

Kansas State University

College of Agriculture and K-State Research and Extension

New Global Center for Grain & Food Innovation

New Construction for the Departments of Grain Science & Industry and Animal Sciences & Industry, and the Food Science Institute

Call Hall and Weber Hall

Renovations for the Department of Animal Sciences & Industry and the Food Science Institute

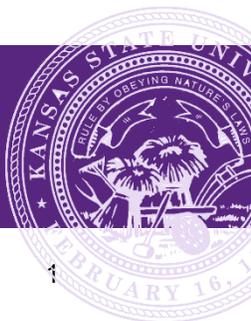
Livestock Competition Arena and Horse Unit

Construction for new Livestock Competition Area and Horse Unit adjacent to Stanley Stout Center.

PROGRAM

November 15, 2022

Prepared by Facilities Campus Planning and Project Management in association with the College of Agriculture and PGAV Architects and GH2 Equine Architects



Introduction

K-State's College of Agriculture (COA) 2030 Facilities Master Plan established a strategic vision for prioritized investment in its main-campus, Agronomy North Farm, and North Campus teaching, research, and extension facilities. Master plan recommendations address broad university and COA goals including supporting K-State's Pillar 3 - Innovation and Economic Prosperity initiative and K-State's aspiration to be the world's foremost global food and biosecurity science university, leveraging its 150-years of excellence and focus on advancing economic growth for the state of Kansas.

For the main campus, the master plan recommended the creation of a new Global Center for Grain & Food Innovation and renovations to Call Hall and Weber Hall as the highest priority projects.

The Global Center for Grain & Food Innovation will support the COA's efforts to strengthen existing programs and support innovative initiatives underway to harness K-State's unique strengths in grain science and animal sciences and support transdisciplinary research and innovation in food product innovation, food safety and food security.

Call Hall and Weber Hall are home to Animal Sciences and Industry, the COA's largest department. The buildings comprise 211,022 GSF and were constructed in the late 1950's – early 1960's timeframe. Following an addition to Weber Hall in 1988, the buildings have had limited renovations and the complex needs a comprehensive renovation to address deferred maintenance and teaching and research lab modernization.

Both projects will create a new “front door” for the COA at the Call Hall / Weber Hall complex and support new ways of working collaboratively across the university and drive these anticipated outcomes:

- Revolutionize and nurture interdisciplinary research across departments and colleges
- Recruit and retain world-class faculty and outstanding students
- Modernize hands-on learning experiences
- Create high-tech space for collaborative partnerships with industry
- Develop future ag leaders
- Advance K-State Research and Extension programs



Site Location Map of the Call / Weber Building Complex

COA 2030 Main Campus Facilities Master Plan

New Global Center for Grain & Food Innovation

The COA 2030 Main Campus Facilities Master Plan identified replacement of teaching and research facilities for the department of Grain Science and Industry (GSI) as an opportunity to create an interdisciplinary teaching and research center within the Call / Weber complex to accelerate grain, food, animal sciences, and agriculture systems innovation, a focus of K-State's Pillar 3 economic prosperity initiative.

The new Global Center for Grain & Food Innovation (GCGFI) will increase capabilities and collaboration for GSI, the COA's department of Animal Sciences and Industry (ASI), and K-State's Food Science Institute. The master plan identified approximately 138,458 GSF of space needs to provide a combination of specialized teaching and research labs for grain science, milling science and food science, flexible research labs for interdisciplinary investigation, a modern 160-seat lecture hall, and collaborative meeting spaces for students and research teams. The GCGFI building program includes replacement facilities for ASI that cannot be effectively renovated in place; a teaching lab to replace Weber 146, research labs to replace labs on Level 1 in Call Hall, and a new livestock pavilion and animal holding rooms to replace or develop an adaptive reuse plan for Weber Arena.

The GCGFI building program will allow GSI to consolidate its teaching and research programs, which are currently dispersed in five structures across the main campus, and vacate Shellenberger Hall and the Feed Technology building, two of the university's most significant deferred maintenance liabilities. Following the completion of the new GCGFI facility, the university plans to demolish Shellenberger Hall and the Feed Technology building to eliminate over \$17 Million in deferred maintenance backlog.

Call Hall and Weber Hall Renovations

The COA 2030 Main Campus Facilities Master Plan recommended targeted renovations in Call Hall and Weber Hall to address ADA access, building systems deferred maintenance, and to modernize the Call / Weber complex for 21st century education, research, and extension activities.

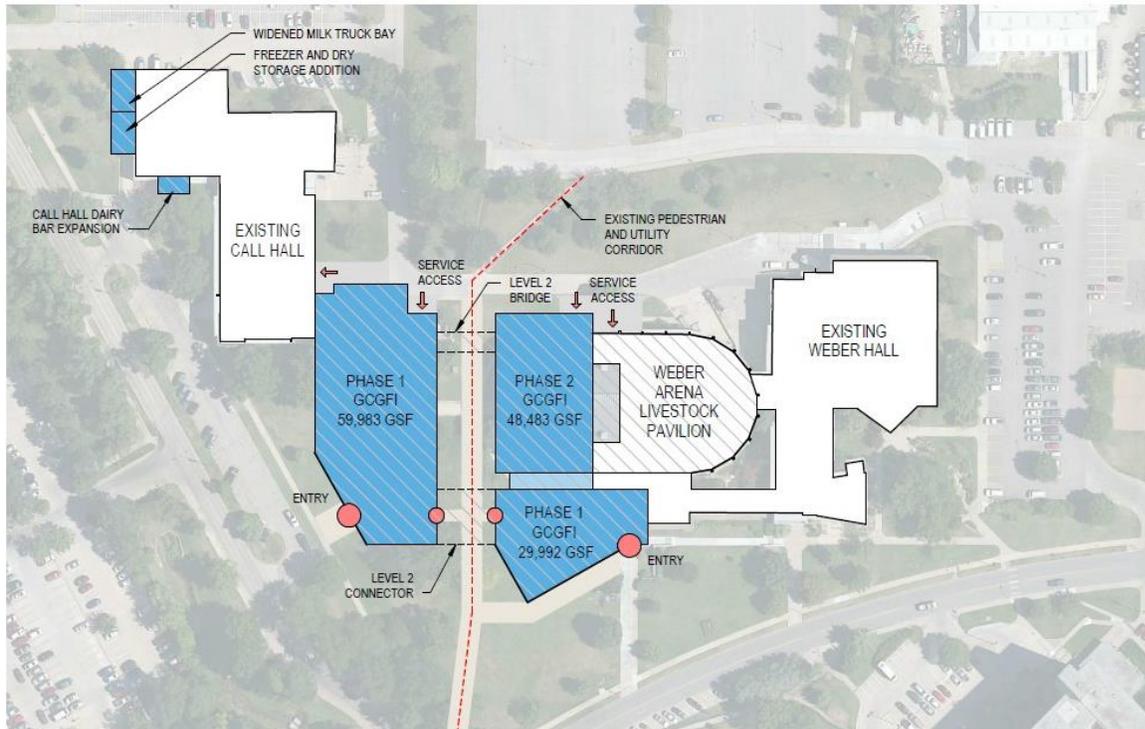
Priority renovations identified for Call Hall:

- Call Hall dairy bar (renovate and expand)
- Creamery / dairy pilot plant (renovate and expand)
- Public and common space refresh
- Conversion of Level 1 research labs to office space
- Building wide electrical system upgrades

Priority renovations identified for Weber Hall:

- ADA - accessibility improvements
- Meats lab and abattoir
- Building wide electrical system upgrades
- Meats classroom (Weber 111)
- Research lab renovations / upgrades
- Conversion of teaching lab (Weber 146) to office space
- Public and common space refresh

- Improvements to University classroom (Weber 123)
- Weber Arena renovations - to be evaluated if arena remains



Call / Weber Building Complex with the new GCGFI (Phases 1 and 2) including new Livestock Pavilion, and Call Hall additions

Phase 1 of the GCGFI will link Call and Weber Halls on Level 2. The “L” shaped structure is shaped to maintain north / south pedestrian movement through the complex, span a site utility corridor, and provide a new entrance for Weber Hall off Claflin Road.

Phase 2 of the GCGFI includes a research laboratory wing to be constructed directly north of and connected to Phase 1 on the site of the west portion of the existing Weber Arena footprint. Phase 2 will include evaluation of the adaptive reuse of the east portion of Weber Arena to develop a new livestock pavilion and animal holding rooms.

COA 2030 North Campus Ag Facilities Master Plan

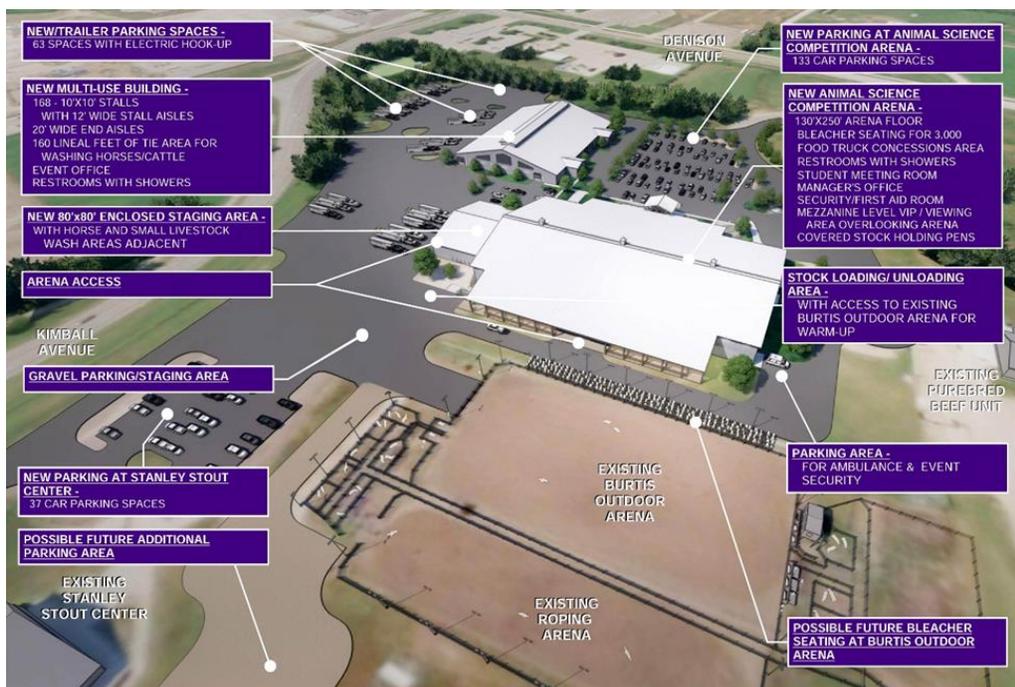
The COA's 2030 North Campus Ag Facilities Master Plan identified four priority projects to address teaching, research, and extension program facility's needs including:

Livestock Competition Arena and Equestrian Research Unit & Renovation to Existing Horse Unit

\$26.4 million Total Project Cost with 130' x 250' arena floor

This project will construct a new multi-use event center adjacent to the Stanley Stout Center, Purebred Beef Unit, K-State Rodeo facilities, outdoor Burtis Arena, and the Sheep and Meat Goat Center, which are all located on the newly renamed road, Animal Science Gateway. Highlights include an Animal Science Competition Arena and modernized K-State Horse Unit to support teaching and extension efforts in equine science. These facilities also provide support for the overall teaching and equine learning program in Animal Sciences & Industry (ASI).

