

OUTLINE OF ISSUE

 Agenda Title: **Research and Collections Resource Facility (RCRF) Functional Programme**

Motion: THAT the GFC Facilities Development Committee approve, under delegated authority from General Faculties Council, the proposed Research and Collections Resource Facility (RCRF) Functional Programme, as proposed by Planning and Project Delivery and as set forth in Attachment 1 (excluding specifics related to the siting of this facility), as the basis for further planning and design.

Item

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| Action Requested | <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation <input type="checkbox"/> Discussion/Advice <input type="checkbox"/> Information |
| Proposed by | Pat Jansen, Associate Vice-President (Planning and Project Delivery), Facilities and Operations |
| Presenter | Gerald Beasley, Vice-Provost and Chief Librarian, Libraries; Lorna Baker Perri, Associate Director, Accommodation Planning and Programming, Office of the University Architect, Facilities and Operations; Shannon Loughran, Accommodation Planner, Office of the University Architect, Facilities and Operations |
| Subject | Research and Collections Resource Facility (RCRF) – Functional Programme |

Details

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| Responsibility | Vice-President (Facilities and Operations) |
| The Purpose of the Proposal is (please be specific) | To present the functional programme requirements for RCRF. This will replace the existing Book and Record Depository (BARD), whose lease expires in 2017, and will relocate one million book volumes off of North Campus, to ease campus space pressure and accommodate new technological functions for Library Services. |
| The Impact of the Proposal is | To allow Facilities and Operations to move forward with planning and design of RCRF. |
| Replaces/Revises (e.g., policies, resolutions) | N/A |
| Timeline/Implementation Date | Design Team Spring 2015; construction to start approx. Fall 2015; construction completion approx. May 2017 |
| Estimated Cost | N/A |
| Sources of Funding | N/A |
| Notes | N/A |

Alignment/Compliance

| | |
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| Alignment with Guiding Documents | Dare to Discover, Academic Plan (Dare to Deliver); Long Range Development Plan (LRDP); University of Alberta Comprehensive Institutional Plan (CIP) |
| Compliance with Legislation, Policy and/or Procedure Relevant to the Proposal (please quote legislation and include identifying section numbers) | 1. Post-Secondary Learning Act (PSLA): The PSLA gives GFC responsibility, subject to the authority of the Board of Governors, over academic affairs (Section 26(1)) and provides that GFC may make recommendations to the Board of Governors on a building program and related matters (Section 26(1) (o)). Section 18(1) of the PSLA give the Board of Governors the authority to make any bylaws “appropriate for the management, government and control of the university buildings and land.” Section 19 of the Act requires that the Board “consider the recommendations of the general faculties council, if any, on matters of academic import prior to providing for (a) the support and maintenance |

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| | <p>of the university, (b) the betterment of existing buildings, (c) the construction of any new buildings the board considers necessary for the purposes of the university [and] (d) the furnishing and equipping of the existing and newly erected buildings [.] [...]" Section 67(1) of the Act governs the terms under which university land may be leased.</p> <p>2. GFC Facilities Development Committee (FDC) Terms of Reference – Section 3. Mandate of the Committee: “[...]</p> <p>2. Delegation of Authority</p> <p>Notwithstanding anything to the contrary in the terms of reference above, the Board of Governors and General Faculties Council have delegated to the Facilities Development Committee the following powers and authority:</p> <p>A. Facilities</p> <p>1. To approve proposed General Space Programmes (Programs) for academic units.</p> <p>2. (i) To approve proposals concerning the design and use of all new facilities and the repurposing of existing facilities and to routinely report these decisions for information to the Board of Governors.</p> <p>(ii) In considering such proposals, GFC FDC may provide advice, upon request, to the Provost and Vice-President (Academic), Vice-President (Facilities and Operations), and/or the University Architect (or their respective delegates) on the siting of such facilities. (GFC SEP 29 2003)</p> <p>B. Other Matters</p> <p>The Chair of FDC will bring forward to FDC items where the Office of the Provost and Vice-President (Academic) and/or the Office of the Vice-President (Facilities and Operations), in consultation with other units or officers of the University, is seeking the advice of the Committee. [...]"</p> <p>3. UAPPOL Space Management Policy and Space Management Procedure: The respective roles of GFC FDC and the Vice-President (Facilities and Operations) with regard to institutional space management are set out in this Board-approved Policy and attendant Procedure.</p> <p>To access this policy suite on line, go to: www.uappol.ualberta.ca.</p> |
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Routing (Include meeting dates)

