the footprint of the existing building, the design transforms the Library experience by enhancing vertical and horizontal circulation and connections. Notable design interventions include a two-story glass west entrance/convening space that gives a fresh face to the building, welcoming people to campus and inviting them into the library. Level one receives the most intervention, taking on a new life as a teaching and learning center experience.

ENERGY EFFICIENT + SUSTAINABLE DESIGN
Sustainability is a core value in how our design team approaches design. This project aspires to be LEED Silver. The design team held a sustainability design charrette and workshops to establish the vision, goals, targets, and standards for high performance, sustainable design ambitions for the project. The Sustainability Design Charette and LEED Requirements Workshop helped to identify strategies and walk through the LEED checklist, though this is just the beginning, and will be continued throughout design phases. LS3P will register the project with the USGBC to start the LEED process as part of Advance Planning.

PROJECT HISTORY
UNC Greensboro was established in 1891 and currently serves around 20,000 students. Originally founded as the North Carolina State Normal and Industrial School, it came into being on behalf of the education of women and was known as the North Carolina College for Women and the Women’s College of the University of North Carolina before consolidating. Today UNC Greensboro is a Minority Serving Institution with a strong population of first generation college students. Jackson Library, designed by Northup O’Brien of Winston-Salem, North Carolina, opened in 1950, replacing the Carnegie Library. In 1960, the library was named for Walter Clinton Jackson, professor, author, and chancellor. The 9-story tower addition was designed by Odell Associates of Charlotte, North Carolina to house the library collection, and opened in 1973.

PROGRAM
Isolated portions of the existing Jackson Library have been adapted over time to address the changing needs of students, staff, and faculty. While these changes have offered incremental improvements, a more holistic approach is required to transform the Library to meet the needs of the University. The program for the Jackson Library was informed by a robust series of visioning and engagement sessions with the Library’s staff, faculty and partners, students, and campus leadership. The Design Team developed the program in concert with the guiding principles that emerged from our sessions, and let the building and project conditions inform our thinking. We explored library trends, examined what was working well or not well in the existing Library, and looked for synergies among disparate parts.

Through detailed meetings with the Design Oversight Committee we worked to prioritize space usage based on the guiding principles and to develop a program that balances the needs and desires of all stakeholders. The resulting program shifts the distribution of patron, staff, and collections space in the direction of forward-looking libraries with a nearly 20% increase in patron space while continuing to meet the functional needs of staff and housing a right-sized print collection.

CONCEPT DESIGN
The re-imagined Jackson Library acts as the heart of campus as a place for teaching, learning, and social interaction along a main thoroughfare of campus. Its new entry points and clarified circulation encourage movement into and through the building in a way that supports its location as a campus crossroads at the intersection of College and Walker Avenues. Design moves are strategic, accomplishing multiple goals with each intervention. Working essentially within

SCHEDULE
Advanced Planning began in September 2022 and continued through May 2023. Numerous meetings were held between the design team and UNC Greensboro stakeholders throughout Advance Planning. At the completion of Advance Planning, Schematic Design will begin, followed by Design Development, and Construction Documents. At the end of each phase we will provide a cost estimate as well as a review by SCO and UNC Greensboro. The current schedule concludes design and begins construction by the beginning of 2024. With phased construction, select portions of the library will be completed earlier than others, allowing those areas to move-in and open while the other area(s) are still under construction. The last phase of construction is anticipated to conclude in November 2027 and be fully reopened for the spring semester 2028.

ANTICIPATED COST
The total project budget is $81,000,000 and the cost of work for construction is anticipated to be $62,387,500. The design team will continue to engage with the Construction Manager-at Risk (CMR) for various aspects of design and construction, including construction logistics, phasing, early construction packages, and cost estimates.
Jackson Library is a 220,000 square foot building, including 99,000 SF in the original 1950’s portion, 121,000 SF in the 9-story 1970’s tower addition, including 10,000 SF of back of house space, and 3,600 SF in the Jackson Library/Elliot University Center Connector.

UNC Greensboro hosts 20,000 students in over 175 majors. With students from freshman to graduate students, to PhD students with varying backgrounds and ages, Jackson Library is a central hub of UNC Greensboro. Additionally, the Library is open to the public and an asset to the greater Greensboro area. As such, Jackson Library must be flexible and accommodating to a wide range of patrons. In addition, its main purpose is education, but Jackson Library also acts as a place for gathering, creating, and connection.

