UMBC

Student Services Building

A new facility to consolidate dispersed student services

Part II Facilities Program
Project Design Criteria

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University System of Maryland

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Section 1 Introduction

Project Overview

1.01 The Project

The proposed 110,000 SF **Student Services Building** project will create a central hub for the myriad of student services needed for students to thrive at UMBC; improving the student experience and promoting academic and post-graduate success by consolidating and streamlining the delivery of critical student services. By addressing urgent space needs and centering the student experience, the SSB will be a touchstone for UMBC's growing legacy of Inclusive Excellence. To ensure that all UMBC students are exposed to critical services and experiences, the Student Services Building project will:

- consolidate facilities that support academic success, like advising and course enrollment, supporting other programs and tutoring facilities located nearby;
- consolidate facilities that support students on new pathways, like transfer students, degree completers, veterans, international students, and other non-traditional student groups;
- consolidate facilities that enhance access and student affordability, like tuition remission, financial aid, and scholarships;
- consolidate facilities that provide support, through advocacy and similar initiatives that promote well-being;
- consolidate facilities that support inclusion and accommodation, to ensure all students with physical and neural challenges can participate and thrive in a challenging academic environment; and,
- consolidate facilities that support return on investment, like career preparation, job readiness and placement, innovation and entrepreneurship, mentoring, and undergraduate research opportunities.

The project will transform the heart of the campus by improving pedestrian pathways between buildings, safety through improved lighting, informal learning and study spaces outside the building, and improved access to visitor parking in the existing Commons Drive Garage.

The Student Services Building (SSB) will also be an unmistakable first stop on campus, welcoming prospective students and their families to the campus, as well as other visitors, returning alumni, and newly enrolled undergraduate, graduate, and international students. The project will expand the capacity of campus tours to welcome visitors and prospective students to campus, while better curating the visitor experience, balancing personal attention with new technologies that personalize the first-time experience to campus.

1.02 University of Maryland, Baltimore County (UMBC)

Founded in 1966, UMBC is one of twelve institutions within the University System of Maryland, alongside three regional higher education centers and one system office. Located just 20 minutes from downtown Baltimore and within commuting distance of Washington DC and Annapolis, the campus is positioned in one of the nation's most vibrant hubs for research, talent, and innovation.

UMBC is nationally recognized for its academic excellence and diversity, playing a critical role in Maryland's economic and social development. The university addresses the state's educational and workforce needs by cultivating talent that drives innovation and economic growth. A majority of UMBC's alumni live and work in Maryland, contributing to industries across the state and enriching local communities.

Notably, UMBC is the nation's #1 producer of Black undergraduates who advance to M.D./Ph.D. programs, a distinction that underscores its commitment to inclusive education and leadership development. By producing graduates who excel in fields like science and technology, UMBC strengthens Maryland's workforce pipeline and fosters equitable opportunities for underserved communities.

The new Student Services Building (SSB) will further this mission by enhancing access to critical student services, helping more students succeed and graduate on time. By consolidating facilities, the SSB will create a stronger foundation for student success, increasing the number of graduates who are prepared to drive innovation and contribute to Maryland's continued growth.

1.03 University Mission and Vision

UMBC is a dynamic public research university integrating teaching, research and service to benefit the citizens of Maryland. As an Honors University, the campus offers academically talented students a strong undergraduate liberal arts foundation that prepares them for graduate and professional study, entry into the workforce, and community service and leadership.

UMBC emphasizes science, engineering, information technology, human services and public policy at the graduate level. UMBC contributes to the economic development of the State and the region through entrepreneurial initiatives, workforce training, K-16 partnerships, and technology commercialization in collaboration with public agencies and the corporate community. UMBC is dedicated to cultural and ethnic diversity, social responsibility and lifelong learning.

Our UMBC community redefines excellence in higher education through an inclusive culture that connects innovative teaching and learning, research across disciplines, and civic engagement. We will advance knowledge, economic prosperity, and social justice by welcoming and inspiring inquisitive minds from all backgrounds.

Figure 1.1 Aerial View of the UMBC Campus

1.04 Purpose of the Student Services Building Facility Program

The Student Services Building (SSB) Facility Program defines the environmental, spatial, and physical characteristics of the proposed building project. The architectural, engineering and planning objectives and detailed space allocation requirements are intended to guide the selected Architect/Engineer consultant (design team) commissioned by UMBC to prepare plans and specifications required for contract bidding and construction of the new facility.

This Facility Program:

- Establishes the site boundaries of the project
- Delineates architectural, engineering, and planning objectives
- Provides the basis for a detailed cost estimate for use in establishing a budget for the project
- Details the required facility space allocations, based on functional requirements
- Describes the functional use, requirements, and general performance criteria and standards of the building and site
- Depicts the desired functional relationships between spaces
- Provides the university with a planning tool for developing project familiarity and assessing priorities

The project site is located at the heart of the UMBC main campus (see Figure 1.2). The proposed project site is not within the Chesapeake Bay Critical Area, the 100-year floodplain, nor will it impact any known historical and/or cultural resources or involve clearing of areas defined as forested by the State of Maryland.

Figure 1.2 The UMBC Campus and Location of the Student Services Building

Section 2 Scope

Project and Program Scope

2.01 Project Goals

The proposed Student Services Building project creates a centralized hub for the wide range of student services needed for students to thrive at UMBC: improving the student experience and promoting academic and post-graduate success by consolidating and streamlining the delivery of critical student services. The Student Services Building program incorporates robust campus input to address these major campus goals:

- Provide a first stop concierge desk to provide easy access to answers and to assist students in finding resolutions to their issues. Responsibility of staffing the desk will fall to both Academic Affairs and Student Affairs units, creating a collaborative environment to inform, assist, and if necessary, escort or direct students to additional staff in the building with specialized training.
- Enhance student success and improve retention of students by consolidating facilities that support academic success, like transition programs, advising, and course enrollment.
- Ensure that all students have an opportunity to benefit from a university experience, by co-locating facilities for service units that ensure inclusion and provide accommodations as well as supporting units that provide financial aid and academic scholarships.
- Create a welcoming place to greet prospective students and their families, support other visitors to campus, provide orientation, and express UMBC's story and benefits. Expand the capacity of Enrollment Management to welcome visitors and prospective students to campus and to provide tours, and better curate the visitor experience, balancing personal attention with new technologies that personalize the first-time experience to campus.
- Emphasize return on investment by co-locating facilities that support career preparation, job readiness and placement, innovation and entrepreneurship, and undergraduate research opportunities. Provide alumni ways to give back to the campus by mentoring students, developing talent, and hiring other Retrievers into Maryland's workforce.
- Support international students and programs with facilities that provide student support, expand a greater understanding of the world, and help the university foster and develop international partnerships.
- Ensure that the building is vibrant, a desirable destination, and used beyond the timeframe that service offices are open. These facilities include student scheduled meeting rooms, student lounges, and a student-run café to serve as an experiential learning platform.

2.02 Location on the UMBC Campus

The Student Services Building is sited in the heart of the UMBC campus. This core area of the campus, referred to as the Student Success District, has been under development for thirty years, since the completion of the Albin O. Kuhn Library in 1995. The Student Success District is critical to the campus as it bridges between the main academic zones of the campus and the residential zone to the north.

The project will complement adjoining facilities in the Albin O. Kuhn Library and Gallery, The Commons (UMBC's student union), and the newly constructed Center for Well-being. The Library is characterized as a *Home for Learning*, The Commons as a *Hub of Student Engagement*, and the Center for Well-being a *Haven of Care for Students' Mental, Physical, and Spiritual Health*. The Student Services Building complements these other buildings, serving students as a *Pillar of Support for their Academic Trajectory*.

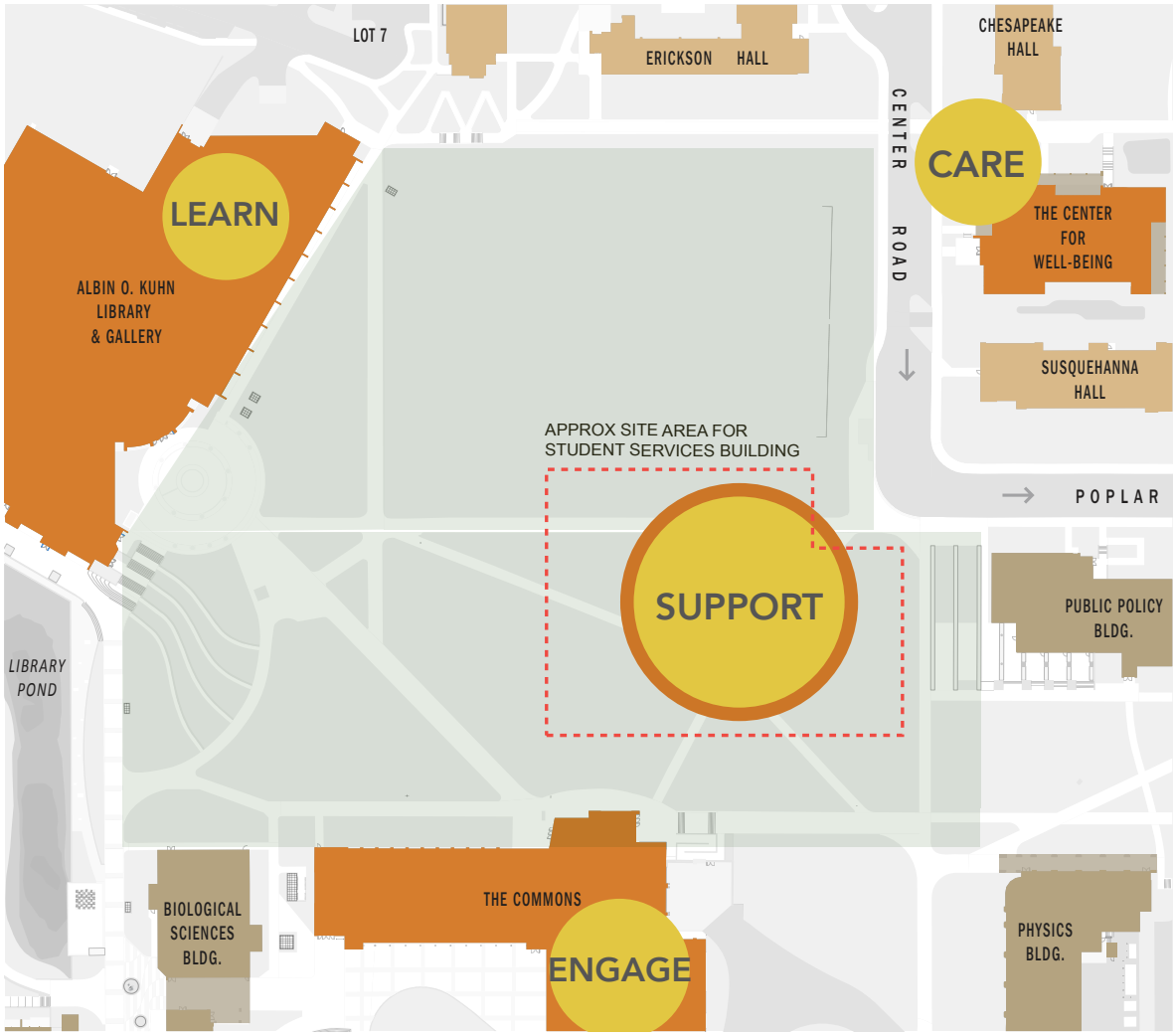


Figure 2.1 Site for the Student Services Building within the Student Success District

2.03 The Project Beyond the Building

The location of the building site along with the connecting outdoor spaces and paths are key to the success of the project. Both the siting and the student-focused activities within creates an opportunity for an iconic building and a new gateway to the campus for prospective students and their families, international students for orientation, returning alumni, and other visitors.

The project is more than the building. The full project (See Figure 2.2) comprises:

A. The Central Green – The project will transform the open space to the west of the building into an iconic green space that creates informal community on campus. The space is envisioned to hold pockets of gathering space for students, and may incorporate public art, outdoor dining terraces, opportunities for outdoor teaching or creativity, as well as environmental features and rain gardens.

B. Informal Recreation Park – The project will address the student-focused informal outdoor area to the north of the site, currently called Erickson Field. This area should be re-graded to work with the siting of the SSB and afford additional areas for informal student gathering or recreation. This area is envisioned to be flexible and balance between student recreation and programmable events.

C. Vehicular and bus drop-off zone – The project will create an area that will accommodate loading and unloading of buses and vehicles.

D. The Public Policy Building plaza and the Public Policy/Physics Building quadrangle – The project will border an existing plaza and quadrangle, and the design should provide for improved pedestrian circulation between the SSB and the existing academic buildings and parking lots to the east.

E. Processional path to the Commons Drive Garage - The project is expected to reinforce existing pedestrian paths to the garage and may widen sidewalks and make landscaping improvements on this route. The short walk from the garage to the SSB will be a great improvement over the long walk, currently experienced by visitors, from the Administration Drive Garage to Undergraduate Admissions in the Library.

F. The Commons Drive Garage - The Student Services Building will rely on the availability of parking in the Commons Drive Garage, a four-story parking facility accessed from Commons Drive. The garage will be refocused from commuter parking to visitor parking supporting Black and Gold Tours and other recruitment and visitor services. In addition, the garage may serve to assist the project by providing electrical power via photovoltaics on the upper floor.

The design team is responsible for the design of all areas within the project site limit boundaries, including those directly impacted by the building footprint, utility, drainage infrastructure, parking and access, and landscape and open space improvements required by the project. Imaginative and responsible solutions should be developed to form a cohesive, integrated, economical, contextual

and aesthetic design solution that is consistent with and advances the goals and objectives of the 2018 Facilities Master Plan and accomplishes the goals and requirements of the project.

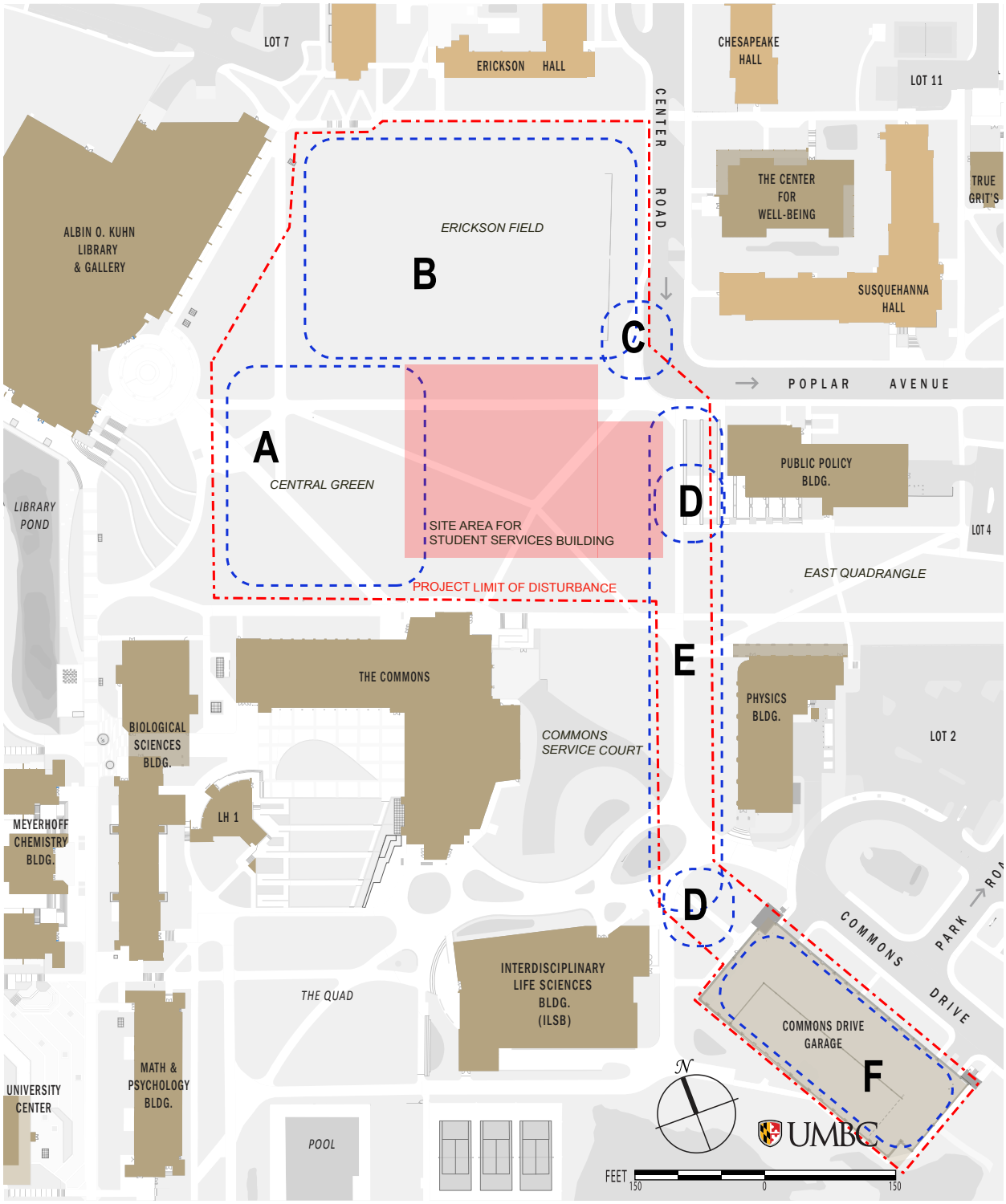


Figure 2.2 Outdoor Areas Impacted by the Project

2.04 Program Summary

The SSB will serve as a centralized hub transforming the heart of campus by consolidating key services, in turn improving the student experience and promoting academic and post-graduate success for Maryland's future workforce. The inclusion of student lounges, meeting rooms, and a student-run café will ensure that the space remains lively and functional beyond regular service hours, offering a dynamic environment for student collaboration and learning.

The project will also significantly improve outdoor spaces with thoughtfully designed pedestrian pathways, recreational areas, and green spaces that connect the building to other campus facilities. These outdoor areas will provide students with informal learning and gathering spaces, creating a sense of community and enhancing the overall campus experience.

The building will represent UMBC's first major step in addressing Maryland's ambitious energy mandate through the implementation of an accordingly ambitious energy target. This facet of the building design will impact many design parameters, especially relating to major systems. Consequently, the building will offer students unique learning and engagement opportunities, reinforcing UMBC's mission to foster innovative teaching, learning, and environmental stewardship.

The Student Services Building brings together nearly all services that current students need to thrive at UMBC. Spaces supporting student services total over 35,000 NASF (60% of the total program). Services include:

- Academic advocacy and advising
- Academic transition programs for first and second year students
- Mentorship and entrepreneurship
- Enrollment and Recruitment
- Financial aid and scholarship management
- Transcripts and records
- Financial literacy and wellness promotion
- Campus accounts and campus ID card
- Career planning and employment opportunities
- Language assistance for non-native speakers
- International student support and guidance
- Accommodation for students with disabilities and challenges
- Research opportunities for undergraduate students

Besides supporting current students, the Student Services Building will serve as a first stop on campus for visitors, especially prospective students and their families, with services to assist in

providing interactive information and campus tours of the campus. Alumni will also be welcomed with facilities that continue opportunities for engagement and mentorship. Spaces supporting alumni, recruitment, enrollment, and campus tours total an additional 10,000 NASF (17%).

In addition, the building will provide co-curricular meeting spaces that will be available to students for collaboration long after the service offices are closed. Spaces including informal, open gathering spaces, a café with seating, and student collaborative meeting rooms total 13,000 NASF (22%).

Assignable spaces supporting the management of the building total roughly 500 NASF (1%).

Section 3 Existing Conditions

Overview and Existing Site Conditions

The purpose of this section is to provide an overview of existing site conditions and constraints, identify the site challenges and opportunities, and outline the project requirements. The information provided in this section is intended to supplement the design team's own site evaluation.

3.01 Project Boundaries

The proposed project site boundary, as illustrated in Figure 3.1, defines the area projected to accommodate the building footprint, as well as associated roadways, vehicle drop-off zones, service areas, pedestrian pathways, landscaping, site amenities, and necessary utility upgrades to meet program requirements. This boundary includes the existing Commons Drive Garage as one candidate remote project area that could be suitable for a photovoltaic (PV) array. It also includes Erickson Field for its potential as a partial staging area and as a potential bore field site, in the event the design team identifies ground source heat exchange as a renewable energy strategy. The boundary is preliminary, and the final impacts on the campus may necessitate adjustments based on the building and site design.

Site planning, along with the architectural and engineering design of the building, will be part of the scope of work to be carried out by the selected design team. The design team will be responsible for verifying the program requirements for the Student Services Building and assessing the site and construction needs to determine the final site boundary area required to fulfill the project goals.

3.02 Existing Surface Features

The site comprises an open grassy field crisscrossed by numerous concrete sidewalks. It is bordered by the Library to the west, The Commons to the south, and Erickson Hall to the north. The nearest road access is from Center Road.

The site slopes and drains from the west to the east. The site slopes approximately 16 feet from the northwest corner to its southeast corner. Existing topographical map and surface feature conditions are documented in Figure 3.1.

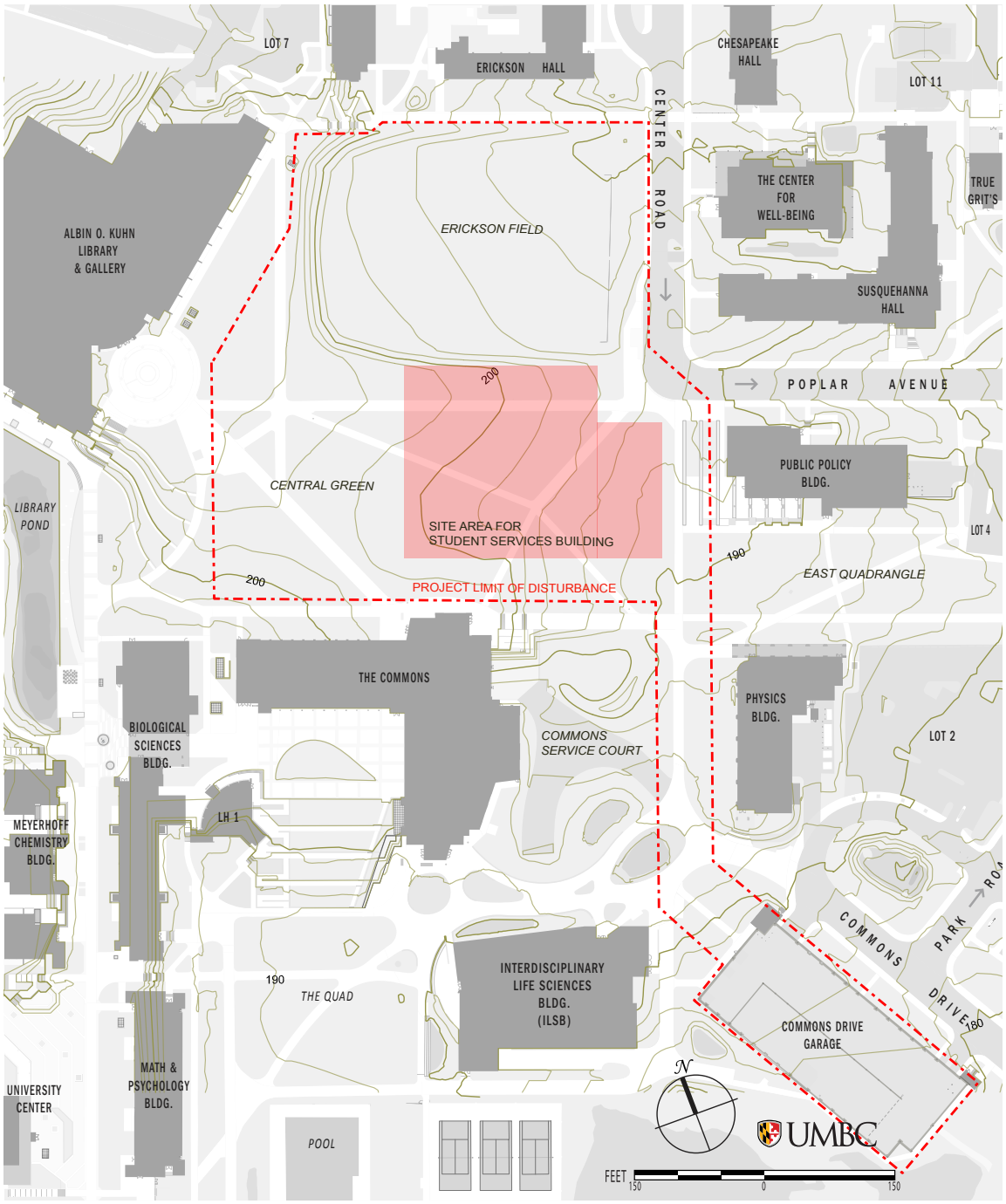


Figure 3.1 The Boundary of Level of Disturbance for the project and building site overlayed on the topography

3.03 Existing Pedestrian Circulation

The proposed location for the Student Services Building is situated at a busy intersection of high-traffic pedestrian routes. It is also the point where the paths of most on-campus residents and commuting students converge.

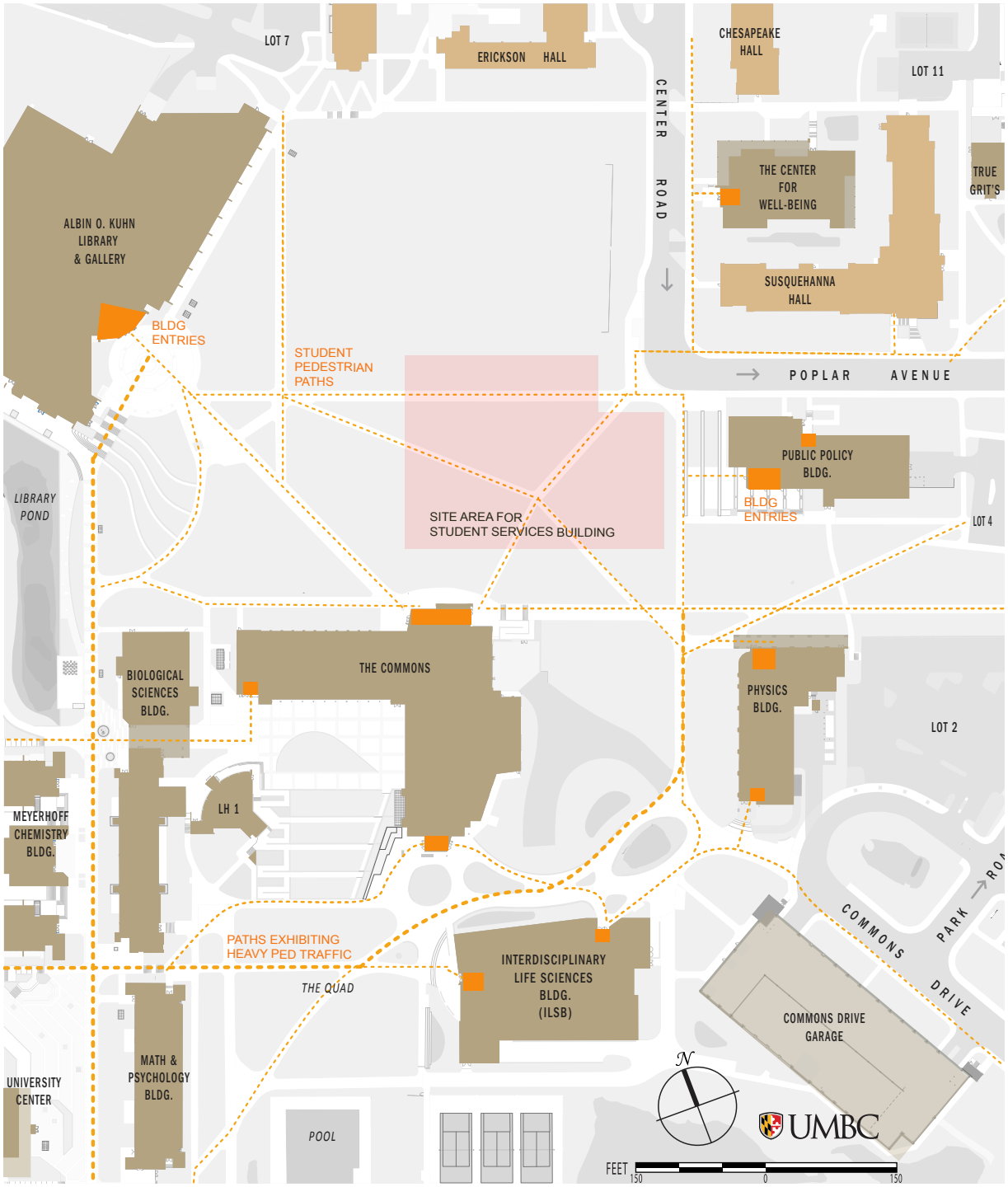


Figure 3.2 Existing Pedestrian Paths and Building Entrances

3.04 Existing Utilities

Figures 3.3-3.9 illustrate existing utilities that serve or traverse the project site area. The university will provide the design team with the latest AutoCAD mapping of the site area, including topography and site utilities. The design team is required to verify the location of all existing utilities.

Utility Tunnel

The original master plan of the campus incorporated a network of fully accessible utility tunnels running between and connecting the major buildings on campus. These tunnels allow for the installation, upgrade and maintenance of utility piping, electrical cables, and communication cables, radiating out from the campus Central Utility Plant.

A branch of the utility tunnel system, enclosing hot water and chilled water piping, an electrical feeder, and fiber optic cables, currently runs to the north of The Commons to connect to the Physics Building and the Public Policy Building. This tunnel may allow for connectivity to piping, power, and data via a spur to the project site.

High Temperature Hot Water (HTHW)

The existing hot water generation system located within the Central Plant consists of four 50,000 BTU HTHW gas-fired boilers with a total capacity of 175,000 MBH. The firm capacity of the HTHW system is 125,000 MBH. HTHW piping runs through the utility tunnel.

Chilled Water

The existing chilled water generation of the Central Plant is comprised of two electric 2,000 ton chillers and four 1,000 ton chillers. The campus also has a 1.6 million gallon storage tank for chilled water storage. Chilled water lines serve campus academic buildings via the existing utility tunnel system.

Domestic Water and Fire Protection

There is an existing 10” water line that runs north-south to the east of the project site. This water line branches off to serve the Library with 8” pipe, the Public Policy Building with 6” service, and several residential communities to the north and east.

There is an existing fire hydrant at the northwest corner of the Public Policy Building served by a spur from the 10” water pipe.

Sanitary Sewer

An 8” diameter sanitary line traverses the project site from the Library and connects to a 12” sanitary line flowing south and picking up the Physics Building and the Public Policy Building. These flows travel south and east under the Commons Drive Garage toward a 15” Baltimore County sanitary main within the ROW of Hilltop Circle.

