Epsilon

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MASS. HIST. COMM

6797/Jones Library, Amherst

May 1, 2023

Ms. Brona Simon
Executive Director
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

Subject: Jones Library, 43 Amity Street, Amherst, MA

Massachusetts Historic Rehabilitation Tax Credit Application

Dear Ms. Simon:

On behalf of Jones Library, Inc., I am pleased to submit for your review and consideration the enclosed Massachusetts Historic Rehabilitation Tax Credit (MHRTC) application for the Jones Library located at 43 Amity Street in Amherst, MA.

Located on the north side of Amity Street in downtown Amherst, the Colonial Revival style library was constructed in 1928 to plans by Western Massachusetts native Allen Cox. The Jones Library is a contributing building within the Amherst Central Business District, which was listed in the National Register of Historic Places in 1991. The building underwent a significant renovation and expansion in the early 1990s but has seen no substantial capital improvements since that time.

The project will include the rehabilitation of the historic building for continued use as a public library. The proposed project will address costly but critical safety and accessibility concerns, improve children's and teen's rooms, improve special collections and ESL facilities, and substantially improve the energy efficiency of the building. With over \$21m in Qualifying Rehabilitation Expenditures, the project is eligible for over \$4.2m in state historic tax credits. As part of this request, you will find the following items enclosed:

- Part 1 and Part 2 MHRTC applications and accompanying photographs, plans, and specifications;
- Pro forma and financial information;
- Letters of support;
- Completed MHRTC Questionnaire regarding executive agents; and
- Department of Unemployment Assistance certificate (to be submitted under separate cover)

I strongly encourage the Massachusetts Historical Commission to demonstrate its support for this significant property by looking favorably upon the enclosed application for state historic tax credits.

If you have any questions regarding the enclosed materials, or require any additional information, please do not hesitate to contact me at (978) 461-6259.

Sincerely,

EPSILON ASSOCIATES, INC.



Douglas J. Kelleher Principal

cc: Jones Library, Inc.



### Massachusetts Historic Rehabilitation Tax Credit Application, Parts 1 & 2

## Jones Library 43 Amity Street, Amherst



# Submitted to: Massachusetts Historical Commission 220 Morrissey Boulevard Boston, MA 02125

Submitted by: Prepared by:

Jones Library, Inc.
43 Amity Street
Amherst, MA 01002
Prepared by:
Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754







# MASSACHUSETTS HISTORICAL COMMISSION STATE HISTORIC REHABILIATION TAX CREDIT PROGRAM HISTORIC PRESERVATION CERTIFICATION APPLICATION QUESTIONNAIRE/ATTACHMENT

| 1. Name of property: Jones Library   |
|--|
| Address of property:   |
| Street 43 Amity Street   |
| City_Amherst   |
| State Massachusetts Zip_01002  |
| 2. Project contact:  |
| Name Doug Kelleher, Epsilon Associates, Inc.   |
| Street 3 Mill & Main Place, Suite 250  |
| City Maynard   |
| State Massachusetts Zip 01754-2658   |
| Daytime Telephone Number (978) 461-6259  |
| 3. Owner:  |
| Name Sharon Sharry, Albrary Director   |
| Signature // CC  |
| Organization Jones Library, Inc.   |
| Social Security or Taxpayer Identification Number: 04-2104358  |
| Street 43 Amity Street   |
| City Amherst   |
| State MA Zip 01002   |
| Daytime Telephone Number (413) 259-3106  |
| 4. Has the applicant or property owner retained an executive agent/lobbyist for the purpose of influencing the decision of the MHC in awarding an historic rehabilitation tax credit for this project? (see G. L. c. 3, § 39 definition of executive agent). |
| □ yes ☑ no   |
| If yes, name of executive agent:   |
| Agent's Company  |
| Street   |
| City   |
| StateZip   |
| Daytime Telephone Number   |
| Date retained by applicant or project owner as executive agent:  |

#### MASSACHUSETTS HISTORICAL COMMISSION STATE HISTORIC REHABILIATION TAX CREDIT PROGRAM HISTORIC PRESERVATION CERTIFICATION APPLICATION

#### PART 1 – EVALUATION OF SIGNIFICANCE

|                    |   |  |   | Project No   | h.:  |
|--------------------|---|--|---|--|--|
| been may be the ba | received. Type or print clear<br>be provided to the Departmen | rly in black ink. If ac<br>nt of Revenue. The o<br>oplication form. In th                          | ditional space is needed, a<br>ecision by the Massachus<br>the event of any discrepance | use continuation sheets or at<br>etts Historical Commission of<br>by between the application for | nless a completed application form hatach blank sheets. A copy of this form with respect to certification is made of form and other, supplementary material cedence. |
| 1.                 | Name of property: Jone  | s Library  |   |  |  |
|                    | Address of property:  | Street 43 Amity  | Street  |  |  |
|                    | riddioss of property.   | City Amherst   | 201000  |  | State MA Zip 01002   |
|                    | ☐ Eligible for listing (p☐ Level of Significance              | Register Historic Di-<br>revious determined by<br>(local, national, NHI<br>(if application for fed | strict as a contributing reso<br>MHC):<br>  | ource: name of District: Am  | give date of listing:<br>nherst Central Business District  |
| 2.                 | Project contact:  |  |   |  |  |
|                    | Name Doug Kelleher, Ep  | silon Associates, Inc.   |   |  |  |
|                    | Street 3 Mill & Main Plac                                     |  | City Mayna  |  |  |
|                    | State Massachusetts   | Zip 01754-2658   | Daytime Tel   | ephone Number <u>(</u> 978) 461-6  | 5259   |
| 3.                 | Owner:  Name Sharon Sharry, Lib Organization Jones Libra      | ary, Inc.  | Signature   | M  | Date 47773   |
|                    | Social Security or Taxpa                                      | yer Identification Nur   |   |  |  |
|                    | Street 43 Amity Street  | 7: 24202   | City Amherst  | 1 37 1 (442) 250 5   | 24.05  |
|                    | State_MA  | Zip_01002  | Daytime Tel   | ephone Number <u>(413) 259-3</u>   | 3106   |
|                    |   |  |   |  |  |
| [] ~               |   | 10001  |   |  |  |
| Se-                | e attachments (please list): L                                |  | rom. 42 Amity Cturet  |  |  |
|                    |   |  | rary, 43 Amity Street<br>ination: Amherst Central I                                     | Rucinace Dietrict  |  |
|                    |   | xisting Conditions Ph  |   | Addition District  |  |
|                    | <del>-</del>  |  | . <del>T</del>  |  |  |

#### **Architectural Description**

Constructed by the town of Amherst to the designs of Western Massachusetts native Allen Cox (1873-1944), the 1928 Jones Library at 43 Amity Street is a Colonial Revival style stone and brick building with additions dating to 1993. The side gable main block measures five bays in width. Two historic secondary blocks extend to the west and north, with later additions forming an enclosed atrium to the rear of the main block. The building is located within the block bound by Amity Street, North Prospect Street, Cowles Lane and North Pleasant Street and is set on an approximately .96-acre parcel.

The original 1928 building is composed of several distinct sections forming an approximately J-shaped footprint. The main block rises two stories to a broad gambrel roof clad in slate shingles. The façade (south elevation) is constructed of random ashlar laid stone and holds a centrally located entrance flanked by rectangular windows. The main entrance is enhanced with a Colonial Revival style surround with a broken pediment entablature supported by fluted pilasters. The entrance holds a half-glazed wood paneled door. Single story additions with wood clapboard siding, original to the building, extend from end bays. The second floor features five regularly spaced double-hung windows. Above, the gambrel roof features regularly spaced gable-roofed dormers at each bay and stone end chimneys at the roof ridge.

The east and west elevations of the main block also feature random ashlar stone and are partially obscured by single story wings. While not identical, both wings feature similar detailing, including double-hung windows, broad gambrel roofs with shed roof dormers, and stone chimneys. A two-story brick wing original to the building but heavily modified in the 1993 renovations extends from the north elevation of the west single-story wing. A secondary entrance is located at the east extension and sheltered by a shed roofed porch. A single-story gambrel roofed wing extends north from the rear of the east addition. The wing is constructed of brick and features a partially exposed basement level as the grade lowers toward the north end of the lot. The wing meets a two-story stone block set parallel to the main block of the library. This northernmost portion of the building is capped with a broad gambrel roof and is clad in random ashlar stone, brick, and clapboard.

Additional wings constructed in 1993 extend to the north and west of the original building, forming an approximately square footprint. The wings enclose a covered atrium at the center of the Library capped with a pyramidal glass roof. The two-story wings are constructed of red brick and feature similar massing to the original buildings, including broad gambrel roofs, regularly spaced double-hung windows, and gable roofed dormers.

The mid-block building is set back from the street to the south by a shallow front yard. Concrete walkways extend from the adjacent sidewalk to the primary entrance at the main block and the secondary entrance at the east extension. A narrow asphalt paved driveway extends along the east side of the building to a small parking area at the north end of the site. The building features a minimal set back from the western property line.

#### **Evaluation of Significance**

The Jones Library was incorporated in 1919 following a bequest of nearly \$700,000 to the town from Samuel Minot Jones (1836-1912). Jones, a successful lumber merchant, was originally from Amherst and grew up on Amity Street. Upon his death in 1912, his estate was granted to his son Minot. Jones' will noted that if his son were to die before age 21, the whole of his estate would be granted to the town of Amherst for a free public library. Minot died only six years later after contracting influenza at 19 years old and the money was subsequently bequeathed to the town. The Jones Library was incorporated the following year and the funds invested for the future operations of the library and construction of a purpose-built building. Beginning in 1921, the library was housed in a number of locations in the center of town, including the Amherst Town Hall, Amherst House, and Whipple House.

The groundbreaking for the purpose-built library occurred on July 25, 1927 and the cornerstone was laid on October 18, 1927. Construction was completed in a year at a cost of \$260,000, with an additional \$100,000 for furnishings and equipment. Upon completion the library featured service spaces and storage at lower level, including a garage for the library's book wagon. The first floor held a children's area, main reading room, rooms for art and special collections, offices and meeting rooms, and an approximately 260-seat auditorium. The second floor featured exhibition, collection, and meeting rooms, while the third floor held a studio and private writing rooms.

The Colonial Revival style library was designed by the Boston-based architectural firm Putnam & Cox, though primarily designed by partner Allen H. Cox (1873-1944). A native of nearby South Hadley, Cox attended MIT and the Ecole de Beaux Arts in Paris. In 1902 he partnered with William Putnam, Jr. to found the firm of Putnam & Cox. Around 1939 the firm became known as Putnam, Cox and Saltonstall, following the expansion of the partnership to include Nathaniel Saltonstall and Allen Cox's son Gardner. For the Jones Library commission Cox designed in the Colonial Revival style, specifically making use of architectural details specific to Connecticut River Valley vernacular.

The building exterior is domestic in character, with a main central block flanked by side and rear wings. Constructed of fireproof construction in concrete and steel, the exterior is primarily clad in fieldstone with sections of red brick and wood clapboard. Since its original construction, the Jones Library has undergone two major renovation campaigns. The first was completed in 1967-1968 to plans by Alderman and MacNeish of West Springfield, Massachusetts. In the planning for this renovation, the principal issues addressed were lack of space for the library's growing collections, and space shortages for several departments including the Children's Room, Special Collections, and the Library work rooms. The auditorium was identified as too large for the library's needs and not an efficient use of space. The alterations to the library in the subsequent renovation included installation of additional shelving and seating, the insertion of an additional floor into the auditorium and conversion of the space to stacks, and reprogramming of a number of spaces in the building.

In the 1980s planning for another building campaign began, executed between 1990 and 1993. At this time, a major addition to the library was completed according to plans by Mark Mitchell Associates, bring the building to its current appearance. The addition included two wings extending from the original J-shaped footprint to create a square plan enclosing a new central atrium. While obscuring the original north and west elevations, the original portions of the 1928 building were retained in place. Changes to the 1928 building at this time served to facilitate access between the new and old portions of the library, including opening some door and window openings, adding some walls, and closing other existing openings. At the Children's stacks area, the west exterior wall dividing the stacks from the the one-story extension (formerly the Youth Room) was removed, enlarging the stacks, and a dedicated Children's Room restroom inserted. A portion of the east wall of this wing was also removed for improved flow with the new central atrium. The second floor which had been inserted into the auditorium space in the 1967-1968 campaign was removed. At the formerly open south end of the original auditorium space, several offices and work rooms were partitioned adjacent to the new main circulation desk.

The Jones Library is located within the Amherst Central Business District, listed in the National Register of Historic Places in 1991 and significant at the local level. The district is an approximately 9-acre area and has served as the town of Amherst's religious, civic, and commercial center since the early 19<sup>th</sup> century. The area experienced a series of significant fires in the 19<sup>th</sup> century, and as a result most buildings in the district date to after 1880. The district is significant under Criteria A and C in the areas of Architecture, Commerce, and Community Planning & Development. Despite the additions constructed at the rear of the building in 1993, the Jones Library retains integrity and contributes to the significance of the district.



Figure 1: Samuel Minot Jones (1836-1912), Amherst native and benefactor of the Jones Library (Source: Jones Library Special Collections).



Figure 2: Laying of the cornerstone of the Jones Library, 1927, with Allen H. Cox second from left (Source: Jones Library Special Collections).



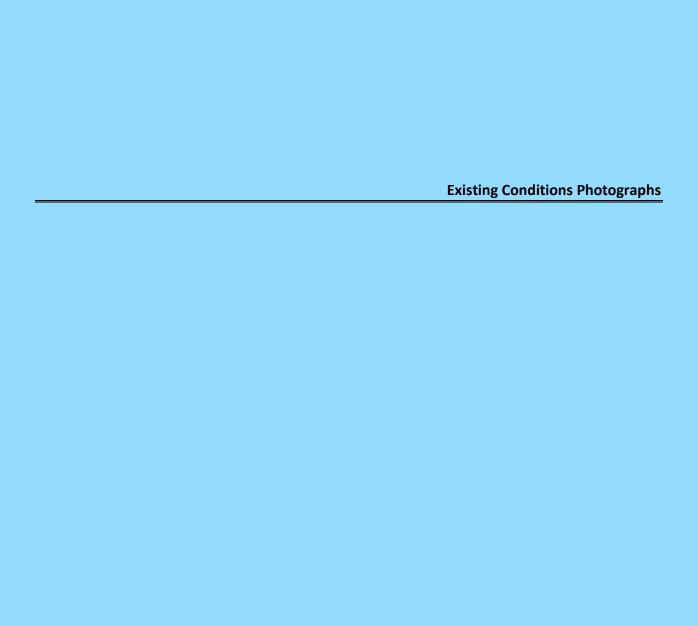
Figure 3: Construction of Jones Library, 1927 (Source: Jones Library Special Collections).



Figure 4: Jones Library, ca. 1932 (Source: Jones Library Special Collections).



Figure 5: Original rear wing of the Jones Library, undated (Source: Jones Library Special Collections).





1. South elevation, view northwest



2. East elevation, view northwest





3. North elevation, view southwest

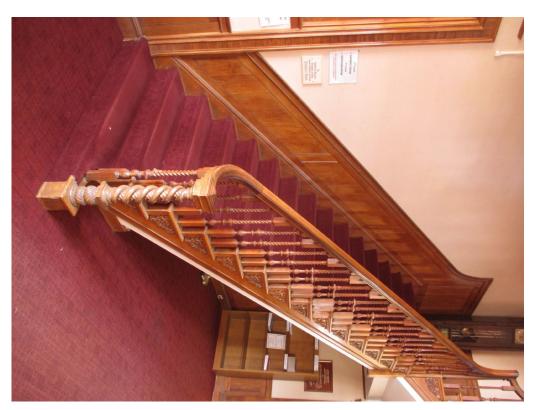


4. North elevation, view southeast





5. West elevation, view southeast



6. Historic main stair, view northwest





7. First floor, typical conditions in 1928 building, view northeast



8. First floor, typical conditions in 1993 addition, view northwest





9. First floor, stacks within former auditorium, view northwest



10. Second floor, typical 1993 renovation finishes, Special Collections storage, view southeast



MHC Inventory Form B: AMH.249

# Massachusetts Cultural Resource Information System Scanned Record Cover Page

Inventory No: AMH.249
Historic Name: Jones Library

**Common Name:** 

Address: 43 Amity St

City/Town: Amherst

Village/Neighborhood: Amherst Center; Local No: 14A-259; 259;

Year Constructed: 1928

Architectural Style(s): Colonial Revival;

Architect(s): Cox, Allen Howard; Luchini Milfort Goodell Assoc.; Putnam and Cox;

Use(s): Library;

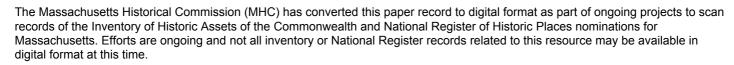
Significance: Architecture; Community Planning; Education;

Area(s): AMH.B

**Designation(s):** Nat'l Register District (12/27/1991);

Building Materials: Wall: Ashlar Random Laid; Stone, Cut; Stone, Uncut; Wood;

**Demolished** No



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Commonwealth of Massachusetts Massachusetts Historical Commission 220 Morrissey Boulevard, Boston, Massachusetts 02125 www.sec.state.ma.us/mhc

This file was accessed on: Wednesday, February 1, 2023 at 9:15 AM



#### FORM B - BUILDING

MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston

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L COMMISSION NADIS

In Area no. Form no.

|  |                       | An so |
|--|-----------------------|-------|
|  | / <b>A</b> , <b>A</b> |       |
|  |                       |       |
|  |                       |       |
|  |                       |       |

4. Map. Draw sketch of building location in relation to nearest cross streets and other buildings. Indicate north.

|   |                           |            | <u>—</u>       |          |
|---|---------------------------|------------|----------------|----------|
|   | V. Prospoct<br>Strong Ho. | Jones 4ib. | •              | Pleasant |
| - | J.W.                      | LYS        | 9 Nat.<br>Bank | N. Ple   |
|   | bect                      | Amity      | St.            |          |
| ( | 3. Prospect               |            |                |          |

| DO NOT WRITE<br>USGS Quadrant_ | IN | THIS | SPACE |
|--------------------------------|----|------|-------|
| MHC Photo no                   |    |      |       |

| 1 | . Town Amherst 249                           |
|---|--|
|   | Address 43 Amity St.                         |
|   | Name Jones Library                           |
|   | Present use /ibrary                          |
|   |  |
|   | Present owner Jones Library                  |
| 3 | . Description:                               |
|   | Date 1926-28                                 |
|   | Source Rand, Jones Library, 1969             |
|   | Style 18th-Century Colonial Rorival          |
|   | Architect Allen Cox                          |
|   | Exterior wall fabric Stone wood trin         |
|   | Outbuildings (describe)                      |
|   | Other features                               |
|   |  |
|   |  |
|   | Altered Date                                 |
|   | MovedDate                                    |
|   | Lot size:                                    |
|   | One acre or less Over one acre /             |
|   | Approximate frontage 195                     |
|   | Approximate distance of building from street |
|   | 48   |
|   | Recorded by Paul F. Norton                   |
|   | Organization Amhorst Hist. Com.              |
|   | Date 12 1275                                 |

(over)

5.

6.

| 7. Original owner (if known)  | Jones Library  |  |
|---|--|--|
| Original use Same   |  |  |
| Subsequent uses (if any) and dates  | same   |  |
| 8. Themes (check as many as applica   |  |  |
| Aboriginal Agricultural Architectural The Arts Commerce Communication Community development | Conservation Education Exploration/ settlement Industry Military Political | Recreation Religion Science/ invention Social/ humanitarian Transportation |
| 9. Historical significance (include exp   | planation of themes che  | cked above)  |
| Handsome reviv  | val of Colonial A  | Architecture.  |
| Stone work  | imitated after<br>Bolchortown  | stone, 18 th Century   |
| Excellent town liwell as stan   | donts in colleges  | in Amherst.  |
|   |  | A Paris Company  |
| and it is the same  |  |  |
|   |  |  |
| and to ease order   | <b>?</b>   |  |
| 747 Year administration of A  | (do.) (44)   |  |
| 10. Bibliography and/or references (suc early maps, etc.)                                   | h as local histories, de   | eeds, assessor's records,  |
| F. P. Rand, Jone<br>Ch. S. Walker, Sa   | s. Library, 196  | 69,  |
| LEON SICENSTRUCTOR  | THE STATE OF THE   | 1922.  |

AMH. 249 Community: Amherst

## MHC OPINION: ELIGIBILITY FOR NATIONAL REGISTER

|    | Date Received: 8/8/80Date  | e Due:            | Date Review   | ed:                                       |                |
|----|--|-------------------|---------------|---|----------------|
|    | Type: Individual   | District (Attach  | map indicatin | g boundaries)                             |                |
|    | Name: The Jones Library  | Inventory Fo      | rm: 51        |   |                |
|    | Address: 43 Amity St   | ., Ambers         | +, MA         |   |                |
|    | Requested by: Bornie \$  | sman, Librar      | rian          |   |                |
|    | Action: Honor  | ITC Grant         | R&C           | Other:                                    |                |
|    | Agency: Mass. Board of<br>Library Commissioner                           | Staff in charge o | f Review: M.  | A. Covaraugi                              | <u>/_</u>      |
|    | INDIVIDUAL PROPERTIES  |                   |               | DISTRICTS                                 | •              |
| 2, | Eligible Eligible, also in district Eligible only in district Ineligible | Consensus         | DOE           | _ Eligible<br>_ Ineligible<br>_ More info | rmation needed |
|    | _ More information needed  |                   |               |   |                |
|    | CRITERIA:  | A                 | В             | C   | D              |
|    | LEVEL:   | Local             | State         | National                                  |                |
|    | STATEMENT OF SIGNIFICA   | NCE by            |               |   | <u> </u>       |

National Register Nomination: Amherst Central Business District

### National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form.10-900a). Type all entries.

| 1. Name of Property  |  |                   |                              |
|--|--|-------------------|------------------------------|
| historic name Amherst Central  | Business District                              |                   |                              |
| other names/site number Same   |  |                   |                              |
|  |  |                   |                              |
| 2. Location  |  |                   |                              |
| street & number 1-79 Main Stre   | et; 13-31 North Pleasant                       |                   | A not for publication        |
| city, town 1-79 South Pleasant   | Street; 1-18 Boltwood                          | Avenue, Amherst N | A vicinity                   |
| state Massachusetts code   | 025 county Hampsh                              | ire code 01       | 5 zip code 01002             |
|  |  |                   |                              |
| 3. Classification  |  |                   |                              |
| Ownership of Property  | Category of Property                           | Number of Reso    | ources within Property       |
| X private  | building(s)                                    | Contributing      | Noncontributing              |
| X public-local   | X district                                     |                   | 4 buildings                  |
| public-State   | site   | 1_                | sites                        |
| public-Federal   | structure                                      |                   | structures                   |
|  | object   | 1                 | objects                      |
|  |  | 24                | 4 Total                      |
| Name of related multiple property listing  | ng:  | Number of contr   | ibuting resources previously |
| N/A  |  | listed in the Nat | ional Register               |
|  |  | *                 | Strong House (NR 1984        |
| 4. State/Federal Agency Certification  | ation  |                   |                              |
| Signature of certifying official Judith  Massachusetts Historical  State or Federal agency and bureau  In my opinion, the property mee | B. McDonough, Executive Commission, State Hist | oric Preservation | Officer  continuation sheet. |
| Signature of commenting or other official  | I  |                   | Date                         |
| State or Federal agency and bureau   |  |                   |                              |
| 5. National Park Service Certifica   |  |                   |                              |
|  | ition  |                   |                              |
| I, hereby, certify that this property is:  |  |                   | 8                            |
| entered in the National Register.  |  |                   |                              |
| See continuation sheet.  |  |                   |                              |
| determined eligible for the National   |  |                   |                              |
| Register. See continuation sheet.  |  |                   |                              |
| determined not eligible for the  |  |                   |                              |
| National Register.   |  |                   |                              |
|  |  |                   |                              |
| removed from the National Register   | •  |                   |                              |
| other, (explain:)  |  |                   |                              |
|  | Signature                                      | of the Keeper     | Date of Action               |
|  | Signature                                      | C. 1.10 1100pc    |                              |

| 6. Function or Use  |                          |  |
|---|--------------------------|--|
| Historic Functions (enter categories from instructions) Commerce/Trade-Business, Professional | Current Fund<br>Commerce | ctions (enter categories from instructions)<br>/Trade: Business, Professtional |
| Government: Town hall; Education: Library   | Governme                 | nt: Town Hall  |
| Religion: Church: Landscape: Town Common:   | Education                | n: Library   |
| Domestic: Hotels; Social: Meeting hall  | Religion: Church         |  |
| 7. Description  |                          |  |
| Architectural Classification (enter categories from instructions)                             | Materials (er            | nter categories from instructions)   |
|   | foundation_              | Brick  |
| Federal, Victorian Eclectic, Georgian   | walls                    | Brick, Granite   |
| Revival, Colonial Revival, Richardsonian  |                          |  |
| Romanesque  | roof                     | Slate, Asphalt shingles  |
|   | other                    |  |
|   |                          |  |

Describe present and historic physical appearance.

The Amherst Central Business District, Amherst, Massachusetts, is a largely intact group of brick and stone buildings, most dating from ca. 1836 to 1930. The two and three-story attached brick commercial blocks meet at the junction of Amity, Main, South Pleasant, and North Pleasant streets in the center of town. The town center retains a late 19th century character. For more than 150 years, this junction has functioned as the religious, civic, and cultural center of Amherst. Two churches (MHC #521 and MHC #290) anchor the district on the south boundary. Town meetings were often held in the commercial blocks, and informal meetings were held in the hotels.

The Amherst Town Hall (MHC #519) a large Richardsonian Romanesque building in the eastern portion of the district, is the seat of local government. The Amherst Public Library (MHC #259), Amherst Historical Society (MHC #916), and the Amherst Cinema (MHC #259) are all located at the western edge of the district. The Common and surrounding commercial structures have undergone alterations since 1836, due to fire and/or civic pride, but the character and function of the area has remained consistent throughout the 19th and 20th centuries.

The Amherst Common, a long rectangle of about three-and-a-half acres, has been the dominant feature of Amherst Center since it was first laid out in 1788. It has been the site of commercial, social, civic, political, and recreational activities since that time. The Common was used as a military parade ground in the early 19th century. By mid-century, it was used for nearly all public occasions, including Amherst College Commencement and the annual cattle show. For thirty years, from 1853 to 1883, it was improved by grading, filling, and plantings. By ca. 1895, Spring Street, running parallel to College Avenue, was cut through the Common, following the path of most frequent use. The present nomination includes only the area north of Spring Street, approximately one-and-a-half acres. It is this section of the common which was significantly altered in ca. 1945, when the present parking lot was created, thus the segment included in the present nomination, though historically important, is considered noncontributing. The remaining portions of the common are not included in this nomination. Current plans call for the remaining two acres to be included in a future National Register nomination which would focus on the Amherst College buildings, located at the southern section of the common.

### National Register of Historic Places Continuation Sheet

Amherst Central Business District, Amherst, Massachusetts

Section number \_\_\_\_\_\_ Page \_\_\_\_\_\_

A discussion of the architecture of the Central Business District, including style, scale, and siting, follows. The continuity of facade depths and regularity of rooflines along South Pleasant Street and Main Street create a homogeneous environment that is enlivened by subtle architectural details in fenestration and ornament. Merchant's Row, on South Pleasant Street, and Phoenix Row, on Main Street, both face onto the Amherst Common.

The district has functioned as the town's commercial center since the early 1800s, and its boundaries have changed only slightly in the past 100 years. At the end of the 19th century, some of the businesses on the outer boundaries of the district were conducted in frame houses rather than commercial blocks. A stove dealer and the Amherst Tea Room were typical of those businesses conducted in domestic buildings on the area's fringes. Traditionally, Amherst Center has been a service-oriented commercial district. Today the buildings continue to be used for civic, religious, or retail activities.

In the early 19th century, buildings in this area included large frame hotels and commercial buildings. After a series of catastrophic fires between 1838 and 1881, brick and stone became the preferred building materials. The existing large commercial blocks in the district were constructed after the 1881 fire, and very little alteration has occurred since that time. The majority of buildings today are typically 19th century Victorian in style and scale, presenting a unified streetscape of attached two and three-story structures with large display windows and well-defined entries.

The district includes has three well-travelled alleys ranging from the width of a car to the width of a single person. In the 19th century, these alleys led to livery stables or additional commerce that did not need high visibility. Currently, the alleys provide pedestrian access to rear shops and parking areas.

A description of contributing and noncontributing buildings in the district follows. The discussion is organized street by street.

#### SOUTH PLEASANT STREET

Beginning at the southwestern end of the Common:

Only four buildings in the Amherst Central Business District predate the 1838 fire. One is the present Town and Country Building (the former Baptist Church) (MHC #290) erected in 1836. Located at 79 South Pleasant Street the building is a front-gabled, three-story brick building that retains a flushboarded pedimented gable and wooden steeple. It is one of two ecclesiastical buildings in the Central Business District. The building currently houses a real estate company. The center entryway features a semicircular, leaded-glass fanlight set within a brick keystoned arch. The

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upper-stories have paired, recessed windows with flush-set stone lintels and projecting sills. The center pair of windows is topped by half-round brick arches that repeat the entry motif. (Other early buildings in the district include the Strong House (ca. 1744), the Montage House (ca. 1800), and the Episcopal Rectory (ca. 1830))

Adjacent but not attached to the north is the Hunt Building at 63 South Pleasant Street (MHC #289), which was built in 1881. Although this building was not damaged in the 1879 fire, its owner, W.W. Hunt, rebuilt it amid the flurry of post-fire reconstruction that occurred along Merchant's Row from 1879 to 1881. The building originally had a partial fourth floor over the central three bays and a stepped-front profile. The present facade is Georgian Revival with fluted engaged pilasters and stonework ornamented with rosettes. The asymmetricality of the ground-floor storefronts is balanced by the evenly spaced facade bays. A stone polychrome arch spans the center second-story windows. The flat roofline features a cast-metal cornice with neoclassical swags and wreaths. The degree of cornice ornamentation is more elaborate than that of the other buildings on Merchant's Row.

An alley separates the next building to the north from the <u>Hunt Building</u>. 55 South Pleasant Street (MHC #288), is a small, two-story frame building. Constructed in 1879, this building to replaced the previous frame structure that burned in the fire. This building is unique within the district; it is the only wood-frame commercial building surviving in the district. The upper story of this modest building is one room deep and features a truncated roofline. The present asymmetrical facade appears consistent with the pre-1879 storefront.

Attached to the north is the <u>Cutler Block</u> (MHC #287) at 45 South Pleasant Street, built in 1879 by George and P. Cutler. It was designed by William F. Pratt of Northampton to replace the previous building on the site, which burned in the fire of 1879. It was constructed of brick, with Fitzwilliam quarry trim stone, wall stone from J.G. Ward's Pelham quarry, a cast iron cornice manufactured in Springfield, and iron columns. This Victorian commercial structure, eight bays wide, displays Italianate styling in the projecting broken pediments. The cornice, beneath the flat roof, is elaborately detailed with brackets, dentils, and circlets.

The Williams Block (MHC #286) 31-35 South Pleasant Street, ca.1880, replaced the Adams Block, which also burned in 1879. The earlier structure was a two-story building with slender Gothic windows on the second level. The present structure is the largest commercial building on South Pleasant Street. It is a red brick Victorian commercial structure housing three shops. Recessed facade bays and projecting brick detail create the richest pattern along Merchant's Row. Full-height brick piers divide the facade's ten bays, which are further enlivened by elaborate horizontal brick detailing at

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the second-story level. Arches with granite keystones top long, narrow, arched windows, which are separated by hexagonal decorative elements of granite.

The northernmost contributing structure in the district is the Savings Bank Block (MHC #285) at 27 South Pleasant Street. Built after the 1897 fire, this modest Victorian vernacular brick and marble building is typical of late 19th century bank architecture. Similar examples can be found in both nearby towns of Greenfield and Northampton. The upper stories exhibit restrained elegance in the marble hooded arches above the windows. The first-floor, two-part storefront with fixed glass windows appear to be intact; however, the side entrance may be a 20th century alteration. Currently, the building continues its original use as a bank.

On the corner of South Pleasant and Amity Streets is the modern Amherst Savings Bank building, built in 1968. It is a two-story brick and glass noncontributing building, sited at an angle to the junction. It follows the footprint of a previous 20th century corner building that housed at various times the A & P food store, a men's clothing shop, a five and dime store, and the Jeffrey Amherst bookstore.

#### BOLTWOOD AVENUE

The <u>Grace Episcopal Church</u> (MHC #521) at 18 Boltwood Avenue, was built in 1866. Designed by Henry Dudley of New York City, it was constructed of gray gneiss quarried in Leverett. Like many other examples of Episcopal Church architecture of the period, it displays Gothic Revival styling. The offset, buttressed tower was added in 1868, and a rose window was installed in 1925.

The Episcopal Rectory, to the south of the Town Hall at 14 Boltwood Avenue (MHC #520) is a Federal/Italianate frame structure of ca. 1830. It is five bays wide with a porticoed center entry.

The Amherst Town Hall, built 1889-1890 (MHC #519) was designed by Henry S. McKay of Boston and constructed by the Boston firm of Mead, Mason and Co. The brick Romanesque Revival building is the focal point of the Central Business District. The large scale and asymmetrical massing of forms are characteristics similar to the large public buildings found in the neighboring towns of Northampton and Easthampton. This building features a brick turreted clock tower and an arched, recessed entry defined by a sawtooth sandstone pattern. Groups of arched windows, defined by granite trim, light the various facade gables. Square windows spiral around the brick turret, which rises from a rusticated stone foundation. Carved pink granite trim and ornament further enrich the exterior.

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Main Street runs along the northeastern boundary of the Common. The buildings on Main Street, from the east to west, are as follows:

#### MAIN STREET

At the eastern boundary of the district, 73-79 Main Street (MHC #485) houses the Albion Bookshop. This single-story brick building contains two storefronts, each with its own entry. The simple facade may have been altered after its original inception as a theater ca. 1928.

Behind the brick bookshop stands a large, center-chimney frame house, the Montage House (MHC #915) ca. 1800, believed to be the oldest house on the block. It is not known when this building was moved back from the road to the rear of the lot.

There are three noncontributing buildings south of the bookshop. All are historic buildings that received incompatible alterations in the 1950s. 63 Main Street is a two-story Greek Revival sidehall-plan domestic structure of ca. 1850 with a substantially altered facade and synthetic siding. Next to that, to the south, is the Associate Realty Building of ca. 1850, which has also had extensive facade alterations and is presently a single-story, brick and glass vernacular structure. 61 Main Street, adjacent to the south, is a four-bay, 19th century brick commercial building that has also had extensive facade alterations. None of the three noncontributing buildings are out of scale or massing with the contributing buildings in the district.

The <u>Lincoln Building</u>, 40 Main Street (MHC #488) is a large brick Georgian Revival building, constructed in 1910. The present building was designed by James H. Ritchie of Boston and built by the Allen brothers of Amherst. The symmetrical facade, with two storefronts, features an evenly spaced fenestration pattern. The doorway leading to the upper story apartments appears intact. A recessed connector, one bay wide and two-stories above a granite-arched passageway, appears contemporary with the main block; since 1928, it has joined the Lincoln Building with the adjacent Nash's Block.

Nash's Block, also known as the Amherst Building (MHC #489) was constructed after the fire of February 27, 1928. The modest facade features panel brick ornament on the second and third-stories beneath a simple, geometric cast-iron cornice. Street-level facades have been altered in recent decades.

The Marsh Block, 26 Main Street (MHC #490) was damaged in the fire of 1928. The present facade dates from that rebuilding. It is the only building in the Central Business District displaying Art Deco references—in the form of subtle Art Deco ornament at the base of the vertical windows. Additional zigzag patterning may be obscured by the applied signage. This modest three-story brick structure replaced a ca. 1840 Greek Revival frame building with a colonnaded two-story porch.

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The Holland Block, 18 Main Street (MHC #491) stands adjacent to the Marsh Block on the east. Built in 1840, it was damaged by fire in 1883. It is a three-story brick building with a typically flat roofline, and atypical fenestration pattern. The evenly-spaced windows are not centered on the facade, but rather are all shifted one-bay to the east to accommodate the staircase inside. Brick banding ornaments the cornice line.

On the corner of Main Street and North Pleasant Street is the Cook's Block (MHC #492) which was partially rebuilt in 1881. It is the largest building on Phoenix Row, this and other buildings on the northern side of Main Street were reconstructed after the fire of 1838. Mid 19th century photos show an imposing three-story structure with stepped gables and a pitched roof. Fires in 1872 and 1883, centered in buildings to the rear of the block, caused some damage although more extensive damage was caused by the 1881 fire. At that time, a flat roof and bracketed cast-iron cornice and a small central pediment with name and date placque were added, along with projecting window lintels. The storefronts have been altered; however, the original asymmetrical fenestration pattern on the upper floors remains intact.

#### NORTH PLEASANT STREET

Two buildings on North Pleasant Street anchor the northern end of the district's major commercial intersection. The most imposing is the Thompson Building at 13-17 North Pleasant Street (also known as the Dickinson Block) (MHC #256). Like many in the district, this large, three-story structure was built following a fire (in this case the fire of 1884), and replaces a previous structure on the site. It has a two-part facade to accommodate the slope of the street. The fenestration pattern is defined by angled brick patterning, flush sandstone lintels, and sills.

The northernmost building in the district stands just south of the alley that leads to the parking area behind the Main Street commercial buildings. Built in 1880, (MHC #254) is a single-story, one-room-deep Victorian vernacular commercial building with ornamental brick patterning at the roofline. The large, fixed pane window, although contemporary, is in keeping with the character of the building.

#### AMITY STREET

At the western end of the Central Business District lies the Amherst Historical Society building (the <u>Strong House</u>), the <u>Jones Library</u>, the <u>First National Bank</u>, and the Amherst Cinema.

The <u>Strong House</u>, 67 Amity Street (MHC #916) was built ca. 1744 by Nehemiah Strong. Listed on the National Register of Historic Places in 1984, it is one of about two dozen 18th-century houses extant in Amherst and the oldest

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building in the district. Despite alterations in the 1760s, 1780s, 1790s, and the 1850s, it retains many elements of 18th century Connecticut River Valley architecture. The symmetrical facade with center-entry plan features double-leaf front doors and a small portico with two Doric columns. The building is surmounted by a gambrel roof with dormers.

The Jones Library, 43 Amity Street (MHC #259) designed by the Boston architects Putnam and Cox, was opened to the public on November 11, 1928. In the 1920s, the architects were active in Amherst designing fraternity buildings for Amherst College and were familiar with the existing architecture in the central business area. The library, however, is atypical of the brick structures they designed for the College. The library is a Colonial Revival structure with a gambrel roof and symmetrical facade. Clapboard side wings flank the stone facade. Stone for the library was collected from mill sites, foundations, and old stone walls in the surrounding towns. Elliptical leaded gable fanlights and the projecting portico are among of the domestic details that the architects employed to maintain compatibility with the scale of adjacent domestic architecture.

The Amherst Cinema, 30 Amity Street (MHC #258) of 1926 predates the library and neighboring bank by two years. In the 19th and early 20th centuries, a building on this site was used as a livery stable. In 1926, the theater auditorium was added to the rear of the existing building; the slate-covered hipped-roof cinema addition is still clearly visible. Designed to seat 850 people, it was intended to be fireproof and was built with brick walls, cement floor, and a metal roof. The facade features a projecting marquee below which a recessed entrance leads to a lobby. Flanked by large, fixed-glass storefronts, the cinema is small in scale and compatible with adjacent residential architecture.

The First National Bank, 11 Amity Street (MHC #257) was constructed by the Hoggson Brothers firm of New York City and was opened November 21, 1928, ten days after the opening of the new Jones Library next door. This Georgian Revival brick building features a revival doorway, which integrates some domestic elements such as the scrolled pediment and urn. The flanking two-story arched and leaded windows repeat the arched, segmented window tucked behind the pediment. Two paired endwall chimneys and a slate-covered hipped roof with a geometric balustrade add elegance while maintaining a compatible scale with the library.

#### Summary

The commercial, religious, and civic architecture in the Amherst Central Business District dates from ca. 1838 to 1930. Rebuilding in the 19th century reflects a desire to improve, beautify, and elaborate the business center. Twentieth century architecture, in contrast, reflects a conscious effort to

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maintain the status quo and promote the reputation of Amherst as a charming, quiet, yet modestly sophisticated oasis.

This area had been the commercial hub of the town prior to the earliest extant structure, as shown on an 1833 map. The Common has been the dominant landscape feature, evolving from swampy hay field early in the 19th century to an open, parklike focus of the downtown area by the end of the 19th century. However, the portion of the common included in this nominatin has experienced major alterations with the addition of the present parking lot, and therefore considered noncontributing. Present-day roadways are based on the pre-1833 highways and have seen minimal change over the past 255 years.

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Archaeological Description

While no prehistoric sites are currently recorded in the district it-is possible that sites are present. One site is recorded in the general area (within one mile). A frog pond was also historically present near the center of the common. This wetland resource may represent a locational characteristic favorable for prehistoric settlement in the area. Since limited historic period development occurred on the common a moderate potential exists for locating prehistoric sites in the common locale. Numerous fires and extensive 19th century rebuilding in stone indicates a low potential for prehistoric site in other areas of the district.

A moderate potential also exists for locating significant historic period survivals within the district. Extensive fires and subsequent rebuilding in stone and brick usually with cellars throughout the district has impacted earlier survivals in the area. Important historic period survivals may include ca. 1753 tavern remains at the corner of Amity and Pleasant Streets, structural remains of outbuildings and occupational related features (trash pits, privies, wells) associated with the ca. 1774 Strong House on Amity Street and street refuse/trash areas associated with public occasions held on the common throughout the 19th century. Since the frog pond historically reported on the common is now filled, sealed historic and/or prehistoric deposits may be present in the common area.

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| 8. Statement of Significance   |  |  |
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| Certifying official has considered the significance of this property and allowed nationally significance of the property significance of this property significance of this property significance of this property significance of this property significance of the signi | y in relation to other properties:<br>tatewide                                   |  |
| Applicable National Register Criteria XA BXC   | D  |  |
| Criteria Considerations (Exceptions)   | D E F G  |  |
| Areas of Significance (enter categories from instructions)  Architecture  Commerce  Community Planning and Development   | Period of Significanceca. 1744-1930  | Significant Dates 1838, 1859, 1872, 1877, 1881, 1893 |
|  | Cultural Affiliation N/A   |  |
| Significant Person N/A   | Architect/Builder Putnam & C<br>Pratt, William F; Dudl<br>H.S., Mead, Mason & Co |  |

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Amherst Central Business District retains integrity of location, design, setting, materials, workmanship, feeling, and association, and fulfils Criteria A and C (as well as Criteria Consideration A) of the National Register of Historic Places on the local level. The nine-acre area has served as the town's institutional and commercial focus for well over 150 years. After a series of devastating fires, most buildings in the district are of late 19th century construction and include well-preserved examples of the popular architectural styles of the period.

Amherst was originally settled as part of Hadley Plantation, established in 1661. The first permanent settlement had occurred by 1728. In 1734, the area was formed as the East Hadley Precinct, becoming the district of Amherst in 1759 and was incorporated as an independent town in 1786. The initial settlement focus was near the intersection of Main and Pleasant Streets, in the nominated district. There are references to a tavern on the corner of Amity and Pleasant Streets prior to the establishment of the town, but the earliest surviving building in the area dates to 1774. The period of strongest historical significance and greatest growth for the Amherst Central Business District did not begin until the 1830s: an 1833 map confirms that retail business has occupied the same area for at least the past 150 years. During the Federal period, Amherst's center had a bank, post office, inn, and bazaar in addition to other services.

The Central Business District was plagued by fires in 1838, 1859, 1872, 1877, 1881, and 1883, and rebuilding followed after each incident. Most of the existing architecture dates from rebuilding after 1880, except for the two buildings at 26 and 30 Main Street, which were damaged in a 1928 fire and rebuilt that same year. The fabric of the downtown has remained constant, with contiguous brick structures on two sides of the common since ca. 1883.

Prior to 1830, newspaper advertisements suggest that the business community was vital and competitive. The following is a sample of business information

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Samuel Fowler Dickinson and Hezekiah Wright Strong, and the school was erected in 1814. The Academy was prosperous from its beginning and tuition was free to "any pious student preparing for the ministry." Amherst College, to the south of the Central Business District, grew out of the Academy and acquired College status by 1821.

Mount Pleasant Institute, established in 1827, was second in importance to Amherst College. It provided a classical education to boys from four to sixteen years of age. One of the students was Henry Ward Beecher, who went from the Institute to Amherst College about 1830.

The Common, which was the hub around which the Central Business District revolved, was altered in relation to its uses through the 19th century. In 1788, the committee who laid out the new roadways in Amherst reserved "...in some places the whole breadth of the old highways for the particular or public use...including that area known as the Commons at the Center Village." (Carpenter and Morehouse, History of Amherst, p. 407). The basic configuration of the Common's outer boundaries has remained constant since 1788, although alterations have reflected use patterns of various periods.

In the early years of the 19th century, the area of the village common immediately south of College Hill was used as a military parade ground and pastureland. Near the center, it held a frog pond. For many years, the hay grown on the Common was sold at auction and the profits went into the treasury of the fire companies. "The Common was used on nearly all public occasions. On Amherst College commencement day the Common was the general place of assembly for visitors from neighboring towns. Booths, tents and stands were erected on the common and pedders, auctioneers and fakirs of all descriptions made their headquarters..." (Carpenter and Morehouse, p. 408).

The Common has been a determinant in creating the unique character of the Amherst Central Business District. The presence of the Common has sustained a pattern of grouping buildings along only one side of the street, and leaving the Common perimeters open. This open frontage has provided a gathering place for the population to pursue recreational, civic, commercial, and social activity.

The Common today is a three-and-half acre, two-block rectangle of grassy open space which slopes to the east and is shaded by large deciduous trees along the perimeter. The boundaries follow South Pleasant Street, Main Street, Boltwood Avenue, and College Avenue. Since the 1890s, Spring Street has divided the Common into two asymmetrical parcels, with the southern section, contiguous to the north lawn of Amherst College Campus, surrounded by buildings associated with the college and the northern section bounded by the commercial blocks of the nominated district. The present nomination includes only the area north of Spring Street, approximately one-and-a-half acres. It

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is planned the remaining two acres of the common will be included in a future nomination which would focus on the Amherst College buildings, located at-the southern section of the common.

The fire of 1838 caused extensive destruction to the Main Street businesses. The building known as Cook's Block (MHC #492), on the corner of Main and North Pleasant Streets, was destroyed and renamed thereafter the Phoenix Row, for arising from the ashes of the extensive fire. (Phoenix Row would suffer bad fires again in 1872 and 1883.)

Fire sales characterized businessmen's attempts to recoup their losses. Seneca Holland's newspaper advertisement of March 21, 1838, reads: "Having removed such of his Goods as were saved from the late fire to the building next south of Nathan Dickinson's dwelling house, offers them to his customers at reduced cost." And Alfred Smith, the proprietor of a Hat and Cap store, advertised, "Since the great fire in Amherst, ... has fitted up a shop in the west end of Mr. L. Root's house, North of the Amherst house, where he will be happy to wait upon any who may favor him with a call." After the fire, prudence dictated that the downtown evolve from a grouping of small-scale frame structures, susceptible to fire, to the contiguous series of brick buildings that continue to frame three sides of the Amherst Common.

The Early Industrial Period (1830-1870) saw the commercial area expand and contract in subtle degrees through the middle decades of the 19th century, with the population reaching 3,400 by 1865. There was some commerce along Maple Street (Boltwood Ave.) in domestic structures of ca. 1850. Shops extended north to the junction of North Pleasant and Kellogg Street, and the South Pleasant Street Merchant's Row stopped at the Hunt Building (MHC #289). Commerce continued to flow south to the Baptist Church (MHC #290) which had rented out space in the basement and vestry as commercial space ca. 1850; by 1865, church had eliminated that practice.

The earliest businesses, ca. 1830-1850, were located in the Palmer Block (present Town Hall site), Boltwood Hotel, Amherst Hotel, Mansion House and the Howland building, none of which survive.

Between 1830 and 1850 the Amherst business district contained or supplied the following: hotels; dry goods; hats, bonnets and caps; an apothecary; some drapers and tailors; a dentist and a doctor; barbers and a hairdresser; butcher stands; harness, trunk and valise makers; two bookstores; two newspapers; two furniture makers (which also made coffins); a watch and clockmaker; attorneys; a jewelry and musical instrument shop; a newspaper; book binders; two shoe and boot shops; and a daguerreotype studio. Town meetings and socials were held in the hotels. Those businesses supplied goods and services to the local population. For the following thirty years, until 1880, these suggest the standard group of businesses and services that



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flourished in Amherst, the goods and service required by the majority of resident farmers and their families, professors, students and visitors.

During the next twenty-year period, from 1850 to 1870, the end of the Early Industrial Period, the town population increased by more than 53% to over 4,000. The Massachusetts Agricultural College, granted in 1867, and Amherst College's expansion contributed to the growth of the town and commercial needs. This was further encouraged by newly established railroad connections. The first railroad to enter Amherst, in 1853, was built by public subscription, which raised \$50,000. It connected Amherst and Palmer and was called the Amherst and Belchertown Railroad. Austin Dickinson, the most influential local lawyer in Amherst at the time, was instrumental in the rail negotiations. (He was also the treasurer of Amherst College and brother of poet Emily Dickinson.) The east-west rail connection between Northampton and Boston was completed in 1887.

The period 1850-1870 saw the addition of a number of new businesses to the district, including: three saloons, a baker, at least three insurance agents, a lamp shop, a stove shop and an artist/photographer. In general, while the number of businesses increased, the type of specific goods and services and their location in the business district remained consistent. There were occasional relocations but address changes occurred more frequently from renumbering of buildings than from physical movement within the town. (At the end of the 20th century, the Central Business District includes three bookshops, two shoe stores, a pharmacy and several clothiers, each continuing the trade of a business existing in town in the 19th century, although not necessarily occupying the same space.)

Throughout the 19th century, the Central Business District included religious and civic activity. The Baptist Church (MHC #290), built at the south end of the business district in 1838, continued to hold services regularly. The Grace Episcopal Church (MHC #521), which was loosely affiliated with Amherst College, was built on the corner of Maple and Spring Streets in 1866. The First Congregational Church had been located outside the Central Business District since 1828, when the congregation hired W.S. Howland to design and build the brick building on the southwest corner of College Street and Northampton Road, to the south of the district. That served as the Congregational Church until the present building was constructed in 1867; at that time, the congregation moved slightly to the east of the center of town (and east of the district), on Main Street, into an English Country Gothic Revival building designed by C.W. Lessey.

Town meetings, led by the Town Moderator, were the annual forum where every citizen was able to be heard on local issues. Originally town meetings were held alternately in the First and Second Parishes, later in Sweetser's Hall, the Amherst House, or the Palmer Block. The idea of a Town Hall was first



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raised at town meeting in 1851 and in typical Amherst style was put to a committee for the next 37 years. The 1888 fire, during a major blizzard, in which Palmer's Hall was burned to the ground, was the impetus to look for a permanent town hall site. Within two years they had acquired a site, hired Henry S. McKay of Boston as architect and Mead, Mason and Company, also of Boston, as contractor, and erected the present building (MHC #519). Although the building was completed in 1890, the clock was not added to the tower until 1900. The first town meeting in the new building was held on January 14, 1891.

The Common continued to be the physical and visual center of the district as a new attitude toward public space was evolving. In 1857 the Amherst Ornamental Tree Association was formed to lay out and ornament the public Common, as well as render improvements throughout the village. W. A. Dickinson and H. C. Nash were the leaders of the organization which had the pond in the southeastern corner of the Common filled in 1857, authorized tree plantings on the Common in 1858, installed a fountain in 1861, and continued grading and filling for more than 17 years. In 1875, W. A. Dickinson received a plan from Frederick Law Olmsted with instructions for the setting of trees and other improvements on the Amherst Common, including a gazebo or bandstand. However there is no evidence to indicate the Olmsted plans were ever executed. By 1883, the Association, which included town business and civic leaders, had spent more than \$3,000 in voluntary contributions to improve the town.

In the Late Industrial Period (ca. 1870-1915), Amherst was undergoing a physical renaissance. The fires of 1872, 1879, 1881, and 1883 changed the physical character of Amherst. During this period, the downtown commercial structures assumed much of their present appearance. Even buildings which were not damaged by the fire, such as the Hunt Building (MHC #289) on South Pleasant Street, were altered and updated during this period. The facade was renovated, the upper floors added, and a Neo-Federal cornice was installed in a spirit of civic pride.

By the end of the 19th century, Amherst had a firmly fixed image of itself both locally and throughout the northeast, if not the country. Because of Amherst College and the Agricultural College, Amherst was a very well documented community, unusually rich in cultural resources. Lecturing was the main entertainment of the period, and because of the presence of the colleges, Amherst drew so many famous lecturers, teachers, scholars and students that the town was often written up in the 19th century New York papers as a quiet, beautiful, education-oriented oasis.

Due to the rich academic life and its bucolic charm, many wealthy professors and many ministers chose to retire to Amherst at the end of the 19th century. They were crucial figures in seeking to maintain the traditional elements of the town. But a conflict seemed imminent in the 1890s: as local industries prospered, the results included increased housing needs, an increase in noise

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Amherst Central Business District, Amherst, Massachusetts

Archaeological Significance

Since patterns of prehistoric occupation in Amherst are poorly understood, any surviving sites could be significant. Surviving sites in this area can provide important examples of prehistoric settlement for interior pondside Connecticut Valley locales beyond the Connecticut River and it's tributaries. These sites may include smaller low density type sites used during fall and winter months when important riverine resources were low.

Historic period remains described above have the potential to provide detailed information on the religious, civic and cultural center of Amherst as it changed from agricultural based self sufficiency at the time of settlement to cashcrops and products for market in the 18th century. By the early 19th century the community had changed to a thriving commercial center. Structural survivals can help reconstruct the 18th and early 19th century character of the village which was destroyed by successive fires from 1838 to 1881. Most existing structures date from rebuilding after 1880. Occupational related features and street refuse can help document the character of Amherst's population as it grew and changed from its agricultural to commercial base.