Some of Jackson Library’s current challenges include accessibility, both inside the building and access to the building; wayfinding; compressed, inflexible spaces; lack of natural light; dated spaces and technology; and programmatic gaps.

Throughout our interactions, we were able to gather information and assess the goals and vision for Jackson Library.

The process of advanced planning and design is centered on testing and weighing various potential outcomes for project. To weigh these effectively, the team worked with the Design Oversight Committee to develop the following guiding principles.

GUIDING PRINCIPLES

- Leverage the library to deepen the connection between the UNC Greensboro campus and the Piedmont Triad, NC and community beyond.
- Position the Jackson Library to be flexible and future-ready, enabling seamless adaptation for changing University needs over time.
- Improve site and building physical access for all approaching, entering, and navigating the library.
- Effectively balance user needs, design goals, and sustainability priorities within project budgetary, phasing, and building constraints.
KEY TAKE-AWAYS

Through our various interactions with library staff, students, and faculty, we found that several types of spaces rose to the top of the priority list. These included:

- **Coffee/Food/Vending**: The existing Jackson Library has a small vending area that is difficult to find on the lower level. While the adjacent EUC building offers several different food options, it is not convenient to walk to the building and return to the library to continue studying.

- **24-Hour Space**: Students are seeking places to study beyond the operating hours the Library currently offers (closes at 1am M-Th, and 5pm F-Sun).

- **Outdoor/Terrace Space**: Students at UNC Greensboro frequently use outdoor space on campus, such as the area outside of Moran Commons, to study and socialize. The current Jackson Library does not offer outdoor patron space opportunities.

- **Stress Relief Activity Space**: UNC Greensboro has been adding stress relief spaces on campus, such as the sensory space at EUC. These are well-loved, and more are desired within the library space.

- **Indoor Plants/Natural Elements/Daylight**: These elements are important components to support health and wellness. The existing tower building of the Jackson library has limited daylight because of the solid west and east façades and small, deep windows on the north and south facades.

- **Prayer Room**: Many students requested prayer space for themselves or their friends. There is a prayer space at the EUC, but it is not well known, and prayer rooms at the library would help with distribution.

- **Graduate Student Space**: The current Jackson Library has little space dedicated specifically to grad students.

- **More Tutoring Space**: Existing tutoring spaces are heavily used and are always in high demand.

- **Individual Study Spaces**: Individual study spaces were a big request. Oftentimes existing larger group study spaces are used by one person.

- **Group Study Spaces**: Existing group study rooms are nearly always fully booked.

- **Print Collection**: It was noted that print collections are necessary to support research and learning.

LIBRARY ANALYSIS

CAMPUS CONTEXT

Jackson Library is located at the heart of campus along the major north-south routes and east-west connection through the library and the adjacent pathways. The location in the central student life area of campus, alongside Moran Commons and Elliott University Center, provides the opportunity to weave together the campus districts. The visual prominence and physical height of Jackson Library tower wing creates an opportunity for the library to act as a beacon for learning on campus with the future expansion of the Forest Street spine. The Library is poised to become a strong node, extending its presence out to activate adjacent spaces, as well as becoming a new west entry for visitors accessing the campus via bus, car, bike, and foot traffic.

SPACE ALLOCATION

In comparison to other academic research libraries, the existing Library space allocation leans towards a traditional library model, with space primarily allocated to stacks and the remainder of assignable space split between staff and patron spaces. Relative to current and projected enrollments, the Library has a lower than needed number of seats for students to study. However, Jackson Library has the capability of moving in the direction of peer libraries and forward-looking libraries to flip the allocation of spaces to be more patron focused and to provide more seats for students to better serve the scholarly goals of UNC Greensboro. Providing a diversity of seating types, a mixture of group and individual study spaces, and a range of active and quiet environments will allow Jackson Library to serve the full diverse array of Library patrons.
SPACE PROGRAM

SUMMARY
The Design Team worked closely with the Design Oversight Committee to develop a program for the reimagined Jackson Library that aligns with the project vision. With an understanding that the program would essentially need to fit within the existing footprint of the building based on budget constraints, there was a careful eye toward finding the right balance of staff, collections, and patron space. The existing program distribution is most closely aligned with current “traditional” library models with approximately 39% of space allocated for patrons, 43% for collections, and 18% for staff. The Advance Planning Program distribution stretches closer toward a more forward-looking model with 63% patron space, 26% collections, and 11% staff.