A multi-use event center will dramatically improve recruitment of future students across the campus through support of youth activities, the learning experience for students at Kansas State University, and outreach to stakeholders of the animal industries in Kansas. This facility, when combined with the surrounding facilities, will truly create a hub for ASI and a destination for current and future students, and its stakeholders from Kansas, the region, and nationally. Updates to the existing horse unit will result in a modern equine breeding and training facility that is equipped to support the extensive, and expanding, educational opportunities for undergraduate, graduate, and veterinary medicine students at K-State. In addition to student engagement, the unit serves as the primary facility for equine reproductive services offered by ASI and the Veterinary Health Center (VHC), and houses horses used in equine nutrition and physiology research conducted by faculty in the Colleges of Agriculture and Veterinary Medicine.



Master Plan Concept: Livestock Competition Arena & Equestrian Research Unit

Main Campus Facilities - Current Conditions

Shellenberger Hall and Feed Technology

Shellenberger Hall (1960) and the Feed Technology building (1956), the current home to the COA's Grain Science and Industry department, are in extremely poor condition. Since KBOR's 2020 Report on University Facilities, both structures have been downgraded to an "F" ("Deficient") rating. A conditions assessment conducted during the COA 2030 Main Campus Facilities Master Plan recommended that both structures (totaling ~69,800 GSF) be demolished due to their deteriorated condition, obsolete building systems, and structural layouts and floor-to-floor heights that are not conducive to renovation for modern teaching or research uses.

GSI currently occupies 40,882 NSF in Shellenberger Hall and Feed Technology and an additional 18,253 NSF in adjacent Waters Hall and Waters Annex. Relocation of these functions to the new GCGFI will provide the department with modern teaching and research facilities needed to support this nationally recognized program and allow the university to demolish Shellenberger Hall and Feed Technology upon completion of Phase 2 of the GCGFI.

PROPOSED DEMOLITION OF 69,800 GSF OBSOLETE BUILDING COMPLEX



Shellenberger Hall

- Current home to Grain Science and Industry Department
- Built in 1960 with additions in '71, '81, and '83
- 50,554 GSF and 31,629 NSF

Kansas Board of Regents Report 2020

Condition - Rated "Poor" ("D"); *since downgraded to "Deficient" ("F")*

Renewal Cost to 90% - \$8,461,622

Limitations – Building structural layout and floor to floor heights are not conducive to renovation for modern teaching or research uses.



Feed Technology

- Grain Science and Industry and Animal Sciences and Industry Departments
- Built in 1956
- 19,265 GSF and 9,253 NSF

Kansas Board of Regents Report 2020

Condition - Rated "Poor" ("D"); *since downgraded to "Deficient" ("F")*

Renewal Cost to 90% - \$2,385,767

Limitations – Building structural layout and floor to floor heights are not conducive to renovation for modern teaching or research uses.

Call Hall

Call Hall (63,657 GSF) was built in 1963 and the current condition rating is "C-" (Fair). Call Hall includes teaching labs, classrooms, and research facilities for the COA's Animal Sciences and Industry department. Call Hall is also home to K-State's Food Science Institute. Call Hall needs targeted renovations and a comprehensive face-lift. Major deficiencies include:

- Electrical distribution equipment serving creamery is obsolete
- Plumbing piping is in poor condition
- Fume hood systems are obsolete
- Level 1 research labs are in poor condition
- Freight elevator is obsolete / nonfunctioning
- Call Hall Dairy Bar needs upgraded ventilation and code compliant grease hood



Call Hall – Existing Creamery / Dairy Pilot Plant and Level 1 Research Labs

Weber Hall

Weber Hall (147,365 GSF) was built in 1957 with an east addition constructed in 1988, and the current condition rating is “D” (“Poor”). Weber includes teaching labs, classrooms, and research facilities for the department of Animal Sciences and Industry. Weber Hall needs targeted renovations including to address critical building infrastructure. Major deficiencies include:

- South wing of the building is not fully ADA accessible
- Abattoir cannot handle and process today’s larger animals
- Chiller system and lifting equipment in Meat Labs (USDA) is failing
- Teaching lab and classroom spaces need improvements



Weber Hall – Existing Abattoir, Teaching Lab 146, and Research Laboratory

Weber Arena

In addition, Weber Arena requires updating to be functional. The 3,500-seat, two level arena (55,000 SF) was constructed in 1957 as part of Weber Hall and designed to serve research, teaching, and extension activities including: teaching and demonstration activities with cattle, swine, goats, sheep, and equine; rodeos; Cattleman’s Day; and livestock exhibitions. The existing eastern portion of the arena provides active animal holding pens and animal loading and provides direct connections to existing animal procedure and BSL2 animal research labs. A portion of the first level also houses a recently renovated student commons area. Major deficiencies include:

- Lack of ADA accessibility
- Poor ventilation
- Animal holding spaces are antiquated
- Paving and grading issues cause standing water outside the building
- Exterior glazing needs replacement
- Safety concerns – arena length is too short for rodeo activities, like barrels and roping events



Existing Weber Arena – Existing exterior, interior, and façade from Clafin Road

The pending Livestock Competition Arena and Equestrian Research Unit at north campus (2030 North Campus Ag Facilities Master Plan) is an important consideration for the future of the Call / Weber complex. Completion of the new competition arena will provide a new venue for the performances and events currently held in Weber Arena, however, important livestock teaching and demonstration functions need to be retained at the Weber Hall site to support teaching and research programs.

Implementation of Phase 2 of the GCGFI assumes either the following for Weber Arena:

1 – Demolition of the western portion of the existing arena to facilitate construction of Phase 2 GCGFI with the existing eastern portion being retained and renovated for adaptive reuse as a livestock teaching and demonstration facility with direct connections to Weber Hall.

2 – Complete demolition of existing Weber Arena to facilitate construction of Phase 2 GCGFI accompanied by construction of a new livestock pavilion and animal holding facilities for teaching and demonstration purposes.

Program Statements

Program statements for the GCGFI and renovations to Call and Weber Halls follow. Both projects identify a Phase 1 and Phase 2 scope of work.

