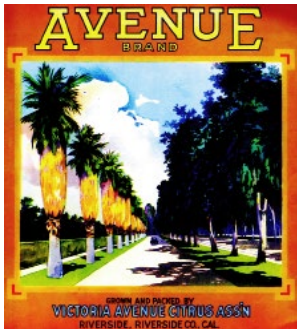
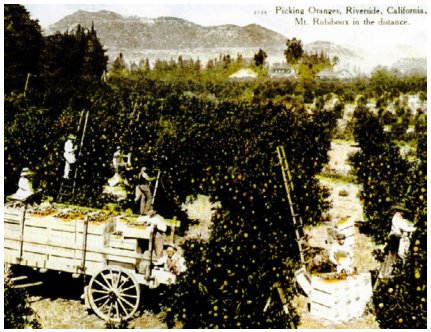
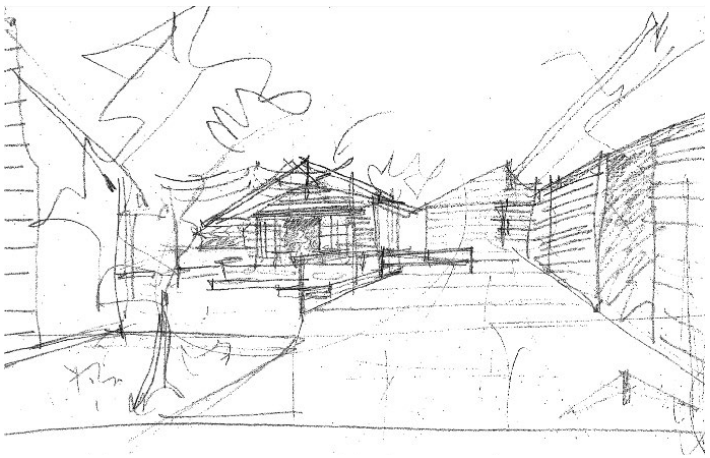
UC RIVERSIDE | THE BARN EXPANSION PROJECT

2016 ADDENDUM TO THE 2012 DETAILED PROJECT PROGRAM UPDATE







FERNAU & **HARTMAN** ARCHITECTS

MARCH 24, 2016

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I. INTRODUCTION

Since its publication, the Campus review of the 2012 Barn Expansion Detailed Project Program Update has resulted in a number of changes that required documentation and program verification prior to initiating design. A new Campus Meeting Room was incorporated into the program while the Barn Stable and the Cottage were removed. Also, the Barn Theater Renovation is now part of the project. Additionally, minor program changes have been made to the Faculty / Staff Dining Facility, The Barn Dining & Kitchen Addition, and the East Courtyard Restrooms.

The purpose of this addendum is to document changes to date, to establish the space program, to note opportunities that can be explored during design, and identify those areas that require further review during schematic design. Only those pages and sections that are affected by these program changes are modified or added. This 2016 Detailed Project Program Addendum is to be used with the 2012 Detailed Project Program Update; it is not a stand-alone document.

The *Executive Summary* outlines the program verification and the changes made in the 2016 DPP Addendum, the methodology, and the project scope amendments. *Process* describes the planning session, the series of conference calls, and the workshop that included the stakeholders' input to arrive at the 2016 DPP Addendum.

Appreciation is given to all who participated in this process.

Participants

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Executive Summary

The purpose of the Program Verification of 2016 was to review and verify the 2012 Detailed Project Program Update and to incorporate changes that have been made to the project scope as a result of intensive budget and business plan review since that time. Cost efficiency, with effective use of new and renovated structures, and flexibility were critical. The intent was to develop a final program that can be used for project approval and as the basis for the preliminary design phases.

The major changes made to the project since 2012 are:

- Barn Stable and the Cottage were removed
- Campus Meeting Room was added
- Barn Theater Renovation or Upgrades was added
- Entertainment program was revised

There was a strong desire to understand the character and experience of the spaces and the way in which new structures can combine with the existing buildings to highlight the campus' agrarian heritage. As part of the program verification, place-making and initial conceptual architectural directions were discussed. Reference images and freehand sketches were provided to facilitate discussions of the architectural and landscape character of the project.

In addition there was discussion and critique of the 2012 Site Plan. There was a concern that the site felt crowded and needed "breathing room", with an interest in less paved roadway and parking and more landscaping. The location of the East Courtyard Restrooms was too prominent and it was suggested that cost efficiencies might be realized by combining it with the new Campus Meeting Room.

Key consultants were engaged to assist in the Program Verification process. These included:

- Food Service—Larry Lanier of Laschober + Sovich, to review proposed adjustments in the Barn's Servery and Kitchen, as well as to help develop the program for the Campus Meeting Room.
- Structural Engineer—David Mar of Mar Structural Design, to provide a summary of structural upgrades for the Barn Theater.
- Code Consultant—Steve Winkel of the Preview Group, to review the code analysis in the UCR Barn Project DPP Update of 2012 and update it to the 2013 UBC reflecting revisions to the program and a new site configuration.
- Civil Engineer—Sherwood Design Engineers, to review the loading dock and look at alternatives that could save space.
- Theater Consultant—Adam Shalleck of the Shalleck Collaborative, to advise on program revisions for the performance and support spaces.
- Cost Estimator—Scott Lewis of Oppenheim Lewis, to review the cost impact of program refinements and revised site configuration.

Other program adjustments and/or confirmations that developed during the Program Verification process include:

- Barn Dining: Ticketing is larger, Green Room is smaller. Servery will be re-organized within the current footprint and assigned square footage. The program expands to include Espresso Based/Blended Beverages station.
- Kitchen is sized to provide 320 meals per hour.
- Barn Kitchen BBQ was removed.
- Dry storage was increased.
- Utility building was relocated to be adjacent to Kitchen Addition.
- Faculty/Staff Dining Facility's Green Room will also be used as a Private Dining Room and is now called "Private Dining / Green Room."
- Private restroom was removed for Green Room.

Executive Summary

- General parking adjacent to Faculty/Staff Dining Facility was removed; Accessible parking was retained.

- The service road at the west was removed to allow less crowding of the landscape and buildings on the western side of the site.

- West Courtyard will have a maximum of 350 patrons for a show; audience will be standing (current practice). The stage height was lowered to a minimum of 18 inches. Outdoor seating will be moveable, with some stationary seating for the Bar.

- The Campus Meeting Room was located at the northeast corner of the site, for easy access for campus-wide use and to take advantage of the proximity to the Orange Grove.

- It was determined that the East Courtyard Restrooms should be grouped with the Campus Meeting Room (either nearby or attached) to realize cost efficiencies. This will also improve to the eastern edge of the site along the Barn Walk and allow the restrooms to be a background structure.

- East Courtyard Restrooms are larger, per code changes. Courtyard seats 100 patrons.

- Gender Neutral Restroom was added to East Courtyard Restrooms. It will be the purview of the Campus Architect as to whether or not more than one gender-neutral restroom is needed for the site. One is assumed for now.

- See *VI. Cost Plan* for a list of items not currently included within the cost estimate.

PROJECT VISION

The Barn Expansion Project offers the opportunity to strengthen the connection between the historic roots of the region and the future identity of the UCR campus. The Barn Group has the possibility of becoming a hub of indoor / outdoor activity and diversity that anchors and brands the image of UCR through a respectful integration of old and new. The Barn Expansion Project will:

- Provide a unique dining and entertainment center.

- Enhance awareness of the Campus's agrarian heritage.

- Serve as a gateway / link between the East Campus and the West Campus.

- Integrate indoor and outdoor spaces to support dining and entertainment programs.

- Provide a model of sustainable adaptive reuse that can serve to both instruct and demonstrate principles of sustainability.

METHODOLOGY

The process began with a half-day planning session at UCR in late 2015 that conveyed to the design team the programmatic and scope changes since 2012. There was critique of the 2012 site plan and discussion on the current budget. Based on this, a work plan was developed (involving the needed consultants) for the program verification process in early 2016.

The Program Verification was done in a focused 8-week effort involving key stakeholders: Capital Assets Strategies, Architects & Engineers, Auxiliary Services, Dining Services, and Transportation and Parking Services (TAPS).

A series of preparatory conference calls were held to understand potential changes to the various parts of the program that would need to be addressed or discussed during the workshop. These reviews examined the kitchen, servery, entertainment, and project budget. The goal was to identify areas that require refinement and further study prior to the workshop. This would provide time to study the area prior to the workshop and present options at the workshop for further discussion. A goal of the workshop was to verify the space program and discuss site schemes that enhance the program and connections to Campus, and to resolve outstanding issues.

PROJECT SITE

The project is located in the southwest Carillon Mall District near the intersection of West Campus Drive with the Barn Walk and the western terminus of the Eucalyptus Walk.

PROJECT SCOPE AMENDMENTS *in more detail*

The 2016 DPP Amendment program is organized by building and site area, and major revisions are as noted below:

The 6,500 ASF of the Barn (Barn Dining Renovation and Kitchen Addition) amendment includes:

- Dry storage needs to be bigger and will increase by 100 sf, bringing the total to 440 sf. This can be in two spaces.

Executive Summary

- The servery will be re-organized within the current footprint and assigned square footages. The program expands to include an Espresso Based/Blended Beverages station.
- The Kitchen is sized to provide 320 meals per hour.
- The Outdoor BBQ (80 sf) is no longer needed and has been removed.
- The utility structures south of Barn Kitchen are relocated to attach to Barn Kitchen.
- The Ticket Office is expanded to 130 ASF to allow the space to be used as a cashier cash counting room (three cashiers and a supervisor).
- The Green Room is reduced to 96 ASF to offset the increase in the Ticket Office.

The 3,132 ASF of the Faculty/Staff Dining Facility amendment includes:

- Changing the Green Room to a Private Dining / Green Room to increase utilization of the space. Change required increasing size to 200 asf. The revised space will support 10-12 people for dining and provides a lounge space for performers.
- Private Rest Room for the Green Room is no longer needed and the space was allocated to the Private Dining / Green Room. Performers can use the restrooms in the Faculty/Staff Dining Room.

The 2,000 ASF of the Campus Meeting Room has been added and includes:

- Meeting Room - for meeting and catered dining
- Servery / Buffet - for serving food prepared in the Barn Kitchen
- Entry
- Storage

The 966 Non-ASF East Courtyard Restrooms includes:

- Size and fixture increases due to updates to current code.
- A Gender Neutral Restroom.

Proposed improvements to the 1,516 ASF Barn Theater Renovation are as follows:

- Upgrade building heating and cooling systems, address code compliance issues, incorporate running water (drinking fountain/ hydration station);
- Complete other interior (e.g., finishes, etc.) and exterior building improvements to integrate the building into renovated Barn complex; and,
- Provide seismic upgrades, if needed.

PROGRAMMABLE OUTDOOR SPACE

Outdoor spaces were revisited to correspond with the new program and to create a place that would not appear to be congested or overdeveloped. New outdoor space allocations are noted below.

The 3,944 sf of the East Courtyard:

- Supports 100 cafe-style dining seats.
- Contains Bussing Station and *Trash & Recycling Stations.*

The 5,269 sf West Courtyard:

- Can accommodate a maximum of 350 patrons (standing) for a show.
- Supports 162 dining seats.
- Contains a 2,080 sf shade structure.
- Established a minimum stage height of 18 inches.
- Contains outdoor seating which will be moveable, with some stationary seating for the Bar.
- Contains a covered area high table seating near the Bar.

The 1,231 sf Campus Meeting Room Courtyard includes:

- an extension of the existing orange grove, if possible.

OTHER SITE-BASED PROJECT SCOPE

In addition to the ASF outlined above, the project still has considerable site-based scope of work. The goal in this amendment has been to lessen the density of structures and paved area on the site. The overall site area has remained the same, but there is less paved area and more landscape area than in 2012.

Executive Summary

This other site work is made up of hardscape and softscape, with the Barn Walk and Campus Walk, as well as primary and secondary pedestrian paths, gates and fencing.

Greater integration of the existing orange grove is desired. This could be achieved by extending the grove toward the south and increasing views into the grove from the Campus Walk and the Campus Meeting Room.

The Drive Aisle and the two parking spaces along West Campus Drive are no longer included in the Loading Dock Area program. A single accessible parking space remains.

The Loading Dock Area has been studied to show two large (42'-6" trailer) trucks parking at and near the loading dock off the road at the same time. As drawn, it is not possible to have two trucks of this size unloading at the actual dock at the same time, without the cab of one truck being in West Campus Drive. This is close to working and is to be studied further in the SD phase.

AREAS THAT REQUIRE FURTHER STUDY IN THE SCHEMATIC DESIGN PHASE

To resolve the following, further study, more information, and/or detailed design is needed:

Barn Dining:

- Expansion to the north or south
- Stage power / dimmer location
- Indoor seating
- Flooring finishes
- Barn Kitchen - Dry Storage layout efficiency
- Update Kitchen program for new code requirements, such as demand-controlled ventilation for exhaust fans
- Location of Food Dehydrator
- Trash / recycling locations

Faculty / Staff Dining Facility:

- Preferable Option to develop
- Study queue at outdoor Bar as relates to volume of people served
- Bar layout - proportions
- Storage and dishwasher location
- Trash / recycling locations
- Loading Dock program and equipment needs relative to space available will be studied in more detail.

Barn Theater:

- Confirm existing conditions as they relate to structural upgrades
- Develop Menu of upgrades that prioritizes improvements that can be made, given the fixed budget

West Courtyard:

- Shade structure - confirm size
- Covered trellis / covered link between Barn and Bar
- Covered area at raised Bar seating
- Heat for outdoor Bar and Dining seating

Campus Meeting Room:

- Meeting Room Shape
- Servery location in relation to Meeting Room
- Location of reception, coat check, and seating at Entry
- Addition of ceiling fans
- Trash / recycling locations
- Courtyard extension of existing Orange Grove is optional and will need to be reviewed with the ABC Consultant.

East Courtyard Restrooms:

- Size and fixture count

Other / General:

- Loading Dock Area space configuration
- Site plan at northeast: confirm restrooms and Campus Meeting Room locations
- ABC Consultant input on site concepts
- Campus standards call for Lactation Rooms. UCR to confirm nearest location of Lactation Room and to determine if proximity of that room meets intent of campus standard, or whether the site will need to provide a new Lactation Room.
- Doors - fly fans / automation requirements
- LED lighting to meet UCR current standards

Process

OVERVIEW OF PROCESS

A Planning Session workshop was held in December 2015 with representatives from Capital Planning, Architects & Engineers, and F&H to review current state of the project and to develop a work plan to obtain information needed to launch design. A list of action items was created and these areas were addressed in a series of conference calls and a workshop.

PLANNING SESSION (DECEMBER 15, 2015)

- Goal of Planning Session: to review current space program requirements, identify areas for further review, and discuss overall architectural character of the project.
- Agenda:
  1) Review Current Space Program Requirements
  2) Identify areas that require further review
  3) Review UC Office of the President Comments
  4) Creating Place Discussion
  5) Understanding the Site
  6) Working Session/Problem Solving/Visuals
  7) Review Project Schedule, Contractual, and Administrative Issues
  8) Plan for early January workshop

CONFERENCE CALL #1 (JANUARY 27, 2016): BARN DINING & KITCHEN PROGRAM REVIEW

- Goal of Call: to review possible program refinements to the Barn Dining & Kitchen Program to be studied in preparation for the Workshop.
- Agenda: review hourly meal capacity, seating capacity, kitchen program, anticipated addition of office space.

CONFERENCE CALL #2 (JANUARY 27, 2016): COST REVIEW WITH COST ESTIMATOR

- Goal of Call: to review program refinements and site requirements, for an initial evaluation of possible cost impact.
- Agenda:
  1) Discuss structural improvements needed at Barn Theater
  2) Summarize anticipated changes for initial and rough cost opinion update

CONFERENCE CALL #3 (JANUARY 27, 2016): INPUT FROM THEATER CONSULTANT

- Goal of Call: to review program refinements for the theater, including the outdoor stage, purpose of the canopy, and support requirements
- Agenda:
  1) Discuss changes in types of performances and the appropriate program refinements
  2) Discuss size and height of stage
  3) Discuss support facilities and multi-use possibilities
  4) Discuss relation to Faculty/Staff Dining
  5) Discuss canopy purpose and functional requirements

CONFERENCE CALL #4: DRAFT PROGRAM REVIEW

- Goal of Call: to review program refinements and site requirements, in preparation for the Workshop.

PROGRAM VERIFICATION WORKSHOP (FEBRUARY 5, 2016)

- Goal of Workshop: to complete program verification, to confirm space requirements, blocking diagrams, and examine site plan changes.
- Workshop Agenda:
  1) Introductions
  2) Provide overview of program assumptions and requirements per the 2012 DPP
     - Overview of Facilities
     - Hourly meal capacity
     - Seating capacity (indoor and outdoor)
     - Service and delivery
  3) Verify Space Program
     - Barn Dining and Kitchen Addition
     - Loading dock -- unresolved
     - Faculty/Staff Dining Facility
     - Campus Meeting Room
     - Barn Theater Renovation
     - East Courtyard
     - West Courtyard and Stage
     - East Courtyard Restrooms
  4) Review reference images that address the potential architectural character of the buildings and outdoor spaces in the project
  5) Review Site Plan and program adjacencies
  6) Discuss site alternatives that enhance quality

Process (cont.)

of the overall environment while meeting program requirements (create two alternatives)

7) Prioritize project elements to address possible value engineering needed to meet project budget.
8) Identify areas that require further examination and / or direction from leadership
9) Auxiliary Services to approve space program
10) Summarize conclusions and next steps

CONFERENCE CALL #5: REVIEW OF REFINEMENTS TO THE PROGRAM AND SITE PLAN WITH CAMPUS REPRESENTATIVES AND WITH COST ESTIMATOR

- Goal of Call: to confirm program and site changes and to get cost estimator's input on the budget impact of the proposed changes
- Agenda:
  1) Review program revisions
  2) Review site revisions
  3) Review cost impact
  4) Confirm direction / make revisions as needed

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II. FUNCTIONAL CONCEPTS

While the basic site organization of the 2012 DPP Update was confirmed, changes have been made in this 2016 Addendum that address the elements removed from and added to the project, as well as the critique of problematic areas in the 2012 layout.

For the Barn and the Kitchen Addition the main discussion and exploration related to which end of the Barn to add the needed square footage for the Dining and Servery. In 2012 it was added to the north and it has now also been studied as an addition on the south. There are advantages and disadvantages to both which will be explored in the subsequent design phases. The Servery was adjusted for menu and food delivery updates developed by Auxiliary Services and to incorporate the Espresso Based / Blended Beverage station.

While the key internal adjacencies remained the same for the Faculty / Staff Dining Facility, the building's form and identity in relation to the Stage, West Courtyard and north entry were changed. It was determined that with the revised entertainment program, the stage could be lower than previously planned and did not need to be at an angle to the West Courtyard. This allows it to be more integrated with the building form, the Dining Room, and the West Courtyard for day-to day use. Flexibility and multi-use were added: so that both the Stage and the Private Dining / Green Room can be used to expand dining opportunities. The main entry, on the north, is more welcoming and identifiable with its larger porch and more prominent lobby. The northeast corner of the building now offers a glimpse of the activities of the building with a view of the Private Dining / Green Room.

In the West Courtyard, still the primary outdoor dining and entertainment venue, the shade structure is a bit smaller and the south trellis is a bit larger and is partially solid to allow access to the Bar from the Barn when it is raining.

The new program element, the Campus Meeting Room, has been located in the northeast corner of the site at the entry to the complex, allowing easy access for wide campus use. There is a strong sense that its large and flexible central room should relate to the Orange Grove—either by opening directly to it or by expanding the grove toward the East Courtyard. The grove is an iconic remnant of the original campus landscape and the hope is to preserve and enhance daily experience of it.

The East Courtyard Restroom Facility has been relocated to the north side of the Campus Walk and efficiencies in combining with the Campus Meeting Room have been explored. The size of the restroom has been increased to meet current codes and a gender neutral facility has been added. The East Courtyard has benefitted from having the restroom building removed and it provides a shady, spacious, and welcoming dining area adjacent to the Barn.

The Barn Theater Renovation, which previously anticipated very minor exterior improvements, is now part of the project. These now include some interior improvements in finishes, comfort and building stability.

Maintaining the character of the existing structures to be repurposed and developing the synergy between the indoor and outdoor spaces for dining and entertainment will continue as the touchstones for the development in Schematic Design.

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Composite Site Organization Plan

BUILDINGS

THE BARN

Barn Dining
- Indoor dining and entertainment venue
- Renovation

Kitchen Addition
- Main Kitchen supporting The Barn Group
- New construction

BARN THEATER RENOVATION
- Rehearsal space for the academic and corresponding student clubs
- Relocation of ramp on the West and moving the South exit to the North side
- Plus optional upgrades to structure, HVAC, and finishes, pending budget
- Renovation

FACULTY / STAFF DINING FACILITY
- Indoor dining with Bar and Food Services Staging and Setup
- New construction

CAMPUS MEETING ROOM
- Indoor meeting
- Indoor dining with catered service provided from Barn Kitchen
- New construction

EAST COURTYARD RESTROOMS
- Serve entire compound
- Includes a gender-neutral restroom
- New construction

OUTDOOR SPACES

EAST COURTYARD
- Quiet dining courtyard

WEST COURTYARD
- Outdoor entertainment and dining venue including covered Outdoor Stage and Shade Structure
- Outdoor access to the Bar which provides service to the Faculty / Staff Dining Facility

THE CAMPUS WALK
- Major cross axis, allows for expansion of West Courtyard and Barn Theater activites

THE ORANGE GROVE
- Expanded to become part of the outdoor experience of the Campus Meeting Room, the East Courtyard, and the Barn Expansion Project Site

Composite Site Organization Plan - Barn Expansion Project - Option 1

Option 1 -- shows a re-oriented Faculty / Staff Dining Facility raised to the level of the Stage, and the Campus Meeting Room combined with the East Courtyard Restrooms in the northeast corner of the site. As in 2012, the Barn is expanded north, leaving more landscape and a large tree on the south. At the Loading Dock, a single curb-cut for entry and exit at the southwest corner is shown.

SITE PLAN - OPTION 1

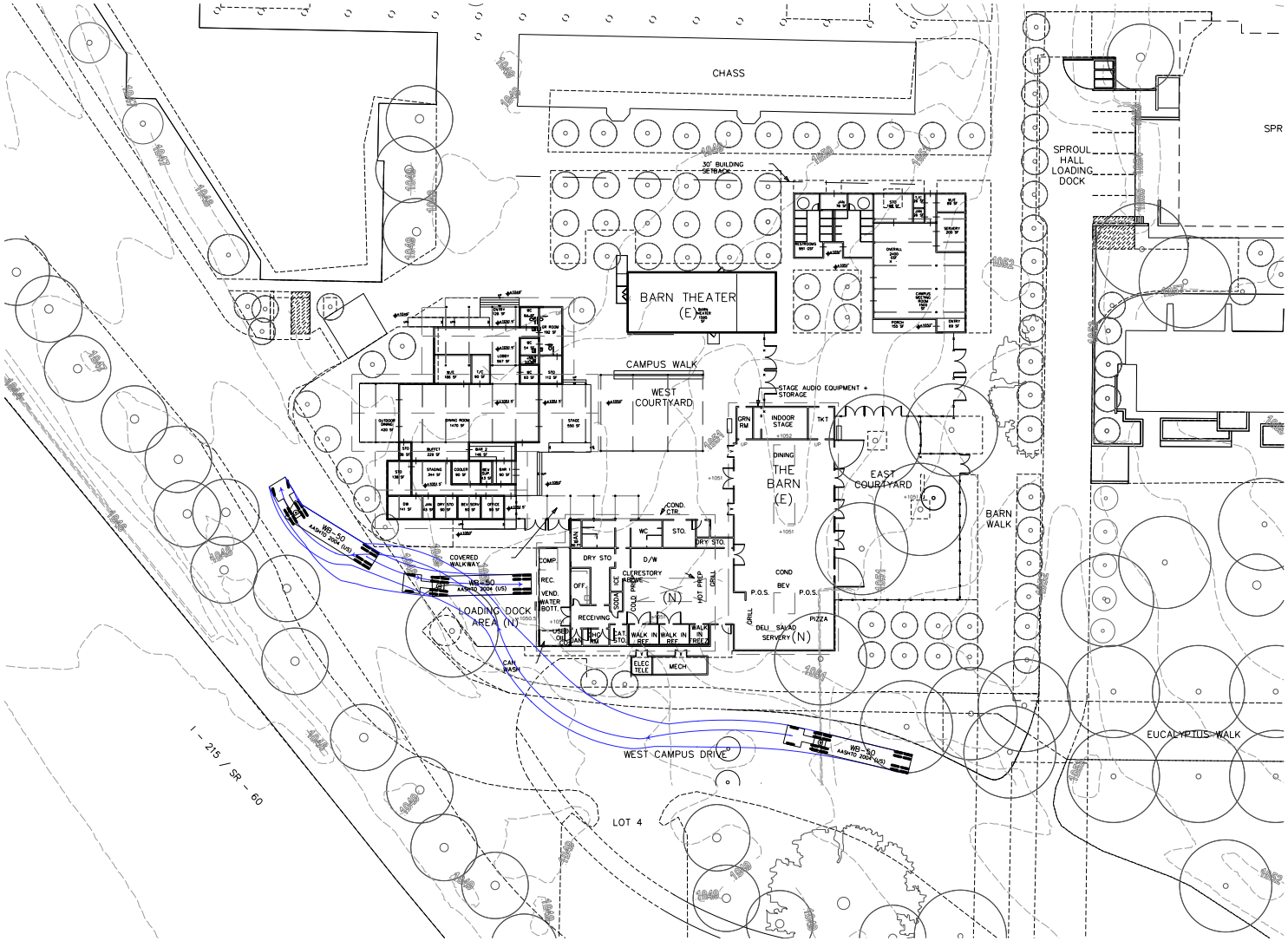
0 30’ 60’ 120’

Composite Site Organization Plan - Barn Expansion Project - Option 2

Option 2 -- shows a re-oriented Faculty/Staff Dining Facility, with a raised seating area at the level of the stage within the Dining Room, the Campus Meeting Room in the northeast corner of the site, and the East Courtyard Restrooms as an extension of the Barn Theater. The Barn is expanded to the south, with wider access to the West Courtyard along the Campus Walk. At the Loading Dock, two curb-cuts for entrance and exit at the southwest corner are shown.

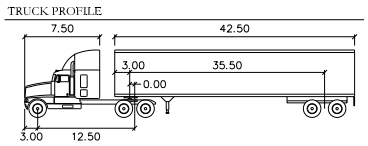
SITE PLAN - OPTION 2

Loading Dock Area Studies - Composite Site Plan Option 1 w/ 50' Tractor Trailer



DESCRIPTION OF ROUTE 1:

1. THIS STUDY SHOWS TWO CURB CUTS AT WEST CAMPUS DRIVE, WITH A SINGLE 50' TRACTOR TRAILER BACKING INTO THE LOADING DOCK. VIEWS OF THE LOADING DOCK ARE BUFFERED WITH PLANTINGS AND PEDESTRIANS CAN WALK ON A SIDEWALK.



WB-50 feet

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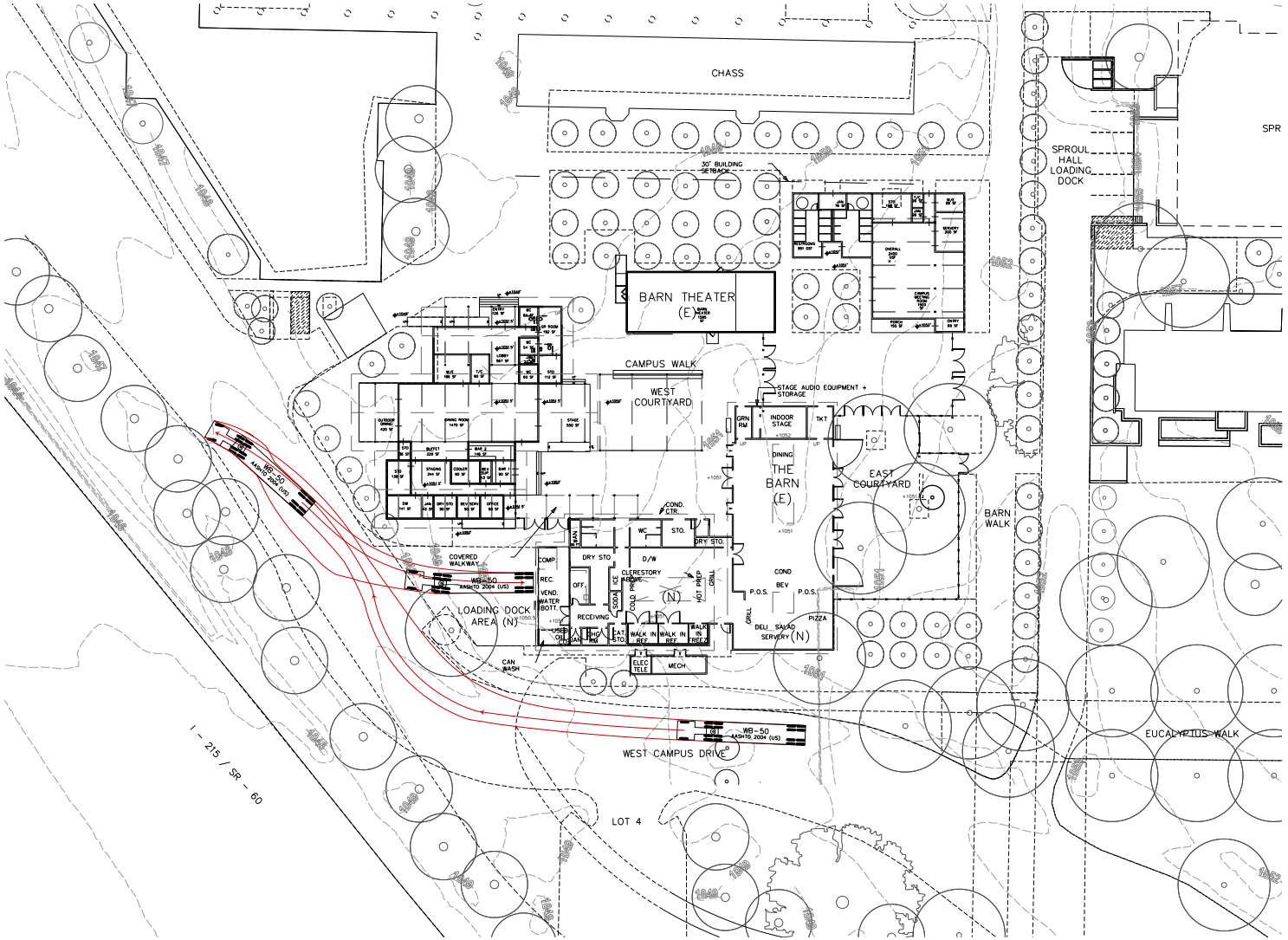
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

CIRCULATION STUDY - WB-50 ROUTE 1

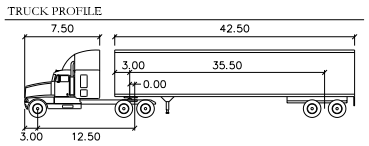
0 40' 80' 160'

Loading Dock Area Studies - Composite Site Plan Option 2 w/ 50' Tractor Trailer



DESCRIPTION OF ROUTE 2:

1. THIS STUDY SHOWS A SINGLE CURB CUT AT WEST CAMPUS DRIVE, WITH A SINGLE 50' TRACTOR TRAILER BACKING INTO THE LOADING DOCK. VIEWS OF THE LOADING DOCK ARE BUFFERED WITH PLANTINGS AND PEDESTRIANS CAN WALK ON A SIDEWALK.



WB-50 feet

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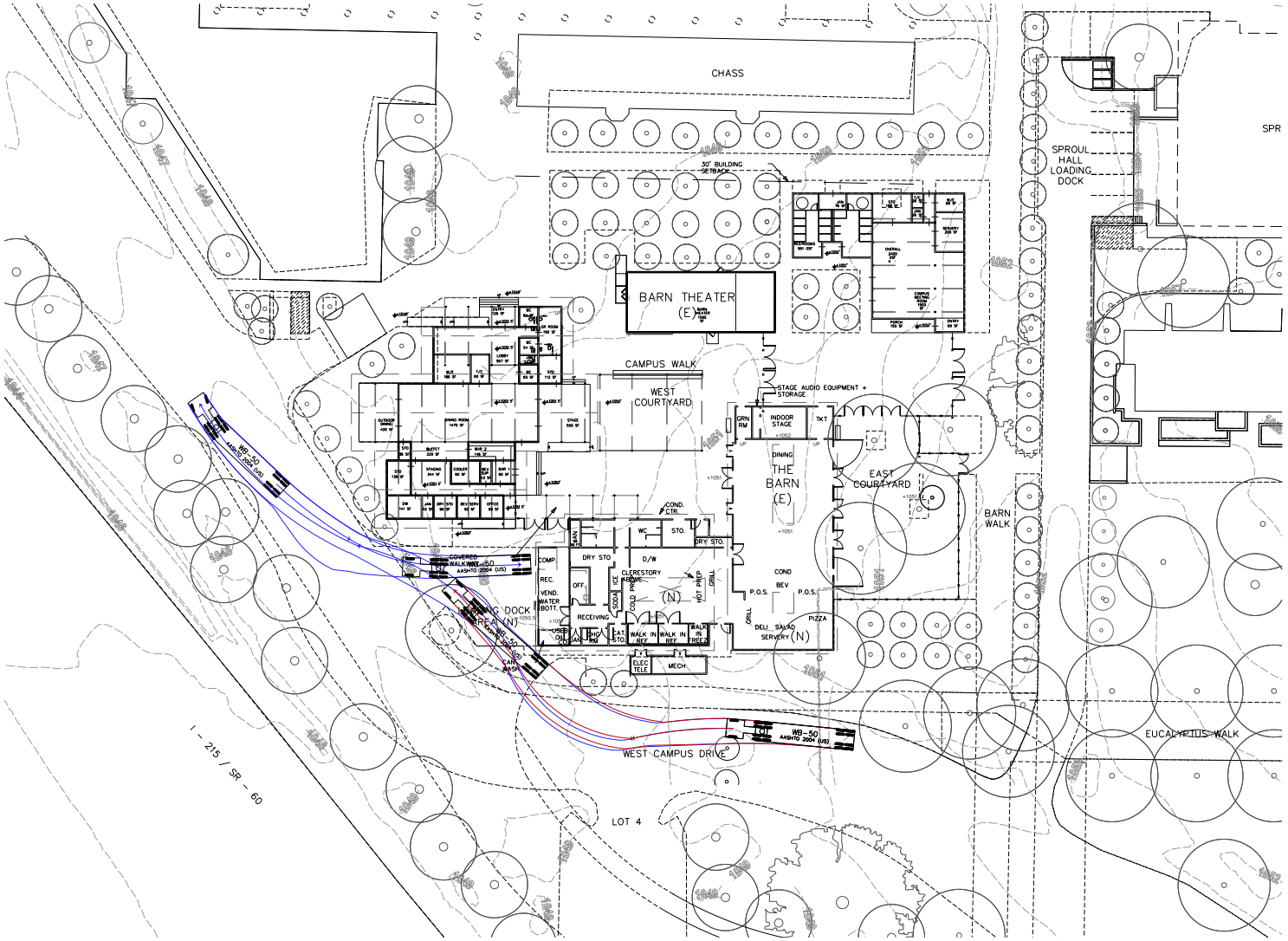
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

CIRCULATION STUDY - WB-50 ROUTE 2

0 40' 80' 160'

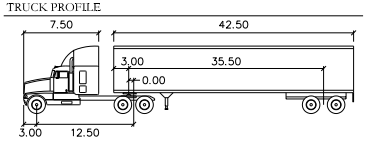
Loading Dock Area Studies - Composite Site Plan Option 1 w/ two (2) 50' Trucks Simultaneously



DESCRIPTION OF ROUTE 3:

1. THIS STUDY SHOWS TWO CURB CUTS AT WEST CAMPUS DRIVE, WITH ONE TRUCK BACKING INTO THE LOADING DOCK AND A SECOND TRUCK PULLED OFF THE DRIVE FOR WAITING AND UNLOADING. VIEWS OF THE LOADING DOCK ARE BUFFERED WITH PLANTINGS AND PEDESTRIANS CAN WALK ON A SIDEWALK.

TRUCK PROFILE



WB-50 feet

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CIRCULATION STUDY - WB-50 ROUTE 3

0 40' 80' 160'

III. CHARACTER & PRECEDENT IMAGES

Reference images were presented at the Planning Session and the Workshop that looked at the potential architectural character of the buildings and outdoor spaces of the Barn Expansion Project. Relevant examples of barn-like projects were shown that addressed form and materials and suggest how contemporary interpretations of traditional barn-like structures, and shaded outdoor compounds can be woven into the UCR Barn complex vernacular.

