



THE BAKER SCHOOL PHASE 1 RENOVATION

PROGRAMMING STUDY

SBC #540/000-01-2019

AUGUST 20, 2024





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1

Overview

Vision and Intent of Study

EXECUTIVE SUMMARY

HED (Harley Ellis Devereaux) was tasked with the programming and planning for the renovation of an existing building on the University of Tennessee Knoxville (UTK) campus, the Baker School of Public Policy and Public Affairs and Institute of American Civics (IAC). The existing building is located at 1640 Cumberland Ave, adjacent to the future Haslam College of Business building. The school is becoming a freestanding college with its own degree programs (undergraduate and graduate) with a plan to grow faculty and staff and add much needed classroom and support spaces. The current building does not meet the future needs for the school.

The Howard H. Baker Jr. Center for Public Policy was originally established in 2003 with the current building completed in 2008. The building was named after United States Senator Baker from Tennessee. He also served as Senate Majority Leader, White House Chief of Staff for President Ronald Reagan, and the United States Ambassador to Japan. The building was designed as a museum with a 100-collection archives and included classrooms and meeting space. By 2012, the museum was closed and the archives was transferred to UT Libraries Special Collections. Until Senator Baker's passing in 2014, he remained involved in the school and its mission. His office remains in the building on the third floor along with several pieces of memorabilia from his career.

In 2012, the Baker Center created a new mission that focused on policy research in specific areas, Energy and Environment, Global Security, and Leadership and Governance. Curriculum was developed with student engagement programs. In 2022, Chancellor Plowman and Provost Zomchick developed a taskforce to review changing the Baker Center into a school of public policy. The findings revealed that Tennessee did not have a school of public policy or academic programs in this area of expertise to serve the state's workforce needs - in summary, a large gap was found in the curriculum.

Fast forward to 2023, the Baker Center was renamed the Howard H. Baker Jr. School of Public Policy and Public Affairs. A Masters program was created for Fall semester 2023 with the undergraduate program kicking off in Fall 2024.

Through various stakeholder engagement, it was discussed that as the school grows and develops its curriculum and staff, a short term renovation is needed to meet immediate needs. Therefore, this programming effort is broken out into two phases with this document focusing on Phase 1. Phase 1 will focus primarily on Level 2 and include the following scope of work:

- Add minimum twelve (12) offices for the Institute of American Civics.
- Add support spaces for the new offices.
- Add two (2) classrooms with one (1) classroom serving at least 50 students.
- Add exterior windows at new office locations on Level 2.

- Add reception area for new offices.
- Add open office area in the current Student Program/Student Advising space.
- If budget allows, add exterior windows at Level 1.
 - The addition of windows at Level 1, will require reconfiguration of perimeter offices as the current office demising walls intersect the future window location.
 - Renovate interior spaces to add additional offices and graduate student spaces.

It is understood that the total project cost for Phase 1 is preferably within \$3M. Level 1 windows and interior spaces reconfiguration is ideally part of this scope, but will be removed from scope should it exceed the budget. The school has set a time frame of Fall Semester 2025 occupancy for Level 2 scope only.

KEY PRINCIPLES

Overall key themes for the Phase 1 renovation of Baker School include the following:

- Wellness
- Adaptability and Flexibility
- Employee Retention and Attraction
- Functionality

APPROACH

- Give priority to provide west wing offices on both first and second floors with new windows to support missions of employee wellness, to keep and attract top talent and enhance employee performance.
- Position and size new windows to integrate into existing building architecture (i.e. existing precast panels, masonry recesses and existing window frames and glass type should inform position, size and detail of new windows).
- Demolish and rework existing first floor offices to be right sized with campus standards and align and integrate with new proposed window locations and sizes.
- Provide two adaptable classroom spaces for 50 and 24 occupants at the second floor. Leverage current 16-foot floor to floor building height on second floor to maximize ceiling height and views of video display from all seats within the space.
- Integrate office support and collaborative activities in the overall office development.

2

Existing Conditions

Site Visit & Facilities Needs Summary

The following summary reflects important scope discussed with the program advisory committee and several facilities members, specific to Phase 1. Phase 2 scope will focus on the remainder of the building, while Phase 1 will serve a short term need. Note that the HED Design Team did tour the entire building and documented all needs of the facility. Refer to the Appendix for those notes.

First Level

- Add exterior windows to existing offices at the west wing of the building.
- Reconfigure and resize perimeter offices so that windows can be added. Currently, demising walls intersect where future windows shall be location.
- With the office reconfiguration, update carpet, ceilings, and repaint walls. All existing furniture shall remain. All lighting shall be reused.
- Renovate interior spaces with additional office and support spaces.

Exterior

- Add exterior windows at levels 1 and 2 at the west wing of the building.

Second Level

- Add exterior windows at the west wing of the building, currently the Archive space.
- Add two classrooms with a goal of 50 students for one classroom.
- Add minimum 12 offices along the perimeter of the building.
- Add office support spaces.
- Add "reception" area for the office spaces.
- Add open office space at the existing Student Services room.

Code Summary

APPLICABLE CODES:

2018 International Building Code
2018 International Fire Code with Local Amendments
2018 International Energy Conservation Code
2018 International Plumbing Code
2018 International Mechanical Code
2018 International Fuel Gas Code
2012 International Green Construction Code
2009 ICC ANSI A117.1 Accessibility Code
2017 National Electric Code with Local Amendments

ORIGINAL APPLICABLE CODES WHEN BUILDING WAS ORIGINALLY DESIGNED:

1999 Standard Building Code (SBC)
1997 Standard Plumbing Code
1997 Standard Mechanical Code
1997 Standard Gas Code
2002 National Electrical Code
2003 NFPA Fire Codes including Life Safety Code (NFPA 101)
1995 Model Energy Code

APPLICABLE CODES PER 2008 REVISION SHEET:

2006 International Building Code
2006 International Fire Code with Local Amendments
2006 International Energy Conservation Code
2006 International Plumbing Code
2006 International Mechanical Code
2006 International Gas Code
2006 National Electric Code
2006 Life Safety Code (NFPA 101)

Allowable Construction Types:

No Change - Type I-B, Sprinklered

Allowable Number of Stories:

No Change - 11-Stories allowed
Actual - 3-Stories plus basement

Allowable Building Height:

No Change - No Limit
Actual - 79'-0" +/-

Allowable Area:

No Change - Unlimited
Actual - 51,527 square feet

Occupancy Types:

No Change - Mixed Use Occupancy with principal intended use of Business B and accessory use of Assembly A-3
1-HR separation between Business and all A occupancies

Sprinklered Building:

Required - No Change

Occupant Load:

Refer to proposed egress plan for occupant load

Number of Exits:

No Change - 1-500 occupants per Story - 2 exits required from a story

Common Path of Egress Travel Distance:

Assembly - 75-feet for areas with 49-occupants or less (one exit)

Business - 100-feet for areas with 49-occupants or less (one exit)

Max Travel Distance:

Assembly A-3 - 250-feet max travel distance

Business B - 300-feet max travel distance

Max Dead End Corridor:

Max 50-feet

Two Exit Distance Separation:

Where a building is equipped with a sprinkler system, the separation distance shall not be less than 1/3 of the length of the max overall diagonal dimension of the area served.

Elevator:

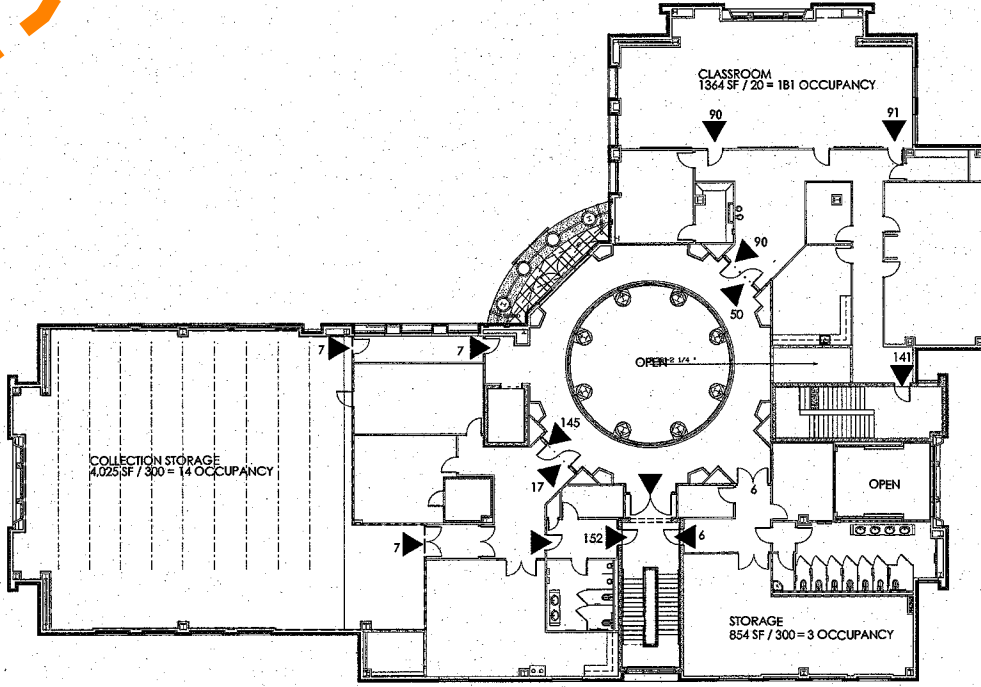
Required - No Change

Code Summary | Existing Conditions

Second Level | Life Safety Analysis



Max Travel Distance 250-feet (A Occupancy) and 300-feet (B Occupancy)
Path A | 139-feet
Path B | 214-feet



Existing Conditions

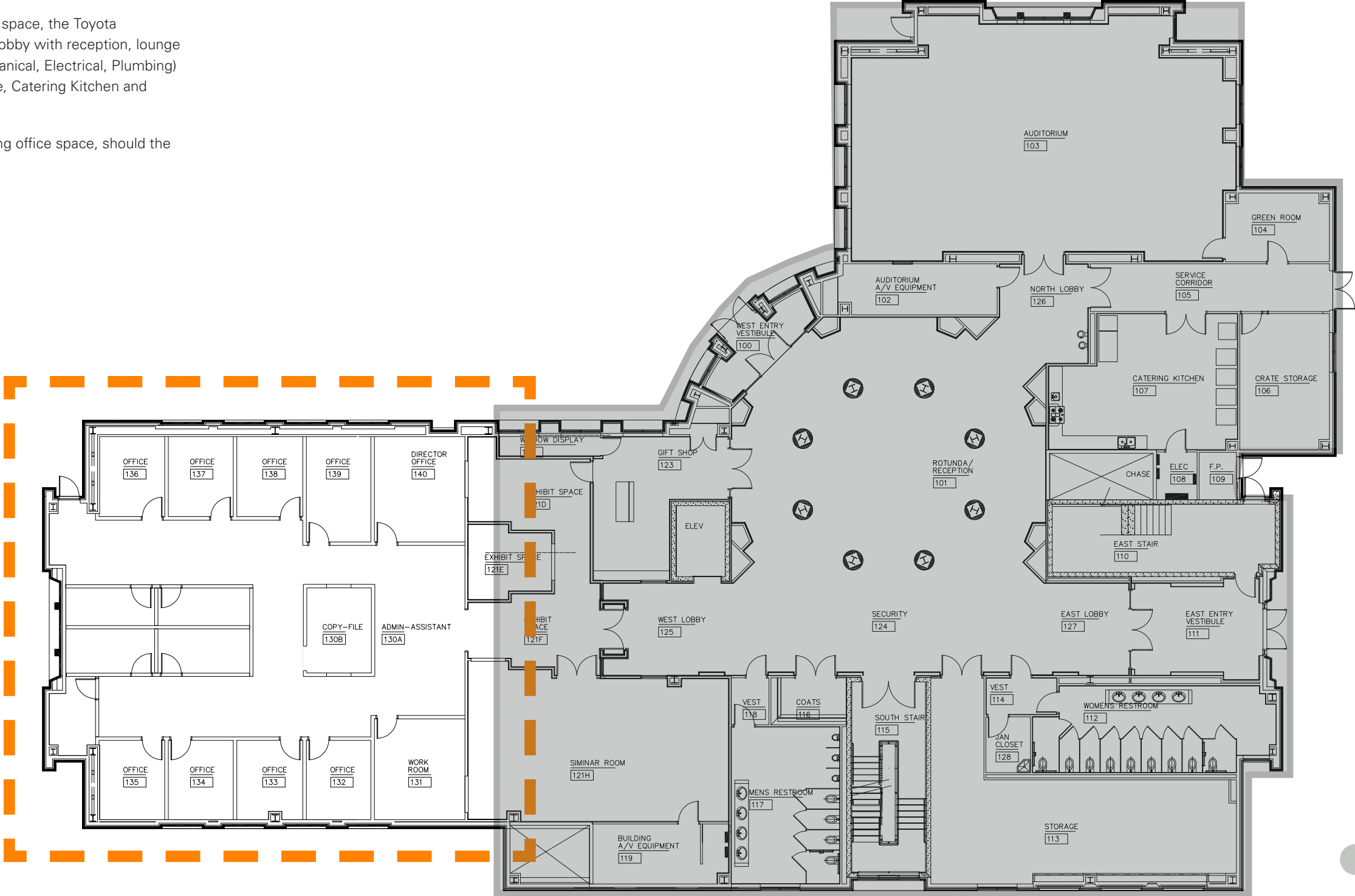
First Level | Floor Plan

SCALE: 3/64" = 1'-0"

Summary

The first floor consists of existing office space, the Toyota Auditorium with AV and storage room, lobby with reception, lounge space, Grad student office, MEP (Mechanical, Electrical, Plumbing) support spaces, Honors Scholar Lounge, Catering Kitchen and storage spaces.

Phase 1 scope will include the west wing office space, should the budget allow.



● NOT IN SCOPE

Existing Conditions

First Level | Photos



Grad Students



Office



Workroom



Hall at Offices



Seminar Room



Workroom

Existing Conditions

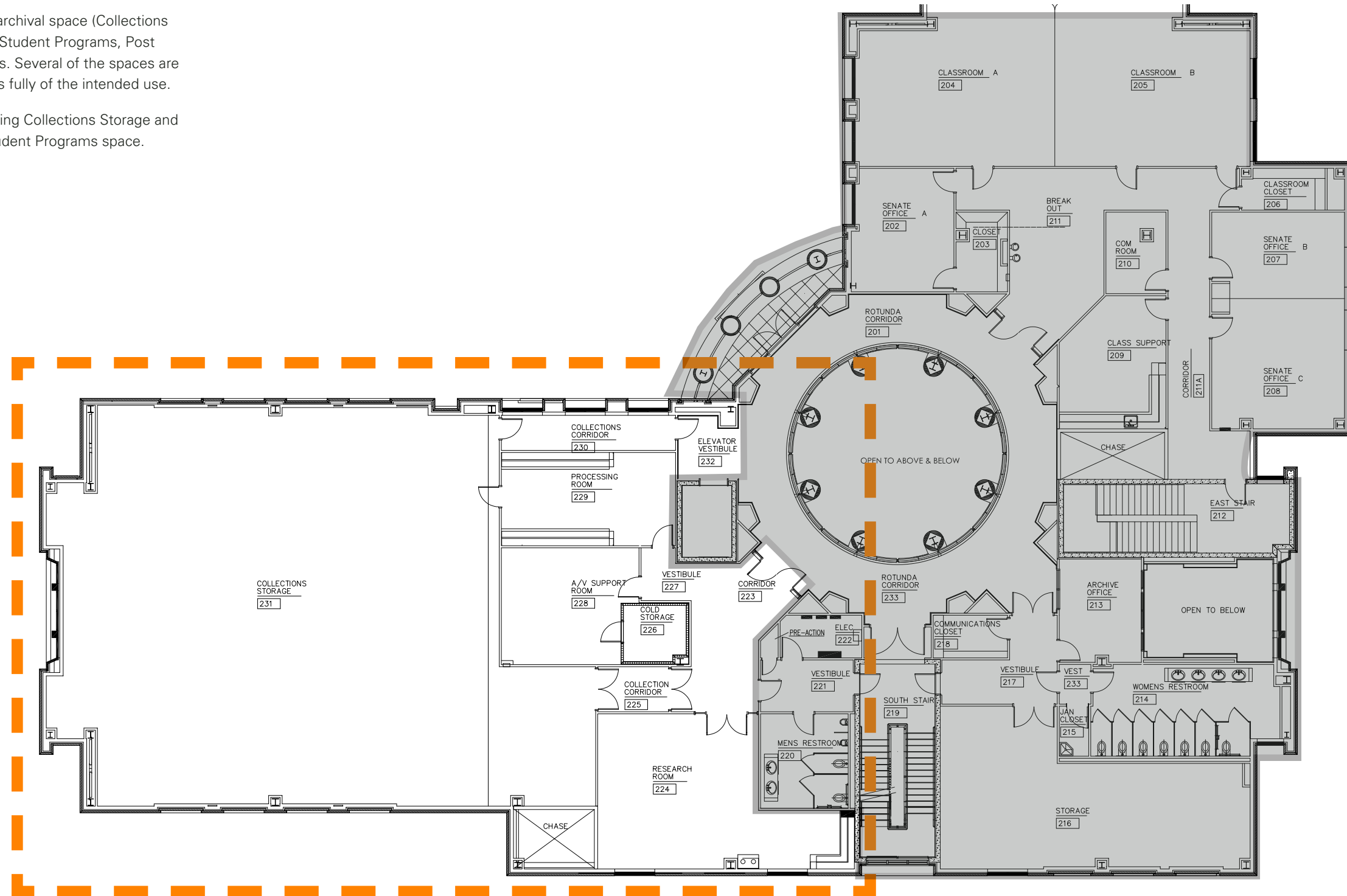
Second Level | Floor Plan

SCALE: 3/64" = 1'-0"

Summary

The second floor consists the original archival space (Collections Storage), classrooms, meeting space, Student Programs, Post Doc and Grad spaces, and MEP spaces. Several of the spaces are underutilized or do not serve the needs fully of the intended use.

Phase 1 scope will include the west wing Collections Storage and support spaces for Collections and Student Programs space.



● NOT IN SCOPE

Existing Conditions

Second Level | Photos



AV Support & Cold Storage



Collections Corridor



Collections Storage



Processing room (now meeting room)



Collections Storage



Student Programs



Student Programs

Existing Conditions

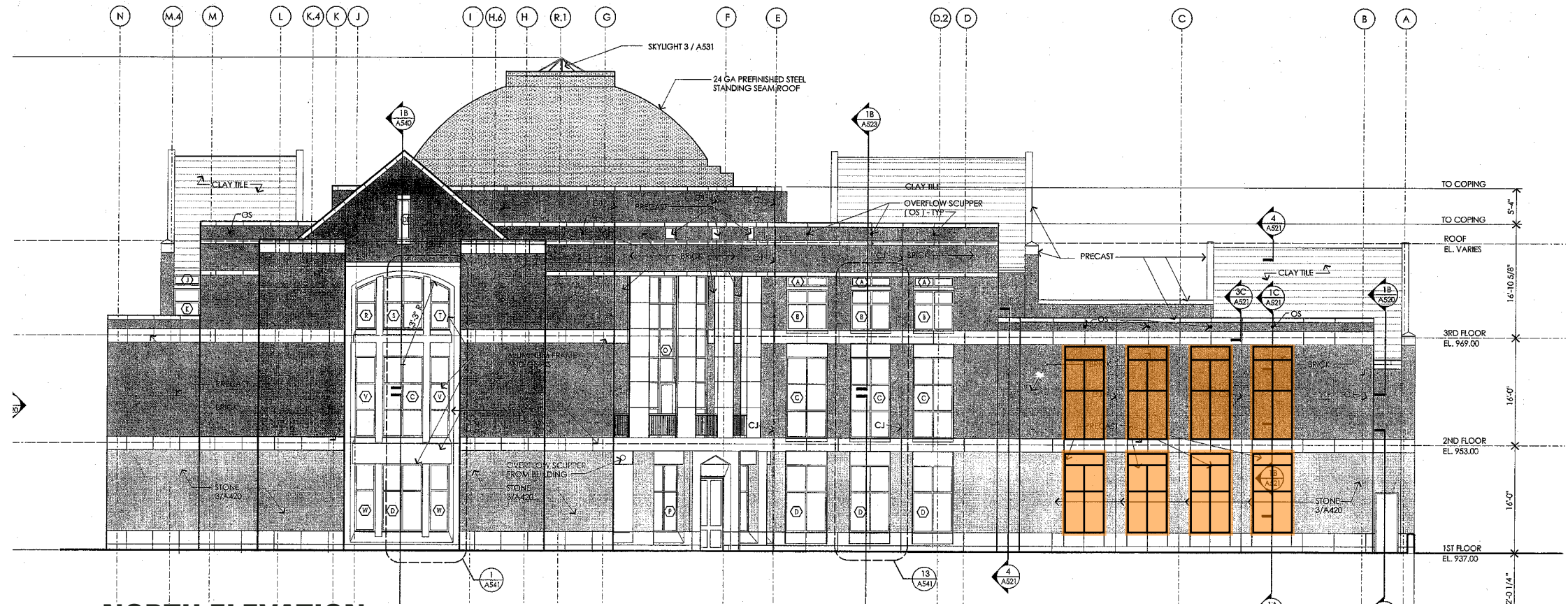
Exterior | Exterior Elevations

Summary

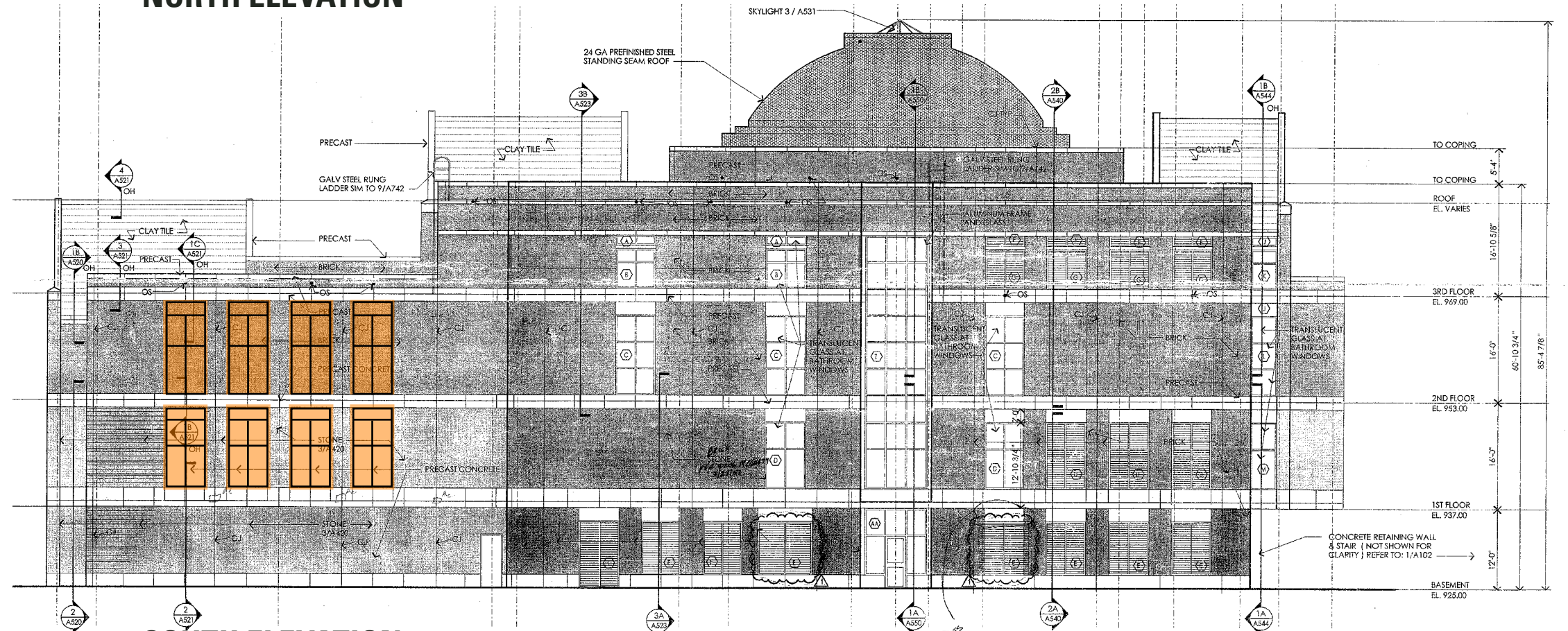
The exterior facade consists of non-bearing precast panels or brick veneer with steel stud backup. The Phase 1 scope includes adding exterior windows at level 1 and 2 to the west wing, as indicated in orange on the three exterior elevations shown.

Window sizes shall match existing windows with a precast panel above the window. The intent is for the new windows to sit within the existing "inset" at along the exterior facade.

Window sizes shall be 6'-0" x 12'-0" and 6'-0" and 10'-0".