Total Project Cost for Phase 1 totals \$100 Million and includes a \$4.3 Million Sustainability Fund; Total Project Cost for Phase 2 totals \$53.5 Million and includes a \$2.3 Million Sustainability Fund

TOTAL PROJECT COSTS - PHASE 1 & PHASE 2	
PHASE 1	
GCGFI - Phase 1	\$70,700,000
Call Hall Renovations - Phase 1 -Priority	\$9,052,479
Weber Hall Renovations - Phase 1 -Priority	\$15,947,521
Sustainability Fund (4.5% of total)	\$4,300,000
Subtotal Combined Project Cost - Phase 1 - (Construction + Soft Costs)	\$100,000,000
PHASE 2	
GCGFI - Phase 2	41,186,038
Additional Call Hall Renovations - Phase 2 -Priority	\$2,966,271
Additional Weber Hall Renovations - Phase 2 -Priority	\$7,088,479
Sustainability Fund (4.5% of total)	\$2,302,355
Subtotal Combined Project Cost - Phase 2 - (Construction + Soft Costs)	\$53,543,143
Total Combined Recommended Budget (Construction + Soft Costs)	\$153,543,143

New Global Center for Grain & Food Innovation

The new Global Center for Grain & Food Innovation will be a focal point for innovation and discovery for K-State and its public and private partners. The new interdisciplinary teaching and research center is proposed at the Call / Weber building complex to increase collaboration across the food, animal, and grain science disciplines to advance food and agriculture systems innovation.

The vision for the new center is to:

- Provide state-of-the-art teaching and research facilities for GSI to advance education and research programs and bolster outreach that impacts Kansas Industry and the global grain and plant-based food, feed, fiber fuel, and bio-product supply chains.
- Provide pilot processing, test kitchen, and teaching and research lab facilities for ASI's food science discipline and the university's Food Science Institute to advance education and research programs and bolster outreach that impacts the Kansas Food Industry and global food science, food safety, and human nutrition innovation.
- Support interdepartmental synergies through the collocation of the new center with Call and Weber Halls and provide increased opportunities for shared space utilization.
- Provide a state-of-the-art 160-seat lecture hall that will be used primarily by ASI.
- Demonstrate environmental stewardship by incorporating best practices in sustainable design.

Space Program Summary

Building upon the needs established in the COA 2030 Main Campus Facilities Master Plan, the space program for the new Global Center for Grain & Food Innovation provides modern, right-sized spaces for Grain Science and Industry and supports additional teaching and research capabilities for Animal Sciences and Industry and K-State's Food Science Institute.

The space program includes:

- Instructional labs and classrooms
- Interdisciplinary research labs and lab support space
- Collaborative work and study space
- Baking and milling teaching and research labs
- Food processing pilot plant
- Prototype test kitchen
- Kansas Value-Added Foods Lab / Center

The space program represents current space needs and projects minimal growth in the faculty and student population. The program totals 83,075 net square feet, and with an assumed building efficiency ratio of 60% targets a 138,459 gross square foot structure to be constructed in two phases.

Program Summary

Global Center for Grain & Food Innovation						
Program Summary (NSF)	Shared		GSI		ASI	
	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2
GSI Departmental and FSI Program Offices			1,938		1,167	
Faculty Offices			3,000		1,400	
Research / Grad. Student / Support Offices			3,090			
Conference Rooms / Study / Collaborative Space	5,830					
Instructional Classrooms	8,490		840		840	
Instructional Labs	660		11,550		2310	5000
Research Labs	1,320	4950	3,300	13200		5940
Building-Wide Support Spaces	1,650					
Food Processing Pilot Plant					6,600	
Subtotal NSF	17,950	4,950	23,718	13,200	12,317	10,940
Sum -Total NSF	22,900		36,918		23,257	
Total NSF			83,075			

Main Campus Space Proposed to be Vacated by GSI

Main Campus Space Proposed to be Vacated by GSI			
	NSF	GSF	Current Condition Rating*
Shellenberger Hall	31,629	50,554	F
Feed Technology	9,253	19,265	F
Waters Hall	14,939		D
Waters Hall Annex	3,314		C
Throckmorton Plant Sciences Center	893		D
Sum -Total NSF	60,028	69,819	

*Reflects downgraded condition rating following KBOR's 2020 Report on University Facilities

Global Center for Grain & Food Innovation – Itemized Space Program

Department/Program Key

GSI Grain Science and Industry Department
 ASI Animal Sciences and Industry Department
 FS ASI Food Science Discipline
 FSI Food Science Institute
 SH Shared Use

Phase	Dept. / Program	Space Name	NSF	Qty.	Total NSF	Notes
GRAIN SCIENCE & INDUSTRY DEPARTMENTAL OFFICE						
1	GSI	GSI Dept Head	330	1	330	
1	GSI	GSI Dept. Office Workstations	64	4	256	8x8 workstations. Includes office and dock management
1	GSI	GSI Administrative Offices	120	5	600	HR, Accounting, Business Manager, Student Recruitment, Program Coord.
1	GSI	Reception / Waiting Area	330	1	330	
1	GSI	Work / Mail Room	165	1	165	
1		Internal Suite Circulation @ 30%	257	1	257	
		Subtotal			1,938	
FOOD SCIENCE INSTITUTE OFFICE						
1	FSI	FSI Directors Office	180	1	180	
1	FSI	Program Assistant	120	1	120	
1	FSI	Student Assistants	64	2	128	
1	FSI	Flex Offices	70	2	140	
1	FSI	Waiting Area	210	1	210	
1	FSI	Work Room / Mail	158	1	158	
1	FSI	Storage	115	1	115	
1		Internal Suite Circulation @ 30%	116	1	116	
		Subtotal			1,167	
FACULTY OFFICES						
1	GSI	GSI Faculty Offices	120	23	2,760	
1	GSI	GSI Emeritus Faculty	120	2	240	(2) 2 person private offices, allows for 4 Emeritus Faculty
1	ASI	ASI Office Space	1,400	1	1,400	Replaces Office / Conference Space over Weber Lobby
		Subtotal			4,400	
RESEARCH / GRADUATE STUDENTS / SUPPORT OFFICES						
1	GSI	GSI Graduate Students	45	48	2,160	6x6 Workstations.
1	GSI	Post Doc / Visiting Research Offices	120	5	600	(5) 2 person offices, allows for a total of 10 post docs / visiting researchers
1	GSI	GSI IT workroom	330	1	330	2 IT Staff at workstations, 1 student, open work bench
		Subtotal			3,090	
CONFERENCE ROOMS / STUDY / COLLABORATIVE SPACE						
1	SH	(1) 40-person Conference Room	1,100	1	1,100	Utilized for seminars, grad student defenses, departmental meetings. Priority GSI Use - Replaces/right-sizes Shellenberger
1	SH	(1) 15-person Conference Room	450	1	450	
1	SH	(2) 10-person Conference Room	275	2	550	Adjacent to departmental and FSI offices
1	SH	Building Lobby	2,200	1	2,200	Collaborative seating, displays / donor walls
1	SH	Student Study / Student Success	1,200	1	1,200	Student Success Center, open study space. Adjacent to Building Lobby
1	SH	Faculty / Staff Lounge	330	1	330	Shared across departments
		Subtotal			5,830	