Storm Sewer

The site currently drains toward the south and east. The current stormwater system to the east of the site carries flows in a 24" pipe toward new stormwater features to the north of the Interdisciplinary Life Sciences Building. These connect to a 78" reinforced concrete pipe (RCP) that originates from the Library Pond. This pipe, modified and reinforced by the ILSB project, outfalls to a creek to the south of Commons Drive Garage and under Hilltop Circle, flowing east to a branch of the Herring Run.

Natural Gas

A 3" high-pressure gas line, maintained by Baltimore Gas and Electric, runs along the north of The Commons. This branch connects and serves the Interdisciplinary Life Sciences Building and the Physics Building.

Power and Site Electric Service

Most of the campus receives its electricity from two (2) 35.4kV shared utility feeders, which each feed half of the campus. The feeders enter a customer-owned substation yard containing two (2) 35.4kV – 13.2kV, which in turn feed the 13.2kV campus loop that serves most of the buildings. Large equipment in the CUP, such as the chillers, are fed by a 4.16kV system provided by two (2) 35.4kV – 4.16kV transformers located in the substation yard. The remainder of the campus have their own electrical services. There is currently no on-site electrical generation.

Medium-voltage electric service runs within the utility tunnel to the south of the project site, proving power to the Public Policy and Physics Buildings. Common voltage electric conduits distribute power to existing site lighting and other site features.

Data and Telecommunications

The fiber optic Main Distribution Frame (MDF) for the campus are the Engineering and the Performing Arts and Humanities Building. Using the existing tunnel system and pathways these MDFs provide a redundant fiber ring to downstream buildings and the east of campus.

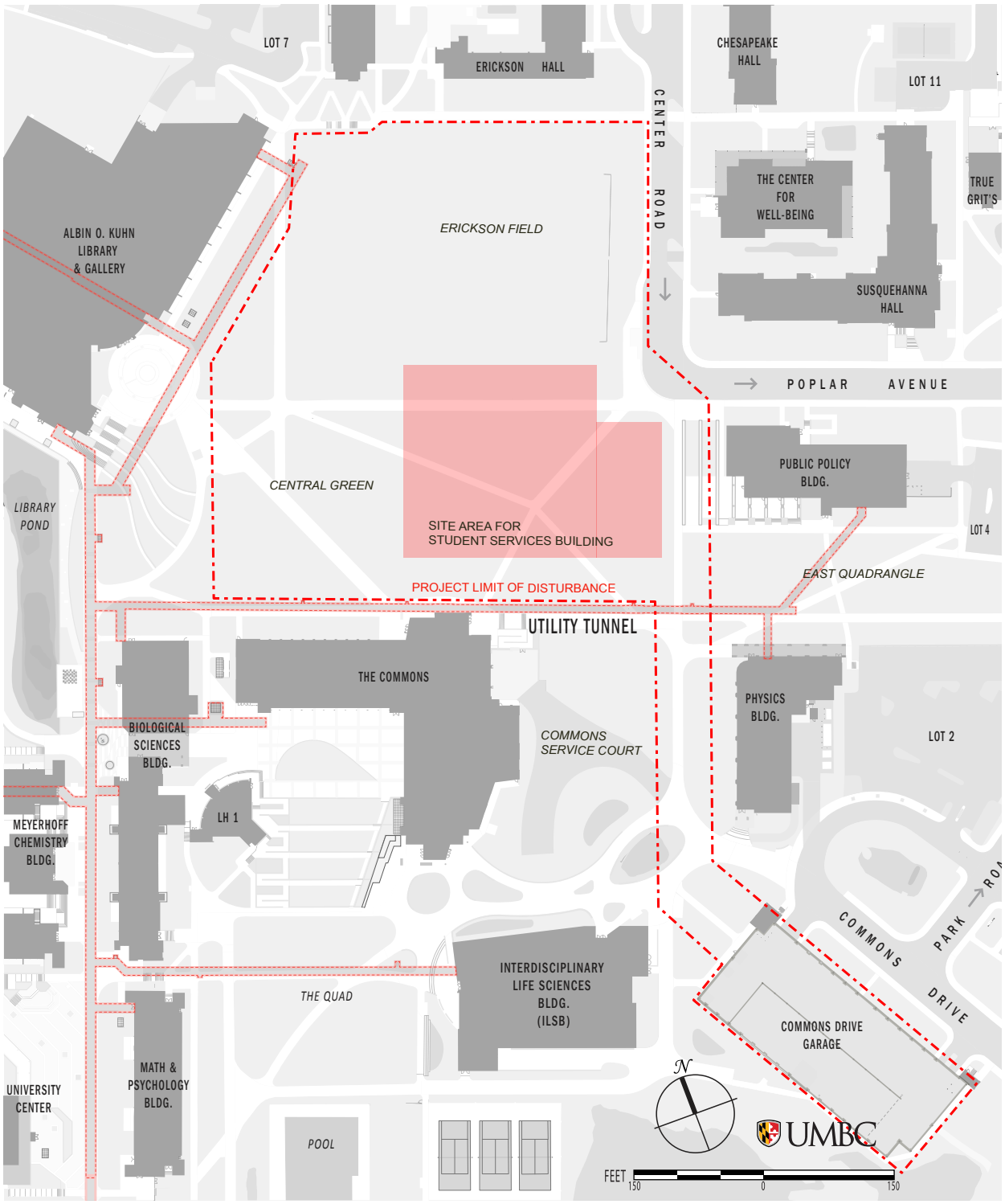


Figure 3.3 Existing Utility Tunnel and Location of the Chilled and HTHW Piping

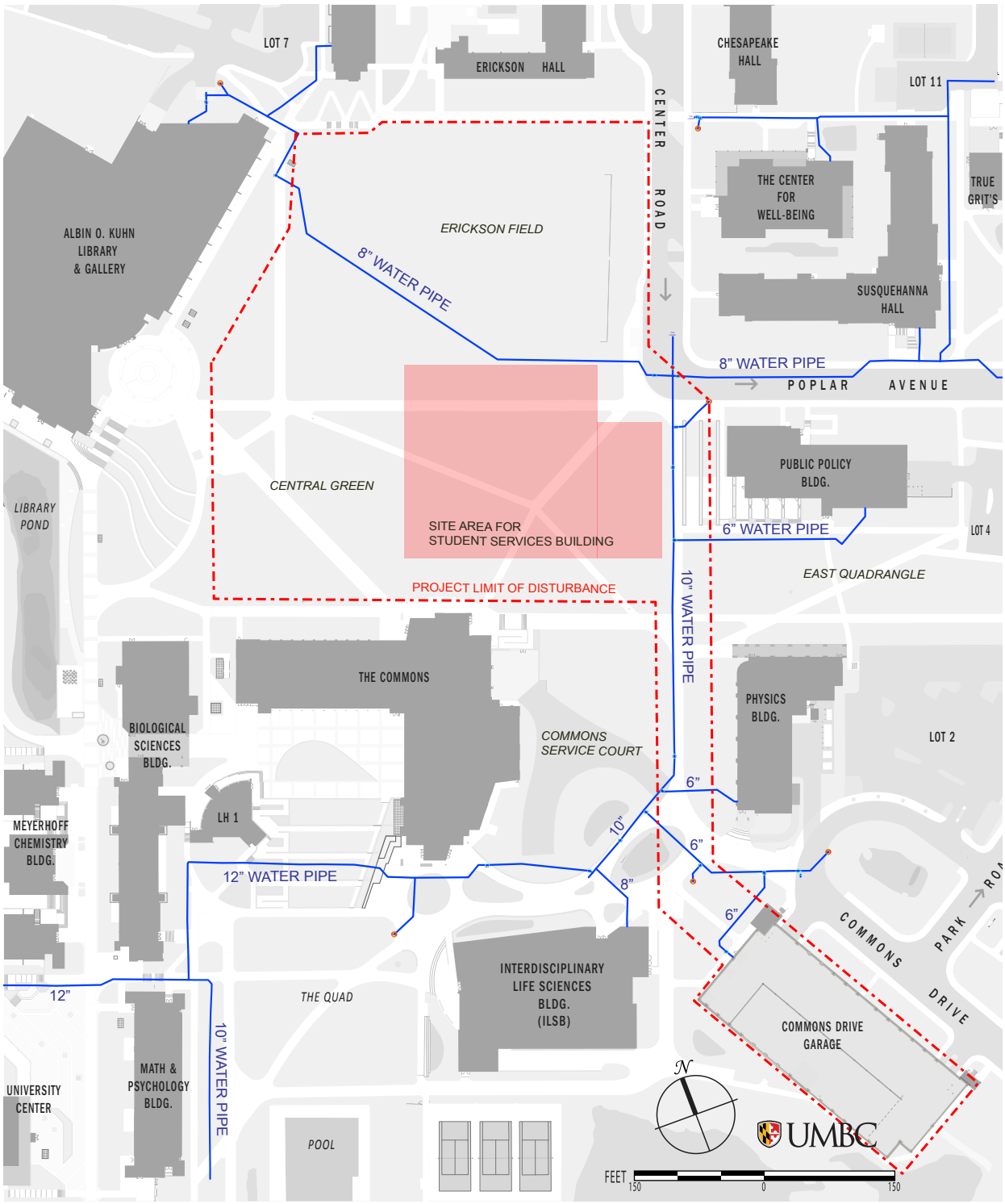


Figure 3.4 Existing Domestic Water Piping

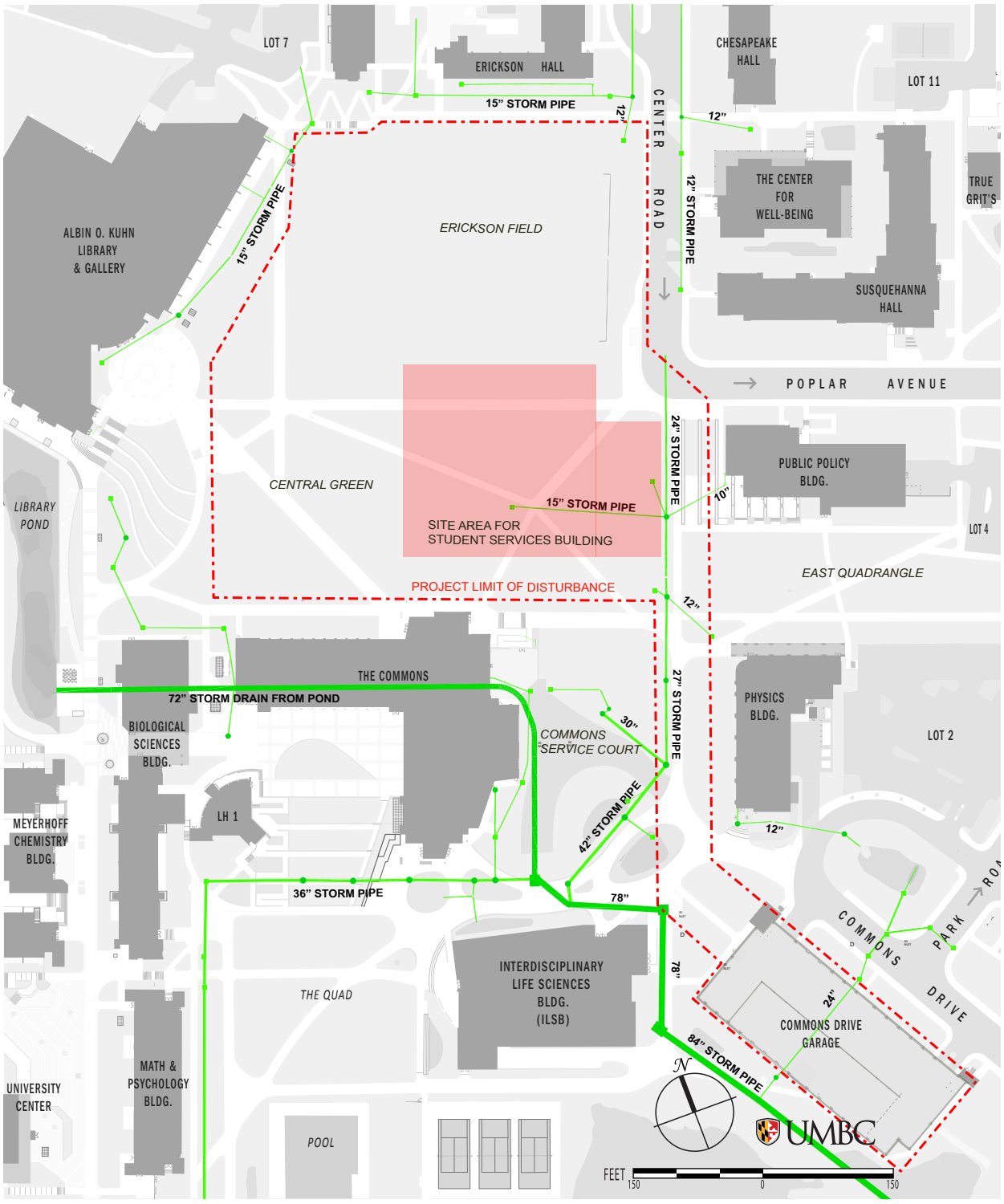


Figure 3.5 Existing Stormwater Piping and Inlets

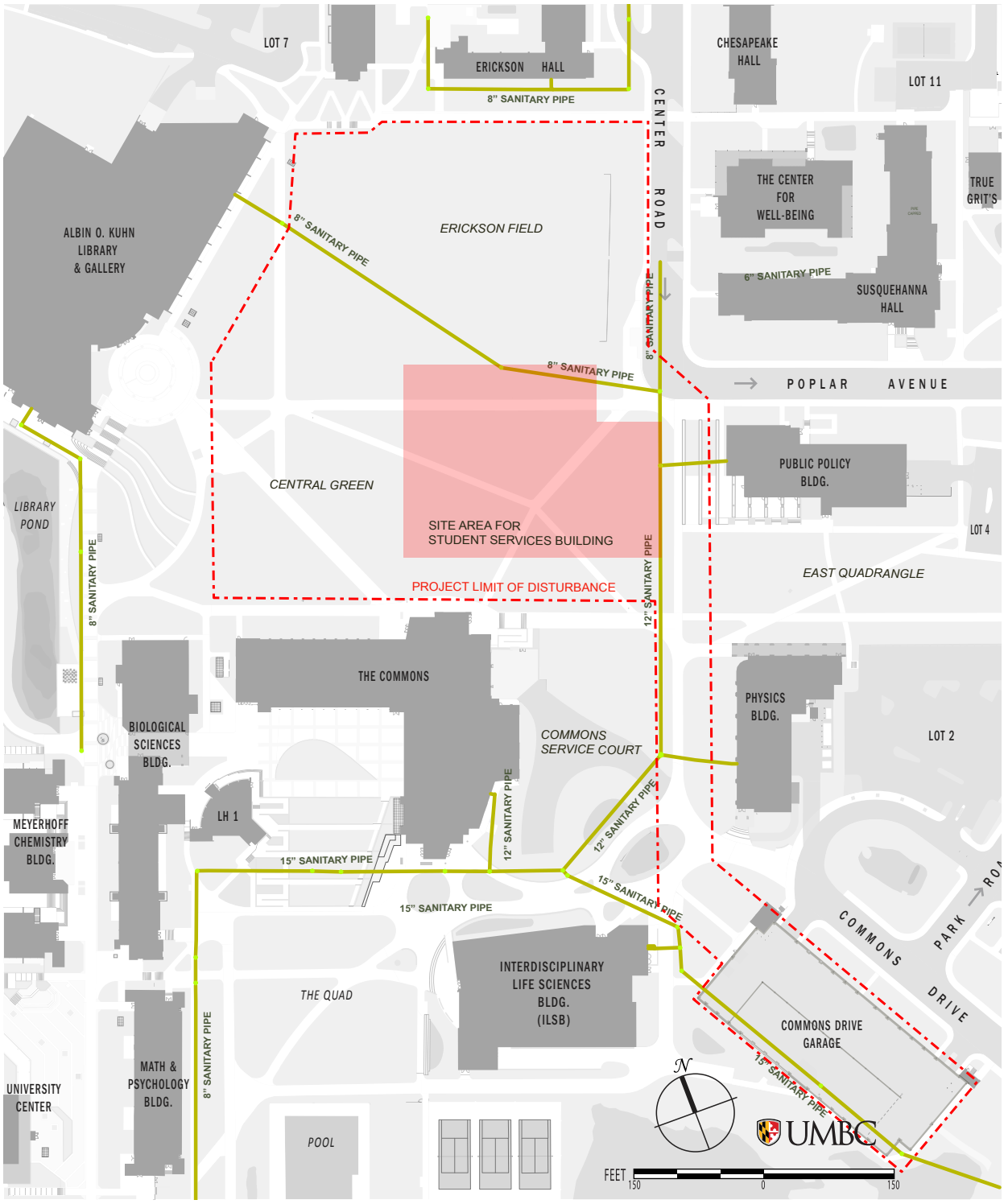


Figure 3.6 Existing Sanitary Sewer Piping

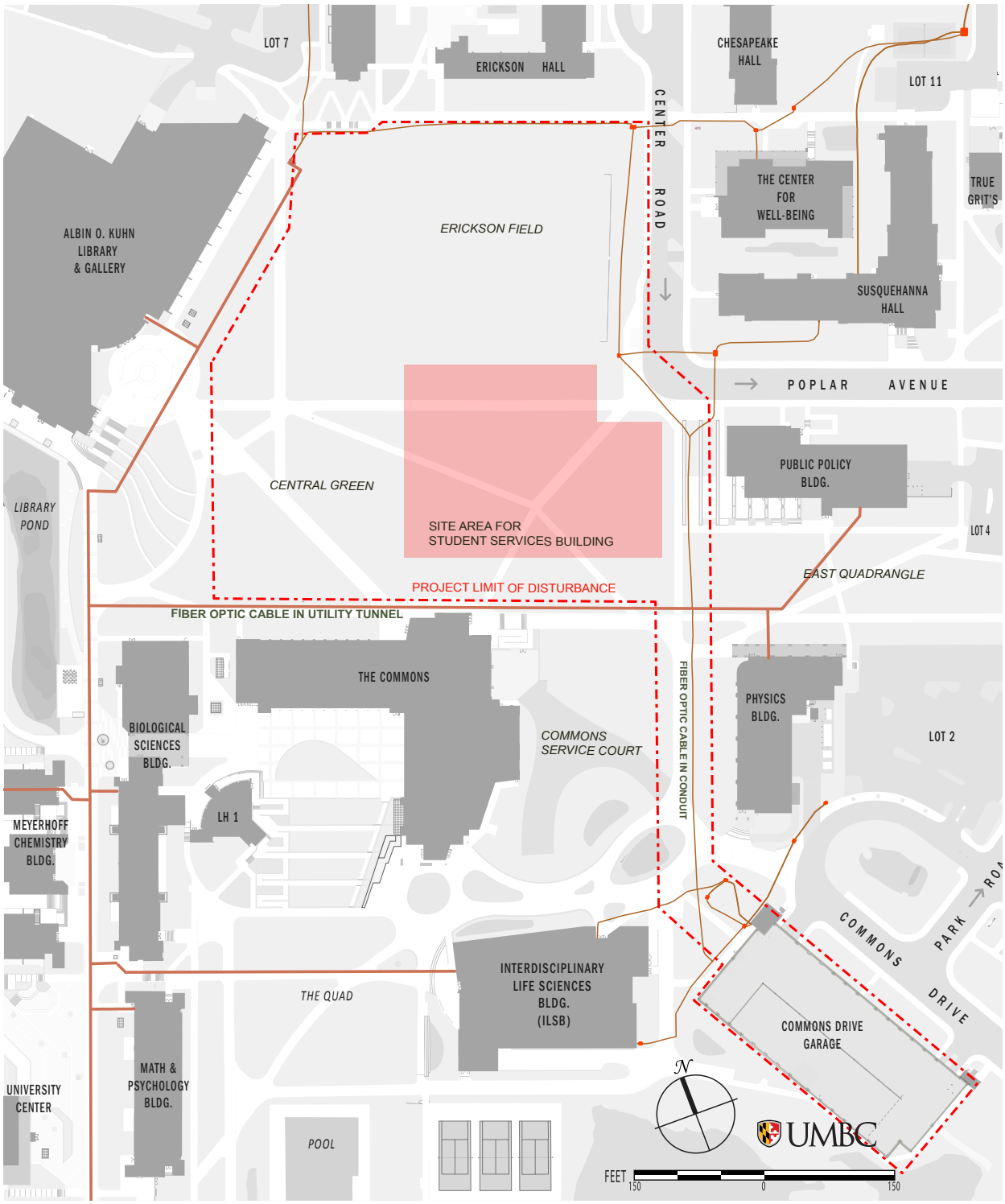


Figure 3.7 Existing Communication Cabling

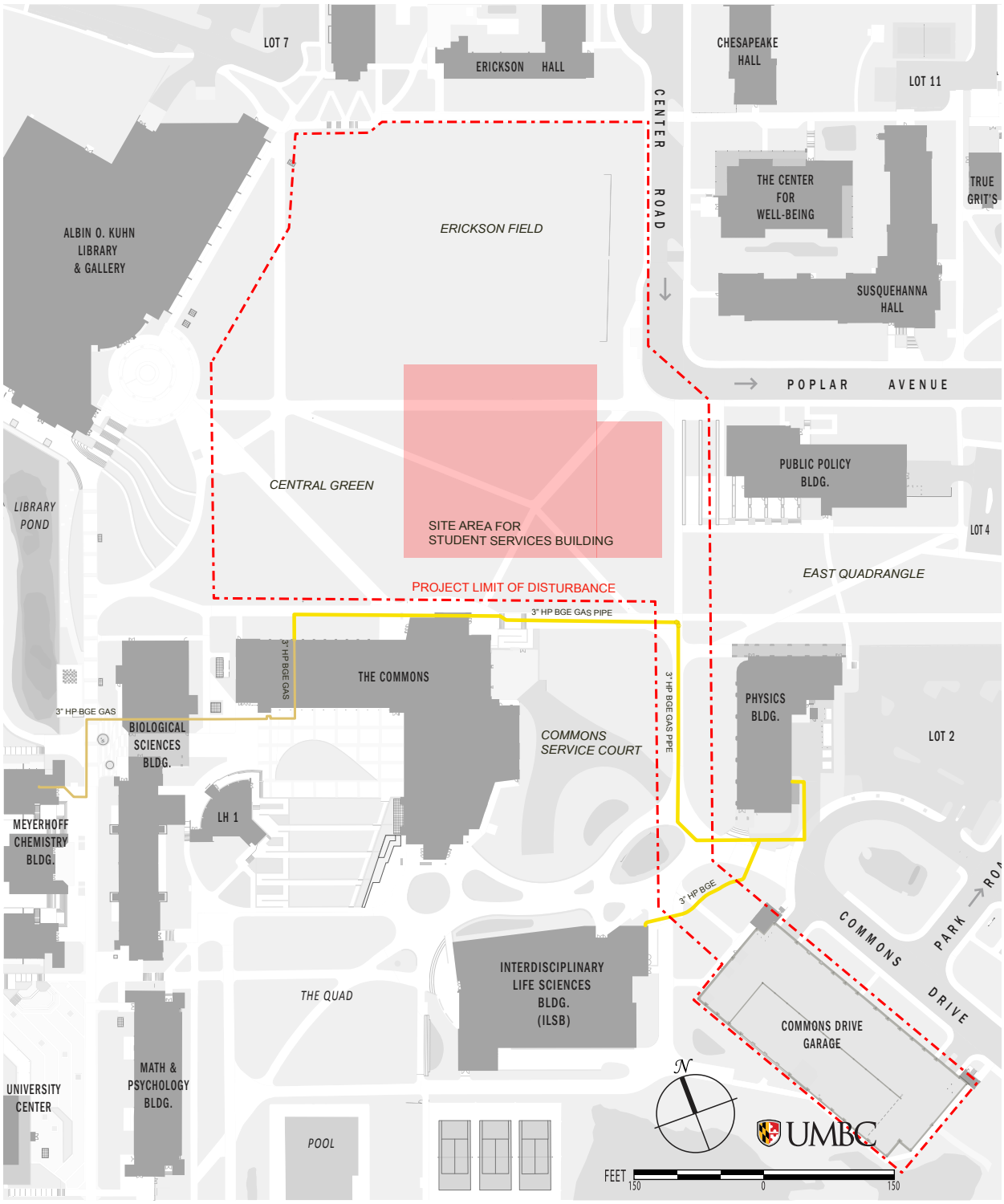


Figure 3.8 Existing Gas Piping

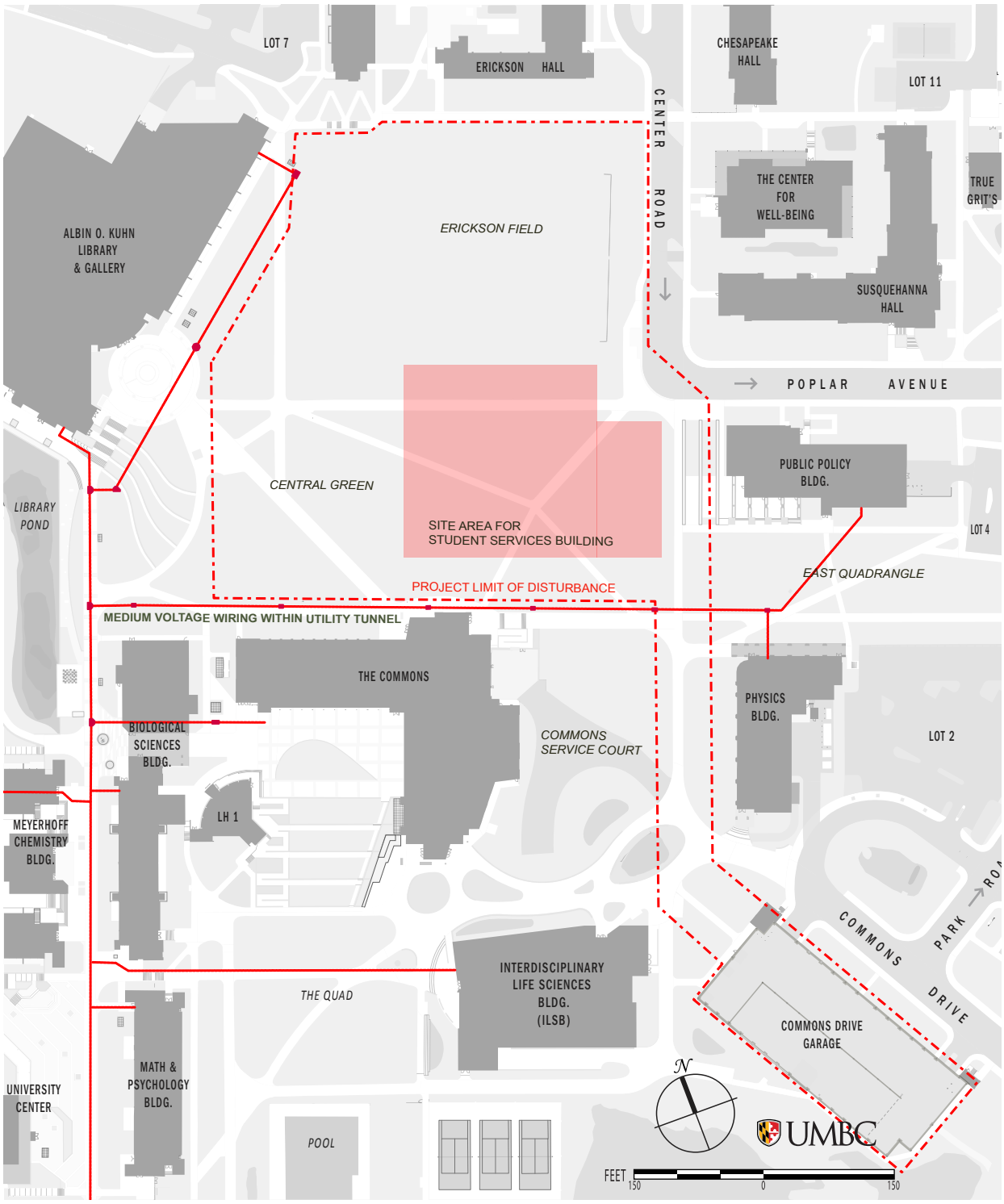


Figure 3.9 Existing Medium Voltage Power Cabling

3.05 Subsurface Conditions

The design team will conduct soil borings around the site to investigate subsurface conditions. The borings will inform and impact the design of the building foundations, as well as the suitability of the location for a ground source heat pump bore field.

3.06 Existing Site Constraints and Opportunities

Existing site constraints to be observed and addressed by the design team in the design of the project are few, but include:

- Maintaining and enhancing the pedestrian circulation that traverses the site, currently linking the building entrances of the Library, the ILSB, and The Commons.
- Maintaining the pedestrian nature of the Student Success District.
- Balancing service access to The Commons and ILSB with pedestrian circulation routes.
- Considering impacts to existing viewsheds in building siting and massing.

Site opportunities to be integrated by the design team into the design effort include:

- Maintaining a strong east-west pedestrian connection between the Albin O. Kuhn Library and a future parking garage at the northeast corner of Hilltop Circle and Poplar Avenue, as illustrated in the 2018 Facilities Master Plan.
- Enhancing and improving the north-south promenade between the main entrance of the Student Services Building and the Commons Drive Garage, including but not limited to plazas at both terminus, a generous paved processional path for pedestrians, pedestrian scaled lighting, banners, distinct landscaping, and, if appropriate, incorporation of outdoor art.
- Ensuring access to all outdoor areas and paths for campus users in wheelchairs and with other mobility issues.
- Integrating a vehicular drop-off from either Center Road or Commons Drive that can accommodate a bus, as well as cars.

Section 4 Space Requirements

Conceptual Planning Objectives

4.01 Distinct Ground Floor Uses

While principally a facility consolidating dispersed student services to provide more efficient and better access for current students, the Student Services Building will also be a first stop on campus for visitors, alumni, and prospective students. These two distinct user groups have possible unique facility needs and would benefit from clear, independent circulation and building zoning. For this reason the SSB is envisioned to have two distinct wings or functional zones of circulation, one for current students and one for visitors to campus.

The ground level Student Service Concierge Desk wing will comprise:

- waiting areas and small meeting rooms for private conversations
- workspaces for both Student Affairs and Academic Affairs units that provide first-stop services for students with service issues
- workspaces and welcome areas for units providing accommodations and disability services
- payment windows or kiosks to settle university accounts

The ground level Welcome Desk wing will comprise an information/check-in desk, as well as:

- interactive and informative displays
- meeting and huddle rooms that support campus enrollment activities
- mock-ups of other facilities, like model dorm rooms
- workspaces for the admissions and financial aid staff that meet with students
- workspaces for units that lead and support campus tours
- workspaces for staff that organize undergraduate and graduate student orientation

4.02 Grouping of Services and Facilities by Wing and Floor

While not dictating the functional relationship of spaces to the design team, this this Part II program report highlights what are considered critical adjacencies to assist in the development of a concept plan and lead to further discussion with the university during the design process.