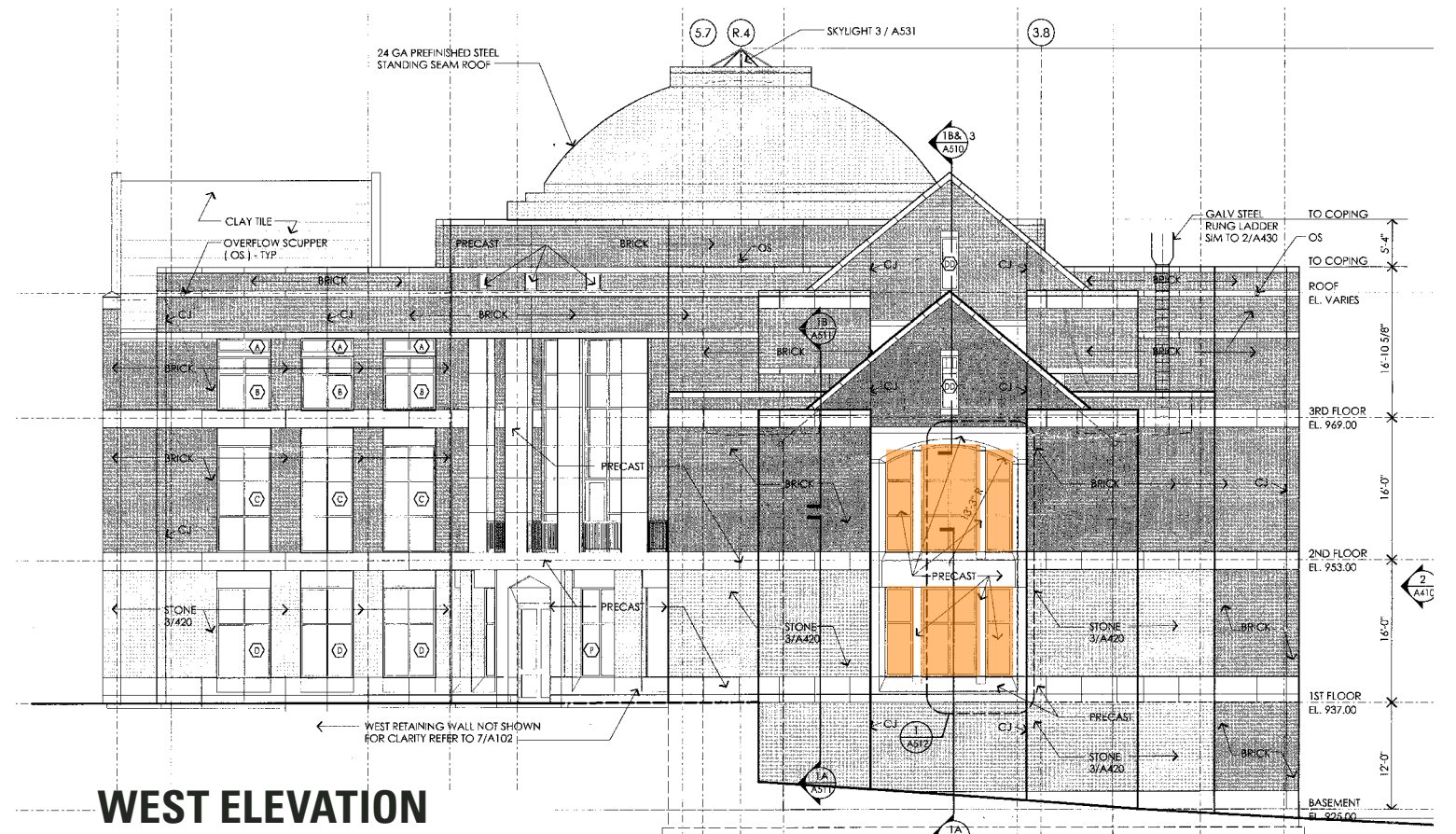
NORTH ELEVATION



SOUTH ELEVATION

Existing Conditions

Exterior | Exterior Elevations & Photos



View of entry and North Elevation

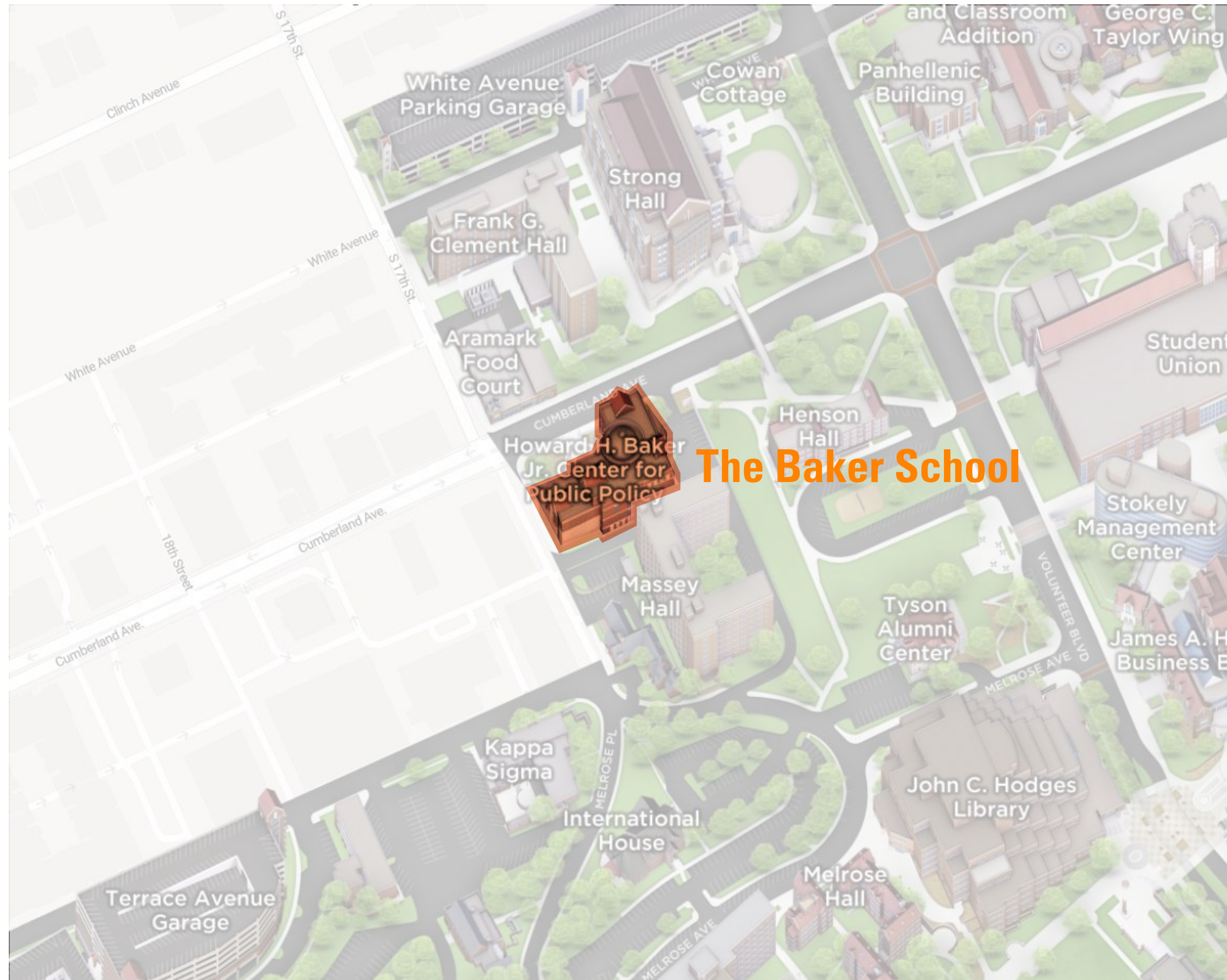


View of Northwest Corner

3

Site Considerations

Building Adjacency



PROGRAM NEEDS

The Baker School is positioned along Cumberland Avenue, adjacent to Massey Hall and Henson Hall. Note that Massey and Henson will be demolished for the new Haslam College of Business.

The goal of Phase 1 scope is to add exterior windows at offices on levels 1 and 2 and much needed classroom space on Level 2.

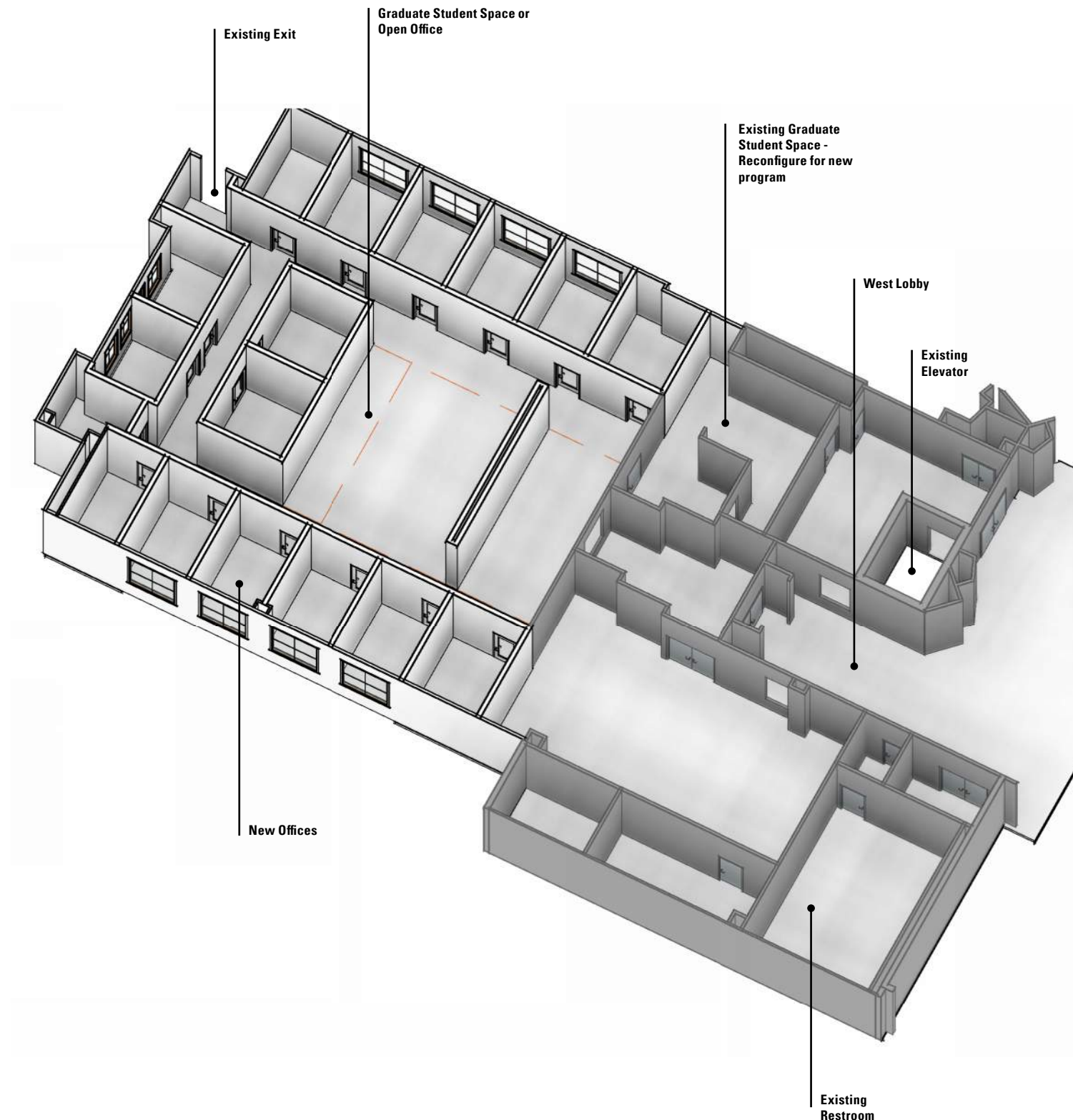
As stated previously, the addition of windows on Level 1 and interior renovation is dependent on budget.

Regardless if Level 1 windows are installed, scaffolding will still be required along the exterior facade for the Level 2 windows. Minor repair of the landscaping around the building will be required once construction activities are complete at the exterior.



Programming

Organizing Concepts

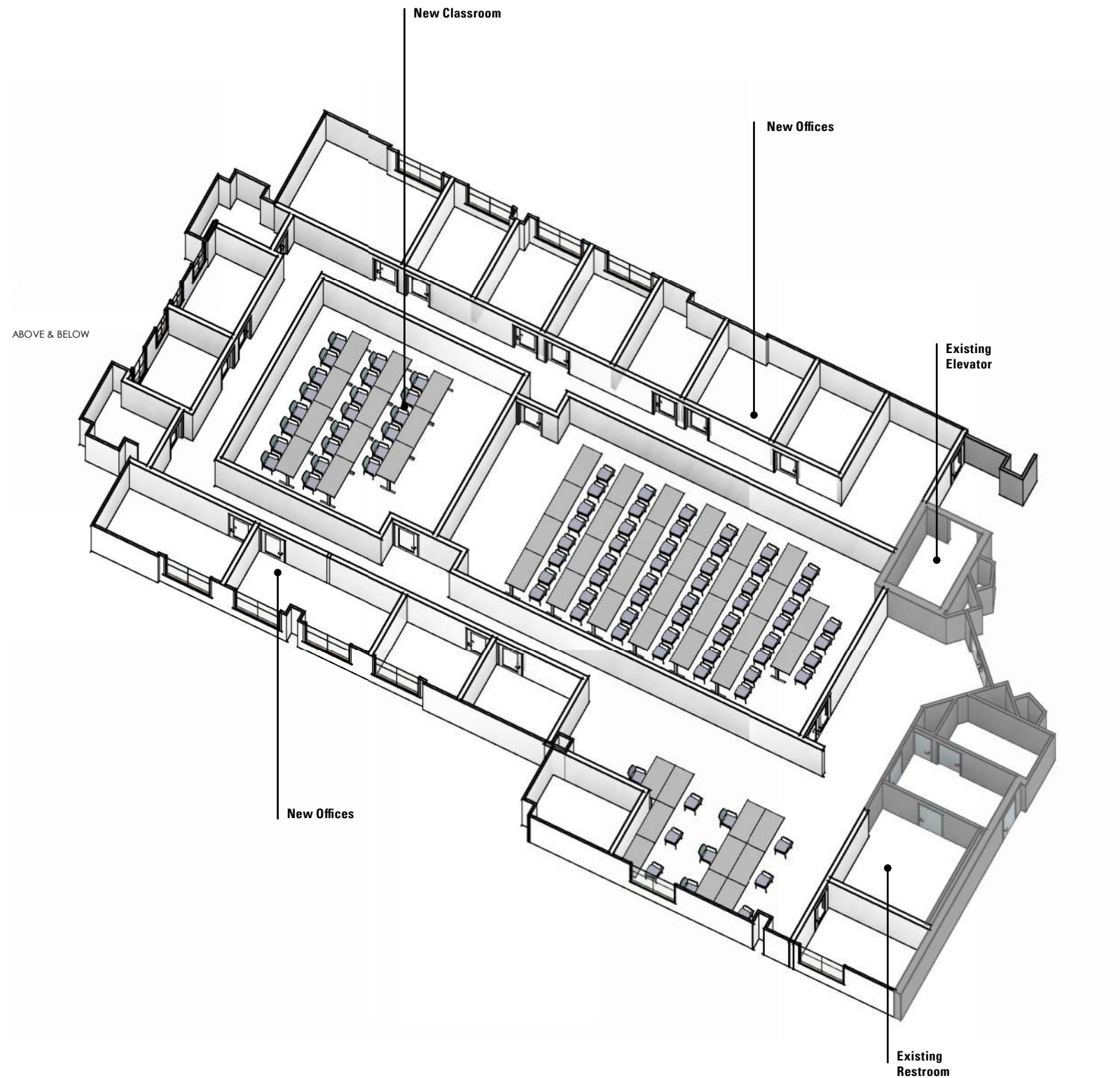


FIRST LEVEL

- Replace the current precast panels at the west wing of the building with windows to match the current window size and aesthetic. Total windows to include:
 - North Elevation - 4 windows
 - South Elevation - 4 windows
 - West Elevation - 3 windows
- Current offices around west wing perimeter are oversized (rom current UTK standards) and do not align with proposed new windows.
- Demolish current offices and replace with new resized offices (target of 100 NSF)
 - North Elevation - 5 offices with 1 without a window
 - South Elevation - 5 offices with 1 without a window
 - West Elevation - 2 offices
- Remaining residual space around west wing perimeter will be used for miscellaneous office support activities.
- Renovated remaining open office space will be renovated with new finishes and lighting.
- Rework current infrastructure as required to align with new office layout.
- Provide all new finishes and lighting for renovated and reconfigured enclosed and open office space.

Programming

Organizing Concepts



SECOND LEVEL

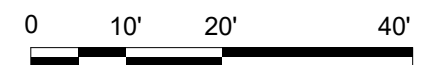
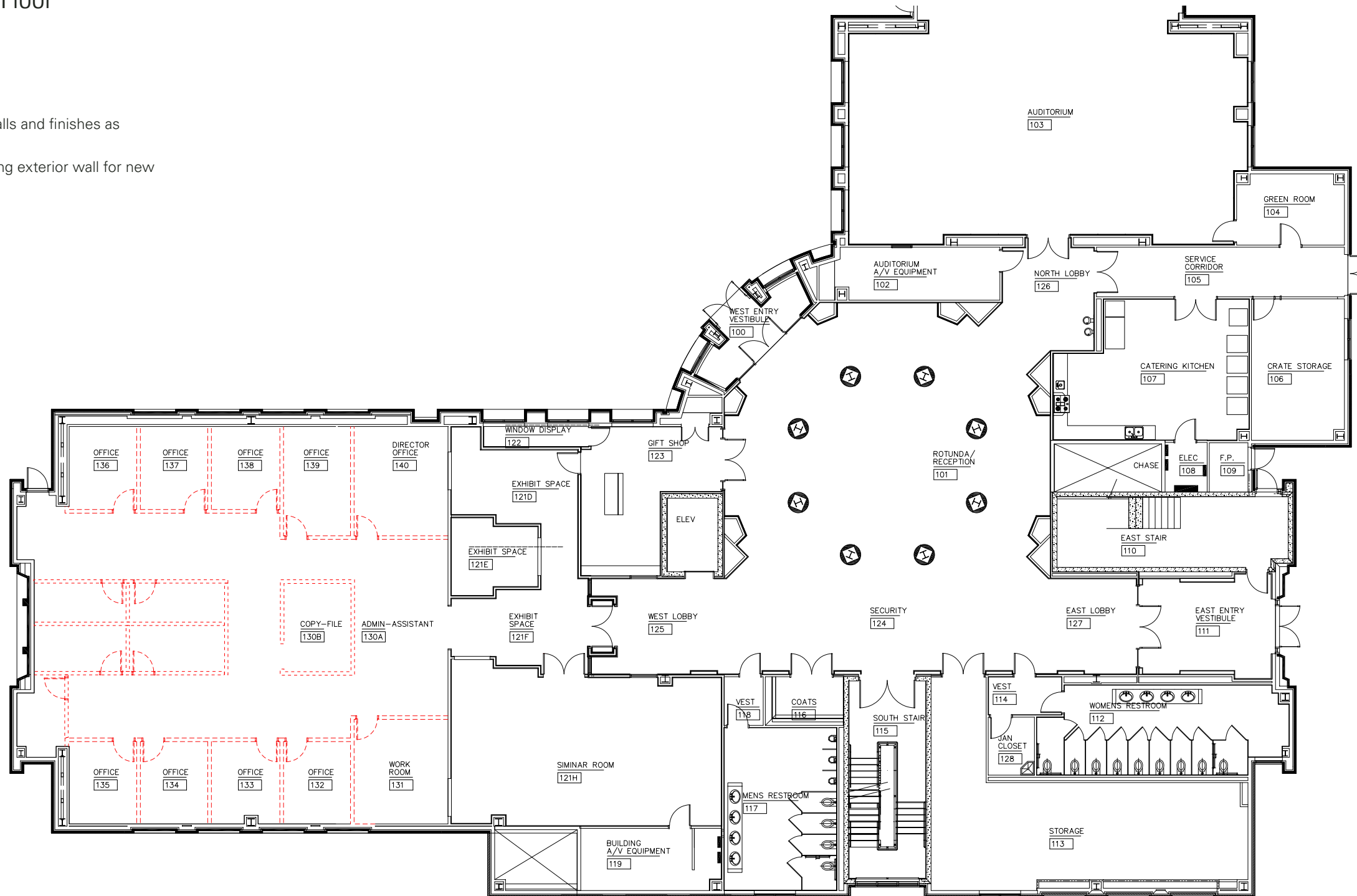
- Replace current masonry recesses (that align with first floor precast panels noted above) at west wing of building with windows to match current building windows. Total windows include:
 - North Elevation - 4 windows
 - South Elevation - 4 windows
 - West Elevation - 3 windows
- Demolish current finishes in existing Collections Storage space to allow for new configuration of office, office support and classroom space.
- Maximize faculty and employee access to daylight and views by locating new offices around west wing perimeter.
- Align new offices (target of 100 nsf each) with proposed new windows. Total offices include:
 - 5 offices at north elevation (1 without windows)
 - 5 offices at south elevation (1 without windows)
 - 2 offices at west elevation
- Rework existing Student Project space to be open flex space (lounge / open office / etc.) Assume approximately 10 occupants
- Remaining residual space around west wing perimeter will be used for miscellaneous office support activities.
- Coordinate new individual office footprints and adjacent corridor with mission to maximize area between perimeter offices for flexible classroom space.
- Create two flexible and adaptable classrooms between the perimeter offices. Classroom sizes will be:
 - 50 occupants in a lecture format
 - 24 occupants in a lecture format
 - See plan graphic for footprint of proposed classrooms.
- Provide classroom technology in walls and floor to maximize pedagogical flexibility of the spaces ranging from lecture to team-based activities.
- Rework current infrastructure as required to align with new office layout.
- Provide all new finishes and lighting for renovated and reconfigured enclosed and open office space and classroom space.

Programming

Demolition Scope | First Floor

Summary

- Demolish current office demising walls and finishes as indicated in red dash lines.
- Demolish existing recesses at existing exterior wall for new exterior windows.

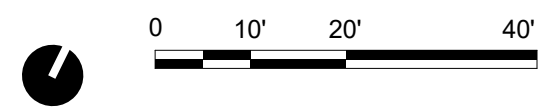
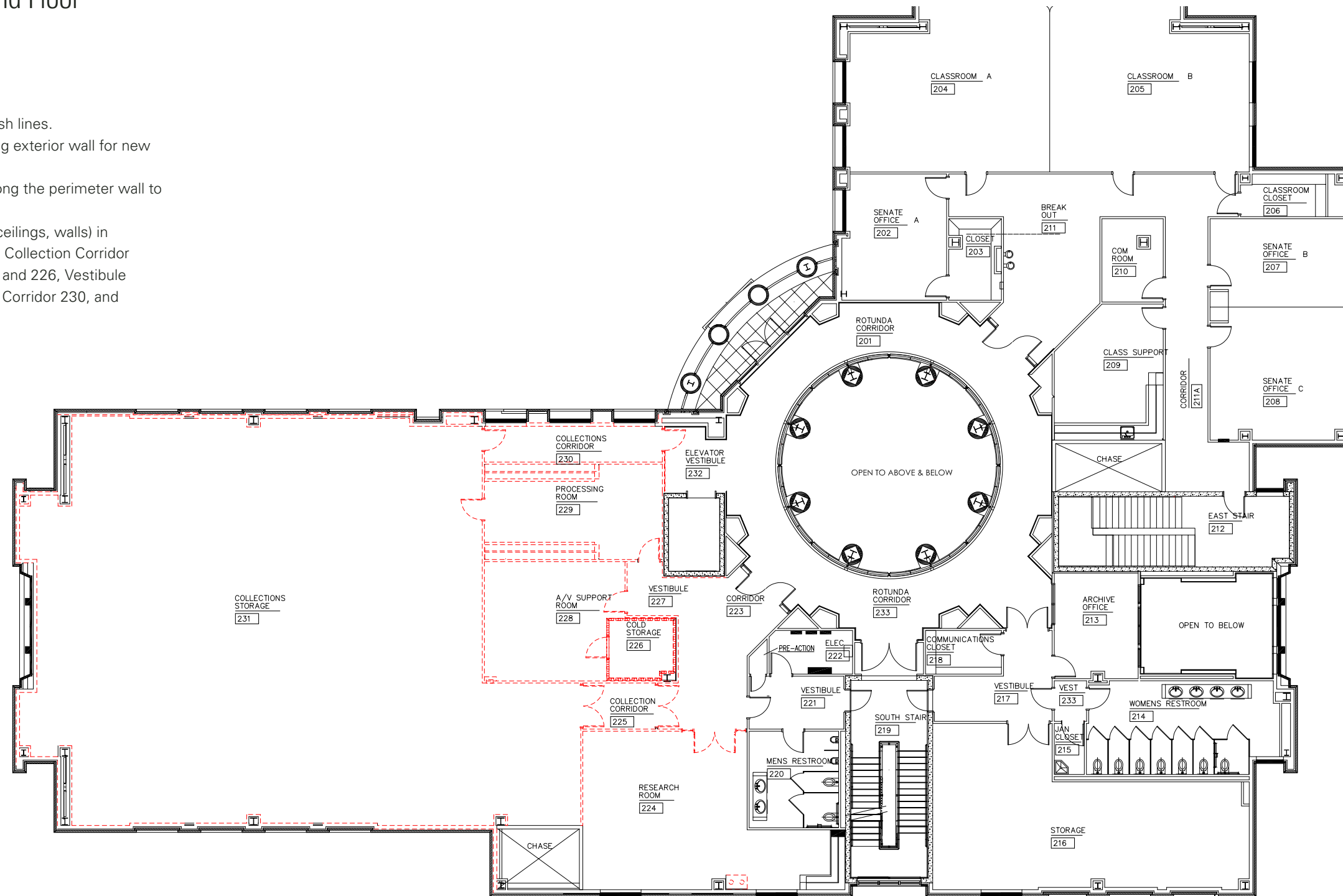


Programming

Demolition Scope | Second Floor

Summary

- Demolish walls at indicated in red dash lines.
- Demolish existing recesses at existing exterior wall for new exterior windows.
- Demolish existing interior finishes along the perimeter wall to allow for new finishes.
- Demolish existing finishes (flooring, ceilings, walls) in Corridor 223, Student Programs 224, Collection Corridor 225, A/V Support / Cold Storage 228 and 226, Vestibule 227, Meeting Room 228, Collections Corridor 230, and Collections Storage 231.

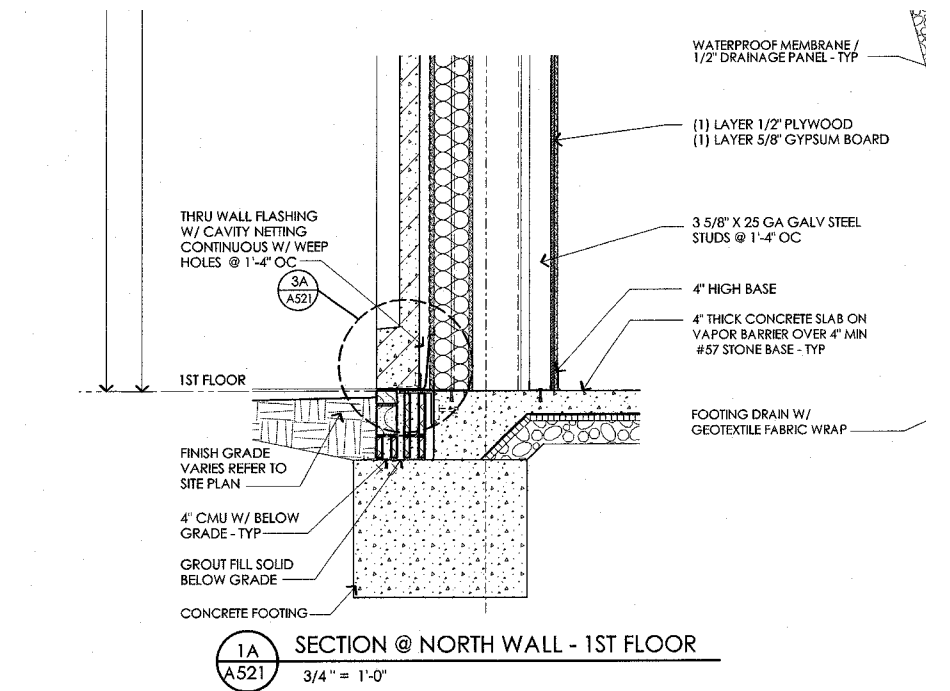
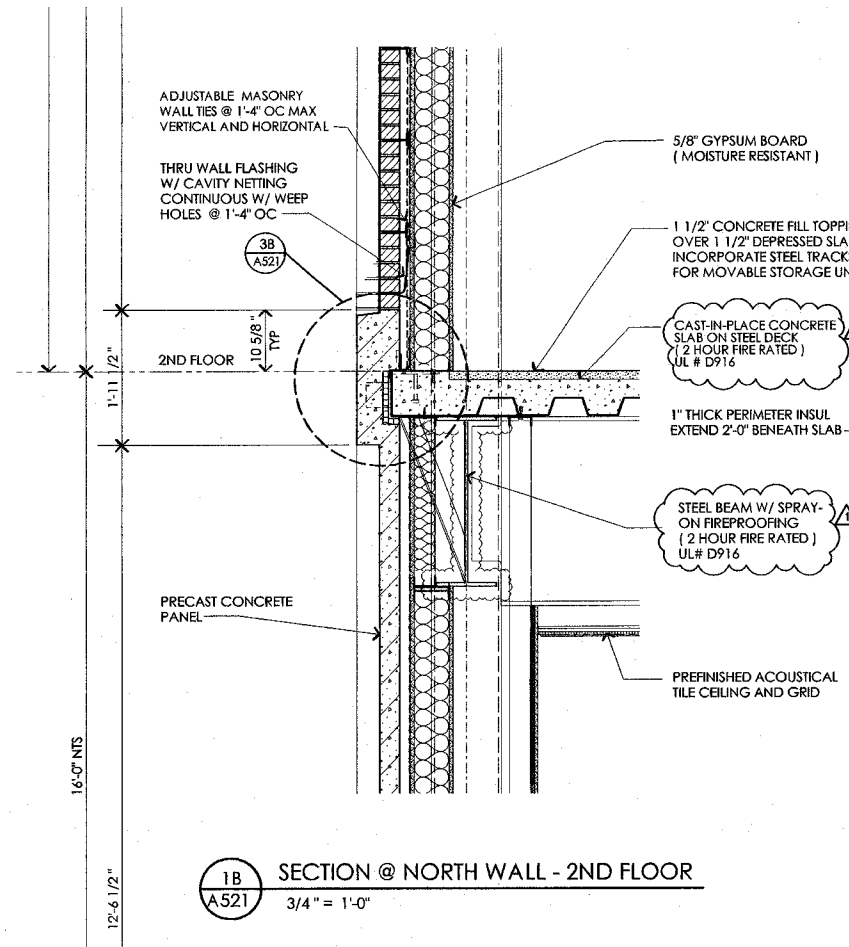
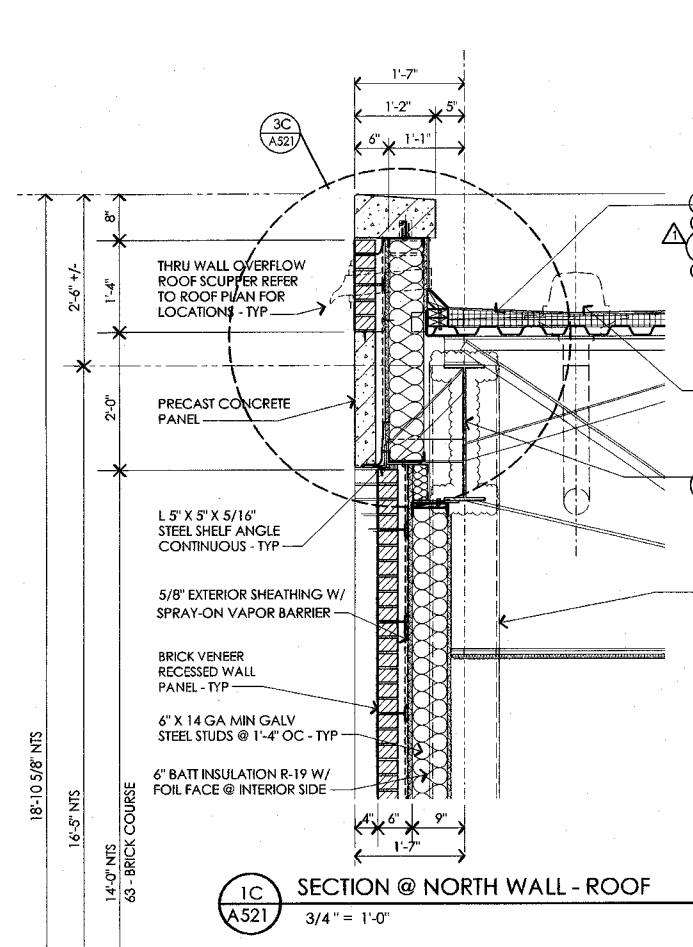


Programming

Demolition Scope | Exterior

Summary

Existing exterior wall sections indicating existing construction - precast panels or face brick with metal stud construction backup.





