



QUEEN'S UNIVERSITY LIBRARY AND ARCHIVES MASTER PLAN

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CS&PArchitects

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1. EXECUTIVE SUMMARY

The Library and Archives Master Plan will guide the development of Queen's Library and Archives facilities over the next twenty years, in the context of the University's strategic framework. The Library and Archives are at the core of the student learning experience, and are essential supports to, and measures of, the University's research and innovation capabilities.

The Library and Archives Master Plan has been developed in alignment with the Campus Master Plan, and has been driven by several factors:

- Unmet and growing demands for study and learning space in the libraries
- The proliferation of digital information resources, overcrowded collections spaces, and new opportunities for preserving and storing lesser used print collections
- The impact of technology on learning and research, and on the scope and delivery of library services
- Aging infrastructure and associated risks to collections and accessibility, particularly in Douglas Library and the Archives in Kathleen Ryan Hall
- Financial sustainability, both in terms of service costs and space costs

The strategies proposed in the Library and Archives Master Plan emerged through an extensive collaborative process with stakeholders, guided by a steering group that included student representatives and faculty members as well as Library, Archives, Queen's Learning Commons and Campus Planning representatives.

KEY PRINCIPLES

Based on the issues and themes explored through the process of discovery, analysis and stakeholder input, the following set of key principles was developed to guide the recommendations of the Plan.

Library and Archives Services

Deploy strategically the resources, tools, and technologies required to enable the cost-effective delivery of expert library and archival services for the 21st century learner and researcher.

Collections

Develop a new collection paradigm that supports learning and research through improved accessibility, presentation, and preservation.

Technology

Integrate new technologies seamlessly into the delivery of services and the creation of dynamic learning and study space.

Learning and Study Spaces

Increase the number of individual and collaborative learning and study spaces to better support scholarship and research.

Sense of Place

Restore, transform, and realize the potential of under-developed library and archives spaces to provide memorable places for social and intellectual encounters and discovery.

Accessibility

Provide safe, secure, and universally accessible learning and study environments in all campus libraries and archives.

Diversity and Community

Welcome and recognize cultural diversity and community outreach through partnerships and programming.

Facilities and Operations

Develop a comprehensive and sustainable strategy for the facilities and operations of the libraries and archives which aligns with the University's academic mission.

VISION

The Library and Archives Master Plan outlines a planning framework that envisions over the next twenty years a transformed library system at Queen's built upon its solid foundation of superb services, collections and spaces. This intellectual network will inspire discovery and enable creativity, from its welcoming presence at the academic crossroads of Queen's to its intimate spaces across the campus and its virtual presence around the world. It will offer expanded and enhanced learning and study spaces, promote and preserve collections, leverage technology, embed and expand services into more open and accessible spaces, and evolve to meet the changing needs of the 21st century learner and researcher. When implemented, the Plan will significantly enrich the student learning experience and research at Queen's and expand the Library's reach to more fully engage Queen's broad and diverse community.

Guided by this vision, the Plan addresses the University's strategic framework as follows.

Student Learning Experience

- Substantially increase the amount of learning space in existing libraries, including numerous group study rooms and dedicated graduate student space, and expand exhibition, gallery and community gathering space
- Develop a network of inviting places for study, interactive learning and innovation, distributed in various key locations across campus and linked to information services and resources.
- Improve accessibility in every library

Research Prominence

- Enhance research opportunities and community engagement with the creation of inviting, technology-enabled, interdisciplinary spaces
- Solve the severe preservation and access issues of the Archives and the Jordan Special Collections and Music Library, where researchers rely upon irreplaceable resources such as the private papers of key figures across the disciplines, historic records, unique collections and rare books
- Support researchers' use of the Library and Archives entire collection, through a re-envisioned paradigm of enhanced access, presentation, and preservation, to provide the best stewardship of resources and sound guidelines for converting portions of stack space to other vital uses

Financial Sustainability

- Reduce overall Library and Archives space by 10%, primarily by relocating the Archives from Kathleen Ryan Hall
- Reinvest strategically in remaining facilities to increase their operational efficacy and life span
- Intensify the use of Douglas Library and Stauffer Library, prime sites in the centre of campus
- Repurpose existing spaces to accommodate new pedagogy and learning needs
- Provide a redevelopment opportunity at Kathleen Ryan Hall, which is adjacent to one of the few potential building sites on campus

SUMMARY OF RECOMMENDATIONS

The Plan recommends investing in the renovation and transformation of five existing libraries. The proposed changes should be considered as a high-level conceptual framework for an orderly, targeted approach to facility investments.

Douglas Library

- Transform Douglas Library, an exemplar of Queen's Collegiate Gothic heritage style and a pivotal place on campus, into a focal point of knowledge and research, to become a dynamic new Centre for Digital and Print Culture
- Relocate the Archives, whose collections and services are an invaluable asset for Queen's and the broader community, from Kathleen Ryan Hall, an inadequate building for the long-term future of the Archives. Join the Archives with Special Collections in Douglas Library in a research and exhibit facility that includes a preservation storage environment, a conservation lab, and a secure reading room
- Incorporate new partnerships, services, expanded study areas, and dedicated graduate research space
- Relocate the Engineering and Science Library and the Music portion of Jordan Library to the Stauffer Library

Stauffer Library

- Strengthen Stauffer Library's signature stature as a focus at Queen's for the student learning experience
- Leverage the distinguishing characteristics of the building to significantly expand and enhance learning and research services and study spaces, including robust technology, an expanded Queen's Learning Commons and dedicated graduate research space
- Reconfigure the lower level to be more open to daylight and include the potential to create a new accessible reading garden as a unique outdoor study space
- Provide new opportunities for the Library to expand its community outreach and partnerships with new exhibition and display spaces

Library Square

- Leverage the iconic value of the Douglas/Stauffer relationship and their pivotal location to develop a new, major, public open space on campus at the intersection of Union and University – Library Square – as an accessible and inviting place for social interaction and special campus events throughout the year

Library Information Network at Queen's (LINQ)

- Develop a new, more agile form of Library infrastructure virtually connected with the full range of library resources and services and physically located in a variety of buildings: smaller clusters of study space, or learning communities, woven into Queen's intellectual fabric and historical narrative and configured to respond more closely with the campus's social geography and the digital information paradigm

Law Library

- Retain and strengthen the Law Library as a laboratory for legal research and a valued sanctuary for study, with additional individual and group spaces and upgrades to the building's mechanical system
- Consolidate the Library from three floors to two, allowing the first floor to be repurposed to accommodate Faculty needs

Health Sciences Library

- Retain and strengthen the Health Sciences Library as a valued place for study and research in Botterell Hall, taking into account building assessments of the Campus Master Plan and Faculty space planning
- Reconfigure the main level to provide more effective programming of staff and service space
- Significantly improve the lower level by creating an area more open to daylight for individual and group study space, and allow a portion of space to be repurposed to accommodate Faculty needs

Education Library

- Create a more compelling ‘sense of place’ with a visible entry to the corridor on the ground floor and a more dynamic demonstration teaching space and atrium
- Incorporate more robust technology infrastructure to allow future teachers better access to 21st century digital teaching and learning tools
- Upgrade building infrastructure to include significant improvements to the HVAC system

The future of the Education Library is dependent, in part, on the Campus Master Plan’s vision for the west campus. The recommendations above assume that the Faculty of Education remains on the west campus. If the Campus Master Plan recommends the development of the west campus with additional academic and research programs, then the Education Library, even when transformed, would not be adequately sized or programmed to function as a major research facility.

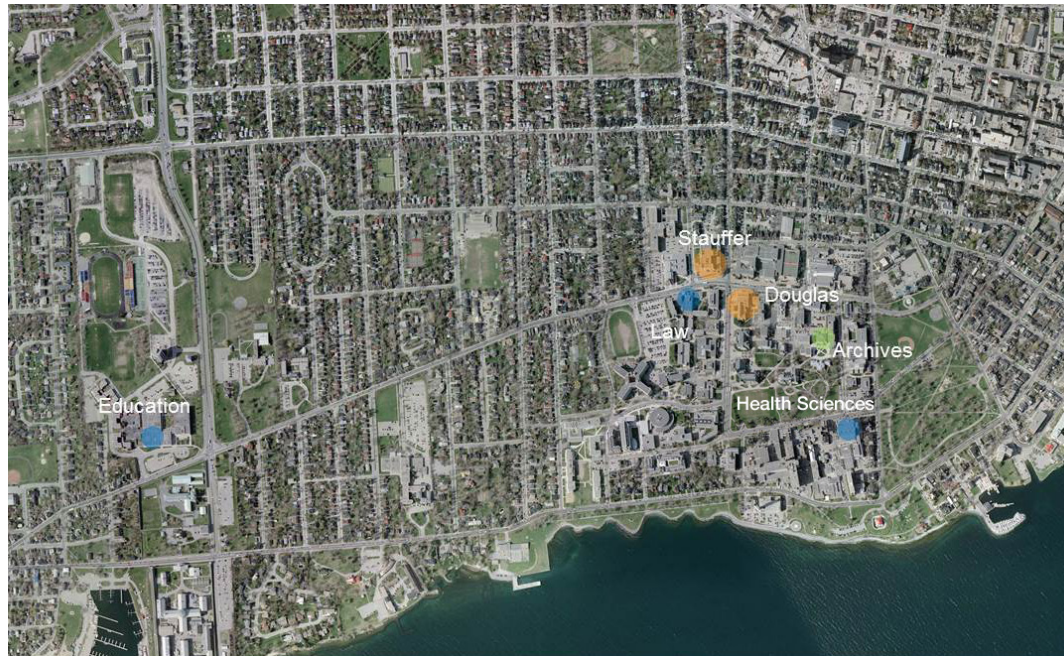
IMPLEMENTATION

The Library and Archives Master Plan is a living document, with a formal review planned for every five years over the next twenty years. The highest priority projects, the relocation of the Archives and the transformations of Douglas Library and Stauffer Library, are interrelated and phasing options are provided in the Plan. Recommended changes to the libraries in Faculty buildings can be implemented as separate projects, as funding and other considerations permit. It is intended that the Library and Archives Master Plan will be operationalized through Queen’s ongoing planning processes.

There are a variety of risks associated with not proceeding expeditiously with the recommendations of the Library and Archives Master Plan. These include risks with very high probability and very high impact: permanent loss of valuable research materials, sharply increasing costs of aging infrastructure, a deteriorating student learning experience and loss of competitive research edge.

The Library and Archives Master Plan sets out a strategy, building upon considerable existing strengths, to create an innovative and remarkable network of tangible, digital and human resources that will ensure excellence in research and wonderfully enrich the student learning experience at Queen’s.

2. STRATEGIC FRAMEWORK



Queen's University Existing Library and Archive Locations

Queen's is envisioned as 'the Canadian research-intensive university with a transformative student learning experience'. Strategic priorities relate to the student learning experience and research prominence, building upon the Academic Plan and the Strategic Research Plan, in an environment of ongoing financial sustainability. The Library and Archives at Queen's are at the core of the student learning experience, and are essential supports to, and measures of, the University's research and innovation capabilities. As unique public realms on campus they offer critical intellectual, cultural and social resources to support excellence in student learning and research. Enhancing these resources, and thereby enriching the student experience and improving the University's research infrastructure, is a primary goal of the Library and Archives Master Plan.

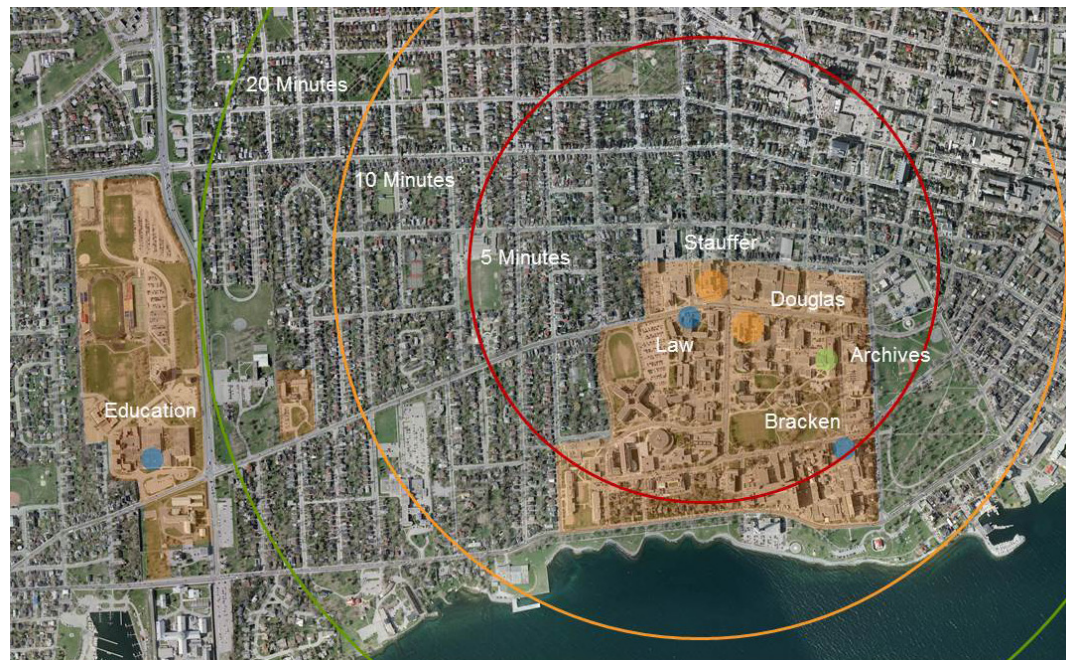
In its planning, the University has articulated a number of critical elements of its academic mission which have helped guide the Library and Archives Master Plan project, including:

- Queen's core activities – teaching, learning, and discovery – derive their nature and their significance from the University's strengths as a research community
- Queen's must develop all students' core competencies and skills
- Queen's must promote diversity, inclusivity, and equality
- Queen's must interact with local, regional and international intellectual culture, and foster global citizenship and engagement
- Queen's values collaboration, partnership and interdisciplinarity
- Queen's must retain and enhance its strong sense of community

To assist in realizing Queen's Strategic Framework, a Campus Master Plan process was started in November 2012, and is projected to be completed by February 2014. The intent is to create a guiding document for campus development, with possible growth opportunities to be explored and analyzed. Relevant points to the LAMP process which have emerged through the Campus Master Plan process are:

- It is expected that the main campus will reach its growth capacity within the 20 year LAMP time frame
- The area known as 'west campus' will be further developed as the home of more academic programs and will be more integrated with the main campus
- Technology is profoundly changing teaching, learning, and research and the way space is considered and used
- Interdisciplinary collaboration and a broader global horizon will be central to student growth and success
- Smart, strategic investment in building renewal will become an even more critical issue in an ongoing, fiscally restrained environment

The LAMP process has coordinated with the Campus Master Plan process, with the consulting teams each working closely together.



Queen's University Walking Distances from Main Campus

3. MANDATE AND KEY DRIVERS

The Library and Archives Master Plan's mandate is to provide a vision and framework for the development of Queen's University's libraries and archives facilities over the next twenty years. The dedicated staff, superb collections and expansive facilities of the Library and Archives provide the intellectual resources essential for academic scholarship, research and community engagement.

Key factors driving the Library and Archives Master Plan include: the need to align to current and emerging forces driving the evolution of the institution; the strategic positioning of Queen's in the forefront of student experience and research excellence; the inherent risks associated with aging infrastructure, including direct risks to the physical collection; and financial constraints creating a need for greater efficiency in the use of space and delivery of services. These factors are outlined in more detail below.

Evolution of the Campus

As strategic assets of the University, the facilities of the Library system both evolve with the campus and impact its future. The University's plans for changes such as increased enrolment must be reflected in the Library's plans. The LAMP team has worked with the Campus Master Plan (CMP) team since inception to ensure an aligned approach to the proposed uses and strategy for the Library and Archives facilities. It is intended that the strategic directions established by the CMP be mirrored in the LAMP outcomes. However, it may be that certain LAMP directions established in this report will need to be revisited as the high level concepts of the CMP are confirmed and then implemented over time. In particular, plans for the west campus will impact the Education Library, and the future of Botterell Hall, which is under review, will impact plans for the Health Sciences Library.

New Needs and Opportunities

Since the last significant library space planning at Queen's occurred, two decades ago, there has been a paradigm shift in the information landscape, resulting in profound changes in Library collections and services. With the proliferation of digital resources, there has been a corresponding decline in the use of print resources. As well, collaborative strategies to ensure long-term preservation and access for both print and digital media have been developed. Libraries around the world are changing their approaches to print stewardship, devoting less public space to physical collections and storing lesser-used but still valuable collections in storage facilities. A few recent Canadian examples that illustrate this shift are included in the Appendix of this report.

These changes in information access are coupled with a shift in pedagogy, with more emphasis being placed on inquiry, collaborative projects, experiential learning and blended models of course delivery. These approaches bring an increased demand for innovative, inspirational, technology-rich learning and study spaces. There is a need for more individual and group study spaces, with a variety of sizes and formats, as well as new types of learning spaces for formal and informal teaching.

In this landscape, the services of the Library and Archives have changed as well. Librarians and Archivists are spending more time with students immersed in the deep learning experiences of complex research questions and with instructors teaching information literacy, with researchers who need to access, share and preserve essential research data, and with campus partners who share similar interests in supporting learning and research. As services evolve, so must the configuration of related spaces.

Aging Infrastructure

The current Library and Archives system is housed within an aging infrastructure. The six buildings range in age as follows: twenty years (Stauffer), thirty six years (Health), forty one years (Education), fifty three years (Law), ninety years (Douglas), and one hundred and six years (Archives). It should be noted that 35% of the Library and Archives facility portfolio currently has a Facility Condition Index (FCI)¹ cost of more than 10% of the value of the buildings themselves. In all cases as well, the physical layout requires updating to suit the new conditions and opportunities described above. The risk of doing nothing to these facilities, or delaying improvement significantly, includes:

- Further deterioration to the building facilities
- Poor stewardship of the University's significant investment in Library and Archives acquisitions
- Facilities that are inadequate and do not address user needs
- Reputation risk and competitive disadvantage, with a drop in the perceived ability of Queen's to support research and the student learning experience
- Health and safety risks and accessibility barriers, with related legal liability
- Lost opportunities for optimization of prime campus real estate

The condition of the existing Library buildings notwithstanding, the intrinsic quality of the buildings themselves is excellent, and their value to the overall campus fabric is immeasurable. Their spaces are good, and have the potential for transformation into much more exemplary libraries, capable of meeting today's and future research needs. Building new libraries was not contemplated in this project due to fiscal realities and other known priorities for the campus, such as a teaching building and research facilities, and it should be noted that the renovations proposed are modest in comparison to the significant costs for new build options. Even for the Education Library and the Health Sciences Library, which are located within buildings with particularly aging or difficult infrastructure, investment in the existing spaces is still the recommended, most cost effective option. Kathleen Ryan Hall, however, as described later in this report, has such severe limitations and risks that investment in continuing its use as the Archives is not recommended. Whereas a new build option would be prohibitively expensive, it is possible to have a major impact across the entire Library system via a transformation of existing buildings.

¹ The FCI is a standard facility management benchmark that is used to objectively assess the current and projected condition of a building asset. The FCI is defined as the ratio of current year required renewal cost to current building replacement value. The purpose of the FCI is to provide a means for objective comparison of facility or building condition as well as allowing senior decision makers to understand building renewal funding needs and comparisons.

Risk to Archives and Special Collections

The Archives and Special Collections have a distinguished and unique nature. They are each considered a 'jewel' of the University, one that requires special care and stewardship to enhance long term preservation and access, as well as provision for future growth. A key driver for this planning is the need to improve the environmental conditions within which these collections are housed, namely by adding a sprinkler system and sophisticated temperature and humidity controls. Currently there is a risk that the wet sprinklers could accidentally discharge and damage or destroy the collections. In the longer term, an inadequate preservation environment would also damage the collection irretrievably. It is not possible to accurately evaluate the dollar value of these collections, due to the priceless and unique value of original historical records, and the value to the University in terms of enhanced identity and scholarship. Both the Archives and Special Collections are lauded by researchers for the strength of their collections. The risks noted above in relation to aging infrastructure are particularly severe in the current Archives facility: Kathleen Ryan Hall is one of a few buildings on campus with an FCI rating that indicates further investment is inadvisable.

Financial Sustainability

The financial sustainability of the Library system as a whole, given the challenging fiscal climate, is a key driver, and one which requires innovative approaches to planning. The LAMP project took into account space costs, ongoing maintenance costs and operating costs, both from facilities and service delivery perspectives. There is today the opportunity to add much needed learning and study space, as well as enhanced and more efficient services, within a reduced Library footprint.



Entrance to Stauffer Library

4. PLANNING PROCESS

The project was led by the Library and Archives Master Plan Steering Group, which began meeting in May 2012. Members included students, faculty and representatives of the Library, Archives and Queen's Learning Commons. This group oversaw the development of the Request for Proposals and selection of the planning consultants, and deeply engaged in all stages of the planning process beginning in November 2012. A small subset of this group formed the core group that interacted weekly with the consultants.

The planning process was based on a three phase methodology:

- Phase 1 – Discovery and Analysis – Data Collection
- Phase 2 – Exploration – Planning Options
- Phase 3 – Proposed Recommendations

The planning process was structured around a comprehensive consultative strategy and a thorough analysis of the physical condition of the Library and Archives facilities. The LAMP consultative process was broad and inclusive, iterative in nature, and captured a wide range of Queen's stakeholder feedback. Key issues and themes were identified in the consultative sessions, guiding the development of a series of design principles, and informing the recommendations of the Plan.

Phase 1 - Discovery and Analysis

During the Discovery and Analysis Phase the consultant team worked closely with the LAMP core group and the Campus Master Plan team to develop a detailed work plan and working schedule. Weekly calls and meetings were held to develop a management strategy and planning process, monitor project scope and schedule, confirm goals and objectives and arrange for exchange of pertinent documents. Over the course of five months the consultant collaborated with Queen's LAMP Steering Group, the Campus Master Plan team, Queen's stakeholders, and an expert team of sub-consultants. The consultant team consisted of specialists in master planning, archives and special collections, library planning, structural engineering, mechanical/electrical/IT engineering, costing, and digital technology.

The goal of the consultative process was to secure the widest possible participation from stakeholders. The focus was on listening, engaging, and supporting the participation of all stakeholders, with the objective to reach consensus on a shared vision. Throughout the consultative process, Queen's stakeholders were challenged to contemplate the strengths and weaknesses of each of the Library and Archives facilities and imagine the Library and Archives of the future, each participant drawing on their own unique perspective.

A wide variety of feedback gathering methods was utilized during the consultative process including:

- Conference calls and meetings with Queen's core group
- Workshop consultation sessions
- In-person and telephone interviews
- Digital media
- Print media

Workshops in the Discovery and Analysis Phase were designed to solicit feedback from both specific users and themed groups with the focus on each stakeholder's own space and specialty. Workshop presentations preceded each working session, to summarize and distill stakeholder feedback generated at previous sessions and present key issues to facilitate discussion. In addition, interviews with key individual Queen's stakeholders provided significant high-level feedback. Refer to the Appendix for a comprehensive list of all the consultation sessions during the Discovery and Analysis phase.

To broaden the consultative reach of the project, the LAMP website (www.queensu.ca/connect/lamp) was developed, in collaboration with Queen's core group and Queen's Marketing and Communications, and implemented early in the process. The website served both to disseminate LAMP information to a large university community and as a repository for feedback. LAMP posters were displayed on campus at open house events and in Stauffer Library to engage and inform stakeholders of the planning process. Key factors that emerged from the early workshop sessions included:

- Changing and critical role of Library and Archives staff and services
- Impact of digital technology and the need to integrate technology into the learning environment
- Storage and retrieval options for tangible resources
- Need to preserve and highlight valued collections
- Pedagogical changes
- Need for more individual and group study spaces including designated graduate space
- Intrinsic value of iconic library spaces
- Need to improve accessibility and engage the cultural diversity at Queen's
- Urgency to deal with aging infrastructure
- Need to find operating efficiencies and the importance of making cost effective investment decisions

Parallel to the consultative sessions was the undertaking of a thorough investigation and analysis of the existing physical condition and the programmatic potential of each of the Library and Archives facilities including:

- Visual survey and photographic documentation of all libraries and archives
- Review of existing building condition reports, operating costs, deferred maintenance and environmental assessments
- Review of existing building operation statistics – mechanical, electrical, architectural, structural
- Review of Library and Archives operation statistics – circulation, services, accessibility, technology, diversity and community
- Review of Library and Archives programmes – collections, services, study spaces
- Interviews with key facility and operations staff



LAMP Workshop

Emerging from this planning process, issues primary to the development of the Library system were articulated. These issues relate to the existing shortcomings of the Library and Archives as well as visions for the future. Key factors considered in planning, identified through stakeholder input and background information, are summarized as follows:

- Changing and expanding role of the Library and its services in facilitating information literacy and collection stewardship
- Critical role of Library and Archives staff, as the lifeline, or human face, essential to the learner's experience and scholarship
- Profound impact of digital technology on existing and future collections
- Availability and range of cost-effective storage and retrieval systems for tangible collections
- Need to better preserve and display valued collections
- Need to integrate technology seamlessly into the learning experience
- Significant changes to teaching and learning modalities
- Increasing and consistent demand for more individual and collaborative study spaces
- Blurring of the distinction between social interaction and learning
- Need for more dedicated graduate space to support scholarship and research
- Intrinsic value and emotional resonance of iconic library spaces as inspirational places for learning
- Serious accessibility challenges in all libraries except Stauffer Library, and the need to address new AODA (Accessibility for Ontarians with Disabilities Act) requirements in public spaces that serve the community
- Need to better engage the cultural diversity of the Queen's community and broaden the Library's outreach
- Aging infrastructure of the libraries and the calculated risks associated with a 'business as usual' approach
- Imperative to cost-effectively manage, and strategically invest, the University's limited financial resources to ensure a superb technology-rich future network of resources, that best supports the student learning experience and innovative research

Phase 2 - Exploration

During the Exploration Phase key overarching concepts were identified and a set of principles was developed from the analysis of the existing facilities and from extensive stakeholder consultation. Key issues identified in Phase 1 are addressed by the eight design principles: Library and Archives Services, Collections, Technology, Learning and Study Spaces, Sense of Place, Accessibility, Diversity and Community, and Facilities and Operations. Big picture planning scenarios and refined planning models were explored in this phase of the planning process.

