

Programming for **Aggie Life and Wellness Center**
Utah State University
Logan, Utah Campus

DRAFT

August 2013
DFCM No. 13050770



Aggie Life and Wellness Center

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FOREWORD

In May 2013, the State of Utah Division of Facilities Construction and Management contracted ajc architects and 360 architecture to assist Utah State University in developing a Program Document and Design/Construction Documents for Aggie Life and Wellness Center to be located on USU's main campus in Logan, Utah. From May through July 2013, the Programming Team worked together to develop the narratives, analyses, and graphics on the following pages. This Document is intended to be the foundation for subsequent design and construction phases.

Jill A. Jones, AIA, LEED AP BD+C

A handwritten signature in black ink that reads "Jill A. Jones". The signature is stylized, with the first letters of each name being larger and more prominent. The signature is written over a large, hand-drawn scribble that forms a roughly triangular shape.

STATE OF UTAH
DIVISION OF FACILITIES &
CONSTRUCTION MANAGEMENT

DFCM Project Manager	Date
Lynn Hinrichs	

UTAH STATE UNIVERSITY

James Morales, Vice President of Student Services	Date
Utah State University	

Thomas Graham, Project Manager	Date
Utah State University	

We have reviewed the Utah State University Aggie Life and Wellness Center Program Document and warrant that it adequately represents our request for a facility to fulfill our mission and programmatic needs. All appropriate parties representing the Utah State University Aggie Life and Wellness Center have reviewed it for approval.

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Lynn Hinrichs	DFCM



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Executive Summary

01

PROJECT HISTORY AND JUSTIFICATION

Funded by students, Utah State University has committed to construct a 100,000 Square-Foot (approx.) Student Recreation Center Building, Aggie Life and Wellness Center that will unite the existing campus recreational facilities under one roof. Guided by the Campus Recreation Department's mission, "The Center is to be a signature building that reflects the vibrant, active, image of the Logan campus community while fitting into the context of the greater USU campus". Aggie Life and Wellness Center will accommodate 17,000 students from all the growing university. The new facility will provide an ample amount of new state of the art equipment for fitness and cardiovascular training. It will include three full-size basketball courts, a multi-activity court, running track, climbing wall and space for outdoor recreation programs. The students and staff will be provided with locker and shower facilities and casual lounge spaces that will emphasize on the importance of health in Aggie students' life. These spaces and experiences will provide a connection with the greater campus community and enhance the daily life of all students. Aggie Life and Wellness center will be an invaluable tool to highlight the vigorous life at Utah State University and engage everyone in recreational and social activities the heart of the campus.

BUILDING PROGRAM SUMMARY

The final program of spaces will provide USU Students with a 99,078 Gross-Square-Foot (GSF) Life and Wellness Center, with 67,400 Net-Square-Feet (NSF) of usable space for current and future needs. Aggie Life and Wellness Center will consist of Five major components:

1. Administration	3,000 NSF
2. General Public & Support Spaces	5,350 NSF
3. Recreational and Fitness	53,800 NSF
4. Health & Wellness	600 NSF
5. Outdoor Recreation Programming	4,650 NSF
. Building Support & Services	31,678 NSF

will make up the balance of the program for a total of:
99,078 GSF.

- Approximate estimated efficiency rate without natatorium:
68%

While a Natatorium was studied as part of the original program, it has been scheduled for a subsequent phase of design to maximize dollars for the core fitness spaces and gymnasiums in the facility.

Site parameters and programmatic relationships between the new building's main components guided selection of a preferred stacking diagram that showcases the fitness activities on the south, west and north sides of the site and utilizes the vertical space in a three story scheme to feature a running track while placing the administration offices at an optimal location to oversee both indoor activities and outdoor fields. As adequate parking exists all around the campus, a small parking lot with 8 stalls is proposed to only serve the loading & unloading needs of the outdoor recreational programs. Additionally, connections to existing pedestrian & bike pathways will be an important consideration. See Section 2 for a detailed site analysis, and Section 3 and 4 for a detailed description of building requirements, programmatic relationships and individual space requirements. Other solutions/studies analyzed at the workshops are also included in Section 4.

PROJECT VISION

Meeting with USU students, recreation directors and the design team elucidated that the Aggie Life and Wellness Center should become “A new hub for the campus community” with the “focus on Play, Wellness and Discovery” to “Enhance Aggie Life”. In addition, the steering committee’s overall tone on appreciating sustainable features plays a key role in resulting “an iconic building”.

The site is centrally located on a busy pedestrian pathway at the intersection of 800 East street and Aggie boulevard (700 north), west of the existing HPER building and north of Nelson Fieldhouse. The area is surrounded by the Legacy Fields, Spectrum Athletic Complex and other fields used for outdoor recreational programs which magnifies the presence of student activity in the area creating an energized recreation core. This provides an excellent opportunity to enhance the connectivity between students and the greater campus community. The site also has impressive views of Logan Canyon and the Bear River Range to the east, the Bear River Valley to the northwest and Wellsville Range to the southwest. Taking advantage of these views has informed the building’s program organization, form and site orientation. By incorporating all of the various site dynamics Aggie Life and Wellness Center becomes rooted in the greater context of the Cache Valley and becomes a physical and visual gateway for the entire campus.

BUILDING COST SUMMARY

The total construction budget for the USU Aggie Life and Wellness Center project is \$23,600,000 (“hard” costs only). The current construction cost estimate for the proposed new building (99,078 GSF) and related site work is \$23,705,50. At \$239/SF for building and site costs, this estimate is aligned with expectations and confirms that at this point in the project, the program is aligned with the budget. This construction cost estimate includes design and construction goals to achieve LEED Silver certification requirements. See section 5 for a detailed construction cost estimate.

PROJECT SCHEDULE

The proposed project schedule is based on CM/GC delivery method, utilizing two bid packages. This schedule will need to be confirmed/modified as the project progresses.

Anticipated milestones and delivery dates are as follows:

CM/GC Selection by End of	August 2013
Schematic Design	August 2013
Design Development	October 2013
Construction Documents	December 2013
Bid Package #1 (Utilities and Structural footings/foundations and Steel)	February 2014
Bid Package #2 Buyout	May 2014
Owner Occupancy	August 2015



Site Analysis

02



Site Analysis

02.1

The Site Analysis component of the Program identifies the effects of the site on the program, project cost and schedule. It also describes the physical characteristics of the proposed site and vicinity. The Site Analysis incorporates maps, photographs, and diagrams, illustrating the location, functional uses adjacent to the site, vehicular and pedestrian circulation, physical boundaries of the site, existing and proposed utilities as well as local climate considerations. This section concludes with an option illustrating potential siting of the building. Additional site options explored during programming are located in Section 4. The Site Analysis information is programmatic and should serve as an outline for a more detailed site analysis to be done in the design phase.

SITE LOCATION

The USU Aggie Life and Wellness Center will be located on the main campus in Logan, Utah. This campus is located in the middle of Cache Valley, on the east bench of the Wasatch Mountain's Bear River Range. On and near the campus are several well established student housing neighborhoods. USU's main campus is conveniently located less than five minutes from Highway 89 to the south of campus and ten minutes from Highway 91 to the west of campus. Student parking is concentrated on the north side of campus, including a 3 story parking structure, as well as ample parking at Romney Stadium.

While USU has several regional campuses around the state, the main campus in Logan is the Administrative headquarters of the University. The main campus houses the core student activities.

Logan is 90 minutes from downtown Salt Lake City, Utah. It has a population of just under 50,000 (2010 Census). Logan is in Cache County, on the backside of the Wasatch Mountains (the Wasatch Front). It is just over thirty miles from a major ski resort, and numerous mountain and desert outdoor activities.

SITE SUMMARY

The project site is located at the center of USU's main campus, on northeast corner of 800 East, and 700 north adjacent to the HPER building, the Legacy Fields, Nelson Fieldhouse and nearby Taggart Student Center. The gradual slope from east side of the project site that ends with a dramatic drop at the west edge together with the trees along the traffic intersection create the main landscape feature of the site. In addition to the standard sidewalks around the block, a pathway deviates from west side and provides a connection from the main campus to the spectrum building while passing by the Legacy fields. The new building will be located on the undeveloped and vegetated area, highly visible from 800 East and 700 North, at the main entrance to the campus.

As described in the preceding Site Location section, direct and convenient access to the site exists via 800 East, 700 North. Due to the existence of well-developed system of parking lots in close proximity, and in order to promote a healthier commute, the campus planning committee supported the direction to provide limited parking stalls designated only for loading/unloading purposes as well as emergency access. Existing vehicular access from the south, 700 north will be required to be maintained for pool maintenance vehicles as well as emergency/fire trucks. Mass transit to the site is readily available via the campus bus system as well as Logan City bus system.

All necessary utilities (natural gas, power, water, storm water, sewer lines, communication lines, etc) currently exist in close proximity to the site, and are generally available for connection. A connection to the existing campus utility tunnels/ central plant will be required as part of this project however, it was determined that a "Direct Bury" approach will be sufficient.

The site has a gentle slope, with approximately two feet of fall from the east edge to the west edge. The high side is at an elevation of approximately 4776, and low side is at an elevation of approximately 4774. The fall equates to a slope of approximately 1%.

Logan/Cache Valley, between the Wellsville Range of the Wasatch to the west and the Bear River Range of the Wasatch to the east is in a high mountain desert, within a semi-arid climate region. The Valley experiences four well-defined seasons: summers are dry, and mild to hot, autumn is mild



and dry, winters are mild to cold and relatively dry, and spring is mild, but wet. While temperatures are generally mild throughout the year, they range broadly from dawn to dusk. In the summer, temperature swings of 30°F and in the winter swings of 20°F are common. The average high temperature in the summer is 87°F, while the average low temperature in the winter around 18°F. Summertime "bright" sunshine is long (over 12 hours) and covers a wide range of angles from sunrise to sunset. Wintertime "bright" sunshine is relatively short (3.6 hours), and covers a narrower range of angles. Cache Valley experiences an average of 20 inches of precipitation per year, with around 63 inches of snowfall annually. Extreme weather events are rare in the Valley, due in large part to the surrounding mountains. Summer storms generally move from southwest to the northeast, and winter storms move from the northwest to the southeast. Strong canyon winds from the east are not uncommon. Also, winds move from east to west in the morning and, in reverse in the evening. While opportunities exist to work with the consistent wind pattern, much consideration in design will need to be dedicated to wind protection.

A survey, soils analysis, and geotechnical report are available for use during subsequent design phases. The survey documents existing topographic slope and drainage characteristics of the site. The survey also provides more reliable locations of existing utilities and existing improvements such as fences, ditches, curbs, etc. USU has also provided approximate topographic information for use in this Program Document where beyond the survey extents. Related civil and structural calculations and assumptions included in this document are based on the soils report. The

soils analysis and site topography will guide the Design Team when developing structural options and drainage strategies. The geotechnical report documents seismic characteristics of the site, groundwater presence and depth, and other subsurface hazards which will need to be considered during the planning and design phases.

Below is a summary of the Geotech report:

"Based upon the results of our investigations and testing, the proposed structure may be supported on conventional spread and continuous footings bearing on undisturbed natural sand and gravel soils and/or structural fill extending to undisturbed natural sand and gravel soils.

The most significant geotechnical aspects of this site are:

1. Non-engineered fill soils blanketing the surface of the south and west sides of the site to depths of two to three feet below the existing surface. These soils are unsuitable for support of footings and floor slabs unless first removed, moisture conditioned, compacted to the requirements for structural fill given in this report.
2. Natural sand and gravel soils will exhibit moderately high strength and low settlement characteristics.
3. Groundwater was not encountered to the maximum depth explored of 31.5 feet below the existing surface.
4. The natural sand and gravel soils, as well as the existing granular fill soils if properly prepared, will provide excellent pavement support when saturated or nearly saturated, but the occasional near-surface layer of sandy silt/silty fine sand will not.

In addition, **the site has been classified as Site Class D.**"

Based on the Site Analysis provided in this section, the Programming Team believes that the proposed site can support the 100,00 GSF building, and open/green spaces for the building. The proposed site provides a very desirable location for the Life and Wellness Center. It has advantageous physical characteristics and more than adequate campus connectivity opportunities.

The maps, photographs, and diagrams on the following pages illustrate the information outlined in the preceding paragraphs. The Selected Site Plan Option at the conclusion of this section suggests possible siting strategies to maximize daylight, views, vehicular and pedestrian connectivity.

SITE CONTEXT

The physical context surrounding the proposed site just north of USU's main campus ranges from large-scale two and three story recreational to educational buildings. The existing structures adjacent to the project site are mainly clad with brick however, various materials including architectural concrete and metal panels can also be found. The color of the brick changes from one building to another and varies from yellow to red. The existing structures are generally rectilinear. While some have warehouse-type pitched roof the other buildings have parapet walls that conceal "flat" roofs. In some cases, concrete structures are exposed. Fenestration patterns vary from small apertures, to large expanses of curtain-wall glazing. The surrounding landscapes are informal and range from natural to urban in character. Hard-scapes are mainly concrete or asphalt pathways between buildings, and soft-scapes are largely lawn with several species of deciduous and coniferous trees (See the Landscaping narratives for details).



Site Planning Principles

02.2

The USU Aggie Life and Wellness Center is composed of several major components: Basketball Courts, Multi-Activity Court, Jogging Track, Fitness Areas and Outdoor Recreational Program(ORP) Center. Critical support spaces will be integrated into each component. ORP area, and related support spaces, should be separable from the main circulation for security and efficiency as it will function with a separate dedicated staff, and will operate at different hours from the rest of the facility.

Site Option studies have suggested a three-sided building based on the nature of the campus site. There are two critical faces of the building: the west side, facing 800 East, and the south facade which welcomes students and faces the existing Fieldhouse and Student Center. On the south side of the building the open spaces may take on the form of a plaza and will be a major components of the student experience. An existing line of the London plane trees on the west and south side of the site are to be preserved to the extent possible.

BUILDING, STREET AND PEDESTRIAN CORRIDOR RELATIONSHIP

A proposed continuation of a pedestrian pathway on the southwest corner of the site delineates the western and southern boundary of the project. The Legacy Fields delineates the northern boundary of the project. An existing vehicle path to HPER building provides access to and defines the east side of the site. There are no legal setbacks associated with the project site however, a project limit line will have to be carefully considered early in the design phases as it relates to the excavation required for the project or the possibility of future connection between the new building and the HPER.

BUILDING ORIENTATION

The building should be oriented such that students have a clear understanding of where the building entrances are. Moreover, it should be a showcase of the main activity spaces inside the building in a welcoming and encouraging manner. Additionally, building orientation should be consistent with sustainable practices where possible and should make use of natural light to the greatest extent possible. This will help to conserve energy and provide a healthy environment for the users. While difficult to control solar gain on the west facade, there is also an opportunity to connect the purpose of the space with the campus and the community visually. Careful attention to the detail of this west facade will be critical to the success of the project.

A guiding principle for the project is that all spaces are to have access to natural daylight. Workspaces that are continuously occupied should be placed at or near a window. Where this is not possible, "borrowed" daylight should be made available.

Gyms, fitness spaces, studios, offices, lobbies and common areas oriented to the south should have solar control devices. Transparent and low partitions should be used where possible to allow natural light penetration as deep into the building as possible. Similarly, where possible, outdoor public spaces should be oriented to take full advantage of natural daylight in all seasons, yet provide shaded areas (via trees, canopies, etc) when and where appropriate.

RELATIONSHIP TO THE MAIN CAMPUS & SURROUNDING COMMUNITY

The building will be a new landmark for the campus as it is located on one of the high traffic points of the campus. It should be sited in a way that expresses its strong connection to the Student Center as well as the existing HPER building. A successful design solution should establish a building concept, massing, and material palette that expresses the inviting purpose of the building, and at the same time be in harmony with the surrounding context.

VIEWS

The building should aim to preserve/enhance existing views to the Legacy Fields, as well as views to the mountains beyond. Both indoor and outdoor spaces should take full advantage of the views where possible. The Aggie Life and Wellness Center should provide a visual connection between the spaces inside and campus activities to integrate most social aspects of the student life. In addition, the upper levels of the building should take advantage of the views to the mountain landscape in the distance. Views for supervision to the future outdoor activity areas and the Legacy Fields is also a critical function of the USU campus recreation department.

OUTDOOR SPACES

Outdoor gathering spaces surrounding the building will be designed to be functional year round however, significant utilization of such spaces is projected to occur in the warmer months of the year due to the climatic features of the location. Outdoor gathering areas, such as landscaped courtyards/plazas should be provided with elements to control both sunlight and wind . Connections between the exterior spaces and interior spaces should be considered. Thoughtfully placing outdoor and indoor activities, with relationship to the building's various functions, will help to "activate" the site, and contribute to lively and vigorous atmosphere of USU campus.

Provide a variety of outdoor spaces for various campus activities: both quiet and active, for large groups and intimate groups, and both sunny and shaded areas. Provide multiple modes of seating and site furnishings, both fixed and flexible where appropriate. With exception of gathering spaces, hard-scaped areas should be minimized to the extent possible. Light colored materials should be considered to reduce the heat island effect.

SHADE AND SHADOW

Minimize building shadows on usable/habitable outdoor spaces in winter, spring and fall, while maximizing shade in the summer months. Utilize mature deciduous tree canopies as much as possible to achieve this goal. Provide areas of seating in full-sun to extend the usability of spaces well into the late fall, and early spring.

LANDSCAPE

Mature trees and lawn exist on the west and south sides of the proposed building should be maintained to the extent possible. All areas within the project boundaries not covered by building, parking, or other hard surfaces shall be landscaped. Proposed development should reinforce the architecture of the building, without over powering it. Plant selections should be well adapted to the local climate and should exemplify "water-wise" planting. Native plants should be used where possible. Plant selections should be easily maintained and not susceptible to diseases and pests. Plant selections shall not contain fruit that may stain sidewalks or cause walking hazards. See the Landscape Design Criteria in Section 3 for details.

Public art, monuments, and site furnishings, as well as way-finding signage associated with this project should adhere to the principles set forth in the USU campus design guidelines.

This project scope will include development of the landscape that borders the immediate pedestrian pathways on the south and west side of the project site.

IRRIGATION

Sustainable practices will be required in designing the landscape with a goal of little to no irrigation required after new plant materials have had a chance to become established. Temporary irrigation may be required during the first year or two after materials have been planted. See the Landscape Design Criteria in Section 3 for details.

BUILDING ACCESS

The Building will likely have two major access points to serve the distinctly different programmatic components: one on the south side as the main entrance, and one on the north/west side to meet outdoor recreational programs' needs and loading and unloading purposes. It is preferred that these two access points be separated for security and efficiency of the differing operations between the building components. The public nature of this facility should be expressed with welcoming pathways on the south and west side of the building.

Additional minor access points may be required for individual programmatic functions, including but not limited to, the building support spaces such as mechanical and electrical rooms.

SITE ACCESSIBILITY

Wherever possible, all site paths shall meet or exceed ADA criteria for slope (including cross slopes) and landings. If this is unfeasible in a particular location, provide elevator access within the building that will allow wheelchair users to transition the non-compliant grade condition. All usable outdoor spaces shall be fully accessible.

PARKING AND TRANSIT

Existing parking lots surround the entire campus. Large student parking lots are located on the south and west sides of the site. Additionally, parking meters are widely distributed around the entire campus.

While ample parking exists, the existing surface parking area to the immediate northwest of the HPER building may need to be utilized to provide additional accessible stalls

as required by code. Additionally, dedicated and preferred stalls for alternative fuel vehicles and carpool parking maybe considered, and will be specifically required for LEED credit SS 4. No new student parking will be provided as part of this project.

The project site is located on existing campus bus routes. Additionally, Logan City provides bus routes within walking distance.

EMERGENCY AND NON-ROUTINE SERVICE ACCESS

Pathways for emergency vehicles will be provided on the east side and possibly north side of the building. Proper emergency/service vehicle dimensions and weights should be utilized for load calculations in such design situations. USU campus standards should be consulted during the subsequent design phase. A preliminary analysis indicates that a 26 foot wide fire lane will be required, and may not be closer to the building than 15 feet, and no further than 30 feet.

The location of the fire department connection, and other related equipment, should be coordinated with the Campus Fire Marshal.

LOADING AND SERVICE

As Outdoor Recreation Program(OPR) requires loading area for their equipment, it is necessary to provide a separate vehicle access along with covered loading area. Large training equipment will be able to be delivered through the main doors (to be oversized). An adequately sized door for exterior access to the mechanical room will be provided.

Service/Delivery for support spaces such as laundry will need to be considered in subsequent design phases.

BICYCLE ACCESS

Bicycle racks should be located conveniently to major entrances to the new facility, and should be covered from rain/snow if/when possible. The quantity of racks will need to be careful considered in subsequent design phases.

SITE FURNISHINGS AND SIGNAGE

Site furnishings include benches, trash receptacles, bike racks, etc. The site furnishings must be selected in accordance with campus standards. While comfort and style are important, durability and vandal-resistance are also major factors in determining suitable furnishings.

While a Skate Park was briefly considered , it was determined that a simplified landscape feature for skateboarders would be more appropriate. This will require additional exploration as to its inclusion and detailed design.

All building-specific exterior signage is to be included in this project, and must be provided in accordance with campus standards.

LIGHTING

Adequate lighting shall be provided for all pedestrian areas, loading zones and building entrances. Heights of pole mounted fixtures, or bollards, should be selected with respect to the scale and function of the pathway being lit. Minimum foot-candle requirements must be considered with respect to safety as well as environmental sustainability. All exterior light fixtures shall be concealed source fixtures and shall meet the requirements for night sky protection. Additionally, all light fixtures will need to meet USU Campus requirements, and should be aligned with requirements of the local municipality as well. Exterior wall mounted floodlights are prohibited.

MISCELLANEOUS ENCLOSURES

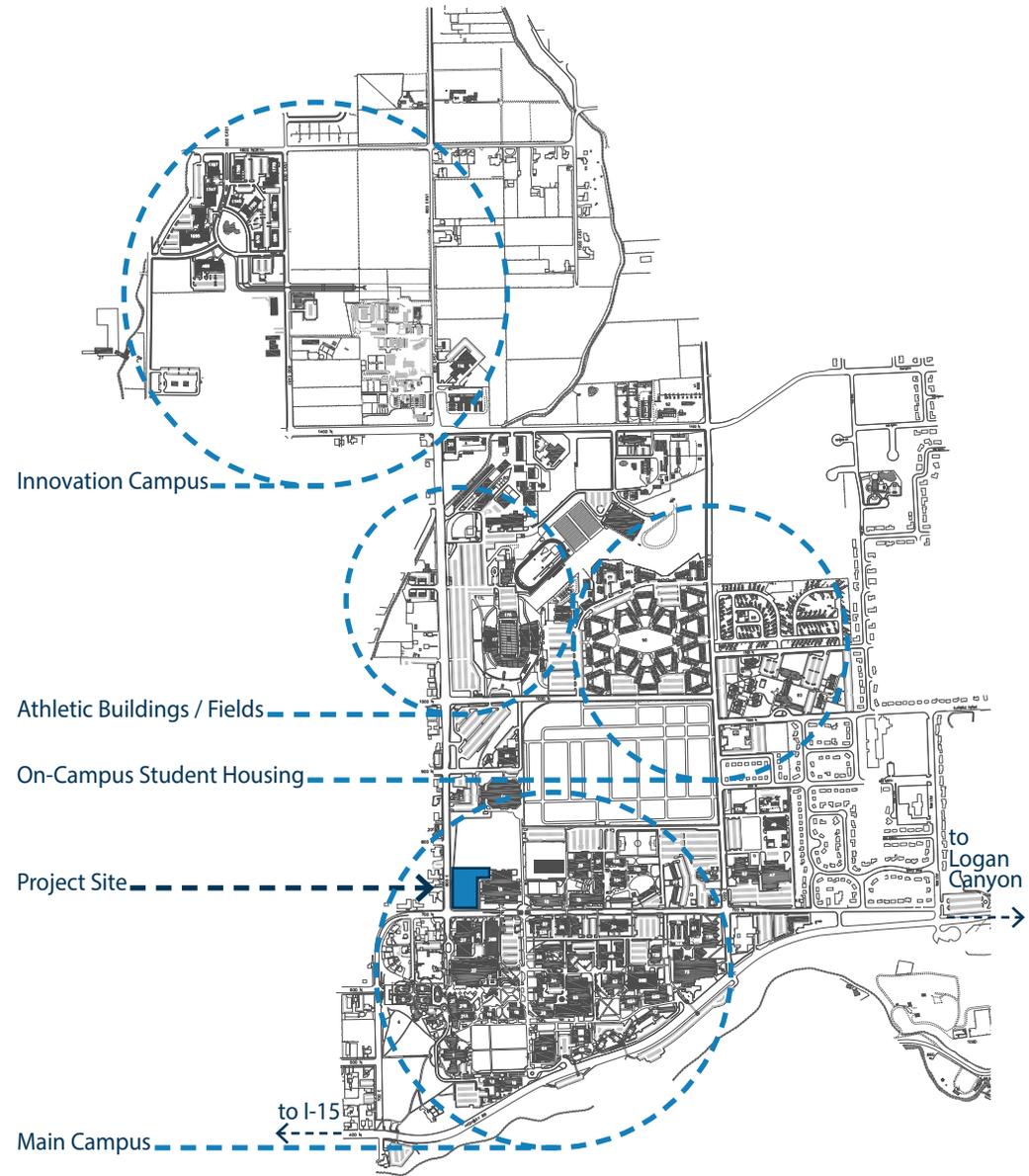
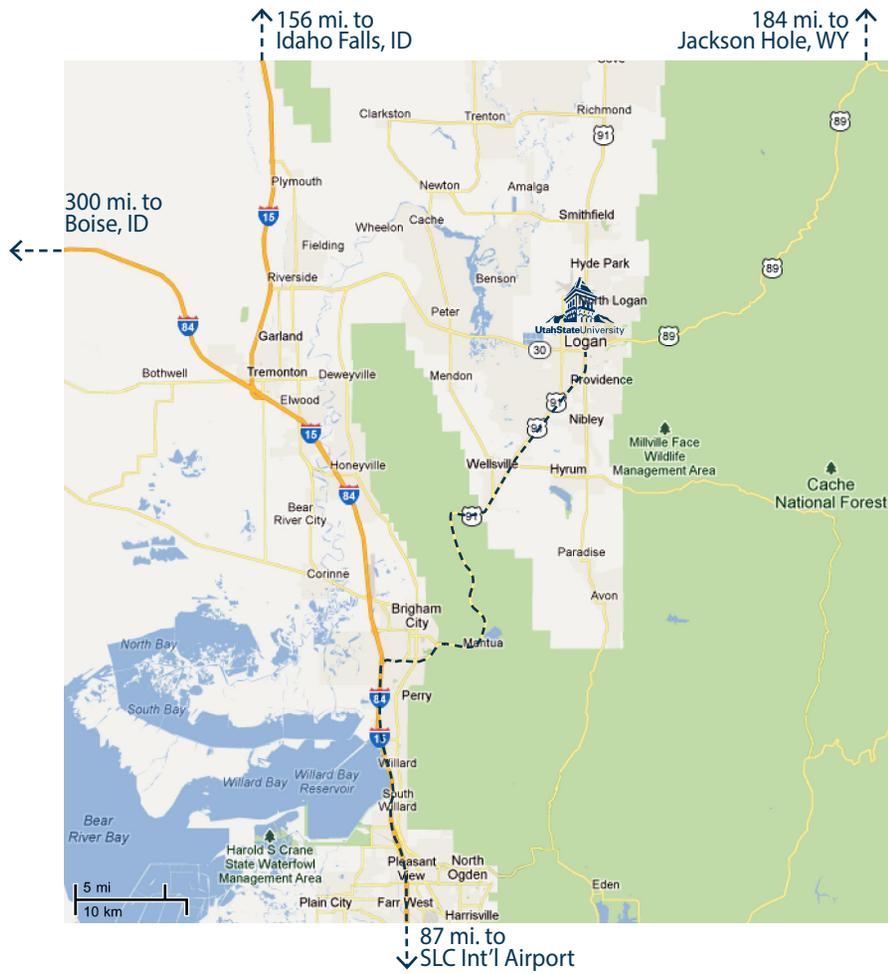
All transformers, and other electrical/mechanical equipment shall be enclosed within the building to the extent possible.

Outdoor storage structures are prohibited.

Site Analysis Maps

02.3





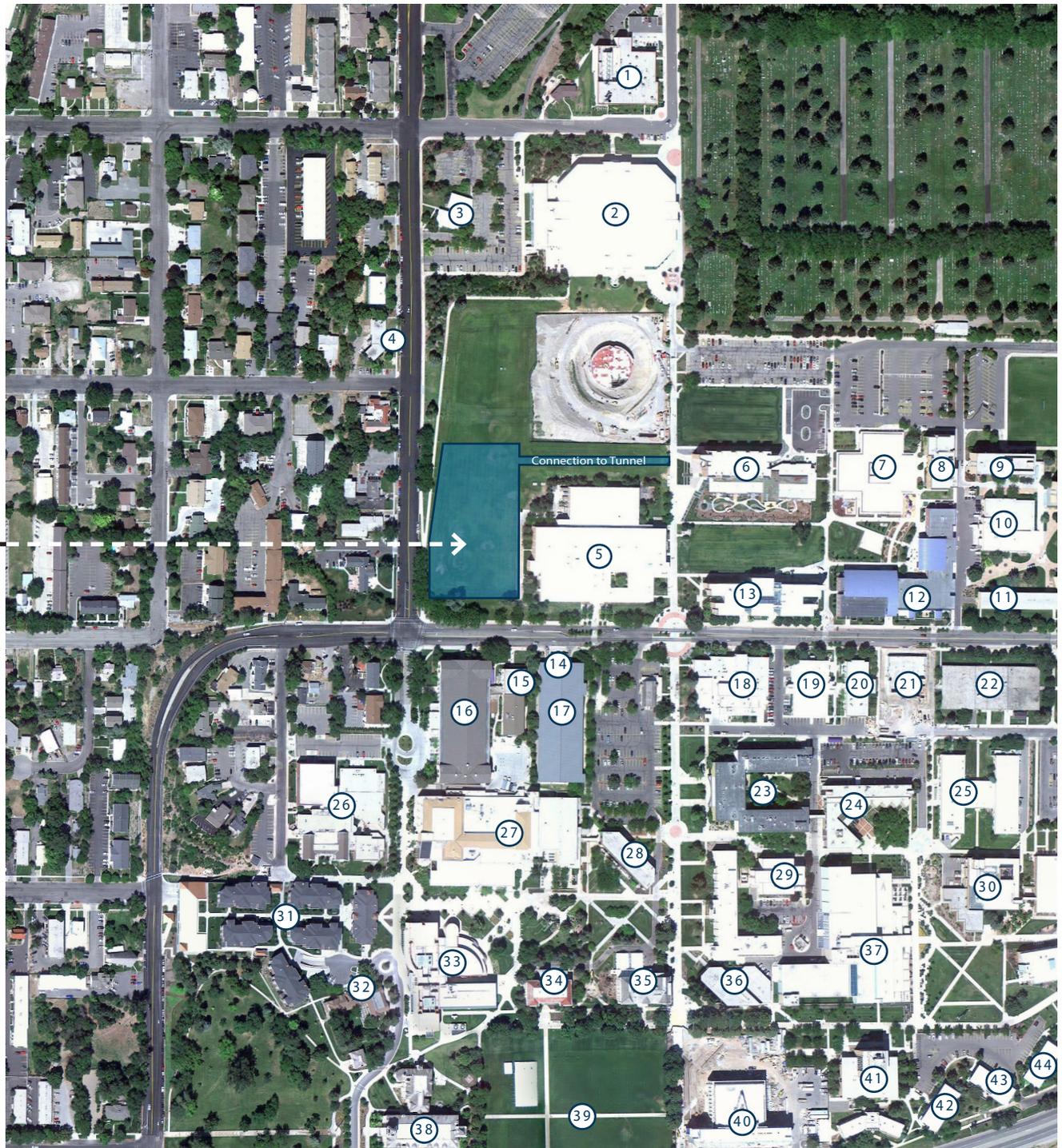
(MAPS NOT TO SCALE)

Regional Map and Overall Campus Map

LIST OF THE BUILDINGS

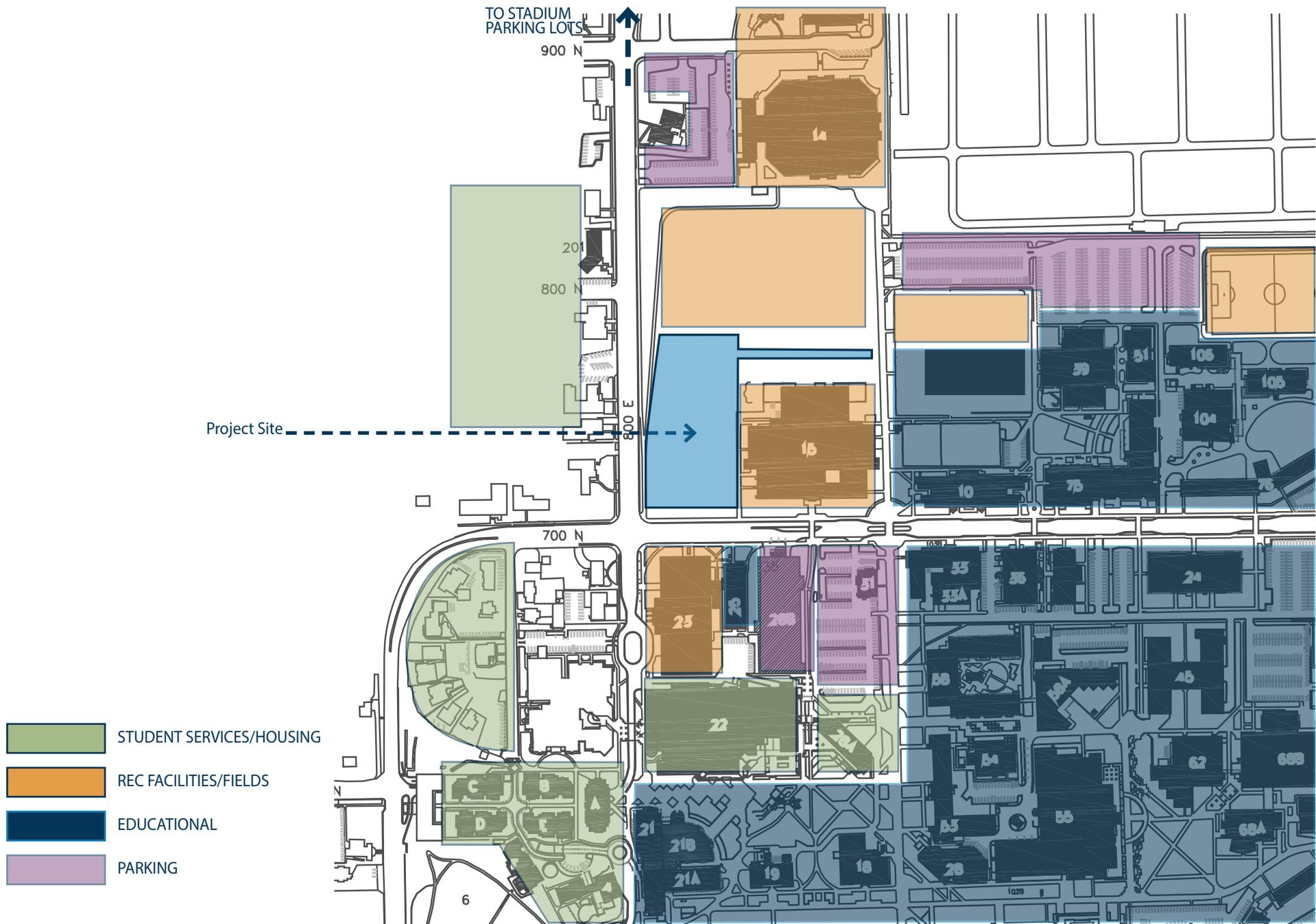
- | | | | |
|----|--|----|--------------------------------|
| 1 | CENTRAL ENERGY PLANT | 23 | BIOLOGY AND NATURAL RESOURCES |
| 2 | SPECTRUM | 24 | QUINNEY LIBRARY |
| 3 | HARRIS ATHLETIC CENTER | 25 | TECHNOLOGY |
| 4 | WEST OFFICE | 26 | LDS INSTITUTE |
| 5 | HPER BUILDING | 27 | TAGGART STUDENT CENTER |
| 6 | EARLY CHILDHOOD EDUCATION
AND RESEARCH CENTER | 28 | UNIVERSITY INN |
| 7 | CENTER FOR PERSONS WITH DISABILITIES | 29 | BIOTECHNOLOGY CENTER |
| 8 | HUMAN SERVICES RESEARCH CENTER | 30 | SCIENCE ENGINEERING RESEARCH |
| 9 | VALLEY VIEW TOWER | 31 | LIVING LEARNING COMMUNITY |
| 10 | JUNCTION | 32 | ALUMNI CENTER |
| 11 | RICHARDS HALL | 33 | ECCLES SCIENCE LEARNING CENTER |
| 12 | EDITH BOWEN LAB | 34 | ANIMAL SCIENCE |
| 13 | INSTRUCTIONAL TECHNOLOGY | 35 | GEOLOGY |
| 14 | INFORMATION TRAFFIC CONTROL | 36 | ECCLES CONFERENCE CENTER |
| 15 | MILITARY SCIENCE | 37 | MERRILL-CAZIER LIBRARY |
| 16 | FIELDHOUSE | 38 | OLD MAIN |
| 17 | BIG BLUE PARKING TERRACE | 39 | THE QUAD |
| 18 | LABORATORY ANIMAL RESEARCH CENTER | 40 | AGRICULTURAL SCIENCE |
| 19 | RS/GIS LAB | 41 | SCHOOL OF BUSINESS |
| 20 | LILLYWHITE | 42 | MOEN HALL |
| 21 | DISTANCE EDUCATION | 43 | GREAVES HALL |
| 22 | INDUSTRIAL EDUCATION | 44 | REEDER HALL |

Project Site
(2.5 acres)

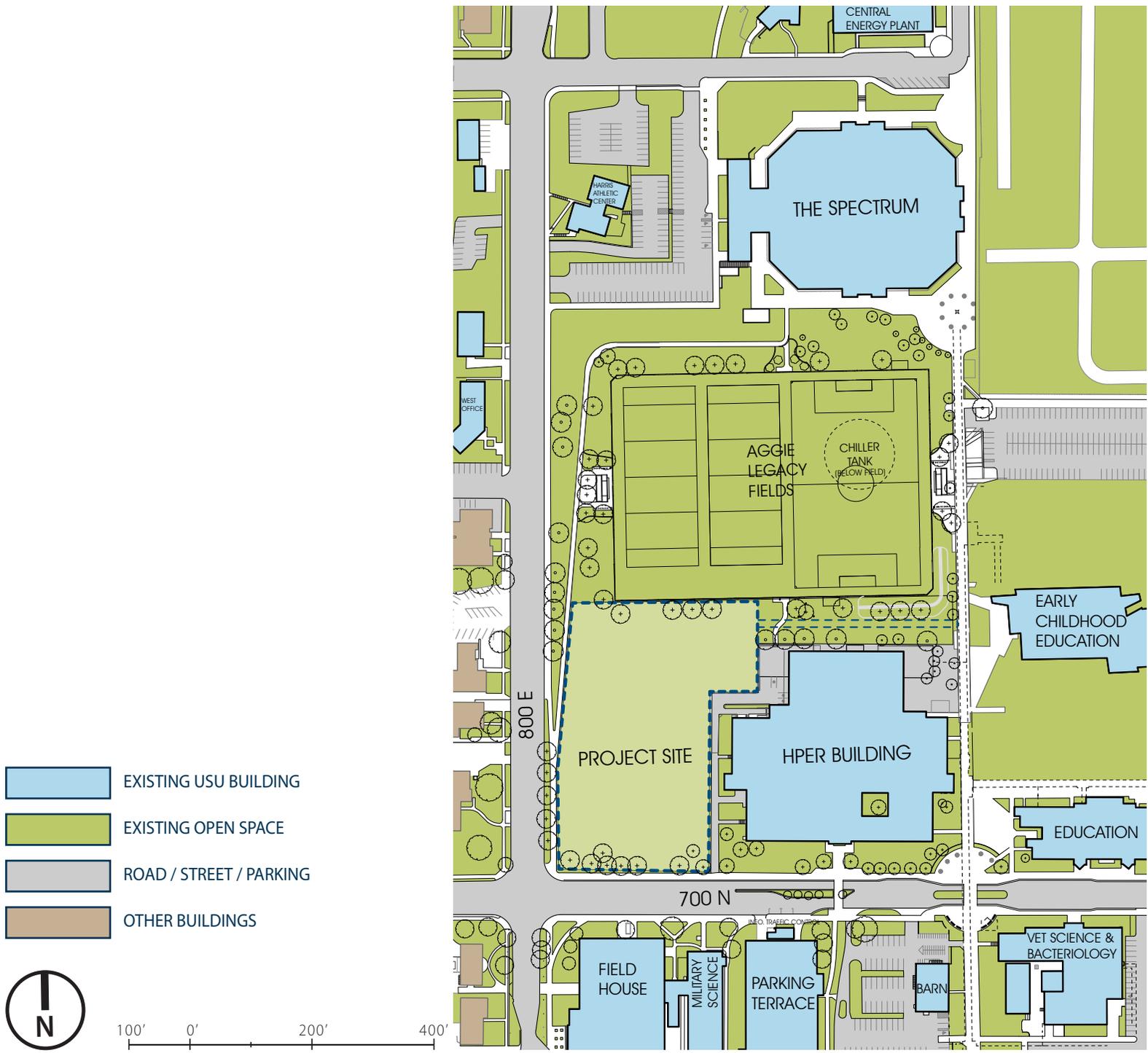


Overall Site Aerial Map

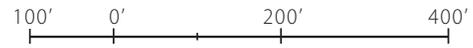




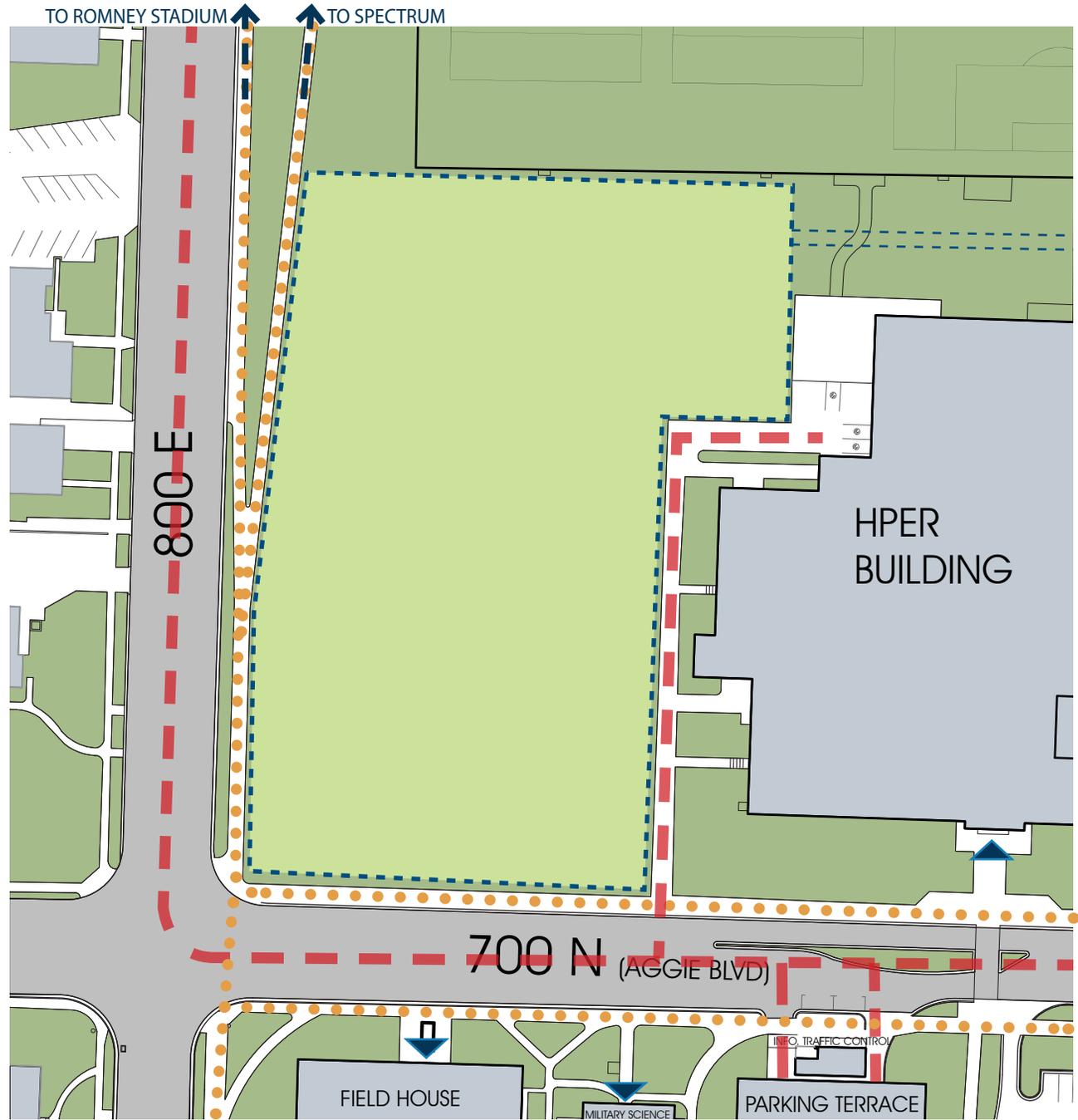




- EXISTING USU BUILDING
- EXISTING OPEN SPACE
- ROAD / STREET / PARKING
- OTHER BUILDINGS



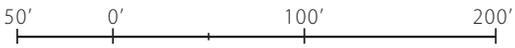




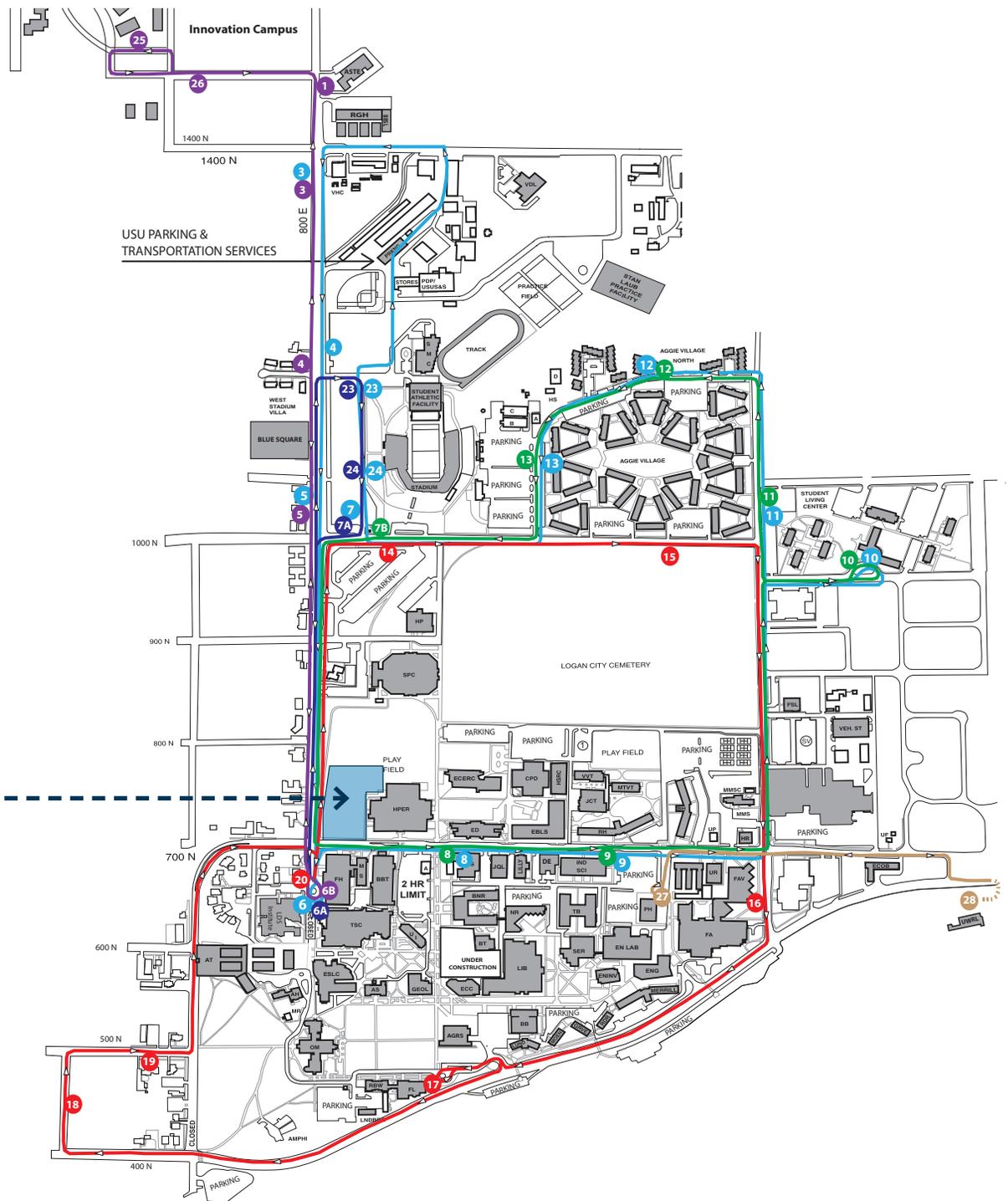
-  MAIN ENTRANCE
-  OPEN SPACE
-  EXISTING CAMPUS BUILDING
-  VEHICULAR CIRCULATION
-  PEDESTRIAN CIRCULATION



SCALE: 1" = 100'-0"







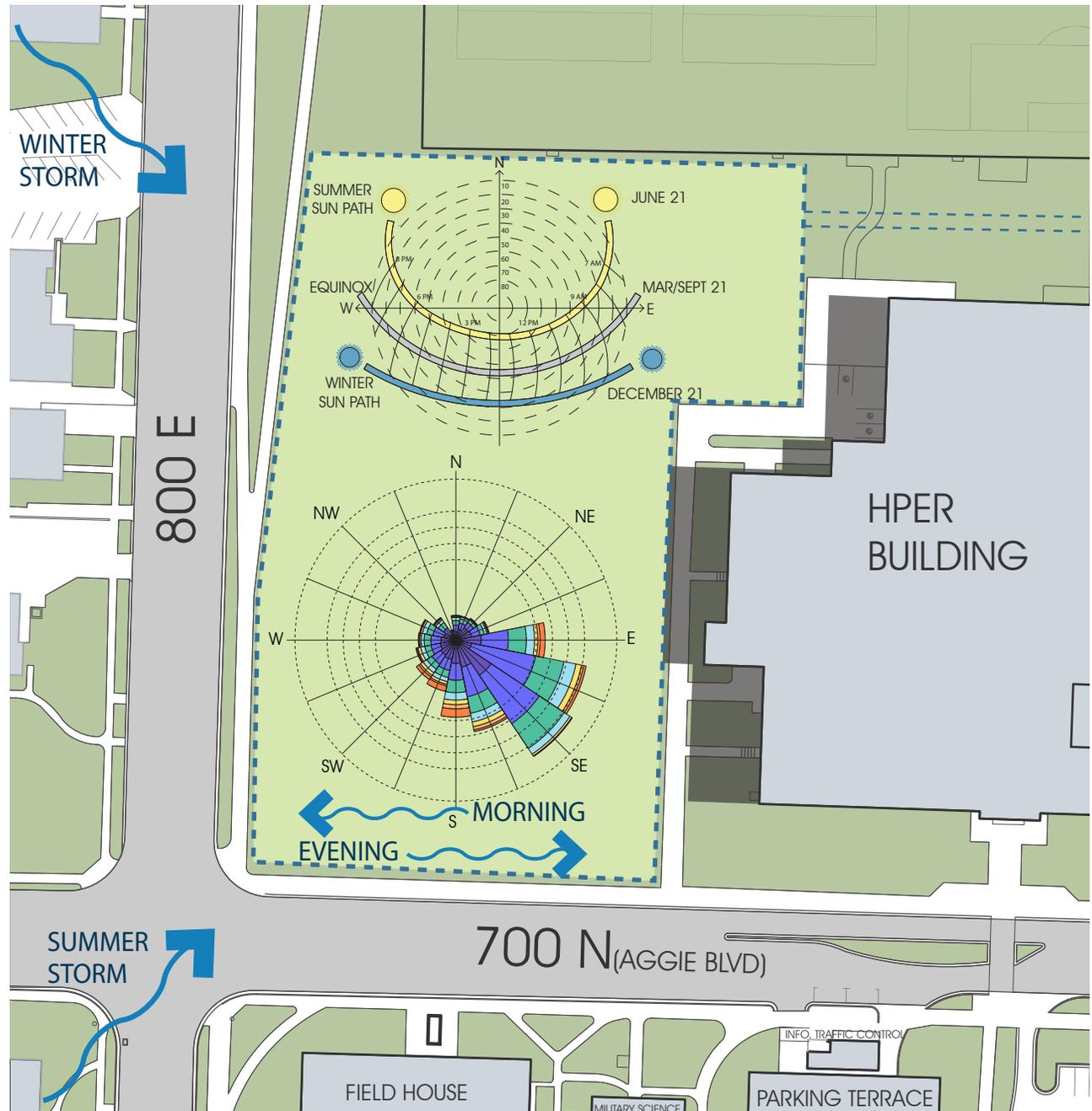
Project Site

- STADIUM EXPRESS
- CAMPUS LOOP/HOUSING EXPRESS
- 8TH EAST EXPRESS/INNOVATION
- SOUTH CAMPUS EXPRESS
- WATER LAB EXPRESS
- EVENING ROUTE

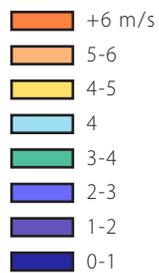


Campus Shuttle Access

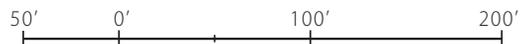




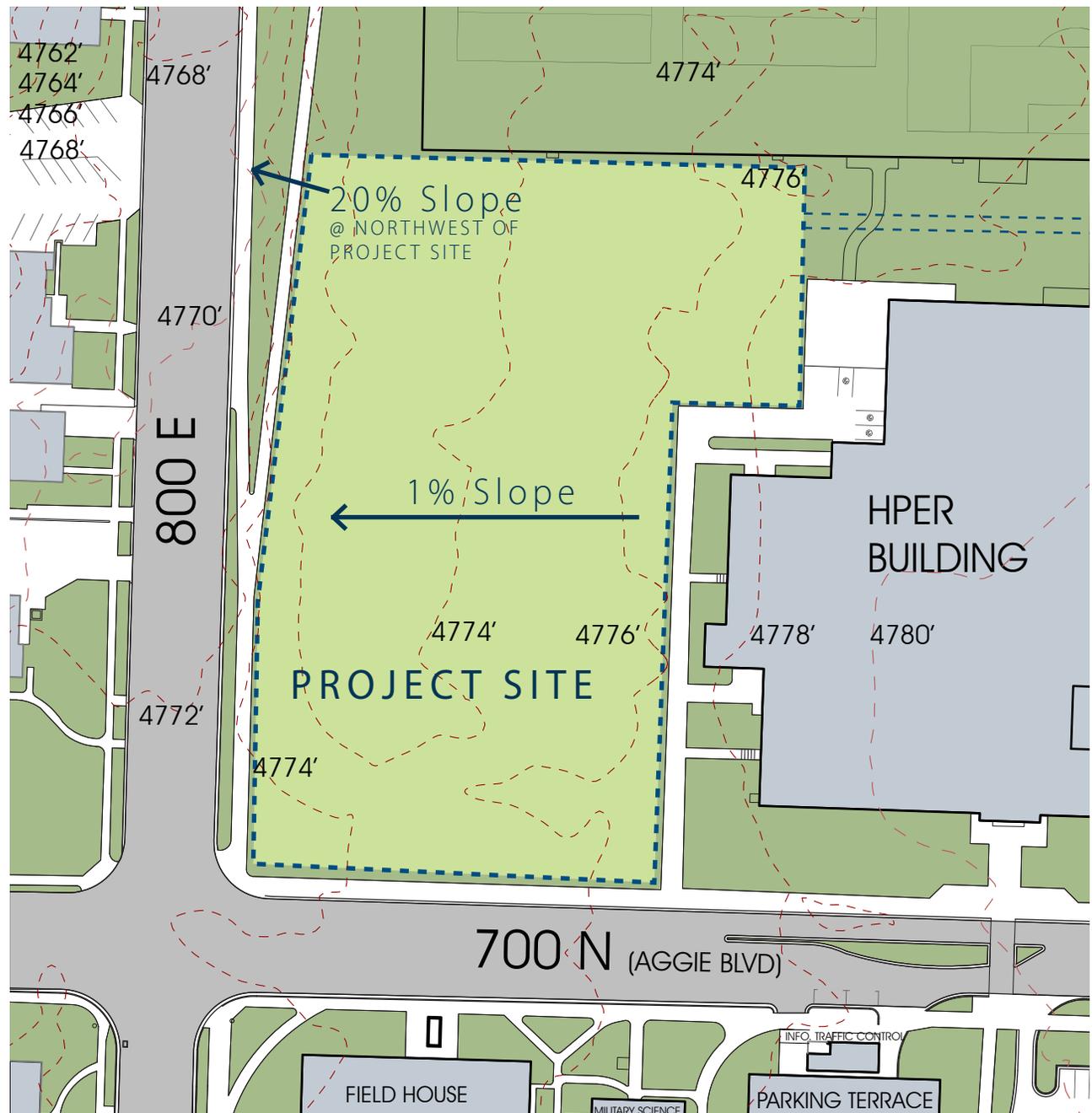
WIND ROSE LEGEND



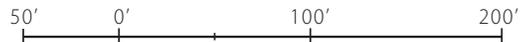
SCALE: 1" = 100'-0"