Programming

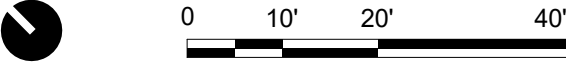
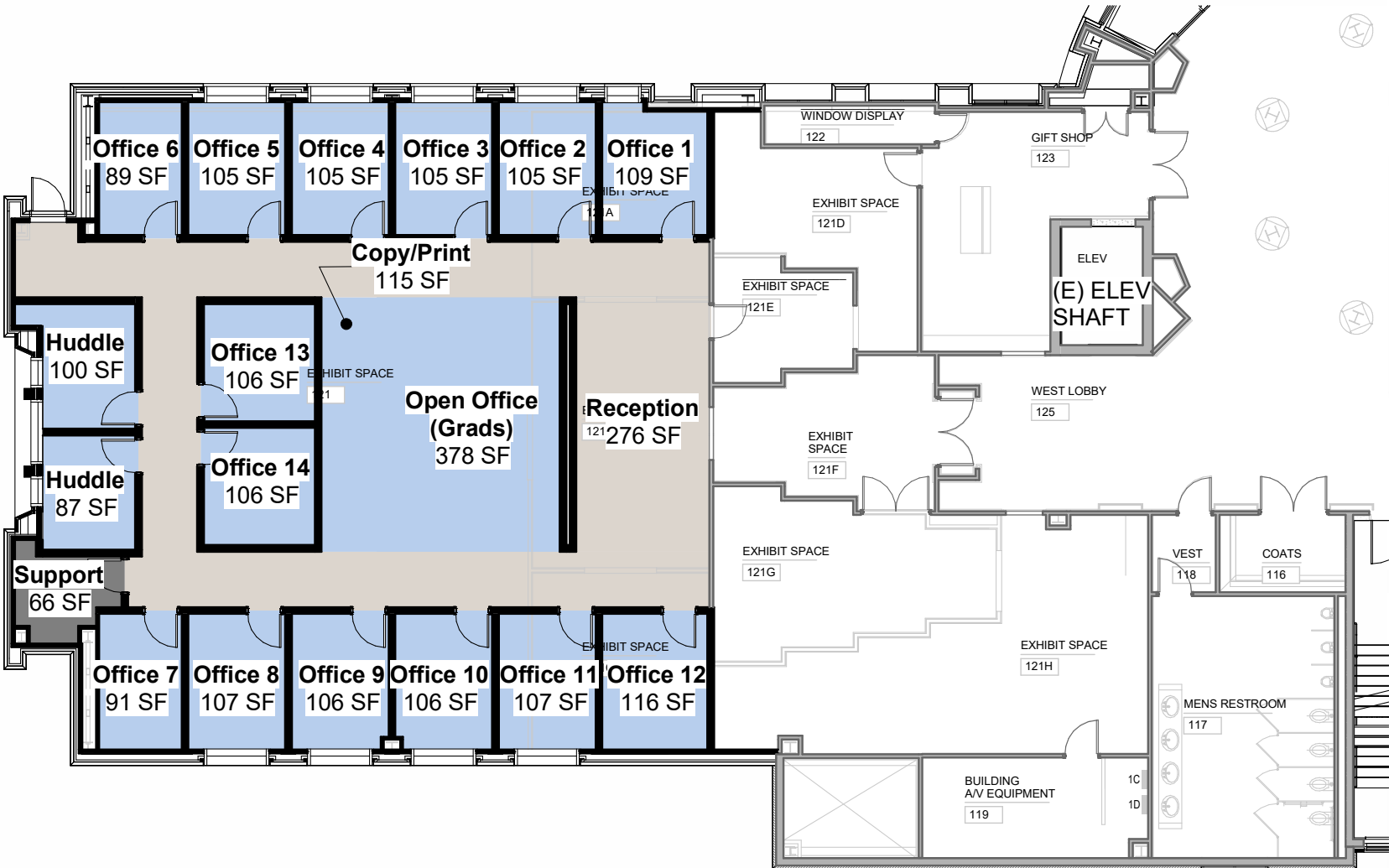
Design Program

UT Knoxville: The Baker School Phase 1 Renovation Program					
	Type/Notes	NSF	QTY	Subtotal NSF	
Level 1					
Faculty Office Suite					
Private Office	Layout to Accommodate New Windows	100	14	1,400	
Huddle Room	1-2 People	90	2	180	
Office Support		60	1	60	
Open Office - Graduate Students		375	1	375	
Reception		275	1	275	
Copy/Print		115	1	115	
Circulation		700	1	700	
				Subtotal	3,105
Level 2					
IAC Faculty Office Suite					
Private Office	Layout to Accommodate New Windows	100	12	1,200	
Director's Office		200	1	200	
Huddle Room	1-2 People	100		-	
Office Support		65	2	130	
Open Office/Lounge	10 Seats	560	1	560	
Circulation					
Circulation / Reception Area		1400	1	1,400	
Academic Space					
Classroom - Small	22	680	1	680	
Classroom - Large	52	1267	1	1,267	
				Subtotal	5,437
				Total Building NSF	8,542

Programming

Design Program | Proposed First Floor Plan

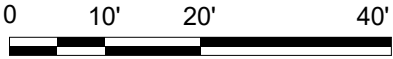
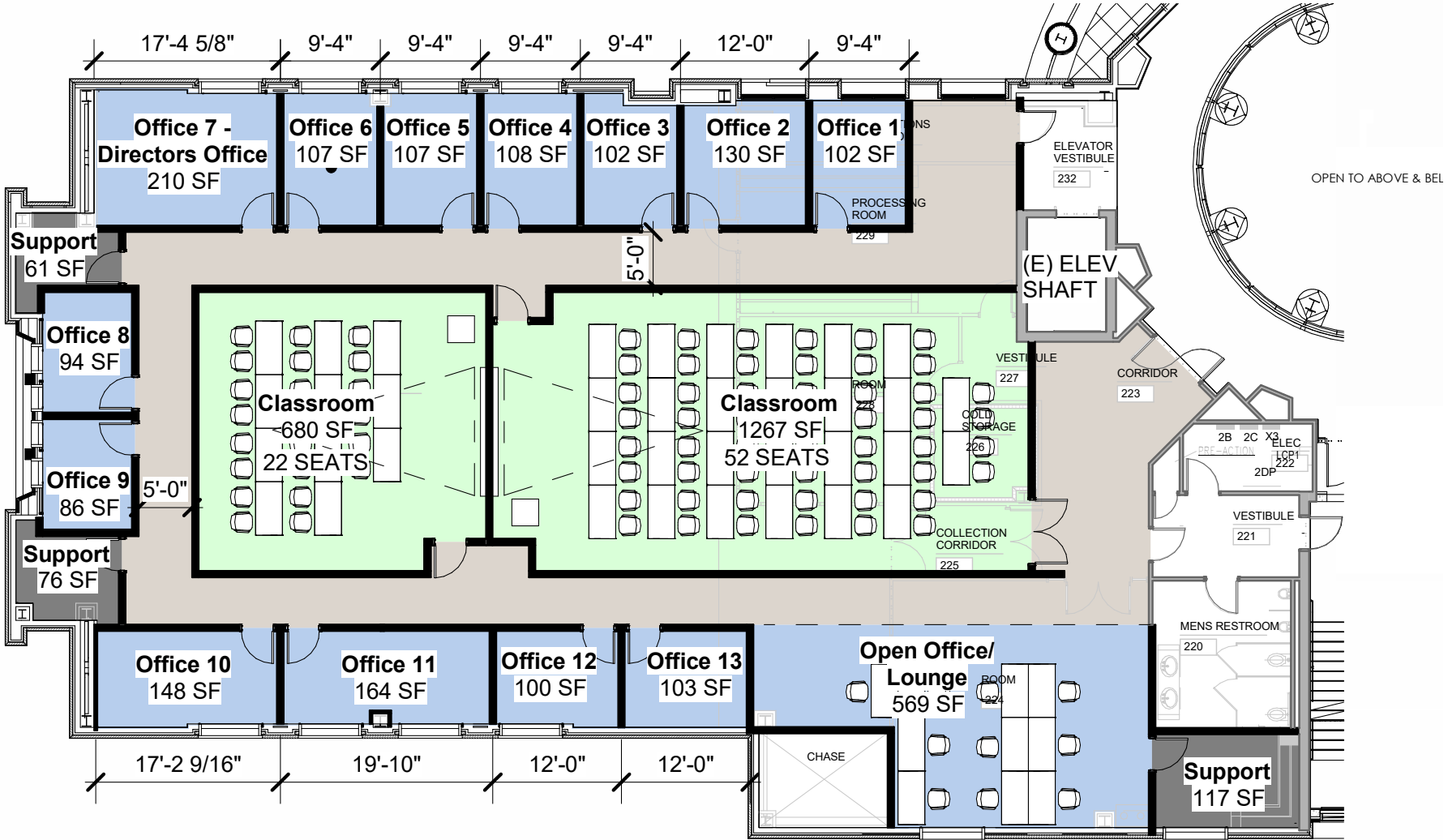
- CLASSROOM
- OFFICE
- CIRCULATION
- SUPPORT



Programming

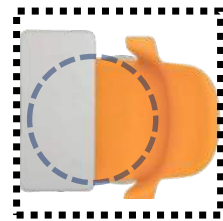
Design Program | Proposed Second Floor Plan

- CLASSROOM
- OFFICE
- CIRCULATION
- SUPPORT

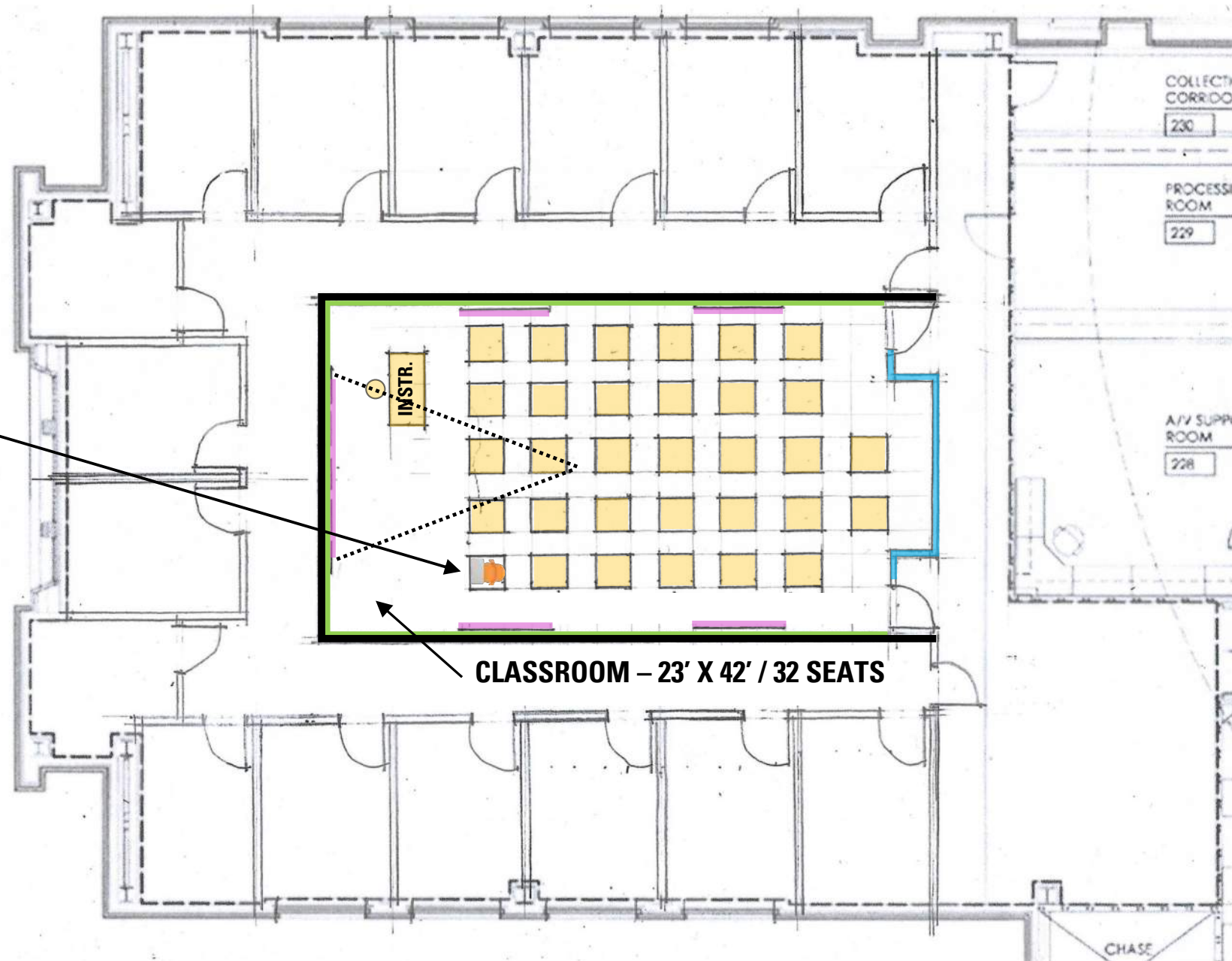


Programming

Design Program | Classroom Layouts



**MOBILE NODE CHAIR /
TABLET BY STEELCASE**



CLASSROOM – 23' X 42' / 32 SEATS

Through a series of stakeholder meetings, several different classroom configurations were discussed. It was established that two (2) classrooms on the second floor were needed with one classroom holding at least 50 students.

As the school grows in the coming months, it will have a better understanding of classroom size and it is understood that the planned classrooms in this programming document may adjust based on the changing needs of the school.

The following pages highlight various classroom layout scenarios discussed with the stakeholder group.

The layout on the following page was preferred with movable tables and teaching walls on multiple sides of the classroom, one being the main teaching wall.

Programming

Design Program | Classroom Layouts

2
OPTION



- ← SHARED FLAT SCREEN TECHNOLOGY
- ← WHITEBOARD
- ← MOBILE TABLES & CHAIRS
- ← POWER & DATA PORTS IN FLOOR UNDER TABLES
- ← LOW PROFILE RAISED FLOOR FOR FUTURE TECHNOLOGY DISTRIBUTION FLEXIBILITY

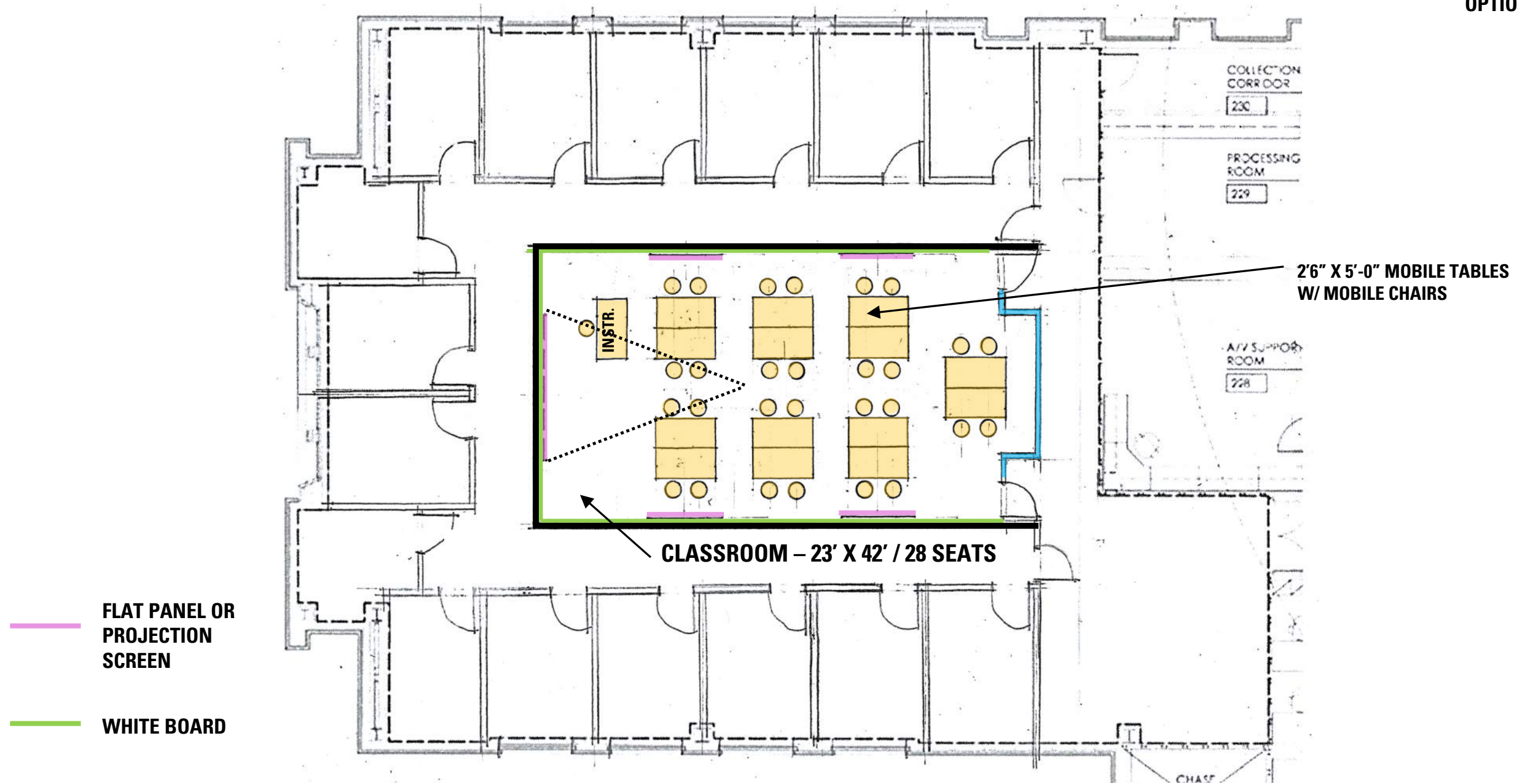


- WHITE BOARD
- FLAT SCREEN
- POWER & DATA IN FLOOR

Programming

Design Program | Classroom Layouts

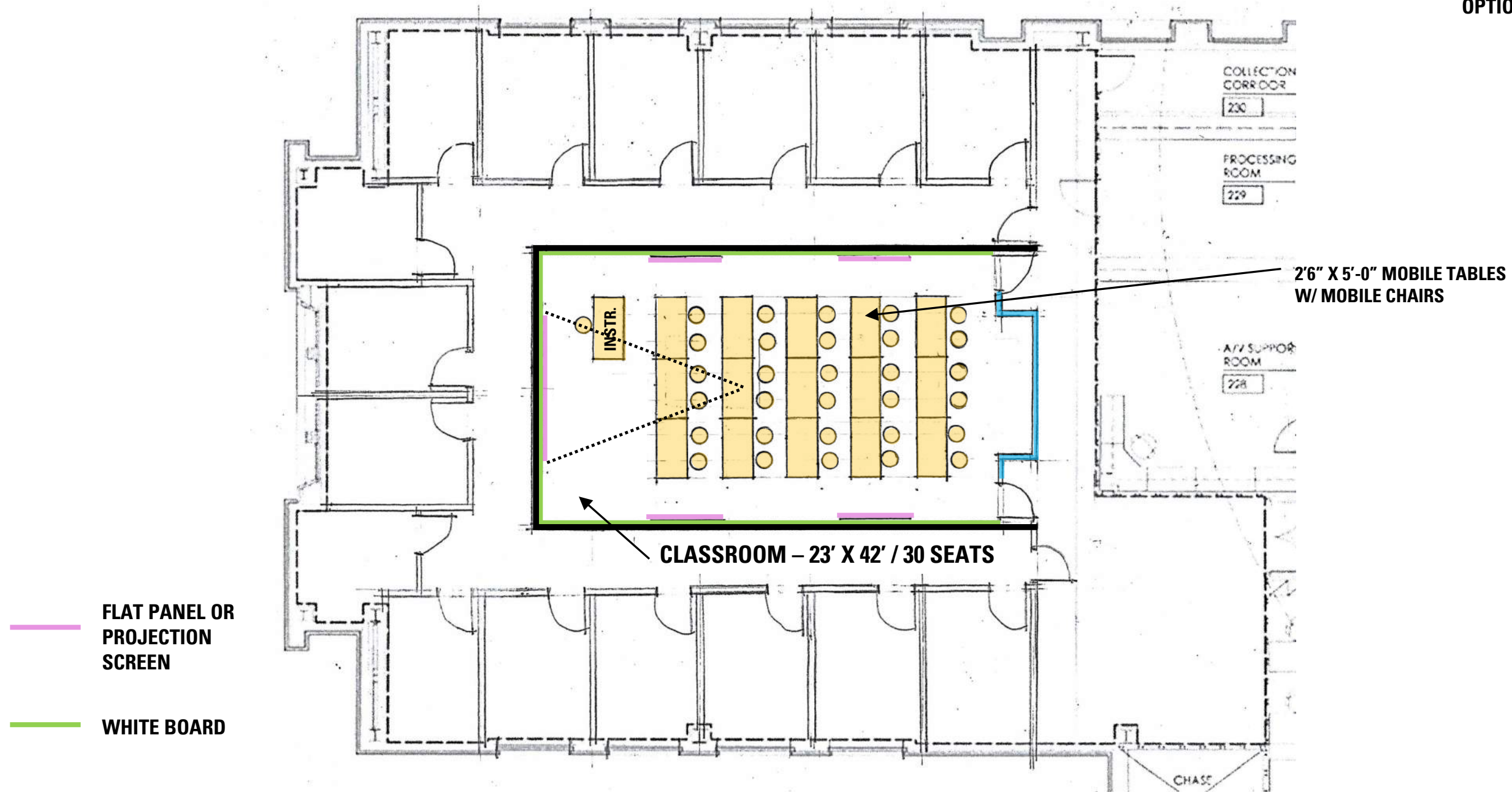
OPTION



Programming

Design Program | Classroom Layouts

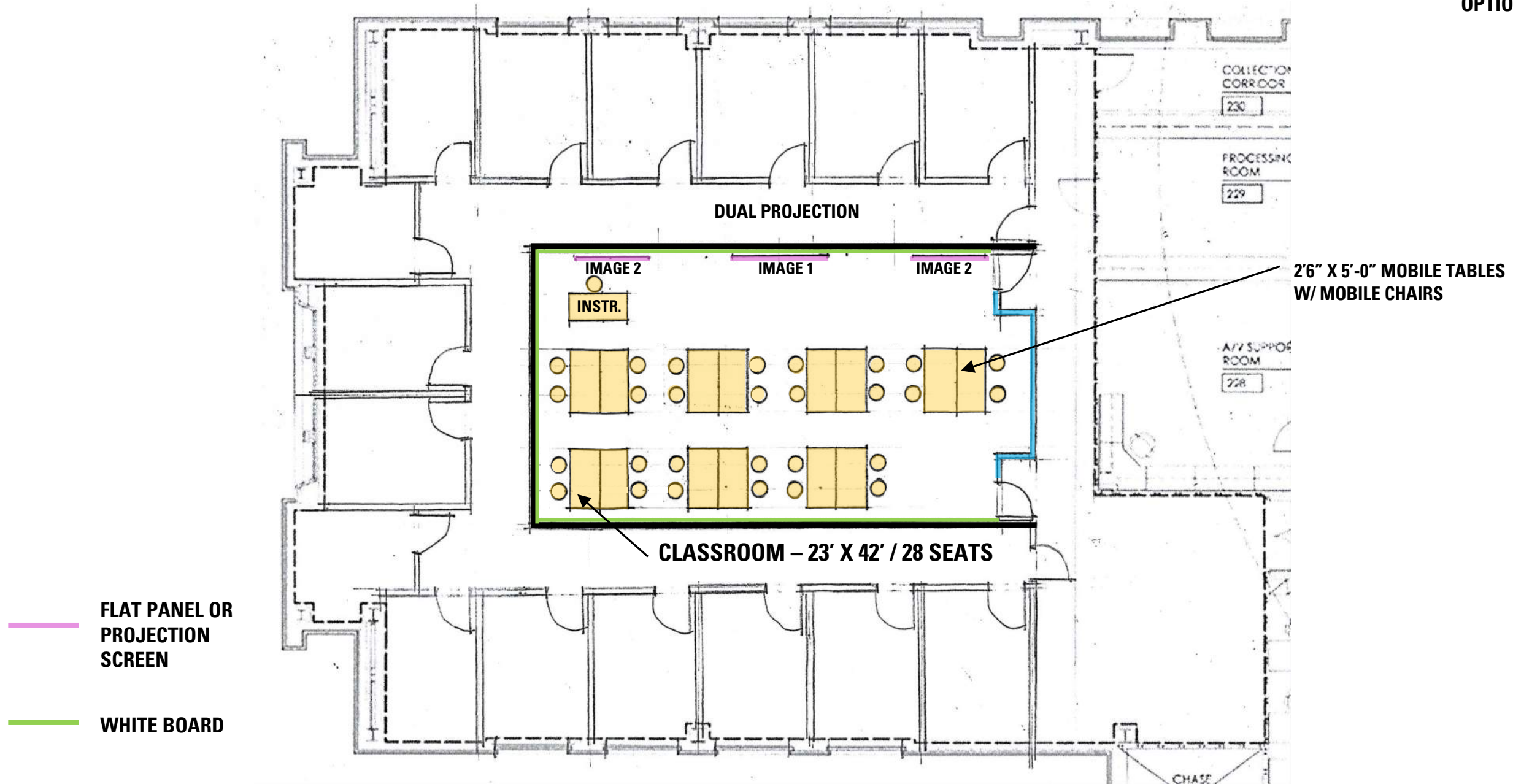
OPTION



Programming

Design Program | Classroom Layouts

OPTION



Programming

Design Program | Classroom Layouts



A.1
OPTION

Programming

Design Program | Classroom Layouts



A.2
OPTION

Programming

Design Program | Classroom Layouts



A.3
OPTION

*"I increasingly believe that the essence of leadership
... is to be an eloquent listener."
—Howard H. Baker Jr.*

Programming

Narrative | Architecture Narrative

FIRST LEVEL

Demolition

Demolition on the first floor includes the west wing of the building - removal of interior partitions and finishes (floor, ceiling, wall finishes). Exterior panels and exterior wall framing will be removed for new exterior windows.

All loose furniture and equipment will be removed by the University,

New Program

The first floor will provide for new right sized offices, targeting 100 NSF and demising walls that will align with new window openings. A total of 14 offices is planned with open office that can be flexible or assigned to Graduate Students. Two huddle rooms plus one support room are included in the program. This floor could include one classroom should office and support spaces not be required in the interior portion of the space. This can be further developed in Schematic Design.

MEP Spaces

There are no MEP spaces in the scope of work area on the first floor.

SECOND LEVEL

Demolition

Demolition of the second floor includes the west wing of the building - removal of interior partitions and finishes (floor, ceiling, wall finishes). Exterior panels and exterior wall framing will be removed for new exterior windows.

As this was the previous collections space, modifications will be required to infill the slab at the existing tracks for the storage cabinets. The storage cabinets will be required to be removed. All artifacts have been removed from the space and are stored elsewhere.

A cold room storage will also be required to be removed as it is no longer in use and this space will be converted to the new program.

All loose furniture and equipment will be removed by the University,

New Program

The second floor program includes right sized offices, targeting 100 NSF, and two classrooms. One classroom shall hold minimum 50 students. All offices are along the perimeter of the wing and most will receive a new window to allow for natural light.