Phase	Dept. / Program	Space Name	NSF	Qty.	Total NSF	Notes
INSTRUCTIONAL CLASSROOMS						
1	SH	160-seat classroom	4,200	1	4,200	160 students.
1	SH	(1) 60-Seat Classroom	1,650	1	1,650	GSI Priority Use - Replaces/right-sizes Shellenberger 311
1	SH	(1) 50-Seat Classroom	1,320	1	1,320	GSI Priority Use - Replaces/right-sizes Shellenberger 301
1	SH	(1) 50-Seat Classroom	1,320	1	1,320	Adjacent to Baking & Milling Science Teaching Labs; GSI Priority Use - Replaces/right-sizes Waters Hall 09
1	GSI	24-seat Computer Lab	840	1	840	Instruction and student lab/workspace. Replaces/right-sizes Shellenberger 105
1	ASI	24-seat Computer Lab	840	1	840	Instruction and student lab/workspace. Replaces Weber Classroom near Lobby
Subtotal					10,170	
INSTRUCTIONAL LABS						
1	GSI	GSI Baking Science Teaching Pilot	330	9	2,970	30 students, wants to be on same level as other instructional labs to share support
1	SH	Prototype Test Kitchen	330	2	660	Adj. to Baking Teaching Lab; To "test bake" and for benchtop
1	GSI	Refrigerator	330	2	660	Supports Baking teaching labs
1	GSI	Freezer	330	2	660	Supports Baking teaching labs
1	GSI	Dry / Ambient Storage	330	2	660	Supports Baking teaching labs
1	GSI	Finish Product & Ingredient Storage	330	1	330	
1	GSI	Baking / Milling Sanitation	330	1	330	Shared Space for Baking & Milling Sanitation
1	GSI	Baking / Milling Science Warehouse	330	2	660	Shared Space for Baking & Milling Teaching Lab Storage
1	GSI	Baking / Milling Quality Assessment Lab	330	2	660	Shared Space for Baking & Milling Teaching Lab Assessment
1	GSI	GSI Milling Science Teaching Lab	330	7	2,310	30 students; locate on same level as other instructional labs to share support
1	GSI	Central Grain Storage	330	2	660	Dedicated Freezer Space.
1	GSI	GSI Flour & Dough Testing Lab & Grain Chemistry Analytical Lab	330	5	1,650	24 students
1	ASI	ASI Teaching Lab	330	7	2,310	40 Students @ 50 SF per student, 330 SF Prep Lab Space. Replaces Weber 146
2	ASI	ASI Large Animal Teaching Pavilion	5,000	1	5,000	Animal Penning and Demonstration Space for instruction and training, replaces teaching function occurring in Weber Arena
Subtotal					19,520	
RESEARCH LABS						
1	GSI	GSI Phase 1 Research Labs	330	10	3,300	Replacement and Consolidation of Research Labs in Shellenberger & Feed Tech; See Note 1
2	FS	Food Science Kansas Value Added Lab	330	3	990	See Note 1
2	GSI	GSI Phase 2 Research Labs	330	40	13,200	Replacement and Consolidation of Research Labs in Shellenberger, Feed Tech, Waters Hall, Waters Annex, BIVAP, & Throckmorton; See Note 1
2	SH	(2) Flex Research Labs	330	4	1,320	Available for (2) PI Teams of 4-5 researchers; See Note 1
2	ASI	Call Hall Ruminant Nutrition Labs Replacement	330	15	4,950	Replacement of Call Hall Level 1 Ruminant Nutrition Labs
Note 1: Lab Support Space allocated below could be dedicated to a single research team, or shared between multiple teams						
1	SH	Laboratory Support, Phase 1	330	4	1,320	Misc. Laboratory Support Spaces (Cold Rooms, Central Supply, etc)
2	SH	Laboratory Support, Phase 2	330	11	3,630	Misc. Laboratory Support Spaces (Cold Rooms, Central Supply, etc)
Subtotal					28,710	

Phase	Dept. / Program	Space Name	NSF	Qty.	Total NSF	Notes
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SHARED BUILDING-WIDE SUPPORT SPACES						
1	SH	Lockers	330	2	660	Supports Food Science and Grain Science as well as Food Processing Pilot
1	SH	Sensory Science Lab	330	1	330	Near Student Traffic
1	SH	Loading Dock	330	2	660	
Subtotal					1,650	

FOOD PROCESSING PILOT PLANT						
1	FS	Wet Processing	330	10	3,300	
1	FS	Dry Processing	330	5	1,650	
1	FS	Viewing Area for Visitors	330	0.5	165	
1	FS	Flex Space for Equipment Evaluation	330	1.5	495	
1	FS	Equipment Storage	330	0.5	165	
1	FS	Food Ingredient Storage Room	330	0.5	165	
1	FS	Packaging Room	330	1	330	
1	FS	Walk-in Refrigeration	330	1	330	
Subtotal					6,600	

Phase 1 Net Square Footage Total	53,985
Phase 1 Targeted Efficiency	60%
Phase 1 Gross Square Footage Total	89,975

Phase 2 Net Square Footage Total	29,090
Phase 2 Targeted Efficiency	60%
Phase 2 Gross Square Footage Total	48,483

Total Project Gross Square Footage	138,459
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Project Budget and Timeline

Budget

The estimated total project cost for the GCGFI is \$117 Million to be implemented in two phases.

