



Program Plan for
A
Center for Community
Containing
A New Dining
and
Student Center
at the
University of Colorado at Boulder

University of Colorado at Boulder
Department of Facilities Management

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Prepared by:

George Galida, Facilities Planner
Department of Facilities Management

Clayton C. Cole, AIA, Principal
SLATERPAULL ARCHITECTS, INC.

Joe Bilotta, President
JBA Incorporated

James W. Sukenik, President
Baker Group

University of Colorado at Boulder
 Program Plan for a Center for Community

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0.0 Preface and Summary

0.01 Vision

The creation of a Center for Community supports the implementation of the Flagship 2030 Strategic Plan and the Residential Campus 2020 Plan. The vision of these plans is to provide students with opportunities for intellectual and personal growth and to prepare them for a rapidly changing world. Whether students go to the Center for a meal or for a service, they will be exposed to exhibits, presentations, and services that will in time become the expectation of all who enter the Center. Such serendipitous educational moments are important to our students' intellectual and personal growth. The synergy that will build amongst the units within the facility and the richness of the student experience because of these moments, scheduled and unscheduled, is what will make the facility a Center for Community.

Quality program and support services and residential dining are essential components for the overall success of the students at the University of Colorado at Boulder. The upper floors of the Center for Community comprise a student center that will attract students because of dynamic and flexible gathering spaces and the centralized location of student programs and services such as Career Services, Counseling, and International Education. The dining center on the lower levels will increase efficiencies in operating costs by consolidating two older dining operations into one, creating a central campus production commissary and bakery center, and offering new dining experiences for students.

0.02 Scope of the Project

The current Dining Centers in Kittredge Commons and Cheyenne Arapaho Hall have served the campus well for more than 40 years. Due to aged infrastructure, antiquated dining equipment and outdated finishes, these facilities have outlived their useful lives. Collegiate dining centers have evolved and become sophisticated and complex operations that would be difficult and costly to retrofit in the current Kittredge Commons building; however, the space could easily be modified to support the academic components of a residential academic community. The creation of a New Dining Center to seat 900 people will result in a dynamic and flexible operation, featuring fresh food production, flexible hours, and efficient service models that will respond to the current and future expectations of our college students.

Housing and Dining Services completed a study of its dining facilities culminating with the recommendations made in the 1999 study of the condition of the residential dining centers by the Ricca Planning Studio, Inc., a nationally respected professional food services planning firm, and identified a need to upgrade all residential dining facilities on campus. Subsequently, two of the dining centers, Farrand Hall and Libby Hall, were renovated in the past five years. Recent customer satisfaction studies indicate that the students using Farrand Hall and Libby Hall dining centers rate their experiences higher than the national average,



and those students who dine in un-renovated spaces rank their dining experiences as lower than the national average. Not surprisingly, these levels of satisfaction have resulted in the renovated dining centers being excessively crowded during meal hours. The proximity of the New Dining Center to the main campus residence halls will help alleviate this problem.

Co-locating a student programs and services center in the Center for Community provides convenient campus facilities for students, and allows for sharing of meeting space required by both functions. Over the years, student programs and services have taken over residential hall space in Willard Hall. Relocation of the student programs and services functions to a new building will allow the Willard spaces to revert to residence hall use, supporting the vision of the Campus 2020 plan.

Total Gross Square Footage

| | |
|-------------------------------|---------|
| Dining / Bakery / Commissary | 55,640 |
| Student Programs and Services | 41,492 |
| <hr/> | |
| Total Assignable | 97,132 |
| Building Infrastructure | 29,468 |
| Constructed Parking Decks | 130,349 |
| <hr/> | |
| Total Gross Square Footage | 256,949 |

Building Density and Ground Cover

An effective stacking of the total gross square footage requirement results in efficient building operation plus reduced land usage. By placing most of the primary dining needs on the main level of the building, the dining operations can work at maximum efficiency. Stacking the student programs and services functions above dining results in optimum density of the square footage.

Underground structural parking is needed to replace surface parking at the proposed new building site. Approximately 365 vehicle spaces below the proposed new Center will replace 253 surface spaces.

See Appendix II and V for details on space requirements.

Cost and Schedule

Construction cost analysis indicates a hard construction cost of \$47,678,638 plus necessary soft costs of \$17,916,897 for a total project cost of \$65,595,535.

The project, if authorized to proceed in late 2007, can be completed for a fall 2010 opening. See Section 5 of this report for detailed cost and schedule information.



Housing and Dining Services completed a study of its dining facilities in 1999, culminating in a report prepared by the Ricca Planning Studio, Inc., a national food service planning firm. The report called for the need to upgrade all dining facilities on the campus.

In May of 2006 a feasibility study was completed by staff in the Department of Housing and Dining Services for a New Dining Center. In April of 2007 the office of the Vice Chancellor for Student Affairs completed an analysis of the needs of the division. The results of those two studies resulted in the program planning process herein concluded.

In July of 2006 SLATERPAULL ARCHITECTS was hired to prepare the CCHE Program Plan, working with:

Ronald Stump, Vice Chancellor for Student Affairs.
Deborah Jean Coffin, Executive Director, Housing and Dining Services
Kambiz Khalili, Director of Dining Services,
Juergen Frieze, Coordinator for Dining Facilities
George Galida, Architect from the Office of Facility Planning.

SLATERPAULL provided building programming and sustainable design planning for the new Center for Community. The building will be designed to meet the equivalent of the requirements of the U.S. Green Building Council for potential certification of a LEED rating.

The Baker Group was engaged by SLATERPAULL ARCHITECTS to provide detailed analysis of the food services operations of the proposed New Dining Center.

JBA Incorporated was engaged by the University of Colorado to provide detailed analysis of the Student Center and Parking and Transportation requirements.

Cator Ruma & Associates was engaged by SLATERPAULL ARCHITECTS to provide initial planning direction for mechanical, electrical, and plumbing building systems, along with recommendations for energy savings to meet LEED certification goals.

Rider, Hunt, Levitt & Bailey was engaged by SLATERPAULL ARCHITECTS to provide cost estimates based on the proposed size, usage, quality and complexity of similar community centers.

Concurrently, in July 2006, Design Concepts was hired to prepare a Micro Master Plan, studying various site alternatives for the new building, as generally recommended in the feasibility study.



1 Institutional Requirements

1.01 Program to be Accommodated

1.01.1 Dining Services - General

The University of Colorado at Boulder ranks among the best public universities, the most desirable location and setting of any campus in the country, and one of many mature campuses with very little ground space remaining for new construction. The quality of this learning and living environment can be maintained, in part, by having state-of-the-art dining facilities that provide a level of food service and points of social interactivity that sophisticated students are accustomed to and expect from great institutions.

Several primary factors, considered in combination, have led to the development of this Program Plan. They are as follows:

1. Vacating Kittredge Commons to create space for the eventual renovation and creation of classrooms, faculty offices, study rooms, meeting rooms, and other residential academic program spaces that will support the Residential Campus 2020 Plan.
2. Housing and Dining Services' assessment of the current physical condition of the Kittredge Commons and Cheyenne Arapaho Hall dining centers and the desire to provide students and other customers with state-of-the-art dining services.
3. Closure of the Housing System Service Center and the CU Bakery at Marine Street due to location, inefficient space layout and use, and operational inefficiencies.
4. The efficiencies gained by implementing a central commissary model for preparation of common food items served at all locations.
5. The growth in the importance of providing more ecologically sensible buildings to allow for advanced recycling, composting and food waste systems, reduced energy consumption of a building type that inherently requires high energy usage, and high density design of a building type that is frequently spread out on a single level.
6. Reinforce the campus emphasis on very low automobile usage by tightly connecting building circulation paths to established pedestrian, bicycle and campus bus routes.
7. Antiquated and out of date food service equipment in existing Dining Centers will require a major investment in new equipment if this plan does not move forward.



8. Enrollment projections for the Boulder Campus (see Appendix VI) will result in the need for additional dining seats. This is due to the University's strategic plan to increase the percentage of students living on the campus. Although an enrollment growth is not predicted at this time, additional housing is planned and needed.

The Center for Community is proposed to be located between Kittredge Commons and Hallett Hall. (See APPENDIX I). The new dining facility will realize efficiencies in operations and staff utilizations by replacing the two older dining centers. Students will enjoy eating in an up-to-date dining facility with display cooking, increased food freshness, and will benefit from introducing additional point of sale options for baked goods and grab and go service. The new dining center in the Center for Community will address the current difficulties present at both Kittredge and Cheyenne Arapaho by presenting to students and other customers a market style of food service, providing just-in-time food delivery access, fresh baked products, display cooking, and a greater variety of fresh food. These improved products would be the direct result of having a commissary on the premises utilizing state of the art equipment for Cook/Chill (Flash Freeze) technology for many products. There are a number of benefits to using this technology which include consistency in the production of products, improved sanitation and food safety, better utilization and more flexibility with the work force (two cooks in one location can make the same amount of food as four cooks in various locations and they are not tied to doing the job during the meal hours). This system also provides flexibility to serve certain meals in locations where the infrastructure does not allow the ability to produce hot food. A commissary will also allow the department to centralize a majority of the preparation/production for produce and other food. A central commissary is not a central store for delivering raw food material but a centralized kitchen production center. It will also assist with serving food during possible emergency periods if the Food Store is inaccessible. In addition a new central commissary addresses vendor accessibility issues, improves the delivery of products, and provides adequate space for composting, recycling, and trash removal. All of these operations now require multiple vehicle trips from dispersed campus food preparation facilities.

Similar to the private sector food operations, it is desirable to utilize a bakery production center in the proximity of the customers so that easy access to purchase fresh bakery items is available to the customers. A new bakery will also allow the closure of the Housing System Service Center (currently housing the Bakery) by relocating it to the Main Campus. Once a modified bakery is incorporated into the dining center, the service building can be made available to the campus for other uses including surge space during general fund building renovations and relocation of service operations from Main Campus to the east campus (per the Campus Master Plan). The dining center addresses the issue of space availability for the Residential Campus 2020 Plan in the Kittredge Complex, by recapturing space in Kittredge Commons. Finally, the new dining facility will "build a bridge" between the



1.01.2

main campus and the Kittredge Complex communities by providing a gathering place for students, faculty, and staff.
History of Housing and Food Services

There are approximately 4,500 student residents living on the Main Campus and the Kittredge residence hall complex. These students currently have a choice of dining in any of the four dining centers dedicated to their food service needs. Kittredge Commons (built in 1963) and Cheyenne Arapaho Hall (built in 1954), have not been renovated since construction. These two Dining Centers are using antiquated equipment and the traditional straight line cafeteria style of service. Kittredge Dining Center has 22,472 total square feet and Cheyenne Arapaho Hall has 12,499 total square feet. These two dining operations collectively have 750 seats and received 19.38% of the total 2,128,945 food service transactions in academic year 2004-05. The physical space designated for dining results in a program of limited size, resulting in operational inefficiencies.

Kittredge Commons is earmarked as a critical academic facility to support the Residential Campus 2020 Plan. Moving the dining services functions out of Kittredge Commons is necessary so that the facility can be renovated to accommodate residential academic program classrooms, meeting rooms, study spaces and faculty offices proposed as part of the Residential Campus 2020 Plan.

The current dining facilities have functional inadequacies, ADA deficiencies, and antiquated infrastructure. The cooking equipment in the kitchens is inadequate to support the creation of quality, fresh and cook to order food options. The current plumbing and electrical services available at both Kittredge Commons and Cheyenne Arapaho Hall are limited; it does not support contemporary kitchen equipment and cannot support additional equipment. This prevents the possibility of implementing new storage, preparation, presentation, and serving arrangements of even a limited scope. The remote dish room location at Kittredge Commons requires a long convoluted soiled tray conveyor while the one at Cheyenne Arapaho Hall requires manual collection of trays at the entrance to the dish room. This area is directly adjacent to the seating area resulting in noise and visual impacts that create a very undesirable dining atmosphere. Food is produced at both locations on the first floor and transported to the second floor for serving the students; an inefficient food production and delivery system.

The loading docks for both of these buildings are small and delivering food and other products to these units is inefficient and results in more truck traffic on the Main Campus. The seating areas are divided into two separate sections on the opposite sides of the cafeteria style serving line and require staffing and managing duplicate serving lines to serve customers. The existing cafeteria style arrangement is not conducive to providing an efficient flow of customers or providing customers a convenient method of making food selections.



The two recently renovated dining centers on the Main Campus, Farrand Hall and Libby Hall, have become increasingly popular and are frequently over crowded. The proximity of a new dining facility to the Main Campus residence halls will help alleviate this problem.

The two operations that are proposed to be closed are older, obsolete facilities. These two facilities were not designed to handle present-day market needs. The mismatch of layout with current dining and service interests at each site compels staff to work-around these facility issues. This adds cost to the dining program, both in extra labor hours and maintenance of these aging facilities. The consolidation of these needs into a single, larger facility eliminates these challenges.

It should also be noted that the operating cost of two smaller facilities is almost always more expensive than operating a single, consolidated facility. Redundancy in supervisory needs, support equipment and maintenance are all examples of costs that are higher in a two-facility model than in a single facility solution.

1.01.3 Role of Student Affairs

The role of Student Affairs is to enroll, educate, serve, and graduate students who are fully prepared to be outstanding contributors to society. The Division of Student Affairs programs are designed to inspire, educate, and support students in their efforts to excel personally and academically, demonstrate high levels of integrity, and exhibit a strong commitment to building a just and equitable world for all people. These programs encourage students to write, speak, and think critically, and to be skilled and knowledgeable in their academic disciplines. They also help students develop a healthy sense of identity as individuals and as members of a community, placing high value on the ability to thrive both independently and interdependently. The University of Colorado at Boulder places a particular emphasis on cross-cultural appreciation and literacy, ethical leadership, a commitment to civic engagement and social justice, and exposure to international cultures.

Finding common building locations to co-locate these programs enhances their effectiveness, operating efficiencies, and allows common functions to be shared.

1.02 Institutional Planning Policies

1.02.1 Strategic Goals of the Center for Community.

This project addresses a number of the University, campus, and Housing and Dining Services strategic goals. The Residential Campus 2020 Plan will benefit by converting the Kittredge Commons and Cheyenne Arapaho Hall floor space to classrooms, meeting rooms, study spaces and faculty offices. The quality of the living and learning environment, as stated in the institution's master plan, for the student residents on campus will improve by



having a state of the art dining facility that provides a level of food service quality that the current sophisticated students are accustomed to and expect from the university. There will be a significant saving in the energy use on campus by replacing the two antiquated dining facilities, with their old equipment, with a new energy efficient dining facility. The new dining facility would be ecologically more sensible as it allows for better use of recycling, composting, and food waste management. The proposed site of the new dining facility is easily accessible via established pedestrian, bicycle, and bus routes. Finally, the new dining facility will bring the communities from the Main Campus and Kittredge Complex closer to each other.

The goals as stated in the *Campus Master Plan* that this project most directly supports are to:

- Provide high-quality facilities to meet institutional needs
- Foster a living-learning community, including residential academic programs
- Accommodate enrollment projections
- Retain the 10-minute class change possibility for most undergraduate courses
- Provide additional housing to maintain or increase the percentage of students housed on campus

1.02.2 Strategic Goals of the Student Center

Student Center's role in support of the University Flagship 2030 Strategic Plan and the Flagship 2030 Vision.

Seeds of ideas and dreams that have long blown across the campus are starting to find fertile ground in the strategic planning process that is Flagship 2030. Sub-committees envisioning the University of Colorado at Boulder in 2030 are describing a community rich with opportunities for our students to learn, grow, and prosper. The vision includes greater diversity, a more welcoming environment, and better access for under-represented groups, including people with mobility impairments. In this community, students develop skills, knowledge, and values that prepare them for a world much more global and technology-driven than today. Employers are attracted to our students because of their attributes and potential to contribute to our society.

The creation of a Center for Community will support the Flagship 2030 vision. This center couples student programs and services providing a total student experience. Within this facility will be the offices currently in Willard Hall, the Office of International Education and a new dining center. Bringing these units together provides them much needed space, and, more importantly, the opportunity to offer their services in a collaborative and synergistic manner.

Examples of such opportunities are described as follows:



- In addition to the current services and programs, the Office of International Education will have an “International Center” which will be a multi-purpose space and serve as an exhibit area, reception area, lecture room, and meeting room. The center will draw in many faculty, staff, and students from diverse geographic and cultural backgrounds for a variety of reasons, which will enhance the globalization of our campus. Employers, staff, and students will utilize the center for visiting the exhibits and for presentations which may or may not be directly related to international topics. The exposure to other cultures will be both subtle and direct.
- Having the student center located above the new dining facility offers opportunities to bring students together in a modern facility that heightens their senses while serving meals that are nourishing as well as attractive to a diverse population. Dining itself is a community experience. Students, as well as all of us, need moments found in the common dining experience to share our daily activities and to exchange thoughts. In the common dining experience, the appetite as well as the sense of connection is satisfied.
- The Student Academic Services Center will have the space to support the pre-collegiate and retention programs. Moving the pre-collegiate programs in Willard Hall to the Center for Community allows Willard Hall to be developed into a residential college which will support retention and academic support programs. The residential college will serve students in programs such as the First Generation Scholars program. The proximity of the services, programs, and common dining within the community center will readily complement the residential college. The student participants in the residential college will have a richer educational experience that will greatly support their academic and personal success.
- Students will be drawn to the services and programs within the facility because of their location. The private dining spaces in the new dining center will also be locations to have meals featuring speakers and topics that complement the programs sponsored by departments from within the facility, the residential college, and across the campus. Such occasions could center on academic issues, cultural events, employers speaking about their professions, and student development themes in general.

The facility also addresses space and access issues that have long been concerns because of how the opportunities for students are detrimentally impacted.

- The Office of Disability Services has been on the third floor of Willard Hall. A situation that does not serve well people with mobility impairments. Disability Services will be on the first floor of the community center, thus relieving this access issue. Plus, adequate



space for proctoring exams for students with learning disabilities can also be realized.

- Moving the Office of International Education (OIE) out of Environmental Design and into this new space will provide OIE with additional and better space to meet current and future demand for their programs, as well as open up space for the Writing Program and/or for other academic use within the Environmental Design building. With the additional office space and staff, the number of students studying abroad could easily double from the current level of twenty-five percent of students who start at and graduate from our campus. Greater numbers of international students and scholars will also be served in this expanded space.
- Often the first contact between CU and new corporate partners begins at Career Services. The current facilities in the basement of an older residence hall do not make a suitable impression for the university or for our students. The lack of space means scrambling to accommodate interview schedules for interns and full-time hires and many employers complain about the aesthetics of the space itself. Although CU Career Services is now recognized across the country as a leader in the field, it does not have the physical space it needs to facilitate interactions between students, employers, intern supervisors, faculty and parents.

BENEFITS TO THE RESIDENTIAL CAMPUS MODEL

The Center for Community will allow the campus to convert Willard Hall into a full residence hall providing more beds (approximately 180) while being renovated to support the Residential Campus 2020 Plan. The intent of this plan, which will begin with the renovation of Arnett Hall in the summer of 2007, is to fully engage students as active learners from their first year through their entire undergraduate experience. The residence halls will become “residential colleges” with an academic theme and an environment that fosters community and supports their intellectual and personal growth.

With the conversion of Willard Hall, it is important to note that:

- Willard Hall currently has classrooms and office space that could be easily adapted within the residential campus concept for the McNeil and Academic Excellence programs. Classrooms/seminar rooms, faculty offices, tutoring and study rooms can be renovated at a minimal cost, thus providing a quality residential academic program environment for freshmen and non-freshmen alike. The focus on the concepts embodied in the mission of the McNeil and Academic Excellence programs will allow continued development and recognition of the University’s diversity efforts that could then be exported and implemented in other residence halls and across the campus in general.
- The number of available residence halls beds can be increased by approximately 180, which contributes to the goal of providing a larger



number of non-freshmen with the opportunity to live on campus. Additional beds are also needed because of the anticipated loss of beds caused by the renovation of the residence halls and the goal to increase the retention of non-freshmen in the residence halls.