Thirteen offices are planned with one dedicated to the Director of the IAC. Two huddle spaces are also planned. These spaces are less than 100 SF and not recommended to be offices. Any of the offices can be used for additional huddle space. Two of the offices range from 145 SF to 165 SF and could be used a shared office or hoteling office.

The current Student Programs space will be converted to an open office / collaboration area.

Two office support spaces are provided, both located in corners with no access to windows.

MEP Spaces

There are no MEP spaces in the scope of work area on the second floor. An electrical closet and chase are adjacent to the work area. Refer to the MEP narrative for scope of work.

EXTERIOR/FACADE IMPROVEMENTS

Exterior facade improvements will be limited to new window openings at the west wing.

Programming

Narrative | Structural Narrative

NEW SCOPE OF WORK

North and South Elevation (between 1st and 2nd Floors):

- Add steel backup framing to support precast below and above opening. Attach precast panels to new backup framing. Saw cut opening in precast for new window. Do not cut openings until steel framing is installed to support precast.

North and South Elevation (between 2nd and 3rd Floors):

- Remove brick between top of precast panels at the 2nd floor and below the precast panels at the 3rd floor. Add steel framing to support new precast above new window.

West Elevation:

- Add vertical steel framing between the 1st to 2nd floors and 2nd to 3rd floors on each side of each opening. Add horizontal steel framing at the head and sill of each window. Attach precast panels to new backup framing. Saw cut opening in precast for new window. Do not cut openings until steel framing is installed to support precast.

Additional Notes:

Additional steel framing such as tubes and plates may be required to provide attachment of the new windows.

It is recommended to remove the interior finishes in these areas to provide access to review the precast panel connections. New steel backup framing and new connection details would be developed following review of the as-built conditions.

Programming

Narrative | Mechanical Narrative

HEATING, VENTILATING, AND AIR CONDITIONING

General

HVAC systems will comply with the following minimum requirements:

- International Building Code – 2012
- International Mechanical Code – 2012
- International Energy Conservation Code – 2012
- ASHRAE Standard 62.1 – 2013
- ASHRAE Standard 90.1 – 2010
- State of Tennessee High Performance Building Requirements – 2021
- University of Tennessee – Mechanical Criteria – 2018
- UTK – Facilities Services – Design Guidelines and Preferences – 2020

Design conditions for load calculations will be as follows:

- Inside design cooling: 72°F db, 50% RH.
- Inside design heating: 72°F db (no humidification required).
- Outside design cooling: 95°F db, 80°F wb.
- Outside design heating: 0°F db.

Pressurization Criteria:

- The following spaces will be designed to maintain inward directional airflow relative to adjacent building areas:
 - Toilets.
 - Janitor closets.

Demolition

The following HVAC demolition is anticipated:

- All supply ductwork, return air ductwork, and associated

grilles, registers and diffusers will be demolished in the renovated space back to a point just outside of the MEP Shaft.

- Heating water piping serving duct heating coil DH-3 on Level 2 will be demolished and capped.
- Ductless split system DSS-4 serving A/V Support Room 228 will be demolished.

Cooling System

The existing building chilled water system will have adequate capacity to serve the renovated space without modification.

Heating System

The existing building heating water system will have adequate capacity to serve the renovated space without modification.

Heating water piping will be distributed from Mechanical Room B001 to new terminal units on Level 2 as follows:

- Piping 2” and smaller will be Type L, hard drawn seamless copper tubing with wrought copper, solder joint type fittings.
- Piping will be insulated with fiberglass pipe insulation. Fittings will be insulated with preformed fiberglass fittings finished with glass fabric and vapor barrier mastic.

Air Conditioning Systems

The existing air handling unit AHU-2 plus dehumidifier unit DHU-1 will be reused to serve the renovated space on Level 2. The following modifications will be required to AHU-2:

- Outside air quantity currently serving AHU-2 at 200 CFM is inadequate for renovated space. The existing outside air duct will be increased in size to deliver code-required CFM.

- The cooling coil in AHU-2 will be replaced to handle the increased outside air.
- A variable frequency drive will be added to AHU-2 to convert the unit into variable air volume type.
- Controls for the AHU will be modified to convert the unit into variable volume type.

Air Distribution Systems

Terminal units will be pressure-independent type complete with access doors, 1” thick foil-faced fiberglass liner, direct digital control, and maximum allowable leakage of 2% design air at 8”wg static pressure. Variable volume reheat terminal units will provide heating/cooling for all zones in the renovated spaces. Heat in the terminal units will be provided by hot water heating coils sized for a 30°ΔT.

Return air will be fully ducted from room grilles and registers back to air handling units.

Ductwork will be galvanized steel, unless otherwise noted, and will conform to SMACNA recommendations.

Ductwork will be insulated for energy conservation and to prevent condensation as follows:

- Exposed supply air, outside air, and mixed air ductwork will be insulated with 2” rigid fiberglass board insulation finished with canvas.
- Concealed supply air, outside air, and mixed air ductwork will be insulated with 2” flexible fiberglass insulation.
- Duct lining will be allowed on a limited basis where needed for sound attenuation purposes.

Exhaust Systems

The existing exhaust system serving Men’s Restroom 220 will remain.

Automatic Temperature Control Systems

The existing building control system (BCS) by JCI will be modified to convert AHU-2 from constant air volume type to variable air volume type and to control new terminal units throughout the renovated space.

Testing, Adjusting, and Balancing

Systems will be tested, adjusted, and balanced to achieve proper operation, design flow, temperature and pressure differentials, and pressure drop through piping, ductwork, equipment, and components. A Subcontractor, certified by AABC or NEBB and independent of the Contractor, will be required to perform testing, adjusting, and balancing work.

HVAC Systems Commissioning

The project will require commissioning of HVAC equipment and controls as required by the State of Tennessee High Performance Building Requirements.

Programming

Narrative | Electrical Narrative

General

Electrical systems will comply with the following minimum requirements:

- International Building Code – 2012
- NFPA 70-2017, National Electrical Code
- International Energy Conservation Code – 2012
- State of Tennessee High Performance Building Requirements – 2021
- UTK – Facilities Services – Design Guidelines and Preferences – 2020
- University of Tennessee – Facility Services – Electrical Specifications
- University of Tennessee – Office of Information Technology Communications Group – Satellite Equipment Room and Structured Cabling Requirements - 2020

Demolition

The following electrical demolition is anticipated:

- All power outlets and associated conduit and cabling in the renovated spaces will be demolished back to Electrical Room 222.
- Power for ductless split system DSS-4 serving A/V Support Room 228 will be demolished.
- Power for Cold Storage 226 will be demolished.
- All lighting fixtures and associated controls, conduit and cabling in the renovated spaces will be demolished.
- All telecom outlets and associated conduit and cabling in the renovated spaces will be demolished.

- All security devices in the renovated spaces will be demolished.

Interior Electrical System

Electrical service to the building originates from a single pad-mount service transformer with service to the building at 208Y/120 V.

Existing branch circuit panelboards 2B and 2C will be reused to serve normal lighting and receptacles loads in the renovated spaces. Existing branch circuit panelboard X3 will be reused to serve emergency lighting in the renovated spaces. New branch circuit breakers will match existing in type and rating.

Wiring will be insulated conductors installed in raceways. Conductors will be copper with type THWN/THHN or XHHW insulation. Conductors for power wiring will be minimum #12 AWG and a maximum of 500 kcmil. Separate neutral conductors will be provided for each branch circuit phase conductor. Wiring will be color-coded the entire length to identify phases, neutral, and ground.

Raceways will be minimum 0.75” for power and minimum 1” for communications. In general, electrical metallic tubing will be provided for interior wiring installations. Flexible metal conduits will be provided for connections to recessed luminaires and electrical equipment subject to movement or vibration.

Cable trays will be provided to form a system that interconnect Communication Closet 218 with the renovated spaces.

Wiring Devices

Wiring devices will be provided as follows:

- Receptacles will be installed a maximum of 50' on center in corridors.
- Duplex receptacles will be provided on each wall for offices. Each workstation will be provided two duplex receptacles. In classrooms, duplex receptacles will be provided approximately every 15' along the perimeter of the room.
- Poke-thru devices will be provided in each classroom on a 10' x 10' grid to provide a flexible power solution within the middle of the room.
- Poke-thru devices will be provided in meeting/conference rooms as required per the NEC (one for every 215 sq. ft. of space).

Lighting

New interior lighting will be LED type. Illumination levels for work surfaces will be provided in accordance with IESNA recommended illumination levels.

In general, the following luminaire types will be provided:

- Enclosed offices: recessed direct/indirect LED systems.
- Corridors: downlights and recessed direct/indirect LED systems.
- Conference rooms: recessed direct/indirect lighting systems.
- Classrooms: recessed linear direct/indirect systems and recessed wallwasher lighting systems.
- Means of egress: LED edge-lit exit signs.

Interior spaces will be provided controls for automatic lighting shut-off in accordance with International Energy Conservation Code-2012. Automatic lighting shut-off controls will consist primarily of ceiling-mounted occupancy and vacancy sensors with local dimmer switch.

Lighting near glazed exterior walls will be provided with daylight responsive dimming controls. Interior office spaces will be provided with dimming controls. Architectural preset lighting control systems will be provided for classrooms and conference rooms. Classrooms will be provided with vacancy sensors. Dimming and daylight control systems will be Lutron.

Communication Systems

The existing communications system will be modified for the renovated spaces as follows:

- New outlets will be furnished and installed per UT Telecommunications Design and Installation Standards.
- New outlets will be terminated in Communications Closet 218.

Security Systems

The existing security systems will be modified for the renovated spaces as follows:

- New classrooms will be provided with electric strikes with access control and alarm monitoring.
- New classrooms will be provided with UTK locking requirements.

Electrical Systems Commissioning

The project will require commissioning of new lighting controls systems as required by the State of Tennessee High Performance Building Requirements.

Programming

Narrative | Fire Alarm Narrative

General

Fire alarm systems will comply with the following minimum requirements:

- International Building Code – 2012
- International Fire Code – 2012
- NFPA 70-2017, National Electrical Code
- NFPA 72-2010, National Fire Alarm Code
- NFPA 101-2012, Life Safety Code

Design Criteria

The existing fire alarm system will be modified to serve the renovated spaces.

The existing pre-action initiating devices serving Collections Storage 231 will be decommissioned and demolished with the entire zone being converted into a wet sprinkler system. The fire alarm system will be reprogrammed accordingly.

Alarm Initiating Devices

New alarm initiating devices will include addressable duct detectors and smoke detectors to match existing.

Notification Devices

New alarm signaling devices will consist of alarm horns and strobe lights to match existing.

Programming

Narrative | Plumbing Narrative

General

Plumbing systems will comply with the following minimum requirements:

- International Building Code – 2012
- International Plumbing Code – 2012
- State of Tennessee High Performance Building Requirements – 2021
- University of Tennessee – Mechanical Criteria – 2018
- UTK – Facilities Services – Design Guidelines and Preferences – 2020

Demolition

No plumbing demolition is anticipated.

Plumbing Fixtures

Plumbing fixtures will be provided as follows:

- Water fountain will be electric, modular type with in-wall chiller, extended receptors, and bottle filler attachments built in. Fixtures to be barrier-free, UL-listed, NSF approved, and meet Lead Free compliance. Fixtures to include a filtration system as well as energy and water conservation technology. Unit will be manufactured by Elkay or equal.

Drainage Systems

The new water fountain will be tied into the existing sanitary drainage system.

Drainage and vent piping above grade will be hubless, coal-tar coated, service weight cast iron pipe and fittings with heavy duty compression type couplings.

Domestic Water Systems

The new water fountain will be tied into the existing domestic cold water system.

Domestic water piping within the building will be type L hard copper with wrought copper sweat type fittings, and joints using lead-free solder. In lieu of soldered joints, pressed joints will be acceptable. Domestic cold water piping will be insulated with fiberglass pipe insulation. Fittings will be insulated with preformed fiberglass fittings finished with glass fabric and vapor barrier mastic.

Programming

Narrative | Fire Protection Narrative

General

Fire suppression systems will comply with the following minimum requirements:

- International Building Code - 2012
- International Fire Code – 2012
- NFPA 13-2010, Installation of Sprinkler Systems
- University of Tennessee – Mechanical Criteria – 2018
- UTK – Facilities Services – Design Guidelines and Preferences – 2020

Design Criteria

Sprinkler piping will be sized by hydraulic calculations. Storage areas will be classified Ordinary Hazard, Group 1. Other areas will be classified Light Hazard. Hydraulic design criteria will be in accordance with NFPA 13-2010, Paragraph 11-2.3 as follows:

- Light Hazard areas will be designed to provide a minimum density of 0.10 gpm/ft². Maximum area per sprinkler will be 225 ft².
- Ordinary Hazard, Group 1 areas will be designed to provide a minimum density of 0.15 gpm/ft². Maximum area per sprinkler will be 130 ft².

Systems

The existing pre-action sprinkler system serving Collections Storage 231 will be decommissioned with the entire zone being converted into a wet sprinkler system. All existing dry-type pendant sprinklers will be replaced with new.

The existing wet sprinkler system serving other parts of the renovation will be modified to conform to the new room and ceiling layout.

Sprinklers heads will be commercial, quick response, UL listed type. Sprinklers in areas having ceilings will be semi-recessed pendent design with a white finish and white ceiling cup. Concealed type sprinklers with white coverplates will be used in areas with gypsum board ceilings.

Aboveground piping will be black steel with threaded, grooved, or welded fittings. Piping 2" and smaller will be schedule 40 and pipe 2.5" and larger will be schedule 10. No plain-end fittings, strap-on branch outlets, or couplings employing set screws will be used.

The renovated fire suppression system will be monitored by the building fire alarm system.

4

Cost Analysis

UTK - Baker School
Knoxville, TN
ROM

Project # 71824
08/01/24

SUMMARY MATRIX

Combined First & Second Floor Work* 9038 SF				First Floor Scope of work 2490 SF				Second Floor Scope of work 6548 SF			
Element		Total		Total	Cost/SF			Total	Cost/SF		
First & Second Floor COMBINED		\$2,029,079		First floor		\$739,519		Second Floor		\$1,396,353	
Sub total		\$2,029,079		Sub total		\$739,519		Sub total		\$1,396,353	
Subtotal Cost		\$2,029,079	\$225	Subtotal Cost		\$739,519	\$297.00	Subtotal Cost		\$1,396,353	\$213.25
General Conditions	6.1%	\$123,774	\$13.69	General Conditions	7.0%	\$51,766	\$20.79	General Conditions	7.0%	\$97,745	\$14.93
General Requirements	2.8%	\$56,814	\$6.29	General Requirements	3.0%	\$22,186	\$8.91	General Requirements	3.0%	\$41,891	\$6.40
Bonds & Insurance	2.0%	\$40,582	\$4.49	Bonds & Insurance	2.0%	\$14,790	\$5.94	Bonds & Insurance	2.0%	\$27,927	\$4.26
Contractor's Fee	3.8%	\$77,105	\$8.53	Contractor's Fee	4.0%	\$29,581	\$11.88	Contractor's Fee	4.0%	\$55,854	\$8.53
Design & Construction Contingency	10.0%	\$202,908	\$22.45	Design & Construction Contingency	10.0%	\$73,952	\$29.70	Design & Construction Contingency	10.0%	\$139,635	\$21.32
Escalation to MOC 12/15/2025	6.0%	\$121,542	\$13.45	Escalation to MOC 06/15/2026	8.3%	\$61,454	\$24.68	Escalation to MOC 06/15/2025	3.7%	\$50,967	\$7.78
Bid Target		\$2,651,803	\$293.41	Bid Target		\$993,248	\$398.89	Bid Target		\$1,810,372	\$276.48
Owners Contingency	10%	\$265,180	\$29.34	Owners Contingency	10%	\$99,325	\$39.89	Owners Contingency	10%	\$181,037	\$27.65
Total Estimated Construction Cost (MACC)		\$2,916,984	\$322.75			\$1,092,573	\$438.78			\$1,991,409	\$304.12
Indirect Costs (Below the line items)				Indirect Costs (Below the line items)				Indirect Costs (Below the line items)			
Professional Fees	5%	\$145,849	\$16.14	Professional Fees	5%	\$54,629	\$21.94	Professional Fees	5%	\$99,570	\$15.21
Moveable Equip. (FF&E)	7%	\$204,189	\$22.59	Moveable Equip. (FF&E)	7%	\$76,480	\$30.71	Moveable Equip. (FF&E)	7%	\$139,399	\$21.29
Networking Equip.	4%	\$116,679	\$12.91	Networking Equip.	4%	\$43,703	\$17.55	Networking Equip.	4%	\$79,656	\$12.16
Administration & Misc.	6%	\$175,019	\$19.36	Administration & Misc.	6%	\$65,554	\$26.33	Administration & Misc.	6%	\$119,485	\$18.25
TOTAL Indirect Costs		\$641,736		TOTAL Indirect Costs		\$240,366		TOTAL Indirect Costs		\$438,110	
Total Estimated Project Cost		\$3,558,720	\$393.75			\$1,332,939	\$535.32			\$2,429,519	\$371.03

*Combined First & Second Floor Work assumes reduction of mobilization/equipment for combined schedule in Direct and Indirect Costs.

PROCESS

The following rough order of magnitude cost analysis is based on the program data and conceptual floor plans for the Design Program.

Clarifications

- Three options are shown on this summary page - (1) First and Second Floor Combined Scope of Work, (2) First Floor Only Scope of Work, (3) Second Floor Only Scope of Work.
- Each option has a different square footage, different cost per square foot, and different mid-point of construction. Refer to each option for these differences.
- The preferred option is First and Second Floor Combined Scope of Work. Should the budget not allow, the First Floor will be removed from the scope of work.
 - It should be noted that this ROM estimate was based on a smaller first floor renovation square footage. The preferred square footage for the first floor is 3,760 SF versus 2,490 SF indicated to the left. This is a difference of 1,270 SF.
 - The additional first floor square footage brings the combined first and second floor total to 10,308 SF.
 - **This modifies the MACC to the following:**
 - **First and Second Floor Combined - \$3,334,457**
 - **First Floor Only - \$1,649,730**
 - **Second Floor Only - No Change, \$1,991,409**
- This ROM estimate assumes current market conditions with inflated pricing and anticipated escalation through mid-point of construction.
- Three to five qualified Subcontractors competitively bidding on the majority of bid packages for this project.
- Competitively bid contract.

Exclusions

- Professional fees, testing, moving expense for Owner's account
- FF&E
- Owner provided items
- Hazardous material removal and abatement, unless noted in estimate
- Construction contingencies

Cost Analysis

SUMMARY - FIRST FLOOR

Element	Total	Cost / SF
1 General Requirements (Incl. Below)	\$0	\$0.00
2 Site Preparation	\$83,879	\$33.69
3 Concrete	\$0	\$0.00
4 Masonry	\$85,400	\$34.30
5 Metals	\$55,150	\$22.15
6 Wood & Plastics	\$5,230	\$2.10
7 Thermal & Moisture	\$6,325	\$2.54
8 Doors & Windows	\$132,198	\$53.09
9 Finishes	\$98,070	\$39.39
10 Specialties	\$11,046	\$4.44
11 Equipment	\$0	\$0.00
12 Furnishings	\$0	\$0.00
13 Special Construction	\$0	\$0.00
14 Conveying	\$0	\$0.00
15 Mechanical	\$135,466	\$54.40
16 Electrical	\$126,756	\$50.91
Subtotal - Direct Costs	\$739,519	\$297.00

DETAIL ELEMENTS - FIRST FLOOR

Element	Quantity	Unit	Unit Cost	Total
1 General Requirements				
Shown above			\$0.00	\$0
Total - General Requirements \$0				
2 Site Preparation				
<u>Controls - public</u>				
Traffic control alley	1	Ls	\$2,500.00	\$2,500
<u>Demolition</u>				
Demo existing interior partitions	266	lf	\$30.30	\$8,060
Demo existing doors & frames	10	ea	\$85.86	\$859
Demo existing ceiling grid & tile	2,490	sf	\$2.55	\$6,350
Demo existing ductwork w/ mechanical				
Demo existing wiring & lighting fixtures - w/ electrical				
Demo existing cabinets & tops	10	lf	\$33.50	\$335
Demo existing floor covering	2,490	sf	\$2.25	\$5,603
Demo existing wall section to receive new windows - West Elev. 1st fl	120	sf	\$23.50	\$2,820
Demo existing wall section to receive new windows - North Elev. 1st fl	432	sf	\$23.50	\$10,152
Demo existing wall section to receive new windows - South Elev. 1st fl	432	sf	\$23.50	\$10,152
Saw- track cut masonry wall	420	lf	\$65.00	\$27,300
Ground protection to grassy areas - North Elev.	25	ea	\$65.00	\$1,625
Landscape repair to damaged turf - allowance	1	Ls	\$2,000.00	\$2,000
Scaffolding - 1st floor North & South elevations	1	Ls	\$6,125.00	\$6,125
Total - Sitework \$83,879				
3 Concrete				
No Work	0	sf	\$8.50	\$0
Total - Concrete \$0				
4 Masonry				
Custom profile form for casting	1	Ls	\$5,800.00	\$5,800
F&I sloped - custom cast stone base sills & header fillers - North elev.	8	ea	\$3,500.00	\$28,000
F&I sloped- custom cast stone base sills & header fillers - South elev.	8	ea	\$3,500.00	\$28,000
Tooth-in & patch masonry at lintel installation	16	ea	\$950.00	\$15,200
Misc. masonry retro-fit related work	1	Ls	\$8,400.00	\$8,400
Total - Masonry \$85,400				

Cost Analysis

5 Metals	Misc. Metals, brackets, struts, etc.	1	Ls	\$9,000.00	\$9,000
	Header Beam / Lintels at new openings - North elev	4	ea	\$4,850.00	\$19,400
	Header Beam / Lintels at new openings - South elev	4	ea	\$4,850.00	\$19,400
	Header Beam / Lintels at new openings - West elev	1	ea	\$4,850.00	\$4,850
	Hoisting / Rigging	1	Ls	\$2,500.00	\$2,500

Total - Metals					\$55,150
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6 Wood & Plastics	Misc. blocking	10	lf	\$0.00	\$0
	Copy / Data room cabinets	10	ft	\$250.00	\$2,500
	Solid Surface counter-top	10	ft	\$158.00	\$1,580
	Integral Sink	1	ea	\$1,150.00	\$1,150

Total - Wood & Plastics					\$5,230
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7 Thermal & Moisture	Repair insulation & exterior wall window install	9	ea	\$425.00	\$3,825
	Caulking & Sealants	1	Ls	\$2,500.00	\$2,500

Total - Thermal & Moisture					\$6,325
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8 Doors & Windows	Interior SC wood door, HM frame & hdwr, single - w/ vision panel - 1st floor	12	ea	\$2,319.00	\$27,828
	New windows - Alum. Frame/ thermal broken - West Elev. 1st fl	120	sf	\$105.00	\$12,600
	New windows - Alum. Frame/ thermal broken - North Elev. 1st fl	432	sf	\$105.00	\$45,360
	New windows - Alum. Frame/ thermal broken - South Elev. 1st fl	432	sf	\$105.00	\$45,360
	Caulking / Sealants	420	lf	\$2.50	\$1,050

Total - Doors & Windows					\$132,198
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9 Finishes	Interior Walls (Drywall, Framing & Insulation)	243	lf	\$85.00	\$20,655
	Interior Paint drywall	14,328	sf	\$1.50	\$21,492
	Flooring - Resilient Tile copy room	140	sf	\$8.00	\$1,120
	Flooring - Carpet Tile	2,490	sf	\$5.55	\$13,820
	Ceiling (ACT 2x2 in grid) 1st floor	2,490	sf	\$6.25	\$15,563
	Ceiling (ACT Install tie into existing)	1	Ls	\$1,500.00	\$1,500
	Exterior painting- lintels - high work	1	Ls	\$1,400.00	\$1,400
	Paint interior doors & frames	12	ea	\$185.00	\$2,220
	Resilient base	1,194	lf	\$6.50	\$7,761
	Patch & reframe drywall assembly at new window installation - 9 locations	90	hrs	\$110.00	\$9,900
	Misc wall prep prior to paint	24	hrs	\$110.00	\$2,640

Total - Finishes					\$98,070
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10 Specialties	Fire extinguishers	4	ea	\$175.00	\$700
	Marker Boards	12	ea	\$250.00	\$3,000
	Interior code and wayfinding signage, on a sf basis	2,490	sf	\$2.95	\$7,346

Total - Specialties					\$11,046
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11 Equipment	No Work			\$0.00	\$0
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Total - Equipment					\$0
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12 Furnishings	No Work			\$0.00	\$0
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Total - Furnishings					\$0
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13 Special Construction	No Work			\$0.00	\$0
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Total - Special Construction					\$0
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14 Conveying	No Work			\$0.00	\$0
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Total - Conveying					\$0
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15400 - Fire Protection - Mechanical	Automatic Sprinkler System - Relocate /add misc heads	2,490	sf	\$2.95	\$7,346
	Design/engineering, rentals, tagging & identification	2,490	sf	\$2.65	\$6,599

15500 - Plumbing	Plumbing Demolition				
	Remove fixtures, cap lines	2,490	ea	\$1.99	\$4,955
	Sanitary Fixtures				
	Electric water cooler, EWF-1	1	ea	\$2,947.00	\$2,947
	Rough-ins				
	Complete rough-in per fixture	1	ea	\$2,728.00	\$2,728
	Domestic Cold Water				
	Connect to existing	1	ea	\$412.40	\$412
	1/2" pipe, cu type L, in bldg	20	lf	\$29.26	\$585
	Pipe insulation, 1/2" pipe	20	lf	\$7.67	\$153

Cost Analysis

Waste Piping				
2" pipe, ci, no-hub, in bldg	20	lf	\$45.49	\$910
Connect to existing	1	ea	\$476.10	\$476
Vent Piping				
2" pipe, ci, no-hub, in bldg	20	lf	\$45.49	\$910
Connect to existing	1	ea	\$476.10	\$476
Additional Plumbing Requirements				
Firestopping	4	ea	\$55.00	\$220
Miscellaneous plumbing, sf allowance	2,490	sf	\$0.50	\$1,245

15800 - HVAC- Mechanical

HVAC Demolition				
Remove ductwork & registers	2,490	sf	\$1.99	\$4,955
Hot Water Distribution				
Coil connection KIT	6	ea	\$810.70	\$4,864
HHW distribution	2,490	sf	\$3.16	\$7,868
Air-Side Equipment				
Terminal units				
VAV box w/ reheat, 10", 1450 cfm max	6	ea	\$926.80	\$5,321
Air Distribution				
Ductwork, grilles, diffusers and dampers	2,988	lbs	\$16.13	\$48,196
Additional HVAC Requirements				
Pre-read and record - cfm, gpm	10	hr	\$71.39	\$714
Test / balance HVAC	40	hr	\$71.39	\$2,856
MEP Coordination	16	hr	\$64.90	\$1,038
Penetrations and firestopping for HVAC	2,490	sf	\$0.65	\$1,619
HVAC Controls				
DDC controls, air handler, vav	1	ea	\$7,744.00	\$7,744
DDC controls, vav box, reheat	6	ea	\$2,904.00	\$17,424
DDC controls, tie into existing controls workstation	1	ea	\$2,904.00	\$2,904

Total - Mechanical \$135,466

26 Electrical

Demolition				
Electrical demolition - 1st floor offices - reuse circuits to feed, salvage lighting, receptacles	2,490	sf	\$3.00	\$7,470
Electrical Requirements				
Staff	1	Ls	\$5,029.70	\$5,030
Indirect labor	1	Ls	\$3,017.82	\$3,018
Consumables	1	Ls	\$1,886.14	\$1,886
Equipment rentals	1	Ls	\$2,263.37	\$2,263
Testing/Commissioning	1	Ls	\$1,886.14	\$1,886
Additional electrical reqmts. (firestop, core drilling, labeling, temp. power)	2,490	sf	\$3.50	\$8,715
Voice and Data system	2,490	sf	\$8.50	\$21,165
Audio-video system, rough-in only	2,490	sf	\$0.50	\$1,245
Fire alarm system	2,490	sf	\$4.25	\$10,583

Total - Electrical \$126,756

Cost Analysis

SUMMARY - SECOND FLOOR

Element	Total	Cost / SF
1 General Requirements (Incl. Below)	\$0	\$0
2 Site Preparation	\$94,780	\$14
3 Concrete	\$0	\$0
4 Masonry	\$109,200	\$17
5 Metals	\$56,800	\$9
6 Wood & Plastics	\$3,190	\$0
7 Thermal & Moisture	\$6,325	\$1
8 Doors & Windows	\$150,416	\$23
9 Finishes	\$187,461	\$29
10 Specialties	\$31,767	\$5
11 Equipment	\$0	\$0
12 Furnishings	\$0	\$0
13 Special Construction	\$0	\$0
14 Conveying	\$0	\$0
15 Mechanical	\$328,473	\$50.16
16 Electrical	\$427,942	\$65.35
Subtotal - Direct Costs	\$1,396,353	\$213.25