The programming effort has led the university to propose grouping of services by floor level and wing. Building organization goals include:

- theming each floor level in a way that simplifies an overall understanding of the building organization, allowing for better student access to services

- locating service units to support collaboration to better serve our students and to share facilities
- locating most active zones and facilities as close to the ground floor as possible
- locating back offices and quieter zones (like testing facilities) on upper floors
- locating facilities that attract non-student visitors, like employers, alumni, visiting international delegations, etc. near the Welcome Desk wing
- evenly distributing student facilities, like schedulable meeting rooms and unscheduled lounges throughout the building to ensure that the building stays active beyond the hours that service offices are open
- locating the café and dining area on the ground floor where it has greater visibility, supports both current students and visitors, and has access to outdoor terraces and plazas
- locating student facilities, like lounges and meeting rooms, proximal to vertical circulation routes

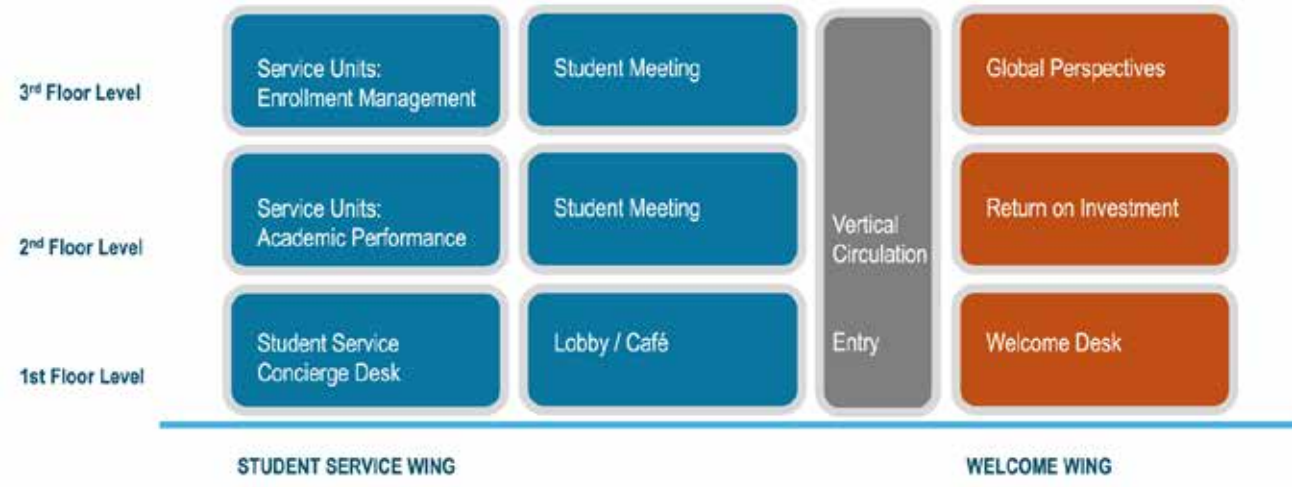


Figure 4.1 Stacking Diagram

As currently envisioned, the illustrative stacking diagram depicted in Figure 4.1 organizes the Student Service Concierge Desk wing (shown in blue):

- The ground level will comprise first-stop concierge desk and disability services, a student lounge and café
- The first level up will locate academic service units like the academic advocates, academic advising, registrar, and transition programs
- The next level up will locate enrollment management and financial aid back offices

As currently envisioned, the illustrative stacking diagrams depicted in Figures 4.1 organize the Welcome wing (shown in orange):

- The ground level will comprise visitor services and campus tours, with facilities supporting enrollment activities
- The first level up may locate facilities that illustrate a direct return on the investment of an academic career including career services, entrepreneurship and innovation labs, alumni mentoring and meeting facilities, and undergraduate research offices
- The next level up may locate services and facilities that provide a global perspective, support international students and programs, engage students in sustainable practices, and promote global exchanges and partnerships

Sections 4.03 – 4.11 highlight the program in detail and are grouped principally by wing and then by floor level. Diagrams are provided to create a better understanding of the adjacencies between units on that floor level and wing. These are suggested arrangements and do not necessarily represent sketch floor plans. The design team is tasked with testing these planning assumptions and assessing alternative approaches if appropriate to support the overall project goals.

The Student Services Wing

4.03 Proposed Ground Floor Facilities in the Student Services Wing

The First Stop Concierge Desk

To facilitate access to services and support student success, the SSB will locate a first stop concierge desk on the ground floor of the building, manned by trained staff from both Academic Affairs and Student Affairs. With the goal to provide a vastly improved student experience, this blended approach will improve how UMBC students access support for a wide range of issues.

The Concierge Support Team will coordinate with the various student service units in the building, coordinating cross-training to better serve our students. When necessary, they will either meet directly with students in private huddle rooms, assign an advocate to meet with them, or direct students to other service providing units in the building if the issue requires more specialized consultation.

The Concierge Support Team includes a service desk that is highly visible upon entering the building, sited adjacent to comfortable student lounge seating. Staff workstations and offices will be conveniently located to this desk and to a bank of huddle rooms for private conversations.

An adjacent office suite will support both Student Affairs (including the Dean of Students) and Academic Affairs staff with a mix of offices and workstations, and shared facilities like a conference room and breakroom. There will be additional shared workstations for other units including the Graduate School.

Office of the Dean of Students and Student Affairs Support Team. This unit is charged with supporting students by accessing resources, navigating campus policies, and seeking connections with university programs and departments. The office suite of the Dean of Students supports 16 Student Affairs staff and students in offices and workstations.

Academic Affairs Support Team. This unit is currently temporarily located in the AOK Library and coordinates with peer and professional academic advocates to provide services to students and coordinate a range of services from counseling to tutoring.

Table 4.1: Space Requirements for the Concierge Support Desk/Team and the Supporting Office Suite

CONCIERGE SUPPORT TEAM						
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY EACH	AREA EACH	TOTAL	AREA
310.04	STAFF / ADMIN ASST WORKSPACE	2	1	100		200
310.05	SHARED STAFF WORKSTATION	6	1	50		300
310.07	STUDENT WORKSTATION	4	1	25		100
315.07	SERVICE DESK	1	4	50		200
350.02	HUDDLE ROOM	4	4	80		320
315.06	OFFICE SUPPORT	1	1	100		100
650.02	LOUNGE/WAITING	1	4	800		800
						2,020
STUDENT AFFAIRS/ACADEMIC AFFAIRS OFFICE SUITE						
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY EACH	AREA EACH	TOTAL	AREA
310.01	DEAN'S OFFICE	1	1	200		200
310.02	DIRECTOR OFFICE	3	1	150		450
310.03	ASST DIRECTOR OFFICE	3	1	120		360
310.04	STAFF / ADMIN ASST WORKSPACE	4	1	100		400
310.07	STUDENT WORKSTATION	4	1	25		100
350.01	CONFERENCE ROOM	1	12	240		240
315.01	BREAKROOM	1		100		100
315.06	OFFICE SUPPORT	1	1	100		100
						1,950

The Retriever Card Center

One of the first actions that an enrolled student has on campus is to formalize their relationship with the university, with both a student account and a student ID. This campus identification card manages access to each student's financial account and manages access to facilities and campus events. At this location students both receive their ID and address any questions they may have in person regarding their accounts. Self-service kiosks will allow students to access their student accounts and make payments.

Retriever Card Center. The Retriever Card Center manages access to the UMBC Campus ID card providing access, payment, transit, dining, gym access, and library services. Students visit the Retriever Card Center to obtain new or replacement campus IDs and to facilitate meal plans. While students have the option to submit ID photos online, they are required to appear in person to collect their campus IDs due to security protocols.

Table 4.2: Space Requirements for the Retriever Card Center

RETRIEVER CARD CENTER					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY EACH	AREA EACH	TOTAL AREA
310.02	DIRECTOR'S OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	7	1	100	700
310.06	OFFICE SUPPORT	1		200	200
					1,050

Inclusion and Accommodation

The Student Services Building will be thoughtfully designed to better support students with disabilities and create an inclusive, accessible environment. By placing Student Disability Services (SDS) on the ground floor, the university is ensuring that these services are easy to find and access, making it clear that all students are welcome and supported. The visibility of the SDS office signals the university's commitment to inclusivity, while the proximity to the Student Services Concierge Desk fosters coordination for accommodations.

In addition, Student Disability Services manages and staffs an Accommodation Testing Suite. The testing suite will be located on a quieter and less busy upper floor of the building, providing a distraction-free environment for students needing accommodations during exams. The testing suite comprises a variety of testing rooms, as well as support space for SDS staff and proctors.

Student Disability Services is a part of the Office of Accessibility and Disability Services. This unit is committed to providing access to individuals with disabilities in all UMBC's programs, activities, and services, supporting the university's fundamental values of diversity and inclusion. Services include one-on-one meetings to assess and address needs and accommodations, and the management of specialized testing facilities.

Table 4.3: Space Requirements for Inclusion and Accommodation (Ground Floor and Upper Floor)

SPACE SHEET	SPACE USE	QUANTITY	CAPACITY EACH	AREA EACH	TOTAL AREA
STUDENT DISABILITY SERVICES					
310.04	STAFF / ADMIN ASST WORKSPACE	4	1	100	200
310.07	STUDENT WORKSTATION	4	1	25	100
315.06	OFFICE SUPPORT	1	1	100	100
					400
STUDENT DISABILITY SERVICES TESTING SUITE					
SPACE SHEET	SPACE USE	QUANTITY	EACH	EACH	TOTAL AREA
310.06	GA WORKSTATION	4	1	50	200
315.09	TESTING ROOM - SMALL	4	4	100	400
315.1	TESTING ROOM - MEDIUM	2	12	300	600
					1,200

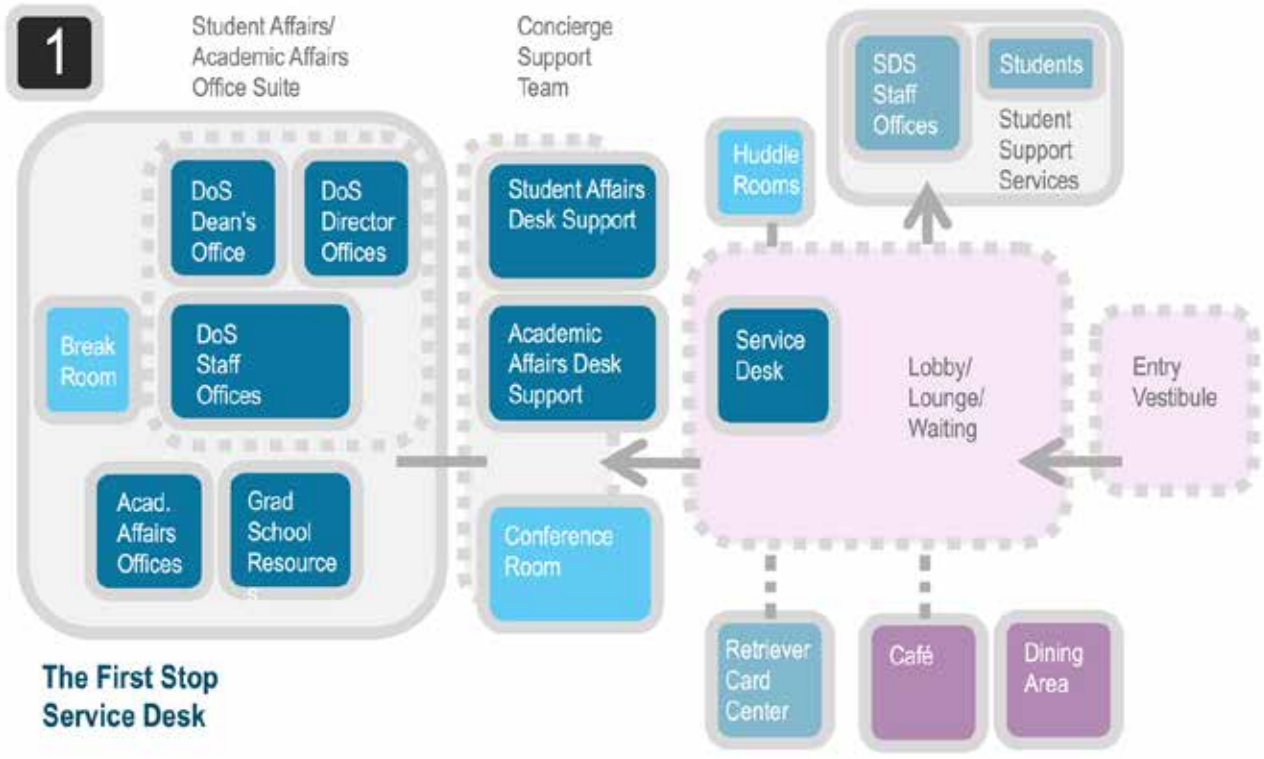


Figure 4.2: Diagram Illustrating Adjacencies: Service Desk area

4.04 Supporting Student Academic Success (Second Floor Level

The Student Services Building will provide facilities for service units that provide students with first-year transition programs, academic advocacy, and career advising that support their academic progress. Co-location in the building will allow for improved communication and cooperation between these distinct academic service providers.

Proximity will also increase effectiveness and efficiency and allow office support facilities, like conference rooms, meeting rooms, and copy rooms to be shared. The service units, listed below, currently support academic success on campus.

Academic Engagement and Transition Programs (AETP). AETP provides incoming first year students with academic support through coordinated transition courses, seminars, and other programmatic opportunities. AETP staff also coordinates Living-Learning Communities, the Summer and Winter Bridge Programs, as well as American Sign Language Courses. AETP relies on a large instructional pool of faculty/staff/teaching assistants (about 100 instructors each year and 40-50 teaching assistants) that will share hoteling or touch down space.

Academic Advocacy. The Academic Success Center offers academic support through a variety of programs, including Academic Advocacy (individual meetings coordinating resources for academic success) for students to achieve their academic goals and claim their future with a UMBC degree. Academic Advocates work with students to review their progress, present options toward graduation, map out a plan for success, and facilitate communication and connections with the appropriate resources. The office collaborates closely with various campus units including Academic Advising and the Dean of Students to support student needs and manage accommodations.

Office for Academic and Pre-Professional Advising (OAPA). OAPA plays a crucial role in the academic journey of undergraduate students at UMBC. Their mission is to equip students with the knowledge and tools to make informed decisions about their academic pathways by providing specialized support to exploratory, pre-allied health, and incoming students. Advising collaborates closely with several campus units to enhance advising and support services. Key partnerships include Admissions, Registrar, and Financial Aid, as well as Disability Services, the Center for Global Engagement, and the Academic Success Center.

Office of the Registrar. The Registrar's Office provides students with a broad range of services leading to both enrollment and graduation. These include managing student's academic records, transfer services, degree planning, and the preparation of transcripts, diplomas, and honors. This office also serves to verify status, including residency, military status, and transfer status. The Registrar's Office also coordinates with the Office of Academic Advising to help guide students in understanding the degree requirements of various majors and programs.

A portion of the staff within the office of the Registrar interface with students and provide direct assistance by preparing documents with direct financial implications. Other staff assigned to the Registrar are focused on coordination of courses, instructors and teaching spaces and the preparation of the course catalog. It is expected that all Registrar staff will relocate to the Student Services Building.

Table 4.4: Space Requirements for Units Supporting Academic Success

ACADEMIC ADVISING					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	ASSIST VICE PROVOST OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	7	1	100	700
310.05	SHARED STAFF WORKSTATION	4	1	50	200
310.07	STUDENT WORKSTATION	1	1	25	25
315.06	OFFICE SUPPORT	1		100	100
					1,175
ACADEMIC ADVOCACY (ACADEMIC SUCCESS CENTER)					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	7	1	100	700
315.05	SHARED STAFF WORKSTATION	2	1	50	100
315.06	OFFICE SUPPORT	1		100	100
					1,050
ACADEMIC ENGAGEMENT AND TRANSITIION PROGRAMS					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	AVP/ASST DEAN OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	7	1	100	700
315.05	SHARED STAFF WORKSTATION	2	1	50	100
315.06	OFFICE SUPPORT	2		100	200
					1,150
REGISTRAR					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.03	ASST DIRECTOR OFFICE	10	1	120	1200
315.06	STAFF / ADMIN ASST WORKSPACE	8	1	100	800
315.05	SHARED STAFF WORKSTATION	2	1	50	100
310.07	STUDENT WORKSTATION	4	1	25	100
315.06	OFFICE SUPPORT	2		100	200
					2,550

SHARED ACADEMIC SUPPORT					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
315.02	SHARED BREAKROOM	1		200	200
315.06	OFFICE SUPPORT	1		100	100
350.01	CONFERENCE ROOM	1	16	320	320
350.01	CONFERENCE ROOM	1	12	240	240
350.02	HUDDLE ROOM	2	4	80	160
					1,020

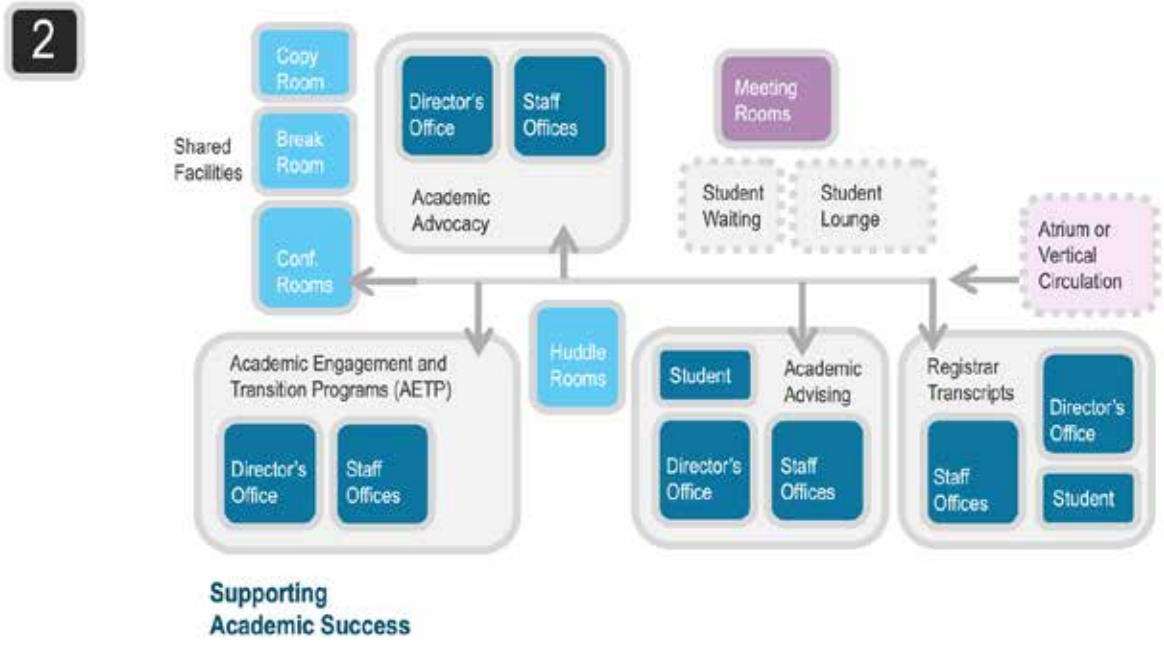


Figure 4.3: Diagram Illustrating Adjacencies: Units Supporting Academic Success

4.05 Ensuring Access and Affordability (Third Floor Level)

Enrollment Management is responsible for the recruitment and admission of new first-time, first-year and transfer students to support the university's enrollment goals. In addition, they coordinate orientation programs and campus tours. Enrollment Management units also support students through financial support, employment, internships, and scholarships.

UMBC offers a range of financial aid and payment options so that all students may benefit from a UMBC education. Financial aid can come in the form of grants, work, student loans, parent loans, scholarships and other awards. Of the full-time, beginning undergraduate students enrolled in the fall of 2023, 94% received some type of aid to support their academic studies. Enrollment Management staff on this level support and complement staff and programs at the Welcome Desk.

The third floor of the Student Services Building will provide space to support the staff from Enrollment Management leadership, Undergraduate Admissions staff with less direct prospective student contact, and Financial Aid and Scholarship staff that manage federal and state grants, loans, campus employment, internships, and scholarships. The design team will develop alternative layouts for this floor that allows for sharing of facilities and meeting spaces, and if possible a shared reception area.

Undergraduate Admissions. The Office of Undergraduate and Orientations is responsible for the recruitment and admission of new first-time, first-year and transfer students to support the university's enrollment goals. Additionally, the office facilitates the onboarding of new students through new student orientation programs.

Financial Aid and Scholarships. The office of Financial Aid and Scholarships offers a range of aid and payment options so that all students may benefit from a UMBC education. Financial aid can come in the form of grants, work, student loans, parent loans, scholarships and other awards. Additionally, the Office supports and promotes student financial wellness by providing financial literacy education on topics ranging from budgeting, saving and investing, managing credit and debt, understanding income taxes, and more.

Primary collaborators include the Academic Success Center, Academic Advising, the Registrar, and Student Business Services (SBS). The unit's effective service delivery relies on these partnerships to manage student needs, from application and registration to ongoing academic support and financial assistance.

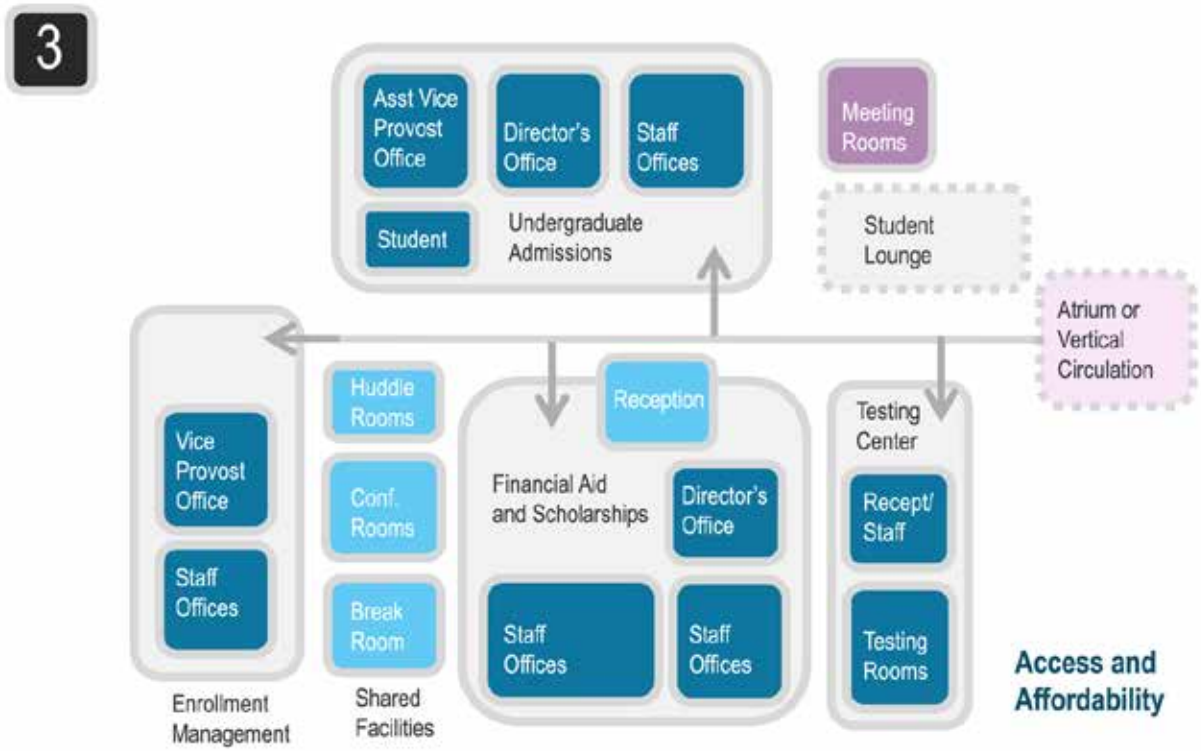


Figure 4.4: Diagram Illustrating Adjacencies: Units Providing Access and Affordability

Table 4.5: Space Requirements for Units Providing Access and Affordability

ENROLLMENT MANAGEMENT LEADERSHIP					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.01	VICE PROVOST OFFICE	1	1	200	200
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	6	1	100	600
					950
UNDERGRADUATE ADMISSIONS (BACK OFFICE)					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	ASSIST VICE PROVOST OFFICE	1	1	150	150
310.03	MANAGER OFFICE	4	1	120	480
310.04	STAFF / ADMIN ASST WORKSPACE	4	1	100	400
310.07	STUDENT WORKSTATION	4	1	25	100
315.06	OFFICE SUPPORT	1		100	100
					1,230
FINANCIAL AID AND SCHOLARSHIPS					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	21	1	100	2,100
310.05	SHARED STAFF WORKSTATION	4	1	50	200
310.07	STUDENT WORKSTATION	4	1	25	100
315.06	OFFICE SUPPORT	2		100	200
315.14	RECEPTION AND PROCESSING	1	4	250	250
350.01	CONFERENCE ROOM	1	12	240	240
350.02	HUDDLE ROOM	2	4	80	160
					3,400
SHARED OFFICE SUPPORT					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
315.08	STUDENT WAITING	1	10	200	200
315.02	SHARED BREAKROOM	1		200	200
350.01	CONFERENCE ROOM	1	24	480	480
350.02	HUDDLE ROOM	2	4	80	160
					1,040

The Welcome Wing

4.06 Creating a Welcoming Place (First Floor of Welcome Wing

The ground floor of the Welcome Wing will create a vibrant and welcoming atmosphere, offering visitors an inviting first impression of the university. The design will strike a balance between functionality and warmth, ensuring that prospective students, their families, and other guests feel at ease from the moment they enter. The welcome desk and waiting lounge will be central to the experience, acting as the starting point for every visitor's journey. This space must be visually appealing, serving as a hub for greetings, tour check-ins, and fostering an immediate connection to the university.

With natural light, clear sightlines, and contemporary materials, the space will exude openness and approachability. It will be highly functional, featuring interactive digital displays with customized content, comfortable waiting areas, and stations where visitors can explore campus facilities virtually while waiting for their tour.

The visitor experience will be enriched with various areas designed to engage and inform, allowing the university to share its story and offer a glimpse into life as a Retriever. Additional amenities, including lounges, model residence hall rooms, and interactive displays, will enhance the experience. A refreshment station will further contribute to the welcoming environment. All tours will begin in the Retriever Room, a versatile meeting space that accommodates 150 people for presentations or approximately 108 at tables for group activities.

When not hosting tours, the Welcome Center will serve as a venue for other university functions, such as graduate student orientations, alumni events, and catered receptions. The design team will need to design flexible spaces that can easily adapt to these varied events, equipped with the infrastructure to accommodate large gatherings.

To support the Enrollment Management team, the design will include dedicated offices and workstations for staff and student workers, private conference rooms for one-on-one meetings, and a workroom for student tour guides. Shared workstations will also temporarily support staff from remote campus units, such as the Office of Academic Opportunity Programs. Thoughtful planning for storage—such as for promotional materials and merchandise—will support on and off-campus recruitment efforts.

Undergraduate Admissions and Orientation. Undergraduate Admissions organizes campus tours, prepares students for their application to the university, and delivers notices of acceptance. The office engages with a diverse range of prospective consumers and guests, encompassing all student types: traditional first year, transfer, re-admit, reinstate, non-degree seeking, Golden ID, and International First Year. The office offers private meetings for problem-solving and addresses specific issues such as residency status, billing, term activation, and application processes. The office collaborates closely with several key campus units to deliver comprehensive support services to students.

Campus Tours and Visitor Services. Campus Tours is a central component to Enrollment Management. Prospective students and their families come to tour campus and attend an information session (a Black and Gold Tour), often a student's first impression of the university. Campus Tours has a large cohort of student Grit Guides that are trained to answer questions for visitors and lead campus tours for prospective students and their families, showcasing academic spaces, student organizations, research facilities, and residential accommodations. This first impression is crucial as it directly impacts enrollment and reflects how prospective students, and their families might be treated as members of the UMBC community.

Table 4.6: Space Requirements for Units Providing Welcome and Recruitment Services

SHARED WELCOME DESK					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
315.11	WELCOME DESK	1	4	200	200
315.06	OFFICE SUPPORT	2		100	200
620.01	EXHIBITS	2	1	500	1,000
620.02	MODEL STUDENT DORM ROOM	2	1	300	600
650.01	WELCOME LOUNGE	1	80	1600	1,600
660.02	VENDING	2	1	100	200
660.01	MERCHANDIZING	1	1	250	250
680.05	RETRIEVER ROOM	1	150	2700	2,700
685.01	LARGE MEETING STORAGE	1	1	200	200
685.03	CATERING PANTRY	1	1	150	150
310.05	SHARED STAFF WORKSTATION	4	1	50	200
					7,300
UG ADMISSIIONS AND ORIENTATION					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.03	MANAGER OFFICE	4	1	120	480
310.04	STAFF / ADMIN ASST WORKSPACE	11	1	100	1100
310.07	STUDENT WORKSTATION	4	1	25	100
315.06	OFFICE SUPPORT	1		100	100
350.01	CONFERENCE ROOM	1	12	240	240
350.02	HUDDLE ROOM	4	4	80	320
					2,490

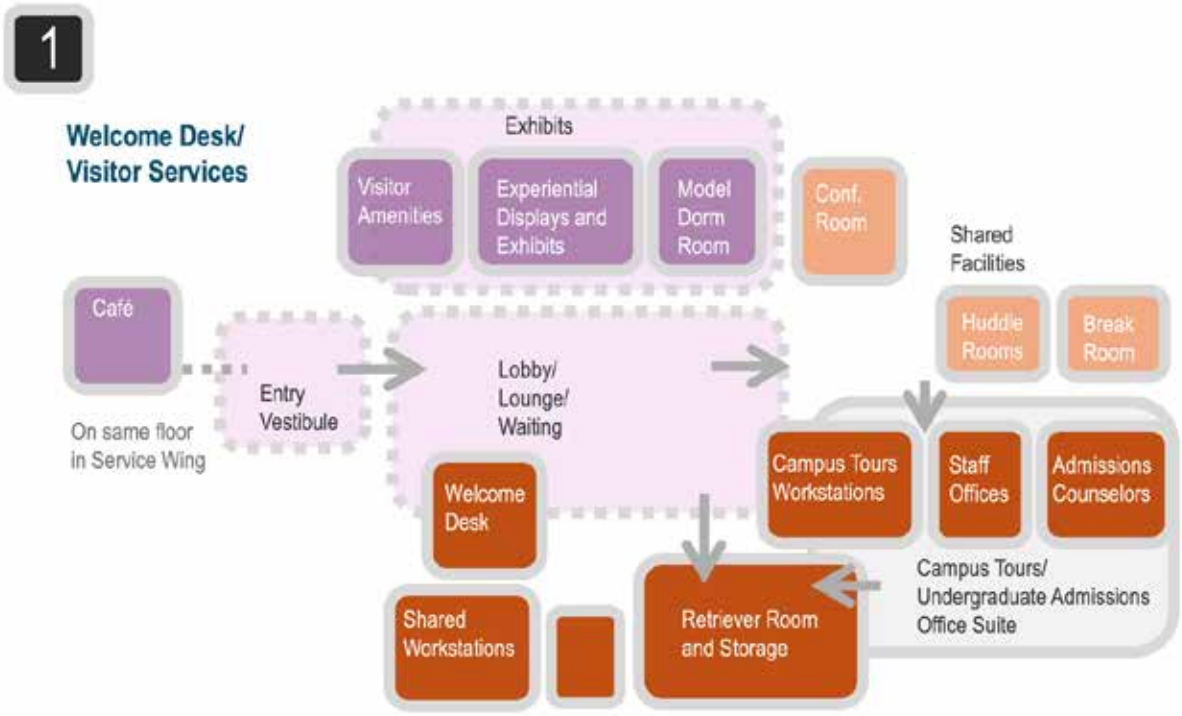


Figure 4.5: Diagram Illustrating Adjacencies: Spaces comprising the Welcome Experience (Welcome Wing Ground Floor)

4.07 Emphasizing Return-on-Investment (Second Floor Level)

The SSB will house several key functions aimed at supporting students as they navigate their academic and professional paths. The design should ensure that these spaces are fully accessible to all students, with a clear emphasis on inclusivity. The layout of the building should be planned so that these activities, highlighting a return-on-investment, are visible to visitors, showcasing UMBC's commitment to student success from the very first point of contact. While these units have been grouped together on this floor there may be other satisfactory arrangements.