(end)

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|  |  |
|  |  |
| *  |  |
|  | See continuation sheet   |
| revious documentation on file (NPS):   | See continuation sheet   |
| preliminary determination of individual listing (36 CFR 67)  | Primary location of additional data:   |
| has been requested   | State historic preservation office   |
| previously listed in the National Register   | Other State agency   |
| ■ [MOTERN TO A TO MOTERN TO A STATE OF THE MOTERN METERS OF THE STATE OF THE STAT |  |
| previously determined eligible by the National Register  | Federal agency   |
| designated a National Historic Landmark  | Local government   |
| recorded by Historic American Buildings  | University   |
| Survey #   | Other  |
| recorded by Historic American Engineering  | Specify repository:  |
| Record #   | Massachusetts Historical Commission  |
| Coographical Data  |  |
| O. Geographical Data creage of property <u>approximately 9 acres</u>   |  |
| JTM References  Zone Easting Northing  | B Zone Easting Northing D  |
|  | X See continuation sheet   |
| Verbal Boundary Description The Central Business District begins, at the wand North Prospect Streets, it then proceeds each of the northernmost boundary is at 31 North Pleas along South Pleasant Street to #79. The bound along the south edge of the Common to Spring Salasin Street.   | astward along Main Street to 79 Main Street ant Street and the district extends southwa ary extends east from #79 S. Pleasant Stree  |
| 2  |  |
| Boundary Justification The boundaries were drawn to include propertie in a tight geographic central area. The prope of Amherst and played a role in its developmen of the community. Streets and parcel lines we of the District.  | rties included were integral to the fabric t as the commercial, civic and religious hu   |
| 1. Form Prepared By Pioneer Valley Planning Com  | mission with MHC National Register Director  |
| ame/title Betsy Friedberg and Assistant Doug Ke  |  |
| rganization Massachusetts Historical Commission  |  |
| treet & number 80 Boylston Street  | telephone <u>(617)</u> 727-8470  |
|  | state Massachusetts zip code 02116   |

Amherst Central Business District, Amherst, Massachusetts

9. Major Bibliographical Reterences

### National Register of Historic Places Continuation Sheet

| Castian | mumah an | 9 | Dane | 1 |
|---------|----------|---|------|---|
| Section | number   |   | Page |   |

Amherst Central Business District, Amherst, Massachusetts

9. Major Bibliographical References

Town of Amherst. Tax assessments and real estate valuations. 1750-present Amherst Town Directories. 1869-1930 Barke, William. Map of Hampshire County, Mass. Philadelphia; Scott & MacLearn: 1854. Beers, F.W. County Atlas of Hampshire, Mass. New York. 1873 Hampshire County Registry of Deeds. Plan Books 1-3. Map of Amherst, 1771. Manuscript. JLSC. Jones Library. Map of Amherst, 1833. Alonzo Gray and Charles B. Adams. Boston. Birdseye View of Amherst. Lithograph. 1886. Burleigh. Troy, N.Y. JLSC. Jones Library. Sanborn Maps. 1887, 1892, 1902, 1910, 1916, 1930. JLSC. Jones Library Amherst Record. 1845-present. JLSC. Jones Library Amherst Historical Commission. Lost Amherst. Amherst, MA 01980. Atkins, Marjorie A.E. Leave the Light Burning. South Amherst, MA. McFarland, Wis. 1973. Barnes Photograph Collection of Amherst. 1925-1966. JLSC. Jones Library. Carpenter and Morehouse. The History of the Town of Amherst, MA. Amherst. 1896. Fish, Edwina. The History of the First Baptist Church. 1832-1982. Grace Church. The First One Hundred Years. 1865-1965. Church Archives. Hitchcock, F.H. The Handbook of Amherst, MA. Amherst, 1894. Lombardo, Daniel. Tales of Amherst: A Look Back. Jones Library, Inc. 1986.

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"Essays on Amherst History". Vista Trust. 1978. Amherst, MA.

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# **National Register of Historic Places Continuation Sheet**

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Amherst Central Business District, Amherst, Massachusetts

10. UTM References

|   | ZONE | EASTING | NORTHING |
|---|------|---------|----------|
| Α | 18   | 704100  | 4694650  |
| В | 18   | 704230  | 4694800  |
| С | 18   | 704230  | 4694150  |
| D | 18   | 704300  | 4694155  |
| Ε | 18   | 704300  | 4694250  |
| F | 18   | 704250  | 4694300  |
| G | 18   | 704025  | 4694300  |
| Н | 18   | 704100  | 4694240  |

### National Register of Historic Places Continuation Sheet

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Amherst Central Business District, Amherst, Massachusetts

10. Boundary Justification, continued

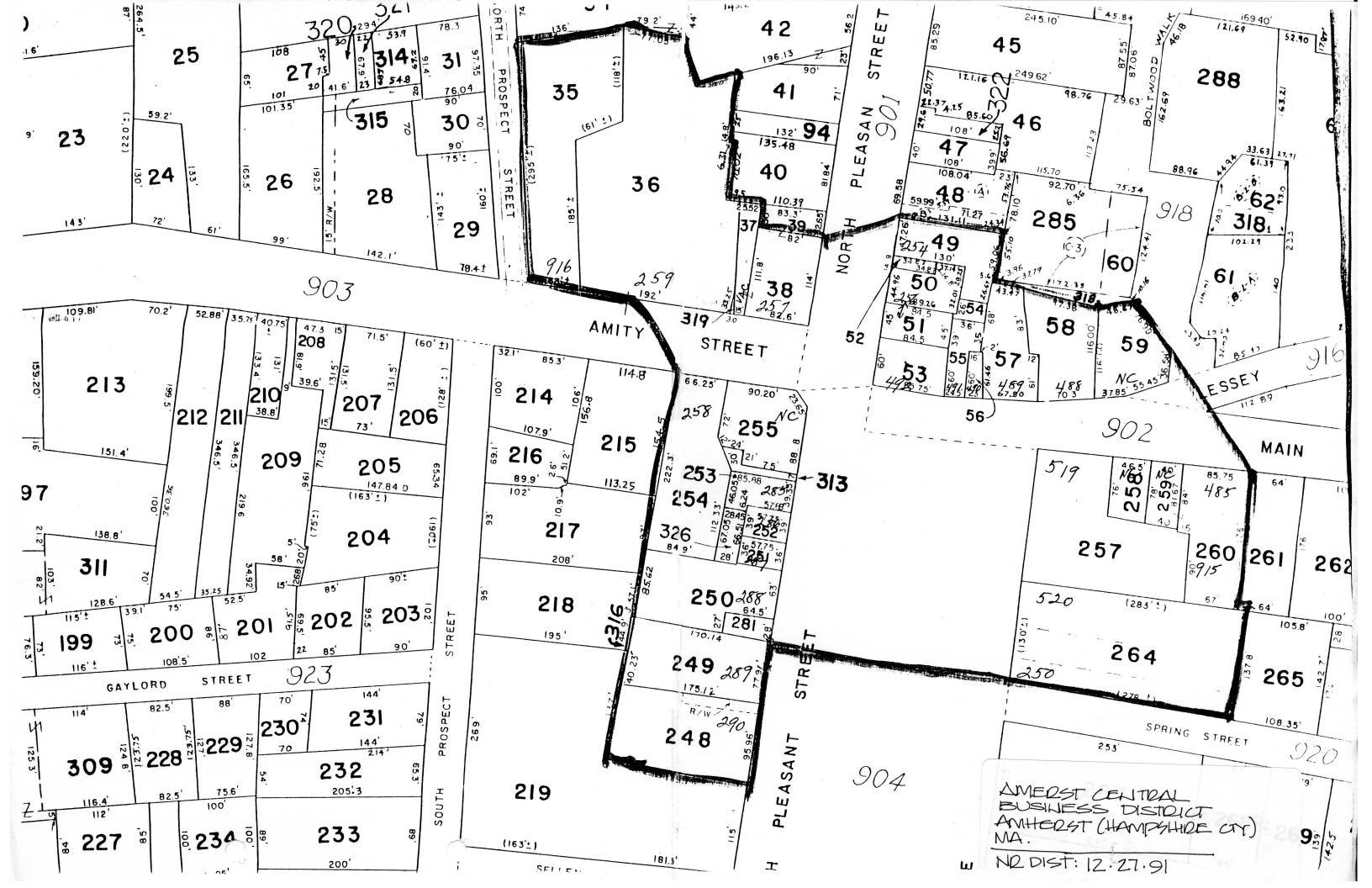
Directly East of the Central Business District, on Main Street, is the Emily Dickinson National Register District, which includes the Emily Dickinson House and surrounding domestic architecture. That district was listed in the National Register of Historic Places in 1977. To the north area and west of the presently nominated are residential areas developed in the 19th and 20th centuries. To the south lies the campus of Amherst College.

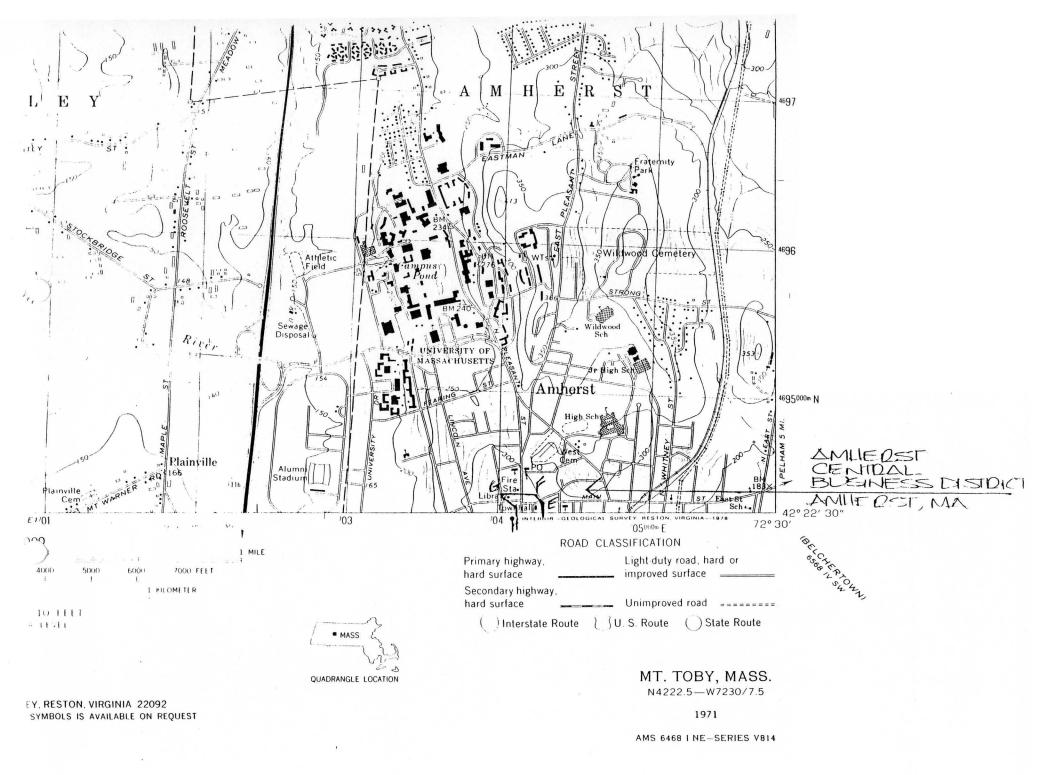
Only the northern third of the Common is included in the boundaries of the Central Business District. The larger portion, south of the district and north of College Street (Route 9), is bordered on the west by Amherst College fraternities, on the south by Amherst College administration building, Converse Hall, formerly a Amherst College library, and on the east by residence halls affiliated with Amherst College. It seems appropriate to include that portion of the Common in a future nomination for Amherst College. This nomination relates to commercial, civic and religious development in Amherst, therefor, thematically, the south section of the Common was not included in this nomination. The buildings surrounding the lower section of the Common are architecturally related to the development of Amherst College, not the business district.

#### AMHERST CENTRAL BUSINESS DISTRICT DATA SHEET

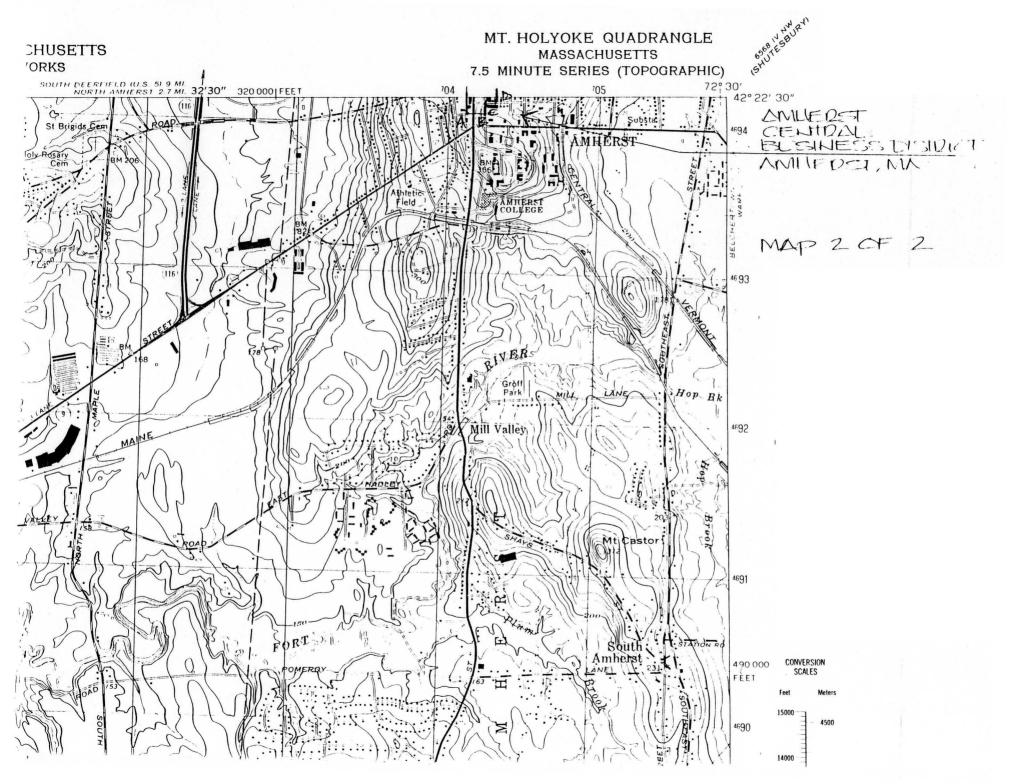
| MAP/PARCEL | INV # | STREET ADDRESS       | HISTORIC NAME          | STYLE                       | DATE      | RE SOURCE | C/NC        |
|------------|-------|----------------------|------------------------|-----------------------------|-----------|-----------|-------------|
| 14A-038    | 257   | 11 Amity Street      | First National Bank    | Georgian Revival            | 1928      | В         | С           |
| 14A-254    | 258   | 30 Amity Street      | Amherst Cinema         | Vernacular Commercial       | ca.1926   | В         | Č           |
| 14A-259    | 259   | 43 Amity Street      | Jones Library          | Colonial Revival            | 1928      | В         | C           |
| 14A-035    | 916   | 67 Amity Street      | Strong House           | Georgian                    | ca.1744   | В         | C*          |
| 14A-257    | 519   | Boltwood Avenue      | Town Hall              | Richardsonian<br>Romanesque | 1890      | В         | C           |
| 14A-264    | 520   | 14 Boltwood Avenue   | Episcopal Rectory      | Federal/Italianate          | ca.1830   | В         | С           |
| 14A-264    | 521   | 18 Boltwood Avenue   | Grace Episcopal Church | Gothic Revival              | 1866      | В         | C           |
| 14A-057    | 489   | Main Street          | Nash's Block           | Vernacular Commercial       | 1928      | В         | С           |
| 14A-260    | 915   | Main Street          | Montage House          | Federal                     | ca.1800   | В         | C           |
| 14A-053    | 492   | 2 Main Street        | Cook's Block           | Victorian Commercial        | 1881      | В         |             |
| 14A-055    | 491   | 18 Main Street       | Holland Block          | Victorian Commercial        | 1840      | В         | C           |
| 14A-056    | 490   | 26 Main Street       | Marsh Block            | Art Deco                    | 1928      | В         | C<br>C<br>C |
| 14A-058    | 488   | 40 Main Street       | Lincoln Building       | Georgian Revival            | 1910      | В         | C           |
| 14A-258    |       | 61 Main Street       | Sophia Bookshop        | Victorian Commercial        | 1890      | В         | NC          |
| 14A-258    |       | 63 Main Street       | Realty Bldg.           | Vernacular                  | 1850      | В         | NC          |
| 14A-259    |       | 63 Main Street       | House (modified)       | Greek Revival               | 1850      | В         | NC          |
| 14A-260    | 485   | 73-79 Main Street    | Albion Bookshop        | Vernacular Commercial       | ca.1928   | В         | С           |
| 14A-050    | 254   | North Pleasant St.   | Store                  | Victorian Commercial        | 1880      | В         | C           |
| 14A-051    | 256   | 13-27 North Pleasant | Thompson Building      | Victorian Commercial        | 1884      | В         | C           |
| 14A-255    |       | South Pleasant       | Amherst Savings Bank   | Modern                      | 1968      | В         | NC          |
| 14A-256    |       | South Pleasant St.   | Town Common            | N/A                         | est. 1857 |           | С           |
| 14A-256    |       | South Pleasant St.   | Fountain               | Victorian                   | 1861      | Obj.      | C           |
| 14A-253    | 285   | 27 South Pleasant    | Savings Bank Block     | Victorian Commercial        | 1897      | В         | C           |
| 14A-252    | 286   | 31-35 South Pleasant | Williams Block         | Victorian Commercial        | 1880      | В         | C           |
| 14A-250    | 287   | 45 South Pleasant    | Cutler Block           | Victorian Commercial        | 1879      | В         | C           |
| 14A-281    | 288   | 55 South Pleasant    | Bookstore              | Commercial Vernacular       | 1879      | В         | C           |
| 14A-249    | 289   | 63 South Pleasant    | Hunt Building          | Georgian Revival            | 1881      | В         | C           |
| 14A-248    | 290   | 79 South Pleasant    | Baptist Church         | Federal                     | 1838      | В         | С           |
| 7 +N-2 +0  | 250   | 75 South Fredsume    | ,                      | , ever a                    | , 000     |           |             |
|            |       | Contributing         | Noncontributing        |                             |           |           |             |
| Buildings  |       | 22                   | 4                      |                             |           |           |             |
| Sites      |       | 1                    |                        |                             |           |           |             |
| Structures |       | 0                    |                        |                             |           |           |             |
| Objects    |       | 1                    |                        |                             |           |           |             |
| TOTAL      |       | 24                   | 4                      |                             |           |           |             |

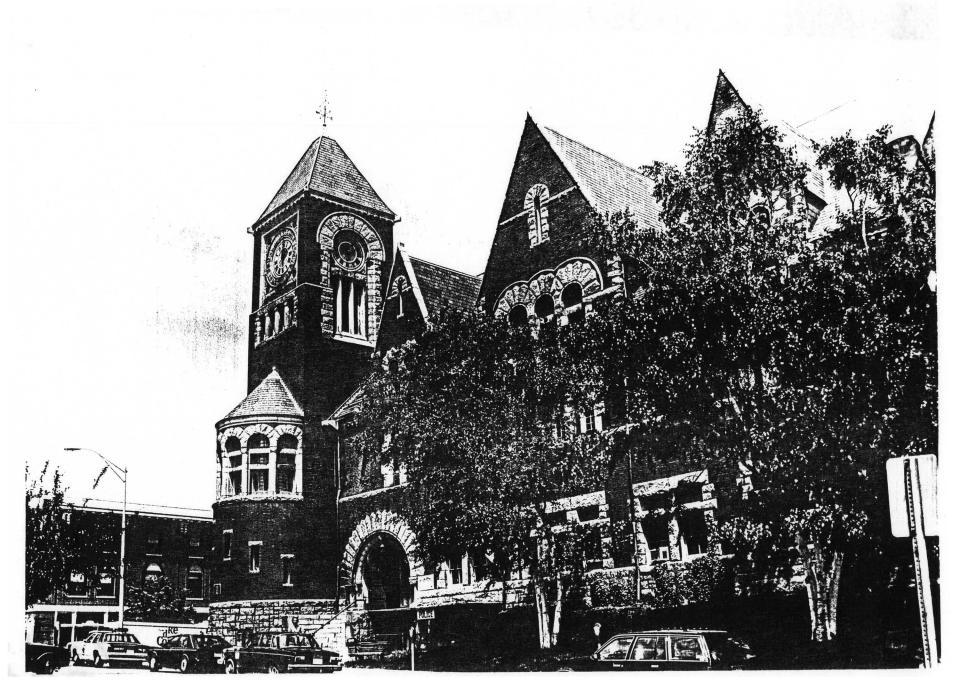
<sup>\*</sup> Previously listed individually in National Register:
Strong House NR: 7/5/84





MAP1 OF 2





1. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)



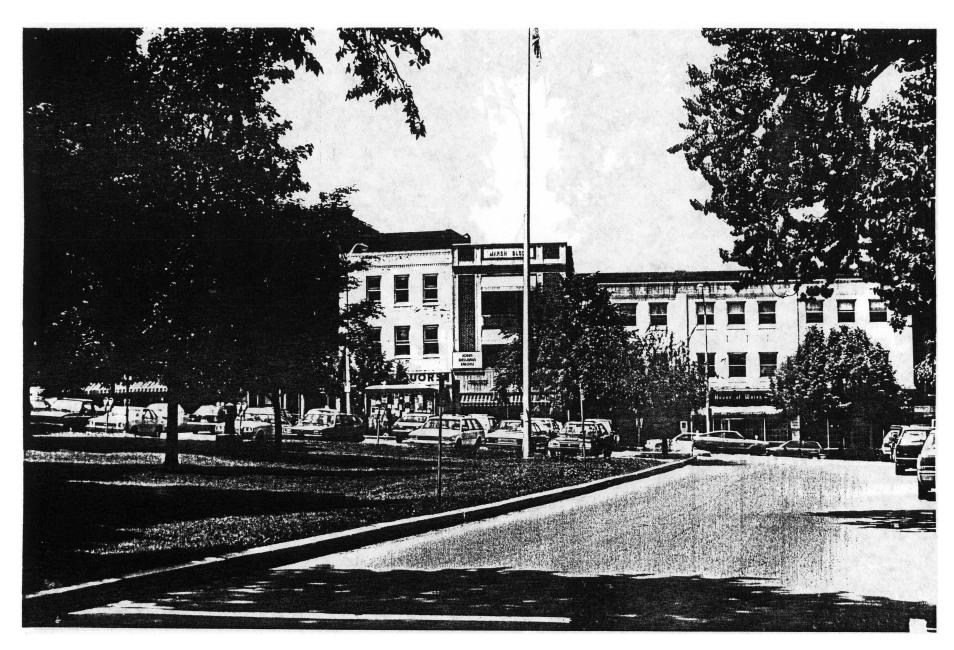
2. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)



3. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)



4. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)



5. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)



6. Amherst Central Business District (Photocopy from an orginal photograph by Pioneer Valley Planning Commission, c.1991)

# National Register of Historic Places Continuation Sheet



JAN 13 1992

MASS. HIST. COMM.

| Section number | er | Page |  |
|----------------|----|------|--|
|----------------|----|------|--|

|  |                                  | and the state of t |
|--|----------------------------------|--|
| SUPPLEMENTARY I  | LISTING RECORD                   | 9  |
| NRIS Reference Number: 91001859  | Date Listed:                     | 12/27/91   |
| Amherst Central Business District Property Name  | <u>Hampshire</u><br>County       | MA<br>State  |
| N/A<br>Multiple Name   |                                  |  |
| This property is listed in the National accordance with the attached nor the following exceptions, notwithstanding the National Park the nomination documentation. | mination document<br>exclusions, | tation subject to<br>or amendments,  |
| Bignature of the Keeper  | Dat                              | /2/27/9/<br>e of Action  |
| Amended Items in Nomination:   |                                  |  |

#### 7. Description

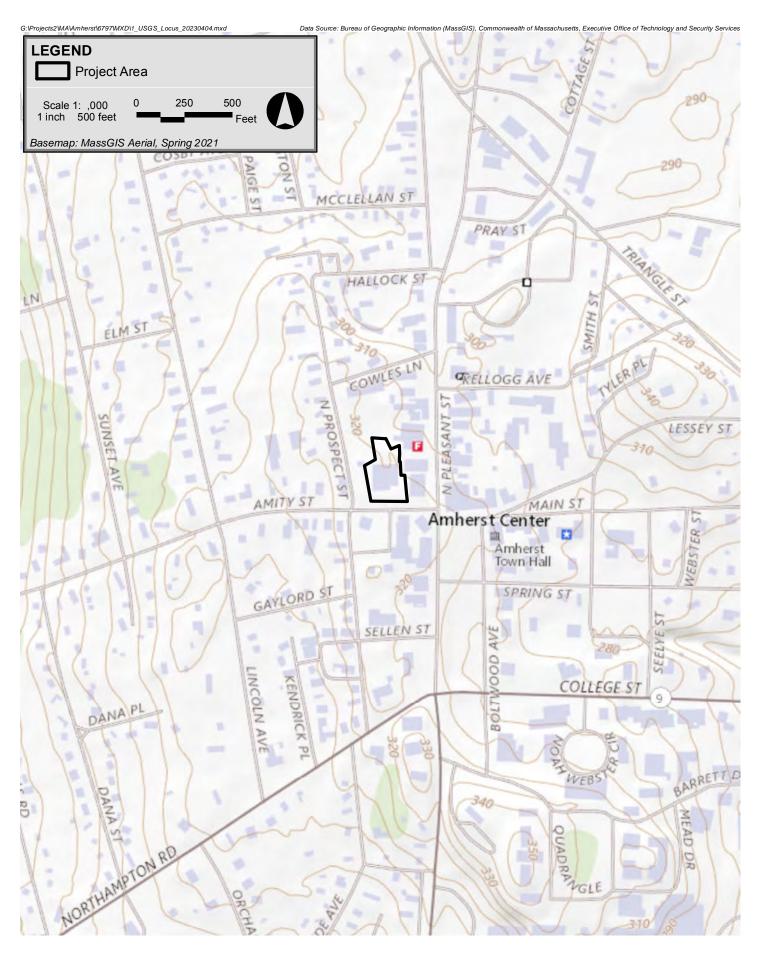
The correct date of construction for the Strong House is 1744, not 1774 as indicated in the data sheet. The clarification of this date is particularly important because it relates to the start of the period of significance for the district.

This information was confirmed with Doug Kelleher, MASHPO, by telephone.

#### DISTRIBUTION:

National Register property file Nominating Authority (without attachment)

COPIES ON JANUARY 15, 1992.



43 Amity Street Amherst, Massachusetts



| Jones | Library                      |                                |   |                    |
|-------|------------------------------|--------------------------------|---|--------------------|
| Prope | rty Name                     |                                |   |                    |
|       | nity Street, Amherst, MA     |                                |   |                    |
| Prope | rty Address                  |                                | Project   | Number:            |
|       |                              |                                |   |                    |
|       |                              |                                |   |                    |
|       |                              |                                |   |                    |
|       |                              |                                |   |                    |
| 1.    | Name of property: Jones      | i Library                      |   |                    |
|       | Address of property:         | Street 43 Amity Street         |   |                    |
|       |                              | City Amherst                   | 100.000.00  | State MA Zip 01002 |
|       | Hag a Bart 1 Evaluation      | of Ciamificance has submitted  | for this property?  yes no  |                    |
|       |                              | ed: Concurrently               |   | ion: Pending       |
|       | 11 505, adio 1 art 1 submitt | od. <u>concurrently</u>        | Date of certificati   | ion. renaing       |
|       |                              |                                |   |                    |
| 2.    | Project contact:             |                                |   |                    |
|       | Name Doug Kelleher, Eps      | cilan Associates Inc           |   |                    |
|       | Street 3 Mill & Main Place   |                                | City Maynard  |                    |
|       | State Massachusetts          | Zip 01754-2658                 | Daytime Telephone Number (978) 46                                   | 61-6259            |
|       | •                            |                                |   |                    |
| 2     | 0                            |                                |   |                    |
| 3.    | Owner:                       |                                |   |                    |
|       | Name Sharon Sharry, Libr     | ary Director Signatu           | ure V ~ 1   | Date 4/27/23       |
|       | Organization Jones Librar    |                                | 1 4   |                    |
|       |                              | er Identification Number 04-21 |   |                    |
|       | Street 43 Amity Street       | City_Ar                        |   |                    |
|       | State MA                     | Zip 01002                      | _ Daytime Telephone Number (413) 25                                 | 59-3106            |
|       |                              |                                |   |                    |
| 4.    | Data on building and reha    | bilitation project:            |   |                    |
|       |                              |                                |   |                    |
|       | Date building constructed    |                                | _ Total number of housing units before                              |                    |
|       | Type of construction: Ma     |                                | Number that are affordable:   | 0                  |
|       | Use(s) before rehabilitation |                                | Total number of housing units after re                              | ehabilitation: 0   |
|       | Proposed use(s) after reha   | nab. expend.: \$21,841,100     | Number that are affordable:  Floor area before rehabilitation: 52,4 |                    |
|       | Estimated cost of total pro  |                                | Floor area after rehabilitation: 62,75                              |                    |
|       |                              |                                | s Completion date (est.): 9/2025                                    |                    |
|       | Project/phase start date (ex |                                | <u>,                                    </u>                        |                    |
|       |                              |                                |   |                    |

Please also attach a budget summary which details and provides the total certified rehabilitation expenditures within the overall project cost. Please also submit a budget summary detailing and totaling the entire project costs, both certified rehabilitation expenditures and other expenditures.

| Jones Li |   |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| Property | Name  |  |  |  |  |  |
| 43 Amit  | v Street, Amherst, MA   |  |  |  |  |  |
| Property | Address   | Project Number:                            |  |  |  |  |
|          |   |  |  |  |  |  |
| 5.       | Public support for project (please attach letters of support):  |  |  |  |  |  |
|          | <ul> <li>National Trust for Historic Preservation</li> <li>✓ State Preservation Organization (PreservatiON MASS)</li> <li>✓ Local Historical Commission / Local Historic District Commission Other:</li> </ul>  |  |  |  |  |  |
| 6.       | Other sources of funding:   |  |  |  |  |  |
|          | Please describe the extent of financial hardship for the project See attached   |  |  |  |  |  |
|          |   |  |  |  |  |  |
|          | Please describe the importance of state assistance for successful project completion See attached   |  |  |  |  |  |
|          | Please list additional funding sources (public and/or private) See attach   | ed   |  |  |  |  |
|          | Please list the comparative per capita income average for the city or tow   |  |  |  |  |  |
|          | ✓ Please attach a pro forma indicating the project's sources of funding,  |  |  |  |  |  |
| 7.       | Compliance with Executive Orders, planning initiatives:   |  |  |  |  |  |
|          | Please list any Executive Orders with which the project complies (e.g. Executive Orders with which the project order | recutive Order 215, Executive Order 452):  |  |  |  |  |
|          | Please list any local, state, or regional preservation, revitalization/develowith which the project is consistent:  See attached  | oment plans, or other planning initiatives |  |  |  |  |

| Jones Library |  |  |
|---------------|--|--|
| Property Name |  |  |
| 43 Am         | nity Street, Amherst, MA   |  |
| Proper        | ty Address   | Project Number:  |
|               |  |  |
| 8.            | Is the property under threat of loss (please check all th  | at apply):   |
|               | ☐ Deferred maintenance; years ☐ Water penetration (please rate mild or major) ☐ Structural failure (please rate mild or major) ☐ Other (please describe): See attached | ☐ Demolition imminent without tax credit ☐ Property has been vacant; years vacant:                                   |
|               |  |  |
|               |  |  |
| 9.            | Please list any particular preservation and restoration cotta restoration, masonry repointing, window rehabili   | work or any specialized craftsmanship to be executed as part of the project (e.g. terra itation, etc.): See attached |
|               |  |  |
|               | Please also list any creative or innovative solutions to   | difficult preservation issues: See attached  |
|               |  |  |
|               |  |  |
| 10.           | If you propose to replace windows, please submit a co<br>See attached.   | nditions assessment documenting the percentage of loss or deterioration.   |
| 11.           | Readiness to proceed:  |  |
|               | ✓ Please attach a project timeline which includes a sprivate) will be/has been secured, and an estimated   | site preparation start date or a construction date, dates on which financing (public or completion date.             |

| Jones | Library                                  |                                       |   |
|-------|--|---------------------------------------|---|
|       | ty Name                                  |                                       |   |
| 12 Am | nity Street, Amherst, MA                 |                                       |   |
|       | ty Address                               |                                       | Project Number:   |
| roper | oy 11441000                              |                                       |   |
|       |  |                                       |   |
| 12.   | Economic impact:                         |                                       |   |
|       | Please describe the employment: See atta | ached                                 | et will create, including construction jobs, temporary employment, and permanent    |
|       |  |                                       |   |
|       |  |                                       |   |
|       | Please also describe h                   | ow your project will impact (d        | directly and indirectly) the surrounding community and the Commonwealth as a whole. |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
| ✓ See | e attachments (please list)              | : Budget Summary                      |   |
|       |  | Letters of Support Sources of Funding |   |
|       |  |                                       | Orders, Planning  |
|       |  | Threat of Loss                        | Jucis, Flatilling   |
|       |  | Specialized Craftsmanship a           | nd Preservation Issues  |
|       |  | Window Conditions Assessm             |   |
|       |  | Readiness to Proceed                  | Territ  |
|       |  | Economic Impact                       | <del></del>   |
|       |  | Description of Rehabilitation         | 1   |
|       |  | -                                     |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |
|       |  |                                       |   |

| Jones Library   |  |
|---|--|
| Property Name   |  |
| 43 Amity Street, Amherst, MA  |  |
| Property Address  | Project Number:  |
|   |  |
|   | RVATION WORK – Includes site work, new construction, alterations, etc. |
| Complete below (please attach additional sheets when necessar                                 | у).  |
|   |  |
| Number 1.   | Describe work and impact on existing feature:                          |
| Architectural feature Exterior  | See attached.  |
| Approximate date of feature <u>See attached.</u> Describe existing feature and its condition: |  |
| Describe existing leature and its condition.  |  |
| See attached.   |  |
|   |  |
|   |  |
| Photo no. See attached. Drawing no. See attached.   |  |
| Thoto no Drawing no   |  |
| N   | Describe words and impact on societies features                        |
| Number 2. Architectural feature Windows   | Describe work and impact on existing feature:                          |
| Approximate date of feature See attached.   | See attached.  |
| Describe existing feature and its condition:  |  |
| Č   |  |
| See attached.   |  |
|   |  |
|   |  |
| Photo no. See attached. Drawing no. See attached.   |  |
|   |  |
| Number 3.   | Describe work and impact on existing feature:                          |
| Architectural feature Exterior Entrances  | See attached.  |
| Approximate date of feature See attached.   | See attacheu.  |
| Describe existing feature and its condition:  |  |
| See attached.   |  |
| see attached.   |  |
|   |  |
| Son attached Son attached   |  |
| Photo no. See attached. Drawing no. See attached.   |  |
|   |  |
| Number 4.   | Describe work and impact on existing feature:                          |
| Architectural feature Interior Spaces   | See attached.  |
| Approximate date of feature See attached.  Describe existing feature and its condition:       |  |
| Describe entering reactive and no condition.  |  |
| See attached.   |  |
|   |  |
|   |  |
| Photo no. See attached. Drawing no. See attached.   |  |

| Jones Library Property Name  43 Amity Street, Amherst, MA Property Address   | Project Number:   |
|--|---|
| Number 5. Architectural feature Interior Stairs Approximate date of feature See attached. Describe existing feature and its condition:  See attached.  | Describe work and impact on existing feature: See attached. |
| Photo no. See attached. Drawing no. See attached.  |   |
| Number 6. Architectural feature Roof Approximate date of feature See attached. Describe existing feature and its condition: See attached.              | Describe work and impact on existing feature: See attached. |
| Photo no. See attached. Drawing no. See attached.  |   |
| Number 7. Architectural feature Building Systems Approximate date of feature See attached. Describe existing feature and its condition:  See attached. | Describe work and impact on existing feature: See attached. |
| Photo no. See attached. Drawing no. See attached.  |   |
| Number 8. Architectural feature Site Approximate date of feature See attached. Describe existing feature and its condition:  See attached.             | Describe work and impact on existing feature: See attached. |
| Photo no. See attached. Drawing no. See attached.  |   |

#### 4. Budget Summary

Please see attached Budget Summary and Pro Forma.

#### Town of Amherst Jones Library Additiona & Renovation Project

43 Amity St, Amherst, MA 01002 4/28/2023

\*Represents renovation costs only

| MHRTC Budget                            |    | Budget    |    | QRC     |  |
|---|----|-----------|----|---------|--|
|   |    |           |    |         |  |
| Hard Costs                              |    |           |    |         |  |
| A10 Foundations                         |    |           |    |         |  |
| A1010 Standard Foundations              | \$ | 286,100   | \$ | -       |  |
| A1020 Special Foundations               | \$ | 35,000    | \$ | -       |  |
| A1030 Slab on Grade                     | \$ | 254,400   | \$ | 45,900  |  |
| A20 Basement Construction               |    |           |    |         |  |
| A2010 Basement Excavation + Foundation  | \$ | 246,900   | \$ | -       |  |
| A2020 Basement Walls                    | \$ | 75,000    | \$ | -       |  |
| B10 Superstructure                      |    |           |    |         |  |
| B1010 Floor Construction                | \$ | 2,097,600 | \$ | 87,700  |  |
| B1020 Roof Construction                 | \$ | 1,456,400 | \$ | 44,900  |  |
| B20 Exterior Enclosure                  |    |           |    |         |  |
| B2010 Exterior Walls                    | \$ | 1,242,300 | \$ | 270,200 |  |
| B2020 Exterior Windows                  | \$ | 787,300   | \$ | 144,600 |  |
| B2030 Exterior Doors                    | \$ | 40,700    | \$ | 10,700  |  |
| B30 Roofing                             |    |           |    |         |  |
| B3010 Roof Coverings                    | \$ | 1,391,600 | \$ | 783,500 |  |
| B3020 Roof Openings                     | \$ | 403,200   | \$ | 11,100  |  |
| C10 Interior Construction               |    |           | _  |         |  |
| C1010 Partitions                        | \$ | 1,558,100 | \$ | 683,000 |  |
| C1020 Interior Doors                    | \$ | 576,300   | \$ | 233,600 |  |
| C1030 Fittings                          | \$ | 337,500   | \$ | 133,500 |  |
| C20 Stairs                              |    |           |    |         |  |
| C2010 Stair Construction                | \$ | 383,300   | \$ | 231,100 |  |
| C2020 Stair Finishes                    | \$ | 58,800    | \$ | 36,000  |  |
| C30 Interior Finishes                   |    |           |    |         |  |
| C3010 Wall Finishes +floor construction | \$ | 551,900   | \$ | 251,300 |  |
| C3020 Floor Finishes                    | \$ | 428,000   | \$ | 185,400 |  |
| C3030 Ceiling Finishes                  | \$ | 945,500   | \$ | 337,800 |  |
| D10 Conveying                           |    |           |    |         |  |
| D1010 Elevators and Lifts               | \$ | 332,600   | \$ | -       |  |
| D20 Plumbing                            |    |           |    |         |  |
| D2010 Plumbing Fixtures                 | \$ | 459,400   | \$ | 185,000 |  |
| D2020 Water Distribution                | \$ | 179,400   | \$ | 84,400  |  |
| D2030 Sanitarty Waste                   | \$ | 156,700   | \$ | 70,300  |  |
| D2040 Storm Drainage                    | \$ | 109,100   | \$ | 14,100  |  |
| D2090 Other Plumbing                    | \$ | 63,500    | \$ | 27,200  |  |

43 Amity St, Amherst, MA 01002 4/28/2023

\*Represents renovation costs only

| RTC Budget Budget                         |    | QRC        |    |           |
|---|----|------------|----|-----------|
| D30 HVAC                                  |    |            |    |           |
| D3010 Energy Supply                       | \$ | 2,477,600  | \$ | 1,115,600 |
| D3040 Distribution Systems                | \$ | 1,754,600  | \$ | 787,300   |
| D3060 Controls                            | \$ | 250,700    | \$ | 112,500   |
| D3070 Testing and Balancing               | \$ | 62,700     | \$ | 28,100    |
| D3090 Other HVAC Systems and Equipment    | \$ | 266,100    | \$ | 129,300   |
| D40 Fire Protection                       |    |            |    |           |
| D4010 Sprinklers                          | \$ | 760,700    | \$ | 513,100   |
| D50 Electrical                            |    |            |    |           |
| D5010 Electrical Service and Distribution | \$ | 2,191,700  | \$ | 1,050,300 |
| D5020 Lighting and Branch Wiring          | \$ | 838,300    | \$ | 337,400   |
| D5030 Comminications and Security         | \$ | 438,600    | \$ | 196,800   |
| D5090 Other Electrical Systems            | \$ | 202,100    | \$ | 94,300    |
| E10 Equipment                             |    |            |    |           |
| E1010 Commercial Equipment                | \$ | 75,000     | \$ | 37,500    |
| E1020 Institutional Equipment             | \$ | 7,100      | \$ | 1,800     |
| E1090 Other Equipment                     | \$ | 8,200      | \$ | 3,400     |
| E20 Furnishings - Fixed Casework          |    |            |    |           |
| E2010 Fixed Casework                      | \$ | 371,600    | \$ | 150,300   |
| E2020 Movable Furnishings                 | \$ | 1,516,300  | \$ | -         |
| F10 Special Construction                  |    |            |    |           |
| F1010 Special Structures                  | \$ | 115,000    | \$ | 40,000    |
| F1030 Special Construction Systems        | \$ | 25,000     | \$ | 25,000    |
| F20 Selective Building Demolition         |    |            |    |           |
| F2010 Building Elements Demolition        | \$ | 719,400    | \$ | 719,400   |
| F2020 Hazardous Components Abatement      | \$ | 381,400    | \$ | 381,400   |
| Total Building Construction               | \$ | 26,918,700 | \$ | 9,594,800 |

43 Amity St, Amherst, MA 01002 4/28/2023

Total Markups

\*Represents renovation costs only

1,088,600 \$ 7,511,200

| MHRTC Budget                           | Budget          |    | QRC       |  |
|--|-----------------|----|-----------|--|
| Site Construction                      |                 |    |           |  |
| Sitework (beyond 5' of building )      |                 |    |           |  |
| G10 Site Preparation                   |                 |    |           |  |
| G1010 Site Clearing                    | \$<br>244,800   | \$ | -         |  |
| G1020 Site Demo and Relocation         | \$<br>378,900   | \$ | -         |  |
| G1030 Site Earthwork                   | \$<br>50,400    | \$ | -         |  |
| G1040 Hazardous Waste Remediation      | \$<br>,<br>-    | \$ | -         |  |
| G20 Site Improvements                  |                 |    |           |  |
| G2010 Roadways                         | \$<br>33,000    | \$ | -         |  |
| G2020 Parking Lots                     | \$<br>31,900    | \$ | -         |  |
| G2030 Pedestrian Paving                | \$<br>593,500   | \$ | -         |  |
| G2040 Site Development                 | \$<br>104,000   | \$ | -         |  |
| G2050 Landscaping                      | \$<br>151,200   | \$ | -         |  |
| G30 Site Mechanical Utilities          |                 |    |           |  |
| G3010 Water Supply                     | \$<br>36,600    | \$ | -         |  |
| G3020 Sanitary Sewer                   | \$<br>13,500    | \$ | -         |  |
| G3030 Storm Sewer                      | \$<br>356,900   | \$ | -         |  |
| G3040 Heating Distribution             | \$<br>-         | \$ | -         |  |
| G3050 Cooling Distribution             | \$<br>-         | \$ | -         |  |
| G3060 Fuel Distribution                | \$<br>-         | \$ | -         |  |
| G3090 Other Site Mechanical Utilities  | \$<br>-         | \$ | -         |  |
| G40 Site Electrical Utilities          |                 |    |           |  |
| G4010 Electrical Distribution          | \$<br>130,200   | \$ | -         |  |
| G4020 Site Lighting                    | \$<br>35,000    | \$ | -         |  |
| G4030 Site Communication & Security    | \$<br>7,500     | \$ | -         |  |
| G4090 Other Site Electrical Utilities  | \$<br>-         | \$ | -         |  |
| G90 Other Site Construction            |                 | •  |           |  |
| G9010 Service and Pedestrian Tunnels   | \$<br>-         | \$ | -         |  |
| G9090 Other Site Systems and Equipment | \$<br>-         | \$ | -         |  |
| Total Site Construction                | \$<br>2,167,400 | \$ | -         |  |
|  |                 |    |           |  |
| Markups                                | <br>            |    |           |  |
| F. Design and Pricing Contingency      | \$<br>3,218,600 |    | 1,106,500 |  |
| G. Performance Bond                    | \$<br>686,200   | \$ | 235,100   |  |
| H. Insurance                           | \$<br>-         | \$ | -         |  |
| I. Permits (If by GC or CM)            | \$<br>-         | \$ | -         |  |
| J. CM Contingency (CM Only)            | \$<br>          | \$ | -         |  |
| K. General Conditions                  | \$<br>2,517,800 | \$ | 1,040,900 |  |
| L. General Requirements                | \$<br>-         | \$ | -         |  |
| M. Overhead and Profit / Fee           | \$<br>1,088,600 | \$ | 374,200   |  |

43 Amity St, Amherst, MA 01002 4/28/2023

\*Represents renovation costs only

| MHR                   | TC Budget                           | Budget |            | QRC |            |
|-----------------------|-------------------------------------|--------|------------|-----|------------|
| Escalatio             | n                                   | \$     | 3,290,000  | \$  | 1,118,000  |
| Γotal Ha              | rd Costs (Estimated Construction)   | \$     | 39,887,300 | \$  | 13,469,500 |
| Soft Co               | ests                                |        |            |     |            |
| Fees                  |                                     |        |            |     |            |
| <u>1</u>              | Existing Conditions & Space Program | \$     | -          | \$  | -          |
| <u>2</u>              | Architect                           | \$     | 2,725,000  | \$  | 2,725,000  |
| <u>a</u>              | Interior/Furniture Designer         | \$     | 100,000    | \$  | 100,000    |
| b                     | Civil Engineering                   | \$     | -          | \$  | -          |
| С                     | Landscape Arch.                     | \$     | -          | \$  | -          |
| d                     | Structural Engineering              | \$     | -          | \$  | -          |
| е                     | MEP/FP Engineering                  | \$     | -          | \$  | -          |
| f                     | Lighting Consultant                 | \$     | -          | \$  | -          |
| g                     | Acoustical Consultant               | \$     | -          | \$  | -          |
| h                     | Signage Consultant                  | \$     | -          | \$  | -          |
| i                     | LEED Designer                       | \$     | -          |     |            |
| į                     | Referendum Services                 | \$     | -          | \$  | -          |
| k                     | Code Consultant                     | \$     | -          | \$  | -          |
| 1                     | Designer's Cost Estimator           | \$     | -          | \$  |            |
| 3                     | Special Consultants                 | \$     | -          | \$  | -          |
| <u>a</u>              | Haz. Mat. Consultant                | \$     | 100,000    | \$  | 100,00     |
| <u>b</u>              | Audio/Visual                        | \$     | 50,000     | \$  | 50,00      |
| <u>C</u>              | Technology & Security Consultant    | \$     | -          | \$  |            |
| <u>d</u>              | Geo-Tech Engineering                | \$     | 20,000     | \$  | 20,00      |
| <u>е</u>              | Traffic Engineer                    | \$     | 15,000     | \$  | 15,00      |
| <u>f</u>              | Ecologist/Soil Sample               | \$     | 20,000     | \$  | 20,00      |
| <u>g</u>              | Peer Reviews                        | \$     | -          | \$  |            |
| h                     | Green Building Consultant           | \$     | _          | \$  |            |
| i                     | Storm Water Monitoring              | \$     | _          | \$  |            |
| 4                     | Project Management                  | \$     | 888,300    | \$  | 888,30     |
| <u>.</u><br>5         | Building Commissioning              | \$     | 80,000     | \$  | 80,00      |
| <u>2</u><br><u>3</u>  | Owner's Cost Estimator              | \$     | 40,000     | \$  | 40,00      |
| <u>5</u><br>7_        | CM Preconstruction Fee              | \$     | -          | \$  | . 3,00     |
| <u>-</u><br><u>3</u>  | Owner's Legal Fees                  | \$     | -          | \$  |            |
| <u>9</u>              | Site Survey                         | \$     | 10,000     | \$  | 10,00      |
| <u>5</u><br><u>10</u> | Utility Assessment                  | \$     | 10,000     | \$  | 10,00      |

43 Amity St, Amherst, MA 01002 4/28/2023

\*Represents renovation costs only

| MHRTC Budget  |  | Budget  |           | QRC                    |  |
|---|--|---|-----------|------------------------|--|
| Expenses  |  |   |           |                        |  |
| 1 Owner's Insurance   | \$   | 59,800  | \$        | 59,800                 |  |
| 2 Permits   | \$   | -   | \$        | -                      |  |
| 3 Printing  | \$   | 5,400   | \$        | 5,400                  |  |
| 4 Construction Utilities Use  | \$   | -   | \$        | -                      |  |
| <ul><li>4 Construction Utilities Use</li><li>5 Site Borings</li></ul>   | \$   | -   | \$        | -                      |  |
| 6 Materials Testing   | \$   | 199,500   | \$        | 199,500                |  |
| <ul> <li>6 Materials Testing</li> <li>7 Special Inspections</li> <li>8 Consultant Reimbursables</li> </ul>  | \$   | -   | \$        | -                      |  |
|   | \$   | -   | \$        | -                      |  |
| 9 Moving/Relocation   | \$   | 165,000   | \$        | 165,000                |  |
| 10 Temporary Space/Ops  | \$   | 550,000   | \$        | 550,000                |  |
| 11 Advertising  | \$   | 11,000  | \$        | 11,000                 |  |
| 12 Physical Plant Expenses  | \$   | -   | \$        | -                      |  |
| 13 Misc. Expenses   | \$   | 11,000  | \$        | 11,000                 |  |
| 14 Bond/Financing   | \$   | -   | \$        | -                      |  |
| 15 Site Acquisition   | \$   | -   | \$        | -                      |  |
| Total Fees and Expenses   | \$   | 5,060,000   | \$        | 5,060,000              |  |
| Outing and  |  |   |           |                        |  |
| Contingency  A. Construction & Owner's Project  |  |   |           |                        |  |
| 1 Construction  | \$   | 1,812,600   | \$        | 1,812,600              |  |
| 2 Owner's Project   | \$   | 1,499,000   | \$        | 1,499,000              |  |
| B. Additional Need  | \$   | 1,499,000   | \$        | 1,499,000              |  |
| D. Additional Proof   | Ψ  |   | Ψ         |                        |  |
| Total Contingency   | \$   | 3.311.600   | \$        | 3.311.600              |  |
| Total Contingency   | \$   | 3,311,600   | \$        | 3,311,600              |  |
| Total Soft Costs  | \$   | 3,311,600<br>8,371,600  | <b>\$</b> | 3,311,600<br>8,371,600 |  |
|   |  |   |           |                        |  |
|   |  |   |           |                        |  |
| Total Soft Costs  Total Project Cost  | \$   | 8,371,600   | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources   | \$   | 8,371,600<br>48,258,900   | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources Town of Amherst   | \$   | 8,371,600<br>48,258,900<br>15,751,810   | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners   | \$   | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314   | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign  | \$<br>\$<br>\$<br>\$<br>\$                               | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776   | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal)   | \$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$                   | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661  | \$        | 8,371,600              |  |
| Total Soft Costs  Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collections)   | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000   | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collection National Endowment for the Humanities Grant (Garden Level   | \$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>F              | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000  | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives   | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000<br>220,500   | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic  | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000  | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic FY23 Massachusetts Office Travel & Tourism Grant (ESL De   | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000<br>220,500<br>200,000<br>50,000                        | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic FY23 Massachusetts Office Travel & Tourism Grant (ESL Deg Frank Stanley Beveridge Foundation grant   | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000<br>220,500<br>200,000<br>50,000<br>46,000              | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic FY23 Massachusetts Office Travel & Tourism Grant (ESL Deg Frank Stanley Beveridge Foundation grant Community Campaign Giving (Including Bequests)                                      | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000<br>220,500<br>200,000<br>50,000<br>46,000<br>6,000,000 | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainal Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic FY23 Massachusetts Office Travel & Tourism Grant (ESL Deg Frank Stanley Beveridge Foundation grant   | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600  48,258,900  15,751,810 13,871,314 18,635,776 1,110,661 1,000,000 1,000,000 220,500 200,000 50,000 46,000 6,000,000 6,558,615                         | \$        | 8,371,600              |  |
| Total Project Cost  Project Funding Sources Town of Amherst MA Board of Library Commissioners Capital Campaign HUD FY23 Economic Development Initiative Grant (Sustainat Amherst Community Preservation Act Grant (Special Collectic National Endowment for the Humanities Grant (Garden Level Mass Save Energy Use Intensity Construction Incentives FY22 Massachusetts Cultural Facilities Fund (Special Collectic FY23 Massachusetts Office Travel & Tourism Grant (ESL Def Frank Stanley Beveridge Foundation grant Community Campaign Giving (Including Bequests) Cost Escalation Grant (Due to COVID) | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 8,371,600<br>48,258,900<br>15,751,810<br>13,871,314<br>18,635,776<br>1,110,661<br>1,000,000<br>1,000,000<br>220,500<br>200,000<br>50,000<br>46,000<br>6,000,000 | \$        | 8,371,600              |  |

### 5. Support for the project:

See attached letters from:

- Preservation Massachusetts
- Amherst Historical Commission (to be submitted under separate cover)
- Amherst Town Council
- State Senator Jo Comerford
- State Representative Mindy Domb
- Representative James P. McGovern



Post Office Square 6 Main Street Extension Suite 613 Plymouth, MA 02360 617-723-3383

April 20, 2023

Ms. Brona Simon State Historic Preservation Officer Massachusetts Historical Commission 220 Morrissey Boulevard Boston, MA 02125

Re: Application for Massachusetts State Historic Rehabilitation Tax Credit Jones Library, Amherst Massachusetts

Dear Ms. Simon:

I am writing to you to express Preservation Massachusetts' support of Jones Library, Inc's application for the Jones Library project, located at 43 Amity Street in Amherst, for the Massachusetts Historic Rehabilitation Tax Credit. Preservation Massachusetts is the statewide historic preservation non-profit organization. By virtue of Massachusetts Regulations 830 CMR 63.38R.1, our organization reviews each project seeking state tax credits.

The Jones Library, though incorporated in 1919 with a bequest from namesake Samuel Minot Jones, was constructed in 1927-1928 by architects Putnam and Cox. The Colonial Revival structure features a gambrel roof, and a fieldstone façade flanked by clapboard sheathed side wings. Upon completion it featured children's spaces, main reading room, special collections rooms and an auditorium that could seat approximately 260 people. The property underwent a major addition from 1990-1993 and despite the original north and west elevations being obscured, the original portion of the library was retained and largely unaltered. The Jones Library continues to serve Amherst as a community resource and is part of the Amherst Central Business National Register District.