Early workshops in the Exploration Phase examined 'big picture' planning scenarios. All of the Library and Archives facilities were explored in detail; proposed scenarios considered the following key factors:

- Consolidated library system vs. dispersed system
- Physical condition of the existing facilities, including accessibility and the building's upgrade potential
- Physical relationship of each collection to its users

- Intrinsic value of existing library and archives spaces, e.g. Douglas 1923 Reading Room
- Relationships between different collections, such as natural combinations and shared space efficiencies
- Library and Archives space needs similarities and potential overlap
- Location and type of library and storage facilities
- Public Realm – Library network of interior and exterior study and social spaces
- Relationship to the Kingston community, e.g. Archives use by the community
- Dovetailing of LAMP strategies with Campus Master Plan strategies, such as campus expansion plans

Each planning scenario was tested to determine whether the design principles had been addressed by the scheme. Workshop discussions with stakeholders resulted in the elimination of scenarios and the refinement of the preferred master plan scenario.

A draft programme of requirements for each library and archives followed the selection of the preferred scenario. In-person and telephone interviews were conducted to establish and confirm the programme. Workshops later in the Exploration Phase focused on the testing of proposed programme opportunities and collection space for each of the existing library and archives facilities. Workshops centred around consultation with specific Library and Archives stakeholders and the refinement of their specific facility.

Concurrent to the workshop sessions were detailed analyses of key library and archives issues, by Queen's groups and the consultants:

- Queen's LAMP Collection Working Group
- Architect/Queen's core group – Benchmarking examples
- Architect – Phasing strategy for discrete projects
- Structural Engineer – Structural analysis of discrete projects
- Mechanical and Electrical Engineer – Review of existing HVAC and electrical systems
- Cost Consultant – Costing of discrete projects

Phase 3 – Proposed Recommendations

The Library and Archives Master Plan is founded on the preceding informative stages of Discovery, Analysis and Exploration. The recommendations proposed are based on key issues that emerged from the extensive collaborative process with stakeholders. The Plan serves as a guide for the next stages in the transformation of the Library and Archives; a conceptual framework for an orderly approach to target investment in facility enhancements. The long term planning described in this report is intended to be an overview, with the modules for development described in a broad way. Some of the recommended interventions are sequential, dependent on the completion of other preceding activities or projects, while others could be autonomous and proceed independently. Some may be adjusted within the sequencing to suit greater or lesser emphasis or priority. A careful analysis of the sequencing is required in subsequent stages to ensure that a logical order of decommissioning and construction phasing is maintained.

The preferred planning option models demonstrate a transition to libraries with smaller physical collection footprints on campus, with the expectation of remote storage as required for less used items. Larger areas are shown devoted to learning and study spaces, and associated staff and partner services. As well, the new planning model looks at staff and services being closely embedded within the library space for greater access and assistance to students. The results of this planning process were used in generating collection, study, and services needs for the future. Additional planning process information is also contained within the Appendices.



LAMP Exhibit during Planning Process

5. DISCOVERY AND ANALYSIS

In the discovery and analysis phase of the planning process, the core components of the University's Library and Archives system – its collections, services, learning and study spaces – were carefully explored, resulting in the observations below. As well, existing facilities were closely examined for strengths, shortcomings and opportunities.

i. COLLECTIONS

Queen's Library and Archives are part of a vast information ecosystem, in which collections of scholarly resources and archival material remain central to research activities. The importance of these collections, both physical and virtual, is affirmed consistently by students and faculty through user surveys and many other informal and formal interactions. As one of the oldest universities in the country and a prominent institution in its local region, Queen's has considerable collection strengths.

The Library

Queen's Library presently has an overall collection of 8,057,646 physical holdings. Of these, approximately 2,668,997 are physical volumes, 1,133,638 are documents, 3,993,742 are microform, and 261,268 are non-book items. The growth rate in the physical collections is slowing. There was a 1.2% overall increase between 2005/06 and 2006/07, whereas the overall increase between 2010/11 and 2011/12 was .45%. These holdings are presently located within the campus libraries; Queen's does not have a dedicated Library storage facility. Annual regular circulation of these physical holdings has been declining steadily, from 265,000 per year in 2002 to 137,481 per year today, a reduction of 48%. This is due to dramatic growth in the availability and use of electronic resources, which by various measures shows an eight-fold increase in the same time period.

A key driver to this master plan process is the need to respond to the profound changes in how users access and interact with the Library's digital and tangible collections. These changes also provide a timely opportunity to develop a more comprehensive strategy for the presentation and enhanced preservation of print collections. It is recognized that there are limits to physical collection growth, and that digital publication, open access, and the virtual exchange of materials is becoming the dominant paradigm.



Collections

Past and Present Library Collection Development

Queen's Library has developed excellent collections over more than a century, and for the most part has retained physical volumes on open shelves for immediate access by users. The exceptions are materials designated as special collections and some low-use materials placed in very limited storage space in Stauffer Library. Issues with current arrangements, noted by users and librarians, include:

- Valuable historic materials currently on open shelves should be stored in preservation conditions
- Much of the space devoted to collections is occupied by materials used infrequently
- There is very limited growth space for new acquisitions
- There are limited opportunities for the presentation and promotion of the Library's superb collections for current learning and research.

In principle, the Library has a preference for acquiring digital over print resources, but in practice there are still some areas where print is preferred, for example in disciplines such as humanities or law where fewer publications are available digitally, where high quality images are important, where quality of the digital version is unreliable, or where print monographs are considered essential for academic study. The proportion of the acquisitions budget allocated to electronic resources therefore varies by discipline, presently ranging from Law at 13%, Education at 35%, Humanities and Social Sciences at 58%, and Engineering and Science at 92% and Health Sciences at 94%. Close to 65% of the annual budget is now directed towards the acquisition of electronic resources.

Along with the rise of electronic resources and corresponding decline in print circulation, there are increased demands for learning and study space and new expectations for user services and it is felt that a substantial portion of the collection space within the Library footprint should be repurposed for these other priorities. A reduced physical collection footprint is now commonplace in other research universities' policies and initiatives, as evidenced in various Canadian examples (see Appendix).

Re-Envisioned Library Collection Development Paradigm

To enhance accessibility, presentation and preservation of the collection and achieve a reduced collection footprint within Queen's Library, a new collection paradigm will be needed to guide collection growth. The Library intends to develop this new approach in consultation with stakeholders and based on a set of broad principles that rely upon new opportunities for storage of physical materials as well as a number of factors to consider in retention decisions. The application of these factors will address changes in physical collections over time, creating a reduced and then steady state or declining footprint on Library floor plates. Acquisitions and collection growth need to be balanced with removing items no longer appropriate for the open stacks.

This new paradigm assumes several layers of access:

- **Core and High Demand:** Materials supporting the University's academic and research programs will be accessible as electronic resources where feasible, and in open stacks if a physical medium is the appropriate format and use is relatively high. As much as possible assigned course readings will be available digitally to enrolled students through the Library's e-reserves service, which includes digitization of print materials according to copyright and accessibility guidelines
- **Special Collections:** Rare or special materials requiring greater security and preservation conditions will be housed in designated special collections areas accessible by staff. The existing criteria will be revised to encompass a larger selection, for inclusion in special collections areas, of valuable materials currently housed in open stacks
- **Local Storage:** Physical materials in the core collection that are used infrequently but are anticipated to be in demand periodically will be housed in storage spaces on campus, allowing quick staff access
- **Remote Storage:** Physical materials appropriate for retention in Queen's research collection, but in very low demand, will be housed in lower-cost storage facilities offering retrieval services with turnaround periods of a few days. Queen's is in the process of investigating potential arrangements with other academic partners for providing this off-site storage, looking at factors such as cost, retrieval time and management
- **Global Access:** Where Queen's has secure perpetual access to digital resources and/or access to physical copies held in other collections, and/or where other factors determine that retention is inappropriate, physical copies may be removed from Queen's collection

This layered approach requires consideration of a variety of factors to determine which type of access is appropriate for any item at any given time. Those to be reviewed in the consultation process may include:

Potential factors for monographs:

- | | |
|---|---|
| • dollar value | • electronic editions available with perpetual access guaranteed |
| • recorded use – circulation history | • faculty consultation |
| • recorded use – print versus digital editions | • book reviews |
| • relevance to collection strengths | • benchmarking against institutions with similar programs |
| • relevance to the curriculum/research | • citation analysis |
| • significance/relevance of previous editions | • inclusion in substantive subject bibliographies/core lists/digital repositories to which Queen's has access |
| • provenance (e.g. donation) | • discipline-specific requirements |
| • age – publication date | |
| • age – date of acquisition | |
| • physical condition | |
| • holdings at other Ontario/Canadian universities | |

Potential factors for bound journals:

- electronic edition available with secure backfile/perpetual access guaranteed
- holdings at other Ontario universities
- relevance to collection strengths
- quality and completeness of electronic reproduction

Queen's is signatory to the Ontario Council of University Libraries Thunder Bay Agreement which provides for the coordinated retention of last print copies of journals across Ontario. This type of coordination is also developing for monograph collections amongst various research institutions and across various regions, and it is anticipated that it will become a significant factor in the not too distant future.

In this LAMP process, an overall reduced physical collection footprint has been targeted. Based on the factors indicated above, and consistent stakeholder input, it is anticipated that most bound journals can be removed from the 'core and high demand' layer of access, the Library's open stacks. As bound journals account for approximately 20% of the overall stack area, significant space can be repurposed with this change alone. Further reductions are recommended through the creation of policies centered on management of the collection as described above, for a total of approximately 38% reduction in collections space or 48,740 square feet.

Over the next twenty years, this revised campus collection footprint is anticipated to remain stable or decline over time, depending on the future level of reliance and transition to e-resources. In order to maintain this upper limit to campus collections space, it is recommended that existing Queens' policies be built upon and further codified, through a comprehensive collection development paradigm as outlined above. This strategy should define and quantify retention priorities for print material, and provide recommendations for enhanced accessibility, presentation, and preservation of collections.

Archives and Special Collections

The Archives and Special Collections share similarities with the Library's core collections, but they also need distinct consideration. These two jewels of Queen's are dedicated to preserving rare or unique materials or items of special provenance, in an ever-widening range of formats, both for the information they contain and for the intrinsic value of the items themselves. The fundamental objective in maintaining these materials is to support the teaching, learning and research goals of the University and to build a valuable record for the future, for individual scholarship, research and community benefit.

The unique nature of the material in the Archives and Special Collections warrants a renewed focus for the University, both in promoting and highlighting collections and improving research opportunities and access. Improving the preservation environment to ensure long-term survival of the material is also a priority, as well as providing for future growth and storage needs. These goals are topical for many similar university institutions, and special collections and archives are now a key focus area for the Association of Research Libraries (ARL).

The shared goals and unique set of requirements of both Archives and Special Collections support the possible synergies and rationale for locating the two together, in one exemplary facility, as described in this Plan. To continue their vital role within the University into the future, the Archives and Special Collections need to:

- provide built-in growth capacity for collections
- enhance the quality of the environmental and security measures
- expand access through increased displays of their holdings and opportunities for educational outreach
- enhance their capacity for active conservation and preservation efforts
- enhance their application of digital technologies to document and provide access to the collections

Both the Archives and Special Collections currently experience significant growth within very limited space. In forward planning, the factors for expansion can be based upon an analysis of the past growth of collections, but cannot fully predict the growth of the collection over twenty years. Based upon the analysis of current collections growth trend factors and the plans for a renovated on-campus facility as described later in this document, the need for additional off-site storage will become important in about fifteen years and critical after twenty years. The ongoing review and revision of policies will be critical in managing and predicting this growth.

Well before this urgency arises, consideration should be given to which materials need to be held on the Queen's campus, and which are candidates for off-site storage. In considering storage options, Queen's will also want to consider a long-term collections digitization program that would enable online viewing, not to replace physical materials but to help determine when physical access is needed for the research question at hand.

The matter of off-site storage for Archives and Special Collections can be examined in concert with the storage requirements for the Library's core collection, though two important aspects should be noted. First, the preservation conditions of any storage facility are of paramount importance for archival and rare materials. Second, a recent review of the records management program recommends that the University conduct a thorough examination of storage needs and options for university records, which may be destined for eventual disposal rather than archiving, according to records retention policies.



Archives Collection

ii. SERVICES

The rapid evolution of information technologies has had, and will continue to have, a profound impact on the delivery and types of services offered by the Queen's Library and Archives. Technology has fundamentally changed not only the access to, and amount of, information available, but also the means to share, create, manipulate, store and preserve that information. This seismic shift in the availability and potential of broadly sourced information has equally changed today's learning and study landscape, for example by enabling new course delivery models such as blended learning, and it has further emphasized the role of the librarian and archivist in that landscape in assisting learners and researchers in the use and development of the broad spectrum of resources for information discovery, access and creation.

This shift in turn has significant implications for the disposition of space. Library and Archives staff have moved more significantly to the forefront of educational leadership, assuming a critical role in supporting the culture of scholarship, research and innovation in the University's mission. As such, the physical location of librarians and library staff within their libraries, as foreground participants embedded with the learners, is both functionally and symbolically of great importance. The proposed renovations to all of the libraries at Queen's have sought to move Library personnel into those more accessible and helpful locations, within each library's footprint, to encourage more interaction in support of the student learning experience. The future detailed design execution of those spaces should ensure, as a priority, that all staff areas are configured to have excellent air quality, generous access to daylight, views, and the requisite functionality of their work and meeting spaces.

The exemplary services and partnerships of Queen's Library, as evidenced by their popularity and heavy use, are perhaps best highlighted by the success of Queen's Learning Commons. Just as the profile, range of skills, and contributions of Library staff has intensified with the educational changes initiated by technology, so too will the demand to include an expanded as well as more diverse range of services in all of Queen's libraries. This could include new partnerships compatible with a particular library's focus, or relocated services to broaden the skills of both students and faculty.

The proposed renovations recommended for each library have indicated an increased area for learning and study space as well as enhanced and expanded services, and offer a potential breakdown and relationship between the two for each library. The space allotments as shown for services were calculated to accommodate current staff and potential new partnerships, however they are conceptual at this stage; further analysis at the time of renovations will determine the detailed needs and placement of particular services. What can be stated with confidence, at this planning stage, are the larger or higher-level ideas about services as they are foreseen over the next many years. Specifically:

- The Queen's Learning Commons is a successful and critical provider of essential services that should and will expand to offer more services with more robust technology
- The proposed renovations to the Stauffer Library's second floor envision a unique opportunity to assemble, in a collaborative work and study environment, an extraordinary alchemy of service spaces including embedded staff
- The LINQ concept, as a new network of learning and study communities, envisions, in each, the virtual connection to the Library system's considerable resources
- Services, such as adaptive technologies, which are essential to ensuring the equitable access to all resources in the Library system, must be a priority for each library
- The development of the Douglas Library as a new Centre for Digital and Print Culture, a focal point of knowledge and research housing the joint Archives and Special Collections, has the potential to include and attract new services and partners
- The recommended renovations to Law, Health Sciences, and Education are intended to provide improvements to existing services and new opportunities through reorganized space planning

In the floor plans of the proposed plan, most of the service areas shown do not identify particular occupants. A partial list of existing and potential services which could be incorporated in the services space allotments in proposed floor plans include:

- | | |
|---|--------------------------------------|
| • Embedded staff offices and common areas | • Writing Centre |
| • Staff counter service points | • Learning Strategies Development |
| • Student/Librarian group meeting space | • IT Services Support |
| • Interview/One-on-one rooms | • Centre for Teaching & Learning |
| • Conservation Lab | • Union Gallery |
| • Digitizing Studio | • New Media Centre |
| • Photographic Studio | • Digital Humanities Research Centre |
| • Printing Press Studio | • Queen's Research Data Centre |
| • Adaptive Technology Centre | • Queen's Quarterly |
| | • McGill Queen's University Press |



Services



iii. LEARNING/STUDY SPACES

The Library and Archives Master Plan addresses the critical role of the Library's learning and study spaces in fulfilling Queen's strategic objectives as a research-intensive university with a transformative learning experience. Through the analysis and discovery phase, including extensive stakeholder feedback, several important trends for learning and study spaces were identified which have informed the recommendations of the Plan.

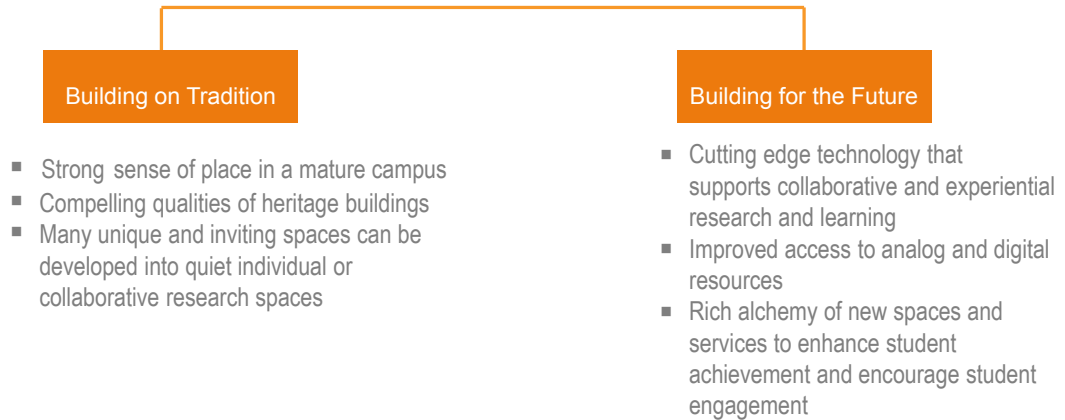
- The availability of individual and collaborative study space for graduate and undergraduate students in the libraries and archives is "stretched to the limit" - a problem most acute mid-term and during exam periods, but evident throughout the year
- The demand for a variety of study spaces, from individual carrels to group study settings, within the libraries, and, in general, on campus, is only increasing, and will continue to do so for the foreseeable future
- The campus needs more alternative learning spaces, outside of the registrar controlled classrooms – spaces which can enrich individual exploration and foster collaborative and interdisciplinary learning and innovation
- The demand for digitally based learning spaces, with more robust and immersive technology, which will support hands-on, project-based learning, is also increasing
- The distinction between social interaction and study and learning has become blurred, and the essential opportunity for the library of the future, as the University's intellectual public realm, is to provide the common ground for this new interactive way of learning
- The University is part of a global digital research community in which the Library and Archives play an integral role
- Learning spaces and opportunities are an essential component of the university's community outreach
- The quality, robustness, and adaptability of furnishings is an increasingly important aspect of, and support to, learning and study spaces

The transformation of Queen's existing libraries to increase the availability of well-equipped learning and study spaces will significantly contribute to supporting the vision of Queen's University as a balanced academy. The proposed designs leverage each library's most admirable qualities, which in several cases are their heritage characteristics. Each building has been considered in terms of its

- spatial possibilities
- access to daylight and views
- unique or distinguishing qualities
- acoustical properties
- infrastructure capabilities or shortcomings.

These were all considered key factors in determining where, and how best, to most cost effectively, locate new learning and study spaces.

Library and Archives Master Plan



Twin aspects of a successful Plan

The Library and Archives Master Plan has recognized, through the proposed design transformations, the need to provide a broad range of learning and study spaces within each library in order to offer both individual and collaborative spaces that are responsive to a variety of study styles and behaviours, from contemplative to socially engaged. The Plan also recognizes the serious shortage of dedicated graduate learning and study spaces and recommends that new and significantly more space be created, particularly in the Douglas and Stauffer Libraries, dedicated to graduate scholarship and study.

The increasing demand for more study space, coupled with the need to provide new technology-rich learning environments, has been a key driver to exploring alternative space configurations. The existing libraries, with the exception of Stauffer, offer limited opportunity to expand in rational increments of size where demand arises. The recommended plans to transform each library maximize learning and study spaces in the areas vacated by stacks. The adequacy of this supply will be revisited every five years through the course of the LAMP implementation. However, the transformation of existing buildings is only one part of the two-part plan for study space. The strategy to create a more agile, user-centred typology of study communities ‘woven’ into the campus fabric, is a response not only to the significant demand for study space, but also one which aligns conceptually with the evolving attraction and use of campus space based on social geography rather than discipline.

The proposed transformation to new and expanded study space through the proposed library renovations and the Library Information Network at Queen’s (LINQ) will create a dynamic and enriched library infrastructure. This will be an important factor in the Library and Archives Master Plan, in helping ensure Queen’s University’s continued leadership position in attracting the best and the brightest of faculty and students. The transformative construction of these spaces, in libraries and LINQs, however, is only one half of the equation for their success. The functionality and attraction of both the new study and learning spaces will depend equally on the quality of their furnishings and equipment as supports to scholarly research and collaboration.

The Library and Archives Master Plan, as a key principle, has sought to rationalize and optimize space use and operating costs in order to allow for the ongoing and sustainable investment into the best, most effective library technology and furnishings for exemplary learning and study environments. These spaces will, in the future, continue to be more dynamic and malleable than similar spaces from libraries of the past. The ability for learners to move, reconfigure, cluster in groups, spend long hours comfortably in one place, or vacate a space to allow for other uses, such as exhibits, are all essential considerations in the selection of furnishings. As a major component of the learning and study experience, the selection of furnishings is as critical a factor as the design of the space itself.

In the recommended library transformations proposed for the Plan, most of the learning/study areas do not indicate particular types of uses. A partial list of existing and potential features which could be included in the learning/study space allotments as shown could include:

- Individual study areas/carrels
- Study 'pods'
- Lounge seating
- Open study tables
- Group quiet study rooms
- Lounge rooms
- Reading rooms
- Collaborative group study rooms
- Interactive meeting rooms
- Outdoor seating
- Learning Commons
- Graduate Student Commons
- Faculty Commons
- Multi-purpose room/theatre
- Screening room
- Studio/workshop
- Immersive media labs
- 3D printing
- Peer to peer tutoring interview rooms
- Project rooms
- Technology 'sandboxes'
- Large interactive classrooms (100)
- Interactive seminar rooms (50)
- Flexible open/closed classrooms
- Exhibitions and displays
- Gallery Spaces
- Café/food services
- Event spaces
- Speaker's Corner
- Outdoor meeting/gathering spaces
- Library Town Square



Learning and Study Spaces



6. PROPOSED PLAN

i. VISION

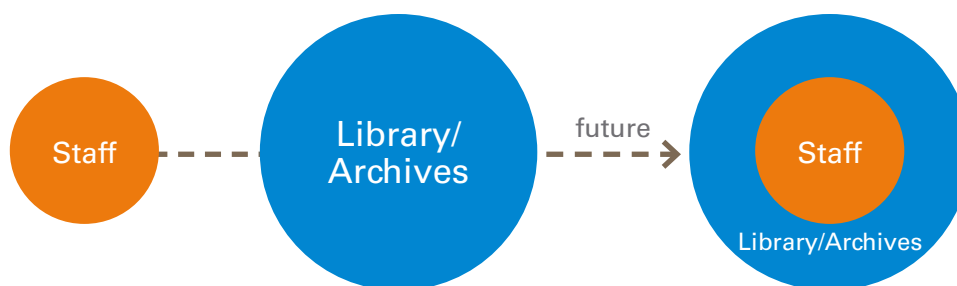
The Library and Archives Master Plan outlines a planning framework that envisions over the next 20 years a transformed library system at Queen's built upon its solid foundation of superb services, collections and spaces. This intellectual network will inspire discovery and enable creativity, from its welcoming presence at the academic crossroads of Queen's to its intimate spaces across the campus and its virtual presence around the world. It will offer expanded and enhanced learning and study spaces, promote and preserve collections, leverage technology, embed and expand services into more open and accessible spaces, and evolve to meet the changing needs of the 21st century learner and researcher. When implemented, the Plan will significantly enrich the student learning experience and research at Queen's and expand the Library's reach to more fully engage Queen's broad and diverse community.

ii. KEY PRINCIPLES

Through the analysis and discovery phase, and with the benefit of considerable stakeholder feedback, a number of key principles were developed as the framework throughout the Plan.



Queen's Learning Commons



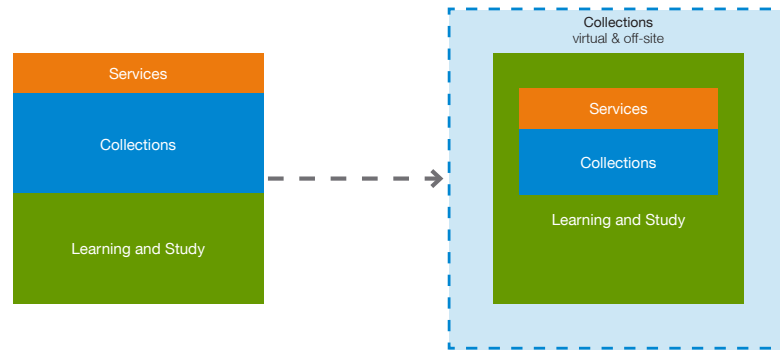
Services Planning Model

Library and Archives Services

Deploy strategically the resources required to enable cost-effective delivery of library and archival services to the 21st century learner and researcher.

The past twenty years has witnessed significant changes, both planned and unplanned, to the Library and Archives at Queen's University. The next twenty years, with rapidly evolving technology, promise to produce even more change. What hasn't changed from the past are the financial constraints under which universities operate. The Queen's planning documents prepared in 1997 to guide the Douglas Library development described limited fiscal resources very similar to that of today. The need to invest strategically and cost-effectively in the Queen's Library and Archives has never been more evident. The efficacy of operations of each library, and the optimal use of space, are all equally significant factors in the singular goal of a socially, financially, and environmentally sustainable Library and Archives Master Plan. **While the collections are the foundation of intellectual scholarship at Queen's, it is the services and partnerships that the Library and Archives provide that are essential to nurturing and enriching the student experience and building research capacity.** The staff of Queen's Library and Archives have been described as the lifeline or human face to services and resources. The existing arrangement of segregated staff spaces in several of the libraries alludes to an older, more space-intensive, and less relevant model of the librarian, archivist or staff role. Today, they are embedded in the curriculum and in research teams whether in person or digitally, and this integration should be extended to include their physical presence in library and archives facilities. They should be close to the learners, and easily accessible as befits a vital relationship within the broad service spectrum offered by the Library and Archives.





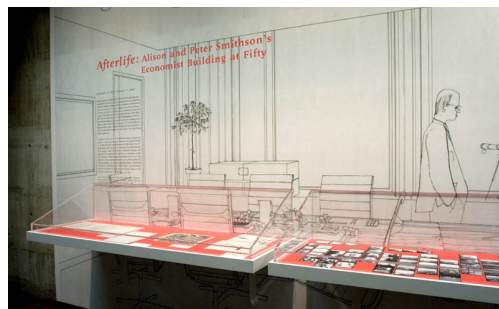
Future Collections Planning Model

Collections

Develop a new collection paradigm that supports learning and research through improved accessibility, presentation, and preservation.