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| Consultative Route (parties who have seen the proposal and in what capacity) | <ul style="list-style-type: none"> • Vice-Provost and Chief Librarian • Associate Vice-President (Planning and Project Delivery) |
| Approval Route (Governance) (including meeting dates) | GFC Facilities Development Committee (March 26, 2015) – for approval |
| Final Approver | GFC Facilities Development Committee |

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Attachments:

1. Attachment 1 (pages 1 – 11): Research and Collections Resource Facility (RCRF) Functional Programme (March 26, 2015)

Prepared by: Shannon Loughran, Accommodation Planner, Office of the University Architect, Planning and Project Delivery, Facilities and Operations, shannon.loughran@ualberta.ca

Revised: 3/19/2015

Research and Collections Resource Facility (RCRF) FUNCTIONAL PROGRAMME

March 26, 2015



Image source: http://www.library.illinois.edu/prescons/disaster_response/high_density_storage_disaster_plan/

Research and Collections Resource Facility (RCRF) Functional Programme

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Letter of Support



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March 5, 2015

Dr. Olive Yonge, Interim Provost & VP (Academic)

Re: Functional Program – Research and Collections Resource Facility (RCRF)

I strongly support the recommendation of the report dated March 26, 2015 that the RCRF Functional Program be approved as the basis for further design and construction.

The Book And Record Depository (BARD) gave the library system a collection space advantage that was unique in Canada when it opened in 1994. However, it has long been recognized that the university should seek a more sustainable solution. I am convinced the South Campus location and design of the proposed RCRF will allow it to meet the goals outlined on page 5 of the Functional Program. It will therefore provide an essential basis for the future development of the university's research library. This will provide long term benefit to the university's community as well as library systems throughout Alberta and beyond. As the existing lease is set to expire in 2017, I believe there is no time to lose in moving forward on this exciting and important project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'G. Beasley', with a long horizontal flourish extending to the right.

Gerald Beasley
Vice-Provost & Chief Librarian

Acknowledgements

Planning and Project Delivery and Library Services and Information worked in collaboration to define the parameters and requirements for the Functional Programme for the Research and Collections Resource Facility (RCRF).

We would like to acknowledge the many contributions of the following University of Alberta staff:

Library Services and Information, Learning Services

Gerald Beasley, Vice-Provost & Chief Librarian

Kathryn Arbuckle, Associate University Librarian, former Acting Chief Librarian (2012-2013)

Tina James, Library Facilities (retired)

Merril Distad, Associate University Librarian and University Archivist (retired)

Facilities and Operations

Don Hickey, Vice-President, Facilities and Operations

Pat Jansen, Associate Vice-President, Planning and Project Delivery

Craig Moore, Director, Real Estate Services

Todd Werre, Director, Project Management Office

Ben Louie, Director, University Architect, Office of the University Architect

Lorna Baker Perri, Associate Director, Accommodation Planning and Programming

Rick Mercier, Project Manager

Shannon Loughran, Accommodation Planner

Background

The existing Book and Record Depository (BARD) is a high-density facility that houses less frequently accessed library materials, research collections and the University Archives. It was the first of its kind in Canada when it opened in 1994. The facility holds mostly books and journal volumes, but also microfilm, maps, audio discs, manuscripts, archives, and other formats normally collected by research libraries. The total insured value of the collection and material is in the order of \$750 million.

The University Archives is the official repository for the institution's administrative and academic records and materials. It includes publications, papers, photographs, maps and historical and legal records. Archive records cannot be borrowed so researchers access these materials on site in the Archives' Reading Room.

Over the past 7 years, the University has been investigating options to relocate the collection from the existing facility into a more appropriately sized and located facility which would accommodate growth projections, relocate items from North Campus to high-density storage and improve the location for better access by the academic body. The existing BARD (50th Street and Sherwood Park Freeway) is adjacent to a busy railway line, which transports dangerous goods, increasing the risk profile and liability to the University. The existing lease will expire in 2017.