Proposed work on the Jones Library includes the careful repair and rehabilitation of original portions of the library for continued library use. The library suffers from deferred maintenance and non-historic additions will be replaced with sensitively designed new construction. The successful completion of the project will see the library enhanced to continue serving Amherst as a community and educational center as well as contributing to the vitality of the downtown Amherst business district.

This project appears to meet the criteria for eligibility for the Massachusetts Historic Rehabilitation Tax Credit. Please note, however, that we are not in a position to certify the project's compliance with the applicable tax regulations.

I encourage your favorable consideration of the Jones Library for tax credits that will restore an important part of Amherst's history while promoting an active and conscious investment in its historic resources as a means to economic and community revitalization.

Thank you for your attention to this letter.

Sincerely,

Erin D. A. Kelly

**Preservation Massachusetts** 



April 21, 2023

William F. Galvin Secretary of the Commonwealth of Massachusetts One Ashburton Place Boston, MA 02108

Dear Secretary Galvin,

On behalf of the Amherst Town Council, I am writing to express my support for the Jones Library of Amherst's application to the Massachusetts Historic Rehabilitation Tax Credit (HTC) program.

Amherst's Jones Library is at the literal and emotional center of our town. Its historically significant architecture and collections are essential to the Central Amherst National Historic District and Downtown Amherst Cultural District. Jones Library houses one of the world's finest Emily Dickinson collections, drawing researchers as well as history and literature enthusiasts from across the world.

The original 1928 building, designed by the Boston architectural firm of Putnam and Cox, is particularly in need of skillful and historically sensitive rehabilitation and renovation so that the entire building can fulfill its potential to serve the community in both traditional and new ways now and well into the future. The project architect's, Feingold Alexander, were selected in part because of their experience and skill in rehabilitating historic structures, including multiple historic libraries in the Commonwealth.

The Amherst community has demonstrated support for the Jones Library Building Project multiple times over, including the Town Council's 10-2 vote authorizing the Town borrowing for the project, and 65% of voters endorsing the project at the ballot in November of 2021. The Jones Library Capital Campaign's early fundraising success, raising more than \$4.7 million toward a total goal of \$14 million, is another testament to the project's importance to Amherst.

With the dramatic cost increases caused by the economic impacts of the COVID pandemic, the success of the Jones Library's much needed renovation and expansion project relies heavily upon these HTCs. My office has actively supported the Jones Library Building Project in multiple ways including dedicating \$13.8 million in town funds, \$1 million additional in Community Preservation funds, and significant time of town staff and leadership to preserve and restore this vital landmark in our community.

I respectfully request your favorable response to this Jones Library's application for HTCs as they will be an essential component of the capital funding needed. I thank you for your consideration. Please do not hesitate to contact me with any questions or concerns related to this highly needed project.

Sincerely,

Lynn Griesemer, President

On Behalf of the Amherst Town Council

# The Commonwealth of Massachusetts MASSACHUSETTS SENATE

### SENATOR JO COMERFORD

Hampshire, Franklin and Worcester District

STATE HOUSE, ROOM 410 BOSTON, MA 02133-1053 Tel. (617) 722-1532 www.MASENATE.GOV Chair
JOINT COMMITTEE ON HIGHER EDUCATION

Vice Chair
JOINT COMMITTEE ON AGRICULTURE

Assistant Vice Chair
SENATE COMMITTEE ON WAYS AND MEANS

April 18, 2023

William F. Galvin Secretary of the Commonwealth of Massachusetts One Ashburton Place Boston, Massachusetts 02108

Dear Secretary Galvin,

Thank you for your work and service.

I write to express my support for the Jones Library of Amherst's application to the Massachusetts Historic Rehabilitation Tax Credit (HTC) program.

Beyond serving Amherst's population of 39,263, the Jones Library in downtown Amherst is the most intensively used library in western Massachusetts, and 22<sup>nd</sup> statewide, with hundreds of thousands of visitors each year. Its historically significant 1928 architecture and unique special collections department attract researchers as well as history and literature enthusiasts from across the world.

Yet both the historic portion and the newer addition to the library are in need of significant repairs. The Jones Library's Building Project will renovate and expand the 48,000 square foot facility into a sustainable and energy efficient 63,000 square foot, fully accessible facility that meets the library needs of a 21<sup>st</sup> century community while preserving and enhancing the historic 1928 building. The project architects, Feingold Alexander, were selected in part because of their experience and skill in rehabilitating historic structures, including multiple historic libraries in the Commonwealth.

Following the leadership of public officials as well as individual constituents in my district, my office actively supports the Jones Library Building Project. My staff and I continue to work alongside Jones Library leadership to secure funds through the MBLC capital grant program, the Massachusetts Cultural Council, and state appropriations.

The award of HTCs will be an essential component of the capital funding needed to enable the Library to fulfill its vision and remain a vital institution in the community.

I respectfully request your favorable response to the Jones Library's application for HTCs, and I thank you for your consideration. Please do not hesitate to contact me with any questions or concerns related to this critical project for Amherst and the region.

Sincerely,

Jo Comerford

**State Senator** 

Hampshire, Franklin, Worcester district

### The Commonwealth of Massachusetts

#### **HOUSE OF REPRESENTATIVES** STATE HOUSE, BOSTON 02133-1054

MINDY DOMB STATE REPRESENTATIVE 3rd HAMPSHIRE DISTRICT

Mindy.Domb@mahouse.gov

CHAIR, Joint Committee on Tourism, Arts & Cultural Development

**Member,** Joint Committee on Higher Education

April 24, 2023

William F. Galvin Secretary of the Commonwealth of Massachusetts One Ashburton Place Boston, MA 02108

Dear Secretary Galvin,

I am writing to express my support for the application from Jones Library of Amherst to the Massachusetts Historic Rehabilitation Tax Credit (HTC) program.

The Jones Library building and collections are essential to the Central Amherst National Historic District and Downtown Amherst Cultural District. The original 1928 building, designed by the Boston architectural firm of Putnam and Cox, is particularly in need of skillful and historically sensitive rehabilitation and renovation so that the entire building can fulfill its potential to serve the community in both traditional and new ways for many decades to come.

The Jones Library Building Project is critical to the Library's ability to continue to successfully fulfill its goal to be a community hub to the diverse population of Amherst residents. The planned renovation and expansion will preserve the historic 1928 building and incorporate a fully accessible facility to meet community needs in the 21st century. The project will expand the children's room, provide a teen space, rectify the inadequacies of the Special Collections and English as a Second Language facilities, increase community meeting space, and make the building accessible to all.

The Amherst community has demonstrated support for the Jones Library Building Project in multiple ways, including voter approval and donor involvement. Given the dramatic cost increases caused by the economic impacts of the COVID pandemic and the project's commitment to uphold the historic characteristics of the existing library, the award of HTCs will be an essential component of the capital funding needed to fulfill this commitment

I respectfully request your favorable response to the Jones Library's application for HTC. Thank you for your consideration and please do not hesitate to contact me with any questions or concerns.

Sincerely,

**MINDY DOMB** 

State Representative, Third Hampshire District

Chindy Smul

JAMES P. McGOVERN 2ND DISTRICT, MASSACHUSETTS

COMMITTEE ON RULES

COMMITTEE ON AGRICULTURE

SENIOR DEMOCRATIC WHIP

### Congress of the United States House of Representatives

Washington, DC 20515-2102

http://www.mcgovern.house.gov

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94 PLEASANT STREET NORTHAMPTON, MA 01060 (413) 341–8700

24 Church Street, Room 29 Leominster, MA 01453 (978) 466–3552

William F. Galvin Secretary of the Commonwealth of Massachusetts One Ashburton Place Boston, MA 02108

04/18/2023

Dear Secretary Galvin,

I am writing to express my support for the Jones Library of Amherst in their application to the Massachusetts Historic Rehabilitation Tax Credit (HTC) program.

The Jones Library is the most intensively used library in Western Massachusetts, and 22<sup>nd</sup> statewide. The Jones Library's Building Project will preserve the historic 1928 building while expanding to an energy efficient, sustainable, and fully accessible facility that meets community needs.

An anchor of the Amherst downtown Central Amherst National Historic District and downtown economy, the original 1928 building is in need of significant rehabilitation and renovation. This work will enable the entire building to fulfill its role in the community in both new and traditional ways for many decades to come. With the dramatic cost increases caused by the economic impacts of the COVID-19 pandemic, the success of the Jones Library's renovation and expansion project relies heavily upon these HTCs.

Additionally, the Jones Library is making significant sustainability efforts in their rehabilitation so the restored and renovated building will be net zero ready, eliminating reliance on fossil fuels. When complete, the building will serve as a model for historic and climate-friendly renovation.

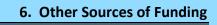
My office has supported the Jones Library Building Project, securing \$1.1 million in Economic Development Initiative Community Project Funding designated for the sustainability measures integrated into the project.

It is my hope that you will extend full and fair consideration to the Jones Library's application. Please direct your response to my Regional Manager, Koby Gardner-Levine, at Koby.Gardner-Levine@mail.house.gov.

Sincerely,

James P. McGovern Member of Congress

James P. mc Hover



### 6. Other sources of funding:

Please describe the extent of financial hardship:

The Jones Library has not undergone capital improvements in over 30 years and suffers from issues of deferred maintenance. The proposed project will address costly but critical safety and accessibility concerns, improve children's and teen's rooms, improve special collections and ESL facilities, and substantially improve the energy efficiency of the building. The Massachusetts Historic Rehabilitation Tax Credits are imperative to provide adequate funding to rehabilitate an already financially challenging project to the Secretary of the Interior's Standards.

Please describe the importance of state assistance for successful project completion:

The Massachusetts Historic Rehabilitation Tax Credits represent a vital component of the Proponent's project financing. Without the equity raised from the tax credits, there will be a significant gap in the financing of the project, thereby jeopardizing its success. Funds derived from the requested state historic tax credits will ensure that the design and scope of work outlined in this application will be carried out at a high standard that will maintain the historic integrity of the building, while allow it to meet modern library standards.

Please list additional funding sources (public and/or private):

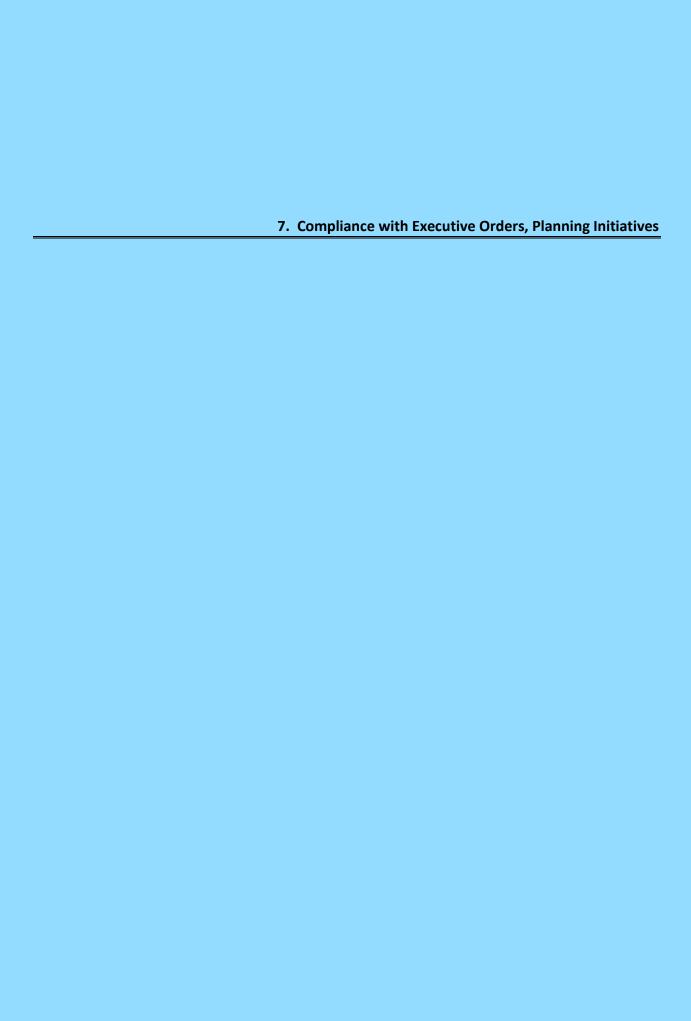
In addition to the Massachusetts Historic Rehabilitation Tax Credits, the Project will utilize a variety of public and private funding sources, including the Jones Library's endowment, Community Preservation Act funds, Massachusetts Board of Library Commissioners grant funds, funds from the Town of Amherst, private contributions to a community capital campaign, and other grant funding. All funding sources are detailed on the enclosed proforma.

Please list the comparative per capita income average for the city or town:

According to recent census data, the per capita income for the Town of Amherst is \$26,341.

Please attach a pro forma indicating the project's sources of funding, total project costs, and any funding gaps.

See attached budget pro forma.



### 7. Compliance with Executive Orders, planning initiatives:

Please list any Executive Orders with which the project complies (e.g., Executive Order 215, Executive Order 452):

Executive Order 327 was signed by Governor William Weld in 1992. It established the Advisory Committee on the Coordination of Economic Development programs in the Commonwealth to make recommendations to the Governor to most effectively and efficiently advance the Commonwealth's economic development interests including the coordination of those agencies deemed to be public economic development agencies. The allocation of state historic tax credits to the project demonstrates the Massachusetts Historical Commission's consistency with E.O. 327.

Executive Order 367 was signed by Governor William F. Weld in 1994 to nominate communities as federal enterprise zones or communities, so that these communities may be designated empowerment zones and a "strategic plan" may be drafted in which Commonwealth and local resources are dedicated to revitalizing these communities. This Order was intended to alleviate social and economic distress and to stimulate private investment and economic development in these communities by identifying economic, social/human services, housing, public safety, drug abuse prevention, education, and environmental factors, which can contribute to the revitalization of these neighborhoods. The proposed rehabilitation project is consistent with the goals of E.O. 367.

Executive Order 452 was signed by Governor Mitt Romney in 2003 to ensure that diversity is reflected in all state government activities including: planning, decision-making, and design and delivery of services to customers; to identify and remove barriers to making programs and services accessible to all citizens; to develop public and private organizations to share best practices for enhancing diversity, planning, and implementing community outreach and diversity recruitment programs; to establish guidelines for diversity plans; to comply with all federal and state reporting requirements; and to ensure that all activities are in compliance with applicable state and federal laws. Executive Order 452 was revoked by Governor Deval Patrick in 2007 and replaced with Executive Order 478.

<u>Executive Order 478</u> was signed by Governor Deval Patrick in January of 2007 revoking Executive Order 452. This Order requires all state agencies and all persons and organizations doing business with the Commonwealth, to consider the likely effects of their actions will have on non-discrimination, diversity, and equal opportunity including developing and implementing affirmative action and diversity plans to identify and eliminate discriminatory barriers in the workplace and that all actions shall be conducted without unlawful discrimination.

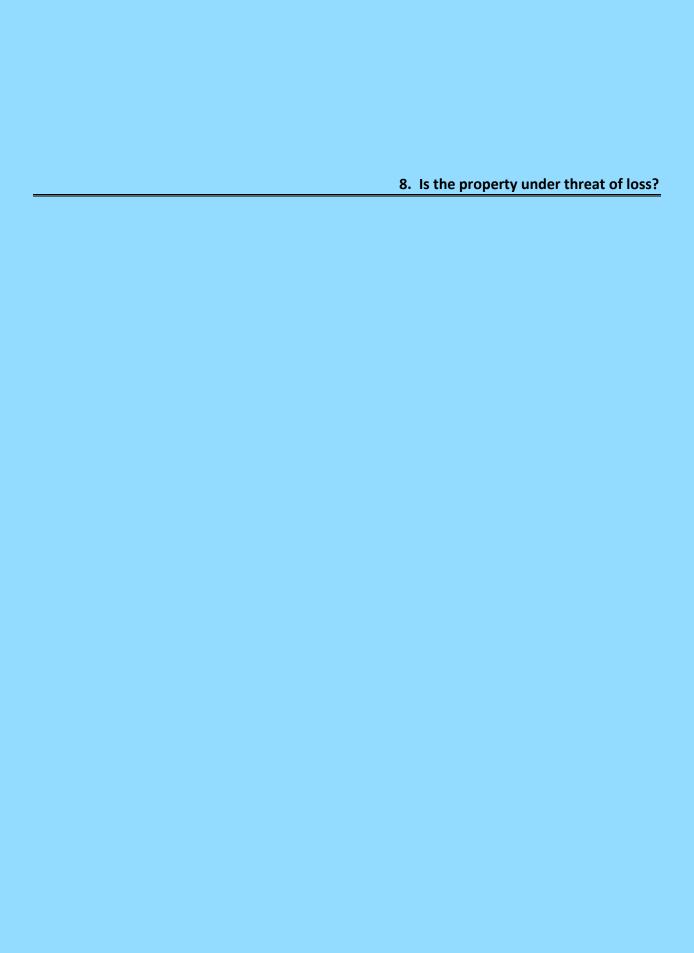
Executive Order 418 was signed by Governor Argeo Paul Cellucci in 2000 to encourage communities to undertake community development plans that identify, among other resources, significant historic resources that represent the unique character of their communities. A community development plan is a comprehensive, strategic plan for the future development of a city or town, and includes, among other things, plans for: where the community will create new housing opportunities; where it will target commercial or industrial economic development (if any); how it will improve its transportation infrastructure (or how its existing infrastructure will handle any growth); and where and how it will preserve open space. The redevelopment of the Jones Library building is consistent with the goals of E.O. 418 as it will involve the substantial rehabilitation of a historic building in Amherst's historic downtown.

Please list any local, state, or regional preservation, revitalization/development plans, or other planning initiatives with which the project is consistent:

<u>Town of Amherst Master Plan</u>: In 2010, the Town of Amherst adopted a Master Plan to guide the Town's decision-making on long-term physical development. Goals and key directions of the plan include maintaining Amherst's existing mixed use village centers, preserving the Town's historic fabric, providing community services to meet the needs of all residents, and promoting sustainable environmental and energy practices. The proposed rehabilitation of the Jones Library is consistent with the goals of the Town of Amherst's 2010 Master Plan as it sensitively preserves a historic library building in the downtown area, allowing its continued use as a community resource. The rehabilitation will also incorporate energy efficiency and sustainability improvements.

Town of Amherst Preservation Plan (2005): In 2005, the Town of Amherst, through grant funding provided by the Community Preservation Act, adopted its first Preservation Plan which identified tasks to ensure the continued preservation of Amherst's historic and cultural resources. The plan identifies goals for physical preservation of historic buildings, documentation of historic resources, regulations to protect and enhance resources in the development process, and outreach and advocacy. The proposed rehabilitation of the Jones Library is consistent with the goals and recommendations of the Town of Amherst's Preservation Plan.

<u>Smart Growth:</u> The rehabilitation of the Jones Library is consistent with the Smart Growth Principles outlined by the Office of Commonwealth Development. The project will redevelop and preserve an existing building significant to the Town of Amherst's history and reuse an existing community resource in its current location in a developed area.

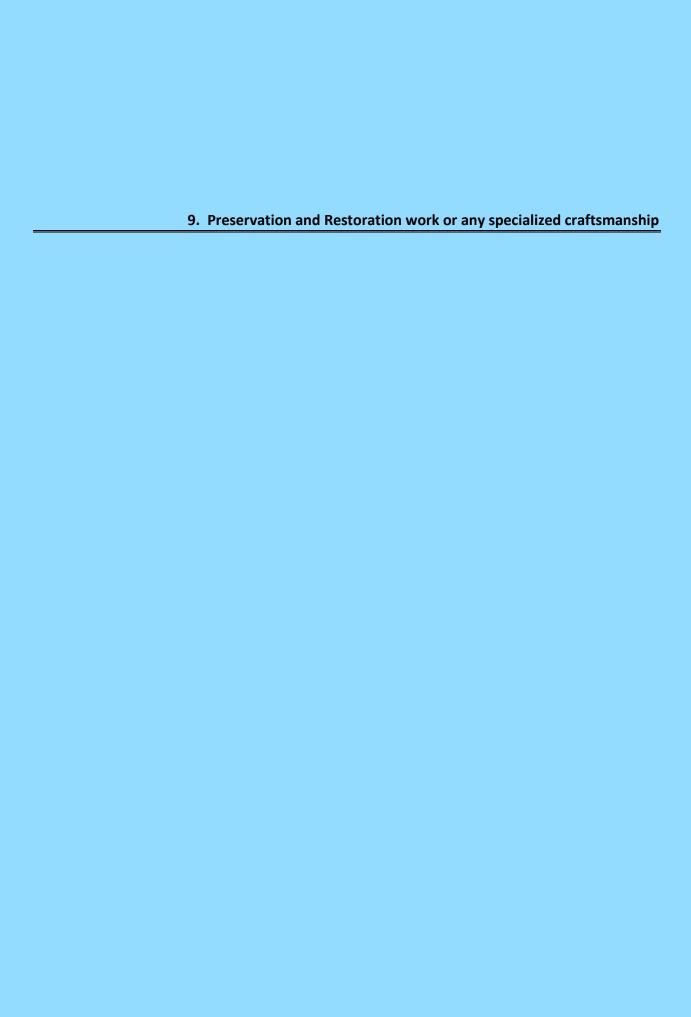


| 8. | Is the property under threat of loss:   |
|----|---|
|    | X Deferred maintenance 30 years         |
|    | Demolition imminent without tax credit  |
|    | X Water penetration                     |
|    | Property has been vacant; years vacant: |
|    | Structural failure                      |
|    | Other:                                  |

Although demolition is not imminent, it is highly unlikely that the project would move forward without the benefit of state historic tax credits. Given the Project's substantial scope, the Project will utilize a variety of public and private funding sources to ensure its successful completion, and the state tax credits represent a vital component of the Proponent's project financing.

No capital improvements have been made to the building since the 1993 renovation and expansion campaign. Due to gaps in the building envelope, there are areas of water infiltration throughout the building which have resulted in damage to library materials as well as interior finishes. Further, HVAC systems are outdated and at the end of their useful lives with limited options for repairs. Notably, a catastrophic failure of the HVAC system above the current Special Collections/Archives area resulted in the removal of 710 books and 12 manuscript boxes from the shelves; 157 were water damaged. Further delay in addressing deferred maintenance issues will result in additional deterioration of historic finishes, as well as damage to library materials.

The rehabilitation of this historic structure will ensure its long-term preservation, allowing the Jones Library to remain in its existing central Amherst location while upgrading the building to meet current library standards.



9. Please list any particular preservation or restoration work or any specialized craftsmanship to be executed as part of the project (e.g., terra cotta restoration, masonry repointing, window rehabilitation, etc.):

The rehabilitation of the Jones Library includes a number of preservation and restoration efforts that will be executed in order to maintain and heighten the historic character of the building. Proposed work will be undertaken by contractors with documented experience in working on State or National Register-listed buildings, or buildings designated as Landmarks by local governmental authorities. In particular, proposed preservation work will include the following:

- Repair and restoration of the building's brick and stone masonry exterior to improve its physical integrity and historic character;
- Repair of historic exterior wood trim, including door and window surrounds;
- Restoration of significant interior features and finishes including the historic main stair, historic interior wood trim, and fireplaces.

### Please also list any creative or innovative solutions to difficult preservation issues:

The project architects have incorporated a number of creative and innovative solutions to difficult preservation challenges. Specifically:

- The incorporation of the original floor levels from the historic building into the new addition;
- The replacement of existing deteriorated wood window sash with new energy efficient wood window sash, retaining the historic frames and carefully replicating the historic window sash;
- The sensitive integration of a range of life safety and accessibility improvements and other improvements across the building which will bring the building up to current library standards while retaining character defining interior and exterior features;
- The retrofit of the building to be net zero ready, eliminating reliance on fossil fuels and serving as an important example of marrying climate preparedness and historic preservation goals.

## 10. If you propose to replace windows, please submit a conditions assessment documenting the percentage of loss or deterioration.

The existing windows at the original 1928 library building consist of a mix of wood double-hung sash and replacement wood windows dating to a renovation campaign from 1993. Windows at the 1993 additions are wood double-hung sash. A historic wood elliptical window is located at the north elevation of the 1993 addition which was relocated from another previous location at the library. The existing historic windows are in poor condition due to lack of regular maintenance, while the 1993 windows are in fair condition.

All windows at the historic portions of the library will receive sash-only replacements. New sash will be wood, true divided light sash closely replicating the dimensions, profiles, and configurations of the historic. Windows at the new construction component will be aluminum sash.

The attached photographs document the existing window conditions and the table below provides a summary of the property's windows and their current condition.

| Elevation        | Window Condition |      |      |        |  |  |
|------------------|------------------|------|------|--------|--|--|
| Elevation        | Good             | Fair | Poor | Absent |  |  |
| North Elevation  | 0                | 30   | 2    | 0      |  |  |
| East Elevation   | 0                | 4    | 25   | 5      |  |  |
| South Elevation  | 0                | 0    | 35   | 0      |  |  |
| West Elevation   | 0                | 15   | 23   | 1      |  |  |
| Elevations Above | 0                | 11   | 14   | 0      |  |  |
| Central Atrium   | -                |      |      |        |  |  |
| Total            | 0                | 60   | 99   | 6      |  |  |



1. South elevation, first floor, typical historic double-hung wood window



3. East elevation, second floor, typical historic double-hung wood window



2. East elevation, first floor, typical historic fixed wood window



4. West elevation, second floor, typical historic double-hung wood window



5. South elevation, typical historic double-hung wood window at dormers



7. West elevation, first floor, typical replacement wood window



6. East elevation, typical replacement wood window at dormer



8. North elevation, basement level, typical replacement wood window



9. North elevation, second floor, typical wood windows at 1993 addition



11. Basement level, south wall, detail of typical historic wood window deterioration



10. Basement level, south wall, typical historic double-hung wood window



12. Basement level, south wall, detail of typical historic wood window deterioration



13. Basement level, south wall, detail of typical historic wood window deterioration



15. Basement level, north wall, detail of typical 1993 double-hung wood window condition



14. Basement level, north wall, typical double-hung wood window at 1993 addition



16. Basement level, north wall, detail of typical 1993 double-hung wood window condition



17. First floor, south wall, typical historic double-hung wood window



19. First floor, south wall, detail of typical historic wood window deterioration



18. First floor, south wall, detail of typical historic wood window deterioration



20. First floor, south wall, detail of typical historic wood window deterioration



21. First floor, south wall, detail of typical historic wood window deterioration



23. First floor, west wall, detail of typical historic wood window deterioration



22. First floor, west wall, typical historic double-hung wood window



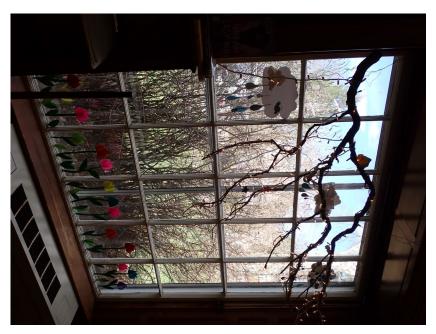
24. First floor, west wall, detail of typical historic wood window deterioration



25. First floor, west wall, detail of typical historic wood window deterioration



27. First floor, west wall, detail of typical historic wood window deterioration



26. First floor, west wall, typical fixed wood window



28. First floor, west wall, detail of typical historic wood window deterioration



29. First floor, west wall, detail of typical historic wood window deterioration



31. First floor, north wall, detail of typical 1993 wood window condition



30. First floor, north wall, typical double-hung wood window at 1993 addition



32. First floor, north wall, detail of typical 1993 wood window condition



33. First floor, east wall, typical historic double-hung wood window



35. First floor, east wall, detail of typical historic wood window deterioration



34. First floor, east wall, detail of typical historic wood window deterioration



36. First floor, east wall, detail of typical historic wood window deterioration



37. First floor, east wall, detail of typical historic wood window deterioration



39. Second floor, south wall, detail of typical historic wood window deterioration



38. Second floor, south wall, typical historic double-hung wood dormer window



40. Second floor, south wall, detail of typical historic wood window deterioration



41. Second floor, south wall, detail of typical historic wood window deterioration



43. Second floor, south wall, detail of typical historic wood window deterioration



42. Second floor, south wall, typical historic double-hung wood window



44. Second floor, south wall, detail of typical historic wood window deterioration



45. Second floor, south wall, detail of typical historic wood window deterioration



47. Second floor, south wall, detail of typical historic wood window deterioration



46. Second floor, south wall, typical historic double-hung wood window



48. Second floor, south wall, detail of typical historic wood window deterioration



49. Second floor, south wall, detail of typical historic wood window deterioration



51. Second floor, west wall, detail of typical historic wood window deterioration



50. Second floor, west wall, typical historic double-hung wood window



52. Second floor, west wall, detail of typical historic wood window deterioration



53. Second floor, west wall, detail of typical historic wood window deterioration



55. Third floor, east wall, detail of typical historic wood window deterioration



54. Third floor, east wall, typical historic double-hung wood window



56. Third floor, east wall, detail of typical historic wood window deterioration



57. Third floor, east wall, detail of typical historic wood window deterioration



59. Third floor, south wall, detail of typical historic wood window deterioration



58. Third floor, south wall, typical historic double-hung wood window



60. Third floor, south wall, detail of typical historic wood window deterioration



61. Third floor, south wall, detail of typical historic wood window deterioration



63. Third floor, south wall, detail of typical historic wood window deterioration



62. Third floor, south wall, typical historic double-hung wood window



64. Third floor, south wall, detail of typical historic wood window deterioration



65. Third floor, south wall, detail of typical historic wood window deterioration

# 11. Readiness to proceed:

Please attach a project timeline which outlines a construction start date, dates on which financing (public or private) will be/has been secured, and an estimated completion date.

Site Preparation: December 2023 (Relocation of library

operations to temporary locations)

Construction Commencement: February 2024

Construction Completion: September 2025

## 12. Economic Impact:

Please describe the number of jobs your project will create, including construction jobs, temporary employment, and permanent employment:

Over the four years of design and construction, the project will employ at least 12 professional architects and consultants on a part-time basis. During the 18 months of construction approximately 20-30 workers will be on site daily for the first 3 months of construction, growing to 50-75 for much of the construction phase. The final completion phase will require approximately 20-30 workers on site daily.

Further, the Jones Library currently has 54 employees working on a part- and full-time basis. These jobs will be maintained and an additional full-time custodial position will be added following the completion of the project.

Please also describe how your project will impact (directly and indirectly) the surrounding community and the Commonwealth as a whole:

The proposed project will benefit the Town of Amherst, the Pioneer Valley area, and the Commonwealth of Massachusetts by rehabilitating an important community resource. Currently, the library serves 225,000 visitors per year and is a foundational community institution serving all residents free of charge. The project will retain the Jones Library in its existing central Amherst location while upgrading the building to meet current library standards, enhancing the library's role as a community and educational center as well as drawing additional foot traffic to the area. The Jones Library fills a critical community need with its award-winning ESL program, which provides English tutors, study materials, citizenship classes, and referrals. Further, the Jones Library Special Collections serves local residents as well as researchers from around the world, safeguarding an extensive collection of materials of local, national, and international importance, one of the largest in the Commonwealth.

As the Jones Library is located within Amherst's historic downtown business district, the project will contribute to ensuring the downtown is a vibrant place with a variety of commercial and cultural offerings for residents and visitors. The project will serve as a key example of the importance of retaining historic libraries within traditional village centers. The project will also be a benefit to local contractors and associated construction materials suppliers through providing a substantial construction opportunity.



Architectural Feature: Exterior Wood and Masonry

**Approximate Date of Feature:** 1928, 1993

### **Describe Existing Feature and its Condition:**

The property at 43 Amity Street is situated on the north side of Amity Street in downtown Amherst, Massachusetts. The property holds a Colonial Revival style library constructed in 1928 with additions dating to 1993. The original building is situated facing south on Amity Street. Resting on a concrete foundation, the two-story main block rises to a side-oriented gambrel roof and flanked by two historic single-story wings. Additional historic wings extend to the north from the single-story wings. The additions constructed in 1993 form an approximately square footprint with an enclosed central atrium.

The symmetrical five-bay wide random ashlar façade (south elevation) contains a central entrance accessed by low granite steps. The entry is enhanced by a Colonial Revival style wood surround with a broken pediment entablature supported by fluted pilasters. The broken pediment holds a carved pineapple. The entry bay is flanked by single windows to the north and south. Single story sunrooms extend from end bays. The gable roofed sunrooms feature wood clapboard siding and quoining. Gable ends are lined with dentil courses and molded trim. Windows are present at all five bays at the second floor. Five regularly spaced gable roofed dormers are located on the roof. The windows of the façade are double-hung wood sash framed by molded wood surrounds and projecting wood sills. The façade is framed by a shallow molded cornice and modillion blocks and stone quoins. All wood trim is painted. Two stone end chimneys with bluestone caps rise from the ridgeline of the main block.

The east and west elevations are partially obscured by single-story wings. Both wings rest on concrete foundations and are clad in random ashlar. The west wing rises to a deeply overhanging gambrel roof and extends two bays in width and depth. The south elevation features a side entrance at the east bay and bay window to the west. A dentil course extends along the elevation below the roof overhang. Two shed dormers are located on the roof. The west elevation holds double hung wood windows at each bay. A stone end chimney with a bluestone cap rises from the ridgeline. The north elevation is obscured by a two-story wing; a portion of the roof is exposed and holds a single shed dormer. Similar in massing and detailing, the east wing also rises to an overhanging gambrel roof and is two bays in width and depth. A shed roofed extension clad in wood clapboard is located alongside the east elevation of the wing. An entrance with a modern entry door is located at the extension, sheltered beneath an overhang supported by square fluted columns with carved rosettes. Like the west wing, exposed bays primarily hold wood double-hung windows and two shed roofed dormers are located at the south roof plane. A fixed multi-light window is located at the south bay of the east elevation.

Exposed portions of the east and west elevations of the main block feature wood double-hung windows. Attic level windows at the east elevation are infilled with louvers. The closed gable ends of main block

feature molded rake trim. The north elevation of the main block is obscured at the first floor by the central atrium constructed in 1993. The exposed second floor features regularly spaced wood doublehung windows framed by molded wood surrounds and projecting sills. Mirroring the façade, five gable roof dormers are located at the north roof slope.

A two-story gable roofed wing extends north from the west single-story wing. The wing features a brick exterior and standing seam metal roofing, and measures four bays in length and two bays in depth. The wing was historically two bays in length and was expanded to the north in the 1993 renovations. Most of the first floor on the west elevation is obscured by a single-story entry porch capped with a shed roof. The enclosed porch originally extended only two bays but was expanded to include the covered entry at its north end in 1993. An entrance sheltered under the porch dates to 1993. The enclosure is clad in wood clapboard siding and the porch is supported by square fluted columns. The second floor features attenuated wood double-hung windows in molded surrounds. The east elevation is partially obscured by the central atrium added in 1993. The exposed second floor features regularly spaced wood double-hung windows in molded surrounds.

Two additional historic wings extend north from the east wing. Both are set on concrete foundations. Set perpendicular to the single-story wing, the first wing features a brick exterior and gambrel roof and formerly served as an auditorium. The single-story wing measures four bays in length and due to the sloping grade has a partially exposed basement level at the east elevation. Most basement window openings at this elevation are infilled with louvers. An entrance is located within the north bay and is sheltered by an entrance porch supported by square fluted columns with carved rosettes. The porch is accessed by brick and stone stairs. Three windows are located to the south of the entrance. The roof at the east elevation holds four shed dormers with square windows with decorative tracery. The west elevation is obscured by the central atrium, added in 1993. The exposed west roof slope features four shed dormers with square windows with decorative tracery. A stone chimney with a bluestone cap rises from the roof ridge at the south end of the wing.

The northeast wing is set perpendicular to the auditorium wing and originally served as the stage area for the auditorium. Like other sections of the building, it features a broad gambrel roof. Due to the sloping grade, there is a fully exposed basement level at the east and north elevations. The east elevation features a random ashlar exterior and molded wood rake trim. The basement level holds two service entrances flanking a single window. The first floor holds two double-hung wood windows. A single window lights the attic level. The north elevation was substantially altered in the 1993 building campaign and is primarily clad in red brick with stone quoining. The central bay is clad in wood clapboard and is further emphasized by a cross gable at the north roof slope. Regularly spaced double-hung windows appear at all bays with the exception of the central bay at the third floor which holds a historic Palladian window. In the 1993 building campaign, a new brick veneer elevation was installed, historic windows were removed, and new reduced size windows were installed lower on the elevation (see enclosed historic photographs and plans). The elevation is capped by a projecting wood cornice

supported by modillion blocks. Tie rods are present across the elevation. Two stone chimneys with replica concrete caps are located on the south roof slope.

The red brick 1993 addition extends west from the historic stage wing and returns south to meet the historic gable-roofed rear wing of the original library. The L-shaped addition sits on a concrete foundation and is composed of two distinct masses with gambrel roofs. The east portion of the addition features an exposed basement level while the rising grade to the west conceals the basement level of the west wing of the addition. A basement level entrance is sheltered by a gable-roofed entry porch supported by square fluted columns. Regularly spaced double-hung windows appear across the elevation. The eastern portion of the addition, set parallel to the north wing, features five gable-roofed dormers.

The north facing end wall of the west portion of the addition features attenuated double-hung wood windows at the attic level, along with the elliptical "Whipple Window," which was relocated from the gable-roofed wing in the 1993 building campaign. The west elevation of the addition is constructed of red brick with a central projecting pavilion clad in wood clapboard. Borrowing details from the original building, the pavilion features a Palladian window and is flanked by regularly spaced double-hung windows. Four shed roofed dormers feature square windows with decorative tracery, replicating the dormers at the historic auditorium wing. The 1993 campaign also included the construction of a central atrium not visible from the exterior of the building. The atrium is a single story in height and capped with a pyramidal glass roof.

Exterior stone, brick, wood clapboard and wood trim at the original 1928 building and 1993 addition are in fair condition. Natural rubble stone, obtained from farms in Pelham and North Amherst, and granite from a Pelham cider mill, are in good condition. Localized areas of step cracking, missing mortar, brick and stone deterioration are present across the historic buildings. The concrete foundations at the original 1928 building and 1993 additions are in fair condition. The existing stone chimneys are in good condition, though several are not capped and remain open to the elements. The two concrete chimney caps on the north chimneys are modern replacements and are in good condition. All chimneys were repointed in 2010-2011. Wood surfaces exhibit areas of peeling paint, mildew and rot.

**Photo No.** 1-30, 168-176

**Drawing No.** 101, 102, 103, 104, 111, 112, 113, 114, 115, 116, 117, 118, 131, 132, 133

# **Describe Work and Impact on Existing Feature:**

The project will remove the 1993 additions and the altered gable-roofed wing and introduce sensitively designed new construction. The new construction will be situated to the rear of the historic main block and west one-story wing, as well as adjacent to the northeast wing. The exterior of the new construction will feature a distinctive roof profile, projecting bays and dormers, and a variety of window types, resulting in a composition that is compatible with but differentiated from the historic building. The exterior will feature brick, shiplap siding, and standing seam metal. As detailed further below in

Number 2: Windows, select window openings at the historic building will be converted to open doorways to provide internal access between the historic building and the new addition. Several basement level mechanical louvered openings at the east elevation of the auditorium wing will be infilled with brick to match adjacent surfaces.

Exterior wood clapboards, cornices, and rake trim will be retained, scraped, feather sanded, primed, and painted. Trim elements which are beyond repair will be replaced in kind. Prior to removal of any deteriorated wood clapboards or trim, the exposed reveals and profiles will be documented. The centrally located main entrance and its surround will be retained, scraped, feather sanded, and painted. Secondary entry doors and surrounds will also be retained, scraped, feather sanded, primed, and painted. Window surrounds will be retained, scraped, feather sanded, primed, and painted. Wood entry porches at the southeast corner of the building and the auditorium entrance will be retained, scraped, feather sanded, primed, and painted.

All exterior brick and stone at the retained historic building will be rehabilitated to meet the Secretary of the Interior's Standards. Each of the exposed elevations will be repointed as needed in accordance with National Park Service *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings*. Existing deteriorated mortar will be hand-scraped from the mortar joints, and new mortar will be installed with the same color, texture, tooling and appearance of the historic mortar. Wherever possible existing historic masonry elements will be retained and reused. In isolated areas of deterioration, existing masonry elements will be removed, cleaned, and reset within the existing locations. Where masonry elements are missing, they will be replaced to match the original in design and material. In areas where the brick has been cracked or broken, the existing brick will be removed and the areas reconstructed with new bricks and mortar matching the historic masonry as closely as possible. The historic chimneys will be retained, cleaned and capped internally. Existing replica cast concrete caps will be retained. Following the completion of proposed repointing activities all exterior elevations will be cleaned using a low-pressure wash. Masonry repair to the concrete foundation is not anticipated. Specification for masonry repair and repointing are enclosed with this submittal.

Architectural Feature: Windows
Approximate Date of Feature: 1928, 1993

### **Describe Existing Feature and its Condition:**

Windows at the original 1928 portions of the building primarily consist of historic multi-light double-hung or fixed wood sash from the original construction of the building, with some replacement wood sash from the 1993 renovation. Where windows have been replaced, the window openings themselves were not altered. At the exterior windows feature molded wood surrounds and projecting wood sills. Aluminum storm windows cover many windows.

The south elevation contains twelve-over-twelve windows to either side of the central entrance at the first floor. Single story sunrooms extend from end bays and feature 25-pane fixed wood windows at their south elevations and six-over-nine windows on east and west elevation. Twelve-over-twelve windows are present at all five bays at the second floor. Five regularly spaced gable roofed dormers hold six-over-six windows. The basement level holds several four-over-four windows set within concrete window wells. At the north elevation, the second floor holds twelve-over-twelve windows at all five bays. Like the south elevation, the roof holds five dormers with six-over-six windows. The north roof plane also holds a modern skylight which replaced a historic 1928 skylight in the 1993 renovation. With the exception of historic fixed wood windows and modern skylight, all windows are historic double-hung wood sash.

The east and west elevations of the main block are partially obscured by side wings. Exposed bays hold twelve-over-twelve windows at the first and second floors and eight-over-twelve windows at the third floor. A shallow projecting bay at the first floor of the east elevation holds a bay with a central six-over-six window flanked by two-over-two windows at its east elevation and a four-over-four window to the south. At the west elevation, the exposed first floor bay holds an eighteen-over-eighteen pane window. Windows at the attic level have been infilled with vents at the east elevation but retain six-pane awning sash at the west elevation. Two basement windows at each elevation hold four-over-four sash set within concrete window wells. All windows are historic double-hung wood sash.

The south elevation of the west one-story wing holds a three-sided bay window at the first floor with a central twenty-pane fixed sash at the center flanked by four-over-four windows. The second floor holds two shed dormers with six-over-six windows. The west elevation holds eight-over-twelve windows at the first floor and six-over-nine sash at the second floor. A single shed dormer at the north elevation holds a three-over-six window. The east one-story wing holds two eight-over-twelve windows at the first floor of the south elevation, and two shed dormers with six-over-six windows. The east elevation holds a fixed twenty-pane window and a six-over-six window at the first floor, and eight-over-eight

windows above. With the exception of historic fixed wood windows, all windows are historic double-hung wood sash.

The two-story gable roofed wing holds a historic fixed twenty-pane wood window and two historic six-over-eight windows at the first floor. The fixed multi-light windows at the north elevation of the one-story extension are wood dating to the 1993 construction and were installed to replace an entrance formerly in this location. At the second floor of the west and east elevations are four four-over-eight windows. The southern two are historic double-hung wood sash, while the northern two are wood double-hung sash dating to the 1993 expansion of this wing.

At the historic auditorium wing the partially exposed basement level at the east elevation holds three basement window openings infilled with louvers and one eight-over-eight wood window. At the first floor, three historic wood twelve-over-twelve windows are regularly spaced across the elevation. The east and west roof slopes hold four shed dormers with square windows with decorative tracery. While these windows replicate the appearance of the historic sash, they are modern wood replica windows with interior Low-E panels installed during the 1993 renovation.

The northeast wing holds historic double-hung wood twelve-over-twelve windows at the exposed basement and first floor levels. A single window at the second floor holds a modern replacement upper sash installed in 1993, with louvers at the lower sash. The north elevation of the wing was extensively modified in the 1993 renovation, including the relocation of most windows. The exposed basement level holds five twelve-over-twelve modern wood double-hung windows. The second floor holds a historic wood Palladian window at the central bay which was part of the original elevation but has been moved lower from its original position. The window is flanked by four eight-over-twelve modern wood double-hung windows.

The 1993 wings mainly hold regularly spaced modern divided light sash in a variety of configurations including six-over-six at dormers, eight-over-twelve, and twelve-over-twelve. The gable end of the modern west wing holds a historic elliptical wood window salvaged from the former end wall of the original west gable-roofed wing. The west elevation of the wing holds a Palladian style window imitative of the historic Palladian window at the north elevation.

All windows at the 1928 portions of the building are in poor condition due to years of deferred maintenance. Wood windows exhibit deterioration and rotting of individual components due to water infiltration, deterioration of glazing putty, and broken glazing. Windows at the 1993 building and replacement wood windows in the 1928 portions of the building are in fair to poor condition and at 30 years old are at the end of their expected lifespans.

**Photo No.** 1-3, 5-7, 9-21, 23-26, 32, 36, 45, 60, 61, 68, 70, 71, 78, 93, 94, 106, 109, 111,

114, 119, 121, 123, 125, 130, 135, 138, 143, 153, 154, 158-160, 168-176

**Drawing No.** 111, 112, 113, 114, 115, 116, 117, 118, 119

# **Describe Work and Impact on Existing Feature:**

Window sash at the 1928 portions of the building will be removed and replaced with new energy-efficient wood double-hung or fixed sash to match existing conditions. New window sash will feature double pane insulated glazing with true divided lights. Only sash will be replaced. Existing frames and decorative surrounds will be retained. The profiles and dimensions of the new sash will be based on measured drawings of the existing historic wood windows. Interior window finishes will be stained or painted as needed to match historic interior trim. The non-historic skylight at the historic west wing will be replaced in kind.

At the north elevation of the main block, the western two windows at the second floor will be removed and sills lowered. Doors will be inserted in the openings to serve offices. The adjacent central window at the north wall will be removed and the opening modestly widened to serve as an open passage between the historic building and the new addition.

At the north elevation of the northeast wing, the easternmost window at the basement level will be removed and opening modestly widened to hold a double door accessing the northeast stair hall. The window in the adjacent bay will be removed and the sill lowered to create a doorway. At the first floor, existing first floor windows will be removed and sills will be lowered to create passages between the existing building and new addition. The easternmost bay will receive a new door.

Windows at the new addition will be aluminum sash.

Architectural Feature: Exterior Entrances

**Approximate Date of Feature:** 1928, 1993

## **Describe Existing Feature and its Condition:**

The symmetrical façade (south elevation) contains a central entrance accessed by low granite steps with a single metal handrail. The historic half-glazed wood paneled door is framed by half-glazed wood paneled sidelights and a glazed transom and dates to the original construction. The entry is further enhanced by a Colonial Revival style wood surround with a broken pediment entablature supported by fluted pilasters. The broken pediment holds a carved pineapple. The entrance is accessed by a granite paved path extending from the adjacent town-owned sidewalk.

Two secondary entrances on the south elevation are located at the east and west wings. At the west wing, the historic entrance to the Children's Room is located in the east bay. The entrance holds a half-glazed wood paneled entry door flanked by half-glazed wood paneled side lights and is recessed under the roof overhang. The entrance is accessed by a bluestone platform and granite step. The east wing holds an entrance at the easternmost bay, originally serving the auditorium. The entrance is sheltered beneath an overhang supported by square fluted columns with carved rosettes. Converted for universal access in 1993, the entrance holds a modern half-glazed metal door and infill panel within a historic molded surround. A book drop is located in the infill panel. The entrance is accessed by a concrete platform with concrete stairs to the east and a paved concrete path to the south. The path and stair hold modern metal railings.

At the east elevation, a secondary entrance is located at the north bay of the auditorium wing. Due to the descending grade, the first-floor entrance is elevated above grade. The entrance holds a historic half-glazed wood paneled door topped with an 8-light wood transom and is set in a molded wood surround. The entrance is sheltered by a wood porch supported by square fluted columns with carved rosettes. The porch roof is lined with a decorative molded cornice. The porch is accessed by brick and stone stairs with a wood railing.

Two service entrances are located at the east elevation of the northeast wing. The basement level entrances are located at grade, providing access from the adjacent driveway. The entrances are located in the north and south bays and hold historic double-leaf entry doors. The south doors are half glazed wood paneled doors with large strap hinges set within a molded wood surround. The doors are sheltered by a cantilevered standing seam copper roof. The northern doors are solid wood paneled doors with large strap hinges. The doors are topped with five light wood transoms and are set within a molded wood surround. Concrete pads are situated in front of each service entrance.

A basement level entrance is located at the north elevation within the 1993 addition. The entrance holds a modern half-glazed wood entry door topped with a five-light transom and is set within a simple wood surround. The entrance is sheltered by a shed roofed porch with an intersecting cross gable clad in standing seam metal roofing. A dentil course and molded cornice lines the porch roof, which is supported by square fluted columns imitating those on the historic building.

The west elevation holds an entrance to the northwest stair hall and is accessed by low concrete steps. The entrance was introduced in 1993 and holds a half-glazed wood paneled door in a simple flat board surround. The entrance is sheltered by a shed roofed porch supported by square fluted columns and lined with a simple wood railing.

Exterior doors, entry steps, and porches are in fair condition.

**Photo No.** 1-6, 8, 11, 12, 13, 17, 18, 20, 21, 24-27, 29, 30

**Drawing No.** 111, 112, 113, 114, 115, 116, 117, 118

### **Describe Work and Impact on Existing Feature:**

The main entrance at the façade (south elevation) will be retained and repaired as necessary and will continue to serve as the primary entrance to the building. The existing wood paneled door will be retained, scraped, feather sanded, and painted. Door hardware will be retained and restored. The existing wood pilasters, sidelights, and decorative surround will be retained, scraped, sanded, and painted. The existing granite entry steps and paved path will be removed and replaced with an entry patio. A central concrete path with intermediate steps will extend directly south to the adjacent sidewalk. Two sloped paths will extend to the east and west to provide universal access to the historic main entrance. These site improvements are discussed further in Number 8: Site.

The secondary entrances at the east and west single-story wings will also be retained and repaired as necessary. At the historic Children's Room entrance the existing wood door will be retained, scraped, feather sanded and painted. The existing wood surround and sidelights will also be retained, scraped, sanded and painted. The existing bluestone platform and granite step will be removed and a new outdoor children's area will be constructed, detailed further below in Number 8: Site. The entrance at the east wing will be converted to serve as a shipping entrance and will receive a new historically appropriate wood entry door. The existing concrete entry steps and path and their metal railings will be replaced in kind.

The auditorium wing entrance will be retained and repaired as necessary. The existing wood door, transom, and surround will be retained, scraped, feather sanded and painted. The existing entry porch will be retained, scraped, feather sanded and painted. The stone entry steps will be cleaned and reset as necessary.

The two service entrances at the east elevation of the northeast wing will be retained and repaired as necessary. The existing wood doors, transom, and surrounds will be retained, scraped, feather sanded and painted. The standing seam copper roof at the south doors will be replaced in kind.

The non-historic basement level entrance at the north elevation will be replaced by a new entrance at the north wall of the new addition. The entrance will hold fully glazed entry doors with a glazed transom and will be located at grade at the new lower level. A new reading patio will be installed along the north elevation, detailed further below in Number 8: Site.

The existing non-historic entrance at the west elevation will be removed. A new door at the west elevation will be located within the new construction. The door will be accessed by a new concrete path extending south along the property line to the Amity Street sidewalk and will feature fully glazed doors.

Architectural Feature: Interior Spaces
Approximate Date of Feature: 1928, 1968, 1993

### **Describe Existing Feature and its Condition:**

Constructed in two major building campaigns completed in 1928 and 1993, the interior of the 1928 portions of the building were designed with finishes typical of early 20<sup>th</sup> century Colonial Revival buildings. The interior holds a lower level and two upper floors, with attic levels at some areas. The main block consists of a center hall plan with rooms flanking either side of the corridor. Side and rear wings generally hold large rooms or offices directly accessed from one another without corridors.

The lower level is accessed from the interior by the southeast and southwest stairs within the 1928 building and the northeast and northwest stairs within the 1993 building. Two straight-run stairs within the atrium also access the lower level. Due to the sloping grade, the southern end of the floor is below grade and the north end is fully above grade. Windows are set into the perimeter walls. The layout consists of stacks at the center of the plan below the central atrium, surrounded by library offices to the northeast (constructed in 1993), reading and meeting rooms to the north and west, and additional stacks to the southwest. Public restrooms are located at the west side of the plan, adjacent to the west stair hall, and feature tile flooring and walls and GWB ceilings. Utility and storage rooms are located to the south and east. Within the public areas of the library and in library offices partitions and finishes date to the 1993 renovation and include carpeted flooring, GWB or plaster walls with simple wood baseboards, and flat GWB or acoustical tile ceilings with exposed systems. Doors are wood paneled with wood surrounds. Utility and mechanical rooms feature concrete flooring, GWB or exposed painted brick walls, and flat GWB ceilings with exposed systems. Doors are typically metal with metal surrounds.

The interior layout of the first floor consists of a center hall plan at the main block. The main entrance contains a vestibule enclosed by a wood half-glazed door with half-glazed sidelights and a glazed transom. The vestibule opens to the main central corridor, which holds the main stair. The main stair extends to the building's third floor. Framed openings at the east and north walls of the main stair hall open to a suite of library offices and a rear cross hall, respectively. The west side of the plan holds a reading room not accessed from the main stair hall.

The rear hall located to the north of the central stair hall provides access to the northeast stair hall. To the east of the stair hall is the east wing, which holds a community room and the building's universal entrance. The remainder of the single-story wing holds administrative offices partitioned as such in the 1993 campaign. Historically these areas served as the lobby for the auditorium wing to the north. Directly west of the main block, the west wing holds a circulation space to the east and Children's Room to the west. The circulation hall is enclosed with double-leaf glazed wood doors. A secondary stair is situated to the north and an entry vestibule, formerly an active entrance to the Children's Room wing,

to the south. The vestibule is enclosed with a half-glazed wood door and sidelight. The Children's Room stacks are located to the north of the Children's Room, accessed via a wide passage at the historic north wall and from the 1993 addition. The stacks are located within an original wing heavily modified in the 1993 renovation. At this time, interior partition walls were removed, and new finishes and bathrooms installed.

