

Springfield Museum

Collection Assessment for Preservation (CAP) Assessor's Report

> October 9th, 2018 Final Report

Prepared for:

The Springfield Museum
590 Main Street
Springfield, OR 97477







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ABOUT Peter has over 30 years of professional experience with an emphasis on the preservation and assessment of older, existing, and historic buildings for both private and public agencies. As a professional architect with a background in scientific research, Peter has developed his career with a focus on the unique building sciences associated with existing and historic resources. He has become a well-regarded expert on the diverse issues affecting older buildings both regionally and nationally.

> Peter meets the Secretary of the Interior's Historic Preservation Professional Qualification Standards (36 CFR Part 61), and the National Park Service cultural resources specialties: Historical Architect (GS-808).

RELEVANT PPS | Chapman Aimee Gorman Marquetry* **EXPERIENCE** Portland, OR 2017 This project received a 2017 Oregon Heritage Award

> PP&R | Shemanski Fountain Portland, OR 2017

PP&R | On-Call Art/Restoration Portland, OR 2016- Ongoing

Neighbors West, Northwest | Chinatown Gate Restoration Portland, OR 2015-2016



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1.1 Introduction

General Information

The Springfield Museum

The Springfield Museum is divided into two main building sections: a two-story brick rear section; and a one-story stucco clad brick front section. Together, the two sections form a single connected rectangular main floor plan on two different floor elevations/levels connected via a corridor ramp. The second story of the rear section originally housed the substation electrical equipment and is a two story high interior volume with a square floor plan accessible by an internal stairway and external elevator. The Museum's front section faces Main Street and functions as the main entrance, museum gift shop, and rotating exhibit space.

Booth Kelly

Off-site storage is housed in rental property that was converted from wood storage to creative office space. The floor plan is rectangular. Access to the storage space is from a common vehicle drive lane and parking area (the original lumber sorting floor). There is one rear door leading to a rear corridor with access to adjacent tenant spaces and the exterior.



▲ Figure 1-1: Springfield Museum east elevation



▲ Figure 1-2: Springfield Museum entry exhibit space



Figure 1-3: Booth Kelly Off-site Storage

1.2 Assessment

Materials Condition

Typical of an electrical substation building from its era, the Museum is constructed of brick resting on a concrete foundation with pre-cast concrete decorative elements and multi-pane steel frame windows. The masonry is a variegated red color laid in a common bond pattern with header brick occurring every seventh course. The pre-cast decorative features including window sills and headers, cornice and belt lines, pilaster capitals and bases, and other decorative façade elements has been painted white. Stucco was applied (ca. 1940) over brick on the single story entry wing. It appears that the original projecting brick corbels and other projecting brick decorative elements were removed at the time of the stucco installation. With the exception of the single story front wing, remaining windows appear to be original.

Overall, the Museum building is in good condition given its age and original use. The site and grounds are accessible although it was reported that there is some problem with transients on the exterior stair and elevator landings. There are no exterior security cameras.

There are no reports of water intrusion or other weather related damage. Sprinkler heads along the west façade are too close to the building and appear to lack the ability to direct water away from the walls. There is some sign of water damage adjacent to these head locations.

Mortar joints were repointed in 2011 and a major repair project in 2013 replaced damaged masonry and missing mortar on the west elevation. Some cracking and spalling of the pre-cast window sills on the two-story south elevation are occurring and the mortar wash around the roof access hatch has failed. The east exit wood door is exposed to the sun and weather and requires refinishing. The single ply roof system is nearing the end of its life (installed 20 + years) and should be scheduled for near term replacement. Roof top mechanical units are also at end of life cycle. The restroom hot water heater has no spill pan and a leak could damage adjacent phone and security systems.



Figure 1-5: South elevation of 2nd story space from root

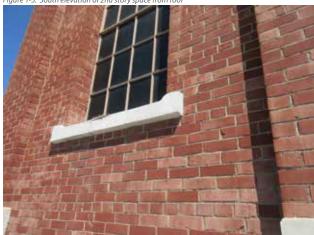


Figure 1-6: Spalling concrete at window sill



Figure 1-7: Main entry elevation



Chapter 1.2: Assessment

Booth Kelly

As a new built space, the side and rear walls and the ceiling of the storage area are gypsum board. The front wall of the storage area is a wood storefront system with large expanses of glass and an aluminum entry door. Original large wood glulam beams are exposed on the interior.

There are no apparent deficiencies of materials in the storage area.



The Springfield Museum

When the building was renovated in circa 1980 for the Museum, all work was performed to 1980 building code practice. There are no requirements on the Museum or the City of Springfield to upgrade the building to current 2018 code unless major renovation work is undertaken.

However, as a building open to the public some observations of potential improvement related to current building code and life safety were noted.

- The museum has no fire suppression system
- Electrical closet is used as breakroom to prepare food
- Hot water heater has no catch pan in case of failure
- Displays stored in exit stair pathway. This is a current violation.
- There is a lack of push button at main entry for mobility challenged visitors.
- The internal corridor ramp is too steep per accessibility standards

Although unrelated to building code, it was noted that the Museum lacks internal security cameras or other monitoring devices.



Figure 1-8: Interior Booth Kelly off-site storage





Fiaure 1-9: Display within exit path

Figure 1-10: Breakroom within sensitive electronic equip



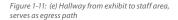




Figure 1-12: Hot water tank within electrical



Chapter 1.2: Assessment

Booth Kelly

Immediate changes are required at the off-site storage to improve the life safety of people working in the space. The following items are existing code violations of which the property owner is liable:

- Lack of panic door hardware Both storage unit doors are required exit pathways. A sign above the entry door states that the "Door to Remain Unlocked During Regular Business Hours." This sign is routinely ignored by staff because of the isolated nature of the storage unit and a fear for personal safety. Panic door hardware would allow the door to remain latched closed from the outside and provide quick exiting from the interior. The second door is an emergency exit and is routinely locked by a dead bolt. The dead bolt is installed incorrectly and appears to be open when in the locked position.
- Exit corridor is blocked by other tenants using the corridor as storage.
- Exit corridor contains flammable substances. Improper exit path signage.
- Corridor exit door has incorrect exit path hardware

The fire sprinkler system improves the life safety in the storage space. However, many of the museum's stored objects will be severely damaged by water.



Figure 1-14: Booth Kelly entry. No emergency egress hardware



Figure 1-15: Booth Kelly egress exit showing improper egress lighting location and improper exit door hardware.



Figure 1-16: Booth Kelly blocked exist pathway





Future Planning

Springfield Museum

As part of the CAP Assessment, the conservators engaged Museum staff in conversation about future planning of both short-term and long-term desired improvements. Both programming vision and facilities needs were discussed.

Currently the exhibit space is on two floors which increase the difficulty for staff to interact with visitors, to monitor the collection displays, and to house larger exhibits. Mobility challenged visitors and staff must exit the building to use the elevator and staff has to provide access on the second floor from the elevator landing.

Staff work space is limited. There is no dedicated breakroom and no room to repair objects. Storage space is limited and should the off-site storage area close, there is inadequate storage within the building to accommodate the full collection.

The current Museum gift shop sales are low volume. There was some discussion on whether a revision to the sales area and revising the items available would help increase sale volume.

As a result of the long-term planning discussion, it is the assessor's opinion that revisions and/or additions to the existing building would resolve some of the desired changes. Moving the staff to the second level and dedicating the first level to exhibit space can be achieved. There is a slight loss of exhibit square footage but an increase in staff workroom and curatorial space.

The existing building could accommodate an addition on either the west façade, adjacent to the parking drive lane, or on the north facade. A north addition could incorporate the existing elevator thereby providing internal connections between floors. An addition on the west could increase display space or provide additional collections storage.

As a historic property, the Museum building is part of the story of Springfield. There was a brief discussion on potential for highlighting unique characteristics of the building (e.g. wall penetrations) as part of the building story.



COLLECTIONS ASSESSOR

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2.1

SPRINGFIELD MUSEUM COLLECTIONS

EXECUTIVE SUMMARY

Collections:

The collections that form the core of the Springfield Museum, Springfield, Oregon, appear to be in good condition, although this is hard to determine as the bulk of the collections have yet to be catalogued and sorted appropriately. There has been a high turn over in paid staff in recent years, but the new Curator is clearly dedicated, enthusiastic and well qualified for the job. She is supported by a small team of long-term, equally dedicated volunteers. The CAP Assessment of the collections needs of the Museum made it clear that, from the aspect of collections preservation, the primary needs are as follows:

- Additional paid, full-time staff member A second, professionally trained, full-time staff member is badly needed to support the Curator who is currently fulfilling multiple roles. The current situation is a poor and inefficient use of her abilities.
- Training of volunteers in current museum best practices Providing further education and training opportunities for the volunteer staff is badly needed. This could take the form of on-site workshops hosted by the museum, visits to other institutions in the region, and so forth. All aspects of collections care should be covered, including, but not limited to object handling, processing objects for cataloguing, use of PastPerfect, collections management in general, rehousing and storage of objects, and exhibit preparation.
- Address the current conditions at, and use of, the Booth-Kelly Business Complex location The storage unit at
 Booth-Kelly is not an appropriate space for the care and security of collections, or as a place of work for museum staff.
 Preferably alternative space should be found, or the current use of the space should be reviewed and adjusted so
 that no collections objects are housed there. At a minimum conditions at the space should be improved, including
 better locks, the clearing out of the back corridor of all obstacles and flammable materials, and the installation of
 the required emergency exit route signage.
- Relocate photograph collection The photograph collection needs to be moved to a more suitable and environmentally appropriate location as soon as possible. Its current site appears to be causing the active deterioration of this material due to excessive temperatures and lack of ventilation.