Queen's diverse and superb collections are at the core of scholarship and research. A comprehensive collection development paradigm directed to curation and stewardship will enhance the access to, and preservation of, those collections. While today many information resources are available digitally, the printed word or image is equally significant for many disciplines. The presentation and preservation of special and rare collections and archival documents not only benefits the scholar, but can reach beyond the boundaries of the University, to engage the community. Notwithstanding the value and primacy of tangible collections and their place in a balanced collection development strategy, the primary focus for collections has shifted to a digital landscape with the proliferation of electronic resources and web-based access options to these materials. This increasingly prevalent digital access in ever-increasing multiple formats, in tandem with a range of options for off-site storage and retrieval on less valuable real estate, makes the reduction in the amount of Library space occupied by tangible resources a realistic and desirable option. The challenge today is to develop a reconsidered collection development paradigm as a critical management tool – a strategy that considers the delivery of information in a holistic approach to both the physical and digital realms. This strategy should address acquisitions, demand and use frequency, access, storage options, interlibrary loans, collection growth, presentation, preservation, and collection support.

A comprehensive collection paradigm will not only enhance and ensure the best stewardship of the University's collections, it will also provide the guidelines for the consolidation and repurposing of large areas of stack space for other vital services and uses.



Technology

Integrate new technologies seamlessly into the delivery of services and the creation of dynamic learning and study spaces.

Technology evolves rapidly and what is new technology today is obsolete tomorrow. Strategies to incorporate technology for the learning, teaching and research spaces of modern university libraries and archives have to acknowledge this dynamic by incorporating design elements that not only support current technologies, but also emerging technologies and anticipated future advances. Students, teachers and researchers are also changing the ways in which they access and source information from global data bases and other digital intellectual resources. This strategic change from local to worldwide resources is shaping the infrastructure of modern libraries and archives. Technology today offers more questions than answers, and predictions about specific future technologies will be of limited value for system planning. There is, however, an imperative to embrace technology, understand its potential and recognize with planned flexibility the need to allow for change.

Queen's has fully recognized this mission as an integral part of the solution for supporting new directions for teaching, learning and research in a digital age. The Library is aligned with IT Services in advancing this mission, and the inclusion of robust technology for all of Library and Archives facilities and services is a key principle of planning. Seamless, user-centred access, across a wide spectrum of different smart devices, operating systems and device functionalities is essential for the effective acquisition, utilization and sharing of digital information and electronic resources. Adaptive networks, mobile and other devices, and expansive cloud technologies will provide a climate that empowers students, teachers, and staff to access everything that university libraries and archives have to offer in the global information network.

Library users have been well served by investments in technology to date, with excellent public computing infrastructure and information management systems. **Technology investments will become even more important as digital needs and opportunities continue to emerge.** Collaborative learning in physical or virtual space and peer mentoring teaching models require display technologies that permit information to be shared within groups. Integration of personal devices with projection, flat panel displays, interactive touch screen displays or gesture enabled devices, 3D simulations, or other multi-media presentation platforms are recommended for these transformative learning practices. Distance learning through online videoconferencing courses and tele-presence technologies can bring students, teachers and researchers together on a global scale, and has unprecedented potential to increase outreach learning opportunities. Many researchers working with digital information now require wall-size high resolution displays for data visualization, resources that are costly for any single research team but effectively offered in the interdisciplinary realm of a library.



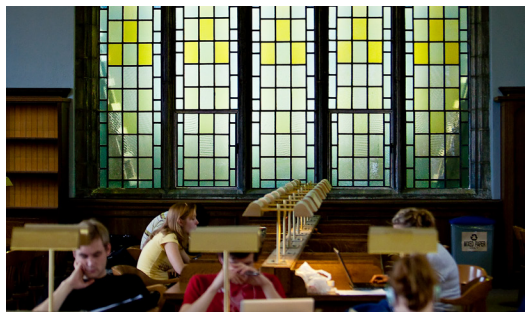
Learning and Study Spaces



Increase the number of individual and collaborative learning and study spaces to better support scholarship and research.

Queen's libraries are heavily used as places for learning and study. This indisputable fact is visually evident, as well as supported in word and image, by both students and staff. It belies the space analysis of COU metrics as provided for in the current Campus Master Plan study by Rickes Associates Inc., which indicates a modest surplus just under 2000 square feet of study space available within the Queen's campus as a whole. The two types of study space have been grouped together as one category. This data can be interpreted in a number of ways, as no detailed breakdown is available on the areas provided for as study space within the libraries, as compared to the totals for study space outside of the libraries in other buildings. **Without question, the space available within the libraries used for study is at capacity, with seats at carrels and group tables and bookable group rooms in very high demand.** Queen's libraries are places where students want to be – studying, learning, researching, and socializing. Demand for study space is expected to increase, as Queen's enrolment planning brings more students to the campus, and Library services and amenities are improved.

Sense of Place

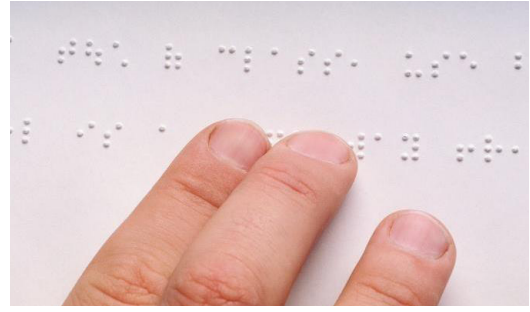


Restore, transform, and realize the potential of underdeveloped library and archives spaces to provide memorable places for social and intellectual encounters and discovery.

Our best and most valued libraries and archives, whether modern or steeped in tradition, are those with spaces that inspire us as places of knowledge and creativity. Queen's is fortunate to have libraries with several such spaces that attract students and reside in their memories as part of their Queen's experience long after they have left the campus. The list could include the Douglas Library 1923 Reading Room, the Stauffer Library Fireplace Reading Room, and the Law Library Reading

Room. Still, there are many more spaces, as yet underdeveloped, but potentially as remarkable, within the Queen's libraries that could be transformed, with imagination and care, to create new, equally remarkable places for study and research.

Accessibility



Provide safe, secure, and universally accessible learning and study environments in all campus libraries and archives.

The libraries and archives at Queen's University represent the intellectual public realm of the campus, where both the perception and reality of access to information and resources, digitally and physically, must be seamless. Accessibility is a broad, diverse concept, protected by laws and standards and intended to ensure that people of all abilities are afforded equal access to all of the resources of a particular place without imposed limitations by the built or natural environment. Queen's Library and Archives buildings, with the exception of the Stauffer Library, present to varying degrees significant, actual and perceived accessibility challenges, which must be addressed as a LAMP priority policy recommendation. Adaptive technology should be added to each library, as well as barrier-free access improvements. In terms of legal compliance with the Accessibility for Ontarians with Disabilities Act (AODA), requirements for the built environment and for information and communications standards are particularly urgent.

Diversity and Community



Welcome and recognize cultural diversity and community outreach through partnerships and programming.

As Queen's looks abroad to expand its reach to the larger global community and welcomes more international students to its campus, it will seek ways of engaging its local community and student

population and the diversity of cultures that comprise it. The Library and Archives can play a significant role in this important mission. Outreach opportunities could include inviting appropriate new partners into library and archives spaces, offering exhibit and meeting space to groups such as Four Directions Aboriginal Centre or the International Centre, hosting special events and speaker workshops, supporting emerging publications, programmes and digital integration, and providing expanded community access to Library and Archives resources. Providing cultural naming opportunities for particular library spaces would be another way for the libraries to help recognize the diversity of the community. Particular Library and Archive collections of unique value could be highlighted and showcased, to encourage study in perhaps under-recognized areas of scholarship and research, or to celebrate their diversity.

Facilities and Operations



Develop a comprehensive and sustainable strategy for the facilities and operations of the libraries which aligns with the University's academic mission.

The annual operating budgets of the Libraries and Archives buildings represent a considerable financial commitment from the University. The existing buildings vary in age and condition, ranging from the most recent, the Stauffer Library, constructed in 1994, to the oldest and most deficient, Kathleen Ryan Hall, constructed in 1907. In the current and likely future environment of fiscal constraint, consideration of the deferred maintenance costs, risk assessment, as well as the long term potential of each facility is of critical importance in developing a comprehensive and sustainable Library and Archives Master Plan.

An analysis on how effectively the key planning principles might be implemented in each building can be used to measure the value of future investment into each of these existing facilities. Can these buildings be reasonably adapted to accept new technologies, upgrades for universal accessibility, or improved security as required? It should be possible to make changes to interior planning to more readily accept new services and expand existing resources. Opportunities to create the more intangible "qualities of place" within existing spaces, through transformative renovations, should be explored. Significant on-going risks to deferring maintenance or long-term building status decisions, that could jeopardize the valued contents, should be reviewed. Our recommendations to retain and invest in each of these libraries, with the sole exception of Kathleen Ryan Hall, affirms our confidence in their value for satisfying these principles, and in delivering the long-term benefits that will enhance the University's academic mission.

Proposed changes, from what could be described as modest interior improvements in some of the libraries, to the more major renovations proposed for the Douglas Library or Stauffer Library or the removal of Kathleen Ryan Hall from the portfolio, must be based on sustainable design strategies. This would align completely with the University's mission to achieve a reduced environmental footprint, and support the imperative of reducing long-term building maintenance and operating costs. Greener, more robust materials, resilient planning, and energy-efficient building systems must be the mandate and point of departure to any renovations. Furnishings are, and will continue to be, an essential component to every facility as the Library and Archives seek to provide more comfort, mobility, and flexibility in supporting collaborative seating arrangements and longer hours spent seated in study spaces.



Group Study Room

iii. OVERVIEW

The Library and Archives Master Plan recommends specific changes to the existing facilities and to the campus fabric, both to buildings and open space, to create a transformed library network. Various planning options for facilities were explored with the stakeholder groups, through the planning process described earlier in this document, resulting in a set of preferred options that form the proposed plan. Each of the proposals has phasing and timing expectations associated, as well as budget projections. The drawings and descriptions of proposed changes to the existing floor plans of all libraries should be considered as high-level planning recommendations intended to establish the concept of a transformed library, and would be subject to further detailed analysis and design development as the next step in the design process.

Following is an outline of planning outcomes:

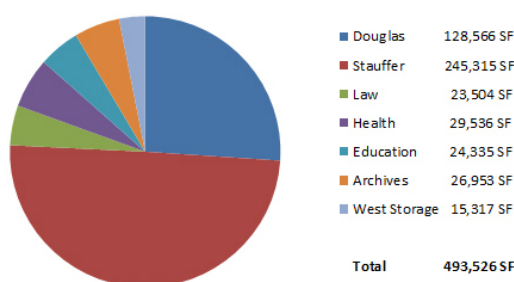
Broadly:

- 25% increase in study space in existing libraries (including 117 group rooms, up from 44)
- Enhanced access, presentation and preservation through re-envisioned collection paradigm
- Transformed Douglas Library and Stauffer Library, twin aspects of the balanced academy, and a proposed new Library Square, as magnetic elements of Queen's public realm
- Proposed Library Information Network at Queen's (LINQ)- a new typology of library, existing and future
- Reduction by 10% of current Library space

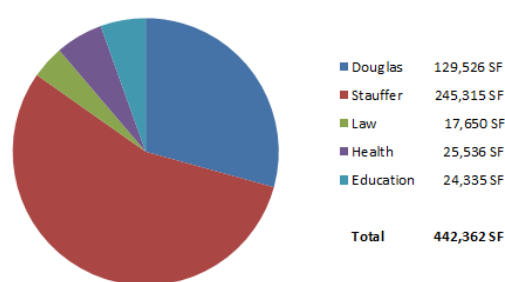
Specifically:

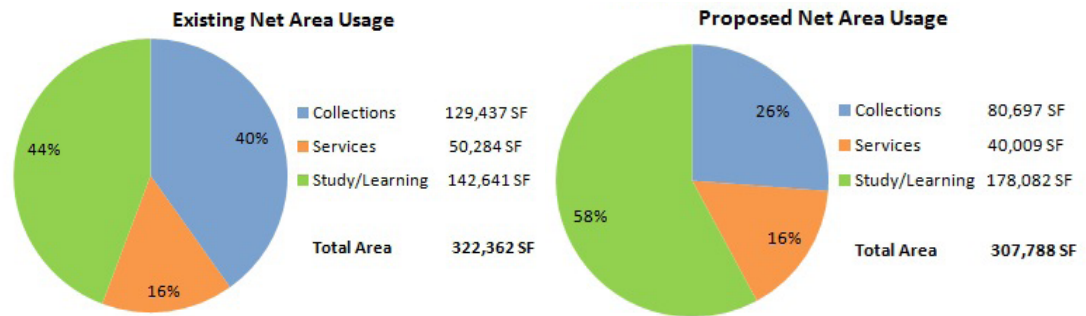
- Close Kathleen Ryan Hall, as an inadequate building for the Archives
- Close West Campus Storage Facility as unnecessary with increased storage capacity of new Douglas Library
- Relocate the Archives to the Douglas Library to join with Special Collections, with a renovated, inviting, joint research and exhibit space
- Transform the Douglas Library into a Centre for Digital and Print Culture with repurposed or added space for new academic partnerships, services and study
- Leverage the distinguishing features of Stauffer Library to significantly expand and enhance the provision of learning services and study spaces, as well as outreach to the community
- Strengthen and transform the Libraries in faculty buildings with enhanced learning and study space, more robust technology, and upgrades to infrastructure where required

Existing Library Buildings Gross Floor Area



Proposed Library Buildings Gross Floor Area





Following are proposed plans for each facility. The standalone buildings of Douglas Library and Stauffer Library, and the proposed Library Square, are associated with each other and represent a larger scale category of library infrastructure that provides a welcoming presence at the academic crossroads of the campus. The smaller libraries in the buildings of the Faculties of Law, Health Sciences and Education are presented as part of a strategy for a learning and research network of more intimate spaces across the campus, along with a new typology of library space, in the section titled Library and the Campus Fabric.

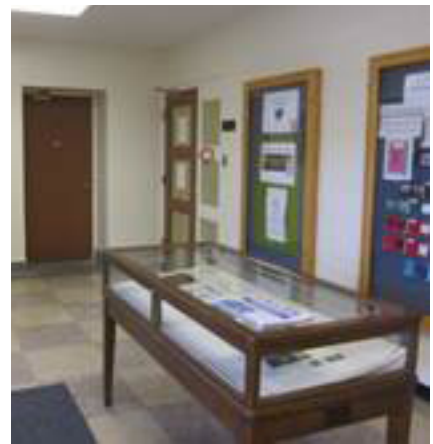
iv. LEARNING AND RESEARCH AT THE CROSSROADS

The intersection of University Avenue and Union Street is the site of two of Queen's signature buildings, Douglas Library and Stauffer Library. The transformations proposed for each of these facilities reinforces their existing strengths in contributing to research prominence and the student learning experience, the pillars of the balanced academy. It is envisioned that the combination of these two libraries and the public realm surrounding them will welcome, inspire and support the students, staff, faculty, alumni and friends of Queen's.



Intersection at Union Street and University Avenue





Kathleen Ryan Hall

KATHLEEN RYAN HALL - EXISTING ARCHIVES

There are severe limitations and risks to the existing Archives. It is recommended that the Archives collection and operations move to the Douglas Library to be joined with Special Collections in an expanded and renovated facility providing the environment required for research and preservation of the collections. Our analysis of Kathleen Ryan Hall can be summarized as follows;

Analysis

- Kathleen Ryan Hall was built in 1907, renovated in 1982. It has very high operating costs and a very high FCI* index and would require extensive remediation
- Collections spaces are presently full beyond capacity
- No fire suppression systems within the vaults, placing the collections at risk
- Existing environmental controls that are in place offer limited capacity for providing conserved air to the collections and do not respond to a variety of conditions according to the needs of the collections
- Existing research facilities are limited in study and learning space
- Very limited capacity for display and exhibition of the collections
- Modest use of digitization of the collections and limited digital access to collections
- Very limited security surveillance of the study areas and throughout
- Severe spatial limitations for processing newly acquired archival materials
- Serious and rapidly accumulating processing backlog is held in compromised conditions
- Physical barriers to accessibility at the entry to the building
- Physical barriers to accessibility within the building due to the vulnerability of the aged elevator
- Floor plates are very small and make it impossible to locate staff together in larger, more effective, collaborative work environments

Opportunities

- Kathleen Ryan Hall is adjacent to one of the few development site opportunities for the campus

¹ The FCI is a standard facility management benchmark that is used to objectively assess the current and projected condition of a building asset. The FCI is defined as the ratio of current year required renewal cost to current building replacement value. The purpose of the FCI is to provide a means for objective comparison of facility or building condition as well as allowing senior decision makers to understand building renewal funding needs and comparisons.



Douglas Library



DOUGLAS LIBRARY

The Douglas Library, the University's first purpose-built library, has, over time, undergone the most significant changes of any of the campus libraries. As an exemplar of Queen's Collegiate Gothic heritage style, it occupies not only an important place in its history, but also a pivotal place on campus. Our recommendations for this library involve significantly more change – change that we believe will provide a most complementary synergy of uses within this building, joining together Special Collections with a new Archives. As one of the campus's pillars to the University's mission of a balanced academy, the Douglas Library is envisaged as a new, remarkable Centre for Digital and Print Culture, with the Stauffer Library, the other pillar, equally enriching the student learning experience. Both buildings will offer more expansive space dedicated to graduate students and scholarship, as well as many more and varied undergraduate study spaces. Both will equally extend their reach to the campus and greater community beyond, through new partnerships, programmes, and event spaces, and by opening their doors to Library Square.

Analysis

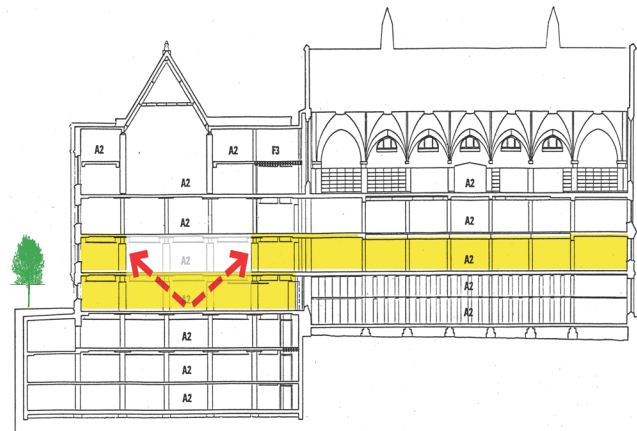
- Built in 1923, addition in 1964, renovated in 1996, renovated again in 1999
- Houses the Engineering and Science Library and the Jordan Special Collections and Music Library
- Attractive heritage building with one of the campus's most iconic and student beloved spaces – the 1923 south Reading Room
- Building comprises two architecturally consistent, but minimally connected wings, constructed over 40 years apart. Dense existing programme of uses, coupled with a tight structural grid of columns and low ceilings, contribute to a heavy, cluttered, and somewhat ordinary impression of what should be a more generous, transparent, and remarkable building
- No powerful sense of place upon arrival in the building
- Underdeveloped and unattractive north Reading Room
- Original inaccessible street entrance to the building's south wing by staircase is closed, remaining as an orphaned vestige of the past
- No access to the unused rear terrace
- Poor accessibility

Special Collections

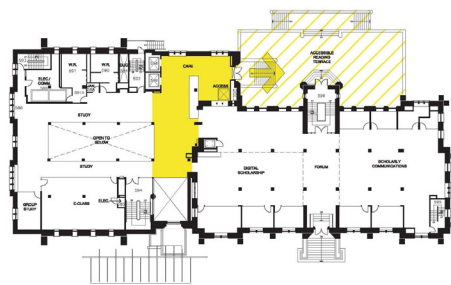
- Collections spaces are now at capacity with overflow within the stacks
- Size limitations within the existing stacks, limiting storage capacity regarding oversize collections and folios
- Storage of the collection is not optimized, according to the content, but rather stored where available space can be found
- Fire suppression systems in the stacks are highly vulnerable due to the low mounting height of the sprinkler heads, and the exposure to potential accidental damage and activation, and due to the use of a wet pipe system over the rare books (conditions contrary to current best practice)

- Existing environmental controls have limited capacity for variety of conditions, and are very vulnerable to seasonal swings in relative humidity, placing the collections at risk
- Library services would benefit from enhanced research spaces and educational spaces
- Limited capacity for display and exhibition of the collections
- Modest use of digitization / digital access to collections
- Limited security surveillance of the stacks causes vulnerability of rare and valuable collections
- Spatial limitations for processing new materials

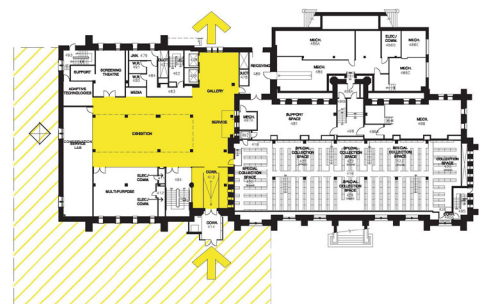
Recommended Concept Designs



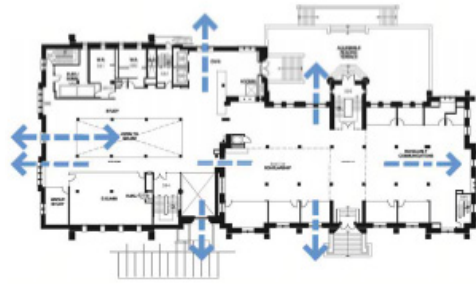
Section showing new connection between levels



Level 5 - Exhibit and Learning Connectivity



Level 4 - Exhibit and Learning Connectivity



Level 5 and 6 Enhanced Visibility and Daylight



Level 7 - Sense of Place



Level 6 - Embedded Services

Opportunities

- Prominent location of the building opposite the Stauffer Library provides the requisite identity and visibility to the campus and community as a home to a new Queen's Archives
- Opportunity to better connect the building as one contiguous space, improving the functionality for scholarly research, and perception of each floor, and of the building from inside, as the grand signature library it registers from the outside
- Unfinished space at the south end of the sixth floor could be easily and cost-effectively incorporated into the renovation of the building as an invaluable asset of additional space
- With Stauffer Library proximity, it provides a pillar of the balanced academy and an opportunity for a dynamic public realm, Library Square
- Existing three levels of below grade stack space have well-sized floorplates with a regularly-shaped, unadorned perimeter wall that could be reasonably converted, with a second "skin," to environmentally controlled stack space for collections
- The collections in Douglas Library could be in staff-only secure stacks. With no circulating collections and related security issues, people will have a choice of multiple entrances, adding to the inviting, open nature of the building
- Rear terrace could make a lovely outdoor reading space with the addition of a small lift to achieve universal access
- A compelling public space at the entrance could be created by interconnecting the main level with the level above, with a double height volume, which would dramatically enhance the entrance sequence
- The street access stairs could be re-used as a secondary entrance adjacent to the barrier-free entrance to the north which could resolve the disconnect that these vacant stairs have created with the heritage facade
- Environmental conditions must be improved to ensure long-term survival of the collection

- North Reading Room could be transformed, with modest but well-considered improvements, into an equally attractive companion space to the 1923 Reading Room across the hall

Floor Plan Recommendations

Level Four – Ground Level

- Install a new dry sprinkler system in the existing Special Collections stack space
- Redevelop the 1964 wing as inviting, open and spacious, technology-rich, exhibition space for Special Collections and the new, relocated Queen's Archives. Through extensive renovations, interconnect the ground level to the floor above, creating a dramatic double height exhibit and gallery space. Include within this exhibit floor plate, exhibition support space, a small screening theatre, a conservation lab, and a large multipurpose room within the former e-classroom. Provide convenient, ground-level adaptive technology software and hardware to ensure full accessibility to all services and resources

Levels One, Two, Three – Below Grade

- Leverage the available below grade existing stack space on three floors for continued use as cost-effectively converted collection space for the Archives and Special Collections. Upgrade these spaces to create the required preservation environment with improvements to the exterior wall envelope and mechanical and electrical systems as required, to achieve the following conditions:
 - Recommended class of environmental control generally (according to the CCI, Canadian Conservation Institute)
 - AA: Precision Control, minimal seasonal swings to Temperature only
 - 20°C & 50% Relative Humidity
 - (Max short-term fluctuations/swing: $\pm 2^{\circ}\text{C}$ & $\pm 5\%$ Relative Humidity)
 - Seasonal adjustments in system set point: Relative Humidity no change and Temperature up 5°C or down 5°C possible
 - For specific sub-collections (chemically unstable material) other conditions govern:
 - COOL storage: (e.g. photographs / digital media)
 - 10°C & 30-50% Relative Humidity
 - COLD storage: (e.g. negatives / celluloid / digital media)
 - -20°C & 40% Relative Humidity (maximum swing = $\pm 2^{\circ}\text{C}$ & $\pm 10\%$ Relative Humidity)
- Reorganize Level Three plan to create a central core of staff-only service space for Archives and Special Collections
- Install mechanical sump system and back up fuel generators to ensure against below grade flooding
- Develop where functionally appropriate on the stack levels a series of environmentally controlled preservation vaults to house collections requiring even more specific environmental control to the general stacks areas

- Install compact shelving as shown on Level One, and in the detailed ‘test plans’ below, which locate existing Archives materials on Levels One, Two, and Three and test the capacity for remaining expansion space

Level Five

- Remove wall to open the space and connection between the 1923 and 1964 wings to create a generous, daylit, contiguous floor plate of study and research space
- Relocate the Engineering and Science Library’s active collection, and its services, to the Stauffer Library in order to consolidate print circulation and collection management and provide dynamic space and services appropriate for students in the sciences, engineering and applied sciences
- Repurpose the 1923 wing with technology-rich dynamic new spaces for digital scholarship and communications made available for complementary partners and digitally-assisted research. Develop within this area a new collective public space for scheduled events and scholarly discourse, as a counterpoint to Stauffer’s Speakers’ Corner
- Provide barrier-free lift to access the existing outdoor terrace for use as a beautiful patio space. Create a small, new café space adjacent to the new lift and at the light-filled corner space overlooking and accessible to the terrace
- Complete the double-height exhibition space from below with a variety of study spaces overlooking the exhibit floor in a similar arrangement to the proposed Stauffer exhibit spine and study areas above

Level Six

- Relocate the Music Library to the Stauffer Library, providing longer hours of access and consolidating print circulation and collection management services
- Expand the useable floor space, appropriating the unfinished area at the south end of the 1923 wing. Undertake major renovations to repurpose the floor for joint Special Collections and Archives services and study space, including new staff offices and support spaces, as well as group and individual study areas
- Create a new, large, climate-controlled Archives and Special Collections Reading Room, with an associated staging area and connected group study rooms, all with supervisory oversight and the potential for controlled daylight and views

Level Seven

- Undertake modest renovations to the 1923 Reading Room to include a small group study room and enable the Reading Room as a whole to showcase the spirit of Queen’s, for example with displays evoking the research of the students who studied there
- Transform the north Reading Room in the 1964 wing into a beautifully appointed, dedicated Graduate Student Reading Room with associated group study spaces, individual study carrels and reading tables, as well as a new stair and bridge connecting the two mezzanine wings

