designated for those who wish to work or read with virtually no disturbance:

- no conversation
- no music or media audible noticeable to others
- no cell phone use audible phone use calls
- no persistent or ongoing noise

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tTyping on laptops allowed

(Appendix referenced in Policy 6. Approved by PPLD Board of Trustees 1-12-11, Last Revised 5-18-21; Effective 6-1-21)

## **6 – Library Facilities**

## 6 – 1 Emergency Plan

The Library maintains an emergency manual that is reviewed annually and updated as needed. (Approved 9 Sept 2009, Last Revised 17 Sept 2024, Effective 1 Oct 2024)

## 6 - 2 Safety Drills

The Library has plans of action in case of fire, tornado, lockdown, and other emergencies. To prepare staff for emergencies, the Library will hold a minimum of two safety drills per year. (Approved 12 April 1982, Last Revised 16 Sept 2025, Effective 1 Oct 2025)

#### 6 – 3 Bomb Threats

The safety and well-being of visitors and staff are the primary consideration if a bomb threat occurs. The administration and staff will follow procedures established with fire and law enforcement agencies. These procedures are located in the Library's emergency plan. (Approved 13 Aug 1986, Last Revised 17 Sept 2024, Effective 1 Oct 2024)

### 6 - 4 Smoking

All Library facilities are designated as smoke-free. No person may smoke or vape in any area of Library facilities or garages, including in vehicles in the garage. Smoking is prohibited within 15 feet of any entrance. (Approved 8 Aug 1990, Last Revised 16 Sept 2025, Effective 1 Oct 2025)

## 6 – 5 Building Cleaning

Library property should be clean and well-maintained at all times. The Executive Director will see that the facilities and grounds are cleaned and maintained according to an established maintenance schedule. All damage and repair needs should be reported to the Executive Director or designee. (Approved 13 Aug 1986, Last Revised 16 Aug 2025, Effective 1 Oct 2025)

## 6 - 6 Bloodborne Pathogens

Bloodborne pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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#### 6 – 7 Airborne Pathogens

Normal Library operations are not likely to pose substantial risk to employees and visitors from airborne pathogens. However, the Board recognizes that in extraordinary circumstances airborne pathogens such as the coronavirus that causes COVID-19 may require extreme measures. During such times, the Library will follow requirements and restrictions from the State of Illinois set forth by the Illinois Department of Public Health, the Illinois Department of Commerce and Economic Opportunity, and other state and local agencies. (Approved 16 June 2020, Last Revised 17 Sept 2024, Effective 1 Oct 2024)

#### 6 - 8 Noise Zones

Noise zones are designated and posted throughout areas of the Main Library. The purpose of these designated zones is to indicate conversation and activity levels patrons may expect in various areas of the library.

Information about zone locations and explanations of each are found in Appendix 6A. (Approved 12 Jan 2011, Last Revised 17 Sept 2024, Effective 1 Oct 2024)

## 6 - 9 Space Needs Assessment of Library Facilities

Periodically, and not less than every 10 years, an assessment of the space needs of the Library's facilities is conducted to respond to the evolving needs of the community. (Approved 9 Sept 2009, Last Revised 9 May 2018, Effective 1 July 2018)

Policy 6 Comprehensive Review: Adopted 12 April 1982, Last Revised 16 Sept 2025, Effective 1 Oct 2025.

# **Appendix 6A – Noise Zones**

The Library Board believes that all visitors have the right to read, work, and socialize at the Library without unnecessary disturbance or distraction. In an effort to better serve our visitors, the Main Library designates zones that permit different noise levels and activities. Visitors are asked to choose the zone that is appropriate for their needs and to be considerate of others.

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- audible phone use
- no music or media audible to others
- active visitor area

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- minimal, brief, and low-volume phone use
- no music or media audible to others

The **Quiet/Red Zone** is designated for those who wish to work or read with virtually no disturbance:

- no conversation
- no audible phone use
- no music or media audible to others
- no persistent or ongoing noise
- typing on laptops allowed

(Appendix referenced in Policy 6. Approved 12 Jan 2011, Last Revised 16 Sept 2025, Effective 1 Oct 2025)