- Examine photograph collection for possible nitrate film stock The photograph collection has not been surveyed for the presence of nitrate film stock, and it is of an age that such materials could be present. Nitrate film stock becomes dangerously unstable as it ages and breaks down and has been known to self-combust, especially if stored in poor environmental conditions as this collection is at present.
- Data loggers The two environmental data loggers that the museum own are insufficient. To develop a true
 understanding of conditions within the museum and its collections areas, at least 8-10 additional loggers are
 needed.
- Written policies The museum has not yet developed several core written policies including a Pest Management Plan, an Emergency Preparedness and Response Plan, and a Volunteer Handbook. A list of all needed core policies should be developed and then efforts must be made to develop, write and implement them as soon as possible.
- Upgrade PastPerfect software The current collections data base should be updated to PastPerfect5 as soon as possible.
- Back up database and key museum documents to an off-site location A comprehensive system for backing up
 the collections database and all important museum documents to an off-site location needs to be established and
 used routinely. The off-site location should not be an adjoining or immediately neighbouring building.

Regarding ongoing collections related tasks, the following are of the highest priority:

- Increase the available space for collections storage and provide adequate work space The current amount of space is woefully inadequate for the size of the collection. The lack of work space is also inhibiting progress in sorting out and rehousing the collection appropriately.
- Systematically sort, catalogue and rehouse the entire collection The collection is not currently sorted and stored according to current best practices. This should be remedied as soon as possible.
- Annual increase in funding for the museum Efforts should be made to establish an annual increase in the budget for the museum of 2% per year.
- Identify local conservation resources Establish contacts with local conservation professionals who can be of assistance in the future.
- Location expansion Begin planning to find additional space into which the museum can grow as its collection expands.
- Reassess collection for conservation needs Once the collection has been sorted and rehoused, a full conservation needs assessment of the collection should be carried out.
- Support Curator in her work The current Curator should be supported in her efforts to raise the standards of
 collections care at the museum.
- Support collections reorganization and rehousing While starting this is priority, as listed above, it is likely to become an on-going project that may continue well into the future and so will need to be supported long-term.
- Improve access to the collection There should be a long-term goal to improve safe and secure access to the collection for researchers and the community in general.



The following report on the assessment of the collections contains many other recommendations that are presented at the end of each section and in order of priority.

A note on photographs contained in the collections section of this CAP assessment report: Unfortunately, towards the end of the field visit the auto focus on the collections assessor's camera malfunctioned resulting in many of the photographs being slightly out of focus. This was not realised until this report was being produced. Despite their poor quality, but out of necessity, some of these images have been used to illustrate this report.

General Information

Governance

The Springfield Museum was founded in 1979 as part of the City of Springfield and at some point later changed to operate as an independent 501c3 entity. In 2017 it reverted to City of Springfield control and currently operates as part of the Public Library Department.

Budget

The museum receives direct financial support from the City of Springfield with a current annual budget of \$26,000 which can be allocated at the discretion of the Curator. The Curator's salary and building maintenance and utilities costs are in addition to the budget and are covered by the City. The museum also supports its work through grants and public donations.

If the museum is to act on the recommendations made in this report as part of the CAP assessment, additional funds will be needed, especially in the short term. Long term, while greater financial support would be welcome (especially funding for an additional, paid, full-time, professional staff member to assist the Curator), the current level of funding will be an adequate starting point. An annual increase in this budget of at least 2% would be appropriate.

Staffing

The museum has had a high turnover of leadership staff in its recent history, especially in the last few years of functioning as a 501c3 entity and within the last 12 months. It also has a history of staff without a background or training in professional museum practices. This does not include the current curator who has a Master of Arts in Museum Studies and significant prior experience in other institutions. Since rejoining the City of Springfield in 2017, the post of Executive Director has been fulfilled by the Library Director.

The museum has one fulltime, paid staff member whose title is Curator. However, her work embraces all roles typical of a museum staff including, but not limited to, administrator, collections manager, exhibit designer, education outreach and registrar. The current curator is new to the post having started in May of this year – in fact the CAP grant application was the work of her predecessor who was in the post for only three months. Considering how short of a time the new Curator has been at her job, she has made great strides in bringing the museum up to speed with current standards and methods of museum practice. However, she is still in the process of becoming familiar with the collections, the history of the institution and the expectations of the community in which she serves, so while there may be many things that could be improved, she cannot be expected to have tackled, or even recognized them all yet. She is clearly very competent and driven and her efforts should be supported.

The remaining staff comprises one volunteer, full-time archivist who assists with accessioning, cataloging, database entry and rehousing of items; one part-time, volunteer who assists with inventorying the collection, helping with research requests and staffs the front desk; another volunteer docent who gives public tours. These individuals have been with the museum for many years and form its institutional memory. There are also two longtime volunteers



who work sporadically in support of museum activities. None of the volunteers have professional training in museum practices.

The Curator, who, as has already been mentioned, is professionally trained and has considerable experience of museum work, reports that one of her biggest challenges is addressing poor collections practices on the part of the volunteer staff. These are rooted in the museum's history of functioning without professionally trained staff and/ or a lack of qualified and informed guidance for volunteers. This challenge is most likely made more difficult by her very recent appointment (compared to the volunteers' consistent and decades-long work at the museum) and her comparative youth. It is often harder for younger staff equipped with professional training to step into a position of supervising long-time, consistent volunteers whose selfless work has understandably engendered in them a certain sense of "ownership", and certainly protectiveness, of the collections and the institution. This is by no means meant as a criticism of the volunteer staff – volunteers are the life blood of most museums – but simply a common situation brought about by circumstance.

The Curator also stated that her goal was to provide a much better balance between public education (exhibits) and collection preservation. At present the activities of the museum are biased toward exhibits and insufficient emphasis is placed on collections care and preservation. My observations made during the site visit support this view.

While the Curator certainly has the background and ability to provide training for her volunteer staff, her already over extended work load does not allow her time to develop and carry out such work. In addition, it is often more affecting to have a professional from outside the institution carry out this training. This not only provides the necessary instruction, but also serves to validate and underline any information and training that the in-house, professional staff have tried to impart. This training could be provided through a series of on-site workshops (the cost of which could be shared if the event was opened to other, local museums and historic properties), or by encouraging volunteers to visit, and perhaps work with, other local institutions that have professionally trained collections staff.

There is no conservator on staff, nor does there need to be as the collection is too small to warrant such a post. The museum has not, to the knowledge of the Curator, formed a working relationship with conservation professionals in the region.

A second, full-time, professionally trained staff member who can assist the Curator is badly needed if the museum is to operate on a professional level. While volunteer help is also crucial, it rarely comes with the experience of a museum professional, and the lack of a salary also makes accountability and standards of performance impossible to enforce.

Space

The museum occupies two buildings; the public museum on Main Street, Springfield, and an off-site storage facility located in the Booth-Kelly Business Complex, a short walk from the public building. Both buildings are owned and managed by the City of Springfield.

The public building is a re-purposed historic structure with two floors. The first floor includes the Curator's office, an adjoining office/administrative space used for collections data entry and other similar tasks, a small general-purpose area with adjoining screened off storage/work area, a temporary/changing exhibit space, gift shop, collections storage, public restrooms and custodian's closet. The second floor houses the main, permanent exhibition space.

The Booth-Kelly Business Complex is a repurposed lumber mill that now functions as a multiple use facility housing a variety of businesses and activities. The museum has the use of one of the units as an off-site storage area.



As will become clear in this assessment, one of the main challenges for this institution is a lack of space for all aspects of its work, but in particular adequate and appropriate collections processing and storage. The museum is doing a reasonable job of managing with what space they have, but exhibits are overcrowded, storage space is orderly but inadequate and overcrowded, administrative space is insufficient, and there is no suitable space for processing collections, exhibit preparation, specific storage for non-collection items, or work space where visiting researchers can access the collections appropriately.

Over the years efforts have been made at the museum building to organize the available space, dividing it and managing it between public and non-public areas, and to some extent arrange collections storage by object type, for example there is an area for photograph storage, a filing cabinet for archive documents and a shelving unit for a small library. However, there was not one storage space that did not include some non-collection items being housed there for lack of anywhere else to put them.

The collections are not fully sorted by object type, in part probably for lack of guidance in appropriate collections processing and storage practices, but also because of simple lack of space. I got the impression that as the collections have grown and space has become more and more of an issue, instead of trying to make the available space work for the collections, the collections have been made to fit into the existing space. This makes for poor conditions for the objects and a collection that is difficult to manage and access.



▲ Figure 1: The rear corridor of the Booth-Kelly off-site storage facility showing its use for storing flammable materials and generally being obstructed making safe and easy egress impossible. Specific space issues, as they impact the collections, will be discussed elsewhere in this document in the section headed "STORAGE".

During the site visit mention was made of reorganizing the entire museum building (including swapping the functions of the first and second floors) and generally better using the available space. While this is an excellent approach, it does not solve the problem of lack of space into which the museum can expand as its collections grow in the future.

The off-site storage area at the Booth-Kelly building is similarly a mix of collections and non-collections material. Many of the collection items are lager pieces for which there is no space at the museum, such as furniture, oversized books, framed works of art and so forth. While this space is without doubt needed, it is far from appropriate for collections storage with concerns over the physical security of the collection, as well as the security and safety of personnel working in the building. Regarding the latter, at the time of the assessment all the businesses housed in the building shared access to a single, very narrow, rear corridor that serves as the egress to the exterior rear of the building. Besides flimsy locks on the doors (including the unit housing the museum's property), the one fire exit is not appropriately marked or fitted with a push-bar exit and would be easily missed in the event of an emergency. The corridor was also being used as a storage space by adjacent businesses, further impairing safe egress. Among the materials seen in the corridor were bags of trash, including food wrappers and waste, and several boxes of empty wine bottles (all pest attractants) and most alarmingly flammable materials including a large quantity of dry lumber and paint cans (Figure 1). The approach and entrances to the building are also somewhat hidden by a covered, secluded parking and entry area which although public, has the feeling of being enclosed and easily cased.

Recommendations:

• Plan to expand the paid professional staff by at least one person within the next 3-5 years, if not sooner.