The SSB will provide comprehensive career planning and employment support through the Career Center. An inviting reception area will provide students with interactive digital displays and computer terminals that allow for self-exploration and job search resources. Adjacent to this reception area, private meeting rooms will allow career counselors to work one-on-one with students. These spaces must be soundproof and comfortable, providing a confidential setting for discussing resumes, interview preparation, and career strategies. In addition, the SSB will need to include a set of interview practice rooms, well-equipped with video conferencing capabilities for mock interviews. These rooms will allow students to rehearse and refine their interview skills in a private and supportive environment.

Larger group meeting spaces should be integrated into the building's design to accommodate employer visits, career fairs, workshops, and seminars. These rooms should allow staff to configure the space for different group sizes and activities. A professional attire closet within the suite offers

students access to professional clothing for interviews and networking events. This space should incorporate fitting rooms.

In addition to career services, the SSB will provide critical support for UMBC's innovation and entrepreneurship programs, which are vital to the university's growing focus on fostering student entrepreneurship. An Innovation and Entrepreneurship Suite will serve as a hub where students can engage in business development activities, access resources, and connect with mentors and business leaders. The space should include an innovation lab where students can brainstorm, prototype, test, and pitch their ideas. This area must be flexible, with movable furniture and ample space for group collaboration. Adjacent to the innovation lab, a resource center will provide students with access to tools and support services to help them launch and grow their entrepreneurial ventures.

The building will also need to house facilities dedicated to student research and academic achievement. The architect should include offices for staff who coordinate undergraduate research opportunities across the campus. These offices should be centrally located within the building, easily accessible to students who may need assistance finding research opportunities. The design should also incorporate spaces that celebrate academic success, such as interactive digital displays that highlight student research projects, scholarships, and other academic achievements. These displays will serve to engage the broader campus community and inspire students to take pride in their scholarly work.

Staff will be located to the SSB that coordinate opportunities available to students, especially undergraduates, to engage in meaningful campus research. Coupling these offices with digital displays highlighting student research, scholarships and award achievements will also make the UMBC student community more aware of the vast student talent on campus.

Units that currently provide programs and services related to these activities include:

Career Center. The UMBC Career Center is dedicated to empowering students and alumni to achieve their professional goals through a variety of services aimed at career exploration and readiness. These services include personalized career advising and counseling, networking opportunities, on-campus recruiting events, and career and professional skills workshops. Additionally, the Center offers applied learning experiences through internships, co-ops, and research opportunities. Each year, the Center engages with over 6,000 students and alumni through a range of activities including career counseling, workshops, interviews, and career fairs. The Center also facilitates over 600 employer visits from notable organizations such as NSA, Northrop Grumman, and Morgan Stanley.

Alex Brown Center for Entrepreneurship and Innovation. Staff from the Alex Brown Center direct students in how to develop ideas, coordinate networks between students and entrepreneurial leaders, and provide guidance and connections to a wide range of students to help them make informed decisions and expose them to entrepreneurial thinking. The Center's programs benefit many students, but growth in this sector is hampered by both a lack of exposure and a shortage of space. The center must schedule and coordinate existing general-use space on campus to host

programs and hold discussions with students. Further, there is no space for students to engage in the development of their ideas and/or to meet with mentors and other advisors assigned to help them.

Office of Undergraduate Research and Prestigious Scholarships. This unit works to create opportunities for UMBC students, especially undergraduate students, to engage with meaningful research work on campus. Staff conduct research workshops, coordinate opportunities between students and researchers, and provide mentoring opportunities. In addition, the office assists students in preparing research posters at campus events, like the Undergraduate Research and Prestigious Scholarship Day (URCAD). The office also coordinates and assists students applying for prestigious scholarships and awards including Rhodes Scholarships, Truman Scholars, and others.

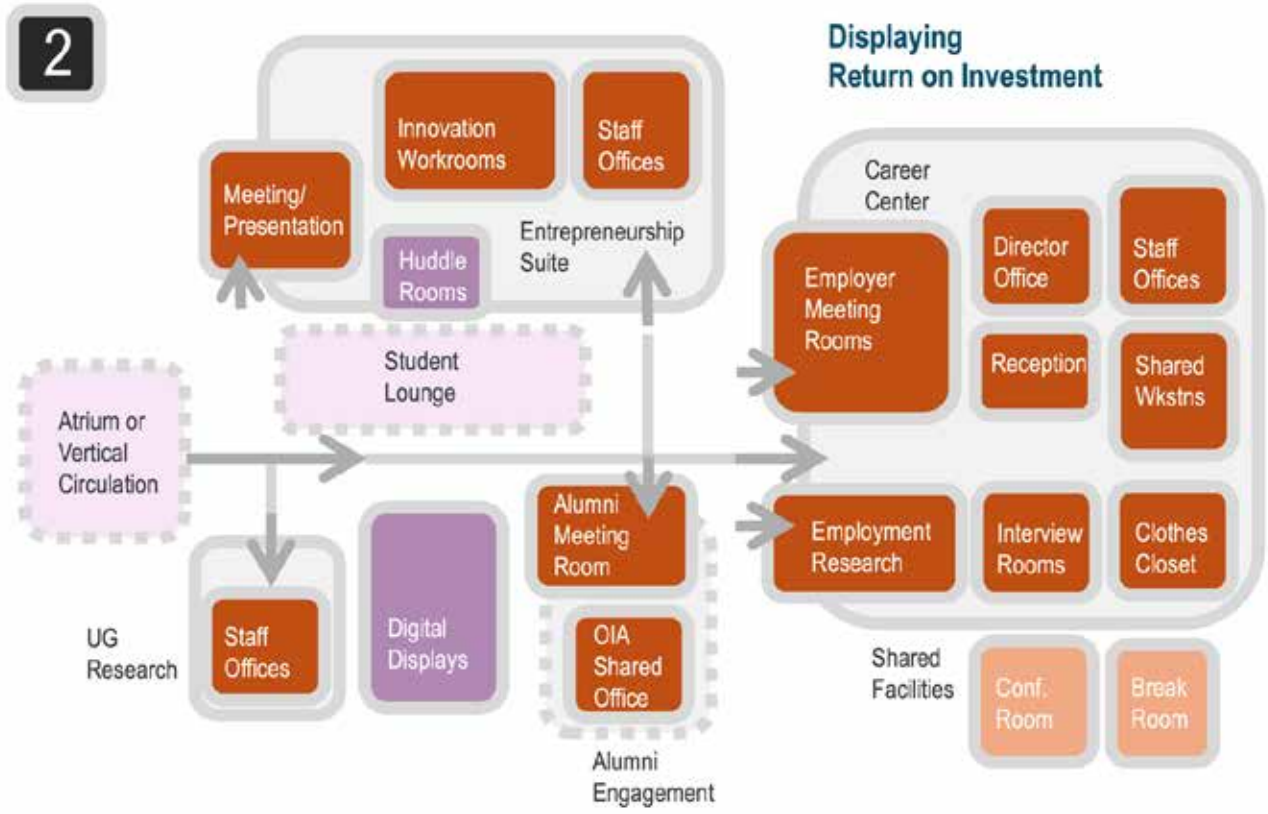


Figure 4.6: Diagram Illustrating Adjacencies: Services Illustrating a Return-on-Investment

Table 4.7: Space Requirements for Units Illustrating a Return-on-Investment

CAREER CENTER					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	18	1	100	1,800
310.05	SHARED STAFF WORKSTATION	4	1	50	200
310.07	STUDENT WORKSTATION	4	1	25	100
315.01	BREAKROOM	1		100	100
315.03	CLOTHES CLOSET	1	15	300	300
315.05	INTERVIEW ROOM	4	4	80	320
315.06	OFFICE SUPPORT	2		100	200
315.08	STUDENT WAITING	1	10	200	200
315.13	EVENTS WORKROOM	1	4	150	150
350.01	CONFERENCE ROOM	1	16	320	320
680.08	EMPLOYER MEETING ROOM	1	12	240	240
680.09	EMPLOYER MEETING ROOM	1	50	1,000	1,000
					5,080

EINTREPRENEURSHIP AND INNOVATION CENTER					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
220.01	WORKROOM	2	10	500	1,000
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	2	1	100	200
315.01	BREAKROOM	1		100	100
315.06	OFFICE SUPPORT	1		100	100
350.02	HUDDLE ROOM	2	4	80	160
680.06	MEETING / PRESENTATION ROOM	1	30	600	600
					2,310

OFFICE OF INSTITUTIONAL ADVANCEMENT					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.05	SHARED STAFF WORKSTATION	4	1	50	200
680.07	ALUMNI MEETING ROOM	1	24	480	480
					680

UNDERGRADUATE RESEARCH					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	2	1	100	200
315.06	OFFICE SUPPORT	1		100	100
					450

4.08 International Students and Global Programs (Global Perspectives: Third Floor

International students comprise a large portion of the UMBC student body. 17.8% of all UMBC students and 56% of graduate students were international students In Fall 2023. To address the unique needs of international students, regarding customs, language, visas, scholarships, etc. the Student Services Building will consolidate facilities that support the units that provide services to this integral part of our student body.

Besides offices for staff, the suite of spaces supporting international students and global programs contains a reception area comprising a welcome desk and a waiting area/student lounge, huddle rooms for private discussions, and an internationally themed meeting room that serves trainings, partnership agreement signing ceremonies, and hosting international delegates and visitors.

Staff and faculty offices supporting English language instruction will be provided in the SSB. Teaching classrooms supporting these efforts will remain in the University Center and elsewhere on campus. The suite of spaces supporting the English Language Institute includes shared touchdown workstations and a faculty development team room/lounge for the numerous adjunct faculty that teach language support courses to international students.

The SSB also includes support space for staff from the Graduate School, allowing for collaboration, engagement, and orientation programming for new graduate students (who may be arriving to the campus for the first time at the start of classes).

The Center for Global Engagement (CGE) is an umbrella organization that facilitates a range of interactions with prospective and current international students, alumni, students studying abroad, as well as international delegations. For prospective students, CGE handles inquiries, manages recruitment activities, and organizes orientation programs.

The Center for Global Engagement offers a range of services and activities, including mandatory advising sessions and orientation programs for international students, as well as managing short-term exchange programs for groups ranging from high school students to international delegations. CGE provides legal and work-related guidance to over 3,000 international students, alumni, and their dependents, and offers training for faculty and staff on international employment and immigration sponsorship. Additionally, it provides in-person and online intensive English courses, customized training, and cultural activities open to the entire campus community.

The Center for Global Engagement provides the UMBC community with various supports through the following internationally specialized units:

> Office of International Student and Scholars (OISS) dedicated to supporting UMBC's international student and scholar community
>
> Education Abroad helps students find study abroad programs that enable them to earn credits toward their UMBC degree while developing a global perspective

Fulbright Program is the flagship international educational exchange program sponsored by the U.S. government and is designed to build lasting connections between US and international students abroad.

English Language Institute (ELI) provides high quality training to those who need strengthen their English skills in speaking, listening, reading, writing, and/or grammar

International Partnerships is the main point of contact for international partnerships that contribute to the work of the CGE units and is critical to the university's strategy to grow its international prestige and attract qualified international students and faculty.

The **Graduate School** supports UMBC's fastest growing student population, coordinating services for students, and academic programs and accreditations. While the Graduate School offices will not be relocated to the SSB, the school will benefit from a presence in the proposed Student Services Building, especially through hoteling office space in the CGE suite to coordinate activities and international student orientation activities.

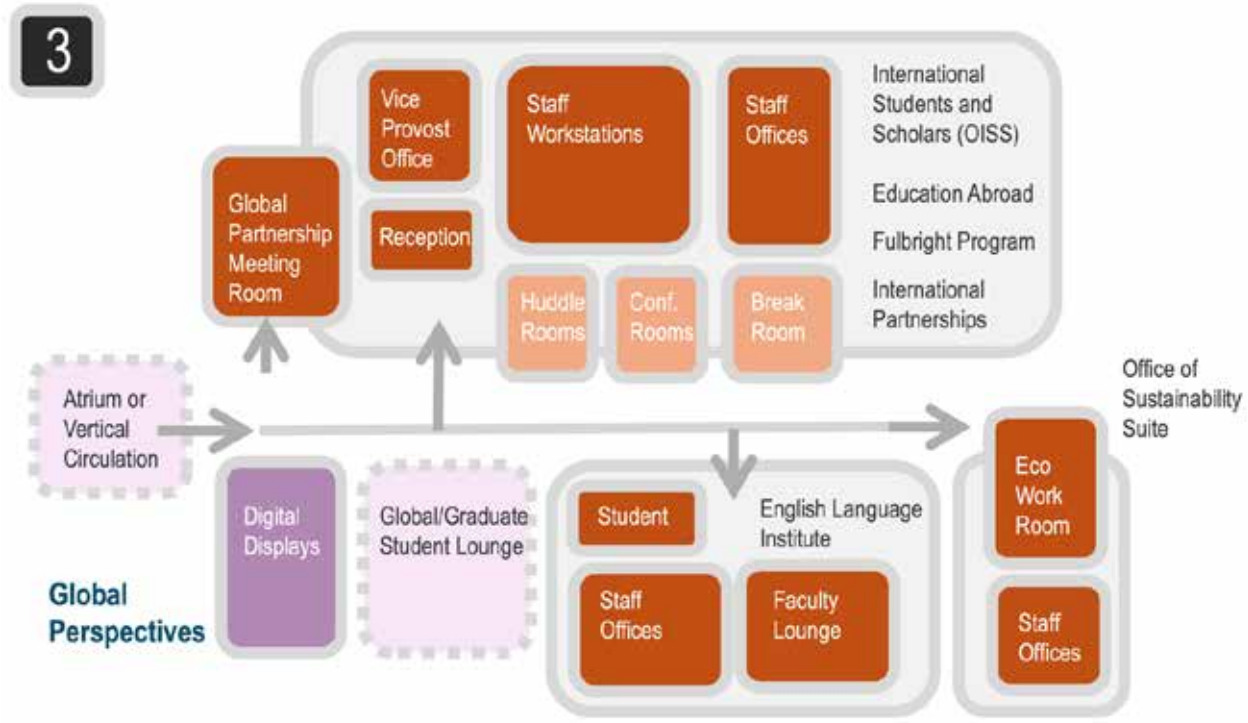


Figure 4.7: Diagram Illustrating Adjacencies: Services Illustrating Global Perspectives (Welcome Wing 3rd Floor)

Table 4.8: Space Requirements for Units Supporting International Students and Global Partnerships

CENTER FOR GLOBAL ENGAGEMENT					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	ASSOC VICE PROVOST OFFICE	1	1	150	150
310.02	DIRECTOR OFFICE	4	1	150	600
310.03	MANAGER OFFICE	5	1	120	600
310.04	STAFF / ADMIN ASST WORKSPACE	21	1	100	2,100
310.06	GA WORKSTATION	5	1	50	250
310.07	STUDENT WORKSTATION	5	1	25	125
315.02	SHARED BREAKROOM	1		200	200
315.06	OFFICE SUPPORT	2		100	200
315.08	STUDENT WAITING	1	10	200	200
350.01	CONFERENCE ROOM	2	16	320	640
350.02	HUDDLE ROOM	2	4	80	160
355.01	CONFERENCE ROOM SERVICE	1		100	100
					5,325
ENGLISH LANGUAGE INSTITUTE					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	1	1	100	100
310.05	SHARED STAFF WORKSTATION	4	1	50	200
310.06	GA WORKSTATION	2	1	50	100
310.07	STUDENT WORKSTATION	4	1	25	100
315.04	FACULTY LOUNGE	1	10	200	200
315.06	OFFICE SUPPORT	1		100	100
					950

4.09 Promoting Sustainable Futures and Environmental Engagement (Global Perspectives: Third Floor)

The new Student Services Building will incorporate sustainability throughout, providing a dynamic environment for students to engage with cutting-edge, energy-saving approaches and technologies. By reducing reliance on traditional energy sources, the building minimizes its environmental footprint and demonstrates the university's commitment to sustainable practices.

One of the key highlights of the building's design will be its energy-efficient systems, such as a high-performance HVAC system and smart lighting, both of which adjust based on occupancy and natural

light levels. These features not only reduce energy consumption but also create a comfortable and adaptable space for students to work and collaborate.

Additionally, energy-efficient appliances and water-saving fixtures are placed in common areas, making it easy for students to participate in reducing waste and conserving resources. These features are designed not only to benefit the environment but also to educate and inspire students to make more sustainable choices in their daily lives.

The building's innovative use of renewable energy, such as solar panels and geothermal heating and cooling, further demonstrates its commitment to long-term sustainability. By harnessing these technologies, the Student Services Building generates a significant portion of its own energy, offsetting the need for external power sources and reducing the university's overall carbon footprint. Students can learn about these renewable energy systems through interactive tours and educational programs that explore the technology behind them, encouraging the next generation of leaders to engage with and innovate in the field of sustainability. Overall, the new Student Services Building is not just a space for academic and personal support—it's a living laboratory for sustainability that empowers students to be active participants in shaping a greener future.

The Student Services Building will house the Office of Sustainability and support its Eco-Ambassadors program, melding student outreach with hands on campus projects. Facilities include staff offices, a workroom for Eco-Ambassadors, storage areas for outreach supplies, and a micro-mobility repair shop, allowing students to repair and maintain their bicycles, scooters, and other mobility devices. The Bicycle Workshop may be located within the building or remotely, like in the Commons Drive Garage.

The SSB project affords an opportunity to promote sustainability while educating and engage students. Students will have direct opportunities to engage with the building's energy-saving features through interactive displays and real-time monitoring systems. Digital dashboards will track energy usage, water consumption, and other sustainability metrics, allowing students to see how their actions impact the building's performance.

Office of Sustainability (OoS). OoS is actively engaged in providing the campus with the resources to empower every member of our community to investigate, experience, and impact the university's journey to a more sustainable future. OoS works closely with Facilities Management, to ensure that our State and University System sustainability commitments are met, and with the broader campus community to provide outreach, education and action. This office also engages students through their Eco-Ambassadors program and through the coordination of year-round sustainability programs and education.

Table 4.9: Space Requirements for Facilities Supporting Environmental Engagement

OFICE OF SUSTAINABILITY					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
220.02	LAB AND DISPLAY	1	12	300	300
310.04	STAFF / ADMIN ASST WORKSPACE	3	1	100	300
310.07	STUDENT WORKSTATION	6	1	25	150
315.12	WORKROOM	1	15	300	300
315.06	OFFICE SUPPORT	2		100	200
720.01	BICYCLE WORKSHOP	1		700	700
					1,950

Additional Facilities

4.10 Supporting High Impact Practices with Student-Centered Facilities

The Student Services Building should be designed as a dynamic space where students naturally draw together to collaborate and socialize, fostering a sense of community. Key to this vision are facilities that encourage informal interactions and support student needs, especially during evenings and weekends when service offices are closed. These include:

- **Meeting Rooms:** These should be flexible spaces to accommodate group study, mentoring, seminars, and other student-driven activities. The meeting rooms will be designed to serve groups of varying sizes (6, 12, 24 students). Two of the larger rooms should be equipped with removable acoustic partitions to allow for adaptability, creating the potential to host larger gatherings (up to 48 participants in a single room). Meeting rooms should be schedulable and have furniture and technology that can support collaborative study.
- **Lounges:** Comfortable, welcoming spaces for students to relax, study, or meet with friends. Lounges should have a range of seating options but should prioritize informal meeting over quiet study. Lounges are envisioned for each floor level and can be themed to reflect the service units that are adjacent.
- **Digital Gallery**: One or more galleries are strategically placed within the public areas of the Student Services Building, potentially near high-traffic areas like student lounges, corridors, atriums, or lobbies. The primary goal is to showcase student achievements, such as academic excellence, creative work, volunteer efforts, research contributions, and extracurricular accomplishments, through dynamic and interactive digital media.
- **Café:** A student-run café should be located on the ground floor near the student service desk. Besides a source of nutrition, this café will serve as a hub for student entrepreneurship and experiential learning, offering an opportunity for students to manage and operate a

real-world business. The location should be easily accessible and visible from the main entry and circulation paths of the ground floor. The Café space will include seating with dining tables and bar seating, located to allow for outdoor dining.

Table 4.10: Space Requirements for Facilities Supporting High Impact Experiences

STUDENT MEETING ROOMS					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
680.01	STUDENT MEETING - SMALL	8	6	120	960
680.02	STUDENT MEETING - MEDIUM	8	12	240	1,920
680.03	STUDENT MEETING - LARGE	2	24	480	960
680.04	STUDENT MEETING - X LARGE	1	48	960	960
685.01	LARGE MEETING STORAGE	1	1	200	200
685.02	MEETING ROOM SERVICE	2	1	100	200
					5,200
LOUNGES					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
650.02	STUDENT LOUNGE	3	40	800	2,400
650.03	INNOVATION LOUNGE	1	40	800	800
650.04	INTERNATIONAL / GRAD LOUNGE	1	40	800	800
					4,000
DIGITAL GALLERIES AND EXHIBITION					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
620.03	DIGITAL GALLERY	5		150	750
625.01	GALLERY STORAGE	1		150	150
					900
CAFÉ					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.02	DIRECTOR OFFICE	1	1	150	150
310.04	STAFF / ADMIN ASST WORKSPACE	2	1	100	200
315.06	OFFICE SUPPORT	1		100	100
					450

4.11 Provide Spaces that Support Building Operations

A building with as many diverse users and facilities as the Student Services Building requires adequate facilities for management and operations, including offices, a workshop, and central storage. These spaces can be located anywhere within the building, but there is an advantage to a location adjacent to a service entry.

Many students, especially those living in the residence halls order online and receive packages at the university. The SSB will include a room with an automatic package locker for the safe delivery of (Amazon, or similar) packages, located adjacent to the service entry and near service parking.

Table 4.11: Space Requirements for Spaces Supporting Building Operations

BUILDING SUPPORT SPACES					
SPACE SHEET	SPACE USE	QUANTITY	CAPACITY	AREA	TOTAL AREA
310.04	STAFF / ADMIN ASST WORKSPACE	2	1	100	200
720.02	WORKSHOP	1		300	300
730.01	SHARED STORAGE	3	1	400	1,200
780.01	STUDENT PACKAGE LOCKER	1		500	500
					2,200

Section 5 Building Performance and Energy Approach

Net Zero Energy

5.01 Context

The new Student Services Building will be the first major new building to be constructed on UMBC's campus since 2019. The project represents an opportunity to draw on lessons the campus and the designers of this project have learned about what will make buildings resilient and adaptable well into the 21st century. The SSB also occupies a pivotal site on the UMBC campus that will be a hub of student activity and a touchstone for the UMBC student experience.

In the theme of resiliency, the SSB project also represents UMBC's first opportunity to embrace the challenge presented by global climate change by having a net zero impact on UMBC's overall carbon emissions.

UMBC is presently undertaking a Campus Clean Energy Master Plan (CCEMP) seeking a broad, comprehensive, and integrated approach to meeting the goals set forth in Maryland's Building Energy Performance Standard (BEPS). The CCEMP will investigate the path forward to decarbonizing our campus through the replacement of fossil-fuel burning systems for electric-based systems and generating power on campus.

The CCEMP will outline a process for converting legacy centralized HTHW and chilled water systems that serve our campus academic buildings. Moving away from these systems will be a slow and incremental process that is unlikely to be significantly implemented by the time the SSB is constructed.

In parallel, the university is undertaking a Solar Installation Study in 2025 to assess the best locations on campus for the installation of solar photovoltaic arrays to produce electricity. Generating power on campus will be a part of the CCEMP.

The Campus Clean Energy Master Plan (CCEMP) and the Solar Installation Study will be completed in 2025 or early 2026 and provided as an addendum to this document. The university expects that these documents will assist in an understanding of how the SSB can best fit into the energy network of our future campus.

5.02 Performance Objectives

In recent years, the number of building projects reporting Zero Energy objectives has been growing to include larger projects across a more diverse range of uses and climate zones. Numerous energy agencies, research institutes, and public interest organizations publish data that are reflective of broadening industry trends that are responding to the growing demand for ZE and Ultra-low energy performance.

Building systems technologies that seemed novel, narrowly specialized, and/or unlikely to scale commercially as recently as 10 years ago are showing more resilience and acceptance. Yet today these can be evaluated with the benefit of a knowledge base that includes relevant design applications, a history of useful service in the field, and numerous case studies. UMBC believes this is supportive for setting an ambitious but achievable energy goal for the SSB project.

The SSB, as a non-lab building that will house many student-facing spaces, represents the ideal type of university facility in which to pursue ambitious energy goals: the SSB will be designed to be a carbon neutral building with respect to Scope 1 Direct Greenhouse Gas (GHG) emissions. Beyond "zero carbon," zero energy (ZE) is also an objective of the project, which addresses Scope 2 GHG emissions.

UMBC believes that setting an energy target early in the design process is critical to achieving net zero energy. Accordingly, the SSB project will have a dual energy target consisting of a gross site energy use index (kBtu/sf) and a net site energy use index (kBtu/sf minus on-site renewable inputs). These are referred to herein as "EUI" or "site EUI" and "net EUI" respectively.

Based on benchmarking data the design team is asked to target a site EUI of 28 with on-site renewable energy production and heat exchange capacity accounting for a net EUI of 0.

100% of the energy used by the SSB on a net annual basis will be supplied by on-site renewable energy: This objective is consistent with the International Living Future Institute's (ILFI) definition of net zero energy performance as measured over a 12-month performance period of full building occupancy. The design team will be asked to pursue the ILFI Zero Energy (ZE) certification inclusive of the 12-month verification period, which may commence only after certain commissioning milestones are attained.

It is important to note that the ZE certification does not permit the design and energy accounting to rely on waste heat recovery from a district energy system if it is from a combustion-based source, as is UMBC's existing High Temperature Hot Water (HTHW) loop.

5.03 Energy Strategy and Opportunities

UMBC is a suburban campus with large areas of surface parking, open space, and a private underground utility infrastructure. Components of a renewable energy infrastructure can have unforeseen implications for campus space, land use, and aesthetic considerations. As such, all recommendations relating to siting of the building and its renewable energy facilities will be evaluated by UMBC on the basis of good planning principles and guidance set forth in the university’s current Facilities Master Plan (FMP).

Notably, the SSB will be situated in a prominent campus open space of roughly 2 acres (not including the building footprint) contiguous with another open space of just under 3 acres. If the design team's recommendation is for a Geo-exchange (GHX) system, it is possible that one or both of these open spaces will be recommended by the design team as suitable bore field locations. But the

designers will also have the flexibility to define a project boundary that instead relies on remote project areas connected to the primary site by areas of utility conveyance.

The possibility of incorporating remote project areas into the "project boundary" (employing the term as defined in ILFI's Zero Energy Certification Program Manual) may also be deemed by the design team to apply to PV arrays, thermal storage, or long duration energy storage, as applicable.

The design team will be responsible for evaluating the SSB mechanical and electrical design options with respect to findings of the CCEMP. This is expected to include investigating whether one or more remote energy facilities, located elsewhere on campus, might present a superior solution for any components of a renewable energy solution when evaluated in the context of the CCEMP.

The SSB systems cannot be designed in isolation but must be designed with consideration for how the building will fit into the future campus infrastructure. This may include but is not limited to:

- Considering whether the SSB should be a stand-alone system;
- Whether it should be designed to connect to a future campus low temperature or ambient smart thermal grid.

It may be important for the design team to make recommendations relating to whether SSB renewable energy facilities should be conceived of as standalone or as the first of many "modules" of what will ultimately become extensive campuswide or "community" energy resources.

The design team is expected to present a life cycle cost analysis (LCCA) for each alternative strategy considered to facilitate final systems and (remote) site selection. The LCCA is expected to model costs pertaining to SSB first and operational costs and not broader campus implications, which will have been addressed in the CCEMP.

5.04 Operational Reliability and Redundancy

Reliability of services is important for operations on the UMBC campus. Thus, redundancy and standby capacity will be major design considerations. The designers will be asked to recommend strategies that are appropriate and cost effective for assuring that the building is operationally, as well as environmentally, sustainable.

The design team will use energy modeling to evaluate the potential role of demand response and advanced energy management in mitigating periods of low generation.

This study should also include recommendations by the designers relating to how operational stability is best defined for the facility type. If there are operational accommodations that the designers have seen successfully implemented in other ZE or Ultra-low energy facilities, these should be presented as case studies to UMBC for consideration, along with a cost-benefit analysis to equip FM staff to make fully informed decisions in consultation with end users.

To this end, the design team is expected to leverage scenario energy modeling, relevant case studies, and evaluation of innovative and field-proven technologies to propose a

holistic solution. The result will be a cost effective and value driven performance pathway to attain the project's energy objectives.

Combined with this analysis, the design team's experience in higher education projects, knowledge of best practices in similar climate zones, and sensitivity to institutional needs will result in a project that is resilient and operationally sustainable in the institutional setting.