Barn Character

Massing & Exterior Materials
Project: Boathouse
Architect: TYIN Tegnestue
Location: More og Romsdal, Norway

Massing & Exterior Materials
Project: Tillamook Forest Interpretive Center
Architect: Miller Hull
Location: Tillamook, Oregon

Barn Character

Massing & Exterior Materials with Covered Outdoor Space
Project: Parrish Art Museum
Architect: Herzog & de Meuron
Location: Long Island, New York

CHARACTER & PRECEDENT IMAGES

Barn Character

Covered Outdoor Space - Overhangs
Project: Montana Cookhouse
Architect: Fernau & Hartman Architects
Location: Clyde Park, Montana

Massing & Exterior Materials
Project: Wild Turkey Bourbon Visitor Center
Architect: De Leon & Primmer Architecture Workshop
Location: Lawrenceburg, Kentucky

CHARACTER & PRECEDENT IMAGES

Barn Character

Interiors - Repurposing & Re-Use of Materials with New Materials
Project: Avis Ranch
Architect: Fernau & Hartman Architects
Location: Clyde Park, Montana

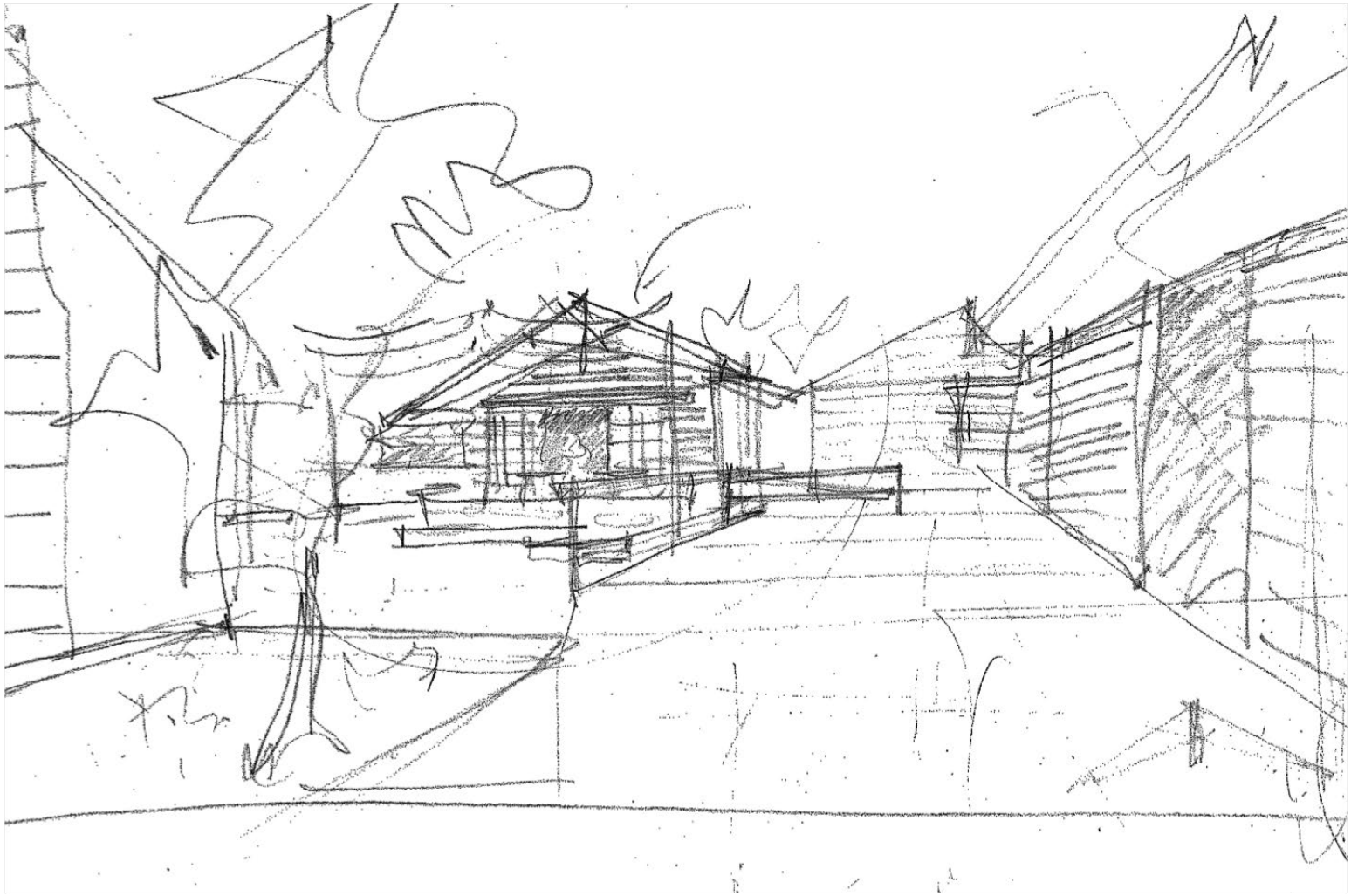
Indoor / Outdoor Connections
Project: Parrish Art Museum
Architect: Herzog & de Meuron
Location: Long Island, New York

Indoor / Outdoor Connections
Project: Porch House
Architect: Lake | Flato
Location: Dallas, Texas

Barn Character

Exterior Courtyard with Shaded Circulation
Project: Shangri La Botanical Gardens
Architect: Lake | Flato
Location: Orange, Texas

Perspective Sketches

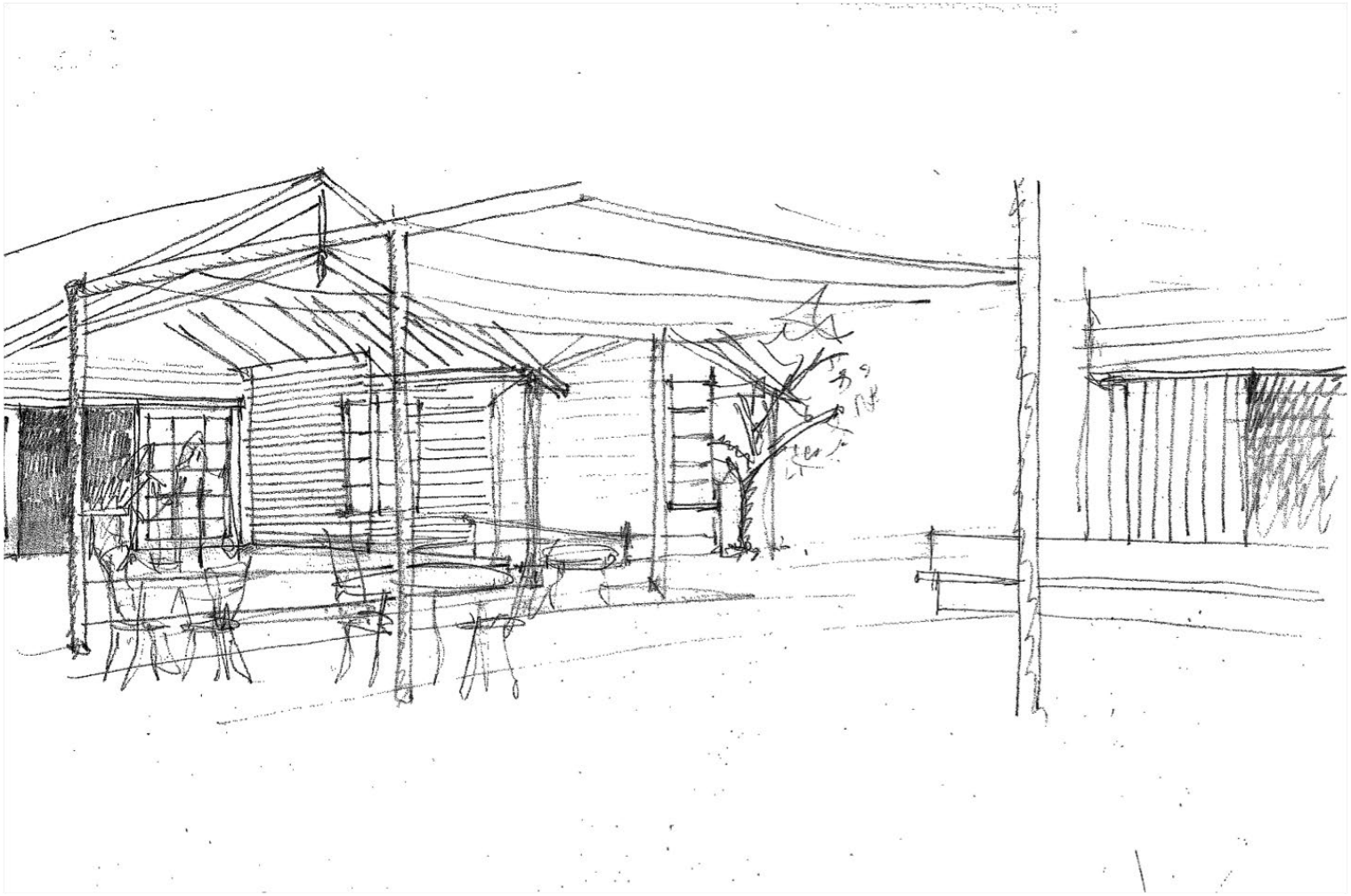


VIEW OF WEST COURTYARD FROM EAST ENTRY

Perspective Sketches

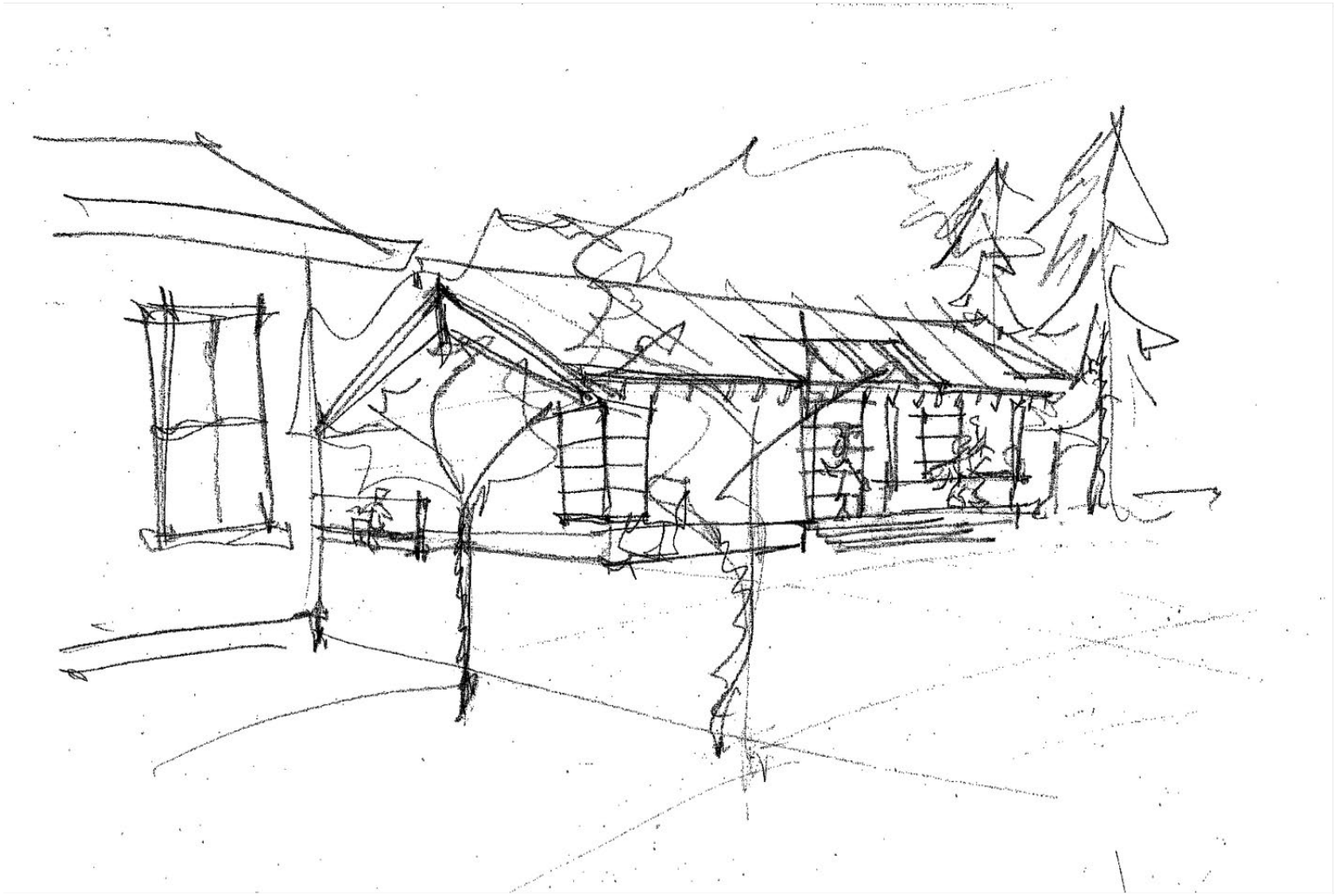
VIEW OF FACULTY / STAFF DINING FACILITY AND STAGE FROM SOUTHEAST

Perspective Sketches



CLOSE-UP VIEW OF FACULTY / STAFF DINING FACILITY AND STAGE FROM SOUTHEAST

Perspective Sketches



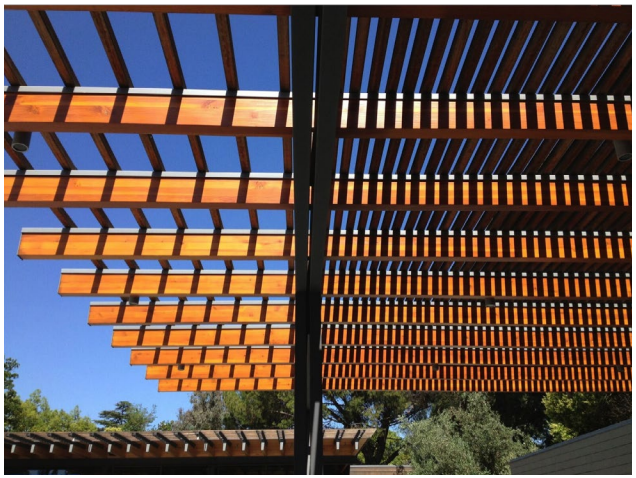
VIEW OF FACULTY / STAFF DINING ENTRY FROM NORTHEAST

CHARACTER & PRECEDENT IMAGES

Shade Structures

Project: Avis Ranch
Architect: Fernau & Hartman Architects
Location: Clyde Park, Montana

Project: Mills College Natural Sciences Building
(entrance structure)
Architect: EHDD Architecture
Location: Oakland, California



Project: Sacramento Residence
Architect: BCJ Architects
Location: Sacramento, California

CHARACTER & PRECEDENT IMAGES

Shade Structures

Project: ASU Polytechnic Campus
Architect: Lake | Flato
Location: Mesa, Arizona

Project: Main Plaza San Antonio
Architect: Land8
Location: San Antonio, Texas

Project: Glen Mor 2 Market
Architect: Architects & Engineers, UCR
Location: Riverside, CA

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IV. PROGRAM

The identity and character of the project—within the campus, within the Riverside community, and within the UC system—continue to be addressed in relation to the unique functional requirements that are the basis of the program. The amendment incorporates relatively minor program changes for the Barn Dining & Kitchen Addition and the Faculty/Staff Dining Facility. The Campus Meeting Room and Barn Theater Renovation have been added to the project. The Project Area Summary and the Room Data Sheets summarize these changes. Only the Room Data Sheets that have been revised from 2012 are included here. For the others, see the 2012 DPP Update.

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Project Area Summary - Barn Expansion Project 2016 Addendum to 2012 DPP Update

BUILDING AND ASSOCIATED OUTDOOR AREAS	ASF	NON-ASF	BASIC GROSS TOTAL	Covered Area (SF)	OGSF100	OGSF50	SF[1]	Indoor Dining Seating	Outdoor Dining Seating
THE BARN: BARN DINING & KITCHEN ADDITION	6,500	728	8,320	1,320	9,640	8,980		94	
EAST COURTYARD RESTROOMS	0	966	1,111	290	1,401	1,256			
CAMPUS MEETING ROOM	2,000	200	2,640	460	3,100	2,870		75	
FACULTY / STAFF DINING FACILITY[2]	3,132	978	4,727	2,896	7,623	6,175		60	
BARN THEATER RENOVATION[3]	1,516	0	1,651	0	0	0			
EAST COURTYARD (OUTDOOR) [4]							3,924		100
WEST COURTYARD (OUTDOOR UNCOVERED DINING) [5]							616		
WEST COURTYARD (OUTDOOR SHADE STRUCTURE OVER DINING) [6]							2,080		162
WEST COURTYARD (OUTDOOR CIRCULATION) [7]							2,573		
CAMPUS MEETING ROOM COURTYARD (OUTDOOR)							1,231		0
TOTAL	13,148	2,872	18,448	4,966	21,763	19,280	10,424	229	262

[1] Outdoor areas are calculated in square feet (SF).

[2] Faculty/Staff Dining Facility covered area includes an estimate of 2,154 SF for non-programmable roof overhangs including covered front and back entry porches + 742 SF for the covered Stage and Stage Roof Overhang at the Outdoor Stage adjacent to Faculty/Staff Dining Facility.

[3] Barn Theater Renovation is included as part of the Barn Expansion Project. Program is based upon current space allocations.

[4] East Courtyard - Seating and Circulation. The outdoor dining seating in the East Courtyard is 100 seats.

[5] West Courtyard includes 2,573 SF Outdoor Circulation + 2,696 SF available for Outdoor Dining Seating. 2,080 SF of Dining Seating is covered by Outdoor Shade Structure, and the remaining 616 SF Dining Seating is uncovered.

[6] Assumes stand-alone shade structure, not a solid roof.

[7] Includes a trellis of 954 sf at the south side of the West courtyard. The trellis will have a portion of solid roof, not yet in the budget.

Project Area Summary - Barn Dining / Kitchen Addition

AREA DESCRIPTION	NEW CONSTRUCTION	RENOVATION OF EXISTING BUILDING	TOTAL
THE BARN: BARN DINING/ KITCHEN ADDITION			
ASSIGNABLE (ASF): PRODUCTION KITCHEN			
Cold Prep	579		579
Soda Room / Ice Machine	82		82
Hot Production (Cook Line & Grille)	408	153	561
Refrigerated Storage - Bulk Food	120		120
Refrigerated Storage - Finished Product Cooler	120		120
Frozen Storage	120		120
[6] Dry Storage - Food--can be in two rooms	440		440
Catering Storage	63		63
Receiving, Recycling and Outbound Staging	160		160
SUBTOTAL	***2,092***	***153***	***2,245***
ASF: WARE-WASHING			
Dishwashing & Pot-washing Combined	127		127
Janitor's Closet for Kitchen	32		32
SUBTOTAL	***159***	***0***	***159***
ASF: BACK OF HOUSE SUPPORT			
Unisex Changing Room & Lockers	77		77
Manager's + Production Office	123		123
Storage - West Courtyard Tables + Chairs	160		160
Stage Power & Dimmers for Outdoor Stage	45		45
SUBTOTAL	***405***	***0***	***405***
ASF: SERVING			
Serving Area		800	800
Customer Queuing		360	360
Self-Serve Beverage Counter & Queuing		65	65
Self-Serve Condiment Counter & Queuing		65	65
SUBTOTAL	***0***	***1,290***	***1,290***
ASF: INDOOR SEATING & STAGE			
Indoor Seating[1]		1,870	1,870
Indoor Stage[2]	105	160	265
Stage Audio Equipment + Storage[2]	40		40
Green Room[2]	96	0	96
Ticket Booth[2]	130	0	130
SUBTOTAL	***371***	***2,030***	***2,401***
ASSIGNABLE TOTAL	**3,027**	**3,473**	**6,500**
NON-ASSIGNABLE (NON-ASF) SPACES			
Mechanical	200		200
Telecom Closet	120		120
Electrical Room	66		66
Public Restrooms (2)	300		300
Janitor's Closets for Restroom	42		42
NON-ASSIGNABLE TOTAL	**728**	**0**	**728**
NET TOTAL ASF & NON-ASF	**3,755**	**3,473**	**7,228**
Grossing Factor (15%)	565	527	1092
BASIC GROSS TOTAL	**4,320**	**4,000**	**8,320**
ASF TO GSF RATIO	**70%**	**87%**	**78%**

AREA DESCRIPTION	NEW CONSTRUCTION	RENOVATION OF EXISTING BUILDING	TOTAL
THE BARN: BARN DINING/ KITCHEN ADDITION (continued)			
NON-PROGRAMMABLE COVERED OUTDOOR SPACE			
Covered Loading Dock Area	603		603
Building Overhang	167	550	717
NON-PROGRAMMABLE COVERED OUTDOOR TOTAL	***770***	***550***	***1,320***
OGSF100	**5,090**	**4,550**	**9,640**
OGSF50	**4,705**	**4,275**	**8,980**
PROGRAMMABLE OUTDOOR SPACE[3]			
Outdoor Dining Seating/Gathering - East[4]	2,488		2,488
Outdoor Circulation - East	1,436		1,436
Outdoor Dining Seating - West[5]	2,696		2,696
Outdoor Circulation - West	2,573		2,573
Outdoor Condiment Counter - West	20		20
Outdoor Condiment Counter - East	20		20
SUBTOTAL (SF)	***9,233***	***0***	***9,233***
NON-PROGRAMMABLE OUTDOOR SPACE			
Loading Dock[6]	3,465		3,465
Campus Walk	3,670		3,670
SUBTOTAL (SF)	***7,135***	***0***	***7,135***
TOTAL OUTDOOR SPACE	**16,368**	**0**	**16,368**

[1] Assume 20 SF / Person for indoor dining seating:

Indoor Seating 1,870 ASF / 20 = 94

[2] The Indoor Stage, Stage Audio Equipment & Storage, Green Room, and Ticket Booth include both existing space and new construction (on the North edge of Barn Dining.) In the cost estimate, the new construction area is covered under Kitchen Addition. This assumes expansion is to the north, however the final decission on whether expansion is to the north or south of the Barn will be made in the SD Phase.

[3] Outdoor areas are calculated in square feet (SF). East and West Courtyard Programmable Outdoor Space is covered in this summary because the Barn Kitchen serves the East Courtyard Dining and West Courtyard Dining.

[4] For the East Courtyard, assume 20 SF / Person for outdoor dining seating.

[5] For the West Courtyard, maximum capacity varies depending on use:

West Courtyard 3,255 SF / 20 = 162 people dining seating (max. lunch capacity)
3,255 SF / 15 = 217 people row seating
3,255 SF / 8.8 = 350 ticketed people standing (max. event) + 20 staff

[6] Can be in two areas

Project Area Summary - Faculty / Staff Dining Facility

AREA DESCRIPTION	TOTAL
FACULTY / STAFF DINING FACILITY	
ASF: DINING	
Indoor Faculty / Staff Dining--for 50	1,300
Buffet Serving Area	192
Back of house support for Dining:	
Beverage Service (non-alcoholic)	80
Storage (Catering and Dining Room)	150
Food Staging (warmers, refrigerators) + Set Up Area (glasses, utensils, place sets, bussing)	200
Dishwasing	150
Entry /Lobby	100
SUBTOTAL	***2,172***
ASF: OTHER SPACES	
Bar	270
Support spaces for the Bar:	
Office + Packaging	100
Dry Storage	80
Walk-in Refrigerator / Wine Cooler	150
Janitor's Closet for Kitchen	40
Support Spaces for Stage	
Private Dining / Green Room[1]	200
Outdoor Performance Equipment Storage	120
SUBTOTAL	**960**
ASSIGNABLE TOTAL	**3,132**

AREA DESCRIPTION	TOTAL
NON-ASSIGNABLE (NON-ASF) SPACES	
Circulation	500
Mechanical/Electrical	200
Telecom Closet	100
Public Restrooms (2)	128
Janitor's Closet for Restrooms	50
NON-ASSIGNABLE TOTAL	**978**
NET TOTAL ASF & NON-ASF	**4,110**
Grossing Factor (15%)	617
BASIC GROSS TOTAL	**4,727**
ASF TO GSF RATIO	**66%**
OGSF100	**7,623**
OGSF50	**6,175**
PROGRAMMABLE UNCOVERED OUTDOOR SPACE	**0**
PROGRAMMABLE COVERED OUTDOOR SPACE	
Outdoor Stage	432
PROGRAMMABLE COVERED OUTDOOR TOTAL	***432***
PROGRAMMABLE + NON-PROGRAMMABLE COVERED OUTDOOR SPACE	
Building Overhang	2,154
Outdoor Stage Roof and Stage Roof Overhang	742
COVERED PROG. + NON-PROG. OUTDOOR AREA TOTAL	***2,896***

[1] When not used as a Green Room, this space can be used as a Private Dining Room for 10-12 people.

Project Area Summary - Barn Theater Renovation

AREA DESCRIPTION	2009 BAS
BARN THEATER RENOVATION[1]	
ASF SPACES	
Open Laboratory	1,231
Storage	285
ASSIGNABLE TOTAL	**1,516**
NON-ASSIGNABLE (NON-ASF) SPACES	
Circulation (included above)	
Mechanical	
NON-ASSIGNABLE TOTAL	**0**
NET TOTAL ASF & NON-ASF	**1,516**
Grossing Factor (7%)	135
BASIC GROSS TOTAL	**1,651**
ASF TO GSF RATIO	**92%**
OGSF100	**1,651**
OGSF50	**1,651**
OUTDOOR SPACE [2]	**0**
TOTAL OUTDOOR SPACE	**0**

[1] Only exterior improvements were included previously. Campus incorporated the Barn Theater Renovation into the project prior to the Program Verification Phase. Proposed program reflects current space assignments.

[2] Requires revising building entry and adding a ramp for accessibility.

Project Area Summary - Campus Meeting Room

AREA DESCRIPTION	TOTAL
CAMPUS MEETING ROOM	
ASSIGNABLE (ASF)	
Meeting Room[1]	1,500
Servery / Buffet [2]	200
Entry	100
Storage for tables and chairs	200
ASSIGNABLE TOTAL	**2,000**
NON-ASSIGNABLE (NON-ASF) SPACES	
Mechanical / Electrical	100
Telecom/ AV Closet	50
Janitorial	50
NON-ASSIGNABLE TOTAL	**200**
NET TOTAL ASF & NON-ASF	**2,200**
Grossing Factor (20%)	440
BASIC GROSS TOTAL	**2,640**
ASF to GSF Ratio	**76%**
OUTDOOR SPACE[2]	
Covered Outdoor Space (included above)	0
Building Overhangs	460
NON-PROGRAMMABLE COVERED OUTDOOR TOTAL	***460***
OGSF100	**3,100**
OGSF50	**2,870**
OUTDOOR SPACE[2]	
Courtyard / new orange grove	1,088
TOTAL OUTDOOR SPACE	**1,088**

[1] Assumes 75 seats @ 20 SF / Person for indoor dining seating

[2] Servery / Buffet provide a room to stage refreshments without disturbing the meeting. Requires an exterior entrance and two interior access points from meeting room (entrance and exit).

[3] Outdoor areas are calculated in square feet (SF). It may also be used to provide a visual buffer for the East Courtyard Restrooms.

Project Area Summary - East Courtyard Restrooms

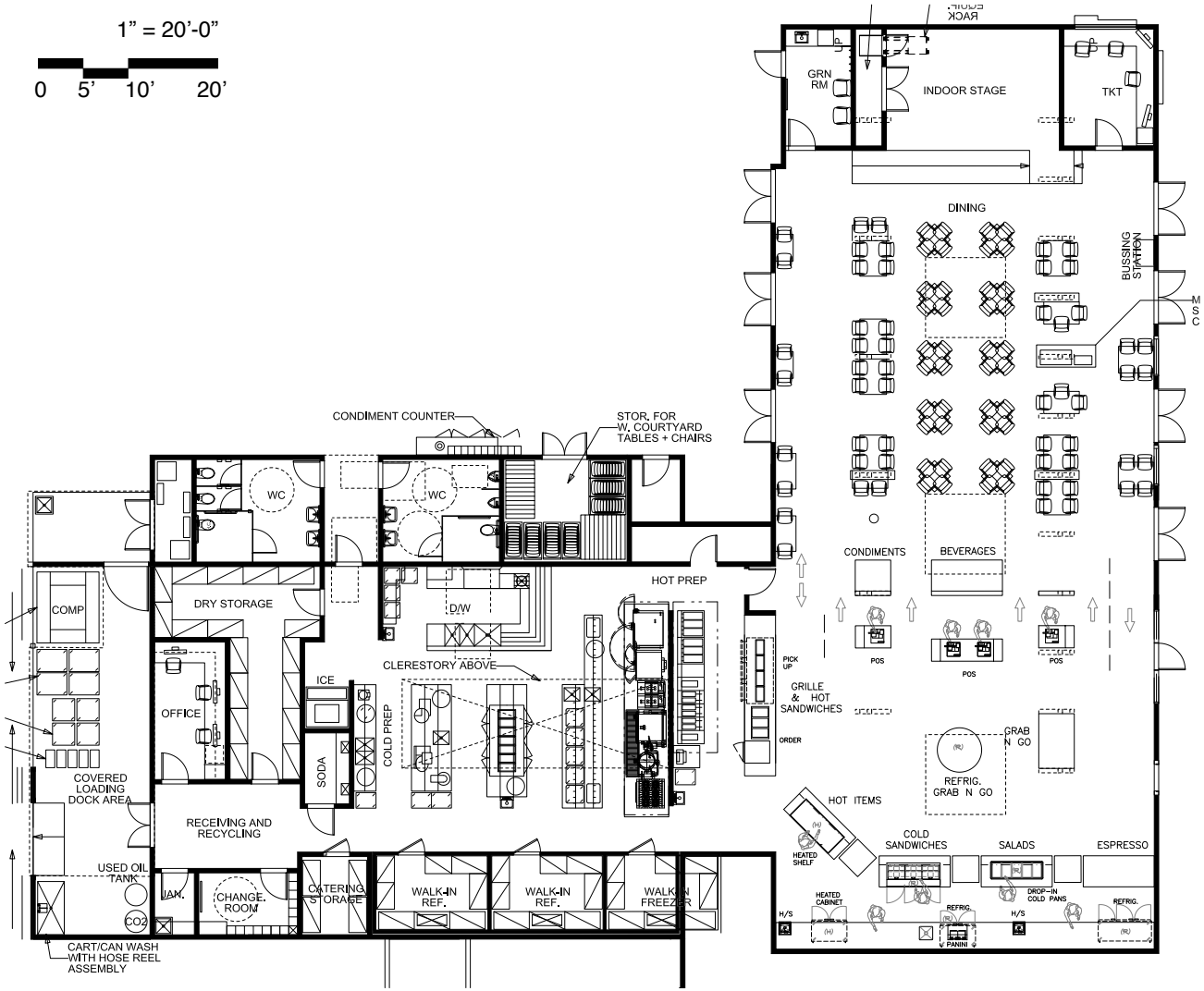
AREA DESCRIPTION	TOTAL
EAST COURTYARD RESTROOMS	
NON-ASSIGNABLE (NON-ASF) SPACES	
Janitor's Closets for Restroom	32
Unisex restroom	64
Public Restrooms (2)	870
NON-ASSIGNABLE TOTAL	**966**
NET TOTAL ASF & NON-ASF	**966**
Grossing Factor (15%)	145
BASIC GROSS TOTAL	**1,111**
Building Overhang	290
NON-PROGRAMMABLE COVERED OUTDOOR TOTAL	***290***
OGSF100	**1,401**
OGSF50	**1,256**

Comprehensive Space Plans

THE BARN DINING / KITCHEN ADDITION

SCALE 1" = 20'-0"

0 5' 10' 20'

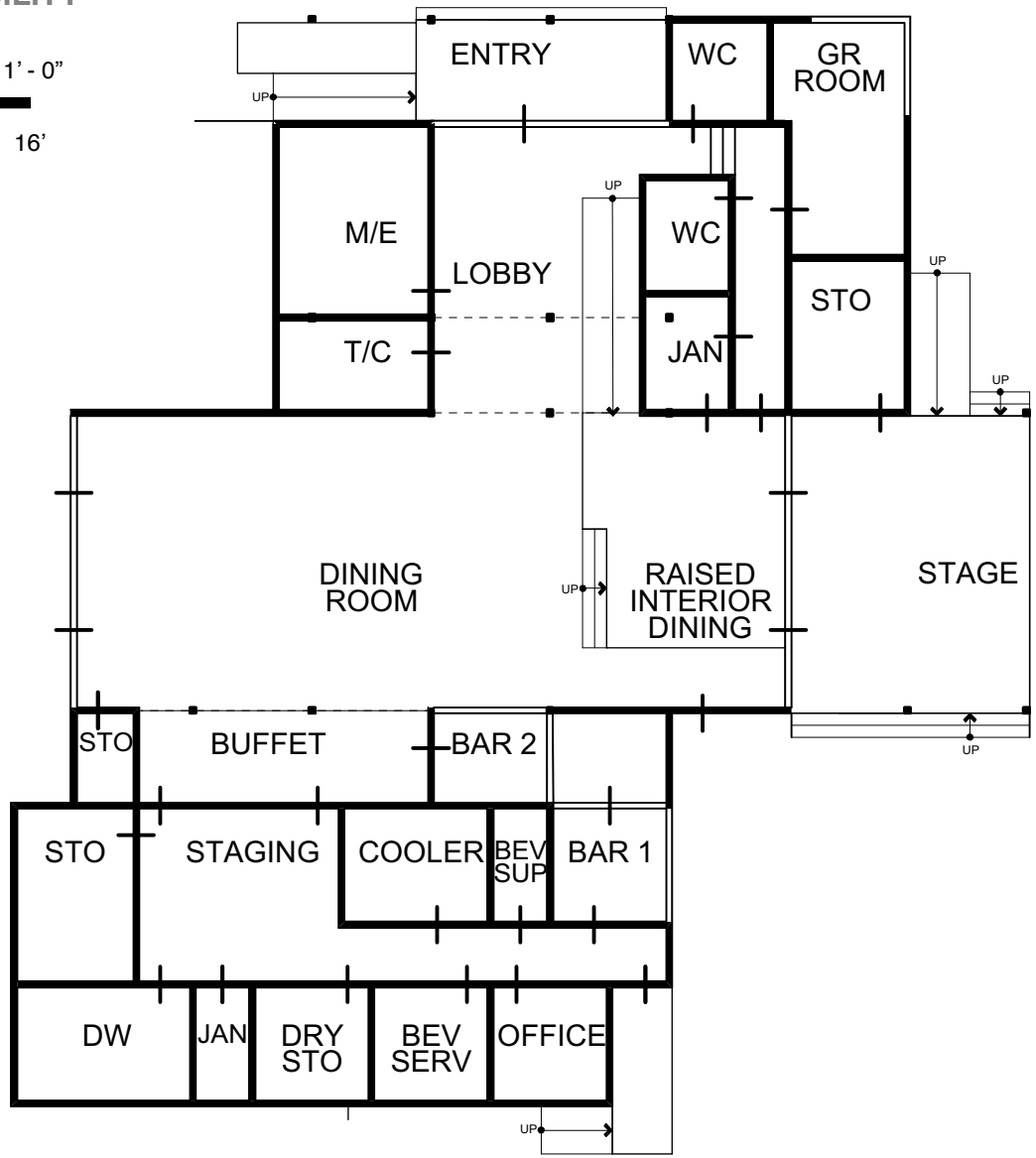


Comprehensive Space Plans

FACULTY / STAFF DINING FACILITY

SCALE 1/16” = 1’ - 0”

0 4’ 8’ 16’

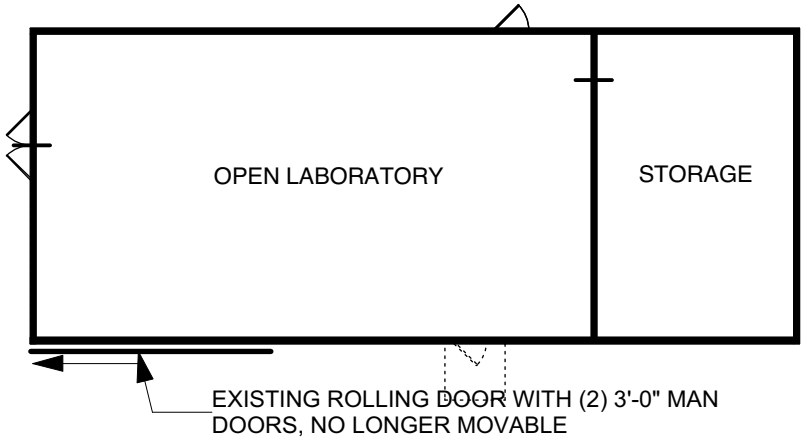


Comprehensive Space Plans

BARN THEATER RENOVATION

SCALE 1/16” = 1’-0”

0 4’ 8’ 16’

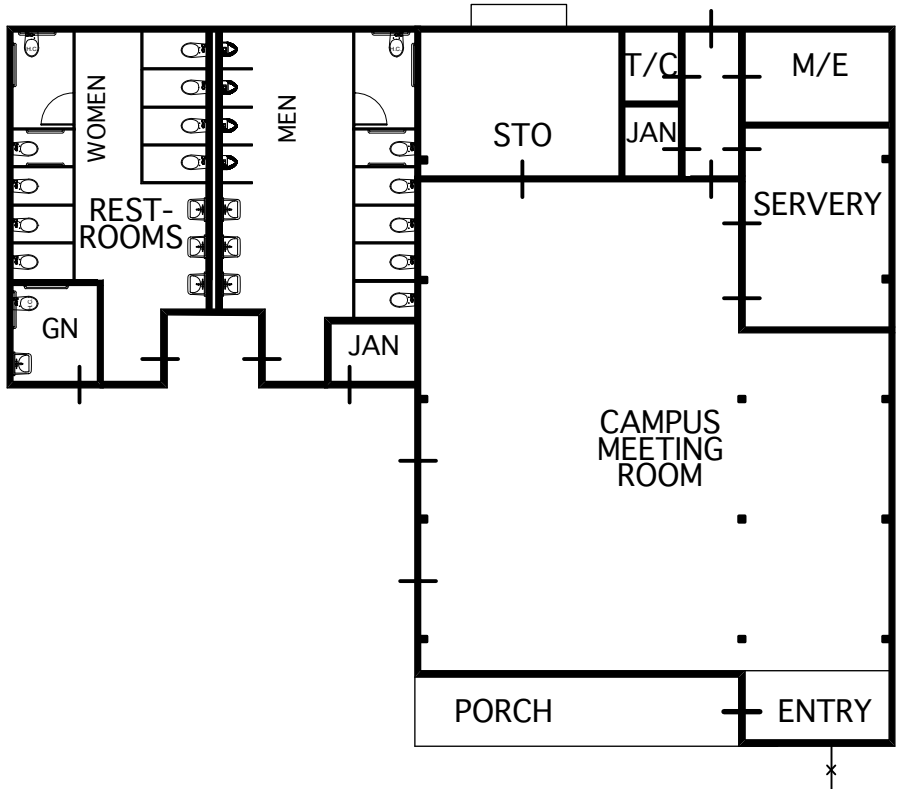


Comprehensive Space Plans

CAMPUS MEETING ROOM

SCALE 1/16” = 1’-0”

0 4’ 8’ 16’



Room Data Sheets

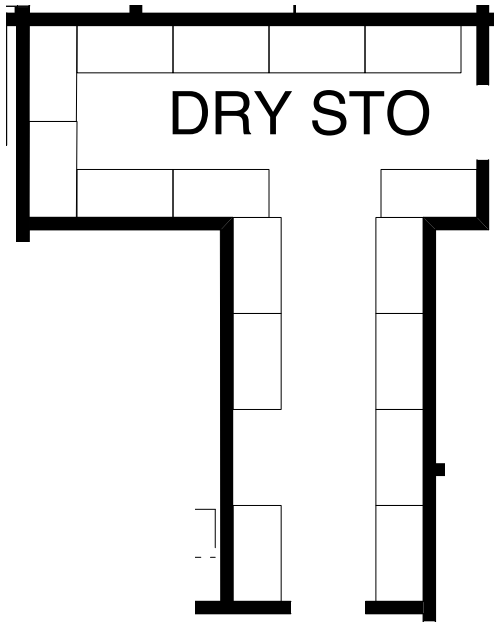
ABBREVIATIONS

A/V	Audio/Visual
CFM	Cubic feet per minute (ventilation)
FC	Foot-candles
FRP	Fiberglass-reinforced plastic
FSC	Forest Stewardship Council
HVAC	Heating, Ventilation, and Air Conditioning
NA	Not applicable
NC	Noise Criteria
POS	Point of sale
STOR	Storage
U/C	Under-counter
V	Volts
WAP	Wireless Access Point

Room Data Sheets

BARN DINING: PRODUCTION KITCHEN

DRY STORAGE - FOOD



GENERAL INFORMATION

Dry storage for bulk food items.