- Improve volunteer working practices by hosting a series of workshops or in-house training on all aspects of collections care, including but not limited to object handling, object housing and general storage practices, collection processing (including cataloging issues and the use of PastPerfect), collection housekeeping, and so forth.
- Better balance the current institutional bias towards development and production of exhibits with the need for improved collection care.
- The unit at the Booth-Kelly building should, at a minimum, not be used for housing collections items. This would not only better protect the collection but would also eliminate the need for personnel to work in what is a worrying if not dangerous location.
- Acquire additional space and associated work space where collection processing and other work can be done.
- An annual budget increase of 2% at a minimum per year should be established.
- Identify conservation resources in the region who may be of assistance in the future.
- Start planning for expanding the space the museum occupies in order to accommodate the growth of the collection in the future.

Resources:

- Oregon Museums Association: https://www.oregonmuseums.org/
- American Institute for the Conservation of Historic and Artistic Works (AIC): http://www.conservation-us.org/
- American Alliance of Museums: https://www.aam-us.org/

CLIMATE AND ENVIRONMENT

Temperature and Humidity

There is almost no hard data about environmental conditions within the museum or the Booth-Kelly, off-site storage building as no monitoring has taken place until a month ago. The Curator obtained and installed two environmental data loggers, one in the front entrance room of the museum where the rotating exhibit space is situated, the other in the off-site storage room. As a result, at the time of the assessment there was a single months' worth of data which indicted some fluctuation in readings at both locations, but these averaged out to be within acceptable levels. The environments within both the museum and off-site storage are controlled via central HVAC units, neither having any zonal control.

Without hard data it is impossible to properly assess the environment of either building, other than to say that they are clearly being controlled based on the needs of people's comfort, rather than collections needs, a situation that is not ideal. Walking around the various areas of the museum makes it clear that there is variation across the building. This is to be expected in the absence of zonal control. For example, the space designated as photograph storage (a small room created from the space under the stairs to the second story) is much warmer than the hallway outside. The use of data loggers to start acquiring environmental data over time is a great improvement, but sadly several more loggers are needed before a comprehensive survey of the conditions at the museum building can be prop-



erly assessed. Loggers only record conditions in the area within their immediate vicinity, so right now there is only information about the museum entrance room and nothing telling the story of conditions upstairs in the permanent exhibition, or in the photograph storage space, or anywhere else in the building. While the single logger in the offsite storage room is valuable, the room is large enough and configured such that a second logger would be useful, although not essential.

Acquiring environmental data will not only help directly with understanding and thus working to improve conditions in both the museum and off-site storage, but they will also support any applications for grants or other financial assistance needed to provide the means to improve the environment.

Pollutants and Particulates

There is no monitoring for pollutants and particulates at either location and I do not consider this to be a major concern or priority at this time. However, the museum does front a primary road route through the city, and should traffic become considerably worse, or there is noticeable accumulation of dust and grime that might be attributed to street traffic, it might be worth addressing monitoring at that time.

Illumination

A mix of incandescent, fluorescent, some LED lighting and ambient daylight is being used throughout the museum. Except for the entrance area where the glass frontage has exterior awnings to help shade the windows, all windows in the museum are either blacked out or shaded in some way. The off-site storage space is lit by fluorescent fixtures and ambient daylight which enters through the front wall of the room which is mostly glass screened with venetian blinds that are kept closed.

While the windows in the museum have been coated with UV absorbing film, it does not seem to have been replaced since its installation in the early 1980s and it is visibly detaching from some of the entrance room windows. No UV film was seen on the windows of the off-site storage. No UV screening of light fixtures was observed in either location.

The museum does not possess a UV radiation or light meter. Owning a UV radiation meter is undoubtedly useful, however, they are expensive. It may be possible to borrow a UV meter from another institution or a department at the University of Oregon, Eugene, if only to check whether the UV window film is still active and to assess UV levels in all areas where collections are present. Light meters on the other hand are relatively inexpensive and are a useful first step to understanding the illumination conditions in the museum and providing guidance as to appropriate light levels for exhibit areas.

Pest Control

Starting to monitor for pests was one of the first actions the Curator took on starting her job in May of this year. She has deployed pest monitoring sticky traps throughout the museum and the off-site storage space and so far has not found any indication of a current infestation. Of course, as this monitoring is new there is no prior knowledge of pest activity patterns in the buildings and these may become apparent over time. No signs of any active pest infestation were observed at the time of the assessment.

The Curator voiced concern over the use of food in the building (both for special events and consumption on the premises by volunteers) because of the tendency for such activities to attract pests. Getting volunteers out of the habit of eating at their work stations was also mentioned and the prevalence of this activity is probably a result of a combination of the past lack of professional guidance in museum practices and a lack of a space designated for meal breaks.

During the visit to the off-site storage area discarded food wrappers where found in a wastebasket in the room and judging by their appearance, they had been there for a while. This is another indication that the best practice of not



consuming food and discarding wrappings in collections spaces is not being followed.

There is a very official looking and sounding visitor guidance sign in the main exhibition area directing visitors not to touch, not to eat or drink around the exhibits, etc. However, similar signs have been removed or moved in the past. No similar signs were observed in work or collections areas. In a conversation with the Curator before I left I suggested that she consider using less formal signage to get the message across in both public and staff-only areas, as I have found this to be better received than those that can be rather over bearing in tone.

A written pest management plan is in development and will help support the Curator in her on-going efforts to

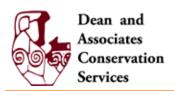
A written pest management plan is in development and will help support the Curator in her on-going efforts to control food consumption in and around the collections.

Recommendations:

- Developing a written pest management plan should be a priority.
- Efforts should be made to encourage volunteers not to eat in collections areas and to remove all food contaminated containers and wrappers from the building daily, or in the case of the off-site storage area, after every visit.
- Continue to monitor and record the contents of pest monitoring traps.
- Installing less overbearing food restriction signage where needed.
- Several additional data loggers should be acquired as soon as possible, enough to cover all of the main areas of the museum building, including but not limited to individual loggers for the photograph storage space, "the vault" storage room, the hallway where the documents archive filing cabinet is located, the common space and adjoining work area, the stairwell up to the second floor (as long as collections objects remain on exhibit in that space) and at least four to monitor the permanent exhibit space. An additional logger in the off-site storage space at the Booth-Kelly site would also be useful, especially if collections items remain stored in that location.
- Try to borrow a UV radiation meter to assess the condition of the UV absorption screening on the windows and what UV levels are being immitted from the various lighting fixtures. This data will help support applications for funding to improve lighting in the museum, in particular switching to LEDs throughout the building.

Resources:

- Connecting to Collections Care is a web based, community driven, resource covering all aspects of collections preservation and conservation information, links to resources, access to recorded webinars and online discussions: https://www.connectingtocollections.org
- Conserv O Grams is part of the National Park Service, Museum Management Program, and comprises a large collection of short documents related to all aspects of practical collections care. New Conserv O Grams are added periodically, and while many are decades old, the information they contain is still relevant and applicable in most cases: https://www.nps.gov/museum/publications/conserveogram
- Pest control and Integrated Pest Management (IPM) plans a quick web search will deliver many examples of IPM plans which can be adapted for use at the museum. There is also invaluable information, especially about practical steps that can be taken, included in the two resources already listed, above.



PHYSICAL COLLECTIONS AND COLLECTION POLICIES

The Collection

The collections of the Springfield Museum are typical of those found in a local historical society collection; the holdings are diverse and eclectic with a focus on the history (social and economic) of the City of Springfield and immediate surrounding area. The collection, numbering a little over 10,000 objects, includes physical objects along with a sizable archive of books, documents and photographs.

While the bulk of the collections are housed at the public museum building (either in storage or on exhibit), there is also a second storage area off-site at the Booth-Kelly Business Complex nearby. There are also items reported as being on exhibit in other City properties, although there is no inventory of what these objects are or where they are currently located. There are no known current loans to outside institutions.

Written policies

In general there is a lack of written documents to guide the museum in its activities, but this is a situation recognized by the Curator who has made rectifying this a priority.

The museum currently has a written Collections Policy which is short, concise and seems adequate at this time. However, it should be reviewed on a regular basis (for example, every five years) to make sure that it continues to be relevant. Currently in draft form is a Scope of Collections policy which will help guide the future collection activities of the institution. There has been the common problem of accepting items which are not relevant to the focus of the museum, a problem that the Scope of Collections document, along with the Collections Policy should correct.

There is a Conservation Cleaning Checklist outlining collection related housekeeping tasks and when they should be carried out (daily, weekly, monthly, etc.). This list is excellent for the public exhibit spaces but does not include the storage areas. It is not clear whether this routine is being implemented at this time and, if not, it is likely due in large part to a lack of human resources.

The Curator is in the process of revising and drawing up all other written policies typically used to guide and improve the care and management of collections. This includes an Emergency Preparedness Plan and a Volunteer Handbook, both of which should be priorities.

Other documents that are in draft form are new Temporary Custody Receipt and Deed of Gift forms which will become the standard documentation and replace the all earlier versions. Both will also be given out to potential donors at the time an object is received for possible acquisition, and this will stop the history of one or other of the documents not have been completed in the past. There is also a draft Deaccession Form in development.

Collections records

PastPerfect 4 is the collections database in use. The exact proportion of the collection that has been accessioned and/or cataloged is not clear. Both activities are on-going and mostly being done by volunteer staff. There was an attempt to inventory the collections in 2015 – 2016, but the results appear to be incomplete and the process used inconsistent.

In a document ("Issues with the Museum Collection") written by the previous Curator at the time that she left the museum, the following problems regarding collections records were noted.



- A lack of accurate accession records leading to confusion as to when a donation was made and if indeed proper transfer of ownership took place.
- Inconsistencies in creating accession records and inconsistent use of a standardized vocabulary.
- Incorrect entering of important data leading to reducing the usefulness of the database as a research or collections
 management tool. (For example, details that should go into fields such as People, Subjects, Classification, Search
 Terms, have been lumped together in the notes fields, thus making this important information unsearchable).
- Inconsistencies in the inventory process has lead to objects now having more than one Object ID number.
- Lack of use of the on-board lexicon in PastPerfect leading to poor and under representative search results.
- Use of single Object ID Number to catalog a group of objects that should be cataloged as separate items.