5.05 Building Efficiency

Because reducing the initial need for energy use is the most direct way of conserving energy resources, the design team will be tasked to seek creative approaches for reducing the building's demand profile without detriment to its aesthetics or utility.

In addition to conventional "invisible" strategies such as improved thermal envelopes, glazing systems, or commissioned continuous air barriers, other strategies may directly engage how occupants use and experience the building. These may include but are not limited to:

- Optimized building form and orientation;
- Solar shading and glare management;
- Integrated daylighting strategies;
- Mechanical zoning strategies;
- Natural and demand-controlled ventilation.

Notably, these strategies are likely to entail occupancy analytics that merit consideration for use in applications not strictly related to the building's energy performance. This potential interface is also an important design consideration because capturing such real-time data can contribute to other important and related design objectives such as continuously monitoring and improving indoor air quality (IAQ).

5.06 System Parameters

The designers are also expected to bring their expertise to bear during the proposal phase of the project to evaluate the traditional metrics through which UMBC's facilities stewards set operational parameters and occupant expectations. These have served and continue to serve the university well. But it should be noted that they were not originally developed at a time when building systems had the level of capability and responsiveness that they have today and increasingly trend toward.

For example, Bucknell University reported in 2019 that their plant managers have (since 2016) deployed the building automation system's capacity to selectively set back zone temperatures during high demand periods. The implementation of this demand management program among the 45 buildings served reportedly results in a peak demand reduction of 1MW attributable to the control strategy alone. Notably, the capacity of Bucknell's chiller plant (3,450-tons) is less than half that of

UMBC's central facility. This implies that proportionally greater peak demand reductions may be an enabling factor for UMBC both at a building and campus scale.

The SSB design is an opportunity to consider this approach: In contrast to lab and classroom facilities, the building comprises offices and meeting spaces that have scheduling adaptability that these other types of facilities inherently lack. The design team should be prepared to engage UMBC at the level of understanding where sensible policy implementations may yield opportunities for the building design. This is an area where the depth of the design team's experience in higher education, among a diversity of client types and cultures, can credibly inform the project and validate its objectives.

UMBC's current design standards and a summary of conventional operating parameters will be made available in Section 8.

As with IAQ and IEQ, mentioned above, the SSB project will have other objectives beyond energy efficiency that guide the selection and design of building systems -- *These can be best distilled as a needed strategy to pursue a broader high-performance standard than ZE alone.*

The integrated design principles underlying the concept of a "high performance building" (and of related benchmark standards) are important to the design of the SSB and go beyond minimum code compliance.

5.07 Voluntary High Performance Building Certification

The design team will be asked to pursue a voluntary standard that meets or exceeds the Maryland High Performance Green Building Program at the time of design. The design principles guiding this effort will include not only energy efficiency, but also environmental impact and a healthy indoor environment.

The range of considerations this may implicate in the design is broad – *While UMBC recognizes the potential value of pursuing objectives across all these areas, they will not all be equally achievable, cost effective, or weighted toward obtaining a meaningful certification.* Formulating a certification strategy will thus require the guidance of an experienced design team. And the final decision for which certification to pursue will be based on recommendations of the design team. Although this certification will be additive to the ILFI ZE certification, there is expected to be a significant beneficial overlap in the documentation efforts.

Constituting this effort, the design team is expected to make comprehensive recommendations, administer, commission, and pursue a certification aligned with implementing these general principles:

- Optimize energy performance (the ZE objective)
- Protect and conserve water
- Reduce the environmental impact of materials (life-cycle)

- Design for resilience
- Enhance the indoor environment

For the SSB project, the pursuit of an ambitious energy goal (ZE) will be very supportive of attaining LEED Platinum, Green Globes 4, the equivalent ILFI Living Building certification, or other certification programs and levels recommended by the design team.

Section 6 Site Development Criteria

Pedestrian Systems

The site chosen for the Student Services Building is currently criss-crossed by some of the heaviest trafficked student pedestrian paths on campus. Understanding how the new building and site features will both affect pedestrian circulation and access to the adjoining buildings will be important in developing a successful overall project.

Paramount to the success of the project is an analysis of the circulation paths required to serve each of the unique user groups: current students, visitors and delegations to the campus, prospective students and their families, and staff working in the building. The pedestrian paths leading to the building should be clearly delineated and well-designed to serve these diverse users. Outdoor spaces should be designed to be integral with pedestrian circulation and will create a sense of "arrival" and provide spaces for outdoor experiences and activities.

6.01 Pedestrian Circulation

There are four strong pedestrian routes that should be acknowledged that will impact the overall site design. Two are east-west circulation paths parallel to Poplar Avenue - one that connects the Stadium Lot to the academic core and another that connects True Grits and a future large parking facility at the Poplar Road intersection with Hilltop Circle to the Library. Another circulation path runs north-south and connects the residential district to the ILSB and academic core. The last one is a diagonal connecting The Commons and the main entry of the Albin O. Kuhn Library.

Each user group in the building may have distinct pedestrian paths that should be considered and may influence site features or open space design. The design team should consider that:

- commuting students may be accessing the building from dispersed parking to the east or from the academic core
- resident students may be arriving from the residence halls to the north or from the academic core
- staff may arrive from the Commons Drive Garage or the Lot to the east of the Physics Building, and
- visitors to campus, including prospective students and their families will be arriving from the Commons Drive Garage

Linking the SSB lobby to the closest parking facility, the Commons Drive Garage, will be an enhanced pedestrian promenade. This promenade should integrate features like pedestrian scaled lighting, banners, site furniture, wayfinding signage, and specialized hardscape to clearly draw visitors to the building entrance.

6.02 Open Space

The Student Services Building will border four distinct open spaces that must be considered and improved to the extent the SSB design necessitates. Listed in order of priority for the project, these include:

1. The **Central Green** to the west. This space will become, with the backdrop of the SSB and the existing Commons student union, the iconic campus gathering space.

Also of note, bordering the new Central Green design to the west, is an existing amenity that the new design should harmonize with. This is an existing landscaped area of curved retaining walls planted with trees that overlooks the Library Pond. This signature landscape feature is outside the project area.

2. **An entry plaza** associated with the SSB lobby. There may be more than one hardscape entry plaza associated with this project, depending on the location of ground floor entries and pedestrian paths. There may also be plazas or terraces on several sides of the building, especially if access is from both the west and east.

It is also possible that the primary public entry to the SSB could be developed as an extension of the small plaza fronting the Public Policy Building.

SECONDARY ADJACENT OPEN SPACES INCLUDE:

3. **The recreation area (Erickson Field)** that will be to the north of the likely building site. It is anticipated that the existing informal recreation field will be impacted by the project and will need to be restored or redeveloped. In addition, this site may incorporate a bore field for ground source heat pump systems and may incorporate storm water management features that support the project.
4. The **East Quadrangle**, bordered by the Public Policy Building and the Physics Building. This space will be the gateway to future academic development on the eastern part of the campus. The project site borders this quadrangle and new pedestrian paths to the SSB may impact existing paths in the East Quadrangle.

6.03 Relationship of Interior to Exterior Spaces

The relationship of the SSB to the surrounding outdoor spaces will be important to how the building functions and how ground floor uses are organized.

Investigate the potential to expand seating for the café out into the site via a terrace. Design outdoor dining terraces take advantage of the sun's warmth in the spring and fall, and to provide shade in summer.

Extend textures or materials from within the building to the exterior to lessen the contrast between the exterior and interior of the building. In addition, allow design features and landscape textures from adjoining outdoor plazas and gardens into the building.

6.04 Plaza and Hardscapes

The design solution for exterior spaces will be in accordance with an overall site development plan. This plan must take into consideration vehicular circulation, the overall pedestrian network on campus, UMBC standards for materials, furnishings, plantings and construction details, and existing adjoining building entries.

The project should take design cues from recent buildings and the site development around it, especially the most recent building on campus, the Interdisciplinary Life Sciences Building, to ensure that paths and outdoor spaces are harmonious and knitted into the existing campus. Hardscape, including pedestrian paths, roadways, drivable paths, and building entry plazas will be designed in accordance with university preferences and in concert with university input. The university has established standards for materials that are durable and color palettes that have visual appeal and longevity.

Hardscapes and paths will need to be designed to accommodate emergency and service vehicles.

Some student paths will cross the service drive of The Commons and design features should reflect this dual use path while ensuring pedestrian safety. Careful attention to the choice of paving materials and site details is needed, especially where paths transition into existing vehicular roadways and drives.

6.05 Landscaping and Plantings

The landscaping design for the project area will be considered as a unified and comprehensive design, coordinated with the university landscape design themes.

Plant species selection and planting layout must be designed for aesthetic consideration throughout the year. Special consideration will be given to the use of native indigenous plants and those that require minimal maintenance.

Planting beds will not inhibit access to open space, create security concerns or require excessive maintenance requirements, and will be used in conjunction with the requirements of storm water management.

Preserve natural soils as much as practical through grading design. When planting in disturbed areas ensure that proper planting soil is provided throughout the root zone of the mature tree or plant.

The disturbed (reconstructed) planting areas should be un-compacted and well drained. The design must require contractor to obtain soil testing in advance of the installation schedule. The imported soil will be inspected by the design team against the approved soil sample.

6.06 Pedestrian Scaled Lighting

Incorporate UMBC standards for pedestrian lighting type, illumination, and color within the areas improved by the project.

Lighting will comply with the latest edition of The Lighting Handbook from the Illuminating Engineering Society of North America and UMBC standards and preferences for placement of light standards.

Site lighting will incorporate a design scheme for lighting the building facades and will also consider the use of interior building lighting of lobbies, corridors, and significant interior spaces to supplement the exterior spaces adjacent to the building. Overall design will limit the amount of light transmission off-site and into the atmosphere.

Exterior lighting may be required to light banners, signage, and other site features.

6.07 Site Furnishings

Bicycle and scooter parking areas will be incorporated into the layout and design of new paths and exterior spaces. Locations of bicycle racks will consider limiting bicycle traffic on main pedestrian paths and keeping bicycles free of building entries.

Site furnishings, including trash and recycling receptacles, benches, bike racks, and site lighting will be selected and located in accordance with UMBC standards. Placement of furnishings will encourage use of outdoor space for social interaction and study and will not impede use of outdoor space for passive recreation.

Consider the visually impaired users of the campus when locating site furnishings.

6.08 Wayfinding and Celebratory Signage

The project will incorporate the current UMBC way-finding signage system into its design for pedestrian, vehicular, parking, and accessibility and access signage.

The way-finding system may include provisions for digital signage inside the building.

A system of pedestrian wayfinding to mark the pedestrian path linking the Student Services Building to Commons Drive Garage will be required.

Vehicular Circulation and Systems

In addressing vehicular access, circulation, parking, drop-off, and loading the design team will address the following:

6.09 Site Access and Vehicular Circulation

The principal access for visitors in cars will be along Commons Drive. It is from Commons Drive that the majority of short-term parking, accessible parking, and drop-off will occur.

Center Road will be used for school bus drop-off of prospective students, and the nearest shuttle-bus stop is located on Park Road at Poplar Avenue.

6.10 Parking

No net new parking for visitors, students or faculty is proposed. The university plans to use existing surface lots and parking garages to support the new Student Services Building. However, enhancing pedestrian connections to existing parking facilities, like the Commons Drive Garage, will be required.

Accessible parking will be accommodated in the Commons Drive Garage. Ensure a clear, safe and appropriate accessible path from the garage to all entrances of the building.

6.11 Loading and Service

This building is not envisioned to need a service court or dock. The building should have a dedicated service entry leading to temporary service vehicle parking, where deliveries can be made and trash removed.

Currently there is service parking on Center Road and adjacent to the south entrance of the Physics Building. The design team will assess the adequacy of these current locations and if necessary propose service parking improvements.

6.12 Drop-off Zone

The project will include an appropriate off-street bus drop-off and pick-up zone for school groups. It is expected to be located on Center Road, south of Erickson Hall. The design team should test this location in lieu of the overall site plan for the project. The bus drop-off zone should include sufficient width of pedestrian space to not create a bottleneck with other student paths.

The design team will also investigate reusing the current Park Road and Commons Drive pick-up/drop-off circle for those arriving by car. This zone would allow for easier drop-off of visitors by a motorist seeking to park within the Commons Drive Garage.

6.13. Emergency Vehicle Access

The design team will coordinate emergency vehicle access within the project site and buildings adjoining it with campus life safety and security personnel and with local jurisdictions.

Paths used for designated emergency vehicle access, regardless of their use as roadways or pedestrian paths will be designed to accommodate the maneuvering requirements and weight of emergency vehicles.

Emergency access to buildings and spaces adjoining the project site must remain accessible to emergency vehicles throughout the construction phase.

Additional Site Issues

6.14 Educational Landscapes

The university has an opportunity to extend informal learning into the spaces and landscapes surrounding the building. The design team should study opportunities within the context of the site development plan.

These may include but are not limited to:

- “Retriever spirit” opportunities for community-building
- Posting areas or interactive concepts to encourage student ownership
- Environmental graphics relating to sustainable site features
- Opportunities for outdoor events
- Gathering places
- Private contemplative places

6.15 Drainage and Stormwater Management

Site drainage and stormwater management on the site will require study and analysis due to existing grade conditions and the unique program requirements. Storm water management will comply with the most recent MDE requirements regarding drainage, stormwater management, and erosion and sediment control, including all permits and approvals.

A National Pollutant Discharge System (NDPES) permit is required for disturbed sites exceeding one acre.

The project will include a stormwater management strategy that meets current standards and effectively protects downstream waterways from erosion and flooding. The system should coordinate with the university’s Institutional Management Plan for Stormwater as approved by MDE.

Drainage patterns around structures will direct water away from foundations, walks, patios, roadways, and turf areas so as not to interfere with the function of these site elements.

Water quality management improvements incorporating Environmental Site Design (ESD) techniques as a primary treatment approach will be used to the maximum extent possible. Some examples of this technique include micro bio-retention, non-rooftop disconnection, rain gardens, swales, porous paving for non-vehicular areas, vegetated roofs, and rainwater harvesting.

Where it is not feasible to implement ESD measures, MDE may allow for alternative forms of treatment under the 2001 Stormwater Management Requirements (Chapter 3 of the MDE Manual) to meet Water Quality requirements.

6.16 Excavation and Soils

The existing conditions and character of the site will be considered by the design team in developing the site design. Careful consideration of the site character is required in the development of the site, including determining the footprint and placement of the building. The existing change in topography may be useful in properly siting the building, organizing floor levels, and maximizing the amount of grade-level access to the building.

The design team is responsible to understand the limitations to the development of the site due to soil condition, impacting the placement and design of on-site building support systems (e.g., tunnels, utilities, storm water management, etc.).

Geotechnical information is not available for the proposed site area.

The design team is expected to secure contract services to provide a soil analysis, determine the condition of existing soil and substrata, and identify any restrictions the soil types or subsurface conditions may place on the development of the building's foundation and/or retaining systems.

> This analysis should include assessment of the suitability of primary and remote project areas (as identified by the design team) for geo-exchange (GHX) bore fields, if this is the selected design approach. Such analysis will require coordination between the MEP consultants and the geotechnical engineers and encompass all needed parameters to develop a detailed design including, (but not limited to), heat exchange potential at various depths, the most cost-effective balance between bore depth and bore field extents and weighed implications for remoteness from the primary project boundary.

Site Utilities

The Student Services Building will tie into existing domestic water, sanitary sewer, storm sewer, data/communication, and medium voltage power provided by the various underground utilities available within or adjacent to the project site. The project may extend the utility tunnel system via a spur but will more than likely not extend the HTHW or chilled water lines. Section 5 Building System Criteria will address energy goals and the heating and cooling design criteria in more detail.

6.17 Extension of the Campus Utility Tunnel

The utility tunnel runs along the north edge of The Commons to serve the Physics and the Public Policy Buildings with HTHW and chilled water, power, and communications fiber optics cabling. The Student Services Building can be connected to this underground utility network through a T-connection within the tunnel.

Currently, it is not envisioned that the project will connect to the existing HTHW or chilled water loop. The design team will need to assess the advantages and costs of extending the tunnel to the

SSB if it serves the project. Alternatively, the design team may connect the SSB with power and communications cabling via a direct buried conduit.

If an extension of the underground tunnel is preferred, it will be designed and constructed to meet or exceed the design for the recently constructed section of the utility tunnel connecting to the Interdisciplinary Life Sciences Building. UMBC will provide the design criteria of the tunnel design to the design team. The existing tunnel has walls and ceiling of reinforced concrete to a minimum of 1'0" in thickness and have a clear interior height of 11'-0" and clear width of 9'-0". The tunnel design incorporates egress, lighting, ventilation, and drainage.

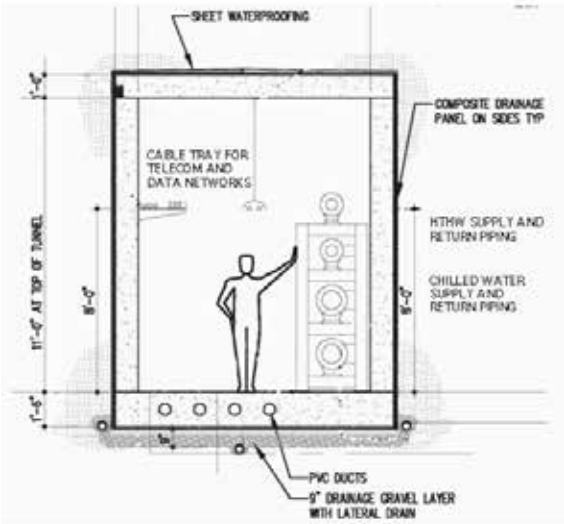


Figure 6.1 Typical Utility Tunnel Section

6.18 Upgrades and Connections to Site Utilities

General

Meter all utility services to the building for integration with the campus building automation system for energy management purposes, system loads and utilization, system performance, and threshold monitoring/alerting.

High Temperature Hot Water (HTHW)

Although the HTHW distribution system that radiates out from the Central Plant may be adequately sized to support the addition of the SSB facility, the project will not employ this system which relies on gas-fired boilers to maintain water temperature.

Opportunities for waste heat recovery should be evaluated by the design team, provided the waste heat has not been sourced from the HTHW loop or other fossil fuel reliant system. This is because the project's energy objectives will not permit the SSB design to rely even indirectly on fossil fuels, which are being phased out in compliance with State regulatory mandates.

Chilled Water

Although the campus central chilled water is generated using electricity from the grid, the designers should prioritize evaluating the potential for air and/or ground source heat exchange (GHX) in combination with thermal storage as the preferred approach to cooling the SSB.

In this scenario, net annual consumption of grid (non-site generated) power will be zero, and there will be a bi-directional point of connection to the campus power grid at the SSB submeter.

The on-site system will provide the needed chilled water capacity to the SSB in a balanced design that also provides the needed space heating capacity.

Domestic Water

The existing 10” water line running easterly through the site and along the east edge is adequate to serve the needs of the project and any required fire hydrants.

The design team will determine and design the final pathway, size and material of the water line and confirm the capacity of the existing system to support the proposed project.

Sanitary Sewer

A 6” sanitary service will be required and is expected to drain to the easterly side of the proposed SSB. The existing sanitary manhole may be replaced or used as is, and it is drained by an existing 8” sewer, to the southeast, connecting with a 15” main under the Commons Drive Garage. The entire campus system drains to Baltimore County’s sanitary sewer system in Hilltop Circle continuing to the east. New sewer piping will be PVC.

Natural Gas

Not applicable due to the project’s zero GHG objective.

Storm Sewer

The 30” storm sewer that runs along the east edge of the site may serve the needs of the site. design team to confirm based on the overall site concept.

Power and Site Electric Service

The Student Services Building will leverage site generated power coming from a photovoltaic array. The building will also have a submetered bi-directional connection to the existing medium voltage campus infrastructure. The purpose of this connection is twofold: 1) it will allow the SSB to input excess site-generated power to the campus grid under normal operating conditions; and 2) it will provide to the project a standby power source if the design team recommends this approach to providing reliable backup power. Alternatively the PV source may be metered and then connected to an existing campus 13.2KV transformer which could serve the building.

As a net zero energy building, the photovoltaic system is expected to generate enough power on a net annual basis to meet the building's energy needs, including heating, cooling, ventilation, domestic hot water, plug loads, and equipment loads.

Data and Telecommunications

It is expected that this project will connect to the MDF through new telecommunication duct banks. The sizing of the duct bank capacity should be studied to provide redundancy as needed. The design team will be expected to coordinate with university Department of Information Technology staff to confirm these parameters.

Section 7 Building Design Criteria

Form and Architectural Expression

The Student Services Building's scale and massing, and the development of areas surrounding the structure are of critical importance to the preservation of a unified campus environment. The design team shall provide design solutions that result in a building that is inviting to the user, both as a functional structure and as a compatible element in the campus built-environment. Design solutions must consider materials, scale, space, light, relationship of outdoor and indoor environments and pedestrian circulation to, around, and within the building.

The Student Services Building is a fully student-centered building and is a once in a generation opportunity to create a touchstone experience for UMBC students. Its unique position in the center of the Student Success District along with the availability of new construction technologies and design possibilities is an opportunity for a building that creates a supportive place for UMBC students that is both distinctive and welcoming.

Additionally, as discussed in the preceding sections, the SSB's expected role in UMBC's ambitious Campus Clean Energy Master Plan will challenge the design team to take a creative and integrative approach to all aspects of the building design: from its siting and form to its major systems.

7.01 Massing and Structure

To allow for the development of important outdoor spaces the new Student Services Building will be three to four levels in height. This size is consistent with the campus' facilities master plan and in keeping with the scale of the adjoining three to four story buildings, The Commons, the Physics Building, and the Public Policy Building.

The design team will vary the building massing to respond to the surrounding buildings and site areas, while accommodating the required functions and activities.

The structural design for this project will provide a building system that will integrate the program requirements for space layout with the architectural and building service needs, while meeting current code standards for sustaining all vertical and horizontal loads imposed on the building system.

During the design phase, a thorough coordination of mechanical, electrical, plumbing and civil services with respect to all structural elements is required to avoid any potential conflicts and minimize unplanned penetrations of floors and other structural members.

The design team, in concert with the construction management team, will evaluate structural systems, including mass timber, relative to Life Cycle Cost Analysis.

Notably (and especially because the building site occupies a highly trafficked campus open space), this evaluation should take into consideration the potential for off-site fabrication, reduced jobsite

waste, and speed of erection, which can benefit schedule and support sustainability objectives such as reducing embodied carbon inputs.

These considerations should be weighed against the increased complexity of systems coordination and modular nature of some the systems that might be considered, as impacts plasticity of the building forms and flexibility of internal layouts.

All equipment on the penthouse floor or the roof will be supported on dampening pads to minimize the effects of vibration and noise.

7.02 Exterior Architectural Elements

The Student Services Building will be compatible and complementary to the architecture style of the latest buildings on campus, extending the modern vocabulary with building elements of an appropriate scale and approachability appropriate to its purpose.

The exterior architectural elements and materials should be tested, low-maintenance systems with a service expectancy of more than fifty years. The design team should make recommendations for use of full-scale mockup panels to validate aesthetics, scale, material selection, workmanship, and performance, as appropriate.

The roof systems will provide a canopy celebrating the main entry of the building and will be clean of all major mechanical systems, as it will be highly visible.

Major mechanical systems will be integrated in the lower flat roof structures and located within enclosed mechanical rooms or penthouses. Attention throughout the design process is required to ensure that major equipment, stacks, and penthouses are orderly and attractive when viewed from adjoining buildings and open spaces.

Consider and analyze the feasibility of including green roofs, roof terraces, or photovoltaic arrays in the overall design of the building.

7.03 Relationship to Exterior Spaces

The siting of this building is unique in that it engages open spaces, pedestrian paths, and adjacent buildings on all sides. An important design challenge will be to engage the exterior spaces to the west (the Campus Green), the east (the East Quadrangle) and the north (Erickson Field) in a way that effectively integrates ground floor uses to the site. By organizing the building to provide direct ground floor access from these important campus open spaces, the building can enhance these important campus outdoor spaces, leveraging the project to further benefit the university.

Entries will be at or just above grade with each primary entrance designed for use by individuals with disabilities as well as service deliveries and other general traffic.

Weather protection at building entries will be provided by overhangs, canopies, or recessed doorways. Vestibules will be provided at each major entrance.

Care will be taken in the design of roof details and walking paths around the building to avoid hazards associated with snow or ice falling off the building onto pedestrians.

Interior Architectural Planning and Design

7.04 Circulation Within the Building

In the overall design, careful attention will be given to the circulation patterns for students and visitors. The relative size of the horizontal and vertical circulation elements, like entrances and corridors, will be appropriately sized to the areas directly served and to the movement of persons from one area to another. These areas will be designed with due consideration to the ratio of net assignable square feet to gross square feet.

The main entrance to the building will immediately convey a sense of the building and its activities to both the first-time visitor and persons well acquainted with the building. The space will be inviting, warm, and of a scale to visually impart a sense of direction to the facilities in the building.

A large staircase directly accessible from the main entrances will link floors containing services.

More generally, stairways will be designed as inviting links among all floors providing access and discouraging elevator use. The location and design of the staircases will be deliberate and visible.

The circulation spaces in general will serve double duty as a means to promote spontaneous social interaction and therefore encourage the exchange of ideas and information. Furnish areas along circulation routes and corridors with appropriate lighting, natural light, furniture and technology to support interaction.

Locate visual displays, celebrating the achievements of students and alumni, in areas where students circulate and congregate.

Effective acoustic treatment of the circulation areas will be of great importance in the success of the floors with gathering, dining, and lounge spaces.

7.05 Reducing Barriers to Access

The design will provide for the convenient use of the facility by individuals with disabilities.

Locate Student Disability Services in an area of the ground floor to ensure that accommodation services are not hidden from sight.

Design pertaining to use of the facilities by individuals with disabilities will conform to current ADAAG regulations and Maryland accessibility codes.

7.06 Visibility of Services

The distribution of student services and their location relative to vertical circulation will greatly impact their visibility and accessibility. While the location of suites housing student service units will

have a large impact, so will the architectural cues incorporated in the design. Materials, forms, color, and wayfinding signage have the potential to play a large role in ensuring visibility and increasing student access.

7.07 Flexibility

Create a facility that can evolve alongside the changing needs and functions of its occupants and the university. The design should allow for easy reconfiguration of space layouts without requiring major structural changes, ensuring the office spaces remain flexible and adaptable for the future. A modular design approach will facilitate seamless reassignment of spaces while maintaining efficient, functional office arrangements.

Focus on flexible infrastructure that can accommodate future modifications, with the capacity to adjust to new configurations as needed. The design should also be forward-thinking, anticipating advancements in technology. Include adaptable distribution systems that can accommodate future updates and additions to the building's services, ensuring the facility remains responsive as technologies evolve and systems are upgraded.

7.08 Office Suites and Workstations

The Student Services Building will be a student-centered facility, actively occupied and used by students throughout the full day the building is open. To ensure security after service hours most service units in the building will require a lockable suite. Glass walls that enclose the reception area of suites can provide a welcoming presence while also serving as an acoustic barrier to potential noise in adjacent public corridors, meeting rooms, and student lounges.

While Section 6 outlines the assignable space needs of each service unit the final design may blur assignment distinctions, allowing for more flexibility in future assignments of space, increased sharing of facilities, and improved collaboration between units.

- Locate shared facilities, like conference rooms, break rooms, student waiting areas, and huddle spaces in a centralized location to serve all service units on each floor level.
- Position shared workstations in spaces that can be accessed by multiple service units. These workstations will promote collaboration among staff from different units and provide flexibility to accommodate future expansion or downsizing.

The program, which follows UMBC space guidelines for office assignment, will allow for flexibility in office suites, especially in suite with open plans and cubicles.

- Non-managerial staff and administrative assistant workstations can be in shared open suites. The program assigns 100 SF to 310.04 Staff / Admin Asst Workstation. When these workstations are surrounded by acoustic prefabricated walls (cubicle), the more appropriate size may be 64 or 80 SF. Efficiencies created by open office configurations can be applied to reduce the overall size of the office suite or create additional collaboration spaces.

- Office service needs, like copying and file storage, have typically accounted for roughly 10% of office space needs. As offices are moving to less paper and digital data management, the need for these types of spaces can be reduced. The program assumes that except for specific storage needs, most office suites can accommodate these types of spaces within corridors between offices, workstations, and shared collaboration and meeting spaces.

Technology changes are allowing for more flexibility in working environment.

- The university has a policy that allows for telework opportunities for staff. With technology that allows for greater remote collaboration a staff member that is not on campus can be an effective team member and not be on campus each day. 'Hoteling' workstations can provide space for staff with flexible telework schedules. The final design of each service suite should consider if a certain percentage of staff can be assigned a shared hoteling workstation in lieu of an office or private cubicle.
- Locate huddle rooms near hoteling workstations and cubicles to ensure that staff have private meeting spaces to attend virtual meetings, answer personal calls, or meet with students.
- Group hoteling workstations and cubicles in a way that creates a desirable work environment, with access to natural light and shared collaboration facilities.

7.09 Food Service

Food service in the Student Services Building will be modest but will provide an important source of hands on training, management, and entrepreneurship.

The planned café will be located on the ground floor and will be supported with a dining area and open to the outdoors. Locate the outdoor terrace to take advantage of natural light.

It is not envisioned that the café will require dedicated loading and service areas or a service elevator unless critical kitchen or food service storage is provided on a separate floor level.

7.10 Security and Access Control

Building security measures will provide personal safety and security for occupants as well as provide measures to protect personal and university property. These include site lighting, physical deterrents to unauthorized entry, security communications systems and equipment, and emergency power for all electric locks and accessible door equipment.

Provide appropriate exterior lighting to the building entrances and along all paths in accordance with UMBC standards. Provide lighting at all service entries and the loading area.

Security cameras will be positioned on entry doors, the loading area and the roof (for recording activities in adjacent open spaces). On the inside, cameras will be positioned at the entries/exits.

The fiber optic security equipment must be tied to the campus security infrastructure with alerts sent to the UMBC Police department.

A security system, as specified and approved by UMBC, must be installed in the building. Door prop alarms for card-controlled doors, fire alarm reporting, alarm signals for high-value / hazardous spaces, and environmental monitoring for critical spaces will be connected to the security system.

All access control hardware, security system hardware will have a conduit installed from the location of the hardware device to within 18" of the closest communications basket tray.

Security cameras and respective lighting will be on e-power. Lighting, in corridors and rooms video-monitored, will not be controlled by wall switches at the entrance or exit to the space. To conserve energy not all lights in a monitored space need to be on and interior lights can be controlled by switches.

Provide emergency phones linked to the UMBC call response system.