An atrium constructed in 1993 is located to the north of the main block at the center of the plan. The central circulation desk is located at the southeast corner of the atrium. The atrium is surrounded by stacks and reading areas to the east, north, and west, accessed by open doorways at the perimeter of the atrium. Several small offices are partitioned at the northwest corner of the plan.

Within the 1928 portions of the first floor, historic finishes are intact and include varnished wood baseboards, wainscoting, window trim, carved door surrounds, and crown moldings. Decorative fireplaces with original wood mantels remain in the community room, library offices, and Children's Rooms. Some fireboxes are infilled. Walls throughout are mainly wood wainscoting with painted plaster. Historic built-in bookcases are located in several reading rooms. Ceilings are plaster. The historic auditorium space features a barrel vaulted ceiling. Wall to wall carpeting has been laid within most rooms and the central corridor. Historic doors include solid wood paneled doors, wood paneled doors with multi-light glazing in the upper panels, and fully glazed doors. Some historic doors have been replaced with modern fire-rated units. Within the 1993 additions, finishes include carpeted floors, GWB walls with simple wood baseboards, and acoustical tile ceilings. The perimeter of the atrium is lined with fluted columns imitating the appearance of historic exterior columns. Doors feature simple wood surrounds, and windows are set within simple plaster returns. At the former exterior walls of the auditorium and stage wings, brick and masonry is exposed.

The second floor holds meeting and reading rooms, staff break rooms, and a gallery along the south and west portions of the historic 1928 building. Similar to the first floor, the main block holds a central stair hall. Framed openings at the west, north, and east walls of the stair hall provide access to staff work rooms and a large meeting room. The east wing holds staff break rooms. At the west wing is a Youth Room and bathroom, primarily accessed by the public from the southwest stair hall. To the north of the Youth Room is the gallery. The 1993 addition is located to the north of the gallery, comprising a stair hall and several rooms and offices devoted to Special Collections. A storage room for Special Collections is located within the historic northeast wing.

Like the first floor, the historic 1928 portions of the second floor are largely intact and include varnished wood baseboards, wainscoting, window trim, carved door surrounds, and crown moldings. Decorative fireplaces with original wood mantels remain in the staff break room, work rooms, the east meeting room, and Youth Room. Walls throughout are painted plaster with wood chair rails or paneling. At the former exterior wall of the northeast wing, masonry is exposed. Ceilings are mainly plaster. The gallery features a vaulted plaster ceiling and dropped ceilings have been installed in the Special Collections storage room. Wall to wall carpeting has been laid within most rooms and the central corridor. Wood

flooring is present in the Youth Room, gallery, and staff break room. Tile is present in bathrooms and the staff kitchen area.

The 1993 addition features mainly carpeted floors, GWB walls with simple wood baseboards, and acoustical tile ceilings. Portions of the Special Collections division feature wood flooring. Doors feature simple wood surrounds, and windows are set within plaster returns.

Above the historic main block is a third floor level, accessed by the central main stair and a secondary straight run stair to the east. The third floor holds a large meeting room with a vaulted ceiling to the west and offices to either side of a central corridor to the east. A staff restroom is located at the east end of the plan. The third floor features wood flooring, plaster walls with wood baseboards, chair rails, and crown moldings, and plaster ceilings. The ceiling in the large meeting room is vaulted.

An attic level is located over the east end of the main block and consists of a large open room. The central elevator override is enclosed at the center of the plan.

A mechanical room is situated at the attic level of the northeast wing over the Special Collections storage area. The room consists of a semi-finished room with concrete floors, plaster walls, and plaster ceilings.

**Photo No.** 31-167

**Drawing No.** 121, 122, 123, 124, 125, 126, 127, 128

## **Describe Work and Impact on Existing Feature:**

The proposed project will rehabilitate the building for continued use as a public library. Character defining features of the original building at the interior and exterior will largely be retained and preserved. The historic plan, room configurations and circulation patterns throughout the historic building will largely be retained, as will the vast majority of the historic trim, baseboards, paneling, fireplaces, and other moldings. Some secondary partition walls will be removed to accommodate the building's new programming and current library standards and requirements. The 1993 wings and heavily modified gable-roof wing at the west side of the plan will be removed and replaced with sensitively designed new construction. Modifications to the historic building are limited to changes required to meet current life-safety and accessibility codes, as well as current library standards. As noted in the attached letter from the Massachusetts Libraries Board of Library Commissioners, the retention of those elements slated for removal would jeopardize the project, requiring a larger footprint or reductions to programmatic space which would not be permitted.

The lower level will primarily hold facilities for Special Collections along with several meeting rooms, restrooms, mechanical rooms, and offices. A new concrete floor slab will be poured in lower level of the former auditorium and stage wings. A wide central corridor will be located at the middle of the plan, with side halls extending to the east and west. The central corridor will hold the new main stair and the

new elevator. Special Collections storage rooms, exhibit rooms, workrooms, reading room, and offices will be situated along the eastern side of the historic building and within the northeast addition. The western side of the new addition will hold meeting rooms, a kitchenette, art gallery, and inclusive restrooms. Mechanical rooms will primarily be located at the lower level of the historic main block and west single-story wing.

The first floor will hold youth library rooms as well as adult fiction and new materials, a large reading room and central gathering area, and staff work rooms. The existing south entry vestibule and central stair hall within the main block will be retained. To the east of the central stair hall, staff offices will be retained and expanded into the east one-story wing. The existing safe and elevator will be removed and the associated floor space incorporated into the offices. The elevator surround will be retained at the corridor, and the safe door will be salvaged for reuse. As detailed further below in Number 5: Interior Circulation, the partition walls at the northeast corner of the main block will be reconfigured to allow for insertion of a fully code-compliant stair serving all levels of the historic building. The reconfiguration will also allow for improved circulation among new staff work rooms. The historic west Children's Room wing will hold stacks for youth fiction and non-fiction. An office for the head of Youth Services will be constructed at the west sunroom. To achieve the clear sightlines required in the section of the building directly serving children, the existing partition wall dividing the entry vestibule and stair hall from the remainder of the wing will be removed. As noted below in Number 5: Interior Circulation, the stair within the wing will be removed and the floorplate infilled. The existing opening in the north wall of the Children's Room wing will be widened providing clear sightlines to the youth circulation desk within the new addition. The former auditorium wing will be converted to serve as a reading room and adult fiction stacks. The offices at the south end of the auditorium, which were partitioned in the 1993 renovation, will be reconfigured.

The west rooms of the new addition, located north of the historic Children's Rooms, will be devoted to youth and children's rooms, restrooms, and a staff workroom. The central portion of the addition will hold the new main stair, main circulation desk, café/gathering area, and adult new materials. The portion of the addition at the northeast corner of the building will hold adult fiction stacks, adult periodicals, and adult AV. Study rooms and an office for the Head of Collections will be situated at the east wall. As noted above in Number 2: Windows, select window openings at the north wall of the historic northeast addition will be removed and the openings converted to open doorways.

The second floor will hold adult reading rooms within the main block and library administrative offices within the historic side wings. As noted below in Number 5: Interior Circulation, the stair hall in the west wing will be removed and the floorplate infilled. The existing bathroom opposite the stair will also be removed and the associated space will be reprogrammed. The existing east meeting room will be expanded to the north, meeting the enclosure wall of the new northeast stair. The existing partitioned office at the northwest corner of the main block will be retained and an additional office added directly to the east. Within the new addition, an open work area will be located at the center of the plan with desks and computer workstations. The western portion of the plan will hold the adult non-fiction

section. The northeast corner of the plan will hold small tutoring and study rooms, ESL rooms, digital media, and Young Adult programs. The north roof slope of the northeast wing will be raised to allow for effective circulation between the existing building and new addition.

At the third floor of the main block, the existing large meeting room will be retained and preserved. The historic doors, trim, fireplace, and flooring will be repaired as needed and retained. The southern pair of double doors will be fixed in place and infilled at the east face. The offices and bathroom at the eastern side of the plan will be reconfigured to accommodate a staff kitchen, break room, mother's room, meeting room, locker room and restrooms. Historic trim will be retained at perimeter walls. Within the new northeast stair hall, a new door opening will be created. The doorway will provide access to the new elevator which will be enclosed at the roof level.

No work at the attic level of the main block is anticipated. The mechanical systems at the attic of the northeast addition will be removed and relocated within the building.

Throughout the historic 1928 portions of the building all historic doors, casings, baseboards and other trim will be retained except where specifically noted. These features will be sanded and stained to match the existing finish where required. All decorative fireplaces will be retained. Plaster wall and ceiling surfaces will repaired and painted. New partitions within the historic building and new addition will be constructed of GWB and will have painted wood baseboards and trim.

#### 13. Number 5

Architectural Feature: Interior Circulation

**Approximate Date of Feature:** 1928, 1993

### **Describe Existing Feature and its Condition:**

The 1928 building contains six staircases. The main stair is centrally located opposite the main entrance and extends between the first and third floors. The stair is among the building's most prominent interior architectural features carved spiral balusters, molded handrails, and a carved spiral newel post. Carpeting covers the wood treads and risers. The stair hall features wood wall paneling, molded baseboards, and crown moldings. Walls are plaster.

A secondary stair provides access between the lower level and second floors and is located at the northeast corner of the main block. The stair features turned wood balusters, carved handrails and square newel posts with decorative fluting. Carpeting covers the wood treads and risers. The stair hall features a molded baseboard, chair rail, and crown molding. Walls are plaster. The west wing holds an additional stair extending from the lower level to the second floor. The stair features turned wood balusters, carved handrails and square newel posts with decorative fluting. Carpeting covers the wood treads and risers. The stair hall features a molded baseboard, wood wall paneling, and crown molding. Walls are plaster.

A utilitarian straight run stair provides secondary access between the second and third floors. The enclosed stair is constructed of metal with concrete treads and a modern wall-mounted wood handrail. A simple metal skirt board frames the stair; walls are otherwise plaster. A utilitarian quarter- turn stair provides access from the third floor to the attic level. The stair is constructed of metal with concrete treads and modern wall-mounted wood handrails. Walls are plaster with a simple metal skirt board. The stair is enclosed by a metal railing with a wood handrail at the attic level.

A utilitarian stair extends from the lower level to the attic of the northeast wing. The stairwell was added in the 1993 renovation and has outlets at the lower level, second floor, and attic. The stair is metal and features simple metal railings and rubber tread covers. A wall-mounted ladder provides access from the uppermost stair landing to the attic mechanical room.

Three stairwells are located in the 1993 addition. Two straight-run stairs are located at the north wall of the central atrium. The stairs extend between the lower level and the first floor. The stairs are constructed of metal and carpeting covers the treads and risers. Molded wood handrails are mounted to the sidewalls, which are constructed of plaster and painted brick. The stair openings at the first floor are lined with piers holding clusters of four fluted columns with rosettes, and carved wood railings.

A stair extending from the lower level to the second floor is located at the west side of the building adjacent to the historic second floor gallery space. The stair is metal and carpeting covers the treads and risers. Rubber tread covers are also present in some areas. The stair features plaster walls and a low wood skirt board. Modern wood handrails are mounted to side walls.

The main block contains a single elevator serving the lower level to third floor. The elevator entrances feature elaborate wood surrounds dating to the building's original construction. A second elevator is located within the 1993 addition adjacent to the west stair. The elevator was installed in 1993 and serves all levels of the building.

**Photo No.** 31, 34, 35, 40, 42, 48, 49, 61, 62, 65, 66, 77,89, 90, 98-100, 103, 118-120, 127,

128, 132, 133, 143, 144, 150, 151, 165, 166

**Drawing No.** 121, 122, 123, 124, 125, 126, 127, 128

## **Describe Work and Impact on Existing Feature:**

The existing main stair will be retained and preserved and will continue to be among the building's prominent architectural features. The staircase will be gently hand sanded and refinished with varnish to match the existing finishes. Wall paneling will be refinished with varnish to match the existing and plaster walls will be repaired and repainted. A new carpet runner will be installed. Handrails will be modified only if required by code; should alterations be required this will be the subject of a future Amendment.

The secondary stair at the northeast corner of the main block will be removed and replaced with a new code-compliant, fully enclosed and fire rated stairwell. The stair will be constructed of metal and will feature simple metal railings. The stair hall will occupy a portion of the passage north of the historic stair hall.

The utilitarian straight run stair providing access between the second and third floors of the main block will be removed and the floor plate infilled. The utilitarian quarter turn stair accessing the attic level will be retained and repaired in kind as needed. The stair located within the historic west wing will be removed and the floor plate infilled. The additional floorplate area will be incorporated into programmable space. Similarly, the existing elevator at the main block will be removed and the floorplate infilled. Decorative surrounds will be retained.

The utilitarian stair at the northeast wing will be removed and replaced with a new code-compliant, fully enclosed and fire-rated stairwell servicing all levels of the building. The new stair will be fully enclosed The stair will be constructed of metal and will feature simple metal railings.

The existing stairs and elevator within the 1993 addition will be removed. The new additions will feature a single centrally located main stair and elevator serving all levels of the building.

Architectural Feature: Roof

**Approximate Date of Feature:** 1928, 1993

### **Describe Existing Feature and its Condition:**

The historic 1928 library building is composed of a central main block and secondary wings with intersecting roof planes. The main block is capped with a side-oriented gambrel roof. The roof is covered in slate shingles with copper snow guards. The roofline is enhanced with a shallow molded cornice and modillion blocks and molded rake trim at the closed gable ends. Five gable-roofed dormers are present at the north and south roof planes. Two stone end chimneys rise from the ridgeline. Half round copper gutters and leaders are present on the main block, as well as other secondary wings. Two single story sunrooms extend from the outer bays at the façade. The sunrooms are capped with gable roofs clad in slate shingles. The rooflines are enhanced with a narrow cornice and dentil course. The open gable ends of the sunrooms are lined with dentil courses and molded trim.

The wings to the east and west of the main block are also capped with gambrel roofs clad in slate shingles with copper snow guards. The rooflines are enhanced with dentil courses set under deeply overhanging eaves. Shed roof dormers are present at both wings. The west wing features a stone end chimney at the ridgeline. The exposed end walls of the wings feature molded rake trim.

A two-story wing extends north from the west single-story wing and is capped with a gable roof clad in metal roofing. The roofline features a simple boxed cornice. The wing was originally two bays and was extended to the north in 1993. A single-story shed roof extension alongside the west elevation of the wing is also clad in modern metal roofing.

Extending perpendicular from the rear (north) elevation of the east one-story wing, the original auditorium wing is also capped with a gambrel roof clad in slate shingles with copper snow guards. The roofline features a simple molded cornice. Four shed dormers are located at the east and west roof planes. A stone end chimney is located at the south end of the wing at the ridgeline. The northeast wing is also capped with a slate-clad gambrel roof, set perpendicular to the auditorium wing. The exposed east end wall features simple molded rake trim and cornice returns. The north roofline is enhanced with a projecting wood cornice supported by modillion blocks. Two stone chimneys are located at the south roof slope.

The 1993 addition features two distinct masses capped with gambrel roofs clad in metal roofing. The central atrium is sheltered by a pyramidal glass roof surrounded by a flat membrane roof perimeter.

Slate roofing is Buckingham slate and dates to the building's original construction in 1928. The slate shingles have reached the end of their serviceable expected life span. Deterioration of the slate roofing

includes extensive broken and chipped slates missing their margins, cracked slates, loose slates, delamination, and poor-quality replacement slate. The failure of slate roofing has led to water infiltration throughout areas of the building. Copper gutters and leaders are in fair condition. Copper snow guards are in poor condition.

The metal roofing across the building is in fair condition. Flat membrane roofing over the central atrium is in fair to poor condition, with areas of water infiltration. The pyramidal glass atrium roof is in fair condition, with areas of water infiltration.

**Photo No.** 1, 2, 3, 5, 7, 9-12, 14, 16-18, 20, 24-26, 28

**Drawing No.** 129, 130

# **Describe Work and Impact on Existing Feature:**

The slate on the historic 1928 building will be replaced with a composite slate which matches the appearance of the historic slate in size, shape, thickness, texture and color. Color selection will be based on the current color range of the remaining historic slates, which is a gray blue color. A review of manufacturer options by the project team has identified EcoStar Empire Slate in "Freeport Federal" as an appropriate match to the appearance of the existing slate. Additional information on the EcoStar slate as well as detailed photos of an existing slate salvaged from the building is included for review. Copper gutters and leaders will be replaced in kind. New copper snow guards will be installed on portions of the roof. As noted above in Number 1: Exterior Wood and Masonry, the historic chimneys will be retained, cleaned and capped internally. Existing replica cast concrete caps will be retained.

The rear (north) roof slope of the northeast wing will be removed and a new flat roof will extend from below the existing ridge line. The roof will shelter a connection between the northeast wing and the new addition. The new additions will feature standing seam metal roofing on sloped surfaces and TPO roofing on flat surfaces. Shed dormers will be located on some portions and will feature flat seam metal cladding. The slate roofing on the west roof slope of the auditorium wing will also be TPO roofing integrated with the new addition to ensure appropriate drainage. A flat membrane roof will extend over the north roof slope of the main block to provide a protected connection between the existing building and addition. A roof hatch will be located at the flat roof to provide access for routine repairs and maintenance. A roof monitor will be located near the center of the building. New mechanical equipment will be located only on the roof of the new additions. Due to the building's height and surrounding site conditions, the equipment will not be visible from street level.

### 13. Number 7

**Architectural Feature:** Building Systems

**Approximate Date of Feature:** 1993

### **Describe Existing Feature and its Condition:**

Existing building systems, including heating and cooling, plumbing, and electrical systems date to the 1993 renovation of the building. The 1928 portions of the building are heated and cooled by fan coil units and the 1993 additions are heated and cooled by perimeter radiators and forced air. Sprinkler systems are exposed and lighting is mainly suspended fluorescent fixtures. Electrical service is located in the basement along with heating and cooling systems. A mechanical room is also located at the attic level of the northeast wing. Building systems are not energy efficient and beyond the end of their expected life spans.

**Photo No.** 53, 162-164

Drawing No. N/A

### **Describe Work and Impact on Existing Feature:**

The existing building systems will be fully replaced and upgraded with energy efficient systems that comply with current building code requirements. The project seeks to eliminate the use of fossil fuels and create a net-zero ready building. The project will reduce energy use intensity by 60% and reduce the total lifetime carbon emissions by 41%. A high efficiency VRF system for heating and cooling will be installed.

All new mechanical ductwork and the new sprinkler system will be concealed within walls and ceilings and will not be visible. Any surfaces disturbed by the installation of new building systems will be repaired in kind.

**Architectural Feature:** Site

**Approximate Date of Feature:** 1928, 1993

### **Describe Existing Feature and its Condition:**

The Jones Library is located on the north side of Amity Street in Amherst, Massachusetts. The property is located within the block bound by Amity Street, North Prospect Street, Cowles Lane and North Pleasant Street. Set on an approximately .96-acre parcel, a grassy lawn separates the building from the adjacent sidewalk. A stone path extends from the sidewalk to the main central entrance, and a sloped concrete path provides access to the universal entrance at the east wing. An asphalt paved driveway and small parking area extends along the east side of the building. At the west elevation, the building features a narrow setback from the west property line. To the north is open space bisected by pathways leading to the adjacent public parking lot.

Photo No. 1-3, 5, 7, 9-12, 16, 17, 18, 20, 25, 26 Drawing No. LC-001, LC-002, LC-111, LC-112

### **Describe Work and Impact on Existing Feature:**

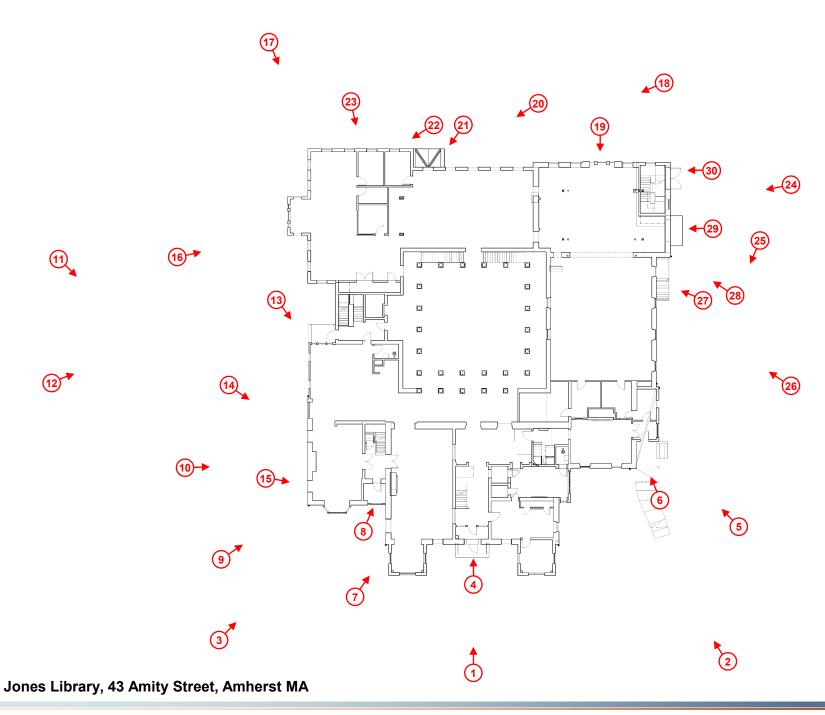
The overall site configuration will be retained. As described above, the 1993 additions and gable roofed wing heavily modified in the 1993 campaign will be removed and replaced with new construction. The new addition will be internally connected to the historic 1928 building and will occupy much of the same footprint. New construction will also be added to the north of the historic northeast wing.

A new at-grade patio will be constructed at the main entrance. The patio will feature concrete pavers and Goshen stone seat walls. A central concrete path with intermediate steps will extend directly south to the adjacent sidewalk. Two sloped paths will extend to the east and west to provide universal access to the historic main entrance. A new outdoor children's area will be constructed adjacent to the historic Children's Room entrance. The area will feature a concrete path and moveable furniture. The children's outdoor area will be enclosed by a low ornamental metal fence and hedge for security purposes. At the western edge of the site, a new concrete path will extend from the sidewalk to the new west entrance of the library. New shade trees will be introduced at the street edge along with an evergreen shrub. Landscaping along the front of the building will be modified to ensure vegetation remains appropriately sited to avoid maintenance issues at the building envelope.

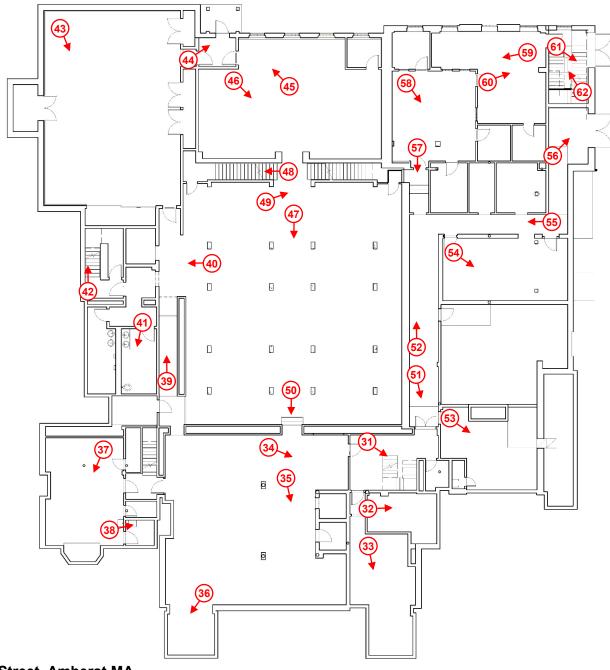
A new reading patio will be constructed along the north elevation of the building. The patio will be paved with unitized concrete pavers with a Goshen stone seat wall along the north edge. New concrete paths will extend from the patio to the rear pedestrian entrance to the site and the building's new north entrance. New rain gardens and shade trees will be introduced. A retaining wall will be constructed at

the northwest corner of the site adjacent to the new addition. The retaining wall will be constructed of concrete with a stone veneer and will be topped with an ornamental fence.

Alongside the east elevation a portion of the existing asphalt-paved driveway will be retained and will be repaved. Accessible parking spots will be added at the south end of the driveway and will be edged with cobblestones. The historic east entrance will be converted to a shipping and receiving entrance. The existing landing, steps, and pathway, installed in the 1993 renovation, will be replaced and will connect to the driveway. A new bike storage area will be constructed alongside this path. At the north end of the driveway, a new dumpster enclosure will be installed. The enclosure will be set on a concrete pad with a cedar fence and gate. Beyond the dumpsters, the drive will transition to a concrete paved pedestrian walkway extending to the north end of the site.

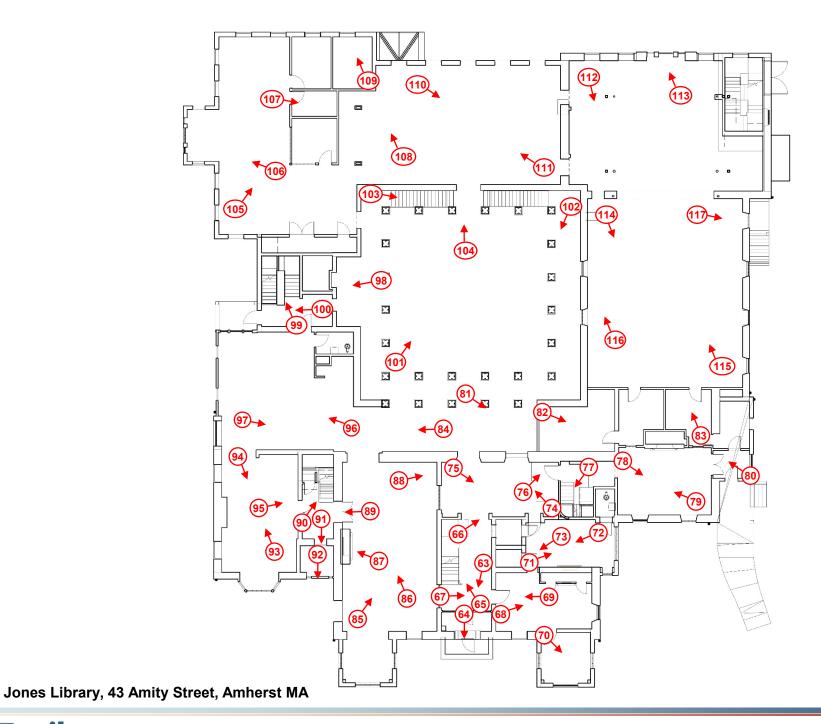




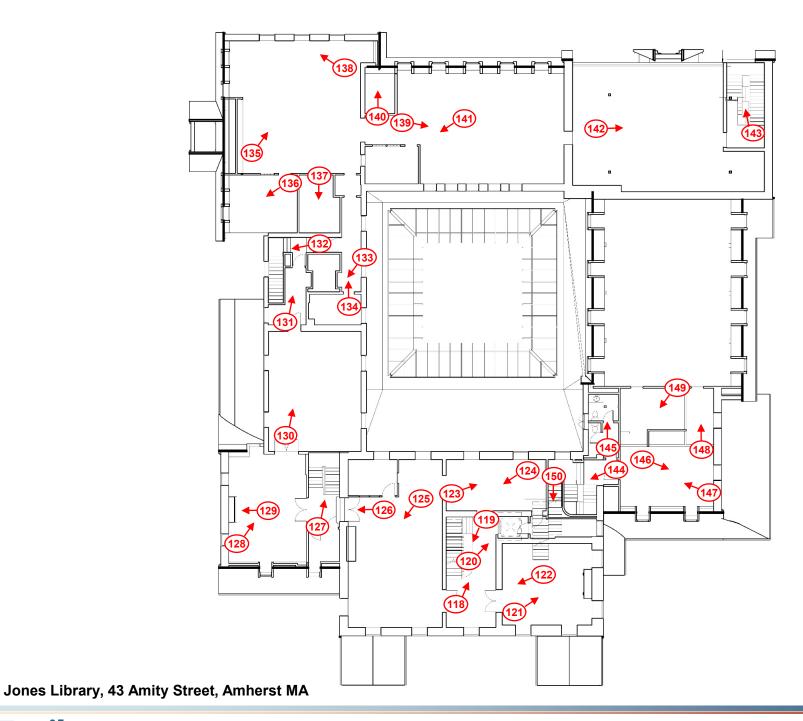


Jones Library, 43 Amity Street, Amherst MA

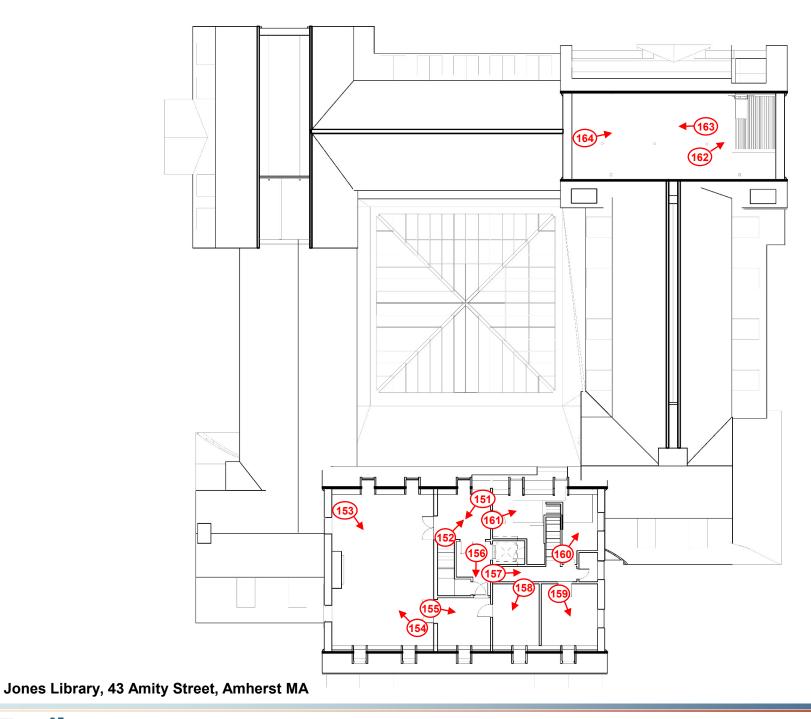




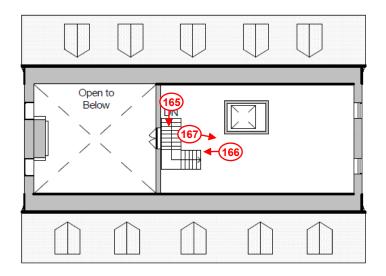






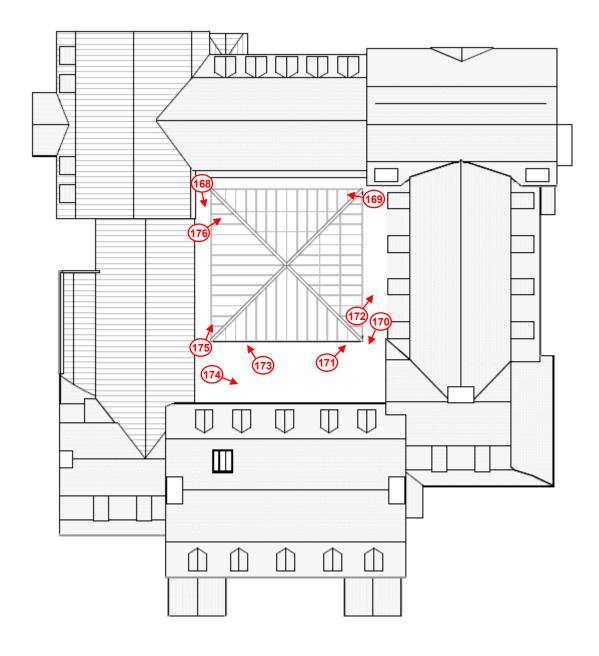






Jones Library, 43 Amity Street, Amherst MA





Jones Library, 43 Amity Street, Amherst MA





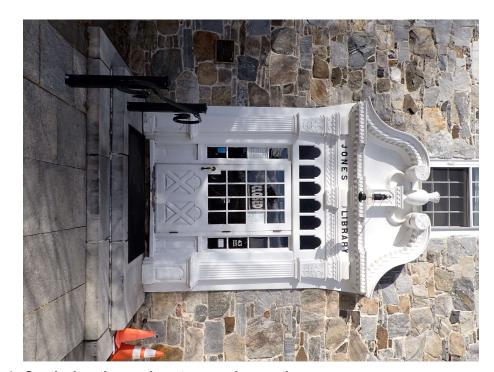
1. South elevation, view north



3. West elevation (left) and south elevation (right), view northeast



2. South elevation (left) and east elevation (right), view northwest



4. South elevation, main entrance, view north



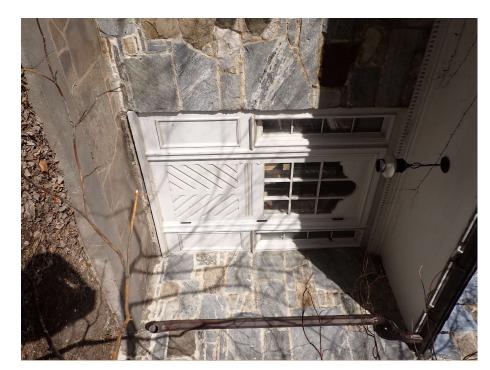
5. South elevation (left) and east elevation (right) of east wing and primary active entrance, view northwest



7. South elevation detail, view northeast



6. East elevation, primary active entrance, view northwest



8. South elevation of west wing, secondary entrance, view northeast



9. West elevation, view northeast



11. West elevation with 1990s addition at left, view southeast



10. West elevation of west wing, view east



12. West elevation, 1990s additions, view northeast



13. West elevation, secondary entrance, view southeast



15. West elevation of west wing, typical window, view east



14. West elevation of main block, chimney detail, view southeast



16. West elevation, view northeast



17. North elevation (left) and west elevation (right), view southeast



19. North elevation, second floor window detail, view south



18. North elevation, view southwest



20. North elevation, view southwest



21. North elevation, secondary entrance, view southwest



23. North elevation, upper floor window detail, view southeast



22. North elevation, cornerstone of 1990s addition, view southwest



24. East elevation, view southwest



25. East elevation, view southwest



27. East elevation, secondary entrance, view northwest



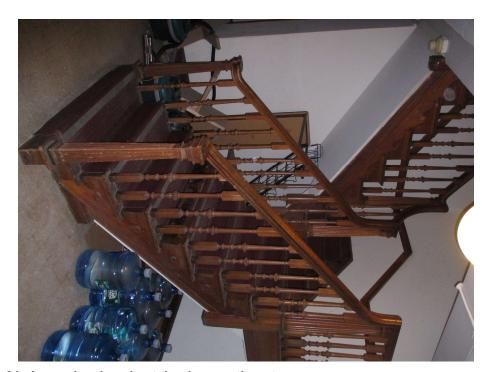
26. East elevation, view northwest



28. East elevation, chimney detail, view northwest



29. East elevation, ground level entrance, view southwest



31. Lower level, main stair, view southeast



30. East elevation, ground level entrance, view west



32. Lower level, storage closet, view east



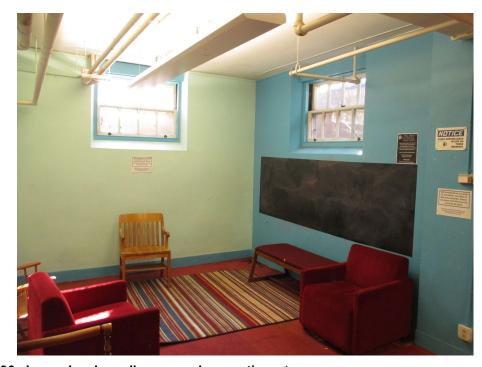
33. Lower level, storage closet, view southeast



35. Lower level, south elevator and stacks, view south



34. Lower level, circulation area, view southeast



36. Lower level, reading area, view southwest



37. Lower level, classroom, view southwest



39. Lower level, ramp and corridor, view north



38. Lower level, bathroom, view east



40. Lower level, circulation area and west elevator, view west



41. Lower level, bathrooms, view south



43. Lower level, assembly space, view southeast



42. Lower level, west stair, view north



44. Lower level, rear (north) entry vestibule, view northeast



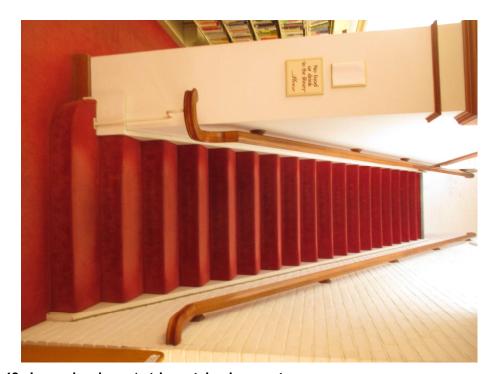
45. Lower level, reading area, view northwest



47. Lower level, central stacks, view south



46. Lower level, stacks and reading area, view southeast



48. Lower level, west atrium stair, view west



49. Lower level, east atrium stair, view northeast



51. Lower level, entry doors to mechanical area, view southeast



50. Lower level, stacks, view south



52. Lower level, corridor, view north



53. Lower level, mechanical room, view southeast



55. Lower level, corridor, view west



54. Lower level, custodial room, view southeast



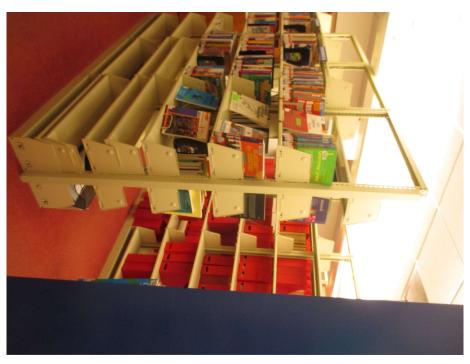
56. Lower level, service entrance vestibule, view northeast



57. Lower level, corridor, view south



59. Lower level, offices, view southwest



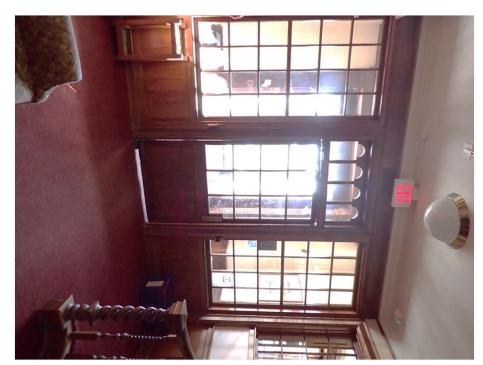
58. Lower level, stacks, view southeast



60. Lower level, offices, view northeast



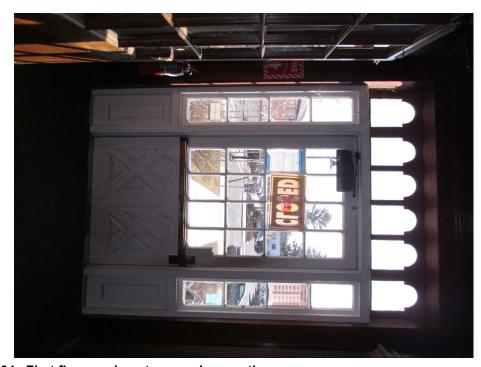
61. Lower level, northeast stair, view southeast



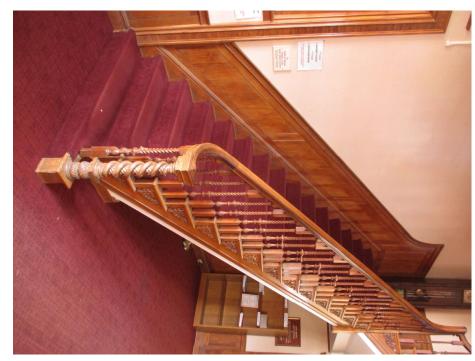
63. First floor, main inner vestibule door, view southwest



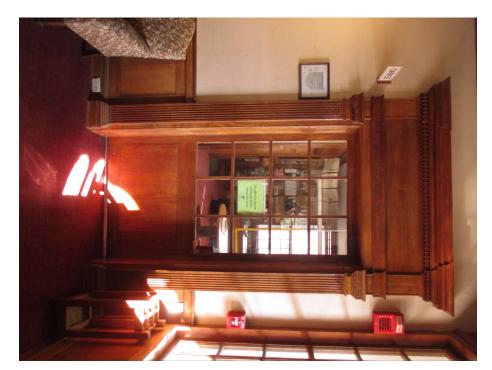
62. Lower level, northeast stair, view northwest



64. First floor, main entrance, view south



65. First floor, main stair, view northwest



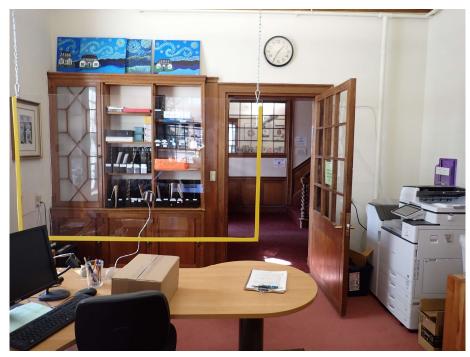
67. First floor, main stair hall, entrance to administrative offices, view east



66. First floor, main stair hall, elevator, view east



68. First floor, administrative office, view northeast



69. First floor, administrative office, view west



71. First floor, Director's office, view northeast



70. First floor, administrative office, view north



72. First floor, Director's office, view southwest



73. First floor, safe within Director's office, view southwest



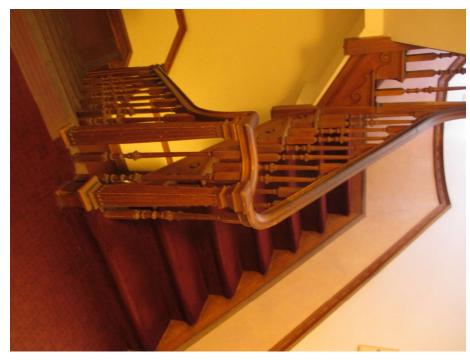
75. First floor, entry hall, view northwest



74. First floor, entry hall, view southeast



76. First floor, entry hall door detail, view northeast



77. First floor, southeast stair, view southeast



79. First floor, community room, view northwest



78. First floor, community room, view southeast



80. First floor, southeast entry vestibule, view northwest



81. First floor, main circulation desk, view southeast



83. First floor, typical office, view northwest



82. First floor, circulation office, view northeast



84. First floor, view west



85. First floor, children's room stacks, view northeast



87. First floor, children's room, fireplace, view northwest



86. First floor, children's room stacks, view northwest



88. First floor, children's room, woodwork detail, view east



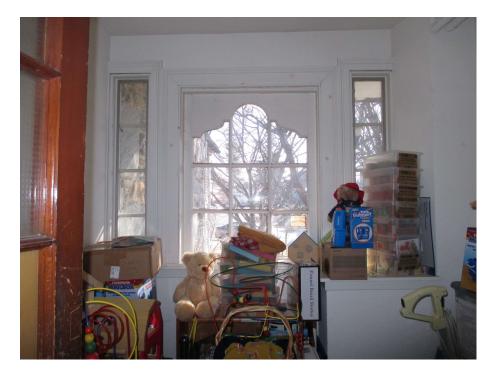
89. First floor, entrance to children's reading room, view west



91. First floor, children's room inner vestibule door, view south



90. First floor, southwest stair, view northeast



92. First floor, children's room entry door, view south



93. First floor, children's reading room, view northwest



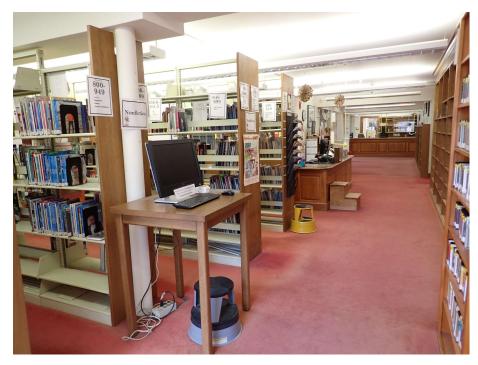
95. First floor, children's reading room, view east



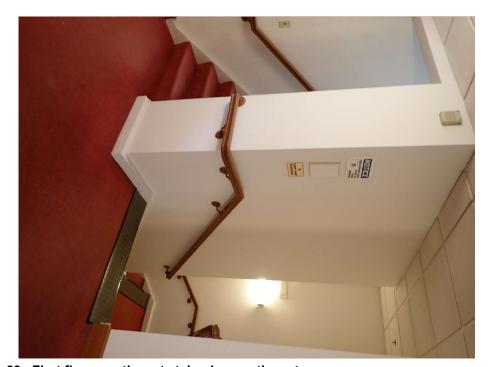
94. First floor, children's reading room, view southeast



96. First floor, children's room circulation desk, view northwest



97. First floor, stacks in children's room, view east



99. First floor, northwest stair, view northwest



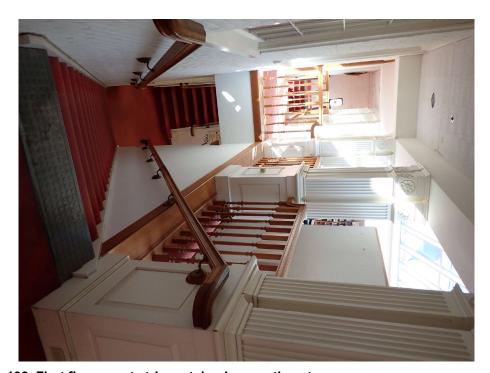
98. First floor, west elevator, view southwest



100. First floor, west entrance and stair hall, view west



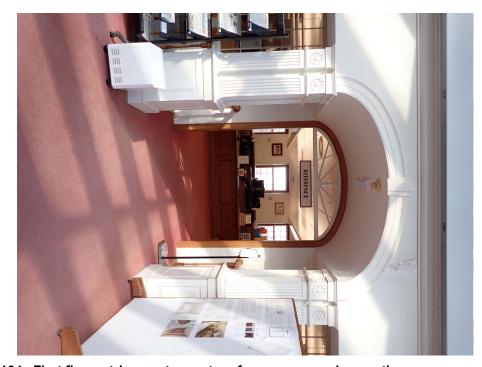
101. First floor, atrium, view northeast



103. First floor, west atrium stair, view southeast



102. First floor, atrium, view southwest



104. First floor, atrium, entrance to reference room, view north



105. First floor, audiovisual room, view northeast



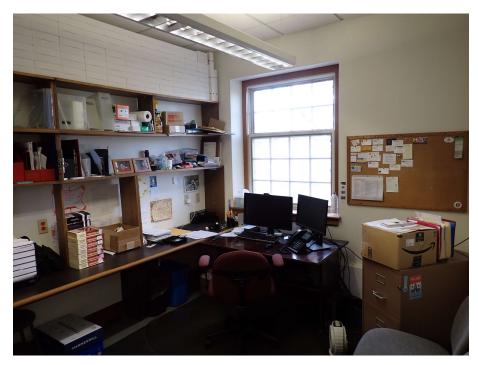
107. First floor, audiovisual office, view east



106. First floor, audiovisual room, view northwest



108. First floor, reading room, view northwest



109. First floor, typical staff office, view northwest



111. First floor, reference room, view northwest



110. First floor, reference room, view southeast



112. First floor, stacks within former auditorium, view southeast



113. First floor, window detail, view northwest



115. First floor, stacks within former auditorium, view northwest



114. First floor, stacks within former auditorium, view southeast



116. First floor, original exterior library wall, view northwest



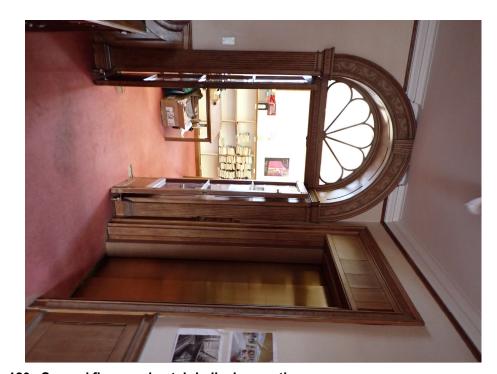
117. First floor, secondary entrance at former auditorium, view east



119. Second floor, main stair hall, view southwest



118. Second floor, main stair hall, view northwest



120. Second floor, main stair hall, view north



121. Second floor, Amherst Room, view northeast



123. Second floor, work room, view northeast



122. Second floor, Amherst Room, view southwest



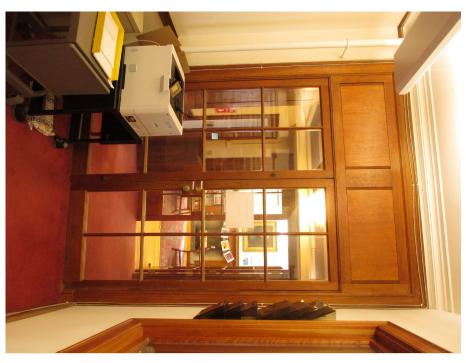
124. Second floor, work room, view southwest



125. Second floor, work room, view southwest



127. Second floor, southwest stair, view northeast



126. Second floor, work room, entrance to southwest stair, view west



128. Second floor, youth room, view northeast



129. Second floor, youth room, fireplace detail, view west



131. Second floor, corridor to Special Collections, view north



130. Second floor, art gallery, view northeast



132. Second floor, northwest stair, view west



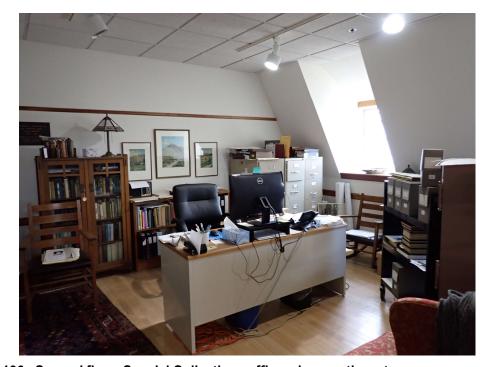
133. Second floor, elevator, view southwest



135. Second floor, Special Collections exhibit room, view northeast



134. Second floor, corridor to Special Collections, view north



136. Second floor, Special Collections office, view southwest



137. Second floor, Special Collections workroom, view south



139. Second floor, Special Collections reading room, view east



138. Second floor, Special Collections, north wall, view northwest



140. Second floor, storage closet, view north



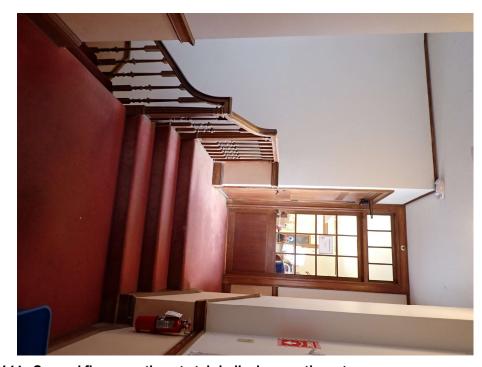
141. Second floor, Special Collections office, view southwest



143. Second floor, northeast stair, view northwest



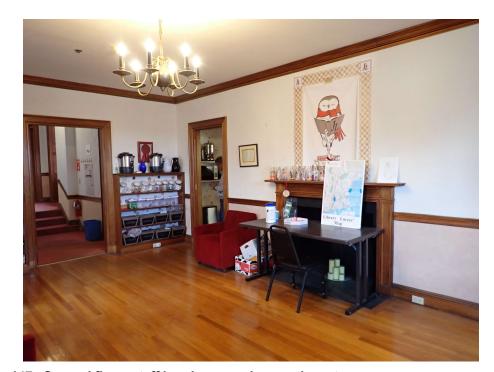
142. Second floor, Special Collections storage room, view east



144. Second floor, southeast stair hall, view southwest



145. Second floor, staff bathrooms, view north



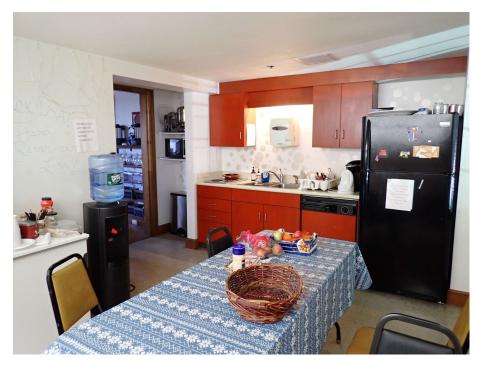
147. Second floor, staff break room, view northwest



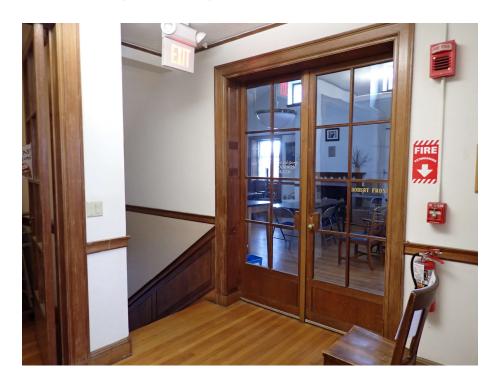
146. Second floor, staff break room, view southeast



148. Second floor, staff break room, view north



149. Second floor, staff kitchen, view southwest



151. Third floor, main stair hall, view southwest



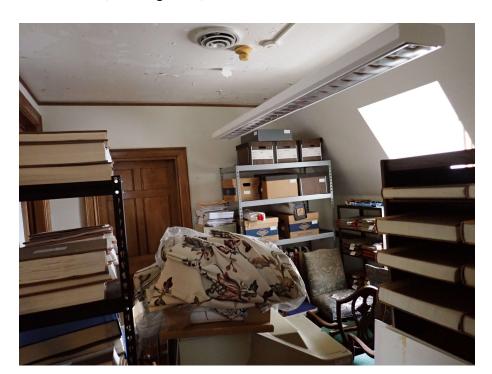
150. Second floor, east stair to third floor, view south



152. Third floor, main stair hall, view northeast



153. Third floor, meeting room, view southeast



155. Third floor, storage room, view east



154. Third floor, meeting room, view northwest



156. Third floor, main stair hall, view south



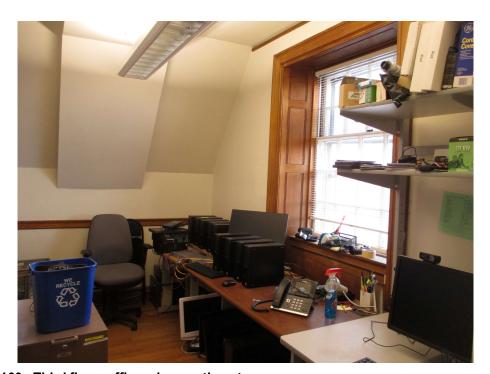
157. Third floor, corridor, view east



159. Third floor, office, view southeast



158. Third floor, office, view southwest



160. Third floor, office, view northeast



161. Third floor, storage room, view northeast



163. Third floor, mechanical room, view west



162. Third floor, mechanical room, view northeast



164. Third floor, mechanical room, view east



165. Attic level, main stair, view south



167. Attic level, view southeast



166. Attic level, main stair, view west



168. Roof level, view south



169. Roof level, view east



171. Roof level, view northeast



170. Roof level, view south



172. Roof level, view northeast



173. Roof level, view northwest



175. Roof level, view north



174. Roof level, view southeast



176. Roof level, view northeast

Massachusetts Libraries Board of Library Commissioners Letter Regarding Proposed Renovations

## Massachusetts Libraries

## **BOARD OF LIBRARY COMMISSIONERS**

mass.gov/mblc

Andrea Bono-Bunker 90 Canal Street, Suite 500 Boston, MA 02114

February 8, 2023

## Commissioners

Sharon Sharry Director Jones Library 42 Amity Street Amherst, MA 01002

Chair Deborah Conrad Marshfield

Vice-Chair Deborah V.H. Abraham

Needham

Secretary Stacy DeBole Swampscott

Leslie D. Ball Scituate

Vicky Biancolo Worcester

Mary Ann Cluggish Wellesley

George T. Comeau, Esq. Canton

Karen Traub Shutesbury

Jessica Vilas Novas Haverhill

Director James M. Lonergan Dear Ms. Sharry:

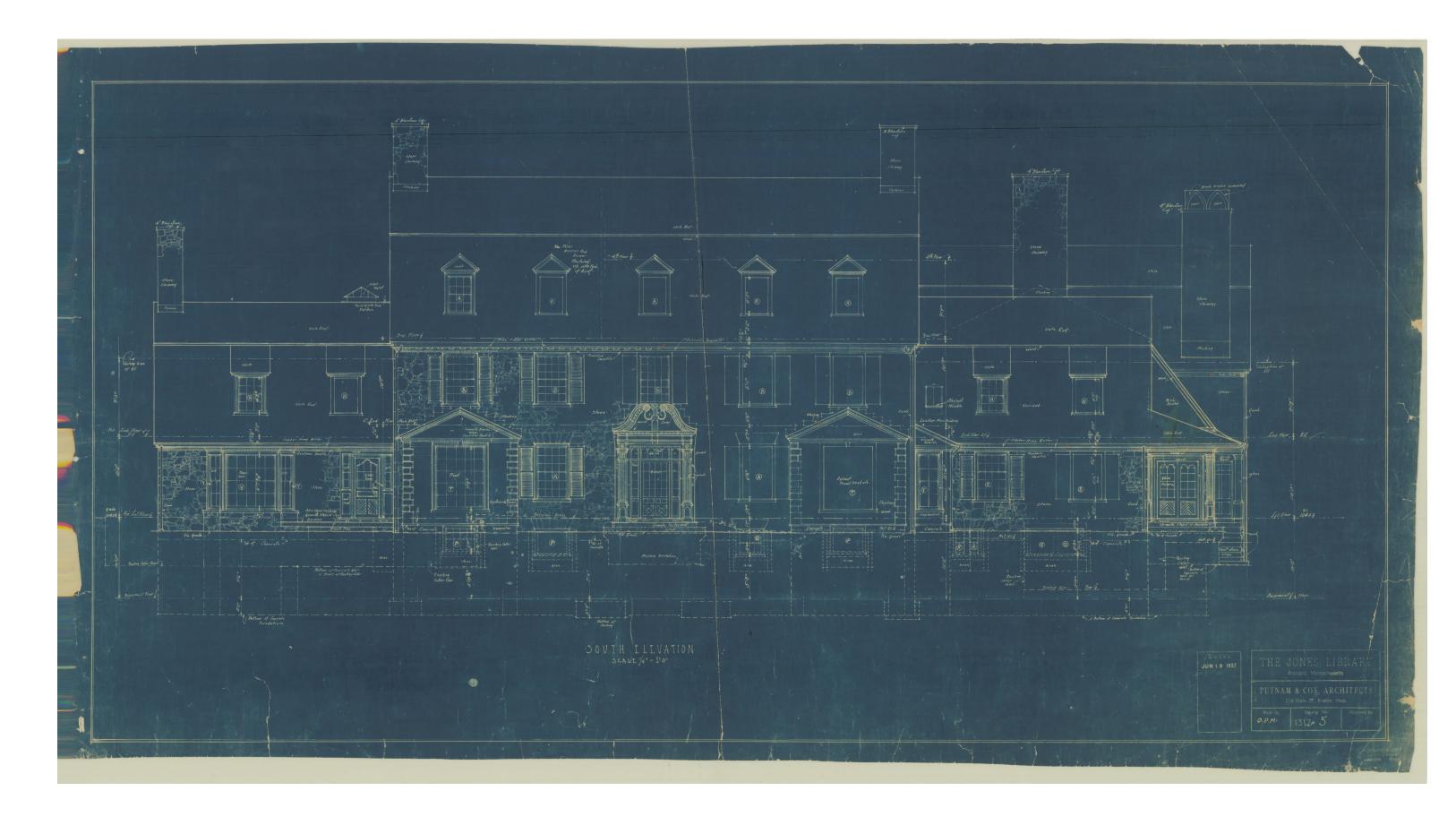
It has come to my attention that existing interior walls and conditions within the Jones Library in Amherst have been flagged to remain to retain historic elements of the building. As the Library Building Specialist for this project, I can unequivocally state that such retention will seriously alter the functional integrity of the building and jeopardize State funding, as no other reductions to programmatic space are allowed.