Vision

Under the guidance of the Vice-Provost & Chief Librarian, Library Services and Information is working towards a vision to reduce the number of open-stack shelving items to closed-stack shelving, such as high-density storage for the University of Alberta Libraries. This allows valuable space on North Campus to be repurposed into spaces that support academic requirements. Library Services and Information is selective in its growth of the collection and accepts gifts and materials that complement the existing collection.

The goal of the Research and Collections Resource Facility (RCRF) is to:

- Provide an appropriate, functional and welcoming space for staff, students and visitors for academic and special research purposes;
- Be located in a more suitable, low-risk location, free from a high-risk dangerous goods railway line, decreasing the liability exposure and risk profile, protecting the irreplaceable collection and the University Archives;
- Improve the proximity of the facility to North Campus, ideally accessible by LRT, for better access by students, staff and researchers;
- Accommodate growth and the backlog of unprocessed materials to the collection;
- Accommodate up to one million items relocated from North Campus to free up valuable space for academic requirements; and
- Provide appropriate quantity, type and function of space for processing, storing, and digitizing materials in the collection.

Programme Overview

A high-density storage facility is considered a closed-stack storage model whereby it holds less-accessed research and reference materials not accessed by the public. Upon request, these items are delivered to other university library locations by an in-house delivery service. The University will maintain more frequently accessed materials in existing, but downsized open-stack shelving in existing Library facilities across the University of Alberta (U of A) campuses. University of Alberta Libraries (UAL) is an active member of NEOS (from historical name: Networking Edmonton's Online Systems), which is a 17-Library consortium in central and Northern Alberta who share resources, technology and collections across the region.

The Functional Programme is largely based on the high-density storage requirements of 3,437 square meters. This number is based on volumetric capacity of 40 feet high shelving in an efficiently laid out warehouse of open rack shelving with a manned lift for retrieving trays from the shelves. The high-density storage facility in RCRF would need to accommodate the existing 3.1 million items from BARD, a relocation of one million items from North Campus, and a growth projection of 50,000 items per year for 20 years, for a total of 5.1 million items projected capacity over 20 years. The University Archives is currently measured at 7.3 km of shelving space and is anticipated to grow 100m/year for 20 years, for a total growth of 2.0 km, reaching a total Archives capacity of 9.3 km. The entire inventory requires a temperature and humidity controlled environment.

The warehouse support space, to be adjacent to the warehouse space, includes a heated indoor loading dock for loading and delivery of fragile items, pallet storage, sorting and processing space for incoming inventory, and space to maneuver and park a forklift.

Space is also required to accommodate additional items for intermittent retrieval including: microfiche, microfilm and map cabinets. These items would be relocated from North Campus and all require reinforced flooring due to their weight. Film will also need to be accommodated in a temperature controlled cold room.

Library Services and Information has identified a requirement for a second Digitization Area as the collection is actively being digitally archived, with one print copy kept in the collection. There is an existing digitization space on North Campus (Level 2, Cameron Library) but having a second one provides the ability to expedite the long process of digitizing the collection with two locations. Related to this is the need for a Media Migration Room which will house equipment to transfer different types of film to digital records.

Space is also required for staff, student and public use. The staff component includes office space for RCRF staff and Archives staff, additional book processing space, a collaboration space, lockers, kitchenette, copy room and office supplies storage.

Public support spaces are intended for the use of researchers and visitors wanting to access items from the University Archives, which must remain within the facility and are not able to be

borrowed. Most researchers visit for full day time periods, so an Archives Reading Room is required, as well as a small waiting area, lockers for personal items (no backpacks allowed for collection security), and a small kitchenette for heating lunch, would be required. There will be a 'hold and self-check' space for non-Archive items requested for on-site pick-up.

Programme Methodology

Programme space requirements are based on a variety of metrics. The office space components are based on U of A space standards and guidelines. Warehouse storage requirements are based on a calculation of typical high-density book storage dimensions placed in to 'trays' which are placed on shelves, the capacity of shelves, the height of shelves and an approximate layout of shelving racks in an open warehouse. These factors result in an overall volumetric capacity, factored for targeted volume and then translated to a two dimensional area for approximate overall square meters. Other areas for such as the Digitization Area, Map Room, Microfiche and Microfilm areas are based on existing room areas in Cameron, Rutherford North and J.W. Scott Libraries. The remaining requirements such as loading dock, cold room and sorting spaces are based on existing space at the existing BARD and the now U of A-owned Federal Archives Building. The Functional Programme space requirements spreadsheet can be found in Appendix 1.