- Since Bear Creek Apartments are now nearly full, Housing & Dining Services will not be able to use beds for freshman housing at Bear Creek without negatively impacting the housing needs of non-freshmen.

The new community center as described and the transition of Willard Hall into the residential campus model with McNeil and Academic Excellence programs as the core theme can be a transformational moment for the campus. Services and programs can be enhanced that fit the aspirations for Flagship 2030 in enriching the campus community and the academic and personal growth of our students. This opportunity to initiate an action in support of Flagship 2030 is one that may not again be readily available for the campus and one that should be given every consideration for enactment.

1.02.3 Site Master Plan Objectives

Concurrent to this Program Plan process, The University engaged a landscape architect to prepare a site Micro Master Plan (MMP)

The site Micro-Master Plan explores various site plan options and provides a framework for the planning and design of the proposed Dining Center to serve the students, faculty and administration of the University as well as the surrounding community. The site plan responds to the existing campus master plan, meets the goals of the University, as well as anticipates future student needs.

A site analysis was conducted and diagrams were created to evaluate the physical, cultural and biological attributes of the proposed sites. Information gathered through research and meetings has been synthesized into a final plan represented in this Program Plan Report. See Section 2.05. A full copy of the MMP is available at the offices of Facility Planning.

The goal of the Center for Community Micro-Master Plan is to advocate a site location and direction for development that provides an effective location designed to foster community on the campus by offering a unique dining and service atmosphere. Specific goals and objectives for the Dining Center were generated through a series of meetings and work sessions with the University and project consultants. These goals address environmental impacts, context, character, scale and circulation. The Center for Community will serve as a link for the central campus and Kittredge Commons Complex.

The following goals were created and identified by the University through a series of meetings.

1. Support the Residential Campus 2020 Plan, the Flagship 2030 Vision, and the Campus Master plans.



2. Provide a Center for Community that will bridge together and compliment both the Kittredge Complex and the Main Campus residence halls by providing a sophisticated, quality facility attractive to students, faculty and staff.
3. Locate the facility to provide easy access for students, faculty and staff via pedestrian, bicycle and bus routes from the residential communities as well as from many academic buildings.
4. Locate the Center for Community to increase delivery efficiencies to reduce labor and transportation costs.
5. Create indoor/outdoor transition spaces between the site and the new dining facility to create a variety of dining settings, to take advantage of views and climate, and to compliment and integrate the building within the existing campus setting.
6. Connect the Center for Community with the anticipated development of a Residential Academic Program by Student Academic Services in Willard Hall.
7. Develop the site and building to incorporate sustainable design principles using LEED principles as a guideline.
8. Provide a development plan that meets budget, schedule and phasing needs of both the project itself and of associated and adjacent projects.
9. Recognize opportunities to improve surrounding campus conditions appropriate for this project.

In addition, the project supports the following campus Master Plan goals:

1. Provide high-quality facilities to meet institutional needs.
2. Foster a living-learning community, including residential academic programs.
3. Accommodate possible growth in the number of students living on campus.
4. Retain the 10-minute class change possibility for most undergraduate courses.
5. Provide additional housing to maintain or increase the percentage of students housed on campus.

The new facility will also serve as a recruitment tool for University Admissions and support the future renovated Kittredge Complex residence halls as a venue for summer conference services.



1.02.4

Campus Master Plan and Other Projects

The Micro-Master Plan process has identified several projects that are being planned near the proposed Center for Community facility that may impact decisions regarding the location, design, circulation and service of the Center.

Boulder Bike Path Design Study

This study proposes to create a multi-use path connecting the City of Boulder Multi-use path along Broadway, through several on-campus academic and residential zones, the Folsom Avenue District and east/west bike corridor on the north. A previously proposed grade-separated crossing would alleviate significant danger and conflict between cars, bikes and pedestrians at the Regent Drive crossing of the corridor alignment. Federal funding has been received by the City of Boulder to build the vehicular overpass. It is anticipated that construction of the overpass would occur within approximately the same time frame as the construction of the Center for Community.

The MMP also proposes to relocate the parking lot that currently serves Reed Hall. The parking lot creates multiple problems for the dining hall in the areas of service/loading, and also would create greater conflicts between pedestrians and vehicles as it brings the vehicles directly through the pedestrian/bicycle path.

The University of Colorado Master Plan

The Business school expansion to be complete in 2007 will enhance a critical portion of the north/south corridor through the development of a separated bicycle and pedestrian alignment.

The Center is sited to give consideration to future expansion of adjacent buildings such as the Regent Administration Center.

Campus 2020 Plan

Kittredge Commons has been selected as the first neighborhood to be renovated in the residence hall community. It includes converting the current Kittredge Commons building into an academic center hosting classrooms, faculty offices, performance, rehearsal and design spaces for student and faculty interaction and academic pursuits.

The Center for Community will compliment both the Kittredge Complex and the Main Campus residence halls by providing food service to the residents in these areas. Its proximity to Kittredge Commons, Hallett Hall, the Quads, and Willard Hall (less than five minutes walk to these buildings) will draw students from these areas and will provide a convenient food service choice to the faculty and staff in surrounding academic and administrative buildings.



Bringing faculty and students together in the social setting of a dining center is integral to a successful academic program experience.

The Campus Master Plan identifies the East Campus as the area where service activities should be located, freeing valuable space for core mission functions on the Main Campus. In this particular case, the relocation of the Bakery, with its associated reduction in size and the creation of the Commissary appear to be appropriate uses that support the dining center operations. Locating both the Bakery and the Commissary in the Center for Community is critical to shared staffing assignments, overall efficiency in operating costs, and reducing vehicle miles for delivery of prepared food.

Compatibility with Campus and Community Neighbors

The Center for Community will provide food service to the student residents as the other two older facilities have done for the past four decades. However, the quality of the food service program will be greatly enhanced, allowing neighboring off-campus students to utilize the facility more frequently. As a new facility the physical architecture of the building would compliment the campus.

Other Projects

The Center for Community offers opportunities to disengage the pedestrian / vehicular path now existing to the south of Hallett Hall and design this site area as a welcoming point to both Hallett and the Center for Community.

In addition, a change in grade to Regent Drive is anticipated in a future project such that Regent Drive crosses over the primary pedestrian / bike path from Kittredge Commons past the Center for Community. The raising of the grade of Regent Drive provides an excellent opportunity for the shipping and receiving operations associated with the New Dining Center to become hidden by the road.

1.02.5

Existing Deficiencies

Program and Facilities Inadequacies

Both Kittredge Commons and Cheyenne Arapaho Hall Dining Centers no longer fully comply with modern building codes for exiting, fire protection, and accessibility. The grease fire at Kittredge Commons Dining Center in the fall of 2004 and the notice of violation received by Cheyenne Arapaho Hall Dining Center for potentially plugging a city sanitary main line with cooking grease are examples of the facility inadequacies. The cooking and dish washing equipment are beyond their useful life, and are increasingly difficult to operate and maintain according to current health and safety expectations. Obvious and apparent health and safety issues are managed and remedied as needed and Boulder County Public Health Department inspections occur regularly and concerns are resolved within the limitations of the facilities.



There are inherent risks in operating antiquated equipment and utility systems. The layout of the facility with production on one floor and food service on a different floor is inefficient both in terms of maintaining the integrity of the food products and also in terms of the range and motion of work activities for the staff. This practice is a detriment to operational safety and is a burden on productivity. It is a continual challenge to maintain food product at acceptable temperatures and sometimes results in a final product that was prepared hours before rather than as fresh as possible. Out of concern for providing the healthiest and freshest food, menus are sometimes limited in order to function in this production environment. A new building can be designed with function and efficiency in mind to limit product handling and reduce storage time of food. These efficiencies will also decrease lifting and product movement by staff which will most likely result in decreased potential injuries and workman's compensation claims (OSHA compliance).

The Office of International Education is currently housed in grossly inadequate space to even meet current needs. Given the campus' initiatives for increasing the international nature of the campus, OIE desperately needs this new space to carry out their functions.

If the student programs and services in Willard Hall are moved into the new center, much needed residence hall space can be gained for upper class students.

Consequences if Project is Not Implemented

1. As it stands, the Kittredge Complex cannot provide adequate classrooms and faculty offices to support the Campus 2020 Residential Plan. In the renovation sequencing plan for Kittredge Complex, Kittredge Commons -- specifically the top floor of the dining center -- would provide the needed footprint to create classrooms, study spaces, and faculty offices. These future classrooms will be used as meeting rooms by CU Conference Services during the summer period, offering a facility enhancement that will help to recruit more summer conference business and added revenues. As presently envisioned the successful implementation of the Residential Campus 2020 Plan is specifically enhanced by the approval and building of the new dining facility.
2. The present dining facilities will not accommodate any future growth. Housing and Dining Services will not realize operational or labor efficiencies if the department must maintain its Bakery as the sole occupant of the Marine Street service building. Finally, not all student expectations for more sophisticated food services, like display cooking, will be realized if renovation of the present dining facilities is undertaken.
3. Renovating Kittredge Dining in its current location would require that the 1,338 students living in the Kittredge Community would have to travel to Farrand and Libby dining rooms to eat their meals during the



construction period. Student use of these two dining rooms is already exceeding capacity both physically and with regard to food production capacity.

4. The renovation of Cheyenne Arapaho Dining would create substantial construction disruptions to its residents, including utility shut offs as well as noise, dust and security challenges during the renovation. The Center for Community provides an alternative dining location so that Cheyenne Arapaho can be more efficiently renovated for other uses.
5. Moving offices from Willard Hall to the Center for Community will provide an opportunity for better utilization of vertical space at that location on campus, as well as the opportunity to re-capture approximately 180 beds.
6. This project will be built on a surface parking lot that accommodates significant demand for long and short-term parking needs not easily accommodated elsewhere. If the project does not include a parking component that replaces what is lost due to construction and parking cannot be built on the surface lot to the SW of the building site, vehicular access to this portion of campus will be severely degraded. Without maintaining the existing supply of parking inventory, access to the campus by students, visitors, faculty and staff is diminished and could negatively affect how campus services and offerings are viewed generally.

1.02.6

Dining Utilization

Transactions at all of the campus dining centers were generally up during the academic year of 2005/2006. This reflects the improvements made at the renovated Farrand and Libby Hall facilities. Also apparent in the 2005/2006 statistics is the fall off in meals served at the Kittredge Commons and Cheyenne Arapaho Hall due to the unattractive and less efficient operations.

2005/2006 Transactions

| | | |
|-------------------|---------|---------------|
| Farrand Hall | 376,655 | up 24,000 |
| Libby Hall | 347,742 | up 22,000 |
| Kittredge Commons | 247,673 | down 37,000 |
| Cheyenne Arapaho | 127,213 | down slightly |

2005/2006 Meals Served

| | |
|-------------------|------------------------------------|
| Farrand Hall | up 6.6% over the previous year |
| Libby Hall | up 6.5% over the previous year |
| Kittredge Commons | down 12.8% below the previous year |
| Cheyenne Arapaho | even |



These statistics confirm the reality of increased income and customer satisfaction in newer dining halls and the need to spread the load of increasing transactions to other facilities.

1.03 Program Alternatives

Housing and Dining Services explored alternative solutions to delivering a comparable program such as renovating both Kittredge and Cheyenne Arapaho Dining Centers, and renovation of the Bakery and Commissary and building a new academic building for the Residential Campus 2020 program at the Kittredge Complex. This alternative does not provide for the operational efficiencies of a central Commissary and Bakery and the quality service that is desired by students. In addition, it is currently forecasted that these approaches would be more expensive to students.

There are no real comparable program alternatives that would provide an equally high value residence hall meal program, providing quality meals, convenience, and an academic center for students and faculty.

Several options were explored to address the goals of the Residential Campus 2020 Plan, Housing and Dining Services, and the Campus Master Plan. They are summarized as follows:

1. Status Quo

Continue with present operations and facilities. At best this option would result in continuing to provide services in a state of stagnation, not meeting student and customer expectations, and would eventually result in a loss of student participation. This option will not result in any space for classrooms or other spaces to support the Campus Master Plan or the Residential Campus 2020 Plan. Space for the Residential Campus 2020 Plan classrooms and faculty offices would have to be found elsewhere resulting in the possibility of the arduous task of obtaining a new academic building.

2. Renovate and add on

Remodel Kittredge Commons and Cheyenne Arapaho Dining Centers and the CU Bakery at the Housing System Service Center, and add a commissary. Due to the limited physical space available in the existing dining halls this option does not respond to campus growth potential, the opportunity to take advantage of economies of scale and to realize efficiencies in operations as a result of operating one dining hall vs. two. It would result in some of the same operational inefficiencies as the current bakery is now subject to. This option will not result in any space for classrooms or other spaces to support the Residential Campus 2020 Plan. This option leaves Housing and Dining Services with aging buildings that will have older infrastructures.

3. New Dining and Student Programs and Services Building



Construction of a new dining facility, bakery, and central commissary. This option supports the Residential Campus 2020 and Campus Master plans. In addition, it provides easy access for students from two major campus residential communities as well as from many academic buildings. This option provides the highest level of service and operational efficiencies identified by Housing and Dining Services.

4. Parking

The project will displace an existing surface parking lot of approximately 253 spaces. Several alternates were considered to address the parking issue.

1. Provide no parking for the project. Although this would avoid the cost of developing parking it would create a situation of severe over utilization of surrounding parking lots.
2. Develop structured parking in either an above-grade or sub-grade configuration in the existing parking lot SW of the building site and across Regent Drive. Although this would provide an economical approach in the short term, it eliminates a critical campus land resource for future needs.
3. The selected alternative is to incorporate a structured sub-grade parking component in the project. Approximately 365 spaces can be accommodated on two levels. This plan provides the advantages of increasing the capacity above the present lot, providing the parking spaces at the point of use of the project and reducing pedestrians from crossing Regent Drive, and preserving a critical campus land resource for future needs.



2 Program Requirements

2.01 Dining Center

2.01.1 Main Dining Functions - General

Since the 1990s food service operations that serve more than a few hundred people have found new ways to increase the efficiency of the meal delivery process. Long before that, the need to offer a variety of meal choices entered the picture. Multiple meal choices tends to increase the size of the preparation kitchen in order to prep, cook and serve more than one menu.

The desire of a customer to see the food prepared, customize the order, and receive a hot meal has moved many elements of the preparation kitchen out into the customer area. Thus the main preparation kitchen has been reduced in size and the serving area has increased in size. Display cooking areas now offer the most efficiency in space utilization and minimize food waste. These display stations give customers the choice they are asking for, plus they are served a restaurant quality plate directly from the person doing the final preparation.

This quality and choice improvement has greatly increased the purchase of food plans by both students and faculty. Because the customer now holds a card indicating they have purchased a food plan, a single point of control is needed to enter the display cooking and dining area.

Faster service, for those who do not have time to sit down, is provided at what is nicknamed a “grab-and-go” counter. Less meal choice and items requiring very little on-the-spot preparation make this a lot like a mini-cafeteria facility. Lines can often form at peak meal hours. The design should consider ways to make this quick service area approachable from the exterior by bicyclists, if possible.

Maximum cost effectiveness of today’s dining centers require control of carry-in bags and control of exiting from the dining area, which is generally in one area near the initial entry control point.

2.01.1.1 Arrival

Since there needs to be a single point of control to enter the dining area, a dominant building entrance needs to be articulated in the design and sufficient space for all persons who will use the center to flow past the point of control. Waiting areas are needed to wait for friends, but these spaces also offer the opportunity for campus display or conversation. Proceeding past the point of control does require some queuing, but not long lines. Prior to reaching the point of control, toilets, bag storage, and some seating is required.

The Center for Community arrival point will be designed to support ease of movement into and out of the building. Where possible, the Arrival space will be designed to minimize the impact of inclement weather on users. The space should be inviting, dramatic and purposeful.

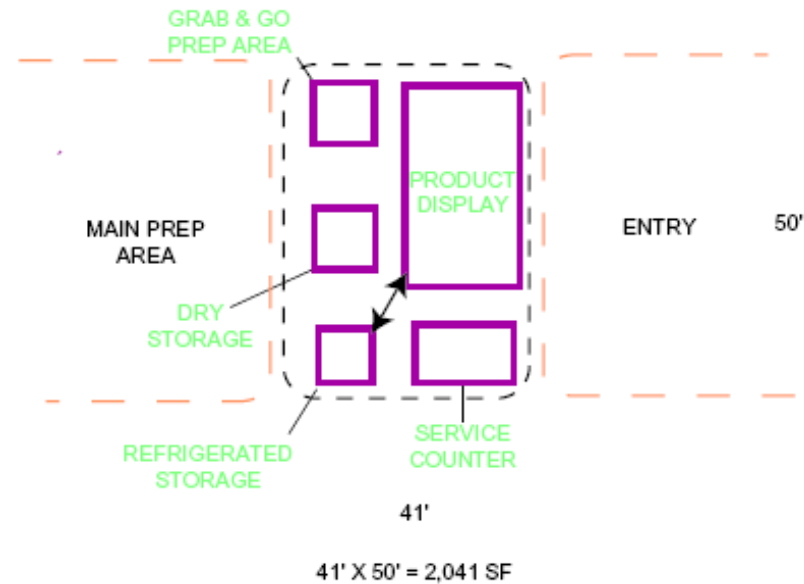
Student bag storage will be provided (coordinated with Arrival space design). This space will be designed so that students can store their personal belongings during the meal period and prior to accessing the dining and servery spaces.



The bag storage will be located adjacent to the Point of Control, providing students with a convenient place to deposit their personal belongings while also affording some potential for allowing security monitoring of the space by Point of Control staff. If required, security video monitoring may be employed to reduce theft.

2.01.1.2

Quick Service



Nicknamed the “Grab-and-Go” area, this space is for customers who have at most, 10 minutes to get their food. The quick service center requires support from the main food preparation area, even though some food items are prepared at the quick service area. This facility can be a destination choice from the main building entrance, or be in a separate location. Space is required to prepare and display food choices in a manner that allows quick movement of customers. No seating is provided for this operation.

The Quick Service venue will be a hybrid venue that changes character from a limited menu, high speed of service convenience concept at lunch to a broader menu, slightly slower service operation at night. In addition to the food offerings at this site, it is anticipated that the Quick Service venue will sell other packaged, convenience items.

During the lunch period, the Quick Service venue provides a speedy, short line option for the customer in a hurry, or the customer who is not interested in participating in the broader offerings or other retail options. To facilitate quick service, it is anticipated that the lunch offerings will be limited to menu items that can be quickly prepared and served.

During the evening hours, this venue may continue to serve the needs of users who remain in the building during non-mealtime hours. It is anticipated that there will be hot and cold preparation taking place in this space. Suggestions have included pizza, subs, packaged salads, hot dogs and other easily prepared and consumed foods. Staffing will be minimal, with an emphasis on creating a high return, low labor operation.

Most of the food service functions for this area will be performed in front of the users. It is anticipated that users will work their way along the counter face



as they order food and beverages at the cashiers' end of the counter, observe their orders being freshly prepared and then pick up their order farther down the counter. Bottled beverages will be displayed in a glass-door refrigerator near the point of sale.

To improve the speed of service, this venue will be located adjacent to the Arrival space. Thus, students and other users who elect this Quick Service option will be able to enter and exit from this space directly, without the need to pass through the Point of Control for the balance of the building.