On the first level, the wooden wall in question renders what is intended to house collections unusable as public space. It would have to revert to storage, and the square footage lost would have to be gained through a larger footprint, as collection space is already at the minimum required. The other existing element on the first floor within what is to be the circulation workroom creates a pinch point, resulting in the inability to transport carts of materials from the sorter to the staff and collection areas. This impediment to functionality therefore impacts efficiency and negates any benefit to having an automated sorter, which is necessary for the volume of circulation the Jones library performs. Again, this square footage would have to be gained through a larger footprint.

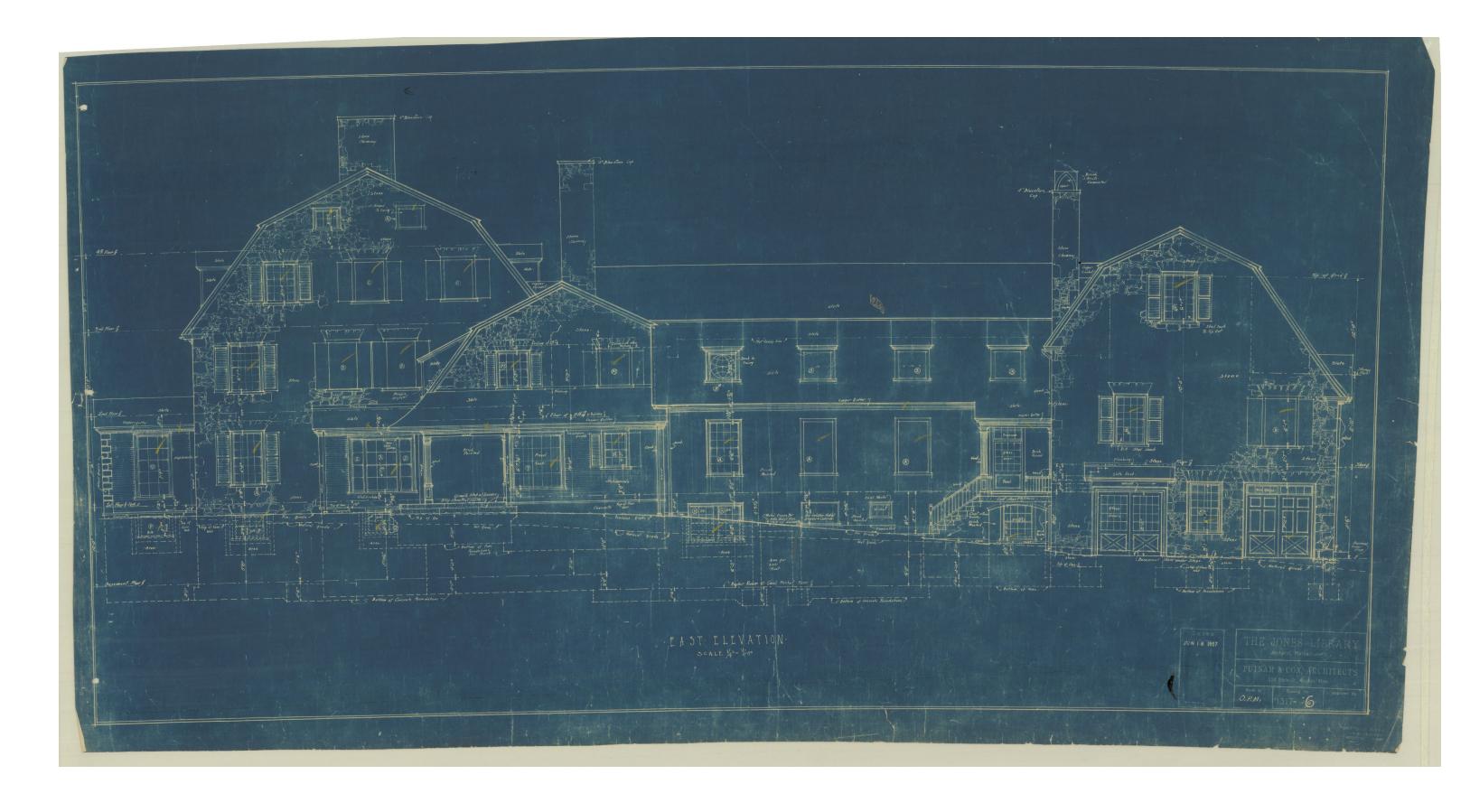
On the upper level, the existing condition, where the administrative offices are to be located, seriously impedes proximal supervision of reading room space that has limited sightlines due to the retention of existing masonry walls. This administrative suite would require significant redesign, and the building would require additional square footage.

These walls and conditions must be removed in order to rectify issues that led to the building project's necessity in the first place. If you have any questions, please do not hesitate to contact me at andrea.bunker@mass.gov or (617) 725-1860 ext. 246.