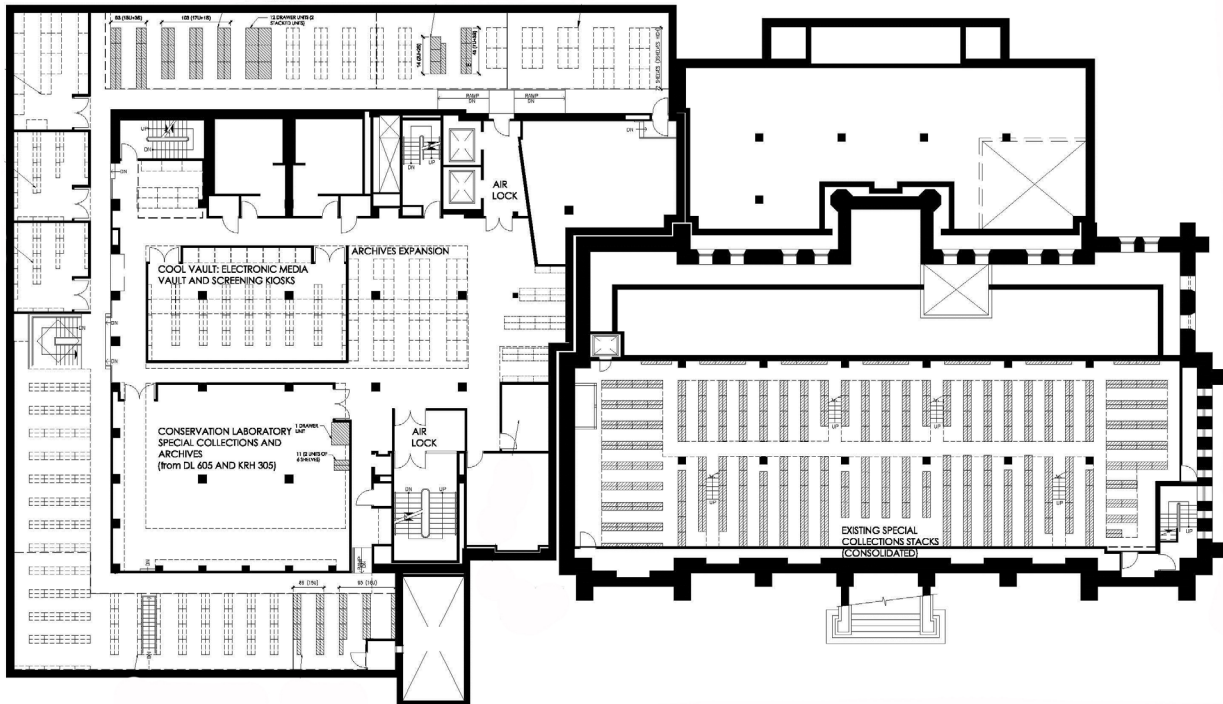
Level Eight

- Relocate the existing Special Collections materials on the seventh floor and eighth floor mezzanine stacks to the new climate-controlled stack areas below grade

Below Grade Collections

The recommendation to relocate the Archives with Special Collections in the Douglas Library, as a new Centre for Digital and Print Culture, is dependent upon creating a proper, safe and secure below grade preservation environment. The strategy to locate valuable collections and resources below grade is not an unprecedented or unusual one. Several institutions, such as Harvard University's Widener Library, or the University of Chicago's Joe and Rika Mansueto Library have employed this design concept for various reasons and created successful collection space. Other examples of below grade Archives and Collections are included in the Appendix. In such planning, consideration is given to the site's geology and the risk of flooding from rising waters or precipitation. In the case of Douglas Library the risk is very low, as it was when the below grade stacks were constructed in 1966. Particular care however will need to be taken in the detailed planning stage to develop the technical specifications and details to ensure a watertight and disaster proof environment. These would include such measures as a back up sump pump system with emergency fuel fed generators, proper waterproofing and drainage, and proper humidity and temperature controls as outlined in the details for the HVAC system.

Significant care has been taken by the consultant team to review the capacity of the below grade floors to house the existing Archives collections, as well as a portion of the west campus storage facility's Archives collections, in addition to Special Collections stack space removed from the eighth floor. For level one, new compact shelving is proposed, with conventional shelving assumed for levels two and three. The three levels were then analyzed and tested for their capacity to house the existing collections. Spare capacity for expansion was determined by calculating the stack space remaining empty. These 'test' plans are provided on the following pages and indicate a capacity for future expansion of the Archives by approximately 3% total per year for the next fifteen years, assuming reasonable acquisition and retention policies are maintained.

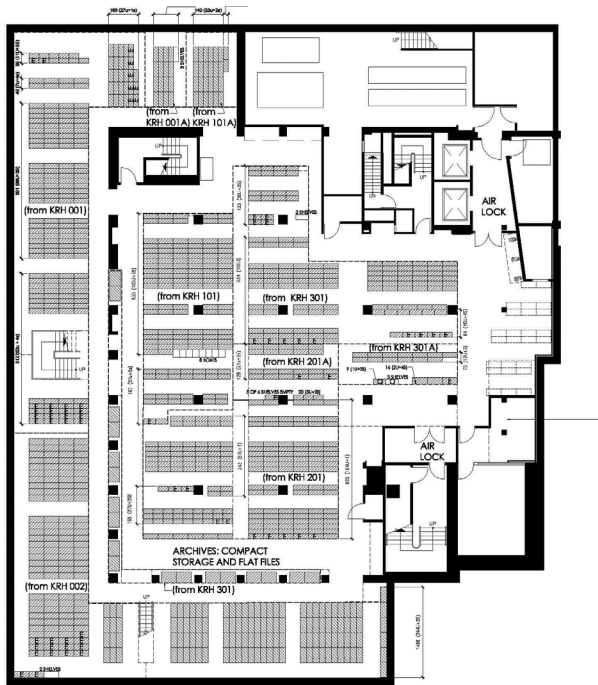


Level 3 Test Layout of existing collections in new Archives and Special Collections



Collection Materials





Level 1 Test Layout of existing collections in new Archives and Special Collections



Level 2 Test Layout of existing collections in new Archives and Special Collections

DOUGLAS LIBRARY



Level One Plan - EXISTING

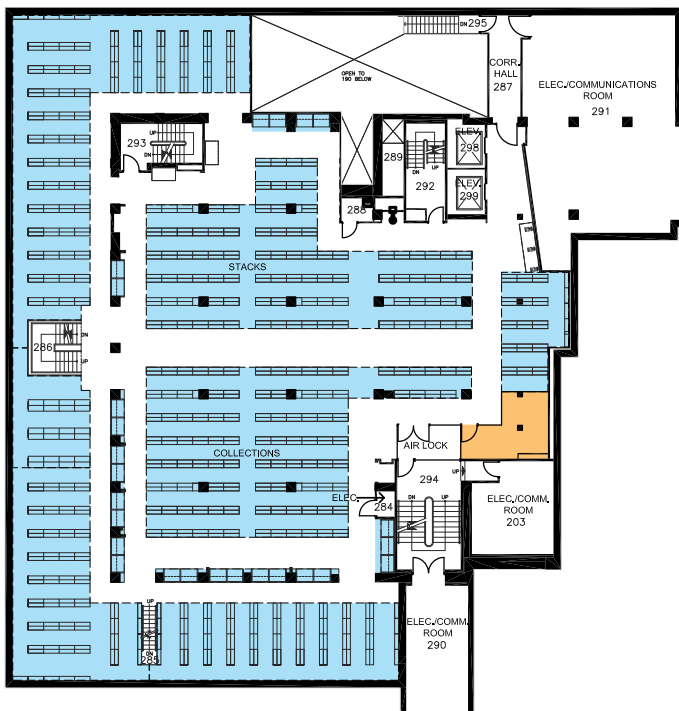


Level One Plan - PROPOSED

DOUGLAS LIBRARY

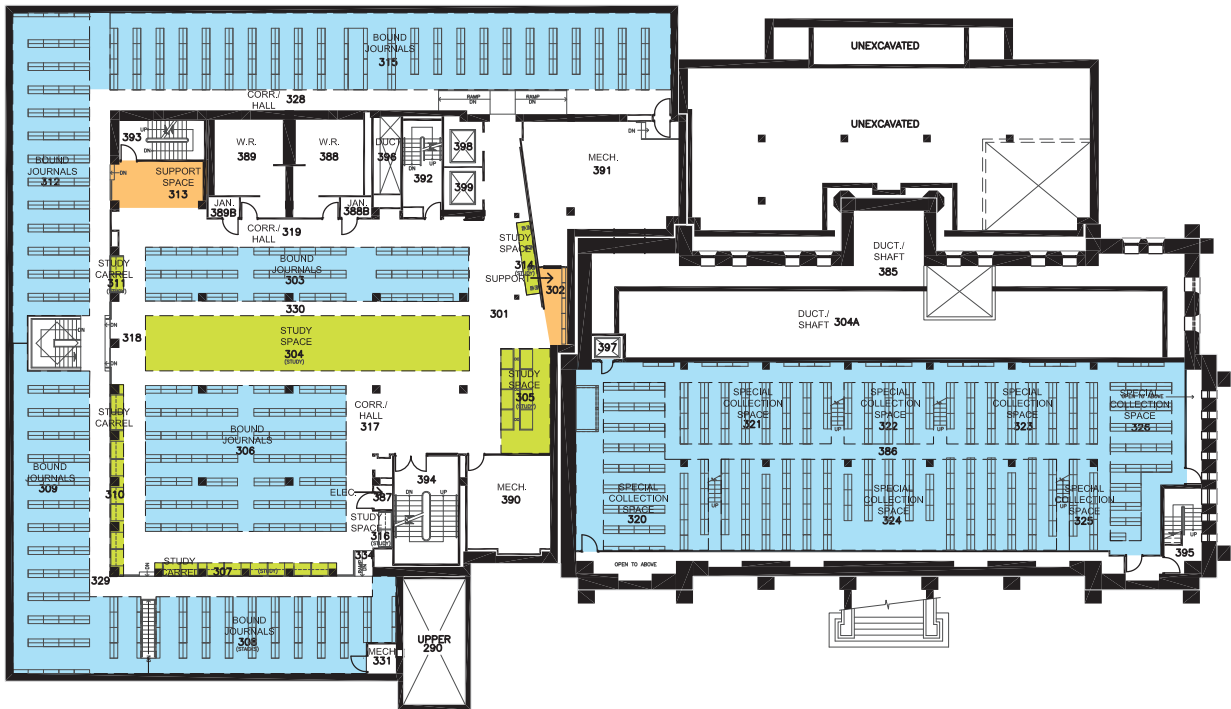


Level Two Plan - EXISTING

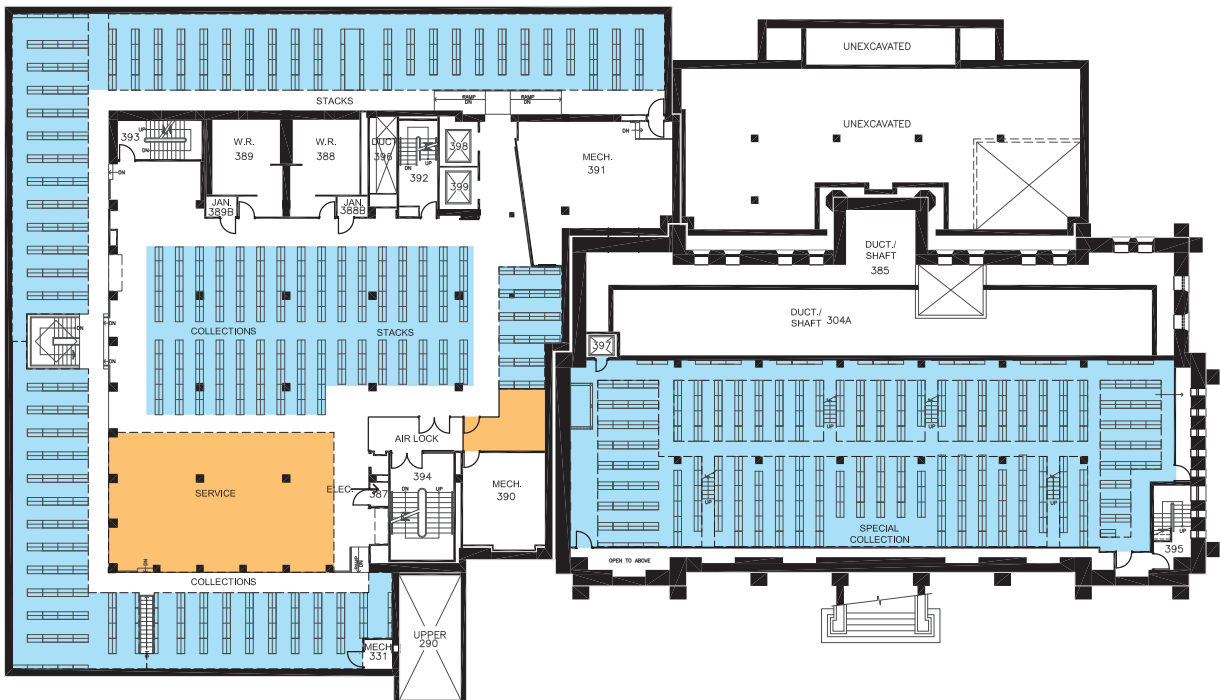


Level Two Plan - PROPOSED

DOUGLAS LIBRARY



Level Three Plan - EXISTING

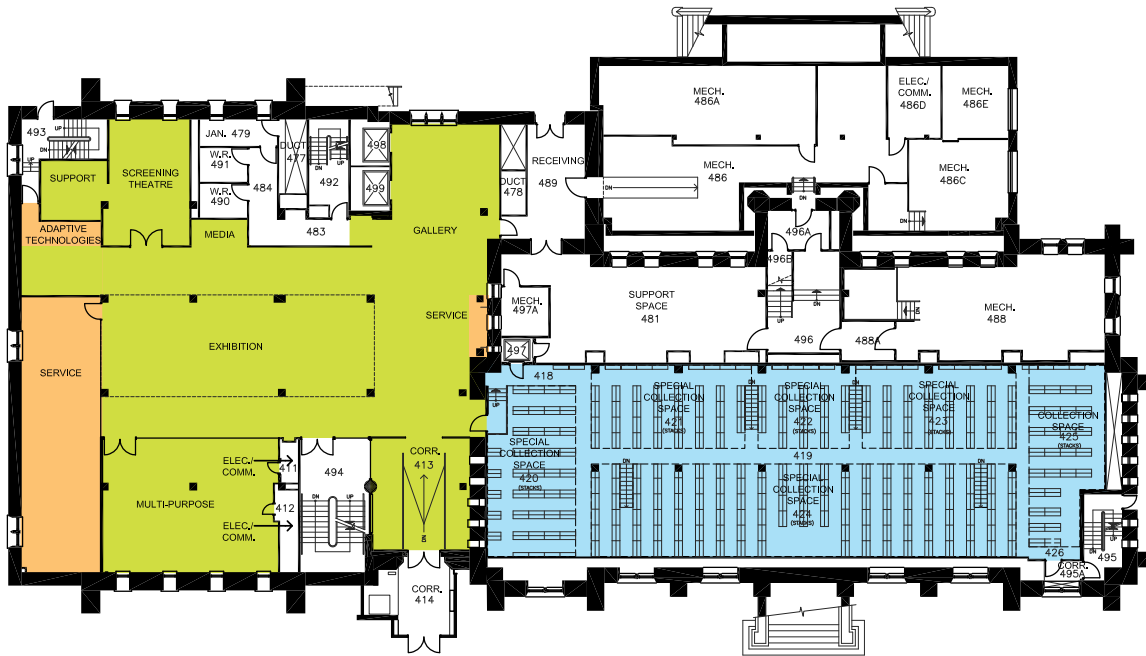


Level Three Plan - PROPOSED

DOUGLAS LIBRARY

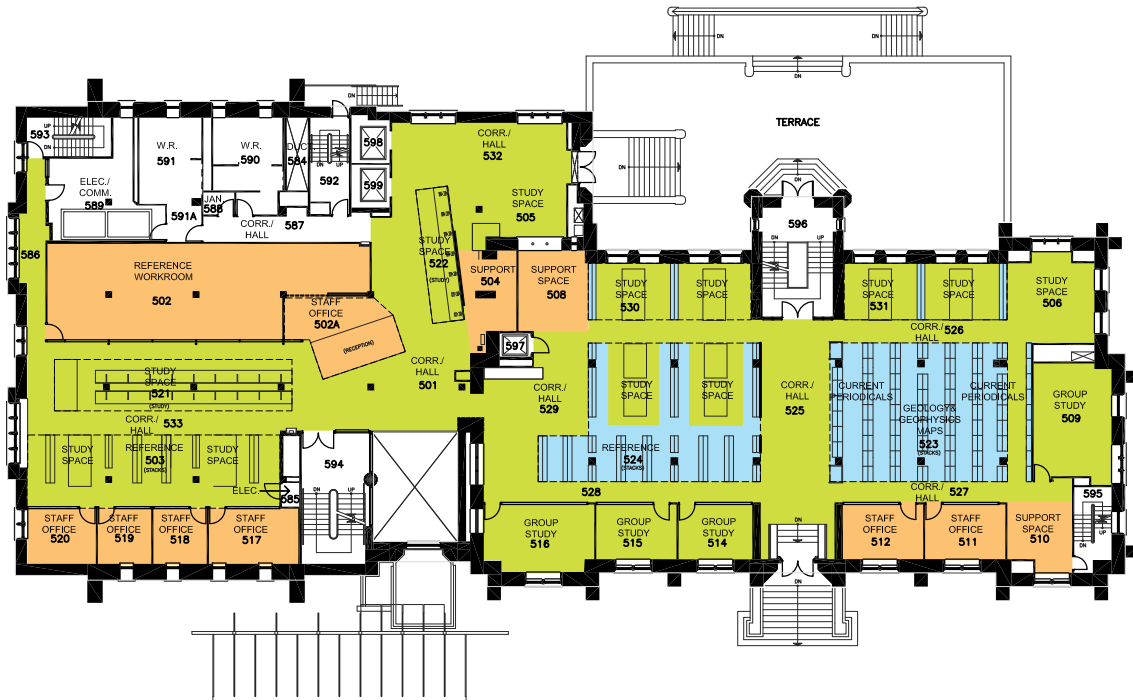


Level Four Plan - EXISTING

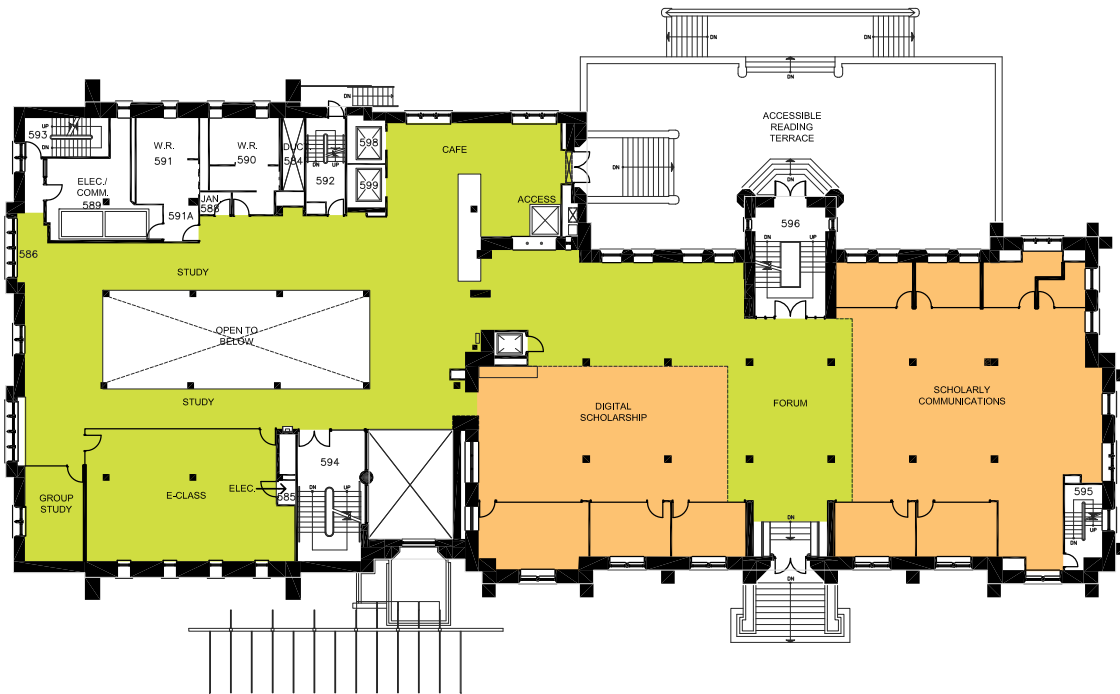


Level Four Plan - PROPOSED

DOUGLAS LIBRARY



Level Five Plan - EXISTING



Level Five Plan - PROPOSED

DOUGLAS LIBRARY



Level Six Plan - EXISTING



Level Six Plan - PROPOSED

DOUGLAS LIBRARY

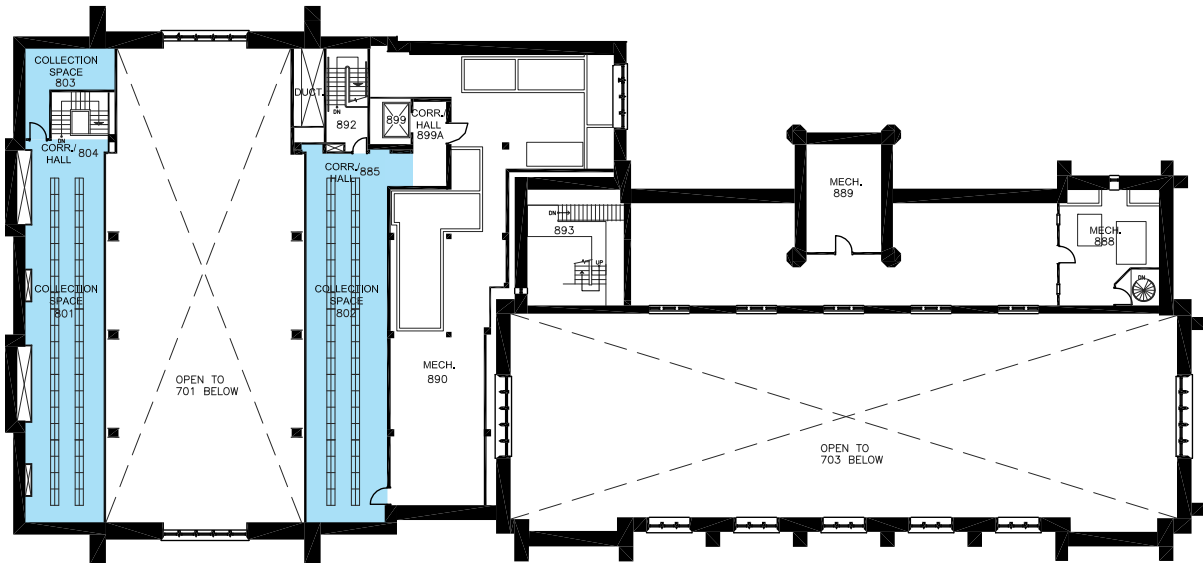


Level Seven Plan - EXISTING

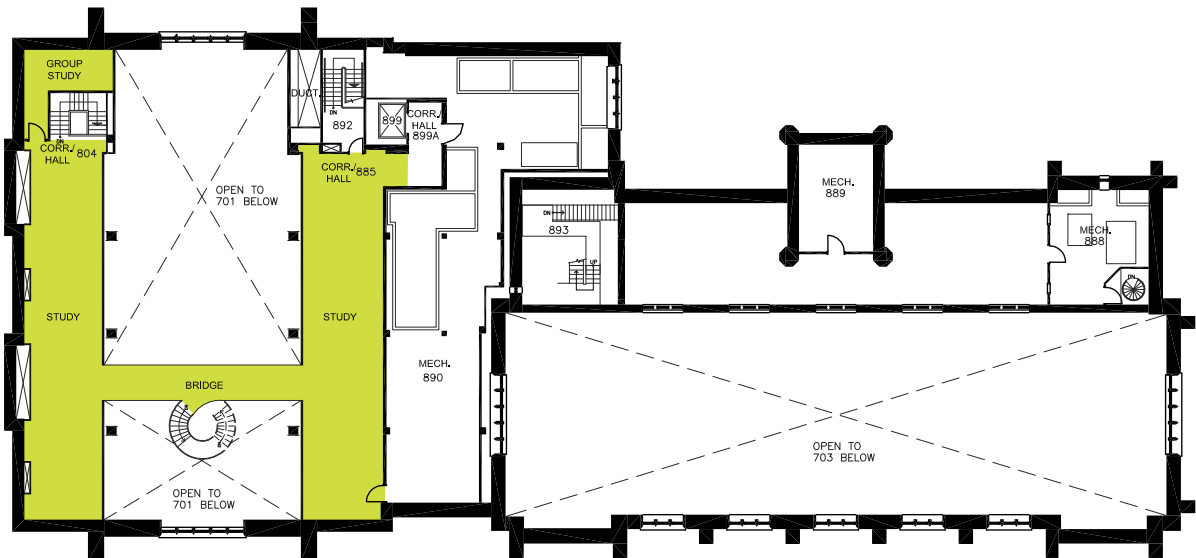


Level Seven Plan - PROPOSED

DOUGLAS LIBRARY



Level Eight Plan - EXISTING



Level Eight Plan - PROPOSED

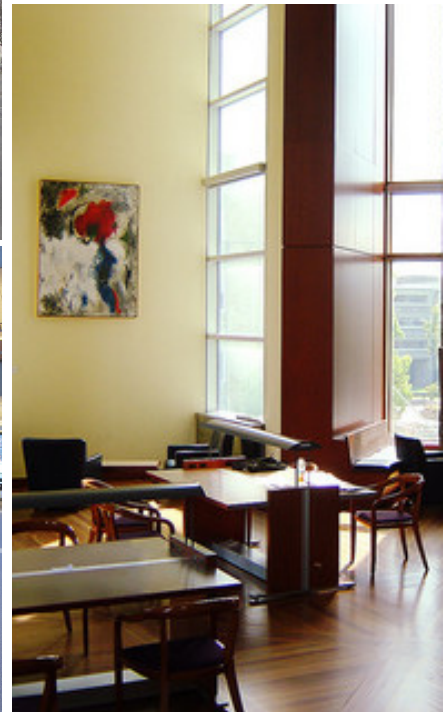
DOUGLAS LIBRARY



Existing – Douglas Library Main Level



Proposed – Douglas Library Main Level Exhibition Space with New Opening to Above



Stauffer Library

STAUFFER LIBRARY

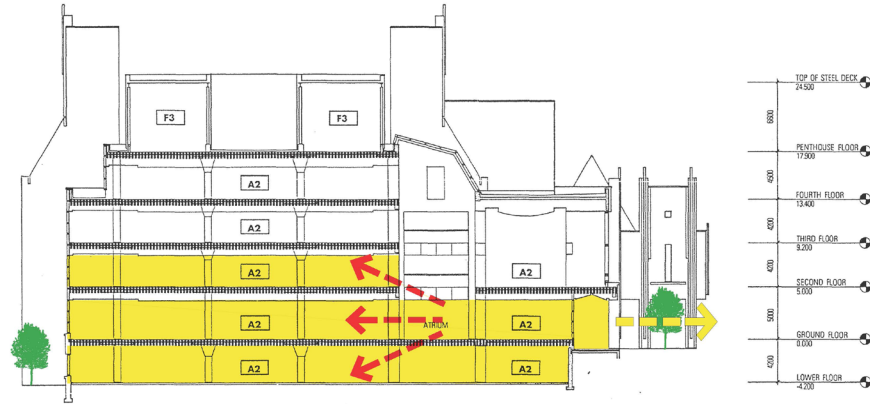
The largest, most modern of the Queen's libraries, the Joseph S. Stauffer Library is much admired and heavily used by Queen's students and faculty. Designed for flexibility and as a place of quiet sanctuary, the building is distinguished by its iconic presence on campus and by its beautiful and unique spaces. The vision for Stauffer Library leverages these distinguishing characteristics, and, through the repurposing of stack space, significantly expands and enhances the library's provision of learner services and study spaces, as well as its outreach to the community. The Stauffer Library's presence on campus as a key element of the student learning experience will be elevated by the expansion of the Queen's Learning Commons, and by its addition of new services, including a Media Commons. New spaces created for individual and group study will increase study space in this library by over thirty percent. Two new graduate student lounges for dedicated graduate study and research will be added, increasing space assigned exclusively to graduates by more than four times its current size. While stack space will be reduced by advantageously employing remote storage and other options, books will be more appropriately highlighted, and given room to "breathe" and be seen. As well, active collections for music and engineering and science will be accommodated in the Stauffer Library stacks.