DETAIL ELEMENTS - SECOND FLOOR

Element	Quantity	Unit	Unit Cost	Total
1 General Requirements				
Shown above			\$0.00	\$0
Total - General Requirements				\$0
2 Site Preparation				
Controls - public				
Traffic control alley	1	Ls	\$2,500.00	\$2,500
Demolition				
Demo existing interior partitions			\$30.30	
Demo existing doors & frames	8	ea	\$85.86	\$687
Demo existing ceiling grid & tile	6,548	sf	\$2.55	\$16,697
Demo existing ductwork w/ mechanical	0		\$0.00	\$0
Demo existing wiring & lighting fixtures - w/ electrical	0		\$0.00	\$0
Demo existing cabinets & tops	5	lf	\$33.50	\$168
Demo existing floor covering	6,548	sf	\$2.25	\$14,733
Demo existing wall section to receive new windows - West Elev. 2nd fl	124	sf	\$30.00	\$3,720
Demo existing wall section to receive new windows - North Elev. 2nd fl	396	sf	\$30.00	\$11,880
Demo existing wall section to receive new windows - South Elev. 2nd fl	396	sf	\$30.00	\$11,880
Saw- track cut masonry wall	406	lf	\$65.00	\$26,390
Scaffolding - 2nd floor North & South elevations	1	Ls	\$6,125.00	\$6,125
Total - Sitework				\$94,780
3 Concrete No Work				
Total - Concrete				\$0
4 Masonry				
F&I sloped cast stone base sills & header fillers - North elev.	8	ea	\$5,800.00	\$46,400
F&I sloped cast stone base sills & header fillers - South elev.	8	ea	\$5,800.00	\$46,400
Tooth-in & patch masonry at lintel installation	16	ea	\$500.00	\$8,000
Misc. masonry retro-fit related work	1	Ls	\$8,400.00	\$8,400
Total - Masonry				\$109,200
5 Metals				
Misc. Metals, brackets, struts, etc.	1	ls	\$9,000.00	\$9,000
Header Beam / Lintels at new openings - North elev	4	ea	\$4,850.00	\$19,400
Header Beam / Lintels at new openings - South elev	4	ea	\$4,850.00	\$19,400
Header Beam / Lintels at new openings - West elev	1	ea	\$6,500.00	\$6,500
Hoisting / Rigging	1	Ls	\$2,500.00	\$2,500
Total - Metals				\$56,800

Cost Analysis

6 Wood & Plastics

Misc. blocking				
Kitchenette cabinets	5	ft	\$250.00	\$1,250
Solid Surface counter-top	5	ft	\$158.00	\$790
Integral Sink	1	ea	\$1,150.00	\$1,150

Total - Wood & Plastics **\$3,190**

7 Thermal & Moisture

Repair insulation & exterior wall window install	9	ea	\$425.00	\$3,825
Caulking & Sealants	1	Ls	\$2,500.00	\$2,500

Total - Thermal & Moisture **\$6,325**

8 Doors & Windows

Interior SC wood door, HM frame & hdwr, single - w/ vision panel -2nd floor	19	ea	\$2,319.00	\$44,061
New windows - Alum. Frame/ thermal broken / arched top - West Elev. 2nd fl	124	sf	\$115.00	\$14,260
New windows - Alum. Frame/ thermal broken - North Elev. 2nd fl	396	sf	\$115.00	\$45,540
New windows - Alum. Frame/ thermal broken - South Elev. 2nd fl	396	sf	\$115.00	\$45,540
arched top west elev.				
Caulking / Sealants	406	lf	\$2.50	\$1,015

Total - Doors & Windows **\$150,416**

9 Finishes

Interior Walls (Drywall, Framing & Insulation)	607	lf	\$85.00	\$51,595
Interior Paint drywall	19,176	sf	\$1.50	\$28,764
Flooring - Resilient Tile - support room	117	sf	\$8.00	\$936
Flooring - Carpet Tile	6,548	sf	\$5.55	\$36,341
Ceiling (ACT 2x2 in grid) 2nd floor	6,548	sf	\$6.25	\$40,925
Ceiling (ACT Install tie into existing)	1	Ls	\$1,500.00	\$1,500
Exterior painting- lintels - high work	1	Ls	\$1,400.00	\$1,400
Paint interior doors & frames	19	ea	\$185.00	\$3,515
Resilient base	1,530	lf	\$6.50	\$9,945
Patch & reframe drywall assembly at new window installation - 9 locations	90	hrs	\$110.00	\$9,900
Misc wall prep prior to paint	24	hrs	\$110.00	\$2,640

Total - Finishes **\$187,461**

10 Specialties

Interior code and wayfinding signage, on a sf basis	6,548	sf	\$2.95	\$19,317
Fire extinguishers	4	ea	\$175.00	\$700
Marker Boards	19		\$250.00	\$4,750

Total - Specialties **\$31,767**

11 Equipment

No Work			\$0.00	\$0
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Total - Equipment **\$0**

12 Furnishings

No Work			\$0.00	\$0
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Total - Furnishings **\$0**

13 Special Construction

No Work			\$0.00	\$0
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Total - Special Construction **\$0**

14 Conveying

No Work			\$0.00	\$0
---------	--	--	--------	-----

Total - Conveying **\$0**

15400 - Fire Protection - Mechanical

Automatic Sprinkler System - Relocate /add misc heads	6,548	sf	\$2.95	\$19,317
Design/engineering, rentals, tagging & identification	6,548	sf	\$2.65	\$17,352

15500 - Plumbing Bldg.

Plumbing Demolition				
Remove fixtures, cap lines	6,548	sf	\$0.50	\$3,274
Sanitary Fixtures				
Electric water cooler, EWF-1	1	ea	\$2,947.00	\$2,947
Rough-ins				
Complete rough-in per fixture	1	ea	\$2,728.00	\$2,728
Domestic Cold Water				
Connect to existing	1	ea	\$412.40	\$412
1/2" pipe, cu type L, in bldg	20	lf	\$29.26	\$585
Pipe insulation, 1/2" pipe	20	lf	\$7.67	\$153
Waste Piping				
2" pipe, ci, no-hub, in bldg	20	lf	\$45.49	\$910
Connect to existing	1	ea	\$476.10	\$476
Vent Piping				
2" pipe, ci, no-hub, in bldg	20	lf	\$45.49	\$910
Connect to existing	1	ea	\$476.10	\$476
Additional Plumbing Requirements				
Test / clean plumbing	4	hr	\$79.79	\$319
Firestopping	4	ea	\$55.00	\$220
Miscellaneous plumbing, sf allowance	6,548	sf	\$1.00	\$6,548

Cost Analysis

15800 - HVAC- Mechanical

HVAC Demolition				
Remove ductwork & registers	6,548	sf	\$1.99	\$13,031
Chilled Water Distribution				
CHW coil connect, weld,	1	ea	\$10,090.00	\$10,090
Hot Water Distribution				
Connect to existing	1	ea	\$476.10	\$476
Coil connection KIT	10	ea	\$810.70	\$8,107
HHW distribution	6,548	sf	\$3.16	\$20,692
Air-Side Equipment				
VFDs to AHU	1	ls	\$7,200.00	\$7,200
Furnaces & Evaporator Coils				
Evaporator Coils, horizontal & multipoise,	1	ea	\$6,961.00	\$6,961
Terminal units				
VAV box w/ reheat, 10", 1450 cfm max	10	ea	\$926.80	\$9,628
Air Distribution				
Grilles and diffusers				
Ductwork, grilles, diffusers and dampers	7,480	lbs	\$16.13	\$120,652
Additional HVAC Requirements				
Pre-read and record - cfm, gpm	32	hr	\$71.39	\$2,284
Test / balance HVAC	72	hr	\$71.39	\$5,140
Start-up/check-out	72	hr	\$64.90	\$4,673
Commissioning assist	36	hr	\$64.90	\$2,336
MEP Coordination	36	hr	\$64.90	\$2,336
Penetrations and firestopping for HVAC	6,548	sf	\$0.65	\$4,256
Miscellaneous HVAC	6,548	sf	\$1.00	\$6,548
HVAC Controls				
DDC controls, air handler, vav	1	ea	\$15,490.00	\$15,490
DDC controls, vav box, reheat	10	ea	\$2,904.00	\$29,040
DDC controls, tie into existing controls workstation	1	ea	\$2,904.00	\$2,904

Total - Mechanical **\$328,473**

26 Electrical

Distribution equipment				
Service and distribution, normal - includes main switchboards, distribution boards, panelboards, transformers, conduit and wire to distribute power to the respective electrical closets throughout the building.	6,548	sf	\$2.00	\$13,096
HVAC and equipment connections				
HVAC and equipment - includes connections, conduit and wire to all mechanical and plumbing equipment such as pumps, air handler units, chillers, fan coil units, exhaust fans, etc. conduit and wire.	6,548	sf	\$3.50	\$22,918
Convenience power				
Convenience power - includes duplex outlets, double duplex outlets, duplex GFI outlets, floor boxes, conduit and wire.	6,548	sf	\$8.00	\$52,384
Lighting and lighting control				
Lighting and lighting control - includes LED light fixtures, title 24 compliant lighting control, conduit and wire.	6,548	sf	\$20.00	\$130,960
Demolition				
Electrical demolition - 2nd floor offices - reuse circuits	6,548	sf	\$3.00	\$19,644
Additional electrical requirements				
Additional electrical requirements (firestop, core drilling, labeling, temp. power) Second floor only req'd.	6,548	sf	\$3.50	\$22,918
Supplemental conditions / requirements				
Staffing	1	ls	\$9,598.82	\$9,599
Indirect labor	1	ls	\$5,759.29	\$5,759
Consumables	1	ls	\$3,599.56	\$3,600
Equipment rentals	1	ls	\$4,319.47	\$4,319
Testing/Commissioning	1	ls	\$3,599.56	\$3,600
power)	6,548	sf	\$3.50	\$22,918
Voice and Data system				
Voice and data system - includes cabling	6,548	sf	\$8.50	\$55,658
Audio-video system				
Audio visual system, (rough-in only) - includes boxes, conduit and pull string to an accessible ceiling space, j-hooks to be installed to a corridor cable tray system. Sleeves will be installed at every fire rated wall. Cabling by others.	6,548	sf	\$3.25	\$21,281
Security system				
Security system - includes cabling.	6,548	sf	\$1.75	\$11,459
Fire alarm system				
Fire alarm system, addressable - includes fire alarm panel, annunciator, terminal cabinets, speakers, strobes, horns, pull stations, control modules, relay modules tamper and flow switch's, conduit and wire.	6,548	sf	\$4.25	\$27,829

Total -Electrical **\$427,942**

Cost Analysis

UTK - Baker School
Knoxville, TN
ROM

Project # 71824
08/01/24

APPENDIX 1 - SCOPE ASSUMPTIONS

Description	Assumed Scope
General Project Info	<ul style="list-style-type: none"> - Escalation included through 10/16/2025. - Local GC laydown / compound area within proximity. - Local trade parking available both onsite (partial) and offsite. - All sub trades to be competitively bid. - Labor pool from Greater Knoxville area - Drawings include; HED - Baker Center Renovation / Classroom Study - Level 2 HED - Baker Center Renovation / Classroom Study - First Floor Plan HED - Baker Center Renovation / MEP Programming Narrative
Detailed Assumptions	
1. Substructure / Foundations	No work anticipated
2. Structure	Addition of header beams, struts & angles over newly created openings for windows
3. Envelope / Roofing	<p>Roofing work not anticipated</p> <p>Windows on 2nd floor are assumed to be placed below the existing thru-wall skippers from roof drains above.</p> <p>Masonry toothing in and repair as required to install new header beams</p>
4. Interiors	<ul style="list-style-type: none"> - Metal stud framed interior construction. - Hollow metal frame/ S.C. wood interior door sets. - Floors: VCT, sealed concrete, or carpet, - Ceilings ACT, 2x2 lay in - Walls: paint, drywall - Only life safety Code required signage. - Cabinetry in copy room to be new - Small cabinet (5') & sink at Open Lounge included - No Visual accessories - projection screens
5. Vert. Transportation	- No Work
6. Plumbing	Connect to existing systems without remedial repair to existing
7. HVAC	<p>New AHU for second floor included</p> <p>First floor AHU is existing</p> <p>DDC sole sourced controls</p>
8. Electrical	



UTK - Baker School
Knoxville, TN
ROM

Project # 71824
08/01/24

APPENDIX 1 - SCOPE ASSUMPTIONS

Description	Assumed Scope
9. Fire Protection	Wet pipe sprinklers throughout. Tied into existing system.
10. Sitework	<p>Protection to lawn areas from manlift damage - West Elevation</p> <p>Traffic control during work on South elevation</p>
11. Exclusions	<p>No exhibit room casework or display</p> <p>No moving of owner's belongings</p>
12. Assumptions	See assumptions sheet attached

Cost Analysis

DETAIL ELEMENTS -

ASSUMPTIONS - Supplemental

Assume there is not existing lintels or sufficient opening support where new windows are installed

Assume supplemental support over each window opening is required

Assume partial demo of chase wall & replacement for HVAC connections

Assume 12 ft walls

Assume 2x2 lay in ceiling

Assume wall panels being removed are stucco on masonry back-up

Assume existing exterior masonry is modular size brick

Assume new ceilings are installed at one level without steps or soffits

Exterior costs have been attributed to each floor cost

Interior walls are assumed as gypsum board on metal framing

Assume that the first floor ties into an AHU that is capable of handling the new design.

No additional support / stabilization (channels) on window openings side jamb locations is anticipated

No roof drainage piping work / relocation

5

Design Guidelines

Architectural Expression

UNIVERSITY DESIGN GUIDELINES & PREFERENCES

Refer to the “2023 Design Guidelines and Preferences” for the “basis of design” standards and design preferences for new capital construction on the University of Tennessee Knoxville (UTK) Campus.

ARCHITECTURE

The Baker School of Public Policy and Public Affairs (formerly the Howard H. Baker Jr. Center for Public Policy) is a collegiate gothic style building. The exterior design has a high degree of formality and symmetry around the central rotunda – the primary organizing building feature. Much of the Phase 1 renovation scope is confined to the two-story portion of the southwest wing; this wing lacks existing fenestration due to its previous use as an archival space.

Exterior Materiality

The exterior envelope is comprised primarily of red brick veneer, stone veneer, precast concrete panels, and large glass openings. The new Phase 1 Renovation program spaces, primarily private offices, will require new fenestration to be added to the two-story southwest wing.

The existing façade has recessed articulation that mimics the fenestration pattern and proportions of the existing windows. The new windows should work within the existing façade articulation; alterations to the exterior should work to enhance the already established architecture of the Baker School. The new glazing systems should match the existing in terms of metal finish and glass clarity and color. Additionally, the mullion articulation of the new windows should take cues from the existing.

If the removal of exterior finishes (such as brick, stone, etc.) is required for the construction of new windows, care should be taken to protect the existing materials and reinstall or provide new that matches the existing.

INTERIOR DESIGN

The interior design of the Phase 1 Renovation should reflect and support the Baker School’s strategic plan goals related to innovation, engagement, recruitment and retention of talent. The selection of finishes should consider the overall building design, yet create a contemporary atmosphere, particularly in spaces that are public-facing or that establish a “first impression” of the Baker School. Materials should be high quality, durable, recyclable and low maintenance. Where cost is a constraint, it is particularly important that durable materials are used in public and community areas that see the highest levels of use.

Design Guidelines

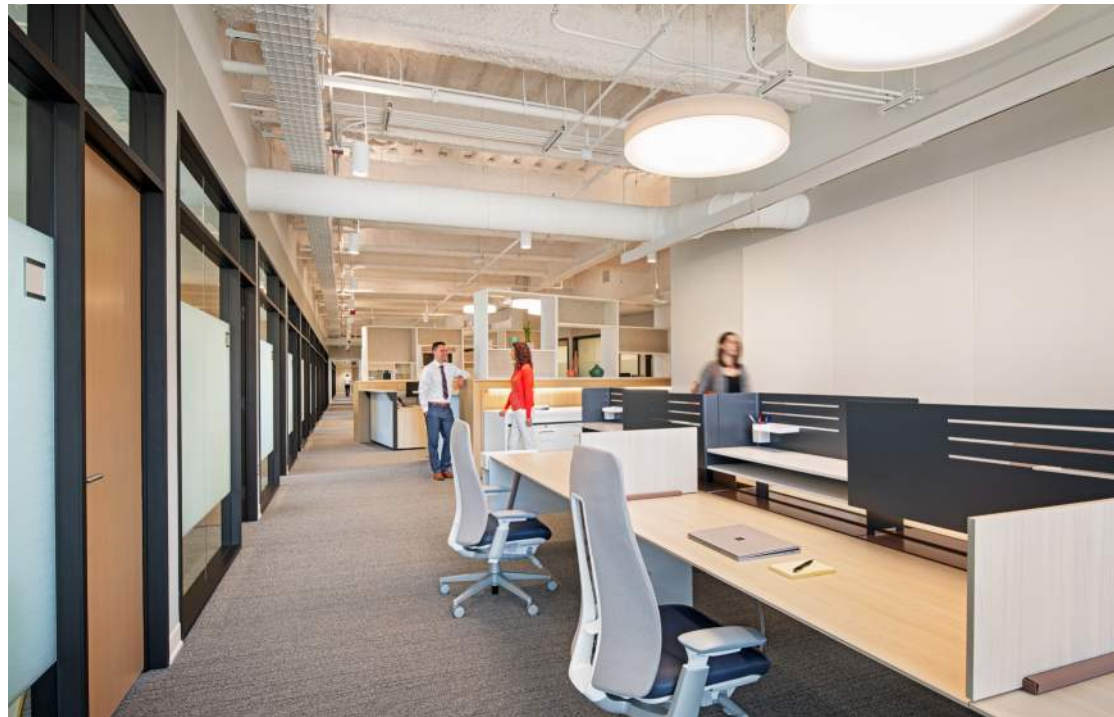
Architectural Expression | Interior Precedents - Office

Perimeter private offices with glass walls and access to daylight.



A private office with ample access to natural light, storage and seating for visitors.

Open office space bordered by perimeter private offices.



Open office workstations with close proximity to an open collaboration zone with lounge seating and whiteboards.

Design Guidelines

Architectural Expression | Interior Precedents - Conference + Meeting

A conference space with a large group gathering table and presentation screen.



A meeting room with flexible furniture and center presentation screen.

Small group meeting or conference area with glass partition and white board walls.



A multifunction meeting and presentation space with flexible/movable furniture.

Design Guidelines

Architectural Expression | Interior Precedents - Classroom

Flexible and movable seating (tablet arm chairs), one teaching wall with multiple projection screens.



Active learning classroom configuration with flexible furniture. Flexible movable back wall to open up the classroom and provide additional seating.

Team-based learning with technology attached at pods. Movable whiteboards throughout the space with mobile teaching station to allow for flexibility.



Active learning classroom configuration with monitors and whiteboards along the room.

Design Guidelines

Room Data Sheets

Office Date: 2024-JUL-14

Programmed Capacity: 10
 Area (net square feet): 551

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use	Power	Temperature	Potable Hot Water (HW)
8 hours/day <input checked="" type="checkbox"/>	110V (20A) 1 Phase <input checked="" type="checkbox"/>	75°F ± 2°F	Potable Cold Water (CW)
14 hours/day	208V (30A) 1 Phase/3 Phase	68°-75° ± 2°F <input checked="" type="checkbox"/>	High Purity Water (DI/RO/WFI)
24 hours/day	480V (100A) 3 Phase	70°-76°	Chilled Water (CHW S/R)
Hours of Operation	Standby	Other Range (specify)	Floor Drain (FD)
8 hours/day <input checked="" type="checkbox"/>	Emergency	Humidity	Safety Shower (SS)
14 hours/day	Instrument Ground (identify equip)	Winter 30%+10%	Safety Eyewash (E)
24 hours/day	Uninterrupted Circuit	Summer 50%+10%	Emergency Shower
ARCHITECTURAL	Dedicated Circuit (identify equip)	Other Range (specify)	Drench Hose (DH)
Floor	Clean Power	Uncontrolled <input checked="" type="checkbox"/>	Clean Steam
VCT (confirm if Chem. Resistant)	Other (see notes)	Quality / Exhaust	Steam/Condensate Return
Terrazzo	Outlets	Min. Total Air Changes/Hr.	Equipment Hook-up
Welded Seam Sht. Vyl.	Wall <input checked="" type="checkbox"/>	100% Make-up Air	Other (see notes)
Epoxy	Floor	Recirculated Air	Sinks (Interceptor or disposal needed?) <input checked="" type="checkbox"/>
Carpet / Carpet Tile	Overhead drop	Air Pressure Positive	Cup (4"x7"x6 1/2")
Sealed Concrete	Wall Mounted Monitor	Air Pressure Negative	Hand (9"x12"x6")
Ceramic Tile	Special Equipment	HEPA Filtration/Supply	Medium (14"x16"x7")
Other (see notes)	Other (see notes)	HEPA Filtration/Exhaust	Large (16"x22"x10 1/2")
Base	Lighting	Clean Room Class	Service (16"x28"x10 1/2")
4" Rubber <input checked="" type="checkbox"/>	Gen. Lighting Level <input checked="" type="checkbox"/>	Laminar Flow Diffusers	Wall Sink
Integral w/flooring	Task Lighting Level	Other (see notes)	Floor Sink (FS)
Partitions	Occupancy/vacancy sensor	CONTAINMENT	ADA Compliant Hand Wash Sink
Glass	LED Lighting <input checked="" type="checkbox"/>	Chemical Fume Hood	Piped Services
Gyp Board, Paint <input checked="" type="checkbox"/>	Zoned Lighting	Radioisotope Hood	Laboratory Gas (G)
Other (see notes)	Safe light	Perchloric Hood	Laboratory Vacuum (V)
Ceiling	Dimmer	Distillation Hood	Laboratory Air (A)
Minimum height	In Use Light	Walk-in Hood	Compressed Air, 100 psi (CA)
Exposed	Other (see notes)	Laminar Flow Hood	Nitrogen Gas (N2)
Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/>	Communications/Data	Canopy Hood	Carbon Dioxide (CO2)
Gyp Board, Paint	Telephone (Wall or Desk) <input checked="" type="checkbox"/>	Snorkel	Medical Gas
Other (see notes)	Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/>	2" Exhaust	Specialty Gas (See Notes)
Door 1	Data: Wireless	Biological Safety Cabinet	Cylinder Gases
Size	Intercom	Special Enclosures	Gas Type: Cyl Size:
Rating	Audio Visual	Other (see notes)	Inert
Vision Panel	Room Controls	CASEWORK (specify material) LF	Flammable
Sidelight	Speakers	Base Cabinets w/ Counter	Toxic
Card Reader	Hearing Enhancement System	Wall Cabinets	CHEMICALS & STORAGE
Lockset	Projection Screen (identify type)	Open Shelving	Bases (Solvents?)
Key Pad	Wall Clock <input checked="" type="checkbox"/>	Tall Cabinets	Acids
Biometric	Document Camera **	Reagent Rack	Flammables
Other (see notes)	Video Conferencing **	OSC (overhead service carrier)	Radioisotopes
CONSTRUCTION / DESIGN CRITERIA	Microphones **	Standing Countertop	Carcinogens/Regulated
Floor Loading	Wall Monitors (Size & Qty) **	Seated Countertop	Controlled Substances
Concentrated Loading	Room Security	Tech Station	Chemical Waste Storage
Acoustical Sensitive	Panic Button	Specialized Table (see notes)	Biological Storage
Vibration Sensitive	Security Camera	Bookcases	Radioisotope Storage
Vibration Producing	Other (see notes)	Cart / Storage	Chemical Storage Cabinet
Light Sensitive	MISCELLANEOUS Size	Safety Glasses Cabinet	Ventilated Storage
Electrical Field Sensitive	Chalkboard	Flammable	Flammable
Radio Frequency Sensitive	Markerboard/Whiteboard	Acid	Acid
Heat Producing	Writable Surface	Other (see notes)	Other (see notes)
Noise Producing	Tack board	NOTES AND REMARKS:	
Lead Shielding	Lockers (identify min size, lock, # of tiers)	N1 Assume linear pendant direct / indirect lighting	
BSL (specify level)	Boot Rack		
Hoist Points (in Ceiling)	Coat / Bag Hooks (Quantity)		
Anchor Points (in Floor)	Fire Extinguisher		
Other (see notes)	Fire Blanket		
Interior windows	Room Darkening Shades		
Borrowed light	Window Blackout Shades		
Covering/Treatment	Other (see notes)		
Pass-through windows			

** Everything included on Room Data Sheet is to be contractor provided, unless otherwise noted.

Room Data Sheets are conceptual and will be updated and modified throughout the design process as details and specifications are determined. The associated plan diagrams are also conceptual. They are provided to illustrate required furnishings, equipment, and general classroom configurations. The final layouts may change.

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Hours of Use	Power	Temperature	Potable Hot Water (HW)
8 hours/day <input checked="" type="checkbox"/>	110V (20A) 1 Phase <input checked="" type="checkbox"/>	75°F ± 2°F	Potable Cold Water (CW)
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24 hours/day	480V (100A) 3 Phase	70°-76°	Chilled Water (CHW S/R)
Hours of Operation	Standby	Other Range (specify)	Floor Drain (FD)
8 hours/day <input checked="" type="checkbox"/>	Emergency	Humidity	Safety Shower (SS)
14 hours/day	Instrument Ground (identify equip)	Winter 30%+10%	Safety Eyewash (E)
24 hours/day	Uninterrupted Circuit	Summer 50%+10%	Emergency Shower
ARCHITECTURAL	Dedicated Circuit (identify equip)	Other Range (specify)	Drench Hose (DH)
Floor	Clean Power	Uncontrolled <input checked="" type="checkbox"/>	Clean Steam
VCT (confirm if Chem. Resistant)	Other (see notes)	Quality / Exhaust	Steam/Condensate Return
Terrazzo	Outlets	Min. Total Air Changes/Hr.	Equipment Hook-up
Welded Seam Sht. Vyl.	Wall <input checked="" type="checkbox"/>	100% Make-up Air	Other (see notes)
Epoxy	Floor	Recirculated Air	Sinks (Interceptor or disposal needed?) <input checked="" type="checkbox"/>
Carpet / Carpet Tile	Overhead drop	Air Pressure Positive	Cup (4"x7"x6 1/2")
Sealed Concrete	Wall Mounted Monitor	Air Pressure Negative	Hand (9"x12"x6")
Ceramic Tile	Special Equipment	HEPA Filtration/Supply	Medium (14"x16"x7")
Other (see notes)	Other (see notes)	HEPA Filtration/Exhaust	Large (16"x22"x10 1/2")
Base	Lighting	Clean Room Class	Service (16"x28"x10 1/2")
4" Rubber <input checked="" type="checkbox"/>	Gen. Lighting Level <input checked="" type="checkbox"/>	Laminar Flow Diffusers	Wall Sink
Integral w/flooring	Task Lighting Level	Other (see notes)	Floor Sink (FS)
Partitions	Occupancy/vacancy sensor	CONTAINMENT	ADA Compliant Hand Wash Sink
Glass	LED Lighting <input checked="" type="checkbox"/>	Chemical Fume Hood	Piped Services
Gyp Board, Paint <input checked="" type="checkbox"/>	Zoned Lighting	Radioisotope Hood	Laboratory Gas (G)
Other (see notes)	Safe light	Perchloric Hood	Laboratory Vacuum (V)
Ceiling	Dimmer	Distillation Hood	Laboratory Air (A)
Minimum height	In Use Light	Walk-in Hood	Compressed Air, 100 psi (CA)
Exposed	Other (see notes)	Laminar Flow Hood	Nitrogen Gas (N2)
Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/>	Communications/Data	Canopy Hood	Carbon Dioxide (CO2)
Gyp Board, Paint	Telephone (Wall or Desk) <input checked="" type="checkbox"/>	Snorkel	Medical Gas
Other (see notes)	Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/>	2" Exhaust	Specialty Gas (See Notes)
Door 1	Data: Wireless	Biological Safety Cabinet	Cylinder Gases
Size	Intercom	Special Enclosures	Gas Type: Cyl Size:
Rating	Audio Visual	Other (see notes)	Inert
Vision Panel	Room Controls	CASEWORK (specify material) LF	Flammable
Sidelight	Speakers	Base Cabinets w/ Counter	Toxic
Card Reader	Hearing Enhancement System	Wall Cabinets	CHEMICALS & STORAGE
Lockset	Projection Screen (identify type)	Open Shelving	Bases (Solvents?)
Key Pad	Wall Clock <input checked="" type="checkbox"/>	Tall Cabinets	Acids
Biometric	Document Camera **	Reagent Rack	Flammables
Other (see notes)	Video Conferencing **	OSC (overhead service carrier)	Radioisotopes
CONSTRUCTION / DESIGN CRITERIA	Microphones **	Standing Countertop	Carcinogens/Regulated
Floor Loading	Wall Monitors (Size & Qty) **	Seated Countertop	Controlled Substances
Concentrated Loading	Room Security	Tech Station	Chemical Waste Storage
Acoustical Sensitive	Panic Button	Specialized Table (see notes)	Biological Storage
Vibration Sensitive	Security Camera	Bookcases	Radioisotope Storage
Vibration Producing	Other (see notes)	Cart / Storage	Chemical Storage Cabinet
Light Sensitive	MISCELLANEOUS Size	Safety Glasses Cabinet	Ventilated Storage
Electrical Field Sensitive	Chalkboard	Flammable	Flammable
Radio Frequency Sensitive	Markerboard/Whiteboard	Acid	Acid
Heat Producing	Writable Surface	Other (see notes)	Other (see notes)
Noise Producing	Tack board	NOTES AND REMARKS:	
Lead Shielding	Lockers (identify min size, lock, # of tiers)	N1 Assume linear pendant direct / indirect lighting	
BSL (specify level)	Boot Rack		
Hoist Points (in Ceiling)	Coat / Bag Hooks (Quantity)		
Anchor Points (in Floor)	Fire Extinguisher		
Other (see notes)	Fire Blanket		
Interior windows	Room Darkening Shades		
Borrowed light	Window Blackout Shades		
Covering/Treatment	Other (see notes)		
Pass-through windows			

** Everything included on Room Data Sheet is to be contractor provided, unless otherwise noted.

Room Data Sheets are conceptual and will be updated and modified throughout the design process as details and specifications are determined. The associated plan diagrams are also conceptual. They are provided to illustrate required furnishings, equipment, and general classroom configurations. The final layouts may change.