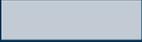


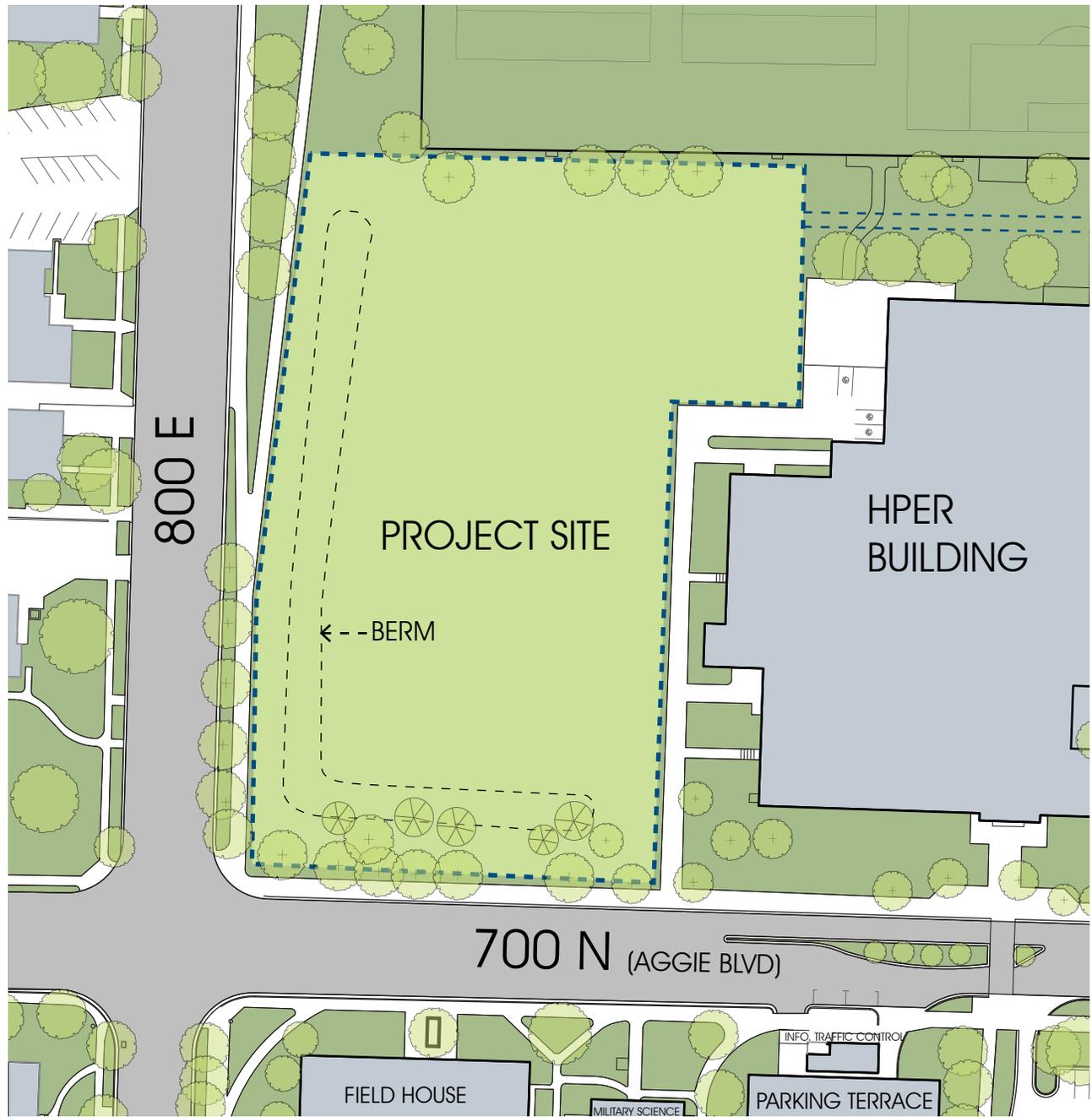
SCALE: 1" = 100'-0"



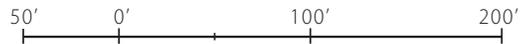
Existing Site Topography



-  CONIFEROUS TREE
-  DECIDUOUS TREE
-  VEGETATION
-  BUILDINGS
-  SIDEWALK



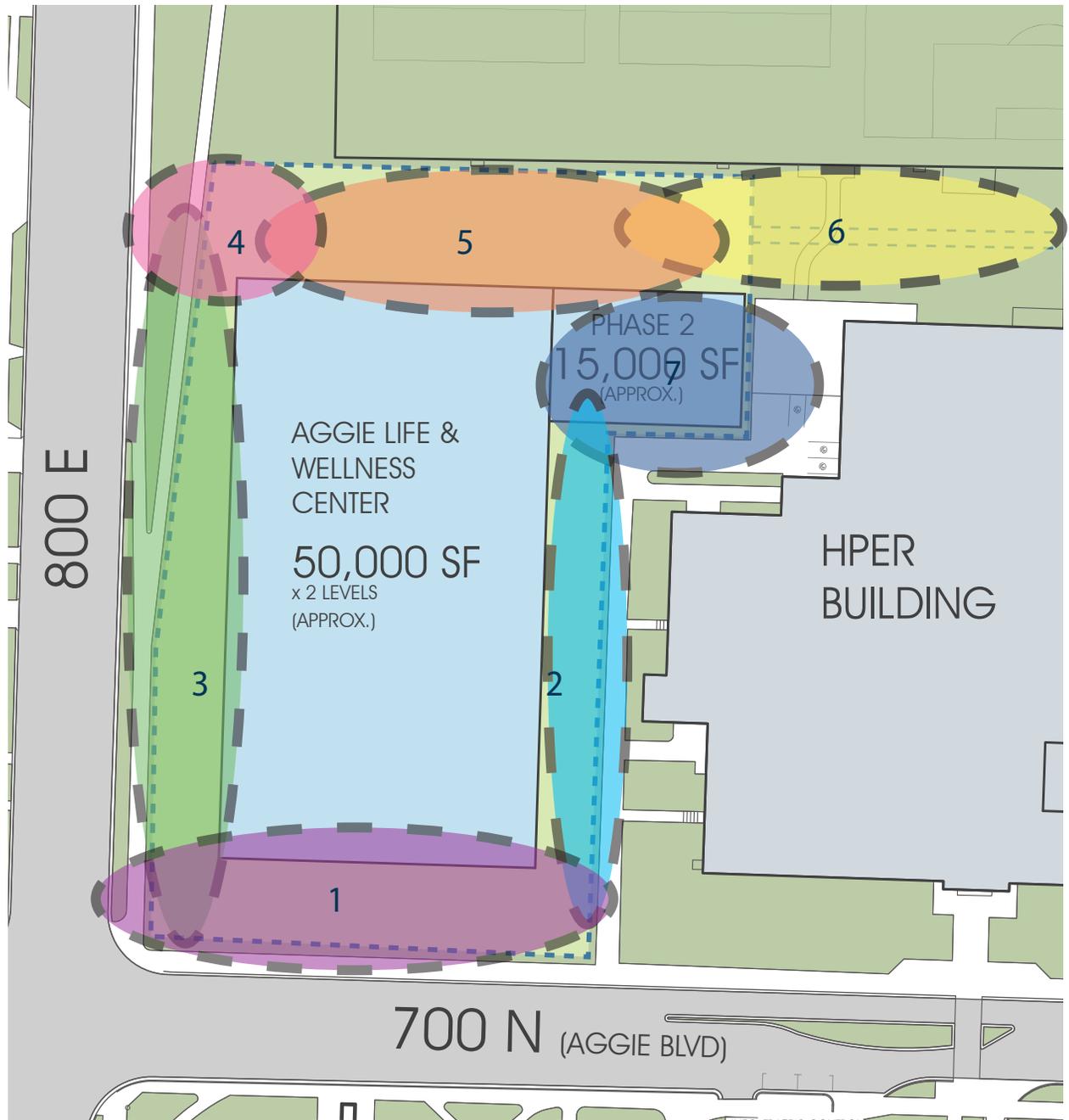
SCALE: 1" = 100'-0"



Existing Site Conditions and Vegetation

LANDSCAPE ZONES

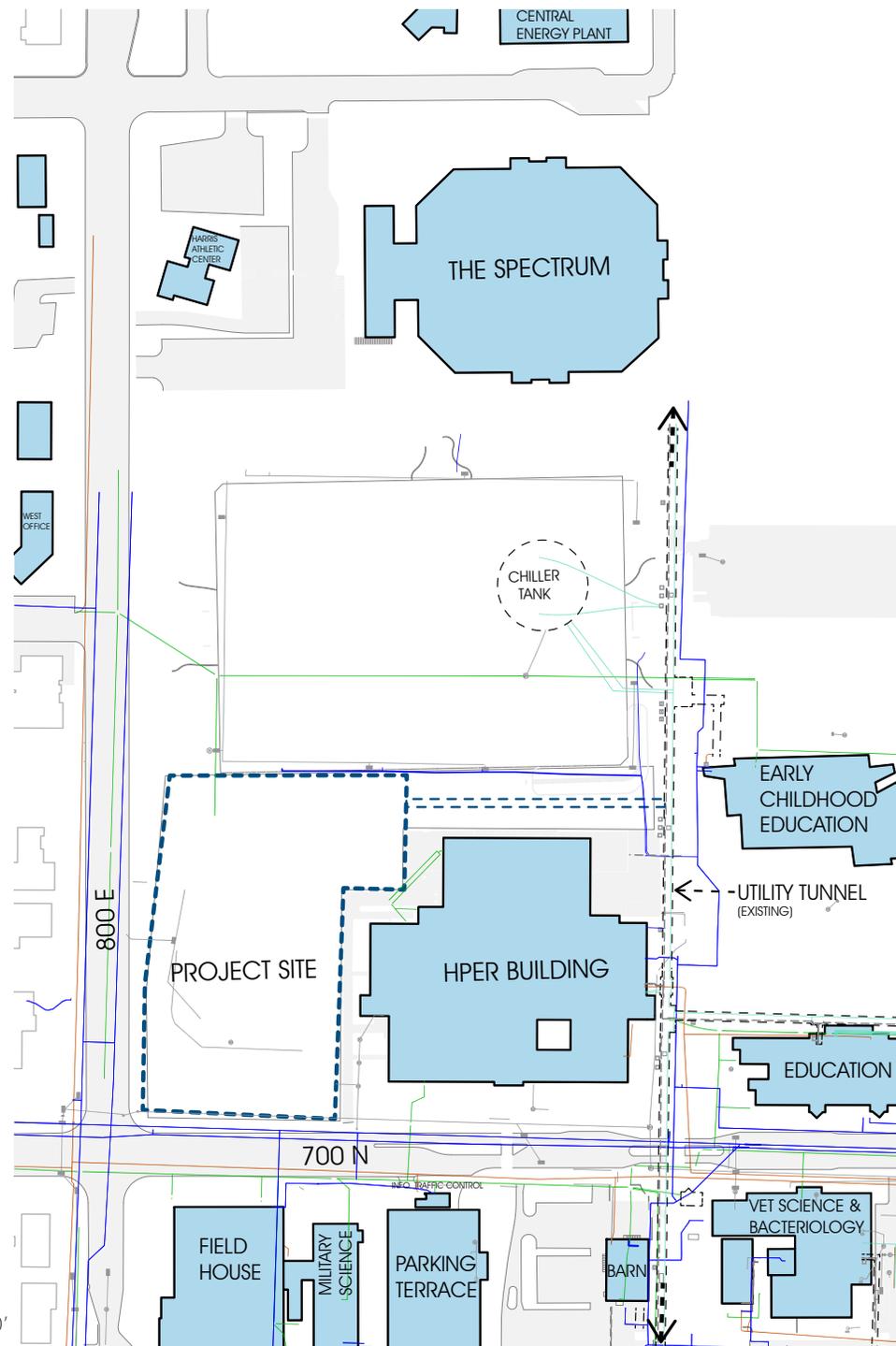
1. FRONT GATHERING PLAZA
2. TRANSITION TO HPER BUILDING/SERVICE
3. 800 EAST SIDE LANDSCAPE
4. ORP DROP OFF/PICK UP
5. OUTDOOR RECREATION AND TRANSITION TO AGGIE LEGACY FIELDS
6. RESTORATION FROM CONSTRUCTION
7. TEMPORARY LANDSCAPE



SCALE: 1" = 100'-0"

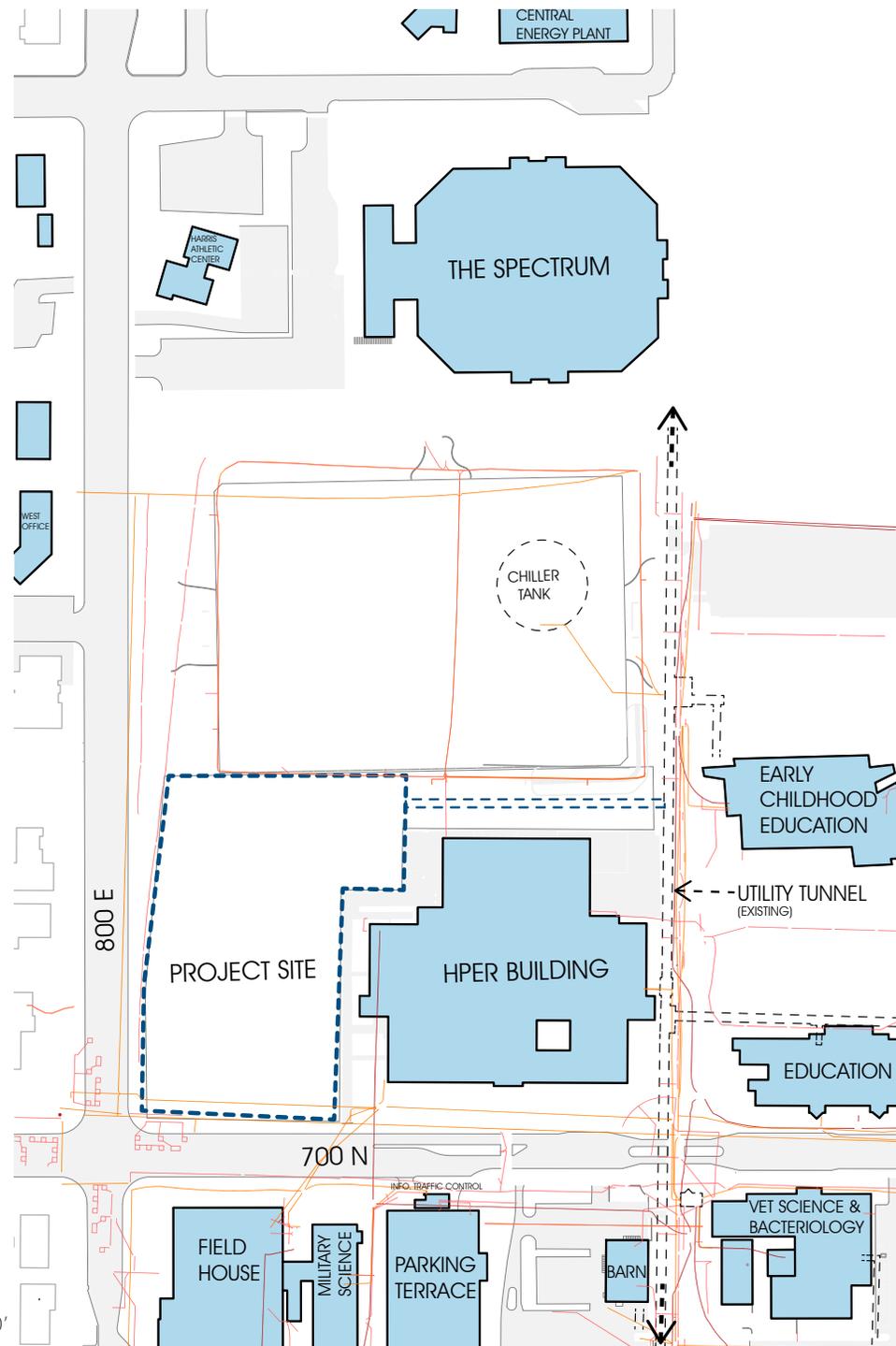




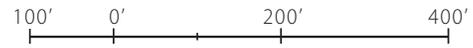


Existing Site Utilities (Wet)





- H.V ELEC LINE
- L.V ELEC LINE
- COMM LINE



Existing Site Utilities (Dry)



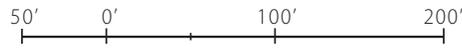
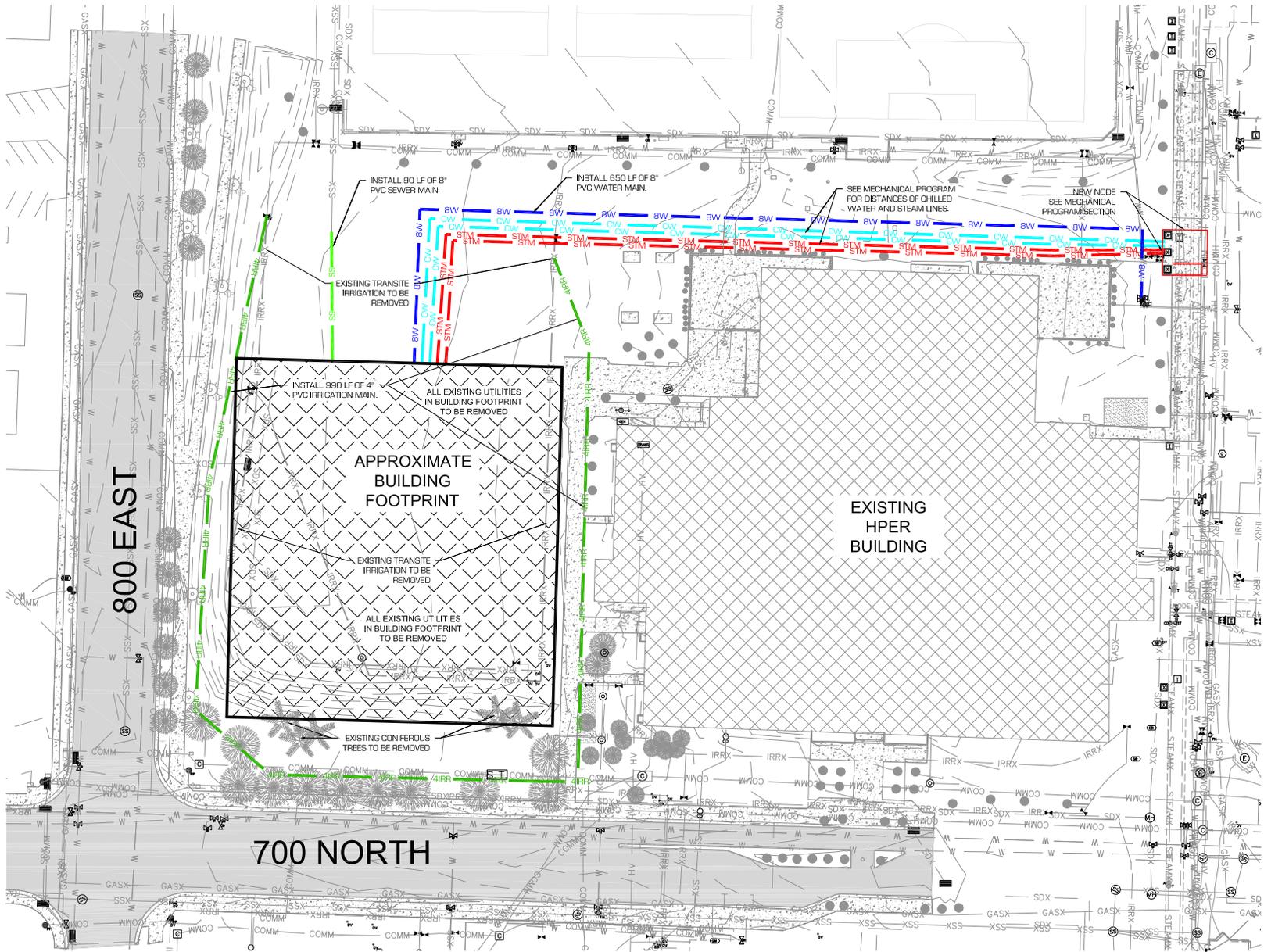
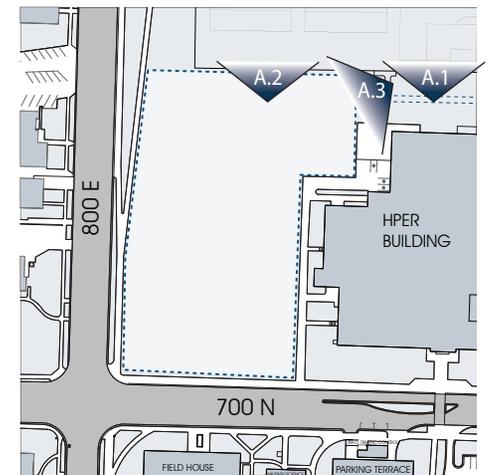


PHOTO KEY MAP





view from north of the site looking at the legacy fields



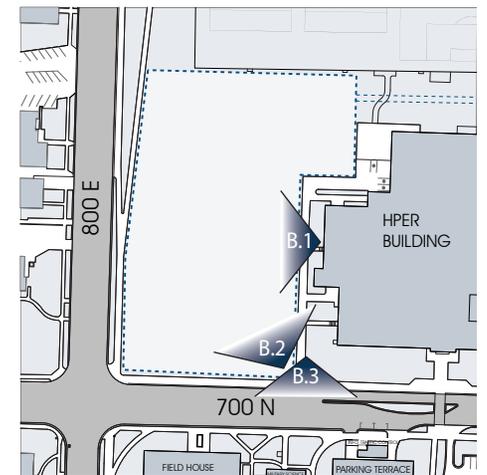
view from north of HPER building looking at the legacy fields



view from northeast of the site looking at the site

Site Views

PHOTO KEY MAP





view from east of the site looking at the site

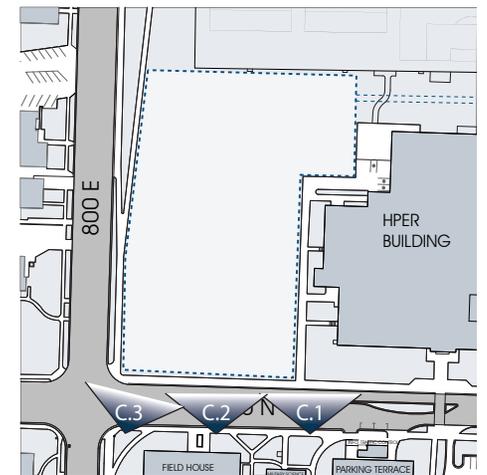


view from southeast of the site looking north



view from south of the site looking at 700 north (aggie blvd)

PHOTO KEY MAP





view from 700 north (aggie blvd) looking at the site

C.1



view from 700 north (aggie blvd) looking at the site

C.2

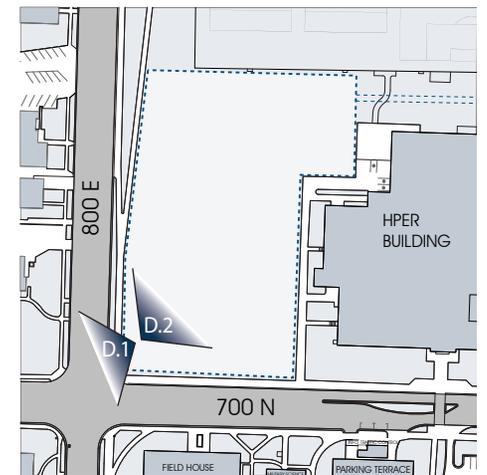


view from 700 north & 800 east intersection looking at the site

C.3

Site Views

PHOTO KEY MAP



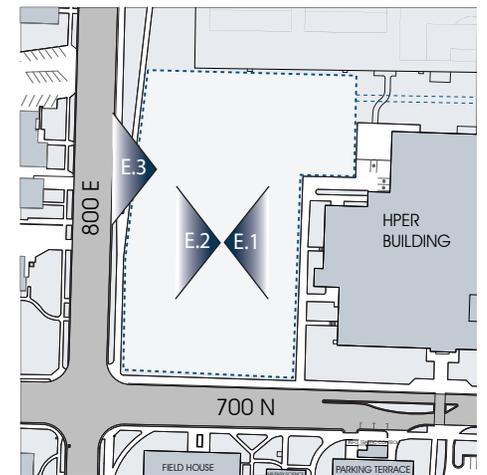


view from southwest of the site looking at the 700 north & 800 east intersection



view from southwest of the site looking at the site

PHOTO KEY MAP

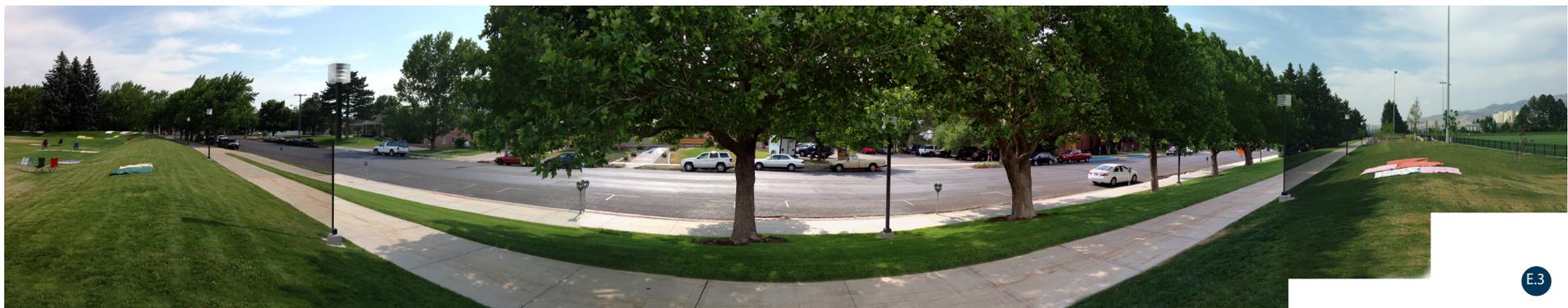




view from the site looking east at HPER building



view from the site looking west



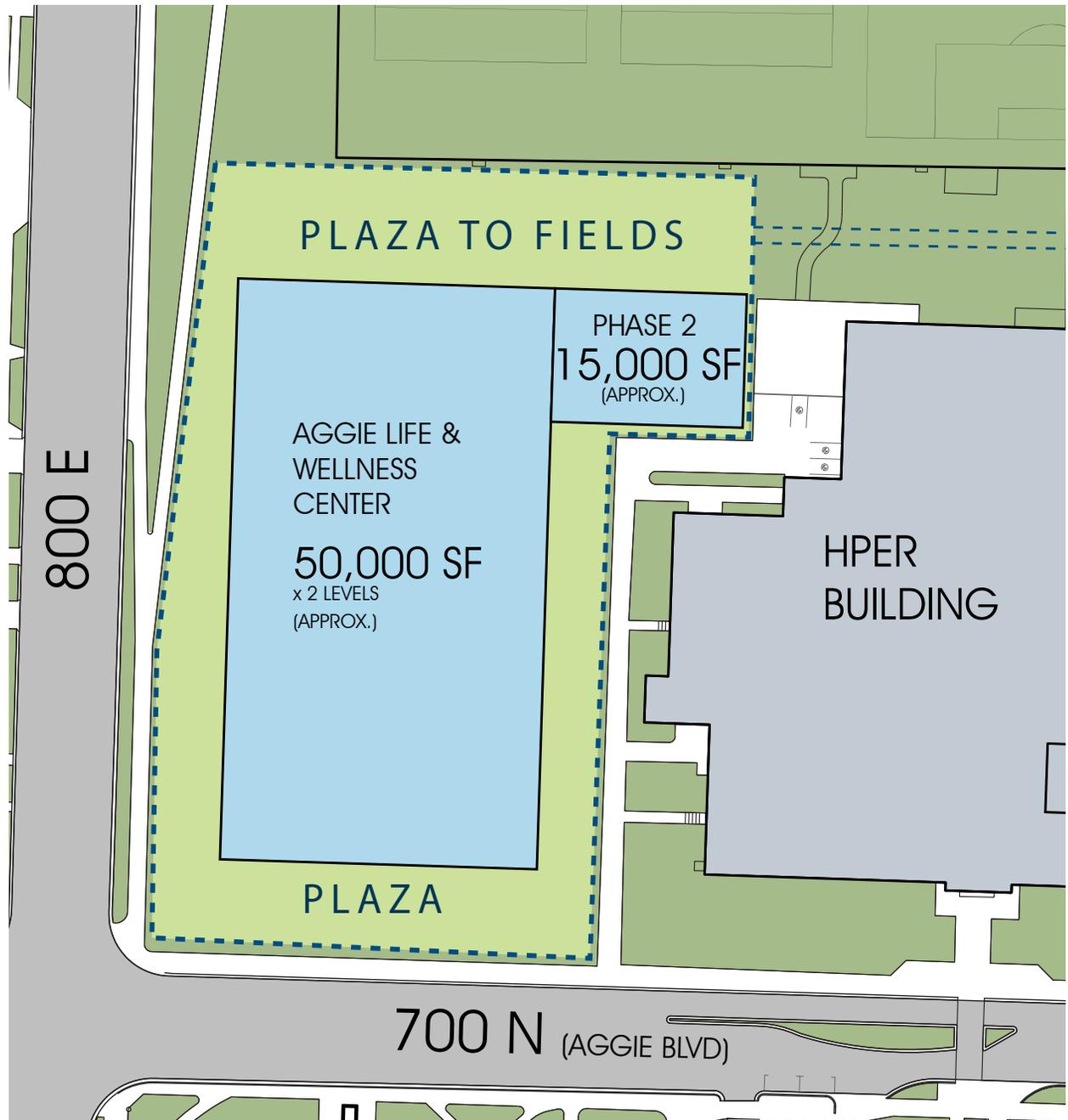
view from west of the site looking at 800 east



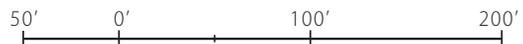
Selected Site Option Plan Summary

02.4





SCALE: 1" = 100'-0"



Selected Site Option



Building Requirements

03



architectural

PROJECT HISTORY/JUSTIFICATION

The students, faculty, and administrators at Utah State University are a major component of a community deeply connected to its beautiful surroundings in Cache Valley, - a community proud of its healthy, active, and easy-going lifestyle. Experiences ranging from team sporting events to rock climbing gatherings are readily shared on a daily basis. A distinct social aspect to being active and outdoors *together* is a unique characteristic of life in Logan, Utah. At USU, the Campus Recreation Department supports, instructs and guides the general university population in this worthwhile pursuit.

Until now, Campus Recreation, has been housed in the HPER Building and the Nelson Field House. The HPER (Health, Physical Education and Recreation Building) was built in 1972 and the Nelson Field House was built in 1939. These facilities can no longer adequately serve Utah State University's current population of over 17,000 students (and growing). While some improvements have been made to these facilities over the years to accommodate a variety of recreational activities and academic objectives, the facilities have become outdated and obsolete. Additionally, these facilities haven't been able to meet all of the ever-increasing needs of the other major tenants: the Athletics Department, the HPER Department, and Campus Health and Wellness. In addition, the Outdoor Recreation Program is housed in a anonymous facility separated from the main core of campus and is unknown to many students.

It is clear that USU's recreational facilities have fallen behind the standards and trends of its peer institutions, and are inadequate to meet growing demand for indoor recreation space on campus and support the healthy lifestyle activities of USU students. In addition, student usage statistics of the current recreational facilities clearly demonstrate the growing demand for these types of facilities at USU.

In 2010, the Associated Students of Utah State University and Vice President for Student Services James Morales began exploring the feasibility of building a new recreational and wellness facility. With Morales' leadership and support, and the students' commitment to making Utah State University a better place than they found it, and ultimately voting to fund the project through student fees, the project was recently granted final approval by the State Legislature in 2012. The project, now known as the Aggie Life and Wellness Center, is sure to serve USU students for many years to come.

As currently planned, the program for the Aggie Life and Wellness Center includes approximately 100,000 Gross-Square-Foot (approx.) of new building that will unite most of the existing campus recreational programs under one roof. Guided by the Campus Recreation Department's mission, "The Center is to be a signature building that reflects the vibrant, active, image of the Logan campus community while fitting into the context of the greater USU campus".

The new facility will provide an ample amount of new state of the art equipment for fitness and cardiovascular training. It will include three full-size basketball courts, a multi-activity court, running track, climbing wall and space for outdoor recreation programs. The students and staff will be provided with locker and shower facilities and casual lounge spaces that will emphasize the importance of health in every Aggie students' life. These spaces and experiences will provide a connection with the greater campus community and enhance the daily life of all students. The Aggie Life and Wellness center will be an invaluable tool to highlight the vigorous life at Utah State University and engage everyone in recreational and social activities the heart of the campus.

PROJECT VISION/IDENTITY

Meeting with USU students, recreation directors and the design team elucidated that the Aggie Life and Wellness Center should become "A new hub for the campus community" with the "focus on Play, Wellness and Discovery" to "Enhance Aggie Life". In addition, the steering committee's overall tone on appreciating sustainable features plays a key role in resulting "an iconic building".

The site is centrally located on a busy pedestrian pathway at the intersection of 800 East street and Aggie boulevard (700 north), west of the existing HPER building and north of Nelson Field House. The area is surrounded by the Legacy

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Fields, Spectrum Athletic Complex and other fields used for outdoor recreational programs which magnifies the presence of student activity in the area creating an energized recreation core. This provides an excellent opportunity to enhance the connectivity between students and the greater campus community. The site also has expansive views of Logan Canyon and the Bear River Range to the east, the Bear River Valley to the northwest and Wellsville Range to the southwest. Taking advantage of these views has informed the building's program organization, form and site orientation. By incorporating all of the various site dynamics Aggie Life and Wellness Center will become rooted in the greater context of the Cache Valley and will become a physical and visual gateway for the entire campus.

PROGRAMMATIC/FUNCTIONAL RELATIONSHIPS (INTERIOR/EXTERIOR)

Based on the early site analysis and programming/stacking the main entrance to the Aggie Life and Wellness Center is to be located on the south side of the site, connecting to 700 North, the main pedestrian and vehicular pathway outside of the main campus core. This side of the site provides opportunities for implied connection to the HPER Building main entrance, and the Nelson Field House, Parking Terrace, and Aggie Blue Bikes program across the street, and to the main core of the campus in general. The west side of the site fronts 800 East and has ample opportunities to express the building function to the students and community that travel that route each day

to and from campus. The general topography of the site drops of significantly to the west of the property, thus providing spectacular views to the west - the valley, and the Wellsville Mountains beyond. The west side has been identified as optimal for the Outdoor Recreation Program for identity and presence, as well as required vehicular access. The north side of the site provides opportunities for the new facility to connect to the recently completed Aggie Legacy Fields and all of the related site programs already in use. Student parking lots near Romney Stadium and the connecting pathways all pass by this side of the site. The east side of the site aligns with the HPER building, and provides opportunities to share maintenance and waste collection access as well as the fire-truck apparatus access. While the east side of the site has a utilitarian aspect, there are also close-up views of the Bear River Range - which rise immediately to the east of the campus and extend both north and south of campus in dramatic fashion.

The Aggie Life and Wellness Center has evolved into a three-story stacking scheme. The three-story scheme minimizes the buildings footprint, maximizing opportunities for outdoor activities and elements. This stacking approach also maximizes the buildings efficiency. Most dramatically, this approach maximizes the opportunity for the building's presence at this gateway to campus, as well as unobstructed views of the mountains and valley beyond.

Early stacking studies indicate that the double-height gymnasiums will be located near the middle of the site, and will likely be placed on the eastern side of the property. Similarly, mechanical and building support spaces will likely be organized on the east side of the site to the extent possible to take advantage of the existing access described in the paragraphs above. This strategy allows for maximum presence of the active spaces within the facility on the south, west, and east sides: studios for fitness, cardio, exercise, weight and strength training, and yoga, etc.

BUILDING FORM AND ARCHITECTURAL FINISHES (INTERIOR/EXTERIOR)

Building Form and Architectural Finishes will be studied in depth during Schematic Design. At the programmatic level, it is clear that the form of the building will be designed to be in harmony with the surround context in both scale and material (including two and three story buildings clad in brick veneer, metal panels, and architectural concrete). Roof forms vary widely throughout campus and thus existing buildings will not likely have a major influence on the new facility. Consideration of timeless, durable, and low-maintenance exterior materials will be imperative to ensure a long-lasting building for the University and the students. At the same time, the architectural form will be composed in such a way that it inspires and expresses the various activities within as well as echo the "stretch and bend" of human body in motion.

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As discussed in previous paragraphs, current planning indicates that the building will likely be three-stories. Eighteen foot floor-to-floor heights will provide the clearances required for interior activities, but will also accentuate the overall height of the building. High-performance, clear glass windows will be strategically placed on all sides of the building to reveal activities within the building and frame views outside of the building.

Interior design and overall spatial experience will be studied and developed in Schematic Design. At the programmatic level, it is clear that the interior of the new facility will feature an open plan, with maximum transparency for visual connectedness both horizontally and vertically. It has been noted that a inside-outside connection is to be prominent throughout the facility. Preferred interior materials will be timeless, durable, acoustically appropriate and low-maintenance to the extent possible. It has been noted that natural materials, such as wood, should be included as a featured accent material to add warmth and softness to the facility. To balance natural materials, painted gypsum wall board finishes will be provided throughout the facility where sensible. However, each unique activity in the building will require unique materials. For example, concrete-masonry-unit (CMU) walls will be considered for areas that need to withstand daily abuse, such as the gymnasiums. Flooring will a major component of the design in every active space. For example, select types of wood flooring will be

considered for the gymnasiums and exercise floors - to provide optimal bounce and rebound. A variety of multi-purpose flooring options will be studied for the MAC. The track will require a specific type of flooring that is durable, resilient, and provides the expected traction levels. Robust sports flooring will be installed over the fitness/cardio/free weight floor surface. The flooring will be a roll product to minimize seams and joints. The flooring system will allow ultimate flexibility in equipment layout. At the cardio area a thinner sports flooring can be utilized since the area does not receive the same abuse. Manufacturers offer the same color palate for various flooring types so visually the floors would appear to be the same. Synthetic turf may be considered for functional training areas. The turf will not contain granulated rubber pellets and will be finished to be flush with the sports flooring where they abut. Ceramic tile will be used on the locker rooms and restroom walls and floors and all counter tops in public spaces will be solid surface. Carpet tile will be used in the office areas, conference rooms, training rooms, and lounge areas. Utility and storage spaces will have affordable resilient floor tiles or sealed concrete depending on their uses. In areas susceptible to abuse or water damage fiber reinforced plastic panel wainscot will be installed.

INTERNAL/EXTERNAL CIRCULATION/SECURITY

While circulation will be studied in detail in Schematic Design, a main central hall to connect all public spaces has been utilized as a organizational strategy during

programming. From this main hall, most public functions will be visually and physically accessible. Public functions such as the central control desk will be accessible directly from new south entry plaza. The Outdoor Recreation Program will have its own separate entry, with limited/controlled access to the other main areas of the building. In both cases, the doors will remain open during business hours and locked when not in use. With the exception of the Outdoor Recreation Program, entry will be open from 6:00 am to 12:00 midnight. The Outdoor Recreation Program will be open from 8:00am to 5:00pm. Building and staff support spaces will be keyed for staff use only. The fitness/cardio/exercise and free weight areas will require maximum supervision throughout business hours for safety purposes. Clear glazing will be provided throughout the facility to maximize visual supervision opportunities.

BRANDING/ENVIRONMENTAL GRAPHICS

The Aggie Life and Wellness Center provides a tremendous branding opportunity for Utah State University. The building itself will stand as an iconic symbol of “Aggie Values.” By maximizing the transparency in the facades facing to the south, west, and north sides, the students and general public will have an immediate connection to the various activities within. During Schematic Design areas with the greatest branding potential will be identified. As the design is refined in subsequent phases so too will the branding and environmental graphics strategy. The key will be to tell a consistent and compelling story embodied within the Aggie Life and Wellness Center - the story of USU and what sets it apart from other institutions. When appropriate Aggie logos and the main color scheme will be utilized -om flooring, equipment and free weights. Large wall areas in the project are ideal for university related murals or logos. The graphics can serve as both inspiration for students and brand recognition for the greater USU community.

BUILDING ENVELOPE:

The building envelope is a significant component of the comprehensive building system, and will contribute to the building's overall energy efficiency. More importantly, in order to create and maintain a suitable environment for exercise and related activities and more importantly underlining the importance of “Wellness”, the design and construction of wall/

roof/floor assemblies enveloping the fitness/workout spaces, exercise studios and the gymnasiums will be vital. Keeping the environmental control layers consistent and continuous between the wall/roof/floor assemblies will be equally critical. Careful attention to detail will be required, and, assuming the layers of control described below are included, will be the keys to success for the building envelope.

The building envelope is an environmental separator. It protects the inside space from the outside environment (water -rain/snow, heat, air, and water vapor). The building envelope, or wall/roof/floor assembly, is composed of five to six critical layers: 1. finish/cladding (for walls) 2. the thermal control layer (insulation), 3. the water control layer, 4. the air control layer, 5. the vapor control layer, and 6. the structure. The first five layers should be located on the outside of the structure (to protect steel, and wood from the negative effects from the outside environment, such as rust, decay, etc). With an airtight enclosure, the interior environment will be much easier to control: heat/cool, move, filter, humidify (or dehumidify). While cladding is described in Building Form and Architectural Finishes narrative above, some additional detail for the insulation and air/vapor layers is below. All building envelope details will be coordinated, studied, and developed in conjunction with the Building Envelope Commissioning Agent to be (contracted separately by DFCM on this project) in subsequent design phases.

THERMAL CONTROL LAYER (INSULATION):

A rigid-board insulation material that provides a minimum of 5 R-value per inch of thickness, and can function as an additional vapor control, should be considered. Compressive strength and melting temperature should be considerations depending on adjacent finish materials.

Spray-applied closed-cell high-density foam insulation offers very high performance over the life of the building. Moreover, if applied carefully it can meet building air tightness requirements. All vertical walls above grade must have rigid board insulation plus one inch (minimum) of closed-cell spray-applied insulation per forth-coming DFCM standards.

Mineral wool rigid-board insulation has a moderate r-value per inch, and a very high melting point - for applications at metal panels/rain screens. Also, it is UV stable.

While Polyisocyanurate has a relatively high R-value per inch, it can absorb water which will reduce its performance. Additionally, It has a lower compressive strength. Use of this material should be considered only if these concerns are adequately addressed.

Note that using batt-insulation in exterior metal stud wall cavities is not recommended as the thermal conductivity of the metal studs significantly reduces the overall performance of the wall.

Where batt insulation is necessary, mineral wool batt insulation is a preferred alternative to glass-fiber batts. In

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addition to having a slightly higher R-value per inch than glass-fiber, it provides fire-resistance, is water-repellent, resists mold growth, is chemically inert, and in overall, is very environmentally-friendly. It should be mentioned that mineral wool batt insulation costs more than traditional glass-fiber batt however, the benefits are higher in comparison.

WATER, AIR AND VAPOR LAYERS

The water, air and vapor layers play a vital role in protecting the interior contents of the building from the exterior environment. It is well documented that water damage is the largest source of construction defect claims. Establishing and protecting the budget for the building envelope assemblies will be critical as the project moves through design and construction phases. The intent of this section is to make certain that the Design Team adequately studies, analyses and implements a design that eliminates, or significantly reduces, air and water flow through the building envelope.

Air barriers, by definition, are layers, or membranes, that permit below 10 perms*. Vapor barriers permit a maximum of .1 perms*. Thus, all vapor barriers are air barriers (but all air barriers are not vapor barriers). Many types of barriers are available: fluid-applied, self-adhered sheets, mechanically fastened sheets, rigid boards/panels, and poly urethane spray foams. The Design Team, along with the Building Envelope Commissioning Agent, will be required to determine the most appropriate barrier for the actual building envelope developed in subsequent phases.

The Design Team will need to ensure that the combination of barrier materials and systems do not negate one another, and, similarly, do not contribute to the degradation of one another. This applies to the relationship between the barriers and the substrates as well. The Design Team will need to be aware of materials that are susceptible to UV deterioration, and should plan/detail accordingly.

Equally important is the management of water within the building envelope. Any water in the envelope will need to be properly drained and vented. A continuous system of drainage cavities, weep holes, and vent space will likely be required.

As energy usage is directly related to air infiltration/exfiltration, an air barrier test will be required during construction to test the air leakage of critical wall assemblies.

Note that, if batt insulation is required at certain wall/roof assemblies, the air/vapor barrier must go on the outside of the insulation. Do not place an air/vapor barrier on the warm side of the insulation. In certain conditions, this will trap moisture, reducing the performance of the wall, and creating conditions for mold growth.

*Perms = permeability, defined as a measure of the rate of transfer of water vapor through a material

While the architect typically takes the lead role in development of the building envelope, the entire Design Team is responsible for its success. Determining the overall R-value of the wall/roof/floor assemblies for the energy model, determining air

pressure loads, determining the dew point, coordinating penetrations for wall finishes, mechanical and electrical devices, determining the impact of structural movement and thinking through a complex construction sequence will be just some of the tasks required by the entire team to ensure holistic building envelope solution.

It is recommended that the Design Team have a specific building envelope workshop. For review and coordination early in the design process, the Design Team should provide clear and comprehensive insulation & water/air/vapor layer section and plan diagrams, coordinated with the specifications, to ensure that the design team/contractor and owner are aware of the systems to be included in the construction of the facility, especially where transitions occur.

It is recommended that the owner retain a Building Envelope/Enclosure Commissioning Agent (BECA) for the Project to provide building enclosure coordination and to oversee, through design and construction, the commissioning of all building enclosure components.

High performance glazing will be used throughout the building. Glazing will be installed in an aluminum curtain wall system at large openings (over twelve feet in height) and in an aluminum storefront window system at smaller openings. In some areas integrated operable doors may be installed in the curtain wall to enhance natural ventilation as well as the open feeling of the facility.

SUSTAINABLE DESIGN

Buildings play a significant role in our natural environment, health, productivity and economy. Sustainable design and building practices are aimed to directly address these important issues and maximize both economic and environmental performance. In the context of this Program Document, “sustainable,” or “sustainability,” refers to the design and building practices that make progress towards the goal of environmental sustainability, social sustainability, and economic sustainability. In an effort to contribute to this progress, the U.S Green Building Council has developed the LEED (Leadership in Energy & Environmental Design) Green Building Rating System to measure individual project design strategies and construction components that directly contribute to these goals above and beyond standard building code requirements. LEED is a voluntary, consensus-based national standard for developing high performance, sustainable buildings. The LEED process provides a complete framework for assessing building performance and meeting sustainability goals.

Based on well-founded scientific standards, LEED categorizes sustainability into six major themes: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, and Innovation in Design process. Holistically, concerted efforts to achieve high levels of performance in each of these categories in design and building practices contribute to a successful, high performance

building, and, ultimately, an ever-growing network of high performance buildings. The U.S. Green Building council offers LEED Certification for distinguished projects that have demonstrated a commitment to sustainability by meeting the highest performance standards. Different levels of certification are available depending on the quantifiable increase in water efficiency, energy efficiency, etc (Certified, Silver, Gold, and Platinum).

The State of Utah is aligned with the U.S. Green Building council in their commitment to building sustainable projects. New projects funded by the State of Utah are required to comply with DFCM’s (Division of Facilities Construction and Management) most current High Performance Building Requirements. The High Performance Building Requirements include, as prerequisite, a minimum of LEED Silver certification level design and construction standards. By means of thorough analysis and modeling, the State intends to limit a building’s ecological and economic impact, and targets strategies for reducing energy and water consumption, as well as reducing consumption and waste of resources during and after construction. Additionally, the State requires buildings to be built to a minimum 50-year life-cycle. The selection of design and construction practices are based on modeling of building systems to analyze life-cycle costs, including: Initial costs (Purchase – Acquisition), Construction Costs, Fuel and Energy Costs, Operation, Maintenance and Repair costs, Replacement Costs, Residual Values (Resale, Salvage or Disposal), and

Finance Charges (loan interest payments where applicable).

The proposed Aggie Life and Wellness Center is no exception to the State’s requirements. In this respect, sustainability was directly addressed at a Sustainability Workshop in July 2013 - facilitated by the Programming Team, including LEED Accredited Professionals at ajc architects and consulting engineering firms. The workshop participants discussed the opportunities and challenges of a high performance building with respect to the mission and goals of Aggie Life and Wellness Center and USU. Ultimately, the workshop participants were resolute that the proposed Aggie Life and Wellness Center should maximize human health and comfort, energy and water efficiency, and implement design/construction methodology that incorporates durable, low-maintenance regional and recycled materials.

USU is committed to designing and constructing the most sustainable facility possible, even if it results in a relatively smaller building. Ultimately, the goal for Aggie Life and Wellness Center is to exceed LEED Silver certification design and construction standards. The current construction cost estimate, including costs for LEED Silver certification, is in line with the construction budget (see Section 5). The following text elaborates on Sustainable Design Criteria with respect to the State’s High Performance Building Requirements as well as LEED Rating System. This section is intended to be a point of departure for subsequent design and construction phases.

STATE OF UTAH / DFCM HIGH PERFORMANCE BUILDING REQUIREMENTS

REFERENCE STANDARDS AND CODES

ANSI/ASHRAE Standard 52.2,
Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ANSI/ASHRAE Standard 55,
Thermal Environmental Conditions for Human Occupancy

ANSI/ASHRAE Standard 62,
Ventilation for Acceptable Indoor Air Quality

ANSI/ASHRAE/IESNA
Standard 90.1,
Energy Standard for Buildings Except Low-Rise Residential Buildings, including Appendix G

Illuminating Engineering Society of North America,
IESNA Lighting Handbook

U.S. Green Building,
Leadership in Energy & Environmental Design for New & Major Renovations (LEED – NC)

Per DFCM High Performance Building Requirements, the project must achieve the following credits in the LEED rating

system:

- (1) WE Credit 1.1: Water Efficient Landscaping: Reduce by 50%
- (2) EA Credit 3: Enhanced Commissioning
- (3) EQ Credit 3.1: Construction IAQ Management Plan: During Construction
- (4) EQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants
- (5) EQ Credit 4.2: Low-Emitting Materials: Paints and Coatings

In addition to building design criteria presented in the program, specific energy modeling requirements include the development of a Preliminary Load Baseline Model that identifies:

- Annual Energy Use (BTU/SF/yr, kWh/SF/yr, \$/SF/yr) of baseline building
- Peak heating/cooling day profile
- Baseline envelope criteria
- Baseline equipment efficiencies
- Baseline systems
- Energy Use by loading type
 - Graphs and chart that illustrate energy loads breakdown such as those from space heating, cooling, equipment, hot water, lighting, pumps, etc. The purpose of this is to understand the magnitude

of energy loads relative to each other.

- Energy reduction prediction based on energy reduction strategies. Predictions should be broken out by measure to understand their respective impact. These strategies may include, but are not limited to high efficiency glazing, envelope, or lighting, daylighting, building orientation, and efficient mechanical systems such as evaporative cooling or equipment such as pumps or fans. Also included shall be a description of the following:
 - Load reduction strategies to be analyzed in schematic design
 - Energy saving strategies to be analyzed in schematic design

Per DFCM requirements, the facility must be equipped with meters or sub meters to measure the individual facility's energy consumption on an ongoing basis in a format that allows the consumption data to be entered into the Energy Star Portfolio Manager Program.

SUSTAINABILITY GOALS

Fundamental Building Systems Commissioning: DFCM will engage a Commissioning Agent that is not an individual directly responsible for project design or employed by one of the designers. Commissioning Agent shall ensure that fundamental building components are installed and calibrated to operate as intended.

Life-Cycle Cost Analysis: The Design Team shall use life-cycle cost analysis in making decisions about their investments in products, services, construction, and other projects to lower the State Government's costs and to reduce energy and water consumption.

Mold Prevention during Construction: Contractor shall ensure porous type building materials, such as wood, insulation, paper, and fabric, is kept dry to prevent the growth of mold and bacteria. Materials that have been affected by mold shall be abated or replaced. Building insulation that is damp or wet for 72 hours shall be replaced.

Building Envelope: The building envelope is a significant component of the building system, and shall be designed to contribute to the building requirement to be 30% better than ASHRAE 90.1-2004 minimum requirements.

SUSTAINABLE DESIGN OPPORTUNITIES

The Aggie Life and Wellness Center will utilize an energy efficient displacement ventilation system which works well in high bay, high volume spaces. High performance glazing will be used to mitigate heat gain and loss through the glazing system. Where added protection is required exterior sun screening will be strategically located to further minimize heat gain and glare while enhancing user comfort. Large expanses of glazing will reduce the need for artificial lighting. Operable windows and exterior doors will be incorporated into the

glazing system to provide natural air flow in and through the building where appropriate. These openings will also provide a visceral connection to the surrounding outdoor spaces. Large ceiling fans will be used to increase air circulation for enhanced user comfort while minimizing operational energy usage. All efforts will be made to use sustainable building materials, products with low or no VOC's and locally sourced products whenever possible.

SUSTAINABLE SITES

Site Selection: As the design progresses, the Design Team is to study the building footprint so as to minimize site disruption of any immediate environmentally sensitive areas that may be identified in subsequent analysis. No environmentally sensitive items were identified during the Programming phase.

Development Density & Community Connectivity: During the site selection process, preference was given to sites with direct pedestrian access the USU Campus, The Student center, and to a variety of community services. Nearby Parking lots will help to encourage a walk-able community.

Alternative Transportation/Public Transportation: The site is located close to the most of the existing Campus Shuttle routes which make it easy to be accessed from the entire campus. There are multiple stops within 3 minute walking distance from the new building. One is near Students Center. The other stop in front of the Education Building is shared with Cache Valley Transit District (CVTD) Buses which connect the campus to the City of Logan.

In order to reduce pollution and land development impacts from automobile use, alternative transportation/public transportation should be a part of future planning efforts. A transportation survey of future building occupants to identify transportation needs may be useful.

Alternative Transportation/Bicycle Storage & Changing Rooms:

In order to reduce pollution and land development impacts from automobile use, the Programming Team mandated that the design of the building will feature amenities such as bicycle racks and showering/changing facilities. On a similar note, skateboards are commonly used for transportation on campus. Students should be able to lock their boards in skateboard specific racks outside of the building, near the main entrance, or "check" their skateboards at the coat check room inside Aggie Life and Wellness Center.

Alternative Transportation/Low-Emission & Fuel-Efficient Vehicles:

Only a minimim amount of temporary parking stalls for support of the Outdoor Recreation Program will provided for this project. In order to reduce pollution and land development impacts from automobile use, USU and the Design Team should consider providing additional preferred parking stalls for car-pooling and Alternative Fuel vehicles within existing parking lots where appropriate.

Site Development/Maximize Open Space: To the extent possible, the Design Team should provide a high ratio of open space to development footprint to promote biodiversity. Perform a site survey to identify site elements and consider

USU future master plan for development of the campus. Minimizing the building footprint to minimize site disruption and preserve the existing green space is a potential strategy.

Heat Island Effect - Roof/Non-Roof: The Design Team should study designs that help to reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on micro-climate and human and wildlife habitat. The Design team should consider installing high-albedo and vegetated roofs to reduce heat absorption. Similarly, constructed surfaces on the site could be shaded with landscape features. The Design Team should consider utilizing high-reflectance materials for hardscape. Also, consider maintaining existing vegetated (i.e., trees, lawn, etc.) where possible and open grid paving or specify high-albedo materials to reduce the heat absorption.

WATER EFFICIENCY

See the Civil and Landscape Architecture narratives for specific description of strategies to maximize water efficiency.

ENERGY AND ATMOSPHERE

Fundamental and Enhanced Commissioning of the Building Energy Systems: Per the State of Utah/DFCM's requirements, the Aggie Life and Wellness Center project will include comprehensive building commissioning. The commissioning process will verify and document that the building's systems (electrical, mechanical, plumbing, building controls, AV, IT, elevators, life safety, building envelope, etc) are installed, calibrated and perform according to the owner's project

requirements, basis of design, and construction documents. Though the commissioning agent will be contracted by DFCM - and the General Contractor is ultimately responsible for the end product to function as designed - the process is accomplished through cooperation, coordination and communication of the entire Project Team (contractors, architects, engineers, inspection and testing firms, commissioning agent, end users, the State Fire Marshal, and DFCM). In order to meet this requirement, the commissioning process will begin early in the design process, and will have ongoing activities after systems performance verification is completed.

