mecanoo BEYER BLINDER BELLE

Stephen A. Schwarzman Building Stacks Study | Executive Summary

May 16, 2019

The Library has developed a multi-pronged collections plan to satisfy needs for the next 10 years, with guidelines for considering a longer timeframe.

This collections plan of course considers the historic stacks. Based on current needs and priorities, the Library only tested options for the stacks that accommodated research collections storage. In their current state, the stacks can no longer serve as a repository for the Library's collections; their environment is inadequate to that task. An architectural and engineering feasibility study concluded that the approximate cost of retrofitting the space—creating an appropriate environment for general and special collections—would be $200 million. A more modest option, one which would not accommodate special collections or offer flexibility for book storage, would, at current construction prices, cost $80 million dollars.

A study of improvements to the Milstein Research Stacks as well as an expansion of the ReCAP facilities in conjunction with the Library's partners is estimated to cost $15 million, satisfy needs for collections growth for the next 10 years, and meet preservation environment standards. Attentive to the radical fluidity of publishing and storage technologies, the Library will move forward with the solution that optimizes on-site storage in the Milstein Research Stacks and makes a joint investment in ReCAP, where access to our partners' collections will benefit patrons. In doing so, it ensures a 10-year window of collection growth, optimizes storage environments, and protects the Library's fiscal well-being. The stacks will be maintained as-is. Their value is in the future flexibility they embody for needs that cannot now be predicted.

Background and Process

Mecanoo and Beyer Blinder Belle (BBB) were engaged in December 2015 by the New York Public Library (NYPL) for the Midtown Campus Renovation project, the scope of which includes the renovation of the Stavros Niarchos Foundation Library (formerly known as the Mid-Manhattan Library) and selective renovation of the Stephen A. Schwarzman Library (SASB). A master plan was developed for SASB that achieves a range of programmatic and functional objectives, including: improvements to building infrastructure and circulation; enhanced spaces for research, visitor amenities, education and exhibitions; and new and upgraded program and event spaces. While the master plan focused primarily on improvements to public spaces, the stacks—comprising 160,000 SF of non-public, multi-level book storage--were not considered in order to preserve the potential future use of this space.

At the request of NYPL in late 2017, the project's focus expanded to include the potential re-use of the stacks, and this analysis converged with the NYPL Research Division's assessment of the current and future states of the General and Special Collections at NYPL's four research libraries.

The process was guided by regular meetings with in-house staff and leadership at NYPL, as well as milestone meetings with a working group of select Trustees to provide updates on progress and refine the direction and focus of the study. The Research Advisory Council, a group representing the academic and research community, also provided input to Research staff, highlighting stewardship of the collections, and access to specialized staff and collaborative spaces in the new scholar center as important ways to preserve and enhance the research mission of the Library.

Research

The stacks are constructed from a modular, load-bearing shelving system developed by Snead & Company and installed in 1911 as part of SASB's original construction. At the time, the system was regarded as revolutionary and highly efficient, and installed in many libraries across the United States including the Library of Congress. However, a century later, limitations have become apparent. The system is inflexible in that its construction relies on many inter-connected, small structural members with spans typically no greater than 4'-8", and headroom is less than 7'-6". The single-depth shelving does not accommodate items of varying size, and the environmental and life safety conditions do not meet current codes and standards. In 2012/13 the Library's research collections were removed from the stacks due to conservation concerns.

Other libraries have faced similar issues. The stacks at Widener Library at Harvard University were renovated leaving the Snead shelving in place, with upgraded mechanical, fire alarm and fire suppression systems, while the St. Louis Public Library removed the Snead shelving entirely and built new storage, staff and public spaces in its place. We know of no examples of Snead shelving re-configured or re-purposed for uses other than storage on the scale of the SASB stacks.

Visioning

The design team initially explored a variety of programmatic and architectural concepts for the stacks space, in order to test the potential of providing greater connectivity to other spaces and programs at SASB. Programmatic opportunities that both relate to and support the SASB master plan, and others that extend beyond the master plan, were also explored at a concept level. Based on current need and priority, the Library decided to only consider options that would make the space appropriate for research collections storage.