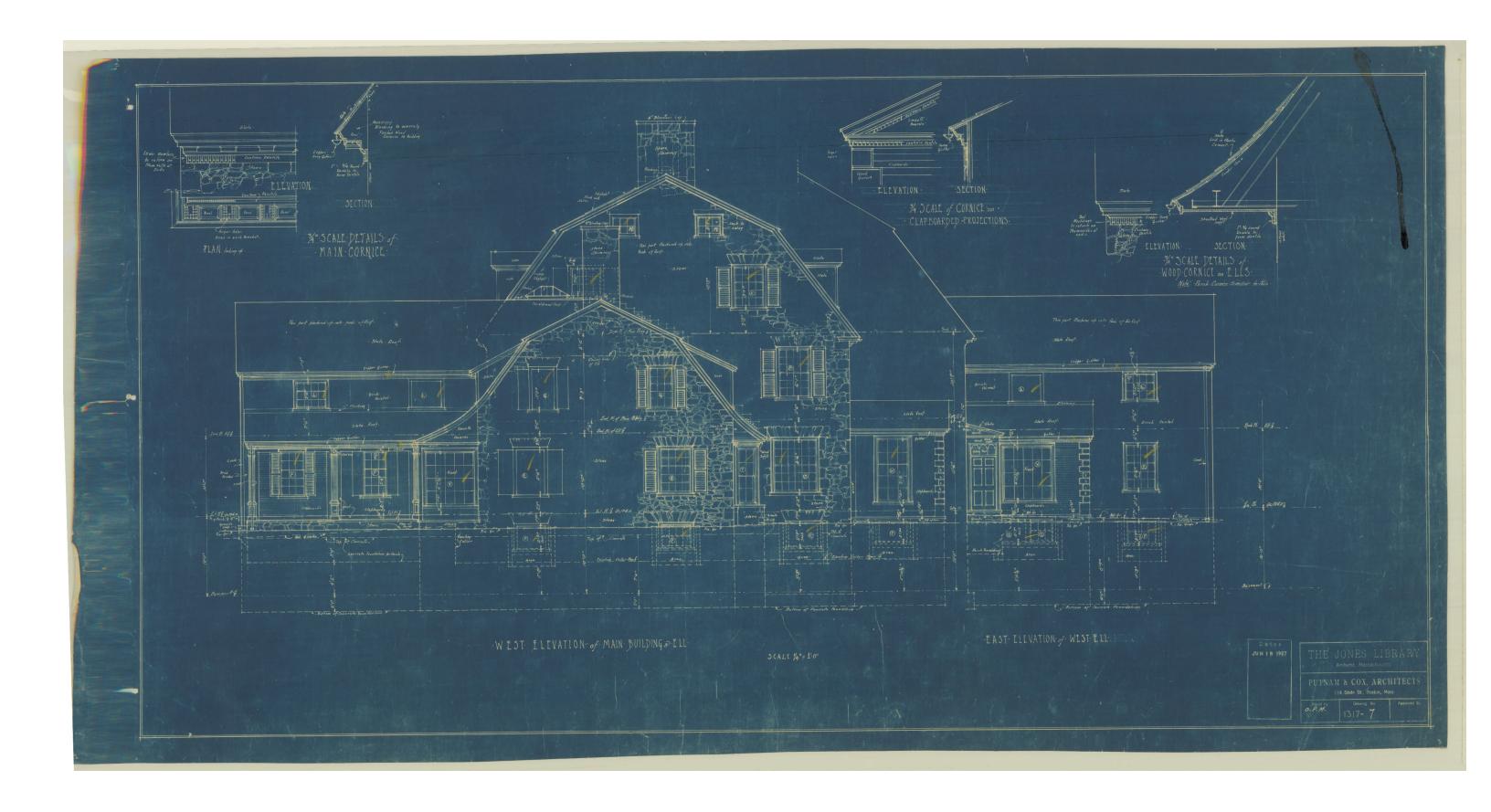
Thank you, Andrea Bono-Bunker

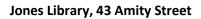


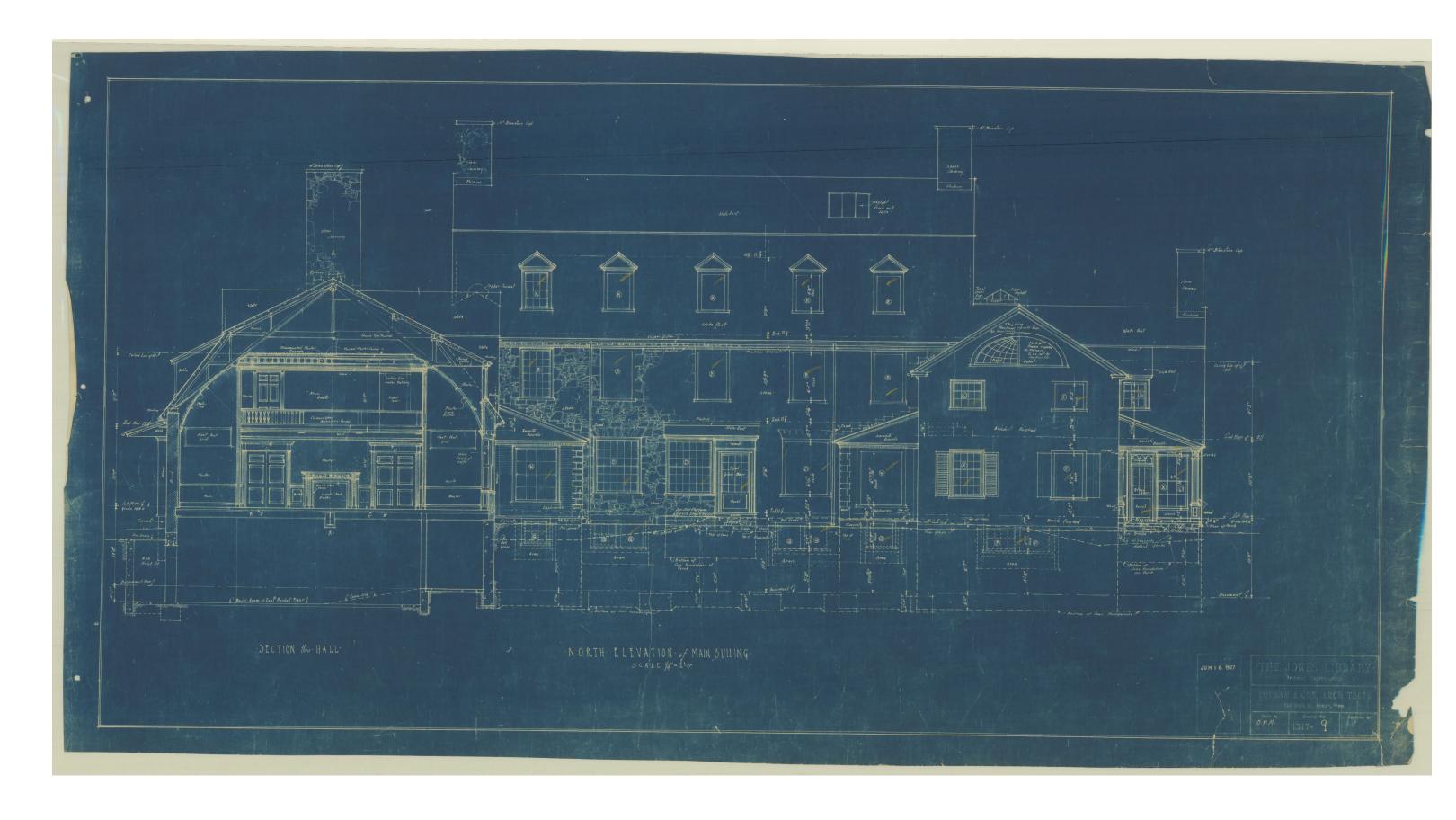








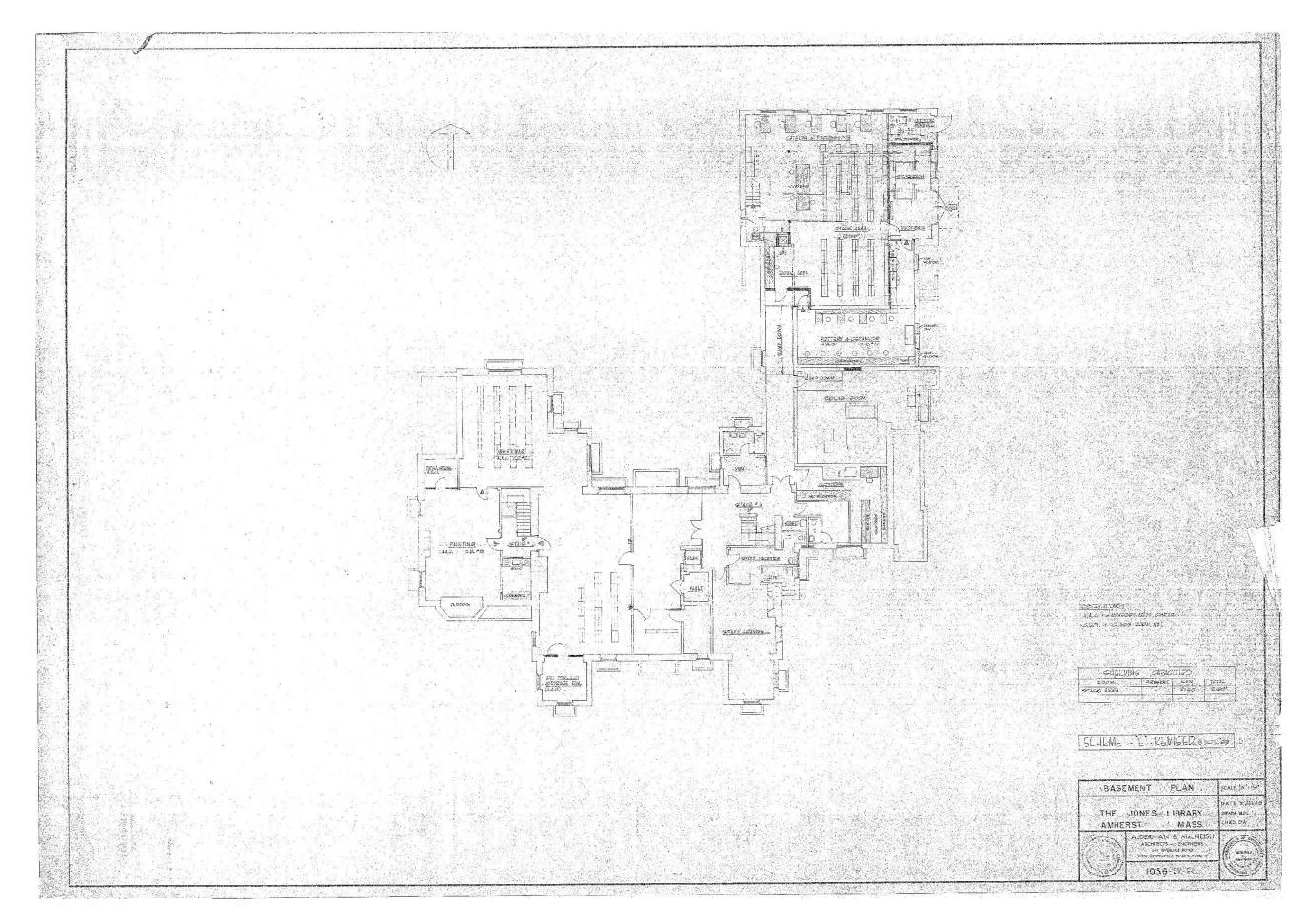




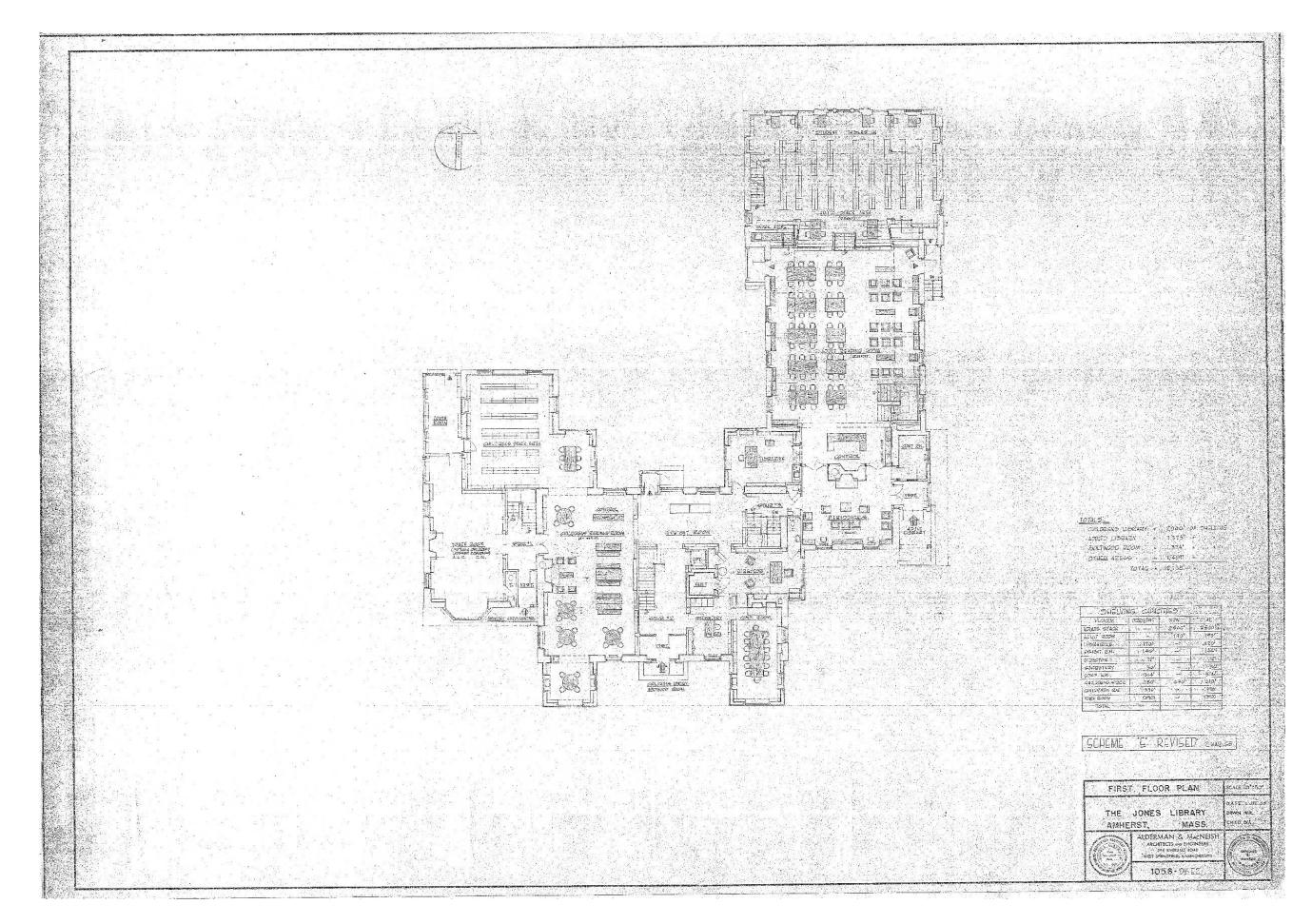




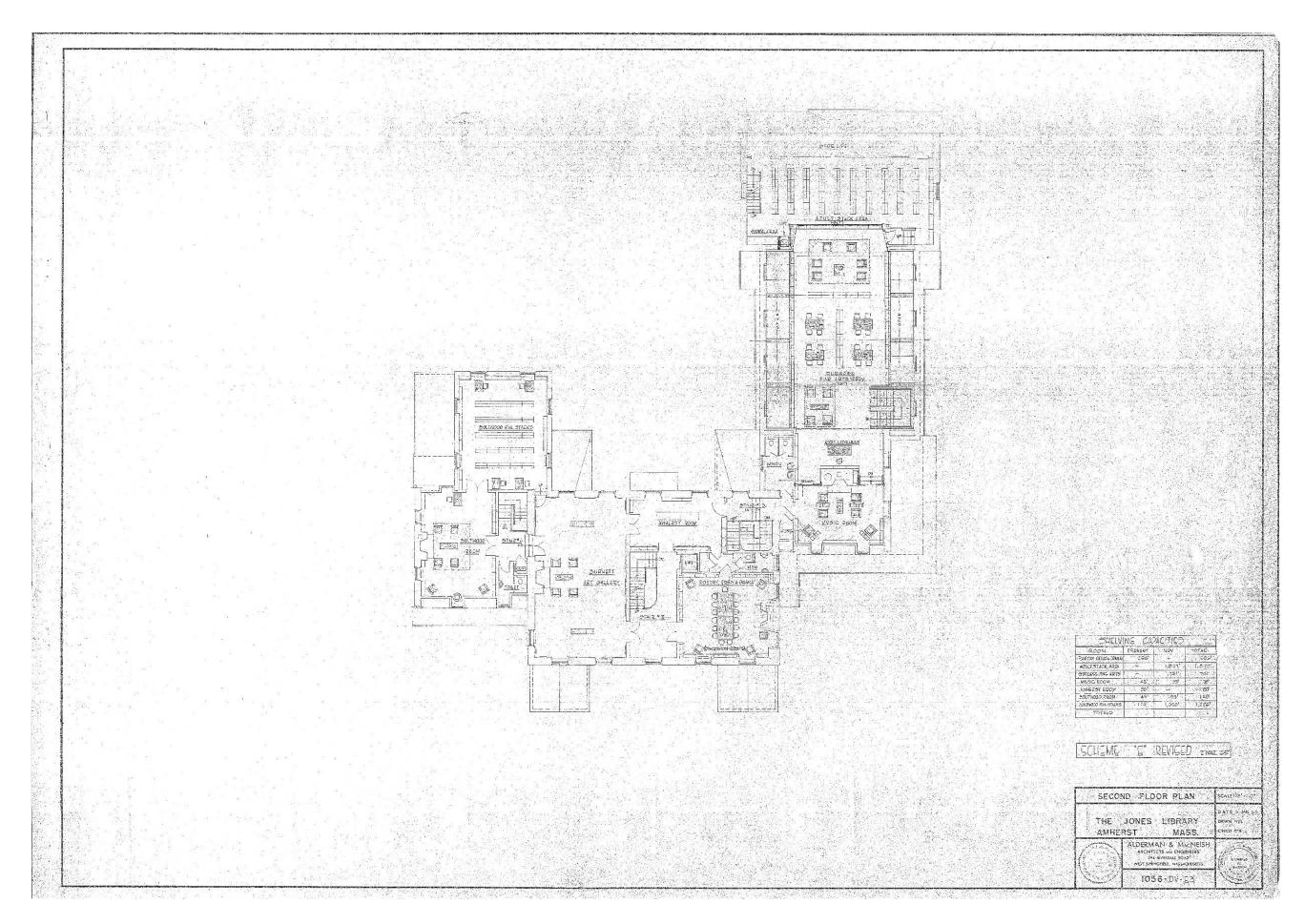


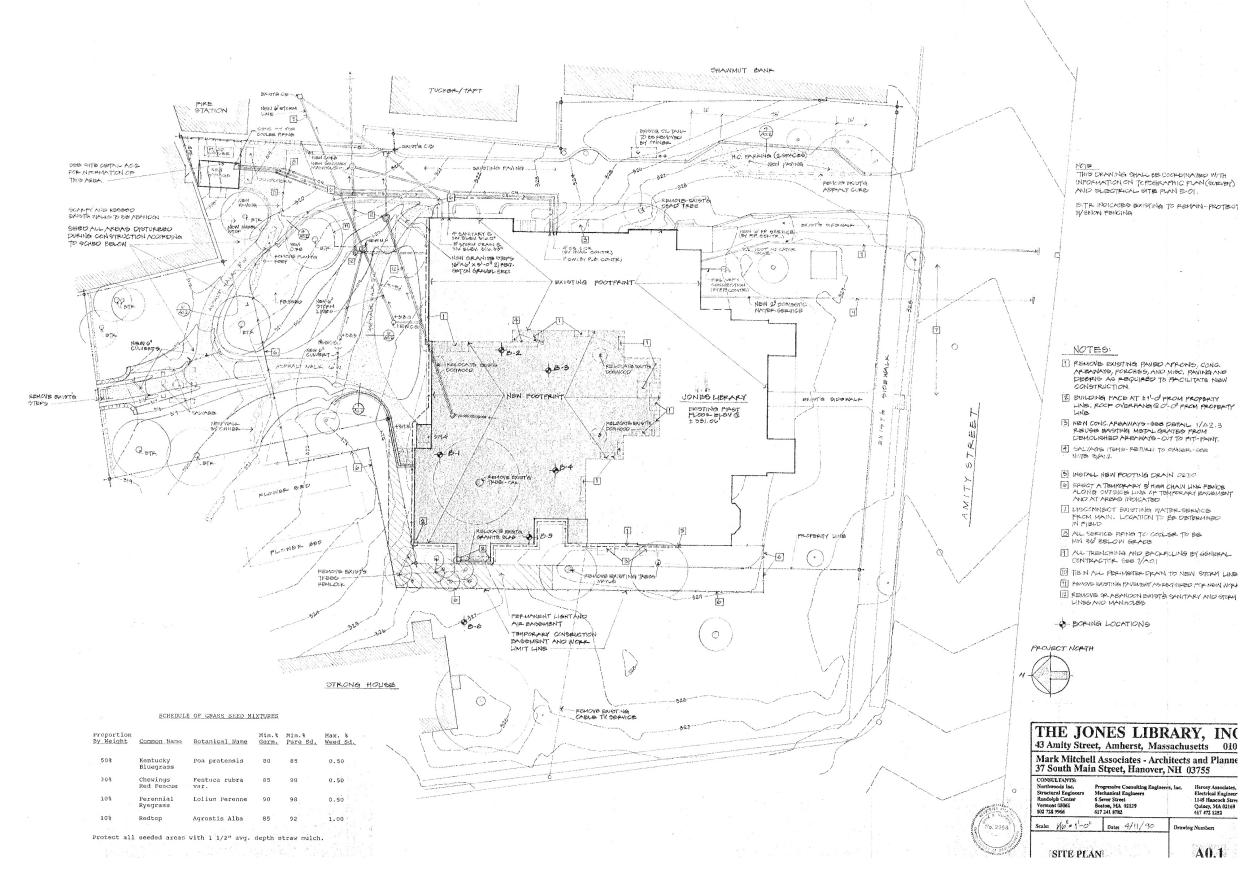


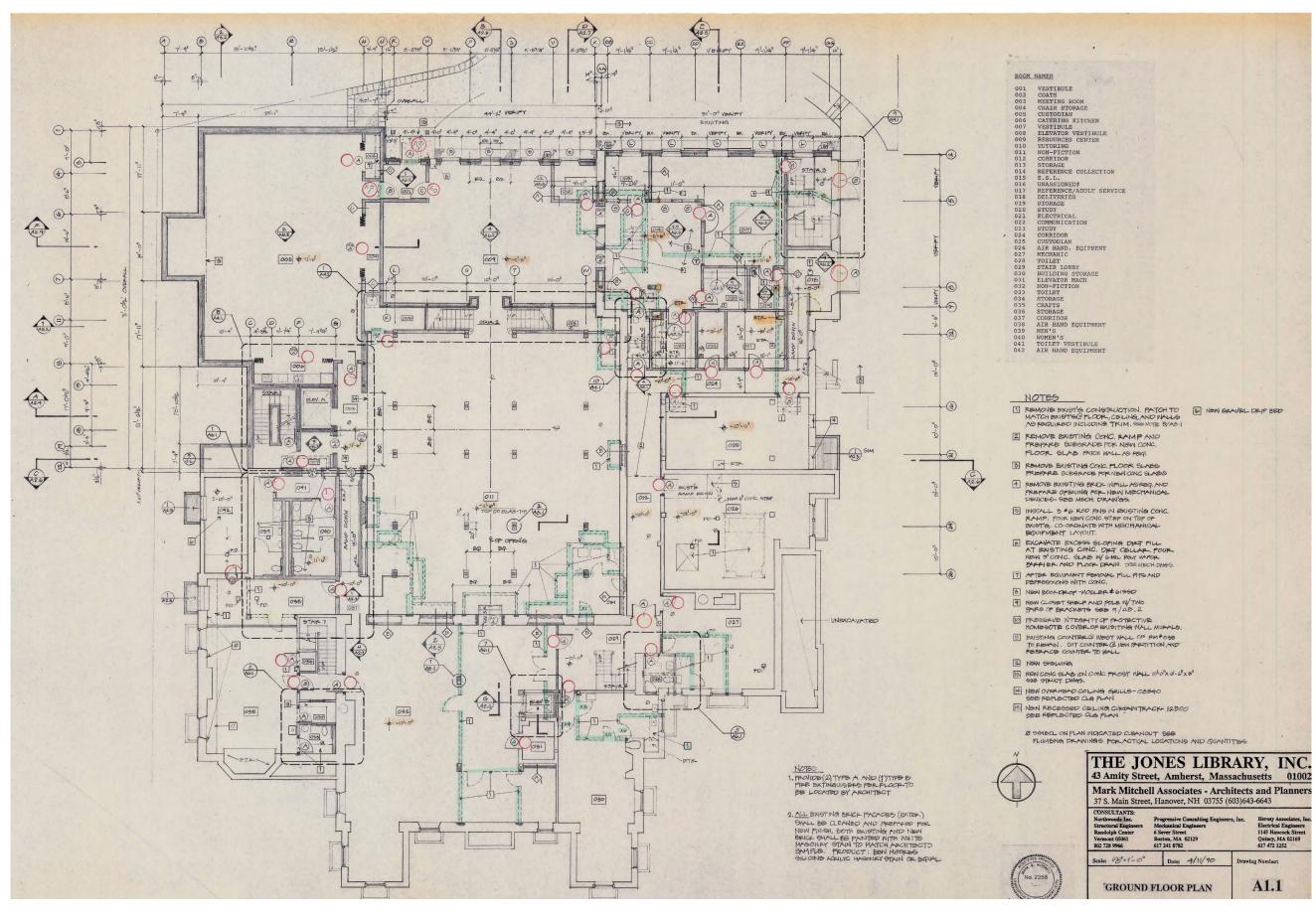


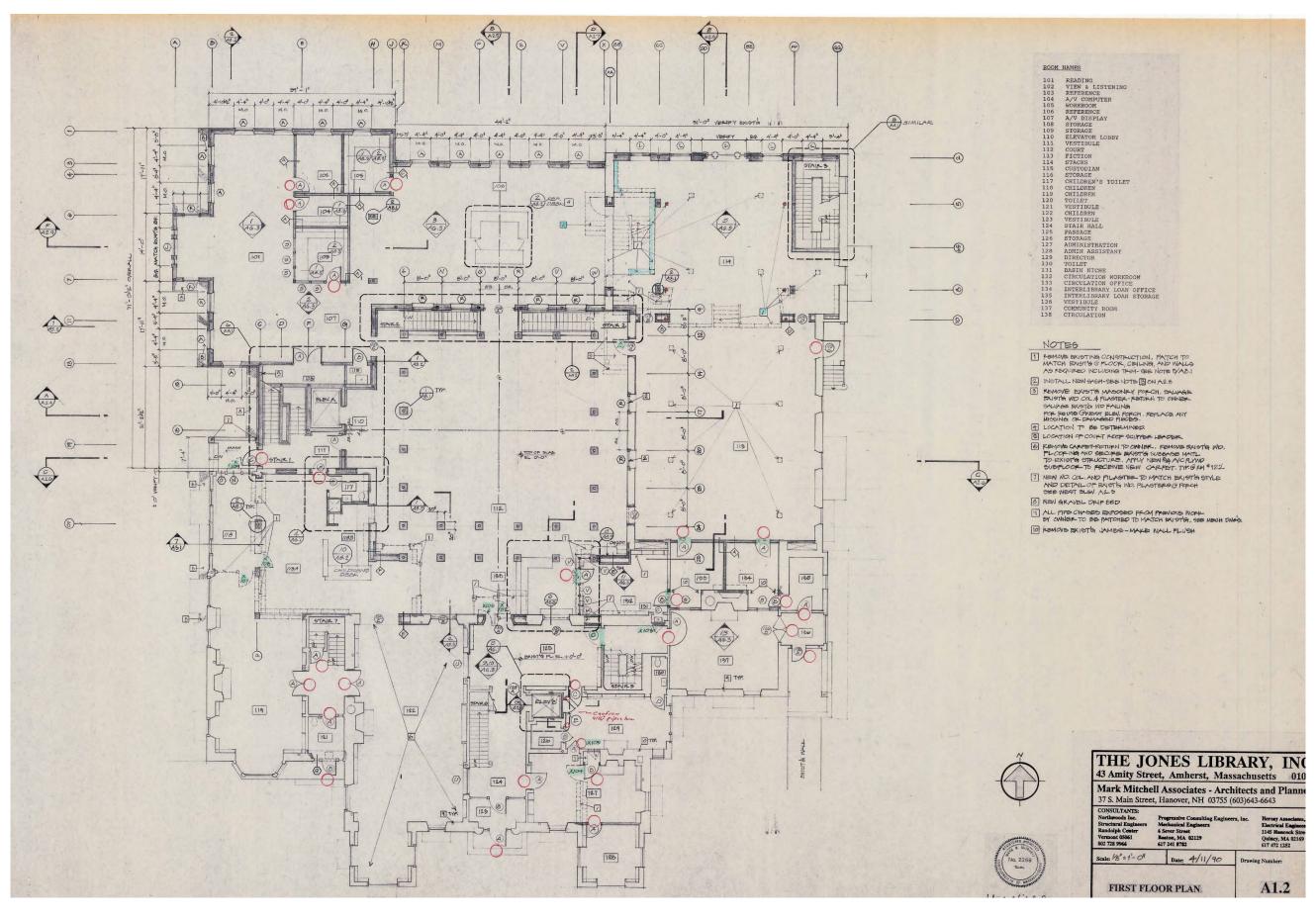


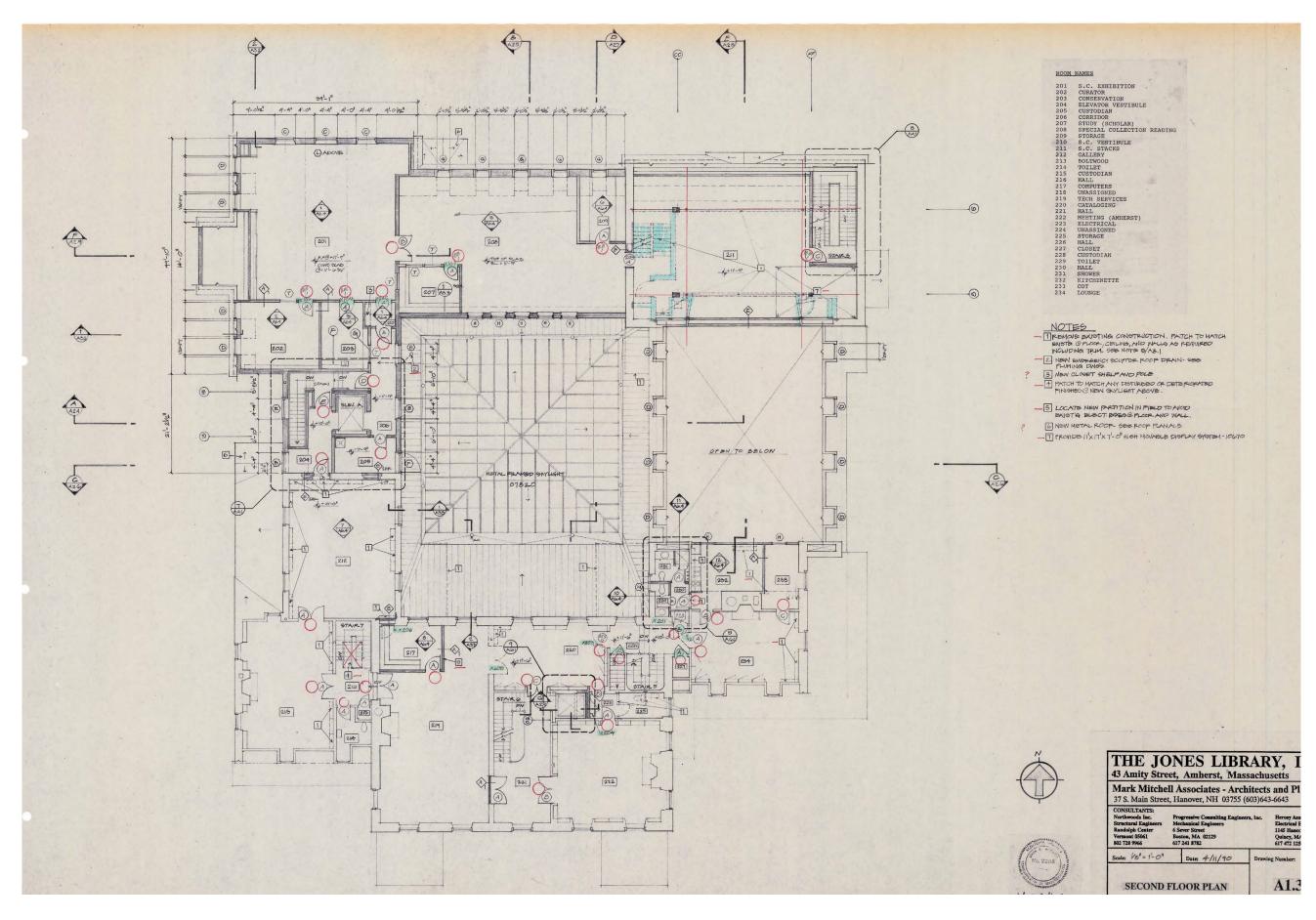


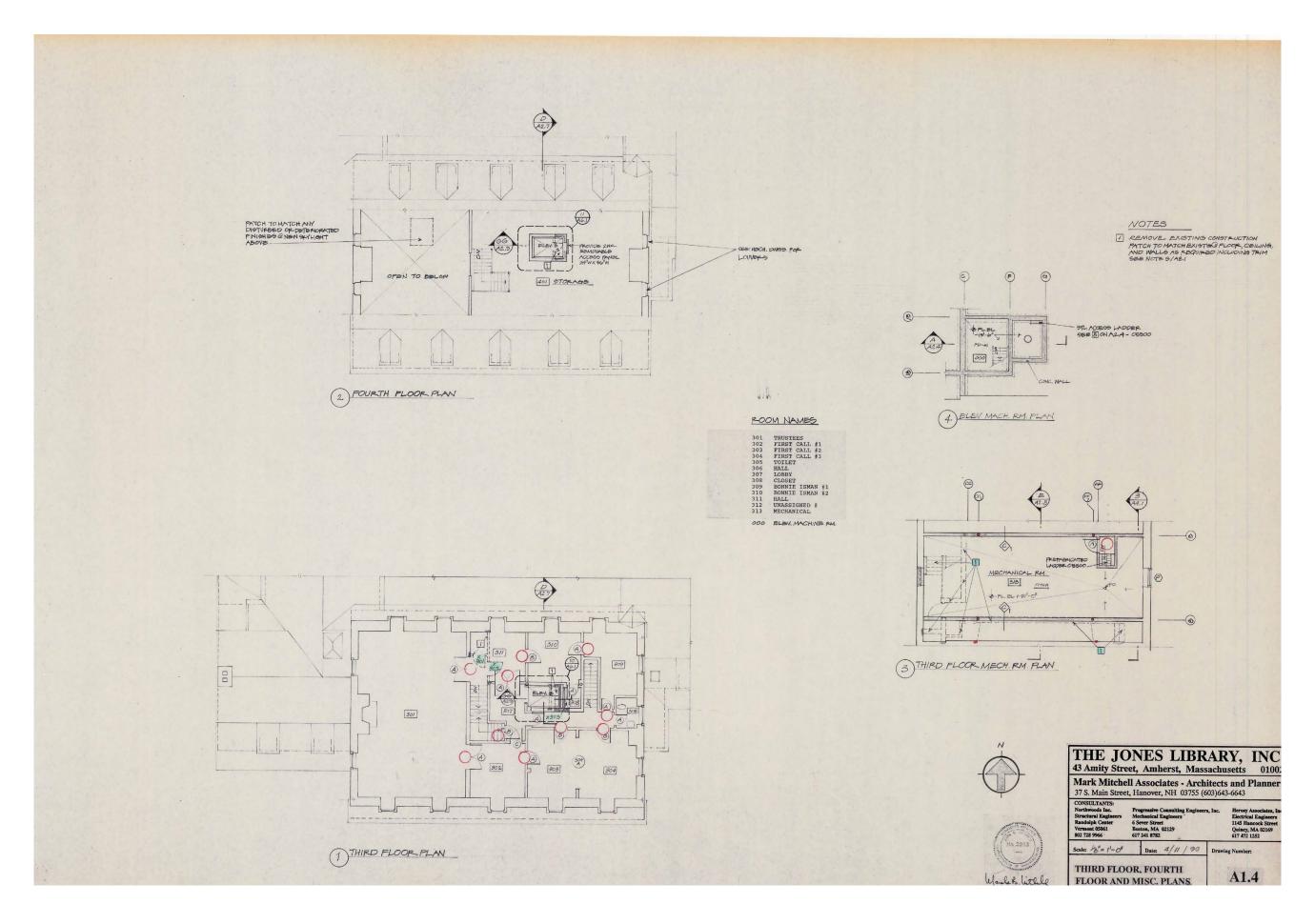


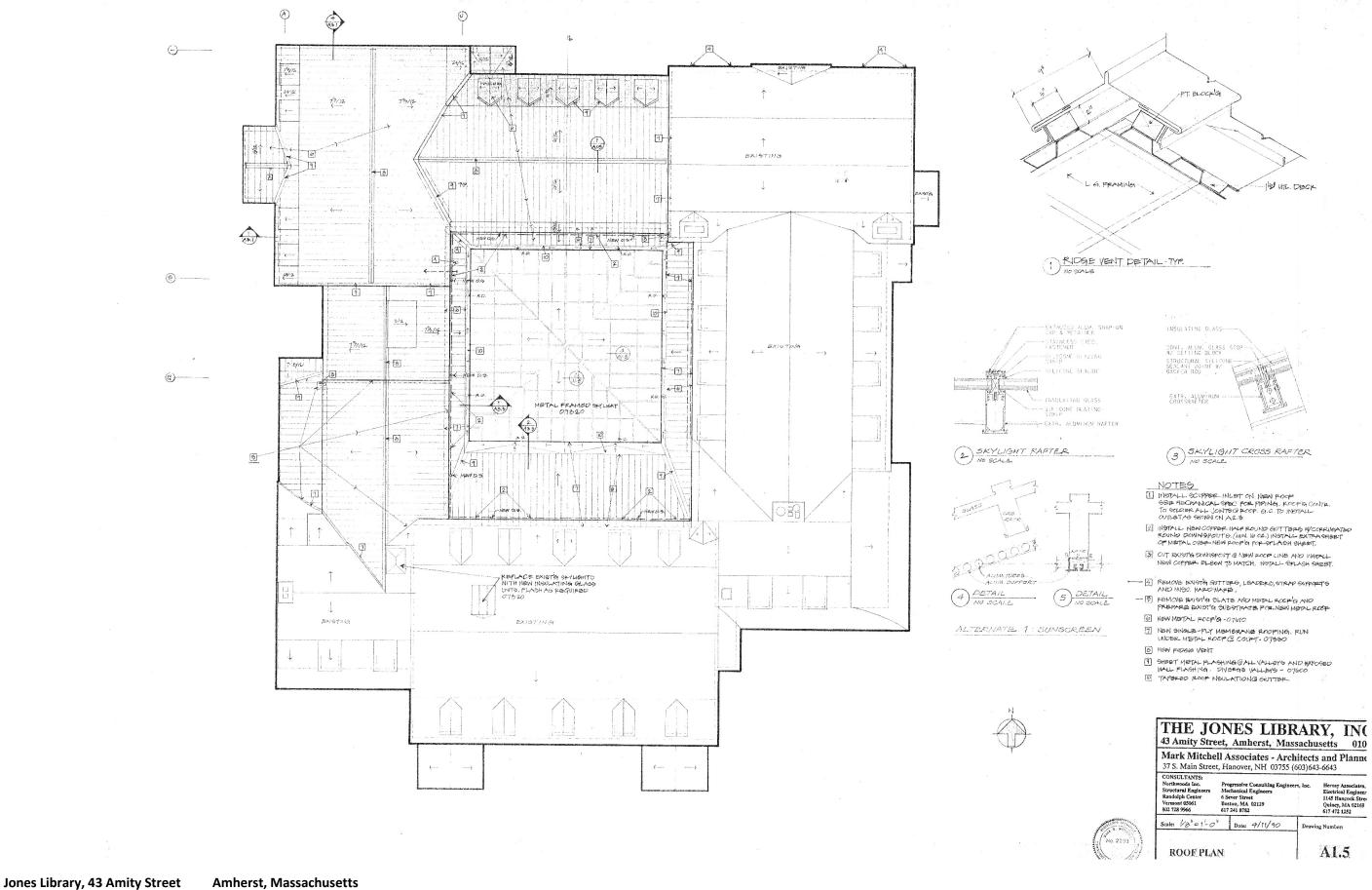




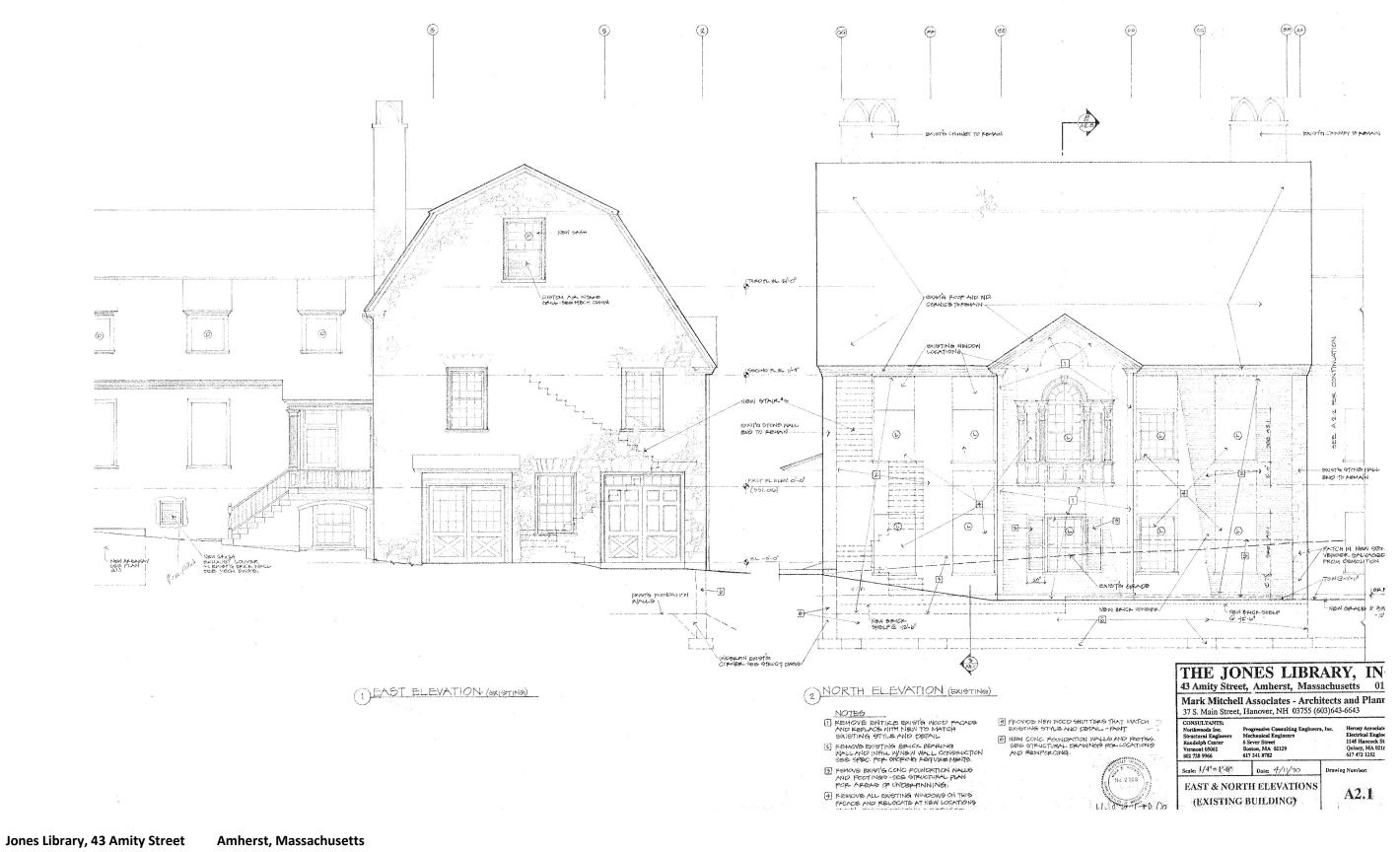




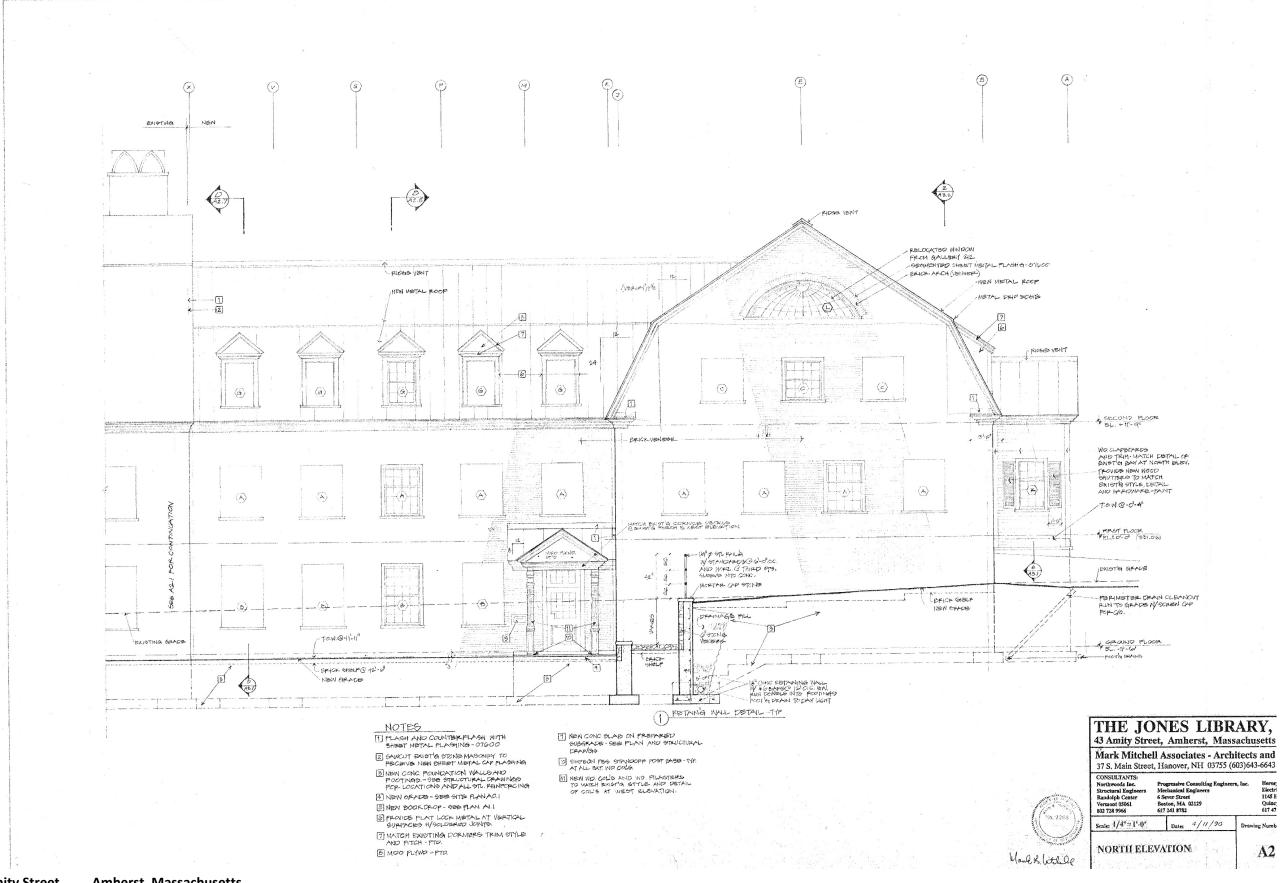


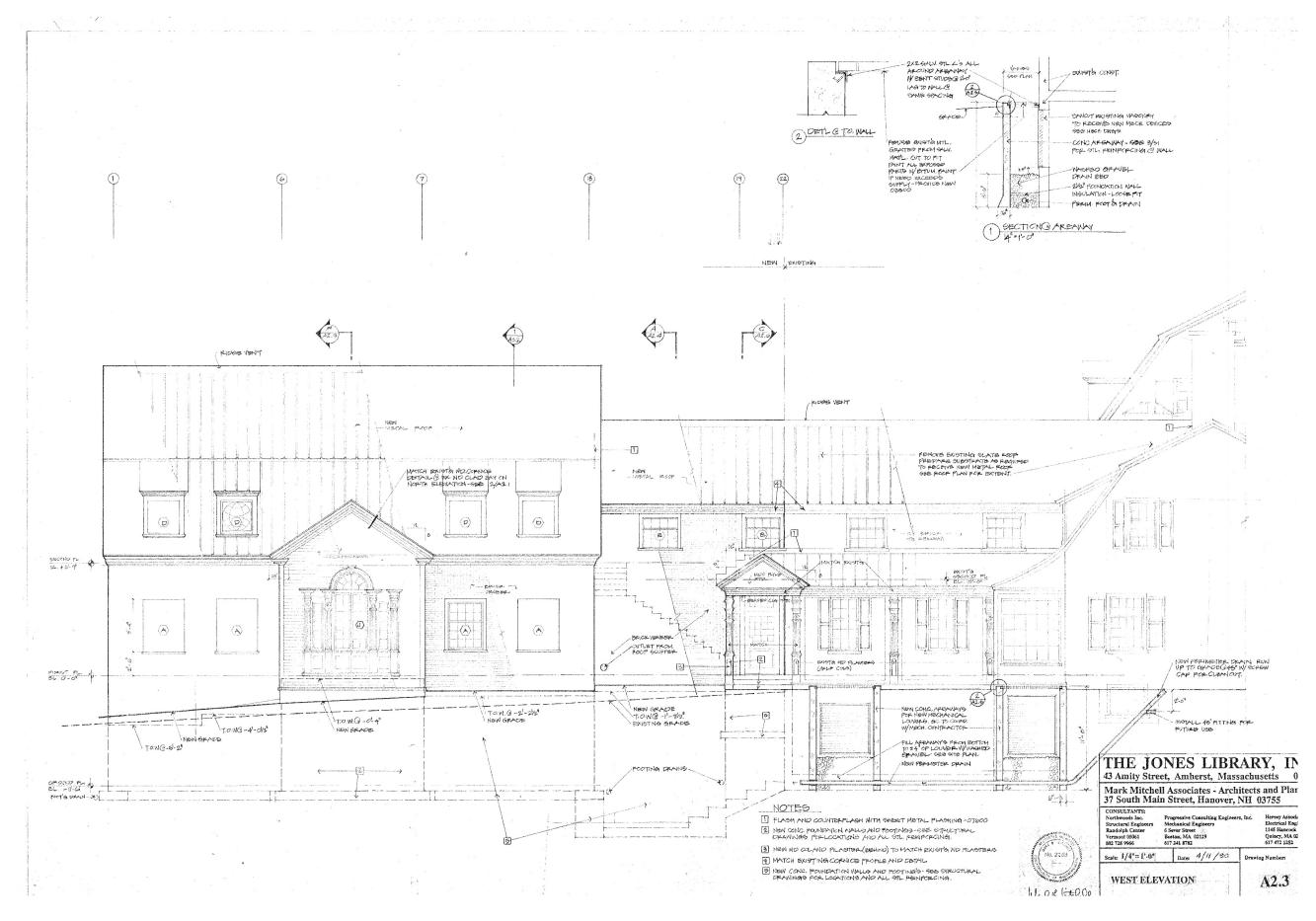


**Epsilon**ASSOCIATES INC.



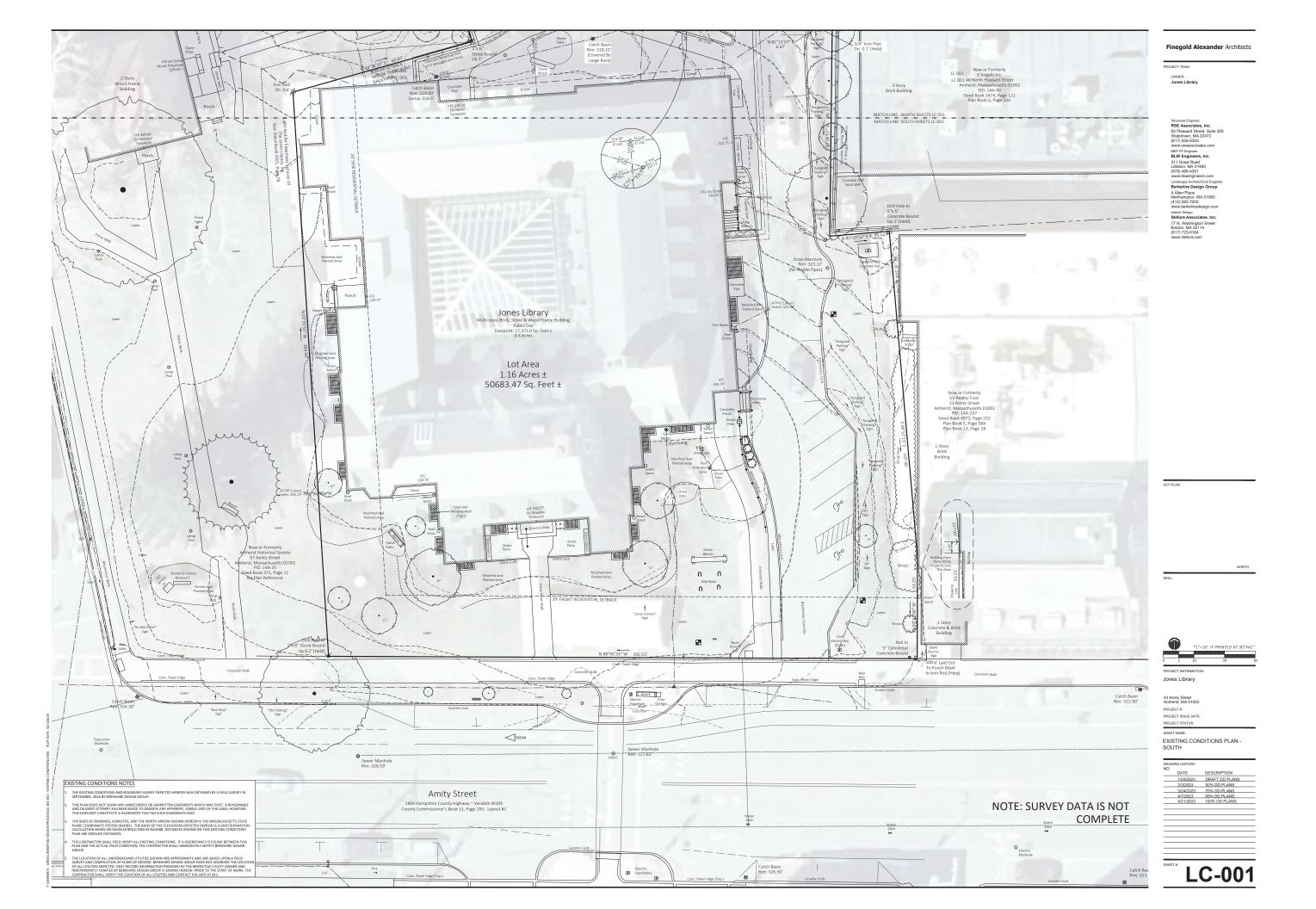
















Existing Exterior Elevation - South



Existing Exterior Elevation - East

1993 Addition



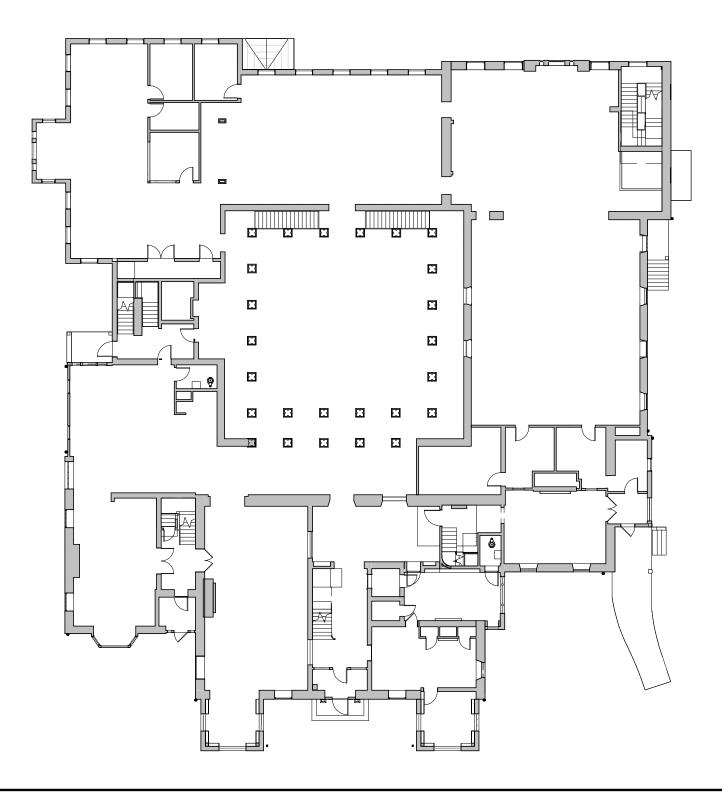
Existing Exterior Elevation - North

1993 Addition

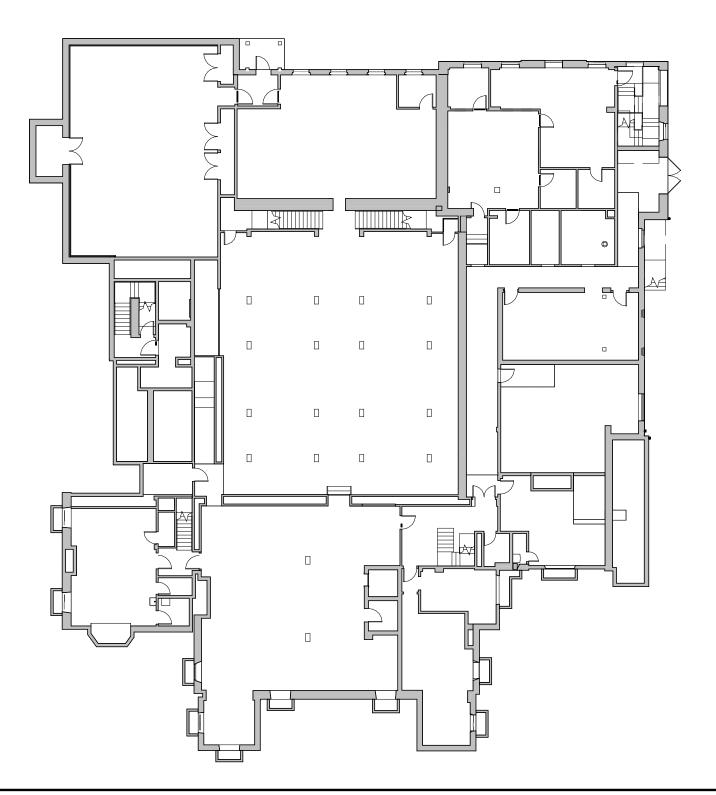


Existing Exterior Elevation - West

1993 Addition



Exisiting Floor Plan - Level 1 Jones Library 43 Amity Street Amherst, MA 01002 Finegold Alexander Architects Inc

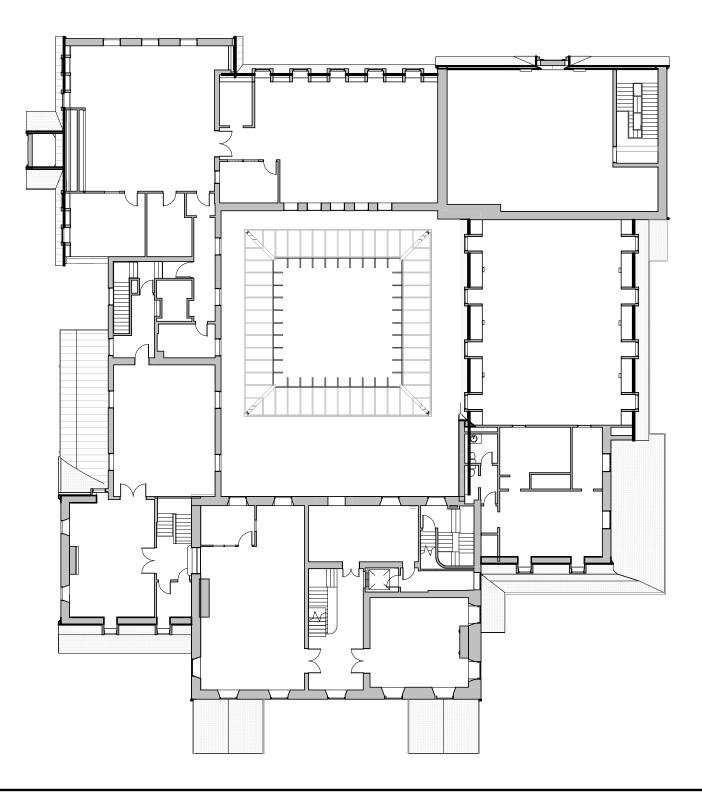


Exisiting Floor Plan - Lower Level

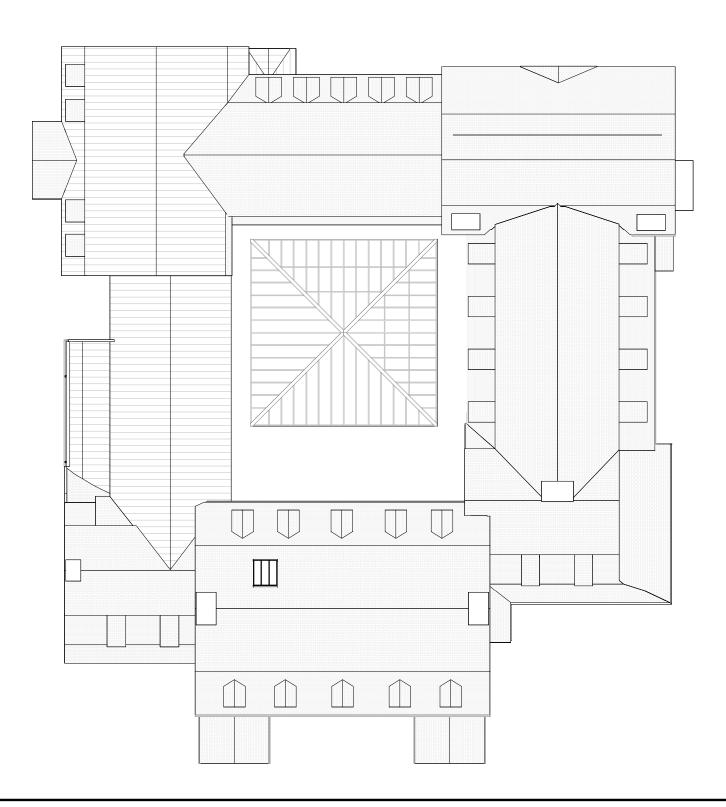
Jones Library

43 Amity Street
Amherst, MA 01002

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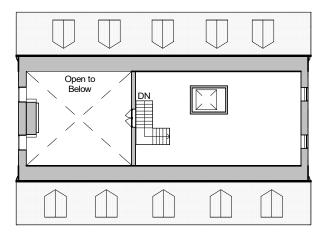


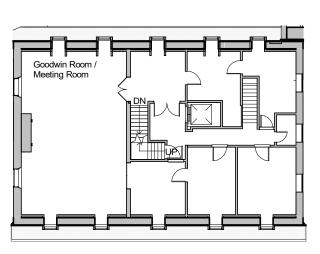
Exisiting Floor Plan - Level 2 Jones Library 43 Amity Street Amherst, MA 01002 Finegold Alexander Architects Inc 04/28/23



Existing Roof Plan

Jones Library 43 Amity Street Amherst, MA 01002

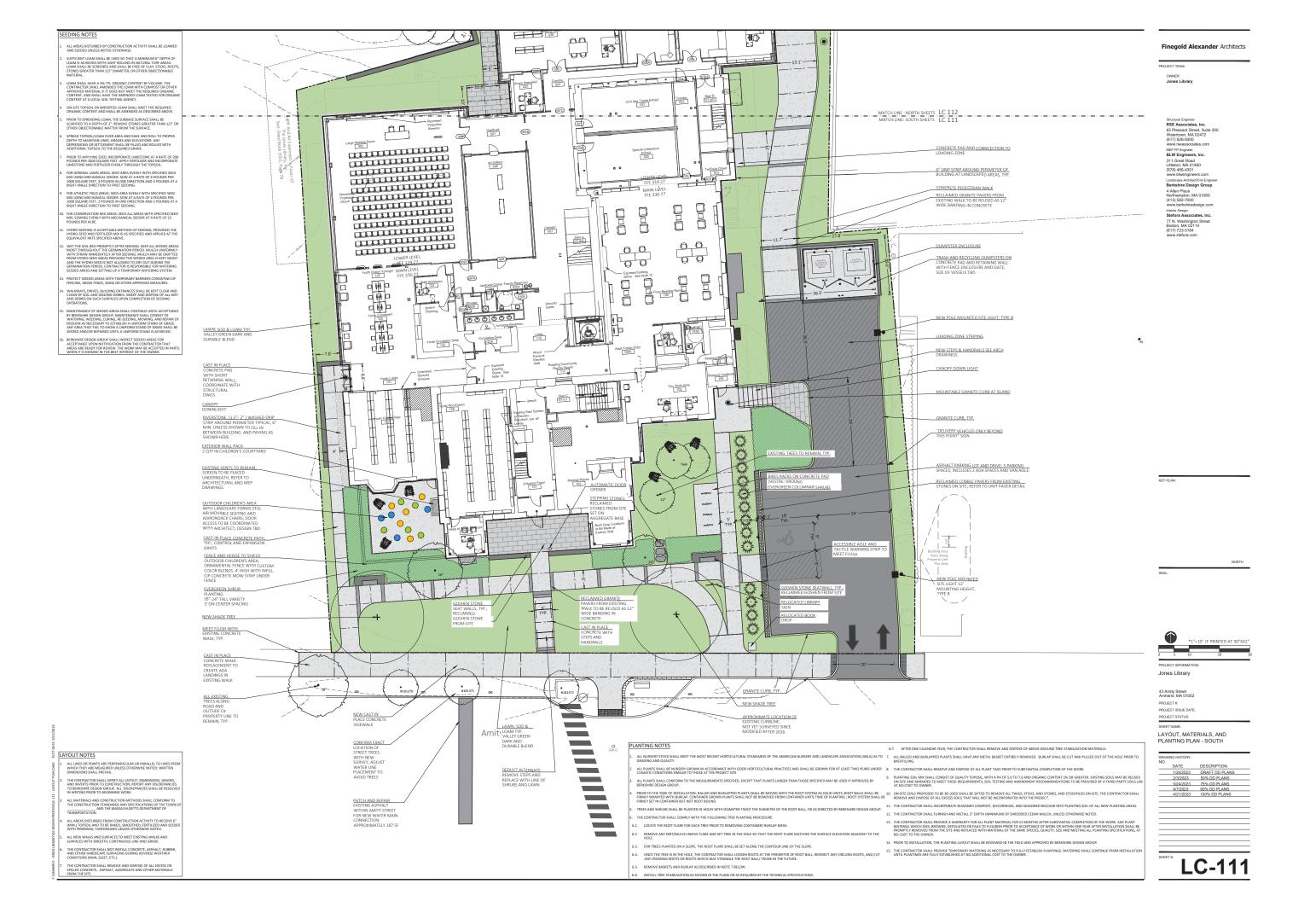




Exisiting Floor Plan - Level 3 & 4

Jones Library 43 Amity Street Amherst, MA 01002

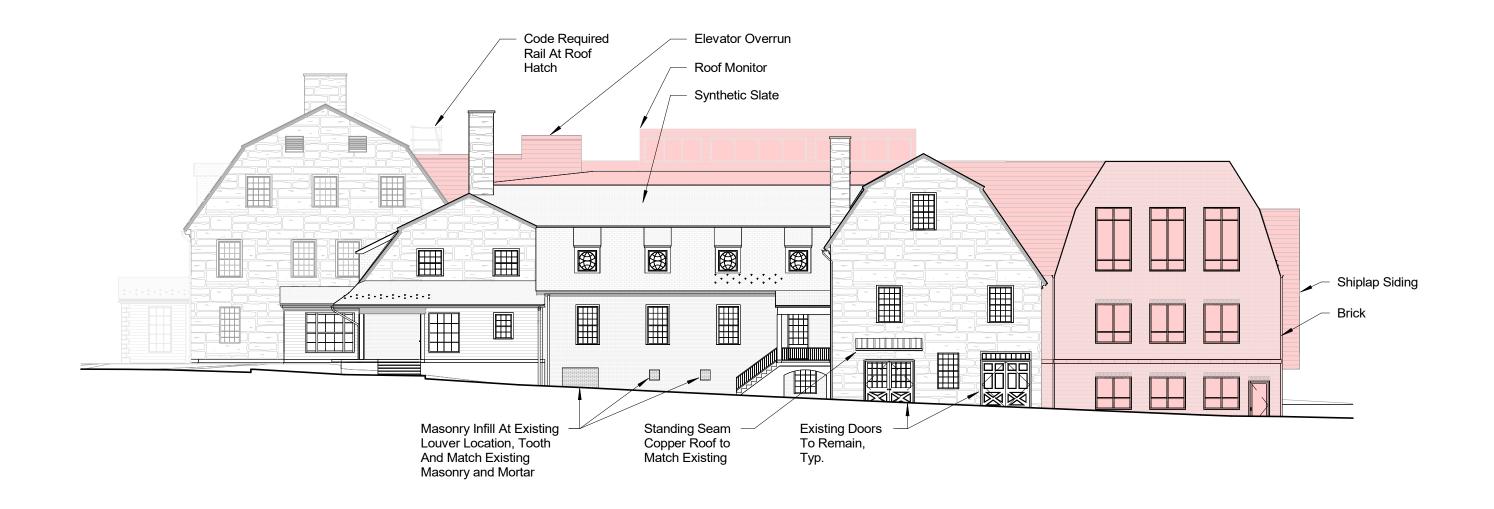






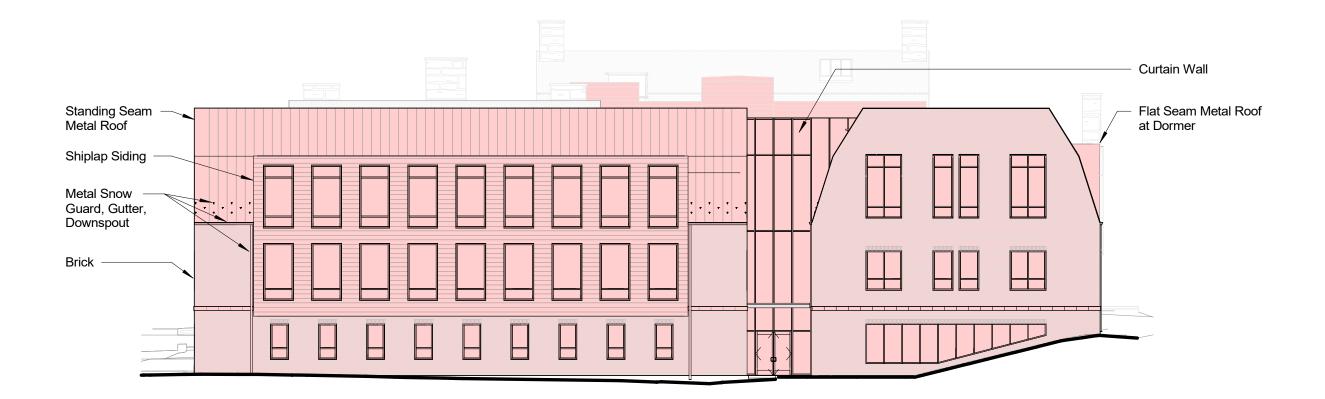


Proposed Exterior Elevation - South



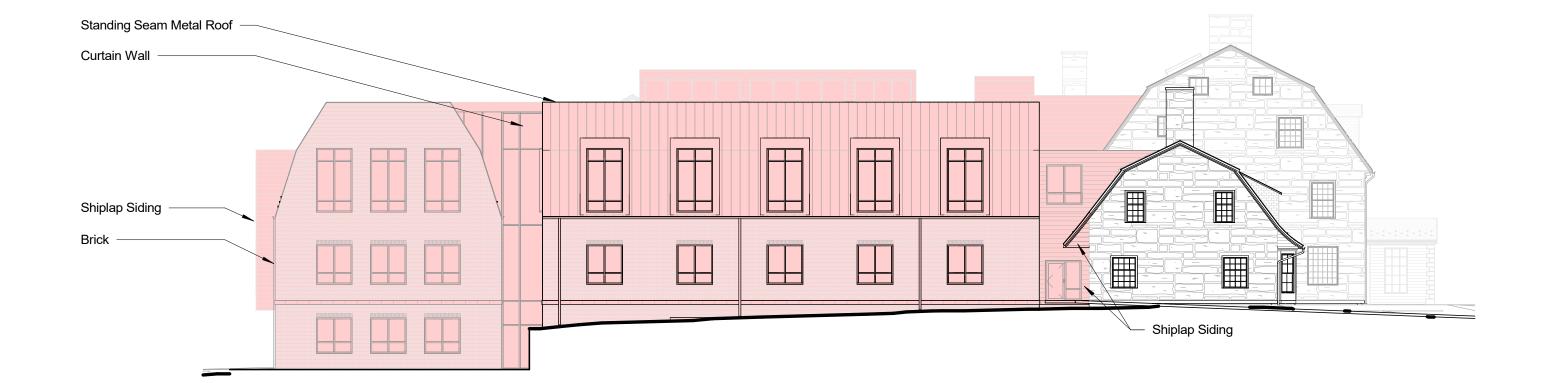
Proposed Exterior Elevation - East

Proposed Addition



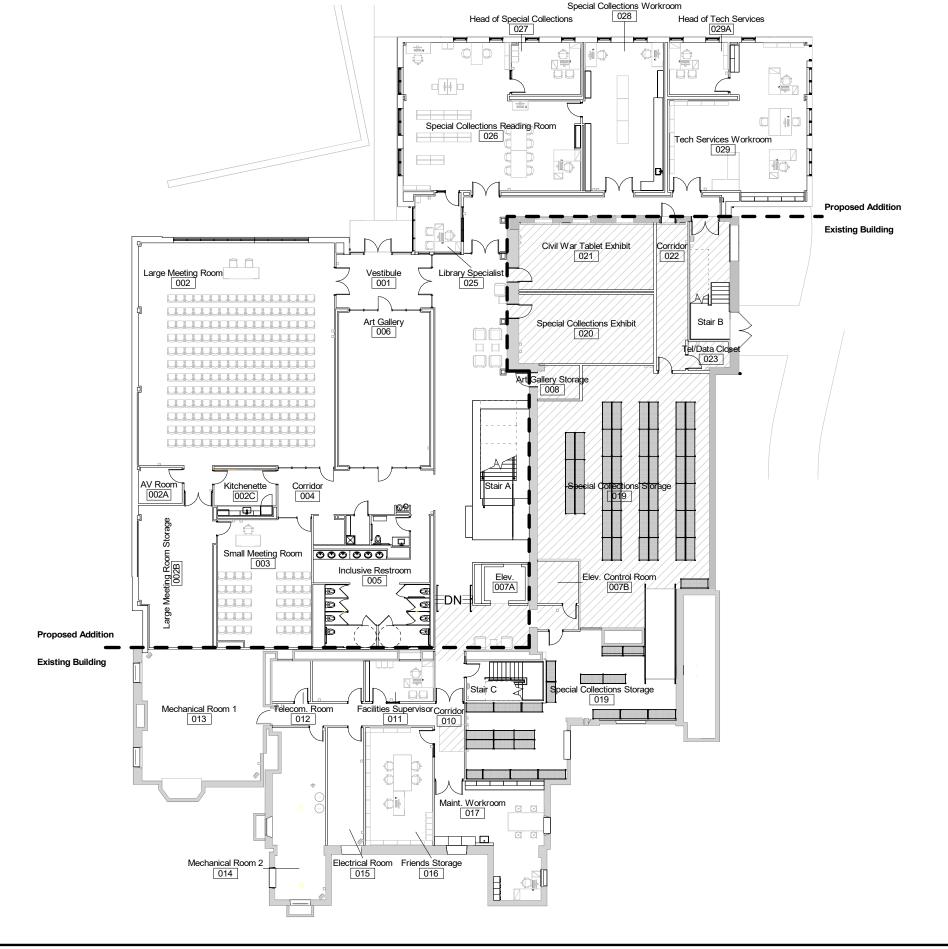
Proposed Exterior Elevation - North

Proposed Addition



Proposed Exterior Elevation - West

Proposed Addition



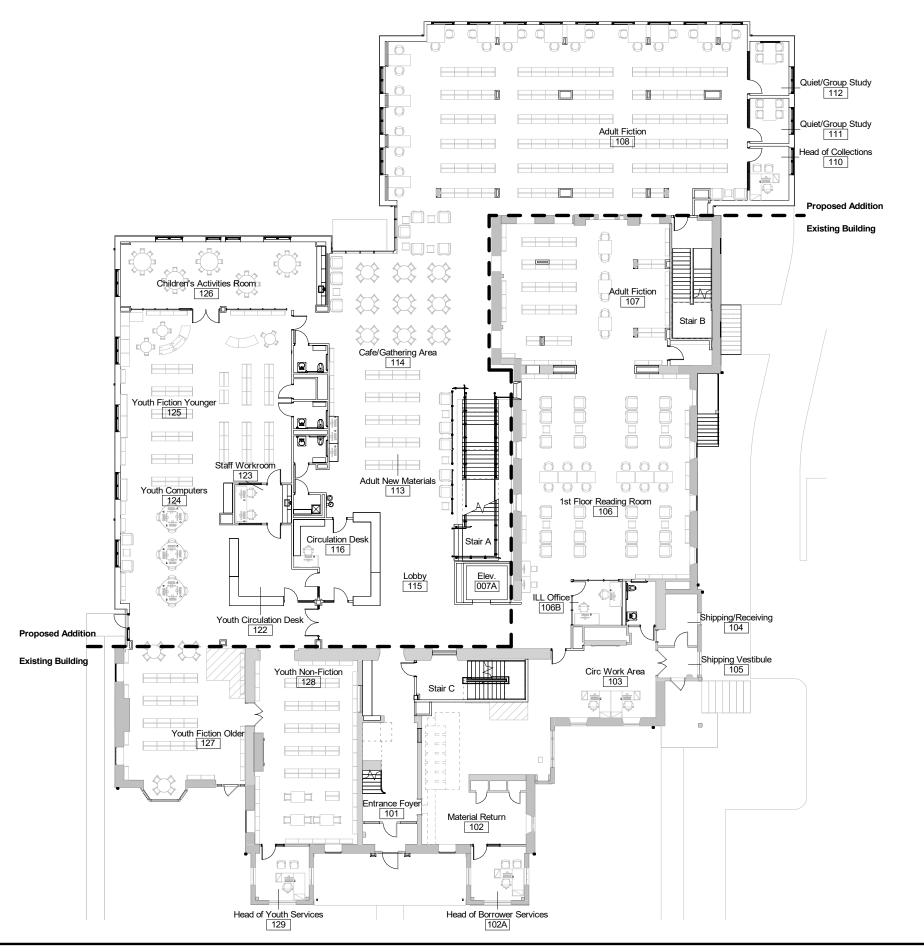
Existing Wall to Remain

New Wall

Infill Existing Openings, See Structural Drawings. New Slab to be Flush with



New Slate Shingle Roofing to Match Existing Roofing. Provide New Copper Flashing, Copper Snow Guards, Copper Gutters, and Copper Downspouts, all to Match Existing

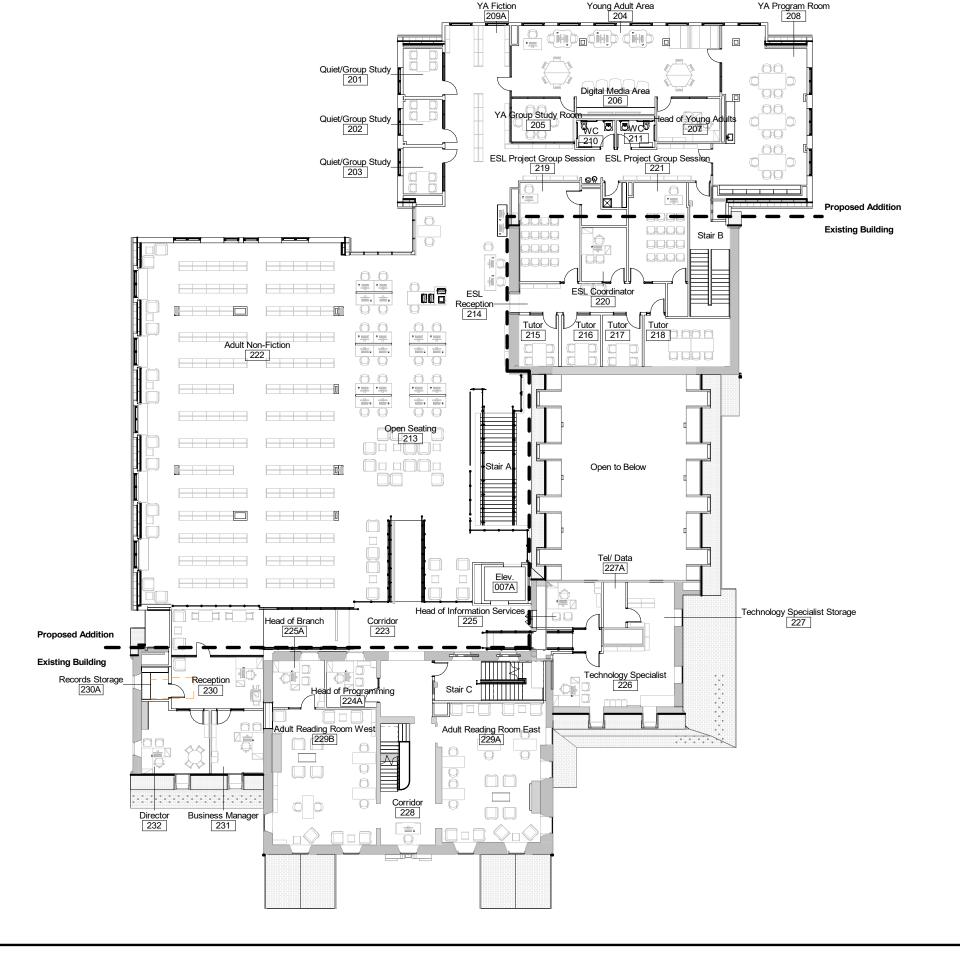


Existing Wall to Remain

New Wall

Infill Existing Openings, See Structural Drawings. New Slab to be Flush with Existing Slab

New Slate Shingle Roofing to Match Existing Roofing. Provide New Copper Flashing, Copper Snow Guards, Copper Gutters, and Copper Downspouts, all to Match Existing

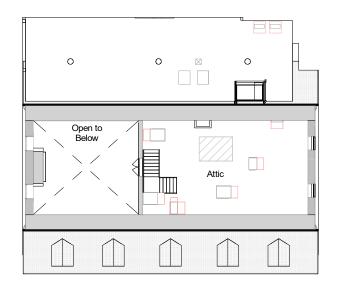


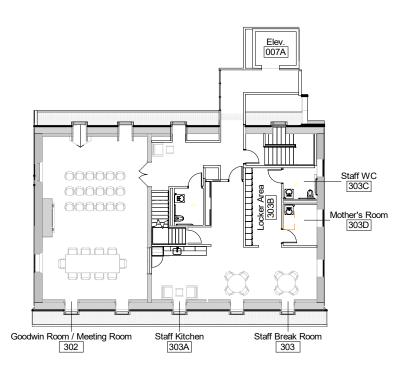
Existing Wall to Remain

New Wall

Infill Existing Openings, See Structural Drawings. New Slab to be Flush with Existing Slab

New Slate Shingle Roofing to Match Existing Roofing. Provide New Copper Flashing, Copper Snow Guards, Copper Gutters, and Copper Downspouts, all to Match Existing





Existing Wall to Remain

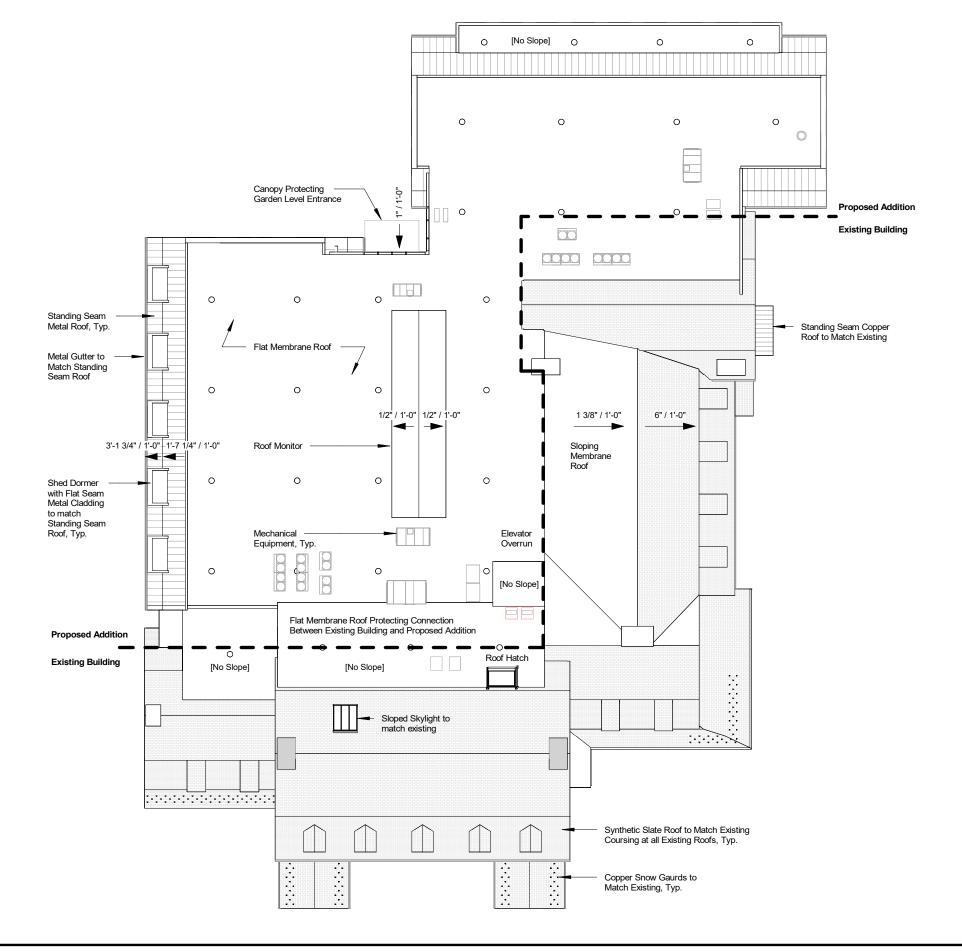
New Wall



Infill Existing Openings, See Structural Drawings. New Slab to be Flush with Existing Slab



New Slate Shingle Roofing to Match Existing Roofing. Provide New Copper Flashing, Copper Snow Guards, Copper Gutters, and Copper Downspouts, all to Match Existing

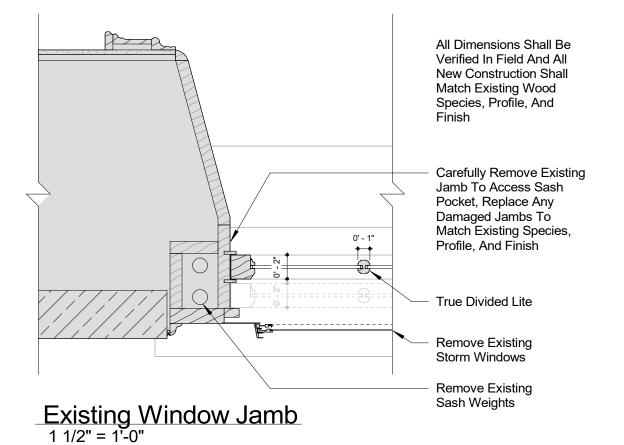


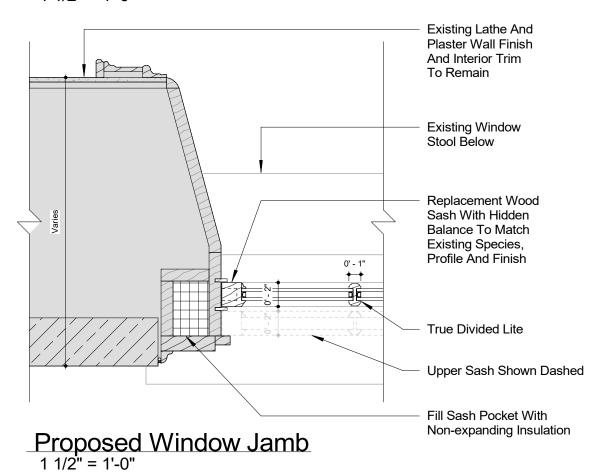
Existing Wall to Remain

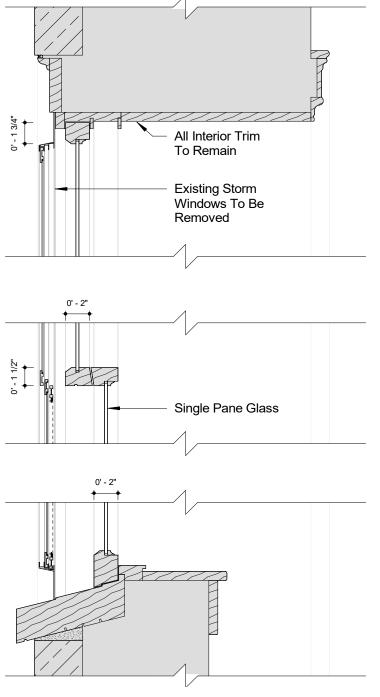
New Wall

Infill Existing Openings, See Structural Drawings. New Slab to be Flush with Existing Slab

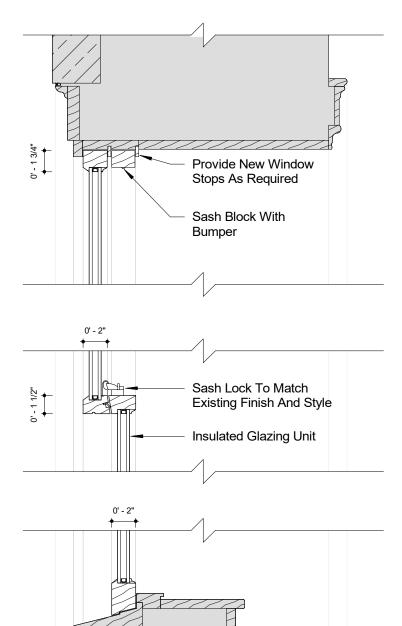
New Slate Shingle Roofing to Match Existing Roofing. Provide New Copper Flashing, Copper Snow Guards, Copper Gutters, and Copper Downspouts, all to Match Existing



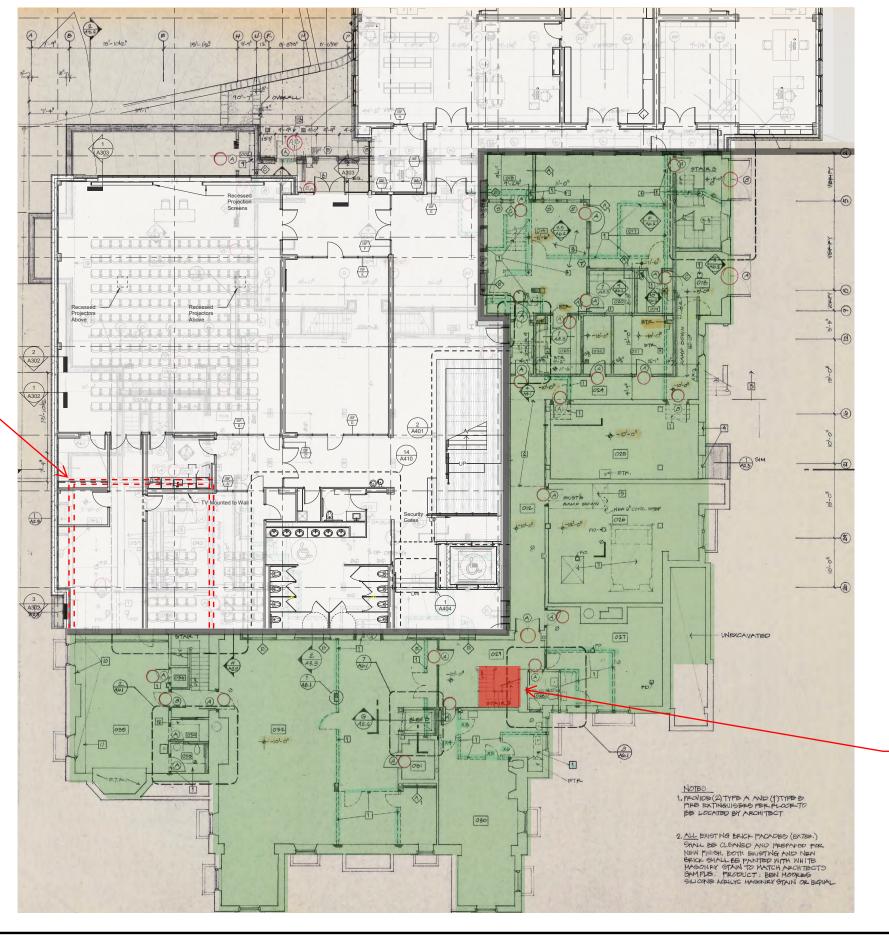








Proposed Window Section
1 1/2" = 1'-0"



1927 Historic elements to remain

1927 Historic elements to be modified

1927 Historic elements to be removed

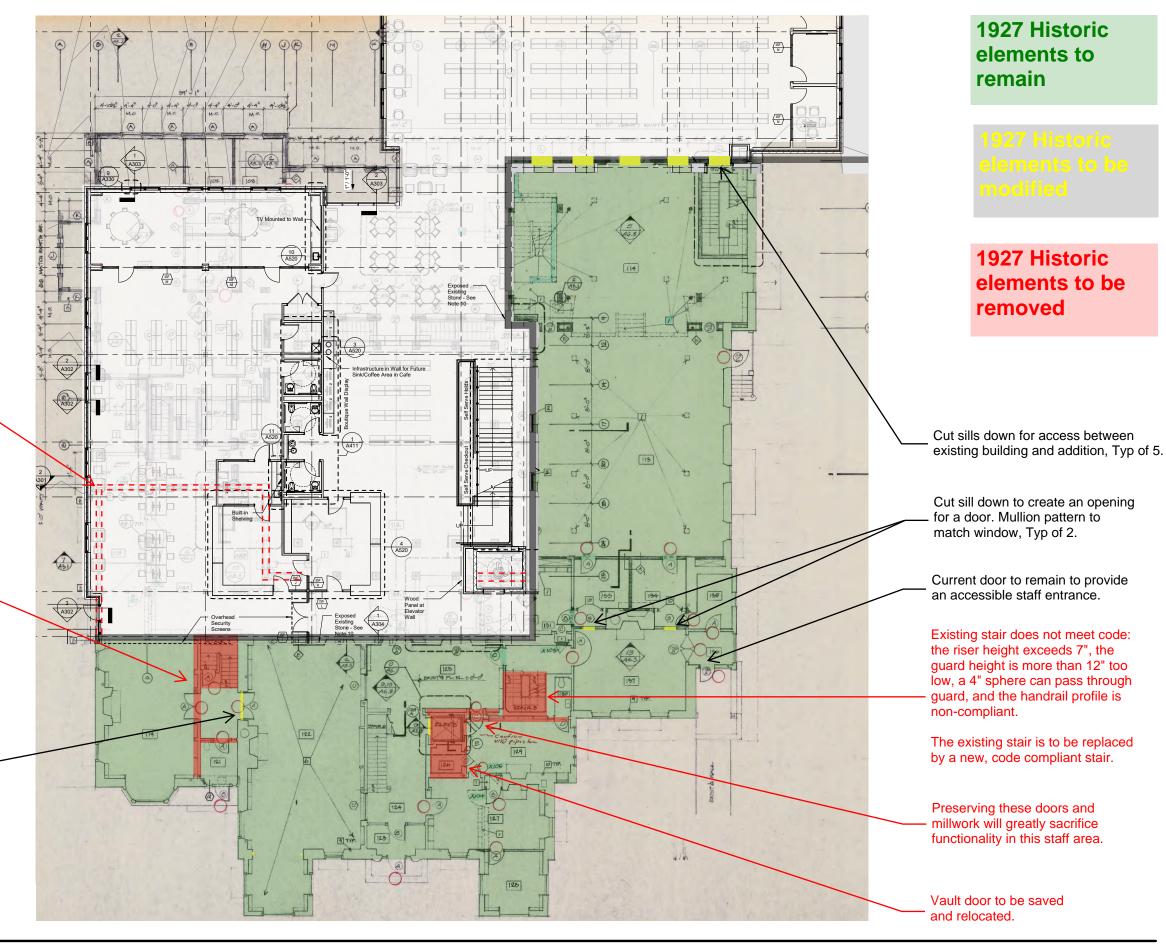
Existing stair does not meet code: the riser height exceeds 7", the guard height is more than 12" too low, a 4" sphere can pass through guard, and the handrail profile is non-compliant.

The existing stair is to be replaced by a new, code compliant stair.

This portion of the original building has been heavily modified in

previous additions. Keeping these existing walls limits required

program.



This portion of the original building has been heavily modified in previous additions. Keeping these existing walls both limits required program and reduces sight lines, increasing the chance of a safety problem in the Children's Area

Existing stair does not meet code: the riser height exceeds 7", the guard height is more than 12" too low, and the handrail profile is non-compliant.

The existing stair is to be replaced by a new, code compliant stair.

The existing stair also reduces sight lines, increases the chance of a safety problem in the Children's Area, and greatly reduces the book count.

Pin doors closed. Add tempered film if needed to glass. Door and frame to remain.

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Drawing:

Jones Library 43 Amity Street Amherst, MA 01002

ISF FOC STARS =. 3 A401 (n) A302 OFBN TO BELOW

1927 Historic elements to remain

1927 Historic elements to be modified

1927 Historic elements to be removed

Existing stair does not meet code: the riser height exceeds 7", the guard height is more than 12" too low, a 4" sphere can pass through guard, and the handrail profile is non-compliant.