EXISTING JACKSON LIBRARY PROGRAM

<table>
<thead>
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<th>COLLECTIONS</th>
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<tr>
<td>18%</td>
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<td>39%</td>
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Collections note: The number of shelving units is being decreased, but current accessibility standards require a wider aisle.

ADVANCE PLANNING JACKSON LIBRARY PROGRAM

<table>
<thead>
<tr>
<th>PATRON SPACE</th>
<th>STAFF/SERVICES</th>
<th>COLLECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>63%</td>
<td>11%</td>
</tr>
</tbody>
</table>

PATRON SPACE
The main goal for patron space in Jackson Library is to provide rich and diverse options for students to learn, collaborate, explore, innovate, and connect. The variety will allow patrons to engage with the Library environment uniquely suiting their preferences and needs at the time. There will be options for quiet focused individual study space and more bustling active zones for interaction. Additionally, if print collections relocate over time, more space can be available to patrons. The patron seat count includes the patron spaces listed below, classrooms, and DMC and partner space (excluding staff areas within those zones).

SITE BACKGROUND

The proposed UNC Greensboro Jackson Library project will improve many aspects of existing site elements at the library, focusing primarily on accessibility, equity, and student life. Proposed new entrances will be designed with full accessibility in mind, promoting equitable access to the library for all students, staff, and visitors on campus. Additionally, existing entrances will be reconfigured, as necessary, to provide accessible and equitable entry to the building’s upgraded services and interior programming. These improved entrances to the library will promote greater permeability of the library’s exterior walls, and provide students with expanded access to the proposed interior improvements.

BUILDING BACKGROUND
The existing Jackson library consists of two wings with unique characteristics.

The 1950’s original library is of a historic brick and column architectural style with generously fenestrated facades which provide a potential for daylight access even on the below grade areas of the lower level. There are four floors in the building including the lower level, with the top level having a smaller footprint than the floors below. This wing has a human scale, though it is challenged by limited floor-to-floor heights, lack of universal access into the building and between floors as well as complicated spatial and wayfinding complexity for users. The interior of the building features a marble and terrazzo stair connecting the lower level to the second floor.

In comparison, the 10-floor 1970’s podium and tower wing is a brutalist concrete and fin style with fenestration limited to the north and south sides only. The tower has a monumental scale that presents a non-welcoming solid face as you enter the campus from Walker Avenue.

While level 1 offers a more generous floor-to-floor height, the remaining floors have limitations similar to the 1950’s building.

As a result of adapting spaces over time, the interior layout of the Library as a whole presents challenges for staff, patrons, and faculty to navigate, access, and engage the resources of the Library. Although it is adjacent to primary campus circulation paths, the library is experientially offset from the paths. As a series of discrete spaces, the interior existing library is experienced as disconnected pockets of moments with a tangible need for a defined space to make physical the academic and conceptual “heart of campus” that the library aims to be for the UNC Greensboro community.
CONCEPT DESIGN

BIG IDEAS

The re-imagined Jackson Library embraces the Library as a destination and crossroads - the heart of the UNC Greensboro campus. The big ideas that emerged from the Design Oversight Committee (DOC) engagement sessions include:

• Invite movement into and through the Library
• Create strong circulation and connections
• Transform the existing building with “wow” moments
• Engage level one as a teaching and learning center
• Leverage the success of the DMC on the lower level
• Disperse meaningful convening spaces
• Activate more floors of the building
• Densify collections to create more contiguous patron space
• Capitalize on views from the 9th floor

LEVEL ONE

Key components of the level one concept design are improved access, clarified circulation, and enhanced visual connections.

THE JEWEL

• The west façade is re-imagined with welcoming glazing that embraces a convening space, becoming a “jewel” befitting the Library as the heart of campus.
• The convening space opens up to the second floor above, creating sight-lines between convening spaces and encouraging users to explore the tower floors.
• At night, it will feel like a lantern, bringing life and light to the experience of the Library from outside.
• This area will be leveraged as a “wow” moment that will be featured on University tours.
CLARIFIED CIRCULATION

• A generous east-west circulation spine strengthens the connection between the buildings and improves wayfinding.

• The circulation spine is flanked with multi-use library-controlled active learning classrooms, easily accessible library staff and services, and the Academic Achievement Center (AAC) staff and service zones, providing an integration of services within the library.