Feasibility of Adaptation

The design team was asked to look at the feasibility of reconfiguring the stacks in part or in whole to support uses other than storage, if such uses were determined to be a priority by the Library. A range of options were studied, agnostic of program. These included very selective removal and reinforcement of the shelving's structural members to create rooms embedded within the stacks; partial removal of the stacks and installation of new structure to create more flexible open plan areas in portions of the volume; and the complete removal of the Snead shelving and re-supporting the Rose Main Reading Room on a super-column structure, as was proposed in the Central Library Plan of 2014.

While these interventions vary in scope and cost, any change in use triggers code-required life safety requirements, including multiple egress stairs, fire protection of the structure, fire separation from adjacent spaces, and increase in headroom. (Without a change in use, these non-compliant issues are “grandfathered” and can remain.) Despite the apparently smaller scope of the limited interventions, their cost was significant, and not demonstrably less than the larger scale scope of structural changes that were part of the Central Library Plan.

Solving for Access, Conditions, and Collection Growth

NYPL’s Research Collections staff and the design team worked closely together to translate future needs for collections growth and care into an architectural solution for the next decade, and consideration for needs beyond that timeframe. The spaces considered for a multi-pronged solution included the SASB Stacks, ReCAP (NYPL’s shared, off-site storage facility in Princeton, NJ) and optimization of space within the Milstein Research Stacks under Bryant Park. Accessibility of the collections, environmental conditions, and capacity for growth were identified as the three objectives to be addressed in any proposed solution.

Fifty-six storage spaces across the four Research Libraries house General and Special Collections. Most Special Collections storage rooms are nearing, at, or over capacity, and a large majority are impacted by poor condition issues. The Milstein Research Stacks are projected to reach capacity for General Collections in 2024, and there is limited growth there for Special Collections. At ReCAP, storage space for all Research Library collections are projected to reach capacity by 2024.

In order to address the study’s objectives, the following three projects will be prioritized:

- NYPL will invest in retrofits and relocations to improve conditions for at-risk collections at LPA and SASB.
- In the Milstein Research Stacks, shelving will be reconfigured in an existing Special Collections vault to maximize the space in order to address the relocation of some materials that are housed in SASB proper under less than ideal environmental conditions, given the challenge of housing such collections in a historic building.
- At ReCAP, a new module is being planned to serve all four partners (NYPL, Columbia University, Princeton University, Harvard University). This expansion will add storage capacity for both General and Special Collections storage for a minimum of five years’ growth and a maximum of ten years’ growth, depending on the type of shelving installed. NYPL will have additional information about the new module after the June 2019 ReCAP Board meeting.

The cost of the above three projects is estimated at $13 to $15 million dollars and will solve capacity for collections for up to ten years.

As capacity and conditions require, Level One of the Milstein Research Stacks will be renovated in the future to replace motorized compact shelving that was installed almost thirty years ago with higher-density and flexible storage systems, as

well as other core and shell improvements to improve waterproofing and pest control. The cost of this project in present value dollars is $25 million.

Long-Term Collection Solutions

With capacity, access, and improved condition needs addressed for the next decade, the SASB Stacks will be considered a “land bank” for future collections growth and conservation, when the compelling need emerges and at a time where the future can be planned for with more predictability. Two options were proposed for the upgrade of the stacks for collections needs. The first removes the stacks in their entirety and installs new structure with a regular grid, potentially accommodating compact shelving systems as a “box within a box” vault to provide greater environmental control and allow for future flexibility that the current stacks do not provide. This option would hold the equivalent of approximately three million Special Collections items, or more for General Collections, which allow for higher shelving. The project cost is estimated at approximately $200 million.

The second option is to renovate the Snead Shelving similarly to the renovation at Widener Library at Harvard. A study exploring this approach was completed in 2013; the estimate from this study, escalated to present value and accommodating full project costs is approximately $80 million. This option offers less flexibility, in that the existing shelving configuration cannot accommodate the specialized storage sizes needed for Special Collections items.

Either long-term option for the SASB Stacks can add enough capacity to house NYPL’s collections until 2050 and, through shifting locations of collections between on- and off-site locations, offers the opportunity to house all additional Special Collections materials stored in SASB proper, as well as growth from the other research libraries, until 2050.

The future expansion of ReCAP beyond the module being planned currently will also provide opportunities for increasing capacity as needed. These options will be continually reassessed as these longer-term needs come into focus in the coming decade.