Provide card readers for access to all primary, secondary and service entrances to the building. Other card readers for suites and spaces within the building may be required by the university. Provide key overrides for all doors with card reader access.

Private offices and spaces will be key controlled only. Building service spaces, like data and telecommunication rooms, janitorial closets, building storage, etc. will be both card and key controlled.

Electronically controlled doors must operate via an electric strike. Emergency power is to be provided for all doors equipped with hardware to make them accessible to persons with disabilities.

Access control to and within the facility will be designed to provide flexibility in segmenting and securing major functional and access areas of the building from each other to allow management of the building by multiple end users and/or concurrent events. Life/safety and fire egress should be accommodated in all design scenarios.

7.11 Safety

The UMBC Safety Office is responsible for inspection and evaluation of safety related problems on campus and is staffed with professionals trained in the various aspects of fire and life safety and bio-hazardous containment. Campus criteria for installation of fire alarm systems, extinguisher cabinets, sprinkler systems, fire lanes and ventilation will be provided by the university. Interconnection of the fire alarm system to the upcoming TrueSite Network will be coordinated with the UMBC Police and Environmental Safety and Health group.

The design team will investigate all potential fire and life safety problem areas, including those that may be generated by the program requirements. Below is a partial list of requirements:

- All fire equipment is to be clearly visible and graphically designated. Systems will report locally within the building and to the central reporting center operated by the UMBC Police Department.
- All materials used in the building will be selected with regard to flammability and the types of gasses produced by combustion.
- Emergency access and egress routes will be clearly identified and physically apparent to the building occupants.
- Ventilation systems will minimally comply with the latest standards set by the American Conference of Governmental Industrial Hygienists, BOCA Mechanical Code, ANSI/AIHA Z9.5, OSHA, ASHRAE, and SMACNA, as well as with other applicable codes and standards.
- The energy monitoring system and security and safety systems will be interconnected with the UMBC campus central system and include card access as required by the university. All components utilizing the campus security monitoring system must match existing equipment, conform to UMBC standards, and be coordinated through the UMBC Department of Communications Services.

Mass notification hardware and equipment will be installed to display emergency messages throughout the building. The displays will work with the UMBC Text Messaging system operated by the UMBC Police Department. Displays will be located at all elevator lobbies, building entrances, stairwell doors, and the loading area.

7.12 Material Delivery and Removal

UMBC does not utilize exterior trash dumpsters for the removal of refuse from buildings. Disposal of trash and waste will be deposited in a compactor room with ease of access from the service yard.

An area convenient to the building will be provided for storage of several recycling containers to store recyclables from the facility including organics/compost, glass, metal, cardboard and paper.

Interior Building Elements

7.13 Elevators

The building will incorporate a fast, flexible, and easy to use the elevator system. It is expected that two passenger elevators will service this building. Each passenger cab will have a minimum capacity of 4000 LBs and be well lit. Finishes will be durable and vandal resistant. Elevator wainscots will be reinforced to prevent damage from cart traffic.

Elevator telephone service and ring down will be provided with the campus telephone system. Elevator telephones must be of the specific model and type stated in the UMBC Communications Services Specifications. The elevator car will house all instruments and equipment compatible with UMBC standards and systems. All keyed switches will match current key systems (H259) except for fire service barrel key EPC 02. Elevators will be equipped with Remote Elevator Monitoring system.

If there is a service elevator, provide card key access.

7.14 Acoustics

Each space in the building will be designed to provide appropriate noise reduction for its scheduled use. Criteria for noise reduction and sound isolation is provided in the space sheets as a guide – the design team will employ “best practices” in this regard. This includes sound generated by equipment and users in adjacent rooms as well as by the building mechanical systems.

Mechanical system design must provide sufficient attenuation of noise generated by air flow through ducts and diffusers, as well as noise generated from system components in all occupied spaces.

Spaces that contain noise generating equipment will be designed in locations away from spaces requiring background noise levels of RC-35(N) or below. If the final design requires adjacencies that cannot meet these requirements, adequate sound isolation must be provided. This may require structurally isolated box-in-box construction.

The Student Services Building will be designed to meet or exceed specified ambient noise levels and sound transmission criteria (STC) for the following room types, unless called out specifically in the individual space sheets.

Type of Space	Room Criteria	STC Rating
Meeting Rooms	RC25-30(N)	STC 50-55
Production Space	RC20-25(N)	STC 60-65
Offices	RC30-35(N)	STC 40-45
Conference Rooms	RC25-30(N)	STC 50-55
Lobby/ Lounges	RC35-40(N)	
Corridors	RC35-40(N)	

7.15 Quality of Light

The design team is to conduct studies of the effect of natural light and illumination on the quality of building interiors, occupant comfort, and energy use.

The design team is expected to take an integrated approach to the design of natural and artificial lighting in the SSB. This should include but is not limited to:

- Shading effect of existing structures and trees
- Influence of building form and orientation for daylighting
- Passive (façade) and active shading devices
- Zoned controls integration with daylight contribution
- Specifying for circadian effect

Deliverables should leverage visualizations and exploit the BIM model to combine accurate visual depiction with quantitative analysis.

The design of lighting systems will include detailed consideration of the normal tasks performed in the room, reflectance of all surfaces, special lighting effects required, normal sight lines, and zone control of larger areas. For general requirements, refer to the latest edition of *The Lighting Handbook* from the Illuminating Engineering Society of North America and the criteria in Section 8.12.

Unique ergonomic circumstances in spaces where computer monitors are used extensively require special analyses and provision for appropriate lighting quality.

Consider multi-story spaces that allow natural light from windows and skylights to penetrate deep into the building to accentuate congregating spaces and provide natural light to interior rooms and corridors.

Provide mechanical means of shading expanses of glazed areas and window systems during times when the sun creates glare.

7.16 Maintainability

The design team will minimize maintenance problems by designing and laying out building systems, selecting equipment and finish materials, and designing other areas which directly affect annual maintenance operations and costs in consultation with UMBC.

Architectural finishes are critically important in this facility, and consideration for maintainability and durability is a key requirement.

7.17 Interior Materials and Finishes

Materials and finishes, both interior and exterior, will be selected to meet the following seven criteria: aesthetic considerations, durability, acoustical requirements, ease of maintenance, conservation of energy, sustainable manufacturing processes, and indoor environmental quality.

All materials, including design details, will be analyzed for their effect on durability and ease of maintenance, and attention will be given to areas of high traffic.

Special care will be taken at building entrances to provide for the removal of dirt and sand.

All building materials will be selected to minimize the absorption and reflection of 802.11a, 802.11g, and 802.11n radio signals. This is especially important when selecting vertical partitions, doors, and ceiling materials. For aesthetic and security reasons, all wireless access points will be installed in the space above the ceiling. All wireless access point installation locations will be in public corridors with acoustic panel ceiling ceilings.

Surfaces must be selected to provide a monolithic, scrubbable surface, free of cracks or ridges. Floor-wall joints must be designed to allow easy cleaning.

Doors will be sealed against pests and vermin and all penetrations of pipe, conduit, etc. will be sealed. If some form of cavity wall is selected, special attention must be paid for prevention of infestation in the cavity.

Floor surfaces will be appropriate to the function of the space. Surface materials will be selected to respond to maintenance needs as well as to the function and acoustical needs of the spaces. Materials will generally be long-lasting and easily cleaned. It is well recognized that carpeting is of assistance in the control of sound and will be specified in those areas where acoustical needs and comfort are essential, and it is appropriate to the function. The minimum specifications for any carpet used will include performance requirements for static protection, Radiant Panel and Aminco Smoke Chamber Test passage, Steiner Tunnel Test (ASTM 84) passage, light fastness, tuft bind, delamination, abrasion resistance, compression resistance, and acoustical qualities.

The design team will develop detailed product and installation specifications and coordinate the review of these with UMBC prior to adoption.

In the selection of building materials, the design team will take into consideration the off-gassing properties of selected building materials and finishes, especially those of wet pollutant emitters (e.g., paints, mastics/glues, etc.), in relation to maintaining good indoor environmental quality. Selected carpets will carry the Carpet and Rug Institute (CRI) IAO Logo in accordance with OSHA 29 CFR 1910.1001 - Air Contaminants and BOCA 3307 -Health Standards.

The nature of the facility insures a certain amount of abuse from the movement of equipment. Measures will be taken to protect the building from unnecessary damage, thereby lowering maintenance. The design team must work closely with the university's Department of Facilities Management maintenance staff to benefit from their knowledge and experience in the maintainability of various surfaces and systems. Care in the design of the building will insure significant life cycle cost savings.

7.18 Stress Reducing Design Elements

The elements of a space's design influence occupant sense of well-being in varied ways that relate to perception, internalized experience, or stress. Natural materials, quality of natural light, play of shadows and textures, ambient sounds, and natural forms for surfaces and furniture all contribute to environments that are at times stimulating and at others calming.

Biophilic design can reduce stress, enhance creativity and clarity of thought, improve our well-being and expedite healing. It is an architectural approach that incorporates natural elements to create healthier, more productive spaces for people. When incorporated into architectural design it impacts our satisfaction with the spaces that are inhabited and enhances the interactions that can take place in these spaces.

Create pockets of seating areas in the building that reduce stress and imbue a sense of calm.

Also consider opportunities to incorporate stress reducing elements and lighting in design of the work environments and meeting rooms to improve general staff well-being.

7.19 Signage and Graphics

The design team will design an identification, events messaging, and directional system to communicate information essential to the operation of the new facility. The interior and exterior wayfinding, events signage and graphic system is to assist individuals navigating to and within the facility.

In accordance with ADA requirements, particular attention must be given to the needs of individuals with disabilities to access the building from adjoining parking areas and walkways, and to circulate effectively throughout the building. Wayfinding will be organized to easily guide students to service units and other facilities.

Branding will reflect or relate to the colors, brand and mascot of the university. Refer to the UMBC Style Guide.

The design team will coordinate all interior and exterior graphics with UMBC standards. All signs will reflect standards established by UMBC in construction, location, color and lighting.

The design team will develop a room numbering system in accordance with UMBC standards during the Schematic Design Phase and subsequent design phases for review and approval by the university.

Stairs will be properly marked indicating egress and area of refuge per UMBC standards and Emergency Egress Maps will be posted on each level near the elevator core.

7.20 Color

Integrate color into the building to highlight design features and to help in the identification and wayfinding to services and facilities.

7.21 Public Art

This project will comply with the Maryland Public Art Initiative which requires the integration of public art into major new State Funded projects, either within the building or the project site.

Identify opportunities for integrating art throughout the building, especially in lounges and waiting areas where students congregate. Consider opportunities for future installation of art as well.

7.22 Furniture and Equipment

Furniture and equipment layouts will be used to illustrate the function of each space. Therefore, the design team will show all furniture and equipment at the Design Development phase to insure that the proportion and size of each room provides for the function of the space.

The selection of movable equipment, except when it is identified as being provided by or installed by the contractor, is not the responsibility of the design team but of the institution. However, the design team is required to provide a prototypical layout to demonstrate space functionality.

Primary lists of equipment required to support this program are outlined in Section 6 Space Requirements. These lists are provided within the individual space sheets.

Existing and new equipment as identified in the program space sheets are categorized as either "built-in equipment" or "moveable furniture". In addition, most space sheets include an equipment list table that documents additional information and specialized equipment, including responsibility for providing the item and for installing it.

Items identified as "built-in equipment" or "moveable furniture" are items that the design team is to include in the contract documents, unless they are identified as *Furnished and installed by Owner*. The design team is to specify manufacturer, style, sizes, and location of this equipment and require that the construction contractor provide this equipment as part of the contract.

The design team is equally responsible to specify the moveable furniture, and coordinate manufacturer's, models, finishes and numbers of items. The design team Is responsible for providing a design that will accommodate this furniture and will be required to provide floor plans that illustrate how it will be accommodated and how and where utilities will be provided to it.

Furniture specification will follow the Maryland State Facility and Maryland Correctional Enterprises (MCE) regulations.

The design team will consider ergonomic factors in the selection of furniture and the development of equipment layouts.

7.23 Digital Displays and Audio-Visual Technology

Audiovisual Systems design will be required throughout the building. Specific equipment is specified in Section 6 for each type of space. The design team will be responsible for both infrastructure requirements and detailed system design.

A sophisticated and extensive interactive digital display is envisioned for the Welcome wing of the building. It is expected that the design team coordinate with university staff and any AV consultants to ensure that the A/V systems are integrated into the building design.

Lounges and select circulation spaces will contain digital displays. Digital Signage for all major spaces will require an adequately sized monitor, a digital signage player and potential TV receiver. The design team will coordinate locations, sizes, power and data with corresponding university staff.

Conference Rooms and Meeting Rooms will require appropriately sized flat panel monitors with integral smart technology plus inputs for laptops and auxiliary video devices.

Section 8 Building Systems Design Criteria

8.01 Overview

Following is a summary of HVAC, plumbing and fire protection design criteria for the major spaces in the Student Services Building. The criteria summarized here and enumerated in the following sections will be used where "Standards" are referenced in the room data sheets.

8.02 Design Conditions

- Outside Design Conditions:

  Summer: 95 degree F DB / 78 degree F WB

  Winter: 0 degree F DB

- Inside Design Conditions (occupied):

  Temperature/ RH (Office/Support Areas/): Offices / Meeting Rooms):

  Summer: 75 F DB +-2-deg F / 55% RH +-2-deg F maximum

  Winter: 70 F DB +-2-deg F / no humidity control

  Temperature/ RH (Storage Areas / Mechanical Rooms / Electrical Rooms):

  Summer: 85 F DB +-2-deg F / 55% RH maximum

  Winter: 75 F DB +-2-deg F / no humidity control

Heating, Ventilation and Air Conditioning

8.03 Ventilation, Central Air Handling, and Exhaust Systems

The design team will design and specify an air distribution system that will minimize air leakage, minimize sound, and provide maximum comfort to the building occupants.

The building will be pressurized to reduce infiltration of moist humid air in the summer and cold air in the winter. Throughout office, support areas, meeting rooms, and circulation areas provide positive pressure. In service areas and mechanical rooms provide negative pressure.

All areas will be ventilated following ASHRAE 62.1 standards. Provide MERV 13 filtration. This may potentially be enhanced as determined through the design process to meet the sustainability objectives as they are recommended by the design team.

As part of a demand-controlled ventilation approach, Carbon Dioxide sensors will be installed in high people density spaces to reduce supply air to spaces (e.g. conference rooms) to minimize outdoor ventilation air requirements. Occupancy sensors will be specified to shut-down air to spaces when not in use to reduce building supply air requirements.

Make up air for the food service spaces will be supplied from the air handling units serving the support spaces. Much of the make-up air will be transfer air from adjacent spaces.

Historically, new UMBC buildings met the following requirements, which may or may not be applicable to the selected strategy:

> Separate air handlers will be utilized for office suites, with their service areas and conference rooms and spaces utilized principally by students, like lounges, meeting rooms, etc. All units will be equipped with variable frequency drive fans. Unit sections will consist of outside air/mixing box, filters, energy recovery, pre-heat coil, cooling coil, fan section, humidification if required, sound attenuation and discharge plenum. It is suggested that the fans be direct drive plenum type.
>
> All air handling units will be of commercial grade, modular, double wall design. All units will incorporate 100% economizer ability. Units will incorporate return fan section with direct drive plenum fans, outside air/mixing box section, air blender section, MERV 8 pre-filters section, pre-heat coil section, cooling coil section, supply air fan section with direct drive plenum fans, MERV 13 final filtration section and discharge plenum section. All fans will be variable speed. Duct mounted sound attenuators will be used to prevent excessive noise generated from the unit to reach occupied spaces.
>
> In lieu of return plenum and return fan section integral with the air handling unit, mixed flow wheel direct drive inline return fans located adjacent to the air handling units may be used. This will reduce mechanical space required for air handling equipment.

8.04 Cooling Source and Distribution

The building will be cooled by a stand-alone cooling system. The design team will provide alternative cooling options that meet the goals of the project. Cooling strategies may include combinations of various active and passive approaches, including but not limited to:

- Electric heat pump systems
- Geo-exchange (GHX)
- Chilled beams (decoupling room conditioning from ventilation)
- Demand control (CO2 sensors interfacing with BAS)
- Radiant slabs for cooling
- Thermal storage
- Natural ventilation through operable windows
- Ceiling fans to increase the thermal comfort zone

Most UMBC academic buildings are being fed from the campus chilled water systems with a delivery temperature of 44F.

Historically, new UMBC buildings met the following requirements, which may or may not be applicable to the selected cooling strategy:

All cooling coils will be designed to achieve a minimum of a 16 degree differential.

The design will include a tertiary system inclusive of a de-coupler and central chilled water building control valve.

Redundant variable speed pumps with pressure independent 2-way control valves will be used in the distribution system. The system will be extended to air handlers and process loads.

Design system elevation will not exceed the campus chilled water storage tank height - if required a plate and frame HX will be used to isolate the building.

Process chillers, with integral pumps will be utilized for data and telecommunication closets and any critical loads such as lasers, imaging equipment or confocal microscopes. The house chilled water system will be used as the condenser loop for the process chillers. The vivarium chiller can serve as a temporary back-up process chiller.

The data and telecommunication rooms will be on a backup cooling system in the event the campus chilled water system is inoperable. They will be able to operate independent of the rest of the ILSB spaces and energy management schedules.

8.05 Heating Source and Distribution

Most UMBC academic buildings are being served from the campus High Temperature Hot Water network via the utility tunnel at 140-degrees. As the campus works to decarbonize its operations new buildings moving forward will not connect to this system.

The building will be heated by a stand-alone heating system. The design team will be responsible to assess alternative solutions for providing heating for the building, without resorting to the burning of fossil fuels for combustion. Heating systems may include combinations of various approaches, including but not limited to:

- Electric heat pump systems
- Geo-exchange (GHX) wells
- Chilled beams (decoupling room conditioning from ventilation)
- Demand control (CO_2 sensors interfacing with BAS)
- Waste heat recovery (such as pumped glycol run-around)
- Transpired solar collectors to passively pre-heat outside air
- Radiant slabs for heating
- Thermal storage

Historically, new UMBC buildings met the following requirements, which may or may not be applicable to the selected heating strategy:

All alternative MEP systems will be selected based on life cycle cost analysis (LCCA). The design team will focus on and provide a design that provides flexible, maintainable and reliable systems throughout while meeting project goals.

Heating hot water will be distributed throughout the building by a variable flow heating hot water pumping system to air handling unit heating coils, unit heaters, cabinet heaters and reheat coils associated with variable airflow (VAV) boxes. All heating coils will have 2-way control valves.

Provide perimeter fin radiation at all large expanses of perimeter glass.

Air handling unit heating coils will have a side stream circulator sized at 50% of coil flow. This circulator will operate below 35 degree F to protect coils from freezing.

8.06 Building Automation System (BAS)

Provide a direct digital control system that is WEB based and integrated seamlessly into the existing campus system. Actuators will be electronic. All panels will have emergency power connections and UPS modules.

The existing, campus-wide Central Control System will control, monitor, and alarm the DDC and CCMS System.

Building DDC and energy management controls are to be implemented using the UMBC campus wide standard system. The building system is to be capable of standing alone but is also to be totally integrated into the overall campus wide network.

System design is to be coordinated with UMBC's designated vendor responsible for site management and support. Sequence of Operation is a major design element. System design is to include:

- Building system configuration drawing
- I/O lists (typicals accepted) include mechanical and electrical systems as follows:
  - Tripped main, tie, or feeder circuit breaker as determined by UMBC
  - Substation secondary voltage
  - Substation transformer hot spot temperature
  - Substation automatic throw over status-automatic, manual
  - Items listed under Emergency Power System
  - Major mechanical equipment (chiller, pumps, AHU, etc.)
  - Minor mechanical equipment (VAV, fan coils, etc.)

- General environmental status (temperature, humidity, etc.)

- Sequence of operation for mechanical equipment
- Drawing locating all system modules/cabinets
- Generalized description of desired graphics
- List of desired reactions to selected alarm conditions
- Integration with power monitoring system

8.07 Testing, Adjustment and Balancing, Commissioning and Retro-commissioning

The design team will incorporate the requirements of the most current approved version of ANSI/ASHRAE 111 Practices for Measurement, Testing, Adjusting, and Balancing of Building Heating, Ventilation, Air Conditioning, and Refrigeration Systems, into the construction specifications.

The building will be commissioned by a third-party commissioning agent meeting the selected certification criteria for scope of services.

Plumbing and Fire Protection

8.08 Plumbing

Complete sanitary sewer, storm water management and potable water systems will be provided.

Domestic hot water will be generated at 110-degree F by high efficiency hot water heaters. Hot water at 140 degrees will be supplied to all food service areas.

Solar domestic water preheating may want to be investigated if it reduces the electric load for the building. The SSB project will not use natural gas for domestic hot water heating.

Potable and fire protection water systems will be separated by backflow prevention devices.

The storm water and sanitary systems will be no hub cast iron. Below grade it will be hub and spigot.

Water piping distribution systems materials will be evaluated and chosen based on a cost-benefit analysis.

Water saving plumbing fixtures will be utilized as required to achieve the voluntary certification targeted for the project. These will be sensor activated faucets and flush valves. Use UMBC preferred products.

Storm water reject system and use of gray water should both be evaluated from a LCCA perspective, and with respect to project sustainability objectives, to provide lawn irrigation to the landscape.

Sump pumps or sewage ejectors required for fixtures or drains that cannot drain by gravity will be fully redundant and on emergency power.

Provide sump pumps with an oil retention feature in elevator pits.

Reuse of condensate from air handling units to provide cooling tower make-up will also be studied for incorporation into design based on a cost-benefit analysis.

8.09 Fire Suppression and Smoke Control

The Student Services Building will be fully sprinklered. A fire pump will not be required. design team to conduct a fire flow test. The sprinkler system will meet the requirements of NFPA 13 and 14.

Dry pipe or pre-action systems will be provided where freezing has a potential to occur.

The building will incorporate ventilation and smoke control systems to meet all requirements of NFPA.

An automatic smoke control system must be provided to maintain the smoke level at least 6 feet above the highest level of seating in atriums. The smoke control system is required to be automatically activated by the automatic sprinkler system and by smoke detectors located over the stage area.

Dry chemical extinguishing system will be provided in kitchen hoods, if applicable.

Electrical and Communication

Following is a summary of electrical, communication and lighting design criteria for the Student Services Building project. These criteria will be used where “Standards” are referenced in the room data sheets. Standards and guidelines are intended to establish the minimum design criteria for the project with final acceptance for potential variation by the university.

8.10 Electrical Power Generation

The Student Services Building project will include site-generated power facilities to run its building systems, including heating, cooling, ventilation, domestic hot water, plug loads, lighting, and the daily operations of the building. The design team will design a complete system that satisfies the project goals of net-zero energy. This will include analysis of alternative photovoltaic (PV) array locations and configurations for discussion with university staff, as discussed in the “Renewable Energy Objectives” summary at the beginning of this section. The design team will be responsible for the modifications of any facilities that will be chosen to support this project with renewable energy.

Power will be produced from one or more PV arrays. As an alternative to sites discussed in the “Renewable Energy Objectives” summary at the beginning of this section, the top deck of the Commons Drive Garage should also be evaluated. The garage has an upper-level deck of roughly 124 feet in width by 306 feet in length. Most of this area allows for the installation of a photovoltaic array suspended above the structure. The garage is well oriented to take advantage of the southern solar gain.

The university is currently served from two 34.5kV BGE, which each provide power to roughly half the overall campus electrical consumption. UMBC's 13.2kV loop will serve the Student Services Building and will provide electric power to the building when the building loads exceed the Photovoltaic array's generation capacity.

As discussed in the preceding sections, the design team will be responsible for evaluating the SSB electrical design options with respect to findings of the Campus Clean Energy Master Plan (CCEMP).

8.11 Electrical Distribution

The design team will design an electrical distribution system to include site generated power via photovoltaic panels, a DC to AC invertor, metering, transformers, backup storage for emergency loads, and building distribution panels, branch circuits, cabling, lighting, and controls.

The building will have a bi-directional metering system that will allow excess power to flow into to the campus network.

Figure 5.2 represents one example of a system that utilizes the area above the upper floor level of Commons Drive Garage to install a photovoltaic array.

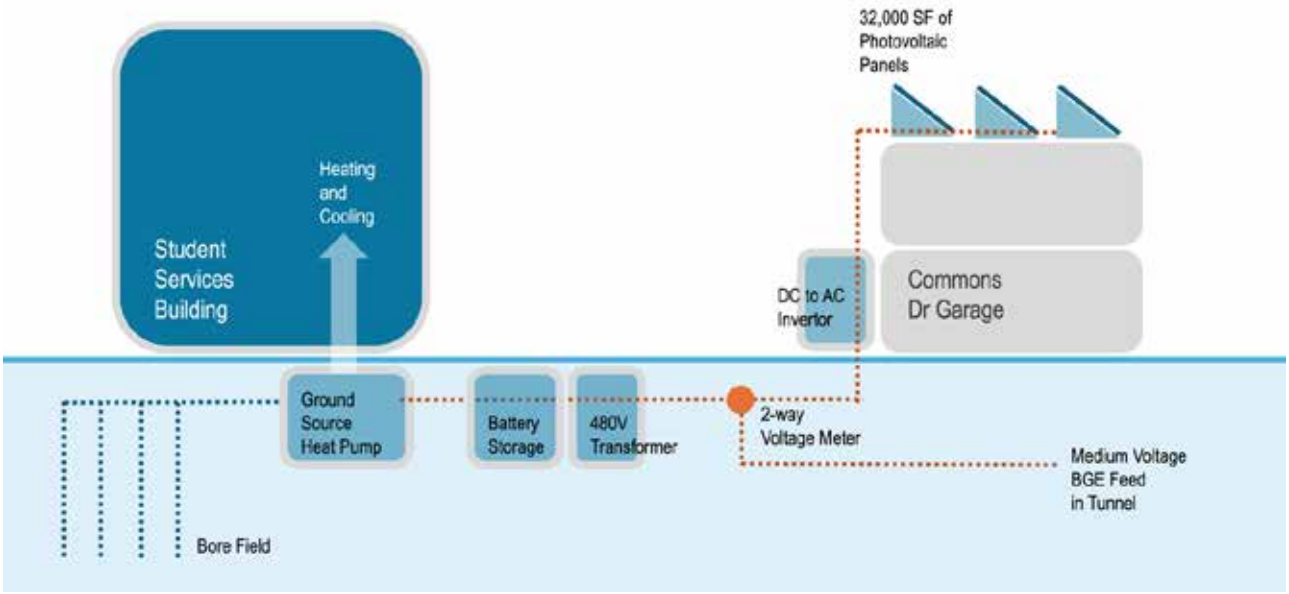


Figure 8.1 Photovoltaic System if Mounted on Commons Drive Garage

Service Entrance Power

The project will provide a unit substation to convert 13,200V campus loop feeders to 480/277 Volts for use in the building. The primary will consist of 2 loop switches and a radial fused

switch. The unit substation transformer will be liquid filled. The unit substation may be located in an underground vault, possibly accessed from the existing utility tunnel. The vault will be mechanically ventilated but not open to the sky.

Consideration will be given to the use of a double-ended unit substation for redundancy, reliability, and maintenance. The secondary will consist of draw-out switchgear with power circuit breakers.

Other electrical equipment will not be in the vault, but in a main electrical room within the building.

Provide local digital metering on the main(s) that are connected to data displays within the building and tied directly to the Square D Power Logic Main Metering System at the Central Plant. Meters should allow for two-way flows of electricity for times when the power generation exceeds the building's electrical demand.

Dry type transformers will be of the harmonic cancelling type to reduce harmonics in the building and save energy.

Evaluate ground fault protection on the feeder breakers and metering on the digital trip units.

Panelboards will have copper busing, be fully rated, have 42 poles, main circuit breakers, and have hinged trim feature (door in door construction).

Electrical Closets

Electrical closets will be stacked. Closets will be walk-in with minimum dimensions of 7'-0" by 8'-0" or larger as required for the equipment contained. Provide 1 closet for every 10,000 GSF of floor area. Closets will contain normal and emergency panels. Closets may be mechanically ventilated (TBD) with the capacity required to remove the anticipated heat load.

The design engineer will perform a Short Circuit Study, a Coordination Study, and an Arc Flash Study. Require contractor to perform the same studies and provide the required arc flash labels prior to approving and ordering the electrical equipment.

Distributed UPS must be installed to protect the data and telecommunication rooms, building automation systems and lighting control systems. It may be fed by power service that is backed up by on-site batteries. An emergency generator status / alarm panel, that monitors the batteries that feeds the UPS, will be installed in the room that houses the UPS.

Secondary or Emergency Power Systems

As a preferred alternative to diesel generated emergency power, The design team is expected to investigate, present alternatives, and design a cost effective approach to resiliency. Such strategies as passive survivability or a battery backup system that will charge from the PV system and provide emergency power to critical building e-power circuits may be considered.

Automatic Transfer Switches (ATS) will be 4 pole for 4 wire systems with bypass as manufactured by Russelectric, or approved equal by ASCO. For ATS that support life safety circuits provide 4 pole switching, non-bypass, closed transition. For equipment on emergency backup provide open transition with in-phase band monitor.

The battery backup system will be sized to support the following Emergency Loads:

Life Safety

- Emergency lighting
- Fire alarm system
- Security system as appropriate
- Emergency communication devices

Equipment

- One passenger elevator and elevator machine room circuitry
- Elevator sump pumps
- Atrium smoke evacuation fans (if required)
- ATC controls
- Sump pumps
- Sewage ejector pumps (if necessary)
- Building IT servers and server room cooling

8.12 Lighting

Consolidate and organize all room controls at a convenient wall location adjacent to entry doors, and in the Retriever Room, also on the wall adjacent to the speaker's podium area. These include controls for lighting, as well as for projection screens (when power actuated), volume controls for speakers, monitor controls and data ports.

In general, independently control general room lighting from task lighting. The lighting controls will be low-voltage and tied to a campus-wide energy management system.

Install occupancy sensors in all rooms per code.

Install daylight dimming sensors in spaces that benefit from natural light.

Lighting levels will be in accordance with ASHRAE Standard 90.1-2022 or most current approved version.

Lighting Levels (maintained horizontal):

Offices	40 fc
Conference Rooms	30 fc
Lobbies and Lounges	8-10 fc
Breakrooms	15 fc
Corridors	5-10 fc
Restrooms	8-10 fc

8.13 Lightning Protection

The design team will perform a lightning protection analysis to evaluate the requirement for a lightning protection system. The design team will design a lightning protection system around the perimeter of the roof, flat copper conductor cables, and copper coated steel ground rods. The system will be installed by a certified lightning protection installer, be in full compliance with ANSI/UL 96 and ANSI/NFPA 780 or latest editions and have a UL Master Label when completed.