All of the above points combined with information provided by the current Curator and observations made during the site visit, point to the biggest problem with collections records is the lack of understanding of accessioning/cataloging theory and practice on the part of the volunteers who have been carrying out this work for years. In particular there is a clear shortfall in their understanding of how PastPerfect works, and how it needs to be used in order for it to be useful. The result is confusion and collection record inaccuracies caused by the very well-intentioned but under-informed and poorly managed work of the volunteers. Without proper training and an understanding of standard practices in collection data management, PastPerfect can be difficult for non-museum professionals to use. Getting the volunteer staff to improve may be tough as old habits are hard to break, but their continuing service to the museum makes it clear that they care about it and its holdings. This dedication needs to be recognized and then used to encourage them to improve on their efforts by accepting proper training and management.

The Curator expressed a desire to upgrade the system to PastPerfect 5. This would provide a reason to suspend cataloging activity for a period of time while the current data is cleaned up and migrated to the newer version. This would also provide the perfect opportunity to organize formal training for the volunteers in the use and function of the database. This training could be arranged to include other PastPerfect users in the region, thus sharing the cost burden while providing the volunteer staff a chance to meet other people working with collections.

The PastPerfect database is stored on the City of Springfield's internal server. It is not clear how often this is backed up. If possible having a secondary backup of the collection database and all essential museum documents is recommended.

At present the state of the collection records can be described as incomplete, confused and somewhat disorganized. This is mostly a result of a history of the use of under-trained but well-intentioned volunteers and the lack of senior museum staff with current training and/or a background in professional museum practice. The current Curator is very aware of this situation and is trying hard to improve it. She should be provided with as much support in this work as possible because not knowing the extent and nature of the collection makes it all but impossible to properly carry out sound collections management.

Specific conservation treatment/assessment needs

It is difficult to pinpoint specific conservation treatment needs (beyond the couple mentioned below) because much of the collection remains unsorted, unrecorded and packed away in storage containers. There is also no protocol in place for carrying out condition assessments for every object. Rectifying the problems with the



collections records is a form of preventative conservation as it would provide a better understanding of the nature and scope of any specific conservation needs.

Once the collection has been further recorded and there is a better understanding of its scope and access is improved, a follow up assessment to more accurate gauge conservation needs should be carried out.

Photograph storage

Currently a space below the stairs to the second floor is being used as a storage space for the photograph collection (prints and negatives). On inspection it was clear that this area is not appropriate (Figure 2.). Not only is it excessively warm inside, but there is no ventilation and there is a very strong, chemical smell noticeable on opening the door. It is likely that the high temperature is causing the photographic materials to deteriorate, producing the strong odor of chemical fumes. Without any ventilation it is also likely that the fumes are accelerating deterioration as they remain concentrated in the space.

It is also not known if this material has been checked for nitrate based films. This is important as these films are notoriously unstable and are prone to self-combustion. For help in identifying film types and how to care for them, see the resources list at the end of this section.

Rehousing these materials in an alternative, cooler and ventilated location should be a priority.

Movie poster "Colonel of the Red Hussars", permanent exhibition area – This large movie poster, mounted between sheets of plexiglass, has been hung directly in front of a large window which has been blacked out by painting the glass black (Figure 3.). At the time of the assessment the weather was overly warm and sunny leaving the glass very hot to the touch and noticeably radiating an excessive amount of heat into the room. This heat is being trapped between the window and the back of the poster and is undoubtedly causing damage to the object.

The poster should be displayed away from any source of direct heat or sunlight. However, due to its large size, reinstallation elsewhere may not be possible. If it must remain on exhibit, the window should be covered with an insulating layer (such as insulated curtaining) to reduce the amount of heat coming in contact with the object.



▲ Figure 2: The photograph storage space. Non-collection items can also be seen in this space.



▲ Figure 3: The large "Colonel of the Red Hussars" movie poster hung in a blacked out window which is radiating excessive amount of heat and likely causing damage to the object.



Accessibility

Due to a lack of comprehensive catalog records and suitable physical space in which to examine objects, access to the collections is limited. In addition, the lack of staff to provide oversight further restricts accessibility.

Currently many boxes in storage contain a mix of objects which are not appropriately protected from each other making retrieving them difficult. There has been a practice of cataloging multiple objects (for example all of the objects from a single donation) under a single number and then housing them all in one box. This means that as objects may not have their own individual number, they are at risk of being misplaced, returned to storage in the wrong box or worse, stolen, with little or no way of accounting for them.

Until the collections records have been improved, more space made available and the contents of the most crowded of the storage containers rehoused, it may be wise to restrict access whenever possible.

Public outreach and collections care – The current exhibition in the rotating gallery addresses how museums acquire donations and process them properly with the aim of preserving the community's heritage. It has been well received and helps explain the purpose and function of this, and any other museum. Additional exhibitions and public talks related to "behind the scenes" activities would be worthwhile in helping the public understand the workings of the museum. This would be especially valuable in garnering support for any major improvements, such as the need to acquire more space, possible temporary closures while storage and exhibit areas are rearranged and/or refurbished, and so forth.

The Curator reported a history of imbalance in emphasis between resources expended on public outreach through exhibits compared to collection care, with the bias being towards exhibits. As a publicly funded institution the tendency to lean towards public engagement is understandable and accountability is essential. However, if insufficient resources are allocated to collections care, the resulting deterioration of the condition and accessibility of the collection results in the institution losing its primary educational resource, as well as failing in its mission to preserve the material cultural heritage of the community. The Curator at the Springfield Museum should be supported in her efforts to redress this balance.

Recommendations:

- Establish a second full-time, paid position for a trained, professional museum staff member to help with all
 collections tasks.
- Provide an alternative storage area of the photograph collection that provides more appropriate environmental conditions.
- Upgrade the collections database software to PastPerfect 5.
- Suspend accessioning and cataloging activities until old data has been cleaned up and migrated to PastPerfect 5.
- Arrange for formal training of volunteers in the theory and practice of accessioning and cataloging collections, followed by instruction in the use of PastPerfect 5.
- Carry out a basic survey of the photograph collection to identify any possible nitrate film and deal with it accordingly.
- Address the exhibit conditions for the "Colonel of the Red Hussars" movie poster.



- Continuing to draw up and/or revise existing written polices should be a priority. Of special importance is the creation of an Emergency Preparedness Plan and a Volunteer Handbook.
- Establish a protocol for reviewing and revising all collections related policies every 5-8 years.
- Design and start using a standard condition assessment form for recording the state of all objects in the collection. This data can then be added to any existing PastPerfect records and included in all new ones.
- Carry out a follow up assessment of the conservation needs of the physical collection once it has been more fully cataloged and access improved.
- Provide appropriate and adequate space and staff to allow for increased access to the collections.
- Support the Curator in her efforts to improve the standards of practice with regard to collection management activities and to redress the current imbalance between resources spent on exhibits and collection care.
- Establish a protocol for backing up the collections database and all other essential museum documents in at least two locations, the City's own computer serving being one of them.
- Develop public outreach activities aimed at informing the community and garnering its support for the activities and needs of the museum.
- Extend housekeeping tasks to the storage areas as well as the public spaces.

Resources:

- A useful list of the core documents and polices museums should develop is available through the America Alliance of Museums: https://www.aam-us.org/
- A quick web search will provide many examples of the various written polices museums should have in order to manage their day-to-day operations efficiently and effectively.
- There are several sources of information on identifying and caring for nitrate photographic media. I have found the following two especially helpful: http://resources.conservation-us.org/pmgtopics/1993-volume-five/05_12_Fischer.pdf and https://www.nps.gov/museum/coldstorage/pdf/2.3.1b.pdf
- Another great source for information on all aspects of collections care, specifically related to their conservation, is the AIC's Wiki: http://www.conservation-wiki.com



EXHIBITIONS

The museum has two main exhibition spaces; a changing or temporary exhibition gallery in the front entrance room of the building on the first floor, and a permanent exhibition that takes up the entire second floor. In addition, there are a number of objects on the stairs between the two floors.

There are also supposed to be museum objects on display in other buildings owned by the City of Springfield, but the location and extent of these has not yet been determined by the Curator and there are no formal records pertaining to them.

Rotating gallery ("Kathleen Jensen Gallery")

At the time of the CAP assessment this area housed an exhibition titled "The Here and Now: Recent Acquisitions, 2016-2018", an exhibit that explains and explores the donation process and how museum collections are developed using recent acquisitions as examples of the process. This is a great way of making everyone, from the visiting public to other City staff, aware of the work that has to be done to protect and conserve their heritage. Similar exhibits on other aspects of museum work may well help in improving support for the museum, as well as prepare visitors for any major changes to the museum infrastructure itself should that occur. Most of the objects are displayed under glass or acrylic vitrines, but some are on open display and are not protected from touching by curious visitors.



Figure 4: A general view of the rotating gallery space with the gift shop and front desk areas in the



▲ Figure 5: A general view of the permanent exhibit space on the second floor.

The space also houses the front desk, gift shop and an interactive area where visitors can leave messages and comments about their experience visiting the museum. It is used as a venue for special events, either privately rented or in house, such as opening receptions and the monthly Springfield Art Walk (Figure 4.).

Illumination is a mix of incandescent and LED fixtures, none of which appear to have UV radiation screens installed. The windows of the gallery are coated with a UV absorbing film, however, there is no record of it having been replaced since its installation in the early 1980s and in places it is detaching from the windows.

Also, in the room is access to "The Vault", the main, secure collections storage space. This is kept locked, however, it does open onto a public space which inherently poses a security problem should it need to be accessed during museum visiting hours.

The area is spacious with no overcrowding and is for the most part suitable for use as an exhibit space.



Permanent exhibition

The second floor is given over to the museum's permanent exhibition. This comprises a series of display areas featuring objects illustrating specific topics of local interest or history (Figure 5). These areas are easily accessible to the public with few if any barriers to prevent touching. Indeed, one of these areas was the subject of a theft a matter of a few weeks ago when a doll was taken (Figure 6).