Project Status

In Fall 2014, the President's Executive Committee (Operations) approved a recommendation from Facilities and Operations, in conjunction with Library Services and Information, to house the RCRF requirements in a new facility on South Campus as the optimum solution given programme, academic and project requirements. This approval was followed by an approval by the U of A's Board of Governors to borrow funds to finance the construction of this facility on South Campus.

Next Steps

The Functional Programme, as recommended, to be approved by General Faculties Council Facilities Development Committee as the basis for future planning and design. Site options on South Campus are currently being considered and the Project Management office is looking to retain a design-build consulting contractor to begin preliminary conceptual design once the Functional Programme is approved.

Recommendation

That the Research and Collections Resource Facility (RCRF) Functional Programme be approved as the basis for further planning and design.

Appendix

- 1) Functional Programme Space Requirements Spreadsheet
- 2) Existing BARD Floor Plan

Research and Collections Resource Facility (RCRF) Space Programme Requirements

*January 15, 2015; Incorporates feedback from Gerald Beasley and Kathryn Arbuckle from December 8, 2014 and email exchange with Kathryn In January 2015 as a follow up.

| Division/Space Type | Occupant OR Based On | Location of Existing Space | | | Projected Need (2035) | | |
|---|------------------------------|----------------------------|----------|-------------|-----------------------|------------|-------------|
| | | Room No. | No. Occ. | Area (nasm) | No. Occ. | Unit Allow | Area (nasm) |
| A. General Office | | | | | | | |
| BARD STAFF | | | | | | | |
| 1 Qty 1, Manager | Qty1, FT | BARD | - | - | 1 | 12.0 | 12.00 |
| 2 Qty 5, Staff, FT Permanent | Qty 5, FT | BARD | - | - | 5 | 6.0 | 30.00 |
| 3 Qty 3, Staff, PT, Casual | Qty 3, PT | BARD | - | - | 3 | 3.0 | 9.00 |
| 4 Qty 3, FUTURE, PT, Casual | Qty 3, PT future | - | - | - | 3 | 3.0 | 9.00 |
| ARCHIVES STAFF | | | | | | | |
| 5 University Records Archivist | FT | BARD | - | - | 1 | 12.0 | 12.00 |
| 6 Archivist Librarian | FT, future | BARD | - | - | 1 | 9.0 | 9.00 |
| 7 Assistant | FT | BARD | - | - | 1 | 6.0 | 6.00 |
| 8 Volunteer, casual | Qty varies, PT | BARD | - | - | 1 | 3.0 | 3.00 |
| NASM Subtotal Staff (Office) | | | | | | | 90.00 |
| B. Support Space (Office) | | | | | | | |
| 1 Extra Book processing/book cart space (added to FT wkstns) | Qty 9 FT @ 3.0sqm | - | - | - | 9 | 3.0 | 27.00 |
| 2 Kitchenette (adjacent or part of Collaboration/Mtg Rm) | new | - | - | - | 1 | 8.0 | 8.00 |