Phase 1: \$73,881,500

GLOBAL CENTER FOR GRAIN & FOOD INNOVATION PHASE 1			
Construction			
Site work	89,975 GSF	\$24.02 Per SF	\$2,161,200
Building - New Construction	89,975 GSF	\$589.82 Per SF	\$53,069,038
<i>Note: Construction cost assumes 9.2% cost escalation and construction start of 3rd Quarter 2024. 24-month schedule includes approximately 22 months of construction and 2 months of start-up and commissioning. An early phase of procurement and site preparation/enabling work is planned outside of the 24-month schedule.</i>			
Subtotal Construction Budget		\$614 Per SF	\$55,230,237
Soft Costs			
AV, Instructional Technology, Security		3.00%	\$1,656,907
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.50%	\$828,454
Furniture		3.00%	\$1,656,907
Utility Costs (tap fees)		0.50%	\$276,151
Building Permit		0.50%	\$276,151
Owner's Equipment Budget (Pilot Plant, Teaching & Research Lab)		4.02%	\$2,220,029
AE Services - OFPM 'Complex - Combined' Project based on State fee table		8.99%	\$4,965,198
Specialty Consultants (Lab Planning, Kitchen Design, AV)		2.00%	\$1,104,605
Third Party Commissioning		0.25%	\$138,076
Geotech, Testing		0.50%	\$276,151
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$414,227
Owner Contingency		3.00%	\$1,656,907
Subtotal Soft Cost Budget	28.0%	\$172 Per SF	\$15,469,763
Total Recommended Budget (Construction + Soft Costs)		\$786 Per SF	\$70,700,000
Sustainability Fund			
Sustainability Fund (4.5%)			\$3,181,500
Total Project Cost Including Sustainability Fund			\$73,881,500

Phase 2: \$43,039,409

GLOBAL CENTER FOR GRAIN & FOOD INNOVATION PHASE 2			
Construction			
Site work	48,483 GSF	\$24.02 Per SF	\$1,164,562
Building - New Construction	48,483 GSF	\$639.65 Per SF	\$31,012,030
<i>Note: Construction cost assumes 9.2% cost escalation and construction start of 3rd Quarter 2024. 24-month schedule includes approximately 22 months of construction and 2 months of start-up and commissioning. An early phase of procurement and site preparation/enabling work is planned outside of the 24-month schedule.</i>			
Subtotal Construction Budget		\$664 Per SF	\$32,176,592
Soft Costs			
AV, Instructional Technology, Security		3.00%	\$965,298
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.50%	\$482,649
Furniture		3.00%	\$965,298
Utility Costs (tap fees)		0.50%	\$160,883
Building Permit		0.50%	\$160,883
Owner's Equipment Budget (Research Lab)		4.01%	\$1,290,281
AE Services - OFPM 'Complex - Combined' Project based on State fee table		8.99%	\$2,892,676
Specialty Consultants (Lab Planning, Kitchen Design, AV)		2.00%	\$643,532
Third Party Commissioning		0.25%	\$80,441
Geotech, Testing		0.50%	\$160,883
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$241,324
Owner Contingency		3.00%	\$965,298
Subtotal Soft Cost Budget	28.0%	\$186 Per SF	\$9,009,446
Total Recommended Budget (Construction + Soft Costs)		\$849 Per SF	\$41,186,038
Sustainability Fund			
Sustainability Fund (4.5%)			\$1,853,372
Total Project Cost Including Sustainability Fund			\$43,039,409

Funding

The project has been approved to proceed by the President's Cabinet and is anticipated to be funded through a combination of private and industry gifts and federal grant matching funds to be repaid with university resources.

Maintenance

Project funding includes a sustainability endowment for ongoing maintenance and operations. The annual costs of operations, maintenance, and utilities are estimated as follows.

Phase 1:

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 89,975 SF	\$ 290,619
Utilities	\$3.50 x 89,975 SF	\$ 314,913
Total Annual Cost		\$605,532

Phase 2:

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 48,483 SF	\$ 156,600
Utilities	\$3.50 x 48,483 SF	\$ 169,691
Utilities and operations savings resulting from planned Shellenberger and Feed Tech building demolitions		\$182,907
Total Annual Cost		\$143,384

Tentative Timeline / Schedule

Date

Phase 1:

KBOR Program Approval	November 2022
Selection of A/E	February 2023
CMAR Selection	May 2023
Design/Construction Documents	March 2023 - May 2024
Design Early Release Pkg. 1	March 2023 - December 2023
<i>Utilities / Enabling Work / MEP Equip. / Steel</i>	
Bidding Early Release Pkg. 1	December 2023 - January 2024
Procure Early Release Pkg. 1	January 2024 - March 2024
OFPM Final Approval	May 2024
Construction	
Construct Early Release Pkg. 1	March 2024 – July 2024
<i>Utilities / Enabling Work</i>	
Bid / Permit / Contract New Building	May 2024 – July 2024
New Building Construction	July 2024 – May 2026
Start-Up and Commissioning	May 2026 – July 2026
Move-In / Occupancy	July 2026 – August 2026

Phase 2:

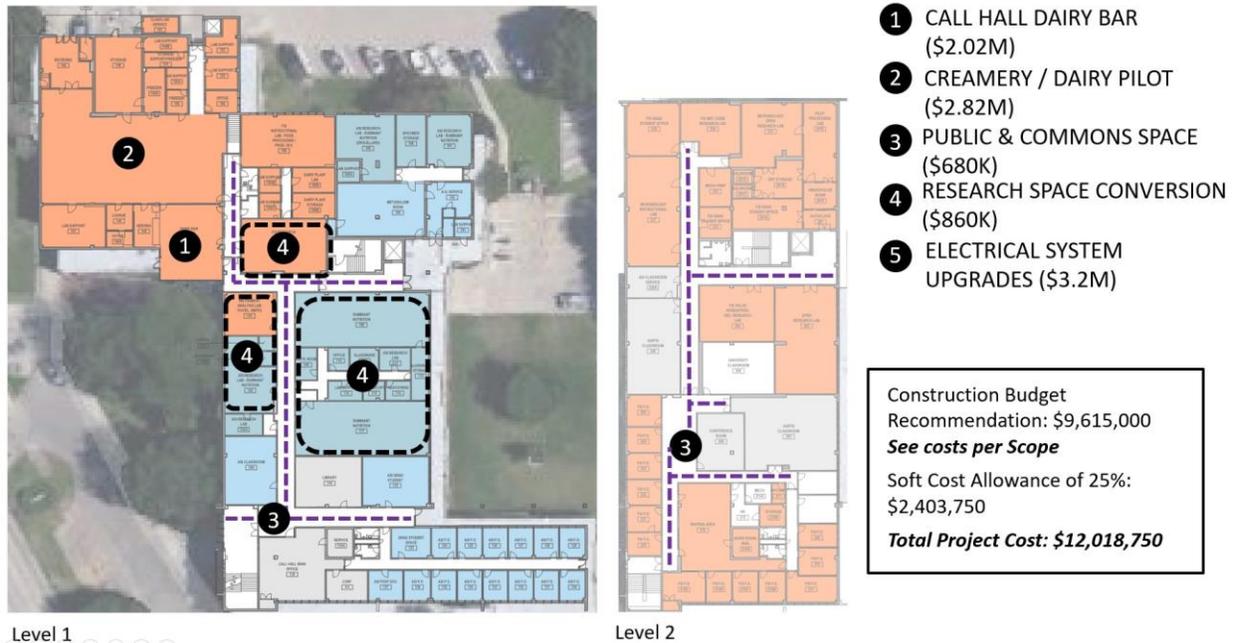
Phase 2 implementation will follow Phase 1 project initiation as additional funding is identified.

Project Description

Call Hall and Weber Hall Renovations

Call Hall Renovations

The following renovations at Call Hall have been identified to address deferred maintenance needs, improve accessibility, and bring teaching and research spaces in line with present day needs and expectations. These renovations are summarized below. The values provided represent construction costs with an escalation contingency to the third quarter of 2024.



1. Call Hall Dairy Bar - Expand & Renovate - \$2,020,000 – PHASE 1

Proposed renovations and expansion of the Dairy Bar to include:

- New ventilation and grease exhaust system in the food prep area
- Expanded kitchen to improve operations and increase capacity to include products from the Grain Science and Industry department
- Building addition to the south to expand the retail / seating area
- New informational display on the history and significance of the creamery and Dairy Bar at Call Hall

2. Call Hall Creamery – Renovation & Expansion - \$2,824,600 – PHASE 1

The Creamery / dairy pilot has aged mechanical, electrical, and plumbing systems, many of which are original to the building and past their service life. In addition, there is not sufficient space in the Creamery for teaching, which could be created by providing additional dry storage and equipment storage and removing large, unutilized equipment. Proposed improvements include:

- Replace motor control center
- Renovate electrical service
- Replace the service elevator which has been condemned

- Address failed plumbing
- Improve ventilation
- Building addition to the west to create new freezer and dry storage space
- Widened milk truck bay

3. Call Hall Public and Common Space Finishes – \$680,000 – PHASES 1 & 2

Public and common spaces within Call Hall need interior finish refreshment. An allowance of \$100 per square foot (over 6,800 SF) is included to refresh corridors, common spaces, lobby, and entrance spaces. These renovations would also include existing restrooms.

4. Call Hall Level 1 Research Lab – Conversion to Office Use – \$860,000 – PHASE 2

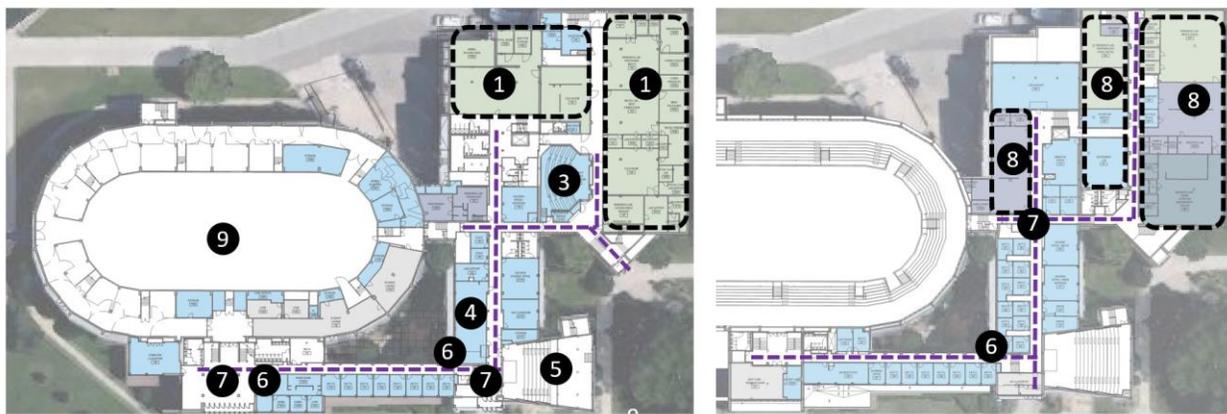
Research labs on Level 1 in Call Hall, assigned to Ruminant Nutrition and Food Science disciplines, are in poor condition and the available height (due to building structure) is extremely low. Replacement labs are included in the new Global Center for Grain & Food Innovation space program and the existing labs will be converted to office use.