TOTAL ASF	440 (can be in two rooms)
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Receiving
VIEWS	NA
MINIMUM CEILING HEIGHT	9’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Vinyl faced lay-in
WALLS / BASE	White FRP
FLOORS	Epoxy with coving
WINDOWS	NA
DOORS	Hollow metal painted door
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	NA
MOVABLE	Adjustable, Washable Plastic Shelving (Cambro)
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase convenience receptacle
LIGHTING	Utilitarian surface mounted linear fluorescents, 20-30 FC with acrylic lens. Controlled with Occupancy Sensor/Switch.
MECHANICAL	HVAC; 0.15 cfm/sf ventilation, Humidity sensor
PLUMBING	Floor drain
SECURITY	Key access
FIRE PROTECTION	Sprinkler with freeze protection
VOICE/DATA	1 phone/ 1 data (for desk and work station to be added later)
MEDIA	NA

ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NC-55

Room Data Sheets

BARN DINING: SERVING

SERVING AREA

GENERAL INFORMATION

Exhibition kitchen and servery, 4 exhibition production platforms (Espresso Based / Blended Beverage, Salad & Cold Sandwiches, Hot Entree / Grill)

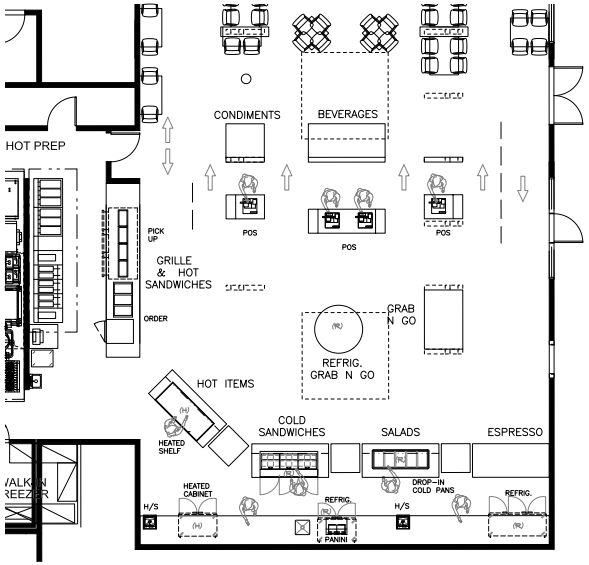
TOTAL ASF	800
NUMBER OF OCCUPANTS	5
ADJACENCIES	Dining, Kitchen
VIEWS	NA
MINIMUM CEILING HEIGHT	9'-0"
ACCESSIBILITY	Per code
SCALE	1" = 20'-0"

MATERIALS AND FINISHES

CEILING	Drop; washable and non-grease absorbent material. Grids must be non-corrosive.
WALLS / BASE	Washable; epoxy, stainless steel or ceramic tile coving -- to be determined during design. All tile work in server areas requires epoxy grout (non-absorbent).
FLOORS	Anti-slip epoxy or Silikal
WINDOWS	NA
DOORS	NA

FURNITURE + EQUIPMENT

BUILT-IN	Serving counter with lighted sneeze/breath guard, heat lamps, stainless steel cabinets with decorative inset panels
FIXED	Counters, refrigerator, large ceiling fans, hand sinks, sandwich prep refrigerator, heated shelf, salad station with cold pans, sink, bread drawers, undercounter heated cabinet, plate shelves, undercounter refrigerator, espresso machine, pastry case, blenders, ice bin, prep refrigerator. All front counter equipment on curbs.
MOVABLE	Trash cans, panini press
OTHER	Glove box holders



BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Roof monitors at Dining
ELECTRICAL	120/208 V / 3 Phase. All POS and PC feeds to be dedicated circuits/isolated grounds.
LIGHTING	Ceiling mount linear fluorescent with acrylic lens, 40-50 FC. Controlled via Occupancy Sensor/Switch
MECHANICAL	HVAC, Exhaust air at kitchen hoods with interlocked tempered make-up air; Air curtains with door actuation switches at exterior doors. All exhaust hoods with fire suppression system to include Utility Distribution System (UDS) with water wash grease capture.
PLUMBING	Floor drain, Cold and hot water, Sanitary sewer for equipment as required.
SECURITY	NA
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	2 data, at Grille 4 data/network ports
MEDIA	Servery/Dining/Courtyard audio source equipment or control, LED menus at each station mounted from overhead or back walls

ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-45

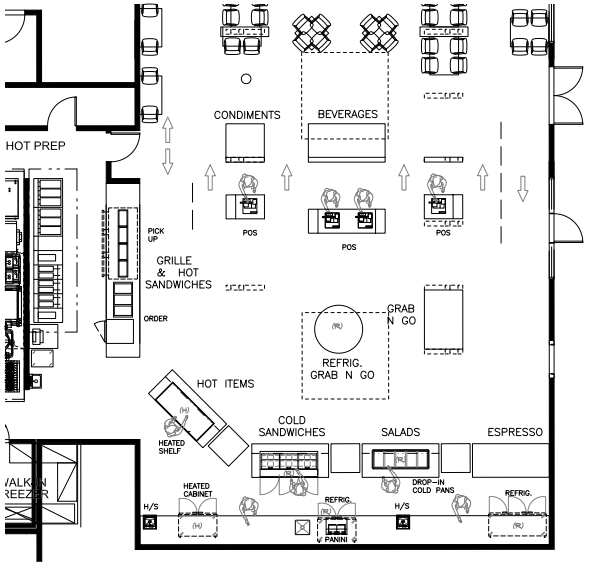
Room Data Sheets

BARN DINING: SERVING
CUSTOMER QUEUING

GENERAL INFORMATION

No queue system (free flow), 4 POS stations

TOTAL ASF	360
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Serving Area, Self-serve Condiments and Beverages
VIEWS	NA
MINIMUM CEILING HEIGHT	Open to existing structure
ACCESSIBILITY	Per code, angle columns require cane detection area.
SCALE	1" = 20'-0"



MATERIALS AND FINISHES

CEILING	Open to trusses above
WALLS / BASE	Wood; epoxy, stainless steel or ceramic tile coving -- to be determined during design
FLOORS	Colored concrete
WINDOWS	Wood painted
DOORS	FSC certified solid-core wood door painted
DOOR FRAMES	Wood painted

FURNITURE + EQUIPMENT

BUILT-IN	POS (4)
FIXED	Large ceiling fans
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Roof monitors at Dining
ELECTRICAL	120 V / 1 Phase, Quad receptacle at each POS. All POS and PC feeds to be dedicated circuits / isolated grounds.
LIGHTING	Downlights, Ceiling mount linear fluorescents, 30-40 FC. Controlled via central time clock system with override switches.
MECHANICAL	HVAC; air curtains with door actuation switches at exterior doors
PLUMBING	Floor drain, Cold and hot water, Sanitary sewer for equipment as required.
SECURITY	Key access, Window sash locks, Magnetic contacts at exterior doors and windows, Camera at each POS
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	1 phone / 1 data at each POS, Wireless Access Point
MEDIA	Speakers, Ceiling loudspeakers

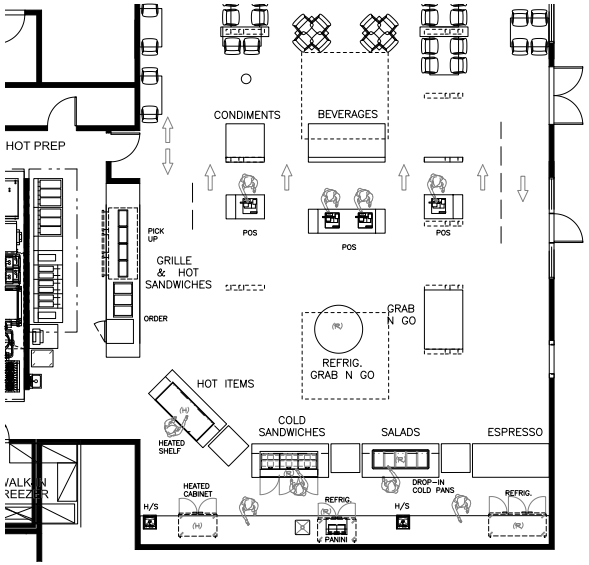
ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment; remote refrigeration (i.e. no display cases with built-in condensers)
BACKGROUND NOISE CRITERIA	NC-40

Room Data Sheets

BARN DINING: SERVING

SELF-SERVE BEVERAGE COUNTER & QUEUING



GENERAL INFORMATION

TOTAL ASF	65
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Part of Customer Queuing at Servery, adjacent to Double-Sided Service Bar
VIEWS	NA
MINIMUM CEILING HEIGHT	Open to existing structure
ACCESSIBILITY	Per code
SCALE	1” = 20’-0”

MATERIALS AND FINISHES

CEILING	Open to trusses above
WALLS / BASE	Washable
FLOORS	Colored concrete
WINDOWS	NA
DOORS	NA
DOOR FRAMES	NA

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	Counter, beverage equipment, large ceiling fans, stainless steel cabinets with decorative inset panels
MOVABLE	Soda/ice dispenser, double coffee machine, iced tea brewer, refrigerated & dry grab-and-go display case, self-serve espresso machine, under-counter single door refrigerator
OTHER	Beverage conduit to Soda Room

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Roof monitors at Dining
ELECTRICAL	120/208 V / 3 Phase
LIGHTING	Downlights, Ceiling mount linear fluorescents, 30-40 FC. Controlled via central time clock system with override switches.
MECHANICAL	HVAC; air curtains with door actuation switches at exterior doors
PLUMBING	Floor drain, Cold and hot water, Sanitary sewer for equipment as required.
SECURITY	NA
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	Wireless Access Point
MEDIA	Ceiling loudspeakers

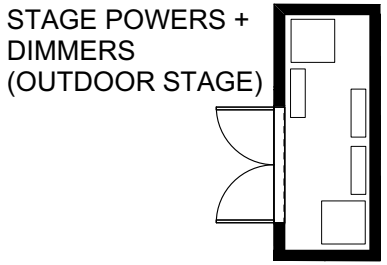
ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment; remote refrigeration (i.e. no display cases with built-in condensers)
BACKGROUND NOISE CRITERIA	NC-40

Room Data Sheets

BARN DINING: BACK OF HOUSE SUPPORT

STAGE POWER & DIMMERS FOR OUTDOOR STAGE



GENERAL INFORMATION

Serves Outdoor Stage at West Courtyard.

TOTAL SF	45
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Indoor Stage, Outdoor Stage, away from acoustically sensitive spaces
VIEWS	NA
MINIMUM CEILING HEIGHT	8’ - 0”
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”

MATERIALS AND FINISHES

CEILING	Open to structure
WALLS / BASE	Gypsum board; epoxy, stainless steel or ceramic tile coving -- to be determined during design
FLOORS	Sealed concrete
WINDOWS	NA
DOORS	Wood or hollow metal (protect from weather intrusion)
DOOR FRAMES	Hollow metal

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	Lighting and electrical equipment
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120/208 V / 3 Phase power breakers, Relays, Processor and Dimmers
LIGHTING	Surface mounted fluorescents with acrylic lens. 30-40 FC. Occupancy Sensor/Switch.
MECHANICAL	Exhaust air and ventilation or local packaged cooling unit, as determined during design
PLUMBING	NA
SECURITY	Card key access, Magnetic contacts at exterior doors
FIRE PROTECTION	Sprinkler (need to confirm advisability of sprinklers in this kind of electrical room in SD Phase)
VOICE/DATA	NA
MEDIA	Dimmers and racks for Outdoor Stage

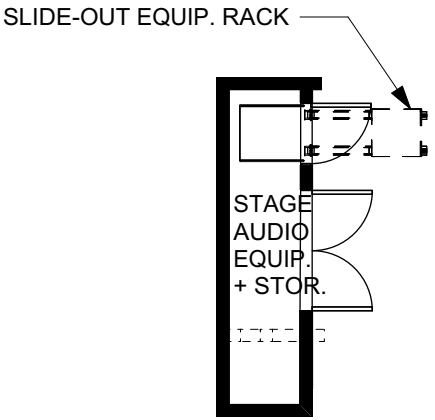
ACOUSTICS

ACOUSTICAL MEASURES	Vibration isolation (if required by adjacency)
BACKGROUND NOISE CRITERIA	NA
AUDIOVISUAL	NA

Room Data Sheets

BARN DINING: INDOOR SEATING + STAGE

STAGE AUDIO EQUIPMENT & STORAGE



GENERAL INFORMATION

For storage of equipment for Indoor Stage.

TOTAL ASF	40
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Stage, Green Room
VIEWS	NA
MINIMUM CEILING HEIGHT	8’ - 0”
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board, plywood impact protection to +4’ - 0” A.F.F., backing for storage racks
FLOORS	Hardwood or linoleum
WINDOWS	NA
DOORS	FSC certified solid-core wood door painted or sliding (pro-tect from weather intrusion)
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	NA
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120/208 V / 3 Phase
LIGHTING	Surface mounted downlights or direct fluorescent (depending on ceiling), 20-30 FC. Controlled via Switch/Occupancy Sensor
MECHANICAL	Exhaust air or local packaged cooling unit, as determined during design
PLUMBING	NA
SECURITY	Card key access, Magnetic contacts at exterior door, Camera
FIRE PROTECTION	Sprinkler (need to confirm advisability of sprinklers in this kind of electrical room in SD Phase)
VOICE/DATA	NA
MEDIA	Large installed audio system, Roll-down projection screen, Truss-mounted Speakers and Projector, Camera for video feed. One or two 22” wide x 28” deep equipment racks required for audio/production equipment. Electrical and audio rough-ins to support portable sound board assembly. Must be in an air-conditioned space (ductless OK).

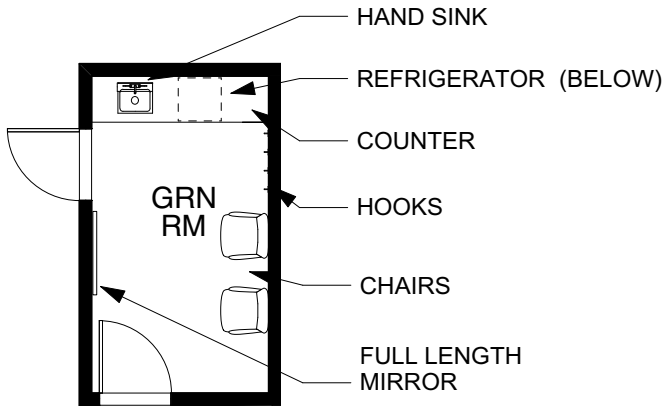
ACOUSTICS

ACOUSTICAL MEASURES	Study needed for possible equipment noise
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

BARN DINING: INDOOR SEATING + STAGE

GREEN ROOM



GENERAL INFORMATION

Space for performers before and after after a show.

TOTAL ASF	96
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Exterior, Indoor Stage, Indoor Dining
VIEWS	Secure
MINIMUM CEILING HEIGHT	8’ - 0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board
FLOORS	Carpet
WINDOWS	NA
DOORS	FSC certified solid-core wood door with lite, painted, with one-way viewing window into Indoor Dining
DOOR FRAMES	Hollow metal

FURNITURE + EQUIPMENT

BUILT-IN	Counter, hand sink
FIXED	Low refrigerator
MOVABLE	Mirror, chairs, hooks
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase all walls; above/below counter
LIGHTING	Direct/indirect pendants, specialty lighting – lights around mirror, 30-50 FC. Occupancy Sensor/Switch.
MECHANICAL	HVAC, Individual zone control/thermostat.
PLUMBING	Hot and cold water
SECURITY	Card key access, Magnetic contacts at exterior door, Camera at exterior door
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 phone / 4 data, at least one on each wall
MEDIA	Intercom station, Wall-mounted monitor for performance monitor use (feed from stage camera)

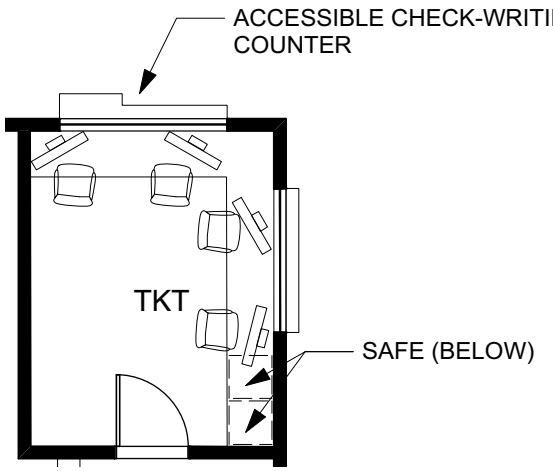
ACOUSTICS

ACOUSTICAL MEASURES	Carpet or sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

BARN DINING: INDOOR SEATING + STAGE

TICKET BOOTH



GENERAL INFORMATION

Area for ticket sales and distributing performance information.

TOTAL ASF	130
NUMBER OF OCCUPANTS	4
ADJACENCIES	Barn interior, West and East Courtyards
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Open to trusses above
WALLS / BASE	Painted sheetrock
FLOORS	Wood
WINDOWS	Wood painted
DOORS	FSC certified solid-core wood door painted
DOOR FRAMES	Wood painted

FURNITURE + EQUIPMENT

BUILT-IN	Sales desk with cable grommets, ticket windows (3)
FIXED	, POS (3), Ticketmaster terminals (3)
MOVABLE	File cabinets
OTHER	Floor safe (2) drop & box safes, camera over safes, window blinds

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Controlled Daylight
ELECTRICAL	120 V / 1 Phase, Quad receptacle at each POS. All POS and PC feeds to be dedicated circuits / isolated grounds.
LIGHTING	Direct/indirect pendants with downlight above counter, 35-50 FC. Occupancy Sensor/ Switch.
MECHANICAL	HVAC. Individual temperature control.
PLUMBING	NA
SECURITY	Window sash locks, Magnetic contacts at exterior windows, Security camera at each POS and at each safe.
FIRE PROTECTION	Sprinkler
VOICE/DATA	2 phone / 4 data, at least one on each wall

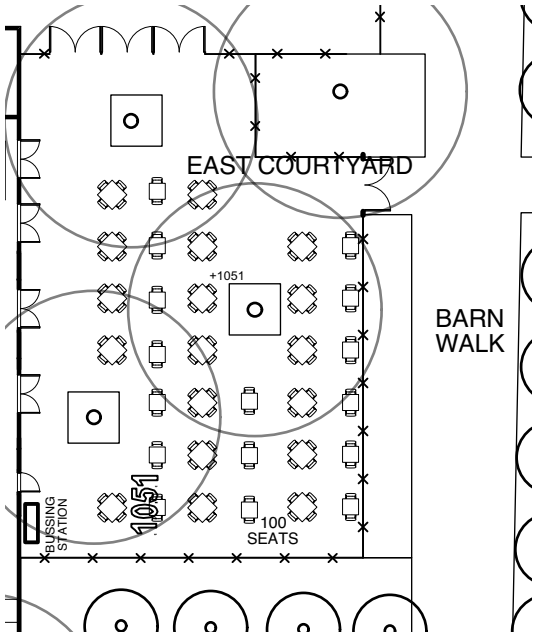
ACOUSTICS

ACOUSTICAL MEASURES	Carpet or sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

BARN DINING: PROGRAMMABLE OUTDOOR SPACE

EAST COURTYARD



GENERAL INFORMATION

Dining, circulation, and gathering space east of Barn Dining (100 seats). Cafe-style seating, Bussing Stations.

TOTAL SF	3,944 SF
NUMBER OF OCCUPANTS	100
ADJACENCIES	Barn Dining, Barn Walk
VIEWS	NA
MINIMUM CEILING HEIGHT	NA
ACCESSIBILITY	Per code
SCALE	1” = 30’-0”

MATERIALS AND FINISHES

CEILING	NA
WALLS / BASE	NA
FLOORS	NA
WINDOWS	NA
DOORS	NA
DOOR FRAMES	NA

FURNITURE + EQUIPMENT

BUILT-IN	Shade structures / trellis, fences and gates
FIXED	Station for trash, recycling and dish bussing for reusable plastic baskets and limited serv ing vehicles
MOVABLE	Tables and chairs, condiment counter for patio with built in condiment dispensing system, condiment rail, napkin dispensers, cut-out for trash containers below and lockable storage below
OTHER	Landscape planters

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	
ELECTRICAL	Outdoor electrical outlets for special events
LIGHTING	Outdoor lighting
MECHANICAL	Heaters
PLUMBING	NA
SECURITY	Key access at gates, Cameras at location TBD
FIRE PROTECTION	Sprinklers at covered areas
VOICE/DATA	Wireless Access Point
MEDIA	Outdoor loudspeakers

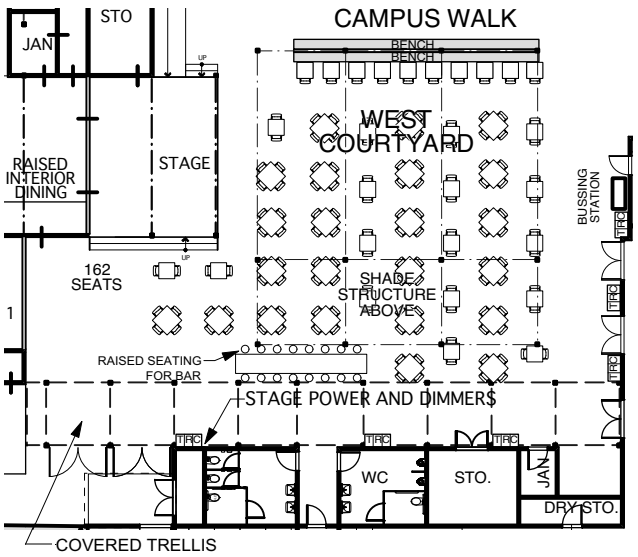
ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

BARN DINING: PROGRAMMABLE OUTDOOR SPACE

WEST COURTYARD



GENERAL INFORMATION

Dining and circulation space west of Barn Dining. Mix of standing, seating, and table seating, and Condiment Counter (see separate room data sheets), A/V and Stage Control Movable Platform (location to be studied during design). A covered connection from Barn Dining to the Bar is needed, as well as some covered seating near the Bar.

TOTAL SF	5,269 SF total (2,696 SF available Dining Seating) 162 people at 20sf/p at table seating for dining (max. lunch capacity) 350 people at 7sf/p standing (max. event capacity)
NUMBER OF OCCUPANTS	Maximum 350 people standing, plus 20 staff
ADJACENCIES	Outdoor Stage, Faculty/Staff Dining Facility, Barn
VIEWS	NA
MINIMUM CEILING HEIGHT	14’ - 0” clearance for shade structure, to be confirmed in SD Phase
ACCESSIBILITY	Per code
SCALE	1” = 30’ - 0”

MATERIALS AND FINISHES

CEILING	NA
WALLS / BASE	NA
FLOORS	NA
WINDOWS	NA
DOORS	NA
DOOR FRAMES	NA

FURNITURE + EQUIPMENT

BUILT-IN	14’ - 0” high clearance for shade structure, to be confirmed in SD Phase
FIXED	Trash, recycling, dish bussing station
MOVABLE	Portable control equipment, condiment counter
OTHER	Landscape planters, seat walls, ramps, steps

BUILDING SYSTEM REQUIREMENTS

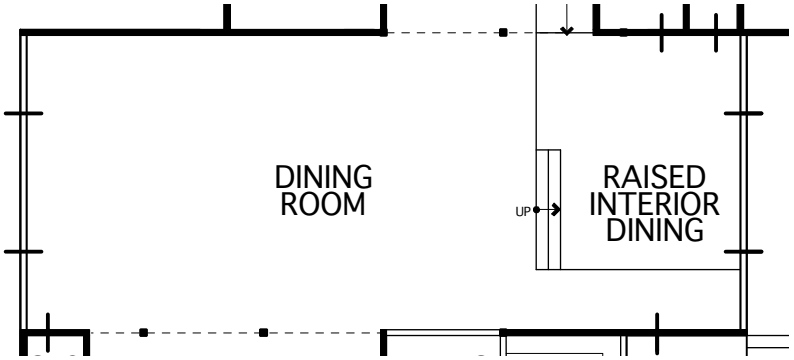
DAYLIGHTING	NA
ELECTRICAL	Outdoor electrical outlets for special events. Provide sufficient outlets (with weather covers) for occupants to plug in computers.
LIGHTING	Outdoor lighting
MECHANICAL	Heaters
PLUMBING	NA
SECURITY	Key access at gates, Cameras at locations tbd
FIRE PROTECTION	Sprinklers at covered areas
VOICE/DATA	Wireless Access Point
MEDIA	See Outdoor Stage room data sheet for additional requirements

ACOUSTICS--see Acoustical Systems Narrative

Room Data Sheets

FACULTY/STAFF DINING FACILITY

DINING ROOM



GENERAL INFORMATION

Main interior dining area with 50 seats that includes a mixture of dining and soft seating.

TOTAL ASF	1,300
NUMBER OF OCCUPANTS	60 (including Bar seating)
ADJACENCIES	Food staging & set-up, Bar, Lobby, Buffet
VIEWS	West Courtyard, view of minor importance
MINIMUM CEILING HEIGHT	10’ - 0”
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”

MATERIALS AND FINISHES

CEILING	Open to trusses above
WALLS / BASE	Wood slats over acoustical cloth
FLOORS	Concrete or wood -- to be determined during design
WINDOWS	Wood operable
DOORS	FSC certified solid-core wood doors and french doors painted
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	Movable chairs and tables, possibly one fixed bench
FIXED	Sunshade at clerestory windows on West wall, protection screens on lower windows
MOVABLE	Tables and chairs

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Clerestory windows, Exterior sun shading where applicable
ELECTRICAL	120 V / 1 Phase. Provide sufficient outlets for diners to plug in computers.
LIGHTING	Direct/indirect pendants. Downlights above any presentation wall. 40-50 FC. Occupancy Sensor/Switch. Lighting to be dimmable.
MECHANICAL	HVAC. Individual zone control/thermostat. Ventilation at 15 CFM / person; Room to be on own zone control; CO2 sensors for demand control ventilation; Air curtains with door actuation switches at doors to Back of House.
PLUMBING	NA
SECURITY	Card key access, Window sash locks, Magnetic contacts at exterior doors and windows
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	1 phone / 4 data, at least one on each wall, Wireless Access Point
MEDIA	Projection screen; Possible ceiling mounted projector, or portable would also work. Audio playback; Laptop presentation support. Provision for speakers to play music.

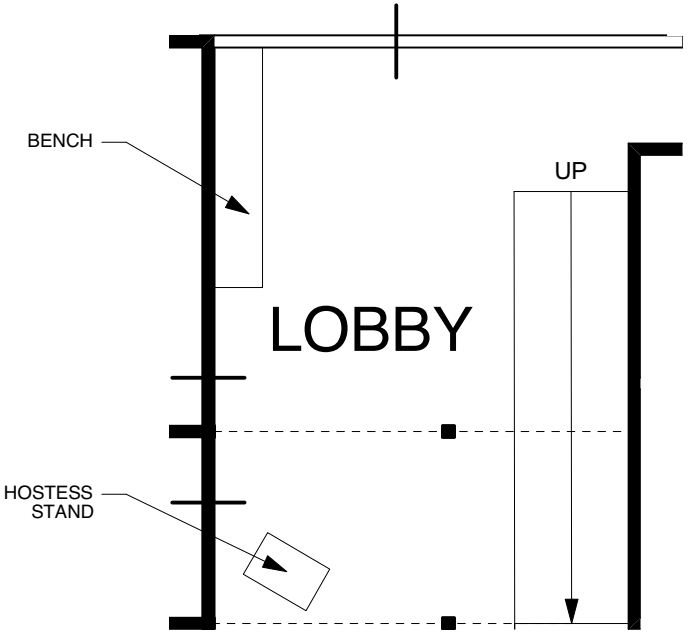
ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment, Acoustical wall treatment
BACKGROUND NOISE CRITERIA	NC-30

Room Data Sheets

FACULTY/STAFF DINING FACILITY

LOBBY



GENERAL INFORMATION

Entry with hostess stand and bench seating and transition area into dining and soft seating.

TOTAL ASF	100
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Main Entrance/Dining Room, Restrooms
VIEWS	to North
MINIMUM CEILING HEIGHT	8’ - 6”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Open to trusses above
WALLS / BASE	Wood slats over acoustical cloth
FLOORS	Wood or concrete
WINDOWS	Wood
DOORS	FSC certified solid-core custom wood door
DOOR FRAMES	Wood

FURNITURE + EQUIPMENT

BUILT-IN	Bench
FIXED	NA
MOVABLE	Hostess stand
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Windows, Exterior sun shading where applicable
ELECTRICAL	120 V / 1 Phase
LIGHTING	Downlights, Ceiling mount linear fluorescents, Architectural sconces, 20-30 FC. Controlled via a central time clock system and provided with an override switch.
MECHANICAL	HVAC. Individual zone control/thermostat
PLUMBING	NA
SECURITY	Card key access, Window sash locks, Magnetic contacts at exterior doors and windows, cameras at door
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	1 phone / 1 data, at least one on each wall, Wireless Access Point
MEDIA	Speakers, possibly some digital signage for menus, events, etc.

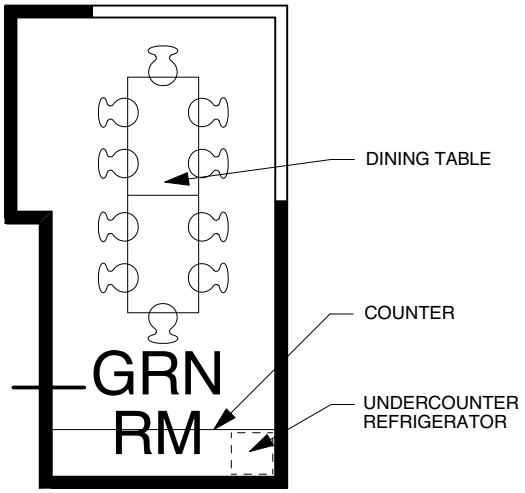
ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

FACULTY/STAFF DINING FACILITY: STAGE SUPPORT

PRIVATE DINING / GREEN ROOM



GENERAL INFORMATION

Space for performers before and after a show. It will also be used as a private dining room for 10-12 people.

TOTAL ASF	200
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Outdoor Stage, Restroom
VIEWS	Secure
MINIMUM CEILING HEIGHT	8’ - 0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board with wood base
FLOORS	Wood
WINDOWS	NA
DOORS	FSC certified solid-core wood door with lite, painted
DOOR FRAMES	Wood

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase all walls; above/below counter
LIGHTING	Direct/indirect pendants, specialty lighting – lights around mirror, 30-50 FC. Occupancy Sensor/Switch. Lighting to be dimmable.
MECHANICAL	HVAC, Individual zone control/thermostat.
PLUMBING	NA
SECURITY	Card key access, Magnetic contacts at exterior door, Camera at exterior door
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 phone / 4 data, at least one on each wall
MEDIA	Intercom station, Wall-mounted monitor for performance monitor use (feed from stage camera)

FURNITURE + EQUIPMENT

BUILT-IN	Counter
FIXED	Under-counter refrigerator
MOVABLE	Dining table, chairs
OTHER	NA

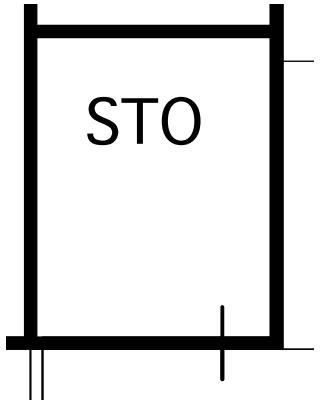
ACOUSTICS

ACOUSTICAL MEASURES	Carpet or sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

FACULTY/STAFF DINING FACILITY: STAGE SUPPORT

OUTDOOR PERFORMANCE EQUIPMENT STORAGE



GENERAL INFORMATION

For storage of equipment for the Outdoor Stage.

TOTAL ASF	120
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Outdoor Stage
VIEWS	NA
MINIMUM CEILING HEIGHT	8’ - 0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board or open to structure
WALLS / BASE	Gypsum board, plywood impact protection to +4’ - 0” A.F.F., backing for storage racks
FLOORS	Sealed concrete or linoleum
WINDOWS	NA
DOORS	FSC certified solid-core wood door painted or sliding
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	NA
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase
LIGHTING	Surface mounted downlights or direct fluorescent (depending on ceiling), 20-30 FC. Controlled via Switch/Occupancy Sensor.
MECHANICAL	HVAC
PLUMBING	NA
SECURITY	Card key access, Magnetic contacts at exterior door, Camera
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 phone / 2 data, at least one near entry door
MEDIA	Intercom station

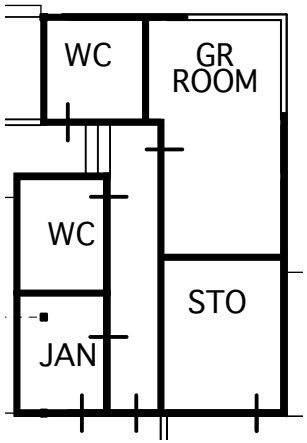
ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

FACULTY/STAFF DINING FACILITY: NON-ASSIGNABLE SPACES

PUBLIC RESTROOMS (2)



GENERAL INFORMATION

Unisex restrooms. See separate Room Data Sheet for Janitor's Closet (Non-ASF).

TOTAL NON-ASF	128 SF Public Restrooms
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Lobby, Private Dining / Green Room, Dining Room
VIEWS	NA
MINIMUM CEILING HEIGHT	8' - 0"
ACCESSIBILITY	Per code
SCALE	1/16" = 1'-0"

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Tile
FLOORS	Tile or colored concrete
WINDOWS	NA
DOORS	FSC certified solid-core wood doors painted
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	Restroom fixtures and accessories: 1 WC, 1 lav each
FIXED	NA
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase
LIGHTING	Surface mounted fluorescents above mirrors, Downlights in the aisle ways with acrylic lens. 30-40 FC. Occupancy Sensor/Switch.
MECHANICAL	HVAC, exhaust air
PLUMBING	Floor drain, Cold and hot water, Sanitary sewer for equipment as required.
SECURITY	Lockable from interior
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe in shared area
VOICE/DATA	NA
MEDIA	NA

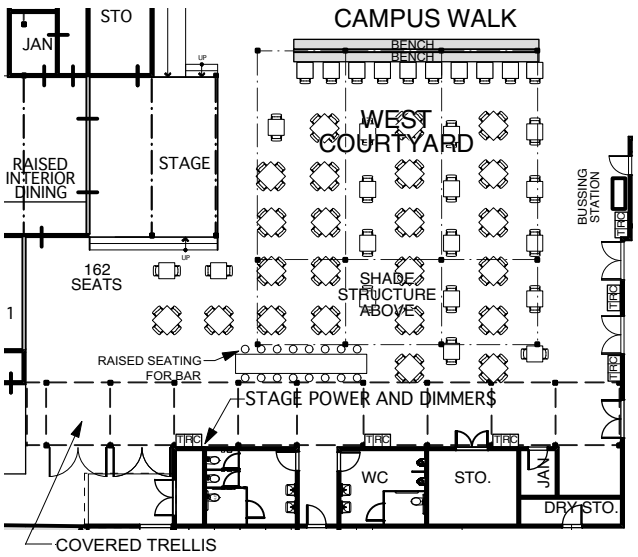
ACOUSTIC

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NC-45

Room Data Sheets

FACULTY/STAFF DINING FACILITY: PROGRAMMABLE OUTDOOR SPACE

OUTDOOR STAGE & STAGE CONTROL - LIGHTING (LT) & SOUND (SD)



GENERAL INFORMATION

Outdoor Stage for performances.

TOTAL SF	432
NUMBER OF OCCUPANTS	Per code
ADJACENCIES	West Courtyard, Equipment Storage, Green Room
VIEWS	West Courtyard
MINIMUM CEILING HEIGHT	10’ - 0” at rear to 14’ - 0” at front of stage
ACCESSIBILITY	Per code
SCALE	1” = 30’ - 0”

MATERIALS AND FINISHES

CEILING	Fixed covered shade and rain structure with built-in over-head heaters
WALLS / BASE	Architectural backdrop
FLOORS	Sealed concrete
WINDOWS	NA
DOORS	NA
DOOR FRAMES	NA

FURNITURE + EQUIPMENT

BUILT-IN	Stage lighting and sound
FIXED	Foldable/rollable drum risers
MOVABLE	Stage lighting and sound, rental wood floor used for dance
OTHER	Equipment attachment points within ceiling canopy

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	Outdoor electrical outlets for special events (see Production Systems Narrative)
LIGHTING	Truss-mounted moveable theatrical lighting (see Production Systems Narrative)
MECHANICAL	Some wired signal paths and pathways for temporary cabling from stage to mix position.
PLUMBING	NA
SECURITY	See West Courtyard room data sheet
FIRE PROTECTION	Sprinkler at covered areas
VOICE/DATA	1 phone / 4 data at LT & SD Booth, Wireless Access Point
MEDIA	Large installed audio system, Roll-down projection screen, Truss-mounted Speakers and Projector, Camera for video feed. One or two 22” wide x 28” deep equipment racks required for audio/production equipment. Remote underground electrical and audio roughins with waterproof termination in hardscape to support portable sound board assembly. Must be in an air-conditioned space (ductless OK).

ACOUSTICS

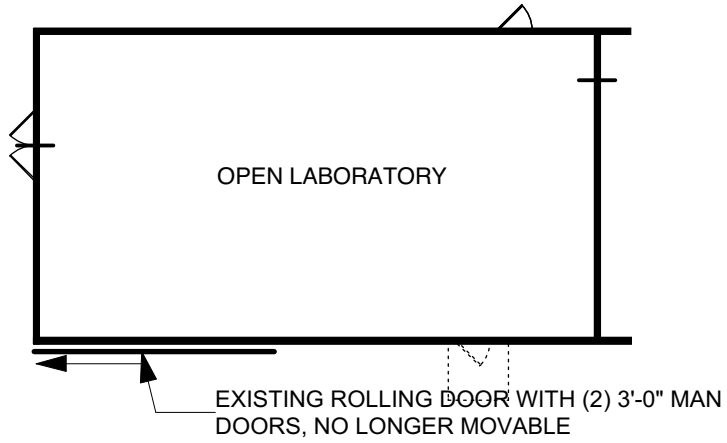
ACOUSTICAL MEASURES	Sound absorbing wall and canopy treatment, some level of sound insulating construction to Faculty/Staff Dining Room
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

BARN THEATER
OPEN LABORATORY

GENERAL INFORMATION
Multi-use practice space.

TOTAL ASF	1,250
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Storage
VIEWS	NA
MINIMUM CEILING HEIGHT	Existing
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”



MATERIALS AND FINISHES

CEILING	Fabric-covered batt insulation between ceiling framing members in roof plane
WALLS / BASE	Gypsum board or plywood over batt insulation
FLOORS	Sealed wood
WINDOWS	NA, poss. skylights
DOORS	Wood
DOOR FRAMES	Hollow metal

BUILDING SYSTEM REQUIREMENTS

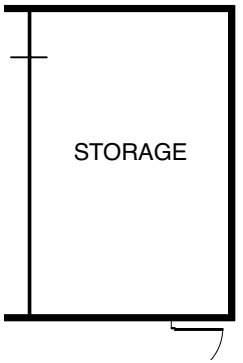
DAYLIGHTING	NA
ELECTRICAL	120V/1 Phase
LIGHTING	Strip fluorescent or LED - up and down lights
MECHANICAL	HVAC - needs heating and cooling
PLUMBING	Drinking fountain
SECURITY	Card key access
FIRE PROTECTION	Sprinklers
VOICE/DATA	1 phone / 2 data, Wireless Access Point
MEDIA	NA

ACOUSTICS

ACOUSTICAL MEASURES	Use batt insulation in ceiling for sound absorption
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

BARN THEATER
STORAGE



GENERAL INFORMATION

Storage for support materials for theater and dance.

TOTAL ASF	290
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Open Laboratory
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board, painted
WALLS / BASE	Gypsum board, painted
FLOORS	Sealed concrete
WINDOWS	NA
DOORS	Solid-core wood door, painted
DOOR FRAMES	Hollow metal, painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	NA
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120V / 1 Phase
LIGHTING	Utilitarian surface-mounted linear fluorescents, 20-30 FC w/ acrylic lens. Controlled w/ occupancy sensor
MECHANICAL	HVAC; 0.15 CFM/sf ventilation
PLUMBING	HA
SECURITY	Key access
FIRE PROTECTION	Sprinkler
VOICE/DATA	NA
MEDIA	NA

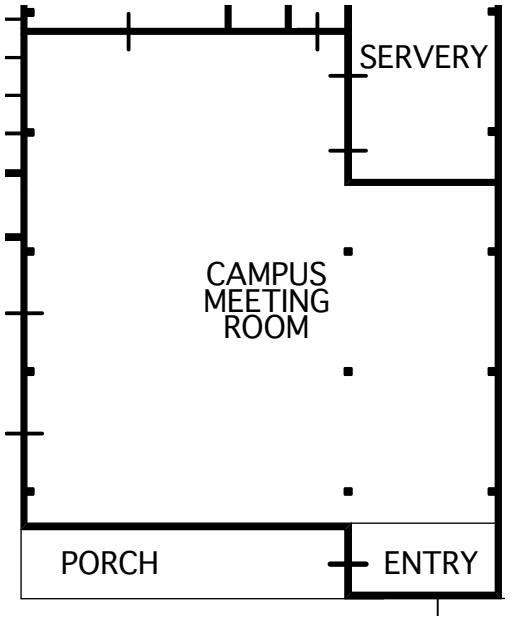
ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

CAMPUS MEETING ROOM

MEETING ROOM



GENERAL INFORMATION

75 seats; flexible multipurpose room for dining, parties, meetings, and lectures.

TOTAL ASF	1,500
NUMBER OF OCCUPANTS	Seating for 75 @ 20 SF / person
ADJACENCIES	Entry, Servery / Buffet
VIEWS	Orange Grove
MINIMUM CEILING HEIGHT	10’-0”
ACCESSIBILITY	Per code
SCALE	1/16” = 1’-0”

MATERIALS AND FINISHES

CEILING	Exposed wood structure w/ wood slats over acoustical cloth
WALLS / BASE	Gyp. Board, painted
FLOORS	Carpet
WINDOWS	Wood or aluminum; operable
DOORS	Solid wood door painted with vision glazing
DOOR FRAMES	Hollow metal, painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	Sunshade, projection screen in ceiling
MOVABLE	Tables and chairs
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

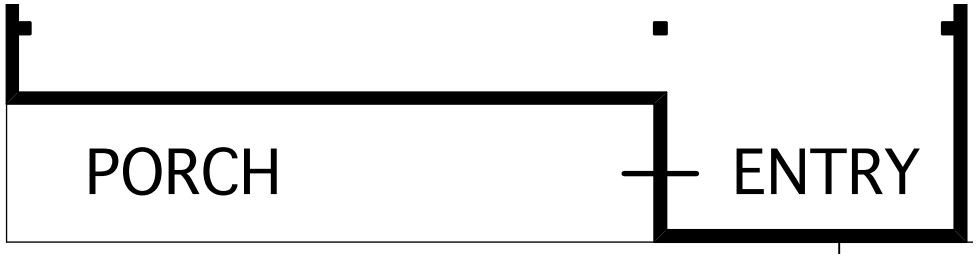
DAYLIGHTING	Windows, exterior sun shading where applicable
ELECTRICAL	120 V / 1 Phase
LIGHTING	Direct/indirect pendants. Downlights above any presentation wall. 40-50 FC. Occupancy Sensor/Switch. Lighting to be dimmable.
MECHANICAL	HVAC. Individual zone control/thermostat. Ventilation at 15 CFM / person; Room to be on own zone control; CO2 sensors for demand control ventilation; Air curtains with door actuation switches at exterior doors
PLUMBING	NA
SECURITY	Card key access, Window sash locks, Magnetic contacts at exterior doors and windows
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	1 phone / 4 data, at least one on each wall, Wireless Access Point
MEDIA	Ceiling loudspeakers; roll-down projection screen; Ceiling-mounted video projector

ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment, acoustcial wall treatment
BACKGROUND NOISE CRITERIA	NC-25

Room Data Sheets

CAMPUS MEETING ROOM
ENTRY



GENERAL INFORMATION

TOTAL ASF	100
NUMBER OF OCCUPANTS	
ADJACENCIES	Meeting
VIEWS	Campus Walk, Barn Walk
MINIMUM CEILING HEIGHT	10’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Exposed wood structure w/ wood slats over acoustical cloth
WALLS / BASE	Gypsum board
FLOORS	Integral colored concrete
WINDOWS	Wood
DOORS	Wood door with vision glazing at exterior, wood at interior
DOOR FRAMES	Hollow metal, ptd., solid wood painted at interior

FURNITURE + EQUIPMENT

BUILT-IN	
FIXED	NA
MOVABLE	Soft chairs
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

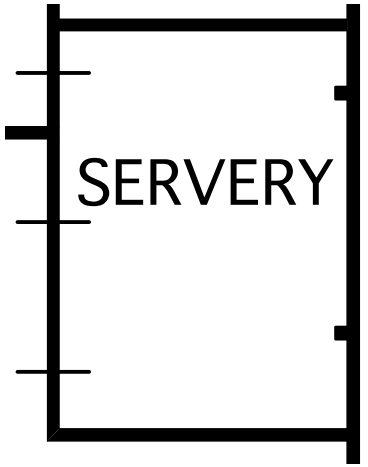
DAYLIGHTING	Windows, Exterior sun shading where applicable
ELECTRICAL	120 V / 1 Phase
LIGHTING	Downlights, Ceiling mount linear fluorescents, Architectural sconces, 20-30 FC. Controlled via a central time clock system and provided with an override switch.
MECHANICAL	HVAC. Individual zone control/thermostat
PLUMBING	NA
SECURITY	Card key access, Window sash locks, Magnetic contacts at exterior doors and windows, Cameras at doors
FIRE PROTECTION	Sprinkler, 120 V hard wired smoke detector, Fire alarm mini-horn and strobe
VOICE/DATA	
MEDIA	Speakers

ACOUSTICS

ACOUSTICAL MEASURES	Sound absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-35

Room Data Sheets

CAMPUS MEETING ROOM
SERVERY / BUFFET



GENERAL INFORMATION

For storage of miscellaneous kitchen items and equipment.