The physical mounting or securing of objects is minimal relying mostly on objects simply being placed on a flat surface, or propped up against each other, or an adjacent wall, or piece of furniture. Objects displayed in this way are likely to sustain damage from falling, being abraded by contact and local vibration, and by causing other damage such as galvanic corrosion caused by two different metals in contact with each other resulting in the accelerated corrosion of the less stable of the two metals. Unsecured objects are also easy targets for theft. For larger objects this can also be a potential safety hazard; for example in one display there is a long, two-handed logging saw propped on end with the teeth side of the blade pointing out towards the front of the display should it fall, the teeth will be on the leading edge of the blade which could cause serious injury if a person is in the way at the time (Figure 7). The Curator reported seeing the drawers of furniture that is within reach being clearly opened and left ajar by visitors.

The layout of this space means that there are areas that are tucked away and out of any main line of sight – indeed it was from just such an area that the theft of a doll, mentioned earlier, occurred.

Security could be provided by relatively cheap, wireless security cameras. However, perhaps the simplest and cheapest deterrent is an infrared beam alarm which makes an audible noise that both alerts staff and volunteers to a possible problem, draws the attention of any other visitors in the space as well as making the person who triggered the alarm aware that their activities are not acceptable. An example of an infrared alarm is provided in the resources list at the end of this section.

The display areas are overcrowded making it difficult to observe individual objects to the full. Objects on exhibition have not been rotated recently and there is no protocol in place for an active rotation schedule.

As with the first-floor gallery, illumination is a mix of incandescent, LED and possibly fluorescent light fixtures, none with visible UV screening in place.

In general the space is clean and well maintained.



Figure 6: . An example of a display in the permanent exhibition area showing the low, barrier meant to deter visitors from accessing the exhibit. However, much of the display (in particular in this example a group of ledgers) is clearly well within reach.



Figure 7: An example of a large object – a two-handed logging saw – dangerously displayed leaning against a large section of log. The close proximity of the public barrier can be seen in the foreground.



Stairwell

On the landing, half way up the staircase between the first and second floor are three large objects (Figure 8). These are vulnerable to being touched and/or accidentally damaged as people pass up and down the stairs. They are also obstacles to the safe egress of visitors between the floors in an emergency. They should be removed and repositioned or placed in storage for the safety of the objects and visitors.

Recommendations:

 Install some form of warning device, or other deterrent, in the display areas of the permanent exhibition to reduce touching by visitors.



▲ Figure 8: The stairwell between the first and second floors of the museum. There are three large collection objects exhibited in this space with no barriers to prevent touching. The two placed on the pathway are also obstacles to safe egress from the building in the event of an emergency.

- Replace the failing window film with new UV absorbing film.
- Objects, especially small ones that are easily removed and large ones that could cause damage and/or harm by falling, should be mounted securely.
- The density of objects in each area should also be reduced to improve security and make objects easier to see.
- Transition to LED lighting fixtures throughout the museum.
- Check existing lighting for UV radiation and provide UV absorbing screens if needed.
- Establish a protocol for rotating light sensitive objects on display.
- Remove the large collections objects displayed on the staircase between the first and second floors.

Resources:

- Mount making for objects a great starting point for exploring options for inexpensive object mounts in the AlC's Wiki page. "Mountmaking": http://www.conservation-wiki.com/wiki/Mountmaking
- An example of an infrared beam alarm that could be used to alert staff to someone reaching into display areas: https://specialtyalarms.com/products/invisible-beam-entry-alert-671
- Many of the general resources listed in other sections of this report also contain information and resources pertinent to the improvement of exhibition spaces and the care of collections on exhibit.



STORAGE

The Springfield Museum has two main areas for collections storage; the main museum building and a unit at the Booth-Kelly Business Complex, an off-site facility nearby.

Apart from the photograph collection and some document storage, there is no systematic sorting and storage of the collection by object type or material. Rather, objects are stored together, often with many objects of varying material, size and mass all placed together in a single box. Boxes are also sometimes over full and there is insufficient packing material around objects to protect them from each other, or they are simply not suitable for the object they house (Figures 9 and 10). This is not the best approach to object storage. Combining different items in this way makes it hard to retrieve objects, puts them in danger of being damaged by accidental contact with each other and heavier items crushing more delicate objects as boxes are moved.



Figure 9: An example of a hat being housed on a try that is too small, forcing the brim to be pushed up, a distortion that may become permanent if the object is not rehoused appropriately in the near future.

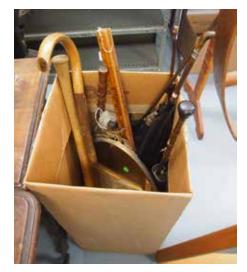
In several places, most notably The Vault (see below) boxes are stored at excessive height, including ones that are extremely heavy. This situation is not safe for either the collection and, more importantly, staff who must retrieve them.

Another common problem is the stacking of too many boxes, one on top of the other, again making retrieval of lower ones difficult, necessitating the removal of many boxes above them in order to reach the target box. Every move of a box poses the risk of damage to its contents. Over stacking also causes dangerous loads on the lowest boxes that are forced to support the weight of all the containers and their contents placed on top of them. Several examples of boxes beginning to be distorted by over stacking were seen.

Many of the boxes in use for storage are large and have been overfilled, making them heavy and difficult to handle, especially at height. This presents a risk of damage to the materials in them and a safety issue for people trying to move them on and off shelves, particularly if using a ladder.

All storage areas also contain non-collection items, such as unused furniture, housekeeping supplies, old exhibit graphics, display props, holiday decorations, stock for the gift shop, etc. (Figure 11). This is also poor practice as it can lead to confusion as to what are and are not collection items, it makes controlling who has access to collections difficult, it puts the collection objects at risk of damage when non-collection items are retrieved, and so forth.

Most of the collections handling, packing and storage is carried out by volunteer staff. It is clear that they are doing the best job that they can but that they would benefit greatly from some comprehensive and structured training. This instruction should be provided by professionals from outside the museum which will help support and validate the changes being implemented by the Curator.



▲ Figure 10: An example of a box of mixed objects with insufficient packing materials around each item.



▲ Figure 11: An example of non-collections and collections items stored together in the same location – in this case at the Boot-Kelly storage facility.



There is a general need for the collections to be sorted, storage areas rearranged to better use them, and a comprehensive project to rehouse and improve the packing of items in storage (Figure 12).

As indicated above, there has not yet been enough data gathered about the environment in any of the storage areas to make meaningful comment. However, this could be remedied by deploying additional data loggers in these locations.

Museum building

Within the museum there are four separate areas used for collections storage as follows.

The Vault – The vault is the largest secure collection area in the museum and it is situated off the rotating gallery space (Figures 13 and 14). It consists of a single



▲ Figure 12: Another example of objects incorrectly housed and stored, in this case a group of books without any protection to their surfaces and with no physical support other than each other.

small room with an exceptionally high (over 12 feet) ceiling, Three walls are lined with single depth shelving, but with insufficient separating shelves leading to the over stacking of boxes. Boxes are also stacked almost to the ceiling making retrieval of the top ones difficult and risky. The fourth wall – that to the immediate left as you enter – is lined with boxes and other containers stacked on top of each other, the bottom ones being directly on the floor. There is simply too much crammed into this room for it to be accessed safely or usefully.



▲ Figure 13: The door leading into the vault storage room.



Figure 14: The interior of the Vault showing its very high ceiling. The over stacking of boxes and general overcrowded conditions of the shelves can clearly be seen.



There is a group of oversized ledgers stacked on top of each other without benefit of the protection of boxes or similar container and according to notes left by the previous Curator, this has led to the detachment of one of the spines (Figure 15).

The primary issue with this space is overcrowding, storage containers placed at excessive height and over stacking of storage boxes one on top of the other.

Photograph Storage Cabinet – Situated in a side niche along the corridor where the restrooms are located on the first floor is a four-drawer, unlocked filing cabinet in which photographs from the collection are stored (Figure 17). It opens out into the corridor and is hidden from view by a fabric screen. This is not an ideal location for collection storage as it is unsecured and in a public area, despite being hidden from view.

The photograph collection needs to be moved to a more suitable, cooler and more ventilated location as soon as possible. It is also imperative that this collection be processed and examined to make sure that there is no nitrate film present. Nitrate film must be stored under special conditions, including refrigeration. Information resources to help with this task are provided below.

This space should be used for storing non-collection items only.

The Library – The small library is contained on a rolling cart inserted under the lower part of the stairs leading up to the second floor (Figure 16). While this is acceptable at present, it is far from ideal as it makes using this resource awkward and difficult to control. It requires volumes to be removed to another location for even the shortest use, making it hard to insure that they are returned to the collection.

Adjacent to this rolling cart are other, similar units used to store non-collection items including containers and equipment used for food preparation. It is easy for these carts to be bumped against the library cart, presenting the rick of damage to the books.

While this area can continue to be used to store the library, thought should be given to relocating it to a safer and more user-friendly location in the future.

Document Storage Cabinet – Situated in a side niche along the corridor where the restrooms are located on the first floor is a four-drawer, unlocked filing cabinet in which documents and other archive items are stored (Figure 17). It opens out into the corridor and is hidden from view by a fabric screen. This is not an ideal location for collection storage as it is unsecured and in a public area, despite being hidden from view. This cabinet needs to be relocated to a more secure place not directly accessible by the public.



Figure 15: A group of oversized, very heavy ledgers stacked one on top of the other in the Vault storage. The stack is visibly leaning and clearly unstable, not to mention the exposed, unprotected surfaces leaving this group of objects prone to accidental damage when being moved, or when items are moved ground them.

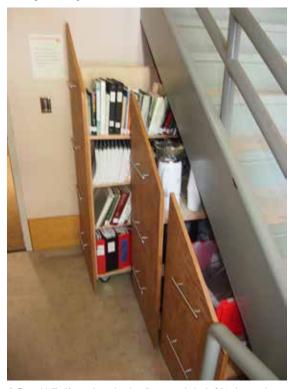


Figure 16: The library is housed on the rolling cart to the back of this photograph. The two adjacent carts hold food preparation related items and other general, noncollections supplies.