2.01.1.3

Point of Control

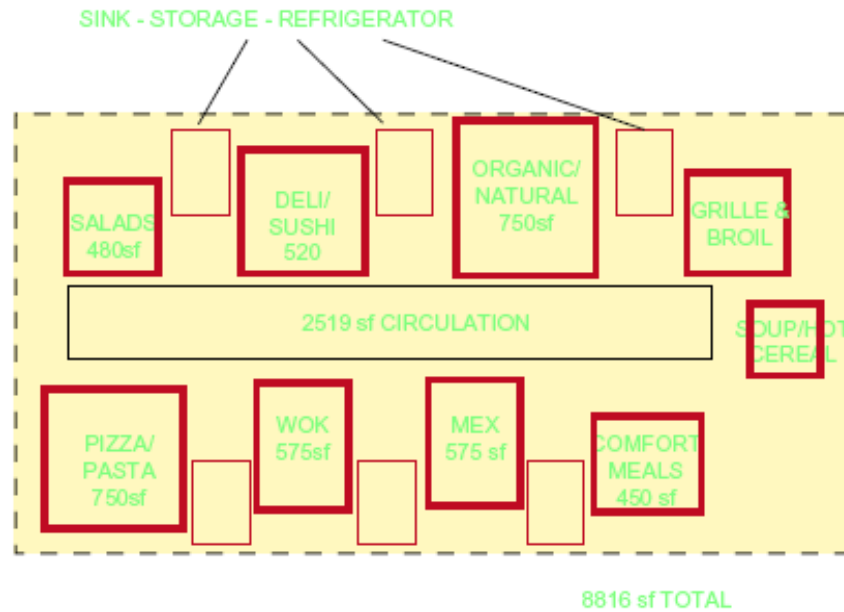
This is a place at which the customer chooses to enter the full service area. Their meal plan card is used to move beyond the point of control. A counter top usually has seating for a staff person.

One or two Point of Control stations will be located at the intersection of the Arrival Space, Display Cooking Stations and Seating areas. The Point of Control Station(s) will be designed to allow staff to easily view those approaching or departing from the secured areas.



2.01.1.4

Display Cooking Stations



The stations are islands or perimeter counters where particular menu items are being prepared and served. Each station has its own storage, refrigeration, grills, exhaust hoods or whatever is required to keep up with the demand for the menu at that station. Replenishment of plates, tableware, partially prepped food items and other supplies can occur throughout an active meal period.

The program anticipates 8 major stations for display cooking by staff and 8 self-serve stations for single items and beverages. The area should be designed to adjust the menu served at some future date without redesign of the infrastructure. Each major station requires a hand sink, local storage, and sometimes refrigeration; minimizing the need for staff to travel long distances to retrieve products during meals.

Significant space for queuing in front of each station plus space between stations for customer choice-making is necessary.

With controlled access, the Display Cooking area is programmed as a flexible serving and preparation environment designed to meet the needs of the meal plan customer or the visitor paying a “per meal” fee for access to the venue. With an emphasis on “fresh” and “quality” offerings, this space is loosely conceived as a “Marketplace” environment. While much of the food will be self-served, counter and equipment designs will provide the flexibility for staff served food, where desired.

The Food Preparation spaces will be directly adjacent to this space, and will provide most of the food items that take more than 10 minutes to prepare. There will be a limited display preparation and cooking of those menu items that have short preparation times or that are particularly appealing to witness as they are prepared. This commitment to display or presentation cooking will add drama, excitement and interest to this servery space.



Aesthetic treatment of this area will include retail lighting, good air circulation, a variety of wall and floor treatments, and attention to reducing noise levels within the area. Durable finishes will be selected to reduce the long-term maintenance needs for the facility.

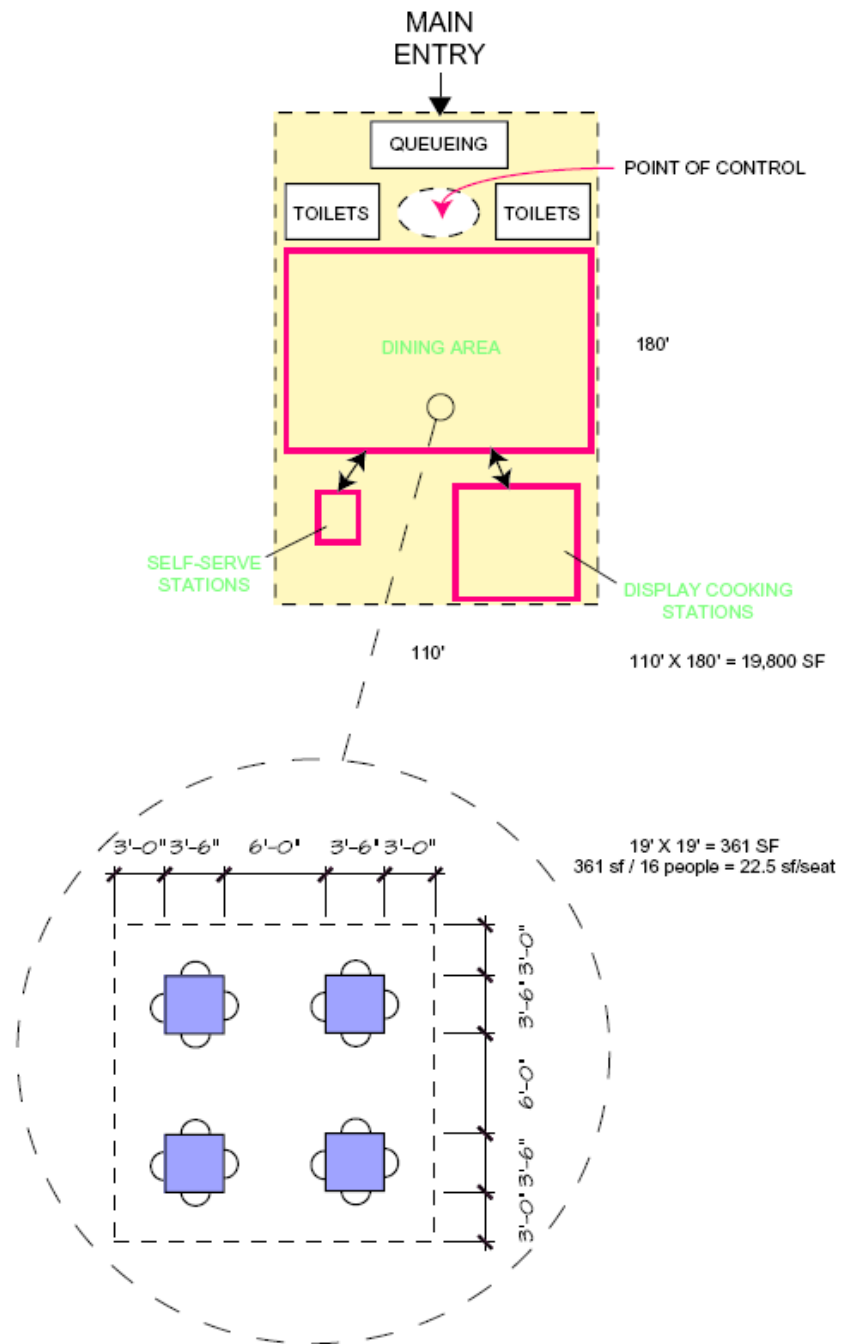
The eight current considerations for this area include a Salad venue, Deli/Sushi Bar, Soup / Hot Cereal Bar, a Grille & Broiler venue, a Pizza and Pasta venue, two Multi-Cultural venues and a Traditional Comfort Food venue. At the point where this project moves into formal planning, it is anticipated that the facility designers will work with the University to determine the appropriate mix of Display Cooking venues.

These light preparation and serving platforms will be arranged to maximize their appeal to the customer, while remaining efficiently linked to the adjacent kitchen and other support spaces. Circulation and line queuing space will be provided to facilitate easy movement of the customer through the Display Cooking Stations. Emphasis will be placed on creating easy access pathways between the Kitchen and Display Cooking areas so that staff and products can efficiently move between these adjacent spaces.



2.01.1.5

Seating



The customer will proceed directly from the display cooking area to dining carrying a tray. This precludes the use of stairs or escalators to different levels, thus the 900 seats of dining called for in this program will be on one level or on simple, terraced level changes.

The program calls for seating to be in four or five, somewhat divided, areas and in two private dining rooms. Additional sub-division of these areas may be desirable to reduce noise and chatter. Special areas for group meetings, etc. can be accommodated within the square footage allocated during low traffic periods or when the Dining Center is closed.



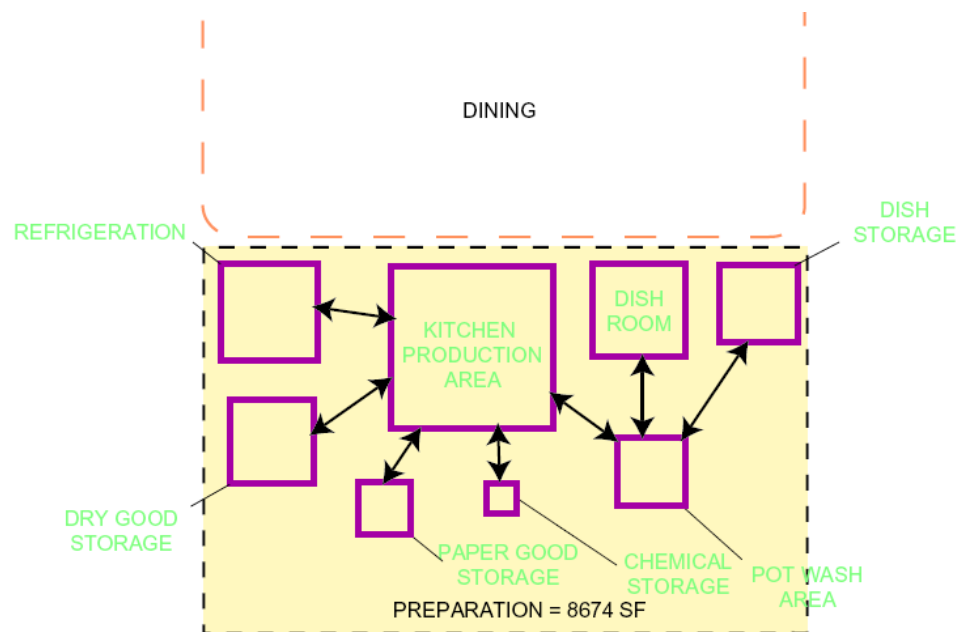
Heating, ventilating and air conditioning (HVAC) the seating area requires large infrastructure space. And, HVAC systems for the seating areas differ greatly from those needed in the display cooking areas and preparatory kitchen. The design should consider means to separate these air volumes which will also contribute to acoustical control of the seating spaces. Significant costs for floor, wall and ceiling treatment to dampen acoustical noise is essential.

Seating types will be varied (booth, chair, stool, stand-up, comfy) and selected for appeal to students with varied and broad seating interests. The dining room layout will allow for a flexible arrangement of these chair and table options. Where possible, table and chair arrangements will be flexible so that the university can make ongoing changes to fine-tune the operation or to better meet with changing needs.

Aisle spaces will be designed to allow for easy passage of both personal and equipment. Aisles will be oriented to provide customers and staff with logical, intuitive and comfortable means of moving through the facility with minimal effort.

2.01.1.6

Food Preparation



This is the main kitchen area which will be designed to support the primary dining population. Sharing functions in this area with the commissary and bakery are not possible due to the need to maintain high efficiency in support of the customer over nearly a 24-hour period. The main population area has to be flexible to menu variations, whereas the commissary and bakery are designed for very specific tasks.

The square footage for this area is calculated based on the known equipment to be used in the space plus a circulation factor which allows for flexibility of arrangements and fine tuning of work flow as the customer requires.

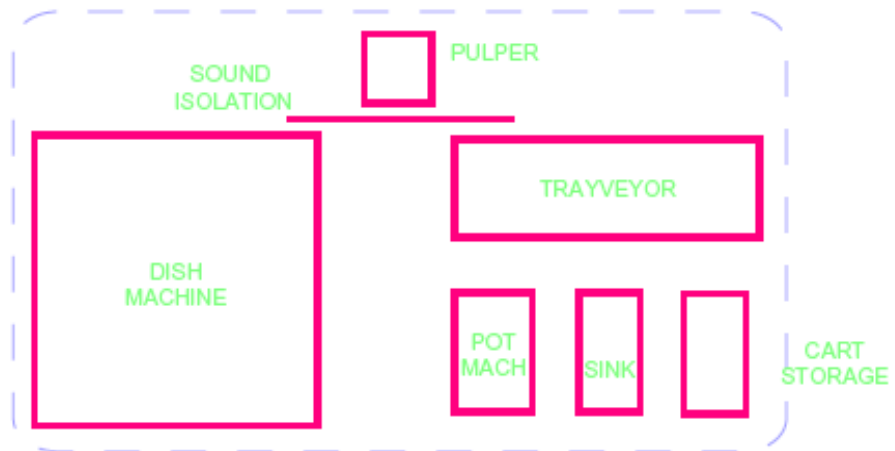


The storage requirements for this area can be divided between bulk storage which can stay in the lower level, and daily or weekly use items which must be stored on the main level.

With its emphasis on front-of-the-house production, the Food Preparation spaces within this building will be oriented toward cold prep, hot prep and some limited catering needs. Where possible, work “cells” will be developed that will minimize nuisance cross-traffic within the space. Equipment will be positioned to maximize the sightlines across the space. Floor troughs will be designed to capture runoff liquids from kettles and steamers. Worktables will be located to maximize utilization rates for the equipment. For example, the prep cook may use the table for one portion of the day with other cooks using the table during another part of the same day. This mixed use will reduce equipment and space needs within the Food Preparation space. The Food Preparation space will be oriented to offer the greatest operational efficiency for those moving product from storage to the kitchen, for those stocking and staffing the Display Cooking Stations, and for those cleaning up. Ceiling, wall and floor surfaces will be constructed of readily cleanable and durable materials. Lighting levels will be appropriate for tasks being performed. Equipment will be designed for ease of service and cleaning.

2.01.1.7

Washing



Today’s washing areas are highly mechanized spaces with large automated pieces of equipment. However, food waste, loading, unloading and pot washing still require staff in an environment with very high noise levels. The space should be designed and allow for a large amount of acoustical sound deadening, appropriate for a moist environment. Food composting begins at the pulper which needs to be physically isolated for sound control.

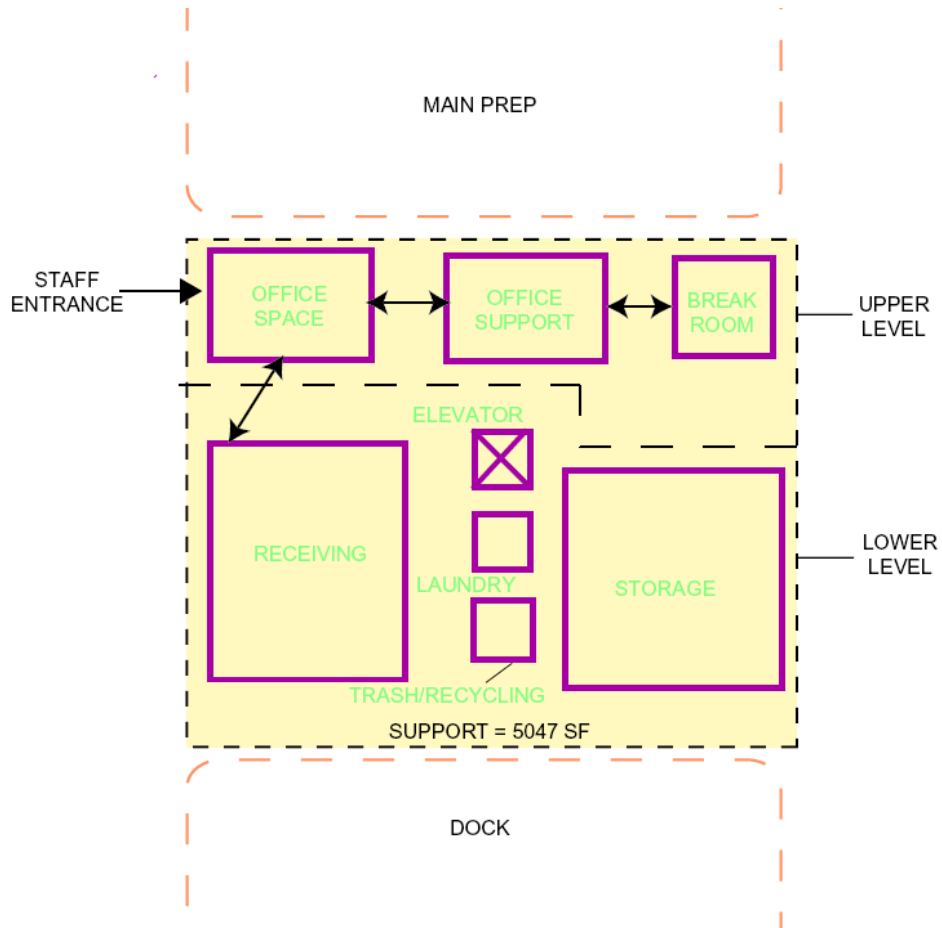
Utilizing a conveyor style dishmachine, the warewashing area will be designed for rapid and easy cleaning of trays, dishes, pots and pans, flatware and other service and customer wares. Students will drop off their trays at the tray accumulator, a device used to hold and transport trays from the student side to the dishwash side of the space. This unit also will “hold” trays until the dishwashing staff is able to unload and wash them. This will create operational economies in both labor and energy use.



A potwash machine and potsink are anticipated for this space, as well. This dual use of the space will allow for efficient staffing. Cleaning supplies will be secured in a small custodial space. Convenient restrooms and lockers will be provided for staff.

2.01.1.8

Support

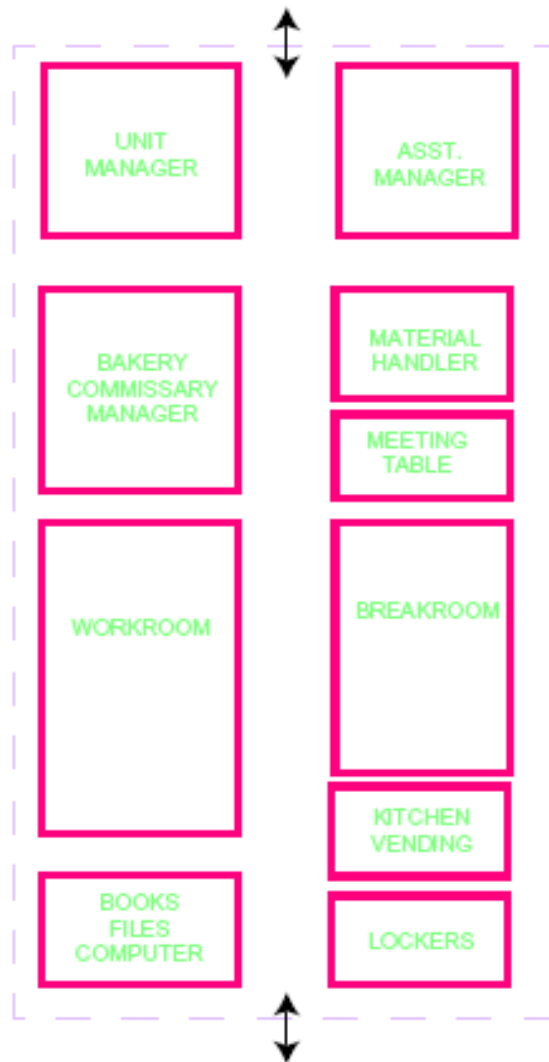


Staff meeting space, locker rooms, office equipment and file spaces will be provided in the plan. Wherever possible, these spaces will be located adjacent to the primary functions they support. Small storage spaces will be designed to provide local support, as required, for each of these functions.