TOTAL ASF	200
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Meeting, Service Access. Should be able to close-off from meeting
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board
FLOORS	Tile or epoxy
WINDOWS	NA
DOORS	Wood painted
DOOR FRAMES	Hollow metal painted

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase (4) Duplex receptacles on both sides of the room (on separate circuits to prevent overloading)
LIGHTING	Down lights, Ceiling-mounted fluorescents, Architectural sconces, 40-50 FC, occupancy sensor/switch. Shatterproof lens protection required by code.
MECHANICAL	HVAC. Individual zone control/thermostat. Ventilation at 15 CFM/person; Room to be own zone control; CO2 sensors for demand control ventilation.
PLUMBING	Sink
SECURITY	Card key access
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 phone/4 data, at least one on each wall, Wireless Access Point

FURNITURE + EQUIPMENT

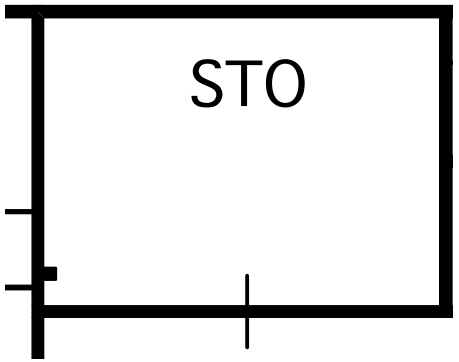
BUILT-IN	Buffet counter, under- or over-counter cabinets needed for local storage over serving counter
FIXED	NA
MOVABLE	Themed trash containers
OTHER	NA

ACOUSTICS

ACOUSTICAL MEASURES	Sound-absorbing ceiling treatment
BACKGROUND NOISE CRITERIA	NC-40

Room Data Sheets

CAMPUS MEETING ROOM
STORAGE FOR TABLES AND CHAIRS



GENERAL INFORMATION

For storage of tables and chairs.

TOTAL ASF	200
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Meeting
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board; walls should have at least 48” high FRP wainscot to protect drywall from damage.
FLOORS	Tile or epoxy
WINDOWS	NA
DOORS	FSC certified solid-core wood door painted
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	NA
FIXED	NA
MOVABLE	Carts for chair storage
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase
LIGHTING	Utilitarian surface mounted linear fluorescents, 20-30 FC with acrylic lens. Controlled with Occupancy Sensor/Switch.
MECHANICAL	HVAC; 0.15 CFM/sf ventilation
PLUMBING	NA
SECURITY	Key access
FIRE PROTECTION	Sprinkler
VOICE/DATA	NA
MEDIA	NA

ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NC-55

Room Data Sheets

CAMPUS MEETING ROOM: NON-ASSIGNABLE SPACES

MECHANICAL / ELECTRICAL

GENERAL INFORMATION

TOTAL NON-ASF	100
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Exterior or Service Entry
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board
FLOORS	Sealed concrete
WINDOWS	NA
DOORS	Hollow metal painted door
DOOR FRAMES	Hollow metal painted

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase, Wireless Access Point
LIGHTING	Utilitarian surface mounted linear fluorescents, 20-30 FC with acrylic lens. Controlled with Occupancy Sensor/Switch
MECHANICAL	HVAC; 0.15 CFM/sf ventilation
PLUMBING	TBD
SECURITY	Key access, Magnetic contacts at exterior door
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 data
MEDIA	NA

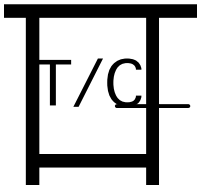
ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

CAMPUS MEETING ROOM: NON-ASSIGNABLE SPACES

TELECOM CLOSET



GENERAL INFORMATION

TOTAL NON-ASF	50
NUMBER OF OCCUPANTS	NA
ADJACENCIES	Exterior or Service Entry
VIEWS	NA
MINIMUM CEILING HEIGHT	8’-0”
ACCESSIBILITY	Per code
SCALE	1/8” = 1’-0”

MATERIALS AND FINISHES

CEILING	Gypsum board
WALLS / BASE	Gypsum board
FLOORS	Sealed concrete
WINDOWS	NA
DOORS	Hollow metal painted door
DOOR FRAMES	Hollow metal painted

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	NA
ELECTRICAL	120 V / 1 Phase
LIGHTING	Utilitarian surface mounted linear fluorescents, 20-30 FC with acrylic lens. Controlled with Occupancy Sensor/Switch
MECHANICAL	HVAC; 0.15 CFM/sf ventilation
PLUMBING	NA
SECURITY	Key access, Magnetic contacts at exterior door
FIRE PROTECTION	Sprinkler
VOICE/DATA	1 phone / 1 data
MEDIA	NA

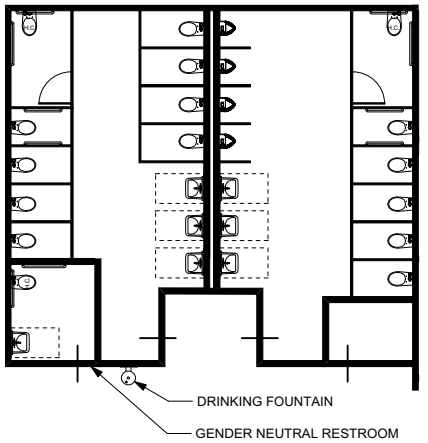
ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NA

Room Data Sheets

EAST COURTYARD RESTROOMS: NON ASSIGNABLE SPACES

PUBLIC RESTROOMS (2)



GENERAL INFORMATION

Restroom for public as well as Barn Dining employees. See seperate sheet for Janitor's Closet (Non-ASF).

TOTAL NON-ASF	902 SF
NUMBER OF OCCUPANTS	NA
ADJACENCIES	East Courtyard, Barn Walk
VIEWS	NA
MINIMUM CEILING HEIGHT	8'-0"
ACCESSIBILITY	Per code
SCALE	1/16" = 1'-0"

MATERIALS AND FINISHES

CEILING	Metal decking
WALLS / BASE	Tile
FLOORS	Colored concrete
WINDOWS	Aluminum skylights
DOORS	Hollow metal painted door
DOOR FRAMES	Hollow metal painted

FURNITURE + EQUIPMENT

BUILT-IN	Restroom fixtures and accessories.
FIXED	NA
MOVABLE	NA
OTHER	NA

BUILDING SYSTEM REQUIREMENTS

DAYLIGHTING	Skylights or Roof monitors, Exterior sun shading where applicable
ELECTRICAL	120 V / 1 Phase
LIGHTING	Surface mounted fluorescents above mirrors, Downlights in the aisle ways with acrylic lens. 30-40 FC. Occupancy Sensor Switch
MECHANICAL	Exhaust air and ventilation, Heating, Fan
PLUMBING	Floor drain, Cold and hot water, Sanitary sewer for equipment as required.
SECURITY	Key access, Magnetic contacts at exterior doors
FIRE PROTECTION	Sprinkler
VOICE/DATA	NA
MEDIA	NA

ACOUSTICS

ACOUSTICAL MEASURES	NA
BACKGROUND NOISE CRITERIA	NC-45

V. SUPPORT DOCUMENTS

The architectural narrative has been modified to reflect the removal of the Barn Stable and the Cottage and the addition of the Campus Meeting Room and Barn Theater Renovation. While much of the attitude toward renovated and new structures still holds, the narrative has been amended to reflect modifications that address these new circumstances.

The consultants have documented their input and amendments that have developed during the workshop and conference calls with UCR. They include:

- The civil engineer has provided truck turning studies for the Loading Dock Area that appear in Functional Concepts.
- The structural engineer has provided a memo addressing the needed and optional upgrades to the Barn Theater. His scope did not include a review of the other buildings.
- The food service consultant has updated the food service narrative from 2012.
- The theater consultant has updated the theater narrative from 2012.
- The code consultant has provided a new memo updating the project to current codes, including a new fixture count assessment and exit diagram.
- The cost consultant has provided two memos that summarize the budget impact of the program and site plan amendments, plus the impact of escalation. A new estimate was not part of the scope.

System Narratives

ARCHITECTURAL

OVERVIEW

The Barn Project offers the opportunity to demonstrate that these well-used (and well-loved) existing structures have utility beyond being part of the historical record. Part found object, part new intervention, the Barn Project can be a model for sustainable adaptive reuse. This project should explore an unromantic attitude toward these structures, one that retains their integrity while addressing contemporary needs and sensibilities. To that end, the development should express what is new as new, and allow the spirit of the old to remain in the existing structures.

This project is conceived of as a compound of two existing historic barns (one to be renovated and added to, and the other left in its original form), and a new Faculty/Staff Dining Facility and Campus Meeting Room. These buildings are to be interconnected through two significant outdoor rooms and the expansion of and views into the Orange Grove in the northeast corner of the site. In order to be perceived as a compound of related structures and activities, it is very important that the material choices, massing strategies and connecting tertiary structures be thought of as a whole. To organize the various structures on the site, a coordinated hierarchy of building elements is proposed.

PRIMARY ELEMENTS

The two barns (called “The Barn”, and “Barn Theater”) were part of the original Citrus Research Station that has become UCR. The Barn has a long history as an important performance venue on the campus. The overall character of this project is driven by a desire to revive and repurpose these buildings as the central elements in this new dining and entertainment compound.

The goal is to update these existing structures in the spirit of their original design. The vernacular and material strategies employed in the existing structures will be the basis for material decisions. It is desirable to maintain the essential character of each structure as it is repurposed. The buildings are to be treated as working farm structures that are being given a new life. Although an exception to the strategies for the expression of new and old above, the addition to the Barn (whether to the north or south) should be seamless and appear as part of the original structure, in order to maintain the calm presence of this central structure.

The existing two barns are wood frame structures on concrete slabs, with painted wood siding (predominantly board and batten and some horizontal wood siding). They are rectangular gable-roofed structures that vary in width and height, with overhangs on four sides. They have wood windows and doors and asphalt shingle roofs.

In the renovation of these structures the exterior siding will be repaired and re-used as much as possible. New double-glazed wood windows, with true divided lights, will replace existing windows. New wood doors in various configurations will replace existing. Additional openings will be added to provide daylight to the spaces that are frequently occupied. The roofs will be replaced with either new asphalt shingles or corrugated metal roofing. Cool roof materials will be utilized to minimize the site’s heat-island effect.

SECONDARY ELEMENTS

The Kitchen Addition, although nearly as big as the Barn, should be secondary and recessive in relation to the Barn. The Kitchen Addition should be compatible with the Barn, but distinctly an addition. Other minor additions should be developed as a “family” of additive elements, which relate to each other within the compound. To contrast with the barns, metal or wood siding is recommended. Doors and windows should be metal (or wood if affordable). In order to address the varying eave heights of the existing structures, flat or gable roofs will be considered, as will the maintenance accessibility requirements and site line considerations surrounding the rooftop equipment.

TERTIARY ELEMENTS

There are a variety of elements that are essential to knit the project into the site, to meet the functional requirements of the hybrid program, and to address the uniqueness of the existing buildings while still conveying an overall sense of place. The most significant of these is the shade structure in the West Courtyard. Also included are trellises, fences, gates, restrooms, a canopy over the kitchen service / loading dock area, and the connecting elements between the existing Barn and the Kitchen Addition. These should be developed as a family of elements with agrarian character. The shade structures should

System Narratives

ARCHITECTURAL (CONTINUED)

be a mixture of steel and wood, as should the fences and gates. The restroom building can be developed in several ways: as an extension of the Barn Theater Renovation, following its form and width, or as a recessive structure attached to the Campus Meeting Room. Its character could be agrarian utilitarian.

THE NEW BUILDINGS - FACULTY/STAFF DINING FACILITY AND CAMPUS MEETING ROOM

There are two new buildings in the project, the Faculty / Staff Dining Facility and the Campus Meeting Room. While their roles on the site and budgets differ considerably, as new buildings with opportunities for structural efficiencies, their form and structural approach can be similar.

The Faculty / Staff Dining Facility has an important role, as the Stage (part of this building) is the primary focus of the West Courtyard and the key to the identity of the Barn Compound as an entertainment and performance venue. The building can be organized in three roughly equal programmatic segments. On the north is the entry (off the Campus Walk and facing CHASS), with the Lobby, restrooms, the Private Dining / Green Room, and building and Stage support. In the middle is the Dining Room and the Stage, with new opportunities for openness between them and for the Stage also to be used for covered outdoor dining. To the south are the support spaces for the Dining Room and Bar. This suggests the possibility of a very straightforward and repetitive framing system of steel columns and trusses that could provide cost efficiency and flexibility within the agrarian vernacular. Three parallel gables running east-west, with significant overhangs for the north entry, the Stage roof, and outdoor bar service queuing would provide clear identity to those important program elements, as well as ample shade, rain protection, and optimal solar orientation for future PV's. These simple gable sheds would be developed in a modern and sympathetic barn aesthetic, with wood or metal siding and metal roofs.

The Campus Meeting Room has a prominent location at the gateway to the compound from the east. A similar approach to structure can be employed: with steel columns and trusses forming a north–south gable over the central portion of the Meeting Room with a lower shed to the east, lowering the scale of the building toward the Barn Walk. As it faces the Barn Walk and the entry to the Barn compound, exterior materials and fenestration will be critical. This building has a lower budget and can to some extent be a background building. A very cost effective approach will be needed on the interior.

FLEXIBILITY / ADDRESSING CHANGE

The programmed spaces allow for flexibility by creating wide open space, not encumbered by structural supports, so that many of the spaces could be adapted (if need be) over time. Whether tailored for the specific needs of performance or dining, the buildings should be designed to respond to a variety of formal and informal activities that change over time.

SUSTAINABILITY

An integrated design approach will be needed to achieve sustainable design. Concentration on "first principles"--orientation, shading, natural ventilation, and other passive strategies--will go a long way toward achieving sustainable design in this climate. Among the most important concepts are durability and consideration of the life cycle impact of these buildings. All materials need to be long-lasting and low maintenance. Materials that can be reused, contain recycled content and are produced regionally will be given priority over exotic and virgin materials. In addition to selecting materials which have decreased environmental impacts, low emitting materials will be selected to promote optimal indoor air quality.

In addition to "first principles" of sustainable design, an emphasis will be place on creating a well-insulated and air sealed facility. By controlling thermal conductivity through insulation and minimizing air infiltration through air sealing, the facility's net heating and cooling loads will be decreased providing a quick return on investment. Spray foam insulation should be considered for its additional benefit of air sealing.

Additional steps will be taken to promote high performance sustainable construction by installing ENERGY STAR products, low-flow fixtures, LED or high-efficient florescent lighting and mechanical systems. Solar PV and hot water systems will be considered due to Riverside's high solar potential."

The goal is to create comfortable, energy-, water-, and resource-efficient facility with measurable

System Narratives

ARCHITECTURAL (CONTINUED)

sustainable performance meeting the University's mission on sustainability. As mandated by the UC Office of the President, all UC LEED eligible construction must have a minimum LEED certification level of Silver. In addition to meeting Silver, it is University policy to outperform CBC energy-efficiency standards by at least 20%. In an effort to outperform current standards, LEED Gold is targeted for project certification. LEED certification at the level of Gold is deemed achievable with little cost impact. Designing the buildings and landscape to reveal their sustainable systems and to educate their users about " " principles should be a fundamental aspect of the design. Education strategies can include a combination of signage for sustainable features, a central building dashboard, website and tours. Building dashboards provide users with an opportunity to learn about the buildings sustainability features, energy performance, and could present other information such as event calendars, menu, and Barn history.

BUILDING AND LANDSCAPE

The Riverside campus has a number of very successful outdoor spaces. These are a key part of the campus character and identity. This project is committed to contributing to and extending the outdoor spaces on the campus. The potential for integration of indoor and outdoor spaces is deeply imbedded in the building program. In the development of the design, the building and landscape should be seen as inseparable partners, so that in the end the project has as much to say about successful outdoor spaces as it does about successful interiors. These outdoor spaces will be able to support a variety of activities. An effort has been made to program the outdoor spaces with as much specificity and flexibility as the interior spaces. These spaces can work with the buildings to establish the character of the Barn Expansion Project and engage the natural cycles of the site with the theater of everyday life.

System Narratives

STRUCTURAL

Mar
Structural Design

Structural Narrative for the Barn Theater

Building description

The Barn Theater is a single-story wood structure reported to have been built in the early 1900's and moved to its current location at a later date. The foundation looks to be fairly modern with no visible signs of distress of settlement. The building is rectangular in plan with a main volume divided into two areas—a dance studio and support spaces. The dance studio has a central ridge in the longitudinal direction and gable ends in the transverse. The roof shape is formed by timber trusses in the transverse direction. The trusses support a ridge beam. Timber rafters with exposed tails span between the ridge beam and the longitudinal walls. The trusses are supported on posts and they have diagonal knee braces in the plane of the exterior walls, connected to the bottom chords of the trusses. The framing is exposed in the dance studio, but the roof sheathing cannot be determined from the available photos. It is conservatively assumed to be straight sheathing. Between the posts, the walls are assumed to be framed with wood studs. However, they cannot be seen because of finishes. The support spaces have a flat platform, framed with exposed wood joists. We suspect that this level was an addition, to increase the available storage. The exterior siding is wood board and batten. There is a segment of longitudinal wall that appears to have been modified from a now fixed sliding door. This section of wall has galvanized flashing at its base, suggesting that the footing is modern. The interior photos suggest that the corresponding openings were filled in with stud framing. The floor is a concrete slab-on-grade. The slab is near grade at the eastern end, and the site slightly drops at the western end. An exterior concrete ramp connects the inside to grade and it looks to be relatively modern.

Gravity System

The gravity load-carrying system described above (trusses, rafters, posts, infill walls, and foundation) does not show any signs of destress, excessive deformation or foundation induced settlement, based on what we can determine from the photos. Given the building's age and condition, it looks to have functioned adequately. However, it most likely would not satisfy new design standards for member strengths or connection capacities. The reason for this is that the framing itself and the existing roof is light in weight, and it is lightly loaded, since there is little added weight (from MEP, lights, etc.) in its current use. We recommend that the framing be inspected more closely, as part of a renovation process, to confirm that there are no signs of distress or damage from water or pests. This would include inspecting the roof for old roof material left in place under the existing roof. We recommend that the future use should avoid imposing any significant new loads, such as from a heavier roof, new equipment, sets, lights, etc. However, the existing structure is most likely capable of supporting new roof insulation and new plywood sheathing.

Lateral System

The existing lateral system consists of the exterior walls connected by the roof diaphragm, and fastened to the foundation. Because of the archaic materials and construction practices, the system most likely

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System Narratives

STRUCTURAL (CONTINUED)

does not meet current code standards. Unlike the gravity system, the lateral system has not been tested by a significant loads, which would result from a local earthquake. Fortunately, small and light wood structures have historically performed well in earthquakes, with respect to protecting life-safety. However, we recommend a modest seismic retrofit as part of any renovation, in order greatly reduce the risk of seismic damage to the building. This retrofit would consist of removing existing interior architectural finishes, and adding new plywood sheathing to the walls. We recommend working from the inside, to avoid the cost of disrupting the exterior siding. In this step, the existing post, sill and stud framing could be inspected for damage, and repaired as needed. Because we have heard from UCR that the building was moved, we expect that the building is bolted to the foundation. This should be confirmed, and added if needed. Small seismic holdowns should be added at wall ends. Insulation can be added at this time, and new finishes can cover the sheathing. The roof and existing sheathing should be tied to the walls with new seismic hardware (sheet metal clips and blocks). If barn doors exist, they could be made functional again, and the new sheathing could be limited to permanent wall segments. We also recommend adding new plywood sheathing to the roof if it does not exist. Because the retrofit is not essential for life-safety, this step could wait until a new roof is needed.

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System Narratives

FOODSERVICE + BEVERAGE

FACULTY / STAFF DINING FACILITY

The Faculty / Staff Dining Facility and beverage program is to serve a limited buffet lunch with beverage and bar service. The food program will be supported by the new Barn Dining Kitchen where all food whether cold or hot will be prepared and transported in enclosed refrigerated, hot or ambient carts to the food set up room in the Faculty / Staff Dining Facility. It will be placed in serving ware and placed on the buffet counter in the Dining Room. There will be furniture / fixture(s) in the Dining Room for table top components easily accessible to dining staff.

The Faculty / Staff Dining Facility will have its own china and glassware which will be washed and stored within the facility. Storage rooms and server station are provided for buffet service ware and other food and beverage service requirements.

The Bar will be operated by a third party and will have service to the West Courtyard through an open front counter with a closure to secure it during non-operating hours. The Bar will also have service to the Dining Room and the two areas will be separated by a double action café style door designed to be air tight to maintain conditioned space inside the dining room. The Courtyard counter will serve draft beer, wine and sodas and the club side will serve draft and bottled beer, wine, soda, hard liquor and espresso based beverages. The Bar will have dedicated office, dry and refrigerated storage support.

THE BARN

The Dining Master Planning Study (DMPS) determined potential foodservice demand of 320 meals per hour as opposed to the current 120 meals per hour, an increase of 2.5 times.

The Barn foodservice demands require the Barn Kitchen to provide meals for the Barn and support for the Faculty / Staff Dining Facility and the Campus Meeting Room food and beverage requirements. Day part service includes lunch, happy hour, dinner, and potentially breakfast. Dining areas include interior seating with a small Indoor Stage at Barn Dining, outdoor eating at the West Courtyard with a large Outdoor Stage, and quiet courtyard on the east side of the Barn.

The DMPS assigned area requirements by function for the Barn to support these foodservice requirements. This recent study and the earlier 2009 Barn Area Study (BAS) presented the need to expand the kitchen and servery. The 2009 BAS proposed an addition to the west side of the Barn to support the requirements but did not address the potential dining demand presented in the DMPS. Accordingly, additional kitchen expansion is necessary to support the anticipated foodservice demands.

The DMPS proposed an operational style of order and pre-payment of meals with the customers recalled to the servery when the meals are ready, putting double circulation requirements on the servery. Thus the decision was made to change to a post-pay system in order to eliminate half of the required circulation space demand. It was also decided to forgo the use of china ware and instead use disposables, re-usable trays, and self-bussing stations located in each of the three dining areas.

As part of this 2016 Program Verification, the program for food service in the Barn was revised, and the Servery and Dining Room layout adjusted. The previously planned addition to the Barn on the north was reconfigured with the new program and is shown in Composite Site Organization Plan - Option 1 and in the Appendix. The currently proposed addition to the Barn is on the south and is shown in Composite Site Organization Plan - Option 2. It was agreed at the Workshop that the location of the addition to the Barn would be studied further in the Schematic Design phase.

The Servery has 4 food stations (Espresso / Pastry, Salad / Cold Sandwich, Hot Entree and Grill), as well as a self-serve beverage counter and one double-sided dual Point of sale (POS) counter and two single-sided POS counters. 2 condiment counters are required; 1 placed along the east Barn Dining Room inside wall near the exit doors, and 1 placed along the west Barn Dining Room inside wall near the exit doors.

All finish food preparation is “on stage” to promote fresh food, freshly prepared.

The Kitchen functions include dry storage, catering storage, cold storage, cold food prep, hot food prep, catering staging, ware-washing, ice machine, soda system room, change room, one shared office, and a cash count room adjacent to the Stage.

The Service area at the Loading Dock is to support deliveries and house the storage of: empty vendor racks / bottles, a dehydrator, a trash compactor, recycling bins, a used cooking oil tank, and a cart/ can wash. Access to staff restrooms is through the service area. It is anticipated that a remote compressor rack will be located on the roof.

System Narratives

FOODSERVICE + BEVERAGE (cont.)

CAMPUS MEETING ROOM

This facility is located northeast of the Barn and will host meeting functions. A buffet and food cart staging area will be provided and supported by the Barn Kitchen. China and glassware will be cleaned and stored in the Barn Kitchen.

ITEMS OF NOTE / COMMON TO ALL FOOD SERVICE FACILITIES

- Stainless steel corner guards to be used in all areas with movable carts and equipment.
- Trash and recycling has been included per new campus standards, of one per every 25 seats. it is a three-compartment assembly with trash, recycling, and compost. Approximately 2' x 4'.
- Exhaust hoods with fire suppression system to include Utility Distribution System (UDS) with water wash grease capture.

System Narratives

THEATER

The following narrative describes our recommended approach for the venue characteristics and technical systems related to the performance facilities at the Barn Expansion Project. The musicians and their audiences are aided and supported by the facilities in which they work. The ultimate goal is to focus on the architectural design, technical operation and what it takes for audiences to have rich and captivating experiences, what it takes to inspire and support students, faculty, artists and musicians, what it takes to maintain financial viability for the project and the working facility, and what it takes to design and build a successful arts education and performance venue.

These recommendations are further based on conversations with the User's committee, our interpretations made from experience on similar projects of this type, and incorporating new directions in production technology.

OUTDOOR AND INDOOR STAGES: VENUE CHARACTERISTICS

Circulation & Access

The following routes must be provided for proper and code compliant circulation between the various areas:

- Gracious and universal route(s) shall connect the pre-function spaces to the seating areas.
- Per the CA Building Code and the 2010 ADA, wheelchair positions shall be integral to the general seating area and dispersed, with placement at varying heights (which is to say front/back), and positions (left/right) within the room. In a venue where the floor is entirely flat, this is solely an operational issue.
- A path shall be provided from the audience areas and the performance platforms. This will facilitate performer circulation into the audience area, audience circulation to the platform as may be the case for award ceremonies, and for rolling equipment access to/from the audience chamber from storage.
- There shall be smooth access between the loading and backstage areas to the performance platforms, of a width sufficient for the movement of instruments and equipment. This operational circulation shall neither pose a risk to valuable instruments nor cause undue operational personnel efforts or time.
- Seating in rows or at tables shall comply with governing codes.
- Technical access shall be provided to all locations for lighting and audio / video devices for the adjustment and servicing thereof. It shall be viable to access all components (drives, tracks and control system elements) for installation, commissioning, servicing and replacement.
- Where performance or architectural lighting is placed over flat floor areas, it shall be no higher than 30'-0" a.f.f. and with sufficient clear floor area for a personnel lift with its outriggers fully extended. Long life lamps shall not be considered a substitute for safe and efficient access.

Illumination

Several systems shall be employed to suit the various use needs:

- For performance use, provide a minimum average 20 fc even coverage for house lights. CRI no less than 94. The selection of appropriate sources and a high quality dimming system and configuration shall provide smooth, flicker-free performance with a completely uniform ignite / extinguish, to and from 0% with no margin of tolerance.
- Provide compliant emergency lighting
- Performance lighting shall be accomplished by the use of a flexible performance lighting systems described below. Mounting positions will be provided over the platforms and front lighting positions at +/-45 degrees vertical and from left and right to each area on the platform, with no gaps.
- It is assumed that these venues will not be used for classroom functions, which precludes the need for higher lighting levels.

GENERAL APPROACH TO SYSTEMS

The Indoor and Outdoor venues will be used for both general assembly and entertainment functions. Because of the wide variety of performances anticipated, flexible production systems are key to proper functionality.

Production Lighting Control – Indoor and Outdoor Stages

A complete control system consists of a control console, control electronics, dimmers and control relays, and circuit outlet boxes ("distribution").

Performance lighting and house lighting will be

System Narratives

THEATER (cont.)

controlled by a single integrated and comprehensive system of a single manufacturer. Three means of lighting control would be provided. For simple events, a lighting system touchscreen LCD panel at the performance platform control position would be provided. This would allow for preset recall, and basic dimming control. For more advanced events, a portable lighting control console would be provided with connection points both on the performance platform and at a technical position within the audience areas. Control locations would be set up on a per-event basis on temporary elevated platforms at the rear of the audience. Outdoor connections would be enclosed in a weatherproof enclosure.

A data network would provide the means to run effects as well as providing control integration of the house lights. Lighting control data output and constant power will be provided at all lighting positions for advanced lighting effects such as LED source lights, color scrollers and moving lights. Simple one-button preset recall panels would be provided at entries.

Outdoor Stage: The system would include all of the control elements described above and 20A, 2.4kw dimmers/relays for production & house lighting. Dimmers are housed in installation racks of 2.4kw dimmers/relays within an electrical room located remotely from the performance platform to provide acoustical isolation between the racks and the noise sensitive areas.

Performance and house lighting dimmers shall be fed with a dedicated isolation transformer. The transformer shall be K-13 type or HMT type. A dedicated 600A, 3-phase breaker in the same room as the dimmers shall also be provided. Feeders shall be copper with neutrals oversized as a current carrying conductor, configured per dimming manufacturer's recommendations.

The dimmers would be located where convenient and accessible to technicians, close to the primary locations of circuits to minimize voltage drop and the cost of wiring. Dimmer room shall be sized for installation and maintenance clearances per code, with room enclosure construction, assembly and equipment mounting techniques that prevent the emanation of noise and vibration to critical areas as stipulated by the acoustical consultant.

Indoor Stage: The system would include all of the control elements described above and (24) 20A, 2.4kw dimmers/relays for production. In order to provide flexible locations and high quality dimming without the need for a dedicated dimmer room, packaged, distributed dimmers/relays will be used and located in groups of (6) circuits at several lighting positions. The dimmer shall be powered by standard, constant 20A, 3-phase power at the lighting positions. The data network will tie the dimmers/relays to the control system.

For House Lighting dimmers are housed in (1) wall mounted installation rack of (24) 2.4kw dimmers within an electrical room located remotely from the performance platform to provide acoustical isolation between the racks and the noise sensitive areas.

Circuit distribution would entail wiring in conduit from the dimmers/relays to 3-pin wiring devices strategically placed at lighting positions. The wiring device types will vary depending upon the specific lighting position. Multi-pin, pigtail or flush receptacle boxes and connector strips will be used for overhead positions.

An inventory of extension cable would be used to augment circuit distribution.

Architectural lighting circuiting shall provide control to logical use areas in the venues, ordered front-to-back in the room (not left to right), and organized within the dimmer rack and addresses logically. Dimmer capacities and assignment for architectural circuits shall be selected to provide high loading to the circuit as another component to control filament noise.

Production Lighting Fixtures and Cable (Group II equipment)

An inventory of theatrical lighting fixtures (typically ellipsoidals, fresnels and pars) plus accessories would be provided.

Accommodation for the integration of advanced devices such as color changers or moving yokes will be provided within the control system, but the initial budgets established will likely not include those types of fixtures and accessories.

Performance Overhead Support – Outdoor Stage

Performance lighting will be supported by two means: a "house" system will be in place to support the ready use of the venue with a minimum of set-up. This will be attached to overhead stage lighting pipes of industry standard dimension that are integrated within the structure of the overhead canopy and that have weight supporting capacity. The weight capacity and configuration will also make these pipes useful for the attachment of scenic elements such as banners and stage draperies.

CODE

March 14, 2016

REVISED DETAILED PROJECT PROGRAM
CODE ANALYSIS UPDATE
UC RIVERSIDE BARN PROJECT

Project Description

The project involves alterations to several existing buildings on the University of California Riverside Campus and additions near them. The initial phase of work will include major utility connections and minor changes to the Barn Theater ramps and fire egress. Later construction work will occur in one phase. The phasing of the project will need to be confirmed as the project moves forward. This code analysis looks at the entire proposed project, including all future building projects in the Barn area, as a single unified project for code analysis purposes. The projected overall areas and space occupancy expectations for the final build-out are included in the analysis. Note that this analysis is done under the current 2013 edition of the California codes. New codes are being developed at this time as part of the regular California 3-year code adoption cycle. The new 2016 editions of the California codes are scheduled to go into effect on January 1, 2017. Any project permitted after that date should have an updated code analysis done, based on whatever is the current code edition.

Applicable Codes & Standards and Authorities Having Jurisdiction

The basis for our analysis and the conclusions contained within this report are taken from requirements contained in the following codes and standards that currently apply to this project:

2013 California Building Code (CBC), CCR Title 24, Part 2
2013 California Electrical Code (CEC), CCR Title 24, Part 3 (reviewed for architectural impacts only)
2013 California Mechanical Code (CMC), CCR Title 24, Part 4 (reviewed for architectural impacts only)
2013 California Plumbing Code (CPC), CCR Title 24, Part 5 (reviewed for architectural impacts only)
2013 California Energy Code (CEnC), CCR Title 24, Part 6 (Not reviewed for this report)
2013 California Fire Code (CFC), CCR Title 24, Part 4 (reviewed for architectural impacts only)
2013 Green Construction Code (CGC), CCR Title 24, Part 11 (Not reviewed for this report)
2010 ADA/ABA (ADA/ABA) Accessibility Guidelines
2015 California Health & Safety Code, Part 7, California Retail Food Code

The Authorities Having Jurisdiction (AHJ) over this project will be the UC Riverside Campus Fire Marshal and the Campus Building Official. Note that while these buildings are in a portion of the campus with historical import none of these buildings have been identified as historic resources and are therefore not eligible for the use of the California State Historical Building Code (SHBC). Accordingly, the applicable building code for this analysis is the 2013 CBC.

The buildings make up a mixed-use facility with a wide variety of anticipated uses. Occupancy groups are classified according to CBC Chapter 3. The anticipated occupancy groups are noted below with an accompanying CBC Chapter 3 citation. We recommend that the uses be treated as nonseparated occupancies to allow the various uses to flow together without occupancy separations. The consideration of how separations of occupancies are treated is described later in this report.

Area / Use Description	CBC Occupancy Classification	CBC Use Description
The Barn Dining/Kitchen		
Food Service Areas	A-2, CBC Section 303.1	Assembly for Food and Drink
Dining	A-2, CBC Section 303.1	Assembly for Food and Drink

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Kitchen	A-2, CBC Section 306.3	Associated with Food and Drink
Storage and Support Spaces	S-2, CBC Section 311.3	Low-hazard storage
Faculty/Staff Dining		
Food Service Areas	A-2, CBC Section 303.1	Assembly for Food and Drink
Dining	A-2, CBC Section 303.1	Assembly for Food and Drink
Kitchen	A-2, CBC Section 306.3	Associated with Food and Drink
Storage and Support Spaces	S-2, CBC Section 311.3	Low-hazard storage
Barn Theater		
Rehearsal (incidental uses)	A-3, CBC Section 303.1	Assembly without fixed seating
Campus Meeting Room		
Assembly	A-3, CBC Section 303.1	Assembly without fixed seating
Storage and Support Spaces	S-2, CBC Section 311.3	Low-hazard storage
Restrooms		
Joint Use Toilet Facilities	B, CBC Section 304	Educational occupancies for students above the 12th grade

Fire Protection Requirements

The project will be sprinklered per the requirements of several sections of CBC Chapter 9 based on assembly occupancies. The sprinkler system will also be used to increase the allowable area of the building(s). The sprinkler system is to be compliant with the requirements of NFPA 13 per CBC and CFC Section 903.3.1.1.

Allowable Heights and Areas, Construction Type and Occupancy Separations

The proposed total area of the group of buildings per the Project Area Summary, attached: 21,690 square feet. This area corresponds to the "OSGF100" factor which includes covered exterior areas associated with the buildings and counts those covered exterior areas at 100% of the area they cover. This corresponds closely with the definition of "Area, Building" in the 2013 CBC:

> **AREA, BUILDING.** The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above."

This definition is used in the CBC to asses allowable building heights and areas based on construction type.

All buildings are proposed to be single story. Because of the proximity of the buildings and their interconnected uses it is desirable to analyze the group of buildings as a single building. CBC Section 503.1.2 addresses buildings located together on the same lot. Two or more buildings on the same lot may be considered as portions of one building if the building height of each building and the aggregate building area of all of the buildings are within the limitations of CBC Table 503 as modified by CBC Sections 504 and 506. Also, because the buildings have many mixed uses it is desirable that the building group be treated as a "nonseparated" occupancy per the requirements of CBC Section 508.3. This section requires that the allowable building area and height be based on the most restrictive allowances for the occupancy groups under consideration for the type of construction of the building using the allowable height and area values shown in Table 503.1. We have examined the requirements for the various occupancies proposed, based on the most restrictive values for each taken from Table 503 compared to the construction type, which is assumed to be Type VB. The formulas for area increase contained in CBC Section 506 are based on location on property and provision of sprinklers. The equations to be used are 5-1 and 5-2. The values to be evaluated are:

A_t = Area from CBC Table 503
I_s = Increase for sprinklers per CBC Section 506.3
I_f = Increase for frontage per CBC Equation 5-2 where I_f = [F/P– 0.25] W/30
F = Frontage on a public way
P = building perimeter
W = width of public way

If the group of buildings is considered to be a single building, then the "building" may be considered to be open on all sides when there is a separation distance exceeding 30 feet. The perimeter of the group of building elements facing outward toward other adjacent buildings near the site is approximately 932 linear feet. There is a 52 linear foot section of wall at the Campus Meeting Room which has a fire separation distance of less than 20 feet. Accordingly, we have deducted it from the perimeter to calculate the frontage area per Equation 5-2. Thus F = 932 – 52 = 880 linear feet and P equals the entire building perimeter, or 932 linear feet.

I_f = [880/932 - 0.25] 30/30

= [0.9442 - 0.25] /1

I_f = 0.6942 [= 69.42% increase, out of a possible maximum of 75% for buildings open on all sides]

The total allowable area A_a is to be determined per Equation 5-1 where $A_a = \{ A_t + [A_t \times I_f] + [A_t \times I_s] \}$. The area for sprinkler increases is per CBC Section 506.3. The sprinkler increase factor (I_s) for single story buildings is 3. This applies to buildings under the purview of the State Fire Marshal, as are A-2 and A-3 occupancies. Here, the sprinklers are not used for an increase in building height, or for the number of stories, so the factor of 3 may be applied in this case.

The allowable areas for the proposed occupancies noted above as shown in CBC Table 504 for Type VB buildings are:

A-2	6,000 square feet
A-3	6,000 square feet
B	9,000 square feet
F-2	13,000 square feet

The most restrictive area allowed for nonseparated uses is either for A-2, or A-3; 6,000 square feet. Using Equation 5-1 the allowable area for the most restrictive occupancy groups, A-2 and A-3 are:

A_a = {6,000 + [6,000 x 0.6942] + [6,000 x 3]}
= 6,000 + 4,165 + 18,000
= 28,165 sf allowable building area, which is greater than the 21,690 sf proposed in the program.

The aggregate area of the group of buildings is under the allowable area so they may be treated as a single building containing nonseparated occupancies. Per the Exception to CBC Section 705.3 no wall or opening protection is required between multiple buildings on a single site that comply with the limitations of Chapter 5 for area, based on the most restrictive allowable area for the occupancies proposed, as does this group of structures.