See the Mechanical Design Criteria narrative later in this section for related information on refrigerant management, optimized energy performance, and measurement and verification.

Renewable Energy: In order to reduce environmental and economic impacts associated with fossil fuel energy use, non-polluting and renewable energy has been considered in the programming process. USU currently does NOT invest in "green power" (commercially available electricity generated from off-site renewable energy sources - solar, wind, biomass, geothermal, and hydroelectric). While not currently supported by the budget, the Design Team should assess the project for on-site, self-supplied building integrated photovoltaic panels, to take advantage of the southern exposure the site offers. Other strategies (wind, geothermal, low-impact hydro, biomass and bio-gas) were considered, but were ultimately

determined to not be feasible for this project.

MATERIALS AND RESOURCES

Utilization of materials suggested in the categories identified below will need to be carefully considered with respect to the available construction budget, as well as the long-term performance and durability of the material. Regular maintenance requirements of these products should be thoroughly discussed and coordinated with USU Facilities Maintenance staff.

Recycled Content: The Design Team should establish a project goal for utilizing pre-consumer/post-consumer recycled content materials and identify material suppliers that can achieve this goal. LEED establishes two levels for incremental credits - 10% and 20%, and gives preference to post-consumer recycled products. The Design Team should consider a range of environmental, economic and performance attributes when selecting products and materials. As this and other projects utilize recycled content materials, there will be an increased demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. During construction, the Design Team and contractor will need to ensure that recycled content materials are installed, and quantify the total percentage of materials installed.

Regional Materials Extracted, Processed & Manufactured Regionally: The Design Team should establish a project goal for utilizing locally sourced materials, and identify materials

and material suppliers that can achieve this goal. LEED establishes two levels for incremental credits - 10% and 20%. Specifying regional materials will contribute to an increased demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. During construction, the Design Team and contractor will need to ensure that the specified regional materials are installed and quantify the total percentage of materials installed.

Rapidly Renewable Materials: In order to reduce the use and depletion of finite raw materials and long-cycle renewable materials, the Design Team should establish a project goal for utilizing rapidly renewable materials and identify products and suppliers that can support achievement of this goal. The Design Team should consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheatboard, strawboard and cork. by replacing them with rapidly renewable materials. During construction, the Design Team and contractor will need to ensure that the specified rapidly renewable materials are installed and quantify the total percentage of materials installed.

Certified Wood: In order to encourage environmentally responsible forest management, the Design Team should establish a project goal for FSC-certified (Forest Stewardship Council) wood products and identify suppliers that can achieve this goal. During construction, the Design Team and

contractor will need to ensure that the specified FSC-certified wood materials are installed and quantify the total percentage of materials installed.

Storage & Collection of Recyclables: It is important that the Aggie Life and Wellness Center project consider strategies to contribute to the reduction of waste generated by building occupants that is hauled to and disposed of in landfills. Within the building, locate right-sized recycling areas for the collection of glass, plastic, office paper, newspaper, cardboard and organic wastes. Consider employing collection bins at individual workstations to further enhance the recycling program.

Construction Waste Management/Divert from Disposal: The Design Team should establish goals for an overall percentage of construction, demolition, and land-clearing waste to be diverted from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals. LEED establishes two levels for incremental credits - 50% and 70%. Consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Where possible, salvage materials for re-use on site. Or, redirect reusable materials to appropriate sites, including consideration to

make a donation of materials to charitable organizations.

INDOOR ENVIRONMENTAL QUALITY

The narrative below includes architectural-related components of indoor environmental quality. See the Mechanical Design Criteria narrative for minimum indoor air quality (IAQ) performance, outdoor air delivery monitoring, increased ventilation, controllability of thermal comfort systems, etc. Similarly, see the Electrical Design Criteria narrative for controllability of lighting systems.

Low-Emitting Materials: In order to reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants, as well as the art collection, the Design Teams should specifically address the following items:

Adhesives & Sealants: Specify low-VOC materials in construction documents. The Design Team will need to ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.

Paints & Coatings: Specify low-VOC paints and coatings in construction documents. The Design Team will need to ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of all interior paints and coatings during construction.

Architectural

Carpet Systems: Clearly specify requirements for product testing and/or certification in the construction documents. The Design Team will need to select products that are either certified under the Green Label Plus program or for which testing has been done by qualified independent laboratories in accordance with the appropriate requirements.

Composite Wood & Agrifiber Products: Specify wood and agrifiber products that contain no added urea-formaldehyde resins. The Design Team will need to specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins.

Indoor Chemical & Pollutant Source Control: In order to minimize exposure of building occupants and the art collection to potentially hazardous particulates and chemical pollutants, the Design Team should provide facility cleaning and maintenance areas with isolated exhaust systems for contaminants. The Design Team should ensure physical isolation from the rest of the regularly occupied areas of the building. The Design Team should locate and specify permanent architectural entryway systems such as grilles or grates to prevent occupant-borne contaminants from entering the building. High-level filtration systems in air handling units processing both return air and outside supply air should be installed. The Design Team and contractor will need to ensure that air handling units can accommodate required filter sizes and pressure drops.

Daylight & Views: The Aggie Life and Wellness Center design

should provide the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. In the gymnasium spaces, if desired, windows, skylights and other devices may be utilized, but will need to be carefully designed and located to limit the greenhouse effect that may weaken the overall performance of the building envelope.

In order to maximize daylight and views, the Design Team should consider these strategies: building orientation, shallow floor plates, increased building perimeter, exterior and interior permanent shading devices, high performance glazing and automatic photocell based controls. The Design Team can predict daylight factors via manual calculations or model daylighting strategies with a physical or computer model to assess footcandle levels and daylight factors achieved.

Environmental Tobacco Smoke (ETS) Control: The Utah Indoor Clean Air Act is designed to protect the public from exposure to the harmful effects of environmental tobacco smoke (commonly called second hand smoke). The Indoor Clean Air Act prohibits smoking in indoor enclosed spaces of public access, and within 25 feet of any entrance-way, exit, open window, or air intake of buildings and designated outdoor smoking permitted areas are not allowed within 25 feet of any entrance-way, exit, open window, or air intake of buildings.

LEED APPLICATION AND CERTIFICATION

Sustainable planning, design, and construction strategies should continue to be evaluated throughout subsequent design phases. While DFCM requires Silver Level of certification, some sustainable design initiatives are not appropriate or feasible for this project. A LEED Project Checklist has been created and will be completed early in the next design phase to determine potential "points" and the feasibility of achieving Silver level of certification. (See LEED Checklist in Appendix)

To encourage and facilitate the comprehensive integration of the sustainable design and construction strategies described in the preceding narrative, a LEED Accredited Professional should be included on the Design Team. A LEED Accredited Professional will be able to educate the Project Team members, and streamline the LEED application and certification process.



code analysis

Type A3

International Building code

- 2012

Occupancy classification – IBC Chapter 3

- B (educational above 12th grade)
- A3 (Gymnasiums)

Mixed use and Occupancy – IBC section 508.3

- Non-Separated Occupancy (provide open design)
- Section 508.3.2 – Building area / Height use the most restrictive
- A-3 occupancy is most restrictive

Type of Construction – IBC Chapter 6

- Type II-B, (sprinkled)

Risk Category – IBC Table 1604.5

- III; Buildings (Occupant Load Greater than 500) .

Allowable Building Height and Floor Area – IBC Chapter 5, table 503

- Maximum height = 55 feet + 20 (sprinkler) = 75 feet

Actual = 72 feet +/-

- Maximum number of stories = 2 + 1 (sprinkler) = 3 stories

Actual = 2 stories plus mechanical penthouse (above grade plan)

Allowable Building Area – IBC Chapter 5, table 503

- 9,500 sq ft.
- Allowable increase (200%) for Sprinkler system, (IBC Section 506.3 = 19,000 sq. ft.
- Allowable increase (75%) for Frontage, (IBC Section 506.2) = 7,125 sq. ft.
- TOTAL ALLOWABLE BUILDING AREA = 9,500+19,000+7,125

= 35,625 SQ. FT. PER STORY

Actual = 50,000 sq. ft. +/- main level,
Level 2 is XXXX sq. ft. +/-.
Basement is XXXX sq. ft. +/-.

Mezzanines – IBC Section 505

- Section 505.2 – Mezzanines shall not contribute to either building area or number of stories.
- Section 505.2.1 exception 2 – The aggregate area of mezzanines shall be not greater than ½ (one-half) when equipped throughout with an approved automatic sprinkler system and approved emergency voice/alarm system.
- Section 1104.4 – At least one accessible route shall connect accessible spaces.

Fire Resistive Requirements – IBC Chapter 6, table 601

- Structural Frame 0 hour rating
- Bearing Walls
- Exterior 0 hour rating
- Interior 0 hour rating
- Exterior Nonbearing Walls 0 hour rating
- Interior Nonbearing Walls 0 hour rating
- Floor
(including supporting beam and joists) 0 hour rating
- Roof
(including supporting beam and joists) 0 hour rating
- Corridor 0 hour rating (table 1018.1)

Required Separation of Occupancies – IBC Table 508.4

- Separation of "A" to "B" 1 hour rating (not required; non-separated)

Occupancy (use) Load Factors – IBC Chapter 10, table 1004.1.2

Description of Occupancy	Occupancy Load Factor (SF/occupant)
• Business Areas (Offices)	100 gross
• Classroom	20 gross
• Exercise Room / Lockers /Gym	50 Gross
• Assembly (tables and Chairs)	15 net
• Library	50 net
• (Storage areas, Mechanical, Electrical, Telecom, Janitor)	300 gross

Egress Width per Person served – IBC Chapter 10, section 1005.3.1 and 1005.3.2

- Stairways = .3 inches/occupant
- Other = .2 inches/occupant
- Table 1018.2, Minimum corridor width is 44 inches (some exceptions)
- Section 1008.1.1, Minimum door width is 32 inches clear; maximum door leaf is 48 inches

Number of Exits – IBC Chapter 10, table 1015.1

- 'A' occupancy load that exceeds 49 will require two exits
Occupancy load of greater than 500 will require three exits

• Travel Distance – IBC Chapter 10, table 1016.2

'A' occupancy = 250 feet

• Common Path of Egress Travel – IBC Section 1014.3,

'A' occupancy: Not more than 75 feet (sprinkler)

• Exit Separation – IBC Chapter 1015.2.1

Exit separation = one third (1/3) the diagonal dimension of the sprinkled building or area.

Stairs / Ramps – IBC Chapter 10

- Section 1007.3; exception 1 – Clear width of 48 inches minimum between handrail is not required (sprinkler)
- Section 1007.3; exception 2 – Area of Refuge is not required when building is equipped throughout with an automatic Fire Sprinkler System.
- Section 1009.4– The width shall not be less than 44 inches; to determine the egress width, multiply the occupancy times .20 to equal the number of width inches required. (table 1005.1)
- Section 1009.7.2 – Stair riser height shall be 7 inches maximum and 4 inches minimum. The stair tread shall be 11 inches minimum.
- Section 1009.10 – The maximum distance a stair may rise with out a landing is 12 feet.
- Section 1009.15 – Handrail is required on each side
- Section 1012.2 – Handrail height, from nosing, shall be not less than 34" and not more than 38"
- Section 1012.6 – Handrail must return to wall, guard, walking surface, the handrail needs to be continuous to the next run of stairs (if not) than the handrail must extend 12 inches beyond the riser and slop a distance of one tread beyond the bottom of the stair riser.
- Table 716.5 – minimum fire door assembly rating is 1 hour.
- Section 1005.6 – Where floors above and below converge the capacity shall not be less than the sum of the two floors.

Two Story Openings

- Section 712.1.8 – Does not contain a stairway required by chapter 10.
- Section 1009.3 Exception 1 and 4 – Stairway not required to be enclosed when serving only two floors.

Guards-IBC Section 1013

- Guards required along open-sided walking surfaces that are located more than 30 inches above the floor or grade below
- Section 1013.3 – protective barrier not less than 42 inches height.
- Balusters or ornamental pattern shall not let a 4-inch sphere pass through any opening to 34 inches; from 34 inches to 42 inches an 8-inch sphere can not pass through.; a 6-inch sphere can not pass through the triangle formed by riser and tread.

Elevators – IBC Sections as noted

- Elevator lobby Section 708.14.1 – not required (connects less than 3 stories)
- Section 1003.7 – Elevator may be used as an accessible means of egress

Corridors – IBC Section 1017

- Table 1018.2 – The minimum corridor width is 44 inches. To determine the egress width, multiply the occupancy times .15 to equal the number of width inches required.
- Section 1018.4 – Dead end corridors shall not be greater than 20 feet, (A3 most restrictive).

Accessible – IBC Chapter 11

- Section 1104 – An accessible route from the Accessible parking to the building entry
- Section 1105 – At least 60% of the entrances shall be accessible
- Section 1106 – Where Accessible parking is provided, parking spaces shall be provided in compliance with table 1106.1
- Section 1106.5 – At least one accessible parking stall will be Van accessible; provide 1 Van per 6 accessible parking
- Section 1109.2.2 – At least one wheel chair-accessible compartment will be provided and one ambulatory-accessible watercloset compartment
- Section 1109.8.1 – Lockers = 5% accessibility
- Section 1109.3 – each restroom will need to have 5% (at least one) accessible sink
- Section 1109.5 – 50 percent of the drinking fountains to be accessible
- Section 1110. – Required accessible elements shall be identified using the international symbol of accessibility

Interior Wall and Ceiling Finish – Table 803.9

- For Group 'A3' and sprinklered:
 - Interior exit stairways – Class 'A'
 - Corridors and enclosure for exit access stairways – Class 'A'
 - Rooms and enclosed spaces – 'C'

Glazing – IBC Section 2408.3

- Shall comply with category II of CPSC 16 CFR 1201 or Class A of ANSI 297.1 listed in Chapter 35.

Automatic Fire Sprinkler System – IBC Chapter 9 and NFPA 13

- Automatic Fire Sprinkler System through out
- NFPA Chapter 10, Portable Fire Extinguishers; max. travel distance is 75 feet; max. distance between fire extinguishers is 150 feet.
- Storage rooms are sprinkled.

Roof – IBC Chapter 15

- Roof Covering Fire Classification – IBC Table 1505.1
Type of Construction II-B = Minimum of a 'C' Cover Fire Classification
- Section 1504.1 – roof decks and roof Covering will be designed for wind loads for the locations = 90 mph.

Plumbing Fixtures required – IBC Chapter 29

- Section 2902.1 – Plumbing fixtures shall be provided for the type of occupancy.

Code Analysis

"A3" Occupancy

- 919.2 Occupants / 2 = 460 Female, 459 Male.
- Male:
Toilets 1/125 = 4 Male.
- Female:
Toilets 1/65 = 8 Female.
- Lavatories 1/200 = 3 Female and 3 Male.
- Drinking Fountain - 1/500 = 2, provided for accessibility.
- Unisex toilet rooms (Section 1109.2.1, 1 per 6 aggregate water closets = 1, accessible.
- Unisex toilet rooms are to be located on an accessible route (section 1109.2.1.4)
- Service Sink - 1 required

"B" Occupancy

- 61.3 Occupants / 2 = 31 Female, 30 Male.
- Male and Female
Toilets 1/25 first 50, 1/50 after = 2 Male; 2 Female.
- Lavatories 1/40 first 80, 1/80 after = 1 Male; 1 Female.
- Drinking Fountain - 1/100 = 1, provided for accessibility.
- Unisex toilet rooms (Section 1109.2.1, 1 per 6 aggregate water closets = 0, accessible.
- Unisex toilet rooms are to be located on an accessible route (section 1109.2.1.4)
- Service Sink - 1 required

TOTAL, PLUMBING FIXTURES REQUIRED (MINIMUM):

Water closets		Lavatories		Drinking Fountains	Service Sinks
Male	Female	Male	Female		
6	10	4	4	3	1

Code Analysis



code analysis

Type B & A3

International Building code

- 2012

Occupancy classification – IBC Chapter 3

- B (educational above 12th grade)
- A3 (Gymnasiums)

Mixed use and Occupancy – IBC section 508.3

- Separated Occupancy

Type of Construction – IBC Chapter 6

- Type II-B, (sprinkled)

Risk Category – IBC Table 1604.5

- III; Buildings (Occupant Load Greater than 500).

Allowable Building Height and Floor Area – IBC Chapter 5, table 503

“A” Occupancy

- Maximum height = 55 feet + 20 (sprinkler) = 75 feet
Actual = 72 feet +/-
- Maximum number of stories = 2 + 1 (sprinkler) = 3 stories
Actual = 2 stories plus mechanical penthouse (above grade plan)

“B” Occupancy

- Maximum height = 55 feet + 20 (sprinkler) = 75 feet
Actual = 72 feet +/-
- Maximum number of stories = 3 + 1 (sprinkler) = 4 stories
Actual = 2 stories plus mechanical penthouse (above grade plan)

Allowable Building Area – IBC Chapter 5, table 503

“A” Occupancy

- 9,500 sq ft.
- Allowable increase (200%) for Sprinkler system, (IBC Section 506.3 = 19,000 sq. ft.
- Allowable increase (75%) for Frontage, (IBC Section 506.2) = 7,125 sq. ft.
- TOTAL ALLOWABLE BUILDING AREA = 9,500+19,000+7,125 = 35,625 SQ. FT. PER STORY

Actual = 50,000 sq. ft. +/- main level,

Level 2 is XXXX sq. ft. +/-.

Basement is XXXX sq. ft. +/-.

“B” Occupancy

- 23,000 sq ft.
- Allowable increase (200%) for Sprinkler system, (IBC Section 506.3 = 46,000 sq. ft.
- Allowable increase (75%) for Frontage, (IBC Section 506.2) = 17,250 sq. ft.
- TOTAL ALLOWABLE BUILDING AREA = 9,500+19,000+7,125 = 86,250 SQ. FT. PER STORY

Actual = 50,000 sq. ft. +/- main level,

Level 2 is XXXX sq. ft. +/-.

Basement is XXXX sq. ft. +/-.

Mezzanines – IBC Section 505

- Section 505.2 – Mezzanines shall not contribute to either building area or number of stories.
- Section 505.2.1 exception 2 – The aggregate area of mezzanines shall be not greater than ½ (one-half) when equipped throughout with an approved automatic sprinkler system and approved emergency voice/alarm system.

Code Analysis

- Section 1104.4 – At least one accessible route shall connect accessible spaces.

Fire Resistive Requirements – IBC Chapter 6, table 601

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- Floor (including supporting beam and joists) 0 hour rating
- Roof (including supporting beam and joists) 0 hour rating
- Corridor 0 hour rating (table 1018.1)

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- Separation of "A" to "B" 1 hour rating (not required; non-separated)

Occupancy (use) Load Factors – IBC Chapter 10, table 1004.1.2

- | Description of Occupancy | Occupancy Load Factor (SF/occupant) |
|--------------------------------|-------------------------------------|
| • Business Areas (Offices) | 100 gross |
| • Classroom | 20 gross |
| • Exercise Room / Lockers /Gym | 50 Gross |
| • Assembly (tables and Chairs) | 15 net |

- Library 50 net

- (Storage areas, Mechanical, Electrical, Telecom, Janitor) 300 gross

Egress Width per Person served – IBC Chapter 10, section 1005.3.1 and 1005.3.2

- Stairways = .3 inches/occupant
- Other = .2 inches/occupant
- Table 1018.2, Minimum corridor width is 44 inches (some exceptions)
- Section 1008.1.1, Minimum door width is 32 inches clear; maximum door leaf is 48 inches

Number of Exits – IBC Chapter 10, table 1015.1

- 'A' occupancy load that exceeds 49 will require two exits
- Occupancy load of greater than 500 will require three exits

Travel Distance – IBC Chapter 10, table 1016.2

- 'A' occupancy = 250 feet

Common Path of Egress Travel – IBC Section 1014.3,

- 'A' occupancy: Not more than 75 feet (sprinkler)

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- Exit separation = one third (1/3) the diagonal dimension of the sprinkled building or area.

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- Section 1009.15 – Handrail is required on each side
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- Section 1012.6 – Handrail must return to wall, guard, walking surface, the handrail needs to be continuous to the next run of stairs (if not) than the handrail must extend 12 inches beyond the riser and slop a distance of one tread beyond the bottom of the stair riser.
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- Section 1109.5 – 50 percent of the drinking fountains to be accessible
- Section 1110. – Required accessible elements shall be identified using the international symbol of accessibility

Code Analysis

Interior Wall and Ceiling Finish – Table 803.9

- For Group ‘A3’ and sprinklered:

Interior exit stairways – Class ‘A’

Corridors and enclosure for exit access stairways – Class ‘A’

Rooms and enclosed spaces – ‘C’

- For Group ‘B’ and sprinklered:

Interior exit stairways – Class ‘A’

Corridors and enclosure for exit access stairways – Class ‘B’

Rooms and enclosed spaces – ‘C’

Glazing – IBC Section 2408.3

- Shall comply with category II of CPSC 16 CFR 1201 or Class A of ANSI 297.1 listed in Chapter 35.

Automatic Fire Sprinkler System – IBC Chapter 9 and NFPA 13

- Automatic Fire Sprinkler System through out
- NFPA Chapter 10, Portable Fire Extinguishers; max. travel distance is 75 feet; max. distance between fire extinguishers is 150 feet.
- Storage rooms are sprinkled.

Roof – IBC Chapter 15

- Roof Covering Fire Classification – IBC Table 1505.1

Type of Construction II-B = Minimum of a ‘C’ Cover Fire Classification

- Section 1504.1 – roof decks and roof Covering will be designed for wind loads for the locations = 90 mph.

Plumbing Fixtures required – IBC Chapter 29

- Section 2902.1 – Plumbing fixtures shall be provided for the type of occupancy.

“A3” Occupancy

- 919.2 Occupants / 2 = 460 Female, 459 Male.

• Male:

Toilets 1/125 = 4 Male.

• Female:

• Toilets 1/65 = 8 Female.

• Lavatories 1/200 = 3 Female and 3 Male.

• Drinking Fountain - 1/500 = 2, provided for accessibility.

• Unisex toilet rooms (Section 1109.2.1, 1 per 6 aggregate water closets = 1, accessible.

• Unisex toilet rooms are to be located on an accessible route (section 1109.2.1.4)

• Service Sink - 1 required

“B” Occupancy

- 61.3 Occupants / 2 = 31 Female, 30 Male.

• Male and Female

Toilets 1/25 first 50, 1/50 after = 2 Male; 2 Female.

• Lavatories 1/40 first 80, 1/80 after = 1 Male; 1 Female.

• Drinking Fountain - 1/100 = 1, provided for accessibility.

• Unisex toilet rooms (Section 1109.2.1, 1 per 6 aggregate water closets = 0, accessible.

• Unisex toilet rooms are to be located on an accessible route (section 1109.2.1.4)

• Service Sink - 1 required

TOTAL, Plumbing Fixtures required (minimum):

Water closets		Lavatories		Drinking Fountains	Service Sinks
Male	Female	Male	Female		
6	10	4	4	3	1

Code Analysis

code analysis

Type A3 non-Separated

- Using the 2012 International Building Code a comparative of type of construction for a building that is sprinkled.
- Using the Non-separated occupancy; with A-3 as the most restrictive.

	Construction Type II-A	Construction Type II-B
Total allowable square footage:		
story.	58,125 sq. ft. / story.	35,625 sq. ft. /
Total Height in Feet:		
	85 feet	75 feet
Total Stories:		
	4 Stories	3 Stories
Fire Resistive Requirements:		
• Structural Frame	1 hour rating	0 hour rating
• Bearing Walls		
Exterior	1 hour rating	0 hour rating
Interior	1 hour rating	0 hour rating
• Exterior Nonbearing Walls	1 hour rating	0 hour rating
• Interior Nonbearing Walls	0 hour rating	0 hour rating
• Floor (including supporting beam and joists)		
	1 hour rating	0 hour rating
• Roof (including supporting beam and joists)		
	1 hour rating	0 hour rating
Roof Covering Classification:		
	"B"	"C"

Code Analysis



structural

The structural framing system shall conform to and complement the layout of the architectural floor plan and contribute to the functional requirements of the programmed space. The structural system shall balance factors of structural integrity, performance, economy, flexibility for future use, and local availability of materials. Close interaction with other design professionals is necessary to identify and implement prudent economical structural solutions.

GENERAL

Structural aspects of the design that will significantly affect the overall performance and budget of this facility must be completely understood. Such aspects include the location of the site, attachment or close proximity of a new structure to an existing structure, vertical mixed use of program spaces, flexibility of design spaces, integrated structural elements and architectural design, significant lateral design loads, and constructability on a relatively restrictive site.

Close coordination with the Owner and Owner's representative will result in meeting the expectations and user desires for the structure with respect to both vertical and lateral loads. It is important to note that code-required force levels represent the minimum requirements for life safety and do not necessarily meet owner needs for overall building performance. Therefore higher force levels may need to be used as design constraints in order to meet the College's performance expectations.

A strong emphasis on sustainable design must also be incorporated into the design process. The structure should utilize materials that are readily available and can be procured and erected in a reasonable manner for this site. Consideration should be given to the availability of skilled labor in each particular material type, bearing in mind that seasonal characteristics can also affect material selections.

Future expansion of the building is not an anticipated design parameter for this project. Interior expansion joints may be required depending on the final building lay-out. Care should be given to the thermal expansion properties of the selected structural materials for the project and their interaction with other materials.

DESIGN CRITERIA

The minimum code and standards for this project shall be based on the 2012 International Building Code (IBC) and all of the current editions of the IBC referenced standards. This project shall also conform to the latest DFCM and USU Campus Standards. Final structural documents shall clearly identify final design criteria and material strengths. As a minimum, the following design criteria and material strengths shall be utilized for this design. These criteria and strengths shall be evaluated on a continual basis as the design process evolves. The building is to be classified as Occupancy Category III per the IBC.

FLOOR LIVE LOADS:

Offices & Recreational Rooms = 80 psf + 20 psf partition loading and a 2000 lb load over a 2.5 foot square footprint.

Corridors & Lobbies = 100 psf

Light Storage = 125 psf

ROOF LIVE LOADS: (20 PSF MIN.)

Flat Roof Snow Load	= 44 psf
Snow Ground Load	= 57 psf
Snow Exposure Factor	= 1.0
Snow Importance Factor	= 1.1
Snow Thermal Factor	= 1.0

Snowdrift accumulations shall be considered at valleys, parapets, vertical offsets in roof elevations, and adjacent to penthouse or RTU locations as required by the IBC. Sliding snow shall also be considered where required. A portion of the roof snow load shall be included in the seismic dead load as required by the IBC and State amendments.

WIND LOADS:

Exposure Category = C*
Basic Wind Speed = 120 mph (3-second gust)

Exposure C shall be used for elements and components including the exterior window and wall systems.

SEISMIC LOADS:

Latitude = 41.745 degrees
Longitude = -111.813 degrees
Elevation of Site = 4,780 feet
Importance Category = 1.25
Soil Site Class = D (presumed)
Short-Period Mapped Acceleration, $S_s = 0.909$
Long-Period Mapped Acceleration, $S_1 = 0.321$
Short Period Site Coefficient, $F_a = 1.136$
Long Period Site Coefficient, $F_v = 1.758$
Spectral Response Acceleration, $SDS = 0.688$
Spectral Response Acceleration, $SD1 = 0.376$
Seismic Design Category = D

Coefficients for Response Modification and Seismic Response, and Factors for System Overstrength and Deflection Amplification shall be determined based on the type of lateral force resisting system utilized in the design.

MISCELLANEOUS LOADS:

Blast Loading and Progressive Collapse are not required design parameters for this project.

WORKING STRESSES FOR MATERIALS:

Concrete (28 day strength min.)

Footings	= 3,000 psi
Foundation Walls	= 4,500 psi
Interior Slabs-on-Grade	= 3,000 psi
Structural Slabs	= 4,000 psi
Columns/Piers	= 4,000 psi
Exterior Slabs-on-Grade	= 5,000 psi

Reinforcing Steel ASTM 615 Grade 60
Fy = 60 ksi

Structural Steel

Wide-Flange Shapes	= ASTM A992
Other Shapes and Plates	= ASTM A36
Steel Tube Columns	= ASTM A500, Grade B (Fy = 46 ksi)

STRUCTURAL SYSTEM DESCRIPTION

Some portions of the building are anticipated to be 3 stories in height and may be divided into different wings each housing specific functions. The column spacing should be based on the most efficient layout for the various functions. It is important that these functions stack in some efficient manner such that similar floor loading and other requirements are best satisfied. The floor to floor heights are also related to the functions of each space. Normalizing the bay spacing can result in cost efficient use of material. The overall area for each floor and total building areas are described in detail in other sections of this program.

GRAVITY LOADING CRITERIA

A steel frame system will provide the support for the gravity loads. Loads will be transferred from the floor system to steel beams and girders. Beam loads will be supported by steel columns. In general all steel columns will stack vertically and extend to the foundations below.

All horizontal framing must be designed to satisfy both strength and stiffness requirements such that the performance of the structure does not result in excessive deflections or perceptible vibrations.

Primary framing grids for multi-story construction shall match a standard grid of approximately 30' bays in each direction.

In general, the building cladding system shall be compatible with and compliment the surrounding existing building architecture and may consist of pre-cast concrete panels, veneer, or EIFS attached to the supporting structure. Connections between the cladding system and primary framing system shall allow for both lateral and vertical movement between the primary structure and the cladding system without damage to the cladding system.

The suspended floor framing will consist of structural steel wide-flange composite beams nominally spaced to support a composite steel floor deck and concrete topping slab. Columns will be structural steel wide-flange or tube columns and will bear directly on the concrete foundation system.

The roof framing will be of open-web joist and girder construction bearing on either wide-flange or tube steel columns. Where roof framing is below mechanical equipment or heavy loads, wide-flange sections should be used. Elevator or mechanical penthouses should also be of wide-flange construction and shall support concrete fill.

Open-web joists may not be the best suited for the roof structure over the Natatorium. Closed structural shapes with clean connections or corrosion-resistant material should be considered for the roof structure over the natatorium to provide a sustainable, maintenance-free structural system in this increased corrosive atmosphere.

LATERAL LOADING RESISTING SYSTEMS

The lateral force resisting system will be most economically satisfied by utilizing Special Reinforced Concrete or Masonry shear walls or structural steel braced frames (special concentric braced frames, eccentric braced frames, buckling-restrained braced frames, etc.). Lateral force resisting elements should be located so as to optimize structural design, but also be compatible with the architectural footprint and flow of the programmed spaces. It is necessary that the lateral and gravity force resisting elements stack vertically from the roof to the foundation level. Smaller openings, such as doors, may be located within shear wall openings or between braces in braced frames.

Moment frames may be used where required by design, but generally can cost more than shear wall systems or braced-frame systems. However, if space does not allow the use of efficiently spaced braced-frames or shear walls, the use of moment frames may prove to be more economical than trying to fit other lateral force-resisting systems in locations and layouts that are not compatible with their intended use.

Refer to other sections of this program for special requirements with regard to fire ratings and area separations.

FOUNDATION DESIGN

The following section is based on preliminary findings by Gordon Geotechnical Engineering, INC. This information should be modified and continually updated as the final soils report is completed.

According to drilling reports from Gordon Geotechnical Engineering that were completed on June 28, 2013, some fill soils were present within the top 5 feet and no groundwater was encountered to depths of 31.5 feet. Preliminarily, the use of conventional spread footings on natural soils, utilizing an allowable soil bearing pressure of at least 2,500 psf may be suitable for this project.

Fill soils may need to be over-excavated and replaced with mechanically compacted structural fill in some areas to provide a stable base for the structure to bear on. Based on the cold climate in Logan, footings should bear a minimum of 36" below lowest adjacent final grade.

Problems associated with liquefaction during a seismic event are unlikely at this site, and special mitigation of the foundation soils may not be required.

Active, passive, and at-rest earth pressures (as needed) should be used for designing retaining wall and basement structures. Additional lateral pressures on retaining structures due to seismic soil loads should be calculated and applied to retaining structures as prescribed in the soils report.

EQUIPMENT AND MECHANICAL CONSIDERATIONS

The majority of the mechanical equipment could be located in a rooftop penthouse, behind screened walls on the roof, or in a basement area designated for mechanical equipment. It is assumed that the vertical circulation of air and other mechanical or electrical equipment will be in identified shafts. These shafts can be economically provided when identified early in the design. Attachment of utilities to the bottom of the floor slabs and roof structure can also be easily achieved.

Areas where the mechanical equipment has motors, fans or other moving parts may cause unwanted noise and vibration. Reduced noise levels can be achieved in wall systems as identified by the architect. Vibration issues can be most effectively mitigated by providing isolation systems between the equipment and the structural framing systems. Such areas must be evaluated by both the mechanical and structural engineers to ensure proper vibration mitigation techniques have been implemented.

Underground piping and other utilities may be located in a centralized underground tunnel and connected to other campus utility tunnels. The location of the tunnel should be coordinated with the design team and should not be located beneath lateral force-resisting elements (shear walls, braced-frames, moment-frames, etc.) or the Natatorium pool. If a mat foundation is used in any or all of the design, it is recommended

that the tunnel be located beneath the foundation or that the entire foundation be lowered beneath the tunnel. The mat foundation should not be interrupted to accommodate the tunnel. Ultimately, if the location of the tunnel drives the foundation design, the design team may consider utilizing a different foundation system, or relocate the underground utilities entirely to arrive at the most economical solution and location.

QUALITY CONTROL

Quality control can best be achieved through close coordination and communication between design professionals, owners, and contractors. All required testing and inspections for structural materials and processes are to be clearly identified on the contract documents. Timely site observations and review of shop drawings can mitigate conflicts before they happen.

SUSTAINABILITY

The referenced standard utilized in the development of sustainable design includes current editions of "LEED-NC for New Construction Reference Guide". The structural systems utilized can take into consideration the Credits available in the sections titled "Materials & Resources", and "Innovation in Design".

MATERIALS & RESOURCES

Close coordination with the General Contractor can result in the managing of construction waste, reducing waste, and the potential re-use of material on future stages of construction. Structural sizes can be normalized and result in multiple uses during construction. An example can be the use of shoring material or forming material eventually being used as framing members.

The incorporation of reuse material and recycled material provides opportunities for construction savings as well as benefiting regional companies. These materials can include exterior brick, concrete masonry units, structural steel, and concrete mixes (fly ash quantities) to name a few.

Perhaps the strongest effort will be in the efficiency of design. This should result in the need for less material than found in an inefficient design. The efficient layout and use of structural materials can result in overall less structural steel, structural concrete, and impact to the existing site. Although there

may not be Credit Points directly associated with this effort, the overall impact on the economy in the production of less material is a very important part of Sustainable Design.

Buildings designed to last well into the future are the very essence of sustainable design. This structure will be designed to meet and even exceed current standards in earthquake design.

INNOVATION IN DESIGN

Opportunities exist in this area if the design professional has the ability to exceed noted values in the Materials and Resources Section above. If a very aggressive Construction Waste program is instituted where 95% of waste can be diverted away from land-fills, an additional Credit can be achieved.

Additionally, reducing overall height of the building reduces building shadow and reduces overall material use. Reducing the amount of building damage after a seismic event also has potential for innovation Credits. This may increase demand capacity on structural elements, but will provide the very essence of Sustainability.

Structural

03.32

PROGRAM
DOCUMENT



AGGIE LIFE AND WELLNESS CENTER

mechanical

STANDARDS

- DFCM Design Criteria
- Utah State University Design Requirements
 - Div 21: Fire Suppression
 - Div 22: Plumbing
 - Div 23: HVAC
- DFCM High Performance Building Rating System
 - ASHRAE Std 55: Thermal Environmental Conditions for Human Occupancy
 - ASHRAE Std 62: Ventilation for Acceptable Indoor Air Quality
 - ASHRAE Std 90.1: Energy Standard for Buildings
 - USGBC LEED 3.0 New Construction Criteria, Silver
 - WE Credit 1.1: Water Efficient Landscaping: Reduce by 50%
 - EA Credit 3 Enhanced Commissioning
 - EQ Credit 3.1 Construction IAQ Management Plan: During Construction
 - EQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants
 - EQ Credit 4.2: Low-Emitting Materials; Paints and Coatings
- ASHRAE Guidelines and Standards

MECHANICAL SYSTEM NARRATIVE CUSTOM BUILT VAV-REHEAT

CUSTOM BUILT AIR-HANDLING UNIT

(Serves Gymnasium, Courts, and Work Out Areas)

- AH-1: Custom Built Fan-Wall Rooftop Air-Handling Unit: XXXX CFM supply. Equipped with the following:
 - Manufacturers: (no alternates allowed per USU guidelines)
 - Temtrol
 - Huntair
 - Ventrol
 - GovernAir
 - ClimateCraft
 - Supply Fan: Fan Wall Array. Qty (XXXX) Supply Fans. XXX-HP Each.
 - Relief Fan: Fan Wall Array. Qty (XXXX) Return Fans. XXXX HP Each.
 - VFD's: By Div. 26
 - Air Tunnel: Sized at 400 FPM max thru coils.
 - Glycol Pre-Heat Coil: 1-row.
 - Chilled Water Cooling Coil: 8-row
 - Direct Evap: Munters
 - Bypass section capable of 50% minimum bypass.
 - Minimum outdoor air sensor.
 - Full Height Access Doors, 24-inch wide or shall be sufficient in size to remove largest piece of equipment in the associated section.

CUSTOM BUILT AIR-HANDLING UNIT

(Serves Natatorium)

- AH-2: Custom Built Fan-Wall Rooftop Air-Handling Unit: XXXX CFM supply. Equipped with dehumidification control and the following:
 - Manufacturers: (no alternates allowed per USU guidelines)
 - Temtrol
 - Huntair
 - Ventrol
 - GovernAir
 - ClimateCraft
 - Supply Fan: Fan Wall Array. Qty (XXXX) Supply Fans. XXX-HP Each.
 - Relief Fan: Fan Wall Array. Qty (XXXX) Return Fans. XXXX HP Each.
 - VFD's: By Div. 26
 - Air Tunnel: Sized at 400 FPM max thru coils.
 - Glycol Pre-Heat Coil: 1-row.
 - Chilled Water Cooling Coil: 8-row
 - Direct Evap: None
 - Bypass section capable of 50% minimum bypass.
 - Minimum outdoor air sensor.
 - Full Height Access Doors, 24-inch wide or shall be sufficient in size to remove largest piece of equipment in the associated section.

Mechanical

- Air-Handler shall be constructed of aluminum components and humidity resistant materials/coatings to protect against the corrosive nature of the pool environment.
- Aluminum Ductwork or Duct Socks
- Area will be negatively pressurized.

CUSTOM BUILT AIR-HANDLING UNIT

(Serves Offices)

- AH-3: Custom Built Fan-Wall Rooftop Air-Handling Unit: XXXX CFM supply. Equipped with the following:
 - Manufacturers: (no alternates allowed per USU guidelines)
 - Temtrol
 - Huntair
 - Ventrol
 - GovernAir
 - ClimateCraft
 - Supply Fan: Fan Wall Array. Qty (XXXX) Supply Fans. XXX-HP Each.
 - Relief Fan: Fan Wall Array. Qty (XXXX) Return Fans. XXXX HP Each.
 - VFD's: By Div. 26
 - Air Tunnel: Sized at 400 FPM max thru coils.
 - Glycol Pre-Heat Coil: 1-row.
 - Chilled Water Cooling Coil: 8-row
 - Direct Evap: Munters
 - Bypass section capable of 50% minimum bypass.

- Minimum outdoor air sensor.
- Full Height Access Doors, 24-inch wide or shall be sufficient in size to remove largest piece of equipment in the associated section.

HYDRONIC HEATING SYSTEM

- Central Plant Connection. A new node will be provided in the central utility tunnel to the east. The steam piping will be direct buried in Gilsulate insulation (in accordance with USU Standards) . Connection will include the following
 - New Utility Node Connection
 - 600-ft of direct buried steam line (REVIEW WITH LORIN MORTENSEN)
 - Steam Line: Schedule 40 seamless black steel (welded) in direct buried Gilsulate Insulation.
 - Condensate Return: Schedule 10 stainless steel (TIG)
- Glycol Pre-Heat System:
 - Heat Exchanger: Sondex model XXXXX; XXX-million btu/h.
 - Pumps: Qty (2) B&G 1531 1-1/2 AA; 40 GPM; 80-ft head.
 - Air Separator: Spirotherm model VDN-250-FL.
 - Expansion Tank: B&G model B-200.
 - Chemical Feed Tank: West model GFS-1E. 35% PPG.
- Perimeter Heating System:

- Perimeter: Runtal model R2-F-6. Each perimeter area shall be equipped with perimeter heating in accordance with USU standards. Provide with custom powder coated color option.

- Snow Melt:

Provide Techmar snow melt system. Serves approximately XXXX sq.ft of snow melt at building entrances.

CHILLED WATER COOLING

- Central Plant Connection. A new node will be provided in the central utility tunnel to the east. The chilled water piping will be direct buried pre-insulated PVC piping (in accordance with USU Standards) . Connection will include the following
 - New Utility Node Connection (serves both steam heating and chilled water)
 - 600-ft of direct buried (REVIEW WITH LORIN MORTENSEN)
 - Piping Materials: Direct Buried Pre-Insulated PVC.

MINI SPLIT DATA ROOM AIR-CONDITIONERS

- Provide Qty(X) remote mini-split a/c's for IT rooms and electrical.
- Mitsubishi Mr Slim; 34,000 Btu/h cooling capacity, 208/1/60; 28 MCA.

GENERAL EXHAUST

- General Exhaust Fans:

DOMESTIC WATER

- Domestic Water:
 - Provide 1/3, 2/3 PRV.
 - Domestic Hot Water Heater, 120-degF: A.O. Smith 199 Cyclone.
 - XXX Gallon Storage Capacity
 - XXX Btu/h Input
 - HW Recirc Pump: Grundfos UP15-18B5.
 - Water Softener: Culligan WS-60; 50,000 grains; 5-gpm; 14" dia resin tank, 18" dia brine tank, 115-volt.

Mechanical



electrical

CODES, STANDARDS, AND REFERENCE MATERIALS

Codes which are directly applicable to design of the electrical systems are listed below:

- ADA, Americans with Disabilities Act
- ASHRAE 90.1 Energy Code
- DFCM, Division of Facilities Construction and Management, Design Requirements
- DFCM, State Buildings Energy Standard
- EIA/TIA, Electronics Industries Association/ Telecommunications Industry Association
- International Building Code
- IESNA, Illuminating Engineering Society of North America
- NFPA, National Fire Protection Association (applicable sections including but not limited to):
 - NFPA 70, National Electrical Code
 - NFPA 72, National Fire Alarm Code
- UL, Underwriter's Laboratories
- Utah State Fire Marshal Laws, Rules and Regulations

SITE ELECTRICAL

MEDIUM VOLTAGE

Medium voltage service will feed from the existing campus 12,470V distribution system. The preferred option is to feed from an existing 15 kV switch "14L4" located east of the proposed site for the new building. This switch as a spare way and the feeder from this switch would go underground

to the new building, sharing the trench for the chilled water and communications lines that will be feeding from the tunnel. Another option is to feed from existing switch 13L4 located south and across Aggie Blvd (700 N.). This switch would have to be replaced, but the underground feed may be a shorter run.

Minimum size for any new underground 15 kV duct bank will be (2) 5" C, concrete encased. Minimum size for all new loop cable will be #350 MCM CU, 15 kV EPR, with #2 cable being used for the last run to the building.

A pad-mounted VFI switch will be provided at the new building to feed the new transformer(s) for the building. The new switch will be solid dielectric type, and preferably be located indoors, above grade. The transformer(s) will be located either in an indoor vault, or in a screened area outdoors immediately adjacent to the building. The transformer(s) will use the less flammable and environmentally safe FR3 liquid, instead of mineral oil.

Transformer options to consider include one medium-voltage 277/480V transformer, using indoor dry-type transformers for 120/208V distribution; or two medium-voltage transformers, one at 277/480V and one at 120/208V. As the design progresses, these options will be considered based on cost and other factors, and presented to USU Facilities for discussion and final decision.

SITE TELECOMMUNICATIONS RACEWAYS

Provide a minimum of (2) 4" conduits from the existing

tunnel (running north-south, east of the new building site). Conduits may also be run from an existing manhole located on the corner of 800 East and Aggie Blvd. Final design will be coordinated with the USU IT department. All telecommunications cabling will be provided by USU, but included in the project budget.

BUILDING SERVICE AND DISTRIBUTION

MAIN SERVICE

The main electrical room is to be close to the medium voltage transformers for the building. Two main electrical services are anticipated. Service voltage will be 277/480V, 3-phase, 4-wire for mechanical and lighting loads, and 120/208V for plug loads, lab and other small equipment. Another option is to provide a single service rated at 277/480V, then use dry-type step-down transformers for 120/208V in the building. This will be evaluated with USU Facilities during the design. The main switchboards will provided with digital metering with network connections back to the central metering system.

MOTOR CONTROL CENTERS

Motor control centers will be provided for areas where 3 or more motors are grouped. All 3-phase motors will be provided with phase-loss protection. Provide disconnect switches within sight of all motors. Provide variable frequency drives (VFD's) where required for mechanical equipment in

compliance with DFCM and Campus requirements, and sized at least 10% over the connected motor load. Minimum total harmonic current distortion when measured at the input terminals of the VFD will be not greater than 15%. The design electrical engineer may evaluate the variety of harmonic filtering and mitigation techniques and choose the best method to achieve this performance.

PANELBOARDS

Distribution panelboards will be provided in vertically stacked electrical rooms. The electrical rooms are to be centrally located as much as possible, while taking into account other building and architectural considerations. Ease and accessibility of running new and future conduits out of each room is an important consideration in defining the location of the rooms. Panelboards serving normal lighting and outlet circuits will be located on the same floor as the circuits they serve. All branch panelboards will have hinged front covers, as opposed to screw-on or latching covers.

SPARE CAPACITY

Switchboards, panelboards, transformers and other distribution equipment will be provided with 25% spare capacity and spaces/spares for future growth and flexibility. Electrical equipment rooms will have 25% additional space for future equipment.

BRANCH CIRCUITS

Branch circuits will be loaded to no more than 80% of what is allowed by NFPA 70. Where outlets are intended for a

specific piece of equipment, the load of the outlet will be based on the equipment nameplate. Otherwise, no more than 6 convenience outlets per circuit or 4 outlets per circuit serving workstation computer terminals, on average, will be used. Sufficient capacity for plug-in task lights and other peripherals typical of desk items will be provided. Outlets with dedicated branch circuits (one outlet per circuit) are provided for vending machines, copy machines, break room counters, refrigerators, dishwashers, A/V cabinets and other locations likely to have equipment requiring dedicated circuits. Each branch circuit homerun will have no more than 3 circuits per raceway. Dedicated neutrals for each phase conductor will be provided.

CONDUCTORS

All conductors will be copper. Conductors for branch circuits will be sized to prevent voltage drop exceeding 3% at the farthest load. The total voltage drop on both feeders and branch circuits will not exceed 5%. For measurement purposes, a load of 180 VA (1.5A) per outlet, with a 50% diversify factor will be assumed)

RACEWAYS

All raceways are minimum ¾" C. MC cable is not allowed. Conduit is not allowed to be embedded in elevated concrete slabs. Cable tray system will be such that raceways do not extend more than 50' (approx.) to cable tray. Conduits will be stubbed to the cable tray and contain pull strings. Raceway is included for all security, audio/visual, and technology systems whether furnished as part of the construction contract or furnished by the Owner.

EQUIPMENT AND FURNITURE

Furniture and equipment that is identified in the program will be provided with electrical connections.

FAULT CURRENT AND COORDINATION STUDY

A fault current and coordination study will be performed to indicate available fault current at all points in the distribution system. New equipment will be rated for the amount of available fault current. Fuses or breakers will be selected to ensure minimum system outage due to overloads or fault currents. Set breakers with adjustable long time, short time, instantaneous and/or ground fault settings for optimum system coordination. Per the 2011 NEC, emergency systems will be selectively coordinated to the extent possible.

SURGE PROTECTIVE DEVICES

Surge Protective Devices (SPD's) and "noise" protection is provided at service equipment (each main) and on main

Electrical

120/208V distribution panelboards in the facility which serve computer terminals. SPD units will be integral to the panelboard or switchboard.

It is recommended that additional surge strips be provided under the furnishings and equipment budget on an as-needed basis. The surge strip should be commercial-grade quality and have at least 26 kA per phase maximum surge rating.

OUTLETS

Outlets will be 20A, minimum. The program and space data sheets will be used as a guideline, but user input will be welcomed during the design. Unless noted otherwise, the following will be used as a general guideline where more specific requirements are not elsewhere identified. Each outlet location will be coordinated with the design team and end user during design. Where the term “outlet” is used, this refers to a 20A duplex receptacle outlet (unless otherwise noted).

Classrooms, Lecture Halls and other Instructional Spaces: Provide outlets for instructor’s station, audio/visual equipment and each student. Ensure that there is at least one duplex outlet for each 10’ of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space. Where tables are fixed in place, coordinate power outlets mounted directly into the millwork.

Student Commons, Lounges and Study Areas: Provide power

outlets for laptop computers, at least one duplex for 20% of user seats, but no less than one outlet per each 12’ of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space. For ultimate flexibility, a raised floor is being provided in selected areas (refer to Architectural description). In other areas, floor boxes, conduit stubs or poke-through type devices will be used to provide the required connectivity.

Offices: For each workstation, provide one outlet dedicated to computer terminals and one normal outlet, and one additional normal outlet for every 10’ of wall space. Provide sufficient outlets to accommodate task lighting for all staff workstations.

Conference and Board Rooms: One outlet for every 10’ of wall space, plus one outlet dedicate to computer terminals on two walls. Provide floor outlets underneath conference room tables. Coordinate installation of outlets in conference table tops with furniture/millwork.

Lounges/Breakrooms/Kitchenettes: GFI Outlets on dedicated circuits every 4’ on counter top plus dedicated outlets for refrigerator, microwave, dish washer, ice machine and disposal (switched at counter top), plus one outlet for every 10’ of other wall space in room.

Counter tops (in general): One outlet every 4’; GFI where within 8’ of a sink.

Fitness and Exercise Rooms: Dedicated outlets for fitness equipment (verify voltage requirements), outlets for TV monitors, plus convenience outlets every 12’ of wall space.

Consider a grid of underfloor duct for flexibility in determining floor outlets locations based on equipment locations.

Basketball/Gyms: Outlets at 20’ spacing around perimeter, plan outlets for score board and score keeper tables.

Running Track: Outlets on 30’ spacing around track.

Locker/Shower Rooms: One GFI outlet on a dedicated circuit near each grooming counter top.

Main Computer/Server/MDF: Several outlets on emergency power under raised floor and around perimeter or room with circuit density to allow for at least 100 watts per square foot. Coordinate exact quantity required with the User groups and the anticipated equipment, including future provisions as well. UPS power is assumed to be rack-mounted, plug-in style and provided by the Owner.

Telephone/Data Closets (IDF): At least 6 quad outlets on emergency power with circuit density to allow for at least 50 watts per square foot. Provide a minimum 6-outlet surge/power strip in every equipment rack. UPS power is assumed to be rack-mounted, plug-in style and provided by the Owner.

Electrical Rooms: At least one outlet on emergency power.

Restrooms: One GFI outlet on wall adjacent to sink at counter height, plus one remote from sink at standard height for breast pumps, vacuum cleaner or power scrubber. Confirm final location with UVU.

Corridors, Lobbies: Provide at least one outlet every 15’, on alternating sides of the corridor or lobby.

Stairs: One outlet at each landing and intermediate landing.

Storage Rooms (small), Janitors Closets: One outlet, near light switch.

Building Exterior: One WP/GFI convenience outlet near each entrance, or a minimum of every 120 feet; additional outlets as needed for special events. Coordinate with users during design.

Other Areas: Refer to individual space plan data sheets, and where not defined coordinate requirements with user during design.

GROUNDING

All feeder and branch circuit raceways will include an insulated equipment grounding conductor. Provide a grounding riser system throughout the telecommunications closets, with grounding bus bars mounted accessibly in each closet. In computer or server rooms with raised access flooring, provide a signal reference grounding grid in accordance with IEEE standard 1100-1999. All grounding systems will be bonded together per NEC requirements.

LIGHTNING PROTECTION

Provide a lightning protection system for the new Building. Engage an LPI-certified installer, designer and inspector for the system. Provide a UL Master Label System and comply with NFPA 780.

EMERGENCY SERVICE AND DISTRIBUTION:

An emergency diesel generator is provided for the new building. Generator will be outdoors in a screened area with weather-protective, sound-attenuating housing and skid-mounted, double-walled tank. Fuel supply will be minimum 18 hours at full load. Design at least two transfer switches: one for emergency and one for non-emergency ("stand-by") loads. Annunciate alarms adjacent to fire alarm panel. Design generator distribution panel with digital metering. The following will be provided with emergency power:

- Emergency egress and exit lighting
- Fire Alarm
- Elevators
- Smoke control
- Communications and Server rooms (including main computer room) – outlets, lights and air conditioning
- Electrical rooms – lights and outlets
- Security systems

LIGHTING

GENERAL

The basis for design shall be the IES and its Recommended Practices, such as RP-6-01 "Sports and Recreational Area Lighting", RP1-93 "Office Lighting", RP3-00 "Lighting for Educational Facilities", and RP-33-99 "Lighting for Exterior Environments"; Utah State Health Department Requirements or Codes where applicable, i.e. pools, spas and pool decks. For exterior lighting, indirect lighting, and other specialized task lighting, a point-by-point plot of illuminance establishing conformance with the Recommended Practices shall be furnished. Ballasts shall be 10% THD to minimize system harmonics. The amount of different lamp types shall be minimized, making replacement and maintenance easier. Comply with UVU design standards for technology preferences. Lamps shall comply with EPA TCLP requirements.

ASHRAE 90.1 requirements shall be met and exceeded to meet the overall project requirement to beat this energy code by at least 20%. This will ensure compliance with the State High Performance Rating System, and contribute to the LEED credits sought for this building. Energy savings design techniques such as daylighting control, occupancy sensors, centralized and de-centralized control systems, energy efficient lamps/ballasts shall be used where practical to maximize energy efficiency.



EXTERIOR LIGHTING

Exterior lighting will use campus standard lighting fixtures and poles for walkways, parking and roadways, compatible with the campus surroundings. All exterior lighting fixtures shall be full cut-off to avoid sky glow and light trespass conditions. Control exterior lighting utilizing combination photocell and time schedule control.

INTERIOR LIGHTING

Interior lighting will use fluorescent lamps to the greatest extent possible, with the 4' T8 lamp being the campus preference based on maintenance and cost. HID sources may be considered where needed to provide the required illuminance levels in large volume spaces, but the issues of restrike time and the desirability of instant on need to be addressed. Incandescent sources should be avoided altogether. LED sources will also be evaluated and given strong consideration.

For offices, classrooms and meeting rooms, pendant indirect lighting should be strongly considered, but must be carefully coordinated in rooms with projectors so that the fixtures will not interfere with the projected image. Select luminaires for areas where VDTs are planned which are designed to minimize veiling reflections, and provide multilevel lighting control and task lighting to reduce the illuminance on the VDT. In addition, in rooms with audio visual, design lighting with variable or switched levels as indicated with a separate

controlled zone to reduce glare and illuminance on the audio visual display. In rooms with projectors, provide a separate bank of lighting control switches or station near the instructor position for ease of controlling lighting during presentations.

For spaces where glare control is not required, fluorescent, lay-in fixtures may be used. This includes corridors, workrooms, restrooms, common areas, equipment rooms and storage rooms. Recessed fluorescent downlights shall be used in areas where aesthetics call for an upgraded appearance, such as in main lobbies.

All interior lighting shall be controlled by some automatic means. This shall include vacancy sensors for smaller enclosed areas and relay control with clock and/or timer supervision for larger areas. Gymnasiums should be design for multiple zones and light level control with occupancy sensors to allow energy reduction when the maximum light output is not needed. Uniformity must be maintained when in reduced lighting modes. The corridors and common areas shall be controlled through the building management system with local wall switch override. Wherever natural daylight is provided, incorporate daylighting controls to promote energy savings by using artificial lighting only as needed. This can be accomplished with automatic dimming, stepped switching or simple on/off control depending on the functional needs of the space. All lighting shall be "instant on" to facilitate quick response to demand and power interruptions.

Exit and emergency lighting shall comply with the IBC. Emergency lighting for means of egress to 1 fc average, 0.3 fc minimum, shall be provided. Emergency lighting shall be included in restrooms, electrical rooms, and communication rooms.

See **Table-E1** for Lighting Summary Table.