2.01.1.9

Office



Up to 30 staff need to enter, sign-in, and dress on overlapping shifts. Toilet rooms, lockers and a break area are essential functions. There are general administrative functions each employee must do which requires a work table, and access to a computer and copiers. Office space will be provided for the foodservice staff anticipated to include the Unit Manager, Assistant Manager (2 desks each), Quick Service Supervisor, Material Handler, Bakery and Commissary. Spaces will include office furniture, communication equipment, task lighting, security and other common office elements.

LEED requirements for recycling includes many levels of material handling. General recycling from the dining area needs to be collected as the customer cleans his or her tray followed by movement to appropriate containers on the loading dock. Bulk packaging and food waste are recycled through larger machines to be located near the loading dock. Trash cans associated with food waste must be washed in a special room.

The daily operations develop a need for laundry washer and dryer plus clothing storage areas, which can be on the lower level.



2.01.1.10

Storage

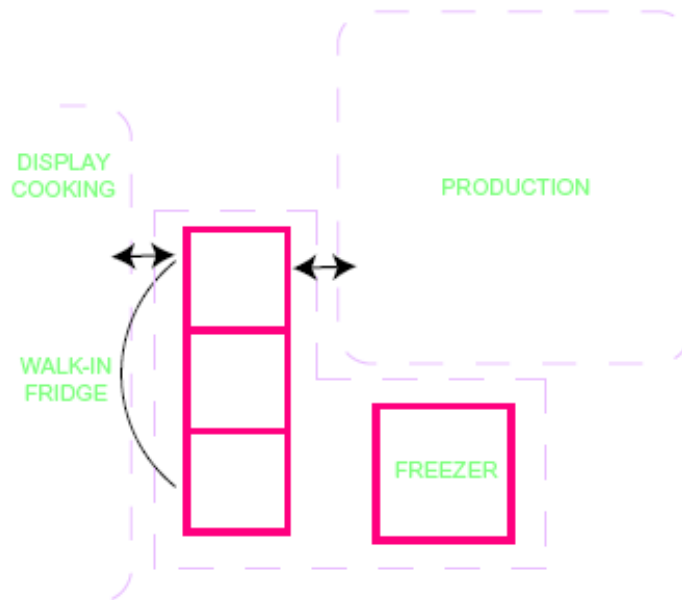
Storage functions require rigid inventory control at the point of receipt followed by movement to bulk or daily-use storage. These rooms require higher than normal floor loading design. Separate rooms for different types of storage is essential. Some compressed air canisters and cleaning chemicals can be hazardous and some storage requires humidification.

In this Dining Center, storage will be both centralized and decentralized. Storage requirements have been established based upon current operations but anticipate changes in demand as required by the Semi-Prime vendor program.

The semi-prime vendor program is designed to allow the University to minimize the number of direct-to-site, large truck deliveries. The semi-prime vendor program consolidates large deliveries to a larger, main site, from which smaller lot deliveries can be made to individual sites, utilizing smaller delivery vehicles. In addition, and on a limited basis, select vendors will make deliveries to these same facilities – also in smaller vehicles. This program will allow the University to control cost through volume purchases, while simultaneously reducing congestion on campus. A study dated July 17, 2006 was performed that detailed this program and its benefit to the campus community at Boulder. A copy is available at the Offices of Dining Services. This program will minimize the disruptions to campus vehicular and pedestrian traffic that are, today, caused by these large vehicles which often must maneuver in tight or difficult traffic conditions.

2.01.1.11

Refrigerators and Freezers



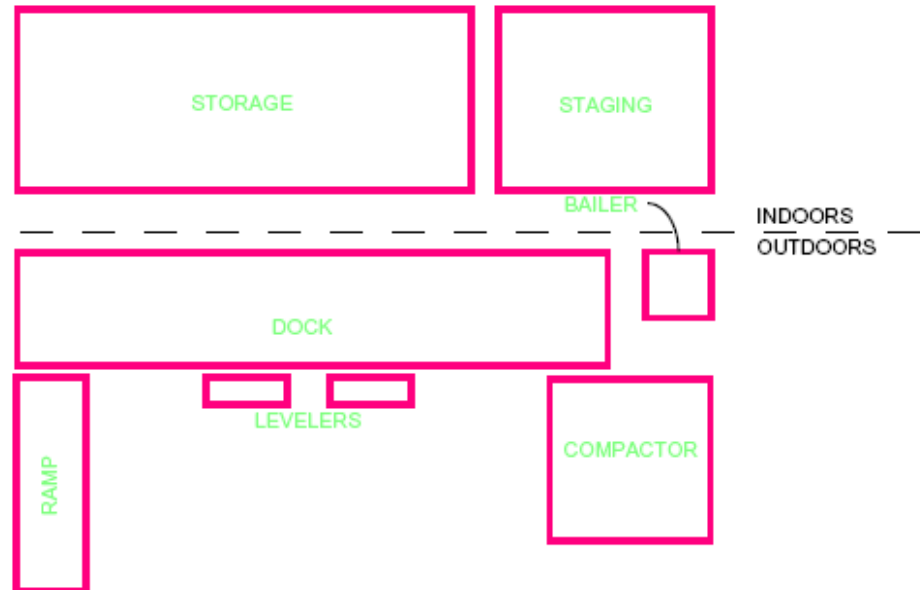
Large walk-in refrigerators will be provided for the volume holding of food products. These walk-ins will be constructed of insulated panels, 4” thick that interlock to form an insulated box. At a minimum, doorframes and doors will be constructed of stainless steel to maximize the life of the equipment. Walk-in panels will be constructed of aluminum, stainless steel or galvalume aluminized steel. Storage racks will be provided within the walk-ins.



Throughout the kitchen and serving areas, product will be stored in walk-ins and in controlled temperature rooms that are designed to provide product support for the closest Foodservice Preparation or Display Cooking Stations. This convenient storage will be sized to handle the proper mix of products in either a raw or prepared state.

2.01.1.12

Shipping & Receiving



Shipping and receiving is partly an interior function and partly an exterior function. The building square footage included in the program plan does not include any exterior functions, as those are noted in the site requirements. However, the need to have the loading dock protected from weather is important to a 7 day-a-week operation.

In addition, shipping and receiving is a noisy operation to adjacent buildings. A protected and covered dock area decreases the noise pollution. Sufficient retaining walls around the dock operations will be needed to mitigate sound transmission to other buildings. The proposed site location for shipping and receiving is on the Regent Drive side of the Dining Center to provide truck access efficiency and the least noise disturbance to other buildings.

This space will include air curtains at the Receiving/Food Preparation threshold (to prevent insect infiltration), wide and durable door passages and circulation space to ease the movement of products. This area will be finished in durable, readily cleaned materials. A power wash will be provided for cleaning the dock, prep surfaces and foodservice equipment. Dock lighting will include a wall mounted adjustable lamp that will be used to illuminate the interior of the delivery trucks and other vehicles. Space for the accumulation of recycled materials and other trash will be provided. Intercom and A/V security is desired.

2.01.1.13

Recycling & Trash

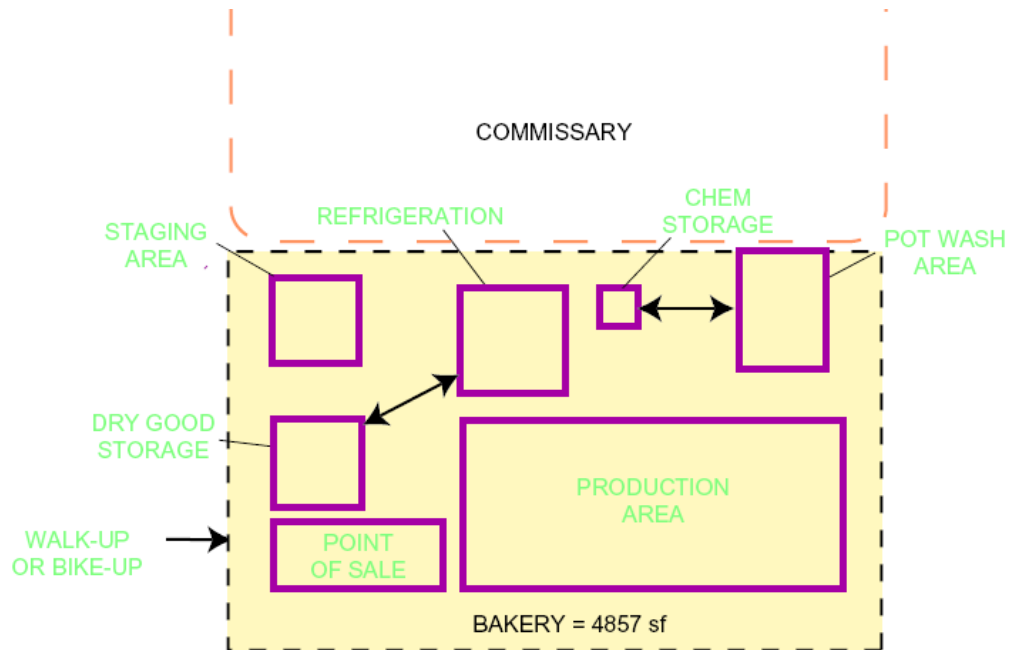
Spaces will be provided to allow for the sorting of various recyclable elements. This will include space for paperboard packaging, metal cans and plastic.



Access to a large compactor at the loading dock will be provided. A garbage can spray wash device will be located in an area that also includes a high pressure spray wash. If operational needs dictate that trash must be stored for any length of time, a tempered trash space will be provided.

2.01.2 Additional Dining Functions

2.01.2.1 Campus Wide Preparation Operations



CU-Boulder is consolidating much of its baking and preparation of cold menu items at this site. The building and equipment support for an operation of this sort include large storage areas for raw products, extensive worktable needs, mixing, cleaning and cutting equipment, proofing and baking devices, portioning and panning appliances, packaging machines, blast chill devices, holding and transport carts, staging and thaw boxes and other elements that will be used in this operation.

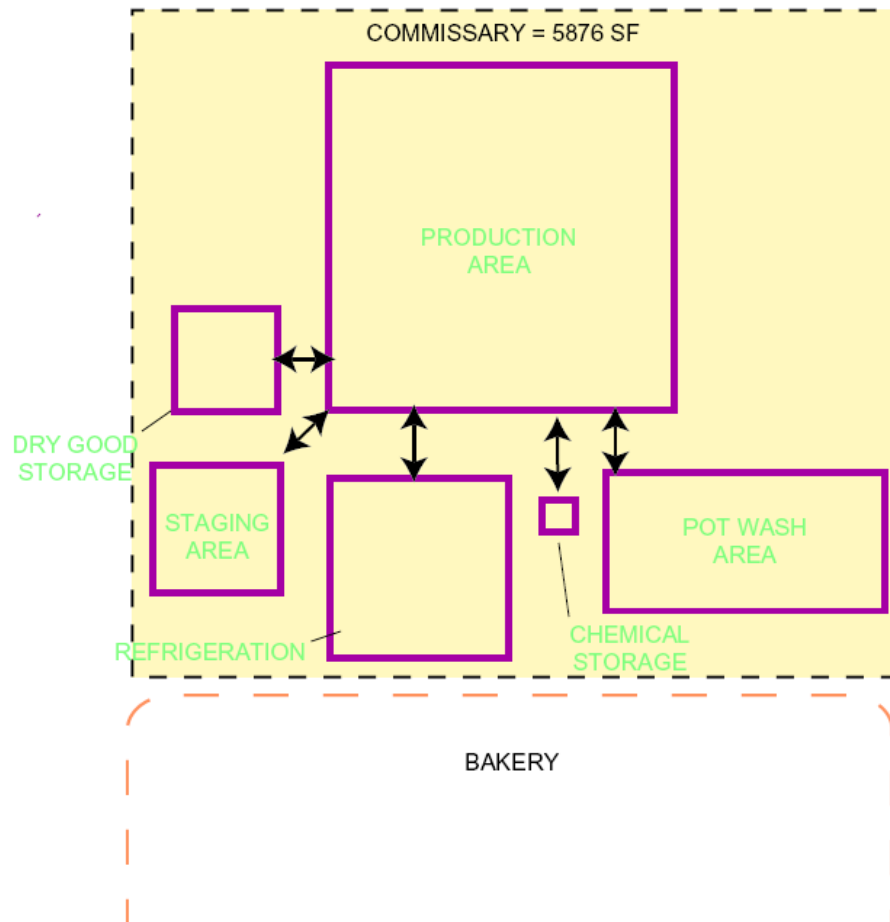
Where possible, the University will leverage its Semi-Prime vendor relationship to accurately monitor deliveries to this site. This will allow the planners to more accurately size the storage environments so that they are well-matched with deliveries into and out of the commissary.

The Commissary will share receiving and support spaces with the balance of the Dining Center. The shared resources also include office space and vertical transport.



2.01.2.2

Bakery



The focus of the Bakery has changed from the preparation of large volume products to offering specialty and point-of-sale products.

2.01.2.3

Bakery Point-of-Sale

The Commissary will produce specialty baked goods for the campus. It is anticipated that the Center for Community will include a retail Bakery outlet. This outlet will offer fresh-baked goods for sale to retail users. There may be opportunities for additional sales to a broader market.

Staffing considerations may result in the consolidation of the Bakery outlet with the Quick Service venue. If this occurs, the Bakery/Quick Service venue may include a hot beverage option. The staff in the coffee area will prepare specialty coffees in full view of the customer. The customer-user will enjoy appealing views of the baked goods.



2.02 Student Center

The “Student Center” portion of this plan refers to the student service programs. These include cultural centers, advocacy offices, various student life support centers, and counseling programs. These programs should not be confused with those located in the University Memorial Center (the traditional campus student center). The Student Center programs included in this plan are Student Life programs and include:

- Center for Multicultural Affairs
- Victims Assistance Program
- Faculty and Staff Assistance Program
- Counseling and Psychological Services
- Center for Students in Recovery
- Card Office
- Judicial Affairs
- Gay Lesbian Bisexual Transgender Resource Center
- Disability Services
- Career Services
- Ombuds Office
- Student Academic Services
- International Education

Besides providing additional bed space in Willard Hall to meet the rising demand of students living on campus, the consolidation of these programs in one location will improve the quality of services and reduce the space needs associated with each program. Co-locating these programs allows each to share space and work in a collaborative environment to improve services. The consultants estimate a 15-20% savings in space needs as a result of the Student Services co-location and the adjacency to Dining and Food Services. This equates to a reduction of between 7,000 and 10,000 square feet, reducing the capital need approximately \$2.0M and annual operating costs \$50,000 to \$100,000.

2.02.1 Center for Multicultural Affairs (CMA)

Program Description

The Center has to adhere to state regulations for counseling. Private spaces are necessary to hold individual counseling sessions. These are best organized around a central, multi-purpose lounge space used for social gathering, academic support programming, and cultural events. The lounge acts as the foundation to the Center. It is a place which reflects varying cultures and must be a comfortable setting to students.

The Center would like an open area/commons leading into the Center for Multi-Cultural Affairs. Many events center on food and food preparation at a small scale so they can benefit from being adjacent to an open space. CMA Functions, graduations, and events have clear ties to dining & food services.

The Center needs to be careful not to be too international so ethnic students don't lose their cultural identity. The supporting administrative function is back door while the counselors and support staff are front door functions. International Education is clearly the leader in this function but CMA does partner with International Education accordingly.

Program Needs

The Center has to adhere to state regulations for counseling. The program needs private spaces for individual counseling sessions. These are best organized around a central, multi-purpose lounge space used for social gathering, academic support



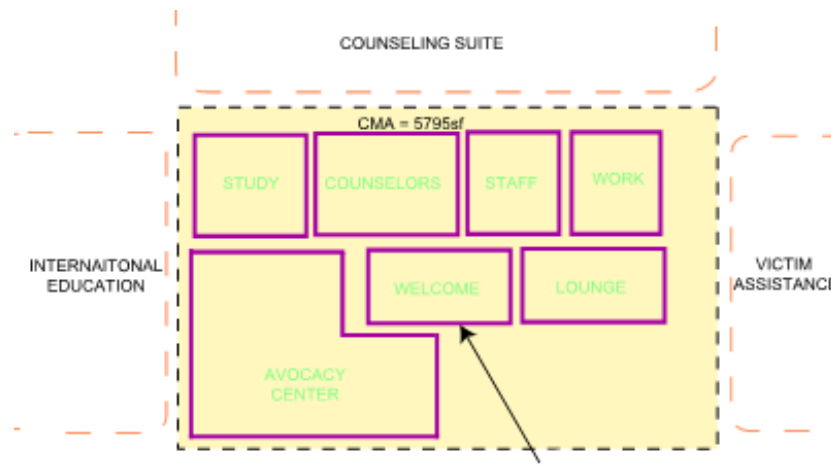
programming, and cultural events. The lounge is the foundation to the Center. It is a place which reflects varying cultures and must be a comfortable setting to students.

The Center has peer counselors who are para-professionals. These persons lead many of the group sessions. There are 10 peer counselors and atypically work 5 at time.

The Center should have an open area/commons leading into the Center for Multi-Cultural Affairs. Many events center on food and food preparation at a small scale. CMA functions, graduations, and events have clear ties to dining & food services.

The Center will also house American Indian, African American, Latino, and Asian Cultural Centers. Each cultural center will be a gathering spot for students to mingle and share their cultural heritage. The centers will also host activities such as exhibits, meetings, and presentations.

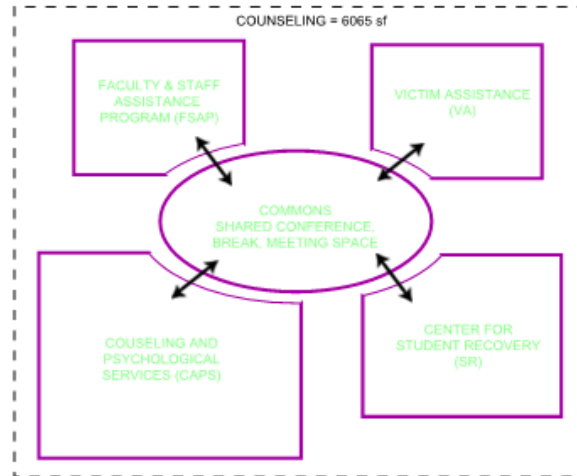
The Center needs to support the development of ethnic students and their cultural identity. The supporting administrative function is back door while the counselors and support staff are front door functions.



2.02.2 Counseling Suite

Because of program synergies amongst four of the programs, a new Counseling Suite is envisioned to improve collaboration and services to patrons of the four programs. These programs include the following:

- Victim Assistance (VA)
- Faculty & Staff Assistance Program (FSAP)
- Counseling & Psychological Services (CAPS)
- Center for Students in Recovery (SR)



The Counseling Suite is not a program, but a place in which the four programs can effectively improve the diverse services for patrons. Programs intend to work in a collaborative manner to remove potential confusion amongst clients and visitors. All counseling support will be located in one area so program differences will begin to fade amongst patrons.

2.02.2.1 Counseling & Psychological Services (CAPS)

Program Description

Counseling and psychological services are free and available to all CU-Boulder students. Staff and faculty are welcome to consult with the center's staff about student concerns. The center is a safe place where students can talk confidentially with a professional psychologist or counselor who understands and respects their needs. Counselors and psychologists also provide groups and skill-building, and interest testing and interpretation (for a small testing fee).

Program Needs

The following areas support a variety of functions within the counseling area. Some areas may be shared with other counseling centers such as Victim's Assistance, Student Academic Assistance Center, and the Faculty Staff Assistance Program.