Other general space

During the assessment other collections items were seen housed in any available space and mixed with non-collections material. This included the small general-purpose area with adjoining screened off storage/work area adjacent to the Curator's office and associated administrative/data entry office (Figure 18). There was also a large spinning wheel stored on the top of the Curator's office. This is an indication primarily of the general lack of usable space as well as past, ill-informed practices. The current Curator is very aware of this and is trying to remedy this challenging situation.

Booth-Kelly Business Complex location

This location has been discussed at length elsewhere in this document. As has already been pointed out, this location is not safe or suitable for collections storage or (in its present state) as a work place for staff and volunteers.

The unit is being used to store both collections and non-collection items and while they are roughly sorted one from the other, there are areas where the two are clearly mixed (Figure 19). Weak hardware on the doors and the building's use as a mixed use business complex make the location a security risk for collections.

It would be preferable if this unit was not used for the storage of collection items at all

Re-organization of available storage space

It is clear that one of the primary needs with regard to collections storage is better organization and re-allocation of available storage space. I would like to suggest that the Booth-Kelly unit be used only for the storage of non-collection materials. All non-collection items not needed on a daily basis that are stored in the museum building should be moved over to Booth-Kelly. The newly freed up space in the museum could then be used to house the collections items currently kept at Booth-Kelly.

It is not clear whether this would provide enough space at the museum for all of the Booth-Kelly material. Even if it does, the issue of lack of general space, and storage space in particular, will remain. Simply put, the Springfield Museum needs more, secure and appropriate storage space.

It is understood that the option to swap the floor functions at the museum (move the permanent exhibition to the first floor, and correspondingly relocate all administrative and storage spaces



▲ Figure 17: The unsecured, document storage filing cabinet is located behand the fabric screen to the left in this public corridor



▲ Figure 18: The screened off storage/work space adjacent to the Curator's office. Out of necessity it is being used more as a storage area than a much needed work space.



 Figure 19: Another example of the mixed storage of collection objects and noncollection items, Booth-Kelly storage facility.



to the second floor) is being considered as a way to address not only space needs, but also as a way to improve collections security and improve general layout and use of the available space. This option has been addressed by the building assessor for this CAP assessment.

During the site visit the possibility of building an extension to the first floor, ostensibly to provide storage for larger collections items that might be hard or impossible to locate on the second floor, was also discussed. This would be a welcome addition to the space currently available for storage.

Enquiring if the City has other, better suited property than the Booth-Kelly Business Complex available that could be used for collection storage is also worthwhile. This will be essential if a major re-organization of the collections is to take place, as there is simple nowhere at present to carry out the physical task of sorting, processing and rehousing the collection.

Recommendations:

- A general reorganization of the collections, sorting collections items from non-collections items, sorting collection objects by type and rearranging the available storage areas are all badly needed.
- Arrange for comprehensive training of volunteer staff in all aspects of collections management, in particular object
 handling, packing and storage. This instruction should be provided by professionals from outside the museum.
- Consider moving all non-collection items in storage at the museum building to the Booth-Kelly space, and bringing
 all collections items in Booth-Kelly over to the museum where they can be more securely stored, managed and
 accessed.
- Discontinue use of the Booth-Kelly Business Complex for collections storage.
- Discontinue use of the current photograph storage space for storing collections items and reuse it for storing non-collection items only.
- · Process the photograph collection to identify possible nitrate film and then re-house all items appropriately
- Environmental data loggers should be deployed in all storage areas in order to fully assess their suitability for use as collections storage.
- · Most of the collection needs to be re-housed in improved containers and with additional packing materials.
- The addition of supplementary shelves into the shelving units in the Vault storage is needed to reduce the need to stack boxes on top of each other.
- Plans should be made to eventually relocate the library collection to a more user-friendly and secure location.
- Relocate document storage to a more secure, non-public location.
- Assess whether or not moving the permanent exhibits from the second floor to the first floor and using the second floor for storage and administration only, is actually a viable and useful option.
- Actively plan to provide more space in general, and more storage space in particular, either through acquiring
 additional suitable properties or by adding an extension to the current building.



• Approach the City with our concerns regarding the Booth-Kelly location and see if conditions can be improved, or other more suitable space found.

Resources:

- There are a huge number of printed and on-line resources to help with storage issues, from dealing with building a brand new storage facility to how to fold a small box for a single object. A good starting point is a webinar available at Connecting to Collections Care: https://www.connectingtocollections.org/storagesolutions/
- Additional guides to storage solutions can be found in several Conserv O Grams: https://www.nps.gov/museum/publications/conserveogram
- Additional guidance and resources related to storage issues: https://www.conservation-us.org/specialty-topics/collection-care#.W2y_mVBKi00
- There are several sources of information on identifying and caring for nitrate photographic media. I have found the follow two especially helpful: http://resources.conservation-us.org/pmgtopics/1993-volume-five/05_12_Fischer. pdf and https://www.nps.gov/museum/coldstorage/pdf/2.3.1b.pdf
- I highly suggest that the museum acquire a copy of "A Guide to Handling Anthropological Museum Collections." by conservator Dr. Nancy Odegaard, and published by the Western Association for Art Conservation. Despite its title, it offers guidance for handling all manner of materials and objects and was written specifically for museum volunteers. http://www.waac-us.org/waac/hguide.html



EMERGENCY PREPAREDNESS

At present there is no written Emergency Preparedness plan, however the Curator is very aware of the need for this document and she considers it to be a priority. In the event of an emergency of any form, it is not clear that the volunteer staff would know how to respond.

The museum and off-site storage facility have fire detection systems in place that are connected directly to assistance. There is also a panic button located near the Curators office in the museum building that raises an alarm with the police department.

My primary concern about emergency issues relate to the conditions at the Booth-Kelly off-site storage space where, as already noted, the rear egress to the building is currently obstructed by various obstacles, including highly flammable materials. In addition, the exit door is not equipped with a push bar and it does not have the appropriate signage indicating its location. This is, in my opinion, not a safe space for either collections or personnel.

Another aspect of emergency preparedness with regard to collections is the maintaining of backup or duplicate records of the collection database and all important documents. This seems to be partially in place (the PastPerfect database is located on the City of Springfield's server) but needs to be extended to make sure that copies are situated independent of the City infrastructure.

Because until recently the museum was operating as an independent entity under its 501c3 (although located in a City owned building), it had not been included in City based emergency preparedness activities, such as fire drills, and so forth. It is understood that since raising this question as part of this CAP survey, the City is now in the process of integrating the museum into its preparedness and response plans and activities as it is once again back under the governance of the City as part of the Library Department. It is essential that the museum participate fully in all activities related to the City of Springfield's emergency preparedness and response plans.

Developing a close relationship with local the law enforcement and fire departments is usually beneficial. This should include inviting emergency service personnel to visit the museum and view not only the exhibits, but all areas used by the museum, including off-site locations. This not only helps responders understand location and any challenges they might face in the event of an emergency, but it usually results in useful input for museum staff on to how best to prevent and prepare for an emergency.

While parts of the collection have been photographed, it is important that all collection items are photographed and the images added to the associated records in PastPerfect, as well as possibly a secondary photo archive of record images labeled with the object's ID number. This is not only for general record keeping but also for insurance purposes.

FAIC Emergency response and Salvage Wheels should be acquired and placed in all collection storage areas. These are an invaluable tool in guiding staff and volunteers when faced with responding to an emergency impacting the collections directly (see Resources, below).

The museum should compile two emergency response kits (one for each location, as long as collections items remain stored in the Booth-Kelly facility) to have on hand in the event of a distaster, large or small, in either location. A quick on-line search will come up with numerous examples of "salvage-kits" put together by institutions across the country. At a minimum they should contain basic personal safety equipment (dust masks, gloves aprons, safety glasses, first aid kit, etc.), as well as flashlights, note pads and pencils, utility knife, plastic sheeting and bags, object packing materials, absorbent socks for spill containment, and so forth.



Recommendations:

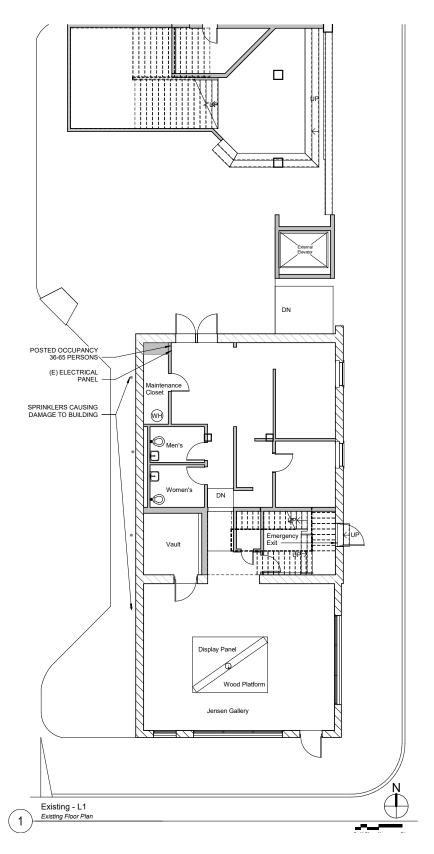
- The development of an Emergency Preparedness and Response Plan should be a high priority.
- The Emergency Preparedness Plan should be provided to all persons working in the building on a regular basis. They should also be required to sign an acknowledgment that they have read and understood it.
- Follow through on becoming an integral part of all City of Springfield emergency preparedness and response plans and activities.
- Invite local law enforcement and fire departments to tour the facility and become acquainted with the museum's holdings and locations, and develop a working relationship with local first responders.
- Emergency response kits should be put together for both the museum and off-site storage.
- Make sure that there are duplicate/back up copies of the collection database and other vital museum documents in locations beyond the City infrastructure.
- Make sure that all collection items have been photographed.