FIRE ALARM

CAMPUS FIRE ALARM AND LIFE SAFETY

Comply with Utah State Fire Marshal's "Rules and Regulations" and USU requirements. Design an addressable system capable of reporting back to central campus security. Design strobes visible from all locations except private offices and coordinate with furniture and equipment plans, keeping in mind standard stack height is 90" and depth of wall shelving may hinder visibility from below. Based on preliminary code evaluation, a voice evacuation system is required. Verify this requirement during the design. Design speakers to comply with NFPA including for higher ambient noise requirements. Where smoke control systems are required, coordinate the integration of the fire alarm with the smoke control systems. Provide duct detectors and fan shutdown where required by NFPA and the IMC, including detection of smoke at all return air shafts serving multiple floors. Coordinate location of the building annunciator with the Campus fire marshal. All other detectors and functions will comply with the referenced codes and standards. All fire alarm wiring will be in conduit.

Final programming of system will be coordinated with the Campus Fire Marshal to ensure that the program will be compatible with existing campus fire alarm programming.

TELECOMMUNICATION RACEWAYS

RISER DISTRIBUTION

Stacked telecommunications closets are provided to serve each floor of the building. Equipment layout and wall space will be coordinated with the Campus. Closets are located such that when cabling is routed through the raceway system provided, no cable length will exceed 290' regardless of the path. Consideration was given to the ease and accessibility of running new and future raceways and cables out of each room. Four 4" conduits from the MDF to the stacked IDF locations are provided and four 4" sleeves between floors. Both normal and emergency circuits are provided to each IDF, 3 each, with one fourplex per circuit. The air conditioning for these rooms will be on the generator.

HORIZONTAL DISTRIBUTION

A cable tray distribution network is provided throughout each floor and into the IDF closets. Cable tray will be routed above corridors, common and similar areas. In all ceiling areas where accessible, provide ladder-type tray to match existing campus standard. Where ceilings are inaccessible, provide an equivalent conduit system bridging cable trays in accessible ceilings. It will be the designer's responsibility

to size the cable tray and raceway system for the intended cabling installation. Specify that cable runs take routes that will limit the total cable distance, between termination end points, to 290' or less.

VOICE/DATA DROPS

Each voice/data outlet location will consist of a 4" square box with two gang mud ring and one 1" conduit stubbed to the nearest cable tray. Refer to program space plans for quantities and coordinate exact locations with the users during design. As a minimum, provide one voice/data drop for each workstation, fax machine, copy machine, vending machine, desk, computer terminal and teaching station. Allow one voice/data box per 80 square feet for areas that are not specifically defined. Where wireless networks are designed for student access, still allow sufficient empty raceways for future hardwired connections should the wireless system have insufficient bandwidth for evolving applications.

RACEWAYS FOR OTHER LOW-VOLTAGE SYSTEMS

Provide empty raceways for all other low-voltage systems in the building, which will include audio/visual, security, TV and paging systems. Coordinate with the campus and/or systems designers.

Electrical



TABLE-E1

The following table summarizes lighting levels and control methods for important spaces.

LIGHTING SUMMARY TABLE		
TYPICAL AREA	ILLUMINANCE IN FOOTCANDLES	COMMENTS
Classrooms	30/50	Bilevel Switched
Climbing Wall	30	Lighted from above, glare controlled
Conference Rooms	50	Multi-zoned or dimmed
Control Counters	50	
Custodial Rooms	10	
Elevated Jogging Track	25	Daylight responsive
Equipment Display / Storage Areas	30	
Examination Rooms	50	Dimmable w/ tasklight
Fitness / Weight Rooms	50-60	Indirect
Grounds Maintenance Rooms	30	
Gymnasiums	80/50	bilevel switched, impact proof
Indoor Pool, In water	5-20 fc	UT Dept of Health Code
Indoor Recreation Pool and Deck	5-30 fc	UT Dept of Health Code
Juice Bar	30	
Laundry Room	30	
Library / Meeting-Work Room / Student Staff Spaces	50	
Lobbys	30	Daylight Responsive if possible
Locker Rooms	40	
Maintenance Areas	30	
Massage Therapy / Assessments	50	Dimmable
Multi-purpose Rooms	60-40	Indirect
Offices	20 ambient / 50 task	Daylight Responsive if possible
Personal Training / Fitness Rooms	30	Dimmable
Racquetball Courts	80	Impact Proof
Registered Nurse / Nurse Practitioner Offices	50	
Restrooms	30	UT Health Dept Code
Rock Climbing Wall Areas	50	
Storage Rooms	10	
Toilet / Changing Rooms	30	UT Health Dept Code
Vending Area	30	

Electrical

electrical

TECHNOLOGY SYSTEMS

INTRODUCTION

This Program provides a narrative description of technology systems for the Life and Wellness Center on the Utah State University Campus. The narrative description is not a technical specification, and does not include line diagrams, installation details, and equipment lists with manufacturer and model information. Rather, the narrative descriptions identify functional requirements for each technology system, and form the Basis of Design for the selected architectural and engineering team (A&E team) to prepare construction documents for bidding by contractors.

Prepare the construction documents, including drawings and specifications, to specify the construction of all technology systems in conjunction with all other building systems and construction activities. Specify technology system construction documents to facilitate the technology systems installation contractors becoming direct sub-contractors to the project general contractor, similar to the installation for other building systems, rather than third tier sub-contractors to other trade sub-contractors.

CODES, STANDARDS, AND REFERENCE MATERIALS

Codes, standards and reference materials which are applicable to the design of the technology systems are listed below. Comply with each of the latest adopted publications. They are part of this program by reference and are not restated in the program narrative.

- USU – Campus Standards
- USU – Cabling Standard
- ADA, Americans with Disabilities Act
- TIA/EIA, Electronics Industries Association/
Telecommunications Industry Association
- ANSI TIA/EIA 568 C
- ANSI TIA/EIA 569 B
- BICSI Publication TDMM 12
- IBC 2000, International Building Code
- NFPA, National Fire Protection Association (applicable sections including but not limited to):
 - NFPA 70, National Electrical Code
 - NFPA 72, National Fire Alarm Code
- UL, Underwriter’s Laboratories
- State of Utah Fire Marshal Laws, Rules and Regulations
- Audiovisual Best Practices, International Communications Industries Association
- Audiovisual Systems Design, International Communications Industries Association
- Standard Broadcast Wiring and Installation Practices”, as excerpted from “Recommended Wiring Practices,” Sound System Engineering, (2nd Edition), D. Davis

SUSTAINABILITY

Design technology systems to maximize sustainability. Specify Energy Star compliant equipment where appropriate models are available including, but not limited to, video monitors and audio power amplifiers. In addition, specify control systems to be programmed to power off AV systems unused for extended periods of time, and to execute global AV system shutdowns at an Owner designated time of day.

INFRASTRUCTURE

For the purposes of this project, infrastructure is generally defined to be all preparatory work required to accommodate the planned technology systems. Specifically, infrastructure includes raceway systems (conduit, boxes, enclosures, and miscellaneous cable pathways), 120 VAC power, mechanical systems for the dissipation of heat generated by technology systems, structural supports and backing to support the weight of technology system devices, and architectural barriers/equipment access for compliance with the American’s with Disabilities Act, and general architectural standards.

All infrastructure related design requirements are to be identified by the technology systems designer for the other members of the A&E team using National CAD standard formatted Reference drawings. The Reference drawings are to be used for coordination between A&E team members, and not to identify construction requirements for contractors.

Electrical

The infrastructure requirements identified on the Reference drawings are to be integrated into the construction drawings prepared by the individual architects and engineers.

For example, all 120 VAC power requirements and raceway system requirements identified by the technology systems designer on the Reference drawings will be specified in the Electrical systems construction drawings by the project electrical engineer in preparation for construction by the project electrical contractor. Similarly, upon identification of AV system equipment heat loads by the technology system designer in the Reference drawings, all mechanical systems needed to dissipate the heat generated by AV system equipment will be specified by the mechanical engineer in the mechanical system construction documents in preparation for construction by the mechanical contractor. Finally, all structural and accessible related requirements identified by the technology systems designer on the Reference drawings will be specified in the Architectural construction drawings by the project architect, in preparation for construction by the general contractor. Please note that cable is not included in infrastructure, and that all technology systems cable will be specified by the technology systems designer along with all technology systems equipment, for installation by the appropriate technology systems contractor.

STRUCTURED CABLING SYSTEMS

GENERAL

Voice/data cabling (structured cabling systems) will be designed, furnished and installed by USU. Provide raceway systems only.

SECURITY SYSTEMS

GENERAL

All security systems will be designed, furnished and installed by USU. Provide raceway systems only.

AUDIO AND VIDEO SYSTEMS

GENERAL

Audio and video systems will be specified in full compliance with established campus standards. System equipment will be specified for consistency with manufacturers and models identified by. All video systems will be digitally based, deploying HDBaseT switching, processing, distribution, and transport technology. All video systems will be fully compliant with high definition content protection (HDCP) standards.

GYMNASIUMS

Specify audio systems for high quality voice and music reproduction. For the seating and court areas, specify complete speaker system coverage using large format,

compression driven, high "Q" devices. Provide a frequency response of 200 Hz to 12,000 Hz + 3 dBA, with no less than 90 dBA sound pressure level present at any seat/location, with no more than 14% articulation loss of consonants. There is an existing speaker cluster located above the scoreboard at the north end of the facility.

In public restrooms, concourses, snack bar areas, other similar public areas, locker rooms, meeting rooms, taping and treatment stations, and all media areas, specify basic quality, 70 volt distributed speaker systems for program reinforcement. Segregate speaker circuits for appropriate level control and signal distribution to accommodate individual space use. In luxury boxes, provide high quality, 70 volt distributed speaker systems for program reinforcement. Remotely locate power amplifiers in the proximity of individual speaker systems. Condition power amplifier rooms and other equipment rooms appropriately with required 120 VAC service and heat dissipation with 20% spare capacity.

Specify high power wireless transmission systems for all assisted listening systems and wireless microphone systems that include distributed antenna systems. Provide wireless microphone systems including, but not limited to head worn microphone elements and high power body pack transmitters for referees; and high power hand held transmitters for miscellaneous use.



Specify portable sound system equipment including, but not limited to, microphones, cords, stands, monitor/fill speakers. Include multi-boxes throughout the facility for input and output connectivity to portable media systems, wired microphones, and specialty speaker monitoring systems.

Specify a complete control booth appropriate for the designed sound system. Include mixing consoles with inputs for all microphones plus 25% spare capacity, resident media sources for playback of audio programs, digital audio processors, power amplifiers, monitor speakers, auxiliary inputs and outputs, equipment racks, as well as all other necessary items commiserate with university gymnasium sound systems.

Network all power amplifiers for monitoring and remote control using a computer in the control booth. The monitoring system will provide real time data for individual amplifier load, temperature, and current status.

Specify fully integrated remote control systems. Control systems will be programmed with macros to simplify sound system set up and operation. For example, without implying limitation, macros will be programmed for orderly power up and down of the sound system, speaker system zone muting procedures for various seating configurations, system preset selection for specialty functions.

FITNESS AREAS

Specify music reproduction systems with multiple high quality speakers with an 80 Hz to 15,000 Hz frequency response. Provide several inputs for source devices such as MP3 players, computer audio, and satellite radio. Provide a basic, wall mounted control system for system power, source selection, and volume control. Protect all speaker systems with limiters to prevent speaker system damage. Provide approximate 46" diagonal flat panel television monitors in throughout all rooms. Equip each monitor with a digital television receiver. Provide connection to the satellite/TV distribution system.

CLASSROOMS

All classroom AV systems will be designed, furnished and installed by USU. Provide raceway systems only.

CONFERENCE ROOMS

Conference rooms will not be provided with the capability for voice reinforcement. Speaker systems will be provided for the playback of media content only. Speaker systems will be integral to the large screen flat panel monitors.

Conference rooms will be provided with several digital and analog video inputs and media source devices in each section. These devices will include, but not be limited to, digital and analog inputs for portable computers, and Bluray DVD players. Audio originating from these source devices will be selected, processed, and amplified to the speaker system.

Digitally based, HD base T video systems will be provided to select, distribute, and display digital video signals in their native format; or analog video signals in a scaled format for large screen display of subject matter. A single, approximately 70" large screen LED monitor with RS-232 control will be specified for each room. Monitors will be specified in a 16:9 format, with a minimum native resolution of 1080p.

Conference rooms will be equipped with an integrated control panel for control of all audio and video system components. To meet this need, a button control panel will be provided. The control panel will be programmed in full compliance with the end user's desired button layout, configuration, and labeling. Each section of the divisible conference room will be equipped with AV systems as described above. The systems will only operate independently. It will not be possible to combine AV system functionality.

BREAK ROOMS

Provide an approximate 46" diagonal flat panel television monitor in each break room. Equip each monitor with a digital television receiver. Provide connection to the satellite/TV distribution system.

FACILITY-WIDE VIDEO SYSTEMS:

Specify base band video distribution systems and RF TV distribution systems for the transport of video and combined audio/video signals. Specify video/TV outlets and the associated approximately 46" diagonal LCD monitors in media

boxes, all snack bar areas, dining areas, periodically in all public concourses, elevator lobbies, public lobbies, locker rooms, taping and treatment stations, rehabilitation, wet room, player's lounge, and coaches offices, and other similar areas indicated in the space data sheets of the program. Provide amplification of the campus TV signal throughout the facility. Provide signal strength of between + 5 and 10 dBv, with a minimum bandwidth of 750 MHz. Provide facilities for the distribution of satellite signals to multiple satellite receivers throughout the facility.

Specify an integrated digital signage system throughout the building. Specify remote, small form factor central processing units to be located at each monitor position, for IP addressable, Ethernet distribution of content and basic monitor control. Specify a central digital signage management software package and all required hardware. Include provisions for visual signage of public address announcements for compliance with the American's with Disabilities Act.

FACILITY-WIDE PAGING SYSTEM

A 4-zone public address system will be provided. Although specified primarily for emergencies, the public address system will also be suitable for use regarding building closing, and other similar announcements. The primary input will be a push-button style paging microphone. Additionally the public address system will be integrated with the facility telephone system so that paging can originate from designated

telephone sets. Power amplifiers and speaker systems will be provided as appropriate for individual spaces utilizing a constant voltage, 70 volt distribution system.

CLOCK SYSTEM

Provide IP networkable, battery operated clocks throughout the building, and a GPS receiver/transmitter at a central location. Specify clocks to be correctable by the GPS receiver/transmitter via an IP networked connection to each clock. Specify all horizontal data cable in compliance with the above stated campus standards.

Electrical

civil

INTRODUCTION

This section pertains to the utilities, grading and site sustainability for the proposed Utah State University Aggie Life and Wellness Center (Proposed Building). Currently the building is a proposed 99,000 GSF to be located on the northwest corner of 800 East and 700 North on the campus of Utah State University in Logan. The information provided in the subsequent sections is programmatic in nature and will require further revision and refinement prior to final construction documents are completed.

UTILITIES

The project site is located on the northwest corner of the 800 East 700 North intersection. The site is bounded by 800 East, 700 North, the HPER building, and Aggie Legacy Fields on the north. A topographical and feature survey was completed for the project area by Civil Solutions Group, which is the basis of the information presented in this section. All utility information presented in this section is based upon the topographical and feature survey, Utah State University Facilities Utility Map, and discussions with Utah State University Facilities staff. The following sections detail the existing conditions and proposed changes, if any, to the utilities on site.

SEWER:

The site currently has multiple options for sewer service. The primary option for sewer connection is an existing 8" PVC sewer main that was stubbed south from an existing 8" sewer main that runs under Aggie Legacy Fields. A sewer manhole was installed along the west side of

Aggie Legacy Fields with the 8" PVC sewer main installed to a point approximately 50' south of the south line of Aggie Legacy Fields. The 8" sewer main was plugged, GPS located by Utah State University, and marked with a 4" x 4" square post with a metal plate on the top of the post. The post is buried approximately 12" below the existing ground surface.

The existing 8" sewer main is approximately 12' deep at the point of connection according to the construction documents from Aggie Legacy Field project.

Sewer mains also exist in 800 East and 700 North street. The main in 700 North street flows westerly and the main in 800 East street flows northerly. The sewer main in 700 North is located under the southern sidewalk and is approximately 10' deep. The sewer main in 800 East street is located just east of the road centerline and is approximately 7.5' deep.

The preferred and likely sewer connection will be to the existing 8" sewer main that was stubbed to the north side of Aggie Life and Wellness Center project area as part of Aggie Legacy Field project. This connection point has adequate depth, is adequate in size, and will disturb the least amount of project area.

The program utility map shown on the following page illustrates that 90 feet of 8" PVC sewer main will be required to service the proposed building. If and when the configuration of the proposed building changes the length of the 8" PVC sewer main may increase or decrease.

WATER:

The topographical and feature survey shows an existing Logan City 24" diameter ductile iron water main along the north side of 700 North Street. There is also an existing 10" diameter ductile iron water main along the east side of 800 East Street that is owned by Logan City. The nearest Utah State University water main is located east of the HPER building running north and south on the east side of the utility tunnel. The Utah State University water main is a 10" diameter ductile iron pipe. An 8" ductile iron pipe was connected to the existing 10" ductile iron water main during the construction of Aggie Legacy Fields project. The 8" ductile iron main was routed west, over the utility tunnel to the west side of the utility tunnel at the northeast corner of the HPER building. The water main was blocked and marked at this location in anticipation of a connection for Aggie Life and Wellness Center Building.

It is recommended that Aggie Life and Wellness Center project connect to the existing 8" ductile iron water main at the northwest corner of the HPER building for the culinary water service to the building.

The program utility map on the subsequent page shows the location of the connection to the existing 8" ductile iron water main and the approximate 650' of 8" ductile iron water main that will be required to service Aggie Life and Wellness Center. The Utah State University Facilities Department minimum water line size is 8 inches. It is recommended that the 8" water main be extended to the final footprint location of Aggie Life and Wellness Center building at which point a smaller culinary service main can be split off of the 8" main for the culinary needs of the building. The 8" ductile iron main could then be reduced to a 6" ductile iron fire line depending upon the recommendations of the fire suppression system engineer.

There is an existing fire hydrant located on the south side of 700 North Street directly south of the southwest corner of the HPER building. This hydrant could service the southern portion of Aggie Life and Wellness Center, but it is anticipated that at least one additional fire hydrant will be required in the northern portion of the project. It is recommended that a hydrant be installed near the drop off location for the Outdoor Recreation Program.

STORM DRAIN:

There is an existing french drain located at the east base of the landscape berm on the west side of the project area that will be removed during construction. There are also two storm drain boxes located north of the HPER building in the area between the HPER building and Aggie Legacy Fields. These boxes drain to gravel surrounding the base and side of the boxes and are to remain or be replaced following the installation of the water main, chilled water and steam lines for the building. There are no additional storm drain inlets or piping located within the project area.

The preliminary soils analysis confirms that gravel materials will be encountered below the top 5' of material. Aggie Legacy Fields had similar existing material, which exhibited high percolation rates. All site drainage on Aggie Legacy Fields is directed to two 10' diameter perforated sumps or dry wells that are installed with 1" minus gravel surrounding the sumps.

It is recommended that this same method of construction be utilized for Aggie Life and Wellness Center. It is anticipated that approximately two to three 10' diameter perforated concrete sumps will be needed for this project. The approximate depth of the sumps is 10' with an open

bottom for drainage to the existing material. It is recommended that all hardscape areas be graded to drain to inlets or bio-swales that will direct the water to the sumps for collection and percolation.

The proposed method of installing gravel sumps is accepted by Utah State University Facilities Department and will enable the project to meet the LEED Storm Water Quality and Quantity Control points.

IRRIGATION:

This section will discuss the irrigation main lines that exist and the irrigation main lines that will be required as part of Aggie Life and Wellness Center. The Landscape section will cover in more detail the specifics of the type and locations of the irrigation system.

Currently an existing 4" transite irrigation main exists along the west, south and east sides of the project area. This main line will need to be removed by professionals trained to remove hazardous materials such as transite. The program utility map illustrates the areas where the transite line will be removed.

An existing 4" PVC irrigation main exists at the northwest corner of the project area and a second 4" PVC irrigation main exists north of the existing HPER fire lane. The new PVC piping currently connects to the existing Transite piping at locations approximately 50' south of Aggie Legacy Fields. The existing 4" irrigation main line is looped system that loops around Aggie Legacy Fields and has a second small loop around the project site. It is anticipated that the full second loop will not be possible with the proposed building footprint. The program utility map shows a

green line representing the proposed 602' of 4" PVC irrigation main. The main would be installed on the west and south sides of the proposed building to service the irrigation needs in those areas. It is possible during design that the diameter of the main line could be reduced based upon project need. The end of the proposed 4" PVC main will need to be plugged, block and marked.

GAS AND MECHANICAL:

It has been decided by the project team with input from Utah State University facilities that natural gas will not be required for this building.

The project will be serviced by steam and chilled water from the Utah State University central plant. The program utility map shows the proposed node location at the utility tunnel and the direct bury steam and chilled water piping. See the Mechanical section for more information pertaining to these items.

ELECTRICAL, COMMUNICATIONS, DATA:

This section will be handled in detail by the Electrical Engineer for the project. It will be noted in this section that a number of low voltage wires exist on site for the irrigation system. It is expected that these wires will be demolished and or salvaged where possible. The existing wiring to irrigation valves will be covered in detail by the project Landscape Architect.

GRADING AND SITE

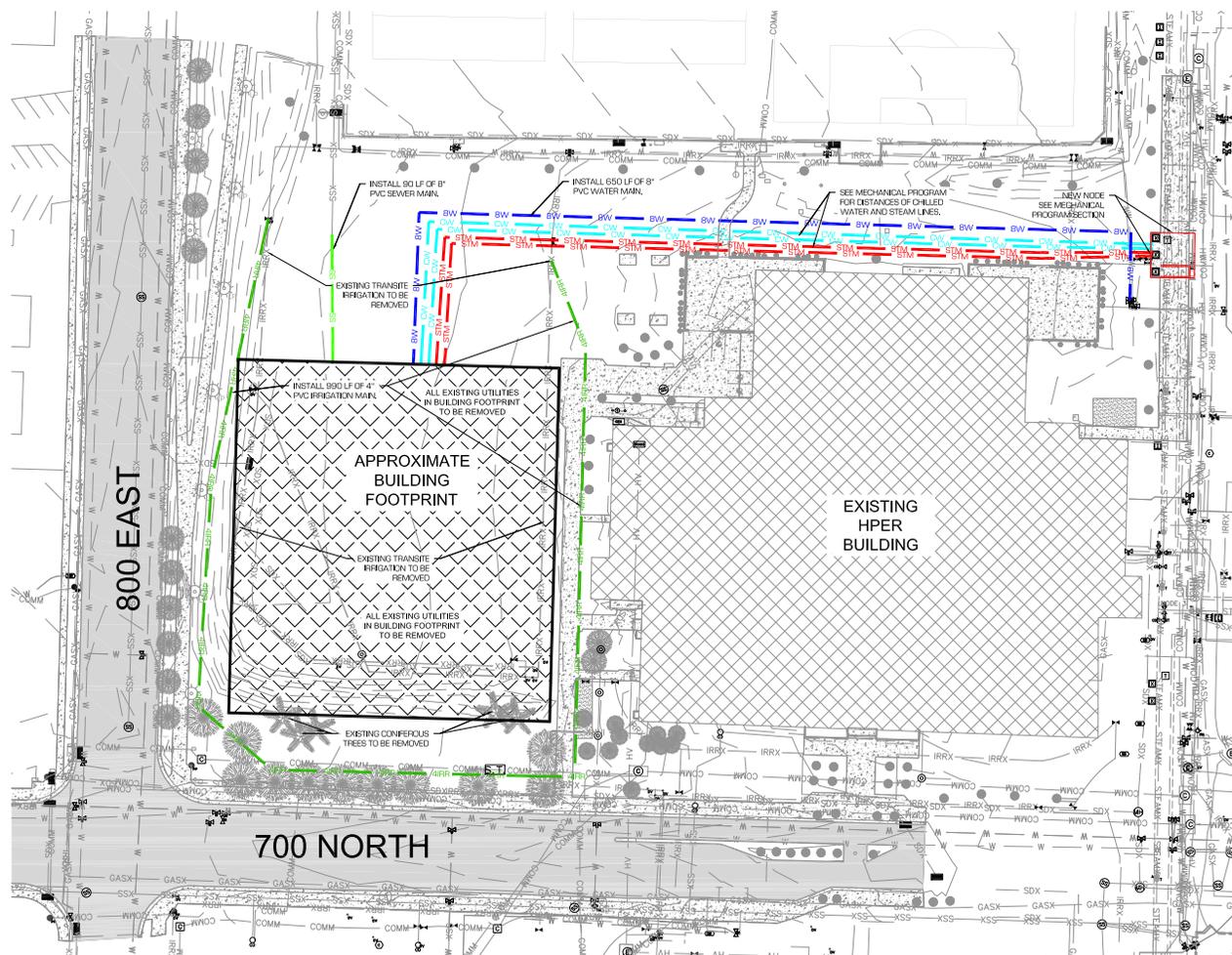
The project site for Aggie Life and Wellness Center has approximately 3.5-4' of elevation change from east to west. This represents an average slope of approximately 1.3%. It is anticipated that the site will be relatively flat in all areas with maximum slopes not exceeding 2% in most areas with limited areas approaching 4-5% slope. It is not anticipated that the site will require access ramps or abundant stair sections.

It is recommended that the service area entrances be located along the east wall of the building at the highest elevations of the existing site. This will ensure minimal stairs needed to enter the building on the east side. It is anticipated that the south, west and north sides of the building will be for user entrances. It is anticipated that these entrances will be accessed by sidewalks and plazas that do not exceed 5% slope.

Based upon the existing site grading there will be limited need for concrete retaining walls to control slope. It has been discussed by the project team that landscape berms are desirable and may be included in the overall site layout.

The existing sidewalk grades on the west, south and east sides of the project will be matched by the proposed plazas, sidewalks and driveways.

There is a need for a drop off/pick up area for the Outdoor



PROGRAM UTILITY MAP

Recreation Program. This drop off/pick up area may provide six long term parking stalls and will be a means to access rental equipment at the Outdoor Recreation Program office. This drop off/pick up area will likely be accessed from 800 East Street to a location near the northwest corner of the building, subject to the final layout of the building. It is anticipated that the drop off/pick up entrance may be covered with the extension of the building. The interface of the drop off/pick up area with the 800 East right of way area will need to be reviewed and approved by Bill Young the Logan City Engineer. All parts of the access in Logan City right of way will need to meet Logan City street standards.

There has been substantial discussion with the Utah State University Fire Marshall, Steve Bell, about fire truck access to the proposed building. Steve Bell noted that the Fire Dept. will require access to within 150' of all points on the building exterior. Any access exceeding 150' in length will require a fire truck turn around. He also noted that a 26' wide fire lane will be required if new building is 3 stories. Steve's assumption was that this would be placed on the west side of the existing HPER building, replacing the existing inadequate/undersized fire truck access to HPER, and would be able to serve both buildings.

SUSTAINABILITY

STANDARDS

The referenced standard utilized in the development of sustainable design includes current editions of *LEED-NC for New Construction Reference Guide*. The civil design will attempt to incorporate available credits in the Sustainable Sites and Water Efficiency Sections.

SUSTAINABLE SITES:

Three credits within this section will be explored during design. Prerequisite point 1 - Construction Activity Pollution Prevention will be included in the plan as a requirement. Credits 6.1, Storm Water Design - Quantity Control and 6.2 Storm Water Design - Quality Control will be explored. It is anticipated that both credits 6.1 and 6.2 will be achieved in addition to the Prerequisite point 1.

landscape

GENERAL

The site design is an integral part of the total project design and student experience. The landscape will continue to grow, develop and enhance the site as the project matures over time. From a landscape perspective the site is an incredibly important location on the corner of 700 North and 800 East on Utah State University's central campus. Essentially the site is in a key real estate location to promote healthy living, recreation and the USU experience. The frontage of the site should be inviting and comfortable with an appropriate plaza out front.

EXISTING CONDITIONS

Seamlessly connecting the site of Aggie Life and Wellness Center and Aggie Legacy fields together is a top priority. The fields lie adjacently to the north. The connections between the two projects should be visible, culturally siblings and extremely convenient for USU recreation participants. To the east is the HPER building and connecting to the HPER users between the HPER and Aggie Life & Wellness is also important. The site overall is generally natural grass and flat, with some berming on the edges. On the perimeter of the site are number of trees including Honeylocust, Blue Spruce and London Plane Tree. Most of the trees are mature, healthy and culturally valuable to USU. Through conversations with USU and the architecture programming team it has been deemed important preserve trees to the extent possible, but most important are the London Plane Trees.

Landscape design should include input from USU LOAM (Landscape, Operations and Maintenance) and Facilities. The irrigation system in the area will be disrupted by construction. Irrigation service to trees, plants and in-use grass should be maintained between April 1 to October 31st during construction. On the north side of the HPER building is the Rainbird Maxicom controller that helps manage water in the area and connects to the campus wide irrigation control system. The nearby irrigation controller can be used to manage water during construction. Temporary connections will be necessary during construction to keep plants alive and healthy.

OUTDOOR PLAZAS

Plazas and outdoor gathering rooms are essential to the student social life. The front plaza or hardscape area should be designed to provide a comfortable, inviting and aesthetically energetic place for students to meet and talk. Nearly all of the building users will pass through the front plaza on 700 North. This outdoor room should be designed to handle a lot of pedestrian traffic and easily facilitate the way finding towards the entrance. The ground surface should be a hard surface like poured concrete or pavers to endure time and use. The plaza should have plenty of built in seating for student socializing.

The entrance plaza and landscape should represent the recreational use of the site and building. The site should be designed to provide energy and encourage to students

to recreate in the building, outside on campus and in the outdoors. The encouragement should happen through plaza design, movement in plaza paving (curve linear) and sculpture. The bouldering wall in the front will also encourage recreation and socializing.

Logan, UT receives a fair amount of snow during winter time. Removal of snow on the plazas, walks and other hard surfaces is part of winter maintenance for LOAM. The hardscape surfaces should be designed to accommodate snow removal and proper equipment. The surrounding softscape areas should be designed to handle winter snow storage. The design process should include input from LOAM regarding snow removal.

On the north side of the building a small gathering area should be encouraged if the building includes concession stands. Students have expressed interest to have outside prep areas before playing games on the field. This area would need seating, cover from the rain/sun, bike parking and drinking fountain.

SITE CIRCULATION AND TRANSPORTATION RELATED

The majority of the transportation to the project for users will be walking, bicycling, bus, skating and driving to campus (not on-site parking). The new site walks and plazas will connect to the sidewalks on 700 north and 800 east. New sidewalks will also need to connect users Aggie Legacy Fields and USU HPER. The front or side plazas will need to consider the possibility of accommodating a USU campus bus stop and or CVTD bus stop. Bike parking is a major part of the transportation system related to the project. The site will need a hardscape surface for bike parking. During the programming it was discussed to break the total bike parking into multiple areas. Studies by USU have found that covered bike parking usage is about 75% and non-covered is around 25%. The majority of the bike parking should be covered bike parking if possible. A long board or skate board parking station should also be included. It has been discussed to also include a bike fix station in the project.

OUTSIDE RECREATION

The programming and planning discussions with Campus Recreation have further developed the ideas that the site should be used for recreation as well as the building. Outside recreation components that have been considered so far include a climbing boulder, box jumps, pull ups, a trail on the north side and the project design will yet consider others. The discussion on the boulder wall is to place it in the front to be in compliance with the marketing graphics presented to the students during the recreation campaign.

PLANTING DESIGN

One of the main elements that sets the USU campus apart from other universities is the greenery. USU Logan Campus has a strong urban forestry component with thousands of mature trees. USU also has a variety of landscape types including the traditional park like canvas, water wise plantings with color and native areas. The planting selection for this project should reflect Campus Recreation's towards the environment. The Outdoor Recreation Program is an important part of the Campus Recreation. To incorporate the values of Outdoor Recreation Program and Campus Recreation the planting selection should be water wise, if appropriate natives of the Bear River area region. Areas in the front should have plants with multiple seasons of color and texture. Areas in the back should consider low growing foundations plants, trees in the right location so as to not cover window views and grass in large areas which will also serve as recreation areas. The front

area (700 north) should be well planned with plants that have color in all four seasons, keep security mind with no hiding places and are incorporated into the plaza design.

IRRIGATION DESIGN

USU has a campus wide irrigation system using primarily canal water (secondary). The irrigation connection point is on the north and comes off the loop feeding Aggie Legacy Fields. The future irrigation control will connect with USU Maxicom system. Currently USU does not use drip irrigation due to dirty water; however this design will explore solutions. The irrigation distribution components will include large rotors for big grass areas. Planter beds will use sprays and small grass areas will use rotary sprays or sprays. Specifications and standards are very important to USU. The Recreation and Open Space Master Plan recommends that all new projects include a 3rd party water audit before finalizing irrigation installation and project close out.





Program Space Summary

04.1

PROGRAM SPACE SUMMARY

Overall Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
1.0 ADMINISTRATION	24		3,000
2.0 GENERAL PUBLIC & SUPPORT SPACES	23		5,350
3.0 RECREATION, FITNESS & SPECIALIZED ACTIVITY	20		53,800
4.0 HEALTH & WELLNESS	2		600
5.0 OUTDOOR RECREATION PROGRAMMING "ORP"	12		4,650
NON-ASSIGNABLE PROGRAM SPACE	21		31,678
GRAND TOTAL: LIFE & WELLNESS CENTER	102		99,078
PHASE 2 NATATORIUM ADDITION PROGRAM			
1.0 NATATORIUM / INDOOR AQUATICS	12		13,146

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
1.0 ADMINISTRATION			
Office Suite			
Reception/Waiting	1	150	150
Private Office - Executive 'A'	1	180	180
Private Office - Executive 'B'	2	150	300
Private Offices - Standard	6	120	720
Open Office	6	65	390
Intramural Supervisors Work Area	1	150	150
Department Conference Room	1	350	350
Professional Staff Break Room	1	200	200
Student Break Room	1	200	200
Work Room/Copy Area	1	150	150
Admin. Toilets/Restrooms	2	65	130
Storage	1	80	80
SUBTOTAL	24		3,000
TOTAL: 1.0 ADMINISTRATION		24	3,000
2.0 GENERAL PUBLIC & SUPPORT SPACES			
Public Reception			
Entry/Public Lobby Area	1	500	500
Control Desk	1	200	200
Lounge(s)	1	500	500
Equipment Check Desk	1	100	100
Equipment Rental Storage	1	500	500

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
2.0 GENERAL PUBLIC & SUPPORT SPACES			
Public Reception			
Department Classroom/Training Room	1	600	600
Classroom Storage	1	100	100
SUBTOTAL	7		2,500
Men's Locker Area			
Locker Area	1	600	600
Shower Area	1	175	175
Lavatory Area	1	100	100
Toilet Area	1	175	175
Dressing/Lounge	1	100	100
SUBTOTAL	5		1,150
Women's Locker Area			
Locker Area	1	600	600
Shower Area	1	175	175
Lavatory Area	1	100	100
Toilet Area	1	175	175
Dressing/Lounge	1	100	100
SUBTOTAL	5		1,150
Family & Misc.			
Family Locker Changing Room	2	100	200

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
2.0 GENERAL PUBLIC & SUPPORT SPACES			
Family & Misc.			
Open Family Locker Area	1	40	40
Day Lockers	1	100	100
Laundry Room	1	180	180
Vending Area	1	30	30
SUBTOTAL	6		550
TOTAL: 2.0 GENERAL PUBLIC & SUPPORT SPACES	23		5,350
3.0 RECREATION, FITNESS & SPECIALIZED ACTIVITY			
Gymnasiums			
Basketball Gymnasium: 3-Court	1	20,000	20,000
Gymnasium Equipment Storage	1	750	750
Multi-Activity Court Gymnasium	1	7,000	7,000
MAC Storage	1	250	250
Elevated Running Track	1	6,600	6,600
SUBTOTAL	5		34,600
Fitness Center			
Cardio	1	5,500	5,500
Strength Training	1	2,200	2,200
Free Weights	1	3,300	3,300
Flexible Multi-Purpose Fitness Studio	1	1,200	1,200
Stretching Area(s)	1	600	600
SUBTOTAL	5		1,150

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
3.0 RECREATION, FITNESS & SPECIALIZED ACTIVITY			
Fitness Center			
Trainer's Station	1	200	200
SUBTOTAL	6		13,000
Group Exercise			
Spin Studio	1	1,000	1,000
Spin Studio Storage	1	120	120
Large Group Exercise	1	3,000	3,000
Medium Group Exercise	0	2,000	0
Small Group Exercise	0	1,000	0
Exercise Storage	2	200	400
Climbing Wall/Studio	1	1,200	1,200
Climbing Wall Storage	1	80	80
SUBTOTAL	7		5,800
Misc.			
Intramural Equipment Storage	1	200	200
Club Sport Storage	1	200	200
SUBTOTAL	2		400
TOTAL: 3.0 RECREATION, FITNESS & SPECIALIZED ACTIVITY	20		53,800
4.0 HEALTH & WELLNESS			
Wellness			
Reception/Waiting	0	240	0

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
4.0 HEALTH & WELLNESS			
Wellness			
Private Office/Consultation Rooms	0	140	0
Fitness Assessment and Testing (Intramural Programming)	1	500	500
Wellness Resource Library	0	400	0
Massage Therapy Room	0	180	0
Instructional Kitchen/Nutrition Lab	0	600	0
Changing Rooms	0	60	0
Storage	1	100	100
SUBTOTAL	2		600
Health			
Health Programming	0	0	600
SUBTOTAL	2		0
TOTAL: 4.0 HEALTH & WELLNESS	2		600
5.0 OUTDOOR RECREATION PROGRAMMING "ORP"			
Outdoor Rec Center			
Entry Lobby & Reception	1	200	200
Control Desk	1	130	130
Private Offices	2	120	240
Open Office Area	1	200	200
Work Room/Copy Area	1	150	150
Staff Breakroom & Food Prep Area	1	200	200

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
5.0 OUTDOOR RECREATION PROGRAMMING "ORP"			50
Outdoor Rec Center			
Classroom/Trip Planning	1	300	300
Washdown Space/"Mud" Room	1	600	600
Restrooms	2	65	130
Storage	1	2,500	2,500
SUBTOTAL	12		4,650
TOTAL: 5.0 OUTDOOR RECREATION PROGRAMMING "ORP"			4,650
TOTAL: ASSIGNABLE SF RECREATION PROGRAMMING			81
TOTAL: ASSIGNABLE SF RECREATION PROGRAMMING			67,400
NON-ASSIGNABLE PROGRAM SPACE			
Misc Areas/Building Services			
Public Restrooms (Men/Women)	2	300	600
Public Restrooms - Exterior (non-gender specific)	1	100	100
Building/Maintenance Storage	2	250	500
Fitness Equipment Workshop	2	200	400
Building Mechanical/Chiller Room(s) - HVAC	1	3,000	3,000
Main Electrical Room	1	600	600
Satellite Tele/Data Rooms	2	100	200
Fire/Water Service (Water Riser)	1	80	80
Janitor/Custodial Rooms	2	50	100
Vertical Circulation - Stairs	2	450	900
Vertical Circulation - Elevator	1	80	80
Satellite Electrical Room	1	200	200
	1	200	200

PROGRAM SPACE SUMMARY

Detailed Summary

PROGRAM /SPACE DESCRIPTION	QUANTITY	UNIT SF	PROPOSED TOTAL NSF
NON-ASSIGNABLE PROGRAM SPACE			
Misc Areas/Building Services			
Elevator Machine Room	1	70	70
Misc. Circulation/Unassignable/Structure/Walls			24,648
SUBTOTAL	21		31,678
TOTAL: NON-ASSIGNABLE PROGRAM SF	21		31,678
GRAND TOTAL: LIFE & WELLNESS CENTER			
	102		99,078
PHASE 2 NATATORIUM ADDITION PROGRAM			
1.0 NATATORIUM / INDOOR AQUATICS			
Indoor Pool - Fitness Recreation Water	1	3,340	3,340
Spa Area	1	315	315
Pool Deck	1	2,650	2,650
Men's Locker Room	1	1,000	1,000
Women's Locker Room	1	1,000	1,000
Aquatic Manager's Office	1	150	150
Life Guard Station / First Aide Room	1	120	120
Pool Equipment Storage	1	300	300
Wet Classroom	1	400	400
Natorium Mechanical	1	1,000	1,000
Pool Filtration Room	1	800	800
Chemical Storage Room	1	100	100
Misc. Circulation / Walls / Unassignable			1,971
SUBTOTAL	12		13,146
TOTAL NATATORIUM - INDOOR AQUATICS ADDITION	12	85% Efficiency	13,146



Room Data Sheets

04.2

AREA COMPONENT

1.1 Administration - Office Suite
Reception/Waiting

FUNCTIONAL DESCRIPTION Reception/waiting area for the Administration Office Suite.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS
 Net Program Area 140 square feet
 Min. Dimensions 10'-0" x 14'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling.
 Plumbing N/A

Electrical Wall outlets as required at equipment locations and around perimeter.
 Lighting Recessed Fluorescent.
 Audio / Video No.
 Computer Yes. One for use by staff maintaining reception desk.
 Telephone Yes. One for use by staff maintaining reception desk.
 Access Control Possible to have key card access or card verification capabilities to access this space.
 Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed Reception desk.
 Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Reception/Waiting

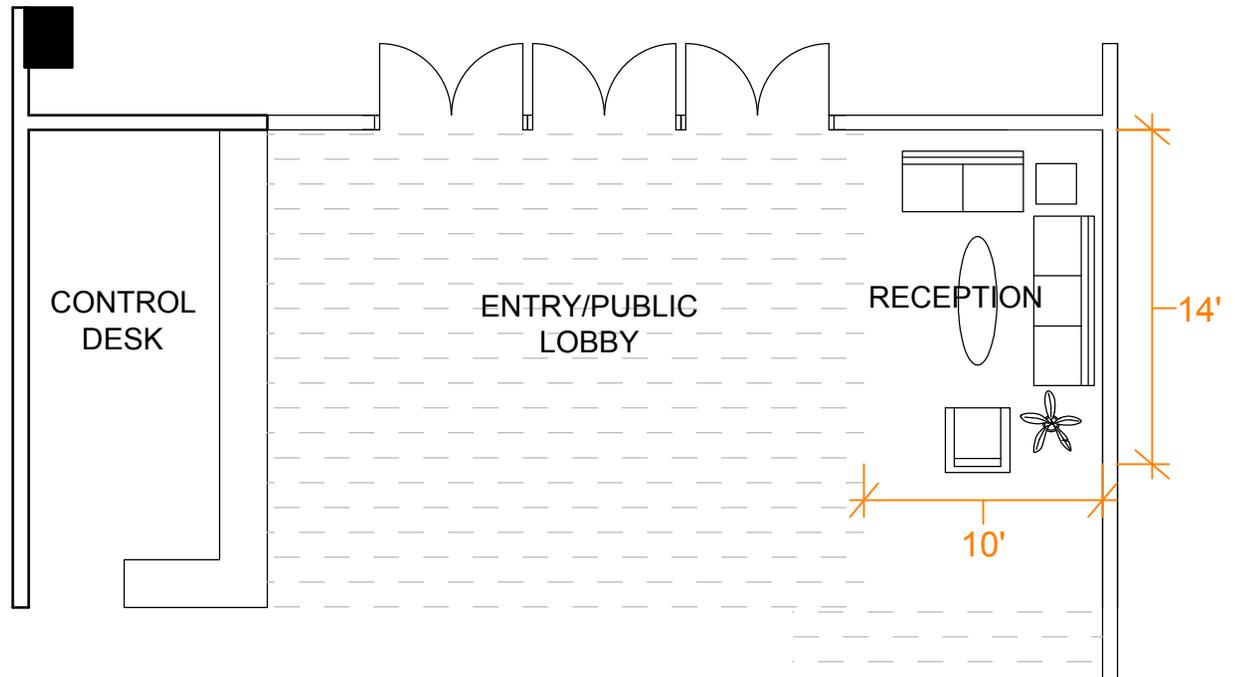
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Reception Desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Reception/Waiting 140 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Private Office - Executive

FUNCTIONAL DESCRIPTION Private offices for executive administration in the office suite.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	150 square feet
Min. Dimensions	10'-0" x 15'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet.
Doors	Wood door.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. With central HVAC system, would like thermostat and VAV box for each office.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Office desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Provide as many windows as possible on exterior walls. Natural Light / Views. Specific offices for Recreation Director and Facilities Coordinator.

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Private Office - Executive

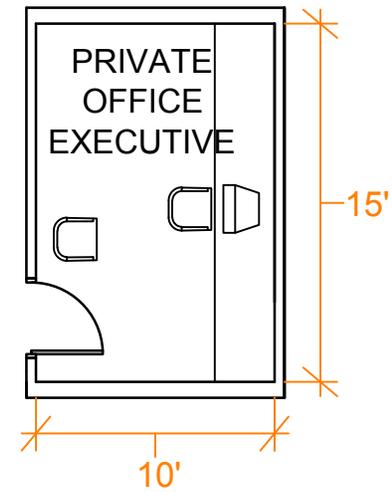
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Office Desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Private Office - Executive 150 sf

Room Data Sheets

AREA COMPONENT

1.1 Administration - Office Suite
Private Office - Standard

FUNCTIONAL DESCRIPTION Private offices for staff administration in the office suite.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS
 Net Program Area 120 square feet
 Min. Dimensions 10'-0" x 12'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 1-2

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors Wooden door.

Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. With central HVAC system, would like thermostat and VAV box for each office.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes. One for use by staff.

Telephone Yes. One for use by staff.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Office desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Provide as many windows as possible on exterior walls. Natural Light / Views. Specific offices to be confirmed by Campus Recreation.

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Private Office - Standard

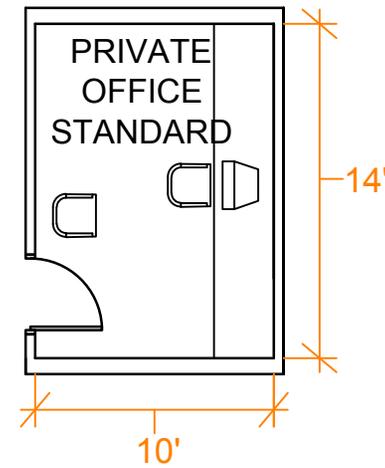
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Office Desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Private Office - Standard 120 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Open Office

FUNCTIONAL DESCRIPTION Accommodates space for four administration assistants or student interns at 65sf each in the office suite.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	260 square feet
Min. Dimensions	13'-0" x 20'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 4

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet.
Doors	TBD

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes. 4 for use by staff.

Telephone Yes. 4 for use by staff.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Office desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Open room. Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Open Office

SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

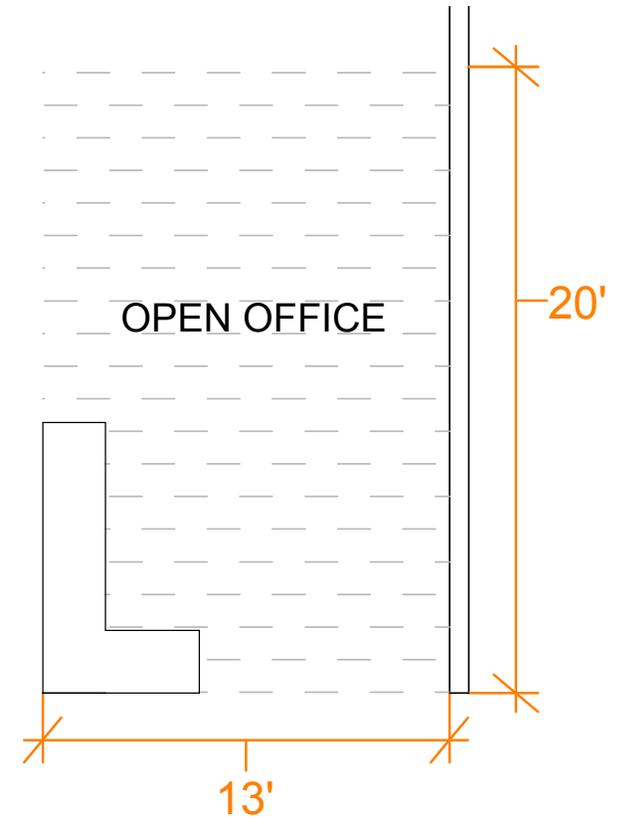
a Office Desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

ENTRY LOBBY



Open Office - 260 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Conference Room

FUNCTIONAL
DESCRIPTION

Capacity for 10-12 people for staff meetings.

ADJACENCY

Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL
REQUIREMENTS

Net Program Area 300 square feet
Min. Dimensions 15'-0" x 20'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers Approximately 10-12

ARCHITECTURAL

Ceiling Acoustical suspended ceiling or gypsum.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring and carpet.
Doors TBD

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer Yes.

Telephone Yes. One for use for conference calls.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Conference table.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets



AREA
COMPONENT

1.1 Administration - Office Suite
Conference Room

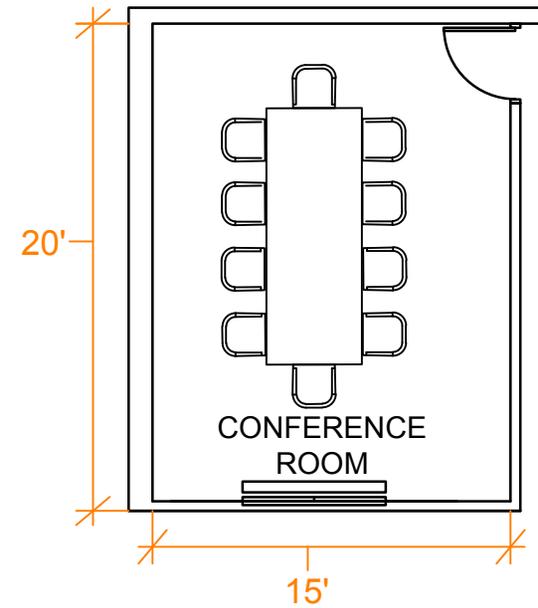
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Conference table.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Conference Room - 300 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Staff Breakroom

FUNCTIONAL DESCRIPTION Breakroom for campus recreation administration staff.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	180 square feet
Min. Dimensions	12'-0" x 15'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 4-5

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet.
Doors	TBD

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling. Exhaust to remove cooking odors. Independent thermostatic control.

Plumbing Dishwasher connections, refrigerator water connections, standard 2 compartment sink.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Staff Breakroom

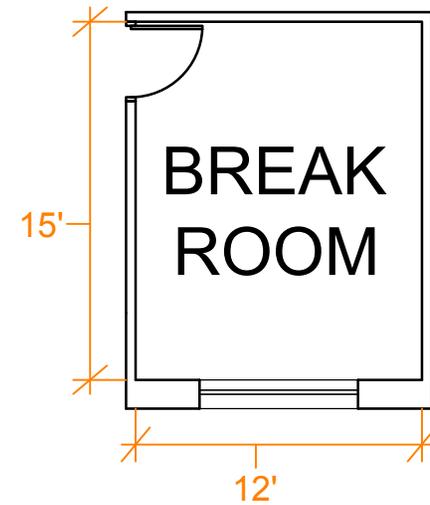
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Staff Breakroom - 180 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Work room/business center

FUNCTIONAL DESCRIPTION Work room/business center for campus recreation administration staff.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS
 Net Program Area 150 square feet
 Min. Dimensions 10'-0" x 15'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 3-4

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors TBD

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer Yes. One for business use.

Telephone Yes. One for business use.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Staff Breakroom

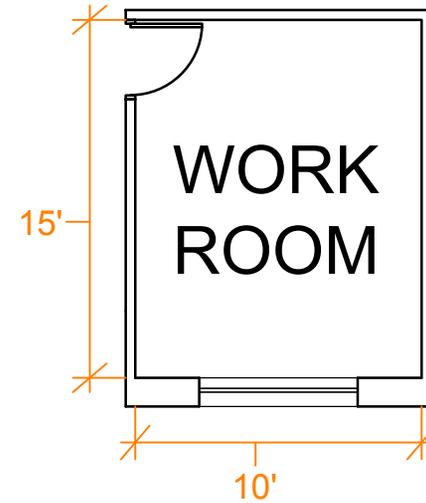
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Work Room/Business Center - 150 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Toilets/Restrooms

FUNCTIONAL DESCRIPTION Toilets/restrooms for campus recreation administration staff.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	65 square feet
Min. Dimensions	7'-6" x 9'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	1

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Wooden door.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling. Exhaust.

Plumbing Standard plumbing (water closet, lavatory, floor drain).

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Accessible at all hours.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Standard plumbing fixtures.

Movable None.

SPECIAL COMMENTS

Room Data Sheets

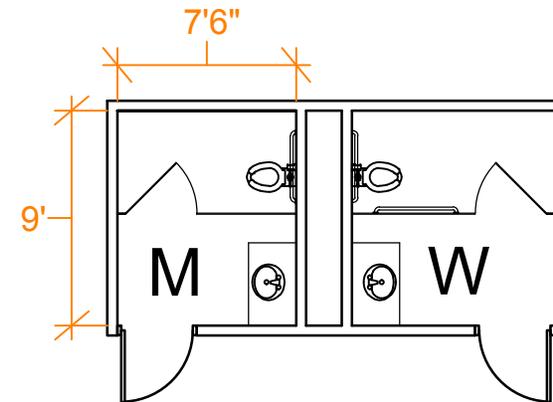
AREA
COMPONENT

1.1 Administration - Office Suite
Toilets/Restrooms

SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a solid surface sink & counter
- b mirror
- c accessible toilet with grab-bars and partition
- d toilet/urinal stall and partition
- e floor drain
- f recessed paper towel dispenser & trash



MOVEABLE EQUIPMENT

None.

SPECIAL
COMMENTS

Toilets/Restrooms - 65 sf

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Storage

FUNCTIONAL DESCRIPTION Storage for campus recreation administration staff.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	80 square feet
Min. Dimensions	8'-0" x 10'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring, tile or concrete.
Doors	Wooden door.

Windows No.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed None.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

1.1 Administration - Office Suite
Storage

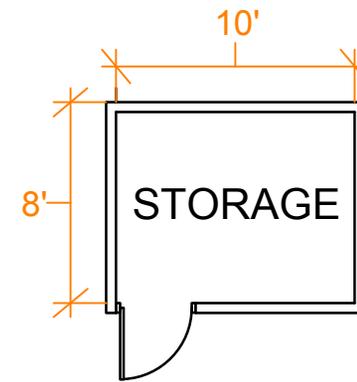
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Storage - 80 sf

Room Data Sheets

AREA
COMPONENT

2.1 Public Reception
Entry/Public Lobby Area

FUNCTIONAL DESCRIPTION Public entry/lobby area for all staff and students.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	500 square feet
Min. Dimensions	20'-0" x 25'-0"
Min. Height	High ceiling preferred for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring, carpet or tile.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed	To be confirmed by Campus Recreation.
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Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.1 Public Reception
Entry/Public Lobby Area

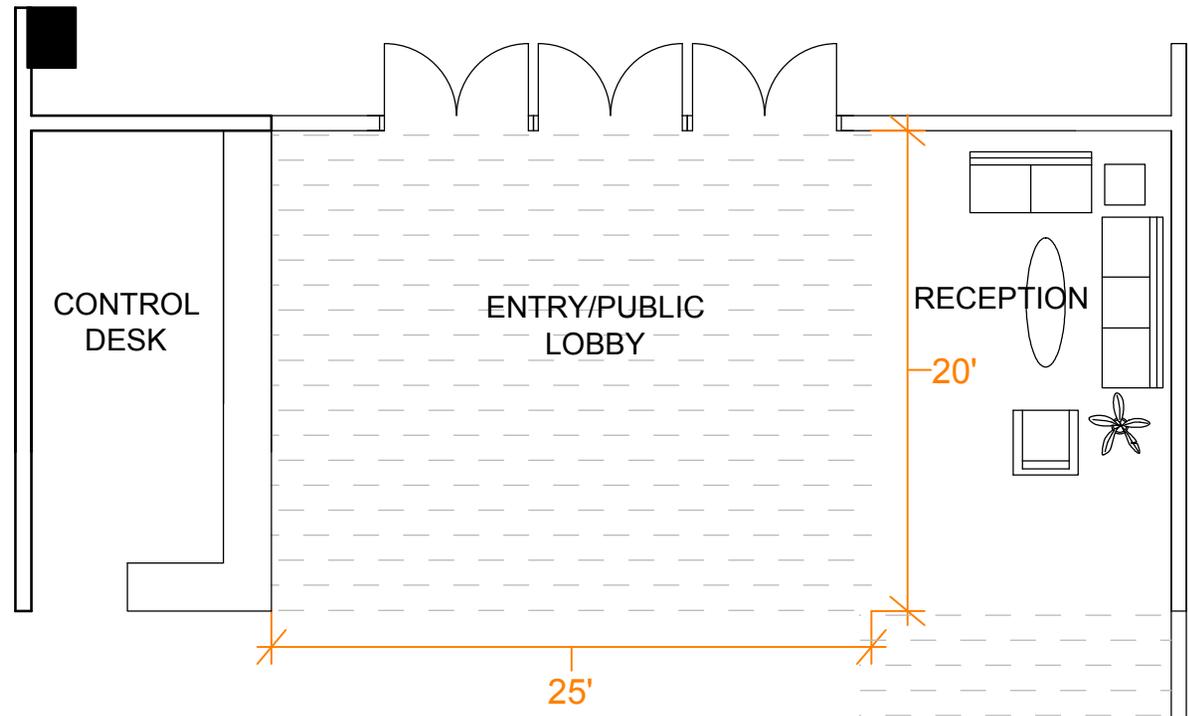
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Entry/Public Lobby Area - 500 sf

Room Data Sheets

AREA
COMPONENT

2.1 Public Reception
Control Desk

FUNCTIONAL
DESCRIPTION

Control desk for public entry/lobby.