- Offices (9 psychotherapists, 1 director, 1 coordinator, 2 admin assistants, 1 psychiatrist, 8 grad interns, 4 peer counselors)
- Reception/Waiting area
- Records Room
- Library
- Testing Space
- Group counseling room
- Conference/meeting rooms
- Break area
- Storage
- Copy center

There is a balance of needing privacy and confidentiality with a welcoming tone. Being able to walk up to a reception area that is calming is important.



50% of appointments are scheduled and 50% are walk-in. Walk-ins can be very upset or angry. The program may need two levels of waiting, one for the distressed client, one for other clients.

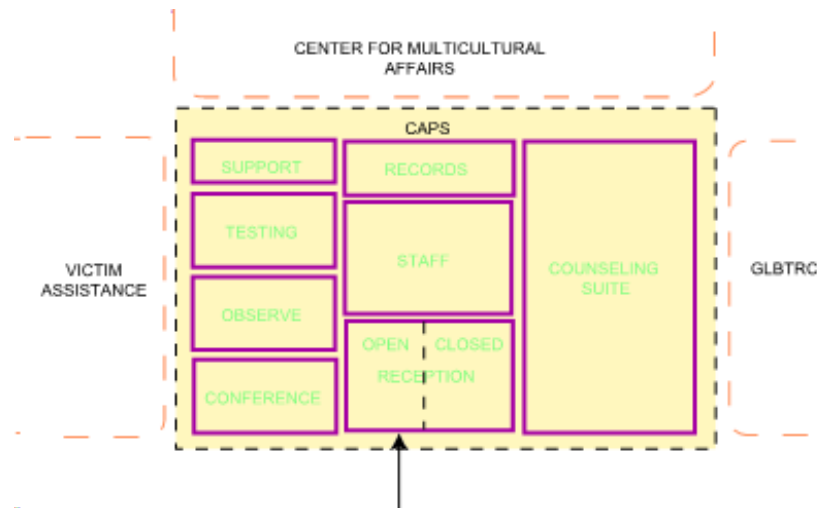
One quarter of counseling done is group sessions. Groups are normally after office hours, they don't have access to waiting area. Most groups are 6-8, no larger than 10.

Offices are used for individual counseling. Because counseling is done in office they need to be soundproof. It is important to have windows for clients not to feel psychologically trapped in office/space.

Some of the areas need to be secure after hours. There needs to be restricted access to offices for non-clients. Need a locked private records room. Ideally clients would enter and exist at different locations.

CAPS need training room for graduate student interns, observe, tape or both.

A large conference room could be shared space.



2.02.2.2

Faculty & Staff Assistance Program (FSAP)

Program Description

The Faculty and Staff Assistance Program is a confidential, free counseling/consulting service designed to provide assistance to faculty and staff for personal or work-related concerns that may interfere with job performance. FSAP provides short-term counseling, group counseling, supervisor consultation, consultation to faculty and staff regarding student issues, conflict resolution/mediation, organizational development, workshops, and an audio/visual tape library.

Program Needs

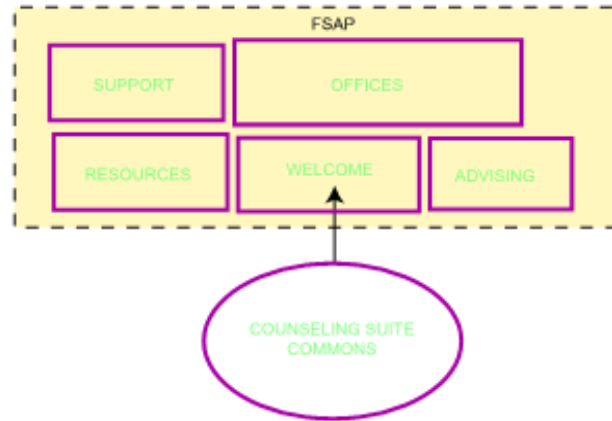
FSAP has confidentiality requirements. It will be important to have a very secure storage area. Privacy for meetings and records are important due to the type of issues the program deals with.

The ideal location would be some place accessible to faculty and students, yet honors some privacy.



FSAP conducts group meetings and individual counseling (private).

FSAP does organizational development work all over campus. The Team is comprised of HR, VA, CAPS, FSA staff & interns. Most of the contact is by appointment, occasional walk-in. FSAP staff meets with clients in an office setting, which works well.



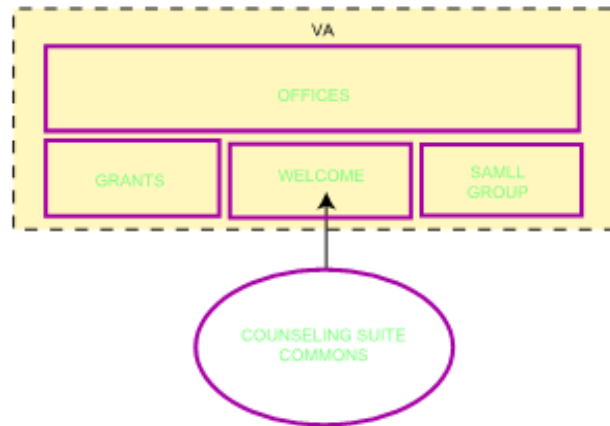
2.02.2.3 Victim Assistance (VA)

Program Description

The professional staff of the Office of Victim Assistance offers free and confidential information and referrals, support, counseling and advocacy to students, faculty, staff and their significant others who experience a disturbing life event. Such events include, but are not limited to: assault, bias motivated incidents, crime, death, harassment, intimate partner violence, serious accidents, sexual assault, sexual harassment, and stalking. Victim Assistance advocates can also help coordinate assistance from the appropriate campus and community services.

Program Needs

The Victim Assistance office does get some walk-ins but much of the traffic is through appointment. The program also does outreach, reports and calls. Traditional space needs include office type, small group gathering and a place where students can feel comfortable and welcome. No special requirements are needed except the adjacency with other support centers would improve services.



2.02.2.4

Center for Students in Recovery

Program Description

The Center for Students in Recovery provides a nurturing, structured, peer-based environment for students. It paves the way to recovery from addictive disorders and allows students to successfully pursue academic, personal, and professional goals. It enhances the quality of their lives and helps them become productive members of the university, community and society.

Students in the center have extensive access to a variety of campus services such as:

Twelve-step meetings on campus, or structured support groups.

Educational support that is peer-facilitated.

Job and career counseling

Life skills training such as:

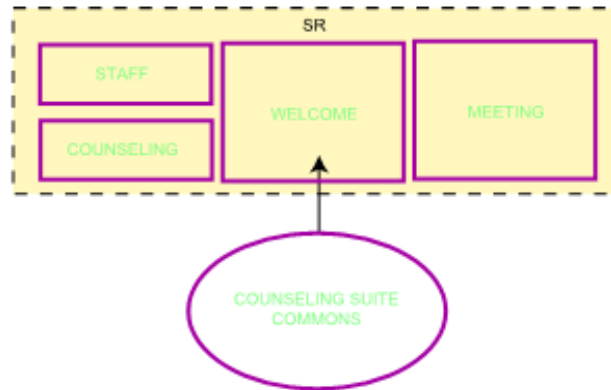
- Money Management
- Conflict resolution
- Parenting/mentoring
- Nutrition and meal planning
- Healthcare management including smoking and HIV/AIDS
- Healthy sexuality
- Peer counseling

In addition to campus services, students in the center participate in a service project each semester within the Boulder community.

The Center's mission is to provide a community for safety and comfort, to provide support to get students through the university. The Center provides emotional and physical services.

Program Needs

The Center for Students in Recovery is a relatively small unit but does need appropriate space to support their services. The Center primarily needs counseling office(s), a meeting room, a place for students to relax and feel comfortable and a quiet study area. It will be important to improve the presence of the program without jeopardizing the private nature of the operations.



2.02.3 Card Office

Program Description

The Card Office provides the Buff OneCard services to the campus and is the official campus identification card for all students, faculty and staff at the University. The Buff OneCard is used to: access the Wardenburg Health Center, attend CU football and basketball games, ride most RTD and campus buses, use the Student Recreation Center, eat in Housing Dining Centers, print in labs across campus, make purchases at any Housing C-Store, do laundry in hall laundry rooms, enter secure campus buildings and halls, check out materials at campus libraries, bank with Elevations Credit Union, and make purchases at Boulder merchants.

Program Needs

The Card Office is a first stop on campus (students, faculty and staff). The Card Office needs easy access. New functions may require office being open 24/7 and may need to be located along the perimeter of the building.

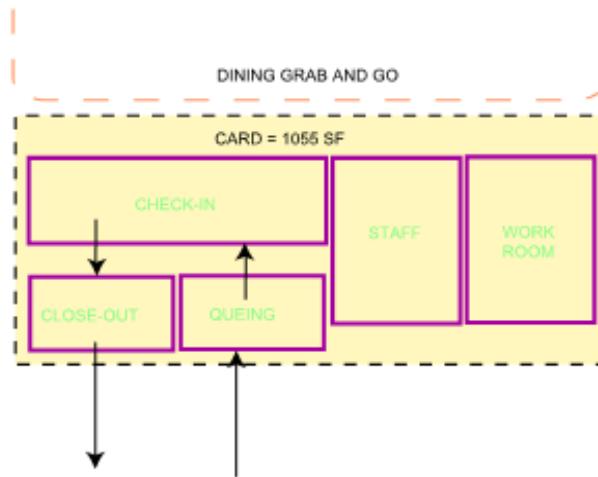
Patrons do not stay long at the Card Office but while they are there it is important to be efficient and have space to support that. A counter is critical for students to fill out forms and it is critical to have a flow, in and out of the Card office. A functioning queuing line is a priority to be addressed.

The Card Office needs a place to stack larger numbers people during peak periods (beginning of fall semester and first week of classes). The Office has line walker during these periods to help students get ready while standing in line. There may be 7-8 employees manning the counter during peak periods.

The card process is: check in, get verified, get carded, closeout at register, card delivery (moving from station to station). The process and space supporting it needs to be very personable. A backlog occurs during printing card out and closeout since these take longer so this should be considered when planning the line process.

The Office currently has no conference or meeting space so locating it near a shared meeting room is necessary. This is also true for some sort of break room or staff space. This can also be shared with other Student Services.

The Card Office does have vendor relationships with credit union, outside vendors (client space), happens a couple of times a year. Currently the office has set them up in tents outside but this could possibly be done in the Student Commons or other large open public space.





2.02.4 Judicial Affairs

Program Description

The university strives to make the campus community a place of study, work, and residence where people treat one another with respect and courtesy. The university views the student conduct process as a learning experience that can result in growth and personal understanding of one's responsibilities and privileges within both the university community and the greater community.

The Office of Judicial Affairs administers the Student Conduct Code that prohibits behaviors that are contrary to the establishment of a safe, respectful, and supportive community. All students must adhere to the provisions of the Student Conduct Code.

The Office of Judicial Affairs is authorized to administer the Student Conduct Code designed to maintain the general welfare of the university community. Students who are charged with violating the Student Conduct Code are subject to the conduct process and may face educational or disciplinary sanctions. Sanctions may include community service, written reflection, alcohol and/or drug education, placement on probation, and, in severe cases, removal from the institution.

The values of the Office of Judicial Affairs provide a framework for programs and practices that mirror the university's values. These values are:

- Civic responsibility and student involvement
- Education and development of all students
- Respect, dignity and equity
- A socially just community
- Responsibility, accountability, and critical thinking
- Fairness, honesty, and integrity

The mission of the Office of Judicial Affairs is to establish an ethic of care through its preventive, behavioral, and accountability practices. Establishment of an ethic of care aids in providing a safe, respectful, and supportive community where students, parents, faculty, and staff will be challenged to develop their critical thinking, values, connectedness to the community, sense of identity, understanding of independence and interdependence, and multicultural awareness.

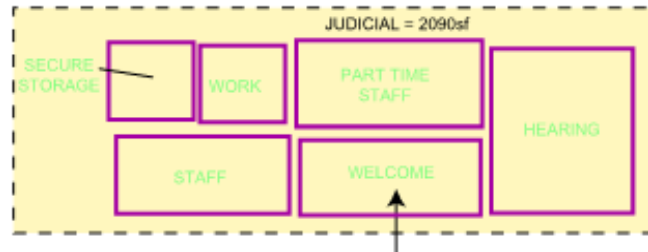
Program Needs

Currently the office has 10-11 FTEs, 1-3 part time staff, averaging normally 2 over year. Most students are scheduled to come in and for follow up so many do not "drop in". Meetings are one-on-one.

The office needs a main reception area (currently admin assistants in open area). Ideally the administrative assistant should be in an area to be able to have physical connection with ability for private conversations.

Judicial Affairs provides training for staff and university staff. These sessions include member of JA staff with members of panel (20-25). This happens 1-2 times a semester and as-needed after that. JA would need space in new building to conduct these sessions. It could be shared easily since it is not used that often by the large group. The Review Committee meets regularly, at least once a month. The committee reviews investigation reports and is made up of campus staff (4-5).

Judicial Affairs also needs space for secure storage, needs to be assessable and good sized. There needs to be balance between look and feel and what happens in program space.



2.02.5 Gay Lesbian Bisexual Transgender Resource Center (GLBTRC)

Program Description

The mission of the Gay Lesbian Bisexual Transgender Resource Center is to ensure equal opportunity for successful academic, social, and personal development for GLBT students, staff, faculty, and their allies in a safe and supportive environment. The center provides information dissemination and referral; educational, cultural, and social programming; advocacy and a voice for GLBT communities on campus; and networking for gay, lesbian, bisexual, and transgender groups on and off campus. The GLBTRC also provides a lounge and gathering space for the community. It is open to people of all sexual orientation and gender identities.

Program Needs

The program provides a place for students to get information and gather and share experiences, especially between classes. The Resource Center has a library including resource materials that need to be available and displayed. This should be adjacent to the computers used for electronic and digital resources sharing. This area should be easily accessible and central to the “suite”.

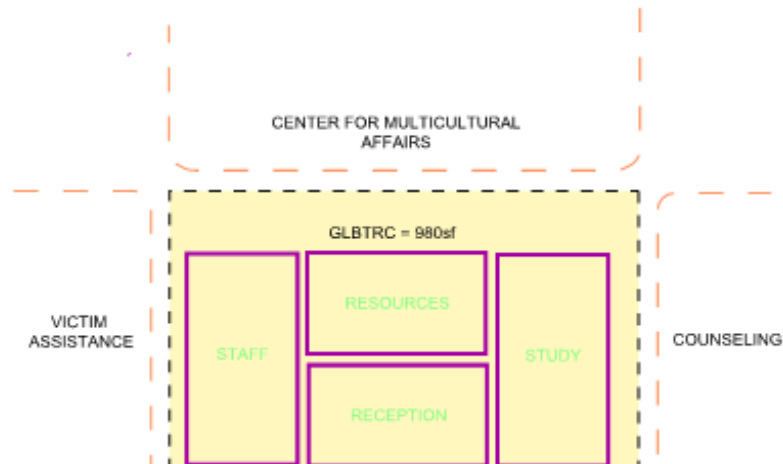
The program needs to balance and improved identity while honoring privacy.

There is a director and a part-time admin. Assistant. There are a lot of student volunteers and student workers. The Center currently has 2 student employees. The Center averages 3-4 students in the current space at one time.

A separate social study space would be ideal. A welcoming area is important. Administrative functions should have a little separation. The program doesn't need a lot of storage, mostly resource materials and administrative files.

A number of student groups will meet in GLBTRC space (8-25). The program has welcome back events, parent events, movie nights, discussion groups (10-20). A shared space for these types of functions would work well. It could be shared with CMA.

There must be multi stall transgender bathroom in the building.



2.02.6 Disability Services (DS)

Program Description

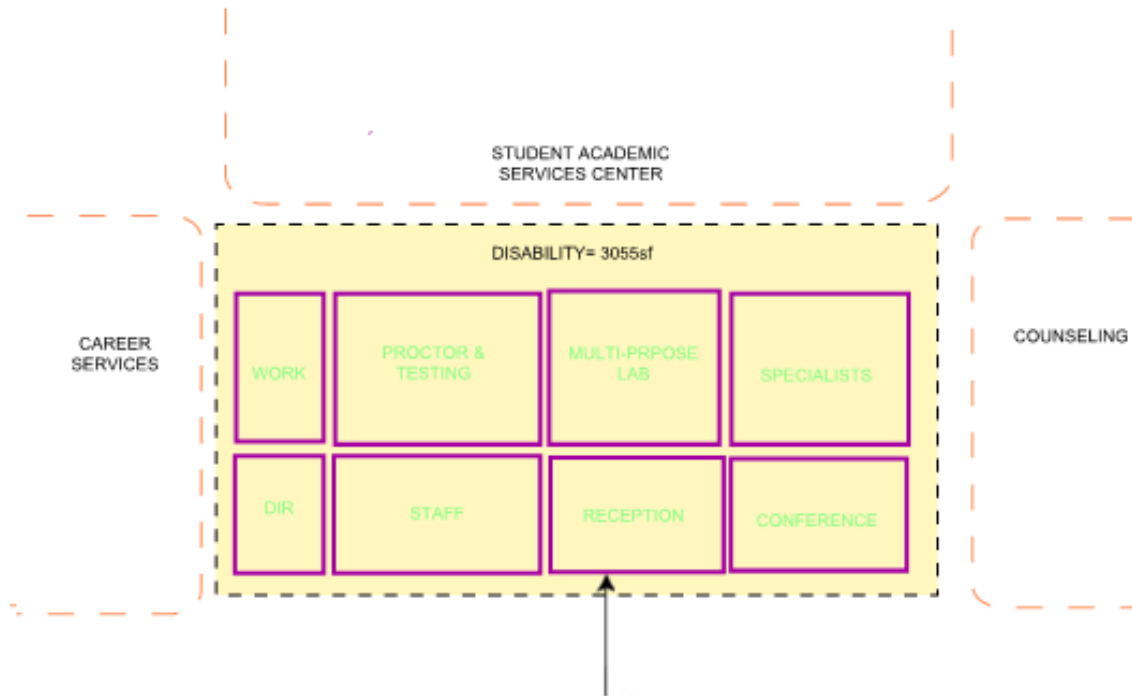
Disability Services works with students to provide support, advocacy, and assistance in accessing the academic, social, and cultural life of the university. Working from a philosophy of empowerment, Disability Services encourages students to become their own self-advocates. A variety of auxiliary aids and services are available including an Assistive Technology Lab, screening/diagnostic assessment, interpreting, captioning, writing lab, and individual sessions with a disability specialist.

Program Needs

The Assistive Technology Lab has two rooms and the space is used for a variety of functions such as proctoring (up to 20 persons), project work, and production. The lab loans lap tops and can be very noisy since it is a multi-purpose center. Keeping noise level down is important. Students come and use computers and adaptive equipment. The brailing activities are labor intensive and enough room will need to be available to support this.

Beyond typical office functions, the program needs a larger meeting or conference area for 25 persons. This can be shared with other building occupants.

A need beyond today's space is a larger meeting or conference area for 25 persons. This can be shared with other building occupants.



2.02.7 Career Services

Program Description

Career Services assists students in all aspects of their career development including decision making, obtaining internships, and finding professional jobs after graduation. Services include career counseling, internship assistance, on-campus interviewing, academic testing, job search assistance, credentials/recommendation files, career fairs, and much more.

The Mission of Career Services is to provide a centralized, comprehensive career center for all students at the University of Colorado at Boulder. Career Services empowers students to take control of their own professional development and job search by providing the following tools and services: Career Counseling, Job & Internship Listings, Career & Internship Fairs, On-Campus Recruiting, Information Resources, Test Preparation & Administration, and Recommendation Files.