Design Guidelines

Architectural Expression | XXX

Large Classroom

Date: 2024-JUL-14

Programmed Capacity: **50 Students**
Area (net square feet): **1,270 NSF**

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use 8 hours/day <input checked="" type="checkbox"/> 14 hours/day <input type="checkbox"/> 24 hours/day <input type="checkbox"/>	Power 110V (20A) 1 Phase <input checked="" type="checkbox"/> 208V (30A) 1 Phase/3 Phase 480V (100A) 3 Phase	Temperature 75°F ± 2°F 68°-75° ± 2°F <input checked="" type="checkbox"/> 70°-76° Other Range (specify)	Potable Hot Water (HW) Potable Cold Water (CW) High Purity Water (DI/RO/WFI) Chilled Water (CHW S/R) Floor Drain (FD) Safety Shower (SS) Safety Eyewash (E) Emergency Shower Drench Hose (DH) Clean Steam Steam/Condensate Return Equipment Hook-up Other (see notes)
Hours of Operation 8 hours/day <input checked="" type="checkbox"/> 14 hours/day <input type="checkbox"/> 24 hours/day <input type="checkbox"/>	Standby Emergency Instrument Ground (identify equip) Uninterrupted Circuit Dedicated Circuit (identify equip)	Humidity Winter 30%+10% Summer 50%±10% Other Range (specify)	Uncontrolled <input checked="" type="checkbox"/>
ARCHITECTURAL	Clean Power Other (see notes)	Quality / Exhaust Min. Total Air Changes/Hr. 100% Make-up Air Recirculated Air Air Pressure Positive Air Pressure Negative HEPA Filtration/Supply HEPA Filtration/Exhaust Clean Room Class Laminar Flow Diffusers Other (see notes)	Sinks (Interceptor or disposal needed?) Qty Cup (4"x7"x6 1/2") Hand (9"x12"x6") Medium (14"x16"x7") Large (16"x22"x10 1/2") Service (16"x28"x10 1/2") Wall Sink Floor Sink (FS) ADA Compliant Hand Wash Sink Piped Services Laboratory Gas (G) Laboratory Vacuum (V) Laboratory Air (A) Compressed Air, 100 psi (CA) Nitrogen Gas (N2) Carbon Dioxide (CO2) Medical Gas Specialty Gas (See Notes) Cylinder Gases Gas Type: Cyl Size:
Floor VCT (confirm if Chem. Resistant) Terrazzo Welded Seam Sht. Vyl. Epoxy Carpet / Carpet Tile Sealed Concrete Ceramic Tile Other (see notes)	Outlets Wall <input checked="" type="checkbox"/> Floor <input checked="" type="checkbox"/> Overhead drop Wall Mounted Monitor Special Equipment Other (see notes) N2	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Snorkel 2" Exhaust Biological Safety Cabinet (specify type) Special Enclosures (specify type) Other (see notes)	Other (see notes)
Base 4" Rubber <input checked="" type="checkbox"/> Integral w/flooring	Lighting Gen. Lighting Level <input checked="" type="checkbox"/> Task Lighting Level Occupancy/vacancy sensor LED Lighting <input checked="" type="checkbox"/> Zoned Lighting <input checked="" type="checkbox"/> Safe light Dimmer <input checked="" type="checkbox"/> In Use Light Other (see notes) N4	Casework (specify material) LF Base Cabinets w/ Counter Wall Cabinets Open Shelving Tall Cabinets Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Chemicals & Storage Bases (Solvents?) Acids Flammables Radioisotopes Carcinogens/Regulated Controlled Substances Chemical Waste Storage Biological Storage Radioisotope Storage Chemical Storage Cabinet Safety Glasses Cabinet Ventilated Storage Flammable Acid Other (see notes)
Partitions Glass <input checked="" type="checkbox"/> Gyp Board, Paint <input checked="" type="checkbox"/> Other (see notes) N1	Communications/Data Data: Hardwired (Quantity) (17 Required) <input checked="" type="checkbox"/> Data: Wireless Other (see notes)	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Track board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades Window Blackout Shades Other (see notes)	Notes and Remarks: N1 Insulate walls and take walls to underside of deck. / 10 ft. high all glass wall at back of room. N2 Assume 6 electric power floor boxes for students and 1 for instructor station. Final location TBD N3 Assume up to 5 locations (2 at each side wall, 1 at front) with monitors sized appropriately for viewing N4 Assume linear pendant direct / indirect lighting
Ceiling Minimum height 12'-0" Exposed Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/> Gyp Board, Paint Other (see notes)	Audio Visual Room Controls <input checked="" type="checkbox"/> Speakers <input checked="" type="checkbox"/> Hearing Enhancement System Projection Screen (identify type) Wall Clock <input checked="" type="checkbox"/> Document Camera ** <input checked="" type="checkbox"/> Video Conferencing ** <input checked="" type="checkbox"/> Microphones ** <input checked="" type="checkbox"/> Wall Monitors (Size & Qty) ** <input checked="" type="checkbox"/> Other (see notes) N3	Other (see notes)	Other (see notes)
Door 1 Size 3'-0" door Rating Vision Panel Sidelight <input checked="" type="checkbox"/> Card Reader <input checked="" type="checkbox"/> Lockset <input checked="" type="checkbox"/> Key Pad <input checked="" type="checkbox"/> Biometric Other (see notes) N2	Door 2 Size Rating Vision Panel Sidelight Card Reader Lockset Key Pad Biometric Other (see notes)	Other (see notes)	Other (see notes)
CONSTRUCTION / DESIGN CRITERIA	Other (see notes)	Other (see notes)	Other (see notes)

Small Classroom

Date: 2024-JUL-14

Programmed Capacity: **24 Students**
Area (net square feet): **627 NSF**

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use 8 hours/day <input checked="" type="checkbox"/> 14 hours/day <input type="checkbox"/> 24 hours/day <input type="checkbox"/>	Power 110V (20A) 1 Phase <input checked="" type="checkbox"/> 208V (30A) 1 Phase/3 Phase 480V (100A) 3 Phase	Temperature 75°F ± 2°F 68°-75° ± 2°F <input checked="" type="checkbox"/> 70°-76° Other Range (specify)	Potable Hot Water (HW) Potable Cold Water (CW) High Purity Water (DI/RO/WFI) Chilled Water (CHW S/R) Floor Drain (FD) Safety Shower (SS) Safety Eyewash (E) Emergency Shower Drench Hose (DH) Clean Steam Steam/Condensate Return Equipment Hook-up Other (see notes)
Hours of Operation 8 hours/day <input checked="" type="checkbox"/> 14 hours/day <input type="checkbox"/> 24 hours/day <input type="checkbox"/>	Standby Emergency Instrument Ground (identify equip) Uninterrupted Circuit Dedicated Circuit (identify equip)	Humidity Winter 30%+10% Summer 50%±10% Other Range (specify)	Uncontrolled <input checked="" type="checkbox"/>
ARCHITECTURAL	Clean Power Other (see notes)	Quality / Exhaust Min. Total Air Changes/Hr. 100% Make-up Air Recirculated Air Air Pressure Positive Air Pressure Negative HEPA Filtration/Supply HEPA Filtration/Exhaust Clean Room Class Laminar Flow Diffusers Other (see notes)	Sinks (Interceptor or disposal needed?) Qty Cup (4"x7"x6 1/2") Hand (9"x12"x6") Medium (14"x16"x7") Large (16"x22"x10 1/2") Service (16"x28"x10 1/2") Wall Sink Floor Sink (FS) ADA Compliant Hand Wash Sink Piped Services Laboratory Gas (G) Laboratory Vacuum (V) Laboratory Air (A) Compressed Air, 100 psi (CA) Nitrogen Gas (N2) Carbon Dioxide (CO2) Medical Gas Specialty Gas (See Notes) Cylinder Gases Gas Type: Cyl Size:
Floor VCT (confirm if Chem. Resistant) Terrazzo Welded Seam Sht. Vyl. Epoxy Carpet / Carpet Tile Sealed Concrete Ceramic Tile Other (see notes)	Outlets Wall <input checked="" type="checkbox"/> Floor <input checked="" type="checkbox"/> Overhead drop Wall Mounted Monitor Special Equipment Other (see notes) N2	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Snorkel 2" Exhaust Biological Safety Cabinet (specify type) Special Enclosures (specify type) Other (see notes)	Other (see notes)
Base 4" Rubber <input checked="" type="checkbox"/> Integral w/flooring	Lighting Gen. Lighting Level <input checked="" type="checkbox"/> Task Lighting Level Occupancy/vacancy sensor LED Lighting <input checked="" type="checkbox"/> Zoned Lighting <input checked="" type="checkbox"/> Safe light Dimmer <input checked="" type="checkbox"/> In Use Light Other (see notes) N4	Casework (specify material) LF Base Cabinets w/ Counter Wall Cabinets Open Shelving Tall Cabinets Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Chemicals & Storage Bases (Solvents?) Acids Flammables Radioisotopes Carcinogens/Regulated Controlled Substances Chemical Waste Storage Biological Storage Radioisotope Storage Chemical Storage Cabinet Safety Glasses Cabinet Ventilated Storage Flammable Acid Other (see notes)
Partitions Glass <input checked="" type="checkbox"/> Gyp Board, Paint <input checked="" type="checkbox"/> Other (see notes) N1	Communications/Data Data: Hardwired (Quantity) (17 Required) <input checked="" type="checkbox"/> Data: Wireless Other (see notes)	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Track board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades Window Blackout Shades Other (see notes)	Notes and Remarks: N1 Insulate walls and take walls to underside of deck. / 5 ft lon, 19 ft. high all glass wall at room N2 Assume 4 electric power floor boxes for students and 1 for instructor station. Final location TBD N3 Assume up to 3 locations (1 at each side wall, 1 at front) with monitors sized appropriately for viewing N4 Assume linear pendant direct / indirect lighting
Ceiling Minimum height 12'-0" Exposed Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/> Gyp Board, Paint Other (see notes)	Audio Visual Room Controls <input checked="" type="checkbox"/> Speakers <input checked="" type="checkbox"/> Hearing Enhancement System Projection Screen (identify type) Wall Clock <input checked="" type="checkbox"/> Document Camera ** <input checked="" type="checkbox"/> Video Conferencing ** <input checked="" type="checkbox"/> Microphones ** <input checked="" type="checkbox"/> Wall Monitors (Size & Qty) ** <input checked="" type="checkbox"/> Other (see notes) N3	Other (see notes)	Other (see notes)
Door 1 Size 3'-0" door Rating Vision Panel Sidelight <input checked="" type="checkbox"/> Card Reader <input checked="" type="checkbox"/> Lockset <input checked="" type="checkbox"/> Key Pad <input checked="" type="checkbox"/> Biometric Other (see notes) N2	Door 2 Size Rating Vision Panel Sidelight Card Reader Lockset Key Pad Biometric Other (see notes)	Other (see notes)	Other (see notes)
CONSTRUCTION / DESIGN CRITERIA	Other (see notes)	Other (see notes)	Other (see notes)

** Everything included on Room Data Sheet is to be contractor provided, unless otherwise noted.

Room Data Sheets are conceptual and will be updated and modified throughout the design process as details and specifications are determined. The associated plan diagrams are also conceptual. They are provided to illustrate required furnishings, equipment, and general classroom configurations. The final layouts may change.



Design Guidelines

Room Data Sheets

Huddle Date: 2024-JUL-14

Programmed Capacity: 2
Area (net square feet): 94 NSF

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use 8 hours/day <input checked="" type="checkbox"/> 14 hours/day 24 hours/day	Power 110V (20A) 1 Phase <input checked="" type="checkbox"/> 208V (30A) 1 Phase/3 Phase 480V (100A) 3 Phase	Temperature 75°F ± 2°F 68"-75" ± 2°F 70"-76" Other Range (specify)	Potable Hot Water (HW) Potable Cold Water (CW) High Purity Water (DI/RO/WFI) Chilled Water (CHW S/R) Floor Drain (FD) Safety Shower (SS) Safety Eyewash (E) Emergency Shower Drench Hose (DH) Clean Steam Steam/Condensate Return Equipment Hook-up Other (see notes)
Hours of Operation 8 hours/day <input checked="" type="checkbox"/> 14 hours/day 24 hours/day	Standby Emergency Instrument Ground (identify equip) Uninterrupted Circuit Dedicated Circuit (identify equip)	Humidity Winter 30%+10% Summer 50%±10% Other Range (specify)	Uncontrolled <input checked="" type="checkbox"/>
ARCHITECTURAL	Clean Power Other (see notes)	Quality / Exhaust Min. Total Air Changes/Hr. 100% Make-up Air Recirculated Air Air Pressure Positive Air Pressure Negative HEPA Filtration/Supply HEPA Filtration/Exhaust Clean Room Class Laminar Flow Diffusers Other (see notes)	Other (see notes)
Floor VCT (confirm if Chem. Resistant) Terrazzo Welded Seam Sht. Vyl. Epoxy Carpet / Carpet Tile <input checked="" type="checkbox"/> Sealed Concrete Ceramic Tile Other (see notes)	Outlets Wall <input checked="" type="checkbox"/> Floor Overhead drop Wall Mounted Monitor Special Equipment Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Sinks (Interceptor or disposal needed?) City Cup (4"x7"x6 1/2") Hand (9"x12"x6") Medium (14"x16"x7") Large (16"x22"x10 1/2") Service (16"x28"x10 1/2") Wall Sink Floor Sink (FS) ADA Compliant Hand Wash Sink Piped Services Laboratory Gas (G) Laboratory Vacuum (V) Laboratory Air (A) Compressed Air, 100 psi (CA) Nitrogen Gas (N2) Carbon Dioxide (CO2) Medical Gas Specialty Gas (See Notes) Cylinder Gases Gas Type: Cyl Size: Inert Flammable Toxic CHEMICALS & STORAGE Bases (Solvents?) Acids Flammables Radioisotopes Carcinogens/Regulated Controlled Substances Chemical Waste Storage Biological Storage Radioisotope Storage Chemical Storage Cabinet Safety Glasses Cabinet Ventilated Storage Flammable Acid Other (see notes)
Base 4" Rubber <input checked="" type="checkbox"/> Integral w/flooring Partitions Glass Gyp Board, Paint <input checked="" type="checkbox"/> Other (see notes) N1 Ceiling Minimum height 10'-0" Exposed Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/> Gyp Board, Paint Other (see notes)	Lighting Gen. Lighting Level <input checked="" type="checkbox"/> Task Lighting Level Occupancy/vacancy sensor LED Lighting <input checked="" type="checkbox"/> Zoned Lighting Safe light Dimmer In Use Light Other (see notes) N2 Communications/Data Telephone (Wall or Desk) <input checked="" type="checkbox"/> Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/> Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
Door 1 Size 3'0" door Rating Vision Panel Sidelight <input checked="" type="checkbox"/> Card Reader <input checked="" type="checkbox"/> Lockset <input checked="" type="checkbox"/> Key Pad Biometric Other (see notes) N3	LED Lighting <input checked="" type="checkbox"/> Zoned Lighting Safe light Dimmer In Use Light Other (see notes) N2 Communications/Data Telephone (Wall or Desk) <input checked="" type="checkbox"/> Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/> Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
CONSTRUCTION / DESIGN CRITERIA	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Tack board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades <input checked="" type="checkbox"/> Window Blackout Shades Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
Floor Loading Concentrated Loading Acoustical Sensitive Vibration Sensitive Vibration Producing Light Sensitive Electrical Field Sensitive Radio Frequency Sensitive Heat Producing Noise Producing Lead Shielding BSL (specify level) Hoist Points (in Ceiling) Anchor Points (in Floor) Other (see notes) Interior windows Borrowed light <input checked="" type="checkbox"/> Covering/Treatment Pass-through windows	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Tack board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades <input checked="" type="checkbox"/> Window Blackout Shades Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
<p>Notes and Remarks:</p> <p>N1 Insulate walls and take to underside of deck. /</p> <p>N2 Assume linear pendant direct / indirect lighting</p> <p>N3 7 ft. high, 1 ft wide glass sidelight next to door.</p>			

** Everything included on Room Data Sheet is to be contractor provided, unless otherwise noted.
Room Data Sheets are conceptual and will be updated and modified throughout the design process as details and specifications are determined. The associated plan diagrams are also conceptual. They are provided to illustrate required furnishings, equipment, and general classroom configurations. The final layouts may change.

Huddle Date: 2024-JUL-14

Programmed Capacity: 2
Area (net square feet): 94 NSF

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use 8 hours/day <input checked="" type="checkbox"/> 14 hours/day 24 hours/day	Power 110V (20A) 1 Phase <input checked="" type="checkbox"/> 208V (30A) 1 Phase/3 Phase 480V (100A) 3 Phase	Temperature 75°F ± 2°F 68"-75" ± 2°F 70"-76" Other Range (specify)	Potable Hot Water (HW) Potable Cold Water (CW) High Purity Water (DI/RO/WFI) Chilled Water (CHW S/R) Floor Drain (FD) Safety Shower (SS) Safety Eyewash (E) Emergency Shower Drench Hose (DH) Clean Steam Steam/Condensate Return Equipment Hook-up Other (see notes)
Hours of Operation 8 hours/day <input checked="" type="checkbox"/> 14 hours/day 24 hours/day	Standby Emergency Instrument Ground (identify equip) Uninterrupted Circuit Dedicated Circuit (identify equip)	Humidity Winter 30%+10% Summer 50%±10% Other Range (specify)	Uncontrolled <input checked="" type="checkbox"/>
ARCHITECTURAL	Clean Power Other (see notes)	Quality / Exhaust Min. Total Air Changes/Hr. 100% Make-up Air Recirculated Air Air Pressure Positive Air Pressure Negative HEPA Filtration/Supply HEPA Filtration/Exhaust Clean Room Class Laminar Flow Diffusers Other (see notes)	Other (see notes)
Floor VCT (confirm if Chem. Resistant) Terrazzo Welded Seam Sht. Vyl. Epoxy Carpet / Carpet Tile <input checked="" type="checkbox"/> Sealed Concrete Ceramic Tile Other (see notes)	Outlets Wall <input checked="" type="checkbox"/> Floor Overhead drop Wall Mounted Monitor Special Equipment Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Sinks (Interceptor or disposal needed?) City Cup (4"x7"x6 1/2") Hand (9"x12"x6") Medium (14"x16"x7") Large (16"x22"x10 1/2") Service (16"x28"x10 1/2") Wall Sink Floor Sink (FS) ADA Compliant Hand Wash Sink Piped Services Laboratory Gas (G) Laboratory Vacuum (V) Laboratory Air (A) Compressed Air, 100 psi (CA) Nitrogen Gas (N2) Carbon Dioxide (CO2) Medical Gas Specialty Gas (See Notes) Cylinder Gases Gas Type: Cyl Size: Inert Flammable Toxic CHEMICALS & STORAGE Bases (Solvents?) Acids Flammables Radioisotopes Carcinogens/Regulated Controlled Substances Chemical Waste Storage Biological Storage Radioisotope Storage Chemical Storage Cabinet Safety Glasses Cabinet Ventilated Storage Flammable Acid Other (see notes)
Base 4" Rubber <input checked="" type="checkbox"/> Integral w/flooring Partitions Glass Gyp Board, Paint <input checked="" type="checkbox"/> Other (see notes) N1 Ceiling Minimum height 10'-0" Exposed Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/> Gyp Board, Paint Other (see notes)	Lighting Gen. Lighting Level <input checked="" type="checkbox"/> Task Lighting Level Occupancy/vacancy sensor LED Lighting <input checked="" type="checkbox"/> Zoned Lighting Safe light Dimmer In Use Light Other (see notes) N2 Communications/Data Telephone (Wall or Desk) <input checked="" type="checkbox"/> Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/> Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
Door 1 Size 3'0" door Rating Vision Panel Sidelight <input checked="" type="checkbox"/> Card Reader <input checked="" type="checkbox"/> Lockset <input checked="" type="checkbox"/> Key Pad Biometric Other (see notes) N3	LED Lighting <input checked="" type="checkbox"/> Zoned Lighting Safe light Dimmer In Use Light Other (see notes) N2 Communications/Data Telephone (Wall or Desk) <input checked="" type="checkbox"/> Data: Hardwired (Quantity) (2) <input checked="" type="checkbox"/> Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
CONSTRUCTION / DESIGN CRITERIA	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Tack board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades <input checked="" type="checkbox"/> Window Blackout Shades Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
Floor Loading Concentrated Loading Acoustical Sensitive Vibration Sensitive Vibration Producing Light Sensitive Electrical Field Sensitive Radio Frequency Sensitive Heat Producing Noise Producing Lead Shielding BSL (specify level) Hoist Points (in Ceiling) Anchor Points (in Floor) Other (see notes) Interior windows Borrowed light <input checked="" type="checkbox"/> Covering/Treatment Pass-through windows	MISCELLANEOUS Size Chalkboard Markerboard/Whiteboard Writable Surface Tack board Lockers (identify min size, lock, # of tiers) Boot Rack Coat / Bag Hooks (Quantity) Fire Extinguisher Fire Blanket Room Darkening Shades <input checked="" type="checkbox"/> Window Blackout Shades Other (see notes)	CONTAINMENT Size Chemical Fume Hood Radioisotope Hood Perchloric Hood Distillation Hood Walk-in Hood Laminar Flow Hood Canopy Hood Telephone (Wall or Desk) Data: Hardwired (Quantity) (2) Data: Wireless Data: Wireless Intercom Audio Visual Room Controls Speakers Hearing Enhancement System Projection Screen (identify type) Wall Clock Reagent Rack OSC (overhead service carrier) Standing Countertop Seated Countertop Tech Station Specialized Table (see notes) Bookcases Cart / Storage Other (see notes)	Other (see notes)
<p>Notes and Remarks:</p> <p>N1 Insulate walls and take to underside of deck. /</p> <p>N2 Assume linear pendant direct / indirect lighting</p> <p>N3 7 ft. high, 1 ft wide glass sidelight next to door.</p>			

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Design Guidelines

Room Data Sheet

Corridor Date: 2024-JUL-14

Programmed Capacity: 1
 Area (net square feet): NA

Room Notes:

UTILIZATION	ELECTRICAL	MECHANICAL	PLUMBING (note quantities)
Hours of Use	Power	Temperature	Potable Hot Water (HW)
8 hours/day <input checked="" type="checkbox"/>	110V (20A) 1 Phase <input checked="" type="checkbox"/>	75°F ± 2°F	Potable Cold Water (CW)
14 hours/day	208V (30A) 1 Phase/3 Phase	68°-75° ± 2°F <input checked="" type="checkbox"/>	High Purity Water (DI/RO/WFI)
24 hours/day	480V (100A) 3 Phase	70°-76°	Chilled Water (CHW S/R)
Hours of Operation	Standby	Other Range (specify)	Floor Drain (FD)
8 hours/day <input checked="" type="checkbox"/>	Emergency	Humidity	Safety Shower (SS)
14 hours/day	Instrument Ground (identify equip)	Winter 30%+10%	Safety Eyewash (E)
24 hours/day	Uninterrupted Circuit	Summer 50%+10%	Emergency Shower
ARCHITECTURAL	Dedicated Circuit (identify equip)	Other Range (specify)	Drench Hose (DH)
Floor	Clean Power	Uncontrolled <input checked="" type="checkbox"/>	Clean Steam
VCT (confirm if Chem. Resistant)	Other (see notes)	Quality / Exhaust	Steam/Condensate Return
Terrazzo	Outlets	Min. Total Air Changes/Hr.	Equipment Hook-up
Welded Seam Sht. Vyl.	Wall <input checked="" type="checkbox"/>	100% Make-up Air	Other (see notes)
Epoxy	Floor	Recirculated Air	Sinks (Interceptor or disposal needed?) City
Carpet / Carpet Tile <input checked="" type="checkbox"/>	Overhead drop	Air Pressure Positive	Cup (4"x7"x6 1/2")
Sealed Concrete	Wall Mounted Monitor	Air Pressure Negative	Hand (9"x12"x6")
Ceramic Tile	Special Equipment	HEPA Filtration/Supply	Medium (14"x16"x7")
Other (see notes)	Other (see notes)	HEPA Filtration/Exhaust	Large (16"x22"x10 1/2")
Base	Lighting	Clean Room Class	Service (16"x28"x10 1/2")
4" Rubber <input checked="" type="checkbox"/>	Gen. Lighting Level <input checked="" type="checkbox"/>	Laminar Flow Diffusers	Wall Sink
Integral w/flooring	Task Lighting Level	Other (see notes)	Floor Sink (FS)
Partitions	Occupancy/vacancy sensor	CONTAINMENT Size	ADA Compliant Hand Wash Sink
Glass <input checked="" type="checkbox"/>	LED Lighting <input checked="" type="checkbox"/>	Chemical Fume Hood	Piped Services
Gyp Board, Paint <input checked="" type="checkbox"/>	Zoned Lighting	Radioisotope Hood	Laboratory Gas (G)
Other (see notes)	Safe light	Pechloric Hood	Laboratory Vacuum (V)
Ceiling	Dimmer	Distillation Hood	Laboratory Air (A)
Minimum height 12'-0"	In Use Light	Walk-in Hood	Compressed Air, 100 psi (CA)
Exposed	Other (see notes)	Laminar Flow Hood	Nitrogen Gas (N2)
Acoustic Tile Size: 2'x4' <input checked="" type="checkbox"/>	Communications/Data	Canopy Hood	Carbon Dioxide (CO2)
Gyp Board, Paint	Telephone (Wall or Desk) <input checked="" type="checkbox"/>	Snorkel	Medical Gas
Other (see notes)	Data, Hardwired (Quantity) (2)	2" Exhaust	Specialty Gas (See Notes)
Door 1	Data, Wireless	Biological Safety Cabinet	Cylinder Gases
Size	Data, Wireless	Special Enclosures	Gas Type: Cyl Size:
Rating	Audio Visual	Other (see notes)	Inert
Vision Panel	Room Controls	CASEWORK (specify material) LF	Flammable
Sidelight	Speakers	Base Cabinets w/ Counter	Toxic
Card Reader	Hearing Enhancement System	Wall Cabinets	CHEMICALS & STORAGE
Lockset	Projection Screen (identify type)	Open Shelving	Bases (Solvents?)
Key Pad	Wall Clock <input checked="" type="checkbox"/>	Tall Cabinets	Acids
Biometric	Document Camera **	Reagent Rack	Flammables
Other (see notes)	Video Conferencing **	OSC (overhead service carrier)	Radioisotopes
CONSTRUCTION / DESIGN CRITERIA	Microphones **	Standing Countertop	Carcinogens/Regulated
Floor Loading	Wall Monitors (Size & Qty) **	Seated Countertop	Controlled Substances
Concentrated Loading	Other (see notes)	Tech Station	Chemical Waste Storage
Acoustical Sensitive	Room Security	Specialized Table (see notes)	Biological Storage
Vibration Sensitive	Panic Button	Bookcases	Radioisotope Storage
Vibration Producing	Security Camera	Cart / Storage	Chemical Storage Cabinet
Light Sensitive	Other (see notes)	Other (see notes)	Safety Glasses Cabinet
Electrical Field Sensitive	MISCELLANEOUS Size		Ventilated Storage
Radio Frequency Sensitive	Chalkboard		Flammable
Heat Producing	Markerboard/Whiteboard		Acid
Noise Producing	Writable Surface		Other (see notes)
Lead Shielding	Tack board		
BSL (specify level)	Lockers (identify min size, lock, # of tiers)		
Hoist Points (in Ceiling)	Boot Rack		
Anchor Points (in Floor)	Coat / Bag Hooks (Quantity)		
Other (see notes)	Fire Extinguisher		
Interior windows	Fire Blanket		
Borrowed light	Room Darkening Shades		
Covering/Treatment	Window Blackout Shades		
Pass-through windows	Other (see notes)		
		NOTES AND REMARKS:	

** Everything included on Room Data Sheet is to be contractor provided, unless otherwise noted.

Room Data Sheets are conceptual and will be updated and modified throughout the design process as details and specifications are determined. The associated plan diagrams are also conceptual. They are provided to illustrate required furnishings, equipment, and general classroom configurations. The final layouts may change.