| 3 Collaboration/Meeting/Lunch Area | new | - | - | - | 12 | 2.5 | 30.00 |
| 4 Locker Area for staff | new | - | - | - | 15 | 0.6 | 9.00 |
| 5 General Storage/Supply/Copy Room | new | - | - | - | 1 | 20.0 | 20.00 |
| NASM Subtotal Support Space (Office) | | | | | | | 94.00 |
| NASM Subtotal (Office) | | | | | | | 184.00 |
| CGSM Subtotal (Office) | | | | | | | 248.40 |
| C. Support Space (Public Accessed) | | | | | | | |
| 1 Waiting Area c/w mail drop counter | new | - | - | - | 1 | 12.0 | 12.00 |
| 2 Nutrition Nook (for public) c/w microwave, sink, etc. | new | - | - | - | 1 | 8.0 | 8.00 |
| 3 Lockers for Public (backpacks, purses not allowed in Archives) | new | - | - | - | 15 | 0.6 | 9.00 |
| 4 Reading Room for Archives, locked after hours, based on 5.0sqm/person for large layout tables (5'x3.5') and boxes, etc. | For 4 people | - | - | - | 4 | 5.0 | 20.00 |
| 5 Reading Room for Public, open after hours | For 8 people | - | - | - | 8 | 5.0 | 40.00 |
| 6 Hold and Self-Check Area | new | - | - | - | 1 | 16.0 | 16.00 |
| CGSM Subtotal (Public Accessed) | | | | | | | 105.00 |
| D. Support Space (Specialized Work/Storage and Loading Dock) | | | | | | | |
| Specialized Spaces | | | | | | | |
| 1 Digitization Area (scanning, storage, prep), based on Cameron Level 2 Digital Archiving Studio of 123.6sqm plus 20% = 156.0 | Level 2 Cameron +20% | - | - | - | 1 | 148.3 | 148.30 |
| 2 Map Room, based on 4-20A (108.6sqm) plus open area Level 4 Cameron (~ 54 sqm), possibility to stack map chests, floor loading. | Level 4 Cameron | - | - | - | 1 | 162.6 | 162.60 |
| 3 Microfiche/film cabinet storage, based on JWSScott Library 2K4.21 (207.6 sqm), possibility of higher cabinets, floor | John W. Scott Library 2K4.21 | - | - | - | 1 | 207.6 | 207.60 |
| 5 Media Migration Room, estimated size | new | - | - | - | 1 | 20.0 | 20.00 |
| 6 Cold Room for Film, based on Fed. Archives of approx. 55sqm, floor loading. | Fed Archives/new | - | - | - | 1 | 55.0 | 55.00 |
| Loading Dock Related | | | | | | | |
| 7 Sorting Space, based on ~125sqm at BARD +20% | ~125sqm at BARD +20% | - | - | - | 1 | 150.0 | 150.00 |
| 8 Pallet Storage (based on: 1 row of 6 bays, 3 shelves high); Each Bay is 12'x8'=96sqft=8.9sqm; adjacent to sorting space so no additional circulation req'd. | 8.9sqm/bay x 6 bays | - | - | - | 1 | 53.6 | 53.60 |
| 9 Loading Dock (approximation based on Fed Archives); To include space for 20 big recycle bins and indoor loading dock. Based on Fed Archives 1-117 (181.5sqm) + 1-118 indoor driveway (70.55sqm) = 252.1 sqm | Fed Archives | - | - | - | 1 | 252.1 | 252.10 |
| CGSM Subtotal (Staff-accessed Areas) | | | | | | | 1049.20 |
| CGSM Subtotal (Non-warehouse) | | | | | | | 1402.60 |