The Stauffer Library will open currently closed doors to allow its users to enjoy new, accessible patron and terrace spaces on the lower, main and second floors. The Stauffer Library will not only extend itself outside to the community, but welcome it in, offering new partnership spaces, expanded exhibition and display galleries, and opportunities for public events and forums.

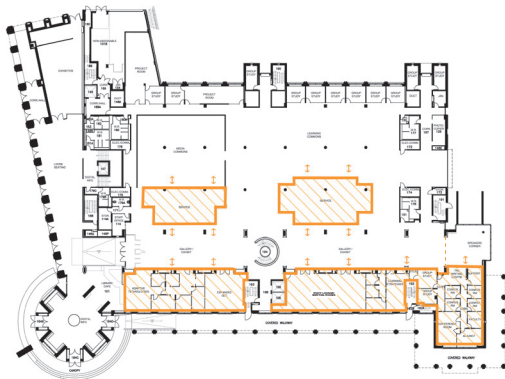
Analysis

- Built in 1994, renovated in 2005, in good condition
- Shortage of individual and group study spaces
- Under utilized lower level with limited daylight in existing layout available to learners
- Attractive central campus library with "excellent bones" and very advantageous structural capacity to add compact shelving to any floor level
- Large flexible floor plates with generous daylight, adequate for repurposing into expanded service, study and learning space
- Inspiring entrance atrium space with an opportunity to better utilize the main circulation space in front of the Queen's Learning Commons
- Well-used, highly successful Queen's Learning Commons, which could be made more visible and expanded to provide a wider range of resources and services
- Several extraordinary, well-loved spaces, such as the Fireplace Reading Room, which are models for creating more such spaces
- Expansive and attractive loggia, as a unique "porch" to the building, offering potentially more flexible gallery and exhibit space
- Pivotal site location at the main campus intersection across from the Douglas Library

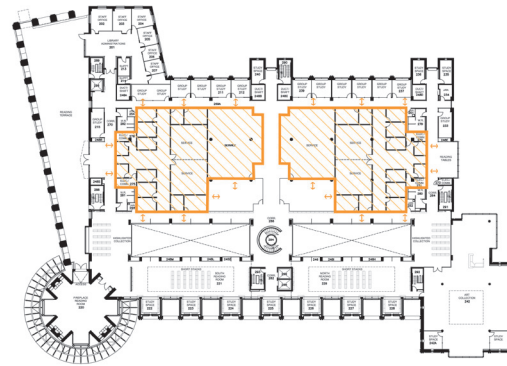
Recommended Concept Designs



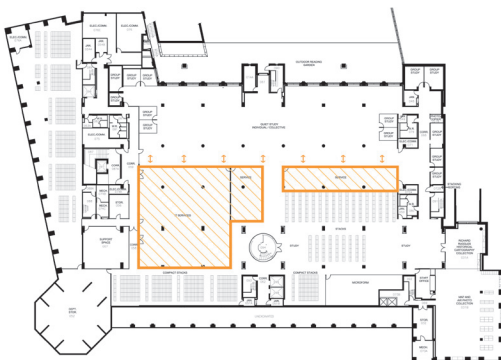
Section showing new connectivity between lower levels



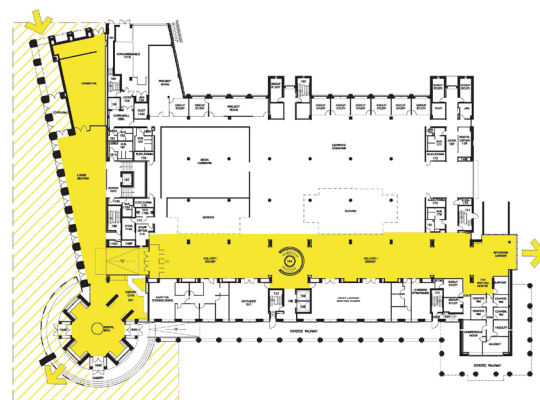
Level 1 Embedded Services



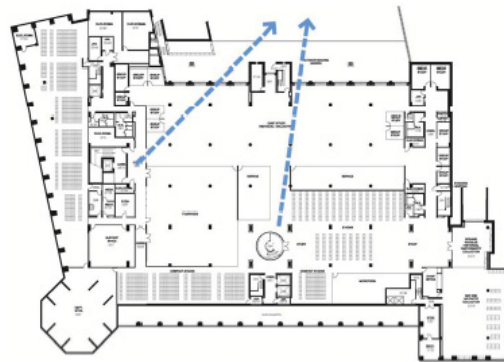
Level 2 Embedded Services



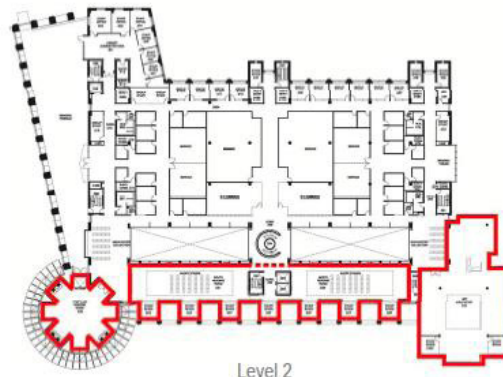
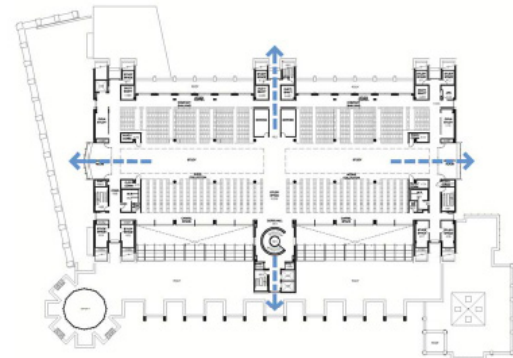
Lower Level Embedded Services



Level 1 Exhibit and Learning Connectivity

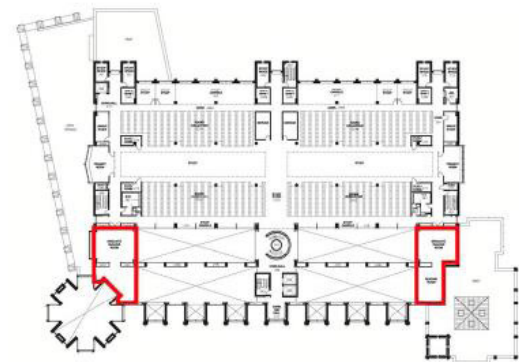


Lower Level and Level 3- Visibility and Daylight



Level 2

Levels 2 and 3- Library as Place



Level 3

Opportunities

- Doors at the bottom of the circular stairs to the lower level seal off the floor, and acoustically offer potential to create a more substantial sanctuary of quiet study space
- Under-utilized space under the loggia minimally used at present for compact storage, could be better organized for expanded, more efficient, compact shelving use
- Unused, attractive exterior spaces at the west side of the basement level and at the second floor terrace could be made fully accessible as outdoor social and event space, as well as unique study space
- Undersized Graduate Study Room could be significantly expanded and duplicated at the opposite side, answering the demand for more private graduate space attuned to student needs
- Enhanced staff lounge and meeting space for all in the building could be created by repurposing the existing study space located along the ground floor east wall
- Under-used window seating benches on the second, third, and fourth floors could be removed and the space repurposed for use as study or project rooms
- Large opening doors to the sidewalk and streetscape, which could allow for use of the sidewalk as patio space, are rarely opened
- Unique opportunity to develop the space between Douglas Library and Stauffer Library and the other two corner buildings as a major new public Library Square / plaza space on campus.
- Invaluable development site to the north, could be reserved for future expansion of this signature campus library

Floor Plan Recommendations

Ground Floor Plan

- Replace the existing fixed banquet seating in the loggia with loose seating and tables to provide flexibility for an expanded exhibition space
- Reconfigure and project out the entrance doorway to the Union Gallery to give it more prominence and visibility from the loggia
- Reposition and reconstruct the café servery to face outward to a new, accessible grade level patio on Union Street. Open the space previously occupied by the servery to create a more porous, free-flowing ground floor entrance way
- Introduce digital information kiosks into the entrance way and the loggia's exhibition space near the elevator and stairs to the basement
- Reconfigure the ground floor main circulation spine, removing the millwork structure at the entrance, as well as the fixed reading tables in front of the Learning Strategies area. Provide loose flexible lounge seating which can be moved aside to easily convert this spine into an elongated gallery/exhibit space, of varying length, or an extended Speaker's Corner and forum for public events. Envision this spine as the main circulation route which would extend to an expanded Stauffer Library in the future on the site to the north
- Reorganize existing staff space on the floor, removing offices from the window wall on the west side, as well as the back of house staff area, behind the circulation desk. Reorganize staff service areas into two main clusters, centred on and embedded in the ground floor. Create a new, larger, daylit staff lounge along the east window wall of the ground floor
- Expand the QLC, providing additional space for Student Academic Success Services (the Writing Centre and Learning Strategies Development), and retaining the highly successful placement of the Adaptive Technology Centre and Library Services for Students with Disabilities
- Introduce important new services, including a state of the art, technology-rich Media Commons, as an integral component to a larger, more open, and visually inviting Queen's Learning Commons
- Provide enlarged and improved individual and collaborative study spaces with the introduction of more group study rooms in repurposed collection space
- Introduce two new large project rooms as 'maker spaces' for hands-on experiential learning, appropriating space from the loading dock area, while providing direct service access into one of the two rooms

Lower Level

- Relocate the existing IT Services and library staff spaces to open the west window wall's valuable daylight exposure for new study space, providing views through the library and improving orientation from the elevator or loggia stairs for people visiting IT Services
- Repurpose collection space to create a new, quiet study area doubling the existing size, composed of individual carrels, reading tables, and group study rooms

- Reorganize, through a more effective use of space, the existing microform area, introducing new technology and expanded associated study space
- Reorganize space under the loggia to introduce more, as well as better-planned, compact shelving layouts

Second Floor

- Relocate rarely used collections from the open floor plate and reposition active collections to new stack configurations as shown in the plan
- Locate new teaching, learning, and services spaces, including new staff space and new partner spaces, in the area formerly dedicated to stacks. Develop the details to these spaces to include generous glazed screens, optimizing daylight and views from offices
- Develop wide corridor access to services, creating an open, inviting, and remarkable alchemy of technology-rich research and learning space supported by embedded staff resources
- Introduce more group study rooms to the floor
- Provide barrier-free access from the study area and Fireplace Reading Room to the terrace, opening it for use as an additional and attractive study space and event space, with potential revenue opportunities, in good weather
- Relocate the Music Library to the North Reading Room as a complement to the Art collection. Install additional new millwork bookshelves lining the study alcoves to attractively display this collection, surrounding the readers with books and creating an even more engaging sense of place to these beautiful existing spaces
- In the north and south entry areas to these Reading Rooms, locate small unique collections, if feasible, as part of the recommended policy of highlighting particular collections of interest

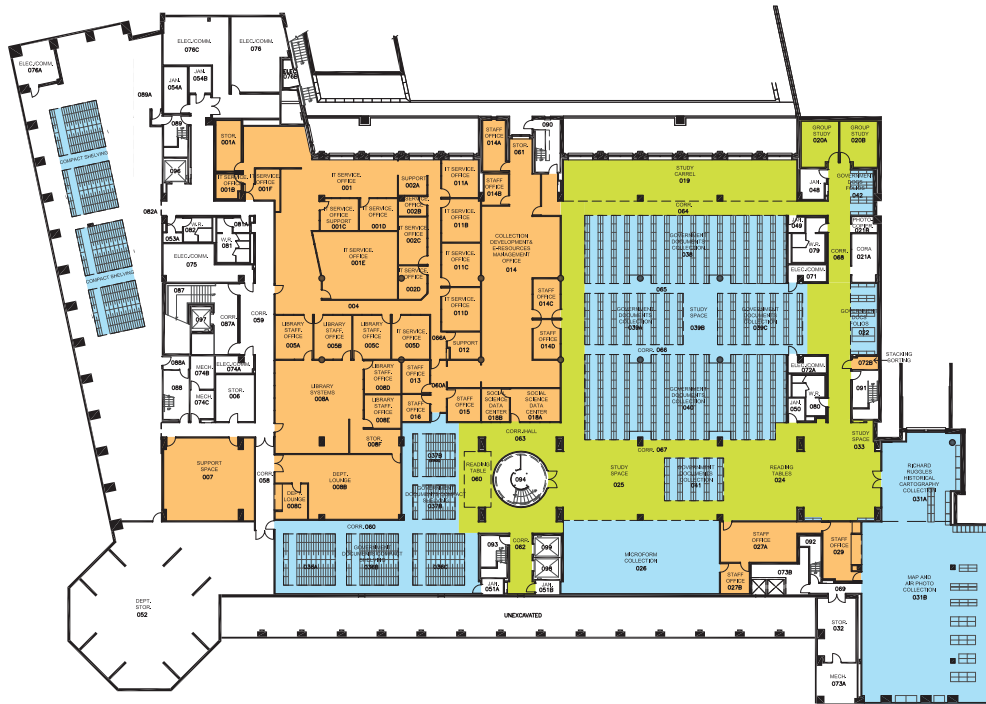
Third Floor

- Remove the middle row of stacks in order to recapture floor area for study space
- Introduce additional group study rooms with generous glazing along the west wall of the floor
- Introduce centrally located service spaces embedded in the study areas
- Create new Project Rooms at either end of the central study space
- Create two new, large, dedicated and technology-rich Graduate Lounges at either side of the atrium for study and research space

Fourth Floor

- Remove the middle row of stacks in order to recapture floor area for repurposed study space
- Replace existing conventional stacks at the southwest side of the floor plate with compact shelving, to match the existing compact shelving on the northwest side
- Create new Project Rooms at either end of the central study space