• Circulation to the tower floors is highlighted on this main path, encouraging exploration.

• A north-south circulation corridor through the 1950’s building features an opening to the lower level at the north end, where a new accessible entrance has been added below.

• A generous amount of patron seating at each entry point reinforces the inclusivity goal of creating a sense that the Library is “a place for me.”

A PLACE FOR TEACHING AND LEARNING

• The cross-axis of circulation through the 1950’s building is anchored by the Academic Achievement Center on the north side and a gracious study space on the south side that takes advantage of the daylight offered by the many windows in this building.

• Research librarians are close by, and students can seek assistance at the service point at the intersection of the main circulation paths.

• The visibility of the AAC enables it to engage the student population to a greater extent, fostering student success and retention.

• An opening to the floor below above the new lower level accessible entrance also increases visibility to patrons passing through.
LOWER LEVEL

The lower level is reimagined with a new accessible, double-height entrance to the north with a clarified circulation path through to the existing accessible entrance at the south side, adjacent to Jarrell Lecture Hall.

The new north entrance is in the heart of the wildly successful existing Digital Media Commons. Minor modifications will be made to the existing space to amplify program offerings.

In synergy with the active, collaborative character of the DMC, the Hub takes residence on the lower level. A bustling zone of active wellness space, a high-end vending cafe and kitchenette, and centralized lockers serves as a counterpart to the DMC, invigorating the lower level. Existing space functions will be maintained, including the Preservation space, loading dock area, and staff break room.

LEVEL TWO - 1950'S BUILDING

Level 2 of the 1950’s wing provides a mixture of special collections, student study space, and consolidated staff areas, all fully accessible by the new elevator. Introducing patron space to this level where it previously did not exist helps integrate special collections into the student experience and activate the second floor. Consolidating staff to the south side offers future flexibility for staffing and departmental changes. The special collections space continues up to level 3 and receives only minor modifications as required for building systems upgrades and relocation of the elevator.
LEVEL TWO - TOWER

The identity of the 1970’s tower on level 2 is an event/flex convening space intended to be flexible for day-to-day group study, or lecture style events such as Board of Directors meetings. Spaces adjacent to the convening space can be used for break-out groups during events. The double-height level one space that extends through level two offers sight-lines to the entry convening space below and through the new exterior glazing to the landscape and campus beyond.

TOWER LEVELS THREE THROUGH EIGHT

Level three begins the pattern and language of the new tower floor layout as a place of interspersed collections and study areas with themed reading rooms. Stacks will be oriented in the north-south direction to improve access to daylight.

LEVEL NINE

The tower culminates with an open final floor on level 9 as a learning lounge with study areas on the floor. The location at the top of the tower emphasizes views to the campus to the north, south, east, and west, taking advantage of the height of the tower to provide exceptional vistas from the interior and creating a symbolic beacon of learning.
LANDSCAPE

SITE CONSIDERATIONS

When developing the design and documentation of the updated Jackson Library, several important site considerations will influence the project. Due to the central location of the site in relation to the campus, understanding and accommodating pedestrian circulation to and through the site will be critical. Incorporating campus-wide accessible circulation routes and organizational framework items from the Campus Master Plan should be considered as site design is evaluated. Existing vehicular circulation for parking and service is located on the northern portion of the site. There is overlap between the vehicular and pedestrian circulation; understanding the interface between the two will be critical to providing a safe and functional site. Lastly, the existing topography will be an important site constraint to analyze. The existing topography limits accessible pedestrian routes through the existing building entrances; proposed improvements to the building will need to be closely coordinated with site topography to ensure equitable access to all accessible building entries. The proposed design should strive to provide as many accessible building entrances as possible, to facilitate the greatest amount of community access and use.

CIRCULATION

This project will impact in some way all forms of pedestrian, vehicular, and bicycle circulation throughout the site. It is important that each transportation system is analyzed and accommodated with the implementation of the updated Jackson Library. Parking and service areas are currently located to the north of the existing Jackson Library. Modifications to aspects of this parking area, in particular the pedestrian route from ADA parking spaces to the entry, must be evaluated to ensure that accessible entry to the building by vehicular users is maintained or enhanced. Additionally, at the proposed new west Library entry, an accessible route from the current Bus Drop-Off area to the new entry should be included. Based on existing topography, there should be minimal disruption to the site to accommodate this pathway. The third area of site disruption for pedestrian users will be at the south east building entry. Minor revisions to the hardscape approaching the building will be required to ensure an accessible route to the existing Jarrell Lecture Hall and Jackson Library, beyond.