6

Acknowledgments

PROGRAMMING ADVISORY COMMITTEE

Name

Lori Campbell, UT System, Project Manager - UT Capital Projects
Dan Smith, UTK, Project Manager - Facilities Services

Marianne Wanamaker, UTK, Dean - The Baker School
Brewton Brownlow Couch, UTK, Chief of Staff - The Baker School
Christy Myers, UTK, Special Projects Manager - The Baker School

CONSULTANT TEAM

Department

Name

HED (Harley Ellis Devereaux)

Architecture + Planning

Alli Mallory, AIA
Katherine Kalant, AIA
Jack Bullo, AIA

Newcomb & Boyd

MEP

Jeff Linde, PE

RBA Structural Engineering

Structural

Brent Thorton, PE, SE

Cumming Group

Cost

Seth Martin
Tom Miler



7

Appendix

Exhibit A | Programming Meeting Summaries

PROGRAMMING KICKOFF MEETING | 03.28.2024

Summary

The purpose of this meeting was to seek alignment on program scope of work for the building.



Meeting Minutes 01

Meeting Date: March 28, 2024
Issue Date: April 17, 2024
Meeting Location: In Person – Baker School
Project Name: UT Knoxville Baker School Renovations Programming
UT Project No:
HED Project No: 2023-OU019-018
Prepared by: Alli Mallory, HED
Meeting Subject: Programming Kickoff & Scope Review Workshop

ATTENDANCE:

Att	Initial	Name	Organization	Email
X	KK	Katherine Kalant	HED	kkalant@hed.design
X	AM	Alli Mallory	HED	amallory@hed.design
X	JB	Jack Bullo	HED	jbullo@hed.design
X	LC	Lori Campbell	UT System	lcampbell@tennessee.edu
X	DS	Dan Smith	UTK – Facilities	dcs@utk.edu
X	CM	Christy Myers	Baker School	Cmyers48@utk.edu
X	M	Marianne Wanamaker	Baker School	wanamaker@utk.edu
X	BC	Brewton Couch	Baker School	bbcouch@utk.edu

DISTRIBUTION: Attendees, Design Team

ATTACHMENTS: Meeting Presentation Document
Meeting Notes from Building Walkthrough

ITEM	DESCRIPTION	RESP.	DUE DATE
01 GENERAL			
01.01	General discussion for project kickoff and scope review. - Team discussed Phase 1 scope and then the remaining scope for the building. - Discussed \$6M budget for renovation scope. - Refer to meeting note included in these meeting minutes – notes from building walkthrough.		

These minutes constitute HED's understanding of the discussion and conclusions reached at this meeting and will be entered into the Project Record and will be deemed to represent a true and accurate account of this meeting unless written comment to the contrary is received within 48 hours of issuance. If attachments noted above are not received, please inform us immediately.

Appendix

Exhibit A | Programming Meeting Summaries



Meeting Minutes 01

Project Name: **UT Knoxville Baker Center Renovations Programming**

HED Project No: **2023-U0019-018**

ITEM	DESCRIPTION	RESP.	DUE DATE
01.02	Team noted that the building is in constant use and has many turnovers during the day. Consideration should be given to the programming effort and suggested renovations.		
01.03	Identify the 5-year plan first: <ul style="list-style-type: none"> - Need to understand growth of students and faculty for long-term plan. - Current need is for 25 faculty and 3 classrooms <ul style="list-style-type: none"> o <i>Note: This was updated to 17 new offices (includes offices for IAC) after the kickoff meeting.</i> - Undergrad students in the fall 2024 – 35 committed students - Long term goal is a complete renovation 		
01.04	(3) Classrooms Needed: <ul style="list-style-type: none"> - One classroom to set 50 students. Other two classrooms can seat more. <ul style="list-style-type: none"> o 100 seats would be a nice to have - Active learning classrooms – 30 sf per student - Node chairs with tablet arm is campus standard - Divisible spaces is needed - If the Masters program grows faster, then need more smaller classrooms. If undergrad grows faster, then need larger classrooms 		
01.05	Goals and Vision: <ul style="list-style-type: none"> - Flexibility - Quality space - In person classes 		
01.06	Hybrid classes: <ul style="list-style-type: none"> - Some students will need to use Zoom, while others will be in person - Programming effort will include for AV / technology scope 		
01.07	Offices – 25 net gain for new faculty <ul style="list-style-type: none"> - Needs to be a separate office for each faculty member <ul style="list-style-type: none"> o <i>Note: This was updated to 17 new offices after the kickoff meeting.</i> 		
01.08	Kitchen Space: <ul style="list-style-type: none"> - Not currently used. Fridge/freezer and ice maker will need to have a new home, but space in general is too large and not utilized. - Consider moving kitchen to storage space off Auditorium. 		
01.09	Events: <ul style="list-style-type: none"> - Hosting of events after 5pm and on weekends. - Need storage for 200 chairs and 12 tables and cocktail tables 		
01.10	Student lounge space is needed: <ul style="list-style-type: none"> - There is a current space, but not specific to the Baker School. Will change to be only for Baker undergrad and grad students. 		
01.11	Meeting spaces: <ul style="list-style-type: none"> - Faculty need to meet with students - Student programs team to meet with prospective students - Centers need meeting spaces 		



Meeting Minutes 01

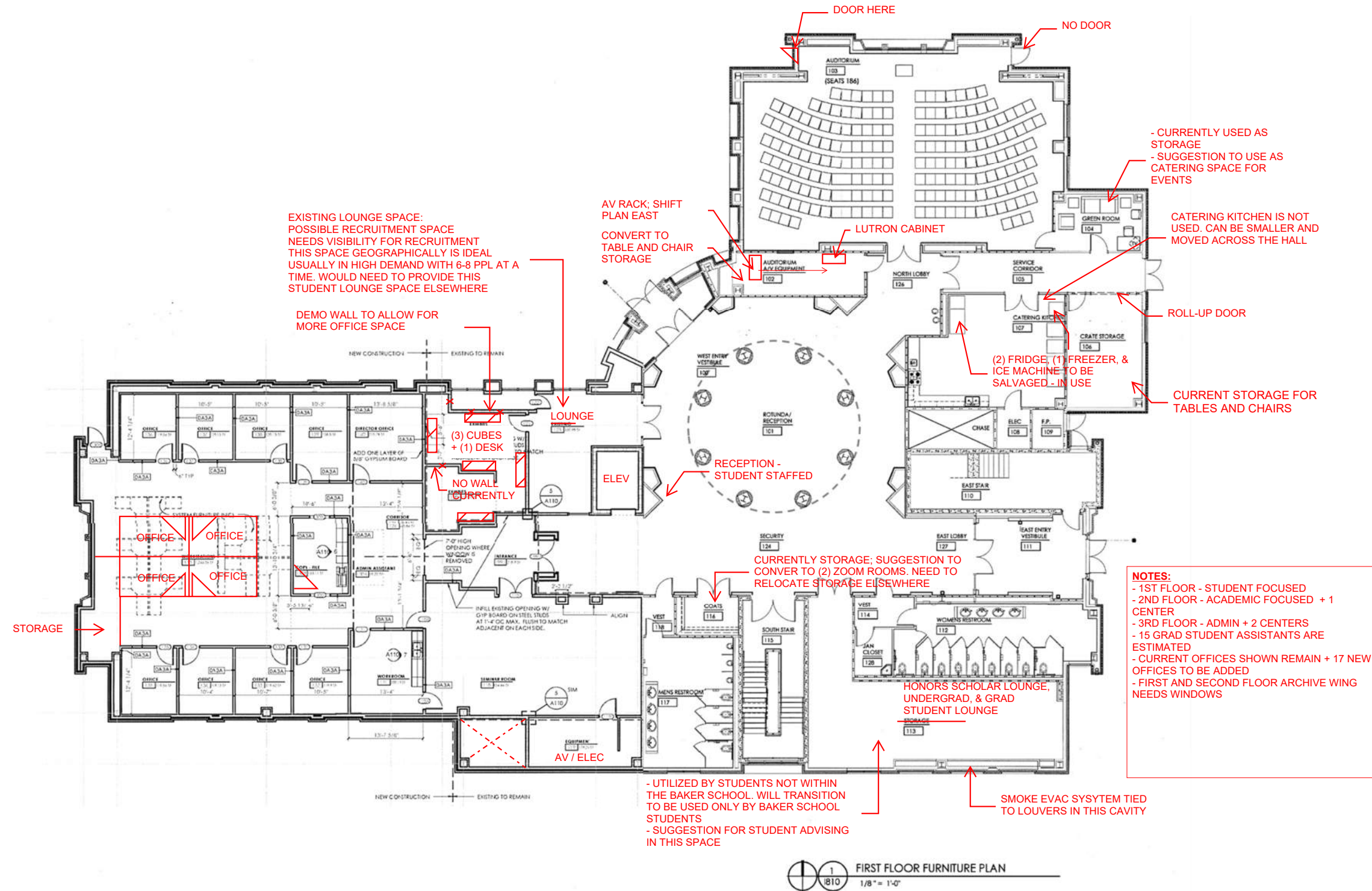
Project Name: **UT Knoxville Baker Center Renovations Programming**

HED Project No: **2023-U0019-018**

ITEM	DESCRIPTION	RESP.	DUE DATE
01.12	(3) Research Centers are part of the Baker School <ul style="list-style-type: none"> - Center for National Security & Foreign Affairs <ul style="list-style-type: none"> o AV technology very important - Center for Energy, Transportation, & Environmental Policy <ul style="list-style-type: none"> o Flexible meeting space o Mostly local - Institute of American Civics (IAC) <ul style="list-style-type: none"> o (5) current staff with possibility for (12) in the future 		
01.13	Advising & Recruitment – possible location on first floor		
01.14	Day 1 Scope <i>desired</i> , pending budget: <ul style="list-style-type: none"> - Windows on floors 1, 2, 3 - Need to maintain current first floor offices - 25 new offices (includes the Institute) <ul style="list-style-type: none"> o <i>Note: Baker School has confirmed 17 new offices are needed (includes the Institute).</i> - 3 classrooms - Auditorium BOH rework - <u>Note: Update Phase 1 scope has been modified to the following:</u> <ul style="list-style-type: none"> o 12 offices for the Institute on second floor only o Windows on second floor only o \$2M budget with July 2025 move-in desired o \$6M Total project budget for all phases 		
01.15	School has a current budget of \$3-6M. <ul style="list-style-type: none"> - Design team to give ROM pricing for phase 1 scope listed above. - Determine ROM pricing for future phases. 		
01.16	Toyota Auditorium: <ul style="list-style-type: none"> - Auditorium has constant turnover, with varying types of events (seated, standing, luncheon, classroom, presentation, etc..) - Consideration needs to be given to moving of furniture in and out of the space (constant turnover). - More storage is needed – consider using existing AV room and possibly add more storage? - Typical 150 people, max 200 people - Typical 80 to 100 standard for luncheon - One table type for all different configurations 		
02 ACTION ITEMS			
02.01	Develop phasing for short, mid-term, and long term.		
02.02	Develop ROM pricing for Phase 1 scope.		
02.03	Develop programming phase schedule.		
02.04			
02.05			

Appendix

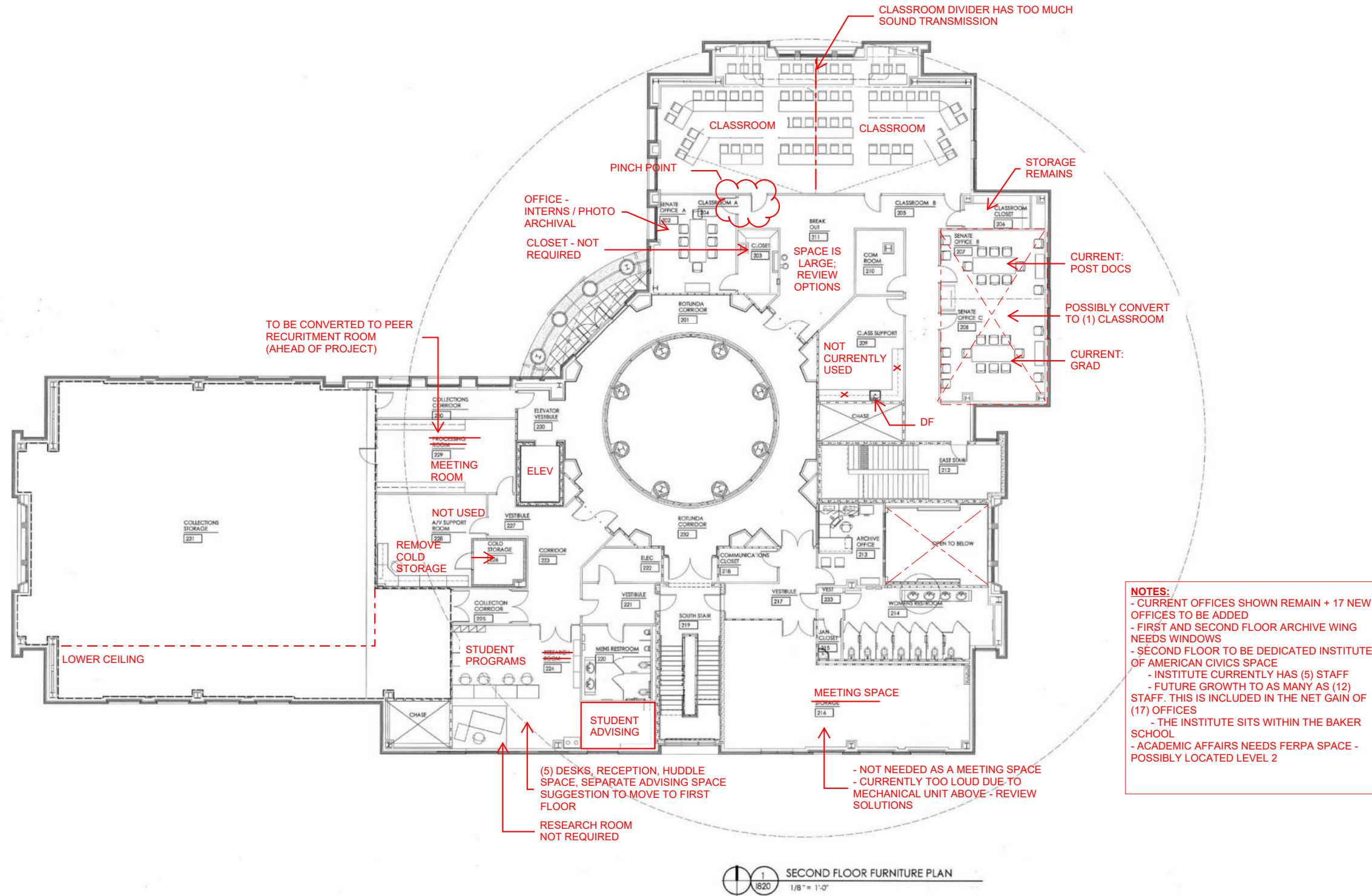
Exhibit A | Programming Meeting Summaries



UTK BAKER CENTER PROGRAMMING KICKOFF & SCOPE MEETING |
MARCH 28, 2024

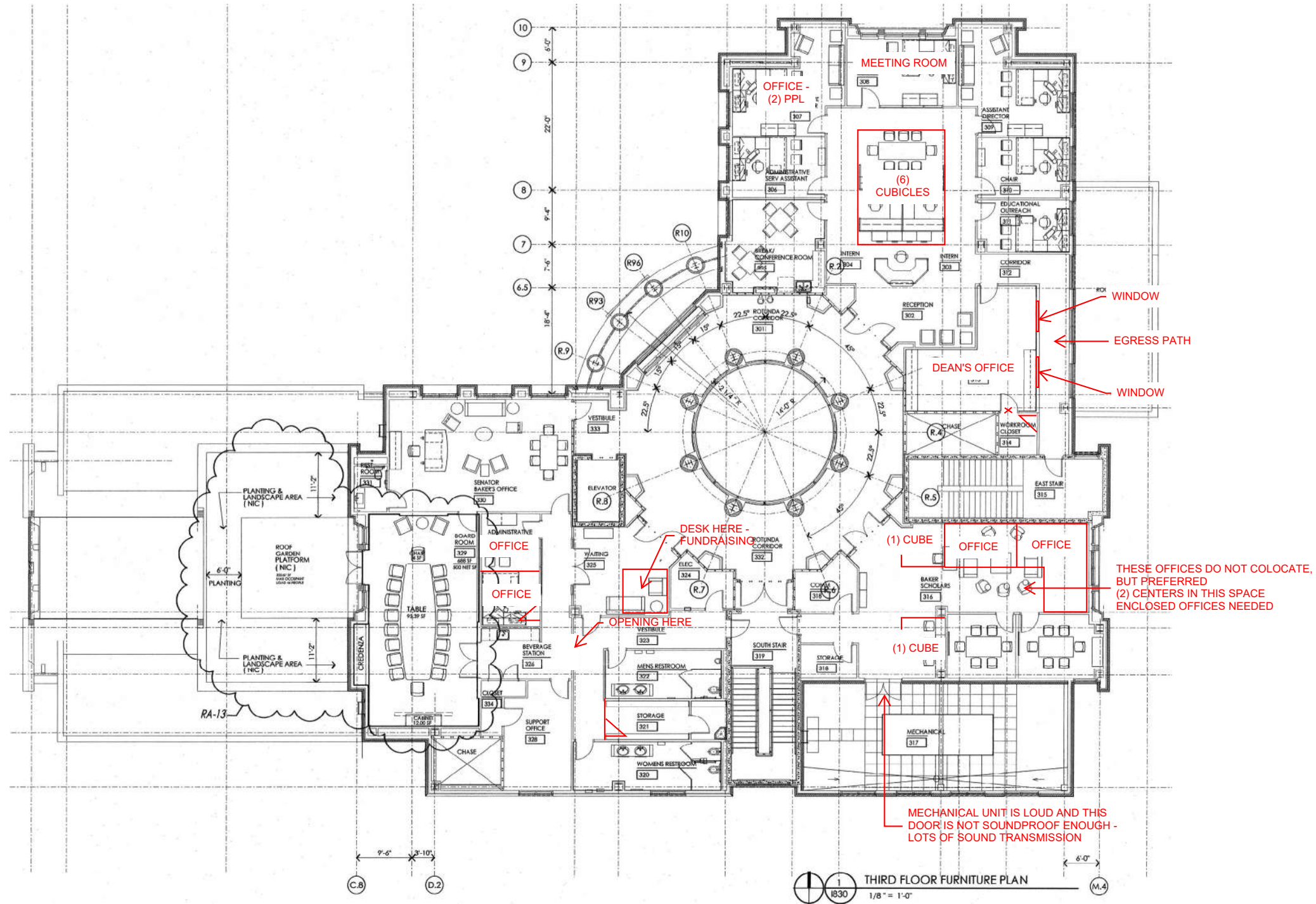
Appendix

Exhibit A | Programming Meeting Summaries



Appendix

Exhibit A | Programming Meeting Summaries



UTK BAKER CENTER PROGRAMMING KICKOFF & SCOPE MEETING | MARCH 28, 2024

Appendix

Exhibit A | Programming Meeting Summaries

PROGRAMMING KICKOFF MEETING | 05.16.2024

Summary

Meeting to recap March kickoff and discuss Phase 1 and Phase 2 scopes along with high level ROM estimate numbers.



Meeting Minutes 02

Meeting Date: May 16, 2024
Issue Date: May xx, 2024
Meeting Location: Virtual (Zoom)
Project Name: UT Knoxville Baker School Renovations Programming
UT Project No:
HED Project No: 2023-U0019-018
Prepared by: Katherine Kalant, HED
Meeting Subject: Programming Updates

ATTENDANCE:

Att	Initial	Name	Organization	Email
X	KK	Katherine Kalant	HED	kkalant@hed.design
	AM	Alli Mallory	HED	amallory@hed.design
X	JB	Jack Bullo	HED	jbullo@hed.design
X	LC	Lori Campbell	UT System	lcampbell@tennessee.edu
X	DS	Dan Smith	UTK – Facilities	dcs@utk.edu
X	CM	Christy Myers	Baker School	Cmyers48@utk.edu
X	M	Marianne Wanamaker	Baker School	wanamaker@utk.edu
	BC	Brewton Couch	Baker School	bbcouch@utk.edu

DISTRIBUTION: Attendees, Design Team

ATTACHMENTS: Meeting Presentation Document



Meeting Minutes 01

Project Name: UT Knoxville Baker Center Renovations Programming
HED Project No: 2023-U0019-018

ITEM	DESCRIPTION	RESP.	DUE DATE
01 GENERAL			
01.01	General discussion of Phase 1 scope <ul style="list-style-type: none"> - Team discussed Phase 1 scope and then the options for the remaining renovation scope for the building. - \$1.16M estimated project cost for renovation scope of 2,490 GSF of renovation per drawings shared today. - Noted that elements could be added to Phase 1 and be under the \$2M budget. - JB noted that Classroom space could most likely be included into the Phase 1 scope and be under the \$2M budget. 		
01.02	General discussion of Phase 2, full project scope: <ul style="list-style-type: none"> - DS noted that the full budget that has been discussed that includes both Phase 1 & 2 is \$6M, which does not align with the Phase 2 project costs presented. - MW noted that the campus will not support the Baker School capital projects until they have proven enrollment growth for the first few years; Baker School will be limited to their own financial contributions for the near-term - MW noted that windows into the first-floor faculty space are a need, not a want for the Phase 2 scope. 		
01.03	DS noted that programming will determine space requirements for Phase 1 and 2 and can help define scope to meet the \$6M budget		
01.04	The Baker School wants the faculty space on the first floor to mimic the proposed layout for the faculty space on the second floor, including windows. <ul style="list-style-type: none"> - DS noted that both spaces may be around \$2M combined 		
1.05	The Baker School was sent the proposal for programming by LC		
1.06	The Baker School is ready to start Phase 1 as soon as possible and would like to start programming – HED needs approval to proceed.		
02 ACTION ITEMS			
02.01	The Baker School is to review the programming proposal and provide approval to begin the effort.		
02.02			
02.03			

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Appendix

Exhibit A | Programming Meeting Summaries

PROGRAMMING KICKOFF MEETING | 06.11.2024

Summary

Meeting to discuss various classroom layouts for Phase 1 scope, Level 2. 1



Meeting Minutes 03

Meeting Date: June 11, 2024
Issue Date: June 18, 2024
Meeting Location: In Person / Zoom
Project Name: UT Knoxville Baker School Renovations Programming
UT Project No:
HED Project No: 2023-UU019-018
Prepared by: Alli Mallory, HED
Meeting Subject: Programming Design Meeting

ATTENDANCE:

Att	Initial	Name	Organization	Email
X	KK	Katherine Kalant	HED	kkalant@hed.design
X	AM	Alli Mallory	HED	amallory@hed.design
X	JB	Jack Bullo	HED	jbullo@hed.design
X	LC	Lori Campbell	UT System	lcampbell@tennessee.edu
X	DS	Dan Smith	UTK – Facilities	dcs@utk.edu
	CM	Christy Myers	Baker School	Cmyers48@utk.edu
X	BC	Brewton Couch	Baker School	bbcouch@utk.edu

DISTRIBUTION: Attendees, Design Team

ATTACHMENTS: Meeting Presentation Document

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Meeting Minutes 03

Project Name: **UT Knoxville Baker Center Renovations Programming**

HED Project No: **2023-U0019-018**

ITEM	DESCRIPTION	RESP.	DUE DATE
01 GENERAL			
01.01	Discussed Phase 1 scope: <ul style="list-style-type: none"> - Line of phase 1 to extend east, adjacent to the elevator in order to have (2) classrooms. - Add Exec. Assistant adjacent to entrances for offices. Does not require an individual office. - Provide windows at level 2 for offices. <ul style="list-style-type: none"> o Providing windows at level 1 will require reconfiguration of walls as the partitions between the offices intersect the future window location. - Classrooms – show (2) – one large and one smaller. <ul style="list-style-type: none"> o Discussed possible folding partition in larger classroom but noted that this may be cost prohibitive. - If the cost estimate is high, offices 6, 7, and 8 can be shelled. 		
01.02	Classroom Layouts: <ul style="list-style-type: none"> - Reviewed several layouts – Node tablet armchairs and moveable table with 2 seats (2'-6 x 5'-0"). - University if moving away from projection screens. Have recently installed 180-inch flat panel screen. - BC noted that she preferred the Flint Murchie layout (refer to attached). - Discussed that the programming document will include several different layouts as enrollment is still in flux and the school is still trying to understand what their future needs are. - Discussed teaching wall locations – along the long or short wall. This relates to how the class will be taught and the different configurations of tables/chairs. <ul style="list-style-type: none"> o Cost estimate to include power/data on the non-teaching wall in the event the classroom needs to be reconfigured in the future. - Team-based learning with technology attached will not be used. Round tables with technology will not work. - Flexibility needed in all scenarios. 		
01.03	Cost Estimate: <ul style="list-style-type: none"> - Estimate should not include deduct alternates. - The first alternate needs to be part of MACC. - Determined that the project would just avoid alternates in general. 		
01.04			
01.05			
01.06			
02 ACTION ITEMS			
02.01	Revise phase 1 plan to show office and classroom locations.		
02.02	Develop programming phase schedule.		
02.03			
02.04			
02.05			

Appendix

Exhibit A | Programming Meeting Summaries



1
OPTION



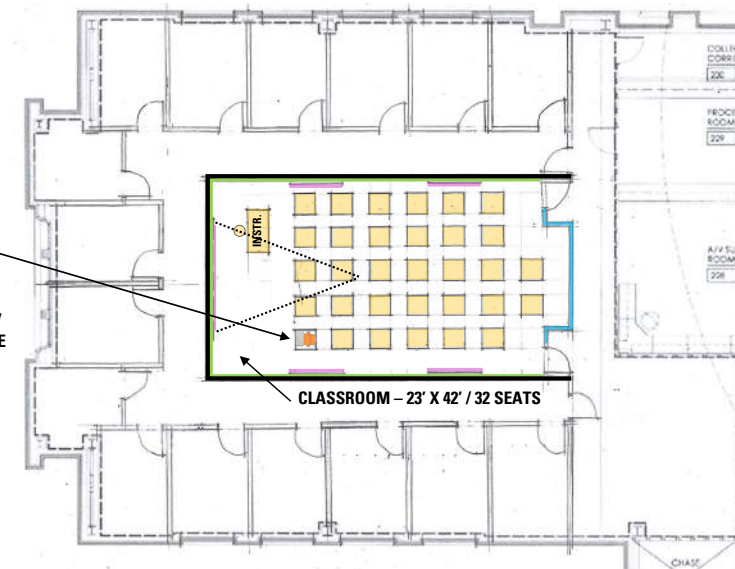
HED

Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024



MOBILE NODE CHAIR /
TABLE BY STEELCASE



1
OPTION

HED

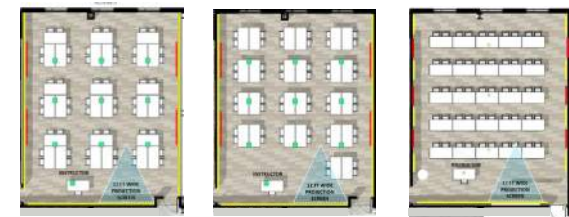
Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024