ADJACENCY

Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL
REQUIREMENTS

Net Program Area 200 square feet
Min. Dimensions 10'-0" x 20'-0"
Min. Height High ceiling preferred for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers Approximately 1-2

ARCHITECTURAL

Ceiling Acoustical suspended ceiling or gypsum.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring, carpet or tile.
Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling. Independent thermostatic control.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes, for control desk staff.

Telephone Yes, for control desk staff.

Access Control Open to lobby.

Acoustics None.

EQUIPMENT

Fixed Control Desk.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

2.1 Public Reception
Control Desk

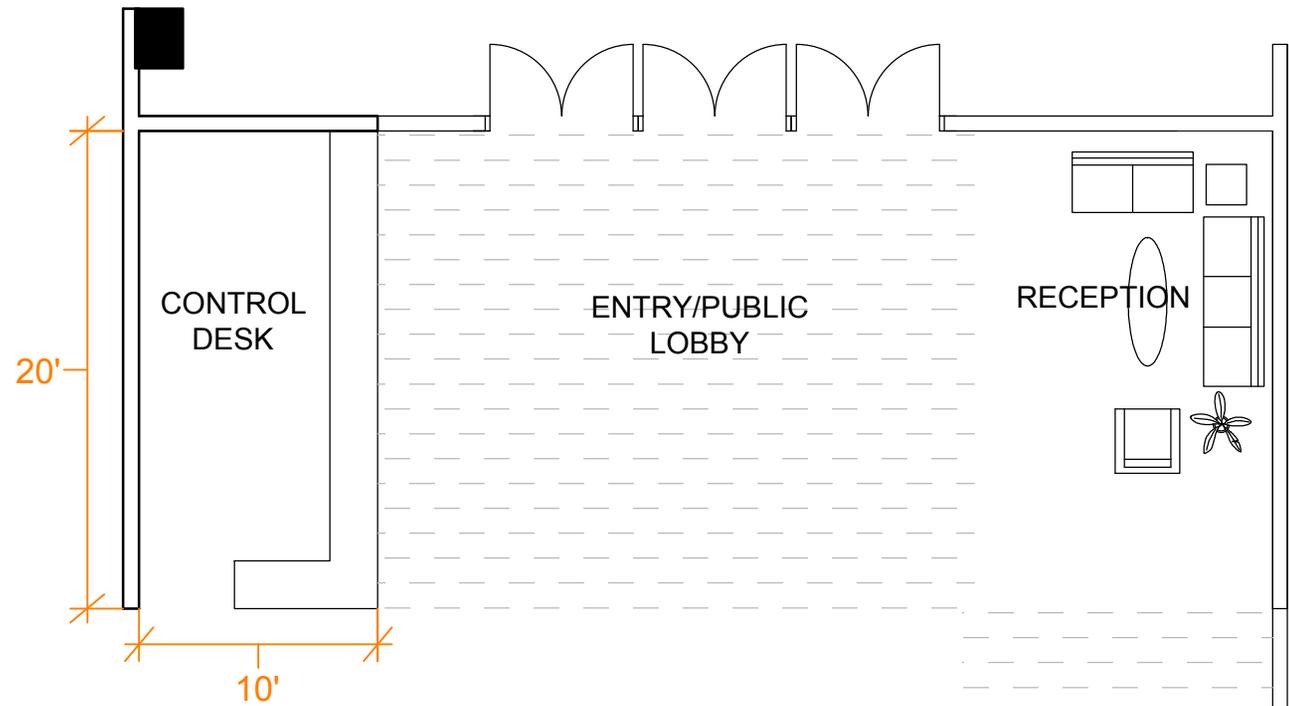
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Control Desk.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Control Desk - 200 sf

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Lounges

FUNCTIONAL DESCRIPTION Includes multiple lounge areas distributed throughout facility.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	500 square feet
Min. Dimensions	
Min. Height	High ceiling preferred for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. High supply outlets, low return air grilles.
------	---

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Open access.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Lounges

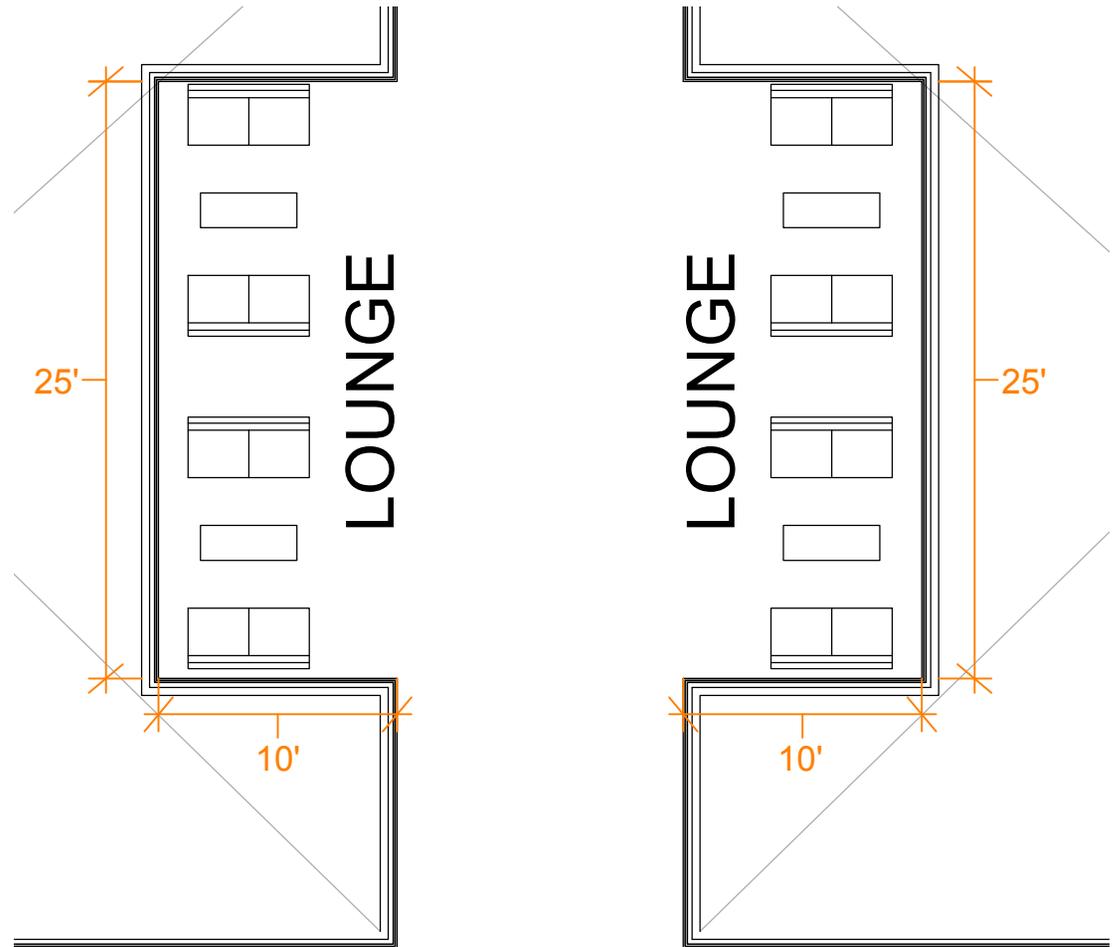
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

SPECIAL
COMMENTS



Lounges - 500 sf

Room Data Sheets

AREA
COMPONENT

2.1 Public Reception
Equipment Check Desk

FUNCTIONAL
DESCRIPTION

Equipment check desk for recreation students.

ADJACENCY

Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL
REQUIREMENTS

Net Program Area 100 square feet
Min. Dimensions 7'-0" x 14'-8"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers Approximately 1-2

ARCHITECTURAL

Ceiling Acoustical suspended ceiling or gypsum.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring carpet or tile.
Doors N/A.

Windows N/A.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes, for equipment check staff.

Telephone Yes, for equipment check staff.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Equipment Check Desk.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

2.1 Public Reception
Equipment Check Desk

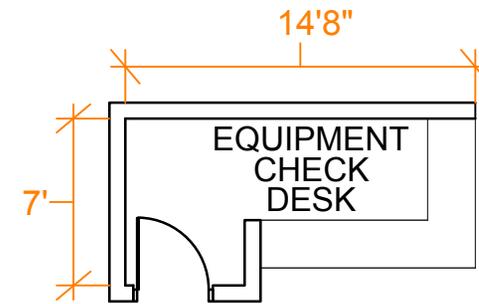
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Equipment Check Desk.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Equipment Check Desk - 100 sf

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Equipment Rental Storage

FUNCTIONAL DESCRIPTION Storage space for rentable recreation equipment.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS

Net Program Area	800 square feet
Min. Dimensions	20'-0"-40'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring, carpet or tile.
Doors	TBD.
Windows	No.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed None.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Equipment Rental Storage

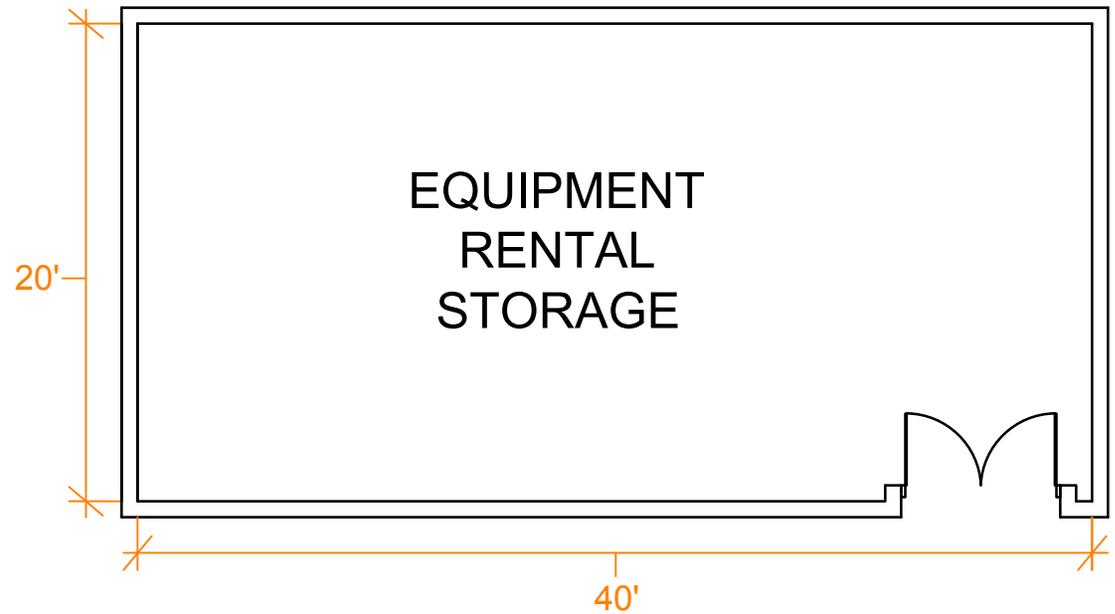
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Equipment Rental Storage - 800 sf

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Classroom/Staff Training Room

FUNCTIONAL DESCRIPTION 1 Multi-purpose classroom/staff training room for staff and students.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS
 Net Program Area 800 square feet
 Min. Dimensions 20'-0"-40'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors TBD

Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed To be confirmed by Campus Recreation.
 Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Open room. Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Classroom/Staff Training Room

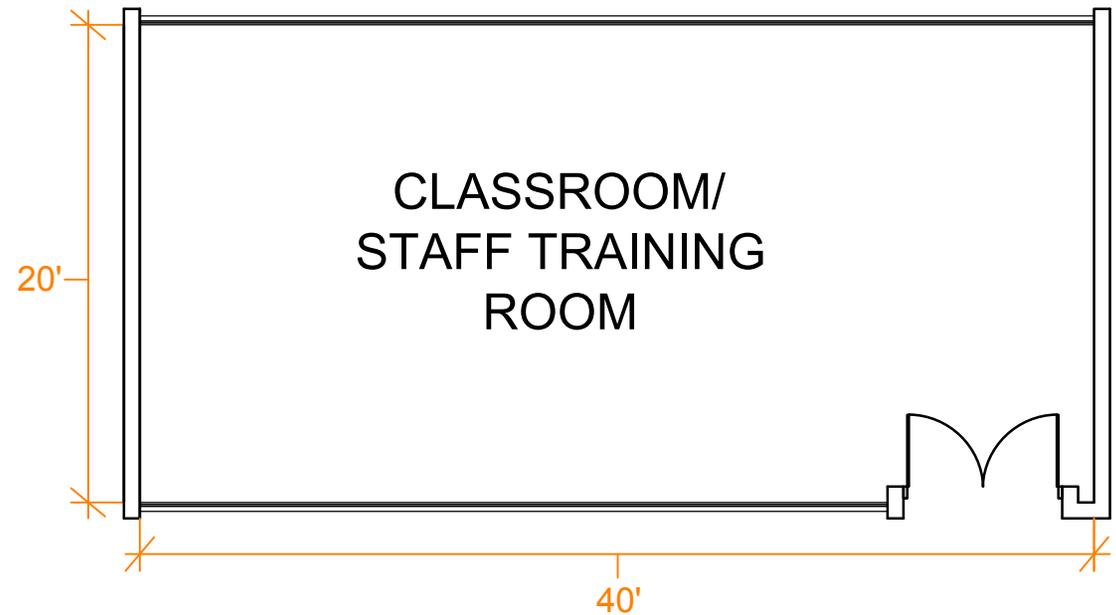
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Classroom/Staff Training Room - 800 sf

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Classroom Storage

FUNCTIONAL DESCRIPTION Storage for multi-purpose classroom/staff training room.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS

Net Program Area	100 square feet
Min. Dimensions	10'-0" x 10'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring, carpet or tile.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	No.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed None.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Classroom Storage

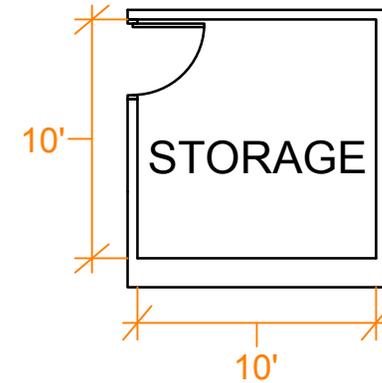
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Classroom Storage - 100 sf

Room Data Sheets

AREA
COMPONENT

2.1 Public Reception
Cafe/Smoothie Bar

FUNCTIONAL DESCRIPTION Cafe/smoothie bar for campus recreation students.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS
 Net Program Area 400 square feet
 Min. Dimensions 14'-0" x 28'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 1-2

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and tile.
 Doors TBD

Windows TBD

SYSTEMS

HVAC Standard mechanical heating/cooling. Provide exhaust based on cooking equipment requirements.

Plumbing Dishwasher connections, floor drain, floor sinks, refrigerator water connections, 3 compartment sink.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA COMPONENT 2.1 Public Reception
Cafe/Smoothie Bar

SCALE: 1/8" = 1'-0"

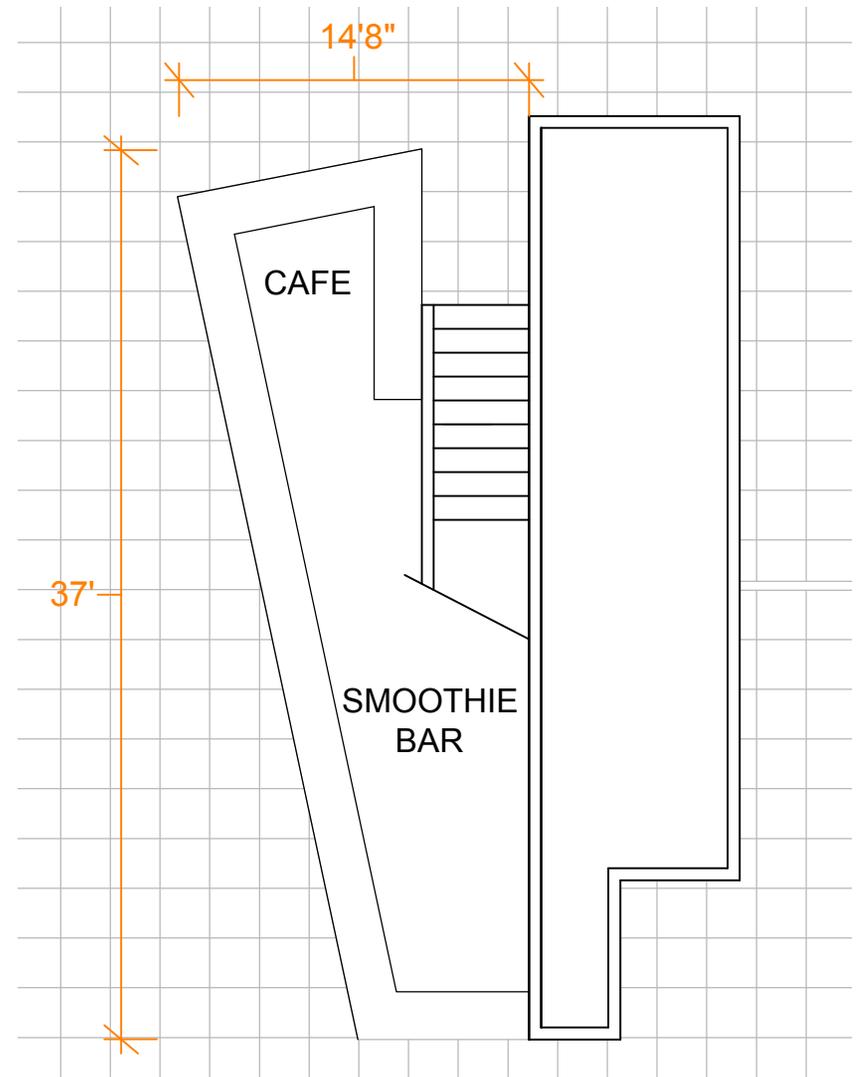
FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL COMMENTS



Cafe/Smoothie Bar - 400 sf

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Operations Storage

FUNCTIONAL DESCRIPTION Storage for operations equipment, may include multiple locations.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS

Net Program Area	600 square feet
Min. Dimensions	20'-0" x 30'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 1-2

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Wooden door.

Windows No.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
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Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed None.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.1 General Public & Support Spaces
Operations Storage

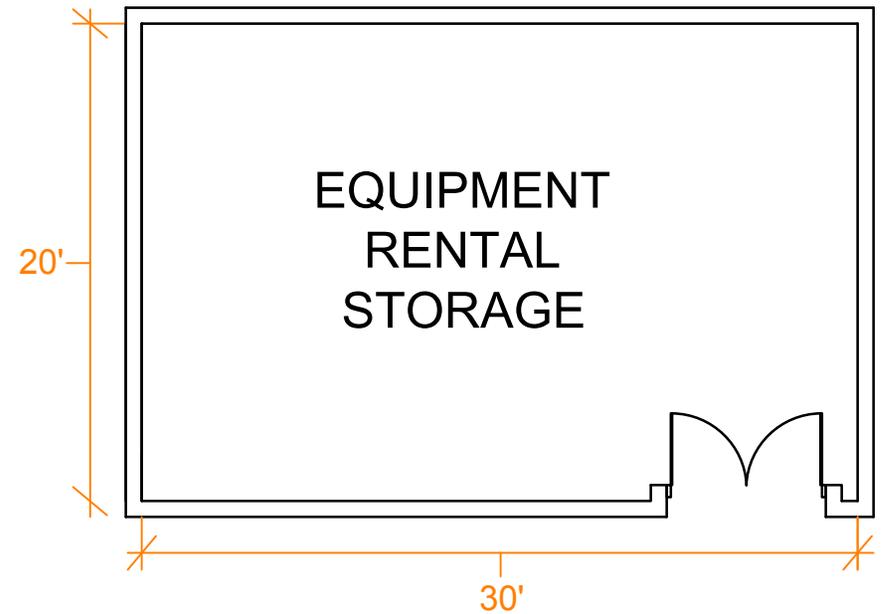
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Operations Storage - 600 sf

Room Data Sheets

AREA
COMPONENT

2.2 General Support
Men's Locker Area

FUNCTIONAL DESCRIPTION Men's locker room for recreation students.

ADJACENCY Primary: Entry Lobby, Equipment Check Desk.

DIMENSIONAL REQUIREMENTS

Net Program Area	1,200 square feet
Min. Dimensions	21'-7" x 61'-4"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Wooden door.
Windows	No.

SYSTEMS

HVAC	Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.
Plumbing	N/A.
Electrical	Wall outlets as required at equipment locations and around perimeter.
Lighting	Recessed Fluorescent.
Audio / Video	No.
Computer	No.
Telephone	No.
Access Control	Accessible during open hours.
Acoustics	Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.
Fixed	(5) Private Showers (5) Water Closets (4) Lavatories (100) Lockers
Movable	To be confirmed by Campus Recreation.

EQUIPMENT

Room Data Sheets

AREA COMPONENT 2.2 General Support
Men's Locker Area

SCALE: 1/16" = 1'-0"

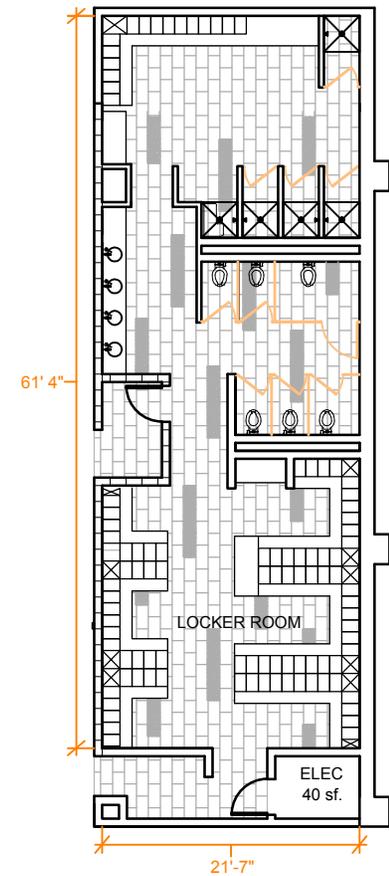
FIXED EQUIPMENT

- a 5 Private Showers
- b 5 Water Closets
- c 4 Lavatories
- d 100 Lockers

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL COMMENTS



Men's Locker Area - 1,200 sf

Room Data Sheets

AREA
COMPONENT

2.3 General Support
Women's Locker Area

FUNCTIONAL DESCRIPTION Locker room for female recreation students.

ADJACENCY Primary: Men's Locker Area.

DIMENSIONAL REQUIREMENTS

Net Program Area	1,200 square feet
Min. Dimensions	21'-7" x 61'-4"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	No.

SYSTEMS

HVAC Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Accessible during open hours.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed (5) Private Showers
(5) Water Closets
(4) Lavatories
(100) Lockers

Movable To be confirmed by Campus Recreation.

AREA COMPONENT 2.3 General Support Women's Locker Area

SCALE: 1/16" = 1'-0"

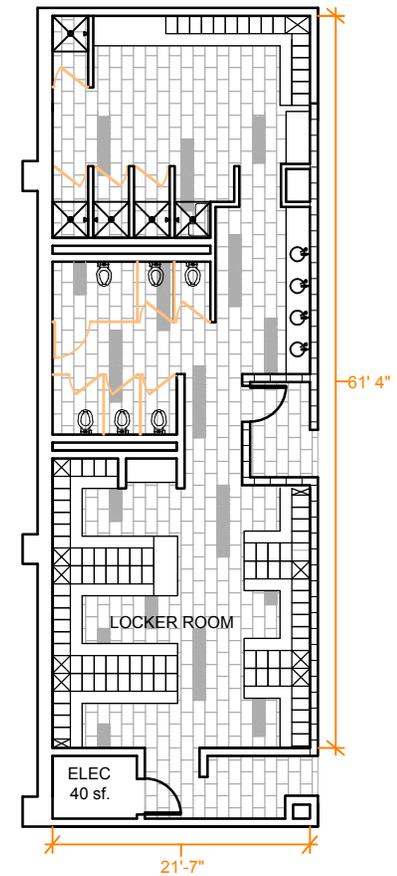
FIXED EQUIPMENT

- a 5 Private Showers
- b 5 Water Closets
- c 4 Lavatories
- d 100 Lockers

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL COMMENTS



Women's Locker Area - 1,200 sf

Room Data Sheets

AREA COMPONENT 2.4 Family & Misc.
Family Locker Rooms/Individual Changing

FUNCTIONAL DESCRIPTION Private individual changing rooms. ADA accessible.

ADJACENCY Primary: Men and Women's Locker Area.

DIMENSIONAL REQUIREMENTS
 Net Program Area 400 square feet
 Min. Dimensions 16'-0" x 25'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 1-2

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and tile.
 Doors Wooden door.
 Windows No.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Accessible during open hours.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed - solid surface sink & counter
 - mirror
 - accessible toilet with grab-bars and partition
 - floor drain
 - recessed paper towel dispenser & trash

Movable To be confirmed by Campus Recreation.

Room Data Sheets

AREA COMPONENT 2.4 Family & Misc.
Family Locker Rooms/Individual Changing

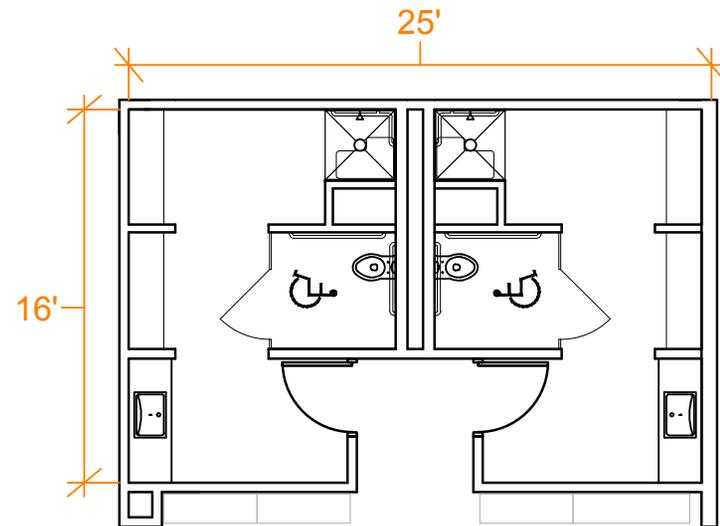
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a solid surface sink & counter
- b mirror
- c accessible toilet with grab-bars and partition
- d floor drain
- e recessed paper towel dispenser & trash

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL COMMENTS

Family Locker Room/Individual Changing Area - 400 sf

Room Data Sheets

AREA
COMPONENT

2.4 Family & Misc.
Day Lockers

FUNCTIONAL DESCRIPTION Private individual changing rooms. ADA accessible.

ADJACENCY Primary: Family Locker Area.

DIMENSIONAL REQUIREMENTS

Net Program Area	100 square feet
Min. Dimensions	10'-0" x 10'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Wooden door.
Windows	No.

SYSTEMS

HVAC Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Accesible during open hours.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed

- solid surface sink & counter
- mirror
- accesible toilet with grab-bars and partition
- floor drain
- recessed paper towel dispenser & trash
- lockers

Movable To be confirmed by Campus Recreation.

AREA
COMPONENT

2.4 Family & Misc.
Day Lockers

SCALE: 1/8" = 1'-0"

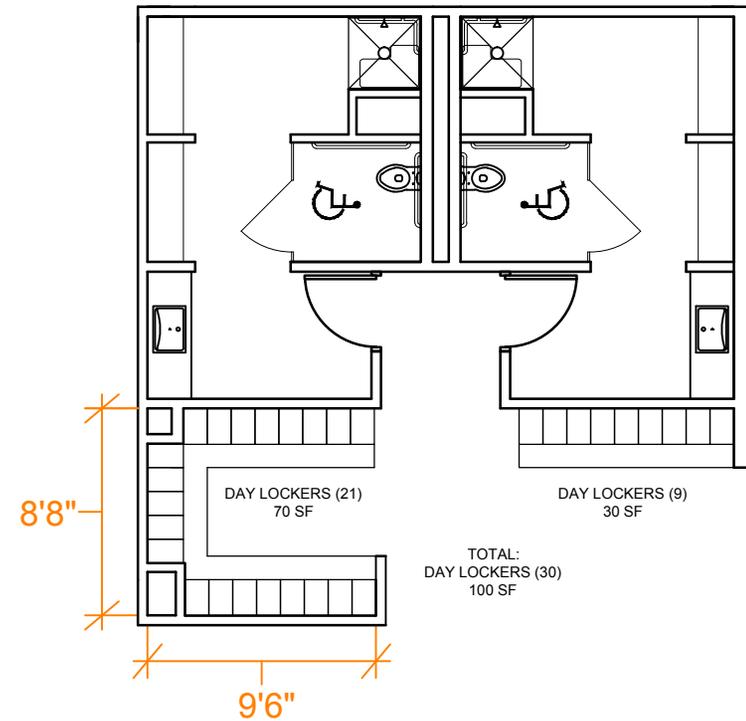
FIXED EQUIPMENT

- a solid surface sink & counter
- b mirror
- c accessible toilet with grab-bars and partition
- d toilet/urinal stall and partition
- e floor drain
- f recessed paper towel dispenser & trash
- g lockers

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL
COMMENTS



Day Lockers - 100 sf

Room Data Sheets

AREA COMPONENT 2.4 Family & Misc.
Unisex Toilet Room w/Shower

FUNCTIONAL DESCRIPTION Unisex toilet room with shower.

ADJACENCY Primary: Family Locker Area.

DIMENSIONAL REQUIREMENTS
 Net Program Area 120 square feet
 Min. Dimensions 10'-0" x 12'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers 1

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and tile.
 Doors Wooden door.
 Windows No.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.
 Plumbing N/A.
 Electrical Wall outlets as required at equipment locations and around perimeter.
 Lighting Recessed Fluorescent.
 Audio / Video No.
 Computer No.
 Telephone No.
 Access Control Accesible during open hours.
 Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.
EQUIPMENT
 Fixed - solid surface sink & counter
 - mirror
 - accesible toilet with grab-bars and partition
 - floor drain
 - recessed paper towel dispenser & trash
 Movable To be confirmed by Campus Recreation.

AREA COMPONENT 2.4 Family & Misc.
Unisex Toilet Room w/Shower

SCALE: 1/8" = 1'-0"

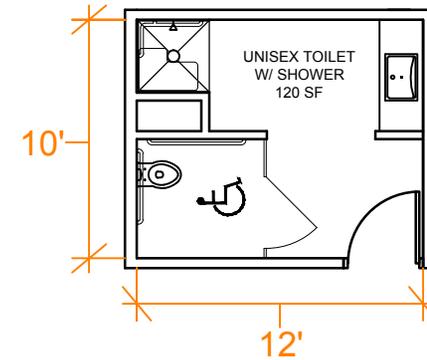
FIXED EQUIPMENT

- a solid surface sink & counter
- b mirror
- c accessible toilet with grab-bars and partition
- d toilet/urinal stall and partition
- e floor drain
- f recessed paper towel dispenser & trash

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.

SPECIAL COMMENTS



Unisex Toilet Room w/ Shower - 120 sf

Room Data Sheets

AREA
COMPONENT

2.4 Family & Misc.
Laundry Room

FUNCTIONAL DESCRIPTION Laundry room for recreation students.

ADJACENCY Primary: Family Locker Area.

DIMENSIONAL REQUIREMENTS
 Net Program Area 300 square feet
 Min. Dimensions 15'-0" x 20'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and tile.
 Doors Wooden door.

Windows No.

SYSTEMS

HVAC Standard mechanical heating/cooling. Provide exhaust air. Maintain negative airflow pressurization relative to adjacent areas.

Plumbing Domestic water connections for washers. Gas connections as required based on clothes dryer type. Floor drain, hose bibb.

Electrical Wall outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Washing and Drying Machines.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.4 Family & Misc.
Laundry Room

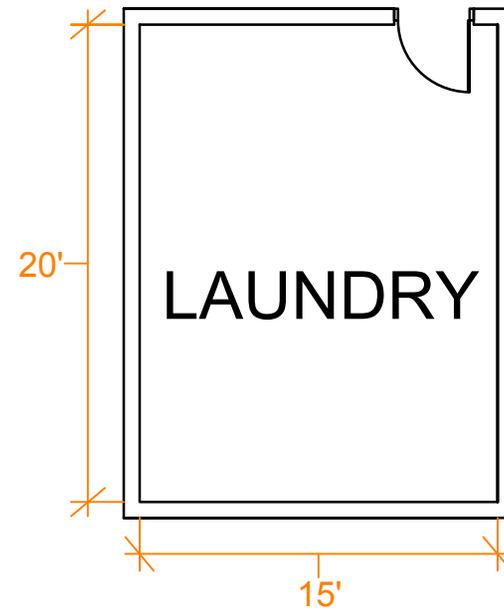
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a washing machines
- b drying machines

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Laundry Room - 300 sf

Room Data Sheets

AREA
COMPONENT

2.4 Family & Misc.
Vending Area

FUNCTIONAL DESCRIPTION Vending area for recreation students.

ADJACENCY Primary: Family Locker Area.

DIMENSIONAL REQUIREMENTS

Net Program Area	30 square feet
Min. Dimensions	3'-0" x 1
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	TBD
Windows	TBD.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
Plumbing	Floor drain for condensate connections.
Electrical	Wall outlets as required at equipment locations and around perimeter.
Lighting	Recessed Fluorescent.
Audio / Video	No.
Computer	No.
Telephone	No.
Access Control	Accesible during open hours.
Acoustics	Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed	Vending Machines.
Movable	To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

2.4 Family & Misc.
Vending Area

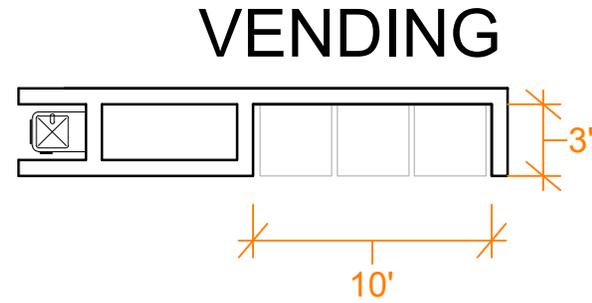
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a vending machines

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Vending Area - 30 sf

Room Data Sheets

AREA 3.1 Recreation
 COMPONENT 3-Court Basketball Gymnasium

FUNCTIONAL DESCRIPTION 3-Court basketball gymnasium, interchangeable with 3 volleyball courts for men's and women's student recreation.

ADJACENCY Primary: Gymnasium storage, Running Track.
 Secondary: Locker Rooms, Fitness Areas.

DIMENSIONAL REQUIREMENTS
 Net Program Area +/- 20,000 square feet
 Min. Dimensions 104'-0" x 192'-4"
 Min. Height High ceiling required for this space. Open to structure. 25' minimum clearance.

OCCUPANCY
 Access Accessible from multiple locations. Controlled exterior exit doors and equipment access.
 Security TBD
 Hours TBD
 Numbers Approximately 500

ARCHITECTURAL
 Ceiling Exposed acoustic metal deck.
 Walls Ground-face CMU or suitable durable material with applied or integrated acoustic treatments.
 Floor Hardwood athletic flooring.
 Doors Flush insulated metal doors at perimeter exits to exterior. Incorporate insulated roll-up door for equipment access.
 Windows Yes. Clearstory windows and daylighting at several locations above gymnasium.

SYSTEMS
 HVAC High supply outlets, low return air grilles. Ceiling fans. Occupancy Sensor for Demand Control Ventilation.
 Plumbing Drinking fountain with bottle filling station.
 Electrical Wall outlets a perimeter walls for maintenance.
 Lighting High bay or similar high efficiency fluorescent or LED fixtures.
 Audio / Video Distributed sound loud speakers & PA (zoned).
 Computer No
 Telephone No
 Access Control TBD
 Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption.

Room Data Sheets

AREA 3.1 Recreation
 COMPONENT 3-Court Basketball Gymnasium

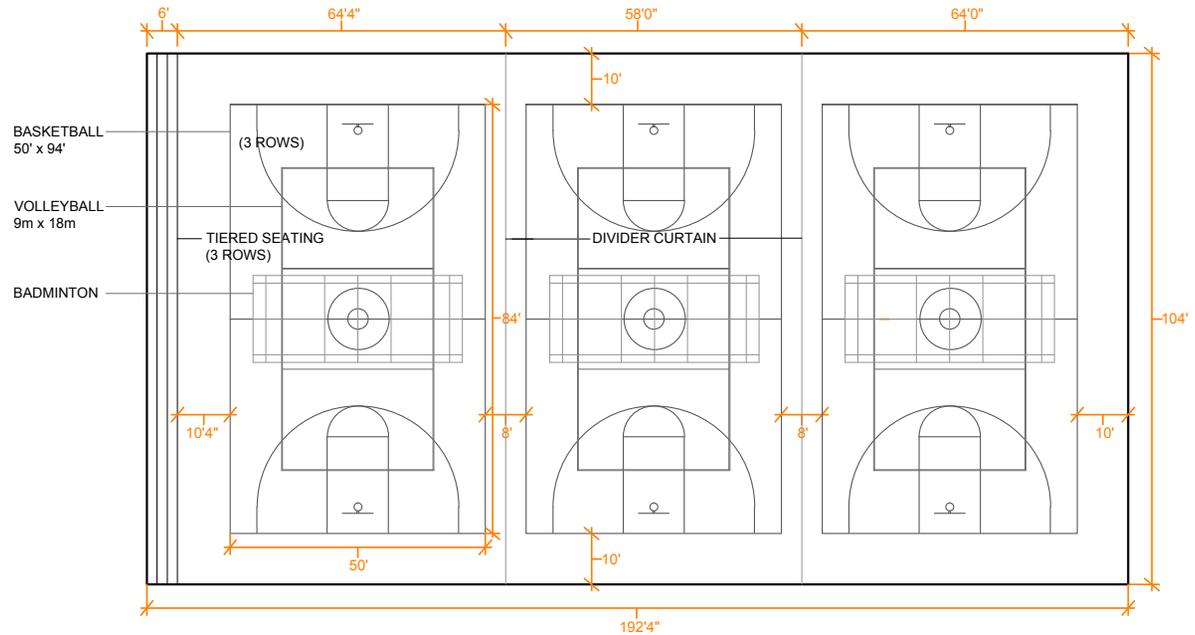
SCALE: 1/32" = 1'-0"

FIXED EQUIPMENT

- a. 6 motor operated basketball goals
- b. wall mounted side goals
- c. Tiered seating at perimeter (approx. 400-500)
- d. (3) Scoreboards

MOVEABLE EQUIPMENT

- e. 3 volleyball nets
- f. 6 badminton nets
- g. 2 divider curtains



SPECIAL COMMENTS

Large open room – Court area
 Visible from outside – As many windows as possible on exterior walls
 Natural Light / Views
 Focal point from entry
 Open storage cubbies, centrally located on the sidelines
 Storage accessible from gym

3 Court Basketball Gymnasium
 w/ Seating 20,000 sf

Room Data Sheets

AREA
COMPONENT

3.1 Recreation
3-Court Basketball Gymnasium



Room Data Sheets



AREA
COMPONENT

3.1 Recreation
3 -Court Basketball Gymnasium



Room Data Sheets

AREA
COMPONENT

3.1 Recreation
MAC Gymnasium

FUNCTIONAL DESCRIPTION Multi Activity Court gymnasium, interchangeable with basketball, futsal, indoor soccer, volleyball, and badminton for men's and women's student recreation.

ADJACENCY Primary: MAC storage.
Secondary: Locker Rooms, Gymnasiums.

DIMENSIONAL REQUIREMENTS

Net Program Area	+/- 7,000 square feet
Min. Dimensions	66'-0" x 104'-0"
Min. Height	High ceiling required for this space. Open to structure. 25' Clear Minimum.

OCCUPANCY

Access	Accessible from multiple locations.
Security	TBD
Hours	TBD
Numbers	Approximately 50.

ARCHITECTURAL

Ceiling	Acoustic metal deck.
Walls	Ground-face CMU or suitable durable material with applied or integrated acoustic treatments. Dasher board wall surface for indoor soccer, if required.
Floor	Light colored resilient rubber sheet flooring with logo and accent color.
Doors	Flush insulated metal doors at perimeter exits to exterior.
Windows	Yes. Clearstory windows and daylighting at select locations above gymnasium.

SYSTEMS

HVAC	High supply outlets, low return air grilles. Ceiling fans. Occupancy Sensor for Demand Control Ventilation.
Plumbing	Drinking fountain with bottle filling station (outside gym).
Electrical	Perimeter convenience wall outlets for maintenance.
Lighting	High bay or similar high efficiency fluorescent LED fixtures.
Audio / Video	TBD
Computer	No.
Telephone	No.
Access Control	TBD
Acoustics	Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption.

EQUIPMENT

Fixed	- (2) Motor operated overhead basketball goals - Dasher wall surface for Indoor Soccer w/ inset goals - (2) player boxes/benches for Indoor Soccer
Movable	Equipment layout with the following inventory (See attached layout options – equipment number varies): (1) Volleyball net (3) Badminton nets (2) Futsal goals (portable)

Room Data Sheets

AREA COMPONENT 3.1 Recreation
Elevated Running Track

FUNCTIONAL DESCRIPTION Elevated running track. Approximately 6,600 sf of track, 3-lane, 10 feet in width for men's and women's student recreation.

ADJACENCY Primary: Gymnasium, Fitness Center.

DIMENSIONAL REQUIREMENTS
 Net Program Area 6,000 square feet
 Min. Dimensions 240'-8" x 104'-0"
 Min. Height Low ceiling possible for this space.

OCCUPANCY
 Access Multiple entry points.
 Security TBD
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Acoustic metal deck or gypsum ceiling as required by code.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Rubber indoor track surface.
 Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Ceiling Fans.

Plumbing Drinking fountain with possible bottle filling station in close proximity.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Coordinate with gymnasium lighting.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.

Computer Yes. One to two for use by patrons maintaining training programs electronically.

Telephone No.

Access Control TBD

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed 3-lane track
 Movable

SPECIAL COMMENTS Elevated 3-lane running track overlooking the free weight gymnasium and fitness area. Provide as many windows as possible on exterior walls. Natural Light / Views. (1-2) Clock(s)

AREA
COMPONENT

3.1 Recreation
Elevated Running Track

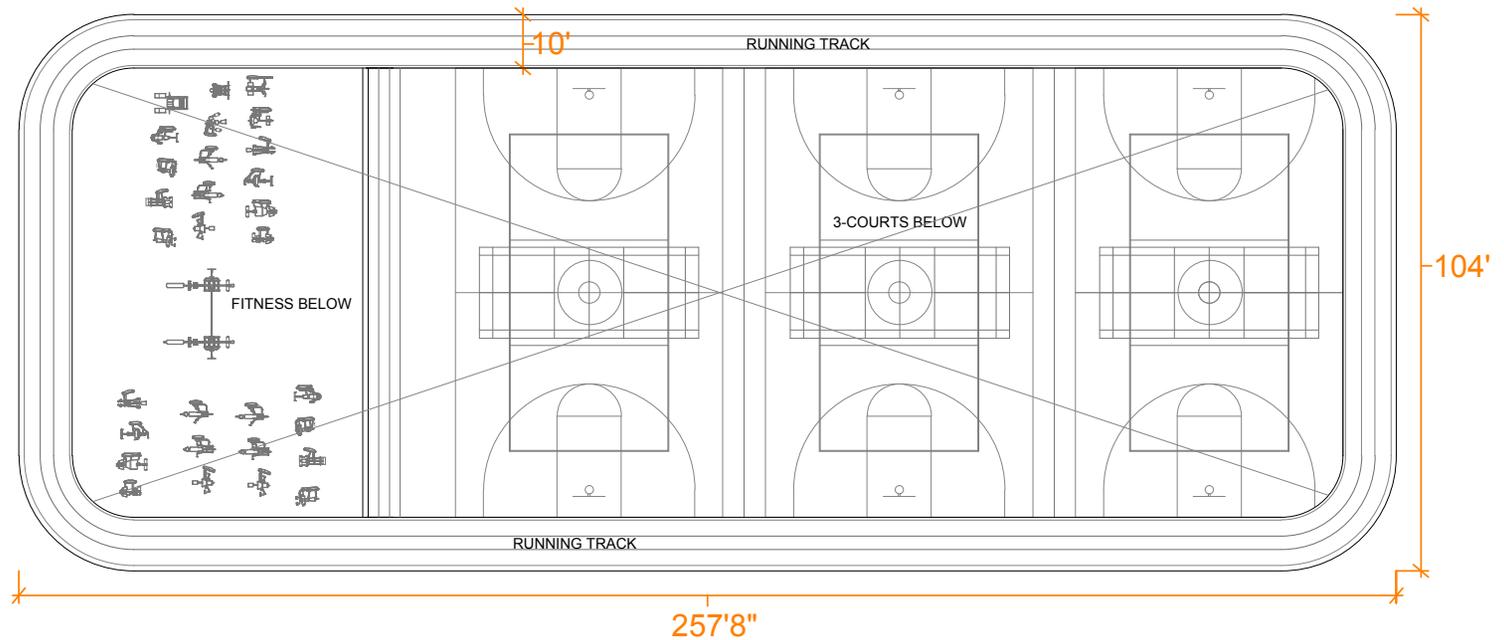
SCALE: 1/32" = 1'-0"

FIXED EQUIPMENT

a 3-lane running track

MOVEABLE EQUIPMENT

b (1-2) Clock(s)



SPECIAL
COMMENTS

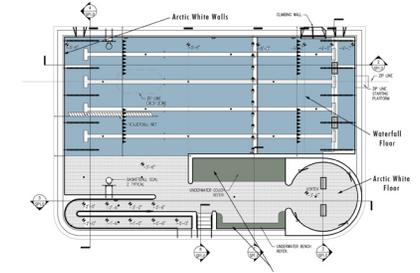
Open to gymnasium and fitness
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry

Elevated Running Track 6,000 sf

Room Data Sheets

AREA
COMPONENT

3.1 Recreation
Elevated Running Track



Room Data Sheets



AREA
COMPONENT

3.1 Recreation
Elevated Running Track



Room Data Sheets

AREA COMPONENT 3.2 Fitness Center
Strength Training

FUNCTIONAL DESCRIPTION Strength training facility for all men’s and women’s student recreation.

ADJACENCY Primary: Cardio, Weights, Flexible Fitness Studio, Stretching.
Secondary: Locker Rooms, Gymnasiums, Equipment Workshop

DIMENSIONAL REQUIREMENTS

Net Program Area	2,250 square feet
Min. Dimensions	30'-0" x 75'-0"
Min. Height	High ceiling preferred, minimum 10'-0" recommended.

OCCUPANCY

Access	Open - Multiple access points.
Security	Area to be monitored from Trainer’s Station.
Hours	TBD
Numbers	Approximately 40-50 (+/- 50 sf per person)

ARCHITECTURAL

Ceiling	Acoustic metal deck or supplemental acoustic ceiling panels “clouds”.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	High impact rubber sheet flooring, 10mm flooring at equipment locations.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. Ceiling Fans.
Plumbing	Drinking fountain with possible bottle filling station in close proximity.
Electrical	Floor outlets as required at equipment locations and around floor perimeter.
Lighting	Indirect, high efficiency fluorescent or LED fixtures.
Audio / Video	Yes. Satellite and/or cable access required. Video flat screen panels, distributed - multiple locations; ‘zoned’ sound/PA
Computer	No; Wi-Fi through facility
Telephone	No.
Access Control	None.
Acoustics	Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption.

EQUIPMENT

Fixed	None for maximum flexibility.
Movable	Selectorized machines & strength equipment distributed throughout multiple locations.

SPECIAL COMMENTS Equipment to be confirmed by Campus Recreation and Vendor. Based on space layout & FF&E budget allocation.

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Strength Training

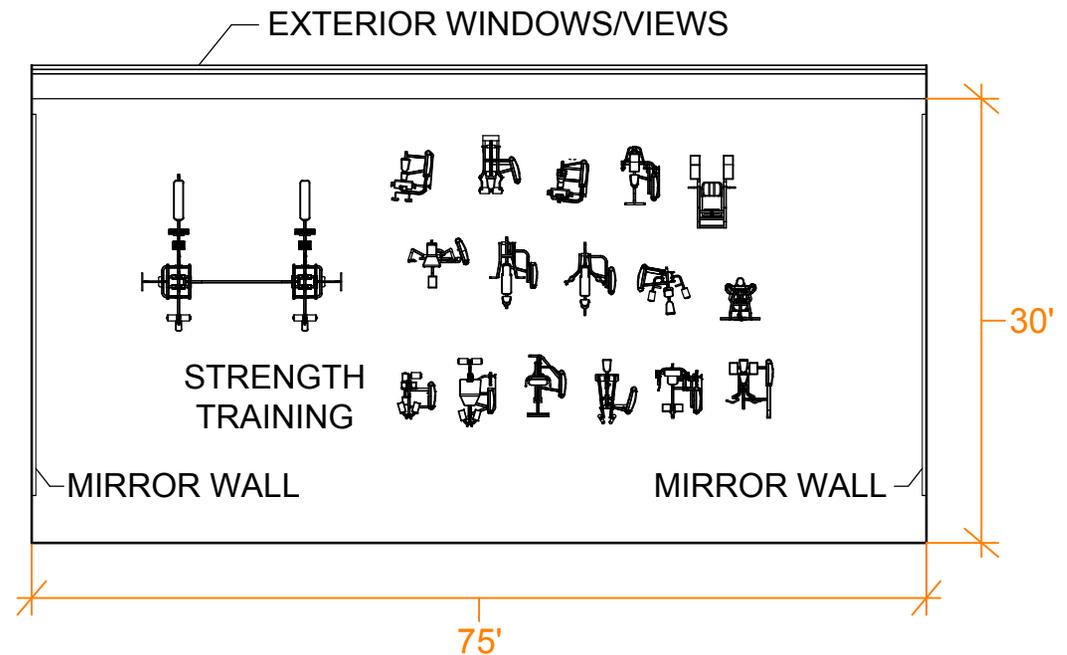
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a None.

MOVEABLE EQUIPMENT

select



SPECIAL
COMMENTS

- Large open room – Free weight area
- Visible from outside – As many windows as possible on exterior walls
- Natural Light / Views
- Focal point from entry
- Open storage cubbies, centrally located
- Stretching and exercise area adjacent to free weights
- Storage and equipment repair
- Mirrors on one or more interior walls

Strength Training 2,200 sf

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Strength Training



Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Strength Training



Room Data Sheets

AREA COMPONENT 3.2 Fitness Center
Cardio Training

FUNCTIONAL DESCRIPTION Fitness and cardio equipment area.

ADJACENCY Primary: Weight Strength Training, Fitness Studio, Stretching Area.
Secondary: Locker Rooms, Gym, Lobby, Equipment Repair.

DIMENSIONAL REQUIREMENTS
 Net Program Area 5,500 square feet
 Min. Dimensions 55'-0" x 100'-0"
 Min. Height High ceiling not required for this space. 10' minium preferred.

OCCUPANCY
 Access Open meeting access points.
 Security Area to be monitored from trainer's station.
 Hours TBD
 Numbers Approximately 50-60 (50 sf per person)

ARCHITECTURAL
 Ceiling Acoustic metal deck or supplemental acoustic ceiling panels "clouds".
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor High impact rubber sheet flooring, 10mm.
 Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Ceiling Fans.

Plumbing Drinking fountain with bottle filling station.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Indirect high efficiency fluorescent or LED fixtures.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels @ multiple locations; "zones" sound/PA

Computer No/ Wi-Fi Throughout

Telephone No.

Access Control None.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption.

EQUIPMENT

Fixed None

Movable Treadmills
Arc Trainers
Steppers
Recumbent Bicycles
(Cardio vascular fitness equipment & machines to be confirmed by user w/ layouts & inventory provided by vendor as part of FF&E)

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between resilient rubber flooring and adjacent fitness flooring materials.

Room Data Sheets

AREA COMPONENT

3.2 Fitness Center
Cardio Training

SCALE: 1/16" = 1'-0"

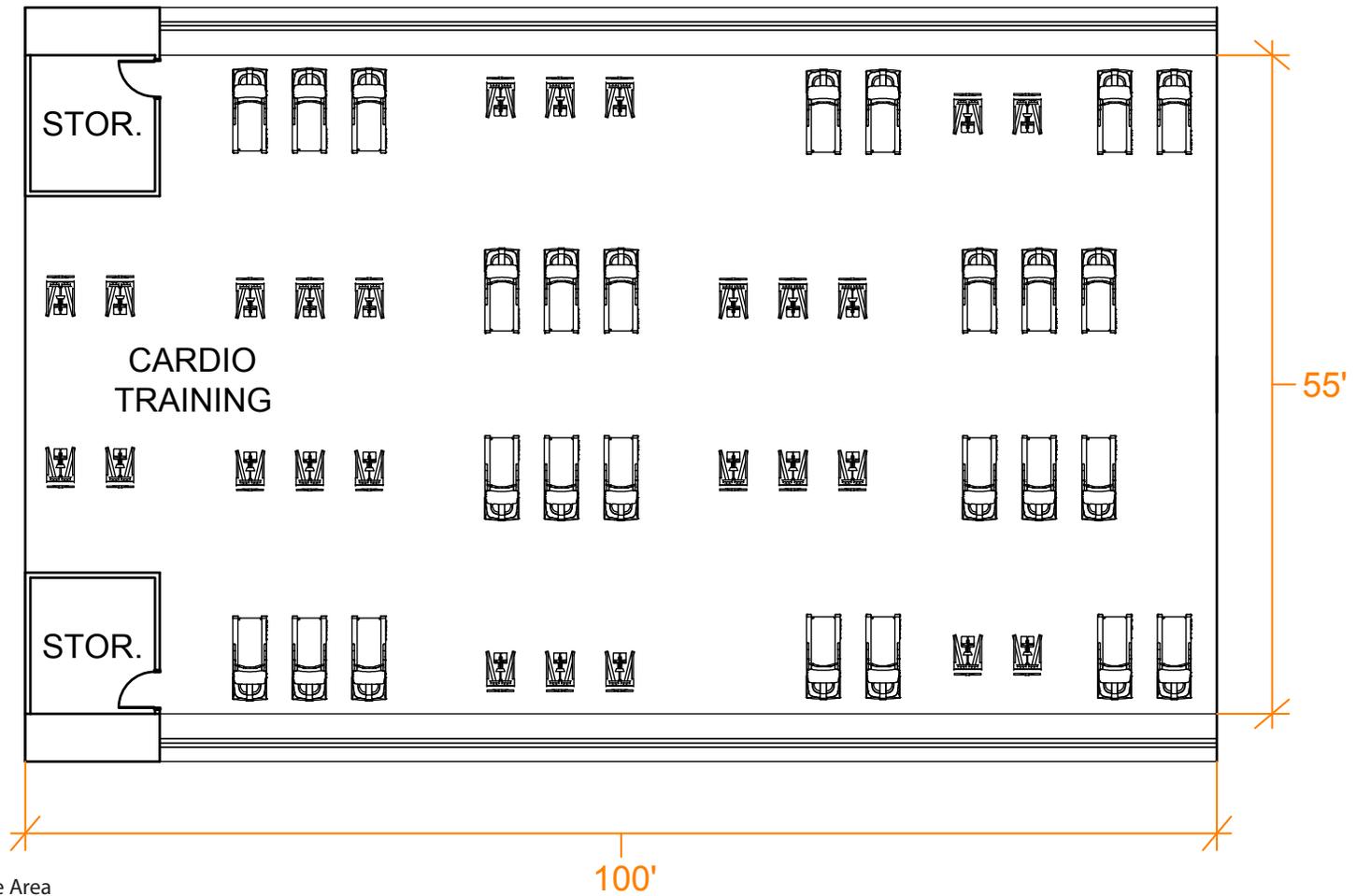
FIXED EQUIPMENT

a None

MOVEABLE EQUIPMENT

To be confirmed by user and vendor.