SITE FRAMEWORK

WEST ENTRANCE & TERRACES
- Terrace with enhanced hardscape
- Kitchen garden with large trees
- Pedestrian lighting
- Power Connections
- Security cameras
- Wayfinding signage
- Incorporate new and revised loading dock
- Enhance pedestrian circulation
- Connect to Transit Hub
- New sidewalk connections
- Incorporate new West Entry
- Possible New Entries to North and South

NORTH ENTRANCE
- Revised grade to accommodate ADA spaces
- Revised loading dock (if needed), with retainer walls
- Enhanced pedestrian crosswalk
- Pedestrian lighting
- New sidewalk connections
- Wayfinding signage

SOUTHEAST ENTRANCE
- Minor revisions to landscape as necessary
- Incorporate new West entry
- Wayfinding signage
- New route to Jarrell entrance

CAMPUS MASTER PLAN

The UNC Greensboro 2014 Campus Master Plan Update represents the latest documentation in an over 30 year planning process by the University. The Master Plan is meant to guide UNC Greensboro as it grows to ensure University objectives are met both for the overall character and identity of the campus and the evolving needs of students and the institution.

Jackson Library is centrally located within the larger University campus, and is identified as an important crossroads for multiple pedestrian and vehicular routes. Its central location implies accessible pedestrian access from all four sides of the building. Within the context of the Master Plan, it is clear that providing a design which allows for future enhancements and connections to existing campus routes, such as the Forest Street Spine and College Avenue pedestrian connectors, will be central to the success of the Jackson Library project, as well as future projects which may extend to areas near this project scope.

SITE CONDITIONS & EXISTING BUILDINGS

The existing site is surrounded by vibrant campus activity on all four sides. To the north, Moran Commons is a critical student hub housing – among other programs – the UNC Greensboro Cafeteria. To the northwest, student housing contains many of the University’s students who will presumably use the library. To the west, the Walker Avenue Parking Garage is where most commuter traffic using the library will park. Between the Parking Garage and Jackson Library is Kaplan Commons, an expansive lawn area which houses many of the University’s major student engagement and annual events. To the south, the Elliot University Center (EUC) is another major student hub, housing various student engagement programs such as the University Bookstore, Food Court and Commons, student lounges, and the Intercultural Resource Center. The ECU drives a significant amount of daily campus traffic, which will indirectly interface with planned exterior site improvements to Jackson Library. To the East, formal gardens and landscape areas, featuring statues of prominent figures in UNC Greensboro history, are located between Jackson Library and College Avenue – a source of significant pedestrian and vehicular traffic for the University. Surrounding Jackson Library are several mature trees and shrubs; proposed improvements should consider this existing vegetation as an influence on the proposed design, by striving to limit disturbance of particular mature vegetation.
The overall project goal is for completion by the end of 2027, so that the library can fully reopen by the Spring 2028 semester. During Advance Planning, UNC Greensboro retained the services of Saknska to be the Construction Manager at Risk (CMR) for preconstruction services to work with the team to help with budgeting, scheduling, and construction logistics for the project.

To allow the library to remain operational during construction, the project will be split into two phases. Overall, the construction duration will be 34 months, including 17 months for phase 1, two months of transition time, and 15 months for phase 2, as shown in the Selected Schedule Option. Phase 1 will include the renovation and small entry addition to the 1970’s building, while the 1950’s building remains open. The transition time will consist of staff moving into the recently renovated 1970’s portion of the building and moving out of the 1950’s building as it prepares for renovation. Phase two will include the renovation of the 1950’s building while the 1970’s building remains open. During construction, the staff will have limited access to the closed portions of the building as they will still need to retrieve materials.

There will be a review period by UNC Greensboro and SCO at the end of each design phase, with a re-review in response to comments anticipated with the first submittal of the Construction Documents. After SCO and UNCG have approved final Construction Documents, there will be a period for the CMR to negotiate the final Fixed Guaranteed Maximum Price (FGMP). Bidding will follow, along with a period for the CMR to vet the various bid packages, and ultimately award the trade packages. This process, from the initial submittal of Construction Documents for review until the construction is ready to proceed, is anticipated to take approximately 6 months. In order to meet all the dates and time frames noted above, the design team expects to submit initial Construction Documents for review in June of 2024.