The Goals of Career Services are:

- Gain recognition as the main campus resource for career and occupational information, recruiting practices, and professional skills development.
- Encourage students to become active participants in their own professional development by helping them integrate their academic and professional experiences with their own goals, personalities, skills, interests and other aspects of self.
- Provide a variety of opportunities for students to interact with employers from diverse industries.
- Collect, organize, and present data related to the employment, internship and graduate school destinations of our students and recent alumni.
- Provide excellent customer service in the form of a welcoming and user-friendly center and staff members who focus on the needs and goals of each client with whom we work.
- Increase student participation in campus career-related programming.



- Upgrade our resources and skills continually to provide state-of-the-art services using the latest technology available.
- Continue to build and develop partnerships on campus for reaching special populations and under-represented groups modeled after our current formal partnerships for serving diverse populations, graduate students, alumni, continuing education students, business students, and engineering students.
- Support students by modeling in ourselves the behavior and values we expect of them. As staff members, we constantly learn and grow and focus on our own professional development so as to provide the best quality service. We strive for open communication, mutual respect, shared vision and professionalism in all of our interactions. We recognize and value the strength of our diversity and celebrate the ways in which we are different as well as the ways we are similar.

Career Services Diversity Statement

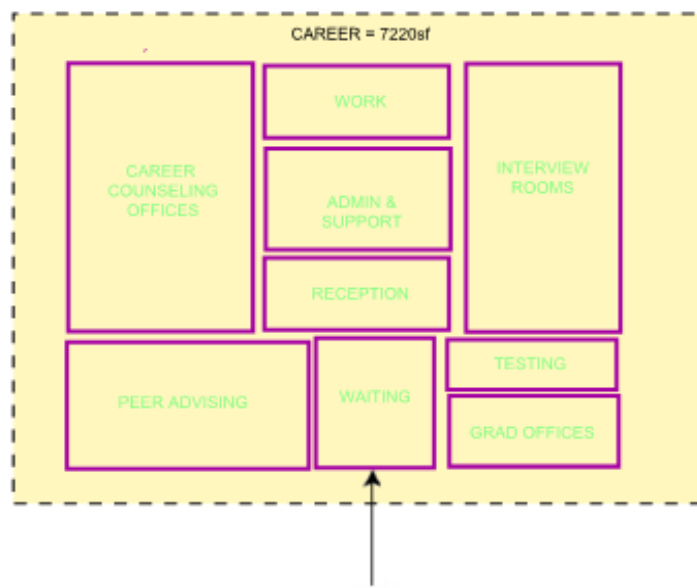
Career Services serves as a comprehensive resource for ethnic minority students, women, and disabled clients as it relates to their career development. Career Services supports and offers an array of programs and services that provide employers with highly skilled and diverse candidates. Career Services practices and promotes the value and respect of diverse individuals and underrepresented groups such as race, nationality, gender, socioeconomic status, sexual orientation, education, physical ability, age, faith, and geographic origin.

Program Needs

Career Services runs testing center which is currently co-located with career recruiting. Web based testing has 14 workstations and the server based testing program has 6 stations. There is a backup up on GRE testing because of space so additional stations are necessary. Test areas need to be separate since they cannot run in the same space due to national testing guidelines.

An appropriate space for campus recruiting is one of the biggest needs. There are currently 14 rooms and they are used year round. Oct/Nov, Feb/Mar/Apr are busiest months.

Career Services teaches continuing education classes. Besides the traditional office spaces for staff and programs, additional space is needed for resources and computer access to on



line information.
Ombuds Office



Program Description

The Ombuds Office provides free, confidential, neutral, informal, and non-adversarial conflict resolution to the entire CU community (students, faculty, staff, and administrators). The Ombuds Office conducts workshops on conflict skills and provides mediation when appropriate. The Office sometimes works with large groups of people. The Ombuds Office deals with a wide range of conflicts and disputes every year such as: Policies and procedures (campus, college/school, or departmental), Decisions or actions affecting groups or individuals, Grading issues, Interpersonal disputes, Employment related disputes, and Unfair treatment.

The Ombuds Office does:

- Listen and discuss questions, issues, and concerns
- Help evaluate various options to address concerns
- Answer questions or help find others who can
- Explain University policies and procedures
- Facilitate communication between people
- Advise individuals about steps to resolve problems informally
- Advise individuals about formal administrative options
- Mediate disputes to seek "win-win" resolution of problems
- Make appropriate referrals when informal options don't work
- Point out patterns of problems/complaints to administrators

The Ombuds Office Does Not:

- Participate in formal grievance processes
- Make administrative decisions for UCB administrators
- Determine "guilt" or "innocence" of those accused of wrong-doing
- Assign sanctions to individuals
- Receive official "notice" for the university about issues
- Give legal advice

Program Needs

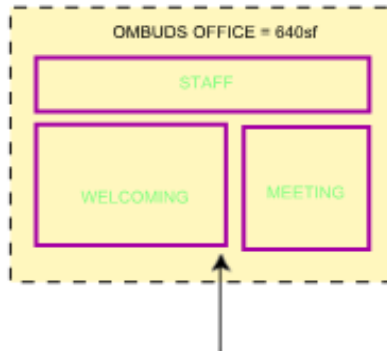
It is important to improve presence of Ombuds Office. It would be helpful for office to be near entry or exit. It wouldn't be good to be located near legal services or administrative offices.

The student/staff office has a lot of walk-in traffic and phone calls while the faculty office has much less walk-in traffic and more scheduled appointments. Confidentiality is the most important issue in all of the office's interactions whether by phone, greeting walk-in and scheduled visitors, or during case discussions among the office staff. The office would prefer not to be located near main high-traffic areas or administrative offices to preserve confidentiality.

Reception area should be connected to offices so staff can have open communication. Accessibility is important for case discussion, time sensitive scheduling issues and urgent calls. The office sometimes needs to caucus a mediation or meeting, that means separating the parties and shuttling between offices.



Workshops are conducted outside of office (20-40).



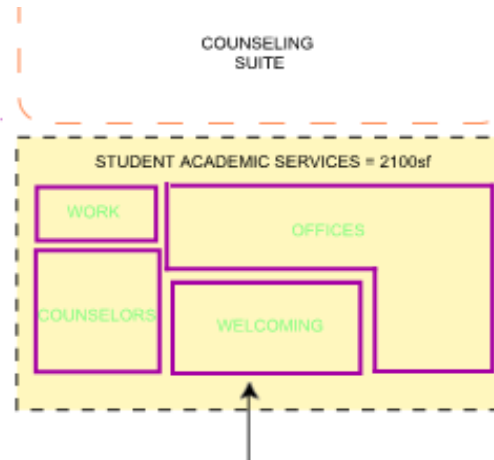
2.02.9 Student Academic Services Center (SASC)

Program Description

The Student Academic Services Center offers tutorial sessions for key undergraduate courses, workshops in academic skills and college writing, referrals for individual tutoring, pre-calculus mathematics classes, core curriculum writing courses, individual consultations for the purpose of improving academic performance, and assistance for undergraduates who speak English as a second language. The Student Academic Services Center hosts three federally funded programs that assist low-income first-generation college students, as well as the McNeill Academic Program, one of the campus's CU-LEAD Alliance academic communities. SASC also houses CU-Boulder's Pre-Collegiate Development Program and hosts the Roaring Fork Pre-Collegiate Program's Summer Residential Program.

Program Needs

The Center has various levels of interaction with students. Students come back to department throughout the time they are on campus. A nice waiting or welcoming area is important prior to going into classrooms or any tutoring session. Otherwise the Center's needs are traditional, revolving around proper amounts of office and support space, as well as classrooms.



2.02.10 International Education

Program Description



The Office of International Education exists to serve as advocate and catalyst for international education through promoting international institutional development, providing assistance to faculty, administrators, and students through information, encouragement, coordination, and support as appropriate and available, and other activities as may be necessary. OIE serves as host to students and faculty from abroad and encourages their success here by maintaining programs of counseling, assistance, and logistical support for these international guests of the University. OIE develops, operates, and maintains a comprehensive, cost-effective study abroad program and maintains a central source of information about opportunities for other educational activities abroad for students and faculty.

The goals of the Office of International Education are:

- To be among the top 20 AAU public universities in the number and percentage of students who study abroad by the time of graduation.
- To provide leadership and coordination in the development of a campus-wide plan for the recruitment of international students.
- To assess how internationalized the CU Boulder campus is perceived to be and to clarify how internationalized the campus wants to be.
- To partner with other internationally-related functions at CU Boulder to create an International Center that will keep CU Boulder among the top universities in the country for international education.
- To enhance the Office of International Education's current infrastructure to support the implementation of this strategic plan.

Program Needs

International Education wants to be visible and build presence. The concept is for IE to be an International Center and be in a prominent location.

The current lobby is always full of students. There needs to be a space for doing signatures for immigration forms, immigration advising, study abroad advising, forms.

International Education personnel spend a lot of time on the phone so audio considerations are important. This is compounded by the fact the department meets with faculty regularly so there is a concern/need to have private offices for confidential conversations.

Space Needs:

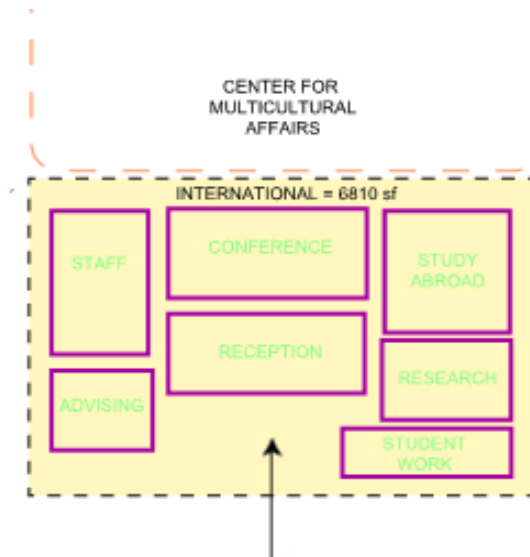
Study Abroad
Advising Area (with computers)
Office
Office Service
(meet with 1-4, some times with parents)
Faculty
Group meeting space
Conference (4-6), larger conference

Other spaces:

International Center Common Area
2 Smart conference rooms
Reception/Lobby
Computer kiosks
Research Area
International Student Advising Office
Work Room
IT server & Lab
General and secure storage
Break room



IE has a need for large meeting space. IE Directors office is where foreign dignitaries are greeted. If Directors office in new building doesn't have space for this at least have space adjacent. Dedicated space for international visitors would be beneficial but is not necessary, it could be shared.



IE is currently expanding and will have staff housed in other areas. Other parts of the University are working on increasing the number of international students, international research. All this will have an impact on IE.

2.03

Unique Features

2.03.1

Sustainable Design Potentials

This project has been programmed with the potential to comply with a Silver LEED rating. The Design Standards of the University of Colorado at Boulder and standard design practices by competent architectural and engineering teams will allow the project to garner a significant percentage of the points needed for this rating. The A/E and Contractor team must be familiar with these requirements.

The following areas represent opportunities that are unique to the Center for Community.

1. Establish a University team that will develop an Operations and Maintenance plan focused on LEED criteria.
2. Minimize the site disturbance area using existing paved surfaces for all construction lay-down space.
3. Organize bicycle, pedestrian and bus stops at this site to maximize user potential.
4. Minimize building footprint during the design process by finding a potential for small building functions to move from the upper level to lower level.
5. Maximize recycling of construction debris and minimize the purchase of excess materials.



6. Maximize recycling during building operations. Minimize use of paper products during operation. Do not allow the use of styrofoam products during operation.
7. Consider the use of a garden or green rooftop. Herbs and vegetables could be grown here. Private meeting and counseling could occur here.
8. The facility will produce more heat than the building needs. Capture heat for use in this building or elsewhere during winter days. Reject excess heat during summer days to avoid increasing air conditioning load. Consider underground heat stores. Capture heat for domestic hot water.
9. Minimize make-up-air volume by carefully sizing hood exhaust. Use alternative methods to temper incoming fresh air.
10. Provide natural light for all daytime operations. Use photovoltaics for non-essential lighting and emergency lighting.
11. Use natural materials appropriate to durability and indoor air quality.

2.03.2 Future Pedestrian Underpass Project

The University has worked in cooperation with the City of Boulder to raise the grade of Regent Drive such that a safe pedestrian walkway under Regent Drive is created. This project is critical to the success of the pedestrian circulation paths that will bring customers to the Center for Community. Programming and funding for this road change is not within the scope of this project, but design of the two projects will be coordinated.

2.04 Health and Code Issues

The University requires that buildings constructed on campus or University-owned land comply with certain codes and regulations. These codes and regulations include, but are not limited to:

IBC - International Building Code, 2003 Version
NFPA - National Fire Protection Association, Full Series (includes the National Electrical Code (NFPA 70), the Automatic Fire Sprinkler Code (NFPA 13), and the Life Safety Code (NFPA 101))
Commercial Building Standards for Telecommunications Pathways and Spaces
University of Colorado at Boulder Standards
ADAAG – American with Disabilities Act Accessibility Guidelines
UFAS – Uniform Federal Accessibility Standards
HB1411 – Concerning Energy Efficiency in Construction of State Owned Buildings
State of Colorado Model Energy Efficiency Construction and Renovated Standards for Non-Residential Buildings

The Department of Facilities Management, through its various offices, determines the appropriateness of the proposed designs, conformity of the proposed construction to University standards and compliance with the Contract Documents. The Department of Environmental Health and Safety reviews projects for items relating to life safety; the use, handling or storage of potentially hazardous materials; and other issues related to the safety of building occupants.

The architects and engineers shall prepare a code analysis in the University-approved format that compares the requirements of the IBC and the NFPA. Whenever regulations



conflict, the more stringent requirement shall be followed. The University will determine which regulation shall apply when conflicts require interpretation.

2.05 Site Requirements

2.05.1 Site Context

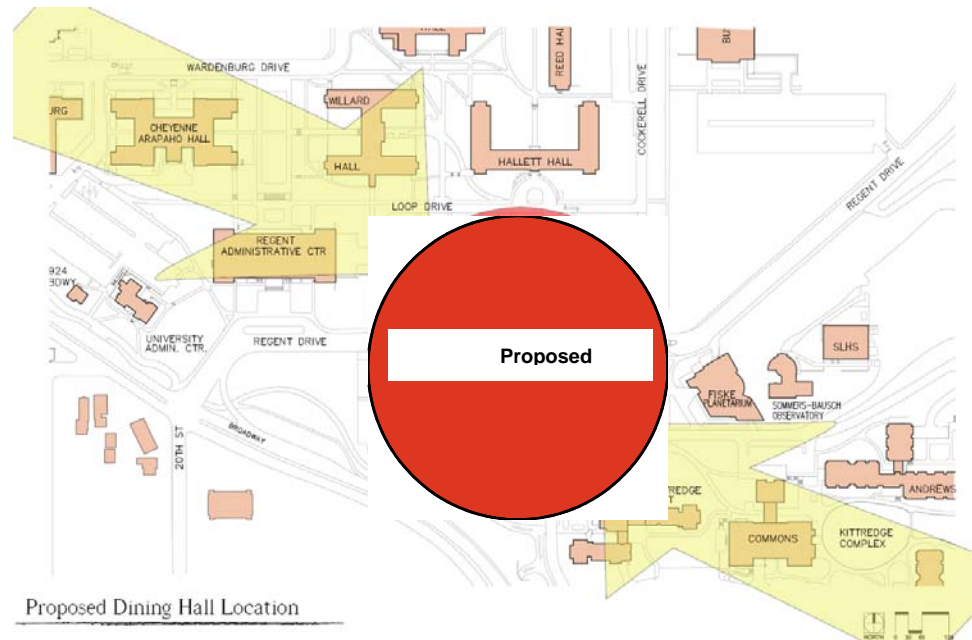
The general location for the Center for Community is between the Farrand Field Complex and Kittredge Commons, west of Cockerell Drive (the Folsom right-of-way) and east of Regent Hall; Regent Drive is a barrier in this area of campus as it is difficult for pedestrians and cyclists to cross safely getting to and from Kittredge Commons. This area has been chosen for the Center because it is centrally located to “link” Kittredge Commons with the central campus. The site is bound by existing infrastructure, utility easements, existing buildings and future proposed expansions. See Figure 1.

The site is easily accessible by foot, bus, vehicle, and bicycle; some areas of the site are more suitable for development than others. In addition, some areas will be affected by other plans for future development

Key contextual influences that were considered for all of the site options included, but were not limited to the scale of existing buildings and their uses, existing circulation systems, and sensitive environmental concerns. The Center for Community is being located to support the mission of the University of Colorado at Boulder and the Residential Campus 2020 Plan by offering quality food and dining venues that enhance the University experience. The location enhances the Flagship 2030 Plan by offering a central campus location with easy pedestrian and vehicular access to the Center. Figure 1 shows the proposed New Building location.



Figure 1.



2.05.2

Existing Conditions

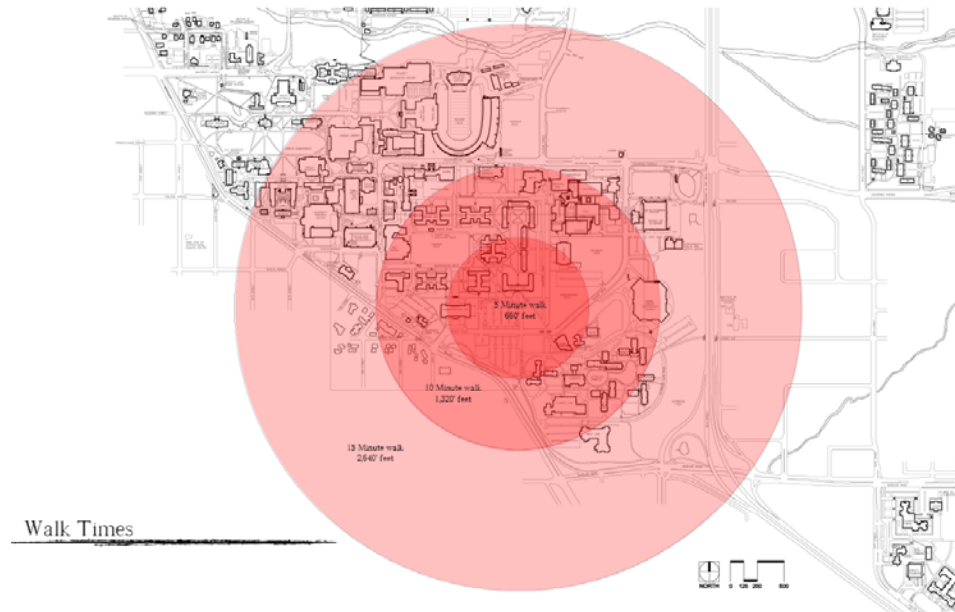
Location of Site

There are no existing buildings in the proposed area. The northeast area of the site is open space and is currently used as a pedestrian corridor. What was once Observatory Field, directly to the east, has recently been redeveloped into a parking lot for the future expansion of the business school. An existing stormwater detention area is located to the southeast; parking lots exist to the southwest and west. The area is known to have a high ground water table and is to be a consideration in the site analysis/site selection process.



Pedestrian and Bicycle

The northeast area (open space) of the proposed building site is dissected by a diagonal pedestrian corridor; this route is the third busiest pedestrian route on campus and connects Kittredge Commons to central campus. Pedestrian and bicycle corridors are also present to the north and west. It is important to not only accommodate the existing circulation but to enhance what currently exists.