A ground point, connected to the building lightning protection system, will be installed at all points where low voltage cabling enters the building. Surge protectors will be installed at any point where conductive cabling enters the building. These surge protectors will be installed in locations that are accessible and serviceable. A ground bar, connected to the building lightning protection system, will also be installed in the data and telecommunication closet on the highest floor of the building. It will be located at the point where the roof conduits enter the communications closet.

The design team will include a performance specification for a Franklin Rod, faraday cage type lightning protection system per NFPA 780 to be provided by the contractor.

8.14 Communication

The design team will design a central distribution system for voice, security, and data cabling in the building. Prior to the Design Development phase of the project, the design team will meet with the university's Director of Communication and Security to review and discuss the incorporation of the university's requirements for data and telecommunications distribution systems into the project design.

The design team will adhere to UMBC’s Network Equipment and Cabling Standards (a copy of which will be provided to the selected design team at the pre-fee negotiation meeting) as well as any subsequent additional requirements communicated by the university to the selected design team.

The design team will incorporate all UMBC Telecommunication specifications into the design documents after coordination with UMBC to determine all the pathway requirements, components and elements that will be incorporated into the project. Data infrastructure and elements will be designed and specified based on UMBC’s Pathway Specifications.

A Data and Telecommunication Room must be installed on each floor in a stacked fashion to facilitate interconnectivity. Each room shall be appropriately sized to support the systems and

services provided from the room. IT closets shall have dedicated cooling systems and dedicated power circuits with normal and emergency power options.

IT systems and cabling shall meet modern design specifications and align with the operations and functions of the facility.

8.15 Fire Alarm

Provide a complete addressable, fire detection and alarm-indicating system. Simplex (Johnson Controls) is the only acceptable manufacturer. A mass communication system with voice communication is required. The system will connect to the upcoming TrueSite Network, which will need to be coordinated with the UMBC Police and Emergency Safety and Health.

8.16 Integrated Data and IT Systems Management

The Student Services Building is envisioned to incorporate technologies that go beyond the building automation systems. Examples of systems that the design team may need to integrate into the project, include but are not limited to:

- Digital exhibit displays providing interactive, personalized prospective student introductions to campus.
- Digital exhibit displays telling the “UMBC Story.”
- Digital exhibit “real-time” and interactive displays educating students and the public about the positive environmental impacts of the net zero energy facility.
- Providing scheduling capability and access to student meeting rooms, staff conference rooms, and other reservable shared spaces.

UMBC

Student Services Building

A new facility to consolidate dispersed student services

ROOM SPACE SHEETS

220.01 Entrepreneurship Lab 1

Space Use Category:	**Open Lab**	**Area NASF:**	**500**
Space Use Code:	**220**	**Quantity:**	**2**
		Capacity:	**10**
		Total NASF:	1,000

Function:	Development space supporting the Innovation and Entrepreneurial suite
Relationships:	Locate adjacent to suite

Architectural

Flooring:	resilient or carpet
Base:	rubber, cove base
Walls:	gypsum wall board
Wall Finish:	paint
Ceiling:	acoustic panel ceiling
Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor
Access:	from within suite
Door:	solid wood, natural finish, with vision panel (may be open without door)
Min. Door Size:	3’-0” x 7’-0“, if applicable
Acoustic Control:	STC 42
Acoustic Treatment:	room acoustics to be controlled through wall, floor, and ceiling treatment
Lighting:	LED, in ceiling grid
Lighting Controls:	at entry to room and motion detector
Security:	UMBC standard door hardware in brushed stainless steel
Room Signage:	per UMBC standards
Other:	

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes, multiple
White Board:	yes, 8’ min.
Coat Hooks:	yes
Speakers:	
Casework:	TBD
Tack Board:	yes, 8’ min.
Clock:	

2 220.01 Entrepreneurship Workroom

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: 5 –tables with power
Chairs: 10 – ergonomic rolling chairs
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes, wall mounted (2 locations)
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets: at tables

Major Equipment

Item	Status	Quantity
Wall mounted monitors	2	2
Computers	2	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

220.02 Open Lab and Display 1

Space Use Category:	**Open Lab**	**Area NASF:**	**300**
Space Use Code:	**220**	**Quantity:**	**1**
		Capacity:	**10**
		Total NASF:	300

Function:	Working space supporting building sustainability efforts. To display real-time data on various building sustainability metrics. May also display other information, like transit options and bus routes, accessibility routes, etc.
Relationships:	TBD, locate near high trafficked area. Can be open to corridor

Architectural

Flooring:	resilient or carpet
Base:	rubber, cove base
Walls:	gypsum wall board
Wall Finish:	paint
Ceiling:	acoustic panel ceiling
Min. Ceiling Height:	8’-6”
Windows:	N/A
Window Treatment:	
Access:	from corridor
Door:	solid wood, natural finish, with vision panel (may be open without door)
Min. Door Size:	3’-0” x 7’-0“, if applicable
Acoustic Control:	STC 42
Acoustic Treatment:	room acoustics to be controlled through wall, floor, and ceiling treatment
Lighting:	LED, in ceiling grid
Lighting Controls:	TBD
Security:	UMBC standard door hardware in brushed stainless steel, if applicable
Room Signage:	per UMBC standards
Other:	

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes, 85”
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	yes, TBD
Clock:	

2 220.02 Open Lab and Display

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: TBD
Chairs: TBD
Trash Can:
Other:

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
Wall displays	1	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.01 Dean / Vice Provost 1

Space Use Category:	**Office**	**Area NASF:**	**200**
Space Use Code:	**310**	**Quantity:**	**2**
		Capacity:	**1**
		Total NASF:	400

Function:	Office for the Dean or Provost
Relationships:	Locate near staff offices

Architectural

Flooring:	carpet
Base:	rubber, cove base
Walls:	gypsum wall board
Wall Finish:	paint
Ceiling:	acoustic panel ceiling
Min. Ceiling Height:	8'-6"
Windows:	exterior desired, not operable provide minimum of 6" wide sidelight adjacent to door
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor
Access:	within office suite
Door:	solid wood, natural finish, with vision panel
Min. Door Size:	3'-0" x 7'-0"
Acoustic Control:	STC 42
Acoustic Treatment:	room acoustics to be controlled through wall, floor, and ceiling treatment
Lighting:	LED, in ceiling grid
Lighting Controls:	at entry to room and motion detector
Security:	UMBC standard door hardware in brushed stainless steel
Room Signage:	per UMBC standards
Other:	

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.01 Dean / Vice Provost

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	1 - 36” round table
Chairs:	1 – ergonomic rolling desk chair, 4 - guest chairs
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 - bookshelf

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.02 Director / Assoc VP / Asst VP / Asst Dean 1

Space Use Category:	**Office**	**Area NASF:**	**150**
Space Use Code:	**310**	**Quantity:**	**21**
		Capacity:	**1**
		Total NASF:	**3,150**

Function:	Office for managerial staff
Relationships:	Locate near staff offices

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.02 Director / Assoc VP / Asst VP / Asst Dean

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair, 2 - guest chairs
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 - bookshelf

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.03 Manager / Assistant Director 1

Space Use Category:	**Office**	**Area NASF:**	**120**
Space Use Code:	**310**	**Quantity:**	**8**
		Capacity:	**1**
		Total Area, NASF:	**960**

Function:	Manager or Assistant Director office. Includes Case Managers who frequently meet with students
Relationships:	Locate near staff offices

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.03 Manager / Assistant Director

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair, 1-2 - guest chairs
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 - bookshelf

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.04 Staff / Admin Assistant Workspace 1

Space Use Category:	**Office**	**Area NASF:**	**100**
Space Use Code:	**310**	**Quantity:**	**137**
		Capacity:	**1**
		Total Area, NASF:	**13,700**

Function:	Staff workstation or office. 310.04A addresses Counseling Staff that regularly meet with students. Determine during design the number of workstations versus enclosed offices needed for each suite.
Relationships:	Locate near huddle rooms. Huddle rooms support staff may occasionally require privacy or infrequently meet with students.

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	As needed: solid wood, natural finish, with vision panel		
Min. Door Size:	As needed: 3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment and/or fabric covered cubicle partition panels		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	As needed: UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.04 Staff / Admin Assistant Workspace

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 – bookshelf
	Minimum 84” x 96” cubicle, when not an enclosed office

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.04A Counseling Staff 1

Space Use Category:	**Office**	**Area NASF:**	**100**
Space Use Code:	**310**	**Quantity:**	**TBD**
		Capacity:	**1**
		Total Area, NASF:	**TBD**

Function:	Enclosed space for staff that regularly to counsel students in their offices
Relationships:	Determine during design the number of workstations versus enclosed offices needed for each suite.

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:	exterior desired, not operable provide minimum of 6" wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment fabric covered cubicles partitions, when supplied		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.04A Counseling Staff

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair 2 – guest chairs
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 – bookshelf

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.05 Shared 1

Space Use Category:	**Office**	**Area NASF:**	**50**
Space Use Code:	**310**	**Quantity:**	**38**
		Capacity:	**1**
		Total Area, NASF:	**1,900**

Function:	Shared workstation. Can represent two 50 SF workstations in one 100 SF office or cubicle area or one workstation shared by various staff that alternate use
Relationships:	Locate near other staff offices or supported facilities, like service desks or counters

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair
Trash Can:	waste and recycling
Other:	1 - lateral file and 1 – bookshelf (desk components TBD) Minimum 84” x 96” cubicle, when not an enclosed office

Telecommunication

Data:	yes, wall mounted (2 locations)
Phone:	as requested
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum two duplex outlets per each workstation)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
Computer (per workstation)	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.06 Graduate Assistant 1

Space Use Category:	**Office**	**Area NASF:**	**50**
Space Use Code:	**310**	**Quantity:**	**11**
		Capacity:	**1**
		Total Area, NASF:	**550**

Function:	GA workstation
Relationships:	Shared workstation. Can represent two 50 SF workstations in one 100 SF office or cubicle area, or one 50 SF workstation shared by various GAs that alternate use

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 310.06 Graduate Assistant

Moveable Furnishings and Equipment

Desk: 60x30 desk
Desk Features:
Table:
Chairs: 1 – ergonomic rolling desk chair
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes, wall mounted (2 locations)
Phone: as requested
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum two duplex outlets per workstation)
Additional Outlets:

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

310.07 Student 1

Space Use Category:	**Office**	**Area NASF:**	**25**
Space Use Code:	**310**	**Quantity:**	**48**
		Capacity:	**1**
		Total Area, NASF:	**1,200**

Function:	Student workstation
Relationships:	Locate near staff offices or adjacent to staff service areas

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	when appropriate: solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

Moveable Furnishings and Equipment

Desk: 60” x 30” desk
Desk Features:
Table:
Chairs: 1 – ergonomic rolling desk chair
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes, wall mounted (2 locations)
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum one duplex outlet per workstation)
Additional Outlets:

Major Equipment

Item	Status	Quantity
computer	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.01 Breakroom 1

Space Use Category:	**Office Service**	**Area NASF:**	**100**
Space Use Code:	**315**	**Quantity:**	**4**
		Capacity:	
		Total Area, NASF:	**400**

Function: small food prep area shared within one unit
Relationships:

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not required provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within office suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	https://open.spotify.com/playlist/37i9dQZF1E39RDwmCpRutQ
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	yes

2 315.01 Breakroom

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can: waste, recycling, and compost
Other: sink and minimum of 60” of counter space

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets: one GFCI 20A microwave circuit

Major Equipment

Item	Status	Quantity
refrigerator	3	1
microwave oven	3	1
toaster oven	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.02 Shared Breakroom 1

Space Use Category:	**Office Service**	**Area NASF:**	**200**
Space Use Code:	**315**	**Quantity:**	**3**
		Capacity:	
		Total Area, NASF:	**450**

Function:	food prep area shared between multiple units
Relationships:	

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not required provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main circulation		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	yes

2 315.02 Shared Breakroom

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 2 bistro tables, 24” diameter

Chairs: 4 café height chairs

Trash Can: large waste, recycling, and compost receptacle

Other: sink and minimum 96” of counter space

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets: two GFCI, one 20A microwave circuit

Major Equipment

Item	Status	Quantity
refrigerator	3	1
microwave oven	3	1
toaster oven	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.03 Professional Clothing Closet 1

Space Use Category:	**Office Service**	**Area NASF:**	**300**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**300**

Function:	Space for professional clothing to be stored, displayed, tried on, and checked out.
Relationships:	Locate within Career Center suite

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:			
Window Treatment:			
Access:	from Career Center suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	to contain two changing booths or rooms with locking doors room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD
White Board:	
Coat Hooks:	no
Speakers:	
Shelving:	yes, mixture of shelving and double rows of hangers (minimum of 20 lin. ft.)
Tack Board:	
Clock:	

2 315.03 Professional Clothing Closet

Moveable Furnishings and Equipment

Desk: service counter or desk, minimum 60”
Desk Features:
Table:
Chairs: 2 lounge chairs
Trash Can: yes
Other:

Telecommunication

Data: yes, at service counter or desk
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.04 Faculty Lounge 1

Space Use Category:	**Office Service**	**Area NASF:**	**300**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**10**
		Total Area, NASF:	**300**

Function:	shared lounge and workroom for faculty
Relationships:	within the English Language Institute office suite

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main circulation		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	wall-mounted glass marker boards
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 315.04 Faculty Lounge

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: tables and rolling chairs

Chairs: mix of lounge furniture

Trash Can: large waste, recycling, and compost receptacle

Other: mobile marker boards

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
computers?	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.05 Interview Room 1

Space Use Category:	**Office Service**	**Area NASF:**	**80**
Space Use Code:	**315**	**Quantity:**	**4**
		Capacity:	**4**
		Total Area, NASF:	**320**

Function:	small office space for one-on-one interview practice
Relationships:	Locate within Career Center suite

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not required		
Window Treatment:	NA		
Access:	within Career Center suite		
Door:	solid wood, natural finish, with vision panel		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment provide acoustic door seals		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 315.05 Interview Room

Moveable Furnishings and Equipment

Desk:	L-shaped desk
Desk Features:	overhead storage
Table:	
Chairs:	1 – ergonomic rolling desk chair, 1-2 - guest chairs
Trash Can:	yes
Other:	

Telecommunication

Data:	
Phone:	
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum two duplex outlets)
Additional Outlets:	

Major Equipment

Item	Status	Quantity
Display	1	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.06 Office Support 1

Space Use Category:	**Office Service**	**Area NASF:**	**varies**
Space Use Code:	**315**	**Quantity:**	**24**
		Capacity:	
		Total Area, NASF:	**2,450**

Function:	service area for office storage, filing, copy/print, etc.
Relationships:	locate near administrative spaces within each office suite

Architectural

Flooring:	VCT or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:	exterior or interior to corridor desired, not operable provide minimum of 6" wide sidelight adjacent to door		
Window Treatment:	if applicable: manual, chain-driven shade cloth, 5-10% openness factor		
Access:			
Door:	solid wood, natural finish, (vision panel not required for copy rooms and storage)		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	wall-mounted glass marker board, if appropriate
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	

2 315.06 Office Support

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes, if appropriate
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
Printer/copier	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.07 Service Desk 1

Space Use Category:	**Office Service**	**Area NASF:**	**200**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**4**
		Total Area, NASF:	**200**

Function:	concierge desk for student service-related questions and concerns
Relationships:	in the lobby of the service wing, adjacent to Huddle Rooms

Architectural

Flooring:	TBD	Base:	TBD
Walls:	NA	Wall Finish:	NA
Ceiling:	NA	Min. Ceiling Height:	NA
Windows:	exterior desired, not operable		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main ground-floor lobby		
Door:			
Min. Door Size:			
Acoustic Control:	NA		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	Investigate special ceiling and lighting above desk for accent		
Lighting Controls:	TBD		
Security:	Is there a panic button or direct line to police? TBD		
Other:	The desk may have additional data requirements for security monitors, etc.		

Built-In Equipment and Casework

Casework:	concierge desk to accommodate four staff/students with undercounter locking cabinets and cubbies for storage min. 42” counter at accessible height
Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Shelving:	
Tack Board:	
Clock:	

2 315.07 Service Desk

Moveable Furnishings and Equipment

Table:
Chairs: 4 – stools with backs
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes
Phone: yes
Cameras: yes
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
computers	3	3

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.08 Student Waiting 1

Space Use Category:	**Office Service**	**Area NASF:**	**200**
Space Use Code:	**315**	**Quantity:**	**3**
		Capacity:	**10**
		Total Area, NASF:	**600**

Function:	waiting space for students
Relationships:	adjacent to service desk or counter

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	NA		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD, discuss with service providers
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 315.08 Student Waiting

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: coffee table

Chairs: lounge chairs (seating type, number, and arrangement to be determined)

Trash Can: yes

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.09 Testing Room (small) 1

Space Use Category:	**Office Service**	**Area NASF:**	**100**
Space Use Code:	**315**	**Quantity:**	**4**
		Capacity:	**4**
		Total Area, NASF:	**400**

Function:	quiet room for testing – several may be oriented to provide specialized equipment for students with visual or other disabilities
Relationships:	within SDS testing suite

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not desired		
	provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:			
Access:	off corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“ with acoustic seal		
Acoustic Control:	minimum sound transmission is critical for testing rooms		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	
Clock:	yes

2 315.09 Testing Room (small)

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 4 - tables or carrels, coordinate with Student Disability Services

Chairs: 4 - rolling office chairs

Trash Can: yes

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets: to support equipment supporting accessibility

Major Equipment

Item	Status	Quantity
Specialized equipment	TBD	TBD

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.10 Testing Room (medium) 1

Space Use Category:	**Office Service**	**Area NASF:**	**300**
Space Use Code:	**315**	**Quantity:**	**2**
		Capacity:	**12**
		Total Area, NASF:	**600**

Function:	quiet room for testing of larger groups
Relationships:	within SDS testing suite

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not desired		
	provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:			
Access:	off corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“ with acoustic seal		
Acoustic Control:	minimum sound transmission is critical for testing rooms		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD, consult with Student Disability Services
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	yes

2 315.10 Testing Room (medium)

Moveable Furnishings and Equipment

Desk: 1 – 48" with chair
Desk Features:
Table: testing furniture TBD
Chairs: 12 – rolling chairs
Trash Can: yes, with recycling
Other:

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum 8 duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.11 Welcome Desk 1

Space Use Category:	**Office Service**	**Area NASF:**	**200**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**4**
		Total Area, NASF:	**200**

Function:	desk area for prospective students and visitors
Relationships:	in the lobby of the welcome wing

Architectural

Flooring:	TBD	Base:	TBD
Walls:	NA	Wall Finish:	NA
Ceiling:	NA	Min. Ceiling Height:	NA
Windows:	exterior desired, not operable		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main ground-floor lobby		
Door:			
Min. Door Size:			
Acoustic Control:	NA		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	Investigate special ceiling and lighting above desk for accent		
Lighting Controls:	TBD		
Security:	yes, TBD		
Other:	The desk may have additional data requirements for security monitors, etc.		

Built-In Equipment and Casework

Casework:	concierge desk to accommodate four staff/students with undercounter locking cabinets and cubbies for storage min. 48” counter at accessible height

White Board:
Coat Hooks:
Speakers:
Shelving:
Tack Board:
Clock:

2 315.11 Welcome Desk

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs: 4 – stools
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes
Phone: yes
Cameras: yes
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
computers	3	3

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.12 Work Room 1

Space Use Category:	**Office Service**	**Area NASF:**	**300**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**15**
		Total Area, NASF:	**300**

Function:	task room with worksurfaces and service areas for office storage, filing, copy/print, to be used by student eco-ambassadors and staff
Relationships:	locate near administrative spaces of the sustainability suite

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	yes

2 315.12 Work Room

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 4 – adjustable height, powered worktables

Chairs: 8 – ergonomic rolling desk chairs , stools or benches

Trash Can: waste and recycling

Other: lockers

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
Printer/copier	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.13 Events Workroom 1

Space Use Category:	**Office Service**	**Area NASF:**	**150**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**4**
		Total Area, NASF:	**150**

Function:	task room with worksurfaces and service areas for preparation of Career Center related events
Relationships:	locate near administrative spaces of the Career Center

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	from within suite		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	yes

2 315.13 Events Workroom

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 2 – adjustable height, powered work tables

Chairs: 4 – ergonomic rolling desk chairs , stools or benches

Trash Can: waste and recycling

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
TBD	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

315.14 Reception and Processing 1

Space Use Category:	**Office Service**	**Area NASF:**	**250**
Space Use Code:	**315**	**Quantity:**	**1**
		Capacity:	**4**
		Total Area, NASF:	**250**

Function:	initial reception and waiting area, includes four carrels for processing of visitors
Relationships:	locate at entry to the Financial Aid and/or Undergraduate Admissions suite

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:	to corridor desired		
	provide minimum of 6" wide sidelight adjacent to door		
Window Treatment:			
Access:	from corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	
Clock:	yes

2 315.14 Reception and Processing

Moveable Furnishings and Equipment

Desk:	4 – 36” wide carrels for processing with computer stations
Desk Features:	privacy dividers – ensure that at least one is ADA compliant
Table:	
Chairs:	4 – ergonomic rolling desk chairs , stools or benches
Trash Can:	waste and recycling
Other:	

Telecommunication

Data:	yes
Phone:	
Cameras:	yes
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	
Other:	

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum four duplex outlets)
Additional Outlets:	provide power at carrels

Major Equipment

Item	Status	Quantity
computers	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

350.01 Conference Room 1

Space Use Category:	**Conference**	**Area NASF:**	**varies**
Space Use Code:	**350**	**Quantity:**	**9**
		Capacity:	**varies**
		Total Area, NASF:	**2,400**

Function:	space serving an office and used for meetings and departmental activities
Relationships:	locate near associated office spaces

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within associated office suite		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 350.01 Conference Room

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: number and type varies
Chairs: number varies, ergonomic rolling desk chairs
Trash Can: waste and recycling
Other:

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other: Webex kit or similar

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four to six duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
wall monitor	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

350.02 Huddle Room 1

Space Use Category:	**Conference**	**Area NASF:**	**80**
Space Use Code:	**350**	**Quantity:**	**18**
		Capacity:	**4**
		Total Area, NASF:	**1,440**

Function:	shared space serving staff and students and used for private meetings or consultations
Relationships:	adjacent to reception areas of suites or service desks

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	within associated office suite		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“ with acoustic seals		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 350.02 Huddle Room

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: 1 36” table
Chairs: 4 ergonomic rolling chairs
Trash Can: yes
Other:

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
Monitor	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

355.01 Storage Closet 1

Space Use Category:	**Conference Service**	**Area NASF:**	**100**
Space Use Code:	**355**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**100**

Function: storage for conference furniture and supplies
Relationships:

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:			

Window Treatment:
Access: within associated conference room
Door: solid wood, natural finish
Min. Door Size: 3’-0” x 7’-0“
Acoustic Control: STC 42
Acoustic Treatment: room acoustics to be controlled through wall and ceiling treatment
Lighting: LED, in ceiling grid
Lighting Controls: at entry to room and motion detector
Security: UMBC standard door hardware in brushed stainless steel
Other: room sign per UMBC standards

Built-In Equipment and Casework

Audio/Visual Equipment:
Flat Screen Monitor:
White Board:
Coat Hooks:
Speakers:
Shelving: yes
Tack Board:
Clock:

2 355.01 Storage Closet

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs:

Trash Can:

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi:

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum two duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

620.01 Exhibits 1

Space Use Category:	**Exhibition**	**Area NASF:**	**500**
Space Use Code:	**620**	**Quantity:**	**2**
		Capacity:	
		Total Area, NASF:	**1,000**

Function:	interactive electronic displays to engage and educate visitors to the campus
Relationships:	within welcome center wing, adjacent to welcome desk

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not desired to reduce glare		

Window Treatment:	
Access:	off main circulation
Door:	
Min. Door Size:	
Acoustic Control:	
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment
Lighting:	coordinate with displays to reduce glare
Lighting Controls:	
Security:	
Other:	

Built-In Equipment and Casework

Audio/Visual Equipment:	specialized displays to be coordinated with Enrollment Management and other service providers
Flat Screen Monitor:	yes
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	
Clock:	

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can:
Other: may be appropriate to specify built in seating near displays

Telecommunication

Data: yes
Phone:
Cameras: TBD
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (provide power and outlets as needed to support displays)
Additional Outlets:

Major Equipment

Item	Status	Quantity
displays	1	TBD

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

620.02 Model Student Dormitory 1

Space Use Category:	**Exhibition**	**Area NASF:**	**300**
Space Use Code:	**620**	**Quantity:**	**2**
		Capacity:	
		Total Area, NASF:	**600**

Function:	mockup of typical residence hall shared dorm room
Relationships:	off waiting area of welcome wing

Architectural

Flooring:	carpet or VCT, as appropriate	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable		
Window Treatment:	TBD		
Access:	off waiting area of welcome wing		
Door:			
Min. Door Size:			
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	to match residence halls		
Lighting Controls:	with adjoining spaces		
Security:			
Other:			

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 620.02 Model Student Dormitory

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can:
Other: furniture to match residence hall, coordinate with Residential Life

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

620.03 Digital Gallery 1

Space Use Category:	**Exhibition**	**Area NASF:**	**150**
Space Use Code:	**620**	**Quantity:**	**5**
		Capacity:	
		Total Area, NASF:	**750**

Function:	electronic displays organized to form a digital gallery
Relationships:	adjacent to student lobby or corridors of the building on each floor level above the ground

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not desired to reduce glare		

Window Treatment:	
Access:	off main circulation
Door:	
Min. Door Size:	
Acoustic Control:	
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment
Lighting:	coordinate with displays to reduce glare
Lighting Controls:	
Security:	
Other:	

Built-In Equipment and Casework

Audio/Visual Equipment:	specialized displays to be coordinated with service providers and OIA staff
Flat Screen Monitor:	yes
White Board:	
Coat Hooks:	
Speakers:	TBD
Shelving:	
Tack Board:	
Clock:	

2 620.03 Digital Gallery

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs:

Trash Can:

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi:

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (provide power and outlets to support equipment)

Additional Outlets:

Major Equipment

Item	Status	Quantity
displays	1	varies

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

625.01 Gallery Storage 1

Space Use Category:	**Exhibition Service**	**Area NASF:**	**150**
Space Use Code:	**625**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**150**

Function:	storage to support digital galleries and static exhibits
Relationships:	off corridor near gallery

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:			

Window Treatment:	
Access:	corridor
Door:	solid wood, natural finish
Min. Door Size:	3’-0” x 7’-0“
Acoustic Control:	
Acoustic Treatment:	
Lighting:	LED, in ceiling grid
Lighting Controls:	at entry to room
Security:	UMBC standard door hardware in brushed stainless steel
Other:	room sign per UMBC standards

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	

2 625.01 Gallery Storage

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs:

Trash Can:

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other: TBD

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

630.01 Café 1

Space Use Category:	**Food Facility**	**Area NASF:**	**1,500**
Space Use Code:	**630**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**1,500**

Function:	grab and go dining facility to support the activities in the building
Relationships:	on ground floor of Service Wing, opens onto outdoor terrace adjacent to Dining and Café Service

Architectural

Flooring:	Resilient Flooring	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	required		
Window Treatment:			
Access:	open to main circulation area of ground level		
Door:	none		
Min. Door Size:	none, except to terrace		
Acoustic Control:			
Acoustic Treatment:	walls and ceiling		
Lighting:	LED, in ceiling grid architectural pendant lighting		
Lighting Controls:	TBD		
Security:	NA		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	audio player
Flat Screen Monitor:	potential electronic signage board
White Board:	
Coat Hooks:	
Speakers:	yes
Shelving:	potentially
Tack Board:	
Clock:	
Casework:	cabinets and service counter

2 630.01 Café

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can: yes
Other:

Telecommunication

Data: for POS
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other: TBD

Special needs

Plumbing: Sink and water for coffee machines
Other mechanical: TBD
Equipment: Below is a sample list. Full list of equipment TBD

Electrical

Normal Power (volts): 120V
Outlets: at wall and service counter
Additional Outlets: for refrigerated cases and coffee machines

Major Equipment

Item	Status	Quantity
Digital display board	1	1
Point of sale	1	2
Refrigerated case	1	2
Commercial coffee	1	2

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

635.02 Dining 1

Space Use Category:	**Food Facility Service**	**Area NASF:**	**1,250**
Space Use Code:	**635**	**Quantity:**	**1**
		Capacity:	**50**
		Total Area, NASF:	**1,250**

Function:	dining area to support the Café
Relationships:	adjacent to the Café and with access to an outdoor terrace

Architectural

Flooring:	Resilient	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:	yes		
Window Treatment:	yes, TBD		
Access:	open to café and circulation routes		
Door:	NA		
Min. Door Size:	NA		
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	TBD		
Security:			
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:
Flat Screen Monitor:
White Board:
Coat Hooks:
Speakers:
Shelving:
Tack Board:
Clock:

2 635.02 Dining

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 10 round tables with 4 chairs each, 5 café height tables with two stools each

Chairs: 40 dining chairs and 10 stools

Trash Can: trash, recycling, and composting

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other: TBD

Special needs

Plumbing:

Other mechanical:

Equipment:

Electrical

Normal Power (volts): 120V

Outlets: wall

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

635.02 Café Service 1

Space Use Category:	**Food Facility Service**	**Area NASF:**	**500**
Space Use Code:	**635**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**500**

Function:	Support space for café
Relationships:	Adjacent to café

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	not recommended		
Window Treatment:			
Access:	corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	yes
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	

2 635.02 Café Service

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: TBD
Chairs: TBD
Trash Can: yes
Other: TBD

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other: TBD

Special needs

Plumbing: SS Sink and counter
Other mechanical: Fan extractor
Equipment: Commercial refrigerators

Electrical

Normal Power (volts): 120V
Outlets: wall
Additional Outlets: as needed

Major Equipment

Item	Status	Quantity
TBD	1	

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

650.01 Welcome Lounge 1

Space Use Category:	**Lounge**	**Area NASF:**	**1,600**
Space Use Code:	**650**	**Quantity:**	**1**
		Capacity:	**80**
		Total Area, NASF:	**1,600**

Function:	waiting and congregation seating area
Relationships:	adjacent to the Welcome Desk and Huddle Rooms

Architectural

Flooring:	Resilient or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	9'-0"
Windows:	yes		
Window Treatment:	yes, TBD		
Access:	open to vertical circulation and entry vestibule		
Door:	NA		
Min. Door Size:	NA		
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid, consider architectural lighting		
Lighting Controls:	TBD		
Security:	cameras		
Other:	room sign per UMBC standards digital wayfinding information signs		

Built-In Equipment and Casework

Audio/Visual Equipment:	TBD
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	

2 650.01 Welcome Lounge

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs: lounge seating for at least 80

Trash Can: trash and recycling

Other:

Telecommunication

Data:

Phone:

Cameras: yes

Intercom: yes

Wi-Fi: yes

Other: charging stations for personal devices

Special needs

Plumbing:

Other mechanical:

Equipment:

Electrical

Normal Power (volts): 120V

Outlets: wall

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

650.02 Student Lounge 1

Space Use Category:	**Lounge**	**Area NASF:**	**800**
Space Use Code:	**650**	**Quantity:**	**5**
		Capacity:	**40**
		Total Area, NASF:	**4,000**

Function:	seating area
Relationships:	SSB envisions dispersing student facilities evenly throughout the building, including a student lounge on each floor of each wing. The lounges may be larger or smaller as the design allows, and subdivided as needed. The Student Lounge is to be open to circulation and have a mix of furniture and seating to allow for collaboration, not quiet study. There may be other opportunities to provide pockets of seating in the circulation areas of the building.