The existing stair is to be replaced by a new, code compliant stair.

Existing windows to remain. Infill window opening with rated partition from stair side, typ of 2.

Elevator door trim to remain. Door becomes a framed opening.

Overlay Plan - Level 2

This portion of the original building has been heavily modified in previous additions. Keeping these

program and reduces sight lines, increasing the chance of a safety

Cut sill down and widen window opening for access between the

existing building and the addition.

Existing stair does not meet code:

The existing stair is to be replaced by a new, code compliant stair.

Pin doors closed. Door and frame to remain. Add wall partition for acoustic isolation behind door.

Keep opening and carefully

Pin doors closed. Door and

frame to remain.

insert wall partition for an office.

the riser height exceeds 7", the guard height is more than 12" too

low, and the handrail profile is

non-compliant.

existing walls limits required

problem in the stack area

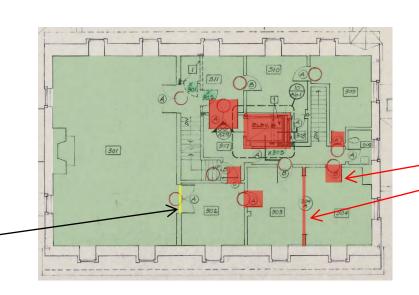
Jones Library 43 Amity Street Amherst, MA 01002 Finegold Alexander Architects Inc 04/28/23

Drawing:

1927 Historic elements to remain

1927 Historic elements to be modified

1927 Historic elements to be removed



Pin doors closed. Door and frame to remain.

Preserving the existing wall and doors does not allow sufficient space for the required program, Typ.

Overlay Plan - Level 3

Jones Library 43 Amity Street Amherst, MA 01002 Finegold Alexander Architects Inc 04/28/23

Drawing:



Exterior Rendering from Amity Street 1

Jones Library 43 Amity Street Amherst, MA 01002







#### **SECTION 040110**

## EXTERIOR MASONRY REHABILITATION

## Filed Sub-Bids Required

#### PART 1 GENERAL

## 1.01 PROVISIONS INCLUDED

- A. The Conditions of the Contract and Division 01, General Requirements, apply to the work under this Section.
- B. Attention of the Contractor is drawn to provisions of the Contract Documents regarding the responsibility of all bidders to visit and inspect the site and to base all bids on conclusions drawn from such inspections.

## 1.02 SUMMARY

- A. The work of this section generally includes all exterior masonry repairs, restoration, alterations, and cleaning of the historic original Jones Library building indicated on the Drawings and specified herein. The work includes, without limiting the generality of the foregoing, the following categories:
  - 1. Stone and brick masonry restoration and construction, including all repairs, alterations and additions to existing stone and brick work, including work associated with building new openings and extending existing openings so as to match the original work. This includes removal of existing exposed masonry, including removal and salvage of masonry units to be removed for reuse in the work, and all indicated rebuilding of areas of deteriorated natural stone work and brickwork of exterior masonry walls. Restoration includes:
    - a. Restoring to original construction existing window and door openings as indicated or required, and restoring masonry around existing and extended openings, as indicated or otherwise required.
    - b. Replacing deteriorated steel lintels over openings, including removing and resetting stone header units.
    - c. Repairing unit masonry, including replacing units and patching.
    - d. Filling in existing openings with masonry construction to match existing, as at basement areaway windows.
    - e. Repairs and repointing of existing stone work, including repair of existing cracks and other defects, and replacement of stone units that cannot be satisfactorily repaired.
    - f. Matching of all new work, repairs and repointing to original conditions, represented by areas of the existing work that remain in original condition.
    - g. Through-wall and wall drainage flashing.
  - 2. Cleaning of existing and altered exposed to view masonry.
  - Installation of all other all other items furnished under other Sections for installation in masonry restoration work.
- B. All indicated selective demolition and removal of exterior masonry shall be performed under this Section, and shall conform to indications on the Drawings and requirements herein. Provide all temporary shoring, supports and bracing required for all work.

#### 1.03 FILED SUB-BIDS

A. Sub-bids shall be submitted for the combined Work of this Section and related Sections 040001, Masonry, and 042000, Unit Masonry, in accordance with the provisions of M.G.L. c.149 §§44A-J. The time and place for submission of sub-bids are set forth in the Advertisement. The procedures and requirements

for submitting sub-bids are set forth in the Instructions to Bidders. Sub-bidders must be DCAM Certified in the listed trade and shall include a Current DCAM sub-bidder Certificate of Eligibility and a signed DCAM Sub-bidder's Update Statement with the bid.

- 1. In filling out the Form for Sub-Bid, enter Section as "040001" and Trade as "Masonry." Sub bid will be understood to include all work of the combined Sections.
- B. The Work of this section is shown on Drawings TBD

# C. SUB-SUBS

1. Sub-sub bids are not required for this. Paragraph E of the Form for sub-bid shall be left blank or marked N/A.

## 1.04 RELATED WORK SPECIFIED IN OTHER SECTIONS

- A. Principal classes of work related to the work of this Section are listed below, and are specified to be performed under the indicated Sections of the Specifications. Refer to the indicated Sections for description of the extent and nature of the indicated work, and for coordination with related trades. This listing may not include all related work items, and it is the responsibility of the Contractor to fully coordinate the work of this Section with that of all other trades.
  - 1. Division 01 Section "Alterations to Existing Construction."
  - 2. Division 02 Section "Selective Demolition" for selective demolition other than masonry removals described herein.
  - 3. Division 04 Section "Unit Masonry" for new masonry elevator hoistway construction at Mitton House, for backup concrete masonry construction for infill of openings as indicated, and for alterations to interior masonry walls.
  - 4. Division 05 Sections "Structural Steel" and "Miscellaneous Metals" for new steel items to be embedded in masonry work, and for beams and lintels to be installed in and supporting masonry work
  - 5. Division 07 Section "Sheet Metal Flashing and Trim" for metal flashing items to be installed in new and existing masonry, including repairs and alterations to existing flashing related to new roofing installations.
  - 6. Division 07 Section "Joint Sealants" for elastomeric sealants to be installed in joints in cornices and other horizontally projecting masonry, as well as joints indicated to be prepared under this Section.

## 1.05 DEFINITIONS

- A. Very Low-Pressure Spray: Under 100 psi (690 kPa).
- B. Low-Pressure Spray: 100 to 400 psi (690 to 2750 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).
- C. Medium-Pressure Spray: 400 to 800 psi (2750 to 5510 kPa); 4 to 6 gpm (0.25 to 0.4 L/s)].
- D. High-Pressure Spray: 800 to 1200 psi (5510 to 8250 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).
- E. Saturation Coefficient: Ratio of the weight of water absorbed during immersion in cold water to weight absorbed during immersion in boiling water; used as an indication of resistance of masonry units to freezing and thawing.

#### 1.06 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on masonry units as follows.

- 1. Provide test specimens as indicated and representative of proposed materials and construction.
- 2. Existing Stone: Test each type of existing stone indicated for replacement, according to ASTM C 170 for compressive strength, wet and dry, perpendicular and parallel to rift; ASTM C 99 for modulus of rupture, wet and dry, perpendicular and parallel to rift; and ASTM C 97 for absorption and bulk specific gravity. Carefully remove not fewer than six existing stones representative of the types of stone used on the building from locations designated by Architect. Take testing samples from these stones.
- Existing Brick: Test each type of existing masonry unit indicated for replacement, according to testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction). Carefully remove five existing units of each type of brick from locations designated by Architect. Take testing samples from these units. Existing Mortar: Test according to ASTM C 295, modified as agreed by testing service and Architect for Project requirements, to determine proportional composition of original ingredients, sizes and colors of aggregates, and approximate strength. Use X-ray diffraction, infrared spectroscopy, and differential thermal analysis as necessary to supplement microscopical methods. Carefully remove existing mortar from within joints at five locations designated by Architect or testing service.
- 4. Temporary Patch: As directed by Architect, provide temporary patching at locations from which existing samples were taken.
- 5. Replacement Brick and Stone: Test each proposed type of replacement masonry unit, according to sampling and testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction).

# 1.07 SUBMITTALS

- A. Conform to the requirements of Section 013300, Submittals, for schedule and form of all submittals.
- B. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each tem to be furnished.
  - 1. Include photographic documentation and stone identification notation for areas requiring reconstruction.
- C. Shop Drawings: For the following:
  - 1. Full-size patterns with complete dimensions for new stone units and specially molded brick shapes and their jointing, showing relation of existing to new units.
  - 2. Setting number of each new stone unit and its location on the structure in annotated plans and
  - 3. Provisions for expansion joints or other sealant joints.
  - 4. Provisions for flashing, lighting fixtures, conduits, and weep holes as required.
  - 5. Replacement and repair anchors. Include details of anchors within individual masonry units, with locations of anchors and dimensions of holes and recesses in units required for anchors.
    - a. Include details for new anchorage for reinstallation of refurbished stone balustrade at terrace.
  - 6. Fabricated Flashing: Detail corner units, end-dam units, and other special applications.
- D. Mortar Mix Designs:
  - 1. Setting mortar.
  - 2. Pointing mortar.
- E. Samples for Initial Selection: For the following:
  - 1. Stone samples for replacement stone units, not less than 10 inches (250 mm) square.
  - 2. Brick proposed for use in replacements for exposed work, in form of sample boards.
  - 3. Pointing Mortar: Submit sets of mortar for pointing in the form of samples of pointing mortar

between two samples of stone approximating appearance and shape of existing stone, for stone work, and between two bricks, with joint width matching that of existing brick, for brick work. Mortar manufacturer's standard samples will not be acceptable.

- a. Have each set contain a close color range of at least three samples of different mixes of colored sands and cements that produce a mortar matching the cleaned masonry when cured and dry.
- b. Submit with precise measurements of ingredients, proportions, gradations, and sources of colored sands from which each Sample was made.
- 4. Patching Compound: Submit sets of patching compound Samples in the form of plugs (patches in drilled holes) in sample units of masonry representative of the range of masonry colors on the building.
  - a. Have each set contain a close color range of at least three samples of different mixes of patching compound that matches the variations in existing masonry when cured and dry.

## F. Samples for Verification: For the following:

- 1. Each type of masonry unit to be used for replacing existing units. Include sets of Samples as necessary to show the full range of shape, color, and texture to be expected.
  - a. For each brick type, provide straps or panels containing at least four bricks. Include multiple straps for brick with a wide range.
  - b. For each stone type. Include at least two samples in each set for each type of stone, exhibiting extremes of the full range of color, exposed finishes and other visual characteristics expected in completed Work. Exposed face of samples shall be at least eight inches (400 mm) square. Provide sets of Samples for each different condition of existing stone to be replaced or extended.
- 2. Each type of sand used for pointing mortar; minimum 1 lb (0.5 kg) of each in plastic screw-top jars.
  - 1) For blended sands, provide Samples of each component and blend.
  - 2) Identify sources, both supplier and quarry, of each type of sand.
- 3. Each type, color, and texture of pointing mortar in small sample panels consisting of not less than four full size units (stone and brick) with jointing to match original work.
  - a. Include with each Sample a list of ingredients with proportions of each. Identify sources, both supplier and quarry, of each type of sand and brand names of cementitious materials and pigments if any.
- 4. Each type of masonry patching compound in the form of briquettes, at least 3 inches (75 mm) long by 1-1/2 inches (38 mm) wide. Document each Sample with manufacturer and stock number or other information necessary to order additional material.
- 5. Accessories: Each type of anchor, accessory, and miscellaneous support.

### G. Informational Submittals:

- 1. Qualification Data:
  - a. For restoration specialists including field supervisors and restoration workers, chemical-cleaner manufacturer and testing service.
    - 1) Include copies of material test reports for completed projects.
- 2. Preconstruction Test Reports: For existing and replacement masonry units.
- 3. Quality-Control Program.
- 4. Restoration Program.
- 5. Cleaning Program.
- 6. Cold-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with cold-weather requirements.

# 1.08 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency qualified according to ASTM C 1093 for testing indicated, as documented according to ASTM E 548.
- B. Source Limitations for Manufactured Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source

from a single manufacturer for each manufactured product required. Obtain each type of material for masonry restoration (face brick, cement, sand, etc.) from one source with resources to provide materials of consistent quality in appearance and physical properties.

## C. Employee Qualifications:

- 1. Field Supervision: Masonry Subcontractor shall maintain experienced full-time supervisors on Project site during times that stone restoration and cleaning work is in progress. Supervisors shall not be changed during Project except for causes beyond control of Subcontractor.
- Restoration Worker Qualifications: Persons who are experienced in restoration work of types they will be performing. When masonry units are being patched, assign at least one worker among those performing patching work who is trained and certified by manufacturer(s) of patching compound(s) to apply its(their) products.
- D. Chemical-Cleaner Manufacturer Qualifications: A firm regularly engaged in producing masonry cleaners that have been used for similar applications with successful results, and with factory-trained representatives who are available for consultation and Project-site inspection and assistance at no additional cost.
- E. Quality-Control Program: Prepare a written quality-control program for this Project to systematically demonstrate the ability of personnel to properly follow methods and use materials and tools without damaging masonry. Include provisions for supervising performance and preventing damage due to worker fatigue.
- F. Restoration Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials and Project site.
  - 1. Include methods for keeping pointing mortar damp during curing period.
  - 2. If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.
- G. Cleaning Program: Prepare a written cleaning program that describes cleaning process in detail, including materials, methods, and equipment to be used, protection of surrounding materials, and control of runoff during operations.
  - If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.
- H. Cleaning and Repair Appearance Standard: Cleaned and repaired surfaces are to have a uniform appearance as viewed from 20 feet (6 m) away by Architect in full day light. Perform additional paint and stain removal, general cleaning, and spot cleaning of small areas that are noticeably different, so that surface blends smoothly into surrounding areas.
- Mockups: Prepare mockups of restoration and cleaning to demonstrate aesthetic effects and set quality standards for materials and execution and for fabrication and installation.
  - 1. Masonry Repair: Prepare sample areas for each type of masonry material indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than 2 adjacent whole units or approximately 48 inches (1200 mm) in least dimension. Erect sample areas in existing walls unless otherwise indicated, to demonstrate quality of materials, workmanship, and blending with existing work. Include the following as a minimum:

- a. Replacement: Four brick units replaced; two stone units replaced.
- b. Patching: Three small holes at least 1 inch (25 mm) in diameter for each type of masonry material indicated to be patched, so as to leave no evidence of repair.
- 2. Repointing: Rake out joints in 2 separate areas, representing each type of masonry on the building, each approximately 36 inches (900 mm) high by 48 inches (1200 mm) wide for each type of repointing required and repoint one of the areas.
- 3. Cleaning: Clean an area approximately 50 sq. ft. (5 sq. m) for each type of masonry and surface condition.
  - a. Test cleaners and methods on small samples of adjacent materials for possible adverse reactions. Do not use cleaners and methods known to have deleterious effect.
  - b. Allow a waiting period of not less than seven days after completion of sample cleaning to permit a study of sample panels for negative reactions.
- 4. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
- 5. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- J. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review methods and procedures related to masonry restoration and cleaning including, but not limited to, the following:
    - a. Construction schedule. Verify availability of materials, Restoration Specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
    - b. Materials, material application, sequencing, tolerances, and required clearances.

## 1.09 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store all products in unopened original manufacturer's packaging. Store all materials in strict accordance with manufacturer's instructions and recommendations. Protect materials from all damage.
- B. Deliver masonry units to Project site strapped together in suitable packs or pallets or in heavy-duty cartons.
- C. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
- D. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- E. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.
- F. Store lime putty covered with water in sealed containers.
- G. Store sand where grading and other required characteristics can be maintained and contamination avoided.

# 1.10 PROJECT CONDITIONS

- A. Protection of Masonry: Cover partially completed masonry when construction is not in progress.
  - 1. Extend cover a minimum of 24 inches (600 mm) down both sides and hold cover securely in place.
  - 2. Where 1 wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches (600 mm) down face next to unconstructed wythe and hold cover in place.
- B. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed

or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

- 1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
- 2. Protect sills, ledges, and projections from mortar droppings.
- 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
- 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- C. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit masonry restoration, cleaning and sealing work to be performed according to manufacturers' written instructions and specified requirements.
- D. Repair masonry units and repoint mortar joints only when air temperature is between 40 and 90 deg F (4 and 32 deg C) and is predicted to remain so for at least 7 days after completion of the Work unless otherwise indicated.
- E. Clean masonry surfaces only when air temperature is 40 deg F (4 deg C) and above and is predicted to remain so for at least 7 days after completion of cleaning.
- F. Cold-Weather Requirements: Cold weather work not permitted. Do not use frozen materials or materials mixed or coated with ice or frost.
  - 1. Work permitted only when air temperature is 40 deg F (4 deg C) and above and will remain so until masonry has dried, but not less than 7 days after completing cleaning.
- G. Hot-Weather Requirements: Work not permitted above 85 degrees F. Protect work from direct sun at ambient temperatures above 78 degrees F. Protect masonry repair and mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks and use cooled materials as required to minimize evaporation.

## 1.11 SEQUENCING AND SCHEDULING

- A. Order replacement materials at earliest possible date to avoid delaying completion of the Work.
- B. Order materials for pointing mortar immediately after approval of mockups. Take delivery of and store at Project site a sufficient quantity to complete Project.
- C. Perform masonry restoration work in the following sequence:
  - 1. Proceed only when demolition and removal of adjoining work has been completed and operations can be carried out without interference for other operations.
  - 2. Remove plant growth.
  - 3. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
  - 4. Remove paint.
  - 5. Remove signs, electrical conduit, piping, and other applied items not indicated to remain.
  - 6. Clean masonry surfaces to remove soiling and adherent matter, including mold and mildew.
  - 7. Rake out mortar from joints surrounding masonry to be replaced and from joints adjacent to masonry repairs along joints.
  - 8. Repair masonry, including replacing deteriorated existing masonry with new masonry materials.
  - 9. Rake out mortar from joints to be repointed.
  - 10. Point mortar joints. Coordinate installation of joint sealants in indicated joints under related Section.
  - 11. After repairs and repointing have been completed and cured, perform a final cleaning to remove

residues from this work.

D. As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in masonry units to comply with "Masonry Unit Patching" Article. Patch holes in mortar joints to comply with "Repointing Masonry" Article.

#### 1.12 WARRANTY

A. Notwithstanding any other requirements of this Contract, the Subcontractor performing the work of this Section shall guarantee the performance of the installation and materials included in this Section for one year from the date of Substantial Completion as defined in the General Conditions. Should any defects in materials or workmanship appear during this period, they shall be corrected or replaced by this Subcontractor to the satisfaction of the Architect, and at no expense to the Owner.

#### PART 2 PRODUCTS

#### 2.01 MASONRY MATERIALS

- A. Salvaged Brick: Salvaged brick from the building in sound, undamaged condition shall be reused for repairs of the same brick type wherever practicable. Clean off residual mortar.
- B. Face Brick: Where sufficient existing brick cannot be salvaged to complete the work, provide face brick, including specially molded, ground, cut, or sawed shapes.
  - 1. Provide units with colors, color variation within units, surface texture, size, and shape to match existing brickwork and with physical properties within 10 percent of those determined from preconstruction testing of selected existing units.
  - 2. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.
  - 3. Where arch headers over openings are to be repaired or replaced, provide fabricated tapered brick units matching the existing as required to rebuild the headers.
  - 4. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
  - 5. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
  - 6. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
  - 7. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- C. Stone: Provide natural building stone of variety, color, texture, grain, veining, finish, size, and shape to match existing stone and with physical properties within 10 percent of those determined from preconstruction testing of selected existing stone.
  - 1. The existing stone is described in a report commissioned by the Owner as follows: "[T]he building's sidewalls are finished in natural rubble stone set in somewhat level courses. . . . The majority of stone used in the walls was obtained from the area. . . . [R]ubble stone was bought from farms in Pelham and North Amherst, and granite for cut cornerstones was obtained from a Pelham Cider Mill."

- D. Other Natural Stone: If other natural stone is encountered and replacement is indicated or otherwise required, provide matching stone of similar properties and appearance.
- E. Building Brick: Provide building brick complying with ASTM C 62, of same vertical dimension as face brick, for masonry work concealed from view.
  - 1. Grade SW where in contact with earth.
  - 2. Grade SW, MW, or NW for concealed backup.
  - 3. Date Identification: Emboss in the clay body on an interior surface of each unit in easily read 1/2-inch- (13-mm-) high characters, "MADE <Insert year>." Manufacturer's name may also be embossed.

#### 2.02 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150, Type I or Type II, white or gray or both where required for color matching of exposed mortar.
  - 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Factory-Prepared Lime Putty: ASTM C 1489.
- D. Quicklime: ASTM C 5, pulverized lime.
- E. Mortar Sand: ASTM C 144 unless otherwise indicated.
  - 1. Color: Provide natural sand or ground marble, granite, or other sound stone of color necessary to produce required mortar color.
  - 2. For pointing mortar, provide sand with rounded edges.
  - 3. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
- F. Mortar Pigments: Natural and synthetic iron oxides, compounded for mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortars.
  - 1. Available Products:
    - a. Bayer Corporation, Industrial Chemicals Div.; Bayferrox Iron Oxide Pigments.
    - b. Davis Colors; True Tone Mortar Colors.
    - c. Solomon Grind-Chem Services, Inc.; SGS Mortar Colors.
  - 2. Pigments shall not exceed 10 percent of portland cement by weight.
  - 3. Organic pigments, such as "carbon black" shall not be used.
- G. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.
- H. Water-Repellent Admixture: Liquid water-repellent mortar admixture intended for use with concrete masonry units, containing integral water repellent by same manufacturer.
- I. Water: Potable.

# 2.03 MANUFACTURED REPAIR MATERIALS

- A. Masonry Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Cathedral Stone Products, Inc.; Jahn M100 Cast stone and Brick Repair Mortar.
    - b. Conproco Corporation; Matrix.
    - c. Edison Coatings, Inc.; Custom System 45.
  - 2. Use formulation that is vapor- and water permeable (equal to or more than the masonry unit), exhibits low shrinkage, has lower modulus of elasticity than the masonry units being repaired, and develops high bond strength to all types of masonry.
  - 3. Use formulation having working qualities and retardation control to permit forming and sculpturing where necessary.
  - 4. Formulate patching compound used for patching brick and stone in colors and textures to match each masonry unit being patched. Provide sufficient number of colors to enable matching the color, texture, and variation of each unit.
- B. Stone Consolidation and Water-Repellent Treatment: Ready-to-use product designed for consolidation and water-repellent treatment of stone that has deteriorated due to weathering and exposure to pollutants. Treatment shall be composed of silicic-ethyl esters, a neutral catalyst, a silane water repellent, and solvents.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Cohalan Company, Inc.; Keim Silex H.
    - b. Diedrich Technologies Inc.; D50W.
    - c. PROSOCO; Conservare H100 Stone Strengthener with HCT pretreatment.

# 2.04 ACCESSORIES

- A. Fully Concealed Anchors: Provide where necessary to stabilize construction, or to replace deteriorated anchors encountered, fabricated from stainless steel complying with ASTM A 240/A 240M, ASTM A 276, or ASTM A 666, Type 304.
- B. Exposed Anchors: Where required to replace existing deteriorated exposed anchorage, fabricated from steel complying with ASTM A 36/A 36M, and hot-dip galvanized to comply with ASTM A 123/A 123M.
- C. Dowels: Round stainless-steel bars complying with ASTM A 276, Type 304, and 1/2-inch (12-mm) diameter.
- D. Setting Buttons: Resilient plastic buttons, nonstaining to stone, sized to suit joint thicknesses and bed depths of stone units without intruding into required depths of pointing materials.
- E. Masking Tape: Nonstaining, nonabsorbent material, compatible with pointing mortar, joint primers, sealants, and surfaces adjacent to joints; that will easily come off entirely, including adhesive.
- F. Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkyd primer complying with MPI #79, Alkyd Anticorrosive Metal Primer or SSPC-Paint 20 or SSPC-Paint 29 zinc-rich coating.
  - 1. Use coating requiring no better than SSPC-SP 3, "Power Tool Cleaning" or SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning" surface preparation according to manufacturer's literature or certified statement.
  - 2. Use coating with a VOC content of 420 g/L (3.5 lb/gal.) or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

- G. Miscellaneous Products: Select materials and methods of use based on the following, subject to approval of a mockup:
  - 1. Previous effectiveness in performing the work involved.
  - 2. Little possibility of damaging exposed surfaces.
  - 3. Consistency of each application.
  - 4. Uniformity of the resulting overall appearance.
  - 5. Do not use products or tools that could do the following:
    - a. Remove, alter, or in any way harm the present condition or future preservation of existing surfaces, including surrounding surfaces not in contract.
    - b. Leave a residue on surfaces.

#### 2.05 EMBEDDED FLASHING MATERIALS

- A. Metal Flashing: Where indicated and wherever flashing is exposed or partly exposed, furnish metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:
  - 1. Copper: ASTM B 370, Temper H00 or H01, cold-rolled copper sheet, 10-oz./sq. ft. (3-kg/sq. m) weight or 0.0135 inch (0.34 mm) thick for fully concealed flashing; 16-oz./sq. ft. (5-kg/sq. m) weight or 0.0216 inch (0.55 mm) thick elsewhere.
  - 2. Fabricate through-wall metal flashing embedded in masonry from copper, with ribs at 3-inch (75-mm) intervals along length of flashing to provide an integral mortar bond.
- B. Flexible Flashing: Only for flashing not exposed to the exterior, and where "Membrane Flashing" is indicated on the Drawings, use one of the following, unless otherwise indicated:
  - 1. Copper-Laminated Flashing: 7-oz./sq. ft. (2-kg/sq. m) copper sheet bonded with asphalt between 2 layers of glass-fiber cloth. Use only where flashing is fully concealed in masonry.
    - a. Available Products:
      - 1) Advanced Building Products Inc.; Copper Fabric Flashing.
      - 2) AFCO Products Inc.; Copper Fabric.
      - 3) Hohmann & Barnard, Inc.; H & B C-Fab Flashing.
      - 4) Phoenix Building Products; Type FCC-Fabric Covered Copper.
      - 5) Polytite Manufacturing Corp.; Copper Fabric Flashing.
      - 6) Sandell Manufacturing Co., Inc.; Copper Fabric Flashing.
      - 7) York Manufacturing, Inc.; York Copper Fabric Flashing.
  - 2. Asphalt-Coated Copper Flashing: 7-oz./sq. ft. (2-kg/sq. m) copper sheet coated with flexible asphalt. Use only where flashing is fully concealed in masonry.
    - a. Available Products:
      - 1) Advanced Building Products Inc.; Cop-R-Cote.
      - 2) AFCO Products Inc.; Cop-A-Cote.
      - 3) Hohmann & Barnard, Inc.; H & B C-Coat Flashing.
      - 4) Phoenix Building Products; Type ACC-Asphalt Bituminous Coated.
      - 5) Polytite Manufacturing Corp.; Coated Copper Flashing.
      - 6) Sandell Manufacturing Co., Inc.; Coated Copper Flashing.
      - 7) York Manufacturing, Inc.; Copperseal.

# 2.06 PAINT REMOVERS

- A. Alkaline Paste Paint Remover: Manufacturer's standard alkaline paste formulation for removing paint coatings from masonry.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; 800 Brush Grade.
    - b. Diedrich Technologies Inc.; 606 Multi-Layer Paint Remover or 606X Extra Thick Multi-Layer

- Paint Remover.
- c. Hydroclean, Hydrochemical Techniques, Inc.; Hydroclean HT-716 Heavy Duty Paint Remover.
- d. Price Research, Ltd.; Price Heavy Duty Paint Stripper.
- e. PROSOCO; Enviro Klean Safety Peel 2, Sure Klean Heavy-Duty Paint Stripper or Sure Klean Heavy-Duty Paint Stripper D.
- B. Covered or Skin-Forming Alkaline Paint Remover: Manufacturer's standard covered or skin-forming alkaline formulation for removing paint coatings from masonry.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; Grip 'N Strip 800 Fast Acting.
    - b. Diedrich Technologies Inc.; 606 Multi-Layer Paint Remover or 606X Extra Thick Multi-Layer Paint Remover with pull-off removal system.
    - c. Dumond Chemicals, Inc.; Peel Away 1 System.
    - d. PROSOCO; Enviro Klean Safety Peel 1 or Enviro Klean Safety Peel 3 with Enviro Klean Overcoat.
- C. Solvent-Type Paint Remover: Manufacturer's standard water-rinsable, solvent-type gel formulation for removing paint coatings from masonry.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; Super Bio Strip Gel.
    - b. Diedrich Technologies Inc.; 505 Special Coatings Stripper.
    - c. Dumond Chemicals, Inc.; Peel Away 2.
    - d. Hydroclean, Hydrochemical Techniques, Inc.; Hydroclean HT-300 Solvent Paint Remover.
    - e. Price Research, Ltd.; Price Strip-All.
    - f. PROSOCO; Sure Klean Fast Acting Stripper.
- D. Low-Odor, Solvent-Type Paint Remover: Manufacturer's standard low-odor, water-rinsable solvent-type gel formulation, containing no methanol or methylene chloride, for removing paint coatings from masonry.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; Super Bio Strip Gel.
    - b. Cathedral Stone Products, Inc.; S-301, S-303 or S-305.
    - c. Dumond Chemicals, Inc.; Peel Away 6, Peel Away 7 or Peel Away 21.
    - d. PROSOCO; Enviro Klean Safety Peel 1 or Enviro Klean Safety Peel 3.

#### 2.07 CLEANING MATERIALS

- A. Water: Potable.
- B. Hot Water: Water heated to a temperature of 140 to 160 deg F (60 to 71 deg C).
- C. Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups  $(0.5\,L)$  of tetrasodium polyphosphate, 1/2 cup  $(125\,mL)$  of laundry detergent, and 20 quarts  $(20\,L)$  of hot water for every 5 gal.  $(20\,L)$  of solution required.
- D. Job-Mixed Mold, Mildew, and Algae Remover: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium polyphosphate, 5 quarts (5 L) of 5 percent sodium hypochlorite (bleach), and 15 quarts (15 L) of hot water for every 5 gal. (20 L) of solution required.
- E. Chemical Cleaning Products, General: In event of stubborn soiling that resists cleaning with products specified above, propose for consideration of Architect compounds with which masonry contractor is

familiar and has a history of satisfactory cleaning of masonry of the kind for which the product is proposed.

- 1. Acidic or otherwise potentially chemically or mechanically destructive of masonry units or mortar will be acceptable only after demonstration to Architect that the use of the product and proposed application and treatment method will not be harmful to the masonry of this Project. Provide mockup samples of each proposed cleaning product and application proposed in location directed by Architect, as specified in Part 1 Article "Quality Assurance."
- 2. The following paragraphs specify types of chemical cleaning products that may be considered for use on this Project.
- F. Nonacidic Gel Cleaner: Manufacturer's standard gel formulation, with pH between 6 and 9, that contains detergents with chelating agents and is specifically formulated for cleaning masonry surfaces.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Price Research, Ltd.; Price Marble Cleaner-Gel.
    - b. PROSOCO; Sure Klean 942 Limestone and Marble Cleaner.
    - c. Or approved equal.
- G. Nonacidic Liquid Cleaner: Manufacturer's standard mildly alkaline liquid cleaner formulated for removing mold, mildew, and other organic soiling from ordinary building materials, including polished stone, brick, aluminum, plastics, and wood.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Diedrich Technologies Inc.; Diedrich 910PM Polished Marble Cleaner.
    - b. Dominion Restoration Products, Inc.; Bio-Cleanse.
    - c. Dumond Chemicals, Inc.; Safe n' Easy Architectural Cleaner/Restorer.
    - d. Price Research, Ltd.; Price Non-Acid Masonry Cleaner.
    - e. PROSOCO: Enviro Klean 2010 All Surface Cleaner.
- H. Two-Part Chemical Cleaner: Manufacturer's standard system consisting of potassium or sodium hydroxide based, alkaline prewash cleaner and acidic afterwash cleaner that does not contain hydrofluoric acid.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; 500 Limestone Prewash Cleaner followed by 500 Limestone Afterwash.
    - b. Diedrich Technologies Inc.; Diedrich 808 Limestone Pre-Wash or Diedrich 808X Black Encrustation Remover Super Strong followed by 707N Limestone Neutralizer After-Rinse.
    - c. PROSOCO; Enviro Klean BioKlean followed by Sure Klean Limestone & Masonry Afterwash or Sure Klean 766 Limestone Prewash followed by SureKlean Limestone & Masonry Afterwash.
- I. Mild Acidic Cleaner Only for Rust Stain Removal: Manufacturer's standard mildly acidic cleaner containing no muriatic (hydrochloric), hydrofluoric, or sulfuric acid; or ammonium bifluoride or chlorine bleaches.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; X-190 Limestone & Concrete Cleaner.
    - b. Diedrich Technologies Inc.; Envirorestore 100.
    - c. Dominion Restoration Products, Inc.; DR-60 Stone and Masonry Cleaner.
    - d. EnviroSafe Manufacturing Corp.; Rust/Stain Remover.
    - e. PROSOCO; Enviro Klean BioWash.

- J. General Cleaners: Provide the following:
  - 1. SureKlean Heavy Duty Restoration Cleaner, ProSoCo, Inc. Kansas City, KS or approved equal.
- K. Brushes: Tampico fiber bristles only.
- L. Spray Equipment: Provide equipment for controlled spray application of water. All cleaners must be brush applied.
  - 1. For spray application of water provide fan shaped spray-tip which disperses water at an angle of not less than 15 degrees.

#### 2.08 MORTAR MIXES

- A. Preparing Lime Putty: Slake quicklime and prepare lime putty according to appendix to ASTM C 5 and manufacturer's written instructions before mixing with other materials.
- B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer. Mortar shall be mixed in small batches so that it will be used within one hour after preparation.
  - 1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
- C. Colored Mortar: Produce mortar of color required by using specified ingredients. Do not alter specified proportions without Architect's approval.
  - 1. Mortar Pigments: Where mortar pigments are indicated, do not exceed a pigment-to-cement ratio of 1:10 by weight.
- D. Do not use admixtures in mortar unless otherwise indicated.
- E. Mortar Proportions: Mix mortar materials in the following proportions or in proportions recommended by testing agency to produce mortar having the same properties as the existing mortar in each area of the building for each type of masonry:
  - 1. Pointing Mortar: match existing original mortar at each location.
    - a. Add mortar pigments and colored aggregate to produce mortar colors required.
  - 2. Rebuilding (Setting) Mortar: Same as pointing mortar except mortar pigments are not required.

#### 2.09 CHEMICAL CLEANING SOLUTIONS

A. Dilute chemical cleaners with water to produce solutions not exceeding concentration recommended by chemical-cleaner manufacturer. Maintain concentration not greater than that used in approved mockup samples throughout the work.

#### 2.10 TOOLS AND ACCESSORIES

A. Grinders: Blade width limited to 1/16-inch. Equip grinder with source extraction vacuum units to contain dust.

#### 3.01 EXAMINATION

- A. Inspect all parts of the structure where masonry work is to be performed and the conditions under which the work must be performed. Report in writing to the Construction Manager, with copy to the Architect, any conditions which might adversely affect the installation. Do not proceed with the installation until defects have been corrected and conditions are satisfactory.
- B. It is not intended to alter the historic appearance of the masonry, and patching and replacement of existing masonry is only required where the deterioration of masonry units impairs the integrity and longevity of the overall building, or where masonry has previously been removed and is indicated to be replaced. The Architect may direct testing by a qualified testing agency in areas of possible structural deterioration. During the course of this work notify the Architect of any suspected structural deterioration of the existing masonry and suspend work in the affected area.

#### 3.02 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.
  - 1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
  - 2. Erect temporary protective covers over all work to remain.
  - 3. Protect decorative copper and woodwork to remain.
- B. Comply with chemical-cleaner manufacturers' written instructions for protecting building and other surfaces against damage from exposure to its products. Prevent chemical-cleaning solutions from coming into contact with people, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
  - Cover adjacent surfaces with materials that are proven to resist chemical cleaners used unless chemical cleaners being used will not damage adjacent surfaces. Use materials that contain only waterproof, UV-resistant adhesives. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive staining.
  - 2. Keep wall wet below area being cleaned to prevent streaking from runoff.
  - 3. Do not clean masonry during winds of sufficient force to spread cleaning solutions to unprotected surfaces.
  - 4. Neutralize and collect alkaline and acid wastes for disposal off Owner's property.
  - 5. Dispose of runoff from cleaning operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.
- C. Prevent mortar from staining face of surrounding masonry and other surfaces.
  - 1. Cover sills, ledges, and projections to protect from mortar droppings.
  - 2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
  - 3. Immediately remove mortar in contact with exposed masonry and other surfaces.
  - 4. Clean mortar splatters from scaffolding at end of each day.

#### 3.03 NEW AND ALTERED OPENINGS IN EXISTING MASONRY

- A. The Work of this Section includes participation in and supervision of selective demolition of masonry work involving existing masonry walls to remain and removal of chimneys and salvage of brick for reuse. Requirements and procedures for selective demolition in Division 02 Section "Selective Demolition" are included in this Section as if written out in full.
  - Demolition contractor under the Construction Manager is responsible for removing demolition
    material not needed for the alterations under this Section. Rough demolition of masonry required
    for new openings in masonry shall be performed under the continuous supervision of the Masonry
    Contractor.
  - 2. Masonry Contractor shall be responsible for the removal of masonry to or beyond the indicated finish openings, so as to properly finish the masonry openings, toothing new work into existing to maintain bond, in accordance with the best practice of the masonry trades. Openings in surfaces that will be exposed shall not be saw cut, but shall be made by extending removal beyond the finish and properly rebuilding the opening. Masonry Contractor shall be solely responsible for removal of existing masonry at heads of existing openings as necessary to install new flashing and lintels as indicated.
  - 3. Masonry Contractor shall be responsible for supervising the salvage under the "Selective Demolition" Section of a sufficient quantity of existing stone units to complete the alterations to the building as indicated. In the event that the quantity of salvaged masonry units is insufficient to complete the work, Masonry Contractor shall be responsible for obtaining masonry units matching the existing to the satisfaction of the Architect to complete the Work at no additional cost to the Owner. Cleaning and stockpiling of salvaged masonry units is specified in Selective Demolition Section.
  - 4. Masonry trade contractor shall be responsible for making all openings through masonry construction required for mechanical and electrical systems, and for properly rebuilding the masonry
- B. In brick masonry that will remain exposed or will be concealed, such rough demolition shall be to permit installation of structural elements under other Sections and to facilitate proper rebuilding to the indicated finish openings. Coordinate rebuilding of openings with embedded work of other trades.
- C. In existing stone facing, where existing openings are to be extended down to new floor levels, rough removal of stone masonry shall be close to intended finish opening to require only finishing under this Section.
- D. Where required to suit indicated door frames to accommodate required door dimensions, enlarge or otherwise alter masonry openings. Restore appearance of such openings to match original masonry work.
- E. In existing unit masonry, remove material beyond intended finished opening, in exposed work, or beyond rough masonry opening where masonry will be concealed by other finishes, vertically and horizontally, and build work back to final opening, toothing masonry units into existing units in coursing and bond to match existing. Install new steel lintels at opening heads where applicable.

#### 3.04 UNUSED ANCHOR REMOVAL

- A. Remove masonry anchors, brackets, wood nailers, and other extraneous items no longer in use unless identified as historically significant or indicated to remain.
  - 1. Remove items carefully to avoid spalling or cracking masonry.
  - 2. Where directed, if an item cannot be removed without damaging surrounding masonry, do the following:
    - a. Cut or grind off item approximately 3/4 inch (20 mm) beneath surface and core drill a recess of same depth in surrounding masonry as close around item as practical.
    - b. Immediately paint exposed end of item with two coats of antirust coating, following coating manufacturer's written instructions and without exceeding manufacturer's recommended dry

film thickness per coat. Keep paint off sides of recess.

3. Patch the hole where each item was removed unless directed to remove and replace the masonry unit.

#### 3.05 BRICK WORK ALTERATIONS

- A. At locations indicated and as otherwise required, remove bricks that are damaged, spalled, or deteriorated. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
  - 1. When removing single bricks, remove material from center of brick and work toward outside edges.
  - 2. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.
  - 3. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.
- B. Replace removed damaged brick with other removed brick and salvaged brick in good quality, where possible, or with new brick matching existing brick, including size. Do not use broken units unless they can be cut to usable size.
- C. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
  - 1. Maintain joint width for replacement units to match existing joints.
  - 2. Use setting buttons or shims to set units accurately spaced with uniform joints.
- D. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than  $30\,\mathrm{g}/30\,\mathrm{sq}$ . in. per min. ( $30\,\mathrm{g}/194\,\mathrm{sq}$ . cm per min.). Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
  - 1. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
  - 2. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area.
  - 3. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.

# 3.06 STONE REBUILDING

- A. Cut out fully designated stones and adjacent stone determined to be loose and mortar from surrounding joints, including collar joint.
  - 1. Remove existing anchors. Where this is not feasible cut back metal to the greatest extent possible. At any remaining metal mechanically remove rust and paint all exposed metal surfaces with Rustoleum Rust Reformer.
- B. Repair exposed back-up masonry. Remove loose, friable or frozen mortar. Reset loose brick and stone to sound condition.
- C. Provide new 3/8-inch threaded stainless steel anchor rods or appropriate strap, butterfly or "up and down," set into back-up masonry with epoxy gel adhesive. Embed 3 inches (or ½ the thickness of the stone if less than 6 inches) and 3 inches into back-up masonry. Provide 2 anchors for each square foot of face stone area, or as noted on the drawings.

#### 3.07 STONE REFINISHING/REDRESSING

- A. Using masonry trade hand tools, remove loose, friable and delaminated stone to sound surface.
- B. Chisel and feather edges of removal areas to surrounding sound stone.
- C. Using chisels, hammers, tooth chisel and associated masonry refinishing equipment, finish newly exposed surfaces to provide surface matching and providing smooth transition to undamaged surrounding stone. Provide best visual effect to blend new surfaces with the finish and plane of surrounding stone.

#### 3.08 MASONRY UNIT PATCHING

- A. Patch the following masonry units unless another type of replacement or repair is indicated:
  - 1. Units indicated to be patched.
  - 2. Units with holes.
  - 3. Units with chipped edges or corners.
  - 4. Units with small areas of deep deterioration.
- B. Do not patch brick units. Remove and replace significantly deteriorated, cracked or damaged brick units as indicated or directed.
- C. Remove and replace existing patches unless otherwise indicated or approved by Architect.

#### D. Patching Stone:

- 1. Remove deteriorated material as determined by sounding gently with a small hammer. Carefully remove additional material so patch will not have feathered edges but will have square or slightly undercut edges on area to be patched and will be at least 1/4 inch (6 mm) thick, but not less than recommended by patching compound manufacturer.
- 2. Where mortar joints adjacent to patch are open, fill back of joints with pointing mortar and allow to cure before patching stone. Leave space for pointing joints according to "Repointing Masonry" Article.
- 3. Mask adjacent mortar joint or rake out for repointing if patch will extend to edge of unit.
- 4. Rinse surface to be patched and leave damp, but without standing water.
- 5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.
- 6. Place patching compound in layers as recommended by patching compound manufacturer, but not less than 1/4 inch (6 mm) or more than 2 inches (50 mm) thick. Roughen surface of each layer to provide a key for next layer.
- 7. Do not apply patching compound over mortar joints. If patching compound bridges mortar joints, cut out joints after patching compound hardens.
- 8. Trowel, scrape, or carve surface of patch to match texture, details, and surrounding surface plane or contour of stone. Shape and finish surface before or after curing, as determined by testing to best match existing stone.
- 9. Keep each layer damp for 72 hours or until patching compound has set.
- 10. Remove and replace patches with hairline cracks or that show separation from stone at edges, and those that do not match adjoining stone in color or texture.

#### 3.09 CLEANING MASONRY, GENERAL

A. Clean brickwork and natural stone that will be exposed in the finished work by the least destructive method that proves effective from the following, as demonstrated in mockup samples required under this Section and described under related articles below:

- 1. Cold-water soaking.
- 2. Cold or hot-water washing.
- 3. Steam cleaning.
- 4. Cleaning with TSP detergent, mold, mildew, and algae remover and/or nonacidic gel or liquid cleaner. Acidic cleaners are not acceptable unless demonstrated harmless in samples.
- 5. Proceed with cleaning in an orderly manner; work from bottom to top of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water will not wash over cleaned, dry surfaces.
- B. Paint Removal: Where indicated or required, remove paint from masonry using cleaning methods specified above, if effective, or paint removal products specified herein as recommended by the manufacturer for the specific condition of the masonry surfaces and the paint to be removed.
- C. Use only those cleaning methods indicated for each masonry material and location.
  - 1. Do not use wire brushes or brushes that are not resistant to chemical cleaner being used. Do not use plastic-bristle brushes if natural-fiber brushes will resist chemical cleaner being used.
  - 2. Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray tip. Adjust pressure and volume to ensure that cleaning methods do not damage masonry.
    - a. Equip units with pressure gages.
  - 3. For chemical-cleaner spray application, use low-pressure tank or chemical pump suitable for chemical cleaner indicated, equipped with cone-shaped spray tip.
  - 4. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
  - 5. For high-pressure water-spray application, use fan-shaped spray tip that disperses water at an angle of at least 40 degrees.
  - 6. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F (60 and 71 deg C) at flow rates indicated.
  - 7. For steam application, use steam generator capable of delivering live steam at nozzle.
- D. Mild Acidic Chemical Cleaning for Rust Stain Removal:
  - 1. Wet stone with cold water applied by low-pressure spray.
  - 2. In strict accordance with chemical manufacturer recommendations, apply cleaner to stone by brush or low-pressure spray and let cleaner remain on surface for period as recommended by chemical-cleaner manufacturer.
  - 3. Rinse with cold water applied by low- or medium-pressure spray to remove chemicals and soil.
  - 4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam cleaning.
- E. Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including corners, moldings, and interstices, and that produces an even effect without streaking or damaging masonry surfaces.
- F. Water Application Methods:
  - 1. Water-Soak Application: Soak masonry surfaces by applying water continuously and uniformly to limited area for time indicated. Apply water at low pressures and low volumes in multiple fine sprays using perforated hoses or multiple spray nozzles. Erect a protective enclosure constructed of polyethylene sheeting to cover area being sprayed.
  - 2. Water-Spray Applications: Unless otherwise indicated, hold spray nozzle at least 6 inches (150 mm) from surface of masonry and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.
- G. Steam Cleaning: Apply steam to masonry surfaces at the very low pressures indicated for each type of

masonry material. Hold nozzle at least 6 inches (150 mm) from surface of masonry and apply steam in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.

- H. Chemical-Cleaner Application Methods: Apply chemical cleaners to masonry surfaces to comply with chemical-cleaner manufacturer's written instructions; use brush or spray application. Do not spray apply at pressures exceeding 50 psi (345 kPa). Do not allow chemicals to remain on surface for periods longer than those indicated or recommended by manufacturer.
- I. Rinse off chemical residue and soil by working upward from bottom to top of each treated area at each stage or scaffold setting. Periodically during each rinse, test pH of rinse water running off of cleaned area to determine that chemical cleaner is completely removed.
  - 1. Apply neutralizing agent and repeat rinse if necessary to produce tested pH of between 6.7 and 7.5.
- J. After cleaning is complete, remove protection no longer required. Remove tape and adhesive marks.

#### 3.10 PRELIMINARY CLEANING

- A. Removing Plant Growth: Completely remove visible plant, moss, and shrub growth from masonry surfaces. Carefully remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal. Remove loose soil and debris from open masonry joints to whatever depth they occur.
- B. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar.
  - 1. Carefully remove heavy accumulations of material from surface of masonry with a sharp chisel. Do not scratch or chip masonry surface.
  - 2. Remove paint and calking with alkaline paint remover.
    - a. Comply with requirements in "Paint Removal" Article.
    - b. Repeat application up to two times if needed.
  - 3. Remove asphalt and tar with solvent-type paint remover.
    - a. Comply with requirements in "Paint Removal" Article.
    - b. Apply paint remover only to asphalt and tar by brush without prewetting.
    - c. Allow paint remover to remain on surface for 10 to 30 minutes.
    - d. Repeat application if needed.

# 3.11 PAINT REMOVAL

- A. Paint Removal with Alkaline Paste Paint Remover:
  - 1. Remove loose and peeling paint using low-pressure spray, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
  - 2. Apply paint remover to dry, painted masonry with brushes.
  - 3. Allow paint remover to remain on surface for period recommended by manufacturer.
  - 4. Rinse with hot water applied by low- or medium-pressure spray to remove chemicals and paint residue.
  - 5. Repeat process if necessary to remove all paint.
  - 6. Apply acidic cleaner or manufacturer's recommended afterwash to masonry, while surface is still wet, using low-pressure spray equipment or soft-fiber brush. Let cleaner or afterwash remain on surface as a neutralizing agent for period recommended by chemical cleaner or afterwash manufacturer.
  - 7. Rinse with cold water applied by low-pressure spray to remove chemicals and soil.
- B. Paint Removal with Covered or Skin-Forming Alkaline Paint Remover:

- 1. Remove loose and peeling paint using low-pressure spray, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
- 2. Apply paint remover to dry, painted masonry with trowel, spatula, or as recommended by manufacturer.
- 3. Apply cover, if required by manufacturer, per manufacturer's written instructions.
- 4. Allow paint remover to remain on surface for period recommended by manufacturer or as determined in test panels.
- 5. Scrape off paint and remover and collect for disposal.
- 6. Rinse with cold water applied by low-pressure spray to remove chemicals and paint residue.
- 7. Use alkaline paste paint remover, according to "Paint Removal with Alkaline Paste Paint Remover" Paragraph, if necessary to remove remaining paint.
- 8. Apply acidic cleaner or manufacturer's recommended afterwash to masonry, while surface is still wet, using low-pressure spray equipment or soft-fiber brush. Let cleaner or afterwash remain on surface as a neutralizing agent for period recommended by chemical-cleaner or afterwash manufacturer.
- 9. Rinse with cold water applied by low-pressure spray to remove chemicals and soil.

# C. Paint Removal with Solvent-Type Paint Remover:

- 1. Remove loose and peeling paint using low-pressure spray, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
- 2. Apply thick coating of paint remover to painted masonry with natural-fiber cleaning brush, deep-nap roller, or large paint brush.
- 3. Allow paint remover to remain on surface for period recommended by manufacturer.[ Agitate periodically with stiff-fiber brush.]
- 4. Rinse with cold water applied by low-pressure spray to remove chemicals and paint residue.

#### 3.12 <u>CLEANING MASONRY</u>

#### A. Cold-Water Soak:

- 1. Apply cold water by intermittent spraying to keep surface moist.
- 2. Use perforated hoses or other means that will apply a fine water mist to entire surface being cleaned.
- 3. Apply water in cycles with at least 30 minutes between cycles.
- 4. Continue spraying until surface encrustation has softened sufficiently to permit its removal by water wash, as indicated by cleaning tests.
- 5. Continue spraying for 72 hours.
- 6. Remove soil and softened surface encrustation from masonry with cold water applied by low-pressure spray.
- B. Cold-Water Wash: Use cold water applied by low-pressure spray.
- C. Hot-Water Wash: Use hot water applied by low-pressure spray.
- D. Steam Cleaning: Apply steam at very low pressures not exceeding 30 psi (207 kPa). Remove dirt softened by steam with wood scrapers, stiff-fiber brushes, or cold-water wash, as indicated by cleaning tests.

## E. Detergent Cleaning:

- 1. Wet masonry with hot water applied by low-pressure spray.
- 2. Scrub masonry with detergent solution using medium-soft brushes until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from mortar joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that masonry surface remains wet.
- 3. Rinse with cold water applied by low- or medium-pressure spray to remove detergent solution and

soil.

4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup.

#### F. Mold, Mildew, and Algae Removal:

- 1. Wet masonry with cold water applied by low-pressure spray.
- 2. Apply mold, mildew, and algae remover by brush or low-pressure spray.
- 3. Scrub masonry with medium-soft brushes until mold, mildew, and algae are thoroughly dislodged and can be removed by rinsing. Use small brushes for mortar joints and crevices. Dip brush in mold, mildew, and algae remover often to ensure that adequate fresh cleaner is used and that masonry surface remains wet.
- 4. Rinse with cold water applied by low or medium-pressure spray to remove mold, mildew, and algae remover and soil.
- 5. Repeat cleaning procedure above where required to produce cleaning effect established by mockup.

#### G. Nonacidic Gel Chemical Cleaning:

- 1. Wet masonry with cold water applied by low-pressure spray.
- 2. Apply nonacidic gel cleaner in 1/8-inch (3-mm) thickness by brush, working into joints and crevices. Apply quickly and do not brush out excessively so area will be uniformly covered with fresh cleaner and dwell time will be uniform throughout area being cleaned.
- 3. Let cleaner remain on surface for period indicated below:
  - a. As recommended by chemical-cleaner manufacturer.
  - b. As established by mockup.
- 4. Remove bulk of nonacidic gel cleaner by squeegeeing into containers for disposal.
- 5. Rinse with cold water applied by low- or medium-pressure spray to remove chemicals and soil.
- 6. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam cleaning.

#### H. Nonacidic Liquid Chemical Cleaning:

- 1. Wet masonry with cold water applied by low-pressure spray.
- 2. Apply cleaner to masonry in two applications by brush. Let cleaner remain on surface for period As recommended by chemical-cleaner manufacturer.
- 3. Rinse with cold water applied by low- or medium-pressure spray to remove chemicals and soil.
- 4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam cleaning.

# 3.13 REPOINTING MASONRY

# A. Rake out and repoint joints to the following extent:

- 1. All joints in areas indicated.
- 2. Joints where mortar is missing or where they contain holes.
- 3. Cracked joints where cracks can be penetrated at least 1/4 inch (6 mm) by a knife blade 0.027 inch (0.7 mm) thick.
- 4. Cracked joints where cracks are 1/16 inch (1.6 mm) or more in width and of any depth.
- 5. Joints where they sound hollow when tapped by metal object.
- 6. Joints where they are worn back 1/4 inch (6 mm) or more from surface.
- 7. Joints where they are deteriorated to point that mortar can be easily removed by hand, without tools.
- 8. Joints where they have been filled with substances other than mortar.
- 9. Joints indicated as sealant-filled joints.
- 10. Extend pointing into jambs and heads of openings before new window panning is installed, so that perimeter sealant will be applied to cured mortar joints.
- 11. The Drawings indicate the percentage of existing joints on each surface to be repointed, in addition to areas otherwise altered or repaired under this Section, as directed by Architect.