- a treadmill
- b stepper
- c arc trainer
- d recumbant bicycle



SPECIAL COMMENTS

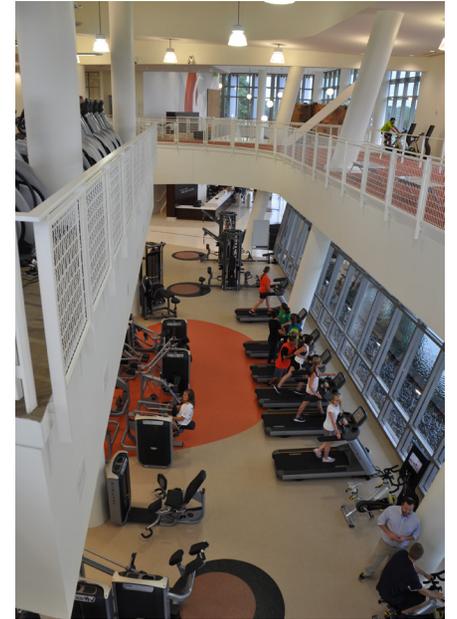
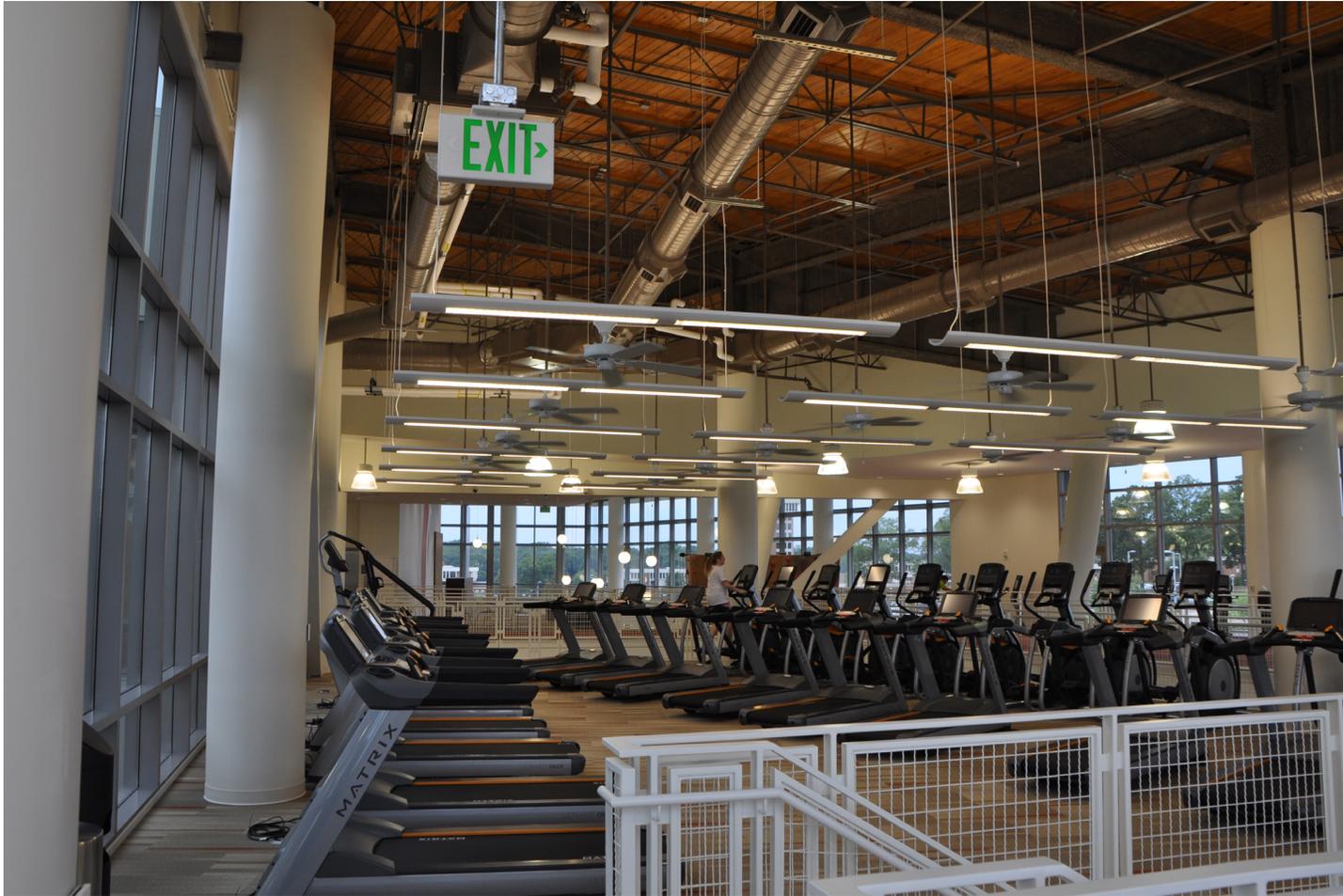
- Large open room – Flexible Area
- Visible from outside – As many windows as possible on exterior walls
- Natural Light / Views
- Focal point from entry & Trainer's Station
- Open storage cubbies, centrally located
- Stretching and exercise area adjacent to free weights
- Storage and equipment repair
- Mirrors on one or more interior walls

Cardio Training 5,500 sf

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Cardio Training



Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Cardio Training



Room Data Sheets

AREA COMPONENT 3.2 Fitness Center
Free Weights

FUNCTIONAL DESCRIPTION Free weight strength training facility for all men's and women's student recreation.

ADJACENCY Primary: Cardio, Strength Training, Stretching Areas.
Secondary: Locker Rooms, Gymnasium, Lobby, Equipment Repair.

DIMENSIONAL REQUIREMENTS
 Net Program Area +/- 3,300 square feet
 Min. Dimensions 30'-0" x 110'-0"
 Min. Height High ceiling, minimum 10'-0" recommended.

OCCUPANCY
 Access Open - multiple access points.
 Security Area to be monitored from Trainer's Station.
 Hours TBD
 Numbers Approximately 65 (50 sf per person)

ARCHITECTURAL
 Ceiling Acoustic metal deck or supplemental acoustic ceiling panels "clouds".
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor High impact rubber sheet flooring, 10mm.
 Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Incorporate natural ventilation strategies with ceiling fans supplemented with mechanical heating and cooling.
 Plumbing Drinking fountain with possible bottle filling station in close proximity.
 Electrical Floor outlets as required at equipment locations and around floor perimeter.
 Lighting Indirect, high efficiency or LED fluorescent fixtures.
 Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels. Distributed/Multiple locations; "zoned" sound/PA.
 Computer No; Wi-Fi throughout facility.
 Telephone No.
 Access Control None.
 Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption.

EQUIPMENT
 Fixed None for maximum flexibility.
 Movable Free weight machines to be determined by user. Specific quantities and inventory layout will be provided by equipment vendor as part of FF&E.

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Free Weights

SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by user and vendor; anticipated equipment to include:

- a. power squat
- b. lateral leg press
- c. combo power rack
- d. glute/ham developer
- e. adjustable plyo-box
- f. double-tiered dumbbell rack
- g. cable-based training equipment



SPECIAL
COMMENTS

- Large open room – Flexible free weight area
- Visible from outside – As many windows as possible on exterior walls
- Natural Light / Views
- Focal point from entry & Trainer's Station
- Open storage cubbies, centrally located
- Stretching and exercise area adjacent to free weights
- Storage and equipment repair
- Mirrors on one or more interior walls

Free Weights 3,300 sf

Room Data Sheets

AREA COMPONENT 3.2 Fitness Center
Flexible Multi-Purpose Fitness Studio

FUNCTIONAL DESCRIPTION Flexible Multi-Purpose Fitness Studio, a dedicated room to serve multiple programming needs such as Functional Training, Cross Fit, and Boxing/Kick-Boxing.

ADJACENCY Primary: Free Weights, Fitness/Cardio Training, Strength Training, Stretching Area.

DIMENSIONAL REQUIREMENTS
 Net Program Area +/- 1,200 square feet
 Min. Dimensions 30'-0" x 40'-0"
 Min. Height High ceiling, minimum 10'-0" recommended.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 50.

ARCHITECTURAL
 Ceiling Acoustic metal deck or supplemental acoustic ceiling panels "clouds".
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor High impact rubber sheet flooring, 10mm.
 Doors Aluminum and glass double doors in curtain wall or storefront system. Incorporate insulated roll-up door for equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Incorporate natural ventilation strategies with ceiling fans supplemented with mechanical heating and cooling.
 Plumbing Drinking fountain with possible bottle filling station.
 Electrical Floor outlets as required at equipment locations and around floor perimeter.
 Lighting Indirect, high efficiency or LED fluorescent fixtures.
 Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels.
 Computer Yes. One to two for use by staff maintaining training programs electronically.
 Telephone Yes.
 Access Control TBD
 Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor conditions to be confirmed.

EQUIPMENT
 Fixed None for maximum flexibility.
 Movable Equipment layout with the following inventory (See attached layout options – equipment number varies):
 Heavy Weight Bags
 (Equipment to be confirmed by Campus Recreation.)

AREA COMPONENT 3.2 Fitness Center
Flexible Multi-Purpose Fitness Studio

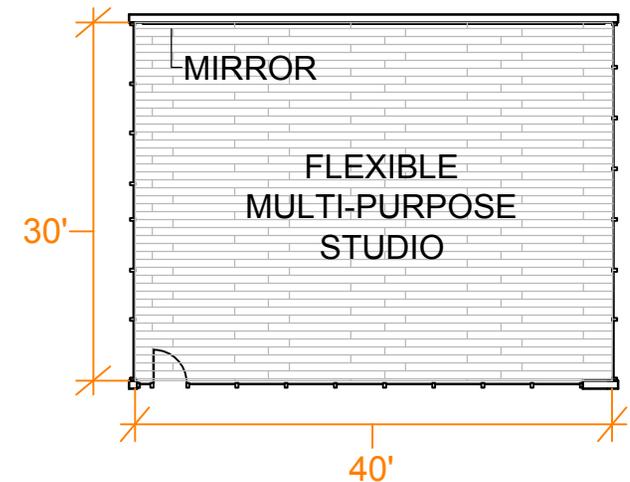
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

None for maximum flexibility.

MOVEABLE EQUIPMENT

- a. heavy weight bags

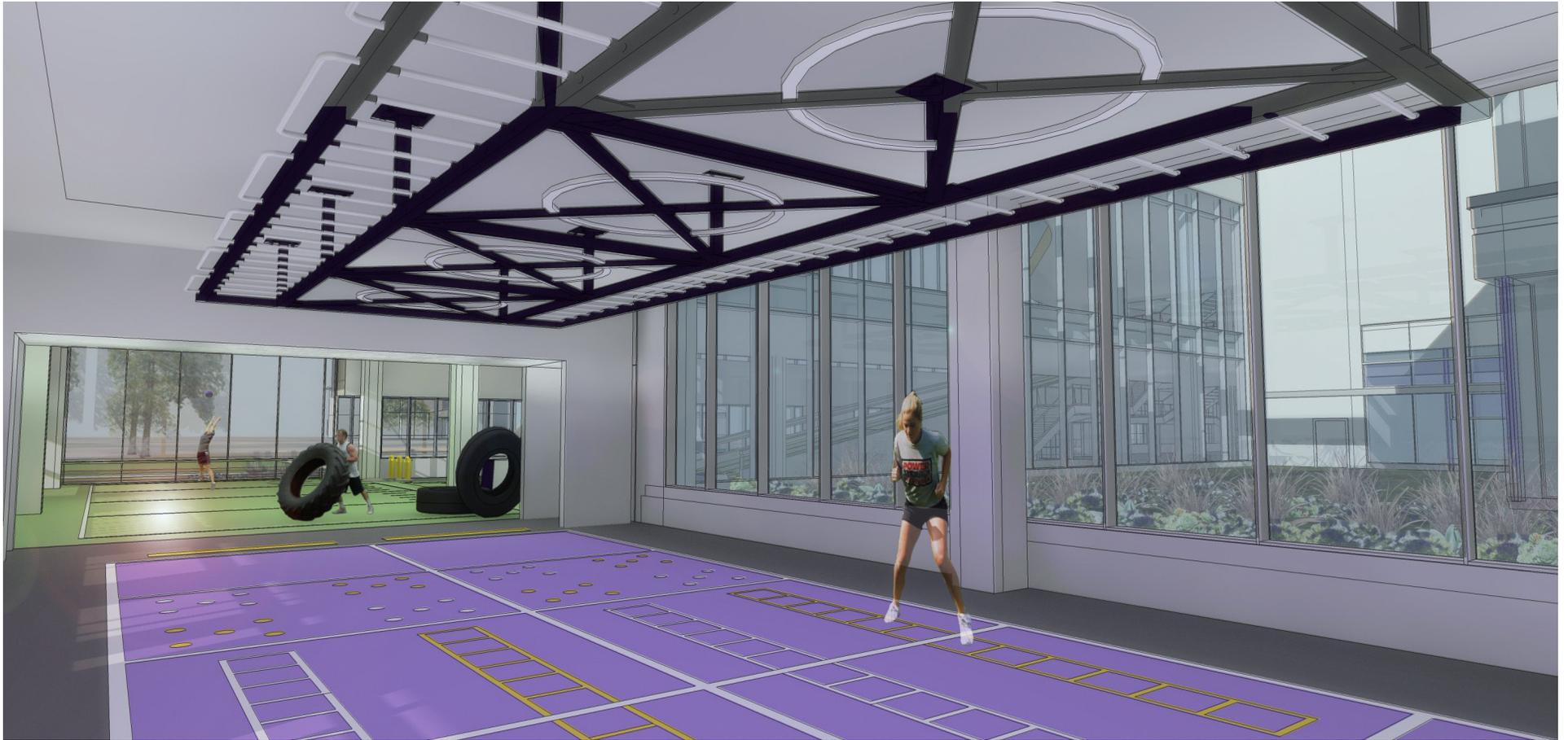


SPECIAL COMMENTS

- Large open room – Free weight area
- Visible from outside – As many windows as possible on exterior walls
- Natural Light / Views
- Focal point from entry
- Open storage cubbies, centrally located
- Stretching and exercise area adjacent to free weights
- Storage and equipment repair
- Mirrors on one or more interior walls

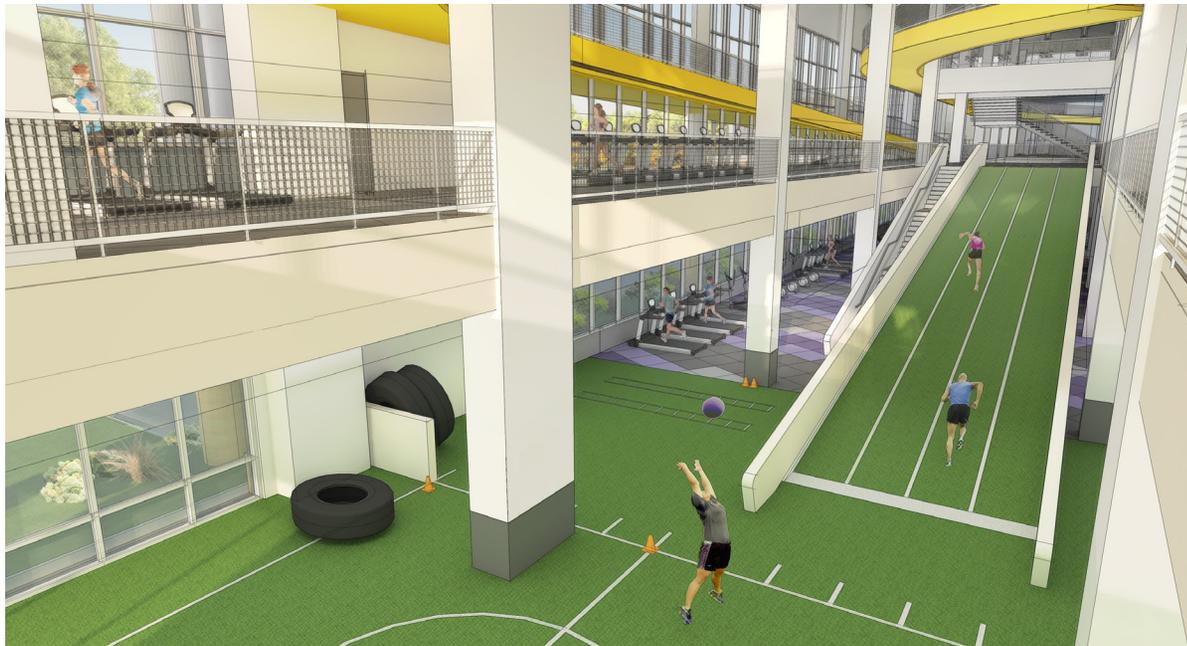
Flexible Multi-Purpose
Fitness Studio 1,200 sf

Room Data Sheets



TRX Training System
LSU Example

Room Data Sheets



Function Training LSU Example

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Stretching Area

FUNCTIONAL DESCRIPTION Open stretching area adjacent to fitness center program components.

ADJACENCY Primary: Weight Training, Cardio, Strength Training.

DIMENSIONAL REQUIREMENTS
 Net Program Area 600 square feet
 Min. Dimensions 20'-0" x 30'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Open to fitness.
 Security Open to fitness.
 Hours TBD
 Numbers (+/- 30 sf per person)

ARCHITECTURAL
 Ceiling Exposed wood deck or accoustic metal deck.
 Walls Suitable durable material.
 Floor Low impact rubber flooring, 6 mm.
 Doors Aluminum and glass double doors in curtain wall or storefront system to facilitate access to exterior terrace.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Ceiling Fans.

Plumbing Drinking fountain with bottle filling station.

Electrical Maintenance wall outlets around perimeter.

Lighting Indirect, high efficiency fluorescent or LED fixtures.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels at multiple locations.

Computer No ; Wi-Fi service throughout facility.

Telephone No.

Access Control No.

Acoustics No special accoustic treatment.

EQUIPMENT
 Fixed None
 Movable Stretching mats
 Resistance bands
 Excercise Balls
 Foam Rollers

SPECIAL COMMENTS Single or multiple areas adjacent to fitness center program components. Opens out to exterior terrace. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located.

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Stretching Area

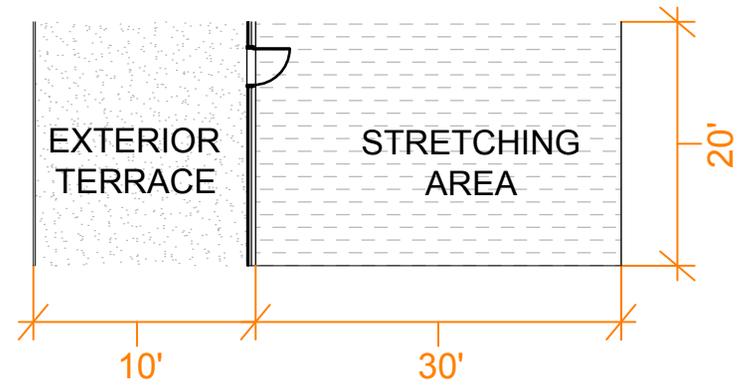
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a none

MOVEABLE EQUIPMENT

- b stretching mats
- c resistance bands
- d exercise balls
- e foam rollers



Stretching 600 sf

Room Data Sheets

AREA COMPONENT 3.2 Fitness Center
Trainer's Station

FUNCTIONAL DESCRIPTION Open work counter area, where trainers reside and monitor fitness areas.

ADJACENCY Primary: Locate central to Free Weights, Strength Training, and Fitness Area.

DIMENSIONAL REQUIREMENTS
 Net Program Area 200 square feet
 Min. Dimensions 13'-0" x 15'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Open.
 Hours TBD
 Numbers Approximately 2-3

ARCHITECTURAL
 Ceiling (Open to Fitness).
 Walls None.
 Floor Low impact athletic flooring, 6mm.
 Doors N/A.
 Windows N/A.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Would like to have independent thermostatic control from Fitness area.

Plumbing N/A

Electrical Power/Data as required for computers at work counter.

Lighting Open to fitness.

Audio / Video None.

Computer Yes. 1-2 for use by staff maintaining training programs electronically.

Telephone Yes.

Access Control No.

Acoustics None.

EQUIPMENT
 Fixed Fixed counter.
 Movable None.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

3.2 Fitness Center
Trainer's Station

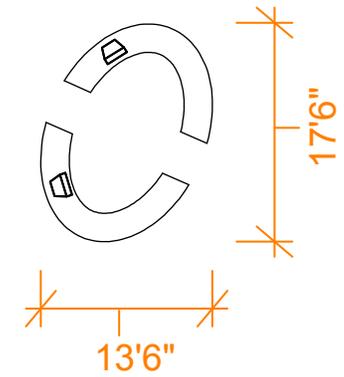
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a Counter w/ work station

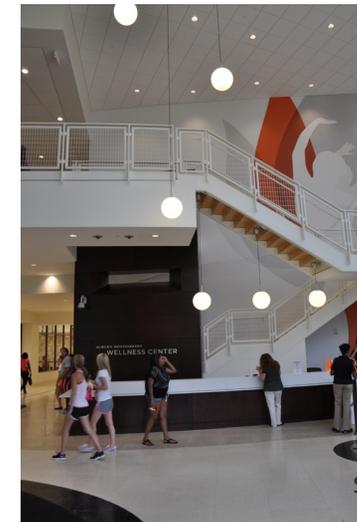
MOVEABLE EQUIPMENT

None



SPECIAL
COMMENTS

Small section of open room – Trainer's Station
Focal point from entry
Centrally located near strength and fitness training



Trainer's
Station

Trainer's Station 200 sf

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Spin Studio

FUNCTIONAL DESCRIPTION Dedicated group fitness room for group spinning activity.

ADJACENCY Primary: Exercise Storage, Exterior Balcony/Terrace.

DIMENSIONAL REQUIREMENTS

Net Program Area	1,000 square feet
Min. Dimensions	25'-0" x 40'-0"
Min. Height	High ceiling preferred, minimum 10'-0".

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 20 + Instructor.

ARCHITECTURAL

Ceiling	Acoustical ceiling or panel "clouds".
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Hardwood athletic flooring.
Doors	Aluminum and glass double doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. Ceiling Fans.
------	--

Plumbing N/A

Electrical Convenience wall outlets as required around floor perimeter.

Lighting Fluorescent or LED Fixtures, multi-level or dimmable.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels; sound system.

Computer No.

Telephone No.

Access Control TBD

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed	Mirrors (Full height)
Movable	(20) Spinning Bicycles + (1) Instructor Spinning Bicycle

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between wood flooring and adjacent flooring surface. Mirrors at Instructor's wall. Provide direct access to adjacent exterior terrace.

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Spin Studio

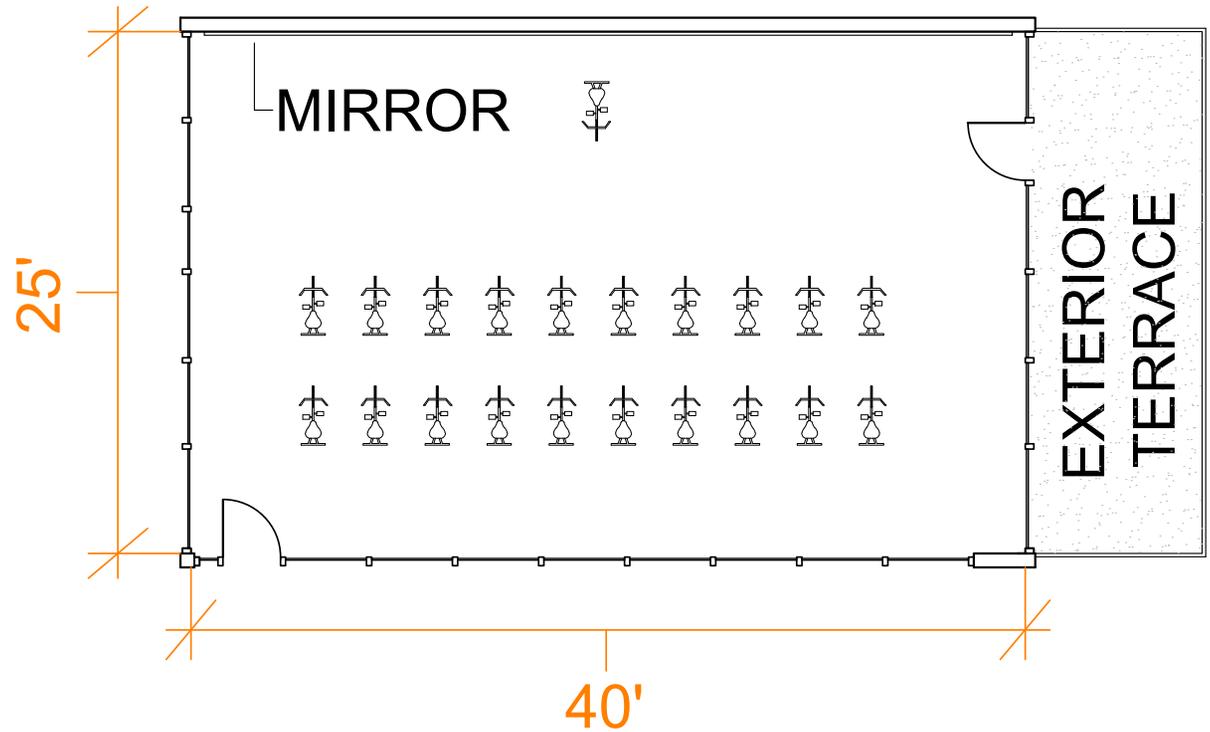
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Mirrors at Instructor's wall.

MOVEABLE EQUIPMENT

- b (20) spinning bicycles
- c (1) instructor spinning bicycle



SPECIAL
COMMENTS

Group cycling room – Spin Studio Area
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry
Open storage cubbies, centrally located
Mirrors on one or more interior walls
Access to Exercise Terrace

Spin Studio 1,000 sf

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Spin Studio



Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Spin Studio



Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Large Group Exercise

FUNCTIONAL DESCRIPTION Large open room for large specialized group exercise activities.

ADJACENCY Primary: Exercise Storage, Exterior Balcony/Terrace.

DIMENSIONAL REQUIREMENTS

Net Program Area	3.200 square feet
Min. Dimensions	50'-0" x 64'-0"
Min. Height	High ceiling is recommended, minimum 10'-0".

OCCUPANCY

Access	(2) Entry points.
Security	Lockable after hours.
Hours	TBD
Numbers	Approximately 100

ARCHITECTURAL

Ceiling	Accoustical ceiling or suspended acoustical clouds.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Hardwood athletic flooring.
Doors	Aluminum and glass doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. Ceiling Fans.
------	--

Plumbing N/A.

Electrical Floor outlets as required around floor perimeter.

Lighting Fluorescent or LED fixtures, multi-level or dimmable.

Audio / Video Yes. Satellite or cable TV. Video flat screen monitor at instructor wall. Stereo and sound system.

Computer No.

Telephone No.

Access Control TBD

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed None

Movable

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between wood flooring and adjacent surface. Mirrors on one or more interior walls. Provide direct access to adjacent exterior terrace.

Room Data Sheets

AREA COMPONENT

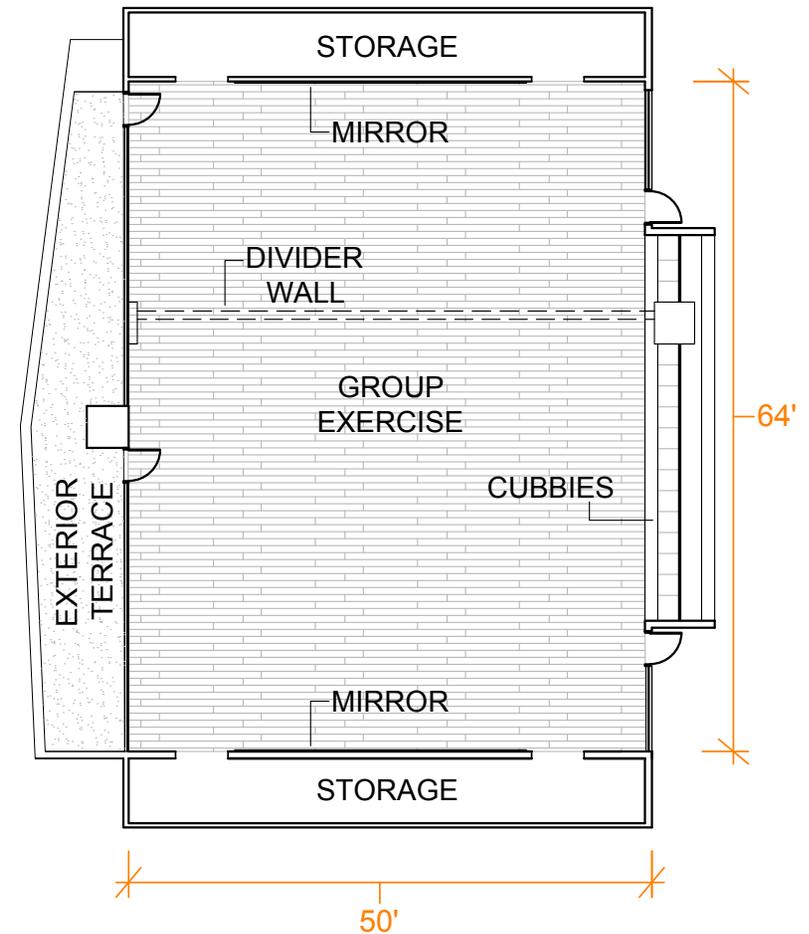
3.3 Group Exercise
Large Group Exercise

SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a None

MOVEABLE EQUIPMENT



SPECIAL COMMENTS

Large open room – Group Exercise Area
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry
Open storage cubbies, centrally located
Mirrors on one or more interior walls
Access to small terrace

Large Group Exercise 3,200 sf

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Large Group Exercise



Room Data Sheets



AREA
COMPONENT

3.3 Group Exercise
Large Group Exercise



Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Medium Group Exercise

FUNCTIONAL DESCRIPTION Medium sized open room for specialized group exercise activities.

ADJACENCY Primary: Exercise Storage, Exterior Balcony/Terrace.

DIMENSIONAL REQUIREMENTS

Net Program Area	2,000 square feet
Min. Dimensions	40'-0" x 50'-0"
Min. Height	High ceiling preferred, minimum 10'-0".

OCCUPANCY

Access	Two Entry Points.
Security	Lockable after open hours.
Hours	TBD
Numbers	Approximately 50-70

ARCHITECTURAL

Ceiling	Accoustical ceiling or suspended accoustical clouds.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Hardwood athletic flooring.
Doors	Aluminum and glass doors in curtain wall or storefront system to facilitate equipment access.
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling. Ceiling Fans.
------	--

Plumbing N/A.

Electrical Floor outlets as required around floor perimeter.

Lighting Fluorescent or LED fixtures, multi-level or dimmable.

Audio / Video Stereo and sound system.

Computer No.

Telephone No.

Access Control TBD.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed	None
Movable	

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between wood flooring and adjacent flooring surface. Mirrors on one or more interior walls. Provide direct access to adjacent exterior terrace.

Room Data Sheets

AREA COMPONENT

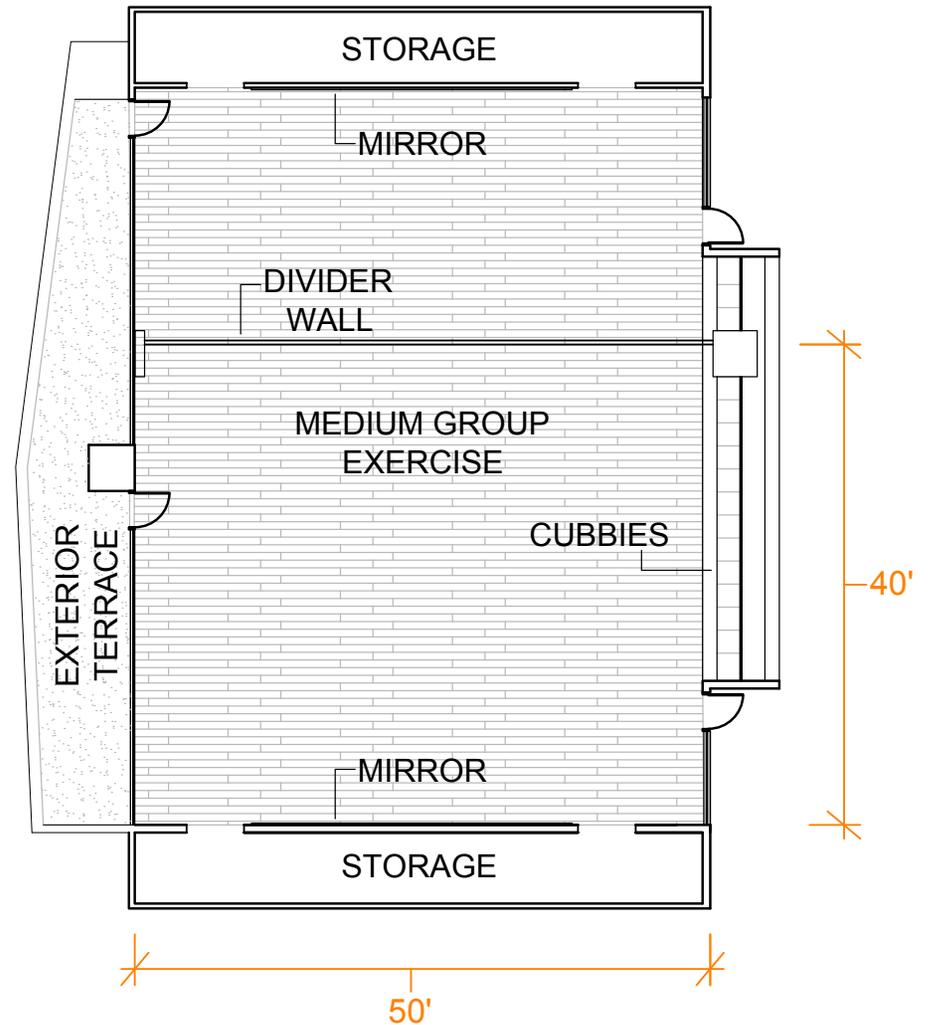
3.3 Group Exercise
Medium Group Exercise

SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a None

MOVEABLE EQUIPMENT



SPECIAL COMMENTS

Medium open room – Specialized group exercise.
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry
Open storage cubbies, centrally located
Mirrors on one or more interior walls
Access to small terrace

Medium Group Exercise 2,000 sf

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Small Group Exercise

FUNCTIONAL DESCRIPTION Small open room for specialized group exercise activities.

ADJACENCY Primary:

DIMENSIONAL REQUIREMENTS
 Net Program Area 1,200 square feet
 Min. Dimensions 24'0" x 50'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single entry point.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 30-40

ARCHITECTURAL
 Ceiling Accoustical ceiling or suspended accoustical clouds.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Hardwood athletic flooring.
 Doors Aluminum and glass doors in curtain wall or storefront system to facilitate equipment access.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Ceiling Fans.

Plumbing N/A.

Electrical Floor outlets as required around floor perimeter.

Lighting Fluorescent or LED fixtures, multi-level and dimmable.

Audio / Video Yes. Satellite and/or cable access required. Video flat screen panels. Stereo and Sound Sytem.

Computer No.

Telephone No.

Access Control TBD.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed None
 Movable

SPECIAL COMMENTS Large open room. Provide as many windows as possible on exterior walls. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between wood flooring and adjacent flooring surface. Mirrors on one or more interior walls. Provide direct access to adjacent exterior terrace.

Room Data Sheets

AREA
COMPONENT

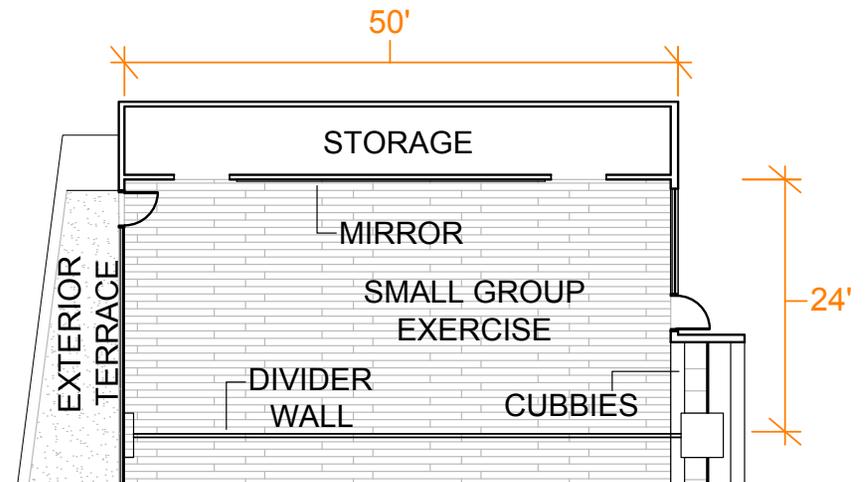
3.3 Group Exercise
Small Group Exercise

SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a None

MOVEABLE EQUIPMENT



SPECIAL
COMMENTS

Small open room – Specialized group exercises
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry
Open storage cubbies, centrally located
Mirrors on one or more interior walls
Access to small terrace

Small Group Exercise 1,200 sf

Room Data Sheets

AREA COMPONENT 3.3 Group Exercise Climbing Tower/Studio

FUNCTIONAL DESCRIPTION Climbing and bouldering tower.

ADJACENCY Primary: Entry Lobby, Fitness Center.

DIMENSIONAL REQUIREMENTS

Net Program Area	900 square feet minimum
Min. Dimensions	30'-0" x 30'-0"
Min. Height	Very high ceiling required for this space; 30-40' minimum.

OCCUPANCY

Access	Single entry point.
Security	TBD
Hours	TBD
Numbers	Approximately 10-20

ARCHITECTURAL

Ceiling	Acoustic metal deck.
Walls	N/A
Floor	High impact resilient flooring.
Doors	N/A
Windows	Yes. Maximize views and natural daylight.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Maintenance outlets.

Lighting High efficiency fluorescent or LED fixtures and theatrical lighting.

Audio / Video No.

Computer Yes. One for use by staff maintaining training programs electronically.

Telephone No.

Access Control No.

Acoustics No.

EQUIPMENT

Fixed	Climbing Tower/ Bouldering Wall.
Movable	None.

SPECIAL COMMENTS Large open room. Natural Light / Views. Open storage cubbies, centrally located. Provide flush transition between high impact flooring and adjacent flooring surface.

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Climbing Wall/Studio

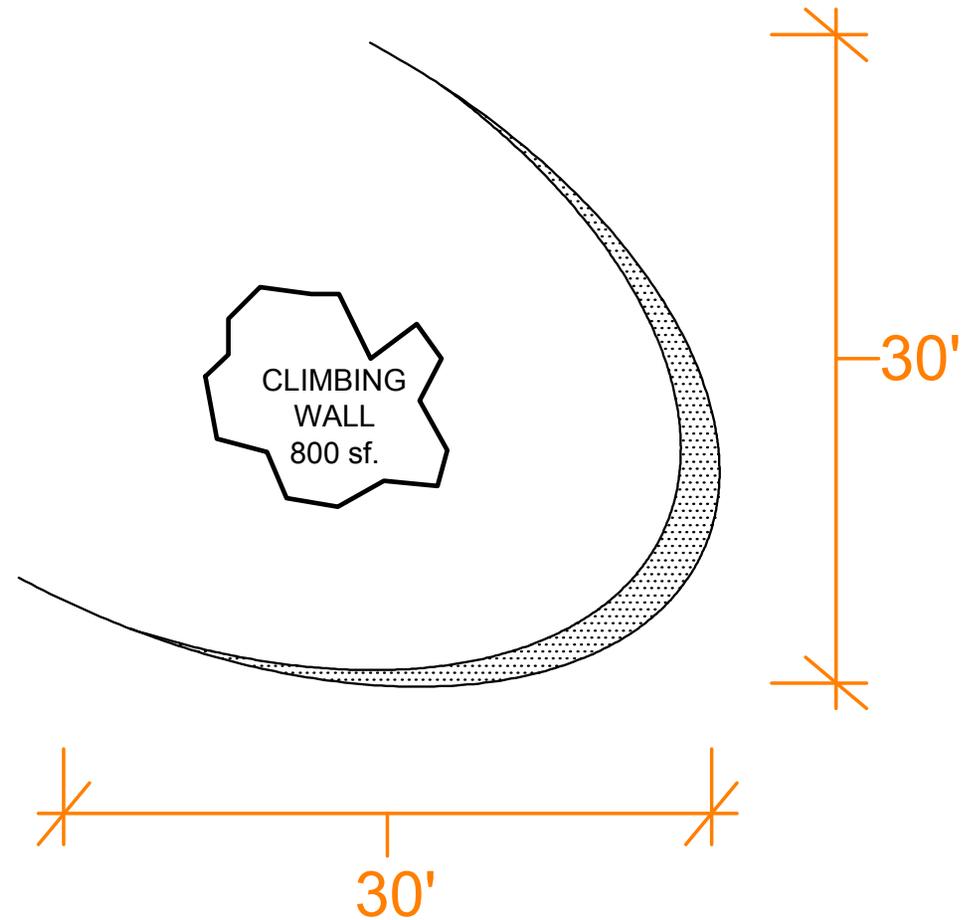
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

a Climbing and bouldering tower

MOVEABLE EQUIPMENT

b
c
d
e



SPECIAL
COMMENTS

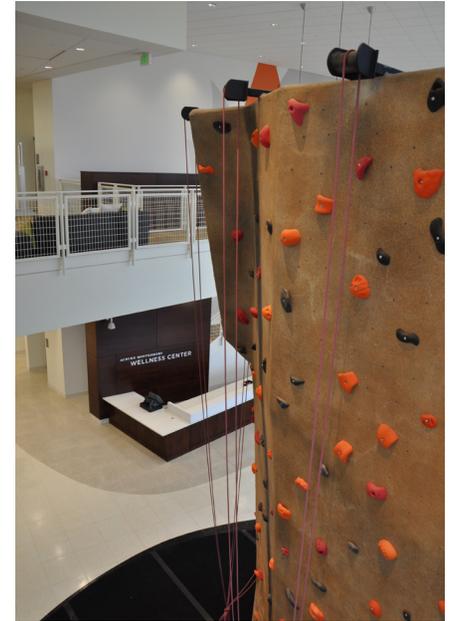
Climbing and bouldering tower in large open space.
Visible from outside – As many windows as possible on exterior walls
Natural Light / Views
Focal point from entry

Climbing Wall/Studio 1,000 sf

Room Data Sheets

AREA
COMPONENT

3.3 Group Exercise
Climbing Wall/Studio



Room Data Sheets

04.106

PROGRAM
DOCUMENT



AGGIE LIFE AND WELLNESS CENTER

AREA
COMPONENT

3.3 Group Exercise
Climbing Wall/Studio



AREA
COMPONENT

4.1 Health & Wellness
Health Suite

FUNCTIONAL DESCRIPTION Health Suite.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS
 Net Program Area 600 square feet
 Min. Dimensions 20'-0" x 25'-0" + storage
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers Approximately 20

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors Wood door.

Windows Not required.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Independent thermostatic control.

Plumbing Handwash sink.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video TBD.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Work counters.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Large open room.

Room Data Sheets

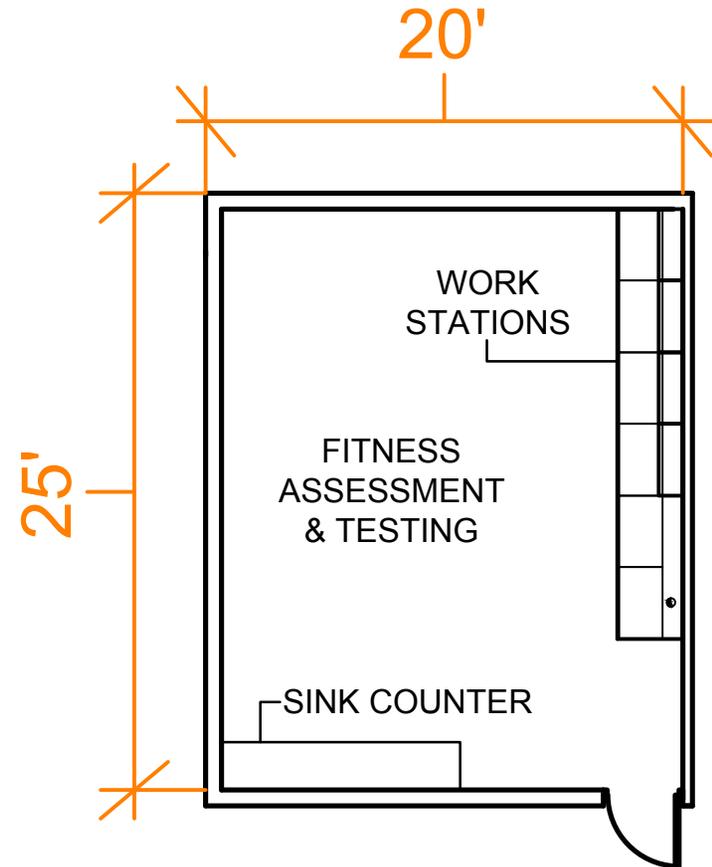
AREA COMPONENT 4.1 Health & Wellness
Health Suite

SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a Open work counter w/ (2) computers

MOVEABLE EQUIPMENT



SPECIAL COMMENTS

Health Suite 600 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Entry Lobby & Reception

FUNCTIONAL DESCRIPTION Entry Lobby and Reception.

ADJACENCY Primary: Outdoor Recreation main entrance.

DIMENSIONAL REQUIREMENTS

Net Program Area	200 square feet
Min. Dimensions	13'-0" x 15'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Accoustical suspended ceiling.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet or tile.
Doors	TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
------	--------------------------------------

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video TBD.

Computer Yes.

Telephone Yes.

Access Control Open to lobby.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Reception desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Entry Lobby & Reception

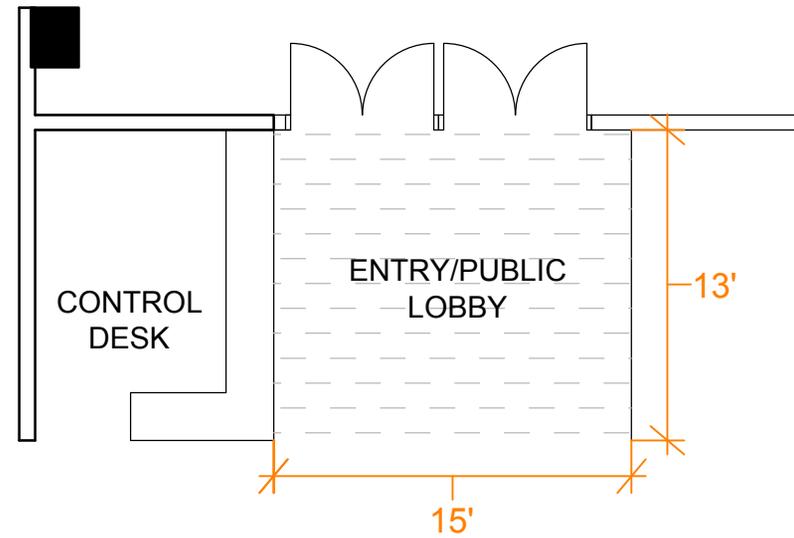
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

None.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Entry Lobby & Reception 200 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Control Desk

FUNCTIONAL
DESCRIPTION

Outdoor Recreation Entry Lobby Control Desk.

ADJACENCY

Primary: Outdoor Recreation Entry Lobby and Reception.

DIMENSIONAL
REQUIREMENTS

Net Program Area 130 square feet
Min. Dimensions 10'-0" x 13'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers TBD

ARCHITECTURAL

Ceiling Accoustical suspended ceiling.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring and carpet or tile.
Doors TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video TBD.

Computer Yes.

Telephone Yes.

Access Control Open to lobby.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Control desk.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Control Desk

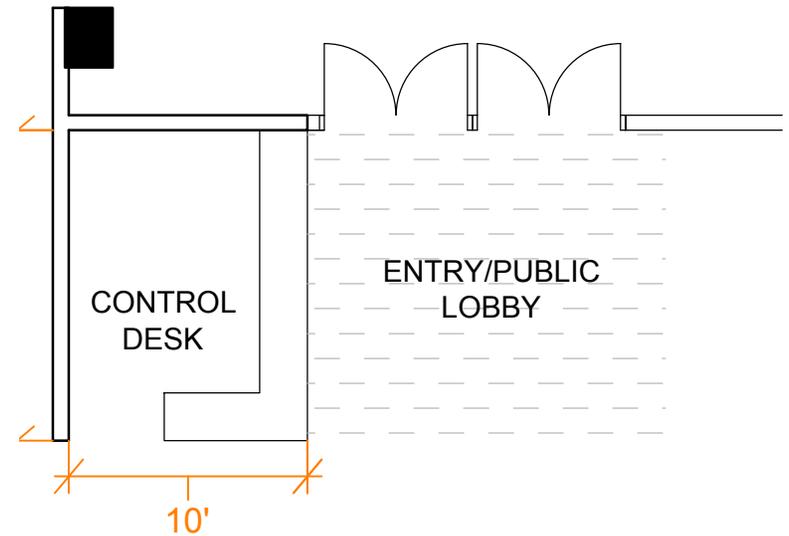
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a control desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Entry Lobby & Reception 130 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Private Offices

FUNCTIONAL DESCRIPTION Private Offices for Outdoor Recreation Staff.

ADJACENCY Primary: Outdoor Recreation Entry Lobby and Reception.

DIMENSIONAL REQUIREMENTS
 Net Program Area 2 x 120 square feet per office
 Min. Dimensions 10'-0" x 12'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet or tile.
 Doors TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Office desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Private Offices

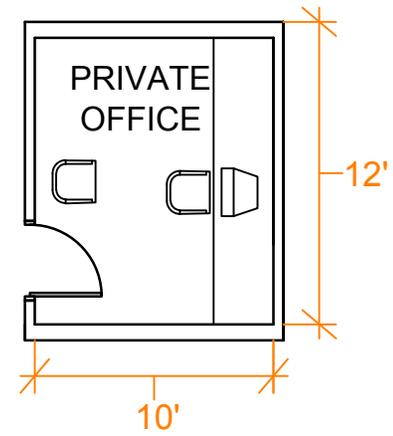
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a (2) desks

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Private Offices 240 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Open Office Area

FUNCTIONAL
DESCRIPTION

Private Offices for Outdoor Recreation Staff.

ADJACENCY

Primary: Outdoor Recreation Entry Lobby and Reception.

DIMENSIONAL
REQUIREMENTS

Net Program Area 200 square feet
Min. Dimensions 10'-0" x 20'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers TBD

ARCHITECTURAL

Ceiling Accoustical suspended ceiling.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring and carpet or tile.
Doors TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Open Office Area

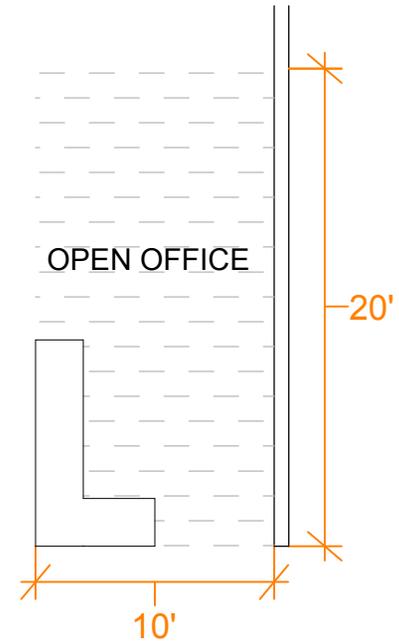
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Open Office Area 200 sf

Room Data Sheets

AREA COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Work Room/Copy Area

FUNCTIONAL DESCRIPTION Work room/copy area for Outdoor Recreation Staff.

ADJACENCY Primary: Outdoor Recreation Entry Lobby and Reception.

DIMENSIONAL REQUIREMENTS
 Net Program Area 150 square feet
 Min. Dimensions 10'-0" x 15'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet or tile.
 Doors TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Desk, copy machine.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Work Room/Copy Area

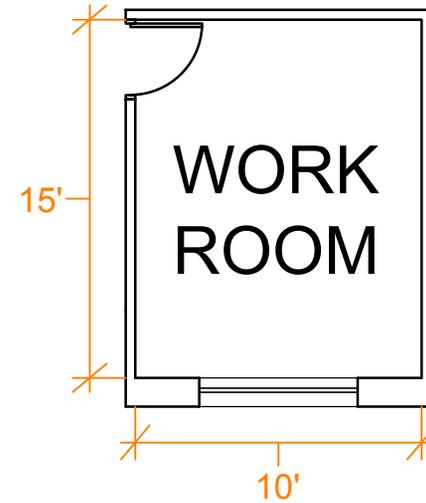
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a desk
- b copy machine

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Work Room/Copy Area 150 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Staff Breakroom & Food Prep Area

FUNCTIONAL DESCRIPTION Staff Breakroom & Food Prep Area for Outdoor Recreation Staff.

ADJACENCY Primary: Outdoor Recreation Offices.

DIMENSIONAL REQUIREMENTS

Net Program Area	200 square feet
Min. Dimensions	12'-0" x 16'-6"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	TBD

ARCHITECTURAL

Ceiling	Accoustical suspended ceiling.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and carpet or tile.
Doors	TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC	Standard mechanical heating/cooling.
------	--------------------------------------

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed	Food prep counter, staff break area table.
Movable	To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Staff Breakroom & Food Prep Area

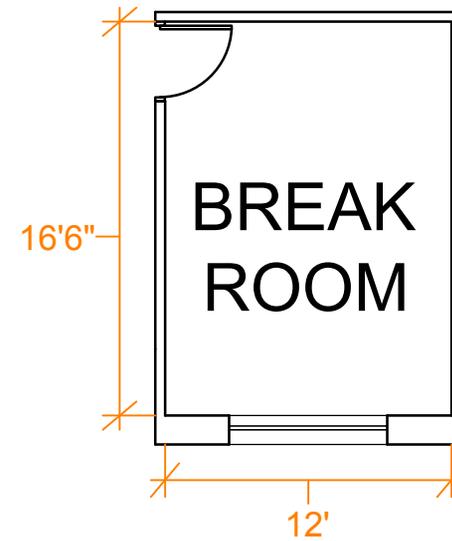
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a food prep counter
- b staff break area table

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Staff Breakroom & Food Prep Area 200 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Classroom/Trip Planning

FUNCTIONAL DESCRIPTION Classroom/Trip Planning for Outdoor Recreation Students.

ADJACENCY Primary: Outdoor Recreation Control Desk , Entry Lobby & Reception.

DIMENSIONAL REQUIREMENTS
 Net Program Area 300 square feet
 Min. Dimensions 15'-0" x 20'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet or tile.
 Doors TBD.

Windows Yes. Maximize views and natural daylight.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed To be confirmed by Campus Recreation
 Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
S Classroom/Trip Planning

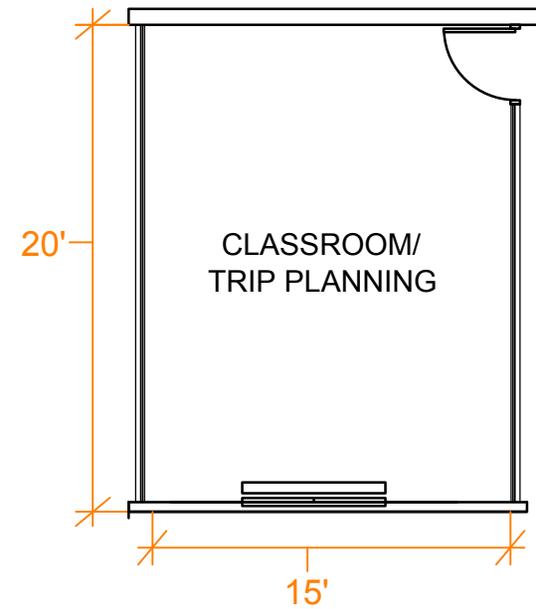
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Classroom/Trip Planning 300 sf

Room Data Sheets

AREA COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Washdown Space/"Mud"Room

FUNCTIONAL DESCRIPTION Washdown Space/"Mud" for Outdoor Recreation Activities.

ADJACENCY Primary: Outdoor Recreation Restrooms and Storage.

DIMENSIONAL REQUIREMENTS
 Net Program Area 600 square feet
 Min. Dimensions 20'-0" x 30'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet or tile.
 Doors TBD.

Windows Not required.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT Fixed To be confirmed by Campus Recreation

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Washdown Space/"Mud"Room

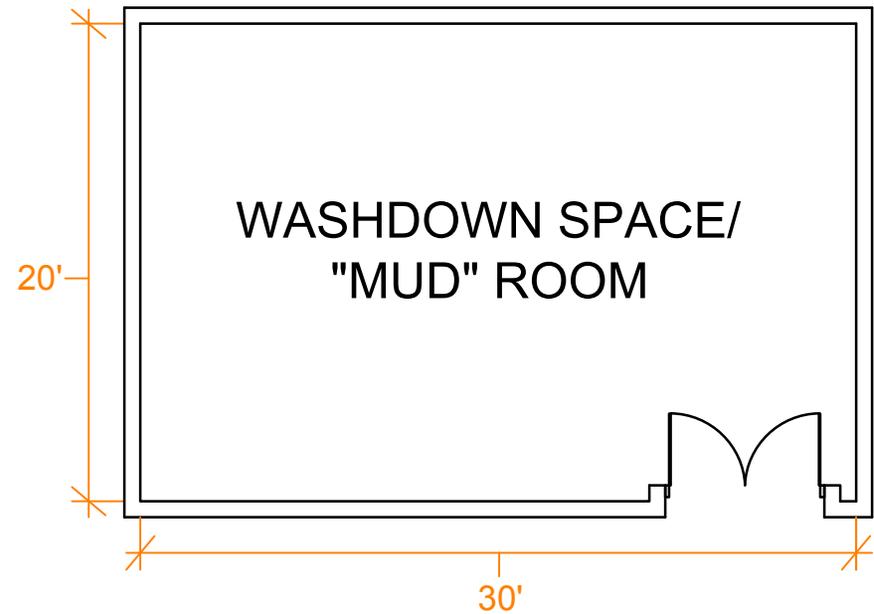
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Washdown Space/"Mud" Room 600 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Toilets/Restrooms

FUNCTIONAL DESCRIPTION Toilets/restrooms for campus recreation administration staff.