Fire Resistance Ratings for Building Elements

Based on the VB construction type assumed above the fire resistance rating requirements for building elements per CBC Tables 601 and 602 are as follows:

Structural Frame:	0 hours
Exterior Bearing Walls:	0 hours

Exterior Nonbearing Walls:	Unrated - per Table 602 the wall at the rear of Campus Meeting may be unrated since it is >10' from the imaginary line
Interior Bearing Walls:	0 hours
Interior Nonbearing Walls:	0 hours
Floor Construction:	0 hours
Roof Construction:	0 hours

Occupant Loads

The occupant load calculations for this report are to determine the required number and widths of exits, including those on the site areas between building elements. This information is gathered from the programming area calculations, but areas have been aggregated among those groups of uses which have the same function and the same occupant load factors. Areas not considered as normally occupied, per the CBC definition of "net" floor area in Section 1002 have been omitted. Thus the square footages shown here may not correspond precisely to those shown in the program documents, as they are evaluated differently in the building code for different purposes than in the program documents. The occupant load factors are taken from CBC Table 1004.1.1. Since the group of buildings will be treated as a single building for egress analysis, usable outdoor areas are assigned occupant loads in order to assess the number and width of required means of egress in the areas between building portions. The occupant loads at typical exterior areas are assigned an Occupant Load Factor of 15 square feet per occupant. This is appropriate for their anticipated use as dining or drinking locations with loose tables and chairs. If areas where seats in rows for viewing programs are desired, then the occupant loads for those areas were assigned an Occupant Load Factor of 7 square feet per occupant with a clear circulation area assigned around the seating area. Note that the large outdoor viewing area has been assigned a maximum occupant load of 370. This is based on the anticipated maximum occupancy for that space being 350 patrons and 20 staff. The assumption is that this maximum occupancy will be posted at this space and the use will be managed by the staff to keep the maximum occupant load under this assumed maximum. We note also that per the site plans under consideration there will be multiple clear egress paths out of the central space so that in the event of an emergency affecting that space it should be possible for it to be evacuated quickly. There will be just over 500 occupants in the two outdoor areas; one for dining and one for assembly, requiring three exit from these spaces in the aggregate per CBC Section 1015.1.1. See the attached egress diagram for a graphic depiction of the egress system.

Egress Doors and Gates

Essentially all of the interior and exterior assembly spaces have more than 50 occupants. Accordingly, per CBC Section 1008.1.2 doors and gates should swing in the direction of egress travel. Also, each of those gates which are required to swing in the direction of egress travel should have panic hardware per CBC Section 1008.1.10

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CODE (cont.)

The Barn: Barn Dining/Kitchen Addition

Use	Area (SF)	Occupant Load Factor	Occupant Load
Production Kitchen	2,245	200	11
Back of House Support	564	200	3
Serving and Queuing	1,290	15	86
Indoor Seating & Stage	2,401	15	160
Indoor Area Total			**260**
Outdoor dining/gathering East (less circulation)	2,488	15	166
Outdoor dining, West	3,255	15	217 (Two exits required)
Outdoor viewing, West	3,255	Posted as 370 max. = 350 patrons and 20 staff	370 (Two exits required, highest use case, used for egress and plumbing fixture count)
Outdoor Area Total			**536 (assumes viewing area occupant load & East Dining)**

Faculty/Staff Dining

Use	Area (SF)	Occupant Load Factor	Occupant Load
Dining Areas/Lobby	1,470 + 465 = 1,935	15	129
Back of House Areas	1,715	200	9
Support Spaces	910	0	"net" sf, support space
Interior Total			**138**
Outdoor Stage	450	15	30
Outdoor Total			**30**

Campus Meeting Room (Replaces Barn Stable)

Use	Area (SF)	Occupant Load Factor	Occupant Load
Entry	69	-	-
Meeting Room	1500	15	75, max. set by program
Back of House	500	200	3
Indoor Total			**78**
Outdoor Porch	155	15	11
Outdoor Total			**11**

Barn Theater

Use	Area (SF)	Occupant Load Factor	Occupant Load
Existing Building	1,595	15	107
Interior Total			**107**

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Accessibility

This facility is a "public accommodation" covered by the Americans with Disabilities Act (ADA) and Chapter 11B of the California Building Code (CBC). All permitted work will be required to comply with the accessibility provisions of these two sets of regulations including the technical and scoping requirements of the 2010 ADA Standards (ADAS). Note that the CBC is now closely aligned with the ADA, but has more stringent requirements for such things as signage and scope of work in spaces that serve areas of alternation to existing buildings. The proposed work will be done under a permit so the provisions of CBC Chapter 11B will be applicable. Of special note are the requirements for assembly spaces in CBC Section 206.2.6 for access to such spaces. Note that accessibility requirements extend beyond just mobility barriers for wheelchair users. Access is also to be provided for visually impaired persons, with such elements as handrail extensions on stairs and marking of tread edges to alert persons with low vision of a step in their path. Projecting objects on site paths of travel must be designed to not strike persons who cannot see them as they move about the site. Visual alarms are to be provided for fire alarm notification of persons who are deaf or hearing-impaired. Also, assisted listening devices, whether hard-wired or portable devices must be made available for persons to enjoy performances in both the inside and outside performance venues on the site.

Plumbing Fixture Calculations

The plumbing fixture requirements are taken from the 2013 California Plumbing Code (CPC). The plumbing fixture requirements are shown on the attached spreadsheet. They are based on aggregating the occupancies of each of the space and assuming that all of the spaces are occupied simultaneously. The worst cast for the West Courtyard is when it is used for event viewing instead of for dining. The event space is projected to have a maximum capacity posted for that use. That maximum is the number used for the occupant load of the West viewing area. The fixture count assumes that each building containing toilet rooms is to be assessed for fixture count based on anticipated occupant load for that set of toilets serving the building where they are located and adjacent areas.

END OF REPORT

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UC Riverside Barn Project
DPP Update

Plumbing Fixture Count - Whole Site
Assumes Simultaneous Occ. W/ West Court
2013 CPC Table 422.1 and Table A

Code Analysis

Aggregate Dining and Service Areas (Barn, Faculty/Staff Dining, Meeting Room, Exterior Uses)

Area/(Occ. For Plg. Fixt.)	Occ.	Size - SF	Occ Load Factor CPC Tables 4-1, A	Occupant Load	Male "M"	*Female "F"*	WC Basic	Urinals	Lavs	Dkg. Ftn. (1:150) M+F total	Notes
Dining	A-2	3,871	30	129	65		2	1	1		
(Aggregate areas)					-	*65*	*3*	-	*1*	-	
Meeting Room	A-3	*1,500*	*30*	*50*	*25*		1	1	1		Will accommodate 75 occ/2, per assumed
						25	*1*	-	*1*		-
Service Areas	F-2/ S-2	6,879	2,000	3	2	-	1	1	1		Includes Barn
(Aggregate areas)					-	*2*	*1*	-	*1*		Theater support
West Courtyard	A-3	-	Viewing	370	185	-	2	2	1		370 Max. Occ.
Performance Use					-	*185*	*4*	-	*2*		not by Occ.Load Factor
Outdoor East Dining/Assembly	A-2	2,488	30	83	41	-	1	1	1		West Court not counted here
(Aggregate areas)					-	*41*	*2*	-	*1*		-
Total Fixtures Required Per Male Occupant Load					**318**	**-**	**7**	**5**	**5**		
Fixtures Provided - Males							**-**	**-**	**-**		
Total Fixtures Required Per Female Occupant Load					-	***318***	***11***	**-**	***6***		
Fixtures Provided - Females							-	-	-		
Drinking Fountains (High-low DF counted as 2 DF)										**0**	**No DF req'd. @ dining**

Barn Theater

Area/(Occ. For Plg. Fixt.)	Occ.	Size - SF	Occ Load Factor CPC Tables 4-1, A	Occupant Load	Male "M"	*Female "F"*	WC Basic	Urinals, Footnote 3	Lavs	Dkg. Ftn. (1:150) M+F total	Notes
Existing Building sf	A-3	1,595	15	106	53	-	1	1	1	1	
(Aggregate areas)						53	*3*	-	*1*		
Total Fixtures Required Per Male Occupant Load					**53**		**1**	**1**	**1**	**-**	
Fixtures Provided - Males							**-**			**-**	
Total Fixtures Required Per Female Occupant Load						***53***	***3***	**-**	***1***	**-**	
Fixtures Provided - Females							**-**	**-**	**-**	**-**	
Drinking Fountains (High-low DF counted as 2 DF)										**1**	**= 1 hi-low DF**

AGGREGATED REQUIREMENTS FOR WHOLE SITE

Area/(Occ. For Plg. Fixt.)	Occ.	Size - SF	Occ Load Factor CPC Tables 4-1, A	Occupant Load	Male "M"	*Female "F"*	WC Basic	Urinals, Footnote 3	Lavs	Dkg. Ftn. (1:150) M+F total	Notes
Total Fixtures Required Per Male Occupant Load					**371**	**-**	**8**	**6**	**6**		
Fixtures Provided - Males							**-**				
Total Fixtures Required Per Female Occupant Load					-	***371***	***14***	**-**	***7***		
Fixtures Provided - Females							**-**	**-**	**-**		
Drinking Fountains (High-low DF counted as 2 DF)										**1**	**= 1 hi-low DF**

The Preview Group, Inc.

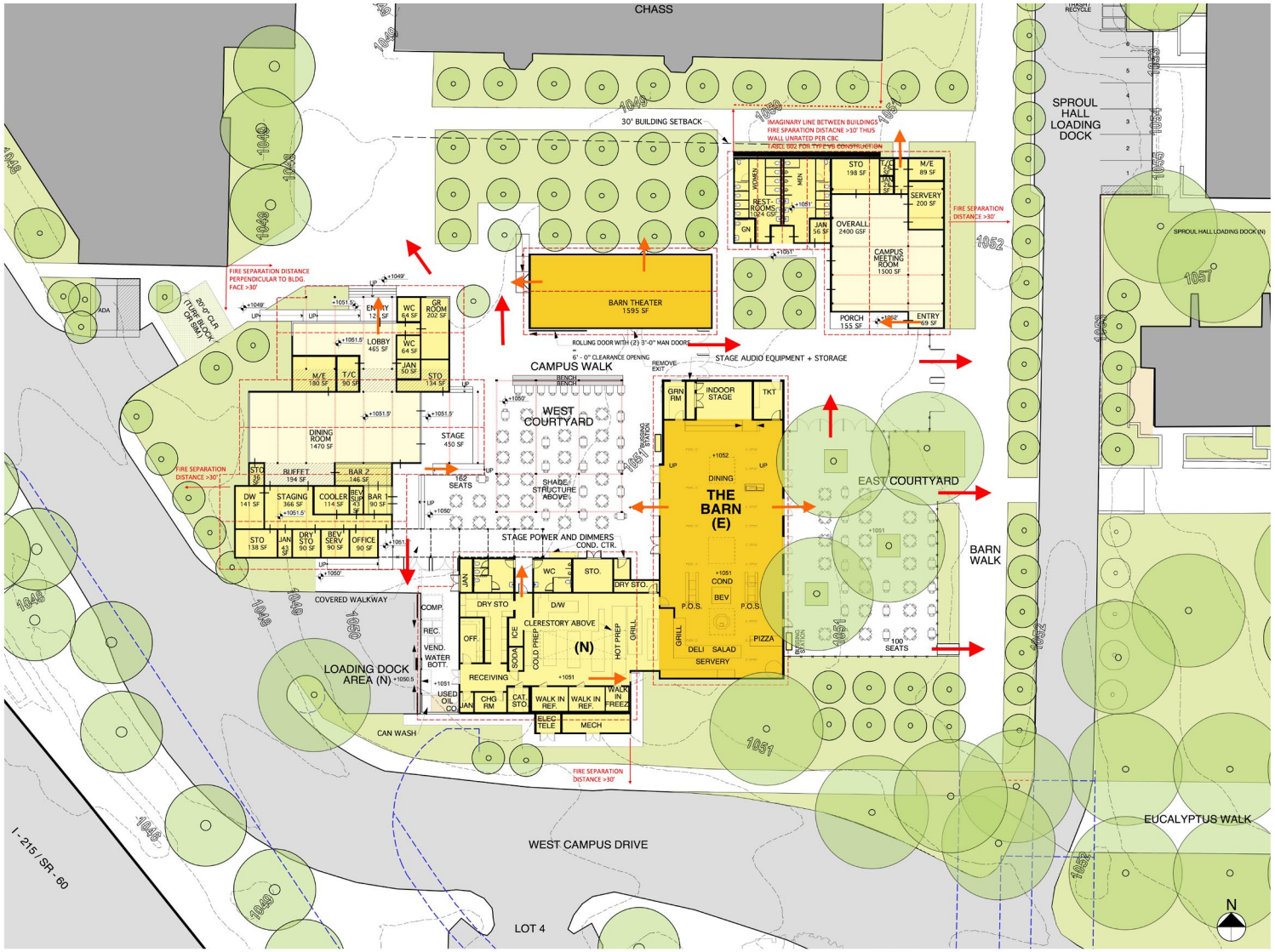
March 14, 2016 with
Stated Occupancy at West Courtyard

Page 1 of 1

SUPPORT DOCUMENTS

System Narratives

CODE (cont.)



FACULTY/STAFF DINING AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 4801 SF
OVERHANG AREA: 2296 SF
1/2 OVERHANG AREA: 1148 SF

RESTROOM AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 1024 SF
OVERHANG AREA: 204 SF
1/2 OVERHANG AREA: 102 SF

CAMPUS MEETING ROOM AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 2400 SF
OVERHANG AREA: 394 SF
1/2 OVERHANG AREA: 197 SF

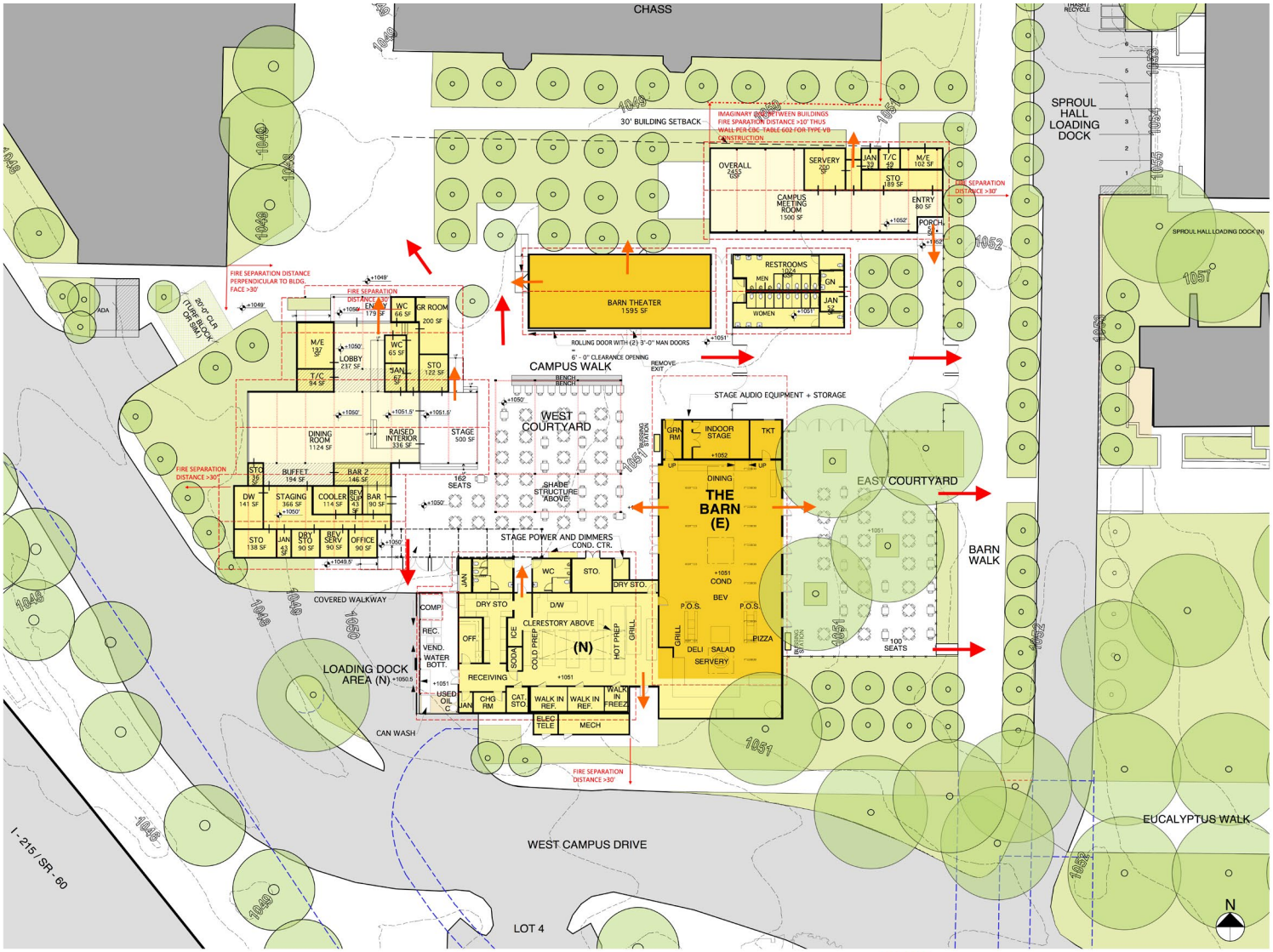
LEGEND
PERIMETER AS A "SINGLE BUILDING" = 880'
FIRE SPEP. DIST. < 30 FOR AREA INCREASE = 52'
SITE EXIT
BUILDING EXIT

UCR BARN EXPANSION PROJECT
Site Plan - Faculty Dining Hall Option 1
Scale: 1/16"=1'-0"
02/11/2016

Site Location & Egress Diagram

System Narratives

CODE (cont.)



FACULTY/STAFF DINING AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 4760 SF
OVERHANG AREA: 2371 SF
1/2 OVERHANG AREA: 1186 SF

RESTROOM AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 1024 SF
OVERHANG AREA: 277 SF
1/2 OVERHANG AREA: 137 SF

CAMPUS MEETING ROOM AREA SUMMARY:
GSF (TO OUTSIDE OF EXTERIOR WALLS): 2455 SF
OVERHANG AREA: 463 SF
1/2 OVERHANG AREA: 232 SF

LEGEND
PERIMETER AS A "SINGLE BUILDING" FIRE SEP. DIST. < 30 FOR AREA INCREASE
SITE EXIT
BUILDING EXIT

UCR BARN EXPANSION PROJECT
Site Plan - Faculty Dining Hall Option 2
Scale: 1/16"=1'-0"
02/11/2016

Site Location & Egress Diagram

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VI. COST PLAN

The cost estimator has reviewed the program and site plan changes and addressed their impact on the budget in the two memos that follow.

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COST PLAN

Preliminary Budget Estimate

Oppenheim | Lewis

project management
cost consulting

February 11, 2016

Memo To: Laura Hartman
Fernau & Hartman

From: Scott Lewis
Oppenheim Lewis Inc.

RE: UCR Barn Expansion Project
Budget Impacts

As part of the program verification scope of work for the Barn Expansion project, Oppenheim Lewis has undertaken a series of tasks in order to provide an opinion and recommendations on the revised construction cost budget provided by the University. This memo summaries the tasks and our findings/conclusions from the review, and the recent verification workshop held on February 5th at the UC Riverside campus.

Prior to the workshop we reviewed the previous construction cost budget that our office had produced, including the original 2012 DPP budget and the budget update from 2014. The 2014 update was an adjustment for inflation from 2012 to 2014 and for the general conditions cost of the work. We also reviewed the currently proposed construction cost budget from the University, including the backup to the budget; and had a conference call with Jon Harvey from UC Riverside regarding the methodology used in arriving at the new budget. This new budget is also based on an adjustment to inflation, but not a new estimate.

Also prior to the workshop, we reviewed the new site plan produced by your office and provided you with some initial feedback. To summarize those discussions, where the overall site remains essentially the same size and the buildings retain essentially the same program, we are not concerned by the reconfiguration of some of the buildings. We would like to see the basic control quantities stay the same as well: floor areas, exterior wall areas, and roof areas. While we have done no quantity takeoffs, with the exception of the Faculty Staff Dining, the new layouts do not appear to have significantly changed the basic control quantities.

At the workshop, it was noted that there has been an increase in program area. The Barn Dining and Kitchen addition; Faculty Staff Dining; and the Restroom Building have all increased from the 2014 update to the 2012 DPP. The new Campus Meeting Room has increased from the area used to develop the University's 2016 budget for this scope. In total the changes represent an increase of roughly 5% to the overall program area.

Preliminary Budget Estimate

From these reviews and program discussions, we conclude the following:

1) The new construction cost budget provided by the University is less than we had predicted due to a lower escalation rate being used. The difference is roughly 3.5%. Given that the 2014 work adjusted the 2012 work based on presumed escalation rate, and the new budget is also based on presumed escalation rates, we will have inherent risk in the numbers until a new estimate is done and an actual construction start date is established.

2) The proposed increase in the program adds to the concern for the adequacy of the new budget. Our understanding is one of the program increases: the increase in size of the restroom building is due to a change in code which is requiring more fixtures. We know there are other code changes, such as the energy codes, which will add to the cost. Until a code review is done, we cannot determine the magnitude of the increase; but all the code changes represent a potential increase in cost.

3) Other risk factors exist as well, including the existing condition of the older buildings which are to be rehabilitated. The existing Barn Theater which is new scope will need an assessment to determine its actual condition and to help determine what scope can be accomplished for the budget. Another risk is the service access at the south edge of the site along Campus Drive, which had unknowns in 2012, and continues to have unknowns regarding the amount of roadwork which may be required to be done. The new Campus Meeting Room building budget was created assuming a construction cost of 450/sf. With the lack of economy of scale of this building, and its programs, this concerns us. None of the other buildings in the project are near this cost per sf, and 450/sf is an aggressive target for the proposed building.

For all of the above reasons, we remain concerned about the budget. We understand that it is fixed so we will need to look for potential scope adjustments. We appreciate the University's discussion last Friday to introduce the idea of potential scope cuts should this be necessary. Once the project starts up again, we believe diligence will be required to stay tight to the program as the buildings get designed, and we will need to continue to look for ways to make the buildings smaller and less expensive.

One thing we would like to table for consideration is an early estimate prior to the end of Schematic Design. Give the reconfiguration of the Faculty Staff Dining and its increased size; the new Campus Meeting Room which has not yet been costed; the new scope for the Barn Theater which has not yet been costed; and some reorganization to the site; an earlier estimate would bring more clarity to the cost, and depending upon the gap between initial cost and budget, could mitigate a more difficult value engineering process later.

Please call after you have reviewed this memo and we can provide additional clarity or talk about potential next steps.

Respectfully,

Oppenheim Lewis Inc
Scott Lewis

Preliminary Budget Estimate

Oppenheim | Lewis

project management
cost consulting

February 11, 2016

Memo To: Laura Hartman
Fernau & Hartman

From: Scott Lewis
Oppenheim Lewis Inc.

Re: UCR Barn Expansion Project
Program Changes

Following up on the request from UC Riverside to quantify the program changes in the 2016 DPP program area summary, the table below lists the affected buildings and the changes to areas. We have applied a cost per sf to each of the program area increases to derive a projected cost increase associated with each building. The costs below are broken out by interior and exterior covered area to allow for the different cost per sf to be applied to the total change in area. In summary, the total increase in program area is 1122sf using the University standard of 100% interior and 50% exterior covered area.

Barn Dining & Kitchen Addition		
Interior Area Change	120sf @ 300/sf	$36,000.
Exterior Area Change	0sf	
Total increase in cost due to area change:		$36,000.
Faculty Staff Dining		
Interior Area Change	17sf @ 400/sf	$6,800.
Exterior Area Change	1096sf @ 100/sf	$109,600.
Total increase in cost due to area change:		$115,400.
Restroom Building		
Interior Area Change	127sf @ 650/sf	$82,550.
Exterior Area Change	120sf @ 100/sf	$12,000.
Total increase in cost due to area change:		$88,550.

Preliminary Budget Estimate

Campus Meeting Room		
Interior Area Change	20sf @ 450/sf	$9,000.
Exterior Area Change	460sf @ 100/sf	$46,000.
Total increase in cost due to area change:		$54,000.

In summary, the total cost increase in for the additional program area is projected to be $293,950. The cost per sf we are applying to these areas are based on the previous unit rates developed for the project. The escalation and code change issues we noted in our cost impacts memo to you still stand as potential cost increases.

Please call after you have reviewed this memo and we can provide additional clarity or talk about potential next steps.

Respectfully,

Oppenheim Lewis Inc
Scott Lewis

Items Not Included in Preliminary Budget

This is a list of specific items mentioned in the program that have not been included in the Preliminary Budget:

General:

- LED Lighting
- Cost escalation beyond the midpoint of construction
- Movable furnishings, fixtures, and equipment (FF&E)
- Audio/visual equipment as described in 2012 DPP
- Security Devices
- Theater Lighting Package
- Costs of offsite construction except potential new utility connections at east of site
- Emergency Power for Kitchen Addition and Faculty / Staff Dining Facility
- Code changes since 2012

Barn Theater:

Budget for this building is fixed. The plan is to have a menu of upgrade options, and to limit the scope of the upgrade so that it fits the budget. It is likely that the program will exceed the allocated budget.

East Courtyard Restrooms:

- Size and fixture increase

West Courtyard:

- Solid roof at trellis link on south side of West Courtyard
- Solid roof over fixed high seating
- Heating at outdoor seating

Loading Dock:

- Horizontal 15-yard trash compactor

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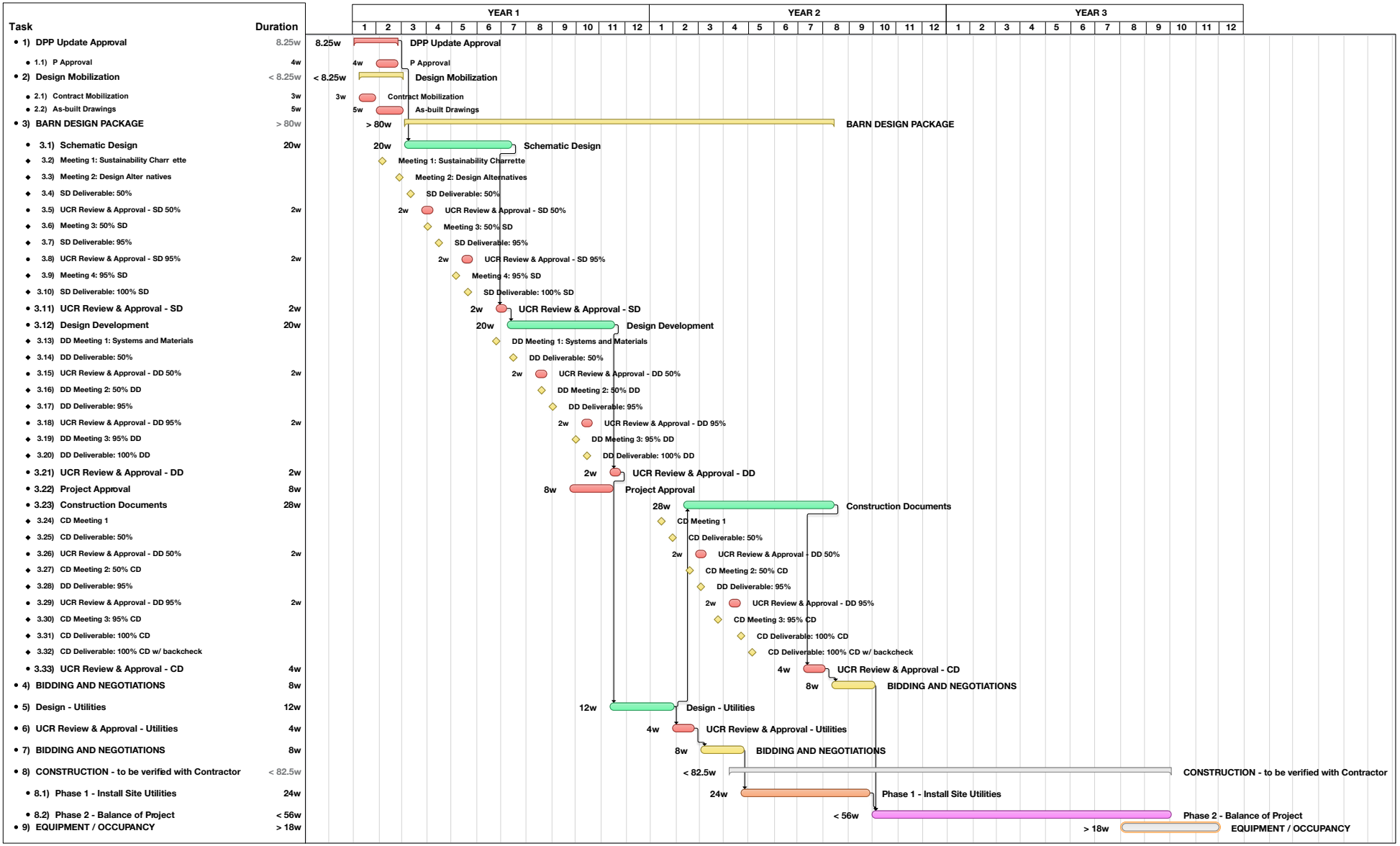
VII. IMPLEMENTATION

The project schedule has been developed in close coordination with the Campus Representatives.

The Barn Expansion project will be constructed in two phases. Phase 1 will bring major utility connections to the site, and Phase 2 will include the remainder of the construction work. The Barn Theater Renovation is now part of Phase 2 and is no longer postponed to a later date.

IMPLEMENTATION

Project Schedule



NOTE: The Project Schedule is shown quarterly and is based on a yet-to-be-determined start date. Durations of tasks are shown in weeks.

VIII. 2016 APPENDIX

2015/2016 - Meeting Notes, Action Items, and/or Site Plan Alternatives presented at:

Planning Session Workshop	December 15, 2015
Conference Call #1	January 27, 2016
Conference Call #2	January 27, 2016
Conference Call #3	January 27, 2016
Conference Call #4[1]	
Program Verification Workshop	February 5, 2016
Conference Call #5	February 11, 2016

2016 - Correspondence

Additional Loading Dock Diagrams

UCR Loading Dock Requirements of March 10, 2016

UCR Loading Dock Program of March 15, 2016

1 Preparation for workshop, no notes provided

APPENDIX

Planning Session Workshop: Meeting Notes

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

Issued January 8, 2016

MEETING NOTES

Program: Planning Session Workshop

PROJECT: UCR Barn Project
TIME/DATE: 8:00 AM – 12:45 PM, December 15, 2015
LOCATION: University Village, 1223 University Suite 240

ATTENDEES:

Project Management Team

Jeff Kaplan (JK)	Associate Vice Chancellor Capital Asset Strategies
John White (JW)	Assistant Vice Chancellor, Capital Planning
Rob Gayle (RG)	Campus Architect
Jon Harvey (JH)	Principal Education Facilities Planner, Capital Planning
Jacqueline Norman (JN)	Senior Project Manager, Architects & Engineers
Tricia Thrasher	Principal Environmental Planner, Capital Planning

Consultant Team

Laura Hartman (F&H)	Principal, Fernau & Hartman Architects
Richard Fernau (F&H)	Principal, Fernau & Hartman Architects
Laura Boutelle (F&H)	Project Architect, Fernau & Hartman Architects

ACTION BY:	ITEM:
	1. **Workshop Goals / Meeting Outcomes:** a. Materials written on Whiteboard i. Define what requires further examination, e.g. Kitchen. ii. Establish the character of the place. What is the feel of the complex, the architecture of the complex, what makes it a gathering place? iii. Identify what (e.g., program, site, etc) can be changed, and when changes can occur (i.e., before P-Approval, during SD, etc). iv. Identify what cannot be changed; establish boundaries for the project. v. Identify and document the remaining issues. Some decisions can be made today. Some follow-up needed. Produce list of items to obtain direction from leadership vi. Obtain reasonable conclusion on the Campus Meeting Room program; right size for site, right size for program, and location. vii. Produce list of items to obtain direction from leadership. viii. Discuss work plan and Dec / Jan / Feb 2016 objectives, and plan to engage stakeholders ix. Architectural Goals: To simplify, and to leverage uses b. Meeting provides an opportunity for A&E, CAS, and F&H to complete a critique of the site plan to address comments and concerns raised by UCOP and others.
	2. **Current state of the project** a. Barn Expansion is high visibility to senior leadership and to Chancellor. i. The intent of the review is to make adjustments to improve and simplify the site and space programs, not to radically alter the program.

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	ii. A goal is to relax the site, not force additional program space into what appears to be an already congested site plan. b. Key changes from the 2012 DPP Update: i. **Program elements removed:** The Cottage, Barn Stable, and West Courtyard BBQ grill. ii. **Barn Theatre:** The Campus has allotted $1.0 million to improve the open class laboratory that is used for instruction and as rehearsal space. Proposed scope includes functional upgrades to the structural and MEP systems Leadership has also requested that the process explore the feasibility of incorporating an outdoor shaded dance practice space, preferably on the east side of the Barn Theatre (a concern is that dance rehearsal would conflict with atmosphere at West Courtyard). Completing the space may require additional funding. • Further discussions conclude that adding the shaded dance practice space function would further crowd the site. iii. **Outdoor Stage:** In 2012, the Stage at West Courtyard was proposed to be three feet above the main grade, which requires a ramp for access. Study is needed to determine if lowering the stage height is feasible to reduce the length of proposed ramp. The general desire is to significant lower the stage to increase the multi-use capabilities of the space. • **Action (1):** UCR to discuss with HDRS the criteria to determine a range of acceptable stage heights. • **Action (2):** UCR to identify performance requirements for the West Courtyard stage and seating area. iv. **Faculty / Staff Dining**: In 2012, planning assumed a buffet lunch service. Chancellor made a comment at a Campus Town-Hall meeting that the space will support table service. • **Action (3):** UCR to confirm the space will continue with a buffet service or if table service is required. It was generally understood that table service will increase kitchen space requirements to incorporate an expediting line. v. **Campus Meeting Room:** The new building replaces the Cottage. • The original vision from Capital Planning was a room to seat 40-45 people which was based upon available land. Housing Dining and Residential Services (HDRS) increased capacity to 60-75 seats for business reasons. • Planning assumed 20 asf seat (75 X 20 =1,500 asf) plus support (storage and preparation spaces). • A review of the overall space requirement and available land concluded that furnishing 75 seats is not feasible. • Concluded that the planning effort needs to “right-size” the Campus Meeting room to make the space work. If 60 to 75 seat capacity is not achievable, Capital Planning will broker the change with campus. • **Action (4):** Program verification step will identify seating capacity and support space requirements based upon available land. This step could also explore placing the meeting room at another location. • **Action (5):** UCR to inform Campus leadership and HDRS that obtaining more than 60 seats in the Campus meeting room is highly unlikely.
	3. **Approvals and Timeline goals** a. Campus is currently working towards obtaining P-Approval in January and beginning Schematic Design shortly thereafter.

DPP Update - UCR Barn Expansion Project—Meeting Notes from Planning Workshop, 12/15/2015
Issued 1/8/16
Page 2 of 8

APPENDIX

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	b. The present project schedule allocated nine months to complete SD and DD, and includes a three week review period. The Campus is under pressure to find a faster way to deliver the project. i. The reality is that achieving any schedule depends upon program stability. ii. Prior to initiating Schematic Design, additional efforts are required to test the revised program pieces on the site, and to examine opportunities with HDRS at the workshop. • **Action (6):** Campus (A&E) and the Executive Architect (F+H) will evaluate project schedule task durations with the goal of obtaining a more aggressive schedule where possible. Schedule to assume a finalized space program and site plan. c. Workshop Timeframe: January • **Action (7):** F&H to provide dates for a January Program verification workshop. • **Action (8):** F+H will prepare a proposal for the next workshop that includes preparation time. Participants to include food service consultant, and cost estimator (UCR).
	4. **Powerpoint of image precedents by Laura Hartman, and group discussion** a. Examples from other barn type projects were presented that illustrated how to incorporate character into the Barn Expansion, and show how new contemporary forms can be placed into the UCR Barn complex vernacular. b. UCSC Hay Barn (recent reconstruction project by F+H) as a precedent. The group responded to the open barn interior that contains a flexible Great Room. c. Parrish Museum by Herzog & de Meuron is a Modern steel frame structure with deep double gable overhang, and a simple enclosure. Group was very enthusiastic about how the form could be incorporated into the Barn Expansion project. i. During the sketching session, a triple gable idea was explored for the Faculty /Staff Dining. The idea assigned one gable for back of house, one for the Great Room, and one for the Stage. ii. Revising the building orientation from north / south to east / west was examined, which would allow one gable to be used for the Stage.
	5. **Discussion / critique of 2012 proposed site plan and program:** a. **Site**: i. **Overall**: Site feels crowded, and the group looked for ways to relax or reduce the density of the overall complex. ii. **Barn Dining**: the north extension provides a new stage and green room. Additional space was needed to support indoor dining seating capacity. Expanding to the north compresses east/west circulation path through the site. There was agreement that extending the Barn to south expands circulation space on the north elevation, and improves overall feel of the place. • **Action (9):** Program verification process to explore extending the Barn South and how to maintain the connection between the servery and the kitchen. iii. **West Side Truck and service road:** Reducing the size of the service drive would greatly help relaxing the site. • The drive and dock seems oversized. Program assumed the largest delivery truck is 55' long. The requirement was challenged. • If deliveries could be made with smaller trucks , the loading dock and drive

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:

approaching could be reduced. Freed land provides more flexibility to the Faculty/Staff Dining facility.

- **Action (10):** UCR to review delivery truck sizes with HDRS to determine if deliveries can be made using smaller trucks.
- Parking spaces: The 2012 DPP shows two standard parking spaces and one van accessible parking space. There is parking right across the street from the site. Removing non-accessible spaces will contribute to relaxing the site.
- **Action (11):** UCR to examine non-accessible parking space requirements to determine what is needed.

iv. **West Campus Drive:** The relocation of West Campus Drive would be a benefit to both the site and the Campus. An option was studied as part of the 2009 Barn Area Study, but did not move forward due to funding.

b. **Kitchen appears to be large and the overall size was questioned:**
   i. **Sizing criteria**: the Kitchen was essentially sized to support the 354 total seats for the Barn Dining and the East and West Courtyards. It was assumed that with scheduling, the kitchen could also support Faculty/Staff Dining buffet lunch service and the occasional event in the Barn Stable. The metric used for Kitchen was 8 sf/seat (354 seats x 8sf/seat = 2,832 asf). An area takeoff of the Kitchen shows it is currently 2,735 asf.
   ii. **Outcome**: Based upon the program requirement of meals per hour and seating, the kitchen size appears appropriate. The ability to add a bakery within the same footprint was questioned and viewed highly unlikely.
   - **Action (12):** Program Verification will confirm the kitchen space requirements and determine if additional program space (e.g., bakery) could be incorporated.

c. **Barn Dining Servery appears small**:
   i. **Sizing Criteria**: the metric utilized to size a Servery is 5 sf / seat (354 seats x 5 sf/seat = 1,770 asf). An area takeoff shows that the Servery is currently 1,798 asf.
   ii. **Outcome**: Servery appears to be the right size.
   iii. **Site**: The location was questioned. If the servery could be placed outside the Barn, there is a greater opportunity to improve the interior dining space. Although the idea was supported, the limited site does not allow expanding the area the west of the Barn.
   - **Action (13):** Program Verification will review and verify the size and possibly the location of the servery.

d. **Faculty / Staff Dining**:
   i. **Overall:** There is a noticeable space disconnect between the Kitchen and Faculty / Staff Dining, and the interior dining area and West Courtyard. The building separation was a Fire Marshall requirement to provide an exit from the West Courtyard. HDRS prefers an enclosed walkway to transport food between the Kitchen and the dining room.
   ii. **Character and Program**: The dining area is currently envisioned as a “Great Hall” that can provide a sense of place. The dining area can be very generic as previously illustrated with other project examples. Opening up the building to strengthen the indoor and outdoor relationship is needed, and placing a small outdoor patio on the west side was viewed as beneficial.
   iii. **Outdoor Stage**: The Stage and support spaces (i.e. Green Room) are part of the Faculty/Staff Dining. As discussed earlier, lowering the stage could benefit the overall program. Planning should explore the possibility of using the stage

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	for outdoor searing when not in use for performances. This will help animate the Courtyard. • **Action (14):** Program Verification to explore the opportunity to use the stage for seating when not in use for performances. iv. **Loading Dock:** Re-siting of the Faculty-Staff Dining is contingent in part on reconfiguring the Loading dock and service drive. • **Action (15):** Program Verification to study Faculty/Staff configurations that strengthen the indoor / outdoor relationships, incorporates a "Great Room" concept, and explores opportunities to change building orientation. • **Action (16):** Preference is to know prior to the workshop the cost impact of the discussed concepts. Do not want to explore an idea with HDRS if it will increase construction costs. e. **Campus Meeting Room:** Siting sketches placed the program in the NE corner of site, where Barn Stable was previously located. The site has potential. f. **Restrooms**: Present location as identified in the 2012 DPP is contributing to the constrained feeling of the site. Group sketches revealed that the restrooms could work well between the proposed Campus Meeting Room location and the Barn Stable. g. **East Courtyard:** Relocating the meeting room and the restrooms opens the courtyard to the adjoining Campus open space. The idea of adding seating under umbrellas at east edge was viewed as a way to strengthen the character of the courtyard. h. **Alley of Citrus Trees:** Since the completion of the 2012 DPP, the Campus has considered the trees that form the north edge of the site as a place-making element and if possible should be retained. The idea was challenged since the area is the only place that could provide relief to the congested site. Concluded that retaining the alley of trees is a priority, but if necessary, some of the trees can be relocated or removed. • **Action (17):** Program Verification to examine the opportunity of opening the East Courtyard by relocating the meeting room and the restroom.
	6. **Construction Cost and Total Project Budget:** a. **Overall**: Project budget cannot increase. It is understood that an updated formal cost estimate may not be done in time for the campus Preliminary Plans Approval, however, cost should be discussed and there may be value in inviting the cost estimator to the next planning workshop with the clients to provide on the spot guidance. i. There was discussion about how best to incorporate the project improvements in the context of an approved budget and to be mindful. While a simpler design may lead to lower costs (to be determined), there is not opportunity to increase construction cost as well as the total project budget. ii. Budget includes an escalation factor and has some wiggle room. The higher end of the construction budget range (OLI figure) was utilized to establish the total project budget. iii. The need to engage a cost estimator to complete some cost review prior to and after the workshop was discussed. Task will show that the proposed program and site changes are within the identified project budget. b. **Current Updates:** The group thought that the potential site changes sketched today are not likely to make the project less expensive. The concern was how to review potential costs prior to the beginning of SD and the program verification workshop since an agreement on a final space program and basic site layout is

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	necessary to review construction costs. • **Action (18):** UCR to engage a cost estimator to complete some work prior to the program verification workshop. Once the program and site concept is finalized, the cost estimator will confirm that the proposed program and site changes still fall within the current project budget. • **Action (19):** Further discussions are necessary to determine how to best to use services of the cost estimator. HDRS believes that having the cost estimator present at the workshop will be positive addition to the process. c. **Barn Theatre:** Campus has allocated One million dollars to renovate the Barn Theater. What is not known is the amount of work that can be completed with the allocation. A concern is if the building will require seismic upgrades. • **Action (20):** UCR and F+H to review the Campus' proposed changes for the Barn Theatre with the cost estimator • **Action (21):** Program Verification process will include a review of the structure to determine if seismic upgrades are necessary. • **Action (22):** UCR to review Humanities Building plans to locate Barn Theater foundation drawings.
	7. **Next workshop, with stakeholders:** a. **Goals:** i. Receive approval on the space program. Requires participation from the food consultant. ii. Establish final space program and conceptual site plan prior to initiating Schematic Design. b. **Visuals:** i. F+H to present building examples similar to PowerPoint shown in meeting. ii. Examine options to open site and Faculty/Staff Dining building configurations, and proposed meeting room and restroom locations. • **Action (23):** UCR to prepare HDRS for workshop in order to complete space program review in one session. • **Action (24):** UCR to draft summary scope narratives for the Barn Theater, West Courtyard performances, and Camus Meeting room. Information to provide direction to cost estimator. c. Follow-up phone call with UCR and F+H before January workshop to review findings and next steps. • **Action (25):** UCR to organize Conference call with F+H before Workshop d. Involve HDRS as an active participant in the decision making process and lead the discussion to cover key planning considerations. Anticipated site plan outcomes would be similar conclusions obtained at this work session. e. **Program Verification Workshop Agenda (DRAFT):** i. Confirm space program for: Barn Dining, Kitchen Addition and Loading Dock, Faculty/Staff Dining, Campus Meeting Room, East Courtyard Restrooms, and Barn Theater. Review hour meal capacity and seating capacity, and meeting room seating capacity. ii. Confirm outdoor program for East Courtyard, West Courtyard, and stage. Clearly identified theater program assumptions and seating capacities. iii. Present precedent images (F+H) iv. Review Site plan and program adjacencies, discuss opportunities and constraints.