STAUFFER LIBRARY



Lower Floor Plan - EXISTING



Lower Floor Plan - PROPOSED

STAUFFER LIBRARY

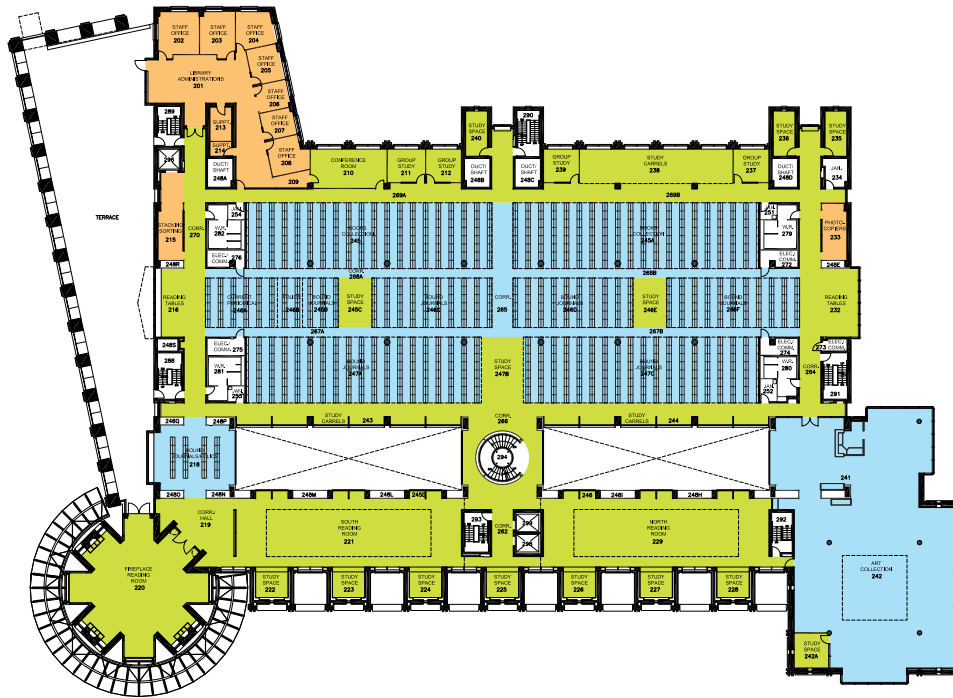


Ground Floor Plan - EXISTING

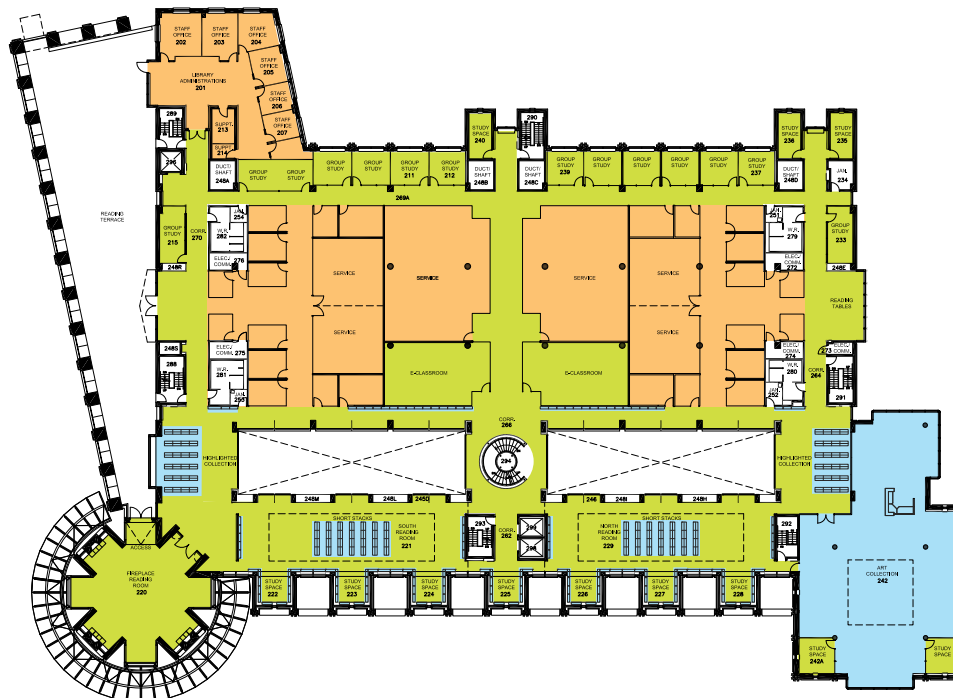


Ground Floor Plan - PROPOSED

STAUFFER LIBRARY

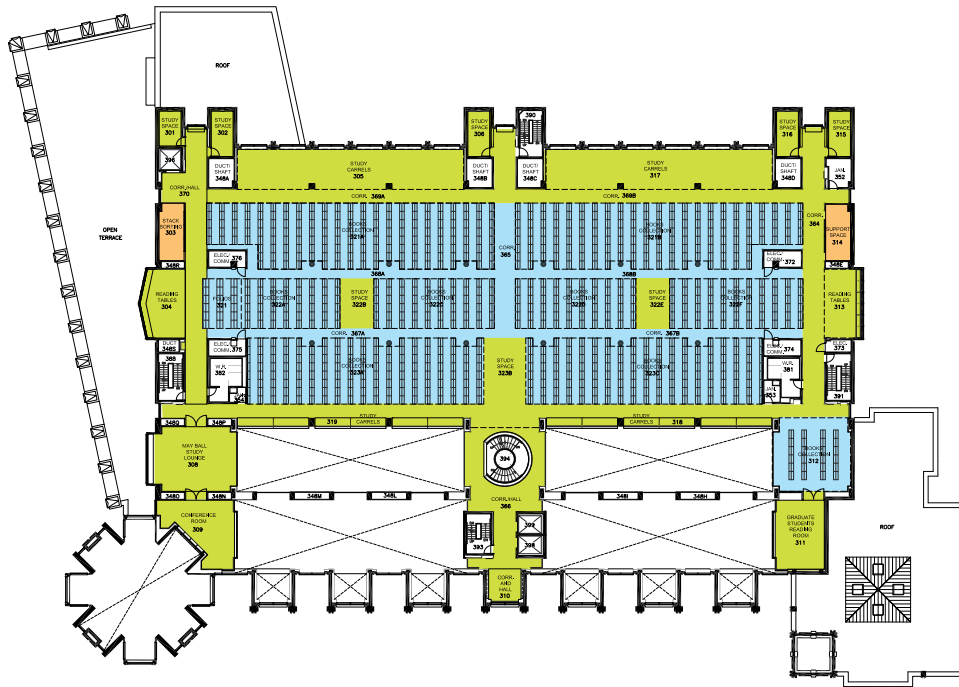


Second Floor Plan - EXISTING

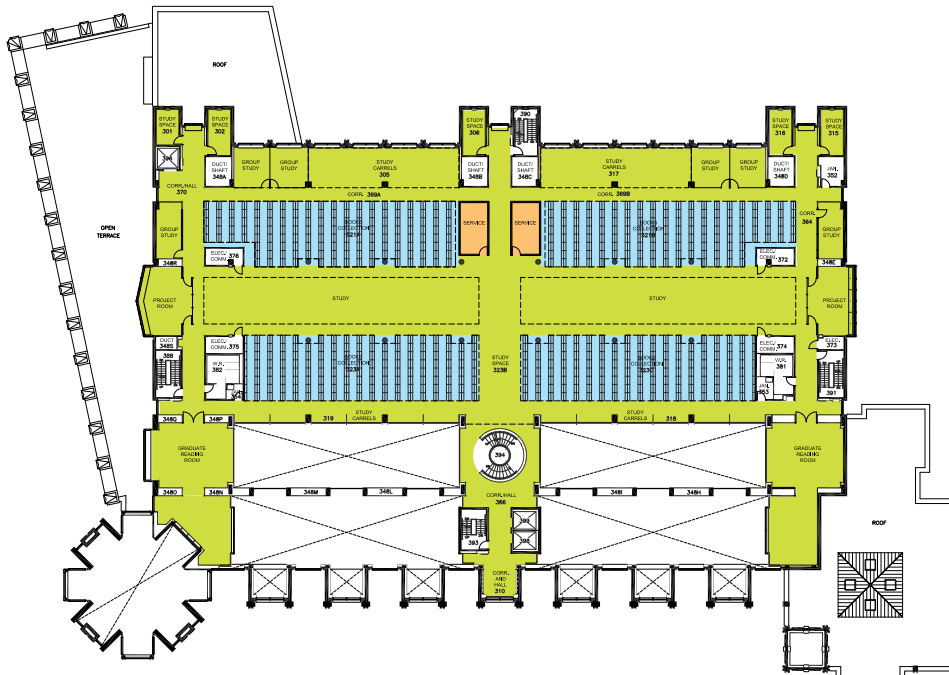


Second Floor Plan - PROPOSED

STAUFFER LIBRARY

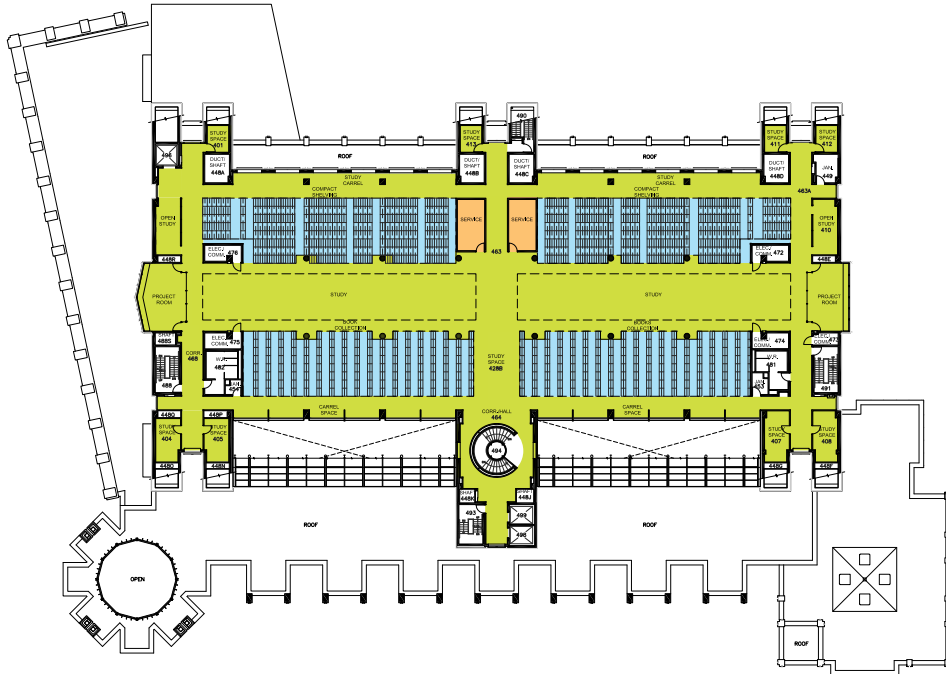


Third Floor Plan - EXISTING

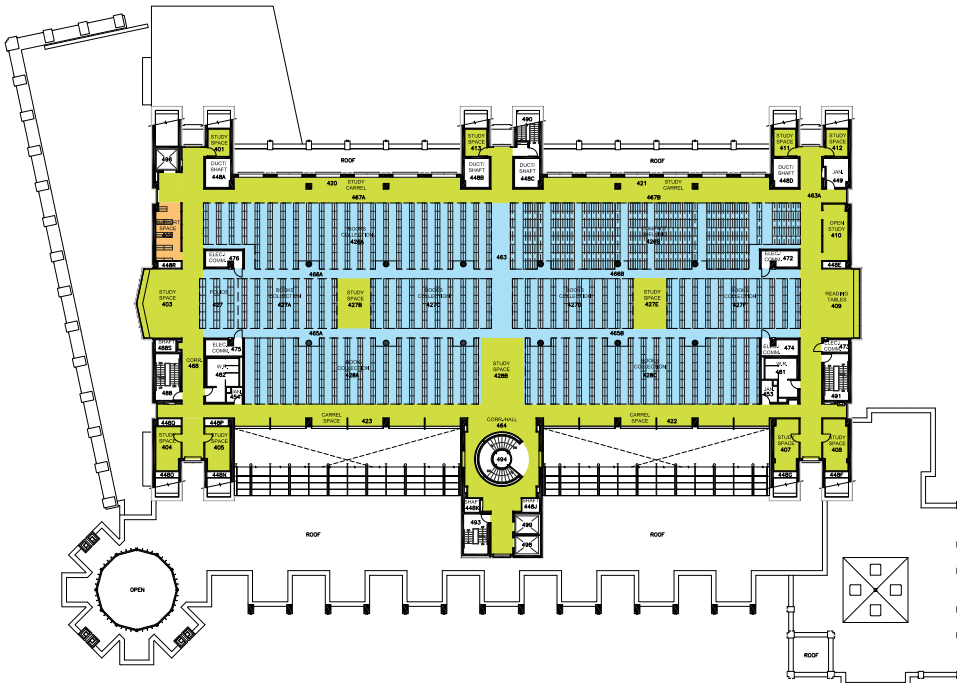


Third Floor Plan - PROPOSED

STAUFFER LIBRARY



Fourth Floor Plan - EXISTING



Fourth Floor Plan - PROPOSED

STAUFFER LIBRARY



Existing – Stauffer Library Lower Level



Proposed – Stauffer Library Lower Level – View to New Student Study Space

STAUFFER LIBRARY



Existing – Stauffer Library View of Atrium

STAUFFER LIBRARY



Proposed – Stauffer Library View to Multi-Purpose Atrium with Seating



Proposed – Stauffer Library View to Multi-Purpose Atrium with Event

LIBRARY SQUARE



Existing – Intersection of Union Street and University Avenue

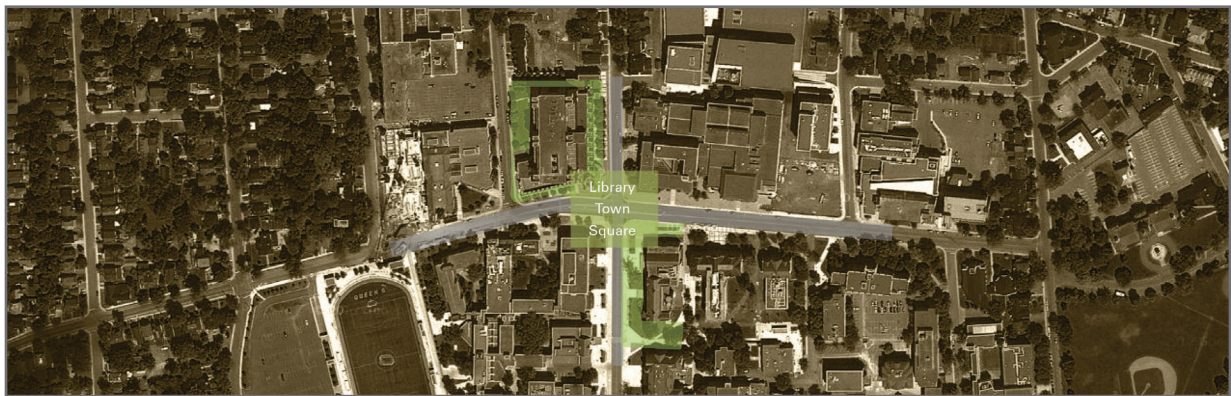


Proposed – Library Square

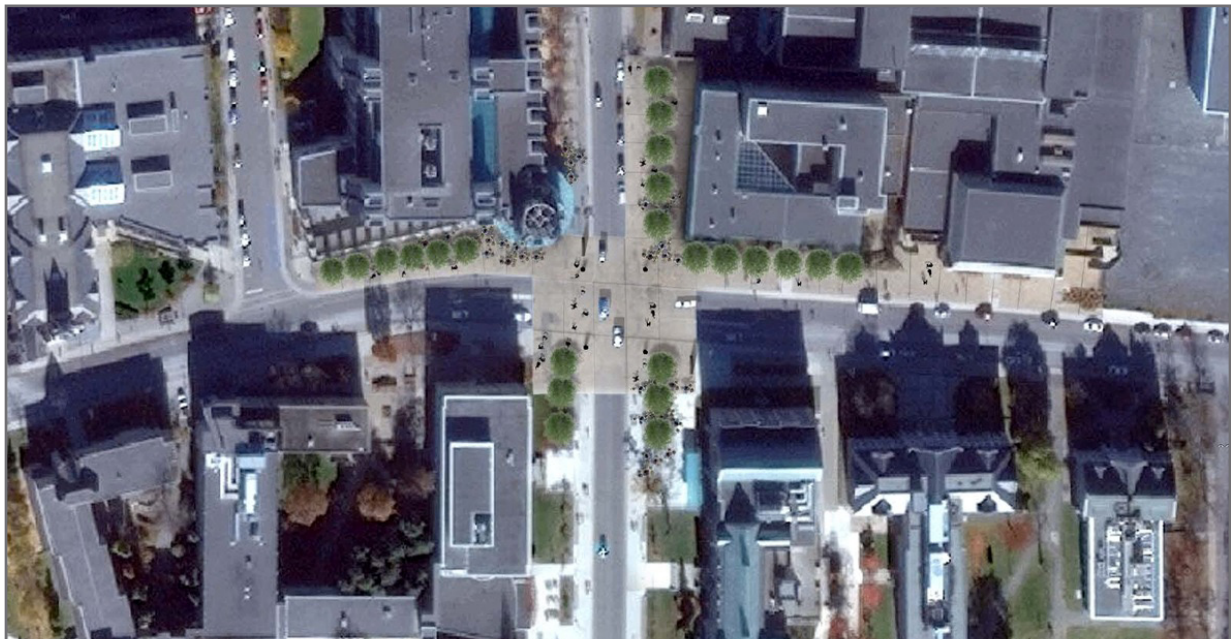
LIBRARY SQUARE

The Stauffer Library and the Douglas Library will more fully engage with the campus outside their doors, and with the community beyond, as street level patios will be opened for study and social space. Coupled with their two neighbours on opposite corners, these signature buildings will help frame a new public space proposed for the campus – Library Square, a space that will intricately and more provocatively weave both libraries into the open space fabric of the campus.

Library Square will be developed and integrated as part of a coherent open space strategy of the Campus Master Plan. It is intended to be a dynamic pedestrian oriented public realm, without jeopardizing the campus's traffic and service vehicle flow, or requisite City of Kingston street and safety requirements. Library Square should become a place of social and intellectual engagement, bearing the unique imprint of Queen's heritage and culture.



Aerial Plan of Library Square and the campus fabric



Detailed Plan of Library Square

v. THE LIBRARY AND THE CAMPUS FABRIC

The Library system is much more than the physical construct of the large library buildings and public realm previously described. Currently, it includes the physical facilities of the three smaller libraries housed in Faculty buildings, and just as importantly it includes the virtual realm. In this planning process, stakeholders were adamant about the importance of the physical libraries in different locations on campus, as well as their access to services and resources online. This led to the strategy presented in this section, for a learning and research information network of more intimate spaces across the campus, including the smaller libraries in Faculty buildings along with a new typology of library space.

New Typology of Library Space: LINQ

Both the Campus Master Plan and the Library and Archives Master Plan consultant teams recognized, early on in the discovery and analysis phase of our work, the very evident and powerful shift from the past paradigms for learning and study on campus, to the new ones, and we identified the types of places that might best support this shift. New technologies, primarily the proliferation and sophistication of mobile devices, have totally altered the means and places from which we access information and communicate with one another. This significant change, coupled with a new emphasis on inquiry, blended learning and collaborative research, has helped blur the distinction between social experience and learning. The impact is significant, to both the campus as a whole and libraries in particular. These changes to how we consider and use space for learning, studying, and research, in different ways than before, suggest a growing need to develop and cluster space based on the social geography of the campus, rather than on a more conventional delineation of disciplines or activities. Furthermore, it recognizes a significant educational benefit to developing attractive space as an essential ingredient to successful collaborative group study.

For all libraries, the guiding principle of 'library as place' is to encourage and support social interaction, and in turn learning, and has become, perhaps counter-intuitively in this digital age, a critical, physical prerequisite, more important than ever, to the learning experience. While library resources, including all forms of communication, can be accessed digitally 24/7 within a virtual space, it is the magnetic qualities of the physical environment we most admire and seek, the 'soul' of a place, that, most importantly, brings people together, to connect in person, as well as by distance, and sparks learning. Library as place has always been important, when considering libraries as sanctuaries for individual quiet study and research, and its importance is even greater today.

The library of the future has a defining twin aspect – it possesses the physical characteristics and requirements to be an attractive place for social interaction and collaboration, as well as a place of repose and contemplation. This twin aspect has had a significant impact on the recommendations in the Library and Archives Master Plan for the recapturing of space in the five existing library buildings. It also suggests that the principle of library as place, as applied to the existing libraries, might equally apply to a newer form of library – comprising smaller groupings of spaces – which could provide equally wonderful, well-crafted places for social interaction and study. These groupings would incorporate ubiquitous access to the Library's considerable resources located in both the renovated libraries and in virtual space.

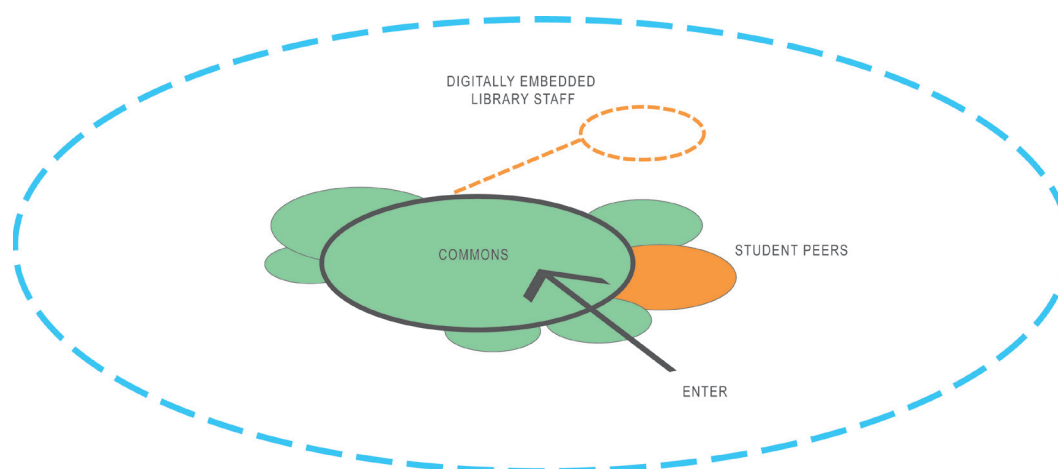
These networked spaces might equally be considered as Queen's libraries, ones that are specifically configured to respond more closely with the campus's new social geography and the digital information paradigm. As smaller libraries or study communities, with no physical collection space, they represent a new space typology, as well as a strategy for an overlaid library infrastructure comprising virtually embedded library resources accessed within quality places for social interaction and study. This strategy also affords an opportunity to leverage, where feasible, through simple interior improvements, the remarkable qualities of the campus's existing heritage buildings, distinguished by their smaller, airier floor plates and unique arrangements of space, which, today, are sadly becoming increasingly anachronistic templates for modern educational buildings. We have given these new library study communities the acronym of LINQ – Library Information Network at Queen's – and are recommending that they be developed as part of a more comprehensive and integrated strategy for the Campus Master Plan and Library and Archives Master Plan.

The criteria for developing LINQs and selecting their sites on campus would include a range of considerations.

- Campus enrolment and density concentrations
- Characteristics of space
- Site coverage and location of study 'deserts'
- Accessibility to existing facilities
- Security, maintenance, and operating arrangements
- Funding and cost benefits to improvements

A LINQ might include a great variety of types of study spaces, or might be more purpose-built to cater to a particular group, such as graduate students. While they may vary in size from one or two rooms of interconnected spaces, to several, they would all share a set of similar defining characteristics. All would have a universally accessible entrance or Commons space, which would serve as both an orientation and circulation space, leading to other study spaces. The Commons would have comfortable seating, reading tables, good lighting, and perhaps even a fireplace. It would essentially be a low-tech space, distinguished by its qualities of place and conviviality rather than its hardware. It would offer lots of places to connect and charge devices, ensuring LINQs practicality as well as attractiveness for long periods of sustained use. A Commons might also lead to an adjacent outdoor study space, taking full advantage of a particular beautiful campus setting, similar to our recommendation for the existing libraries.

The Commons, as the main circulation space, would lead to other spaces which adjoin it for either collaborative or individual study. These collaborative spaces would vary in available technology, depending on the type of LINQ, its security arrangements, funding, and local needs. A Level 1 LINQ, low-tech and perhaps the most prevalent type, might have study or meeting rooms outfitted with simple whiteboards. A Level 2 LINQ would introduce intermediate technology into its space, while a Level 3 one, with higher security and budget requirements, would offer high-tech hardware, such as virtual simulation, with the appropriate security safeguards, including peer mentors. Ideally LINQs would function as 24/7 study space on campus, providing access to food (such as vending machines), as well as comfort.



LINQ Conceptual Diagram

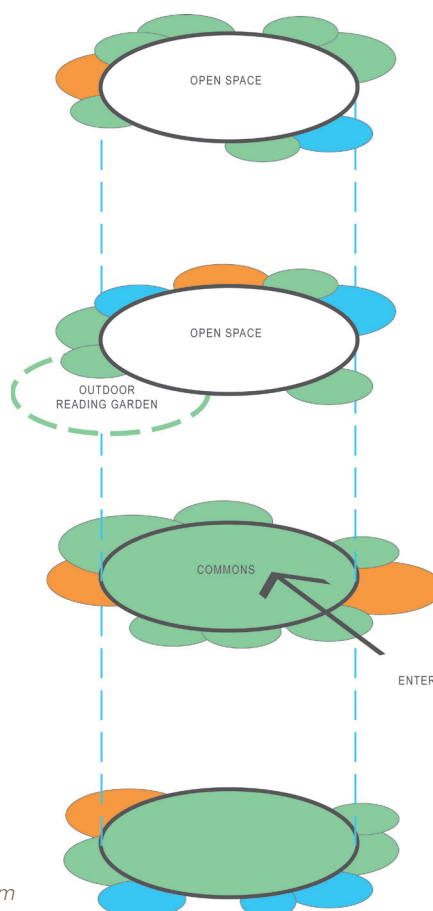
A list of possible spaces connected to the Commons within a particular LINQ might include:

- Small, medium, or large group study rooms.
- Various sized lounges
- Graduate research rooms or studios
- Graduate group study rooms
- Conservatory reading room
- Music practice rooms
- Small seminar rooms
- Multipurpose meeting rooms
- Creativity studios
- Carrel rooms dedicated to quiet individual study
- Service support room for student peer counsellors/mentors or peripatetic library advisors

All renovations to existing buildings to create or enhance LINQ space would be undertaken using simple green design strategies, so that LINQs would exemplify the University's best practices in environmental sustainability.

The proposed physical and conceptual arrangement of spaces in a LINQ serves as a valuable typology, though different in scale, for our reconsideration of all the existing libraries. All five libraries have been developed to reinforce, or create where absent, a strong sense of place on entry into the library's main space, or in LINQ terminology, the Commons. In the case of the five libraries, the Commons may be represented by an atrium, reading room, or interactive study area, depending on the library. The major public space of these libraries is generally that library's central core from which all other spaces and services are organized. The campus libraries, with their collection spaces, and physically, as well as digitally, embedded technology-rich services, offer a broader range of study opportunities than any single LINQ. However, they too, like the network of LINQs, must provide convivial, universally accessible, and sustainably-designed spaces for student engagement and research. Our renovation strategies for each of the libraries will ensure they achieve these goals.

Through the LINQ typology, we can imagine the Library and Archives Master Plan as offering a broad, coherent network of universally-accessible spaces and resources at varying scales – larger libraries and smaller LINQs – all combined and interwoven physically and virtually to best support and enrich scholarly research and the student learning experience at Queen's.



Larger Scale LINQ Conceptual Diagram

LINQs will create not only an inviting network of campus-wide study communities, but also, with the inclusion of modest presentation capabilities (e.g. exhibit case) as a common feature in each one, the opportunity to display interesting historical artifacts from Queen's and its community. The LINQ network would begin then to knit together as one, not only a broad community of scholars to Queen's superb Library and Archives resources, but also a compelling and cumulative narrative over time, of the history of an important and beloved campus, embedded in its community.

LINQ's represent a fundamentally different strategy for libraries of the future, one perhaps more attuned to our digital world and the economy of means with which we must work. The LINQ network envisions the Library of the Future as a broad, agile infrastructure of Library and Archives resources, accessed through a diverse range of convivial settings, spread across the campus, rather than contained within a limited number of traditional Library buildings. Queen's enjoys the unique opportunity to build on its remarkable existing libraries, transforming them relatively inexpensively, rather than building new, while also introducing a new library typology and infrastructure. The ability to create a new network of study spaces across campus, with access to embedded resources, will defuse the pressure on each of the existing libraries, which have a finite space capacity, short of expansion, to fully meet the demand for more study space. This in turn will provide more flexibility for the potential programming of repurposed stack areas for other learning spaces.



Law Library



LAW LIBRARY

The Law Library is an essential laboratory for legal research and a valued place for study, providing the critical staff and collection resources to support its curriculum and scholarly research. The library offers a variety of learning environments, from single carrels to generous reading tables and large conference rooms for collaborative work. The vision for this library is to strengthen its relationship to both its learners and researchers, providing it with more, and better-equipped, study and service spaces in which to achieve this mission. This, we believe, can be achieved within a reduced library footprint, which will in turn improve library operating costs, providing better possibilities for funds to be redirected to library priorities, and for additional much-needed 'found' space to be turned over to the Faculty, to best use for its own purposes.

The Law Library is currently spread over three floors, an arrangement appropriate for years gone by. Now, it could be reduced to a more operationally effective two-floor library with enhanced study and service spaces, if collections space is repurposed and stack spaces organized as recommended.

Analysis

- Built in 1960, renovated in 2008
- Excellent relationship of staff offices embedded with learners in the main Reading Room, as well as part of contiguous staff space
- Highly-used and attractive main Reading Room can be further enhanced as a central focus for library users on upper level, with modest reorganization of the floor
- No separate access to the library; visibility from the entrance can be improved, but independent access cannot be provided
- High concentration of stack space relative to total library area
- No washrooms within the library at main entry level (second floor)
- Poor relationships of main circulation desk at second level entry. Desk staff are separated from the main staff area by reserve book room
- Undersized, poorly-located Queen's Law Journal office should be enlarged and relocated

Opportunities

- Library space could be repurposed and consolidated by applying the principles of redeveloped collections policies and repurposing stack space to collaborative study space. A significant amount of much-needed space, logically apportioned as a full library floor, could be turned over to the Faculty of Law if other library space needs are met through the proposed reconfiguration. For the Library this would be a reduction in space costs, and for the Faculty of Law it would reduce operating costs of space rental for programs currently located off-campus and potentially facilitate new revenue opportunities for those programs
- Washrooms could easily be accommodated on the main level

- Adaptive technology on the first level should be placed on the second level
- Staff spaces could be rationalized and improved with space reconfigured and converted to other uses such as group study rooms
- There is an opportunity to reconfigure this area to provide improved, contiguous relationship between circulation desk staff and other staff spaces. Repositioning the desk outward would improve customer/client facing connectivity and service

Floor Plan Recommendations

First Floor Plan

- Relocate the first floor collections according to the re-envisioned collection development guidelines, and replace the washroom, individual and group study spaces, graduate workroom and adaptive technology room on other floors. While renovations are occurring on other floors, other study spaces may be needed outside the library
- Turn over the library's first floor to Faculty of Law for other uses

Second Floor Plan – Main Level

- Reconfigure circulation desk and reserve collection to provide contiguous staff office space connected to the circulation desk for a more effective and secure arrangement of space
- Reconfigure the staff area along the east wall of the library and repurpose the captured space into group study rooms. Provide a new, unisex, barrier-free washroom, as well as a relocated Graduate Workroom, to replace those spaces lost with the turnover of the space on the first floor to the Faculty

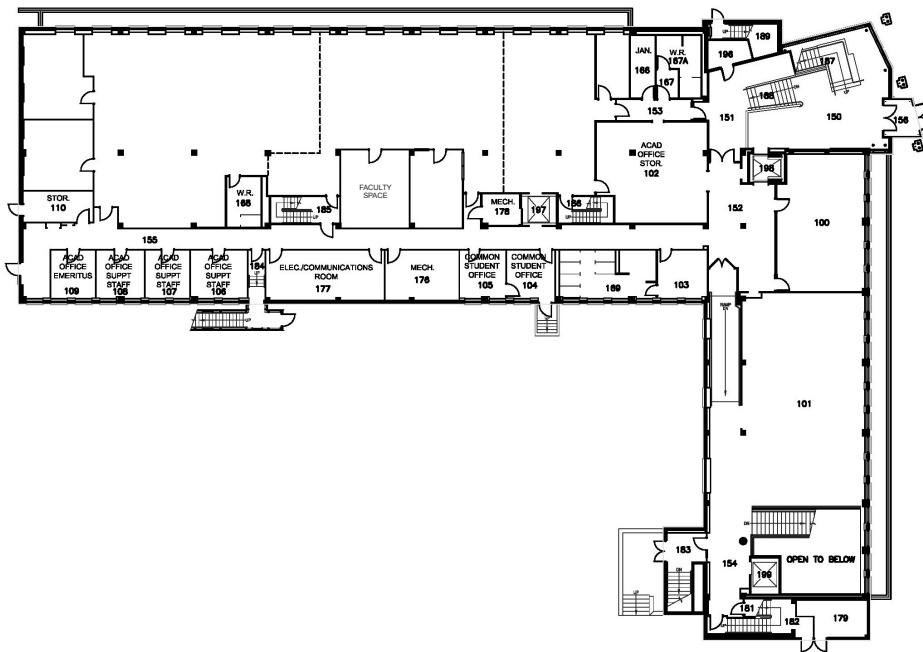
Third Floor Plan

- Provide larger space for the Queen's Law Journal, with entries to both the library and faculty corridors
- Relocate a significant portion of the third floor print material as determined by the re-envisioned collection development guidelines. Relocate remaining stack space to the southeast portion of the floor plate to open the floor to other uses
- Repurpose the collection space to create three new conference rooms, three additional group study rooms, as well as additional individual carrel space overlooking the library's double-height Reading Room