| Division/Space Type | Occupant OR Based On | Location of Existing Space | | | Projected Need (2035) | | |
|---|----------------------|----------------------------|----------|-------------|-----------------------------------|------------|-------------|
| | | Room No. | Area No. | Area (nasm) | No. Occ. | Unit Allow | Area (nasm) |
| E. Book Collection, In 40' racking, Incl. growth projections (See Note 4 below for details on collection size) | | | | | included in 3437.4 below | | |
| F. Archives (Based on 9.3km, converted to 183,136 Book volumes equivalent @ 40' high). Requires lower height and diff. environmental conditions and a separate 'picker' at ~\$50K plus). | | | | | included in 3437.4 below | | |
| Based on 37,000 sq.ft. = 3437.4 sqm | | | | | CGSM Subtotal (Warehouse) 3437.40 | | |

CGSM GRAND TOTAL 4840.00

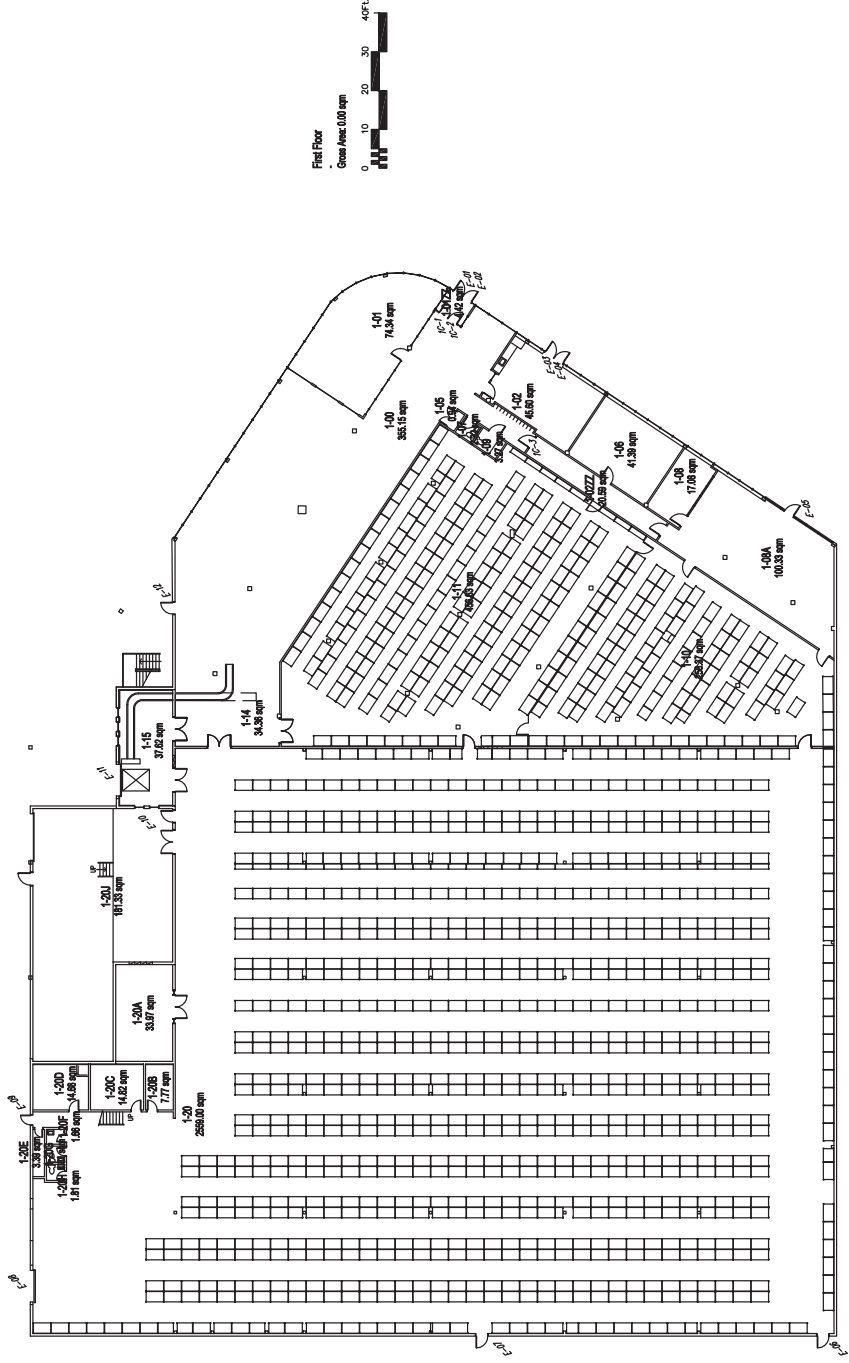
Notes:

- 1 NASM: Net Assignable Square Metres
- 2 CGSM: Component Gross Square Metres (based on Industry standard of 35% gross up factor for circulation within a suite).
- 3 Does not include sqm for building gross up factors suchs as washrooms, stairs, weather vestibules, etc.
- 4 Collection growth is based on the following, In Millions of Physical Items:
Existing BARD Collection 3.1M + Relocation from Ruth N. 0.5M + Relocation from other North Campus Libraries 0.5M + Cumulative growth of 1.0M over 20 yrs = 5.1M
(Cumulative growth is based on 50K titles per year; Other Libraries includes Law, Medicine and Education)
- 5 Existing Archives at 7.3 km; Archives growth is projected at 100m/year, so 2.0km over 20 years for a total of 9.3KM
- 6 All program numbers to be confirmed prior to design start-up. Design layout to be as efficient and open as possible.

Approval:  Date: 19/1/2015
Gerald Beasley, Vice-Provost (Learning Services) and Chief Librarian

Approval:  Date: 27/1/2015
Shannon Loughran, Accommodation Planner, F & O

Appendix 2



Planning & Infrastructure
Planning Services



First Floor Plan
Book and Record Depository -
50508

August 4, 2005
Scale: 1/32" = 1'-0"