Resources:

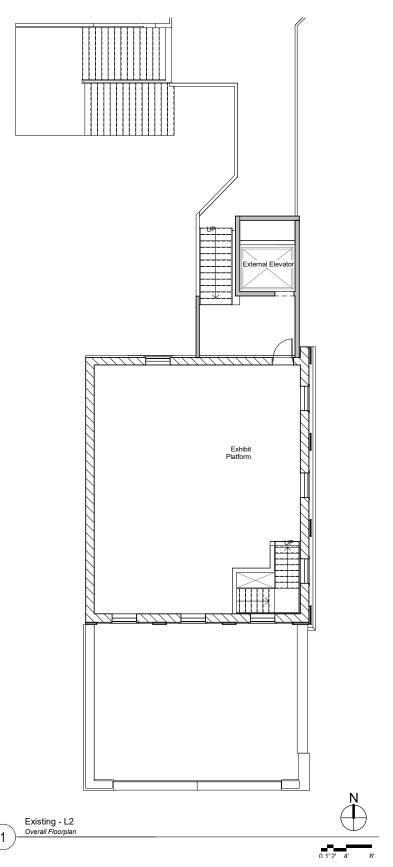
- There are many examples of Emergency Plans in the form of complete plans or templates. Either can be used to create a plan designed specifically for the museum. An example can be found here: https://cdn.ymaws.com/www.vamuseums.org/resource/resmgr/Toolkits/Small_Disaster_Plan_Template.pdf
- The City of Springfield has a web page devoted to its Emergency Management Plan which includes resources useful to the museum as part of the City's infrastructure: http://www.ci.springfield.or.us/dpw/EmergencyManagement. htm
- Emergency Response and Salvage wheel: http://store.conservation-us.org/site/index.php?app=ecom&ns=prodsh ow&ref=FAIC-1



A.1 Existing Condition Assessment

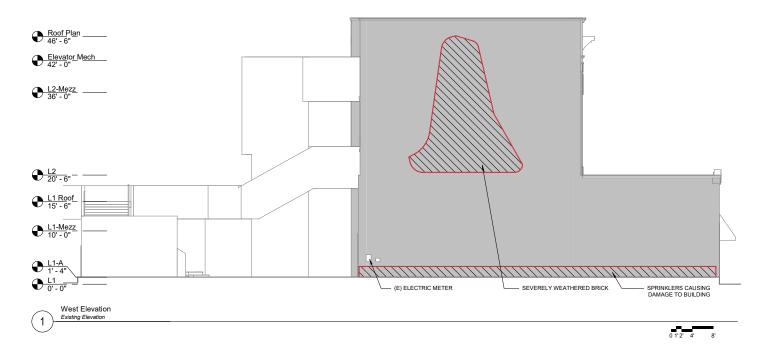


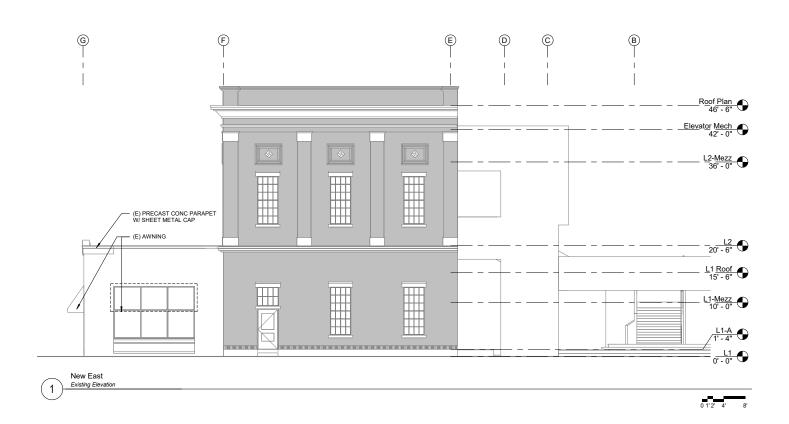
Chapter A.1: Existing Condition Assessment



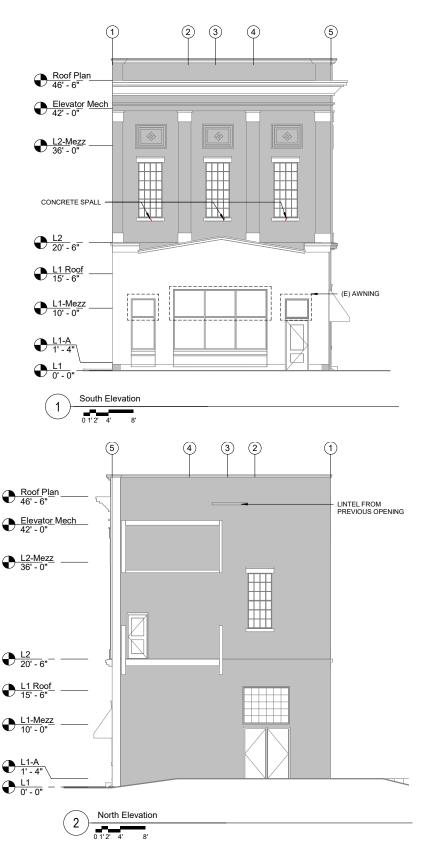


Chapter A.1: Existing Condition Assessment



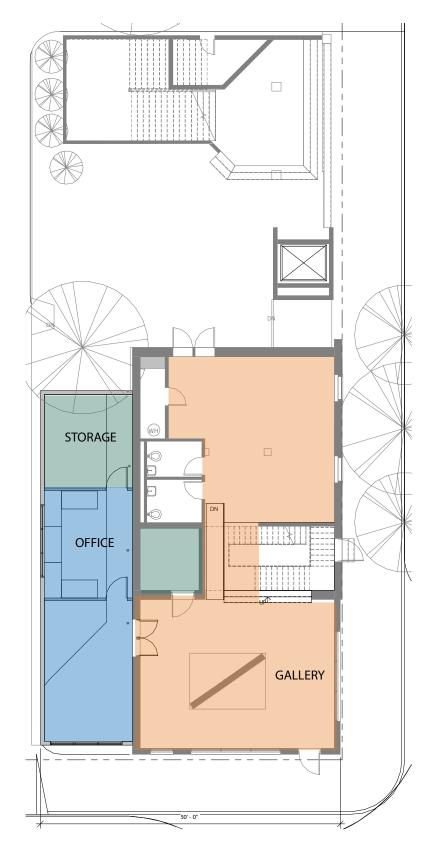


Chapter A.1: Existing Condition Assessment



A.2 Future Option 1 - Side Addition

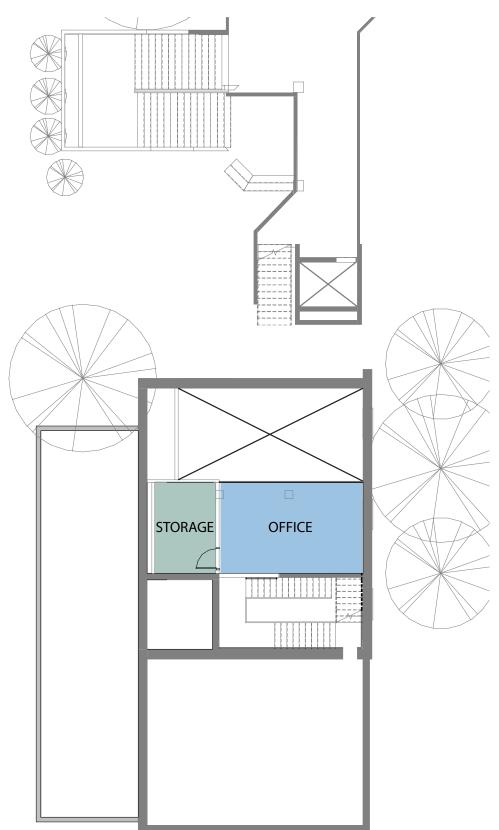
1st Floor Plan





Chapter A.2: Future Option 1 - Side Addition

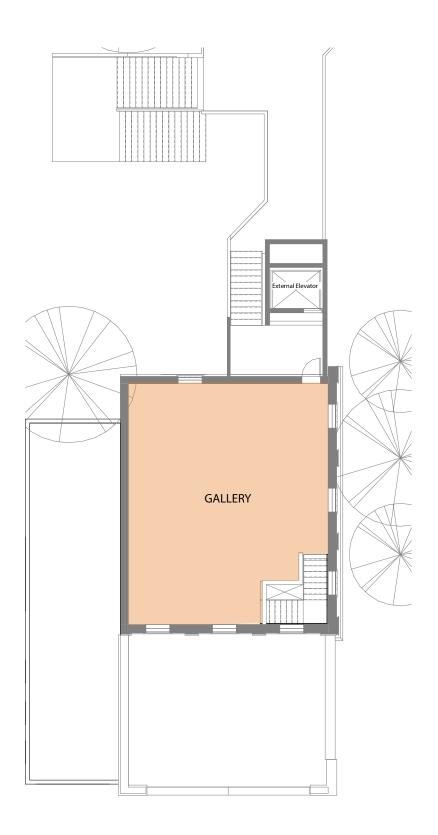
Mezzanine Floor Plan





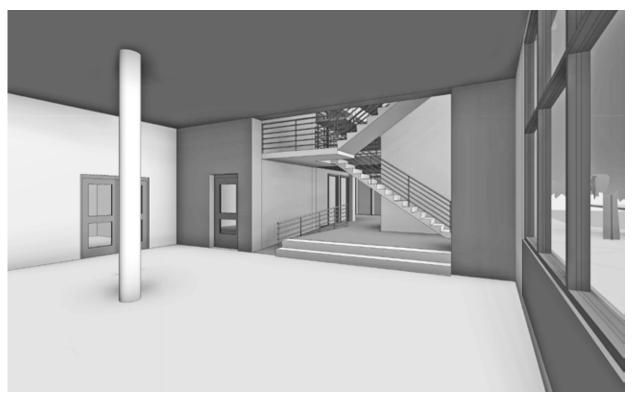
Chapter A.2: Future Option 1 - Side Addition

2nd Floor Plan





Chapter A.2: Future Option 1 - Side Addition



1st Floor Entry



1st Floor Back Entry

Chapter A.2: Future Option 1 - Side Addition



Front Elevation from Main St.