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	v. Examine options to open site and explore Faculty/Staff Dining building configurations. vi. Identify areas that required further examination and/or require direction from leadership.
	8. **Design and Construction Phases** a. UCR's proposal is for F+H to be the Architect of Record, with a regional architect as a consultant to F+H for production and construction administration. Campus is open to discuss approach. Regional Architect must have dining facility experience. b. Follow-up conversations will be scheduled over the next six weeks to discuss design process prior to obtaining P-approval. • **Action (26):** UCR and F+H to discuss contract relationships and the possibility of retaining a regional architect. • **Action (27):** UCR will schedule calls with F+H, and will review potential firms.
	9. **Summary of Action Items** a. Site studies: i. **Meeting Room and Restrooms:** • A-4: Program verification step will identify seating capacity and support space requirements based upon available land. This step could also explore placing the meeting room at another location. • A-5: UCR to inform Campus leadership and HDRS that obtaining more than 60 seats in the Campus meeting room is highly unlikely. • A-17: Program Verification to examine the opportunity of opening the East Courtyard by relocating the meeting room and the restroom. ii. **Barn Dining**: • A-9: Program verification process to explore extending the Barn South and how to maintain the connection between the servery and the kitchen. • A-13: Program Verification will review and verify the size and possibly the location of the servery. iii. **Loading and Parking:** • A-10: UCR to review delivery truck sizes with HDRS to determine if deliveries can be made using smaller trucks. • A-11: UCR to examine non-accessible parking space requirements to determine what is needed iv. **Faculty / Staff Dining**: • A-14: Program Verification to explore the opportunity to use the stage for seating when not in use for performances. • A-15: Program Verification to study Faculty/Staff configurations that strengthen the indoor / outdoor relationships, incorporates a "Great Room" concept, and explores opportunities to change building orientation. v. Cost Estimator: • A-16: Preference is to know prior to the workshop the cost impact of the discussed concepts. Do not want to explore an idea with HDRS if it will increase construction costs. • A-18: UCR to engage a cost estimator to complete some work prior to the program verification workshop. Once the program and site concept is finalized, the cost estimator will confirm that the proposed program and site

Planning Session Workshop: Meeting Notes

ACTION BY:	ITEM:
	changes still fall within the current project budget. • A-19: Further discussions are necessary to determine how to best to use services of the cost estimator. HDRS believes that having the cost estimator present at the workshop will be positive addition to the process. • A-20: UCR and F+H to review the Campus' proposed changes for the Barn Theatre with the cost estimator vi. Barn Theatre: • A-21: Program Verification process will include a review of the structure to determine if seismic upgrades are necessary. • A-22: UCR to review Humanities Building plans to locate Barn Theater foundation drawings. vii. Communicate to, and verify with Leadership and/or Stakeholders (HDRS): • A-1: UCR to discuss with HDRS the criteria to determine a range of acceptable stage heights. • A-2: UCR to identify performance requirements for the West Courtyard stage and seating area. • A-3: UCR to confirm the space will continue with a buffet service or if table service is required. It was generally understood that table service will increase kitchen space requirements to incorporate an expediting line. • A-5: UCR to inform Campus leadership and HDRS that obtaining more than 60 seats in the Campus meeting room is highly unlikely. • A-12: Program Verification will confirm the kitchen space requirements and determine if additional program space (e.g., bakery) could be incorporated. UCR to communicate to stakeholders and leadership that a Bakery cannot be added to the Kitchen. • A-23: UCR to prepare HDRS for workshop in order to complete space program review in one session. viii. Workshop preparation: • A-7: F&H to provide dates for a January Program verification workshop. • A-8: F+H will prepare a proposal for the next workshop that includes preparation time. Participants to include food service consultant, cost estimator (UCR), and possibly the Civil Engineer. • A-24: UCR to draft summary scope narratives for the Barn Theater, West Courtyard performances, and Camus Meeting room. Information to provide direction to cost estimator. • A-25: UCR to organize Conference call with F+H before Workshop ix. Preparation for SD/DD • A-6: Campus (A&E) and the Executive Architect (F+H) will evaluate project schedule task durations with the goal of obtaining a more aggressive schedule where possible. Schedule to assume a finalized space program and site plan. • A-26: UCR and F+H to discuss contract relationships and the possibility of retaining a regional architect. • A-27: UCR will schedule calls with F+H, and will review potential firms.

APPENDIX

Planning Session Workshop: Action Items

Barn Expansion
Planning Session Workshop Action Items
December 15, 2015
Status, Revised January 8, 2016 Page: 1

Summary of Action Items

Action By	Item	Status
	Meeting Room and Restrooms:	
	A-4: Program verification step will identify seating capacity and support space requirements based upon available land. This step could also explore placing the meeting room at another location.	
	A-5: UCR to inform Campus leadership and HDRS that obtaining more than 60 seats in the Campus meeting room is highly unlikely.	
	A-17: Program Verification to examine the opportunity of opening the East Courtyard by relocating the meeting room and the restroom.	
	Barn Dining:	
	A-9: Program verification process to explore extending the Barn South and how to maintain the connection between the servery and the kitchen.	
	A-13: Program Verification will review and verify the size and possibly the location of the servery.	
	Loading and Parking:	
	A-10: UCR to review delivery truck sizes with HDRS to determine if deliveries can be made using smaller trucks.	
	A-11: UCR to examine non-accessible parking space requirements to determine what is needed.	
	Faculty / Staff Dining:	
	A-14: Program Verification to explore the opportunity to use the stage for seating when not in use for performances.	
	A-15: Program Verification to study Faculty/Staff configurations that strengthen the indoor / outdoor relationships, incorporates a “Great Room” concept, and explores opportunities to change building orientation.	
	Cost Estimator:	
	A-16: Preference is to know prior to the workshop the cost impact of the discussed concepts. Do not want to explore an idea with HDRS if it will increase construction costs.	
	A-18: UCR to engage a cost estimator to complete some work prior to the program verification workshop. Once the program and site concept is finalized, the cost estimator will confirm that the proposed program and site changes still fall within the current project budget.	
	A-19: Further discussions are necessary to determine how to best to use services of the cost estimator. HDRS believes that having the cost estimator present at the workshop will be positive addition to the process.	
	A-20: UCR and F+H to review the Campus’ proposed changes for the Barn Theatre with the cost estimator	

jobs:ucr barn:ucr 2015-16:client:meetings:notes:2015_1215 reprogrm session:08 jon final:barn_dec-2015_action_items_status.docx

APPENDIX

Planning Session Workshop: Action Items

Barn Expansion
Planning Session Workshop Action Items
December 15, 2015
Status, Revised January 8, 2016 Page: 2

Action By	Item	Status
	Barn Theatre:	
	A-21: Program Verification process will include a review of the structure to determine if seismic upgrades are necessary.	
	A-22: UCR to review Humanities Building plans to locate Barn Theater foundation drawings.	
	Communicate to, and verify with Leadership and/or Stakeholders (HDRS):	
	A-1: UCR to discuss with HDRS the criteria to determine a range of acceptable stage heights.	
	A-2: UCR to identify performance requirements for the West Courtyard stage and seating area.	
	A-3: UCR to confirm the space will continue with a buffet service or if table service is required. It was generally understood that table service will increase kitchen space requirements to incorporate an expediting line.	
	A-5: UCR to inform Campus leadership and HDRS that obtaining more than 60 seats in the Campus meeting room is highly unlikely.	
	A-12: Program Verification will confirm the kitchen space requirements and determine if additional program space (e.g., bakery) could be incorporated. UCR to communicate to stakeholders and leadership that a Bakery cannot be added to the Kitchen.	
	A-23: UCR to prepare HDRS for workshop in order to complete space program review in one session.	
	Workshop preparation:	
	A-7: F&H to provide dates for a January Program verification workshop.	
	A-8: F+H will prepare a proposal for the next workshop that includes preparation time. Participants to include food service consultant, cost estimator (UCR), and possibly the Civil Engineer.	
	A-24: UCR to draft summary scope narratives for the Barn Theater, West Courtyard performances, and Camus Meeting room. Information to provide direction to cost estimator.	
	A-25: UCR to organize Conference call with F+H before Workshop	
	Preparation for SD/DD	
	A-6: Campus (A&E) and the Executive Architect (F+H) will evaluate project schedule task durations with the goal of obtaining a more aggressive schedule where possible. Schedule to assume a finalized space program and site plan.	
	A-26: UCR and F+H to discuss contract relationships and the possibility of retaining a regional architect.	
	A-27: UCR will schedule calls with F+H, and will review potential firms.	

jobs:ucr barn:ucr 2015-16:client:meetings:notes:2015_1215 reprogrm session:08 jon final:barn_dec-2015_action_items_status.docx

APPENDIX

Conference Call #1
Barn Dining & Kitchen Program Review

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

UC RIVERSIDE BARN EXPANSION
CONFERENCE CALL #1 – BARN DINING & KITCHEN PROGRAM REVIEW

Date and Time: 01/27/16, 1pm – 2pm

Participants:
- UCR: Jon Harvey, Jacqueline Norman, Susan Marshburn, Andy Plumley, Cheryl Garner, Richard Geiger, David Henry, Duane Gornicki
- Laschober + Sovich : Larry Lanier
- Fernau & Hartman: Laura Hartman, Laura Boutelle, Richard Fernau

Reference Materials:
- DPP Update 8/9/12: pages 16, 31, 34, 35, 42, 62, 75, 76, 80.

Action items in red

NOTES

- Misc confirmation
  - Number of meals and seats: Larry and Cheryl confirmed that DPP used a 400 hourly meal capacity. Assumed 45 minutes seat turnover. 354 seats overall (inside + outside).
  - Size of Kitchen: Larry explained that 8 sf per seat is used as a metric for kitchen sizing. 8 sf x 354 seats = 2832 sf. At 2700 sf, the kitchen size is fine or slightly less. In addition, the kitchen also will be preparing meals for Faculty / Staff Dining, and Campus Meeting Room.
  - Faculty / Staff Dining
    - All on the phone call agree that this will be a “special buffet” lunch service only (china, glassware, with servers delivering drinks). It is not plated table service. Ability to switch into plated service at a later point requires a larger or attached kitchen. This decision is irreversible, so it’s important to be clear about this decision with Leadership.
      - Action Item: HDRS to reconfirm there is no table service in the Faculty/Staff Dining Room.
    - The primary meal at Faculty / Staff Dining is lunch. Dining Room can also support or offer appetizers after lunch is over Requires a countertop unit to heat pre-made appetizers and/or an “air frier”. Pre-made items would be stored in a refrigerator. No additional space would be needed.
    - Faculty Staff could also bring food from Barn Dining Servery into Faculty / Staff Dining, if they prefer.
  - Alcohol license – The original planning assumption was a third party will operate the bar. If the Campus cannot get a liquor license, both food and beverage service at the Faculty Staff Dining would need to be outsourced to a 3rd party. It might be that the entire Barn Dining service would need to be included in that outsource arrangement. Larry cautions that 3rd party operators will only be interested if it pencils out for them. HDRS is comfortable moving forward with the program as presented. An operator can use the spaces as currently programmed.

APPENDIX

Conference Call #1
Barn Dining & Kitchen Program Review

- Changes to Kitchen Program:
  - Outdoor Grill area has been removed from the program. The door near Hot Prep could be omitted, as it was intended to serve the Grill.
  - Dry Storage: 100 sf for dry storage to be added, wherever it can fit. Although the preference is to have all Dry Storage in one location, the additional space could be in another location.
  - Bakery: a Bakery is to be added to the program, but will not increase space requirements to accommodate the function. A mixer will be added to the equipment list. Baking is likely to be done after hours and will use the kitchen ovens and prep tables and racks.
- Change to Barn Dining Program
  - Office space: Additional office space is needed for the cash counting function. Instead of adding an Office , the Ticket Booth adjacent to the Barn Dining stage will be used for the function. Decision is to trade space between Green Room and Ticket Booth to provide additional space to meet requirements. Green Room footprint will absorb the slide-out equipment rack, and that space will be given to Ticket Booth. Resulting Ticket Booth is approximately 130 sf, which is sufficient for 4 people (three cashiers and one supervisor) to use for the cash count.
- Changes to Servery: Likely to become a “Lemonade”-style Servery. Cheryl explains that this will fit in the existing footprint, but that the Servery layout will need to be revised. Space and equipment allocations from DPP are adequate. Change will increase through-put.
- Campus Meeting Room:
  - A new Campus Meeting Room is part of the current program refinement. Current proposal places the building in the northeast corner of site, adjacent to the proposed new location for the restrooms.
  - For this building to make financial sense for HDRS’ business plan, 75 seats are needed. The minimum seat count is 60. Original Campus request was for approximately 40 seats. A concern is that a 75 seat meeting room will not likely fit in that area of the site. One mandate of the current program refinement is to mitigate the over-crowding of the site that resulted from the last configuration of program. Planning needs to recognize that the construction budget is fixed, and the program needs to be prioritized to fit the budget. A suggestion was made to review the Conference Center program from the 2009 Glen Mor 2 DPP.
    - Action item: Design Team to study layout and determine the maximum size that will fit. Use 17.5 sf per seat for the seating area only, not including buffet area. (This is an absolute minimum for an accessible layout, per Larry. Assume round tables.)
    - Action Item: UCR to forward information about Glenmore 2 to the Design Team. This project had 60 seats, with similar programming.
  - There are concerns that the proposed construction budget ($/GSF) for this building will not meet the desired program.

APPENDIX

Conference Call #2
Cost Review

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

UC RIVERSIDE BARN EXPANSION
CONFERENCE CALL #2 -- CONSTRUCTION COST REVIEW

Date and Time: 01/22/16, 8am- 9am

Participants:
- UCR: Jon Harvey (JH) and Jacqueline Norman (JN)
- OLI: Scott Lewis (SL)
- Fernau & Hartman: Laura Hartman (LH), Laura Boutelle (LB)

Reference Materials:
- 7/10/14: OLI Budget update (**18.5m**, escalated to October 2016)
- 11/16/15: UCR Project Budget and Scope Illustration (**18.9m**, escalated to June 2017)
- 1/19/16: Memo from JH – Total Project Budget Assumptions (**18.5m**, escalated to June 2017)

Action items in red

NOTES

- Discrepancies in Budget numbers:
  - SL is concerned that the budget was 18.5 million in his 7/10/14 estimate and is still 18.5 in JH's 1/19/16 memo.
  - Delta from 18.9m in 11/2015 to 18.5m in 1/2016 is about $400K. This is a result of some embedded overall project costs that were included, which have since been taken out.
  - SL concerned about $450 / sf assumption at Meeting Room. May be low since there's a lack of economy of scale.
- Escalation date was discussed:
  - June 2017 would be approximately the bid date and is what JH is using for escalation. Campbell Anderson recommended escalating to bid date rather than midpoint of construction.
  - OLI uses midpoint of construction
  - Further discussion on this is needed
- JH's memo from 1/19/16:
  - JH used 1.6% escalation from July 2014 to June 2015. SL: this is low, by a point or two. It's just one year so the overall number may still pencil out, pending analysis.
  - JH used 4% escalation per annum from June 2015 to June 2017. SL is OK with this number.
- Key changes in scope from 2014 to 2016:
  - Program no longer includes the Cottage, the Barn Stable, and Barn Stable addition. Barn Stable will be demolished.
  - Program now includes upgrades to the Barn Theatre:
    - Budget for project will be determined by the construction cost that remains from the 1 million for project cost, approximately $600K. Scope will need to fit budget.

APPENDIX

Conference Call #2
Cost Review

        - Program to come from JH. Anticipated program is to replace the ceiling heater with heating/cooling system, to "spruce up" inside and outside, and to change the access from the south side to north. Will continue to be an "Open Lab." No restroom. Seismic update needed, pending input from David Mar; LH will schedule phone call w/ Mar, OLI, FH, for later today. LH will send photos of the interior to Scott.
    - Program now includes a new Campus Meeting Room:
        - Program to come from JH today. Assume it includes a meeting room, a prep/staging area for food, and a storage room. No restroom.
    - In addition, the Faculty / Staff Dining building form has changed, based on the direction established at the December 2015 workshop. SL has looked at FH's current sketches, and is not overly concerned about these changes in form.

- Moving forward to the upcoming phone calls and the workshop on 2/5/16
    - JH will send the spreadsheet that is the backup for the 1/19/16 memo; SL to review.
    - SL will send his updated budget assumption by early next week, so they can be the background for the programming calls on Wednesday, 1/27/16.
    - LB: The 2/5/16 workshop is the only workshop for this phase. If SL's analysis differs from JH and the estimate is higher than 18.5m, scope will need to be taken out of the project. If that is the case, the workshop would be more useful if the priorities for that scope reduction are already established.
    - JN: Once we've seen SL's updated budget, we can identify the issues. The hotspots will help frame the discussion with Housing + Dining, and will help them prioritize their program needs. Housing + Dining will need to help us understand what their programmatic requirements and priorities are, and where we can tighten the belt.
    - SL: Program must stay the same size or get smaller. The Faculty/Staff and Kitchen Addition are the largest pieces, the ones SL is most worried about.
    - JH and JN will prep Housing + Dining prior to Wednesday's call that scope reduction is a possibility.

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Conference Call #3
Input from Theater Consultant

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

UC RIVERSIDE BARN EXPANSION
CONFERENCE CALL #3 – INPUT FROM THEATER CONSULTANT

Date and Time: 01/27/16, 2pm – 3pm

Participants:

- UCR: Jon Harvey, and Jacqueline Norman, Susan Marshburn, Andy Plumley, Cheryl Garner, Richard Geiger, David Henry, Duane Gornicki
- The Shalleck Collaborative: Adam Shalleck
- Fernau & Hartman: Laura Hartman, Laura Boutelle, Richard Fernau

Reference Materials:

- DPP Update 8/9/12: pages 16, 17, 18, 19, 34, 35, 44, 125

Action items in red

NOTES

- Confirmation of program at West Courtyard:
  - The vision for the type of shows and level of performers has changed since the publication of the DPP. Primary act using the outdoor stage will be bands and comedians.
  - Size of audience decreased from a maximum of 500 to a maximum of 350 standing.
  - The daily driver of the Courtyard is for dining, similar to a Beer Garden, not large performances. Courtyard will be a flat surface.
  - Canopy over the audience will provide shade, and is critical. It will not be solid, will not protect from rain or provide sound containment. Heaters were discussed, and are part of the 2012 DPP .
  - Roof of the stage is for weather as well as shade, and is intended also to help contain sound. Need to recognize that it is hard to stop sound from leaving an open site. Lights and sound could be mounted to the structure.
  - Permanent Sound Board location is needed.
  - Lights and sound equipment could be mounted to the stage roof and/or shade canopy.
  - HDRS doesn't have a AV tech, but they do have a sound tech.
    - Action Item: Adam to talk with sound tech.
- Changes in program at West Courtyard
  - Footprint of stage is to decrease from the size in the DPP update. Stage size is based upon the types of acts. A smaller stage can be used in this location. Adam points out that since the site is flat, the stage can be temporarily extended with risers if there's an event that needs a bigger stage (e.g., for dance performance or a runway). The new stage size is the same as the existing interior Barn stage plus 4 feet in both directions.
  - Height of stage is to decrease from the height in the DPP update (2-3 feet). a higher stage is better for standing audiences. Decision: the West Courtyard Stage can be 18" high, but no lower. One reason for lowering the height of stage was that the lengths of accessible ramp

APPENDIX

Conference Call #3
Input from Theater Consultant

needed to reach a taller stage was a concern. The use of a lift was not supported. A ramp should be kept since it is better for moving equipment at an event.

  - The December planning session identified the stage as a space that could be shared with the Faculty / Staff Dining, as outdoor seating for that building. It would avoid the problem of the stage being unoccupied “dead space” when not in use. HDRS is not in favor of sharing the stage as a seating area. Thought is if Faculty or Staff want to be in the Courtyard, they will sit in the courtyard.
  - Courtyard needs to retain a certain amount of tables and chairs that are not intended to be moved. These would be located close to the bar (reference DPP page 17 that shows long tables). Seating by the stage is also a concern. Stage needs to be viewed as a landscape feature to create a nice environment for diners when there is not a show. HDRS will provide the desired number for fixed seats.

- Changes in program at Bathrooms
  - Restrooms area can decrease, as they were previously sized for a larger event.
    - Action Item: Design Team to do code analysis on restrooms sized for an event of 350 patrons and 20 staff, which will be the maximum event size. There will only be one event at any given time.
- Discussion at Faculty Staff Dining:
  - This will be rented out on some nights for private events. These events would not be concurrent with events in the West Courtyard.
  - Desire is for more flexible seating, no booth seating.

APPENDIX

Program Verification Workshop: Meeting Notes

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

MEETING NOTES

Program: Planning Session Workshop

PROJECT: UCR Barn Project
TIME/DATE: 8:30 AM – 2:00 PM, February 5, 2016
LOCATION: The Johnson Board Room in the Alumni Visitor's Center - 3701 Canyon Crest Drive

ATTENDEES:

Jeff Kaplan	Associate Vice Chancellor Capital Asset Strategies
John White	Assistant Vice Chancellor, Capital Planning
Rob Gayle	Associate Vice Chancellor, Campus Architect
Jon Harvey	Principal Education Facilities Planner, Capital Planning
Jacqueline Norman	Senior Project Manager, Architects & Engineers
Andy Plumley	Assistant Vice Chancellor, Housing, Dining & Residential Services
Cheryl Garner	Executive Director of Dining, Catering & Conference Services
Susan Marshburn	Executive Director of Housing Services
David Henry	Assistant Director of Dining Services
Dwayne Gornicki	Director, Retail Dining
Richard Geiger	Sr. Director of Capital Projects, Housing Services
Andy Stewart	(for part) Superintendent, Facilities & Lot Operations

Consultant Team

Laura Hartman	Principal, Fernau & Hartman Architects
Richard Fernau	Principal, Fernau & Hartman Architects
Laura Boutelle	Project Architect, Fernau & Hartman Architects
Larry Lanier	Food Service Consultant, Laschober + Sovich
Scott Lewis	Cost Estimator, Oppenheim Lewis, Inc
Adam Shalleck	Theater Consultant, The Shalleck Collaborative (by phone, for part)

ITEM:	
	1. **Goal of Workshop:** a. To complete program verification. To confirm space requirements and blocking diagrams, and to examine site plan changes. b. Information will move the project from programmatic and quantitative metrics into architecture and making a place
	2. **Summary of Key Program Changes since DPP:** a. Barn Stable and Cottage are no longer part of the project. b. Campus Meeting Room is a new program piece, with goal of seating 75. c. Barn Dining: a. Green Room is smaller (96 asf); Ticketing Booth is larger (130 asf). No change in overall footprint. Larger Ticket Booth will support dining cash counting operation. b. Servery will be reorganized, with no change in footprint. Coffee and Beverage Function from the Cottage will be absorbed in the Servery. d. Barn Kitchen:

Program Verification Workshop: Meeting Notes

ACTION BY:	ITEM:
	a. The hourly meal capacity is 320 (previously noted as 400 HMC in conference call notes). b. Outdoor BBQ is no longer part of the project. c. Dry Storage area is increased by 100 ASF, and can be incorporated into the existing storage or as a separate storage room. e. Faculty / Staff Dining a. Seating will be movable chairs and tables, with possibly one fixed bench along a wall. b. Green Room / Private Meeting Room will also be used as a 12-person private dining room, and has increased in size to 200 ASF. c. No parking spaces on the west side of Faculty / Staff Dining f. West Courtyard: a. 350 is the maximum audience size for shows. b. Stage size will be 4' wider and 4' deeper than the existing stage in the Barn. c. Outdoor stage height was formerly 36", but will be changed to be a minimum of 18". d. Most outdoor seating will be moveable so it can be removed during a performance. There will be some stationary seating at the south of West Courtyard for the Bar. A shade canopy is desired over the West Courtyard dining seating area (Glen Mor 2 was a referenced precedent, however that type of structure is more costly than what has been discussed previously). The desire to also have a cover over the stationary seats to protect bar patrons from weather was mentioned. g. Restrooms: Add a single-occupancy gender-neutral restroom to the site, per UC policy. Cannot be in the Faculty / Staff Dining, since that building will have more limited hours than other buildings on site.
	3. **Truck access to Loading Dock (Andy Stewart joins)** a. The site area for the Faculty / Staff Dining would be less crowded if the area for truck approach to Loading Dock were reduced. FH presented two studies done by Civil Engineer for the Loading Dock. i. Option #1: Two curb cuts. Truck turns off of West Campus Drive by Loading Dock, then goes forward into West Campus Drive and backs in. ii. Option #2: One curb cut. Truck stays on West Campus Drive until backing in. b. Option #1 is strongly preferred. Layout must allow two trucks to unload simultaneously. c. Parallel service drive is no longer needed
	4. **Campus Meeting Room** a. Program supports 75 seats for dining (target 60-75), at 20 asf per person. b. Servery has a counter with access to power for warmers. Room will need outdoor access. Servery will either be used as a buffet or as a staging area for a catered meal. Should be able to be closed off, and should include a sink.
	5. **Barn Theater** a. Budget for this building is fixed. The plan is to have a menu of upgrade options, and to limit the scope of the upgrade so that it fits the budget.
	6. **West Courtyard (Adam Shalleck joins via phone)** a. Shade canopy is critical. Is not intended to protect patrons from rain. b. Stage will be covered by the overhang from the roof of the Faculty / Staff Dining

DPP Update - UCR Barn Expansion Project—Meeting Notes from Planning Workshop, 2/5/16
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Program Verification Workshop: Meeting Notes

ACTION BY:	ITEM:
	building. c. Lighting and sound will be “ready to go” for typical performances. Can bring in additional lighting and amplification on occasion. Height of the canopy will determine if stage lighting could be on the shade canopy over audience (Study during SD). Lighting will be mounted on either the roof overhang projecting over the stage, or on poles in the site. d. Cabling will terminate into a weather-resistant box, some distance from the stage, into which a rolling rack can plug very easily. Rolling rack will be removed and locked up when not in use.
	7. **Reference images** a. FH presented images that address potential architectural character of the buildings and outdoor spaces of the project, including contemporary interpretations of traditional barn-like structures, and shaded outdoor compounds.
	8. **Review Site Plan and Program Adjacencies** a. FH presented two site alternatives. Both use a form of three parallel gables for Faculty/ Staff Dining, oriented east / west. i. Option #1: 1. Faculty / Staff Dining (a) The building is all one level, 18” up from the West Courtyard, at the same level as the Stage. There are ramps up to the building from the south and from the north. (b) The Bar is on that upper level, West Courtyard patrons will climb a few steps to queue at a large landing in front of the Bar. There is concern about access to the bar via steps. (c) Green Room in Faculty / Staff Dining is in a very visible location in the NE corner. The location of and view from this room is appealing; it was seen as very rentable as a private dining room. Would need good access to serve catered events in that room, which may be possible through a storage room. 2. Campus Meeting Room has a north / south orientation. The configuration shown works well for a meeting function. 3. East Courtyard Restrooms are connected to the Campus Meeting Room, in an “L” configuration. ii. Option #2: 1. Faculty / Staff Dining (a) Part of the main Dining Room is on a raised platform that is on the same level as the Stage. The rest of the building is lower, on the same level as the West Courtyard. (b) A benefit of this is that the Bar is level with the West Courtyard for easy access by West Courtyard patrons. (c) Green Room is in the same location as in Option #1. As it is now intended to be also rented out as a private dining room, wheelchair access will need to be studied. Can be resolved during SD. 2. Campus Meeting Room relates to the Citrus Grove to the west, and to a small courtyard to the south. ABC might be concerned that this building is too removed from the rest of site. Will be addressed during SD. The configuration of this room (more long and narrow) does not work as well as the configuration in Option #1. 3. East Courtyard Restrooms are connected to the Barn Theater. A benefit to this is that the restrooms stay inside the pay zone.

Program Verification Workshop: Meeting Notes

ACTION BY:	ITEM:
	b. Green Room in Faculty / Staff Dining does not need its own dedicated Restroom, as long as the Restroom in this building is easily accessible from the Green Room. c. Barn Kitchen has separate Electrical and Mechanical Buildings to the south. These spaces should instead be attached to the Barn Kitchen. d. Barn Dining expansion could potentially happen on the north or on the south. This will be studied during SD and when more is known about the utilities to the south. Either will work for layout of Servery as relates to Barn Kitchen. e. Refuse area at Loading Dock will be screened from the West Courtyard by a solid fence. It also has a roof over it. There is concern about smell of refuse reaching the Courtyard. The waste will be dehydrated, which will help with smell. Project budget doesn't allow for an air-conditioned enclosure for refuse.
	9. **Budget** a. Last estimate was done in 2014, and was a peer review estimate. b. UCR's current assumption about probable cost is aligned with OLI's,. The unknown is escalation assumptions. c. Updates to the budget model that consider escalation cannot be determined until schedule and construction start date are identified. d. Program area is up a few percent from 2012 DPP update and this will have a cost impact. e. Cost estimate update will not be competed as part of this phase – will be done in SD.
	10. **Prioritize program elements to address strategies needed to meet project budget** a. A 3-5% swing is possible in the estimate, and the budget is capped. If project cost needs to be reduced, it could be done by one of these methods: i. Reduce program size across the board. ii. Reduce quality of project characteristics or materials. iii. Remove certain program elements over others. b. West Patio at Faculty / Staff Dining is not a program requirement and can be taken out. All other program elements are critical. c. Campus Meeting Room is to be isolated in the estimate, to quantify the impact of this new piece on the overall project. d. Materials discussions will be in the context of LEED silver as a minimum goal. Cannot make decisions about cost of materials that are chosen for LEED without more context. e. Current site and building material assumptions are the same as outlined in the DPP update of 2012. Scott Lewis describes the site and building cost assumptions as a "comfortable price," with room to go down or up. Will not know more on this until a cost estimate is done in SD. f. Decision is that it's not possible to prioritize elements without more information on relative cost of elements and materials.
	11. **Summary of areas that require further examination and / or direction from Leadership** a. Revisit original DPP for statement about character of the space. b. Re-examine Restroom count per current code, and reallocate the minimum number of fixtures for the site in order to accommodate a single-occupant gender-neutral Restroom in the East Courtyard building. c. HDRS to query ABC for their perspective on the site plan schemes, for input on Campus Meeting Room and liquor license. d. Faculty Staff Dining: i. Study queue at outdoor Bar as relates to volume of people served.

DPP Update - UCR Barn Expansion Project—Meeting Notes from Planning Workshop, 2/5/16
Page 4 of 5

Program Verification Workshop: Meeting Notes

ACTION BY:	ITEM:
	ii. Private Restroom for Green Room in Faculty / Staff Dining can be removed. Caveat is adjacency of Green Room to the main Faculty / Staff Dining Restrooms. iii. Consider staging for a catered meal served in the private Dining Room (Green Room). iv. Reduce space allocated to the Lobby and waiting area. v. Confirm with Leadership that dining room service will be buffet rather than waited table service. e. Barn Dining and Kitchen: i. Study truck access to Loading Dock. Provide space for two trucks to unload at one time (one at dock and one in service drive). Study line of site and odor concern. ii. Update Kitchen program for new code requirements, such as demand-controlled ventilation for exhaust fans. iii. Relocate the mechanical and electrical buildings that are south of Kitchen, so they are attached to Barn Kitchen. f. Campus standards call for Lactation Rooms. UCR to confirm nearest location of Lactation Room and to determine if proximity of that room meets intent of campus standard, or whether the site will need to provide a new Lactation Room. g. Cheryl and Larry will rework the Servery into a “Lemonade” style service, and to incorporate the coffee and beverage elements.

APPENDIX

Conference Call #5

Review of Refinements to the Program & Site Plan w/ Campus Representatives & Cost Estimator

FERNAU & HARTMAN • ARCHITECTS, INC.
2512 Ninth Street No. 2 • Berkeley California 94710
510.848-4480
fax 510.848-4532

UC RIVERSIDE BARN EXPANSION

CONFERENCE CALL #5 – REVIEW OF REFINEMENTS TO THE PROGRAM AND SITE PLAN WITH CAMPUS REPRESENTATIVES AND WITH COST ESTIMATOR

Date and Time: 02/11/16, 4pm – 5pm

Participants:

- UCR: Jon Harvey, Jacqueline Norman, Rob Gayle, John White, Susan Marshburn, Andy Plumley, Cheryl Garner, Richard Geiger, David Henry, Duane Gornicki
- Fernau & Hartman: Laura Hartman, Laura Boutelle
- Oppenheim Lewis Inc: Scott Lewis

Reference Materials:

- Site plans from 2/11/16
- Project area summary from 2/9/16
- "Budget Impacts" memo and "Program Changes" memo from OLI, 2/11/16

NOTES

- Status report:
  - Executive Summary Report will be an addendum to the DPP-Update from 2012.
    - FH will send draft report on 2/19/16 or 2/22/16, for distribution on 2/22/16.
    - Comments returned to Capital Planning by February 25. Compiled comments to FH by March 1. Cheryl is out of town that week and may require additional time to review notes.
  - Executive Summary will show the Barn Addition to the south for report purposes. Final determination will be made following further review during SD.
  - Cheryl and Larry will work out a Servery reconfiguration this week, and will assume the Barn Addition will be on the south side.
- Review program revisions as a result of 2/5/16 Workshop
  - Gender Neutral Restroom added to East Courtyard Restrooms. Chuck Bloomer's feedback is that it will be the Campus Architect's decision as to whether or not more than one gender-neutral restroom is needed for the site. One is assumed for now.
  - Green Room in Faculty Staff has been revised to add ramp access from inside.
  - Private Restroom for the Green Room was omitted.
  - Utility structures south of Barn Kitchen have been relocated, to attach to Barn Kitchen.
- Review prior program changes (see meeting notes from 2/5/16 for more detail, including specifics for area changes):
  - Barn Stable and Cottage are not part of the project.
  - Campus Meeting Room added.

APPENDIX

Conference Call #5

Review of Refinements to the Program & Site Plan w/ Campus Representatives & Cost Estimator

Barn Expansion
Conference Call #5

- Barn Dining: Ticketing is larger, Green Room is smaller. Servery will be re-organized within the current footprint and assigned square footage. The program expands to include blended coffee beverages station. Kitchen is sized to provide 320 meals per hour.
- Barn Kitchen no longer has the outdoor BBQ, and has gained Dry Storage area.
- Faculty / Staff Dining's Green Room will also be used as a Private Dining Room. There is no longer parking to the west of the Faculty / Staff Dining, except for one accessible space.
- West Courtyard will have a maximum of 350 patrons for a show; audience will be standing (current practice). The stage height was lowered to a minimum of 18 inches. Outdoor seating will be moveable, with some stationary seating for the Bar.
- East Courtyard Restrooms are larger, per code changes.

- Review Loading Dock studies (*Circulation Study – WB-50 Route 3*)
  - Civil has revised the studies to show two large (42'-6" trailer) trucks parking at and near the loading dock off the road at the same time. It's not possible to have two such trucks unloading at the actual dock at the same time, without the cab of one truck being in West Campus Drive.
  - This is close to working and is to be studied further in SD.
- Weather-proof structure for Bar patrons
  - This is not in the current program, but in a follow-up call with Jon Harvey it was agreed to add a covered connection from Barn to Bar. As a new program piece, it was not included in the budget update. Will be studied in SD.
  - Goal is for weather-protection for Bar patrons and on path of travel from Barn Dining to Bar.
- Other Items for study during SD
  - Faculty Staff Dining:
    - Bar layout: proportions are not optimal. Want more counter length outside and less inside. Revisit in SD.
    - Storage should be near the Dining Room, for tables and chairs. Revisit in SD.
    - Barn Kitchen: Dry Storage layout is not efficient. Revisit in SD.
- Review of Program Refinements with Cost Estimator
  - Scott Lewis joins the call, and summarizes his two cost memos from 2/11/16.
    - Budget Impacts Memo
      - As noted in Workshop, UCR's cost model used a lower escalation rate than OLI had used. There is an inherent risk in the numbers until a new estimate is done and an actual construction start date is established.
      - Proposed increase in the program adds to the concern for adequacy of the new budget. There are other code changes, such as the energy code, which will add to the cost. Until a code review is done, the magnitude of the increase cannot be determined, but all the code changes represent a potential increase in cost.
      - Other risk factors include the existing conditions of the older buildings, and the unknown amount of roadwork at West Campus Drive. OLI is also concerned with the aggressive construction cost target for the Campus Meeting Room, since it lacks economy of scale.
    - Program Changes Memo
      - Memo attempts to quantify the program changes from this phase of work. Costs are broken out by interior and exterior covered area, and by building, to allow for different cost per sf to be applied to the changes in area.

APPENDIX

Conference Call #5

Review of Refinements to the Program & Site Plan w/ Campus Representatives & Cost Estimator

Barn Expansion
Conference Call #5

- In summary, the total increase in program area is 1122 sf using the University standard of 100% interior and 50% exterior covered area. The total cost increase for the additional program area is about $300,000.
- Of the 300K, more than half is for exterior covered space. The 2015 Program Cost Summary did not include overhangs at several buildings.

- The program area and cost increase was questioned since the roof overhang that added a significant area is really an eave. The Campus will take the cost memo under advisement while developing the total project budget.