Architectural

Flooring:	Resilient or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	9'-0"
Windows:	yes		
Window Treatment:	yes, TBD		
Access:	open to vertical circulation and entry vestibule		
Door:	NA		
Min. Door Size:	NA		
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid, consider architectural lighting		
Lighting Controls:	TBD		
Security:	cameras		
Other:	room sign per UMBC standards digital wayfinding information signs		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	TBD
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	
Clock:	

2 650.02 Student Lounge

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs: lounge seating for at least 40 students
Trash Can: trash and recycling
Other:

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other: charging stations for personal devices

Special needs

Plumbing:
Other mechanical:
Equipment:

Electrical

Normal Power (volts): 120V
Outlets: wall
Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

660.01 Merchandizing 1

Space Use Category:	**Merchandizing**	**Area NASF:**	**250**
Space Use Code:	**660**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**250**

Function:	space to allow for the promotion or selling of university merchandise
Relationships:	Within Welcome Wing, visible from the Welcome Lounge.

Architectural

Flooring:	Resilient or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	to interior		
Window Treatment:			
Access:	corridor or lounge		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	yes
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	yes
Tack Board:	
Clock:	
Casework:	TBD

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: TBD
Chairs: TBD
Trash Can: yes
Other: Point of sale

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes

Special needs

Plumbing:
Other mechanical:
Equipment:

Electrical

Normal Power (volts): 120V
Outlets: wall
Additional Outlets: as needed

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

660.02 Vending 1

Space Use Category:	**Merchandizing**	**Area NASF:**	**100**
Space Use Code:	**660**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**100**

Function:	space to allow for the location of vending machines
Relationships:	can be subdivided and located on several floors

Architectural

Flooring:	Resilient	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:			
Window Treatment:			
Access:	corridor		
Door:			
Min. Door Size:			
Acoustic Control:			
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:			
Security:			
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	TBD
Clock:	

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can: trash and recycling

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes

Special needs

Plumbing:
Other mechanical:
Equipment:

Electrical

Normal Power (volts): 120V
Outlets: wall
Additional Outlets: as needed

Major Equipment

Item	Status	Quantity
Vending machines	3	

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.01 Student Meeting (small) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**120**
Space Use Code:	**680**	**Quantity:**	**8**
		Capacity:	**6**
		Total Area, NASF:	**960**

Function: schedulable space serving students for meeting, gathering, or studying

Relationships:

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 680.01 Student Meeting (small)

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: 1 – 30x72 table or 48” diameter round
Chairs: 6 guest chairs
Trash Can: trash and recycling
Other:

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
Wall-mounted display	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.02 Student Meeting (medium) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**240**
Space Use Code:	**680**	**Quantity:**	**8**
		Capacity:	**12**
		Total Area, NASF:	**1,920**

Function: schedulable space serving students for meeting, gathering, or studying

Relationships:

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 680.02 Student Meeting (medium)

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 6 – 30x60 tables

Chairs: 12 – ergonomic rolling chairs

Trash Can: trash and recycling

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
Wall-mounted display	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.03 Student Meeting (large) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**480**
Space Use Code:	**680**	**Quantity:**	**2**
		Capacity:	**24**
		Total Area, NASF:	**960**

Function: schedulable space serving students for meeting, gathering, or studying

Relationships:

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-6"
Windows:	exterior desired, not operable provide minimum of 6" wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	2 – 55" minimum
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 680.03 Student Meeting (large)

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 12 – 30x60 tables

Chairs: 24 – ergonomic rolling chairs

Trash Can: trash and recycling

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
Wall-mounted display	3	2

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.04 Student Meeting (x-large) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**960**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**50**
		Total Area, NASF:	**960**

Function:	schedulable space serving students for meeting, gathering, and events that can be subdivided into two rooms of 24 seats
Relationships:	near other student meeting spaces

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-6”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel, card swipe		
Other:	folding acoustic wall partition that can subdivide the room into two equal spaces room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	
Clock:	yes

2 680.04 Student Meeting (x-large)

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 16 – 30x72 tables

Chairs: 48 – ergonomic rolling chairs

Trash Can: trash and recycling

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets: floor outlets and wall outlets to support digital displays

Major Equipment

Item	Status	Quantity
Wall-mounted display	3	4

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.05 Retriever Room 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**2,700**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**150**
		Total Area, NASF:	**2,700**

Function:	gathering space used primarily by Enrollment Management for campus tours and campus orientation events. Can also be scheduled by the campus community for events.
Relationships:	Located on the ground floor of the Welcome Wing, adjacent to storage and a catering pantry. Strong adjacency required to the waiting area/lounge on this level and interactive displays.

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	12’-0”
Windows:	exterior desired, not operable – view ideal provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	power operated shade cloth, 5-10% openness factor		
Access:	off both lobby and the admissions suite		
Door:	solid wood, natural finish		
Min. Door Size:	multiple double 3’-0” x 7’-0“		
Acoustic Control:	yes, throughout. STC 55		
Acoustic Treatment:	room acoustics to be controlled through specialized wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	multiple, at both entries to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	system scaled to room, TBD (discuss with
Flat Screen Monitor:	specialized, multi-screen display
White Board:	
Coat Hooks:	TBD
Speakers:	yes, cinematic experience
Shelving:	
Tack Board:	
Other:	overhead and side structure for hanging lights

2 680.05 Retriever Room

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 4 – 24x72 rolling (TBD)

Chairs: 150 - ergonomic stacking chairs

Trash Can: 2 each trash and recycling

Other: podium and instructor station

Telecommunication

Data: yes

Phone:

Cameras: yes (TBD)

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets: floor outlets and wall outlets to support displays

Major Equipment

Item	Status	Quantity
wall monitors	3	6
projector	3	1
projection screen	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.06 Innovation Meeting / Presentation Room 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**600**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**8**
		Total Area, NASF:	**600**

Function:	Space to support activities and programs of the Entrepreneurship and Innovation Center
Relationships:	Located adjacent to the Entrepreneurship suite and accessed from it and the corridor

Architectural

Flooring:	VCT or carpet (TBD)	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	9'-0"
Windows:	exterior desired, not operable provide minimum of 6" wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	2 - solid wood, natural finish		
Min. Door Size:	3'-0" x 7'-0"		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	projector and screen
Flat Screen Monitor:	yes
White Board:	min. 10 lin ft. wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	min. 10 lin ft. wall-mounted tack board
Clock:	yes

2 680. 06 Innovation Meeting / Presentation Room

Moveable Furnishings and Equipment

Desk: 1 – 30x48 with chair
Desk Features:
Table: 15 – 30x60 rolling tables
Chairs: 30 – ergonomic rolling chairs
Trash Can: trash and recycling
Other: standard UMBC accessible table and chair

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall
Additional Outlets: wall mounted outlets to support wall monitors

Major Equipment

Item	Status	Quantity
Wall monitors	3	2
Projector	3	1
Projection screen	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.07 Alumni Meeting Room 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**400**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**24**
		Total Area, NASF:	**400**

Function:	schedulable space serving primarily alumni events and gatherings
Relationships:	near lounge space and/or workstations supporting Alumni events

Architectural

Flooring:	carpet	Base:	rubber, cove base
Walls:	gypsum wall board, wood paneling	Wall Finish:	paint, stain
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	9’-0”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes, minimum of 55”
White Board:	TBD
Coat Hooks:	yes
Speakers:	yes
Shelving:	TBD
Tack Board:	
Casework:	min. 6 lin. ft. of countertop and cabinets supporting a small bar sink and minifridge

2 680.07 Alumni Meeting Room

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table: TBD
Chairs: Lounge chairs or stacking chairs accommodating 20-24 people
Trash Can: trash and recycling
Other:

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special

Equipment: electric fireplace
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum eight duplex outlets)
Additional Outlets: to support monitors and other equipment

Major Equipment

Item	Status	Quantity
Wall monitor	3	1
Mini-fridge	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.07 Employer Meeting (small) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**240**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**12**
		Total Area, NASF:	**240**

Function:	Space for prospective employers to meet with students
Relationships:	Adjacent to and within the Career Center office suite

Architectural

Flooring:	VCT or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-0”
Windows:	exterior possible, if so not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	if applicable, manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor and from interior of Career Center		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	yes
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	yes
Clock:	yes

2 680.07 Employer Meeting (small)

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 6 – 30x60 rolling tables with lockable casters

Chairs: 12 – ergonomic rolling chairs

Trash Can:

Other:

Telecommunication

Data: yes

Phone:

Cameras:

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity
Wall monitor	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

680.08 Employer Meeting (x-large) 1

Space Use Category:	**Meeting Room**	**Area NASF:**	**1,000**
Space Use Code:	**680**	**Quantity:**	**1**
		Capacity:	**50**
		Total Area, NASF:	**1,000**

Function:	Meeting room for prospective employers to meet with larger groups of students
Relationships:	Adjacent to and within the Career Center office suite

Architectural

Flooring:	VCT or carpet	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	9’-0”
Windows:	exterior desired, not operable provide minimum of 6” wide sidelight adjacent to door		
Window Treatment:	manual, chain-driven shade cloth, 5-10% openness factor		
Access:	off main corridor and from within Career Center suite		
Door:	2 - solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	STC 42		
Acoustic Treatment:	room acoustics to be controlled through wall and ceiling treatment		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	projector and screen
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	yes
Shelving:	
Tack Board:	yes
Clock:	yes

2 680.08 Employer Meeting (x-large)

Moveable Furnishings and Equipment

Desk: 1 – 30x72 instructor station with chair or podium
Desk Features:
Table: 18 tables
Chairs: 50 – ergonomic stacking chairs
Trash Can: trash and recycling
Other:

Telecommunication

Data: yes
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum eight duplex outlets)
Additional Outlets: outlets to support AV technology

Major Equipment

Item	Status	Quantity
Wall monitors	3	2
Projector	3	1
Projection screen	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

685.01 Large Meeting Storage 1

Space Use Category:	**Meeting Room Service**	**Area NASF:**	**200**
Space Use Code:	**685**	**Quantity:**	**2**
		Capacity:	
		Total Area, NASF:	**400**

Function:	Storage room supporting meeting rooms
Relationships:	Adjacent to large meeting room

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-0”
Windows:	no		
Window Treatment:	NA		
Access:	off storage room		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	NA		
Acoustic Treatment:	NA		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:
Flat Screen Monitor:
White Board:
Coat Hooks:
Speakers:
Shelving:
Tack Board:
Clock:

2 685.01 Large Meeting Storage

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs:

Trash Can:

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi:

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum two duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key

1 – Furnished and Installed by Contractor

2 – Furnished by Owner and Installed by Contractor

3 – Furnished and Installed by Owner, coordinated by Contractor

685.02 Meeting Storage 1

Space Use Category:	**Meeting Room Service**	**Area NASF:**	**100**
Space Use Code:	**685**	**Quantity:**	**3**
		Capacity:	
		Total Area, NASF:	**300**

Function:	Storage room supporting meeting rooms
Relationships:	Adjacent to meeting room

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8’-0”
Windows:	no		
Window Treatment:	NA		
Access:	off storage room		
Door:	solid wood, natural finish		
Min. Door Size:	3’-0” x 7’-0“		
Acoustic Control:	NA		
Acoustic Treatment:	NA		
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:
Flat Screen Monitor:
White Board:
Coat Hooks:
Speakers:
Shelving:
Tack Board:
Clock:

2 685.02 Meeting Storage

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table:

Chairs:

Trash Can:

Other:

Telecommunication

Data:

Phone:

Cameras:

Intercom:

Wi-Fi:

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum two duplex outlets)

Additional Outlets:

Major Equipment

Item	Status	Quantity

Status Key

1 – Furnished and Installed by Contractor

2 – Furnished by Owner and Installed by Contractor

3 – Furnished and Installed by Owner, coordinated by Contractor

685.03 Catering Pantry 1

Space Use Category:	**Meeting Room Service**	**Area NASF:**	**150**
Space Use Code:	**685**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**150**

Function:	Support for Retriever Room
Relationships:	Adjacent to Retriever Room, accessed from service corridor

Architectural

Flooring:	VCT	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	acoustic panel ceiling	Min. Ceiling Height:	8'-0"
Windows:	not required		
Window Treatment:			
Access:	off shared circulation route, with direct access to service entrance and to the Retriever Room		
Door:	solid wood, natural finish, with vision panel (if necessary, see below)		
Min. Door Size:	3'-0" x 7'-0" (door may not be necessary, except to Retriever Room)		
Acoustic Control:	STC 42		
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	TBD
Tack Board:	
Casework:	min. 10 linear feet of countertop and base cabinets with integral sink and faucet 7 linear feet of upper cabinets

2 685.03 Catering Pantry

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can: large waste, recycling, and compost receptacle
Other: large sink and faucet, electric warming oven, refrigerator, and microwave

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi: yes
Other:

Special HVAC needs

Room Pressure: negative
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets: two GFCI, two 20A circuits for microwave and refrigerator

Major Equipment

Item	Status	Quantity
refrigerator	3	1 or 2
microwave oven	3	1
warming oven	3	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

720.01 Bicycle Workshop 1

Space Use Category:	**Shop**	**Area NASF:**	**700**
Space Use Code:	**720**	**Quantity:**	**1**
		Capacity:	**6**
		Total Area, NASF:	**700**

Function:	Space for the maintenance and repair of bicycles and other mobility tools
Relationships:	Can be on ground level, opening to the exterior, or within the Commons Drive Garage

Architectural

Flooring:	VCT or concrete	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	no ceiling necessary	Min. Ceiling Height:	9’-0”
Windows:	exterior possible, if so not operable		
Window Treatment:	if applicable, manual, chain-driven shade cloth, 5-10% openness factor		
Access:	Can be on ground level, opening to the exterior, or within the Commons Drive Garage		
Door:	metal		
Min. Door Size:	double 3’-0” x 7’-0“		
Acoustic Control:	not applicable		
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	yes
Other:	ceiling fan

2 720.01 Bicycle Workshop

Moveable Furnishings and Equipment

Bench:	6 – 30x96 work benches
Table:	1 – 30x60 rolling tables with lockable casters and chair
Chairs:	6 – ergonomic stools
Trash Can:	3 - large trash
Other:	4 - tall metal storage cabinets
	4 - 48” wide metal adjustable shelving

Telecommunication

Data:	yes
Phone:	
Cameras:	TBD
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	negative
Other:	exhaust fan

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum twelve duplex outlets)
Additional Outlets:	at wall bench and suspended from ceiling

Major Equipment

Item	Status	Quantity
Wall monitor	3	1
Bicycle repair equip.	3	TBD

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

720.02 Building Maintenance Shop 1

Space Use Category:	**Shop**	**Area NASF:**	**300**
Space Use Code:	**720**	**Quantity:**	**1**
		Capacity:	**4**
		Total Area, NASF:	**300**

Function:	Space to support building maintenance
Relationships:	Can be on ground level, opening to the exterior, or within the Commons Drive Garage

Architectural

Flooring:	VCT or concrete	Base:	rubber, cove base
Walls:	gypsum wall board	Wall Finish:	paint
Ceiling:	no ceiling necessary	Min. Ceiling Height:	9'-0"
Windows:	exterior possible, if so not operable		
Window Treatment:	if applicable, manual, chain-driven shade cloth, 5-10% openness factor		
Access:	Can be on ground level, opening to the exterior, or within the Commons Drive Garage		
Door:	metal		
Min. Door Size:	double 3'-0" x 7'-0"		
Acoustic Control:	not applicable		
Acoustic Treatment:			
Lighting:	LED, in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	yes
White Board:	wall-mounted glass marker board
Coat Hooks:	yes
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	yes

2 720.02 Building Maintenance Shop

Moveable Furnishings and Equipment

Bench:	4 – 30x96 work benches
Table:	1 – 30x60 rolling tables with lockable casters and chair
Chairs:	4 – ergonomic stools
Trash Can:	3 - large trash
Other:	3 - tall metal storage cabinets
	3 - 48” wide metal adjustable shelving

Telecommunication

Data:	yes
Phone:	
Cameras:	
Intercom:	
Wi-Fi:	yes
Other:	

Special HVAC needs

Room Pressure:	negative
Other:	exhaust fan

Electrical

Normal Power (volts):	120V
Outlets:	wall (minimum twelve duplex outlets)
Additional Outlets:	at wall adjacent to bench and suspended from ceiling

Major Equipment

Item	Status	Quantity

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

730.01 Shared Storage 1

Space Use Category:	**Central Storage**	**Area NASF:**	**400**
Space Use Code:	**730**	**Quantity:**	**3**
		Capacity:	
		Total Area, NASF:	**1,200**

Function:	Storage space for building occupants
Relationships:	Locate adjacent to service elevator or service entry

Architectural

Flooring:	VCT or concrete	Base:	rubber, cove base
Walls:	gypsum wall board or CMU	Wall Finish:	paint
Ceiling:	no ceiling necessary	Min. Ceiling Height:	8’-0”
Windows:	no		
Window Treatment:			
Access:	corridor, on service level		
Door:	metal		
Min. Door Size:	double 3’-0” x 7’-0“		
Acoustic Control:	NA		
Acoustic Treatment:			
Lighting:	LED, suspended		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel card swipe		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	
Other:	chain link fencing as dividers, as necessary

2 730.01 Shared Storage

Moveable Furnishings and Equipment

Desk:
Desk Features:
Table:
Chairs:
Trash Can:
Other: shelving as necessary

Telecommunication

Data:
Phone:
Cameras:
Intercom:
Wi-Fi:
Other:

Special HVAC needs

Room Pressure:
Other:

Electrical

Normal Power (volts): 120V
Outlets: wall (minimum four duplex outlets)
Additional Outlets:

Major Equipment

Item	Status	Quantity
shelving	1	1

Status Key
1 – Furnished and Installed by Contractor
2 – Furnished by Owner and Installed by Contractor
3 – Furnished and Installed by Owner, coordinated by Contractor

780.01 Student Package Lockers 1

Space Use Category:	**Unit Storage**	**Area NASF:**	**500**
Space Use Code:	**780**	**Quantity:**	**1**
		Capacity:	
		Total Area, NASF:	**500**

Function:	Space to accommodate lockable package lockers
Relationships:	Can be located in lower level below grade

Architectural

Flooring:	VCT or concrete	Base:	rubber, cove base
Walls:	gypsum wall board or CMU	Wall Finish:	paint
Ceiling:	acoustic ceiling panels	Min. Ceiling Height:	8'-0"
Windows:	no		
Window Treatment:			
Access:	corridor, on service level near service entry		
Door:	metal (door not required)		
Min. Door Size:			
Acoustic Control:	NA		
Acoustic Treatment:			
Lighting:	LED in ceiling grid		
Lighting Controls:	at entry to room and motion detector		
Security:	UMBC standard door hardware in brushed stainless steel, as nessary card swipe		
Other:	room sign per UMBC standards		

Built-In Equipment and Casework

Audio/Visual Equipment:	
Flat Screen Monitor:	
White Board:	
Coat Hooks:	
Speakers:	
Shelving:	
Tack Board:	yes
Clock:	
Other:	bank of storage lockers, to be provided by package delivery company

2 780.01 Student Package Lockers

Moveable Furnishings and Equipment

Desk:

Desk Features:

Table: 2 – 24x60 tables

Chairs: 2 – seating benches

Trash Can: trash and recycling

Other:

Telecommunication

Data: yes

Phone:

Cameras: yes

Intercom:

Wi-Fi: yes

Other:

Special HVAC needs

Room Pressure:

Other:

Electrical

Normal Power (volts): 120V

Outlets: wall (minimum four duplex outlets)

Additional Outlets: to support locker equipment

Major Equipment

Item	Status	Quantity
Package lockers	2	1

Status Key

1 – Furnished and Installed by Contractor

2 – Furnished by Owner and Installed by Contractor

3 – Furnished and Installed by Owner, coordinated by Contractor

NEW BUILDING PROJECT CHECKLIST

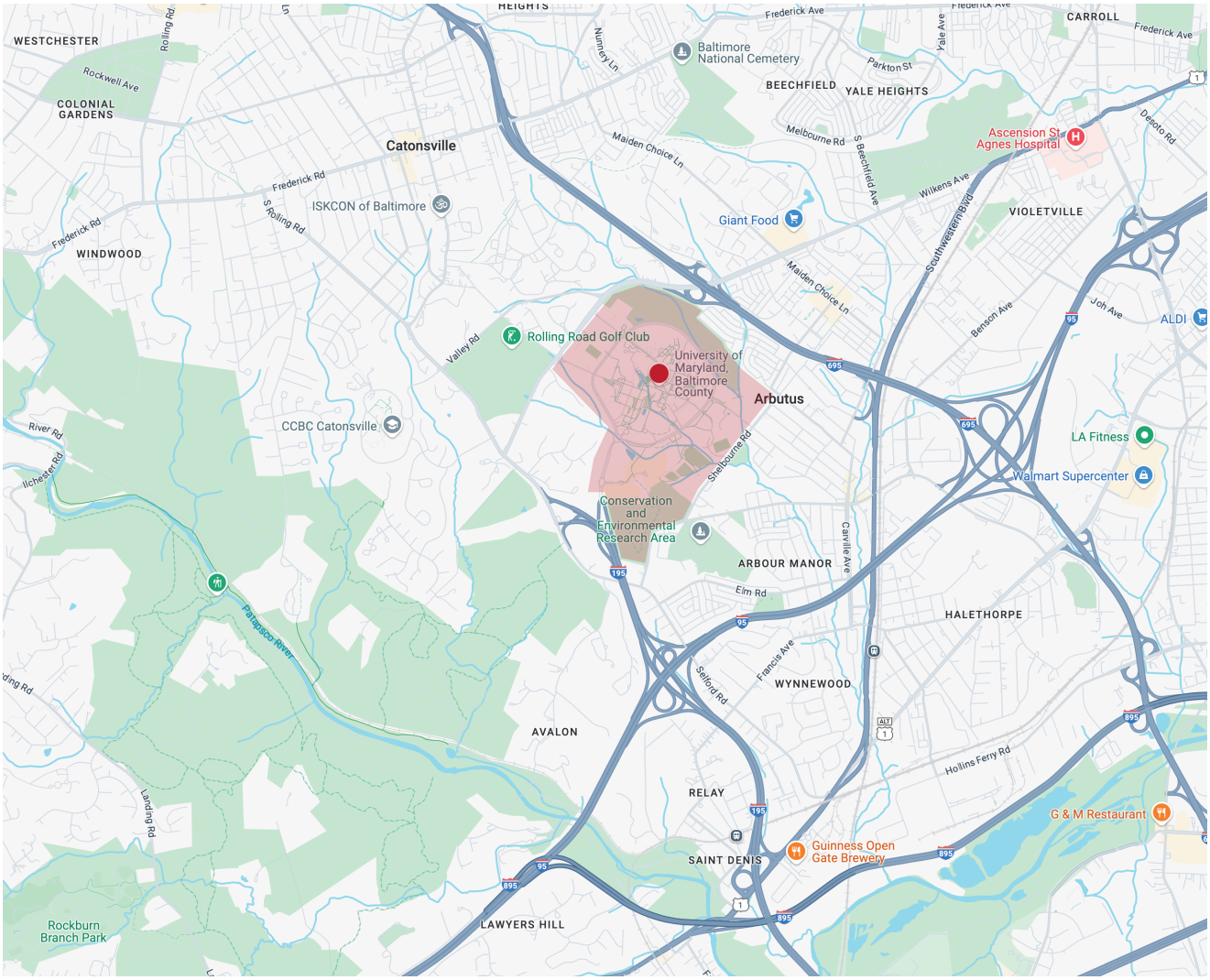
The following checklist shall be completed for projects involving construction of a new structure and includes an addition, extension or replacement of an existing structure. Because a new building project may also require renovation and utility extension work and generally involves site improvements, the program-writer should also complete either or both of these checklists if they are appropriate to the project under consideration.

	Yes	No	N/A
a. Architectural style preferences (If yes, explain on separate sheet.)		X	
b. Work schedules or phases		X	
c. Coordination with master development plan	X		
d. Funding constraints(If yes, what are they?)		X	
e. Site selected	X		
f. Preferred vistas (If yes, describe.)		X	
g. Excavation, clearing, razing constraints (If yes, explain.)		X	
h. Other construction in area		X	
i. Utilities on site	X		
j. Special design features (Describe on separate sheet.)		X	
k. Space needs: present and future			
Entire facility	X		
Functional areas	X		
Rooms	X		
l. Space needs: net sq. footage			
Entire facility	X		
Functional areas	X		
Rooms	X		
m. Special dimension and space requirements	X		
n. Nature of work and services described	X		
o. Functional and spatial layouts	X		
p. Workload projections			X
q. Special working hours or shifts			X
r. Work flow described			X
s. Clerical-professional ratio		X	
t. Client - staff ratio		X	
u. Client - staff traffic preferences	X		
v. Office layout preferences	X		
w. Special room/area features	X		
x. Climate control considerations	X		
y. Furniture and equipment needs	X		
z. Special lighting needs	X		
aa. Information technology needs (voice, video, data, & wireless)	X		
bb. Special access/egress requirements	X		

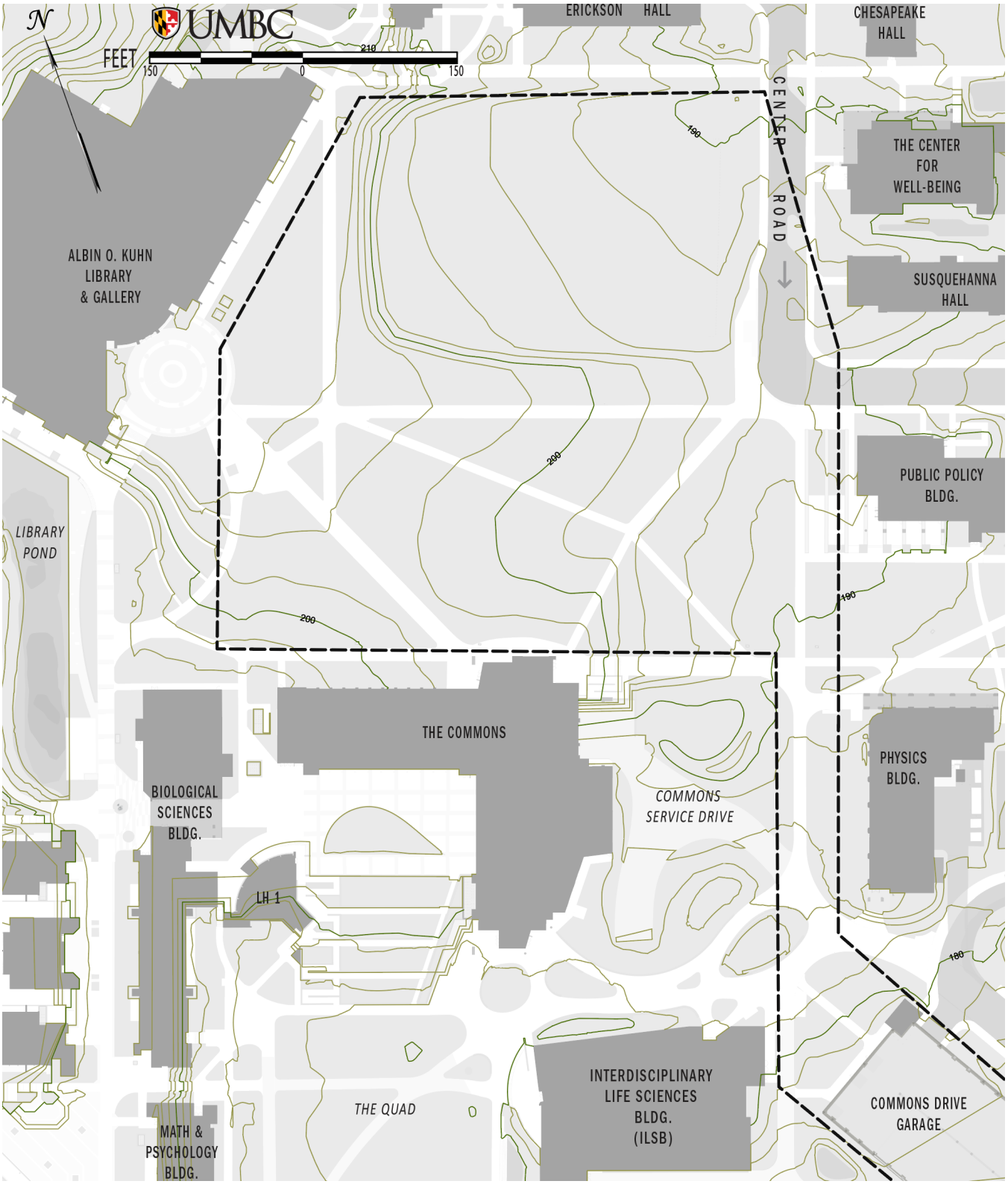
NEW BUILDING PROJECTS CHECKLIST (continued)

	Yes	No	N/A
cc. Preferred floor, wall or ceiling material	X		
dd. Security considerations	X		
Electrically controlled doors	X		
TV-monitoring system	X		
Secured utilities	X		
Secured windows	X		
Motion Detectors	X		
Door and window alarm	X		
Alarm links to offsite locations	X		
ee. Considerations to be given to:	X		
Equipment storage and maintenance	X		
Heat and sound insulation	X		
Linen and janitor closets	X		
Utility area	X		
Physical plant needs	X		
Trash removal	X		
Delivery dock	X		
Escalator, elevator, stairways	X		
Fire protection and sprinklers	X		
Food preparation and delivery	X		
Dining facilities	X		
Client and staff transportation systems	X		
Signage and entranceway needs	X		
Accommodations for youth, aged, and handicapped	X		
Restroom and shower facilities	X		
Special water supply or utility needs	X		
Recreation/play areas	X		

NOTE: For each item checked yes, ensure an explanatory narrative is included in the body of the program.



The Site of the Student Services Building project at UMBC



Topographic Map of the Potential Limits of Disturbance
of the Student Services Building project