ADJACENCY Primary: Entry Lobby, Administration Suite, Restrooms.

DIMENSIONAL REQUIREMENTS

Net Program Area	65 square feet
Min. Dimensions	7'-6" x 9'-0"
Min. Height	High ceiling not required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	TBD
Numbers	1

ARCHITECTURAL

Ceiling	Acoustical suspended ceiling or gypsum.
Walls	Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor	Resilient sheet flooring and tile.
Doors	Wooden door.

Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling. Exhaust.

Plumbing Standard plumbing (water closet, lavatory, floor drain).

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Accessible at all hours.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed Standard plumbing fixtures.

Movable None.

SPECIAL COMMENTS

Room Data Sheets

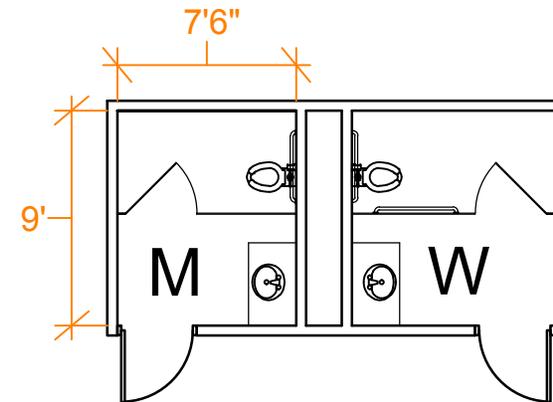
AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Toilets/Restrooms

SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

- a solid surface sink & counter
- b mirror
- c accessible toilet with grab-bars and partition
- d toilet/urinal stall and partition
- e floor drain
- f recessed paper towel dispenser & trash



MOVEABLE EQUIPMENT

None.

SPECIAL
COMMENTS

Toilets/Restrooms - 65 sf

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Storage

FUNCTIONAL DESCRIPTION Outdoor Recreation Storage

ADJACENCY Primary: Outdoor Recreation Restrooms, Washdown Space/"Mud" Room and Storage.

DIMENSIONAL REQUIREMENTS
 Net Program Area 2,500 square feet
 Min. Dimensions 50'-0" x 50'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Accoustical suspended ceiling.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet or tile.
 Doors TBD.

Windows No.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting Recessed Fluorescent.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed To be confirmed by Campus Recreation

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

5.1 Outdoor Recreation Programming "ORP"
Storage

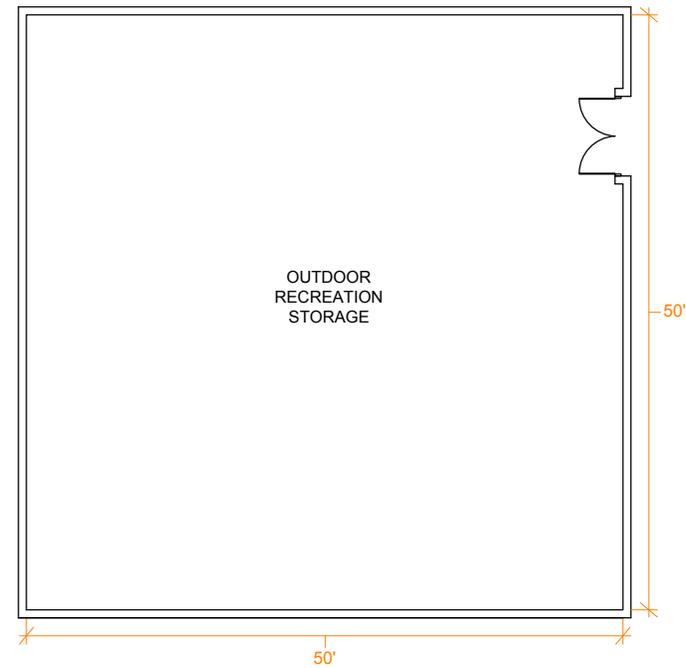
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Storage 2,500 sf

Room Data Sheets

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool - Option 1

FUNCTIONAL DESCRIPTION Fitness pool with (2) x 25 yd. lap lanes, a climbing wall with waterfall, a jumping platform, water basketball and volleyball, zip lines, moving water for kayaks, and social spaces, recreation indoor pool, indoor spa, classroom and support.

ADJACENCY Primary: Pool mechanical and support.
Secondary: Men's and Women's Locker Areas.

DIMENSIONAL REQUIREMENTS
 Net Program Area 10,000 square feet
 Min. Dimensions 94'-0" x 106'-0"
 Min. Height High ceiling required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours 6:00 am to 6:00 pm
 Numbers TBD

ARCHITECTURAL
 Ceiling TBD
 Walls Masonry or suitable durable material with applied or integrated vapor barrier treatments.
 Floor The pool and spa will be constructed of cast-in-place or pneumatically applied concrete. The interior finish of the pool and space will be unglazed cermaic mosaic tile.
 Doors TBD
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Independent air handling unit with provisions for high outdoor air flows, humidity resistant materials (coatings), heat recovery. Moisture resistant duct materials (ie. Aluminum). Negative air pressurization relative to adjacent areas.
 Plumbing Floor drains, floor sinks, trench drains, hose bibbs, domestic water connections, drinking fountain with possible bottle filling station.
 Electrical Floor outlets as required at equipment locations and around floor perimeter.
 Lighting High bay, high efficiency fluorescent or LED fixtures.
 Audio / Video Yes. Satellite and/or cable access required. Stereo and Sound System.
 Computer No.
 Telephone Yes.
 Access Control Possible to have key card access or card verification capabilities to access this space.
 Acoustics TBD

EQUIPMENT
 Fixed Jumping wall with waterfall, a jumping platform, (1) fixed battery operated ADA compliant pool lift, (1) surge tank access hatch.
 Movable (1) Scoreboard
 (2) Water basketball goals
 (1) Volleyball net
 - zip lines
 - 4" diameter floating lane lines
 - 31" octagonal pace clocks
 - life guard stands
 All loose and deck equipment will be as required by the applicable Health Department Regulations (ladders, grab rails, safety ropes and anchors, lifeguard chairs, stanchions, desk anchors, etc.).

Room Data Sheets

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool - Option 1

SCALE: 1/32" = 1'-0"

FIXED EQUIPMENT

- a jumping wall with waterfall
- b jumping platform
- c (1) fixed battery operated ADA compliant pool lift
- d (1) surge tank access hatch

MOVEABLE EQUIPMENT

- e (1) scoreboard
- f (2) water basketball goals
- g (1) volleyball net
- h zip lines
- i 4" diameter floating lane lines
- j 31" octagonal pace clocks
- k ladders
- l grab rails
- m safety ropes
- n anchors
- o lifeguard stands
- p stanchions and deck anchors

SPECIAL COMMENTS

The indoor recreation pool will be approximately 3,500 Sq. Ft. The pool will have a minimum depth of 3'-6" and a maximum depth of 10'-0". A 12" deep deck level gutter system will be provided for recirculation of pool water. A large stair system with ADA compliant lift will be provided for access. An emergency shut off switch will be provided near the pool to control the recirculation pump. Remote start/stop switches will be provided in the lifeguard office to control the pool feature pumps. The water temperature in this pool will be kept between 84-85 Degrees F.

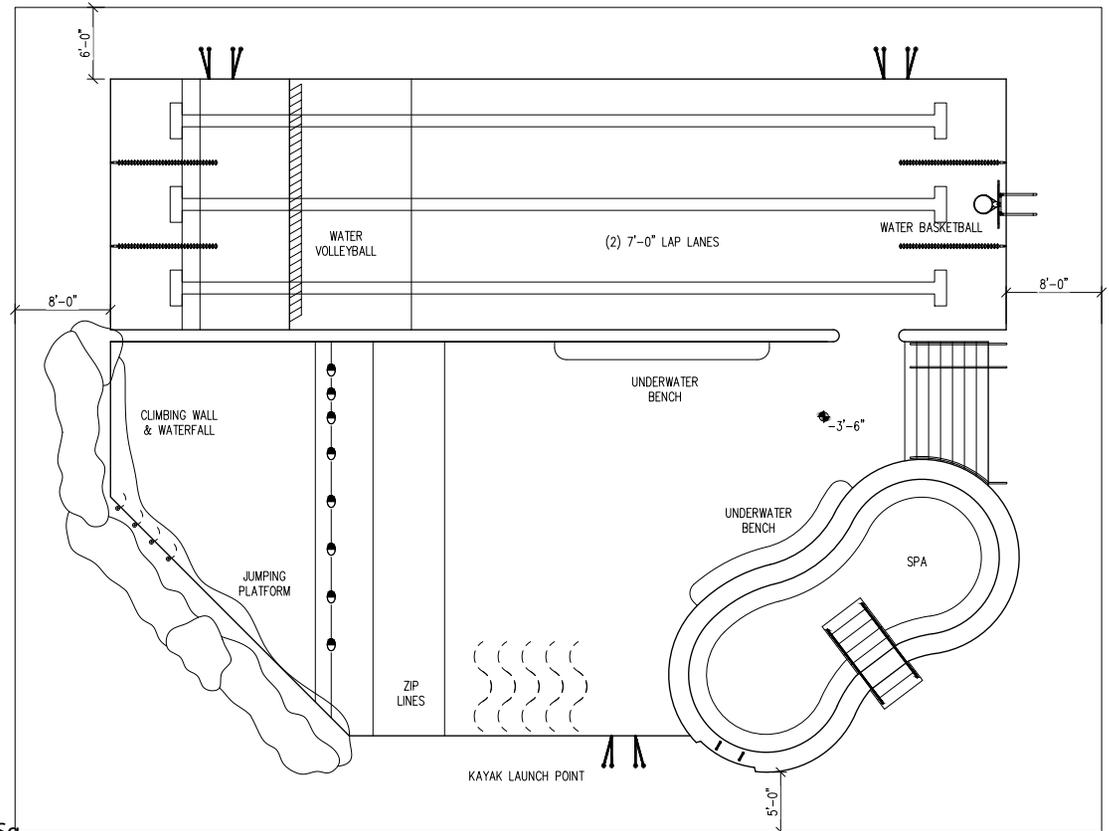


Diagram provided by
Counsilman-Hunsaker

Natatorium 10,000 sf

Room Data Sheets

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool - Option 2

FUNCTIONAL DESCRIPTION Fitness pool with (2) x 25 yd. lap lanes, a climbing wall with waterfall, a jumping platform, water basketball and volleyball, zip lines, moving water for kayaks, and social spaces, recreation indoor pool, indoor spa, classroom and support.

ADJACENCY Primary: Pool mechanical and support.
Secondary: Men's and Women's Locker Areas.

DIMENSIONAL REQUIREMENTS

Net Program Area	10,000 square feet
Min. Dimensions	94'-0" x 106'-0"
Min. Height	High ceiling required for this space.

OCCUPANCY

Access	Single control point entry.
Security	Lockable after open hours.
Hours	6:00 am to 6:00 pm
Numbers	TBD

ARCHITECTURAL

Ceiling	TBD
Walls	Masonry or suitable durable material with applied or integrated vapor barrier treatments.
Floor	The pool and spa will be constructed of cast-in-place or pneumatically applied concrete. The interior finish of the pool and space will be unglazed cermaic mosaic tile.
Doors	TBD
Windows	Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Independent air handling unit with provisions for high outdoor air flows, humidity resistant materials (coatings), heat recovery. Moisture resistant duct materials (ie. Aluminum). Negative air pressurization relative to adjacent areas.

Plumbing Floor drains, floor sinks, trench drains, hose bibbs, domestic water connections, drinking fountain with possible bottle filling station.

Electrical Floor outlets as required at equipment locations and around floor perimeter.

Lighting High bay, high efficiency fluorescent or LED fixtures.

Audio / Video Yes. Satellite and/or cable access required. Stereo and Sound System.

Computer No.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics TBD

EQUIPMENT

Fixed Jumping wall with waterfall, a jumping platform, (1) fixed battery operated ADA compliant pool lift, (1) surge tank access hatch.

Movable (1) Scoreboard
(2) Water basketball goals
(1) Volleyball net
- zip lines
- 4" diameter floating lane lines
- 31" octagonal pace clocks
- life guard stands
All loose and deck equipment will be as required by the applicable Health Department Regulations (ladders, grab rails, safety ropes and anchors, lifeguard chairs, stanchions, desk anchors, etc.).

Room Data Sheets

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool - Option 2

SCALE: 1/32" = 1'-0"

FIXED EQUIPMENT

- a jumping wall with waterfall
- b jumping platform
- c (1) fixed battery operated ADA compliant pool lift
- d (1) surge tank access hatch

MOVEABLE EQUIPMENT

- e (1) scoreboard
- f (2) water basketball goals
- g (1) volleyball net
- h zip lines
- i 4" diameter floating lane lines
- j 31" octagonal pace clocks
- k ladders
- l grab rails
- m safety ropes
- n anchors
- o lifeguard stands
- p stanchions and deck anchors

SPECIAL COMMENTS

The indoor recreation pool will be approximately 3,500 Sq. Ft. The pool will have a minimum depth of 3'-6" and a maximum depth of 10' - 0". A 12" deep deck level gutter system will be provided for recirculation of pool water. A large stair system with ADA compliant lift will be provided for access. An emergency shut off switch will be provided near the pool to control the recirculation pump. Remote start/stop switches will be provided in the lifeguard office to control the pool feature pumps. The water temperature in this pool will be kept between 84-85 Degrees F.

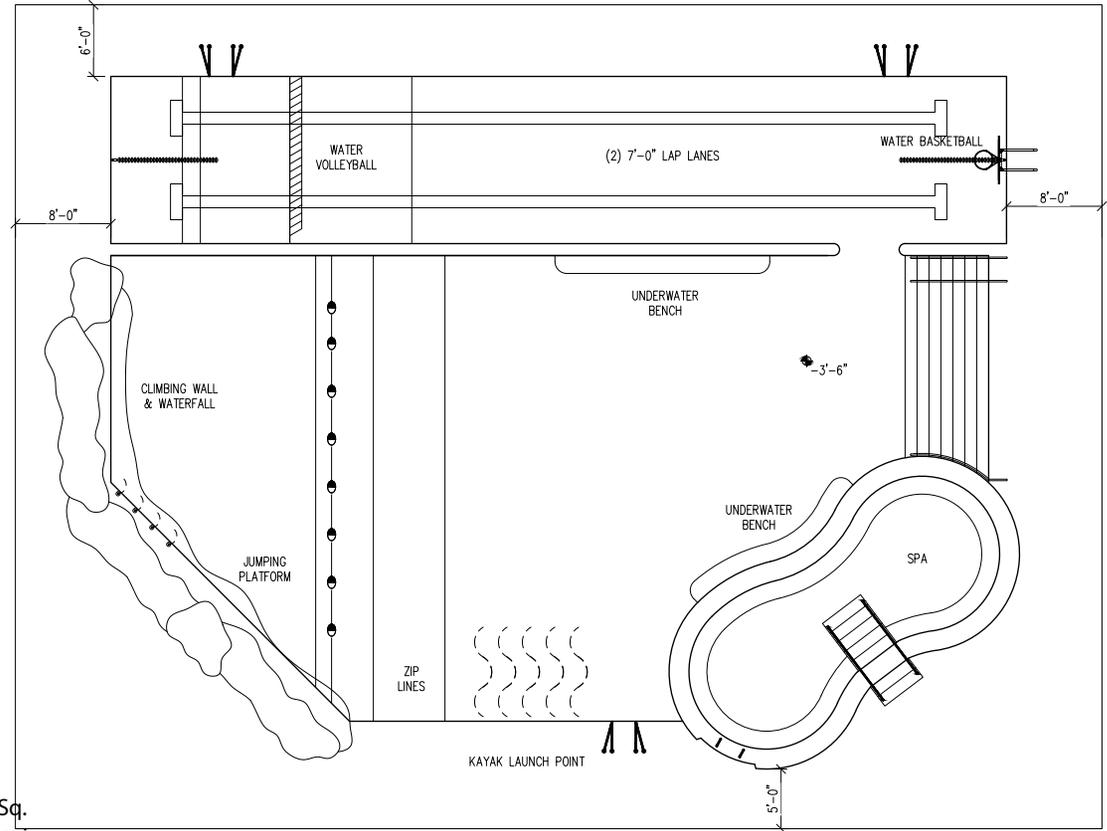


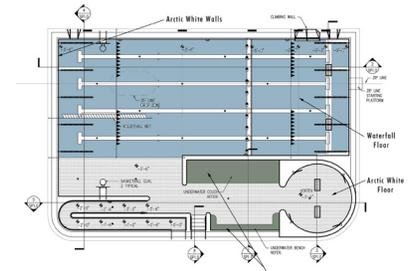
Diagram provided by
Councilman-Hunsaker

Natatorium 10,000 sf

Room Data Sheets

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool



Room Data Sheets

04.134

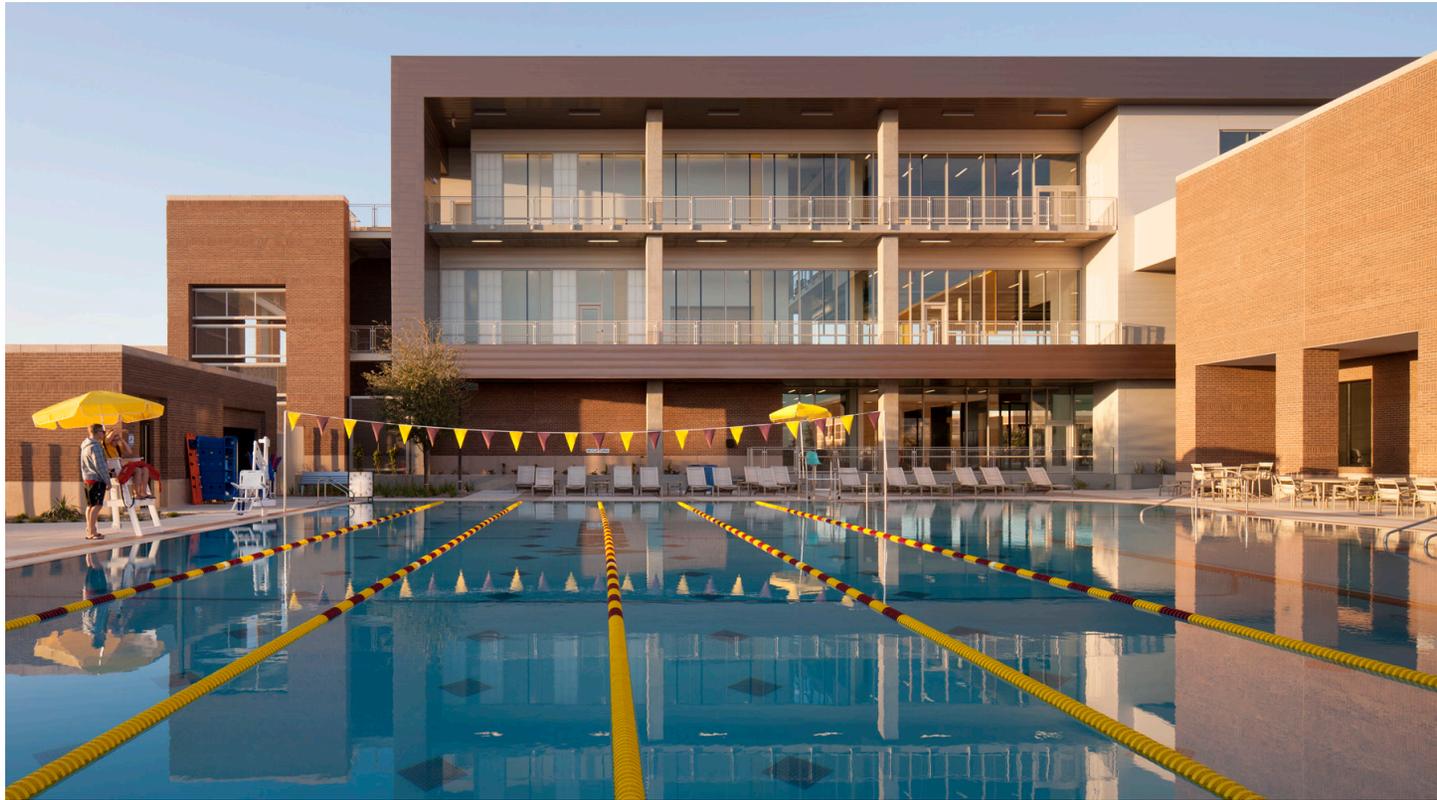
PROGRAM
DOCUMENT



AGGIE LIFE AND WELLNESS CENTER

AREA
COMPONENT

Natatorium
Fitness and Recreation Pool



AREA
COMPONENT

Natatorium Support
Aquatic Manager's Office

FUNCTIONAL DESCRIPTION Aquatic Manager's Office

ADJACENCY Primary: Natatorium

DIMENSIONAL REQUIREMENTS
 Net Program Area 120 square feet
 Min. Dimensions 10'-0" x 12'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours 6:00 am to 6:00 pm
 Numbers Approximately 1-2.

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors Wood door.
 Windows Yes. Maximize views and natural daylight.

SYSTEMS HVAC Standard mechanical heating/cooling.

Plumbing N/A.

Electrical Wall outlets as required at equipment locations and around perimeter.

Lighting Recessed Fluorescent.

Audio / Video Yes. Satellite and/or cable access required.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT Fixed Office desk.

Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS Provide as many windows as possible on exterior walls. Natural Light / Views.

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Aquatic Manager's Office

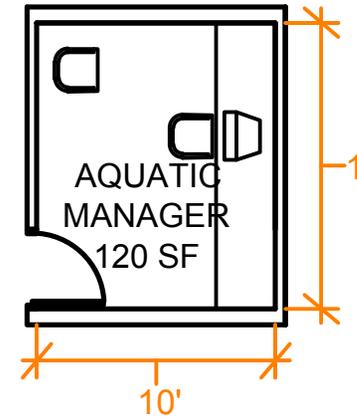
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a office desk

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Aquatic Manager's Office 120 sf

Room Data Sheets

AREA
COMPONENT

Natatorium Support
First Aid

FUNCTIONAL
DESCRIPTION

First Aid

ADJACENCY Primary: Natatorium

DIMENSIONAL
REQUIREMENTS

Net Program Area 130 square feet
Min. Dimensions 10'-0" x 13'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours 6:00 am to 6:00 pm
Numbers Approximately 1-2.

ARCHITECTURAL

Ceiling Acoustical suspended ceiling or gypsum.
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor Resilient sheet flooring and carpet.
Doors Wood door.
Windows Yes. Maximize views and natural daylight.

SYSTEMS

HVAC Standard mechanical heating/cooling.
Plumbing Handwash sink.
Electrical Floor outlets as required at equipment locations and around floor perimeter.
Lighting Recessed Fluorescent.
Audio / Video No.
Computer No.
Telephone No.
Access Control Possible to have key card access or card verification capabilities to access this space.
Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed First Aid station.
Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets

AREA
COMPONENT

Natatorium Support
First Aid

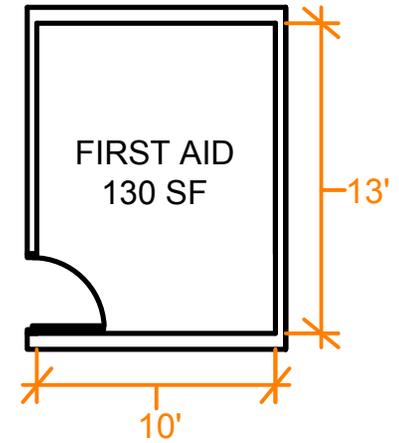
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a First Aid station.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

First Aid 130 sf

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Pool Storage

FUNCTIONAL
DESCRIPTION

Pool Storage

ADJACENCY Primary: Pool mechanical and support.

DIMENSIONAL
REQUIREMENTS

Net Program Area 300 square feet
Min. Dimensions 15'-0" x 20'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers TBD

ARCHITECTURAL

Ceiling Acoustic metal deck or supplemental
acoustic ceiling panels "clouds".
Walls Masonry or suitable durable material with
applied or integrated acoustic treatments.
Floor TBD

Doors TBD

Windows Not required.

SYSTEMS

HVAC Standard mechanical heating/cooling.
Provide exhaust for chemical storage.

Plumbing N/A.

Electrical Floor outlets as required at equipment
locations and around floor perimeter.

Lighting High efficiency fluorescent fixtures.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card
verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent
spaces and on wall surfaces to provide
sound absorption. Floor condition to be
confirmed.

EQUIPMENT

Fixed None.

Movable To be confirmed by Campus Recreation.

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

Natatorium Support
Pool Storage

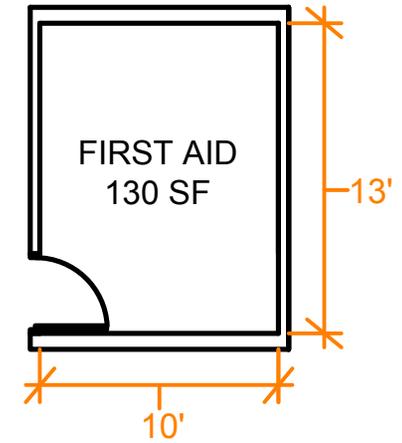
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

a None

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Pool Storage 300 sf

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Wet Classroom

FUNCTIONAL DESCRIPTION Wet Classroom

ADJACENCY Primary: Natatorium.

DIMENSIONAL REQUIREMENTS
 Net Program Area 250 square feet
 Min. Dimensions 15'-0" x 20'-0"
 Min. Height High ceiling not required for this space.

OCCUPANCY
 Access Single control point entry.
 Security Lockable after open hours.
 Hours TBD
 Numbers TBD

ARCHITECTURAL
 Ceiling Acoustical suspended ceiling or gypsum.
 Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
 Floor Resilient sheet flooring and carpet.
 Doors TBD
 Windows Yes. Maximize views and natural daylight.

SYSTEMS
 HVAC Standard mechanical heating/cooling. Occupancy sensor for Demand Control Ventilation (DVC).

Plumbing N/A.

Electrical Floor outlets as required at equipment locations and around floor perimeter.
 Lighting High efficiency fluorescent fixtures.

Audio / Video Yes. Satellite and/or cable access required.

Computer Yes.

Telephone Yes.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT
 Fixed To be confirmed by Campus Recreation.
 Movable To be confirmed by Campus Recreation.

SPECIAL COMMENTS

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Wet Classroom

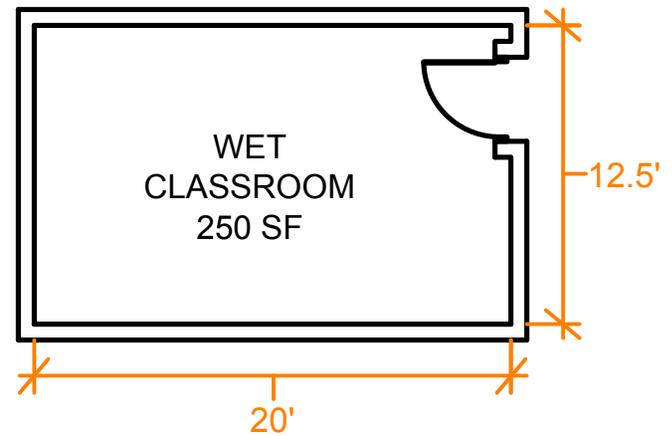
SCALE: 1/8" = 1'-0"

FIXED EQUIPMENT

To be confirmed by Campus Recreation.

MOVEABLE EQUIPMENT

To be confirmed by Campus Recreation.



SPECIAL
COMMENTS

Wet Classroom 250 sf

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Pool Filtration

FUNCTIONAL
DESCRIPTION

Pool Filtration

ADJACENCY Primary: Pool mechanical and support.

DIMENSIONAL
REQUIREMENTS

Net Program Area 800 square feet
Min. Dimensions 20'-0" x 40'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers TBD

ARCHITECTURAL

Ceiling Acoustic metal deck or supplemental acoustic ceiling panels "clouds".
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor TBD

Doors TBD

Windows Not Required.

SYSTEMS

HVAC Standard mechanical heating/cooling. Provide exhaust for chemical storage.
Plumbing Floor drains, floor sinks, trench drains, hose bibbs, domestic water connections per equipment layout.
Electrical Wall outlets as required at equipment locations and around perimeter.
Lighting High efficiency fluorescent fixtures.
Audio / Video No.
Computer No.
Telephone No.
Access Control Possible to have key card access or card verification capabilities to access this space.
Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed
Movable

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

Natatorium Support
Pool Filtration

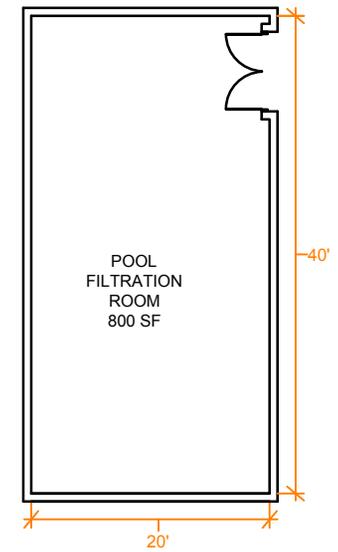
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

N/A

MOVEABLE EQUIPMENT

N/A



SPECIAL
COMMENTS

Pool Filtration 800 sf

Room Data Sheets

AREA
COMPONENT

Natatorium Support
Natatorium Mechanical

FUNCTIONAL
DESCRIPTION

Natatorium Mechanical

ADJACENCY

Primary: Natatorium storage and filtration.

DIMENSIONAL
REQUIREMENTS

Net Program Area 900 square feet
Min. Dimensions 20'-0" x 45'-0"
Min. Height High ceiling not required for this space.

OCCUPANCY

Access Single control point entry.
Security Lockable after open hours.
Hours TBD
Numbers TBD

ARCHITECTURAL

Ceiling Acoustic metal deck or supplemental acoustic ceiling panels "clouds".
Walls Masonry or suitable durable material with applied or integrated acoustic treatments.
Floor TBD

Doors TBD

Windows Not required.

SYSTEMS

HVAC Standard mechanical heating/cooling.

Plumbing N/A

Electrical Wall outlets as required at equipment locations and around floor perimeter.

Lighting High efficiency fluorescent fixtures.

Audio / Video No.

Computer No.

Telephone No.

Access Control Possible to have key card access or card verification capabilities to access this space.

Acoustics Sound proofing of walls between adjacent spaces and on wall surfaces to provide sound absorption. Floor condition to be confirmed.

EQUIPMENT

Fixed N/A

Movable N/A

SPECIAL
COMMENTS

Room Data Sheets



AREA
COMPONENT

Natatorium Support
Natatorium Mechanical

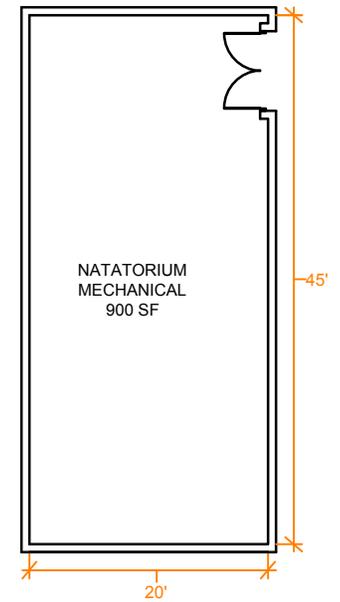
SCALE: 1/16" = 1'-0"

FIXED EQUIPMENT

N/A

MOVEABLE EQUIPMENT

N/A



SPECIAL
COMMENTS

Natatorium Mechanical 900 sf

Room Data Sheets



Preferred Stacking Diagram

04.3

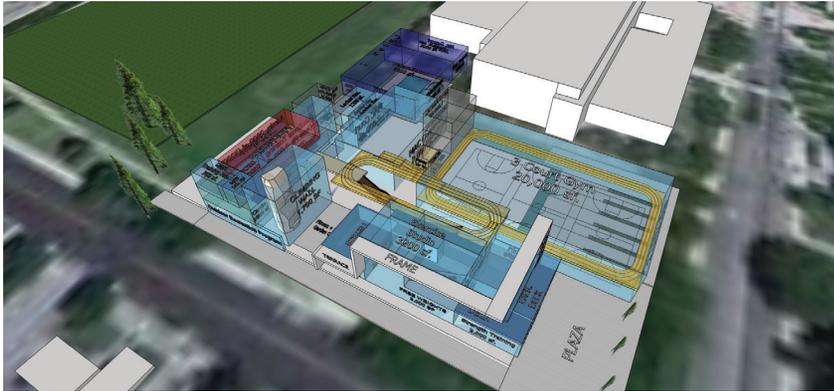
PREFERRED STACKING DIAGRAM

At this stage, preferred stacking diagram has not been determined as the project is in Pre-Design phase. The followings are the comments on the presented Stacking Options:

- Climbing wall towards the back (not a front center piece).
- Administration—wants to be on the upper level. OK to locate it on the northeast side with views to the fields or southeast at the front with views towards the new (future) Student Center. Administration folks like the Admin Offices towards the back (north) side. Some of the student staff can be separated for a remote/shared office at the front desk. No desire to break up Administration into two separate office suites. But maybe the student supervisor offices are towards the front with main Administration towards the back overlooking the fields (and pools in the future).
- Mountain West scheme 1B work out studio “tail”—really likes this concept.
- Students—like the Mountain West scheme 1B best (general consensus).
- Student Activities District—everything we do for this building needs to hit hard on this concept. Front end of the building is on the tail end of the Student Activities District. The back end of the building is more towards the middle of the overall Student Activities District.
- Mountain West Option 1A—do not necessarily like the Courts right out the front of the building.

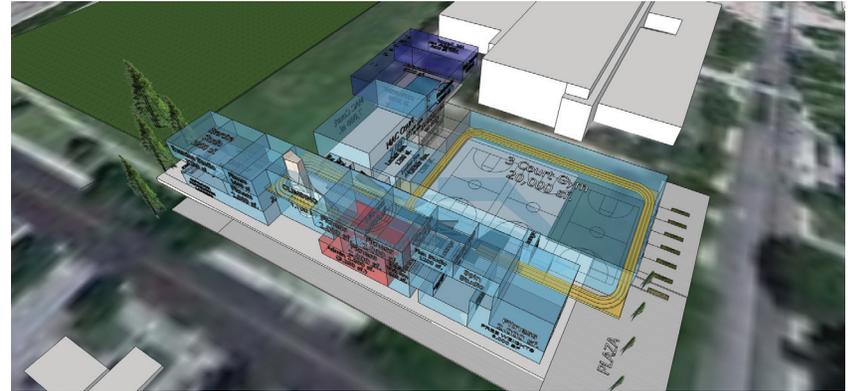
Preferred Stacking Diagram

"AGGIE BLUE..."



OPTION 1A

"MOUNTAIN WEST"



OPTION 1B



OPTION 2A

"CANYON"



OPTION 2B

Preferred Stacking Diagram



Cost Model

05



Building Cost Summary

05.1

PROJECT ESTIMATE		CONSTRUCTION CONTROL CORPORATION		7/29/2013
PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER				
LOCATION.....LOGAN, UT				
ARCHITECT.....AJC			Project Size	99,078 SF
STAGE OF DESIGN.....PROGRAM				
CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
BUILDING COST SUMMARY				
02	EXISTING CONDITIONS		\$ 0.71	\$ 70,378
03	CONCRETE		\$ 23.10	\$ 2,289,030
04	MASONRY		\$ 17.57	\$ 1,740,394
05	METALS		\$ 17.48	\$ 1,731,853
06	WOODS & PLASTICS		\$ 2.38	\$ 236,277
07	THERMAL & MOISTURE PROTECTION		\$ 13.79	\$ 1,365,794
08	DOORS & WINDOWS		\$ 14.82	\$ 1,468,160
09	FINISHES		\$ 16.69	\$ 1,653,172
10	SPECIALTIES		\$ 3.75	\$ 371,094
11	EQUIPMENT		\$ -	\$ -
12	FURNISHINGS		\$ 0.83	\$ 82,623
13	SPECIAL CONSTRUCTION		\$ 3.07	\$ 304,500
14	CONVEYING SYSTEMS		\$ 0.91	\$ 90,000
21	FIRE SUPPRESSION		\$ 3.00	\$ 297,234
22	PLUMBING		\$ 1.88	\$ 186,730
23	HVAC		\$ 28.00	\$ 2,774,184
26	ELECTRICAL		\$ 27.06	\$ 2,680,751
31	EARTHWORK		\$ 5.45	\$ 539,682
32	EXTERIOR IMPROVEMENTS		\$ 10.12	\$ 1,002,933
33	UTILITIES		\$ 5.51	\$ 546,071
SUBTOTAL			\$ 196.12	\$ 19,430,861
	GENERAL CONDITIONS	6%	\$ 11.77	\$ 1,165,852
	OVERHEAD & PROFIT	4%	\$ 7.84	\$ 777,234
	DESIGN CONTINGENCY	12%	\$ 23.53	\$ 2,331,703
TOTAL CONSTRUCTION COST			\$ 239.26	\$ 23,705,650

PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER
 LOCATION.....LOGAN, UT
 ARCHITECT.....AJC Project Size 99,078 SF
 STAGE OF DESIGN.....PROGRAM

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
02	<u>EXISTING CONDITIONS</u>			
	Remove Sod	136200 SF	\$ 0.19	\$ 25,878
	Transite Irrigation Pipe Removal	890 LF	\$ 50.00	\$ 44,500
	Subtotal for Existing Conditions			\$ 70,378
03	<u>CONCRETE</u>			
	Footings Continuous	521 CY	\$ 295.00	\$ 153,769
	Spot Footings	278 CY	\$ 305.00	\$ 84,638
	Foundation Wall	14070 SF	\$ 23.68	\$ 333,178
	Slab on Grade	54850 SF	\$ 3.70	\$ 202,945
	Topping Slab at track	6600 SF	\$ 3.70	\$ 24,420
	Concrete Column	450 CY	\$ 544.70	\$ 245,115
	Waffle Slab	44228 SF	\$ 28.00	\$ 1,238,384
	Vapor Barrier Under Slab	54850 SF	\$ 0.12	\$ 6,582
	Subtotal for Concrete			\$ 2,289,030
04	<u>MASONRY</u>			
	Exterior Wall CMU	29547 SF	\$ 14.68	\$ 433,750
	Masonry Veneer (60%)	18995 SF	\$ 24.00	\$ 455,868
	Interior Ground Face CMU Walls	52259 SF	\$ 16.28	\$ 850,777
	Subtotal for Masonry			\$ 1,740,394
05	<u>METALS</u>			
	Metal Roof Structure (10LB/SF)	548500 LB	\$ 1.90	\$ 1,042,150
	Acoustic Roof Deck	54850 SF	\$ 4.35	\$ 238,598
	Metal Pan Stairs	1300 SF	\$ 59.00	\$ 76,700
	Running Track Structure	59400 LB	\$ 1.90	\$ 112,860
	Running Track Metal floor deck	6600 SF	\$ 2.05	\$ 13,530
	Freestanding Railing	195 LF	\$ 125.00	\$ 24,375
	Wall-Hung Railing	260 LF	\$ 65.00	\$ 16,900
	Running Track Railing	1320 LF	\$ 150.00	\$ 198,000
	Roof Top Terrace Railing	92 LF	\$ 95.00	\$ 8,740
	Subtotal for Metals			\$ 1,731,853
06	<u>WOOD & PLASTICS</u>			
	Carpentry:			
	Wood Plates & Blocking	99078 SF	\$ 0.35	\$ 34,678
	Subtotal for Carpentry			\$ 34,678
	Millwork			
	Reception Desk	94 LF	\$ 315.00	\$ 29,610
	Vanity w/ Solid Surface Top	50 LF	\$ 215.00	\$ 10,750
	Wall Mount Counter/Desk	114 LF	\$ 165.00	\$ 18,810
	Base Cabinet	82 LF	\$ 195.00	\$ 15,990
	Upper Cabinet	85 LF	\$ 165.00	\$ 14,025
	Full Height Bookshelf	60 LF	\$ 59.00	\$ 3,540
	Storage Cubbies	250 LF	\$ 59.00	\$ 14,750
	Misc. Millwork	99078 SF	\$ 0.95	\$ 94,124
	Subtotal for Millwork			\$ 201,599
	TOTAL WOOD & PLASTICS			\$ 236,277
07	<u>THERMAL & MOISTURE PROTECTION</u>			
	Rigid Foundation Insulation	2814 SF	\$ 1.65	\$ 4,643
	Spray Applied Wall Insulation	18995 SF	\$ 2.95	\$ 56,034
	Exterior Rigid Wall Insulation	29547 SF	\$ 1.75	\$ 51,707
	Rigid Roof Insulation	54850 SF	\$ 3.15	\$ 172,778
	Sound Batt	52259 SF	\$ 0.44	\$ 22,994

PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER
 LOCATION.....LOGAN, UT
 ARCHITECT.....AJC Project Size 99,078 SF
 STAGE OF DESIGN.....PROGRAM

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Metal Wall Panel (40%)	10553 SF	\$ 40.00	\$ 422,100
	Aluminum Sun Shades	2533 SF	\$ 70.00	\$ 177,282
	Air/ Weather Barrier	29547 SF	\$ 2.75	\$ 81,254
	Soffit	1000 SF	\$ 30.00	\$ 30,000
	Metal Wall Cap	1876 LF	\$ 9.65	\$ 18,103
	Metal Flashings	3752 SF	\$ 5.65	\$ 21,199
	Single Ply Roofing Membrane	55850 SF	\$ 2.95	\$ 164,758
	Roof Pavers	1000 SF	\$ 29.00	\$ 29,000
	Building Fireproofing	35000 SF	\$ 1.65	\$ 57,750
	Fire Stopping/ Caulking	99078 SF	\$ 0.25	\$ 24,770
	Caulking & Sealants	99078 SF	\$ 0.30	\$ 29,723
	Roof Hatch	2 Ea	\$ 850.00	\$ 1,700
	Subtotal for Thermal & Moisture Protection			\$ 1,365,794
08	<u>DOORS & WINDOWS</u>			
	Aluminum Door - Single	29 Ea	\$ 1,850.00	\$ 53,650
	Aluminum Frame - Double	16 Ea	\$ 3,650.00	\$ 58,400
	HM Frame Single Solid Wood Door - Single	81 Ea	\$ 920.00	\$ 74,520
	HM Frame Single Solid Wood Door - Double	8 Ea	\$ 1,550.00	\$ 12,400
	Insulated Roll-Up Door	2 Ea	\$ 3,465.00	\$ 6,930
	Exterior Curtainwall	8442 SF	\$ 73.30	\$ 618,799
	Exterior Storefront Glazing	4221 SF	\$ 38.50	\$ 162,509
	Interior Storefront Glazing	14896 SF	\$ 30.50	\$ 454,328
	Mirror	2500 SF	\$ 10.65	\$ 26,625
	Subtotal for Doors & Windows			\$ 1,468,160
09	<u>FINISHES</u>			
	6" Exterior Metal Stud Wall w/ 5/8" Gyp Bd. 1 Side	29547 SF	\$ 4.91	\$ 145,076
	4" Metal Stud Wall w/ 5/8" Gyp Bd. 2 Sides	52259 SF	\$ 4.69	\$ 245,095
	Gym Divider Curtain Bulkhead	208 LF	\$ 70.20	\$ 14,602
	Exercise Room Divider Wall Bulkhead	50 LF	\$ 53.00	\$ 2,650
	ACT Ceiling	15090 SF	\$ 5.25	\$ 79,223
	Exposed Ceiling, Painted	40173 SF	\$ 1.89	\$ 75,927
	Suspended Gyp. Ceiling	4710 SF	\$ 4.32	\$ 20,347
	ACT Ceiling w/ Ceiling Clouds	7400 SF	\$ 5.00	\$ 37,000
	Carpet	5853 SF	\$ 4.00	\$ 23,412
	Resilient Sheet Flooring	6110 SF	\$ 4.54	\$ 27,739
	Ceramic Tile	3810 SF	\$ 9.50	\$ 36,195
	High Impact Rubber Flooring	13000 SF	\$ 10.25	\$ 133,250
	Rubber Flooring	1000 SF	\$ 9.65	\$ 9,650
	Hardwood Flooring	31000 SF	\$ 11.65	\$ 361,150
	Running Track Surface	6600 SF	\$ 9.85	\$ 65,010
	Ceramic Wall Tile	4848 SF	\$ 9.00	\$ 43,632
	Rubber Base	9930 LF	\$ 1.65	\$ 16,385
	Ceramic Tile Base	606 LF	\$ 8.50	\$ 5,151
	Paint Gypsum Board Walls/Ceilings	134065 SF	\$ 2.00	\$ 268,130
	Paint/Seal Masonry	71254 SF	\$ 0.53	\$ 37,764
	Paint/Stain Doors	89 Ea	\$ 65.00	\$ 5,785
	Subtotal for Finishes			\$ 1,653,172
10	<u>SPECIALTIES</u>			
	Toilet Partitions	26 Ea	\$ 800.00	\$ 20,800
	Toilet Partitions ADA	4 Ea	\$ 850.00	\$ 3,400
	Bathroom Accessories	30 Ea	\$ 150.00	\$ 4,500
	Fire Extinguisher Cabinet	6 Ea	\$ 278.00	\$ 1,668
	Defibrillator Cabinet	4 Ea	\$ 1,914.00	\$ 7,656
	Identifying Devices	1 LS	\$ 50,000.00	\$ 50,000
	Lockers	200 Ea	\$ 328.00	\$ 65,600
	Locker Room Bench	260 LF	\$ 54.00	\$ 14,040
	Marker Board	360 SF	\$ 11.65	\$ 4,194

PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER
 LOCATION.....LOGAN, UT
 ARCHITECT.....AJC Project Size 99,078 SF
 STAGE OF DESIGN.....PROGRAM

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Acoustic Wall Treatments	1 Allow	\$ 50,000.00	\$ 50,000
	Hardwood Floor Logo	1 Allow	\$ 3,500.00	\$ 3,500
	Dasher Wall	1 Allow	\$ 25,000.00	\$ 25,000
	Gym Divider Curtain	6240 SF	\$ 12.65	\$ 78,936
	Exercise Room Divider Wall	500 SF	\$ 52.00	\$ 26,000
	Projection Screen	4 Ea	\$ 3,950.00	\$ 15,800
	Subtotal for Specialties			\$ 371,094
11	EQUIPMENT			
	Included in soft cost FF&E			
	Subtotal for Equipment			\$ -
12	FURNISHINGS			
	Walk-Off Mats	400 SF	\$ 24.00	\$ 9,600
	Shading Devices	8442 SF	\$ 8.65	\$ 73,023
	Volleyball Nets			NIC
	Badminton Nets			NIC
	Futsal Goal			NIC
	Loose Furniture			NIC
	Excercise Equipment			NIC
	Desk/Office Furniture			NIC
	Subtotal for Furnishings			\$ 82,623
13	SPECIAL CONSTRUCTION			
	Rock Climbing Wall- NIC			
	Exterior Covered Storage Structure	3500 SF	\$ 87.00	\$ 304,500
	Subtotal for Special Construction			\$ 304,500
14	CONVEYING SYSTEMS			
	3 Stop Passenger Elevator oversized	1 Ea	\$ 90,000.00	\$ 90,000
	Subtotal for Conveying Systems			\$ 90,000
21	FIRE SUPPRESSION	99078 SF	\$ 3.00	\$ 297,234
22	PLUMBING			
	Water Closet	30 Ea	\$ 720.00	\$ 21,600
	Urinal	4 Ea	\$ 702.00	\$ 2,808
	Lavatory	8 Ea	\$ 550.00	\$ 4,400
	Shower	12 Ea	\$ 950.00	\$ 11,400
	Counter Mounted Sink	9 Ea	\$ 520.00	\$ 4,680
	Single Basin Sink w/ Disposal	3 Ea	\$ 650.00	\$ 1,950
	Supply Outlet Box	3 Ea	\$ 125.00	\$ 375
	Mop Sink	3 Ea	\$ 680.00	\$ 2,040
	Floor Drains	20 Ea	\$ 125.00	\$ 2,500
	Water Cooler w/ Water Bottle Fill	15 Ea	\$ 620.00	\$ 9,300
	Down Spout Nozzle	6 Ea	\$ 165.00	\$ 990
	Hose Bib	10 Ea	\$ 105.00	\$ 1,050
	Wall Hydrant	8 Ea	\$ 125.00	\$ 1,000
	Water Heater	2 Ea	\$ 1,500.00	\$ 3,000
	Circulating Pump	1 Ea	\$ 405.00	\$ 405
	Roof Drains	18 Ea	\$ 185.00	\$ 3,330
	Wash Down Area Trench Drain	10 LF	\$ 75.00	\$ 750
	Roof Drain Piping	1440 LF	\$ 16.50	\$ 23,760
	Supply Piping	3750 LF	\$ 10.65	\$ 39,938
	Waste/ Vent Piping	2673 LF	\$ 16.50	\$ 44,105
	PRV Valve	1 EA	\$ 850.00	\$ 850
	Clean & Flush Lines	1 LS	\$ 1,500.00	\$ 1,500
	Roof Patio Irrigation System	1 LS	\$ 5,000.00	\$ 5,000

Building Cost Summary

PROJECT ESTIMATE		CONSTRUCTION CONTROL CORPORATION		7/29/2013
PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER				
LOCATION.....LOGAN, UT				
ARCHITECT.....AJC Project Size 99,078 SF				
STAGE OF DESIGN.....PROGRAM				
CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Subtotal for Plumbing			\$ 186,730
23	HVAC	99078 SF	\$ 28.00	\$ 2,774,184
26	ELECTRICAL			
	Service & Distribution	99078 SF	\$ 5.65	\$ 559,791
	Power	99078 SF	\$ 5.00	\$ 495,390
	Site/Building Exterior Lighting	1 Allow	\$ 75,000.00	\$ 75,000
	Interior Lighting	99078 SF	\$ 7.50	\$ 743,085
	Fire Alarm	99078 SF	\$ 2.50	\$ 247,695
	Special Systems	99078 SF	\$ 5.65	\$ 559,791
	TOTAL ELECTRICAL			\$ 2,680,751
31	EARTHWORK			
	Clear & Grub Site	136200 SF	\$ 0.39	\$ 53,118
	Building Excavation (5' Over-Ex)	12062 CY	\$ 6.00	\$ 72,372
	Building Backfill and Compaction w/ Strucural Fills	10031 CY	\$ 19.65	\$ 197,109
	Building Grading	54850 SF	\$ 0.39	\$ 21,392
	Site Excavation, Berm Removal	3383 CY	\$ 6.00	\$ 20,298
	Haul Off Site	15445 CY	\$ 5.00	\$ 77,225
	Gravel Under Slab	1727 TNS	\$ 24.00	\$ 41,442
	Site Grading	81350 SF	\$ 0.39	\$ 31,727
	SWPPP	1 LS	\$ 25,000.00	\$ 25,000
	Subtotal for Earthwork			\$ 539,682
32	EXTERIOR IMPROVEMENTS			
	Site Concrete			
	24" Curb & Gutter	400 LF	\$ 17.68	\$ 7,072
	Fire Lane Sidewalk and Turn-Around	18790 SF	\$ 4.23	\$ 79,482
	ADA Domes	4 Ea	\$ 365.00	\$ 1,460
	Parking, Storage Area Paving	25000 SF	\$ 4.23	\$ 105,750
	Skate Park Elements	1 Allow	\$ 15,000.00	\$ 15,000
	Bike Rack	100 Ea	\$ 580.00	\$ 58,000
	Miscellanious Site Concrete	136200 SF	\$ 0.25	\$ 34,050
	Subtotal for Site Concrete			\$ 300,814
	Landscaping			
	Plaza Area Improvements	31,500 SF	\$ 20.00	\$ 630,000
	Landscape Area	6,060 SF	\$ 3.65	\$ 22,119
	Site Repair After Direct Bury Piping, Node	1 LS	\$ 50,000.00	\$ 50,000
	Subtotal for Landscaping			\$ 702,119
	Subtotal for Exterior Improvements			\$ 1,002,933
33	UTILITIES			
	8" PVC Sewer	200 LF	\$ 34.65	\$ 6,930
	10" PVC Water Main	600 LF	\$ 41.11	\$ 24,666
	Hydrants	4 EA	\$ 2,000.00	\$ 8,000
	Domestic Service	100 LF	\$ 40.00	\$ 4,000
	Meter w/ vault	1 EA	\$ 5,000.00	\$ 5,000
	12" HDPE Storm Water Pipe	300 LF	\$ 24.65	\$ 7,395
	15" HDPE Storm Water Pipe	200 LF	\$ 26.65	\$ 5,330
	2 X 2 Concrete Drain Boxes	15 Ea	\$ 1,250.00	\$ 18,750
	2 X 3 Concrete Inlet Boxes	4 Ea	\$ 1,850.00	\$ 7,400

PROJECT ESTIMATE		CONSTRUCTION CONTROL CORPORATION		7/29/2013
PROJECT NAME.....USU AGGIE LIFE & WELLNESS CENTER				
LOCATION.....LOGAN, UT				
ARCHITECT.....AJC				
STAGE OF DESIGN.....PROGRAM				
Project Size 99,078 SF				
CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	8' Concrete Sump (10' Deep)	2 Ea	\$ 3,500.00	\$ 7,000
	4 Pipe Steam & Chilled Water - Direct Bury	600 LF	\$ 661.00	\$ 396,600
	14 X 14 Tunnel Node	1 Ea	\$ 55,000.00	\$ 55,000
	TOTAL UTILITIES			\$ 546,071



Outline Finish Legend

06

PRE-SCHEMATIC FINISH SCHEDULE

1. PRIVATE OFFICE FINISH LEVEL

Floor: Standard Quality Carpet Tile
Base: Straight Vinyl Base
Walls: Painted Gypsum Walls
Ceiling: 70% Lay In Panel Ceiling, 30% Painted Gypsum
Lighting: Fluorescent, Dimmable Incandescent, Accent Lighting
Casework: Wood Veneer with Solid Surface Countertop

2. DEPARTMENT CONFERENCE ROOM/ TRAINING ROOM FINISH LEVEL

Floor: Standard Quality Carpet Tile
Base: Straight Vinyl Base
Walls: Painted 60% Gypsum Walls, 40% Wood Slats
Ceiling: 70% Wood Slat Panel Ceiling, 30% Painted Gypsum
Lighting: Fluorescent, Dimmable Incandescent, Accent Lighting
Casework: Wood Veneer with Solid Surface Countertop
Miscellaneous: Glass Projection/Whiteboard

3. STAFF/STUDENT BREAK ROOM FINISH LEVEL

Floor: Standard Quality Porcelain Floor Tile
Base: Standard Quality Porcelain Tile Cove Base
Walls: Painted Gypsum Walls
Ceiling: 2x2 Lay In Panel Ceiling
Lighting: Fluorescent, Accent Lighting

Casework: Plastic Laminate with Solid Surface Countertop & Ceramic Tile Backsplash

4. WORK ROOM/COPY AREA FINISH LEVEL

Floor: Standard Quality Carpet Tile
Base: Straight Vinyl Base
Walls: Painted Gypsum Walls
Ceiling: 70% 2x2 Lay In Panel Ceiling
Lighting: Fluorescent, Dimmable Incandescent, Accent Lighting
Casework: Plastic Laminate with Solid Surface Countertop

5. CLASSROOM FINISH LEVEL

Floor: Standard Quality Carpet Tile
Base: Straight Vinyl Base
Walls: Painted Gypsum Walls
Ceiling: 70% Lay In Panel Ceiling, 30% Painted Gypsum
Lighting: Indirect/Direct Dimmable Fluorescent
Miscellaneous: Glass Projection/Whiteboard

6. PUBLIC LOBBY AND LOUNGE FINISH LEVEL

Floor: Terrazzo Flooring System
Base: Integral Cove Terrazzo Base
Walls: 70% Painted Gypsum, 30% Dimensional Stone Tile
Ceiling: 60% 2x6 Lay In Panel Ceiling, 40% Painted Gypsum
Lighting: Fluorescent, Accent Lighting, Large & Decorative Fixtures
Casework: Wood Veneer with Solid Surface Countertop

Miscellaneous: Phenolic Daylockers

7. GENERAL PUBLIC LOCKER ROOM FINISH LEVEL

Floor: Standard Quality Porcelain Quality Tile
Base: Standard Quality Porcelain Tile Cove Base
Walls: 60% Standard Quality Ceramic Tile (to Ceiling Height), 30% Epoxy Painted Gypsum, 10% Glass Tile Accents
Ceiling: Epoxy Painted Gypsum, 2x2 Wet Location Lay In Panel Ceiling
Lighting: Fluorescent, Incandescent, Accent Lighting
Lockers: Premium Quality Phenolic Lockers with Integrated Bench Seating & Digital Locks
Casework: Plastic Laminate with Solid Surface Countertop
Stalls: Phenolic Partitions