UCR Barn Expansion Project – Phone notes from Conference Call #5, Review of Refinements to the Program and Site Plans with Campus Representatives and Cost Estimator, 2/11/16
Page 3

APPENDIX

Correspondence

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December 22, 2015	Direction and Next Steps (email)
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January 25, 2016	Barn Theater Program Narrative Draft (document)
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February 1, 2016	Glen Mor 2 Meeting Space Reference (email)
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February 3, 2016	AV Systems Recommendations (letter)
February 3, 2016	Phone conversation summary (email)
February 11, 2016	Project Area Summaries - Questions (email)
February 18, 2016	Green Room Layout (email)
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March 16, 2016	Loading Dock (email)

Correspondence - Program Cost Summary and Site Plan

UC Riverside - Barn Expansion
Project Budget and Scope Illustration
November 16, 2015

Composite Site Organization Plan

Program Cost Summary

Building	GSF	Construction Budget	$/GSF
The Barn	4,150	$2,104,000	$507
Kitchen	4,050	$3,943,000	$974
Faculty / Staff Dining	4,710	$4,273,000	$907
Meeting Room	2,620	$1,330,000	$508
East Courtyard Restrooms	910	$754,000	$829
Barn Theater	1,651	$634,000	$384
	18,091	$13,038,000	$721
Site work	--	$5,899,000	--
Total Construction Budget		$18,937,000	--

APPENDIX

Correspondence - Direction and Next Steps

From: Andy Plumley
To: Jon Harvey; Susan Marshburn
Cc: John White; Cheryl Garner
Subject: RE: Barn Expansion Information
Date: Tuesday, December 22, 2015 5:33:00 PM
Attachments: image001.png

Perfect, thank you Jon.

Andy

Andy Plumley

From: Jon Harvey
Sent: Tuesday, December 22, 2015 4:53 PM
To: Andy Plumley; Susan Marshburn
Cc: John White
Subject: RE: Barn Expansion Information

Andy,

Thanks for providing direction on potential revisions to the Barn program.

A summary of the direction and next steps discussed follow.

1. West Courtyard entertainment capacity will be revised to achieve a balance between the optimum entertainment program, business plan, and corresponding facility requirements.
2. Size of the West Courtyard stage can be reduced. The minimum stage size is the same as stage located in the existing Barn.. Preference is to have a slightly larger stage. Multiple use of the stage is also a possibility (e.g., use stage for dining when there is not a performance).
3. Stage height can be lowered to one to two feet above the courtyard floor. Actual height will be identified during design.
4. Faculty / Staff Dining service remains as defined in the DPP (i.e., no table service).
5. The loading dock must be able to accommodate delivery truck size identified in the DPP.

We are working to schedule a workshop in late January to complete the program verification process.

Thanks

Jon

Sent: Tuesday, December 22, 2015 12:18 PM
To: Jon Harvey; Susan Marshburn
Cc: John White
Subject: RE: Barn Expansion Information

Just left you a voice message. Did Cheryl connect with you? I am free for a call today after 3:30pm.

Andy

Andy Plumley

From: Jon Harvey
Sent: Wednesday, December 16, 2015 10:28 AM
To: Andy Plumley; Susan Marshburn
Cc: John White
Subject: Barn Expansion Information

Andy, Susan,

As part of the pending program verification process, request update on the proposed West Courtyard entertainment program. Areas of interest are: anticipated audience numbers, size of the stage, and other support requirements. Any information you can provide would be appreciated.

Also, we are continuing with the Faculty / Staff Dining space program that provides a buffet service as discussed at the December 9 meeting.

Thanks

Jon

Jon Harvey, AICP
Principal Educational Facilities Planner
UCR Capital Programs
Capital Planning
951.827.6952 | jon.harvey@ucr.edu

APPENDIX

Correspondence - Non-Accessible Parking

From: Jon Harvey <jon.harvey@ucr.edu>
Subject: FW: Barn Expansion - Non-Accessible Parking
Date: January 7, 2016 at 5:56:33 PM PST
To: Laura Hartman <lh@fernauhartman.com>

Laura,

Per conversation. Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Andrew Stewart
Sent: Tuesday, January 05, 2016 11:53 AM
To: Jon Harvey; Irma Henderson
Cc: John White; Andy Plumley
Subject: RE: Barn Expansion - Non-Accessible Parking

Jon,

Thank you for your time this morning talking over the relationship between the expanded Barn project and our existing ADA parking demands in that area of the campus.

The single van accessible ADA parking space shown in the drawing is a great piece to help offset the three ADA spaces we have along the eastern service road that will be removed by the project. The current spaces help serve the buildings in this area along with our other ADA spaces in Lots 1 and 4.

As we discussed though, we are often close to 100% utilization of the existing ADA spaces in this area of the campus during academic periods. Although we are pushing our commuters to "Park Once" and walk, the disabled community members do use their vehicles more often to move about the campus and we would expect some of them to drive to the barn for dining and events. When we put the overall campus demand and the increased Barn load from campus community and event attendees together we will exceed the current ADA parking supply. I thing we need to plan for modifications to our existing ADA parking in Lot 4, south of the project site. We would need to address the crosswalk ramps and walkway along with evaluating the parking lot slopes and lighting at that crossing. The key for TAPS would be to have this be built in conjunction with the Barn project. Constructing these changes as a separate project could be a lengthy and delayed process. If you would like to sit down and talk about this please let me know. We could even go out and visit the site.

To follow up on our discussion about the removal of the service parking along the proposed Barn loading dock road (that we do no need) and the desire to increase the open space around the Faculty/Staff Dining Room, I marked up the attached drawing similar to what we talked about. The lines show a possible alignment option for a back in dock that may work to provide better access for the larger delivery trucks along with providing more open space and a reduced view of the loading dock activities. If there are further conversations on this topic I can be of use in, just let me know and I will be there.

Andy S.

Andrew Stewart , CAPP
Superintendent
UCR | Transportation and Parking Services

University of California, Riverside
Transportation and Parking Services
683 Linden Street, Riverside, CA 92521

From: Jon Harvey
Sent: Monday, January 04, 2016 2:35 PM
To: Irma Henderson <irma.henderson@ucr.edu>
Cc: John White <john.white@ucr.edu>; Andy Plumley <andy.plumley@ucr.edu>; Andrew Stewart <andrew.stewart@ucr.edu>
Subject: Barn Expansion - Non-Accessible Parking

Irma,

The current Barn Expansion site plan identifies two to three parking spaces on the west side of the Faculty/Staff dining room. A copy of the 2012 Barn Expansion DPP site diagram as of December 2015 is attached for reference.

As part of the program review process, request input on the need to provide non-accessible parking on the west side of the Faculty/Staff Dining room (see attached). The parking was first identified in the 2009 Barn Area Study to support KUCR (see reference below), and the spaces remained in the *2012 Barn Expansion DPP Update* when KUCR was replaced with the Faculty Staff Dining facility.

Removing these spaces provides additional site opportunities. It is important to note that the ADA parking shown on the plan directly south of Humanities will remain.

Please let me know if there are any issues or concerns with removing the non-accessible parking from the plan.

Thanks

Jon

2009 Barn Area Study, Page 52

A dedicated parking and loading area, located directly off of West Campus Drive, would allow for easy guest and employee access as well as good access for stored equipment which would be transported by KUCR to remote locations for broadcasts off-campus since KUCR has many off-campus events.

2010 The Barn Project Phases 1 & 2, DPP, Page 246
Workshop # 2 Meeting Notes, Programming, KUCR

Three parking spaces; one will need to be an ADA space. Also, the parking situation needs to accommodate loading/unloading via a small pickup truck. Any additional parking needs will be met at Parking Lot 4.

Jon Harvey, AICP
Principal Educational Facilities Planner
UCR | Capital Programs

Capital Planning
951.827.6952 | jon.harvey@ucr.edu

Correspondence - Non-Accessible Parking

APPENDIX

Correspondence - Barn Theater Program Narrative Draft

UC RIVERSIDE UNIVERSITY OF CALIFORNIA

Capital Asset Strategies
Architects & Engineers
UNIVERSITY OF CALIFORNIA, RIVERSIDE

BARN EXPANSION
Summary Scope Narriatives: Campus Meeting Room, and Barn Theater
January 25, 2016

Barn Theater Program Narrative:

1. The Barn and associated buildings were originally constructed as support buildings for the new and expanded 1916 era Citrus Experiment Station. The four remaining structures in the area, the Barn, Barn Stable, Barn Theater and the University Cottage. The Barn Expansion project includes the Barn and Barn Theater.

2. A review of the Barn Theater was completed in fall 2014 to determine if the building could be renovated to better support present academic programs as well as additional added campus programs. Space is currently assigned to CHASS and serves as rehearsal space for the academic and corresponding student clubs for Ballet Folklorico and Taiko Ensemble, and is also utilized by the Bagpipe program. Each of these programs is longstanding and uniquely representative of the diverse campus culture.

3. The Barn Theater is comprised of open studio and storage room totaling 1,200 asf, and the primary use of the studio space is for instruction and rehearsal. There are no restrooms nor office space in the Barn Theater.

4. The present quantity and quality of the space does not address fundamental program requirements for both Ballet Folklorico and Taiko Ensemble. The Barn Theater lacks adequate ventilation, cooling and heating. Storage and building security are also insufficient.

5. Enrollments for Ballet Folklorico and Taiko Ensemble are estimated to be 20 to 30 students per program, and enrollments are limited by the available space. The optimum instructional and club program sizes are unknown.

6. A visual building inspection was completed by CAS and A&E in January 2015. Most of the building deficiencies are due to deferred maintenance. The building's role as a part of the first campus buildings and its unique character present both challenges and opportunities for its future use.

7. Proposed Improvements to the building are as follows:
   a. upgrade building heating and cooling systems, address code compliance issues (project assumes a restroom is not needed), modify access, incorporate running water (drinking fountain / hydration station);
   b. complete other interior (e.g., finishes, etc) and exterior building improvements to integrate the building into renovated Barn complex;
   c. modify building access; and, .
   d. Provide seismic upgrades, if needed.

Barn Expansion
Program Narratives
January 25, 2016

Campus Meeting Room Program Narrative:

1. The 2012 Barn Expansion Detailed Project Program (DPP) relocated the Cottage to the southeast corner of the Barn and converted the building to a coffee shop. During the Fall 2014 program review, the Cottage relocation was replaced with a new facility of approximately the same size, to be used as a meeting space. The result was an increase in assignable square feet. The alternative analysis also referenced the need to examine the site to determine the potential impact to East Courtyard Seating.

2. Initial Vision and Goals for the space are as follows.
   a. Incorporate a new meeting room facility adjacent to the Barn that can accommodate both meetings and catered events.
   b. Extend the space capabilities by designing a space that provides an opportunity to integrate indoor space with the East Courtyard or adjacent open space.
   c. Develop a modern flexible facility that will accommodate meeting and pre-function events and contains technological resources to support program functions.
   d. Enhance the Barn's program opportunities by providing additional meeting / pre-function space.

3. Program Summary
   a. November 25, 2014,
      i. 1,360 ASF; 1,700 GSF (Meeting Room: 1,000 ASF; Meeting Room Service: 360 ASF
      ii. Program Notes
         - Seating Capacity: 40 to 50, (20 to 25 ASF/Station)
         - Non-assignable space allocations are place holders pending further analysis during design.
         - Proposed footprint is approximately the same size as the Cottage footprint.
   b. July 1, 2015
      i. HDRS requested a larger facility, minimum size 60 to 75 seats for business reasons.
      ii. 1,865 ASF; 2,620 GSF (Meeting Room: 1,500 ASF; Meeting Room Service: 360 ASF
      iii. Program Notes
         - Seating Capacity: 75 (20 ASF/Station)
         - Non-assignable space allocations are place holders pending further analysis during design.
         - Further study is needed to determine if the proposed building can fit at the proposed location. If the preferred building size cannot be accommodated, alternatives will be forwarded to leadership for consideration.
   c. December 15, 2015, Workshop
      i. A review of the overall space requirement and available land concluded that furnishing 75 seats is unlikely but remains desirable.
      ii. Concluded that the planning effort needs to "right-size" the Campus Meeting room to make the space work on the site. If 60 to 75 seat capacity appears questionable, Capital Planning will broker the change with campus.
      iii. Placeholder program: 1,300 ASF; 1,700 GSF (Meeting Room: 900 ASF; Meeting Room Service: 400 ASF)
         - Seating Capacity Range: 45 to 60 (15 to 20 ASF/Station)

Correspondence - Loading Dock

From: Jon Harvey <jon.harvey@ucr.edu>
Subject: RE: Barn Expansion – Conference Prgm Materials
Date: January 28, 2016 at 9:27:01 AM PST
To: Laura Hartman <lh@fernauhartman.com>
Cc: Laura Boutelle <lb@fernauhartman.com>

Laura,

There is a lot of information and I propose we collaborate on the program.

Appears the only real value to the materials is the Large Meeting Room and the Storage Room Data Sheets (PDF pages 11-13).

The meeting space supports 50 seats in a conference room style, and the presented room configurations could be helpful.

Proposed program for consideration.

60 seats dining – station size 17.5 minimum. Preference is to use 20 ASF per seat to provide a cushion. If space allows, the room can provide additional seating up to 75.

Need direction from the food consultant on the buffet line space requirements. What was described by Cheryl was a separate area where the line can be setup without disturbing the meeting. Also need direction on the amount of storage space needed for tables and chairs. Storage in the Glen Mor 2 program may not have had the same requirements.

The only other space is the Back of House Support. Current allocation was 195 ASF, say 200 ASF. Need direction from food consultant.

Is it safe to assume restrooms are not needed in the building?

Also attached a sketch Andy provided post conference call illustrating how the loading dock drive could be reconfigured. FYI.

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Laura Hartman [mailto:lh@fernauhartman.com]
Sent: Wednesday, January 27, 2016 5:47 PM
To: Jon Harvey
Cc: Laura Boutelle
Subject: Re: Barn Expansion - Conference Prgm Materials

Jon,

This seems like a lot for us to analyze and guess about.

Would you mind distilling the information for us and giving us a list of the spaces, sizes, and relationships you want for the Campus Meeting Room.

Thanks a lot, Laura

On Jan 27, 2016, at 4:34 PM, Jon Harvey <jon.harvey@ucr.edu> wrote:

Laura,

Information on the Glen Mor 2 Conference Facility from the 2009 DPP is attached for reference per today's meeting. The entire report is available on the UCR website at the following location.

http://cpp.ucr.edu/DPP_Glen%20Mor%202_April%202009.pdf

A minimum size for the Campus Meeting Room of 60 seats was provided by HDRS during a post conference call discussion. The maximum remains at 75 seats.

Request those that are CC on this email provide comments on the above or provide additional information as needed.

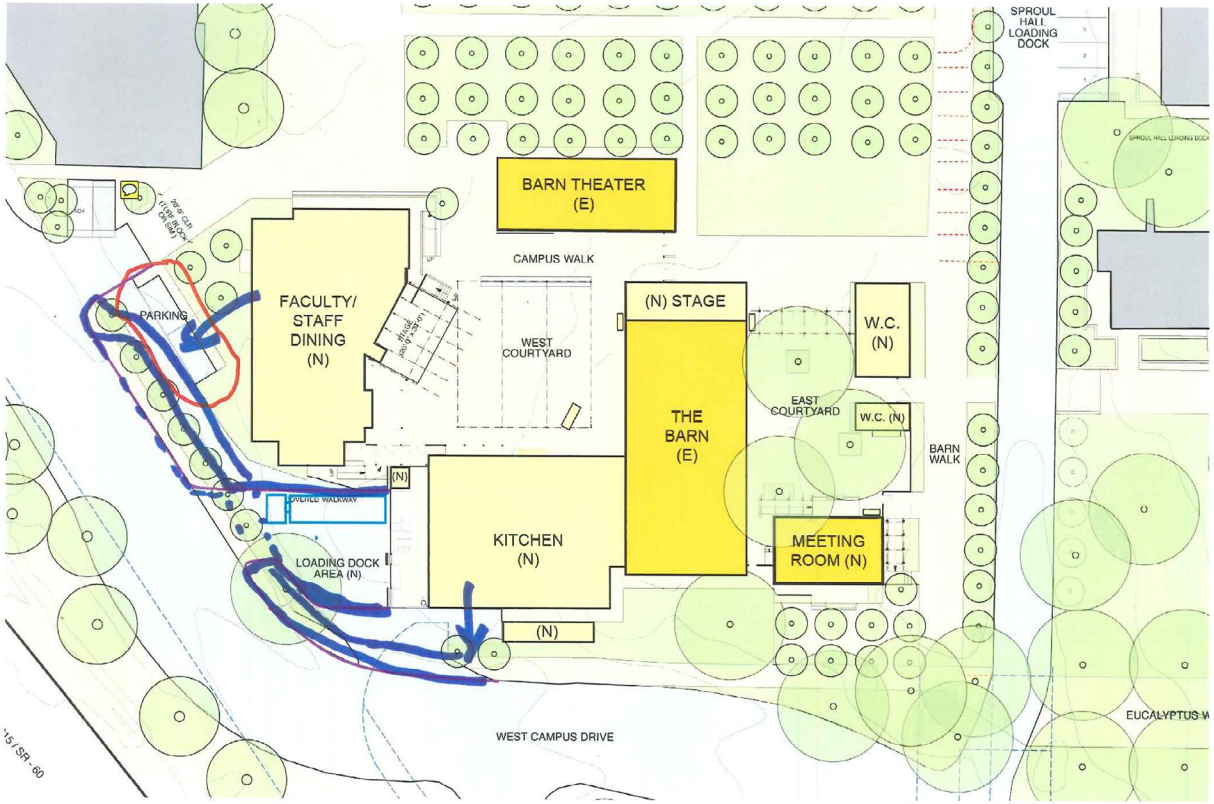
Thanks

Jon

Jon Harvey, AICP
Principal Educational Facilities Planner
<image001.png>
Capital Planning
951.827.6952 | jon.harvey@ucr.edu

APPENDIX

Correspondence - Loading Dock



APPENDIX

Correspondence - Glen Mor 2 Meeting Space Reference

From: Jon Harvey <jon.harvey@ucr.edu>
Subject: RE: Meeting Room Food/Beverage Support
Date: February 1, 2016 at 2:46:41 PM PST
To: Laura Hartman <lh@fernauhartman.com>
Cc: Laura Boutelle <lb@fernauhartman.com>, Jacqueline E Norman <jacqueline.norman@ucr.edu>

Laura,

Meeting with HDRS was very informative.

A clean floor plan from the Glen Mor 2 project showing the meeting room is attached for reference.

Space types for the Campus Meeting Room are: meeting room, storage, servery and a janitors closet. What was not mentioned but could be considered is an AV Closet.

The Servery is shown in the plan as a room with a counter where catering can set up a buffet without disturbing the meeting . Guest walk in one door and out the other door. Doors can be closed during setup and take-down. Space allocation for the servery in the attached is 191 ASF. Appears the servery space is similar to an office service area.

Also confirmed the following at the meeting.

1. Workshop goal is to verify space program by noon, and discuss site schemes that enhance program and connections to Campus.
2. Program refinements:
a. add 100 asf dry storage to kitchen;
b. servery asf is sufficient, do not expect to redesign servery in an hour;
c. refine Campus Meeting Room program to 60 to 75 seats;
d. Faculty/Staff dining room seating, all moveable, no fixed booths; and,
e. Restrooms requirements based upon a maximum audience size of 350 and a staff size of 20.

Let me know if you have any questions. I'll be in meetings until 4:30 this afternoon.

When can we anticipate getting the workshop agenda?

Thanks

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Laura Hartman [mailto:lh@fernauhartman.com]
Sent: Monday, February 01, 2016 10:05 AM
To: Jon Harvey
Cc: Laura Boutelle
Subject: Re: Meeting Room Food/Beverage Support

Jon,

Need user input on this. As it is a single function space, tables and chairs could be left in place, or on rolling carts that remain in the space not in a storage room.

Although, Glenmor did have a 250 sf storage room for tables and chairs.

The building is looking big on the site. Could something else decrease in size?

Best, Laura

On Feb 1, 2016, at 8:32 AM, Jon Harvey <jon.harvey@ucr.edu> wrote:

Laura,

There is no storage space for tables and chairs.

Is this a problem?

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Laura Hartman [mailto:lh@fernauhartman.com]
Sent: Sunday, January 31, 2016 2:56 PM
To: Jon Harvey
Cc: Laura Boutelle
Subject: Fwd: Meeting Room Food/Beverage Support

Jon,

Here are Larry's comments.

As a total this is fairly close to what we discussed on Friday (80 sf less), which was as follows:

75 seats at 20/sf = 1500 sf + 100 sf for the buffet =1600 sf

400 sf for back of house

Total = 2000sf + 20% = 2400 sf

We are developing our studies based on what we discussed Friday.

Best, Laura

Begin forwarded message:

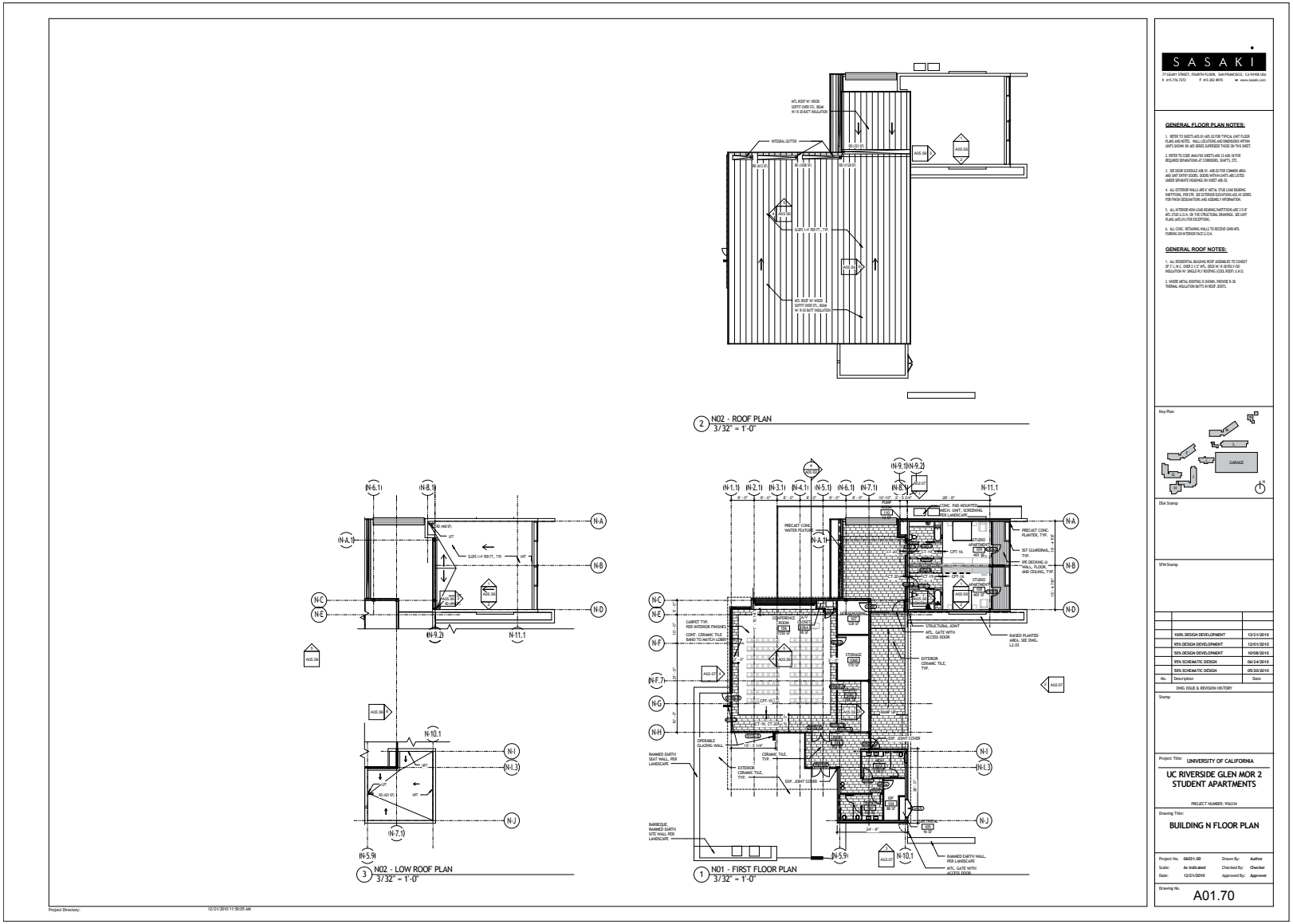
From: Larry Lanier <LLanier@laschobersovich.com>
Subject: Meeting Room Food/Beverage Support
Date: January 29, 2016 at 5:16:18 PM PST
To: "Laura Hartman (lh@fernauhartman.com)" <lh@fernauhartman.com>, "Laura Boutelle (lb@fernauhartman.com)" <lb@fernauhartman.com>

Based on 75 seats, the space allocation should be:
1. BOH Staging for food/china/beverage carts, refrigerator, work counter, coffee machine, hand sink, small custodial closet, bussing carts, 3 compartment sink area – 200 SF.
2. Dedicated buffet room for double buffet set up of food/beverage – 220 SF.

This program requires soiled service ware, china, silverware, glassware to be taken to the Barn kitchen for cleaning.
There will be no food prep in the BOH staging. All food will be placed in service ware in the Barn kitchen and transported via enclosed carts to the meeting staging room. Service ware will then be placed on the buffet counters.

APPENDIX

Correspondence - Glen Mor 2 Meeting Space Reference



APPENDIX

Correspondence - AV Systems Recommendations

The Shalleck Collaborative Inc.
Planning and Design of Theatres and Production Systems

TRANSMITTAL / MEMO

Project: UC Riverside - Barns
Date: February 3, 2016 *Via:* e-mail
Fax:
To: Laura Hartman *Tel:* 510.848.4480
Fernau & Hartman Architects, Inc.

From: Adam Shalleck, FAIA
Ian Hunter, CTS-D

Re: AV Systems Recommendations *# of pgs. including cover:*

Laura-

On February 2, 2016, we conducted a phone meeting with the UC Riverside Barn AV operator, Daniel Gilstrap. Below are our meeting notes, which should serve to inform future directions in AV support in the new outdoor seating & performance area.

Types of Events:

-Comedy Shows
-Live Music
-Presentation at Podium

Current Production Method:

Currently, all audio equipment is portable, and setup on a show-by-show basis. The loudspeakers are stacked on the stage, and loose cabling is deployed between stage and control position (at opposite end of stage).

Audio equipment in place now: ElectroVoice QRX w/ dual 18" subs, Midas Pro 1 audio console

Recommendations:

Option 1: Portable
This option would be very similar to the current scheme. While cost effective, it does not yield the best audio coverage (speakers are stacked on floor, rather than "flown" above), and it requires the greatest amount of labor and troubleshooting in order to start an event.

Option 2: Installed
This option would provide a completely installed loudspeaker system, as well as cabling infrastructure on stage and at the audio control position (opposite the stage). We recommend the audio devices used at the control position be housed in a rolling cart that can be stored inside, but connection to the installed wiring infrastructure would be simple and quick. This option provides for quick setup and minimal labor, as the bulk of the system is ready to go at all times.

400 Montgomery St. Suite 500 San Francisco, CA 94104 tel 415-956-4100 fax 415-840-0494

The Shalleck Collaborative, Inc.
Planning and Design of Theatres and Production Systems

Accommodations:

In addition to the audio gear, certain architectural, structural, and electrical accommodations are necessary for proper system operation.

We recommend an overhead canopy above the stage area, equipped with a series of rigging points for the suspension of loudspeakers and other production needs (ie- lighting, backdrops, banners, etc). The rigging points should each be rated for 1-ton loads.

For electrical power, we recommend a "company switch" which is essentially a large power outlet, suitable to power AV and production lighting systems. Ideally, this power would be fed from an isolated source, in order to keep the AV system as quiet and protected as possible.

Contact Info for Daniel Gilstrap:

Daniel Gilstrap
1-760-333-8306
gilstrapsound@gmail.com

<end of memo>

APPENDIX

Correspondence - Phone Conversation Summary

From: Jon Harvey <jon.harvey@ucr.edu>
Subject: Barn - Budget
Date: February 3, 2016 at 2:42:00 PM PST
To: Laura Boutelle <lb@fernauhartman.com>, Laura Hartman <lh@fernauhartman.com>
Cc: John White <john.white@ucr.edu>, Jacqueline E Norman <jacqueline.norman@ucr.edu>, Scott Lewis <scott@oppenheimlewis.com>

Laura,

Reviewed costs with Scott Lewis this afternoon.

Conclusion. base figures are fine; there is a potential problem with the future escalation assumptions.

Need to identify the construction start and midpoint to inform the construction budget model.

Time permitting, we may want to discuss schedule at the end of the workshop wrap-up with Capital Planning and A&E.

Jon

Jon Harvey, AICP
Principal Educational Facilities Planner
UCR | Capital Programs
Capital Planning
951.827.6952 | jon.harvey@ucr.edu

APPENDIX

Correspondence - Project Area Summaries - Questions

From: Charles Blumer <charles.blumer@ucr.edu>
Subject: FW: UCR Barn Expansion: Project area Summaries--questions
Date: February 11, 2016 at 2:28:30 PM PST
To: "lh@fernauhartman.com" <lh@fernauhartman.com>
Cc: Jon Harvey <jon.harvey@ucr.edu>, Jacqueline E Norman <jacqueline.norman@ucr.edu>, Robert Keith Williams <robert.williams@ucr.edu>

Laura,
The answer to question #5 below is....

We do not require urinals in the unisex bathrooms. In consideration of LEED, I was informed by John Cook (UCR Office of Sustainability) that it is desirable to have a urinal to reduce water usage, but, a two stage flush toilet is an acceptable alternative. I believe you had some space issues. With that in mind, no urinal would be the preference. In our conversation, you said that you had had a meeting with the campus architect, and one unisex restroom had been deem sufficient. So, the answer to the question, "Are two single occupancy / unisex toilet rooms adequate? The answer is yes. I assume that this would also include the signage that would meet UCR requirements for Gender Inclusive Facilities.

Take care, Chuck

Chuck Blumer, IOR
949-9235430
Charles.blumer@ucr.edu
UCR | Capital Programs
Architects and Engineers
University Village
1223 University Avenue Suite 240
Riverside, Ca 92507

From: Robert Keith Williams
Sent: Wednesday, February 10, 2016 5:28 AM
To: Charles Blumer <charles.blumer@ucr.edu>
Subject: Fwd: UCR Barn Expansion: Project area Summaries--questions

Chuck
Please take a look at this and provide comments.
Thanks
Bob

Sent from my iPhone

From: Jon Harvey <jon.harvey@ucr.edu>
Date: February 8, 2016 at 3:57:51 PM PST
To: Robert Keith Williams <robert.williams@ucr.edu>
Cc: Jacqueline E Norman <jacqueline.norman@ucr.edu>
Subject: Fwd: UCR Barn Expansion: Project area Summaries--questions

Bob,

Please provide direction on the restroom question five listed below.

Thanks. Jon

Sent from my iPad

Begin forwarded message:

From: Laura Hartman <lh@fernauhartman.com>
Date: February 8, 2016 at 12:52:51 PM PST
To: Jonathan Harvey <jon.harvey@ucr.edu>
Cc: Jacqueline Norman <jacqueline.norman@ucr.edu>, Laura Boutelle <lb@fernauhartman.com>
Subject: UCR Barn Expansion: Project area Summaries--questions

Jon,

I am working on the Project Area Studies and am hoping to send you a draft today, if I can.

Questions:

1. For the Composite project Area Summary, (p.29 in 2012 DPP Update):
   Should we still show the Cottage and Barn Stable, but show sf at zero?

2. For the individual buildings should we retain our notes in red to record additions and subtractions since 2012?

3. The Cottage had two outdoor seating components, the South Cottage patio is deleted, but should the East Courtyard seating remain—is 1000sf?

4. FYI — Our single occupancy restrooms are a bit small, need to be about 70-72 sf each.

5. What is UC requirement for Unisex toilets?—do you need a WC and a urinal in each or can we just have a WC? Are two single occupancy / unisex toilet rooms adequate? As I understand it this is a UC call. As discussed, we are assuming they would be within the East Courtyard Restrooms and replace other fixtures in that facility. We are hoping we only need a WC in each Unisex toilet room.

Hope to hear back from you soon.

Thanks, Laura

Laura Hartman
Fernau & Hartman Architects, Inc.
510.848.4480
fernauhartman.com

APPENDIX

Correspondence - Green Room Layout

From: Jon Harvey <jon.harvey@ucr.edu>
Subject: RE: UCR Barn Expansion: smaller Green Room layout at the Barn
Date: February 18, 2016 at 8:21:36 AM PST
To: Laura Hartman <lh@fernauhartman.com>
Cc: Laura Boutelle <lb@fernauhartman.com>, Jacqueline E Norman <jacqueline.norman@ucr.edu>

Laura,

Keep the two doors for the purposes of the report. Diagram shows it works.

Suspect that the thinking on how the space will be used has evolved to also consider what is being provided in the FS Dining Green Room.

Thus the move to place the frig under the counter is fine. Seems the more important item is chairs.

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Laura Hartman [mailto:lh@fernauhartman.com]
Sent: Wednesday, February 17, 2016 5:20 PM
To: Jon Harvey
Cc: Laura Boutelle; Jacqueline E Norman
Subject: Re: UCR Barn Expansion: smaller Green Room layout at the Barn

Jon,

Do we need two doors?
Counter will be v crowded w frig under it.
As I recall, it was for make-up.

Thanks
Laura

Sent from my iPhone

On Feb 17, 2016, at 5:00 PM, Jon Harvey <jon.harvey@ucr.edu> wrote:

Laura,

Direction on the Barn Dining Green Room is listed below as requested.

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Richard L Geiger
Sent: Wednesday, February 17, 2016 4:42 PM
To: Jon Harvey
Cc: Andy Plumley; Susan Marshburn; Cheryl Garner; David E Henry; Duane E Gornicki
Subject: FW: UCR Barn Expansion: smaller Green Room layout at the Barn

Jon,

HDRS has reviewed and approved the attached Space Plan with the following caveats:
1) Lockers can be deleted to free-up space for the second chair.
2) Second chair should be reinstated, consistent with 2012 DPP (page 83)
3) Under-counter refrigerator should be shown, consistent with 2012 DPP
We are good to go. Thanks for the communication.

Richard Geiger
Sr. Director of Capital Projects
Housing, Dining & Residential Services
University of California, Riverside
Office (951) 827-7450
Cell (951) 315-2268

From: Jon Harvey
Sent: Wednesday, February 17, 2016 8:45 AM
To: Richard L Geiger
Cc: Susan Marshburn
Subject: FW: UCR Barn Expansion: smaller Green Room layout at the Barn

Richard,

The size of the Barn Dining Green Room was decreased to approximately 98 ASF, which has required updating the Room Data Sheet.

Please review the attached Green Room sketch to see if the space meets the requirements. The previous sketch is on page 83 of the 2012 DPP.

The goal is to resolve this quickly.

Thanks

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

From: Laura Hartman [mailto:lh@fernauhartman.com]
Sent: Tuesday, February 16, 2016 6:47 PM
To: Jon Harvey
Cc: Laura Boutelle
Subject: UCR Barn Expansion: smaller Green Room layout at the Barn

Jon,

Please review.

The refrigerator, coat rack, second chair and coffee table shown in the 2012 plan do not fit.

Also, do we need two doors?

Please confirm they can be deleted from the program's room data sheet.

Thanks, Laura

APPENDIX

Correspondence - Servery (North Expansion)

From: Cheryl Garner [mailto:cheryl.garner@ucr.edu]
Sent: Saturday, March 05, 2016 7:58 AM
To: Richard L Geiger
Cc: Larry Lanier; David E Henry
Subject: Re: UCR Barn Servery / North Expansion Sketch

I don't like it at all. You were right Larry - we need to move towards the South expansion.

Sent from my iPhone

On Mar 3, 2016, at 5:32 PM, Richard L Geiger <richard.geiger@ucr.edu> wrote:

Thanks Larry,

Agreed that the servery is tighter. Queing for hot food and grab-n-go down in the corner could be a bottleneck? That existing column in front of the grab-n-go certainly adds to that circulation issue. Sandwich and Salad cases are smaller? Thanks for the sketch. I will get Dining input ASAP (realizing that Cheryl is on the road).

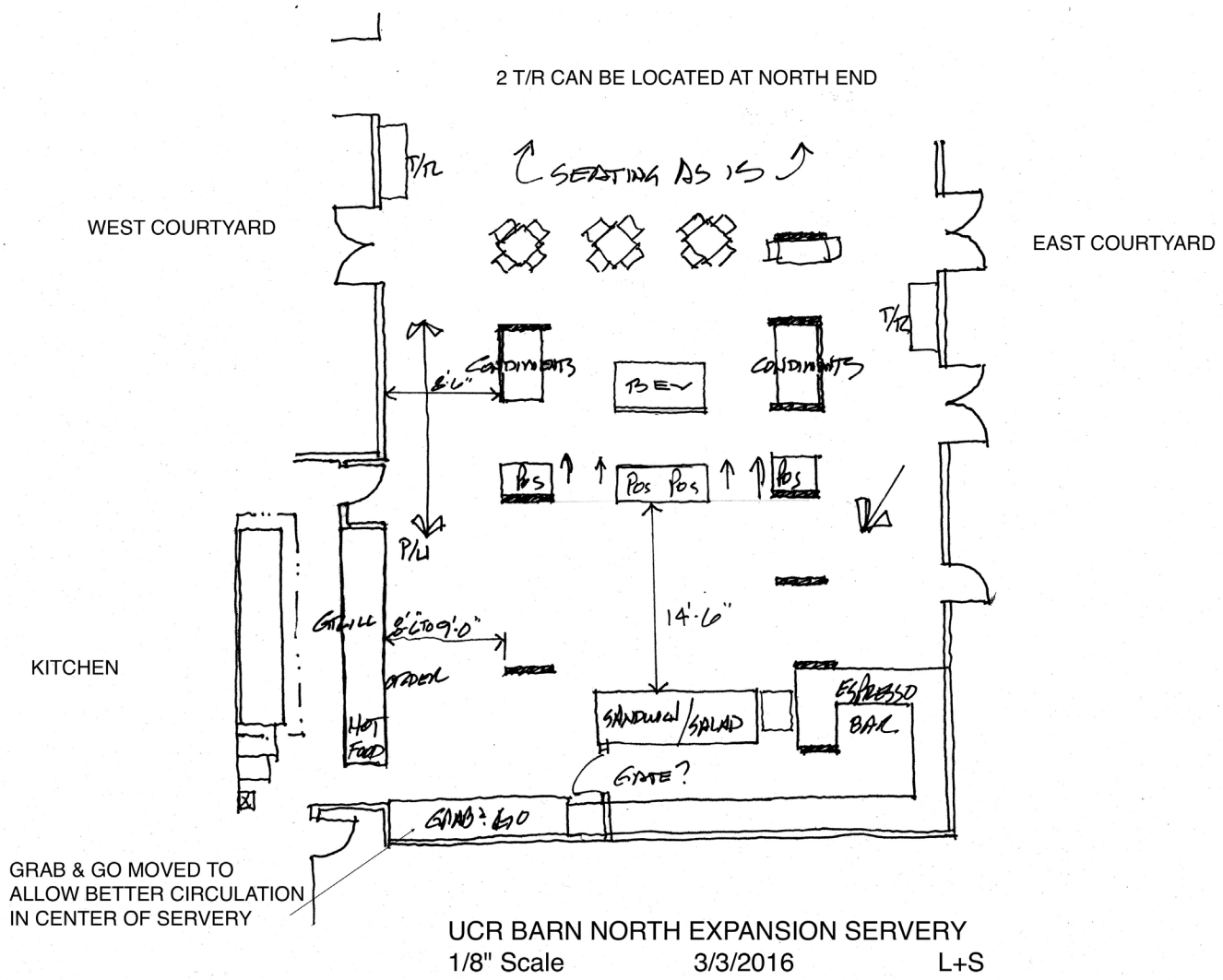
Regards,
Richard Geiger
Sr. Director of Capital Projects
Housing, Dining & Residential Services
University of California, Riverside
Office (951) 827-7450
Cell (951) 315-2268

From: Larry Lanier [mailto:LLanier@laschobersovich.com]
Sent: Thursday, March 03, 2016 4:53 PM
To: Cheryl Garner; David E Henry; Richard L Geiger; Laura Hartman (lh@fernauhartman.com)
Subject: UCR Barn Servery

See attached sketch of servery if the barn expansion were on the north end per discussion this morning.

Larry Lanier, President, FCSI, CFSP
Laschober+Sovich, Inc.
20301 Ventura Blvd, Suite 338
Woodland Hills, CA 91364
818-713-9011, Ext 12
Laschobersovich.com

<UCR Barn Servery - North Expansion.pdf>



APPENDIX

Correspondence - Loading Dock

From: Richard L Geiger
Sent: Wednesday, March 16, 2016 3:12 PM
To: Jon Harvey
Cc: Melissa Ann Garrety; Andy Plumley; Susan Marshburn; Cheryl Garner; David E Henry; Duane E Gornicki; John White; Jacqueline E Norman; Gustavo Plascencia
Subject: RE: Barn Expansion - Final Draft Report

Jon,

I will follow up with Dining to understand comment status.