Vehicular

Regent Drive is the main vehicular route that affects the sites access. Emergency and internal campus traffic use Cockerell Drive to the east and Willard Loop Drive to the west and north. Currently pedestrian and vehicular traffic cross at Willard Loop Drive causing backups for vehicles attempting to drive through campus during transfer time between classes.

Utilities

The underground utilities running through the sites are not a determining factor for the Center for Community location. Minor utilities such as lighting and irrigation can be moved as necessary. The Folsom easement runs down Cockerell Drive. A new campus Central Utility Plan is anticipated to provide new steam and chilled water piping in the vicinity of the proposed building location.

Topography



The general area slopes down, west to east. The contour starting at Willard Loop Drive is 5,396 and at Cockerell Drive is 5,374. The existing at-grade crossing is at 5,375. Slopes across both existing parking lots maintain an approximate 5% slope west to east. Slopes in the open space area are between 2-5% slopes in the stormwater detention area range from 3-50%. In general, the sites suitability for a building is in part a function of the existing slope; the slopes on this site lend itself to a building that has two or more stories facing east, meets grade near the existing pedestrian path by Regent Drive and uses natural daylight in the building according to LEED principles.

On-grade access could occur at the northwest end of the building near Hallett Hall, providing primary access to the Student Center on the third and fourth floor.

Views and Solar Orientation

The proposed site has spectacular views of the Front Range particularly to the Flatirons. Solar orientation is optimal for daylighting, domestic hot-water heating, and photo voltaic systems.

5-10-15 Minute Walk

Walk time diagrams were created to determine how close the Center for Community would be from various areas on campus. It was determined that a 15 minute walk would accommodate most of campus. A 10 minute walk to the proposed Center would include most, if not all of Kittredge Commons.

2.05.3 Site Alternatives

The general area identified by the University for the Center for Community naturally divided into four distinct building sites as defined by existing infrastructure. Two sites are to the north of Regent Drive, two to the south. All sites are east of Broadway on the south side of the campus.

Six alternatives were presented for comments and feedback in the Micro Master Plan. Refer to the MMP for detailed analysis of the six alternatives.

2.05.4 Selected Site Plan

Imagine a state-of-the-art Dining Center that would enhance the image of the campus, provide a link between Kittredge Commons and the main campus and perfectly frame the view of the Flatirons from its dining room. Now imagine this facility complimenting both the Kittredge Complex and the Main Campus residence halls by providing quality food service to its residents, faculty and administrators. Its proximity to Kittredge Commons, Hallett Hall, the Quads and Willard Hall, a 5 to 10 minute walk, will draw students, faculty and administrators from these areas and will provide convenient, healthy food service choices. This sophisticated, efficient, beautifully designed facility would bring faculty, students and administrators together in a social setting that is integral to a successful academic program. In addition, the Center for Community would be used as a recruitment tool for the University; a private conference center could compliment the proposed renovated Kittredge Complex as a venue to serve conference business clients during summer months.

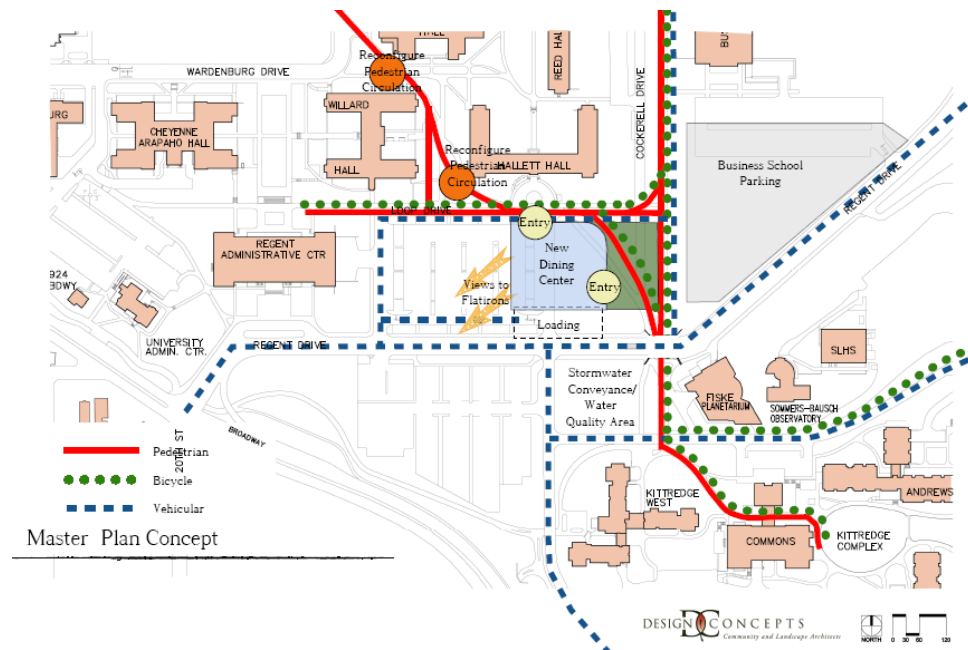
The quality of living and learning for the student residents would greatly increase because the Center for Community would be able to provide a level of food service quality that sophisticated students are accustomed to and expect from their



University. By following LEED principles, the building would be energy efficient and recycling, composting and food waste management could also become an important part of campus practices. The building, designed with function and efficiency in mind, will provide the highest quality of food possible. Figure 16 shows the selected site but is not to be interpreted as a final design, but a framework for design.



Figure 16.



The Site

This Boulder Campus is unique and complex; site selection is a process of weighing many different factors. The proposed location for the Center for Community is an appropriate site to meet the goals the University has established. Most site selection decisions come down to weighing economical, social and environmental factors. The suitability of the four sites was evaluated and one site appears to have better attributes and spatial relationships for the Center the other sites were rejected as the disadvantages outweighed the advantages. The largest building constraints are not necessarily related to the land or the site specifically, but rather potential, future plans the University has for a particular area. This central location will serve two separate, distinct areas of campus and unite them in a community atmosphere.

With a buildable area of approximately 137,000 sf, none of the alternative sites can accommodate the building/site for the Center for Community alone. However, the site lends itself to a multi-story building due to the grading. The potential for solar access is great; the strategy of daylighting the building should be incorporated and again, is another LEED principle. Site attributes influence site design and ultimately function. Following are areas to consider and to further explore in the schematic design phase of the site.

Entry and Circulation

As this building is to serve as a link, the potential exists to have multiple entries; an entry to the south would “invite” the Kittredge Commons Complex; an entry opposite Hallett Hall would allow for the potential of creating a plaza for social gatherings, cookouts and meeting space. This could establish an arrival sequence from the north and south having preference for neither “site” of campus. The building could even extend, through site design, and reach out to students before



entering the building. By providing a grand entry/procession, anticipation would be created of what is to come, the fresh baked goods of the bakery, the aroma of fresh grilled seafood.

Pedestrian access on campus is mostly linear with various diagonals and short cuts. The opportunity exists here to reevaluate circulation and make adjustments as necessary. It has been noted that pedestrian circulation problems exist between Hallett Hall and the Willard Loop Drive as well as between Willard Hall and Farrand Hall. Circulation systems are essential and should be designed as a hierarchical system to facilitate movement within the campus. Orientation and flexibility are critical features of campus circulation.

Functional issues should be considered when evaluating the circulation system. The proposed site is easily accessible via established vehicular, pedestrian, bicycle and bus routes. Vehicle access to the site is a fundamental consideration and is available off Regent Drive. Functional issues exist internally on campus as there are many areas where pedestrian and bicycle traffic cross vehicular traffic. By creating a hierarchy of pedestrian, bicycle and vehicular these conflicts can be resolved. If modes of circulation cannot be separated, then limitations on vehicular transportation during certain times of the day, will help resolve conflict.

Loading

Because there is no “back side” of the building, the design team looked at all sides of building for loading; the north and east sides of the building have the highest pedestrian traffic; the west side is most likely the location of the actual dining room for the best viewing of the mountains. The south side of the building, although it backs and is prominent to Regent Drive, has the most benefits. Using the south side of the building utilizes leftover space between the building and proposed overpass walls which will be built roughly during the same time frame, 2009-2010. For this reason, the service could be located between the proposed, raised, vehicular bridge and the building. This accomplishes several things 1) it reduces the visibility of the loading area and 2) it removed pedestrian and vehicular interaction, eliminating this conflict. It may be difficult for semi-trucks but works very well for moderate size delivery trucks. The loading service entry can utilize the existing entrance of the west Willard Loop Drive. A series of drawings was created to determine truck turning radius and viability. The drawings show various entrances off Regent Drive and accommodations for three bays for a 50' truck. It is estimated that the efficiency of the Central Commissary associated with the New Dining and Student Services Building will only require 24 deliveries per week. Regent Drive carries 10,000 vehicles per day.

Bus Stop

In coordination with RTD, a new bus stop would create and provide convenient bus access for customers to the Center. This will make the Center for Community a more viable option for off-campus students to participate in a meal program and use the Student Center. This bus stop could be located off Regent Drive and allow for student, faculty and administrators to safely access the Center for Community using public transportation.



Bicycle Parking

With the popularity of bicycles as a mode of transportation on the Boulder campus, bicycle parking will be needed to allow for safe parking of bicycles and encourage bicycle travel to the Center for Community.

Building Height and Mass

The Center for Community is proposed as a five story structure. Level one is a completely submerged level of vehicular parking, level two will be partially submerged on the west side due to grade differential on the site. A view shed analysis was conducted by the MMP team to determine the space needed between the Dining Center and any potential parking structure to the west so as not to obstruct the Flatiron view. A two story structure 54' away from the building will not obstruct views.

Environment

LEED principles will be implemented throughout the design and building strategies although certification will not be pursued. The principles of LEED design include: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Air Quality and Innovative Design. As the University intends to reuse Kittredge Commons and Cheyenne Arapaho Hall this will result in minimizing the use of natural resources and energy as compared to new construction. All other LEED principles should be integrated.

Axial Relationships

The potential for additional axis' are created with this concept. The Center for Community would create an opportunity of interaction between Hallett Hall. Another axial relationship could be developed between Farrand Hall and the future structure (possibly parking) located on the southwest corner of the site.

2.06 Equipment Requirements

A full complement of food service equipment and office furniture will be required for this project. The Schematic Design process will determine the list. The cost estimate for food service equipment included in this report is based on similar projects.

A full complement of furniture and audio-video equipment is included for the Student Center.

2.07 Acquisition of Real Property

This site is owned by the University of Colorado and no additional real property is required.

2.07.1 Memorial Garden Relocation

The Nakagawa Memorial Garden located in the open space appears to be underutilized and in need of repair. The potential exists to incorporate the memorial garden as part of the Center for Community. A memorial tree is located southeast of the Nakagawa Memorial Garden. A boulder with an attached plaque is located adjacent to the tree. Both the tree and the memorial could be relocated if needed.



The Onizuka Memorial runs along the Folsom corridor from the Planetarium north to College Avenue. Although located beyond the boundaries of the site under consideration for the Center potential impacts to the memorial should be considered in selecting a site for the Center for Community.

2.08 Building Requirements

2.08.1 Safety

The University of Colorado is a quasi-independent state entity and as such is not under the jurisdiction of outside agencies. The University meets life safety requirements by designing and constructing buildings per the prevailing codes and regulations. The Department of Facilities Management, through its various offices, determines the appropriateness of the proposed designs, conformance to University standards, and compliance with regulations of any state agency. The Department of Environmental Health and Safety review project design for items related to food safety and life safety; the use, handling or storage of potentially hazardous materials; and other issues related to the safety of building occupants.

The Boulder Health Department will enforce food preparation and serving requirements. The Boulder Fire Department will be consulted during design.

The architects and engineers who design the project will prepare a code analysis in the University approved format.

2.08.2 Accessibility

Access to all spaces shall be available in an integrated manner with able-bodied users. It is in the University's best interest to provide functional access rather than merely code access. As noted above, the project shall be designed in accordance with ADAAG requirements. ADAAG Section 4.1.1-1 states:

All areas of newly designed or newly constructed buildings and facilities . . . shall comply with these guidelines, 4.1 through 4.35 unless otherwise provided in this section or as modified in a special application section.

The University, as a higher education institution, considers itself subject to ADAAG Section 7 and all reception and service counters will comply with this section.

2.08.3 Special Architectural Requirements

The University of Colorado at Boulder is renowned for its Tuscan Vernacular Style. The design of the building must respect the architectural character of the rest of the campus. The proposed location south of Hallett Hall provides a unique opportunity to establish a good design in full relationship with the historic character of the campus. Thus, special care in architectural design is demanded. There are many functions of the Center for Community that must be on one floor and have immediate on-grade access. However, those functions require different massing and have different interior daylighting requirements.

The Housing and Dining Department have long supported the design character of the campus introduced by Charles Klauder. Some of the qualities that are emphasized in Klauder's work include:

stepped massing
strong relationship to the ground, generally setting the building on a plinth
strong axial arrangement and symmetrical building form



*relationship to exterior spaces using the building to frame open space
quadrangles
limestone detailing*

This relatively simple building recognizes that all of these qualities may not be possible due to cost and site constraints but the architects will be required to include as many of them as possible.

2.08.4 Special Mechanical Requirements

General:

The anticipated size for the facility is approximately 260,000 square feet. There will be approximately 130,000 square feet of above grade building and approximately 130,000 square feet of below and partially above grade parking. The facility will include dining, food preparation and servery, bakery, commissary kitchen, shipping/receiving areas, offices and mechanical and electrical equipment spaces.

HVAC:

The following is a conceptual description of HVAC systems that are proposed for the dining facility.

See Sustainable Mechanical Design Section for the variable air volume (VAV) exhaust system. The HVAC system that works in conjunction with the exhaust system will need to be VAV. This VAV HVAC system will have reheat coils for on-peak make-up air/exhaust conditions.

Outside air intake and exhaust locations will need to be coordinated to avoid entrainment issues as well as avoid nuisance air intake concerns.

Perimeter spaces with substantial glass will have a perimeter heating system.

Provide a make-up air system implementing evaporative cooling with supplemental chilled water cooling (see Sustainable Mechanical Design Section). Heating at the air handling unit serving the dining/kitchen will be accomplished via an integral face and by-pass steam coil. The heating and cooling water systems will have redundant pumps.

Where applicable the air handling systems that serve traditional supply/return air spaces (offices etc.) will have shut-off VAV with a perimeter heating system.

The design must meet the University of Colorado noise and vibration standards.

HVAC controls will be the University of Colorado system which is a networked Andover system.

Central Plant:

It is anticipated that the steam campus loop will be extended to this building. There will need to be a dedicated chilled water system to serve this building. The chiller will be water cooled with a maximum 0.48 kw/ton energy usage. The chilled water system will need to be capable of connecting to a future central plant. The steam



system will have a pressure reducing station to convert the pressure to a useable building steam pressure.

Plumbing:

The plumbing system will include the following: a grease interceptor located outside (gravity fed if physically possible) and a combined water/fire protection entry room. The water entry room will include proper backflow prevention devices. The water heater (steam instantaneous) will be located in the water entry room. See Sustainable Mechanical Design Section for additional plumbing criteria.

Security System:

Install a new access controlled security system at the building entrances. New door hardware should include card access readers at all entry doors and selected interior offices/rooms only as required. The access control system must be compatible with the current campus standard cards.

Provide security cameras at external entry doors and other identified locations.

Provide wiring for wheelchair accessible door access systems at the main entries as well as within the building.

Provide a new security system in accordance with UCB standards. Due to the nature of the facility the location and type of security sensors should be reviewed with the Department of Housing and Campus police.

Fire Protection:

The fire protection system will consist primarily of a wet sprinkler system, fire suppression system for the cooking hoods and an appropriate system for the loading docks either dry or freeze proof sidewall sprinklers. It is anticipated that a fire pump will not be required.

Codes and Standards:

The University of Colorado standards for HVAC, plumbing and fire protection design and construction will be the basis of design for this project. In addition the following standards will be used for this project: NFPA 13, 14 and 96, ASHRAE 90.1, SMACNA, UL and ASPE. Current building codes will be used for this project.

Sustainable Mechanical Design Features:

Provide a variable air volume (VAV) exhaust system for the kitchen hoods to allow for reduced airflow (energy use) during unoccupied hours. The associated make-up air system will be variable air volume.

Provide a direct/indirect evaporative (supplemented with chilled water) cooling system for the make-up air system. This system will need to have a cooling tower or an evaporative fluid cooler.

Provide a pre-heat loop coupled with the water cooled refrigeration equipment (walk-in refrigerators etc.). The "pre-heat" loop will allow for energy recovery from a substantial heat dissipater.



Where applicable provide low water use plumbing fixtures.

The HVAC and plumbing design must meet or exceed ASHRAE 90.1 2004.

2.08.5

Special Electrical Requirements

General:

The new dining building is anticipated to total approximately 260,000 square feet. The building is anticipated to include approximately 130,000 square feet of building above grade with an additional 130,000 square feet parking structure above and below grade. Interior spaces will include dining, food preparation, servery, bakery, commissary kitchen, shipping/receiving areas, offices, and mechanical/electrical system spaces.

Electrical Distribution:

A new electrical service is anticipated to be provided from the overall campus 13.8kV, medium voltage underground primary distribution system with a new 480/277V, 3-phase, 4-wire, liquid filled utility transformer for the new building. The building electrical distribution system is anticipated to be a 3000-amp, 480/277V, 3-phase, 4-wire main distribution center (MDC), with 3000-amp electronic trip main GFI circuit breaker and equipped with transient voltage surge suppression (TVSS). The MDC will be fed underground from the utility transformer with six (8) sets of 4#500 kcmil in 4" conduit.

It is anticipated that 120/208V, 3-phase, 4-wire transformers will be supplied from the MDC and feed 120/208V, 3-phase, 4-wire branch circuit panelboards located throughout the facility as required for the loads being served. Several 480/277V, 3-phase, 4-wire lighting and mechanical equipment branch circuit panelboards will be fed from the MDC and located throughout the facility. The quantity and locations of lighting, mechanical, and general power panelboards will depend on the lighting and equipment density requirements.

A diesel driven, emergency stand-by generator is anticipated to provide emergency power for building lighting, freezers, garage mechanical equipment, fire alarm equipment and security equipment. The generator and emergency distribution system will be sized according to the equipment loads. Separate life-safety and standby automatic transfer switches (ATS) are anticipated to provide emergency power to these loads upon loss of normal utility power. The life-safety distribution system will consist of 480/277V, 3-phase, 4-wire panelboards located throughout the facility for connection of emergency lighting and equipment loads. The standby distribution system will consist of 480/277V, 3-phase, 4-wire and 120/208V, 3-phase, 4-wire panelboards and associated transformers located throughout the facility for connection of standby equipment loads, such as freezers, coolers, security equipment, fire alarm equipment, mechanical equipment, and other equipment as required. The generator is anticipated to be located outside the building, requiring a sound attenuated, weatherproof enclosure. The life-safety and standby automatic transfer switches are required to be located in a dedicated electrical room per International Building Code (IBC) requirements.

Interior Lighting:

Various lighting solutions are anticipated for the various areas. Fluorescent lamp sources will be utilized for dining, food preparation, back-of-house servery, bakery,



offices, shipping/receiving, circulation, support, mechanical/electrical spaces and the like. Light levels in all food preparation and servery areas will be a minimum of 50-footcandles as set forth by the Illuminating Engineering Society (IES) and State Health Department. Luminaires located in the food preparation and servery areas will be equipped with lenses per the State Health Department and prevailing codes. The focal servery spaces are anticipated to utilize incandescent lamp sources to highlight the various food service stations.

Surface mounted metal halide luminaires are anticipated for the parking structure. The parking structure lighting will be designed to meet the IES recommendations for light levels, including additional luminaires to meet recommended light levels at parking structure entrances and exits.