8. BASKETBALL GYMNASIUM FINISH LEVEL

Floor: Permanent Wood Athletic Floor
Base: Vented Air Flow Base
Walls: Ground Face Block, Painted Gypsum
Ceiling: Exposed Painted Structure
Lighting: Fluorescent High Bay
Miscellaneous: Wall Pads up to 8'-0"

9. MAC GYMNASIUM FINISH LEVEL

Floor: 6mm Volcanized Rubber Impact Resistant Flooring (Mondo- Advance, 6' Roll)
Base: Straight Vinyl Base
Walls: Ground Face Block, Painted Gypsum
Ceiling: Exposed Painted Structure
Lighting: Fluorescent High Bay
Miscellaneous: Wall Pads up to 8'-0"

10. ELEVATED RUNNING TRACK FINISH LEVEL

Floor: Textured 10mm Volcanized Rubber Flooring (Mondo- Super X Performance, 6' Roll)
Miscellaneous: Railing with Stainless Steel Welded Wire Mesh

11. CARDIO TRAINING & STRETCHING AREA(S) FINISH LEVEL

Floor: 6mm Volcanized Rubber Impact Resistant Flooring (Mondo- Sport Impact, 6' Roll)
Base: Wrap Rubber Flooring Up Wall 6" with Finished Metal Channel
Walls: Painted Gypsum, Glass
Ceiling: Painted Exposed Structure, Painted Gypsum, 2x6 Lay In Panel Ceiling
Lighting: Indirect/direct Fluorescent, Ceiling Fans
Casework: Plastic Laminate with Solid Surface Countertop

12. STRENGTH TRAINING & FREE WEIGHTS FINISH LEVEL

Floor: 10mm Volcanized Rubber Impact Resistant Flooring w/ Surface Machine Plat forms (Mondo- Sport Impact, 6' Roll)
Base: Wrap Rubber Flooring Up Wall 18" with Finished Metal Channel
Walls: Glass, Painted Gypsum
Ceiling: Painted Exposed Structure, Painted Gypsum, 4x4 Lay In Panel Ceiling
Lighting: Indirect/direct Fluorescent, Ceiling Fans
Casework: Plastic Laminate with Solid Surface Countertop
Miscellaneous: Mirrors

13. FITNESS ASSESSMENT & TESTING FINISH LEVEL

Floor: 6mm Volcanized Rubber Impact Resistant Flooring (Mondo- Sport Impact, 6' Roll)
Base: Wrap Rubber Flooring Up Wall 18" with Finished Metal Channel
Walls: Painted Gypsum
Ceiling: Painted Gypsum, 2x2 Lay In Panel Ceiling
Lighting: Indirect/direct Fluorescent, Ceiling Fans
Casework: Plastic Laminate with Solid Surface Countertop
Miscellaneous: Mirrors

14. GROUP EXERCISE STUDIO FINISH LEVEL

Floor: Wood Athletic Floor
Base: Vented Air Flow Base
Walls: Painted Gypsum
Ceiling: 70% 2x6 Lay In Panel Ceiling, 40% Painted Gypsum
Lighting: Fluorescent, Dimmable Incandescent, Accent Lighting, Ceiling Fans
Casework: Plastic Laminate with Solid Surface Countertop
Miscellaneous: Mirrors

15. SPIN STUDIO FINISH LEVEL

Floor: 6mm Vulcanized Rubber Impact Resistant Flooring (Mondo- Advance, 6' Roll)
Base: Straight Vinyl Base
Walls: Painted Gypsum, Vinyl Wallcovering
Ceiling: 70% 2x2 Lay In Panel Ceiling, 40% Painted Gypsum
Lighting: Fluorescent, Dimmable Incandescent, LED Accent/Specialty Lighting, Ceiling Fans
Casework: Plastic Laminate with Solid Surface Countertop
Miscellaneous: Mirrors, Projection Screen

PRE-SCHEMATIC FINISH SCHEDULE CONTINUED

16. CLIMBING WALL/STUDIO FINISH LEVEL

Floor: Bonded Carpet with Polyethylene Foam
Flooring, Roll Good
Ceiling: Painted Exposed Structure
Lighting: Indirect/Direct Dimmable Fluorescent,
Spot Lighting, LED Specialty Lighting
Casework: Plastic Laminate with Solid Surface
Countertop

17. FLEXIBLE MULTIPURPOSE STUDIO FINISH LEVEL

Floor: 30% 6mm Vulcanized Rubber Impact
Resistant Flooring (Mondo-
Advance, 6' Roll) & 70% Indoor
Turf (Astroturf- Puregrass)
Base: Wrap Rubber Flooring Up Wall 18" with
Finished Metal Channel
Walls: Ground Face Block, Painted CMU
Ceiling: Painted Exposed Structure, Painted
Gypsum
Lighting: Fluorescent, Ceiling Fans
Casework: Plastic Laminate with Solid Surface
Countertop
Miscellaneous: Mirrors

18. PUBLIC RESTROOM FINISH LEVEL

Floor: Standard Quality Porcelain Floor Tile
Base: Standard Quality Porcelain Tile Cove Base
Walls: 60% Standard Quality Ceramic Wall Tile (to
Ceiling Height), 40% Epoxy Painted
Gypsum
Ceiling: 2x2 Lay In Panel Ceiling
Lighting: Fluorescent, Accent Lighting

19. BACK OF HOUSE FINISH LEVEL

Floor: Sealed Concrete
Base: Rubber Base
Walls: Sealed CMU walls
Ceiling: Exposed (No Ceiling)
Lighting: Industrial Fluorescent

20. MAIN STAIR FINISH LEVEL

Treads: Epoxy Terrazzo
Risers: Stained Ipe Wood

21. CIRCULATION FINISH LEVEL

Floor: 70% Terrazzo, 30% 6mm Rubber Impact
Resistant Flooring
Base: Integral Cove Terrazzo Base & Straight
Vinyl Base
Walls: Ground Face Block, Painted Standard CMU,
Painted Gypsum
Ceiling: 2x6 Lay In Panel Ceiling, Painted
Gypsum, Painted Exposed Structure
Lighting: Fluorescent, Accent Lighting

07

Appendices

APPENDIX A
APPENDIX B
APPENDIX C
APPENDIX D
APPENDIX E
APPENDIX F

USU Existing Facilities
Future Pool Addition Study
LEED Checklist (July 24, 2013)
NIRSA Recommendation & Benchmarking
Site Visit Summary
USU Partial Campus Masterplan

USU Existing Facilities

A

Utah State University Campus Recreation Department

Mission: “We are dedicated to enhancing the college experience for students through play, wellness, and adventure”

TO DO LIST FROM AJC highlighted in bold:

Administration

Number of Offices—private vs. open

- Staff Assistant: 1 Open (+1-2 open work stations for student receptionists)
- Scheduling: 1 Private
- Accounting: 1 Private
- Assistant Director Sports & Fitness: 1 Private w/small meeting table & chairs for 3-5
- Associate Director Facility Operations: 1 Private w/small meeting table & chairs for 3-5 (+ 2-4 open workstations for student employees)
- Executive Director: 1 Private w/medium meeting table & chairs for 3-7
- PR/Marketing: 1 Open (+2 open work stations for student employees)
- IT Systems Specialist: 1 Private (+2 open work stations for student employees)
- Equipment maintenance specialist: 1 Private
- Group Fitness Coordinator: 1 Private w/small meeting table & chairs for 3-5
- Intramural Coordinator: 1 Private
- Club Sport Coordinator: 1 Private
- 1 Breakroom for student employees
- 1 Breakroom for professional staff

Inventory of current space sizes and allotments and equipment*CARDIO

- Spinning bikes: 8 (LeMond & LifeFitness) 24'x11'
- Elliptical Cross-Trainers: 22 (LifeFitness:18; Precor: 4) 33'x33'
- Exercise Bikes: 4 (LifeFitness) 4'x11'
- Treadmills: 22 (LifeFitness) 39'x31'
- Stairclimbers: 4 (LifeFitness) 4'x15'
- ADA Cardio: 1 (LifeFitness); ADA Cable Machine: 1 (LF) 11'x12'



Inventory of current space sizes and allotments and equipment*STRENGTH EQUIPMENT

- Cable, stretching machines and misc. dumbbells/plates (machines: 21) (LifeFitness) 78'x20'
- Plate-loaded strength equipment pieces: 17 (HammerStrength); Benches: 10 (HammerStrength); Plate Trees: 4; Dumbbell racks: 3; 38'x81'

Inventory of Misc. Equipment in current Fieldhouse Fitness area

- Service Desk: 2 workstations; 6'x9'
- 3 Flatscreen TVs
- 4 large speakers
- 9 Sanitation stations (paper towel dispensers, disinfectant bottles, garbage and recycling containers)
- Stretching mat: 1; 12'x12'
- Water stations including water-bottle filling station: 2
- Repair shop w/tools and lift: 17'x11'
- Squash court (used also as stretching area): 18'x32'

Aquatics administration Offices/storage-private vs. open

- Aquatics Director: Private
- Head Lifeguard/Lifeguards (2 open work stations)
- Wet classroom
- Storage: currently using an 8 by 18 storage closet, could use more

Conference Space needs

- 1 Department conference room with space for 12-20 chairs and table & fully supported "smart" technology
- 1 Department Classroom with seating/desks for 20-100 and fully supported "smart" technology; small kitchen sink, etc. (Orientations, Training, and large meetings)

Storage space

- 1 storage suite with the ability to divide into office-storage for various file cabinets, office supplies, etc.
- 1 work area that can be used to store department copy machine, mail boxes, office supplies, printers, etc.

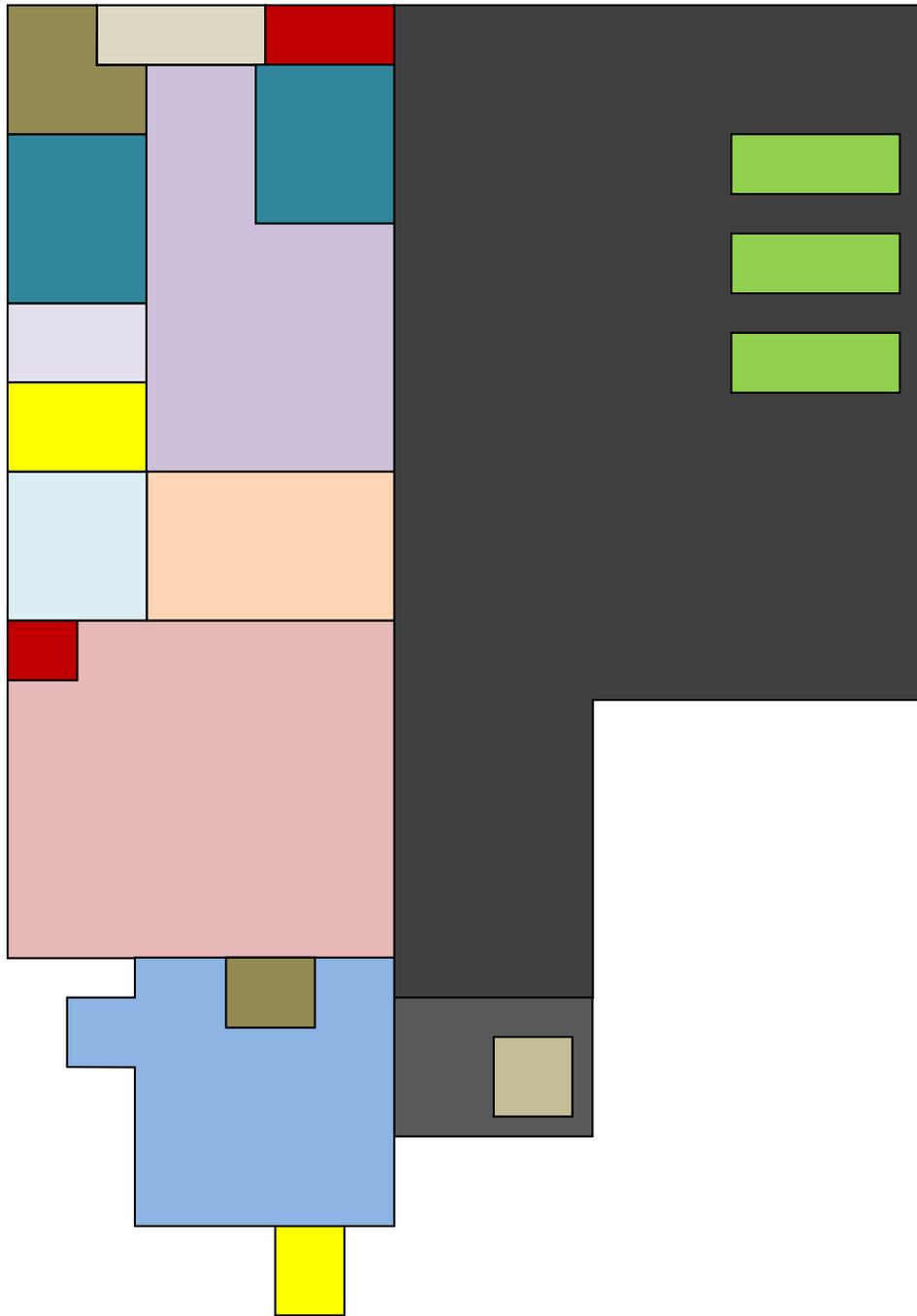
Support??? (Not sure what this refers to)

Any sort of retail component?

- 1 Retail space with enough space to sell items to promote Campus Recreation, Club Sports, Outdoor Recreation, Fitness, Aquatics for users of the facility.

	W	L		
Freezer	7	9	63	
Dirt room	27	27	673	
Repairs	7	7	49	
BR 1	7	8	56	
CR, Kitch	39	34	1278	
Utility	8	6	48	
Boats/skis	14	15	210	
Tents/skis	24.5	15	367.5	
WS/SS	14	9	126	
Sleep bag	14	8	112	
Office 1	14	17	238	
Office 2	14	16	224	
Main shop	24	41	760	
BR 2	14	13	152	
		INDOOR-BR and Utility	4100.5	
			0	
Shed 1	10	12	120	
Shed 2	10	12	120	
Shed 3	8	8	64	
		Sheds	304	
Canoe 1	18	6	108	
Canoe 2	18	6	108	
Canoe 3	18	6	108	
		Boat Racks	324	
Back Half	20	44	880	
Front Half	53	70	3710	
		Outdoor minus sheds canoes	3962	
		Including sheds and canoes	4590	
		TOTAL SPACE	8691	





Outdoor Recreation Program - Existing Facility



Future Pool Addition Study
by Counsilman Hunsaker Aquatic Consultant

B



SECTION 1: SWIMMING POOL EXECUTIVE SUMMARY

The Aggie Life and Wellness Center at Utah State University will be designed to meet the needs of the University for the next fifty years. It is important to provide maximum flexibility for programming, which will be the key to maximum utilization.

The Aggie Life and Wellness Center will feature an indoor Recreation Pool and an indoor Spa as described in Section 2 below. The pool and spa will be constructed of cast-in-place or pneumatically applied concrete. The interior finish of the pool and spa will be unglazed ceramic mosaic tile. The pool will feature lap lanes, a climbing wall with waterfall, a jumping platform, water basketball and volleyball, zip lines, moving water for kayaks, and social spaces. All loose and deck equipment will be as required by the applicable Health Department Regulations (i.e., ladders, grab rails, safety ropes and anchors, lifeguard chairs, stanchions, deck anchors, etc.). The filtration systems will be high rate pressure sand systems. The chemical treatment systems will be calcium hypochlorite (sanitizer), CO2 (pH Buffer), and Ultraviolet Light (Supplemental Sanitizer). Miscellaneous maintenance and first aid equipment will be provided that meets the applicable Health Department Regulations.

The natatorium and swimming pools will meet the following performance standards:

Overhead lighting:		
Recreation Pool	=	50 foot candles
Spa	=	50 foot candles
Water Temperature:		
Recreation Pool	=	84 - 85 degrees F.
Spa	=	100 - 104 degrees F.
Air Temperature	=	86 - 88 degrees F.
Relative Humidity	=	50%
Reverberation Time	=	2.0 to 3.0 seconds
Turnover Rate of Filtration System:		
Recreation Pool	=	2.0 hours
Spa	=	15 minutes
Free Chlorine Level	=	1.0 - 3.0 ppm
pH level	=	7.4 - 7.6

SECTION 2: SWIMMING POOL PROGRAMRecreation Pool

The indoor recreation pool will be approximately 3,500 Sq. Ft. and have the following amenities: two (2) 25 yd. lap lanes, a climbing wall with waterfall, a jumping platform, water basketball and volleyball, zip lines, moving water for kayaks, and social spaces. The pool will have a minimum depth of 3'-6" and a maximum depth of 10' - 0". A 12" deep deck level gutter system will be provided for recirculation of pool water. A large stair system with ADA compliant lift will be provided for access. Equipment to be provided will include (not all inclusive): movable guard stands that are 42" tall, one fixed battery operated ADA compliant pool lift, maintenance equipment, and safety equipment. An emergency shut off switch will be provided near the pool to control the recirculation pump. Remote start/stop switches will be provided in the lifeguard office to control the pool feature pumps. The water temperature in this pool will be kept between 84-85 Degrees F.



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Spa

The indoor spa will be approximately 300 Sq. Ft. and accommodate approximately thirty (30) users. The spa will be 3'-0" deep. The spa will be raised 18" above the deck level. Skimmers will be provided for recirculation of spa water. An emergency shut off switch and hydrotherapy jet timer will be provided near the spa. The water temperature in the spa will be kept between 100-104 Degrees F.

**SECTION 3: SWIMMING POOL SYSTEMS AND EQUIPMENT**POOL CONSTRUCTION

Pool shells of cast-in-place or pneumatically applied concrete will be provided depending on the results of the geotechnical investigation, construction staging, cost, and site access. An option to use either method may be included if appropriate for the soil conditions. Different swimming pool contractors use different methods of concrete pool shell construction.

HYDROSTATIC RELIEF SYSTEMS

A means of stabilizing the pool shell when abnormal subsurface hydrostatic pressure occurs will be provided, which otherwise can cause the pool shell to float when the swimming pool is empty. This hazard is minimized if a full basement surrounds the pool tank; however, if the pool walls rest in an unexcavated mass, the danger does exist.

The design of a hydrostatic relief system is usually based upon the predictable levels of the subsurface water table. Because other developments can also create a hazardous situation when the pool is empty, it is important to understand these various dangers and to design a comprehensive system that will prevent destructive forces from developing. Various systems have been developed including automatic check valves, concrete ballast, dehydration systems, refilling systems and gravity drains. The primary issue, as in any preventative action task, is to understand the various kinds of hazard and damage that may occur.

Even a benign water table is not justification to dismiss the potential problem. An unnatural hydrostatic

pressure condition can develop if a break occurs in a water pipe in either the fresh water system or the pool water system. This rapid introduction of water into the otherwise "dry" substrata can create an unstable condition for the pool shell. In the case of the fresh water line, the condition can go undetected for months in certain circumstances. For this reason the pool will feature some means of draining the substrata below the pool shell.

In addition to a conventional automatic hydrostatic relief mechanism, it is recommended that a sight well be provided in the pool deck, adjacent to the filter room or immediately outdoors of the natatorium. Such a feature will allow the visual inspection of the water table under the pool and in the case of the outdoor sight sump, dewatering can be conveniently executed.

POOL FINISH

The interior finish of the pool and spa will be unglazed ceramic mosaic tile.

DECK SIGNAGE

Depth markings and warning signs for the pool and spa deck will be required by code in contrasting ceramic tile. Depth markings will be shown in standard and/or metric measurements. "NO DIVING" signs will be provided at all pool areas with a depth of water 5'-0" or less. Depth markers will be provided per code at not more than 25 ft intervals.

OVERFLOW RECIRCULATION SYSTEMS

In modern swimming pools, the purpose of the perimeter overflow system is to receive and capture water at the pool surface. This water is then transferred to the filter plant, either by direct suction connection, or through a surge tank, which helps stabilize the water displacement in the swimming pool.

A 12" deep deck level gutter will be installed on the recreation pool. A surge tank will be required to balance the water. The spa will utilize a skimmer system.

FILTRATION SYSTEMS

The filters will be high rate pressure sand filters operating at a flow rate of up to 15 GPM per square foot of filter area. While many manufacturers rate their system at 20 GPM/sq. ft., field experience has shown that the lower flow rate results in better water quality. The system will be designed to completely turn over the recreation pool water every 2 hours and the spa every 15 minutes.

Filter room and filter face piping will be PVC Schedule 80 piping used throughout the pool and spa piping system (8 in. or smaller) because of its non-corrosive quality; however, only molded fittings are recommended. All flanges will be reinforced with a steel ring molded into the flange to avoid cracking due to vibration. Heat exchanger by-pass piping will be copper or CPVC

PUMPING EQUIPMENT

Horizontally mounted centrifugal pumps will be utilized for all the pool and spa recirculation and feature pumps, and will be certified by the National Sanitation Foundation (NSF) and bear the certification mark. Pump casing will be cast iron fitted with a replaceable bronze case wear ring. Pump impeller will be enclosed type of cast bronze, statically and dynamically balanced, and trimmed for the specified design conditions. A hair and lint strainer will be provided, for each pump, constructed of fiberglass or epoxy coated stainless steel construction with a clear observation top. Pressure gauges will be installed on the discharge of the pumps and compound gauges will be provided at the intake port of the pumps, after the hair and lint strainer.

PIPING SYSTEMS

Exposed piping in the filter room and surge tank will be Schedule 80 PVC for strength and resistance to corrosion. All piping below the floor of the pool shell will be encased in concrete and will be Schedule 40 PVC.

All valves will be identified in the filter room. Valves will be described as to their function and referenced in the operating instruction manual and wall mounted piping diagram to be prepared by the contractor.

The pool and spa will utilize a combination of floor and wall inlets.

CHEMICAL TREATMENT SYSTEMS

Calcium hypochlorite will provide the primary chemical sanitizing for the pool and spa. The halogen requirement of the pools will be automatically monitored and controlled by a chemical controller capable of monitoring 0 to 6 parts per million of chemical and showing Oxidation Reduction Potential (ORP) in addition to the traditional readings of sanitizer and pH.

The pH Buffering System for the pool and spa will be a combination CO₂ and Muriatic Acid System. Chemical feeders for muriatic acid shall be peristaltic type pumps. One (1) 55 gallon acid tank by LMI shall be provided. Chemical feed pumps shall be furnished and connected to the filtered water return lines to the pool(s) as shown on the pool plans. The pumps shall be capable of feeding a solution to the pool(s) to maintain pH level against the back pressure involved and shall be fully adjustable while in operation.

An Ultraviolet Dechloramination and Disinfection System will be provided so that the pool and spa water will be monitored and treated by UV sterilization in the range of 220nm to 400nm to kill bacteria, viruses, molds and their spores and to continuously remove chloramines. The concentration of free chlorine residual will at all times meet the requirements of the Health Department authority having jurisdiction over the swimming pool. Any proposed UV system must have a UL listing on the complete system and be listed under NSF Standard 50.

WATER CHEMISTRY CONTROLLER

A programmable chemical automation system will be furnished for the pool and spa for continuous monitoring of water chemistry (ORP/HRR, PPM, pH and Temperature), Langelier Saturation Index, and for automatic control of the chemical feeders, heater, and water level. Installation of the system will be as specified by the manufacturer. A factory-authorized representative will provide training to the owner and the training will be video taped per the specifications. Such a system will not only improve the water quality of the pool, but will also improve the overall environment of the natatorium because of the greater degree of chemical balance of the water. This can result in much less aggressive atmospheric conditions.

INSERTS AND ANCHOR SOCKETS

- A. Anchors for grab rails and stair railings will be provided.
- B. Anchors for backstroke stanchions will be provided.
- C. Heavy-duty cup anchors for all floating lane lines will be provided.
- D. Anchors for the handicap lift will be provided.
- E. Anchors for the volleyball net and basketball goals will be provided.

DECK EQUIPMENT

- A. Grab rails and recessed steps for the pool will be provided as required. These will be provided by stainless steel grab-rails set in chrome plated bronze wedge anchors and escutcheons with set screws. Recessed steps in the pool wall will be provided.
- B. Backstroke stanchions will be provided.
- C. Lifeguard chairs to meet the minimum standards of state regulations will be provided in portable (wheeled) units that may be stored out of the way during periods when lifeguards are not required.
- D. A surge tank access hatch will be furnished and installed over the surge tank. The access hatch will be a single door 2 ft.-6 in. x 2 ft.6 in with 1" fillable pan to receive ceramic tile and grout or concrete deck fill. The frame will be 1/4 inch extruded aluminum with built in neoprene cushion and continuous anchor flange. Door will be 1/4" aluminum plate reinforced with aluminum stiffeners as required.

- E. Surge tank ladder rungs will be 1/2 inch Grade 60 steel encased with co-polymer polypropylene plastic.
- F. Handicap lift(s) will be provided to meet ADA guidelines.

LOOSE EQUIPMENT

- A. 4" diameter floating lane lines will be provided with an adequate number of storage reels.
- B. Lane line storage reels will be fabricated from a heavy-duty aluminum reel joined together by a 1-1/2 inch aluminum axle. This unit must ride easily on four hard rubber wheels.
- C. 31" octagonal pace clocks will be provided on portable carts with battery power.

MAINTENANCE EQUIPMENT

- A. Wall brush will be a flexible polyethylene material with five (5) rows of nylon bristles. Pool brush holder will be permanent mold cast aluminum with hydrofoil flap.
- B. Skimming net head will consist of one-piece molded plastic frame with a reinforced, integral handle bracket suitable for quick attachment to a standard 1¼ or 1 ½ inch diameter handle using bolts and wing nut.
- C. Adjustable telescopic and stainless steel poles to will be provided.
- D. Testing kit to feature liquid reagents, color comparator, waterproof instructions and treatment charts, chemistry guide and watergram. Test kit to have the ability to test for free and total chlorine (0.5 – 5.0 ppm), bromine (1-10 ppm), pH (7.0 – 8.0), acid and base demand, total alkalinity, calcium hardness and cyanuric acid.
- E. A vacuum cleaner will be provided with pump and strainer.
- F. Stainless steel cleaner will be provided.

SAFETY EQUIPMENT

- A. Ring buoys and extension ropes will be provided.
- B. Life hook and an aluminum extension pole will be provided.
- C. Spineboards will be provided with head immobilizer, head strap, body straps, side roll ups, adhesive strips and required staples.
- D. A first aid kit will be a 24 unit kit per American Red Cross standards as manufactured by Swift First Aid, or equal.
- E. Rescue tubes for each lifeguard chair will be provided.
- F. A safety eye wash station will be a self-contained system in which eyewash bottles are securely positioned in a portable holder. Eyewash bottles will be 32 ounces and easily removable from case, and will contain a sterile, saline solution with the ability to neutralize a varying quantity acids or caustics.
- G. A safety eyeglasses dispenser station containing ten (10) pairs of safety glasses will be provided.

POOL COVERS

A swimming pool cover system will be provided for the recreation pool and spa and be the standard catalogued product of a company regularly engaged in the manufacture of such products. Alternate swimming pool cover systems will not be considered unless equal to the specified product and must be submitted for approval. Submittal data must include complete documentation relating to all the specified features and include manufacturer's sales literature, specification sheets, energy conservation audit, installation/maintenance manuals and engineering drawings.

LEED Checklist

July 24, 2013

C



6 2 2 0 WATER EFFICIENCY				10 Points	
Y		Prereq 1	Water Use Reduction	Required	Mechanical Engineer
			This prerequisite will be met through low water use fixtures.		
2	2	0	Water Efficient Landscaping	2 to 4	Landscape Architect
			0 Reduce by 50%	2	
			4 No Potable Water Use or Irrigation	4	
			Landscape Architect to determine specifically what is required to achieve maximum credits.		
0	0	2	Innovative Wastewater Technologies	2	Civil Engineer
			Civil Engineer to determine possible strategies to achieve maximum credits.		
4	0	0	Water Use Reduction	2 to 4	Mechanical Engineer
			0 Reduce by 30%	2	
			0 Reduce by 35%	3	
			4 Reduce by 40%	4	
			Strategies for achieving this to include: pint flush urinals, dual flush water closets, low flow showers. Mechanical Engineer to determine specifically what will be required to achieve this credit.		

11 3 9 12 ENERGY & ATMOSPHERE				35 Points	
Y		Prereq 1	Fundamental Commissioning of Building Energy Systems	Required	Commissioning Agent
			This prerequisite will be met through DFCM's Commissioning Agent (third party contract).		
Y		Prereq 2	Minimum Energy Performance	Required	Mechanical Engineer
			This prerequisite will be met through our Energy Model.		
Y		Prereq 3	Fundamental Refrigerant Management	Required	Mechanical Engineer
			This prerequisite will be met through appropriate equipment selection.		
7	3	9	Optimize Energy Performance	1 to 19	Mechanical Engineer
			Improve by 12% for New Buildings or 8% for Existing Building Renovations	1	
			Improve by 14% for New Buildings or 10% for Existing Building Renovations	2	
			Improve by 16% for New Buildings or 12% for Existing Building Renovations	3	
			Improve by 18% for New Buildings or 14% for Existing Building Renovations	4	
			Improve by 20% for New Buildings or 16% for Existing Building Renovations	5	
			0 Improve by 22% for New Buildings or 18% for Existing Building Renovations	6	
			7 Improve by 24% for New Buildings or 20% for Existing Building Renovations	7	
			Improve by 26% for New Buildings or 22% for Existing Building Renovations	8	
			Improve by 28% for New Buildings or 24% for Existing Building Renovations	9	
			Improve by 30% for New Buildings or 26% for Existing Building Renovations	10	
			Improve by 32% for New Buildings or 28% for Existing Building Renovations	11	
			Improve by 34% for New Buildings or 30% for Existing Building Renovations	12	
			Improve by 36% for New Buildings or 32% for Existing Building Renovations	13	
			Improve by 38% for New Buildings or 34% for Existing Building Renovations	14	
			Improve by 40% for New Buildings or 36% for Existing Building Renovations	15	
			Improve by 42% for New Buildings or 38% for Existing Building Renovations	16	
			Improve by 44% for New Buildings or 40% for Existing Building Renovations	17	
			Improve by 46% for New Buildings or 42% for Existing Building Renovations	18	
			Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovations	19	
			Achievable credits will be determined by an integrated design approach with the mechanical, electrical engineers and the Architect to coordinate the building orientation, envelope, HVAC systems, lighting system and plug load.		
0	0	0	On-Site Renewable Energy	1 to 7	Electrical Engineer
			1% Renewable Energy	1	
			3% Renewable Energy	2	
			5% Renewable Energy	3	
			7% Renewable Energy	4	
			9% Renewable Energy	5	
			11% Renewable Energy	6	
			13% Renewable Energy	7	
			Budget restraints will likely not allow the project to pursue this credit.		
2	0	0	Enhanced Commissioning	2	Commissioning Agent
			This prerequisite will be met through DFCM's Commissioning Agent (third party contract).		
2	0	0	Enhanced Refrigerant Management	2	Mechanical Engineer
			Mechanical system design will achieve these credits--will have to watch closely. A VRV system will not qualify.		
0	0	0	Measurement and Verification	3	Mechanical Engineer
			Budget restraints will likely not allow the project to pursue this credit.		
0	0	0	Green Power	2	Owner
			USU to determine if they want to participate in purchasing green power		

4 4 2 4 MATERIALS & RESOURCES				14 Points		
Y		Prereq 1		Storage and Collection of Recyclables	Required	Architect
This prerequisite will be achieved through designated recycling areas.						
0	0	0	3	Building Reuse - Maintain Existing Walls, Floors and Roof	1 to 3	Architect
Credit 1.1				<input type="checkbox"/> Reuse 55% <input type="checkbox"/> Reuse 75% <input type="checkbox"/> Reuse 95%	1 2 3	
These credits are not achieved as this is not an existing building to be remodeled.						
0	0	0	1	Building Reuse - Maintain Interior Nonstructural Elements	1	Architect
Credit 1.2				These credits are not achieved as this is not an existing building to be remodeled.		
1	1	0	0	Construction Waste Management	1 to 2	Contractor
Credit 2				<input type="checkbox"/> 50% Recycled or Salvaged <input type="checkbox"/> 75% Recycled or Salvaged	1 2	
Specifications will include Construction Waste Management requirements during construction by the General Contractor for 75%						
0	0	2	0	Materials Reuse	1 to 2	Architect
Credit 3				<input type="checkbox"/> Reuse 5% <input type="checkbox"/> Reuse 10%	1 2	
Design team to investigate the option of re-using materials for the project.						
1	1	0	0	Recycled Content	1 to 2	Architect and General Contractor
Credit 4				<input type="checkbox"/> 10% of Content <input type="checkbox"/> 20% of Content	1 2	
Specifications will include material selections with high recycled content requirements for 20%.						
1	1	0	0	Regional Materials	1 to 2	Architect and General Contractor
Credit 5				<input type="checkbox"/> 10% of Materials <input type="checkbox"/> 20% of Materials	1 2	
Specifications will include material selections within regional requirements for 20%.						
0	1	0	0	Rapidly Renewable Materials	1	Architect and General Contractor
Credit 6				Design team to investigate the option of re-using materials for the project.		
1	0	0	0	Certified Wood	1	Architect and General Contractor
Credit 7				Specifications will be written to require certified wood/finishes will be selected accordingly--for 100%.		
Yes	?	No				

13	2	0	INDOOR ENVIRONMENTAL QUALITY		15 Points		
Y				Prereq 1	Minimum Indoor Air Quality Performance This prerequisite will be achieved.	Required	Mechanical
Y				Prereq 2	Environmental Tobacco Smoke (ETS) Control This prerequisite will be achieved.	Required	Architect
1	0	0	0	Credit 1	Outdoor Air Delivery Monitoring Mechanical Engineer to identify strategies for achieving this credit.	1	Mechanical
1	0	0	0	Credit 2	Increased Ventilation Achieve this credit by increasing the outdoor airflow by 30%--but may not achieve this credit if we pursue natural ventilation.	1	Mechanical
1	0	0	0	Credit 3.1	Construction Indoor Air Quality Management Plan - During Construction This credit will be achievable with the mechanical design/specifications clarifying requirements during construction of the GC .	1	Mechanical-General Contractor
1	0	0	0	Credit 3.2	Construction Indoor Air Quality Management Plan - Before Occupancy This credit will be achievable with the mechanical design/specifications clarifying requirements, and the contractor following through during construction.	1	Mechanical-General Contractor
1	0	0	0	Credit 4.1	Low-Emitting Materials - Adhesives and Sealants Specifications will include low VOC requirements.	1	Architect
1	0	0	0	Credit 4.2	Low-Emitting Materials - Paints and Coatings Specifications will include low VOC requirements.	1	Architect
1	0	0	0	Credit 4.3	Low-Emitting Materials - Flooring Systems Specifications will include low VOC requirements.	1	Architect
1	0	0	0	Credit 4.4	Low-Emitting Materials - Composite Wood and Agrifiber Products Specifications will include low VOC requirements.	1	Architect
1	0	0	0	Credit 5	Indoor Chemical and Pollutant Source Control This credit is achievable with entry mats and proper exhaust where required. Architectural to specify walk-off mats that meet the LEED requirements and mechanical to confirm exhaust fans in all spaces required by LEED to get this credit.	1	Architect
1	0	0	0	Credit 6.1	Controllability of Systems - Lighting Individual as well as shared multi-occupant spaces shall be provided with individual lighting controls by the use of multi-level switching or dimming to allow the lighting to be adjusted to individual or group preferences.	1	Electrical
1	0	0	0	Credit 6.2	Controllability of Systems - Thermal Comfort Mechanical Engineer to identify strategies for achieving this credit.	1	Mechanical
1	0	0	0	Credit 7.1	Thermal Comfort - Design We can achieve this credit if we design the spaces in accordance with ASHRAE 55. NOTE: This credit requires 71.5-degF space temp in the work out rooms with ceiling fans.	1	Mechanical
1	0	0	0	Credit 7.2	Thermal Comfort - Verification Mechanical Engineer to identify strategies for achieving this credit.	1	Mechanical
0	1	0	0	Credit 8.1	Daylight and Views - Daylight Architect to develop strategies to achieve this credit.	1	Architect
0	1	0	0	Credit 8.2	Daylight and Views - Views Architect to develop strategies to achieve this credit.	1	Architect

Yes ? No

1	2	0	INNOVATION IN DESIGN		6 Points
0	2	3	Credit 1		Innovation in Design 1 to 5
0				Innovation or Exemplary Performance	1
0				Innovation or Exemplary Performance	1
0				Innovation or Exemplary Performance	1
0				SS Credit 2 Development Density and Community Connectivity	
0				SS Credit 4 Alternative Transportation	
0				SS Credit 5 Site Development	
0				SS Credit 6 Storm Water Design	
0				SS Credit 7 Heat Island Effect	
0				WE Credit 2 Innovative Wastewater Technologies	
0				WE Credit 3 Water Use Reduction	
0				EA Credit 1 Optimize Energy Performance	
0				EA Credit 2 On-Site Renewable Energy	
0				EA Credit 3 Enhanced Commissioning	
0				EA Credit 6 Green Power	
0				MR Credit 1 Building Re-use	
0				MR Credit 2 Construction Waste Management	
0				MR Credit 3 Materials Reuse	
0				MR Credit 6 Rapidly Renewable Materials	
0				MR Credit 7 Certified Wood	
				IEQ Credit 8 Daylight and Views	
				Innovation	1
				Innovation	1
1	0	0	0	Credit 2	LEED® Accredited Professional 1
Yes	?	No			
2	0		2	REGIONAL PRIORITY 4 Points	
2	0	0	2	Credit 1	Regional Priority 1 to 4
1				Regionally Defined Credit Achieved Zip 84322 SS2	1
1				Regionally Defined Credit Achieved Zip 84322 SS4.1	1
0				Regionally Defined Credit Achieved Zip 84322 IEQc8.1	1
0				Regionally Defined Credit Achieved Zip 84322 EAc1 Option 1 36%	1
				Regionally Defined Credit Achieved Zip 84322 EAc2 5% Renewable Energy	
				Regionally Defined Credit Achieved Zip 84322 WEc1 No potable/irrigation	
56	16	16	19	PROJECT TOTALS (Certification Estimates) 110 Points	

Certified: 40-49 credits
Silver: 50-59 credits
Gold: 60-79 credits
Platinum: 80+ Credits



NIRSA Recommendation & Benchmarking

D



NIRSA SPACE STANDARDS for CAMPUS RECREATION SPORT FACILITIES

Facility Type Classification	Institutional Enrollment Category				Utah State University	Utah State University	Recommended Range for Planning per NIRSA Standards
	Small Less than 3,000	Medium 3,000 - 9,999	Large 10,000 - 19,999	Very Large Over 20,000	per Existing (Fall 2012) Enrollment = 16,857	Future (projected) Enrollment = 20,000	
1 INDOOR RECREATION FACILITIES							
Total Indoor Recreation Space (sf per 1,000 students)	13,605	11,524	9,866	8,960	166,311	179,200	166,000 - 180,000 nsf
Basketball Courts (# per 1,000)	0.63	0.61	0.45	0.30	7.59	6.00	6 - 8 indoor courts
Locker Room Space - Men (sf per 1,000)	267	228	192	157	3,237	3,140	3,150 - 3,250 nsf
Locker Room Space - Women (sf per 1,000)	228	226	177	137	2,984	2,740	2,750 - 3,000 nsf
Racquetball / Handball Courts (# per 1,000)	0.68	0.63	0.39	0.27	6.57	5.40	6 - 7 courts
Squash Courts (# per 1,000)	NA	NA	0.07	0.05	1.18	1.00	1 - 2 courts
Table Tennis Tables (# per 1,000)	0.54	0.36	0.31	0.15	5.23	3.00	3 - 5 tables
Swimming Pools (# lap lanes per 1,000 students)	1.24	1.11	0.92	0.54	15.51	10.80	11 - 16 lap lanes
2 INDOOR FITNESS FACILITIES							
Total Fitness Equipment Space (sf per 1,000 students)	1,597	1,359	1,186	1,008	19,992	20,160	20,000 nsf
Cardio Equipment Space (sf per 1,000)	476	476	440	364	7,417	7,280	7,300 - 7,400 nsf
Strength Equipment Space (sf per 1,000)	487	449	309	280	5,209	5,600	5,200 - 5,600 nsf
Free Weight Equipment Space (sf per 1,000)	388	386	295	280	4,973	5,600	5,000 - 5,600 nsf
Group Exercise Space (sf per 1,000)	535	450	351	332	5,917	6,640	5,900 - 6,650 nsf
Group Indoor Cycling Space (sf per 1,000)	133	131	72	46	1,214	920	900 - 1,200 nsf
Multiuse Space (sf per 1,000)	446	415	350	271	5,900	5,420	5,400 - 5,900 nsf
Stretching & Core Exercise Space (sf per 1,000)	80	66	50	42	843	840	850 nsf
3 OUTDOOR ADVENTURE RECREATION FACILITIES							
Indoor Bouldering Walls (sf of climbing surface)	54	43	36	23	607	460	450 - 600 sf of surface
Indoor Climbing Walls (number of top ropes per 1,000)	0.83	0.73	0.55	0.41	9.27	8.20	8-9 top ropes
Storage Space for Trip and Rental Equipment (SF)	184	184	153	122	2,579	2,440	2,400 - 2,600 nsf of storage
4 OUTDOOR FACILITIES (FIELDS & COURTS)							
Total Outdoor Fields (acres per 1,000 students)	1.14	1.04	0.99	0.94	16.69	18.80	17 - 19 acres
Basketball Courts - Outdoor (# per 1,000)	0.48	0.46	0.21	0.11	3.54	2.20	3 - 4 outdoor courts
Flag Football Fields (# per 1,000)	0.57	0.47	0.28	0.23	4.72	4.60	5 flag football fields
Soccer Fields (# per 1,000)	0.48	0.44	0.33	0.20	5.56	4.00	4 - 6 soccer fields
Softball Fields (# per 1,000)	0.53	0.39	0.26	0.15	4.38	3.00	3 - 5 softball fields
Tennis Courts (# per 1,000)	1.09	0.92	0.61	0.41	10.28	8.20	8 - 10 tennis courts
Volleyball Courts (# per 1,000)	0.42	0.34	0.22	0.12	3.71	2.40	2 - 4 volleyball courts

Note: Space criteria listed above is based on current edition of NIRSA Space Planning Guidelines for Campus Recreational Sports Facilities and date collected from 2006 College Recreational Sports Facility Inventory



RECREATION CENTER CONSTRUCTION COST Benchmarking Database (new construction)

Type	Region	Facility Name	Location	Building Area [SF]	Construction Cost	Site	Building	Building Cost/SF	Total Cost/sf	Furn./Fit Equip	LEED	Completion
2013												
R-NC	SE	LSU Campus Recreation Addition / Renov	Baton Rouge, LA	169,000 N / 96,000 R	\$61,261,774	\$9,171,164	\$52,090,610	\$197	\$231	\$3,900,000		2016
R-NC	MW	University of Nebraska East Campus Rec	Lincoln, NE	56,156	\$12,500,000	\$781,531	\$11,718,469	\$209	\$223			2015
R-NC	MW	U of Utah George S. Eccles Student Life Center	Salt Lake City, UT	190,000	\$50,400,000		\$50,400,000	\$265	\$265			Dec-14
R-NC	SE	Auburn University Rec & Wellness Center	Auburn, AL	240,000	\$54,000,000	\$3,104,809	\$50,895,191	\$212	\$225	\$2,272,424	Silver	Aug-13
R-NC	MW	Utah State University Athletics Center	Logan, UT	23,000	\$5,200,000		\$5,200,000	\$226	\$226			Jun-13
R-NC	MW	Provo Recreation Center	Provo, UT	161,200	\$34,500,000		\$34,500,000	\$214				2013
R-NC	SW	ASU West Sun Devil Fitness Center	Glendale, AZ	66,089	\$18,551,219	\$3,849,227	\$14,701,992	\$222	\$281	\$810,123	Gold	Jan-13
Average								\$221	\$242			
2012												
R-NC	MW	Creighton U Fitness & Sports Center	Omaha, NE	51,775	\$10,900,000				\$211			Oct-12
R-NC	SE	Georgia C&SU Wellness & Rec Center	Milledgeville, GA	120,000	\$28,000,000				\$233			Sep-12
R-NC	MW	Missouri State U Rec Center	Springfield, MO	98,500	\$26,000,000				\$264			Sep-12
R-NC	SE	Auburn-Montgomery Wellness Center	Montgomery, AL	80,288	\$16,200,000	\$1,015,000	\$15,185,000	\$189	\$202	\$853,119	Silver	Aug-12
R-NC	SW	Salvation Army Kroc Center - Phoenix	Phoenix, AZ	137,000	\$33,000,000				\$241			May-12
R-NC	SW	Salvation Army Kroc Center - Suisun City	Suisun City, CA	68,000	\$14,200,000				\$209			May-12
R-NC	PW	California State University Northridge	Northridge, CA	118,952	\$41,775,000				\$351			2012
Average								\$244				
2011												
R-NC	SW	Cal State University Northridge Rec Center	Northridge, CA	120,000	\$41,000,000				\$342			Dec-11
R-NC	SW	Northern Arizona U Health & Learning Center	Flagstaff, AZ	287,644	\$83,200,000				\$289			Sep-11
R-NC	MW	J.L. Sorenson Recreation Center	Heriman, UT	107,000	\$23,000,000				\$215			Aug-11
R-NC	MW	Univ Colorado Basketball/Volleyball Practice	Boulder, CO	43,000	\$9,300,000				\$216			Aug-11
R-NC	MW	University of South Dakota Wellness Center	Vermillion, SD	56,000	\$12,000,000				\$214			Jan-11
R-NC	MW	Illinois State U Rec center	Normal, IL	187,295	\$49,600,000				\$265			Jan-11
R-NC	SE	Columbus State U Rec Center	Columbus, GA	102,850	\$23,200,000				\$226			Jan-11
Average								\$252				
2010												
R-NC	MW	Boise State University Aquatic Center	Boise, ID	17,000	\$7,000,000				\$412			2010
R-NC	NW	Portland State University	Portland, OR	208,000	\$69,500,000				\$334			2010
R-NC	SW	Cal State Long Beach Rec & Wellness Center	Long Beach, CA	109,000	\$45,000,000				\$413			Aug-10
R-NC	NW	Everett Community College Fitness Center	Everett, WA	49,000	\$12,480,000				\$255			Dec-10
R-NC	MW	University of Iowa Student Recreation Center	Iowa City, IA	215,000	\$51,300,000				\$239			Aug-10
R-NC	NW	Portland State U Student Rec Center	Portland, OR	208,000	\$69,500,000				\$334			Jan-10
R-NC	SW	University of Arizona Recreation Center	Tucson, AZ	54,000	\$18,650,000				\$345			Jan-10
Average								\$333				
Combined Averages (2010 - 2013)									\$268			
R-NC	MW	USU Aggie Life & Wellness - Program	Logan, UT					\$225	\$249			2015

Utah State University Campus Recreation Facility Benchmarking



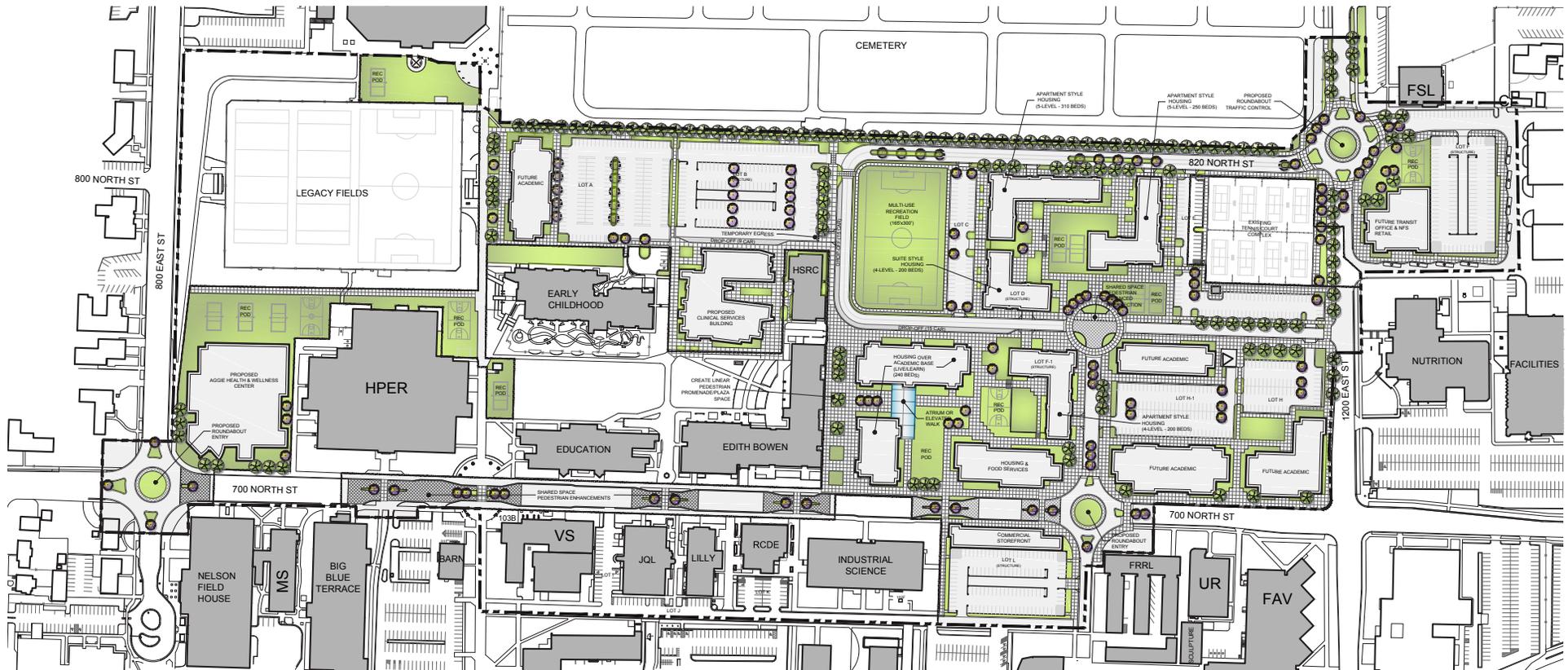
Site Visit Summary

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[Site Visit Summary will be included
in the final draft]

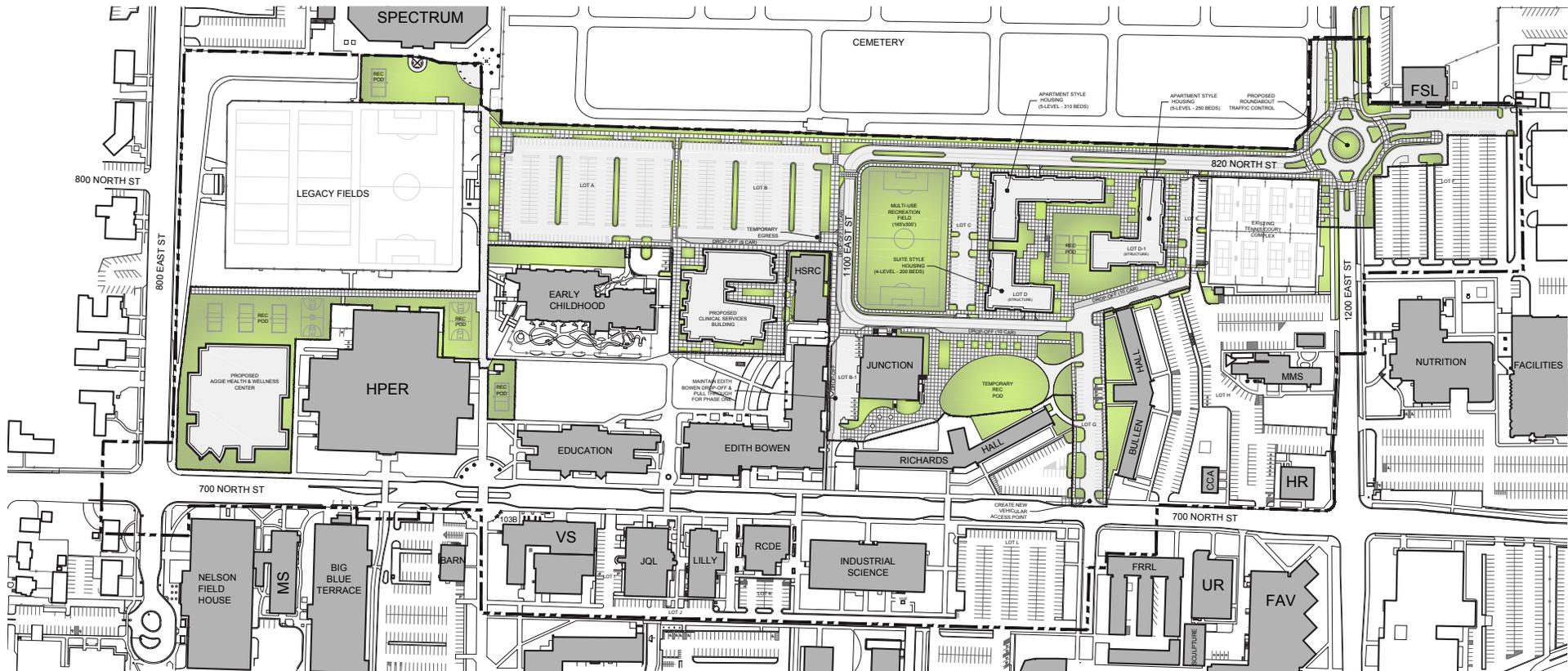






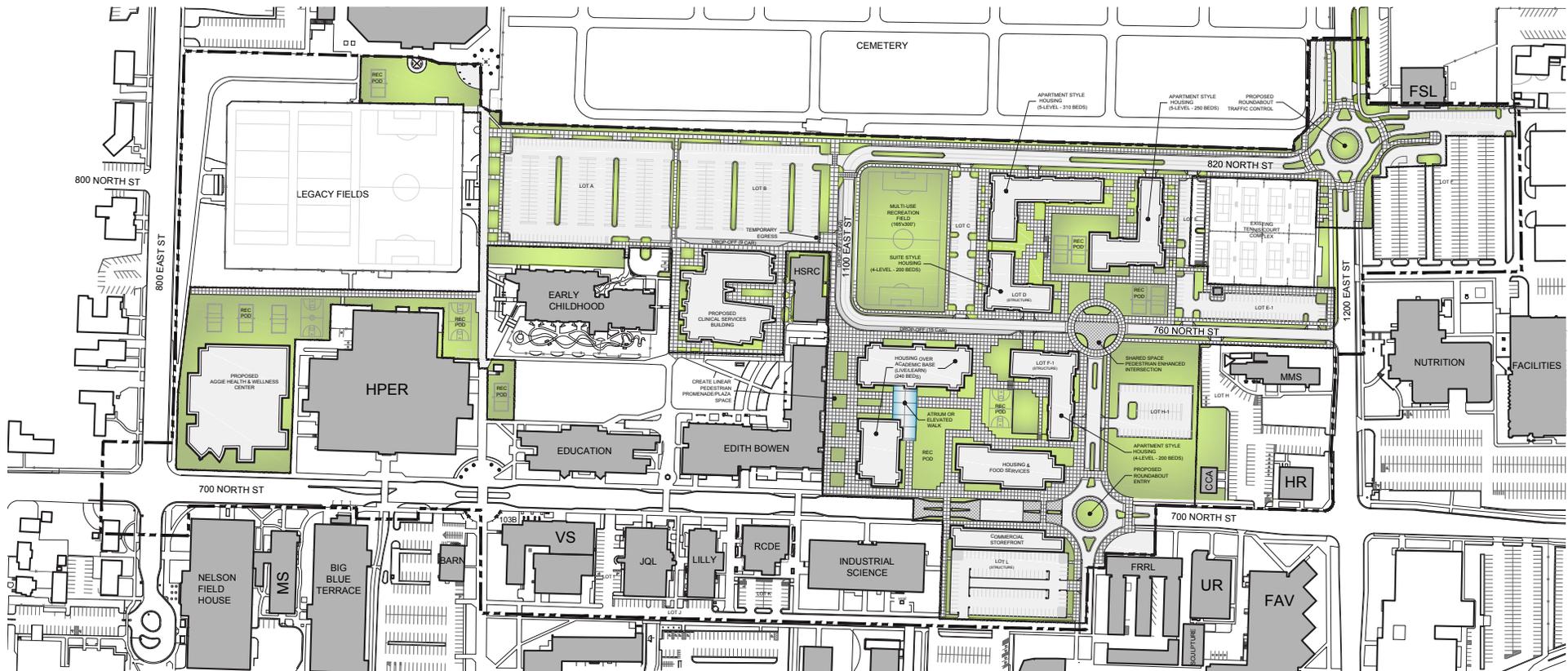
North East Campus Core – BUILDOUT





North East Campus Core – PHASE ONE





North East Campus Core – PHASE TWO