It is true that there is still one 60' truck that delivers weekly. That truck is not going away, but we agree that we will figure it out in the service yard design exercise. Perhaps that truck may not be able to back up to the dock, but off-load somewhere else within the service yard.

You will also note on the Dock Matrix that we list the requirement for one 32' truck and one 50' truck to be off-loaded at the same time. After much discussion here, we agree that this does not necessarily mean that both trucks have to be backed up to the dock at the same time. I think that is an important concession for the service yard layout. You will also note that in addition to the length of the truck in that Matrix, the overall length of the truck off-load space includes the 7' liftgate and 8' palate jack maneuvering (circulation) space behind the liftgate (but not encroaching onto the dock footprint. As a result, a 50' truck will take up 65' of physical space (50+7+8) to off-load.

I'm not sure if we have enough space on the existing dock footprint to accommodate all of the program. We will need to layout that space as soon as possible. I suggest that Fernau & Hartman ask Laschoberr & Sovich to do a dock layout ASAP.

Regards,
Richard Geiger
Sr. Director of Capital Projects
Housing, Dining & Residential Services
University of California, Riverside
Office (951) 827-7450
Cell (951) 315-2268

From: Jon Harvey
Sent: Wednesday, March 16, 2016 2:12 PM
To: Richard L Geiger
Cc: Melissa Ann Garrety; Andy Plumley; Susan Marshburn; Cheryl Garner; David E Henry; Duane E Gornicki; John White; Jacqueline E Norman
Subject: RE: Barn Expansion - Final Draft Report

Richard,

Thanks for your comments on the Barn Expansion draft report.

FYI. As of this writing, comments from Dining Services remain pending. Please let me know when these will be available.

Also appreciate receiving the updated loading dock requirements, and these will be forwarded to F&H for incorporation into the report. Deliveries still show a 60 foot truck. Assume that the design process will need to consider the delivery but the maximum truck size to accommodate remains at 50 feet. Is this correct?

After reviewing the materials, it appears there is sufficient space to accommodate *Items on Dock*, and via design, *Items in Service Yard*. Thoughts / comments on the available space conclusion would be appreciated.

Thanks

Jon

Jon Harvey, AICP
Capital Planning
951.827.6952

Correspondence - Loading Dock

From: Richard L Geiger
Sent: Wednesday, March 16, 2016 12:34 PM
To: Jon Harvey; Andy Plumley; Susan Marshburn; Cheryl Garner; David E Henry; Duane E Gornicki; John White; Jacqueline E Norman
Cc: Robert Gayle; Jeff Kaplan; Melissa Ann Garrety
Subject: RE: Barn Expansion - Final Draft Report
Importance: High

Jon,

My comments as requested. Dining comments to follow (if you have not already received them).

Richard Geiger
Sr. Director of Capital Projects
Housing, Dining & Residential Services
University of California, Riverside
Office (951) 827-7450
Cell (951) 315-2268

From: Jon Harvey
Sent: Thursday, March 10, 2016 4:51 PM
To: Andy Plumley; Susan Marshburn; Cheryl Garner; Richard L Geiger; David E Henry; Duane E Gornicki; John White; Jacqueline E Norman
Cc: Robert Gayle; Jeff Kaplan; Jon Harvey; Melissa Ann Garrety
Subject: Barn Expansion - Final Draft Report

Andy, Susan, Richard, Cheryl, David, Duawine, Jacqueline, John,

The revised Barn Expansion Program Verification draft report that address provided comments is available via Dropbox (link provided below).

Please review and provide comments no later than noon, March 16.

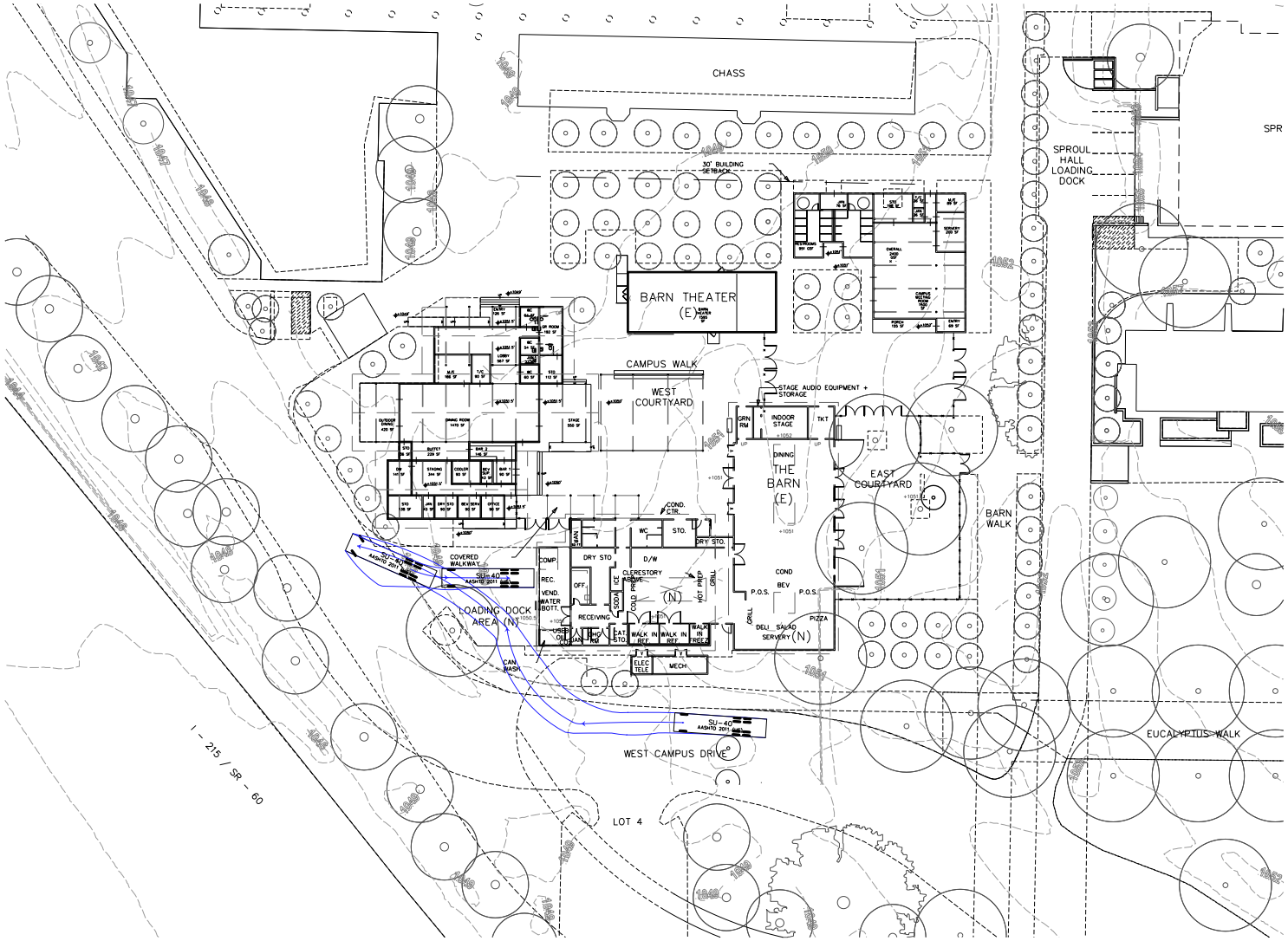
Request that comments be provided in electronic format using the attached template. Legible comments are also welcome.

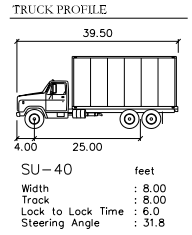
Please give me a call at 2-6952 if you have any questions.

Thanks

Jon

Loading Dock Area Studies - Composite Site Plan Option 1 w/ 40' Truck

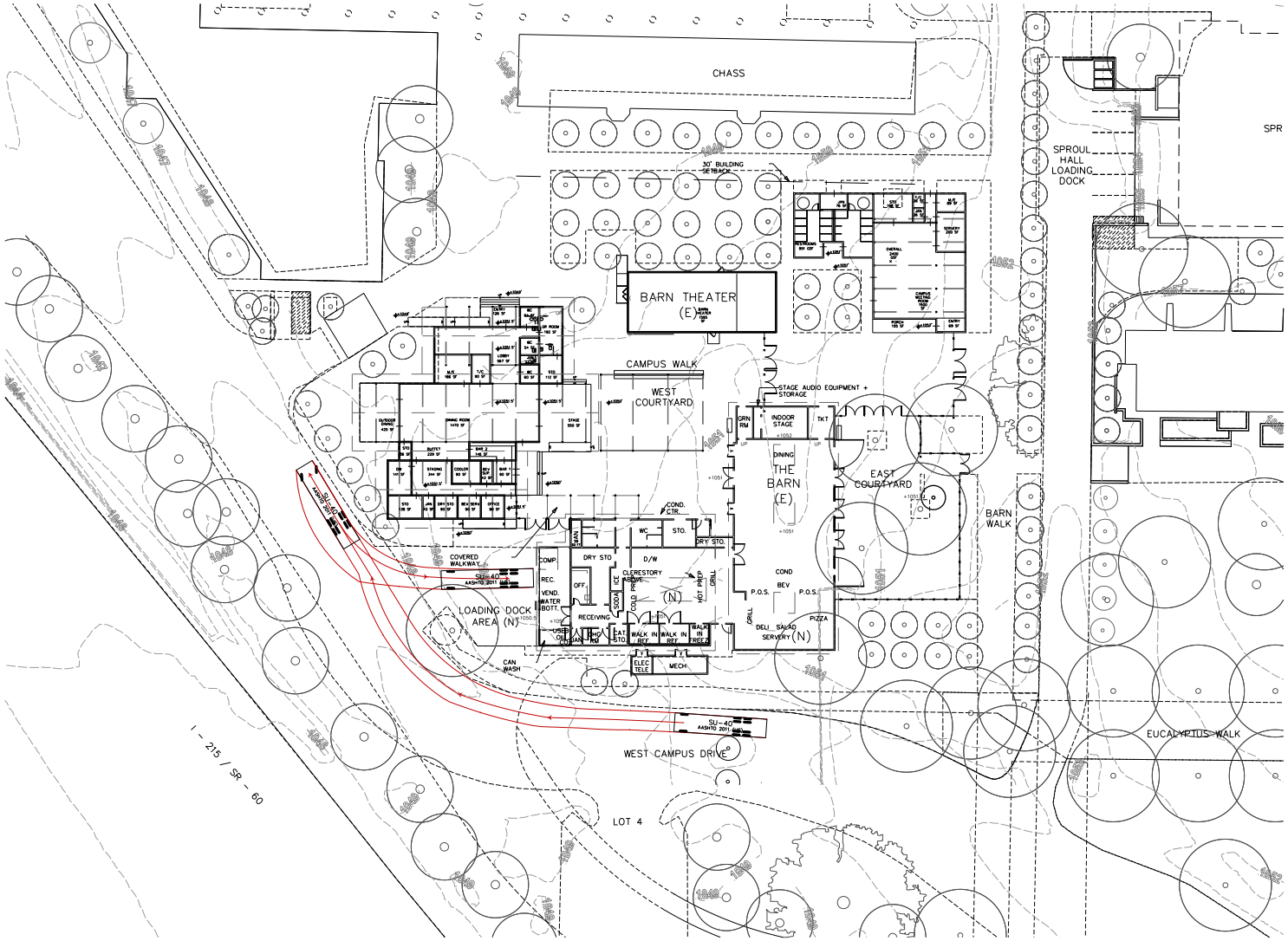


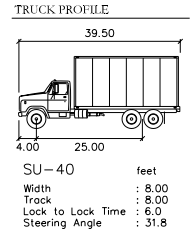


CIRCULATION STUDY - SU-40 ROUTE 1

0 40' 80' 160'

Loading Dock Area Studies - Composite Site Plan Option 2 w/ 40' Truck





CIRCULATION STUDY - SU-40 ROUTE 2

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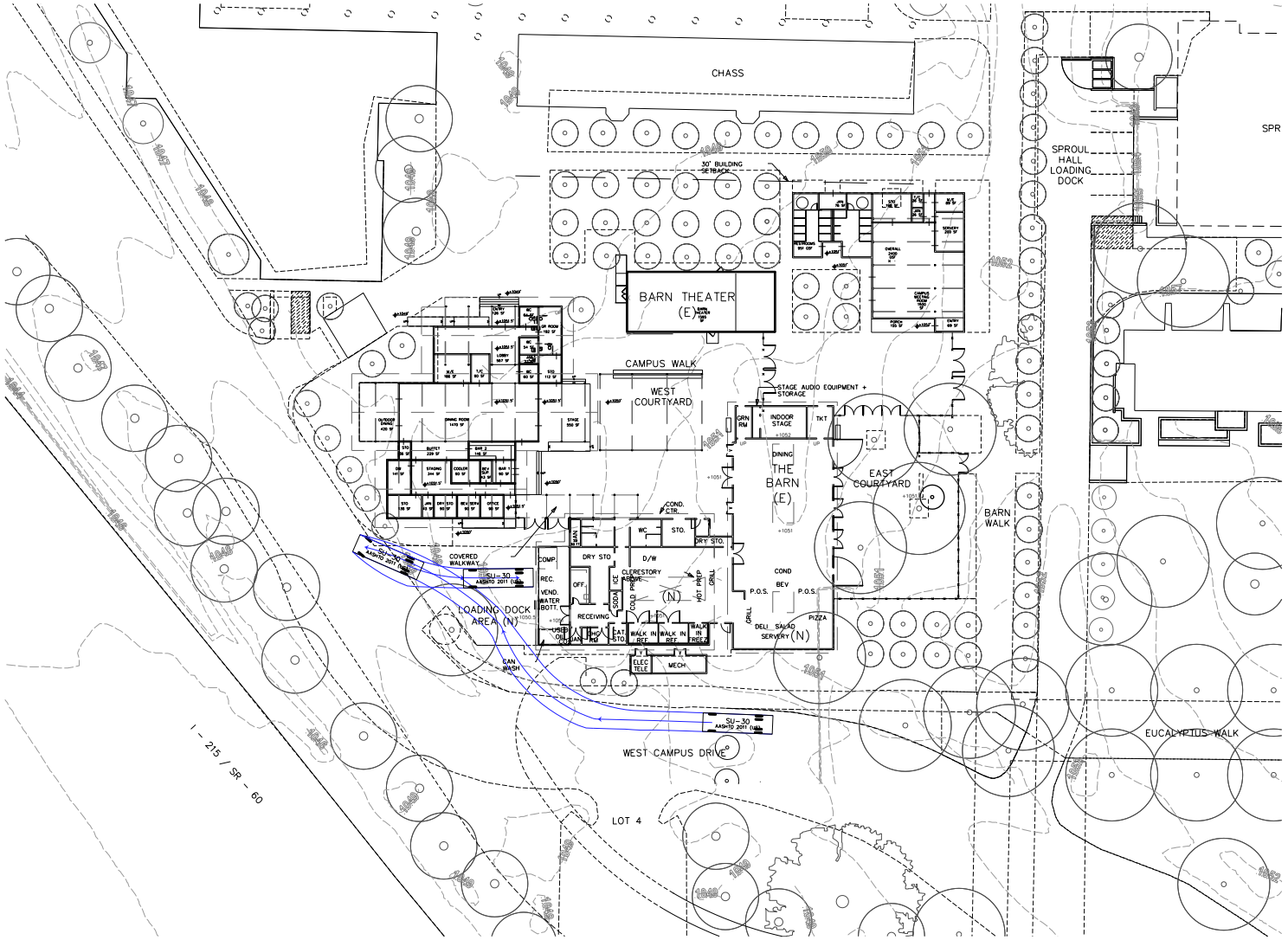
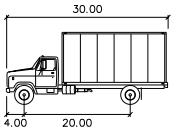
Loading Dock Area Studies - Composite Site Plan Option 1 w/ 30' Truck



NOTE:

1. SU-30 TRUCK USED TO MODEL UCR GARBAGE TRUCK (2005 MACK WITH AMREP TRASH BODY). DIMENSIONS OF SU-30 TRUCK DO NOT EXACTLY MATCH DIMENSIONS OF UCR GARBAGE TRUCK.

TRUCK PROFILE

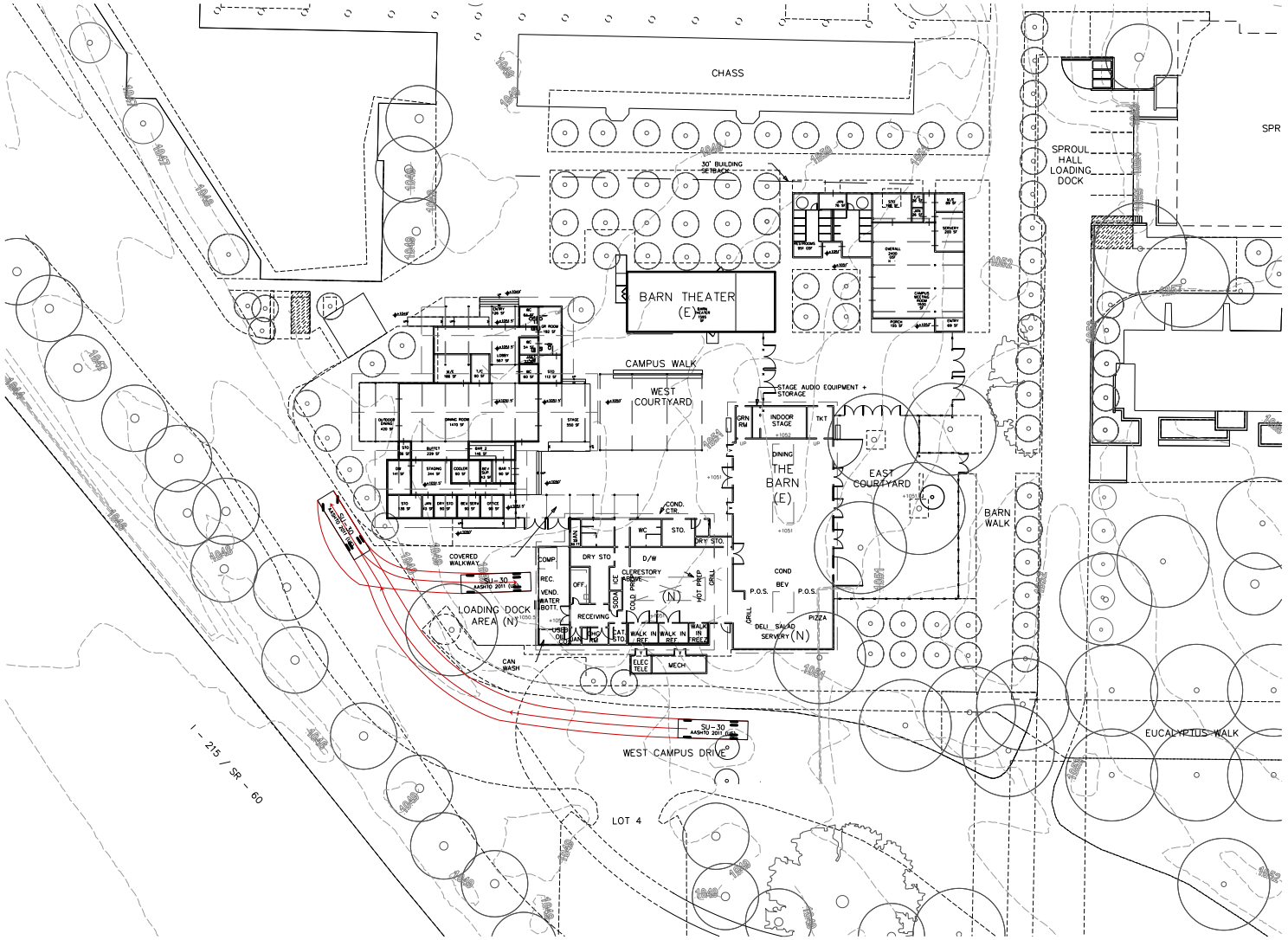


SU-30	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

CIRCULATION STUDY - GARBAGE TRUCK ROUTE 1

0 40' 80' 160'

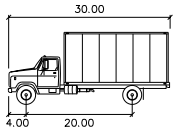
Loading Dock Area Studies - Composite Site Plan Option 2 w/ 30' Truck



NOTE:

1. SU-30 TRUCK USED TO MODEL UCR GARBAGE TRUCK (2005 MACK WITH AMREP TRASH BODY). DIMENSIONS OF SU-30 TRUCK DO NOT EXACTLY MATCH DIMENSIONS OF UCR GARBAGE TRUCK.

TRUCK PROFILE



SU-30	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

CIRCULATION STUDY - GARBAGE TRUCK ROUTE 2

0 40' 80' 160'

APPENDIX

UCR Loading Dock Requirements of March 10, 2016

Barn Expansion Foodservice Loading Dock Requirements

Prepared by:
Gustavo Plascencia, General Manager
Dining Services
3637 Canyon Crest Dr., Suite F101
Riverside, CA 92507
Gustavo.plascencia@ucr.edu

Updated on March 10, 2016

Ergonomic Design Guidelines

All new construction of food service facilities should follow these ergonomic design guidelines to minimize the risk of workplace injuries.

University of California Ergonomic Design Guidelines
Source:
http://www.uhs.berkeley.edu/facstaff/ergonomics/pdf/DiningDesignGuidelines.pdf

Loading Docks

1. Provide adjacencies between the loading dock, stockroom, preparation, cooking, and serving functions to limit the number and distance of material handling transfers required to transport products
2. Design modular loading dock (bays, vehicular access, waste bins, materials handling equipment) to adapt to work process changes
3. Ensure the trucks servicing facility have access to loading dock via driveways or service roads with minimal pedestrian or bicycle traffic.
4. Provide manually adjustable lighting in each loading berth to illuminate the interior of trailers
5. Keep loading dock, storeroom and food preparation areas on same level. If not possible, locate storerooms adjacent to freight elevators in multi-level environments
6. Avoid grades at dock to avoid rolling of vehicles and containers away from dock. Use chocks, wheel stops, dock locks, or hooks on axles to prevent rolling
7. Provide staging area inside building adjacent to the loading dock to inventory and organize received goods
8. Provide durable, slip-resistant, level concrete dock surfaces that are easy to clean and maintain. Avoid thresholds, lips, and uneven drains
9. Include a wet room/wet area with hose connections and drainage to sanitation system to clean equipment such as trash containers, carts and floor mats
10. Provide electrical and utility hookups for equipment used on the loading dock. Consider the size and voltage of electrical hook-ups, the size and coupling of utility hook-ups, the number of hookups to meet demands, and the placement of hookups to limit cords, hoses and cables in walkways and high traffic areas.

Food Service Loading Dock Requirements

Shipping/Receiving

- Receiving area must be level
- Provide wall bumpers to prevent damage to walls from carts
- Receiving area should have space to offload two trucks, at minimum to accommodate one 50 ft truck and one 30 ft truck.
- Provide appropriate apron space according to dock planning standards

APPENDIX

UCR Loading Dock Requirements of March 10, 2016

Storage Space

- Enclosed or secured space, minimum 240 square ft to store and protect the following materials from weather, theft, arson and vandalism:
  - Soiled linens (tablecloths, aprons, towels, mops, grill pads, floor mats)
  - Plastic totes, milk crates
  - Foodservice equipment and carts

Sanitation

- Drains (trench preferred) to sewer
- Hot and Cold Water hose bib
- Cart wash area with hose and high pressure nozzle

Waste Handling Equipment

- Self-contained trash compactor, 10 to 15 cubic yard, for mixed recycling
- Food waste dehydrator – size and capacity will vary based on volume of food waste produced. Equipment specs: Food Service Sustainability Solutions LLC, Compost Accelerator, 208 V, 3 Ph, 30 to 75 Amps depending on unit size.
- Trash bin, 3 cubic yard
- Food waste bin, 3 cubic yard and/or 1 ½ cubic yard
- 60 ft of unobstructed space in front of the compactors and waste bins is required for service by trash trucks.
- Waste oil collection tank with vacuum pump transfer system. Waste oil bin is Cleanstar 2500D exterior unit, 325 gallon capacity and measures 42" D x 91" H, 115 V, 20 Amps, hard-wired.

Safety Equipment Needed

- Mirrors – Convex mirrors for pedestrian and vehicle safety
- Fire sprinklers
- Security Cameras

Utility Requirements

- 120 V electrical receptacles, minimum of two for powering and charging equipment

Material Flow Requirements

The proposed loading dock at the Barn expansion will need to be well planned to ensure the safe orderly flow of incoming and outgoing delivery vehicles and materials. It will require a minimum of two receiving bays to service multiple vehicles.

Deliveries

Most of the delivery trucks are tractor trailer size vehicles. Access and turning radiuses should be considered during the program and design process. Overhead clearance of 15' is required for delivery trucks. The Delivery Schedule below shows the regular deliveries by vendor and the total length of time spent on campus delivering to the Dining locations. Vendors may spend anywhere from 15 minutes to two hours or more making the deliveries at each location depending on the size of the load.

Space Requirements
Apron space is the space between the loading platform and the nearest obstruction. It includes the parking area where the truck parks to unload, and the maneuvering area which the truck uses to move in and out of the parking area. The minimum apron space is calculated at twice the length of the largest delivery truck plus 10 ft for safety. Based on a Sysco truck with a 45 ft trailer, with an overall length of 53 ft including the tractor, the minimum apron space required would be 116 ft.

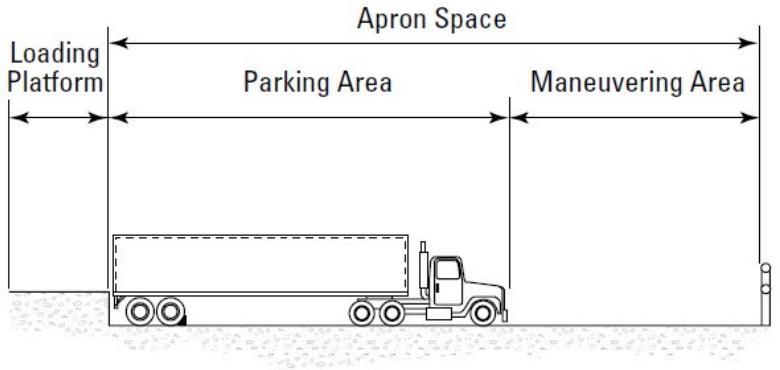


Figure 1. Apron Space. Source: Kelley Co. Dock Planning Standards

Unloading, landing and circulation space also need to be accounted in addition to the apron space. The Sysco trucks have a rail lift gate used to move freight from the truck to the ground. The lift gates have a length of 90". Delivery drivers use a powered pallet jack to move the product from the lift gate to the landing. The landing must be a minimum of 8 ft long. Therefore the minimum space required between the back of the delivery truck and the nearest obstruction is 15'-0". See drawing below:

APPENDIX

UCR Loading Dock Requirements of March 10, 2016

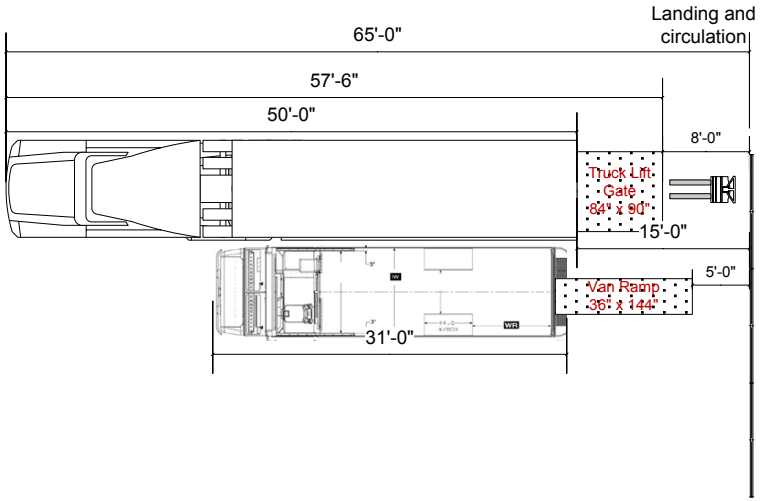


Figure 2. Landing and Circulation Space.

Weekly Delivery Schedule

Vendor	Vehicle & Length	Lift Gate	Days of delivery	Times of delivery
A&R Wholesale	Bobtail, 26 ft.	Lift Gate	Weds	10 am - 12 pm
American Paper & Plastics	Tractor Trailer, 40 ft	Lift Gate	Tues, Fri	7 am - 2 pm
Aramark	Step Van, 32 ft	Lift Gate	Mon, Thurs	7 am - 12 pm
Casey's	Box Truck, 18 ft	N/A	Mon - Thurs	7 am - 12 pm
CoreMark	Tractor Trailer, 28 ft	Lift Gate	Weds	10 am - 12 pm
Darling International	Tank Truck, 32 ft	N/A	Monthly	4:00 AM - 8:00 AM
Diamond Sharp	Pick-up truck	N/A	Bi-weekly	6am - 8am
Diana's Food	20 ft trailer truck	Lift Gate	Mon - Fri	8am - 10am
DPI	Tractor Trailer, 24 ft	Lift Gate	Mon	6 am - 10 am
Ecolab	Pick-up truck	N/A	Monthly	8 am - 10am
Frankly Fresh	Box Truck, 32 ft	Lift Gate	Mon, Fri	8 am - 12 pm
Frito-Lay, Inc.	Step Van, 32 ft	N/A	Mon, Weds, Fri	8 am - 11 am
Ocala Foods	Step Van, 32 ft	N/A	Mon - Fri	4 am - 8 am
Harvest Dairy	Bobtail, 32 ft.	Lift Gate	Mon, Thurs	6 am - 10 am
JFC	Tractor Trailer, 40 ft.	Lift Gate	Tues	9 am - 2 pm
La Chef	Bobtail, 32 ft.	Lift Gate	Tues, Thurs	6 am - 10 am
Naked Juice	Box Truck, 20 ft	Lift Gate	Mon, Weds, Fri	8 am - 10 am
P&R Paper	Box Truck, 32 ft	Lift Gate	Mon - Fri	6 am - 4 pm
Pepperidge Farms	Cargo Van, 32 ft	N/A	Thurs	11 am - 2 pm
Pepsi	Tractor Trailer, 50 ft	Lift Gate	Weds, Fri	6 am - 8 am
West Central Produce	Tractor Trailer, 40 ft	Lift Gate	Mon - Fri	6 am - 9 am
Sysco	35-45 ft trailer truck	Lift Gate	Tues, Weds, Fri	6 am - 11 am
UNFI	Tractor Trailer, 60 ft	Lift Gate	Fri	6 am - 12 pm
UPS	Step Van, 32 ft	N/A	Mon - Fri	9 am - 4 pm
Waxie	Tractor Trailer, 40 ft	Lift Gate	Mon - Fri	6 am - 5 pm
Zee Medical	Pick-up truck	N/A	Monthly	10 am - 1 pm

Recycling and Waste Management

The operations the loading dock will service generate a significant amount of waste. The University of California Policy on Sustainable Practices requires the campus to be at 75% waste diversion currently, and to achieve zero waste by 2020. Additionally, Assembly Bill 1826 requires businesses that generate a specified amount of organic waste per week arrange for recycling services for that waste. Mandatory recycling of organic waste is the next step toward achieving California's recycling and greenhouse gas (GHG) emission goals. Organic waste such as green materials and food materials are recyclable through composting and mulching, and through anaerobic digestion, which can produce renewable energy and fuel. GHG emissions resulting from the decomposition of organic

UCR Loading Dock Requirements of March 10, 2016

wastes in landfills have been identified as a significant source of emissions contributing to global climate change.

AB 1826 Implementation Timeline

- April 1, 2016
  Businesses generating 8 cubic-yards per week of food waste shall arrange for food waste recycling service
- January 1, 2017
  Businesses generating 4 cubic-yards per week of food waste shall arrange for food waste recycling service
- January 1, 2019
  Businesses generating 4 cubic-yards per week of solid waste shall arrange for food waste recycling service

Source: http://www.calrecycle.ca.gov/Recycle/Commercial/Organics/

To meet the UC landfill diversion goals and meet the new regulations, UCR Dining Services must separate the waste into three separate streams: Organics, Recycling and Non-Recyclables. This requires ample space to accommodate the use of multiple collection equipment and bins. Additional space is also required for holding items such as soiled linens, empty delivery crates and totes, bread racks, carts and other equipment.

Solid Waste Collection

Commingled recycling (compactor) will be picked up as needed, no more than once per month. Organics will be collected twice per week and non-recyclables will be collected once per week.

Liquid Waste Collection

Waste Cooking Oil

Waste cooking oil will be held in an insulated 325 gallon exterior tank, Cleanstar Model 2500D Direct Vacuum System, measuring 91" H, 42" Diameter. **All systems require a 120 volt / 20 amp dedicated circuit.** Oil will be picked up quarterly to monthly, depending on the volume.

Figure 3: Exterior waste oil tank

Grease Interceptor

The University's liquid waste hauler will need access to pump the grease interceptors once per quarter. The vendor uses a 40' tanker truck to perform the grease interceptor service.

Solid Waste Collection

New loading dock designs must include space for compactors with adequate access for users and for collection vehicles. Ramps and rails may be necessary in some areas. Below are the measurements of vendor-provided compactors and roll-off waste containers. 20' overhead clearance to roll off containers and upload containers is required. If the dumpster is placed on a raised platform 6" to 2.5', overhead clearance needs can be reduced. The turning radius of this type of truck is 41'. For operation of compactors, power (480 volts or 208 Volts, 3 Phase) is required. Allow 60' in front of container for loading purposes. Compactor length with compactor head (loading chute) can be as long as 25'. Container pad must be able to withstand 55,000 to 60,000 pounds and must be concrete.

APPENDIX

UCR Loading Dock Requirements of March 10, 2016

Figure 4. Self-Contained Trash Compactor

25 yd Compactor Measurements are 8' W x 20' L x 6' H,
(Recommended Size for Recyclables and Food Waste will vary by location based on the volume of waste generated.)

Overhead clearance of 16' to 21' is required for garbage trucks transporting waste containers to accommodate loading the containers.

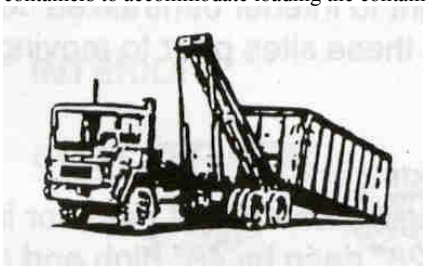


Figure 5. Truck Delivering Roll-Off Container.

Truck needs 60' maneuvering space in front of dumpster and 16’ vertical clearance.

Smaller rectangular containers are "front loaded" as shown and require a minimum of 15' height clearance for the truck to just lift and move the container (if there is an open area immediately nearby where the truck can move the container to empty it); 21' height clearance is required to pickup and empty container into the truck.

Figure 6. Front Loader Trash Truck

Bin Measurements are:

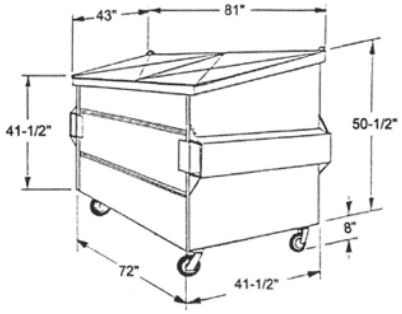


Figure 7. Standard 3 Cubic Yard Trash Bin

For general cleaning of the area, drainage and water are required. Drainage should be directly in front of, behind or adjacent to the container and go into the sewage system rather than the storm drain system. The surface should be slightly sloped so run-off will drain adequately.

UCR Loading Dock Requirements of March 10, 2016

Self Contained Compactors:NSC-200-15 Information Page 1 of 1

PACIFIC COMPACTOR CORPORATION

Friday, Nov. 21, 2014 Email This Page to a Client

When purchasing a Self Contained compactor for your wet waste, the most important thing it must NOT DO is leak. All of our Self Contained compactors use a triple hinged, full seal rear door. To ensure the tightest seal possible, we have engineered an exclusive side and BOTTOM latching system. Through out the life of our compactors, the rear door will not bow outward from extreme pressures allowing fluid to leak.

Model NSC-200-15

Rear Load with Walk-on Deck

Standard Features

PLC CONTROLLED	YES
TRIPLE HINGED REAR DOOR	YES
BOTTOM DOOR LATCH	YES
FULL REAR DOOR SEAL	YES
FULL UL® APPROVAL	YES

YEAR 5 WARRANTY

<Click here for large view with diagrams>

Specifications

Overall Length	17'-5"
Overall Width	101"
Overall Height	94"
Compactor Capacity	2 Cu. Yds.
Container Capacity	15 Cu. Yds. (60 Cu. Yds. Loose)
Platen Area	60" x 44" x 36"
Charge Opening	42" x 60"
Ram Penetration	12"
Twin Bypass Cylinders	4" Bore x 42" Stroke x 2.5" Rod
Line Pressure	2000 PSI
Max Line Pressure	2500 PSI
Max Ram Force	63,000 Lbs.
Cycle Time	45 Sec.
Fluid Capacity	35 Gal.
Pump	10.5 GPM
Motor	10HP - Tri-Volt, 3 Phase
Loading Height	53"
Approximate Weight	9,500 Lbs.

Structural Features

.5" Steel Plate Floor with 3" Structural Steel Channels, .25" Steel Plate Sides with 4" x 2" x .25" and 6" x 2" x .25 " Structural Steel Tubing with 6" channel.
Breaker Bar 6" x 6" x 1" with Retaining Teeth
6" x 6" x .5" Hydraulic Cylinder Mounts
Replaceable .5" UHMW Polyethylene Wear Bars on Ram Sides, Top and Bottoms of Platen for a Smooth, Quiet and Near Frictionless Operation
Weatherproof Control Panel and Power Pack
Removable Rear Access Panel
6" Fluid Sump with Left & Right Side 4" Drains

STANDARD FEATURES

- PLC Controlled Power Unit
- Exclusive Side & Bottom Door Latch System
- Double End Pick-up (standard with outside rail cable pull)
- E-Stop Button / Auto Single Cycle
- Key Lock On/Off Switch
- Low Oil Sensor Shutdown
- Multi Cycle Timer
- 80%-100% Full Lights
- Auto Shutdown with Auto Safety Retract
- 15' Remote
- Fluid Level and Temp Gauge
- Fluid Filled Pressure Gauge
- Fluid Inlet Strainer
- 15' Hydraulic Hoses
- This Equipment Conforms to all Current ANSI Z 245.2 and OSHA Safety Standards

http://www.pacificcompactor.com/products05/sc/nsc20015.html 11/21/2014

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Figure 8. Self-Contained Compactor Specs

APPENDIX

UCR Loading Dock Program of March 15, 2016

UCR DINING SERVICES
BARN LOADING DOCK PROGRAM MATRIX

3/15/16

ITEMS ON DOCK	QUANTITY	FOOTPRINT OF ITEM	REQUIRED CIRCULATION ACCESS	NOTES
Cart / Matt Wash with SS matt rack and SS walls	1	4' x 6.5'	front access	
Hose Reel Assembly	1	4' x 2.5'	front and side access	
Used Cooking Oil Tank with cage	1	42" diameter	front access	325 gal
Bulk CO2 Tank Rack with cage	1	4' x 3'	front and side access	
Recycle Cube Truck	1	27" x 54"	front and side access	
Food Waste Bin	2	34" x 81"	front and side access	2 cu.yds.
Landfill Waste Bin	2	34" x 81"	front and side access	1.5 cu.yds.
Dehydrator / Accelerator	1	34" x 78"	four side access	
Misc Space for crates, racks, carts, linen	1	240 Sq.Ft.	contiguous space, four side access	secured area
full coverage roof	1	full	16' min overhead clearance	21' at packer

ITEMS IN SERVICE YARD	QUANTITY	FOOTPRINT OF ITEM	REQUIRED CIRCULATION ACCESS	NOTES
Recycle Compactor - Roll Off Type	1	15'-5" x 8'-5"	21 ft. vertical clearance to tip	15 yard
Recycle Cart Dumper - ground level at dock side	1	5' x 5'	front and side access	attached to packer
Simultaneous Access for Delivery Truck #1	1	50' plus 7' liftgate	8 ft. circulation behind lift gate	
Simultaneous Access for Delivery Truck #2	1	32' plus 7' liftgate	8 ft. circulation behind lift gate	
electric cart parking - 1 plug at Service Yard	1	no footpring	overnight parking only	
Underground Grease Trap	1	5,000 Gallon min.	dump station for food truck	hose patios & dock

FACULTY DINING DELIVERY ENTRANCE				
Beer Keg Cage	1	4' x 6'		
1 : 12 Ramp from ground level to bar for kegs	1	5' wide min.		

NOTE: Dock Program Matrix is intended for space planning use only. MEP requirements TBD in Design Phase