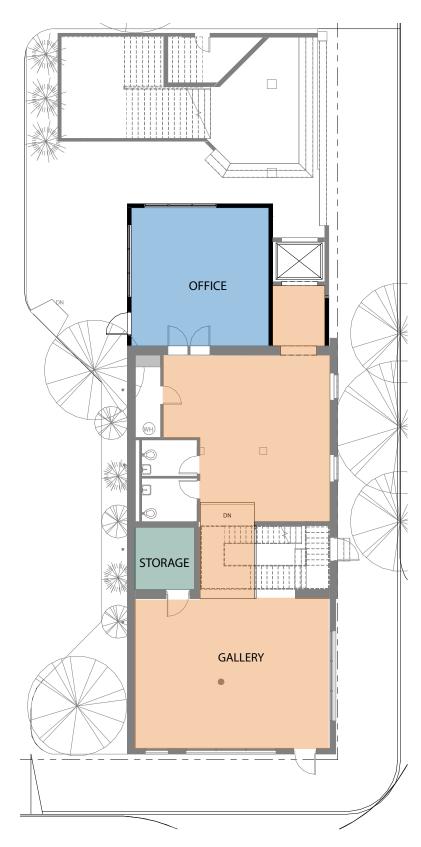


West Elevation from parking lot



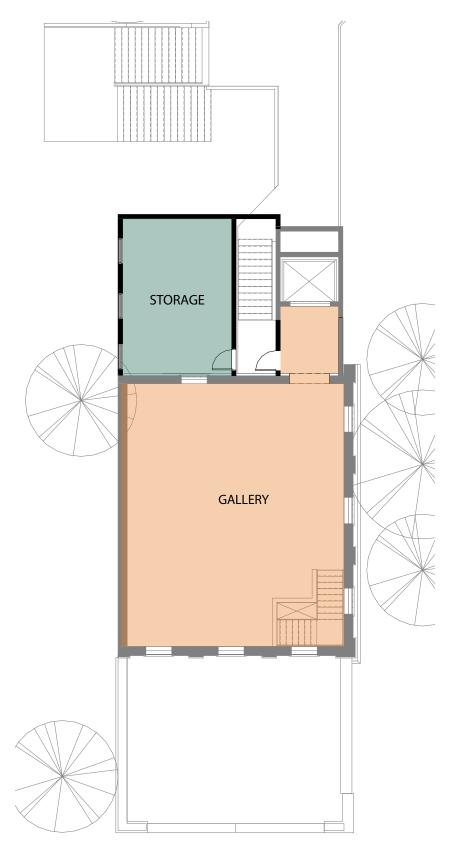
A.3 Future Option 2 - Back Addition

1st Floor Plan



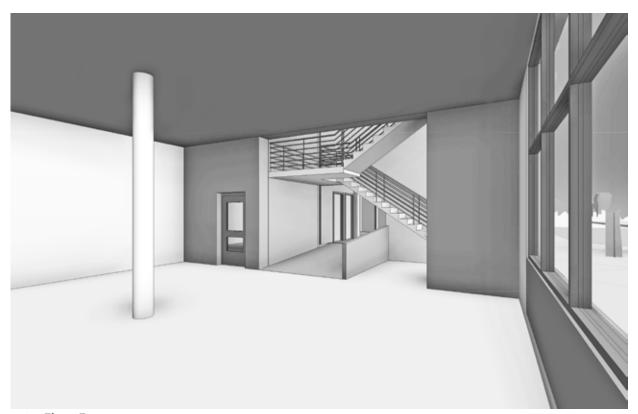
Chapter A.3: Future Option 2 - Back Addition



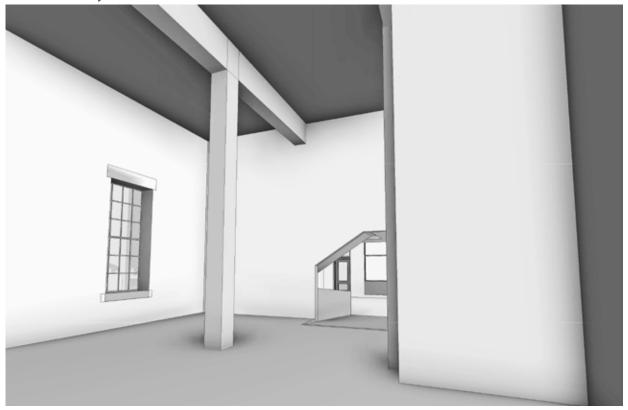




Chapter A.3: Future Option 2 - Back Addition



1st Floor Entry



1st Floor Back Entry

Chapter A.3: Future Option 2 - Back Addition



Front Elevation from Main St.



East Elevation from Main St.



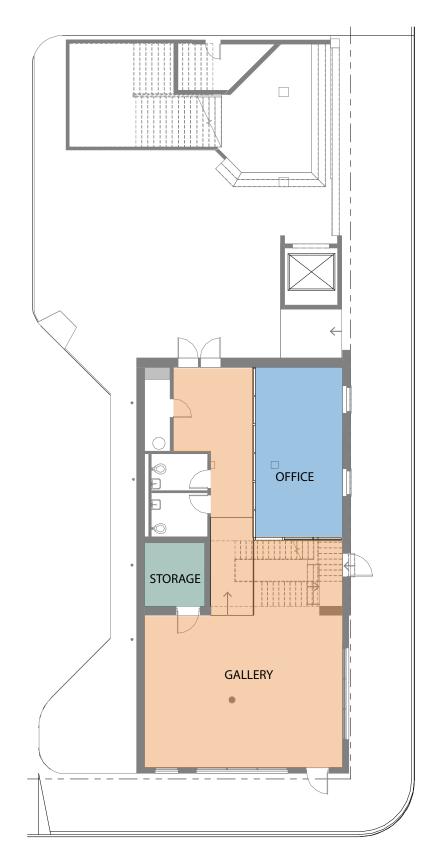
Chapter A.3: Future Option 2 - Back Addition



West Elevation from parking lot

A.4 Future Option 3 - Mezzanine Addition

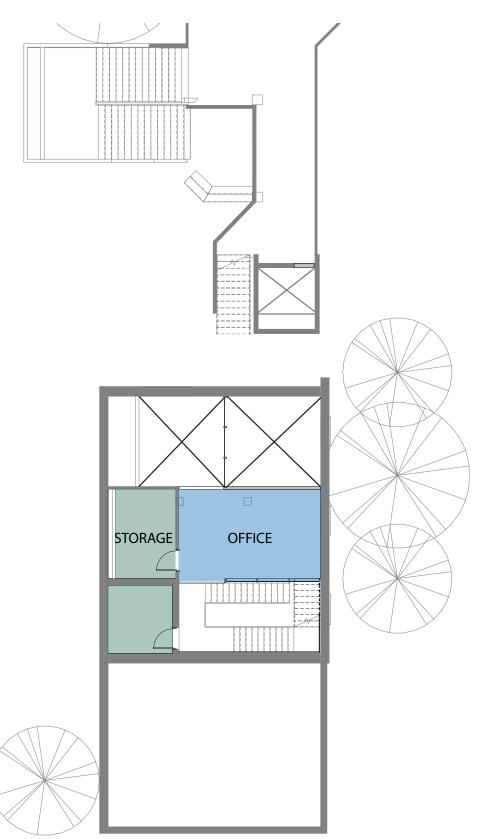
1st Floor Plan





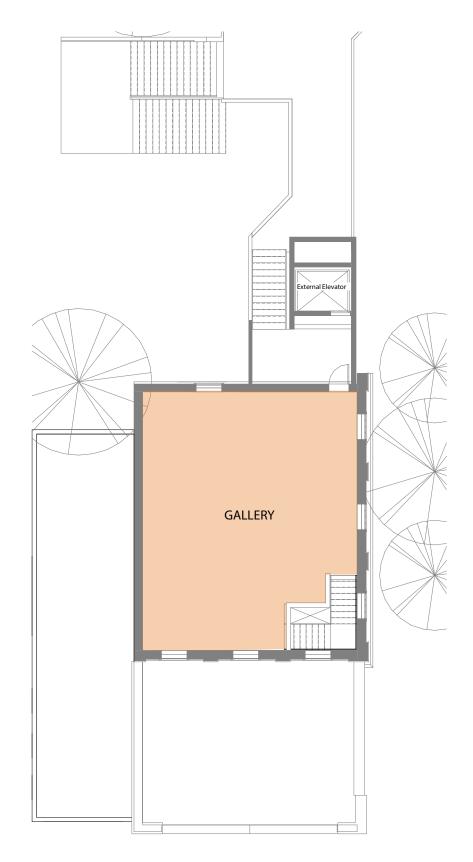
Chapter A.4: Future Option 3 - Mezzanine Addition

Mezzanine Floor Plan



Chapter A.4: Future Option 3 - Mezzanine Addition

2nd Floor Plan

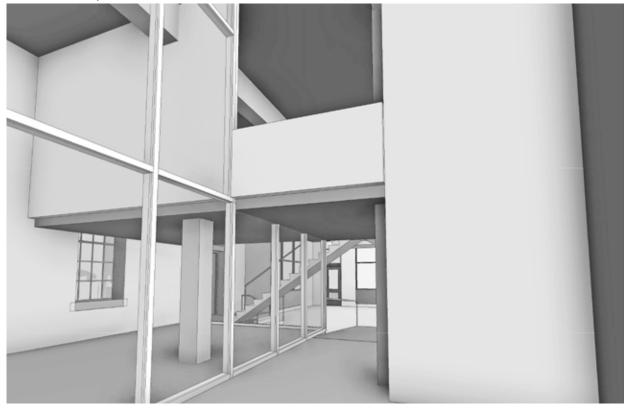




Chapter A.4: Future Option 3 - Mezzanine Addition



1st Floor Entry



1st Floor Back Entry