Due to the current material procurement climate and potential lead times on main pieces of infrastructure, including switchgear, transformers, generator, and custom AHUs, early equipment packages are anticipated to be required in order to meet the schedule. The design team will work closely with UNC Greensboro and the CMR to evaluate the necessity and scope of any early equipment packages as scope is further developed during the design process.
This Advance Planning effort included in-depth programming for space needed to accommodate the desired library program. The Total Project Budget is $81,000,000 which includes: soft costs for site investigation (surveys, geotechnical exploration, environmental assessments); Fees for design, Construction Manager at Risk (CMR) preconstruction services, commissioning, material testing and special inspections; the Owner’s construction contingency, advance planning costs, a furniture allowance, and moving expenses. A copy of the certified OC-25 showing the approved project budget is included in the appendix for reference.

Working with the UNC Greensboro, the available budget for the CMR Fixed Guaranteed Maximum Price (FGMP) is targeted at $62,387,500. In addition to the budget for the FGMP, UNC Greensboro has budgeted:

- $2,712,500 for Owner Contingency during construction, equal to 5% of the Cost of Work.
- $14,700,695 for anticipated soft costs, including design fees, surveying, testing, special inspections, Commissioning, furniture, equipment, and any other items that need to be paid for by the Owner outside of the construction contract.
- $570,000 for CMR preconstruction services.
- $629,305 for Advance Planning design fees.

Following the State Construction Office requirements, the design will target 90% of the FGMP budget for the base scope, which is $56,150,000. Alternates will be identified to target ~100% of the budget to maximize the use of available funds if bids come in favorable.

The FGMP includes the Cost of Work (CoW), subcontractor default insurance, design contingency (set at 15% of the CoW for Advance Planning), the CMR General Conditions and Fee, bonds and insurances on the work, CMR construction contingency (2%), and escalation through the mid-point of construction. The design contingency will be reduced as the project progresses and the scope of the work becomes more defined. Escalation will also continue to be reduced as the project progresses and the time from the estimates to the mid-point of construction shortens. The project is anticipated to be bid in fall of 2024 with a mid-point of construction in summer of 2026. Currently escalation for the construction cost is approximately $230,000 per month. If the project schedule changes from what is presented in this report, the budget and scope will need to be revisited to account for additional escalation costs. Lastly, the CMR General Conditions and Fee will be negotiated with Skanska, the CMR, as the project progresses.

In addition to this list, the design team will continue to explore the possibility of replacing the existing windows in the 1970’s building to improve the thermal performance and energy efficiency. This may have an impact on LEED for the project, and the team will continue to study the impacts of this on the budget and LEED.

The design team as well as the CMR prepared cost estimates based on the program and concept designs presented in this report. A cost summary is provided on the following page. The detailed breakdown of both the design team cost estimate and CMR cost estimate are included in the appendix.

### PREFERRED ALTERNATES

<table>
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<tr>
<th>Rank</th>
<th>Alternate Description</th>
<th>Design Team Estimate</th>
<th>CMR Estimate</th>
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<tr>
<td>1</td>
<td>Renovate Tower Level 9 into a Learning Lounge</td>
<td>$747,415</td>
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<tr>
<td>2A</td>
<td>Renovate Jarrell Hall into a flat floor classroom(s)</td>
<td>$806,828</td>
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<tr>
<td>2B</td>
<td>Create new window openings in the west side of the tower</td>
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<td>3</td>
<td>Renovate Level 2 of the 1950’s building student study areas</td>
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<td>4</td>
<td>Renovate Level 2 of the 1950’s building staff areas</td>
<td>$937,075</td>
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<tr>
<td>5</td>
<td>Provide glass walls at Tower reading rooms</td>
<td>$220,248</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Power wash 1970’s precast building and reseal joints</td>
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<tr>
<td>7</td>
<td>Refurbish existing chilled water cooling towers and chillers</td>
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<tr>
<td>8</td>
<td>Replace roof on Tower</td>
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<td>9</td>
<td>Replace windows in 1970’s building with insulated glass</td>
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### PROBABLY COST SUMMARY

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<th>Description</th>
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<td>1950’s Building Program</td>
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<td>1970’s Building Program</td>
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The design team continues to explore the possibility of replacing the existing windows in the 1970’s building to improve the thermal performance and energy efficiency. This may have an impact on LEED for the project, and the team will continue to study the impacts of this on the budget and LEED.