LAW LIBRARY



First Floor Plan - EXISTING



First Floor Plan - PROPOSED

LAW LIBRARY

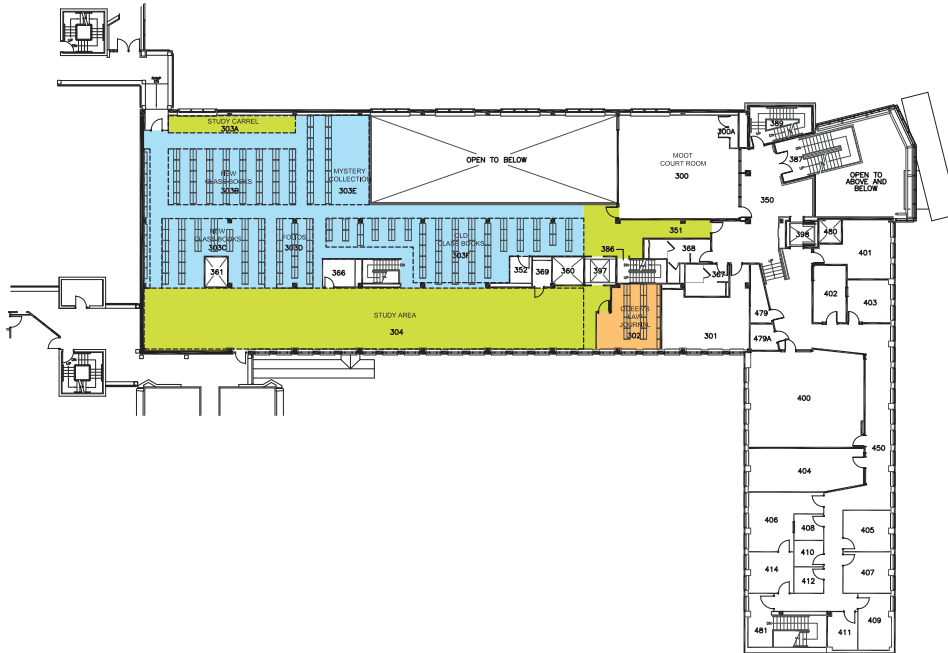


Second Floor Plan - EXISTING

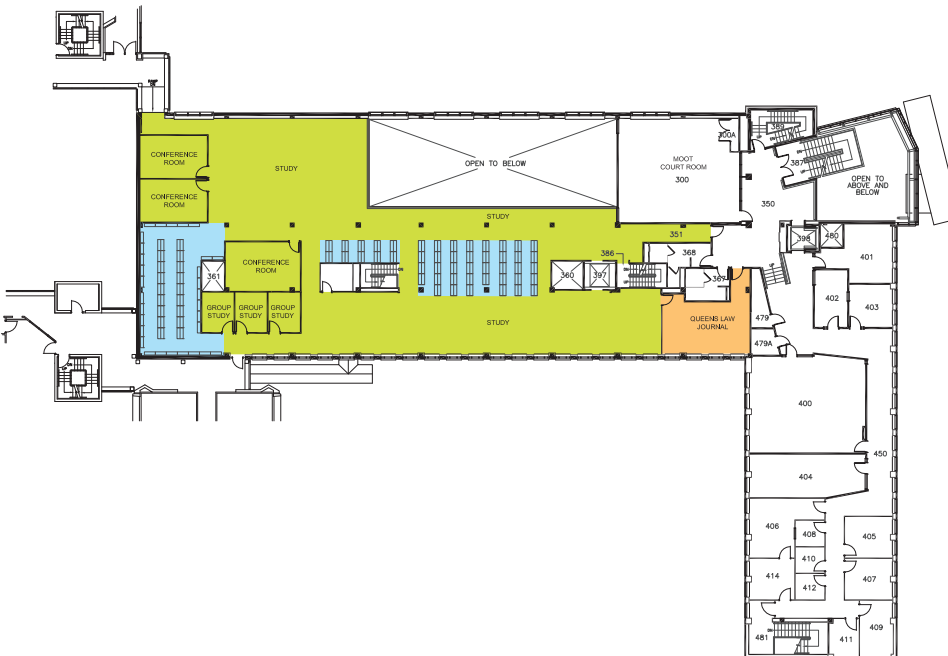


Second Floor Plan - PROPOSED

LAW LIBRARY

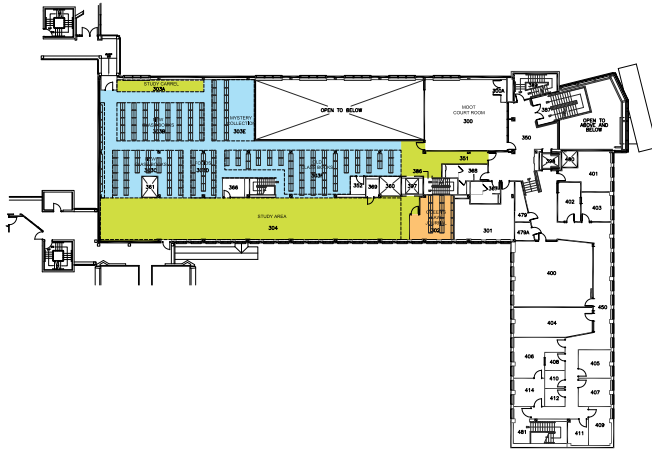


Third Floor Plan - EXISTING

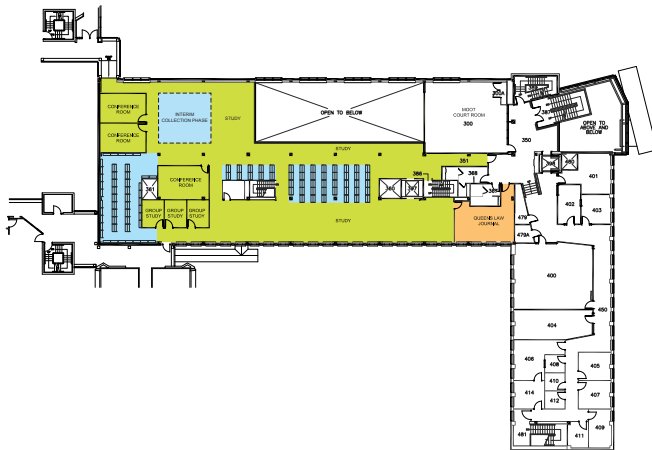


Third Floor Plan - PROPOSED

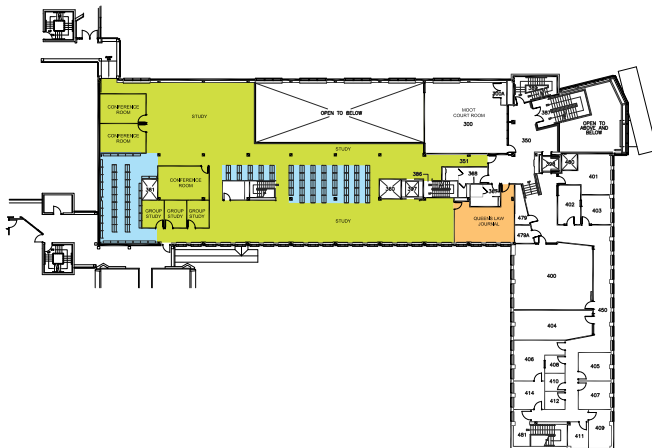
LAW LIBRARY



Third Floor Plan - EXISTING



Third Floor Plan - POTENTIAL INTERIM



Third Floor Plan - PROPOSED

LAW LIBRARY



Existing – Law Library View from Upper Floor



Proposed – Law Library View from Upper Floor



Health Sciences Library

HEALTH SCIENCES LIBRARY

Located in Botterell Hall, the Health Sciences Library is part of an operationally inefficient building that, because of its size and location on campus, is more than likely to remain long-term as an established Faculty building. Our vision for this library is consistent with the two other libraries in Faculty buildings, namely to strengthen its important role and relationship to its learners and researchers by providing it with more and better-equipped study and service spaces in which to achieve its mission, within a reduced footprint, if possible. The 2005 First Floor renovations were successful in providing excellent collaborative learning spaces in the form of large group study rooms and an open interactive learning area. What is still required are more variously-sized group study spaces, as well as a better and more space-effective relationship of service space to learners. The ambition to create operationally independent libraries, not reliant on their Faculty buildings' hours of operation, is the same for all three of the smaller libraries in the system, but achievable only with the Health Sciences Library.

Analysis

- Built in 1977, renovated in 2005
- The 2005 renovation created an attractive, well-used area of large group study rooms and open collaborative group tables. This space could be reconfigured/repurposed to offer a larger choice of different-sized group study rooms
- Ideally-situated building vestibule could be easily configured to serve as entrance to independently operated library as well, if washroom facilities were added to the main level
- Well-sized and outfitted electronic classroom unfortunately screens and relegates staff space to a 'back of house' location, away from learners. Generous exterior windows to attractive outdoor patio space in basement level obscured by heavy concentration of stacks. Exterior views could be easily gained through removal and reorganization of stack space
- Good visibility and library presence from the street
- Security and public access to the basement outdoor patio space not provided
- Inefficiently-organized lower level

Opportunities

- This open collaborative space on the main level could be reconfigured/repurposed to offer a larger choice of different-sized group study rooms
- Staff area could be reduced and more effectively designed to provide both a better, more embedded relationship of staff service space with learners. Certain spaces, such as a lounge, or quiet detached office space primarily for administrative work, could remain in more remote locations
- Lower level could provide better and more varied study spaces, as well as allow for some library floor area to be turned over to the Faculty to provide it with much-needed space
- Opportunity to create a lovely, secure reading garden on the lower level, as unique space to the library, consistent with the recommendation to secure accessible outdoor spaces for use at other campus libraries

- Electronic Classroom can be relocated to rear of the library, freeing area for additional study space and allowing new embedded staff spaces to be created within the learners' study area
- Opportunity to provide adaptive technology on main entry level and reorganize library to become more spacious, open, and accessible facility

Floor Plan Recommendations

Lower Floor

- Repurpose collection space to create a more open floor of individual and group study spaces. Provide within captured space many new group study rooms
- Develop an inviting, book-lined, daylit large open study space of carrels, reading tables, and flexible lounge furnishings with broad views to the outside and more 'elbow room' for learners to use and enjoy this lower level
- Create a secure, attractive outdoor reading and study garden as an accessible space in good weather, as a concept consistent with recommendations to other campus libraries, to open themselves to their outside spaces
- Turn a portion of the lower level stack area over to the Faculty of Health Sciences to help address its space needs

Upper Level Plan

- Create a separate, new entry to the Health Sciences Library off the existing vestibule, allowing the library to operate independently of Botterell Hall
- Provide adaptive technology convenient to the new entrance to the library
- Relocate the existing e-classroom and staff areas to capture space, repurposed for new washrooms, necessary for its independent operation, as well as for new technology-rich smaller study rooms
- Provide new, embedded service space central to the study area and reconfigured as required to best serve learners and staff
- Provide additional service space at the southwest corner where the existing staff lounge is located, to include a reconfigured staff lounge and private office space
- Create a dedicated Graduate Study Room to ensure graduate students have their requisite quiet research space

HEALTH SCIENCES LIBRARY



First Floor Plan - EXISTING

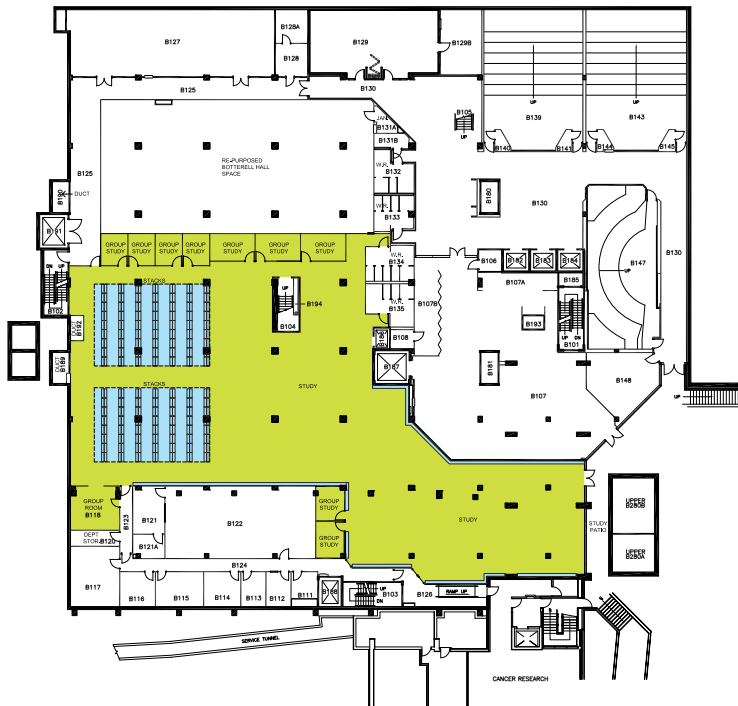


First Floor Plan - PROPOSED

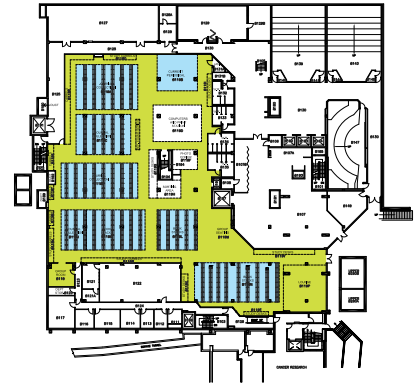
HEALTH SCIENCES LIBRARY



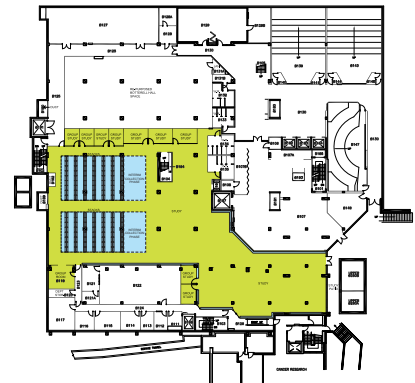
Lower Floor Plan - EXISTING



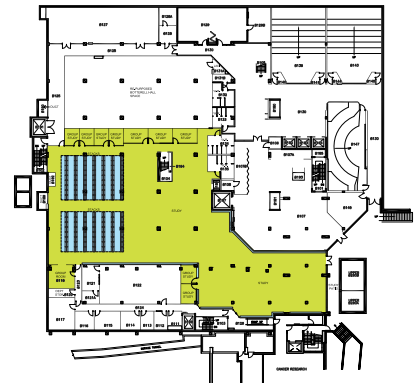
Lower Floor Plan - PROPOSED



Lower Floor Plan - EXISTING



Lower Floor Plan - POTENTIAL INTERIM



Lower Floor Plan - PROPOSED

HEALTH SCIENCES LIBRARY



Existing – Health Sciences Lower Level View



Proposed – Health Sciences Lower Level View



Education Library

EDUCATION LIBRARY

The Education Library provides a broad range of tangible and digital materials and support services essential to the education programme and the intellectual development of our future teachers. Located on the west campus, the library is joined together with its partner, the Teacher Resource Centre (TRC), in a less than ideal facility. The Campus Master Plan could recommend the expansion of the west campus, and integration of the Education Faculty with the new buildings and public realm planned for that future development of the University. The Education Library will require a significant reorganization of its use of space and a major infusion of technology infrastructure and hardware to enrich the new learning and study spaces that we envision for its future. Consistent with the other libraries in Faculty buildings, Law and Health Sciences, the Education Library is firmly embedded with its Faculty. Because of its age and current use of existing space, it will require a number of changes to maintain its relevance in support of the new ways of teaching and learning, which technology has significantly impacted.

The vision for this library, like education today, is to turn its inward focus outward, revealing new views while creating a stronger identity for the library, by exposing its activities to the people using the building's main circulation corridor. We imagine a transformed library with its soaring, redesigned atrium, inspiring students by offering the latest teaching resources, and showcasing these in an educational sandbox or 'classroom lab', visible upon entry. The Education Library will be more open, more accessible, and offer considerably more individual and collaborative study space than is possible in its current configuration, densely packed with collection space. The Teacher Resource Centre will, with better configuration, become more space-efficient, within a smaller footprint, and be located directly adjacent to the Education Library, providing an opportunity for more collaboration.

Analysis

- Built in 1972
- Spatially arranged with a three-story sky-lit atrium at its centre. Current library layout, furnishings, and interior finishes do not contribute to the atrium's potential to become an inspiring and dramatic 'statement' on education and focal point to the library
- Building has significant upgrades required for its mechanical systems, which are nearing the end of their operational life cycle
- No exterior identity or visibility for the Education Library or its partner, the Teacher Resource Centre
- Difficult floorplan with one very large ground level floorplate and two small, highly-specific and difficult to access donut-shaped floorplates above
- Significant lack of group study and collaboration space
- Underutilized and inefficiently organized stack space to house a variety of tangible resources
- Remote location of the Education Library from the main campus

Opportunities

- Opportunity through interior design, reorganization, and furnishings to create a more compelling sense of place
- Opportunity to expose the library to the major circulation corridor within the Education Building and provide views into the library and its activities, as well as views out to the main circulation corridor and courtyard across the hall

- Opportunity to open small floor plates more and exploit their awkward shape to create unique study spaces with expansive views out, and interesting views within the library
- Opportunity and imperative to invest in robust technology for the library's study and teaching spaces
- Group study and collaboration space could be added with the removal of some stack spaces and reorganization of vacated space
- Opportunity to develop more space-effective layouts of fully-utilized stacks
- Teaching corner on main level could be relocated and developed into a more dynamic and technology-rich space to excite learners on entry about their future profession
- Could contribute to greater virtual and symbolic linkages between the west campus and main campus
- Depending on development directions for the west campus emerging from the Campus Master Plan, there may be the opportunity for the library to become more fully integrated with and used by learners from other relocated Faculties, and to become a community hub of the west campus
- Could contribute significantly to enhancing the student learning experience and research at the west campus

Floor Plan Recommendations

- Repurpose some stacks and first floor space, including a reorganization of the TRC to create:
 - A new corner glazed entry at the corridor with views out from the library to the courtyard
 - A back-to-back service configuration between the library and Teacher Resource Centre to allow the potential for shared support spaces and collaboration (e.g. staff kitchen, copier, etc.)
 - A more open, accessible, and redesigned atrium space
 - A transformed and relocated 'teachers' corner' as a more visible, dynamic and technology-rich 'teaching lab' visible on entry and from the main courtyard
 - New technology-enhanced collaborative learning spaces, including project and group study rooms
- Provide a separate entry to the Teacher Resource Centre off the main entrance to the library

Second Floor

- Reorganize and repurpose stack space to provide new expanded, daylit study areas, all with views overlooking the atrium and to the outside
- Provide convenient, embedded, and accessible small service spaces to each mezzanine wing

Third Floor

- Reorganize and repurpose stack spaces to provide, on the third floor, the same arrangement of study space as the second floor with similarly embedded service spaces
- Create a variety of group study rooms for collaborative study

EDUCATION LIBRARY

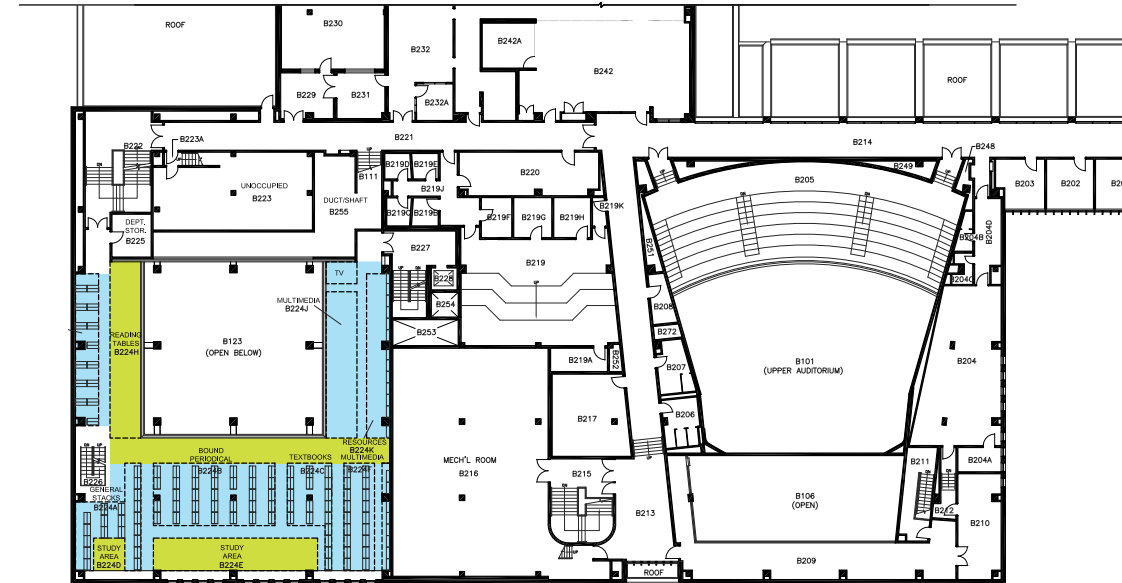


First Floor Plan - EXISTING

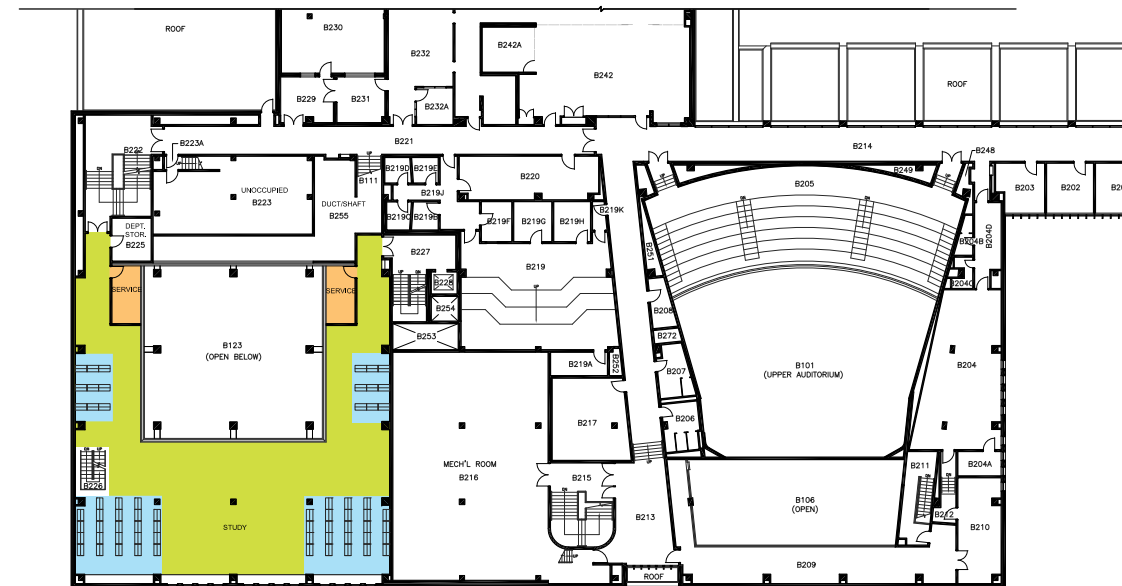


First Floor Plan - PROPOSED

EDUCATION LIBRARY

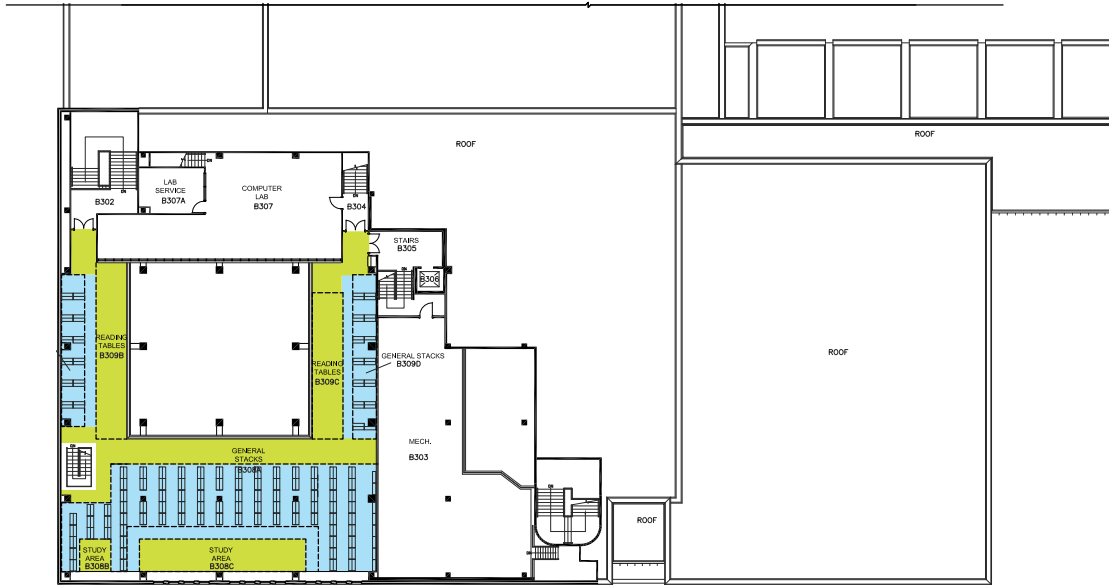


Second Floor Plan - EXISTING

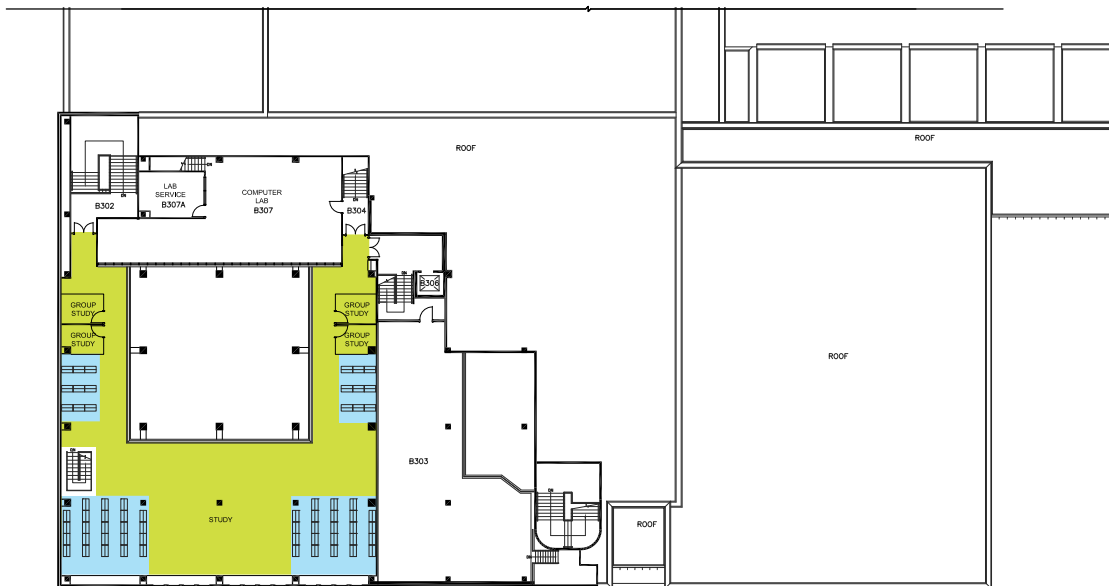


Second Floor Plan - PROPOSED

EDUCATION LIBRARY

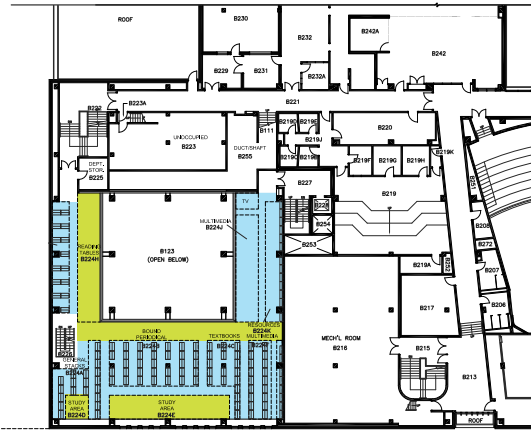


Third Floor Plan - EXISTING

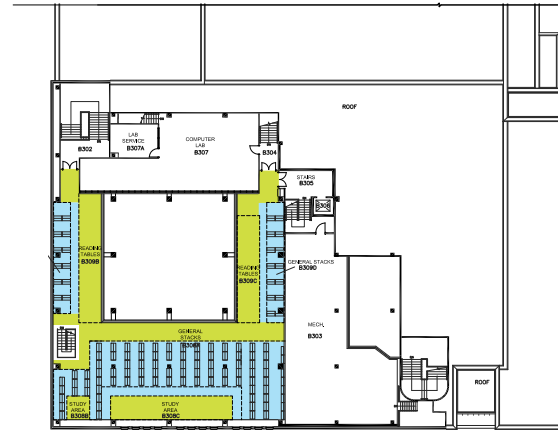


Third Floor Plan - PROPOSED

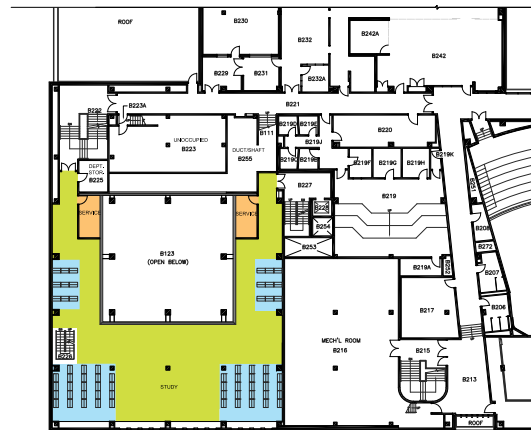
EDUCATION LIBRARY



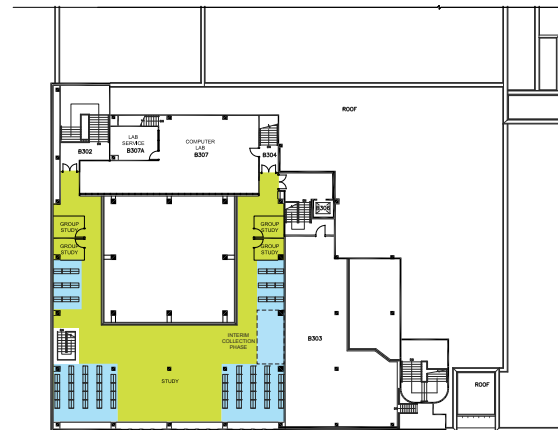
Second Floor Plan - EXISTING



Third Floor Plan - EXISTING



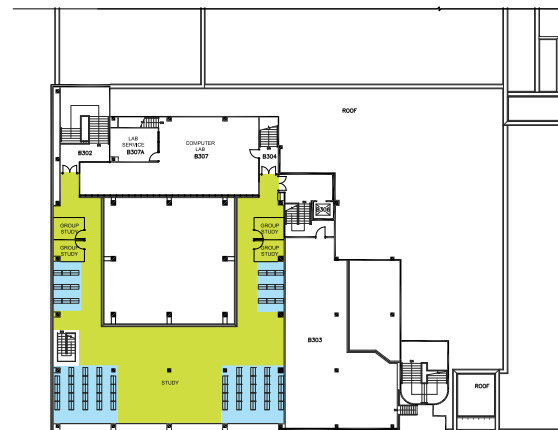
Second Floor Plan - POTENTIAL INTERIM



Third Floor Plan - POTENTIAL INTERIM



Second Floor Plan - PROPOSED



Third Floor Plan - PROPOSED

EDUCATION LIBRARY



Existing – First Floor View at Entrance Corridor



Proposed – First Floor View at New Entrance

vi. PHASING

The Library and Archives Master Plan is intended to establish the planning framework for the next twenty years with recommended changes to the existing libraries' use and configuration, to best align with, and support, the University's strategic objectives as well as changes to pedagogy, information creation and retrieval, and to the evolving social geography of the campus. Recommended changes to three buildings – Stauffer, Douglas, and Kathleen Ryan Hall – are to some degree interdependent. Kathleen Ryan Hall is to be closed as the Archives, which will relocate into a transformed Douglas Library. The Engineering and Science and Music Libraries will relocate from Douglas to a transformed Stauffer Library.