2
OPTION

- SHARED FLAT SCREEN TECHNOLOGY
- WHITEBOARD
- MOBILE TABLES & CHAIRS
- POWER & DATA PORTS IN FLOOR UNDER TABLES
- LOW PROFILE RAISED FLOOR FOR FUTURE TECHNOLOGY DISTRIBUTION FLEXIBILITY

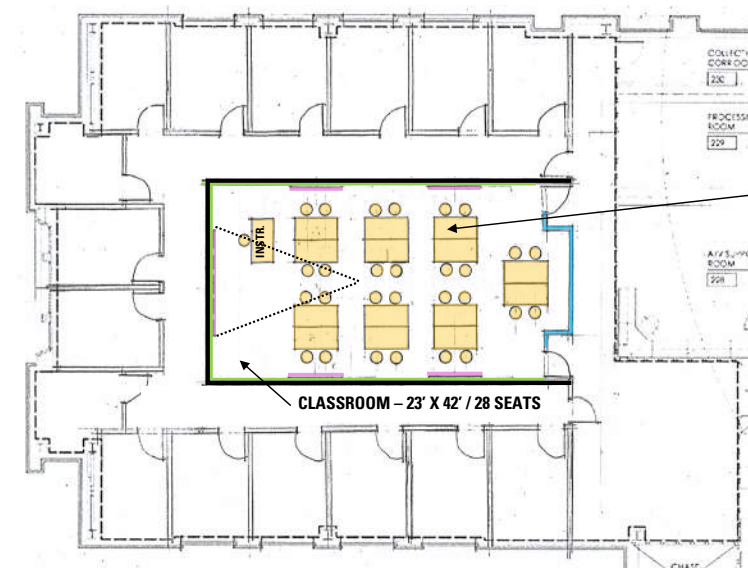


- WHITE BOARD
- FLAT SCREEN
- POWER & DATA IN FLOOR

HED

Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024



2a
OPTION

HED

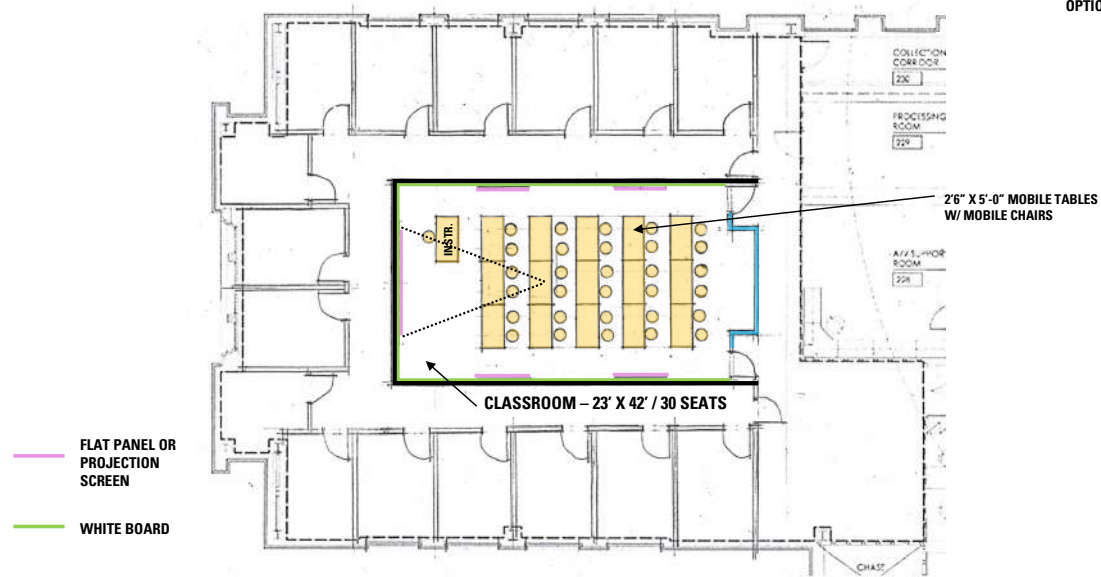
Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024

Appendix

Exhibit A | Programming Meeting Summaries

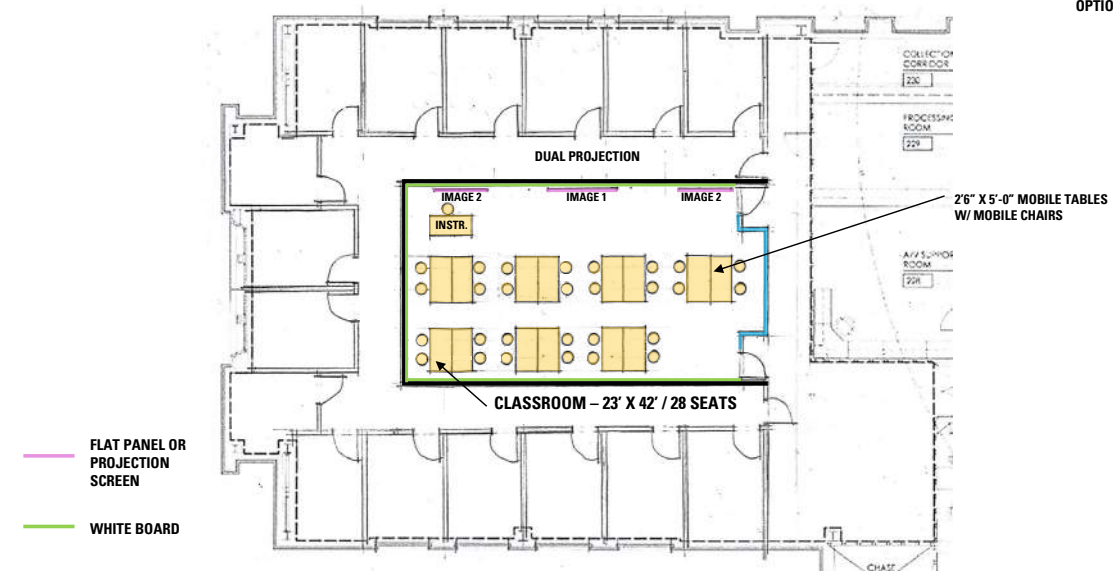
2b
OPTION



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University of Tennessee Knoxville

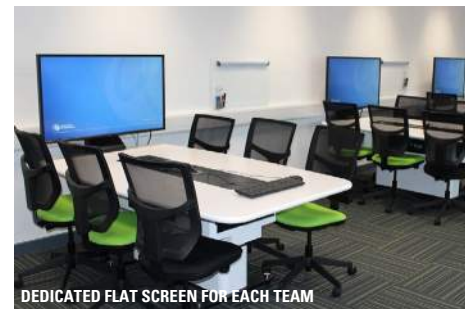
06 / 11 / 2024

3
OPTION



HED Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024

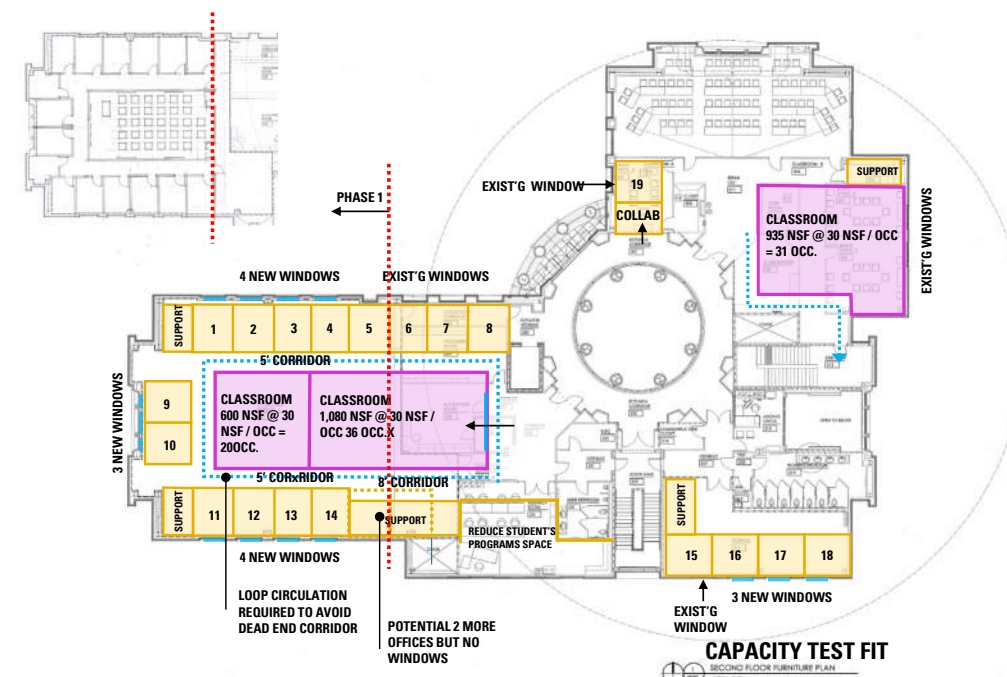


ALTERNATE SEATING CONCEPTS



HED Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024



HED Baker Center Renovation / Classroom Study
University of Tennessee Knoxville

06 / 11 / 2024

Appendix

Exhibit A | Programming Meeting Summaries

PROGRAMMING KICKOFF MEETING | 06.18.2024

Summary

Meeting to review updated floor plans and classroom layout options.



Meeting Minutes 04

Meeting Date: June 18, 2024
Issue Date: June 18, 2024
Meeting Location: Zoom
Project Name: UT Knoxville Baker School Renovations Programming
UT Project No:
HED Project No: 2023-UU019-018
Prepared by: Alli Mallory, HED
Meeting Subject: Programming Design Meeting

ATTENDANCE:

Att	Initial	Name	Organization	Email
X	KK	Katherine Kalant	HED	kkalant@hed.design
X	AM	Alli Mallory	HED	amallory@hed.design
X	JB	Jack Bullo	HED	jbullo@hed.design
X	LC	Lori Campbell	UT System	lcampbell@tennessee.edu
	DS	Dan Smith	UTK – Facilities	dcs@utk.edu
X	CM	Christy Myers	Baker School	Cmyers48@utk.edu
X	BC	Brewton Couch	Baker School	bbcouch@utk.edu
X	JD	Josh Dunn	Baker School	jdunn44@utk.edu

DISTRIBUTION: Attendees, Design Team

ATTACHMENTS: Meeting Presentation Document



Meeting Minutes 04

Project Name: **UT Knoxville Baker Center Renovations Programming**

HED Project No: **2023-U0019-018**

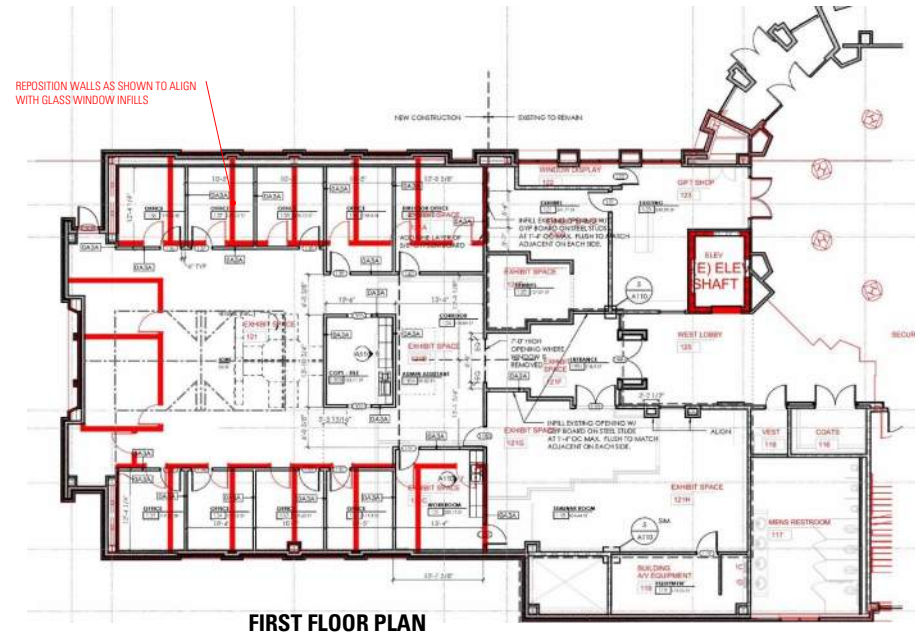
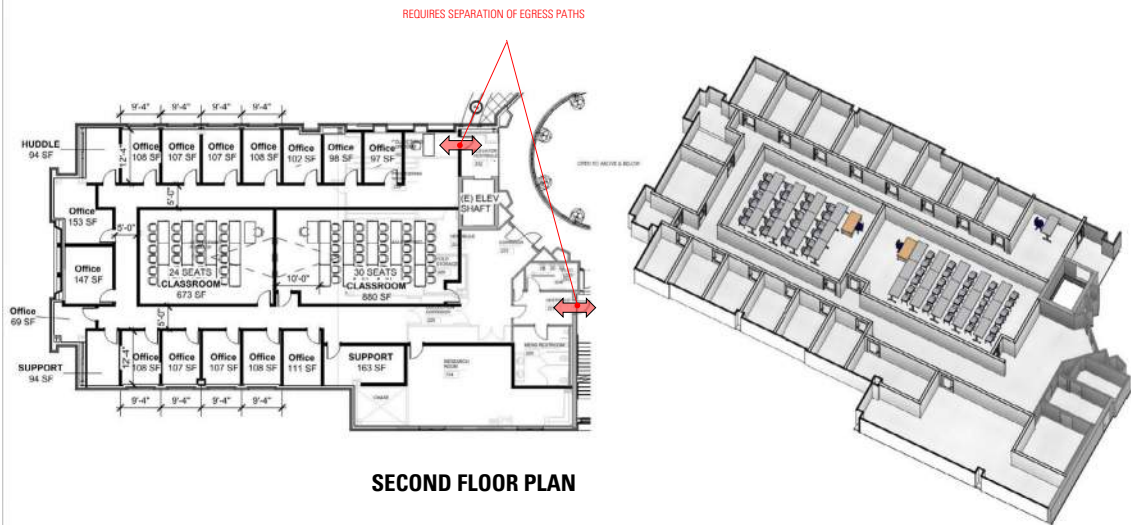
ITEM	DESCRIPTION	RESP.	DUE DATE
01 GENERAL			
01.01	Reviewed updated floor plan layout – classrooms and offices: <ul style="list-style-type: none"> - Two classrooms provided with 14 offices and various support spaces. - Any room over 750sf, requires two means of egress. - Classroom A – 24 seats - Classroom B – 30 seats - Reception location is ideal. 		
01.02	Could Research Room be a classroom? <ul style="list-style-type: none"> - Review is a 15-seat seminar room will work in this space. 		
01.03	Office Layout / Count: <ul style="list-style-type: none"> - More than 12 offices may be needed, so leave number of offices shown as is. 		
01.04	Classroom size – 50 seats would be ideal. <ul style="list-style-type: none"> - Freshman level classes most likely will be in 25-30 range. - Current configuration of seat counts does work, but study an option with more seats than 30 shown. 		
01.05	Operable partition in classrooms: <ul style="list-style-type: none"> - Concerns about price and sound transmission between classrooms. - HED to research products/options. - Will take away a wall for whiteboards and tech 		
01.06	Show power/data on both short and long wall. <ul style="list-style-type: none"> - Allows for different reconfigurations of the classroom. 		
01.07	First floor office reconfiguration and windows – <ul style="list-style-type: none"> - Include in cost estimate but will be removed if exceeds budget. 		
01.08			
02 ACTION ITEMS			
02.01	Update floor plan to show various seating configurations and seat counts for the classrooms. Show seating in Research Room.		
02.02	Discuss schedule at next meeting.		
02.03			
02.04			
02.05			

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Appendix

Exhibit A | Programming Meeting Summaries



HED  **Baker Center Renovation / Classroom Study**
University of Tennessee Knoxville 06 / 18 / 2024

HED  **Baker Center Renovation / Classroom Study**
University of Tennessee Knoxville 06 / 18 / 2024

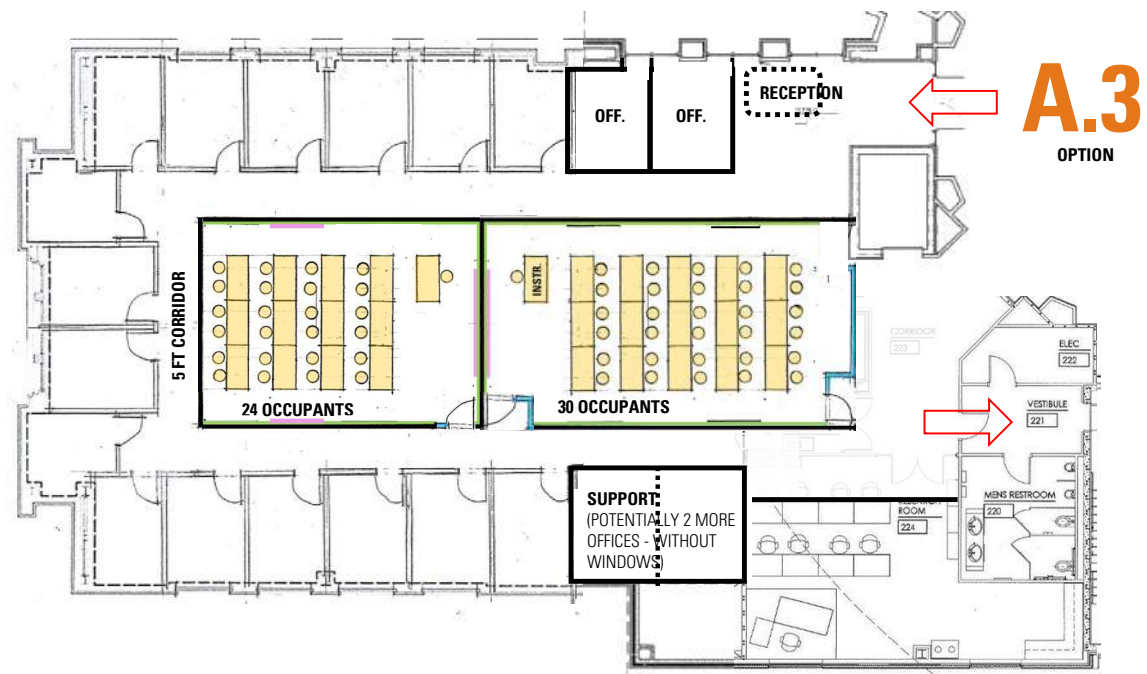


HED  **Baker Center Renovation / Classroom Study**
University of Tennessee Knoxville 06 / 11 / 2024

HED  **Baker Center Renovation / Classroom Study**
University of Tennessee Knoxville 06 / 11 / 2024

Appendix

Exhibit A | Programming Meeting Summaries



Appendix

Exhibit A | Programming Meeting Summaries

PROGRAMMING KICKOFF MEETING | 06.18.2024

Summary

Meeting to review updated floor plans.



Meeting Minutes 05

Meeting Date: June 25, 2024
Issue Date: June 25, 2024
Meeting Location: Zoom
Project Name: UT Knoxville Baker School Renovations Programming
UT Project No:
HED Project No: 2023-UU019-018
Prepared by: Alli Mallory, HED
Meeting Subject: Programming Design Meeting

ATTENDANCE:

Att	Initial	Name	Organization	Email
	KK	Katherine Kalant	HED	kkalant@hed.design
X	AM	Alli Mallory	HED	amallory@hed.design
	JB	Jack Bullo	HED	jbullo@hed.design
X	LC	Lori Campbell	UT System	lcampbell@tennessee.edu
X	DS	Dan Smith	UTK – Facilities	dcs@utk.edu
	CM	Christy Myers	Baker School	Cmyers48@utk.edu
X	BC	Brewton Couch	Baker School	bbcouch@utk.edu

DISTRIBUTION: Attendees, Design Team

ATTACHMENTS: Meeting Presentation Document



Meeting Minutes 05

Project Name: **UT Knoxville Baker School Renovations Programming**

HED Project No: **2023-U0019-018**

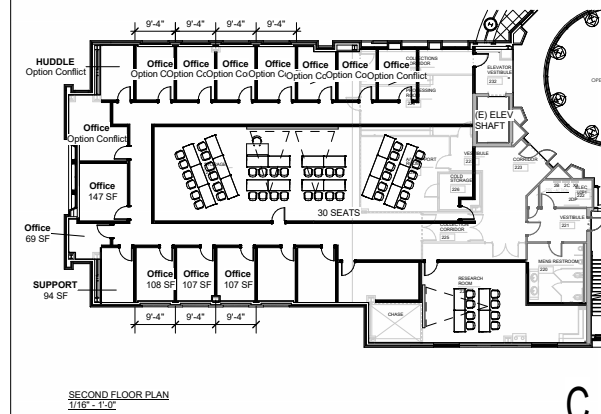
ITEM	DESCRIPTION	RESP.	DUE DATE
01 GENERAL			
01.01	Reviewed Options C, D, E, and F for 50-person classroom. Options also included seating in current Research Room. <ul style="list-style-type: none"> - Option C – Teaching wall on long wall, angled seating shown but is tight at clearances around the desks. Provides 30-seats, but possibly need to drop a few for better clearances. - Option D – Teaching wall on short wall. Provides 54-seats. Confirm clearances. - Option E – Preferred option. Allows for 50-person classroom and additional classroom at 20-24-seats. Clearances to be checked and updated. Partition between classes may shift west. <ul style="list-style-type: none"> o Shift storage to far-right corner. Remove wall at current Research Room and open up area for open office or lounge seating. o Confirm all code requirements. - Option F – Similar to Option D but rotates desks to have teaching wall at long wall. Provides 40-seats. 		
01.02	Determined that all options shall be shown, including options from last meeting. Option E is preferred in terms of outline of classroom space.		
01.03	Brewton noted that determining what is the max capacity based on square footage should be the goal. Indicate on plan the outside walls for the classroom space knowing that interior spaces will be able to be laid out for classrooms during the design phase.		
01.04	Schedule: <ul style="list-style-type: none"> - Meetings cancelled until July 23 meeting. - July 23 – Phase 1 Draft Book and cost estimate review. - July 30 – Baker School to provide comments. - August 6 – Final Phase 1 Book issued. - Phase 2 commences. 		
01.05			
01.06			
01.07			
01.08			
02 ACTION ITEMS			
02.01	HED to work on Phase 1 book (cost estimate, plans, narratives).		
02.02	Team to reconvene on July 23.		
02.03			
02.04			
02.05			

These minutes constitute HED's understanding of the discussion and conclusions reached at this meeting and will be entered into the Project Record and will be deemed to represent a true and accurate account of this meeting unless written comment to the contrary is received within 48 hours of issuance. If attachments noted above are not received, please inform us immediately.

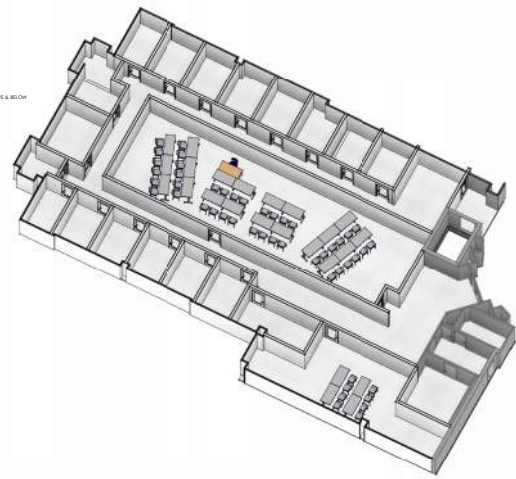
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Appendix

Exhibit A | Programming Meeting Summaries



C

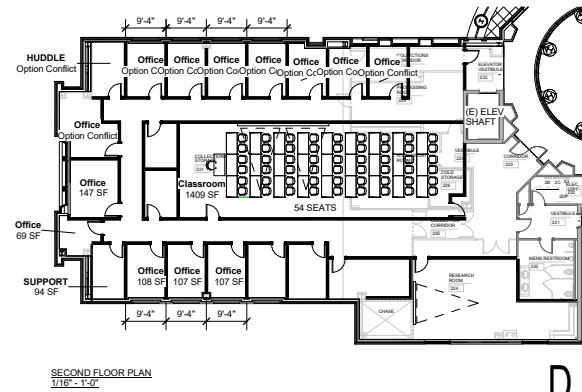


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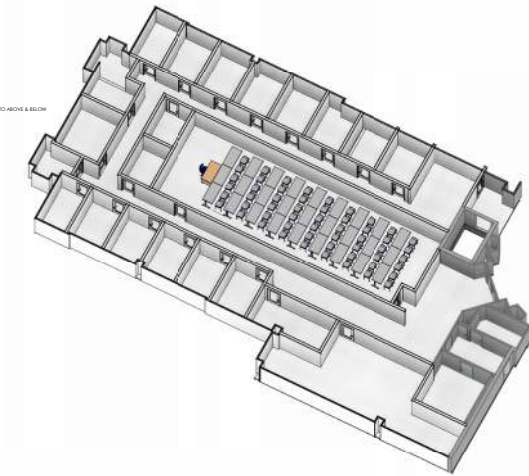
Classroom Study

LEVEL 2

HED



D

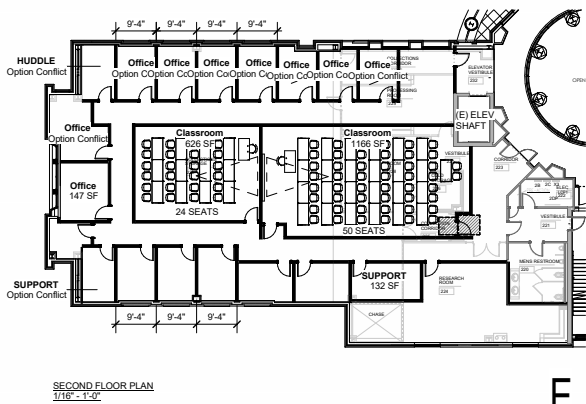


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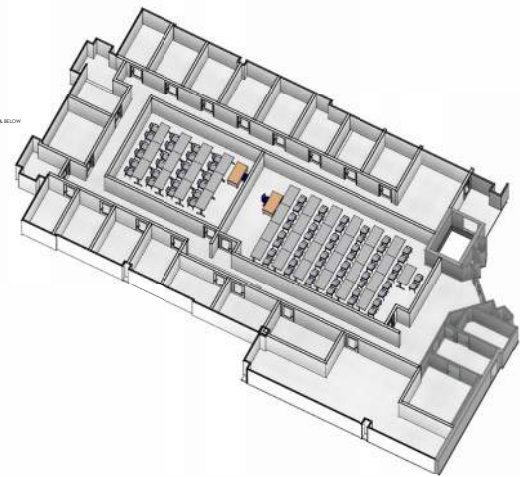
Classroom Study

LEVEL 2

HED



E

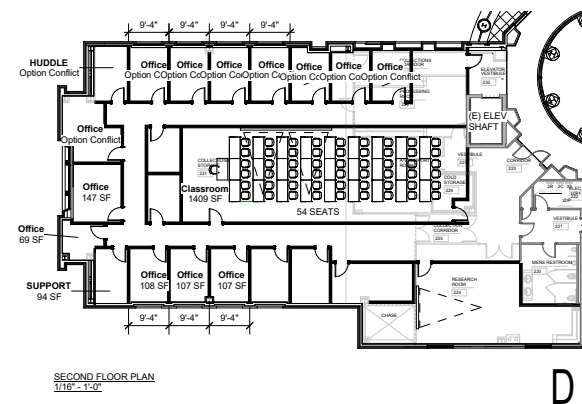


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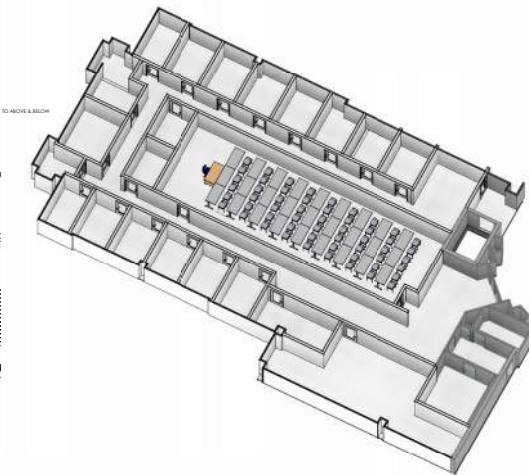
Classroom Study

LEVEL 2

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D



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Classroom Study

LEVEL 2

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