- B. Do not rake out and repoint joints where not required.
- C. Rake out joints as follows, according to procedures demonstrated in approved mockup:
  - 1. Remove mortar from joints to depth of 2 times joint width, but not less than  $\frac{1}{2}$  inch (13 mm) or not less than that required to expose sound, unweathered mortar.
  - 2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
  - 3. Do not spall edges of masonry units or widen joints. Do not damage flashing in joints. Replace or patch damaged masonry units as directed by Architect.
    - a. Cut out mortar by hand with chisel and resilient mallet. Do not use power-operated grinders without Architect's written approval based on approved quality-control program.
  - 4. Joints indicated to receive sealant shall be raked out to depth indicated above and left open to receive joint backing and elastomeric sealant as specified in Division 07 Section "Joint Sealants."
- D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.

#### E. Pointing with Mortar:

- 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
- 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumb print hard before applying next layer.
- 3. After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not greater than 3/8 inch (9 mm). Fully compact each layer and allow to become thumb print hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to feather edge the mortar.
- 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
- 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours including weekends and holidays.
  - a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.
  - b. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.
- 6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

#### F. Pointing with Sealant:

- 1. After raking out, keep joints dry and free of mortar and debris.
- 2. Clean and prepare joint surfaces according to Division 07 Section "Joint Sealants." Prime joint surfaces unless sealant manufacturer recommends against priming. Do not allow primer to spill or migrate onto adjoining surfaces.
- 3. Fill sealant joints with specified joint sealant according to Division 07 Section "Joint Sealants" and the following:
  - a. Install cylindrical sealant backing beneath the sealant, except where space is insufficient. There, install bond-breaker tape.

- b. Install sealant using only proven installation techniques that will ensure that sealant will be deposited in a uniform, continuous ribbon, without gaps or air pockets, and with complete wetting of the joint bond surfaces equally on both sides. Fill joint flush with surrounding masonry and matching the contour of adjoining mortar joints.
- c. Install sealant as recommended by sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead:
  - 1) Fill joints to a depth equal to joint width, but not more than 1/2 inch (13 mm) deep or less than 1/4 inch (6 mm) deep.
- d. Immediately after first tooling, apply ground-mortar aggregate to sealant, gently pushing aggregate into the surface of sealant. Retool sealant to form smooth, uniform beads, slightly concave. Remove excess sealant and aggregate from surfaces adjacent to joint.
- e. Do not allow sealant to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces, particularly rough textures. Remove excess and spillage of sealant promptly as the work progresses. Clean adjoining surfaces by the means necessary to eliminate evidence of spillage, without damage to adjoining surfaces or finishes, as demonstrated in an approved mockup.
- 4. Cure sealant according to Division 07 Section "Joint Sealants."
- G. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.

#### 3.14 FINAL CLEANING

- A. Pointing holes from scaffold and miscellaneous attachment: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance.
- B. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-fiber brushes, and clean water, spray applied at low pressure.
  - 1. Do not use metal scrapers or brushes.
  - 2. Do not use acidic or alkaline cleaners.
- C. Wash adjacent woodwork and other non-masonry surfaces. Use detergent and soft brushes or cloths.
- D. Clean mortar and debris from roofs and overhangs; remove debris from gutters and downspouts. Rinse off roof and flush gutters and drains.
- E. Sweep and rake adjacent pavement and grounds to remove mortar and debris. Where necessary, pressure wash pavement surfaces to remove mortar, dust, dirt, and stains.

#### 3.15 FIELD QUALITY CONTROL

- A. Inspectors: Owner will engage qualified independent inspectors to perform inspections and prepare test reports. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.
- B. Architect's Project Representatives: Architect will assign Project representatives to help carry out Architect's responsibilities at the site, including observing progress and quality of portion of the Work completed. Allow Architect's Project representatives use of lift devices and scaffolding, as needed, to observe progress and quality of portion of the Work completed.
- C. Notify inspectors and Architect's Project representatives in advance of times when lift devices and scaffolding will be relocated. Do not relocate lift devices and scaffolding until inspectors and Architect's Project representatives have had reasonable opportunity to make inspections and observations of work areas at lift device or scaffold location.

# ++ END OF SECTION 040110 ++



#### 1.01 SUMMARY

- A. The work under this Section consists of furnishing and installing custom manufactured wood windows and replacement window sash, in coordination with window restoration work specified in Division 08 Section "Wood Window Rehabilitation," complete with all hardware, insulating glazing, weatherstripping, screens, and installation accessories, as follows:
  - 1. Providing new wood windows to replace previous window replacements. New windows, including sash and frames, shall match the original windows and as shown on the Drawings and specified herein. Windows shall be manufactured to custom sizes for installation in existing window openings as indicated. Windows shall be single hung and fixed sash units as indicated.
    - a. New windows, including sash and frames, shall match the details of the original windows, subject to adjustment for required insulating glass, and shall be as shown on the Drawings and specified herein.
  - 2. Providing new wood sash with insulating glass to replace all existing window sash installed into wood frames restored under related Section. Replace cord and weight balances with new high performance spring balances. Replace parting beads and side stops. Lock operable hung units with replacement locks. Inject draft sealer in unused weight pockets. Seal full perimeter of fixed sash with elastomeric sealant, interior and exterior.
  - 3. Both existing and new double hung and triple hung windows shall have upper sash fixed: only the lower sash shall be operable.
  - 4. Exteriors of new window sash are to be furnished finished in color(s) selected by Architect: interior color may be different from exterior. New window frames and exterior casings shall be primed for field painting.

#### B. Related Work Specified in Other Sections

- 1. Removal of existing windows: Division 02 Section "Selective Demolition" for complete removal of windows indicated to be entirely replaced, and for removal of sash from windows where frames are indicated to be retained and restored in place.
- 2. Rough framed openings to receive windows, including treated wood blocking in masonry walls, and including alterations to existing openings: Division 06 Section "Rough Carpentry."
- 3. Interior wood trim and stools, including interior wood jamb extensions and casings: Division 06 Section"Finish Carpentry."
- 4. Division 06 Section "Interior Architectural Woodwork" for alterations to transparent finished interior window surrounds, sills and casings.
- 5. Injected foam draft sealer around full perimeter of windows: Division 07 Section "Thermal Insulation."
- 6. Metal sill and head flashing: Division 07 Section "Sheet Metal Flashing and Trim."
- 7. Sealant around full perimeter of windows, interior and exterior: Division 07 Section "Joint Sealants."
- 8. Division 08 Section "Wood Window Rehabilitation" for preparation and restoration of existing windows to receive new sash in coordination with work of this Section.
- 9. Glass and glazing, including standards for materials furnished under this Section: Division 08 Section "Glazing."
- 10. Division 09 Section "Painting" for field painting of windows.

#### 1.02 WINDOW SYSTEM DESCRIPTIONS

A. Window System Component Descriptions: Window component terminology shall be as identified in AWI's "Architectural Woodwork Quality Standards," Section 1000.

- B. Wood window components for historic treatment work include the following:
  - 1. Frame Components: Head, jambs, and sill.
  - 2. Sash Components: Stile and rails, parting bead, stop, and muntins.
  - 3. Exterior Trim: Exterior casing, brick mould, and drip cap.
  - 4. Interior Trim: Casing, stool, and apron.
- C. Glazing includes glass, glazing points, glazing compounds, and gaskets.
- D. Adjacent components include circular or arched heads, transoms, mullions, and flashing and drainage components.

#### 1.03 DEFINITIONS

- A. Performance class designations according to AAMA/WDMA 101/I.S.2/NAFS:
  - 1. AW: Architectural.
- B. Performance grade number according to AAMA/WDMA 101/I.S.2/NAFS:
  - 1. Design pressure number in pounds force per square foot (pascals) used to determine the structural test pressure and water test pressure.
- C. Structural Test Pressure: For uniform load structural test, is equivalent to 150 percent of the design pressure.
- D. Minimum Test Size: Smallest size permitted for performance class (gateway test size). Products must be tested at minimum test size or at a size larger than minimum test size to comply with requirements for performance class.

#### 1.04 REFERENCES

- A. American Society for Testing and Materials (ASTM):
  - 1. ASTM E283--Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
  - 2. ASTM E330--Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
  - 3. ASTM E547--Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
  - 4. ASTM E774--Specification for Sealed Insulating Glass Units.
  - 5. ASTM C 1036--Standard Specification for Flat Glass.
- B. American National Standards Institute/National Wood Window and Door Association (ANSI/NWWDA):
  - 1. ANSI/NWWDA I.S.2 Industry Standard for Wood Windows.
  - 2. ANSI/NWWDA I.S.4 Industry Standard for Water Repellent Preservative Treatment for Millwork.
- C. Consumer Product Safety Commission:
  - 1. 16 CFR 1201 Safety Standard For Architectural Glazing Materials.
- D. Sealed Insulating Glass Manufacturers Association/Insulating Glass Certification Council (SIGMA/IGCC).

- E. Federal Specifications (FS):
  - 1. FS DD-G-451D--Glass, Float or Plate, Sheet, Figured (Flat for Glazing, Mirrors, and Other Uses).

#### 1.05 PERFORMANCE REQUIREMENTS

- A. General: Provide wood windows capable of complying with performance requirements indicated, based on testing manufacturer's windows that are representative of those specified, and that are of test size indicated below:
  - 1. Not less than actual size of existing windows to be replaced, and replacement sash.
- B. Structural Performance: Provide wood windows capable of withstanding the effects of the following loads based on testing units representative of those indicated for Project that pass AAMA/WDMA 101/I.S.2/NAFS, Uniform Load Structural Test:
  - 1. Design Wind Loads: Determine design wind loads applicable to Project from basic wind speed indicated in miles per hour (meters per second) at 33 feet (10 m) above grade, according to ASCE 7, Section 6.5, "Method 2-Analytical Procedure," based on mean roof heights above grade, orientation and exposure indicated on Drawings and from the governing codes.
  - 2. Deflection: Design glass framing system to limit lateral deflections of glass edges to less than 1/175 of glass-edge length or 3/4 inch (19 mm), whichever is less, at design pressure based on testing performed according to AAMA/WDMA 101/I.S.2/NAFS, Uniform Load Deflection Test or structural computations.

#### 1.06 SYSTEM DESCRIPTIONS

- A. Hung Window Design and Performance Requirements:
  - 1. Window units shall be designed to comply with ANSI/NWWDA I.S.2, Grade 40 or DP25 for wood single or double hung.
  - 2. Air leakage shall not exceed the following when tested at 1.57 psf according to ASTM E283: Grade 40--0.25 cfm per linear foot of sash crack; DP25--0.25 cfm per square foot of frame.
  - 3. No water penetration shall occur when units are tested at the following pressure according to ASTM E547: Grade 40--4.43 psf; DP25--3.75 psf.
  - 4. Window assembly shall withstand the following positive or negative uniform static air pressure difference without damage when tested according to ASTM E330: Grade 40--40 psf; DP25--37.5 psf.

## 1.07 SUBMITTALS

- A. Product Data for each type of wood window and each type of replacement sash required, including the following:
  - 1. Construction details and fabrication methods.
  - 2. Profiles and dimensions of individual components.
  - 3. Data on hardware, accessories, and finishes.
  - 4. Glass and glazing.
  - 5. Recommendations for maintenance and cleaning of exterior surfaces.
- B. Shop Drawings for each type of window required, including information not fully detailed in manufacturer's standard Product Data and the following:
  - 1. Measured elevation and sectional drawings of existing window components in comparison with proposed window components showing least practical difference between proposed and new components.
  - 2. Construction and installation details, including anchors, at scale not less than 3"=1'-0".

- 3. Elevations of each window at 3/8 inch = 1 foot scale and typical window unit elevations at 3/4 inch = 1 foot scale.
- 4. Component and assembly details, at not less than one-half full size:
  - a. Full-size section details of typical frame, sash, muntin, trim, and composite members, including reinforcement and stiffeners.
  - b. Mullion details, including reinforcement and stiffeners.
  - c. Joinery details.
  - d. Hardware, including operators and balance system.
  - e. Expansion provisions.
  - f. Flashing and drainage details.
  - g. Weather-stripping details.
  - h. Glazing details.
  - i. Accessories.
- 5. For installed products indicated to comply with design loads, include structural analysis data prepared by or under the supervision of a qualified professional engineer detailing fabrication and assembly of wood windows and used to determine the following:
  - a. Structural test pressures and design pressures from basic wind speeds indicated.
  - b. Deflection limitations of glass framing systems.
- C. Samples for Selection and Comparison with Existing:
  - 1. Wood material for all components of windows.
  - 2. Glass unit and glazing.
  - 3. Operating hardware.
  - 4. Finishes, interior and exterior.
  - 5. Wood moldings for each member of windows.
  - 6. Sample window unit.
- D. Samples for Verification: The Architect reserves the right to require additional samples that show fabrication techniques, workmanship, and design of hardware and accessories.
- E. Informational Submittals:
  - 1. Test reports from a qualified independent testing agency indicating that each type, grade, and size of window unit complies with performance requirements indicated based on comprehensive testing of current window units within the last 5 years. Test results based on use of downsized test units will not be accepted.
  - 2. Warranties.

# 1.08 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firms whose windows have been certified under the NWWDA "Hallmark Program" for wood window units are listed in the current NWWDA "Membership and Product Directory" and comply with requirements indicated.
  - 1. Provide only wood window units bearing an NWWDA "Hallmark Program" label certifying compliance with requirements of NWWDA I.S. 2.
- B. AWI Quality Standard: Comply with applicable requirements in AWI's "Architectural Woodwork Quality Standards" for construction, finishes, grades of wood windows, and other requirements.
- C. Testing Agency Qualifications: To qualify for approval, an independent testing agency must demonstrate to Architect's satisfaction, based on evaluation of agency-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying the Work.

- D. Single-Source Responsibility: Obtain wood window units from one source and by a single manufacturer.
- E. Regulatory Requirements: Emergency Egress or Rescue: Comply with requirements for sleeping units of Massachusetts State Building Code.
- F. Safety Glass Standard: Provide products complying with testing requirements of 16 CFR, Part 1201 for Category II materials.
  - 1. Subject to compliance with requirements, provide safety glass permanently marked with the certification label of the Safety Glazing Certification Council (SGCC) or another certification agency acceptable to authorities having jurisdiction.
- G. Fenestration Standard: Comply with AAMA/WDMA 101/I.S.2/NAFS, "North American Fenestration Standard Voluntary Performance Specification for Windows, Skylights and Glass Doors," for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
  - Provide WDMA-certified wood windows with an attached label for new windows.
- H. Glazing Publications: Comply with published recommendations of glass manufacturers and with GANA's "Glazing Manual" unless more stringent requirements are indicated.
- I. Insulating-Glass Certification Program: Provide insulating-glass units permanently marked on spacers or at least on one component pane of units with the appropriate certification label of the inspecting agency indicated below:
  - 1. Insulating Glass Certification Council (IGCC).

#### 1.09 PROJECT CONDITIONS

- A. Field Measurements: Check window openings by field measurements before fabrication and show recorded measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  - 1. Where field measurements cannot be made without delaying the Work, guarantee opening dimensions and proceed with fabricating wood windows without field measurements. Coordinate wall construction to ensure that actual opening dimensions correspond to guaranteed dimensions.

# 1.10 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store all products in unopened original manufacturer's packaging. Store all materials in strict accordance with manufacturer's instructions and recommendations. Protect materials from all damage.
- B. Deliver and all products just in time for installation. All storage shall be in locked and secure trailers or secure off-site locations. Protect materials from all damage.
  - Coordinate and defer delivery and installation of replacement sash until restoration work of a related Section is complete and accepted. Installation be deferred until other operations that may risk damage to the repaired windows are complete. Installation of replacement sash under this Section shall be performed only in proper sequence and coordination with the repairs to frames and installation of restored sash.
- C. Screens for all window units shall not be installed in windows until immediately prior to the Architect's inspection for Substantial Completion. If delivery of screens cannot be deferred until they are required for installation, Contractor shall provide protected storage for all screens, and shall ensure that each

screen is clearly marked for the window opening in which it will be installed. Storage shall not be in any work area.

- D. Protect units from all damage during transportation, handling and installation.
- E. Remove all paper-type wrappings and interleaving. Store units indoors if possible, in a clean well-drained area free of dust and corrosive fumes.
- F. Stack units vertically or on edge, so that water cannot accumulate on or within units, using wood or plastic shims between units to provide drainage and air circulation.
- G. Cover units with tarpaulins or sheet plastic hung on frames, to provide air circulation and prevent contaminants contacting aluminum. Keep water away from stored assemblies.

#### 1.11 FIELD TESTING

- A. Architect reserves right to require on-site testing of installed units for both air and water infiltration, using an accredited testing agency acceptable to both Architect and window manufacturer. Architect will select units to be tested.
- B. Air infiltration tests shall conform to ASTM E283. Allowable infiltration during field test shall not exceed 1 times rate for laboratory testing.
- C. Water resistance tests shall conform to AAMA 501.3. No water leakage is permitted during field test.
- D. All tested units not meeting specified requirements, and all similar units, shall be satisfactorily modified in field, or removed and replaced.

#### 1.12 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Submit a written warranty executed by wood window manufacturer agreeing to repair or replace window components that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection, water leakage, air infiltration, or condensation.
  - 2. Faulty operation of sash and hardware.
  - 3. Deterioration of finishes and other materials beyond normal weathering.
  - 4. Warranty Period: Two years after date of final acceptance of the windows.
- C. Warranty Period for Insulating Glass and failure of finish: 10 years after date of Substantial Completion.

#### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

A. Basis of Design Manufacturer: Subject to compliance with requirements, provide products as manufactured by KSD Custom Wood Products, or comparable products of one of the following:

- 1. Architectural Components, Inc., 26 North Leverett Road, Montague, MA 01351
- 2. Custom Wood Reproductions, Westfield, MA.
- 3. J.S. Benson Woodworking and Design, LLC.
- 4. H. Hirschmann LTD.
- 5. Parrett Windows and Doors, Dorchester, WI.
- B. Manufacturer of products under this Section shall be responsible for fabrication of replacement frames, sills and exterior trim specified in Division 08 Section "Wood Window Rehabilitation" to ensure compatibility between refurbished existing work to remain and new work.

#### 2.02 MANUFACTURED UNITS

- A. Replacement Wood Windows: Custom manufactured wood sash, frames and trim, factory assembled windows, with simulated divided lite wood muntins, insulating glass, screens and hardware, fully factory finished, where indicated.
- B. Replacement Sash: Custom manufactured wood sash, factory assembled with true wood muntins, insulating glass, hardware coordinated with frame restoration work under a related Section, fully factory finished, where indicated.

#### 2.03 NEW WINDOW MATERIALS

- A. General: Comply with requirements of NWWDA I.S. 2.
- B. Wood: Clear kiln dried Honduras Mahogany, Seietenian Macrophylia, vertical grain all heartwood lumber, kiln dried to a moisture content of 6 to 12 percent at time of fabrication and free of visible finger joints, stain, knots, pitch pockets, and surface checks. Finger jointing is not acceptable.
  - 1. Lumber shall be water-repellent preservative treated after machining per NWWDA I.S. 4.
- C. Anchors, Clips, and Accessories: Fabricate concealed anchors, clips, and window accessories of aluminum, nonmagnetic stainless steel, or hot-dip zinc-coated steel or iron complying with requirements of ASTM B 633 for SC 3 (severe) service condition; provide sufficient strength to withstand design pressure indicated. Exposed hardware shall be bronze or brass.
- D. Fasteners: Comply with NWWDA I.S. 2 for fabrication and with manufacturer's recommendations and standard industry practices for type and size of installation fasteners.
  - 1. Use only stainless steel or brass nails and screws for window fabrication and installation.

#### 2.04 WINDOWS

- A. Replacement Sash: Clear kiln dried Honduras Mahogany, Seietenian Macrophylia, vertical grain all heartwood stiles, rails and simulated divided lite muntins. All profiles to match existing, subject to necessary adjustment for required glazing, unless otherwise indicated.
- B. Glazing: Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E774, conforming to all applicable requirements of Division 08 Section "Glazing."
  - 1. Glass Type: Clear Northern Low E with Argon Insulating Glass Altitude Adjusted, tempered where required by installation conditions under governing codes and authorities.
  - 2. Glass unit thickness: As indicated, or as determined by performance requirements.
  - 3. Spacers to be dark bronze color, or as otherwise indicated or directed, aligned with muntins.
  - 4. Glazing Seal: Silicone bedding. Removable interior stops.

# C. Finish:

- 1. Exterior: Factory prime and finish, including frame, brick mold trim, sill, and sash: two brush applied coats of cross-linked urethane/acrylic coating system equal to KTM-1, manufactured by Grafted Coatings, Inc., Stratford, CT, in color selected by Architect.
- 2. Interior: Factory finished frames, sash, stops and associated trim, stain and transparent finish to match original finish, as acceptable to Architect, conforming to Division 09 Section "Painting,", primed for field painting where interior trim is indicated to have opaque finish.

#### D. Hardware:

#### 1. Balances:

- a. Heavy duty Class 5 ultralift type capable of lifting 70 percent of sash weight, of size and capacity to hold sash stationary at any open position in accordance with AAMA 101, Section 2.2.1.3.2, and AAMA 902, Section 8.1. Balance system shall permit removal of sash from interior.
- b. Connected to self-locking balance shoes attached to the sashes using zinc die cast terminals.
- c. Balances concealed within frame.
- 2. Weatherstripping: Provide Zero #6 (10 ga bronze), or approved equal, at meeting rails, 9 ga bronze at jambs, and 16 ga bronze at sills (N.Y. Board of Ed. Std. 8F-04) for hung units. Provide Zero Series 18 full perimeter strips of 34 B&S ga spring bronze at awning sash.
- 3. Lock: cast bronze cam lock and keeper. Two locks on sash sizes of 36 inches and wider. Finish: US10. Phelps-Model # TC-75, or approved equal.
- 4. Sash Lift: Bronze, Hager 7435, or approved equal, US 10. Provide two lifts on sash 36 inches and wider.
- E. Jamb Extensions: Provide factory installed jamb extensions for wall thickness indicated or required. Finish: Match interior frame finish.
- F. Screens: Factory installed screens fitted to operable sash only, in prefinished aluminum frame retained by bale catches at sill and matching channel retainer at head. 18 by 16 mesh charcoal aluminum wire screen cloth. Frame Finish: Baked enamel in color to match exterior frame color. Assemble screening to frame with suitable spline.

#### 2.05 FABRICATION

- A. General: Fabricate wood window units to comply with indicated standards. Include a complete system for assembly of components and anchorage of window units.
- B. Comply with requirements of NWWDA I.S. 2 for moisture content of lumber at time of fabrication.
- C. Fabricate windows to produce units that are reglazable without dismantling sash framing. Provide openings and mortises precut, where possible, to receive hardware and other items.
- D. Factory-Glazed Window Units: Except for light sizes in excess of 100 united inches, glaze window units in the shop before delivery. Comply with requirements of Division 08 Section "Glazing" of these Specifications and NWWDA I.S. 2.
- E. Complete fabrication, assembly, finishing, hardware application, and other work before shipment to the Project site, to the maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

#### 3.01 EXAMINATION

- A. Inspect all parts of the structure where wood windows and replacement sash are to be installed and the conditions under which the work is to be performed. Report in writing to the Contractor, with copy to the Architect, any conditions which might adversely affect the installation. Do not proceed with the installation until defects have been corrected and conditions are satisfactory.
- B. Verify that opening is correct and sill plate is level. Do not proceed with installation until unsatisfactory conditions have been corrected.
  - 1. Masonry surfaces shall be dry and free of construction debris.
  - 2. Wood frames to receive replacement sash shall have been fully restored to Architect's satisfaction and shall be dry and clean.
  - 3. Wood framing and blocking shall be dry, clean, sound, well-nailed, free of voids, and without offsets at joints. Ensure that nail heads are driven flush with surfaces in opening and within 3 inches of corner.
  - 4. Coordinate window installation with wall flashings and other built-in components.

#### 3.02 INSTALLATION

- A. Comply with manufacturer's instructions and recommendations for installing window units, hardware, balances, accessories, and other components of the Work.
- B. Set window units plumb, level, true to line, without warp or rack of frames or sash. Provide proper support and anchor securely in place.
- C. Set sill members in a bed of sealant or with joint fillers or gaskets, as indicated, to provide weathertight construction.
- D. Sash Installation in Existing Restored Frames: Coordinate and sequence installation with frame restoration. Upper sash of double and triple hung windows shall be permanently fixed in place, with molded wood blocks secured to frames below sash; the full perimeter of fixed sash shall be sealed on exterior and interior with approved elastomeric sealant matching color of adjacent finish.
- E. Except at balance pockets for operable sash balance systems, perimeter of frames are to be sealed with injectable foam draft stopping system specified in Division 07 Section "Thermal Insulation." Coordinate installation of the foam with the trade contractor responsible for the sealant under that Section. Exterior and interior perimeter of frames and trim are to receive joint sealant under Division 07 Section "Joint Sealants."

#### 3.03 ADJUSTING

A. Adjust operating sash and hardware to provide a tight fit at contact points and weatherstripping for smooth operation and a weathertight closure. Lubricate hardware and moving parts.

#### 3.04 CLEANING

- A. Clean interior and exterior surfaces immediately after installation. Exercise care to avoid damage to protective coatings and finishes. Remove excess glazing and sealants, dirt, and other substances.
- B. Clean glass of factory-glazed units immediately after installing windows. Wash and polish glass on both faces before Substantial Completion. Comply with manufacturer's recommendations for final cleaning and maintenance.

- C. Remove nonpermanent labels from glass surfaces. Remove visible labels.
- D. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during the construction period.

# 3.05 PROTECTION

A. Protect window units from damage or deterioration until the time of Substantial Completion.

++ END OF SECTION 085200 ++

#### **SECTION 080152**

#### **WOOD WINDOW REHABILITATION**

#### PART 1 GENERAL

#### 1.01 SUMMARY

- A. The work under this Section consists of repairs and alterations of existing wood window frames and exterior casings and sills, and preparation of window frames to receive replacement window sash, to be provided under a related Section, as follows:
  - Removal and salvage of indicated existing window sash to be replaced and of deteriorated trim, frame and sash components as necessary to complete the proper installation of windows throughout the existing building in coordination with operations under Division 02 Section "Selective Demolition." Removed sash shall be turned over to fabricator of replacement units under Division 08 Section "Wood Windows."
  - 2. Restoring and preparing existing wood frames and sills to receive new sash, balances and hardware.
  - 3. Restoring or replacing exterior brickmold casings at windows as indicated or necessary.
  - 4. New and existing window frames and exterior casings shall be primed for field painting.

#### B. Related Work Specified in Other Sections:

- 1. Division 01 Section "Alterations to Existing Construction" for provisions relating to restoration of existing work.
- 2. Division 02 Section "Selective Demolition" for removal and disposal of existing windows, in whole or part, in coordination with with this Section.
- 3. Division 04 Section "Exterior Masonry Rehabilitation" for repairs and restoration of existing masonry openings to receive new or rehabilitated windows.
- 4. Division 06 Section "Rough Carpentry" for necessary alterations to wood blocking at perimeter of windows.
- 5. Division 06 Section "Interior Architectural Woodwork" for alterations to interior window surrounds, sills and casings.
- 6. Division 07 Section "Joint Sealants" for sealant around full perimeter of new and existing windows, interior and exterior.
- 7. Division 08 Section "Wood Windows" for full replacement window units and for replacement sash and balances in existing hung windows.
- 8. Division 08 Section "Stile and Rail Wood Doors" for fixed transom lites above wood doors, side lites and door related interior borrowed lites.
- 9. Division 08 Section "Glazing" for all glass and glazing, including standards for materials furnished under this Section.
- 10. Division 09 Section "Painting" for field painting of windows.

## 1.02 WINDOW SYSTEM DESCRIPTIONS

- A. Window System Component Descriptions: Window component terminology shall be as identified in AWI's "Architectural Woodwork Quality Standards," Section 1000.
- B. Wood window components for historic treatment work include the following:
  - 1. Frame Components: Head, jambs, and sill.
  - 2. Sash Components: Stile and rails, parting bead, stop, and muntins.
  - 3. Exterior Trim: Exterior casing, brick mold, and drip cap.
  - 4. Interior Trim: Casing, stool, and apron.

- C. Glazing includes glass, glazing points, glazing compounds, and gaskets.
- D. Adjacent components include circular or arched heads, transoms, mullions, and flashing and drainage components.

# 1.03 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Replacement Member Shop Drawings: Show fabrication and installation of replacement wood window members. Indicate materials and profiles of each replacement member, joinery, finish, and method of splicing or attaching to existing wood window.
- C. Samples for Verification: For each type of wood window replacement component required, prepared on Samples of size indicated below.
  - 1. Main Frame Member: 12-inch- (300-mm-) long, full-size sections with applied finish.
  - 2. Replacement Members: 12 inches (300 mm) long for each replacement member; including frame parts, sash parts, exterior trim parts, and interior trim parts. Architect reserves the right to require additional Samples of replacement members that show fabrication techniques, materials, and finish.
    - a. Where original material is indicated as the model to create new duplicate replacement members, provide Samples of duplicate replacement wood window member matching the original member.
- D. Samples for Verification: The Architect reserves the right to require additional samples that show fabrication techniques, workmanship, and design of hardware and accessories.
- E. Historic Treatment Program: For each phase of historic treatment process, including protection of surrounding materials on the building and Project site during operations. Describe in detail the materials, methods, equipment, and sequence of operations to be used for each phase of historic treatment work.
  - 1. If materials and methods alternative to those indicated are proposed for any phase of historic treatment work, provide a written description, including evidence of successful use on other comparable projects, and a testing program to demonstrate their effectiveness for this Project.

#### F. Informational Submittals:

1. Qualifications: For historic treatment specialists.

#### 1.04 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A firm or individual experienced in historic treatment of windows similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
  - 1. Field Supervision: Require that an experienced full-time supervisor be at Project site during times that historic treatment of wood windows is in progress.
- B. Mockups: Prepare existing windows to serve as mockups to demonstrate historic treatment methods and procedures for aesthetic effects and qualities of materials and execution. Use materials and methods proposed for completed Work and prepare mockups under same weather conditions to be expected during remainder of Work.
  - 1. Wood Window Repair: Prepare one entire window unit to serve as mockup to demonstrate sample repair of wood window members including frame, sash, glazing, and hardware.

- 2. Approved mockups shall become part of the completed Work if undisturbed at time of Substantial Completion.
- C. AWI Quality Standard: Comply with applicable requirements in AWI's "Architectural Woodwork Quality Standards" for construction, finishes, grades of wood windows, and other requirements.
- D. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to wood windows including, but not limited to, the following:
  - 1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 2. Review, discuss, and coordinate the interrelationship of wood windows with other exterior wall components. Include provisions for structural anchorage, glazing, flashing, weeping, sealants, and protection of finishes.
  - 3. Review and discuss the sequence of work required to construct a watertight and weathertight exterior building envelope.
  - 4. Inspect and discuss the condition of substrate and other preparatory work performed by other trades.

#### 1.05 PROJECT CONDITIONS

A. Field Measurements: Verify window openings by field measurements before fabrication and show recorded measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver patching and repair compounds to Project site in manufacturer's original and unopened containers, labeled with description of contents and name of manufacturer.
- B. Comply with manufacturer's written instructions for minimum and maximum temperature requirements for storage of patching materials.

#### PART 2 PRODUCTS

#### 2.01 MANUFACTURER

A. Manufacturer of window components for work of this Section shall be the same firm as is used for production of window units and replacement sash under Division 08 Section "Wood Windows" to ensure compatibility between refurbished existing work to remain and new work.

#### 2.02 MATERIALS

- A. Comply with NWWDA I.S.2.
- B. Wood for Alterations of Existing Windows: Match original species with solid wood kiln dried to a moisture content of 6 to 12 percent at time of fabrication and free of defects impairing appearance or strength.
- C. Concealed Anchors, Clips, and Accessories: Fabricate of nonmagnetic stainless steel or hot-dip zinc-coated steel complying with ASTM B633 for SC3 (severe) service condition; provide sufficient strength to withstand design pressure indicated.

D. Exposed Fasteners: Brass or bronze, in finish selected for window hardware. For removable items, such as sash stops, provide oval head countersunk brass wood screws with brass cup washers or recessed screw cup washers.

#### 2.03 WOOD REPAIR/REPLACEMENT MATERIALS

- A. General: All requirements of Division 06 Section "Finish Carpentry" shall be considered as if fully repeated in this Section and shall apply to all replacement materials necessary for all windows.
- B. Wood materials used shall be of same species and similar in all characteristics, to the satisfaction of the Architect, as existing wood in each location.
- C. For Field Treatment of Non-Pressure-Treated Stock in Exterior Applications: Disodium octaborate tetrahydrate in polyethylene glycol solution, such as Bora-Care, manufactured by Nisus Corp., or approved equal. All sides of all wood elements, including all field and shop cuts, shall be treated. All unpainted existing wood, both finish and rough construction exposed during the course of repair work shall be treated. All new sash and frames, and existing sash and frames shall be treated.
- D. Materials for Conservation/repair of existing sills and frames:
  - 1. Epoxies to be LiquidWood for epoxy consolidant, and WoodEpox for epoxy filler, both manufactured by Abatron, Inc., 141 Center Drive, Gilberts, IL 60136 (312-426-2200), West System, or approved equal.
  - 2. Glue for installing inserts shall be waterproof.
    - a. Acceptable Products: Titebond III or Elmer's Glue Max.
  - 3. Wood inserts and new wood elements to match existing species unless otherwise indicated and direction of grain of element to be patched or replaced. Moisture content not to be greater than 15 percent.
  - 4. Joint Sealants: Polyurethane based, one part elastomeric sealant conforming to Division 07 Section "Joint Sealants."
  - 5. Backprime all new wood elements prior to installation with the priming paint specified in the Painting Section.
  - 6. Treat all bare wood before priming with Bora-Care, and treat all wood that will remain unpainted with Bora-Care.

# E. Paint removal:

- 1. No heat based removal methods may be used at the site.
- 2. No alkaline products may be used.
- 3. No abrasive methods may be used.
- 4. Acceptable product types: methylene chloride, citrus-based or N-methypynollidine.
- 5. Heat methods may be used off-site.
- 6. Steam methods may be used off-site.
- 7. Infrared methods may be used.

#### 2.04 FABRICATION OF REPLACEMENT MEMBERS

- A. General: Fabricate window replacement members and units to comply with AWI Section 1000 requirements for Custom grade.
  - 1. Fabricate replacement direct glazed wood frame members to suit required glazing that are reglazable without dismantling sash members or framing members.
  - 2. Mullions: Provide replacement mullions as shown, matching existing units, complete with anchors for support to structure and installation of window units.
  - 3. Glazing Stops: Provide replacement glazing stops coordinated with glazing system indicated. Provide glazing stops to match sash frames.

- 4. Molded Profiles of Replacement Members: Match existing profiles.
- 5. Ease edges of replacement members as necessary to match existing members.

#### PART 3 EXECUTION

#### 3.01 HISTORIC TREATMENT SPECIALIST

A. Responsibilities: Coordinate historic treatment of wood windows.

#### 3.02 PREPARATION

- A. Protect adjacent materials from damage caused by historic treatment of wood windows.
- B. Clean existing wood windows of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris. Use bristle brush and mildewcide to kill mildew. After cleaning, rinse thoroughly with fresh water. Allow to dry before patching, repairing, or painting.
- C. Treat existing wood window members to remain in place with water-repellent preservative treatment; apply liberally by brush to all lap and butt joints, edges and ends of wood members, and bottoms of window frames. Apply treatment after wood members are patched and filled.
- D. Condition replacement wood members and replacement wood windows to prevailing conditions at installation areas before installing.

#### 3.03 HISTORIC TREATMENT PROCEDURES, GENERAL

- A. Window Removal: Where sashes or windows or window components are to be removed, cover resultant openings with temporary enclosures so that openings are weathertight during repair period.
- B. Identify removed windows, sashes, and members with numbering system to ensure reinstallation in same location. Key windows, sashes, and members to Drawings showing location of each removed unit. Mark units in a location that will be concealed after reinstallation.
- C. Remove all paint from existing wood frame, mullions and tracery components to bare wood during restoration work, and apply preservative treatment as specified in Preparation Article above. Sand surfaces smooth. Apply primer as specified in Division 09 Section "Painting" to interior and exterior wood and glazing compound surfaces, leaving windows ready for finish painting under the Painting Section.

#### 3.04 REMOVAL AND SALVAGE

- A. As early as practicable in the progress of the overall work, remove window sash and, where indicated or necessary for the successful prosecution of the work of this Section, frames, trim and related components from the building. Early removal is required to ensure protection from other construction operations.
- B. As each item is removed from the building it shall be tagged or marked to identify the location from which the item was removed, and it shall be carefully packaged for transportation to the facility where restoration work will be performed.
- C. Take photographs of the condition of each item before removal and after removal before packaging, and of the opening from which the item was removed. Provide copies of each photograph to the Architect promptly, and retain copies of the photographs on site until all work of this Section is completed. Digital

photography is recommended, and distribution of photographs shall be by email or on compact disc

- D. Transport removed items to restoration facility promptly after removal. Do not store on site.
- E. Any damage to windows to be restored under this Section shall be the responsibility of the Construction Manager, and damaged units shall be repaired or replaced to the satisfaction of the Architect.

### 3.05 WOOD WINDOW MEMBER PATCHING

- A. Patch wood members that have been damaged and exhibit depressions, holes, or similar voids, and that have limited rotted or decayed wood. Remove rotted or decayed wood down to sound wood.
  - 1. Use of patching compound is limited to repairs no greater than 1/4 by  $\frac{1}{2}$  by 1 inch in dimension. Use wood dutchmen for repairs of larger dimensions.
  - 2. Treat wood members with wood pretreatment prior to application of patching compound according to repair and patching material manufacturer's written instructions.
- B. Apply patching compound to fill depressions, nicks, cracks, and other voids. Apply compound in layers as recommended by manufacturer until the void is completely filled. Sand patching compound smooth and flush, matching contour of existing wood member.
- C. Clean spilled compound from adjacent materials immediately.

# 3.06 WOOD WINDOW MEMBER REPAIR

- A. Repair wood members found to be damaged or unsound to satisfaction of Architect.
  - 1. Repair wood members by pretreating and filling with patching compounds or by replacing with new members spliced into existing wood members as indicated in the schedule.
  - 2. Repair windows by splicing in replacement wood sections where deterioration is structural, impairing stability or function of window.
- B. Repair by Pretreatment and Patching Compound:
  - 1. Clean wood surfaces prior to consolidation treatment and patching.
  - 2. If rotted or soft wood remains, remove down to sound wood according to patching manufacturer's written instructions.
  - 3. Apply wood pretreatment to soft wood fibers to remain, complying with manufacturer's written instructions. Coat surface of wood with consolidation treatment by brushing, applying multiple coats until wood is saturated. Allow treatment to harden before filling void with patching compound.
  - 4. Mix only as much patching compound as can be applied according to manufacturer's written instructions.
  - Apply patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood. Apply compound in layers as recommended in writing by manufacturer until the void is completely filled. Sand patching compound smooth and flush and matching contour of existing wood member.
  - 6. Clean spilled compound from adjacent materials immediately.
- C. Repair by Wood Member Replacement: Custom fabricate new wood members to replace missing members or members deteriorated beyond repair. Either replace entire wood member or splice new wood member into existing member.
- D. Cut out deteriorated or damaged sections of wood members and replace them by splicing replacement wood members into existing remaining wood members.

- 1. Anchor new wood members by nailing and adhesive.
- 2. Install wood members with concealed fasteners. Fill nail holes and touch up the finish to match surrounding wood finish.

#### 3.07 IN-PLACE REPAIR TO EXISTING FRAMES

- A. General: Remove sash from frames and refurbish windows as follows:
  - 1. Remove all sash balance hardware, including sash cords or chains, pulleys and attachments, and install new pulleys and chain. Where weatherstripping is intended to be in frame rather than or in addition to that in operable sash, install new weatherstripping, using appropriate sliding type product on jambs and compression type product at head and sill.
  - 2. Repair deteriorated portions of frames and exterior trim. Replace missing or severely deteriorated components that cannot be adequately patched. Repair of interior trim and sash stops is specified in Finish Carpentry Section: refer to that Section for repair procedures that apply to the window repairs also.
  - 3. Prepare all work for refinishing. Remove deteriorated or loose paint, and paint interfering with proper operation of the windows. Sand smooth, leaving surfaces ready for final finishing. Make all adjustments necessary for reinstallation and proper operation of windows before refinishing.
  - 4. Prepare frames to receive replacement sash and hardware under Wood Windows Section.
- B. Except at balance pockets for operable sash balance systems, perimeter of frames are to be sealed with injectable foam draft stopping system specified in Division 07 Section "Thermal Insulation." Coordinate installation of the foam with the trade contractor responsible for the sealant under that Section. Exterior and interior perimeter of frames and trim are to receive joint sealant under Division 07 Section "Joint Sealants."

#### 3.08 CLEANING AND PROTECTION

- A. Protect restored window surfaces from contact with contaminating substances resulting from construction operations.
- B. Monitor restored window surfaces adjacent to and below exterior concrete and masonry surfaces during construction for presence of dirt, scum, alkaline deposits, stains, or other contaminants. If contaminating substances contact window surfaces, remove contaminants immediately according to glass manufacturer's written recommendations.
- C. Clean exposed surfaces immediately after historic treatment of wood windows. Avoid damaging coatings and finishes. Remove excess sealants, glazing and patching materials, dirt, and other substances.

++ END OF SECTION 080152 ++

Replacement Slate Specification and Existing Historic Slate Documentation



1. Salvaged historic Buckingham slate, typical condition



2. Salvaged historic Buckingham slate, typical condition





3. Salvaged historic Buckingham slate, typical condition





Sustainable Roofing



# Majestic Slate



# Majestic Slate

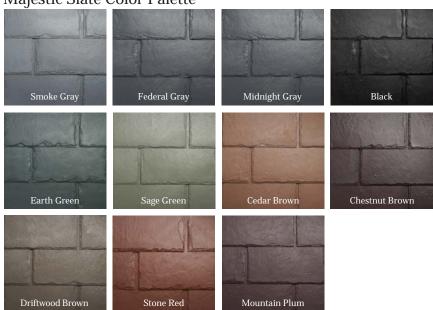


H istorically, natural slate is one of the most appealing roofing choices, combining unmatched durability with aesthetic appeal. The cost of natural slate, as well as its weight and difficulty in finding a qualified slate installer, often makes its use prohibitive. EcoStar LLC, the leading manufacturer of premium synthetic steep-slope roofing products, combines classic appeal with modern technology to offer the lightweight and affordable alternative — Majestic Slate<sup>TM</sup>.

Created with recycled rubber and plastics, Majestic Slate offers a sustainable, lighter and easy-to-install roofing product that provides the appearance of natural slate with lower application costs. Available in two widths and designer accents, this slate alternative offers endless possibilities for residential and commercial projects. The architectural detail of a project, whether historic or new construction, is further enhanced by a wide range of available color combinations using the palette of 11 standard color choices and array of custom options.

Curb appeal is everything when it comes to the look of your home, but protection from the elements must be a priority. Majestic Slate offers both.

#### Majestic Slate Color Palette



Note: Sample pieces, photographs or color samples may not accurately represent the true color level or variations of color blends that will appear on the roof. Before installation, ten tiles or so should be laid out and reviewed for conformity to desired color level. If color levels are unsatisfactory, advise your dealer before proceeding with installation. Colors and specifications subject to change without notice. EcoStar is not liable for color variations or shading. Tiles must be randomly blended for best results. Limited warranties carry terms and conditions. ¹Significant property insurance discounts may be available when upgrading or building a roof to protect against hall, wind or fire damage in regions where severe weather is common. EcoStar tiles meet or exceed industry standards for Impact Resistance and Fire Resistance. Contact your insurance provider for details.

01/19 © 2019 by EcoStar LLC. EcoStar and Majestic Slate are trademarks of EcoStar LLC. See www.ecostarllc.com for available warranties. P/N-602689 MAJESTIC SLATE CUT SHEET

# Advantages

- Weighs 1/3 to 1/2 as much as natural slate
- Easy application keeps installation costs down
- Significant property insurance discounts may be available when upgrading or building a roof to protect against hail<sup>1</sup>

#### **Architectural Flexibility**

- Designer Series tiles can be blended together to add personal style to your home
- Staggered and offset installations accentuate roof texture and depth
- Available in 11 standard colors
- Enhance the historical look in both residential and commercial buildings

# Strength & Durability

- Provides superior durability and protection from extreme weather conditions that include wind, hail and driving rain
- Significant life cycle savings

# Warranty Options

- 50-Year Limited Material Warranty available
- 50-Year Gold Star Labor & Material Warranty available
- 90 mph (145 kph) Wind Warranty (standard)

# Environmental Sustainability 🏅



 Manufactured with post-industrial recycled rubber and plastics

#### Technical Information

- UL listed Class C fire resistance (UL 790)
- UL Class 4 impact resistance (UL 2218)
- Wind resistance to 110 mph (ASTM D3161)
- Prolonged UV Exposure (ASTM G155)
- UL Evaluation Report to ICC AC07 (R18920-02)
- Texas Dept. of Insurance Evaluation (RC-135)
- May contribute to LEED® points
- Manufactured in strict adherence to ISO 9001:2015 Quality Management



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Sustainable Roofing





Pioneers of sustainable roofing since 1993

# Designer Series Slate



Many unique shapes and designs have been seen in slate roofing throughout history. Designer Series Slate tiles allow building owners the opportunity to continue that expression of individuality. EcoStar LLC, the leading manufacturer of premium synthetic steep-slope roofing products, offers three classic shapes as part of the Designer Series Slate collection. Made with the same formulas and offering the same benefits as Majestic Slate and Empire Slate, Designer Series Slate offers unlimited creative possibilities.



#### **Beaver Tail**

The rounded look makes this classic slate tile perfect for designing unique roof patterns or creating a true carriage house appeal.

#### **Beveled Edge**

The look of scalloped edges in a hexagonal pattern makes beveled edge tiles a classic. This rare style can be intermixed with traditional slate tiles or used separately for historical applications.





#### Chisel Point

Chisel Point tiles form a beautiful diamond pattern on the roof, reminiscent of European roof designs.

#### **Available Colors:**

Majestic Slate: 11 standard colors

Empire Slate: 14 standard colors and unlimited custom colors

Note: Sample pieces, photographs or color samples may not accurately represent the true color level or variations of color blends that will appear on the roof. Before installation, ten tiles or so should be laid out and reviewed for conformity to desired color level. If color levels are unsatisfactory, advise your dealer before proceeding with installation. Colors and specifications are subject to change without notice. EcoStar is not liable for color variations or shading. Tiles must be randomly blended for best results. Limited warranties carry terms and conditions.

#### Advantages

- Weighs significantly less than natural slate
- Minimum 4" of headlap protection
- Easy application keeps installation costs down

# Architectural Flexibility

- The various styles of Designer Series Slate can be blended together with Majestic Slate or Empire Slate traditional tiles to create unique designs
- Special shapes replicate those found in historical, carriage house and European architecture
- Available in a wide array of standard and custom colors
- Available in three different shapes: Beaver Tail, Beveled Edge and Chisel Point
- Natural appearance of real slate roofing

# Strength & Durability

- Provides superior durability and protection from extreme weather conditions that include wind, hail and wind-driven rain
- Significant life cycle savings

# **Warranty Options**

- 50-Year Limited Material Warranty available
- 50-Year Gold Star Labor & Material Warranty available
- 110 mph Wind Warranty available



#### **Environmental Sustainability**

Manufactured with up to 80% post-industrial recycled materials

#### **Technical Information**

- UL listed Class C/A fire resistance (UL 790)
- UL listed wind resistance to 110 mph (D3161)
- UL Class 4 impact resistance (UL 2218)
- Prolonged UV Exposure (ASTM G155)
- UL Evaluation Reports, ACO7-ULER 18920-01 and 18920-02
- May contribute to LEED® points
- Manufactured in strict adherence to ISO 9001:2015 Quality Management



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# Sustainable Roofing





# Majestic Niagara Slate

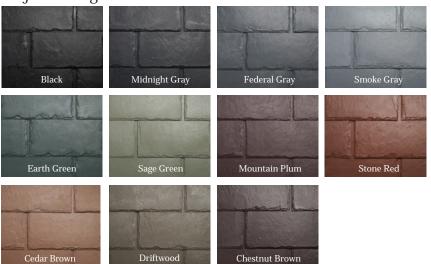


Bigger is better when it comes to EcoStar LLC's latest innovation. Majestic Niagara Slate is a natural-looking, 5%" thick, synthetic slate roofing tile produced in 12" and/or 14" widths. This added size allows each Majestic Niagara Slate 14" tile to cover one square foot of roof deck at the 10" exposure (100 tile/square), maintaining a 2" headlap throughout. An additional 9" exposure option allows for the creation of unique looks using staggered, offset or random width installations.

This design consumes less raw material, reduces roof load by up to 20% and lowers installation labor by 30%. Unlike other synthetic slates, Majestic Niagara Slate is manufactured from 80% post-industrial recycled materials. EcoStar roofing tiles, including the larger Majestic Niagara Slate, provide long-lasting durability, superior protection against extreme weather conditions and 50 years of warranty coverage.

Available in 11 standard colors, Majestic Niagara Slate offers endless opportunity to showcase the beauty of natural slate at a fraction of the cost.

# Majestic Niagara Slate - Standard Color Palette



Note: Sample pieces, photographs or color samples may not accurately represent the true color level or variations of color blends that may appear on a roof. Before installation, ten tiles or so should be laid out and reviewed for conformity to desired color level. If color levels are unsatisfactory, advise your dealer before proceeding with installation. Colors and specifications subject to change without notice. EcoStar is not liable for color variations or shading. Tiles must be randomly blended for best results. Limited warranties carry terms and conditions. 'Significant property insurance discounts may be available when upgrading or building a roof to protect against hail damage in regions where severe weather is common. EcoStar tiles meet or exceed industry standards for Impact Resistance. Contact your insurance provider for details.

#### **Advantages**

- One 14" tile = 1 ft<sup>2</sup> of roof coverage
- Available in two sizes: 14"x 22" & 12" x 22"
- · Weighs significantly less than natural slate
- Look of real slate without extensive maintenance
- Easy application keeps installation costs down
- Significant property insurance discounts may be available when upgrading or building a roof to protect against hail<sup>1</sup>

# **Architectural Flexibility**

- Natural appearance of real slate roofing
- 5/8" thick for enhanced shadow lines
- Available in 11 standard colors
- Staggered, offset and random width installation techniques enhance roof texture and depth

# Strength & Durability

- Provides superior durability and protection from extreme weather conditions that include wind, hail, driving rain and heavy snow
- 22" length provides up to 4" of headlap protection against wind-driven rain and ponding snow melt
- Significant life cycle savings

# **Warranty Options**

- 50-Year Limited Material Warranty standard
- 50-Year Gold Star Labor & Material Warranty available

# **Environmental Sustainability**

Manufactured with 80% post-industrial recycled materials

#### **Technical Information**

- UL listed Class C fire resistance (UL 790)
- UL Class 4 impact resistance (UL 2218)
- UL listed wind resistance to 110 mph (ASTM D3161)
- May contribute to LEED points
- Manufactured in strict adherence to ISO 9001:2015 Quality Management



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# Sustainable Roofing



**Empire Slate** 





Environmentally friendly synthetic slate roofing tiles proudly made in the USA

Pioneers of sustainable roofing since 1993

**Empire Slate** 



Embracing the continued progression of sustainable building practices and recognizing the numerous challenges which have impacted economic conditions, EcoStar LLC proudly offers Empire Slate in its collection of premium steep slope roofing products.

Committed to preserving natural resources, EcoStar's Empire Slate is manufactured from a proprietary compound of recycled content which creates long lasting durability while providing superior protection against extreme weather conditions. Available in 14 standard colors and unlimited custom color options, Empire Slate offers endless possibilities to achieve the beauty of natural slate at a fraction of the cost. Class A fire resistance (UL 790) is standard, making Empire Slate an exceptional choice for any commercial or residential roof.

The increasing awareness of the effects of climate change on the ecosystem and the economy continues to influence standards for environmental responsibility. Empire Slate offers a solution to the obstacles imposed by escalating regulations on building practices and can provide significant cost savings on roof maintenance expenses, cooling expenses and property insurance.<sup>2</sup>

Final Color Selection

to be Made in Field

with Samples

Empire Slate Color Palette



Note: Sample pieces, photographs or color samples may not accurately represent the true color level or variations of color blends that may appear on a roof. Before installation, ten tiles or so should be laid out and reviewed for conformity to desired color level. If color levels are unsatisfactory, advise your dealer before proceeding with installation. Colors and specifications subject to change without notice. EcoStar is not liable for color variations or shading. Tiles must be randomly blended for best results. Limited warranties carry terms and conditions. 'Cool colors may provide energy savings in summer months by reducing air conditioning use. For more information about energy savings visit EPA.gov. <sup>3</sup> Significant property insurance discounts may be available when upgrading or building a roof to protect against hail, wind or fire damage in regions where severe weather is common. EcoStar tiles meet or exceed industry standards for Impact Resistance and Fire Resistance. Contact vour insurance provider for details.

\*Available in Standard or Cool Color

#### Advantages

- Weighs 1/3 to 1/2 as much as natural slate
- Significant property insurance discounts may be available when upgrading or building a roof to protect against hail<sup>2</sup>
- Cool colors help reduce energy used by air conditioning units, typically resulting in energy savings between 10-30%<sup>1</sup>

# Architectural Flexibility

- Designer Series tiles can be blended together to add personal style to your home
- Staggered and offset installations accentuate roof texture and depth
- Available in 14 standard colors and unlimited custom color options
- Preserve the historical look in both residential and commercial buildings

# Strength & Durability

- Provides superior durability and protection from extreme weather conditions that include wind, hail and driving rain
- Significant life cycle savings

# Warranty Options

- 50-Year Limited Material Warranty available
- 50-Year Gold Star Labor & Material Warranty available
- 110 mph (177 kph) Wind Warranty available

# Environmental Sustainability



- Manufactured with post-industrial recycled plastics
- Cool colors contribute to the mitigation of the urban heat island effect<sup>1</sup>

#### **Technical Information**

- UL listed Class A or C fire resistance (UL 790)
- UL Class 4 impact resistance (UL 2218)
- Wind resistance to 110 mph (ASTM D3161)
- Prolonged UV Exposure (ASTM G155)
- UL Evaluation Report, AC07-UL ER18920-01
- Fungus resistant (ASTM G21-09)
- Miami-Dade County, Florida NOA No. 17-1227.10 11/07/23
- Texas Dept. of Insurance Evaluation (RC-420)
- May contribute to LEED® points
- Manufactured in strict adherence to ISO 9001:2015 Quality Management



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