The proposed facility changes to the Law Library, the Health Sciences Library, and the Education Library are not interdependent, and can be implemented more flexibly, at opportune times. The proposed timing for changes to these libraries will depend on the pace of re-envisioned collections strategies, and in the case of Health Sciences and Education, on the Campus Master Plan recommendations in determining the long term future and use of their current buildings. Space planning studies, currently underway for the Health Sciences and Law buildings, will, once determined, no doubt further impact future renovation strategies for their libraries. The Education building, Duncan McArthur Hall, has also been identified in the Campus Master Plan space analysis phase, and in stakeholder discussions for LAMP, as a building with layout inefficiencies, and with poorly sized classrooms, in many cases ill-suited for today's teaching and learning. Recommendations for the layout and future use of this building will also impact the future of its library, and may render the studies recommended for this project subject to further review.

The floor plan drawings for each library in this report indicate collection space allocation, represented as a 'snapshot in time' of remaining stack space in all of the five libraries after proposed renovations. Each library's opportunities and constraints will vary to a certain extent, as the requirements to retain on-site print material for one particular discipline differ from the next. The pace at which stack space can be reclaimed through the application of the re-envisioned collection paradigm will be tied to a range of factors that includes, among many, such considerations as access, acquisition policies, use, digital copies, and alternate storage options. These 'snapshot' plans, however, represent, what we believe to be a very achievable goal, of maximum space allotment to collections for each library, within a five year timeframe. This timeframe recognizes the possibly slower pace of change in certain libraries, but nevertheless sets an achievable target, which may be accelerated for some libraries, where possible. The five year timeframe also represents a time incentive for commencing implementation of the Library and Archives Master Plan prior to its first review.

A set of interim collection space floor plans are included for the smaller libraries which illustrate the flexibility of the plans to accommodate phased collection changes, if the five year plan proves to be too aggressive to achieve in one phase. The percentage of collection space area reduction calculated for all libraries, as shown, is approximately 38%, which would include the bound journals in each library. The Douglas Library, which will be transformed with the addition of Queen's Archives, will have collection space reductions on the floors above grade. However, collection space below grade for the Archives and for Special Collections will be increased with the inclusion of compact

shelving on level one, and will allow for long term expansion of the collections by 3% per annum for approximately fifteen years. Proposed repurposing of stack space in the three libraries in faculty buildings as well as at Stauffer Library is more significant and averages almost 50%. The three libraries in Faculty buildings may choose to sequence the proposed changes into smaller-sized phases, of relatively simple leasehold improvements within the first years, with repurposing of stack space progressing in rationalized 'portions' to allow for effective construction phasing with the least disruption. Stauffer Library as well could be broken into renovation phases, with collection reduction phased to correspond.

STAUFFER LIBRARY, DOUGLAS LIBRARY, ARCHIVES

As discussed in earlier sections, The Library and Archives Master Plan recommends the closure of Kathleen Ryan Hall as the Queen's University Archives. The building has significant shortcomings that severely limit its adequacy as an Archives and preclude it from serious consideration as a long term, cost effective, exemplary Archives facility, even if major renovations were to be considered. The Library and Archives Master Plan recommends relocation into a renovated Douglas Library, as part of a combined, transformed, and distinguished Archives and Special Collections Facility. Douglas Library is envisioned as a Centre for Digital and Print Culture, with its orientation and spatial organization configured to support scholarly research and communications. In order to undertake the significant physical and operational changes required to create this new Centre at Douglas with the Archives and Special Collections, a series of possible sequencing options should be considered. The options vary in priority, cost, and impact on staff and student activities, and are provided to suggest that there are choices to be made with several considerations that will impact the course selected.

Relocation of the Libraries and Collections within the Douglas Library

The Douglas Library will require major renovations to accommodate the proposed new Archives and Special Collections Library as part of the new Centre for Digital and Print Culture. Construction for this project could take anywhere from between 12-14 months. The building would be best vacated to most economically and effectively complete this work. Renovations to a vacant Douglas Library require that one of the following options be selected as a Phasing Plan.

Options

Option I – Sequential Construction – construction projects at Stauffer and Douglas undertaken in sequence, one after the other is completed.

Option II – Concurrent Construction – construction projects at Stauffer and Douglas undertaken simultaneously.

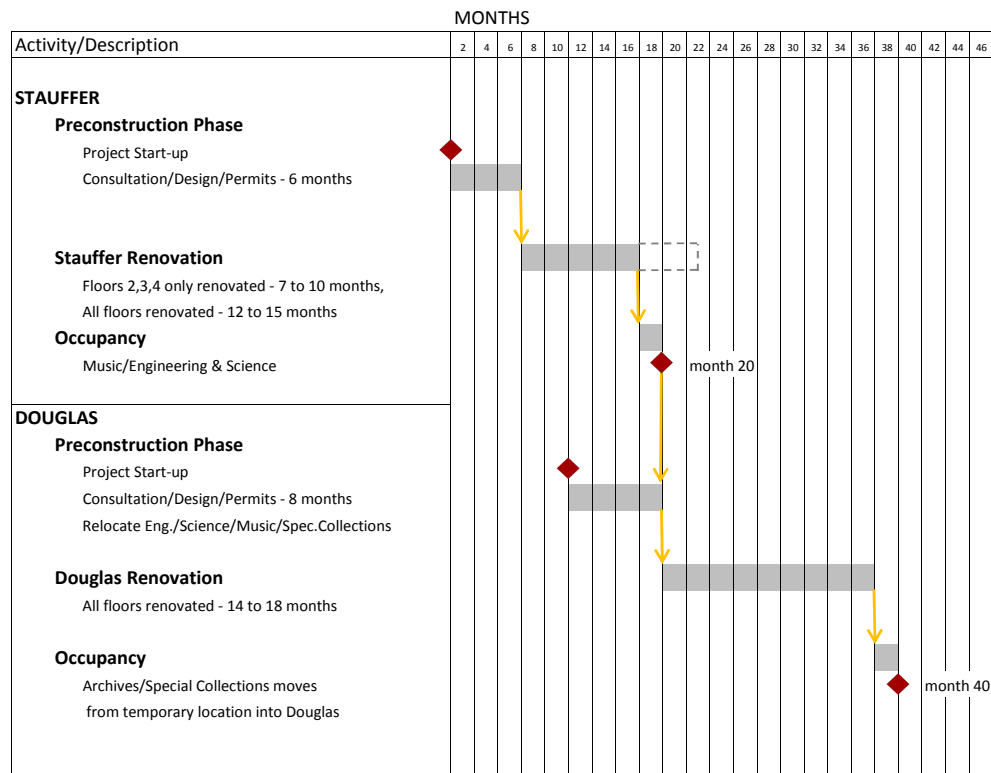
- In both options, Douglas Library needs to be, for cost effectiveness, fully vacated prior to commencing its proposed complex construction project for transforming the building into the Centre for Digital and Print Culture, home to the Archives and Special Collections
- In both options, the Archives would move only once, at the end of construction, to Douglas Library

OPTION I – SEQUENTIAL CONSTRUCTION

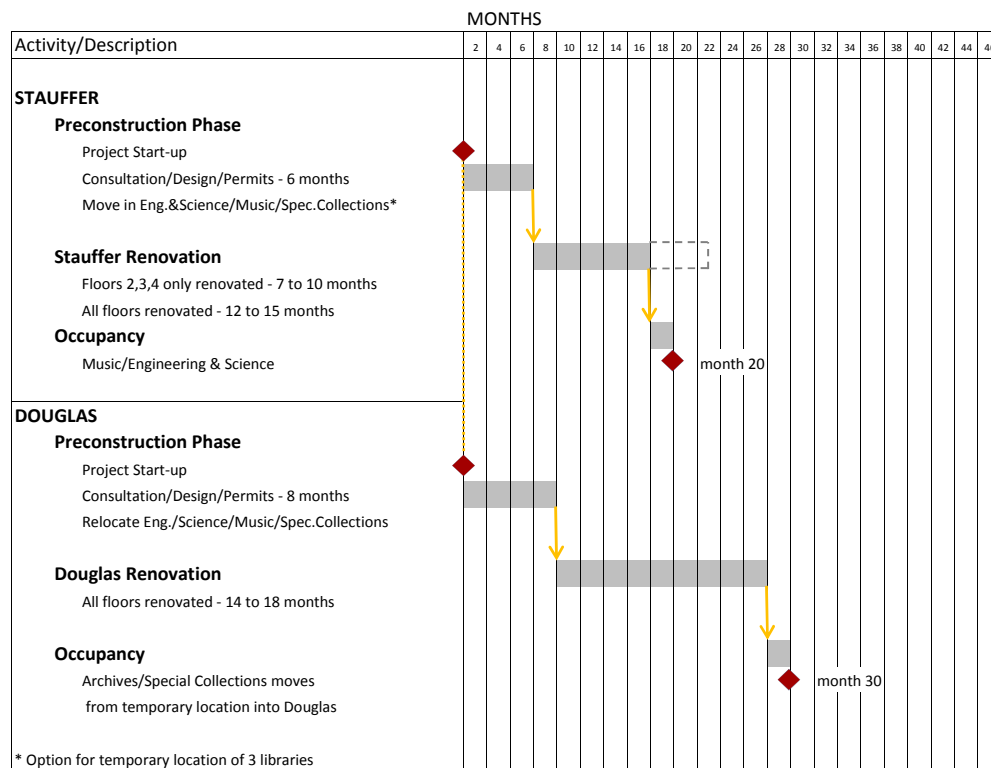
- This option allows for a single relocation of the Engineering and Science and Music Libraries to a renovated Stauffer, which would then be followed by the relocation of the Archives to the renovated Douglas Library
- To renovate Stauffer Library, at minimum, on floors 2, 3, and 4 in order to accept the relocated libraries listed above, stack space would need to be adjusted as follows:
 - Remove bound journals from the stacks to remote storage and/or make available digitally
 - Relocate a portion of the existing print collection to new compact shelving on the lower level
 - Re-organize space in the second floor North and South Reading Rooms and install new shelving to make space available for the Music Collection
- Construction time required for the three floor renovation project at Stauffer Library could take between 7 – 10 months depending on the scheduling issues associated with keeping the Library operational during construction
- Construction time required for the full five floor renovation project at Stauffer Library as shown in the drawings could take between 12 – 15 months
- Upon completion of the renovations to Stauffer Library and relocation of the Engineering and Science and Music Libraries, Special Collections would move temporarily out of Douglas to another location to allow for construction to commence at a vacated Douglas Library
- Construction time required to complete the transformation of Douglas Library could take between 14 – 18 months
- Upon completion of construction at Douglas Library, Special Collections would relocate back to Douglas Library, and Archives would relocate from Kathleen Ryan Hall, which would then be closed

OPTION II – CONCURRENT CONSTRUCTION

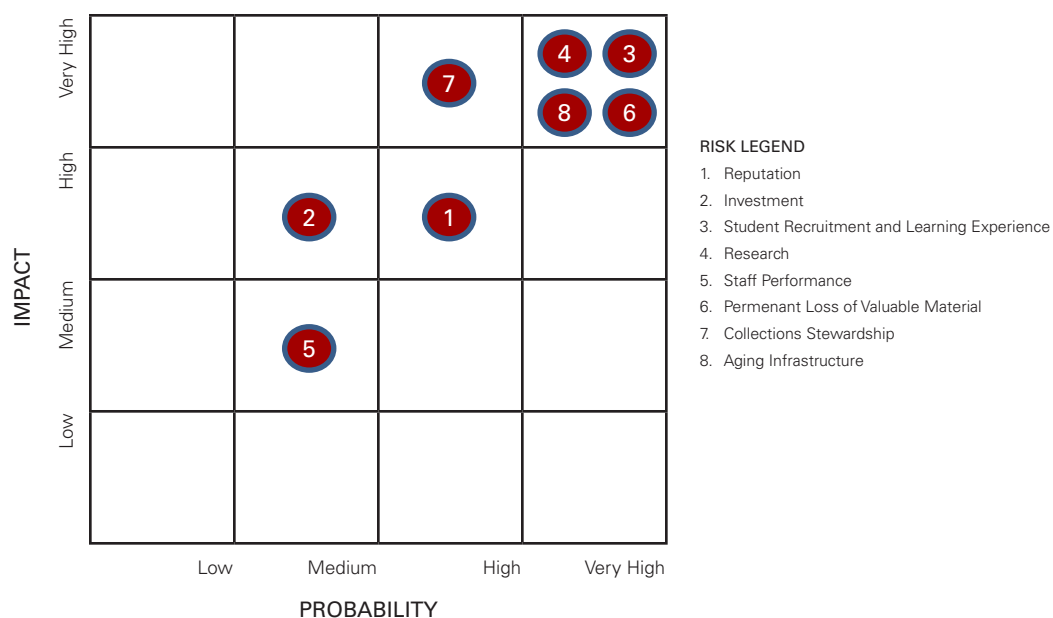
- For Option II, in which construction for both Stauffer Library and Douglas Library occur at the same time, a temporary location would need to be found for the Engineering and Science and Music Libraries, in addition to Special Collections. If all three libraries temporarily relocated prior to their final moves, then the construction schedule for Stauffer may be extended to address the more complex logistics associated with their operations during their period of temporary relocation. Otherwise construction time would be similar to Option I



Option I - Sequential Construction



Option II - Concurrent Construction



RISKS OF NOT IMPLEMENTING RECOMMENDATIONS

The proposed Library and Archives Master Plan recommendations seek to mitigate the potential risks to Queen's, and to the specific Library and Archives facilities. The following list highlights the risks associated with not proceeding expeditiously with these recommendations.

- Reputation**
 Loss of competitive edge (or rank) of Queen's University as a leading research institution with a transformative student learning experience.
- Investment**
 Loss of momentum for donor investment in using a 'bandage' versus coherent planning approach.
- Student Recruitment and Learning Experience**
 Risk of poorer performance and dissatisfaction by students due to overcrowding and shortage of exemplary learning, study, and research spaces to support academic programs.
- Research**
 Inability to manage valuable research collections and deliver effective research services.
- Staff Performance**
 Potential declining service delivery and lost opportunities due to outdated service models and facilities conditions, and inadequate staff work space in the case of the Archives and Special Collections.

- **Permanent Loss of Valuable Material**

Unprotected rare books in open stacks in all locations, and inadequate conservation/preservation in designated storage environments:

- Douglas Library inadequate fire suppression system – wet sprinkler system on all levels except Level 7 and 8 (North and South Reading Rooms) which have no sprinklers
- Kathleen Ryan Hall inadequate fire suppression system – no sprinklers

- **Collections Stewardship**

Overcrowded stacks without growth space for new materials required for current and future academic programs and research.

- **Aging infrastructure**

Douglas Library

- Annual operating costs – high (costs include steam, electricity, and water utility services as well as custodial, maintenance, and waste pick-up)
- Deferred maintenance – \$900,000 (13.8% of total library deferred maintenance cost) Risk of increasing annual operating costs with further deterioration of the building
- Specific deficiencies – Lighting not energy efficient

Kathleen Ryan Hall

- Facilities Condition Index – FCI: 0.35 (very high)
- Deferred maintenance – high \$1,400,000 (21.5% of total library deferred maintenance cost). Risk of increasing annual operating costs with further deterioration of the building
- Specific deficiencies – Equipment in building beyond its expected useful life and recommended to be replaced. Lighting not energy efficient. Aging building envelope: energy inefficient single pane windows

Law

- Annual operating costs – average (costs include steam, electricity, and water utility services as well as custodial, maintenance, and waste pick-up)
- Deferred maintenance – \$1,000,000 (15.3 % of total library deferred maintenance cost) Risk of increasing annual operating costs with further deterioration of the building
- Specific deficiencies - Inadequate working environment due to lack to A/C in majority of library. Lighting not energy efficient. Aging building envelope: energy inefficient single pane windows

Health Sciences

- Annual operating costs – very high (costs include steam, electricity, and water utility services as well as custodial, maintenance, and waste pick-up)
- Deferred maintenance – \$1,500,000 (23 % of total library deferred maintenance cost) Risk of increasing annual operating costs with further deterioration of the building
- Specific deficiencies - Equipment in building beyond its expected useful life and recommended to be replaced, Fire alarm control panel is an outdated multizone, non-addressable panel with no battery back-up. Lighting is not energy efficient

Education

- Annual operating costs are low. However HVAC equipment in this building is beyond its expected useful life
- Deferred maintenance – \$520,000 (8.0 % of total library deferred maintenance cost). Risk of increasing annual operating costs with further deterioration of the building
- Specific deficiencies - Equipment in building beyond its expected useful life and recommended to be replaced. Lighting not energy efficient

Conclusions

- Option I extends the time in which the Archives would need to remain in Kathleen Ryan Hall, which in turn would extend the associated risk
- Option I is less complex to administer or perhaps finance, and saves on the administrative project costs associated with multiple moves. However, the extended completion time for Douglas Library in Option I may negate any potential administrative savings, with cost increases for construction inflation over a longer time period
- Option II allows for the Archives to be moved sooner, which would benefit the University's strategic objectives in exemplary research and enhance the student learning experience
- Option II, in closing Kathleen Ryan Hall sooner, would as well provide the benefit of operational costs savings

7. KEEPING THE LAMP LIT

The Library and Archives Master Plan (LAMP) outlines a planning framework and series of recommendations which envisages, over the next twenty years, a transformed Library system at Queen's, built upon its solid foundation of superb collections and services. The primary goal is to strengthen and equip these critical assets to best support research and the student learning experience at Queen's in the years ahead. To achieve this, Queen's needs to prioritize objectives and strategically invest in its facilities and resources to ensure that the outcome is an exemplar for what is possible, to further distinguish Queen's amongst its peers.

The summary of recommendations that follow establishes the framework for a transformed Library system with significantly increased learning and study spaces, that will be better equipped, more agile and responsive to the needs of the 21st century learner, teacher and researcher, and more open and integrated with the global community which Queen's embraces. Most importantly, this framework recognizes the difficult fiscal climate in which these changes must be accomplished, and recommends, with difficult choices, the strategies required to ensure this essential investment in the future of this remarkable University.

It is intended that this document and the recommendations contained within be part of a living document, with a formal review occurring every five years over the next twenty years. This will enable a review of changes to date, and possible recommendations towards further evolution in library and archives best practice at Queen's. It is intended that the recommendations and budget associated with this reporting process be operationalized through Queen's annual planning process.

i. SUMMARY OF RECOMMENDATIONS

General

- Invest in the renovation and transformation of five existing Queen's libraries, to significantly enhance their facilities and resources in order to successfully support the 21st century learner, teacher and researcher. Relocate the Archives collections at Kathleen Ryan Hall to Douglas Library and turn over the building to the University for other uses. The remaining facilities will be Stauffer, Douglas, Law, Health Sciences, and Education
- Develop a comprehensive collection paradigm to guide the acquisition, access to, presentation, and preservation of Library and Archives digital and tangible collections. An associated review of all of the Library's collections should be undertaken, to develop a comprehensive methodology to determine a phased plan for stack removal, storage and collection relocation, in order to allow for repurposing stack space

Douglas Library

- Transform Douglas Library, an exemplar of Queen's Collegiate Gothic heritage style and a pivotal place on campus, into a focal point of knowledge and research, as a dynamic new Centre for Digital and Print Culture
- Relocate the Archives, whose collections and services are an invaluable asset for Queen's and the broader community, from Kathleen Ryan Hall, an inadequate building for the long-term future of the Archives. Join the Archives with Special Collections in Douglas Library in a research and exhibit facility that includes a preservation storage environment, a conservation lab, and a secure reading room
- Incorporate new partnerships, services, expanded study areas, and dedicated graduate research space
- Relocate the Engineering and Science Library and the Music portion of Jordan Library to the Stauffer Library

Stauffer Library

- Strengthen Stauffer Library's signature stature as a focus at Queen's for the student learning experience
- Leverage the distinguishing characteristics of the building to significantly expand and enhance learning and research services and study spaces, including robust technology, an expanded Queen's Learning Commons and dedicated graduate research space
- Reconfigure the lower level to be more open to daylight and with the potential to create a new accessible reading garden as a unique outdoor study space
- Provide new opportunities for the Library to expand its community outreach and partnerships with new exhibition and display spaces

Library Square

- Leverage the iconic value of the Douglas/Stauffer relationship and their pivotal location to develop a new, major, public open space on campus at the intersection of Union and University – Library Square – as an accessible and inviting place for social interaction and special campus events throughout the year

Library Information Network at Queen's (LINQ)

- Develop a new, more agile form of Library infrastructure virtually connected with the full range of library and archives resources and services and physically located in a variety of buildings: smaller clusters of study space, or learning communities, woven into Queen's intellectual fabric and historical narrative and configured to respond more closely with the campus' social geography and the digital information paradigm

Law Library

- Retain and strengthen the Law Library as a laboratory for legal research and a valued sanctuary for study, with additional individual and group spaces and upgrades to the building's mechanical system
- Consolidate the Library from three floors to two, allowing the first floor to be repurposed to accommodate Faculty needs

Health Sciences Library

- Retain and strengthen the Health Sciences Library as a valued place for study and research in Botterell Hall, taking into account building assessments of the Campus Master Plan and Faculty space planning
- Reconfigure the main level to provide more effective programming of staff and service space
- Significantly improve the lower level by creating an area more open to daylight for individual and group study space, and allow a portion of space to be repurposed to accommodate Faculty needs

Education Library

- Create a more compelling 'sense of place' with a visible entry to the corridor on the ground floor and a more dynamic demonstration teaching space and atrium
- Incorporate more robust technology infrastructure to allow future teachers better access to 21st century digital teaching and learning tools
- Upgrade building infrastructure to include significant improvements to the HVAC system

ii. OTHER CONSIDERATIONS

Other considerations that could change the growth equation for appropriate and sufficient library space in the future, and could not be specifically addressed in the report include:

Master Plan Recommendations for the West Campus

The forthcoming recommendations for growth at the west campus in the Campus Master Plan may impact the adequacy of the library space on the west campus. Proposed renovations to the Education Library at Duncan MacArthur Hall will expand learning and study space in that building by over 80%, a large increase, providing it with space to become a more interdisciplinary facility with the likely addition of new facilities and students on the west campus. Should, however, the Campus Master Plan recommend that the west campus be developed with a focus on graduate students and research, with an accompanying significant shift in population and demographics, then the adequacy of resources and space at the Education Library to support that mission would be seriously questioned. The most likely possibility is that a new research library would be required, in addition to the renovated Education Library, to support students and faculty at the west campus.

Stauffer Library Expansion

The proposed renovations to the Stauffer Library will result in a significant repurposing of space from collection stacks to more study and service space. This shift would continue over the next twenty years as print collections are relocated or removed and more space in turn converted. That said however, the next twenty years are difficult to predict. The demand for the services which the QLC currently provides, and will further offer with its proposed expansion, may increase exponentially. The ground, second and lower floor are the most public and heavily used floors at Stauffer and, even with their large floor plates, they are limited in their capacity. The development site to the north of the Library is an extremely valuable building site for Queen's, and we believe it would be most prudent and logical to reserve its use for the eventual expansion of the Stauffer Library. The site is critical to keeping rational planning options open.

iii. CONCLUSIONS

In summary, the Library and Archive Master Plan recommends repurposing five existing libraries. A new comprehensive collection development paradigm will ensure that tangible and digital resources are more accessible, better preserved and presented and more cost effectively stored. The plan will collectively add approximately 25% more study space in the existing libraries. This space will be created primarily by improved planning and by reducing areas devoted to collection space by approximately 38% across the whole system. The total system reduction in actual collection space stacks, would be less as the plan recommends increasing collection capacity in particular areas of Douglas Library and Stauffer Library by use of compact shelving. This is a prerequisite for Douglas Library's new, long-term collection requirements as home to a transformed Archives and Special Collections facility.

These changes will be accomplished within a smaller total portfolio of library space to manage, with an approximate 10% reduction of gross square feet, achieved primarily through the closure of Kathleen Ryan Hall.

The recommendation to transform the five libraries through renovations, and incorporate the LINQs strategy across the Campus, will provide sufficient high quality learning, study and research space to meet student demand for the next twenty years. We believe that the future of the Queen's Library and Archives is a bright one. We are confident that the Library and Archives Master plan sets out a strategy, building upon the Library's and Archives' considerable strengths, to create an innovative and remarkable network of tangible, digital and human resources that will ensure excellence in research and wonderfully enrich the student learning experience at Queen's.