Refer to the Sustainable Design section for interior lighting requirements and controls.

Exterior Lighting:

It is anticipated that the exterior lighting system will primarily consist of pedestrian and building accent lighting. Additionally, access areas and shipping/receiving areas will be adequately illuminated for the required functions. Exterior luminaires are anticipated to be equipped with metal halide lamps.

Refer to the Sustainable Design section for exterior lighting controls information.

General Power:

General power will be provided as required by the National Electrical Code (NEC) and equipment requirements, including mechanical equipment, kitchen equipment, other equipment, security equipment, etc.

Fire Alarm System:

The facility will be equipped with an addressable fire alarm system per the requirements of the National Fire Protection Association (NFPA) and the University of Colorado, Department of Fire and Life Safety. The system will consist of initiating appliances, notification appliances, kitchen hood fire suppression systems, etc. Duct smoke detectors are anticipated for building air handling equipment and will shut down all air handling equipment in accordance with the NFPA. Upon a fire alarm condition, door hold open devices will release to allow fire/smoke doors to close. Notification appliances will be located in elevator hoistways, elevator lobbies, and elevator machine rooms as required by the NFPA. The building fire alarm control panel (FACP) will be capable of transmitting a system alarm signal to the campus monitoring facility.

The fire alarm system shall be manufactured by Simplex-Grinnell per the University of Colorado Standards.

Low Voltage Systems (Security, Data and Communications):

Security, data and communications systems are not covered in this report. A separate low voltage consultant will provide design for these systems. However, conduit raceway and box rough-in are anticipated to be provided for the individual device locations with a cable tray or j-hook system, located above the ceiling, for the main cabling support systems.



Lightning Protection System:

A lightning protection system is not anticipated for this project at this time.

Overall Electrical System:

The electrical design for this project must conform to the University of Colorado's most current, published standards.

Codes and Standards:

The University of Colorado standards for electrical and fire alarm systems design and construction will be the basis of design for this project. In addition the following standards will be used for this project: NFPA 70, 72, 101, and 110. Current building codes will be used for this project.

Sustainable Electrical Design Features:

The overall interior lighting system will comply with the requirements of the 2003 International Energy Conservation Code (IECC) in order to apply for Leadership in Energy and Environmental Design (LEED) certification. In order to meet these requirements, an automatic lighting control system will be provided to control lighting throughout the facility. The lighting control system will consist of time clock on/off and low voltage override switches for after-hours maintenance. Employee offices and storage spaces will be equipped with dual-level occupancy sensors. Luminaires in the spaces along exterior glazing are anticipated to be dimmed through the overall lighting control system with the use of daylight sensors. The daylight sensors will detect ambient light levels, entering the space from outside, and dim the luminaires to a set level. Lamp dimming must occur gradually to prevent noticeable light level changes by the occupants.

The overall exterior lighting system must comply with the "dark sky" requirements as set forth by LEED and the City of Boulder. Exterior lighting will be controlled via a photocell and time clock through the overall lighting control system.





3 Facility Requirements

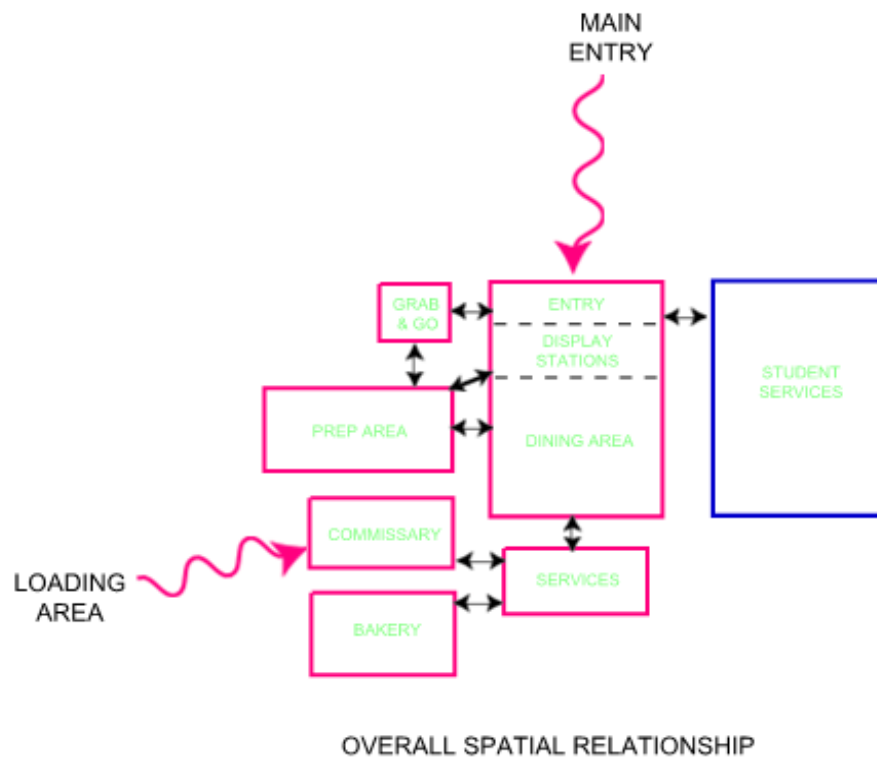
3.01 General

This section provides a functional use list showing the required site coverage and room square footage for every space. A stacking diagram shows how the facility requirements can be achieved at maximum site density. Refer to Appendix II and V for detailed facility requirements spread sheet.

3.02 Effective Site Utilization

The Site

The proposed location for the Center for Community is an appropriate site to meet the goals the University has established. Most site selection decisions come down to weighing functional, economical, social and environmental factors. The largest building constraints are not necessarily related to the land or the site specifically, but rather potential, future plans the University has for a particular area. This central location will serve two separate, distinct areas of campus and unite them in a community atmosphere.





3.03 Functional Room Type Needs

| Dining Space Usage by Program (See Appendix II) | | | |
|---|---------------------------|--------|--------|
| Room Type | Assignable Square Footage | | |
| Arrival and Seating | 18,506 | | |
| Display Cooking Stations | 8,816 | | |
| Self Serving Stations | 1,764 | | |
| Food Preparation | 8,674 | | |
| Grab-and-Go Quick Services | 2,041 | | |
| Office Space | 908 | | |
| Office Support | 895 | | |
| Receiving, Trash & Storage | 3,235 | | |
| Laundry | 68 | | |
| Commissary | 5,876 | | |
| Bakery | 4,317 | | |
| Bakery Point-of-Sale | 540 | | |
| Total Assignable Square Footage | 55,640 | | |
| Total Building Infrastructure | | 16,960 | |
| Total Building Gross | | | 72,600 |
| Assignable to Gross Ratio | 76.6% | 23.4% | 100.0% |

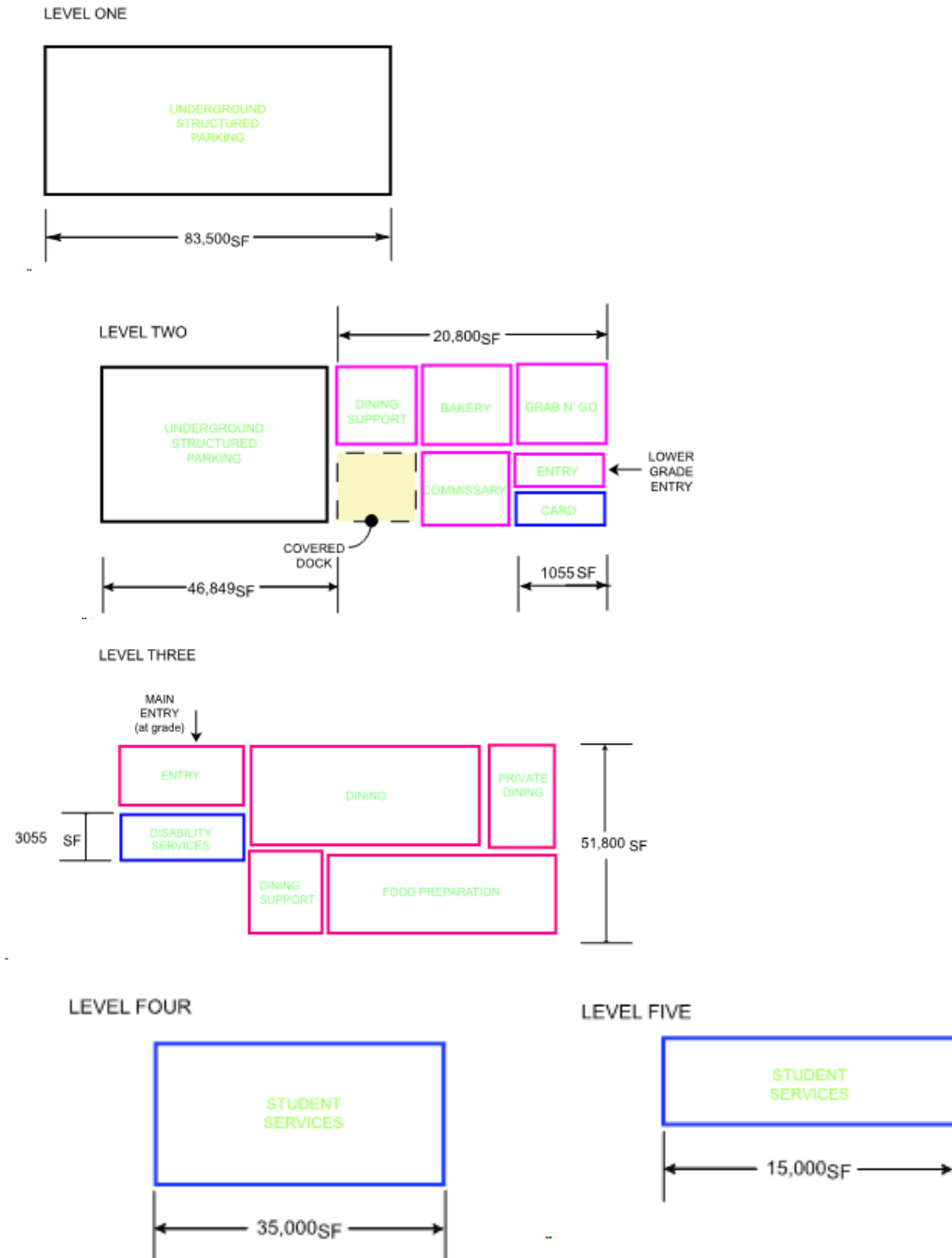
Not included in the above assignable areas are 2180 square feet of exterior loading dock operations (not including paved area noted in the site utilization above). Loading dock operations will be designed under a building overhang or covered roof area.

| Student Center Space Usage by Program (See Appendix V) | | | |
|--|---------------------------|--------|--------|
| Room Type | Assignable Square Footage | | |
| General / Common Spaces | 5,362 | | |
| Multi-Cultural Affairs | 5,795 | | |
| Counseling Suite | 6,065 | | |
| Card Office | 1,055 | | |
| Financial Services | 320 | | |
| Judicial Affairs | 2,090 | | |
| GLBTRC | 980 | | |
| Disability Services | 3,055 | | |
| Career Services | 7,220 | | |
| Ombuds Office | 640 | | |
| Student Academic Services | 2,100 | | |
| International Education | 6,810 | | |
| Total Assignable Square Footage | 41,492 | | |
| Total Building Infrastructure | | 12,508 | |
| Total Building Gross | | | 54,000 |
| Assignable to Gross Ratio | 76.8% | 23.2% | 100.0% |



3.04 Functional Stacking Diagram

The above list of functional room types can be stacked into a five floor arrangement as shown below to minimize site utilization. Red areas are for Dining Services, Blue areas are for the Student Center.







4 Facility Alternatives

4.01 Site Alternatives

The Feasibility Report for the Center for Community established the basic site location for the building. A Micro-Master Plan team was selected to study alternatives within the primary site area. See the results of that study in Section 2.04.

The addition of the Student Center above the Dining Center did not change the site analysis or the conclusions of the Micro Master Plan.

No other alternate sites are available for this project.

4.02 Building Alternatives

The programming process determined the overall needs for the Center for Community to be 256,949 gross square feet, of this 130,349 square feet is non-assignable structured parking. This size can be adjusted or placed in a free-standing parking structure. Options to stack the building in approximately equal floor plates to minimize site coverage were studied. The Student Center needs could be stacked in equal floor plates, but the Dining needs required careful analysis. Two scenarios were studied to determine if Dining could be stacked in equal floor plates.

1. Stack portions of the seating. This requires stairs, escalators or elevators and results in additional building area. In addition, studies and experience show that customers carrying trays of food cannot easily negotiate stairs, escalators or elevators without spilling food.
2. Stack the main food preparation below the seating. This requires food elevators which significantly reduces operational efficiency and increases potential food contamination.

The conclusion was to stack the building with unequal size floor plates with the Dining operations setting the needs for the largest floor plate.





5 Implementation Requirements

5.01 Schedule

The goal of the Housing and Dining Services is to construct a new Dining Center as soon as possible. The Student Center does not alter this critical path to completion of the Center for Community. To that end the following schedule is desirable:

| | |
|---|-------------------|
| Complete Program Plan | June 5, 2007 |
| CEC Program Plan Approval | June 6, 2007 |
| BOR Program Plan Approval | June 28, 2007 |
| CCHE Program Plan Approval | September 3, 2007 |
| CDC Budget Request Approval | October 12, 2007 |
| JBC Budget Request Approval | January 4, 2008 |
| BOR Architect Selection Approval | January 17, 2008 |
| DRB Schematic Design Approval | April 4, 2008 |
| DRB Design Development Approval | June 6, 2008 |
| Construction Documents complete | October 13, 2008 |
| Open Bids | December 12, 2008 |
| Construction Start | January 27, 2009 |
| Construction Completion | July 8, 2010 |
| Occupancy | July 9, 2010 |
| Open | August 19, 2010 |
| Prerequisites | |
| A. BCPB Plan Approval | |
| B. CEC Plan Approval | |
| C. Board of Regents Plan Approval | |
| D. CCHE Plan Approval | |
| E. Capitol Development Committee Approval | |
| F. Joint Budget Committee Approval | |



5.02 Cost Estimate

The cost estimate for the Center for Community was prepared by the Denver offices of Rider Hunt Levett and Bailey. It assumes costs at the midpoint of construction noted above. They used local Denver Metro area indices to predict the cost of major trades and they evaluated the construction costs of the following similar projects:

1. West Dining Hall at UNC (June 2003)
2. Carleton College Dining Hall (June 2003)
3. UW McMahan Hall Dining Facility (November 2001)

All site work costs were estimated by Rider Hunt. However, landscape costs were confirmed by Design Concepts after completing the Micro Master Plan. Civil and Utility costs were confirmed by JVA, Inc. a subconsultant to Design Concepts

Furnishings were estimated by Rider Hunt. Kitchen and dining furnishings were confirmed by The Baker Group using a methodology of approximately \$600 for each of the 900 occupants. Furnishing for the Student Center are estimated at \$12 per square foot of Student Center space, plus a \$150,000 allowance for audio-video equipment.



New Center for Community
 May 16, 2007
Project Cost and Financing

| | Cost per GSF | Total Project Cost | Prior Appropriation | Future Request FY 2006-2007 | Future Request FY 2007-2008 | Future Request FY 2008-2009 | Other Future Requests |
|---------------------------------------|-----------------|---------------------|------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------|
| A. Land Acquisition | | \$0 | | | | | \$0 |
| B. Professional Services | | | | | | | |
| 1. Master or Program Planning | | \$0 | | \$0 | | | \$0 |
| 2. Architect / Engineer (bldg.) | | \$6,151,740 | | \$6,151,740 | | | \$0 |
| 3. Architect / Engineer (other) | | \$172,730 | | \$172,730 | | | \$0 |
| 4. Construction Management | | \$1,163,237 | | \$1,163,237 | | | \$0 |
| 5. Code Review | | \$0 | | \$0 | | | \$0 |
| 6. Site Information and Tests | | \$479,134 | | \$479,134 | | | \$0 |
| 7. Other (_____) | | \$0 | | \$0 | | | \$0 |
| 8. Total Professional Services | | \$7,966,842 | \$0 | \$7,966,842 | \$0 | \$0 | \$0 |
| C. Construction | | | | | | | |
| 1. Building | | | | | | | |
| a. New (256,949 GSF) | \$174.63 | \$44,871,035 | | \$44,871,035 | | | \$0 |
| b. Renovate (0 GSF) | | \$0 | | \$0 | | | \$0 |
| c. Demolish (0 GSF) | | \$0 | | \$0 | | | \$0 |
| d. Hazardous Materials | | \$0 | | \$0 | | | \$0 |
| e. Other | | \$842,378 | | \$842,378 | | | \$0 |
| 2. Site Work | | \$835,595 | | \$835,595 | | | \$0 |
| 3. Landscaping | | \$187,500 | | \$187,500 | | | \$0 |
| 4. Utilities | | \$942,131 | | \$942,131 | | | \$0 |
| 5. Other (_____) | | \$0 | | \$0 | | | \$0 |
| 6. Total Construction Cost | | \$47,678,638 | \$0 | \$47,678,638 | \$0 | \$0 | \$0 |
| D. Equipment and Furnishings | | | | | | | |
| 1. Equipment | | \$5,151,320 | | \$5,151,320 | | | \$0 |
| 2. Furnishings | | \$1,179,000 | | \$1,179,000 | | | \$0 |
| 3. Communications | | \$410,424 | | \$410,424 | | | \$0 |
| 4. Other (_____) | | \$0 | | \$0 | | | \$0 |
| 5. Total Equipment Cost | | \$6,740,744 | \$0 | \$6,740,744 | \$0 | \$0 | \$0 |
| E. Miscellaneous | | | | | | | |
| 1. Art in Public Places | | \$0 | | \$0 | | | \$0 |
| 2. Relocation Costs | | \$90,000 | | \$90,000 | | | \$0 |
| 3. Project Contingency | | \$3,119,311 | | \$3,119,311 | \$0 | \$0 | \$0 |
| 4. Total Miscellaneous Costs | | \$3,209,311 | \$0 | \$3,209,311 | \$0 | \$0 | \$0 |
| F. Total Cost | | \$65,595,535 | \$0 | \$65,595,535 | \$0 | \$0 | \$0 |
| Source of Funds: | | | | | | | |
| Capital Construction Funds | | | | | | | |
| Capital Construction Funds -- Exempt | | | | | | | |
| Cash Funds | | | | | | | |
| Cash Funds -- Exempt | | \$65,595,535 | \$0 | \$65,595,535 | \$0 | \$0 | \$0 |
| Federal | | | | | | | |



5.03 Financial Analysis

Summary

Financing for this building comes from three distinct sources. Housing and Dining Services is responsible for paying approximately \$31,800,000 or 50.6% of the total cost of the building. The Office of Student Affairs is responsible for approximately \$16,500,000 or 26.2% and Parking and Transportation Service is responsible for approximately \$14,600,000 or 23.2%.

Financing

The Department of Housing and Dining Services has prepared a financial model that demonstrates future cash flows are sufficient to meet all operating expenses and additional debt incurred. Housing and Dining Services' portion of the project will be debt financed. The annual debt payment will be paid from auxiliary revenues from residence room and board fees.

The Office of Student Affairs will fund their share of the cost from various sources. Approximately \$10,000,000 will be paid for by the campus, and \$2,000,000 will be paid using Student Affairs plant fund money. The remaining \$4,500,000 will be paid using gift money. The outstanding balance at the time of financing will be paid by debt financing with the debt payment paid by gifts.

Parking and Transportation Services' portion of the project will be debt financed. The annual debt payment will be paid from parking revenues.





6 Appendices