5. Call Hall Electrical System Upgrades - \$3,230,400 - PHASES 1 & 2

Miscellaneous electrical renovations across Call Hall including replacement of light fixtures to LED, and additional circuits and electrical devices in research and teaching spaces.

Weber Hall Renovations

Specific renovations at Weber Hall have been identified to address deferred maintenance needs, improve accessibility, and bring teaching and research spaces in line with present day needs and expectations. These renovations are summarized below. The values provided represent construction costs with an escalation contingency to the third quarter of 2024.



Level 1

Level 2

- | | |
|---------------------------------|----------------------------------|
| ① MEATS LAB & ABATTOIR (\$5.5M) | ⑤ UNIV. CLASSROOM 123 (\$1.12M) |
| ② MISC. ELECT. RENO. (\$5.33M) | ⑥ ACCESSIBILITY IMPROV. (\$1.1M) |
| ③ MEATS CLASSROOM 111 (\$388K) | ⑦ PUBLIC SPACE RENO. (\$1.3M) |
| ④ ROOM 146 CONVERSION (\$215K) | ⑧ RESEARCH LAB RENO. (\$3.5M) |

⑨ ARENA SCOPE TBD

<p>Construction Budget Recommendation: \$18,428,800 – <i>See costs per Scope</i> Soft Cost Allowance of 25%: \$4,607,200 Total Project Cost: \$23,036,000</p>

1. Weber Hall Meats Lab and Abattoir - \$5,475,000 – PHASE 1

The Meats Lab and Abattoir have deficiencies that are directly affecting ASI's teaching and research operations. Proposed renovations to the Meats Lab include:

- Chiller system replacement
- Surge suppression system replacement
- Carcass lifts replacement
- Basement mechanical room ventilation
- Improvements to meat processing spaces (smokehouse replacement, roll package room refrigeration, curing room refrigeration system, etc.)

Proposed renovations to the Abattoir include:

- Overhead rail system replacement
- Carcass wash down equipment replacement
- Reconfiguration and expansion of the animal holding area

2. Weber Hall Electrical Renovations - \$5,331,000 – PHASES 1 & 2

Miscellaneous electrical renovations and upgrades across Weber Hall including replacement of light fixtures to LED, new fire alarm, standby power, and switchgear, and additional circuits and electrical devices in research and teaching spaces.

3. Weber Hall Meats Classroom 111 – \$387,800 – PHASE 1

Renovations to address deficiencies in the Meat Science Classroom 111 include:

- New chair lift
- New student tables and seating
- Upgrade instructional technology

4. Weber Hall Teaching Lab 146 – Conversion to Office Use - \$215,000 – PHASE 2

Teaching Lab 146 is ASI's only teaching lab, and it does not have appropriate ventilation for frequent in-class dissections. The room is also poorly proportioned, placing students far from the instructor. This function will be relocated to the new Global Center for Grain & Food Innovation and the existing space converted to office use.

5. University Classroom 123 - \$1,120,000 – PHASE 2

The existing and highly utilized 260-seat classroom needs renovation, as the furniture, interior finishes, and instructional technology are all extremely dated. The space is also in need of improved accessibility, as only the front row of the classroom is accessible to all students.

6. Weber Hall ADA Accessibility Improvements - \$1,100,000 – PHASE 1

Weber Hall's design includes a 'split level' that is only accessible by stairs and a stair lift system. A renovation to add a double-sided elevator that stops at each level of Weber Hall, accessed from the southeast entrance, as well as a platform lift at the arena entrance, would make all levels of Weber Hall accessible.

7. Weber Hall Public and Common Space Finishes – \$1,300,000 – PHASES 1 & 2

Public and common spaces within Weber Hall need interior finish refreshment. An allowance of \$100 per square foot (over 13,000 SF) is included to renovate corridors, common spaces, lobby, and entrance spaces. These renovations would also include interior refreshments to restrooms.

8. Weber Hall Research Lab Renovations – \$3,500,000 – PHASES 1 & 2

Research labs within Weber Hall need various improvements and renovations, ranging from the addition of safety fixtures to replacement or addition of fume hoods and other fixtures. An allowance of \$250 per square foot is recommended for selective enhancements and repairs across approximately 14,000 SF of research space.

9. Weber Arena Renovations – To be Evaluated – PHASE 2

If a portion of Weber Arena is adaptively reused, renovations have been identified to support its continued use including:

- Improved ADA accessibility
- Replacement of all exterior glazing
- New ventilation fans
- Improved animal holding spaces
- Plumbing and electrical renovations and repairs and lighting replacement
- Re-painting of structure and rails
- Address standing water at exterior of building, grading, and paving issues

Space Program – Call Hall Renovations

Phase	Existing		Proposed			Notes
	Occ.	NSF	Occ.	Qty.	NSF/occ. NSF/space	
CALL HALL PRIORITY RENOVATIONS						
CALL HALL DAIRY BAR (EXPAND & RENOVATE)						
1	144	Seating Area	1,043	1		1,043
1	145	Serving Area (Expanded)	200	1		400
1		Building Addition	0	1		1,000
		Subtotal				2,443
CALL HALL CREAMERY / DAIRY PILOT PLANT (RENOVATION & EXPANSION)						
1	155	Dairy Pilot Plant	3,858	1		3,858
1		Dairy Pilot Plant Support	3,972	1		3,972
1		Building Addition				2,700
		Subtotal	7,830			10,530
PUBLIC AND COMMON SPACE FINISHES						
		Circulation / Lobby - First Floor	5,900	1		5,900
		Circulation / Lobby - Second Floor	4,500	1		4,500
		RESTROOMS				
		Rooms 120-122	145	1		218
		Room 157	73	1		110
		Room 159 - TBD	73	1		110
		Room 234	157	1		236
		Rooms 212-214	147	1		221
1		50% of Areas Above				5,646
2		50% of Areas Above				5,646
		Subtotal				11,293
RESEARCH LAB RENOVATIONS (CONVERSION TO OFFICE USE)						
2	108	Research Lab	1,579	1		1,579
2	109	Research Lab	150	1		150
2	110	Research Lab	102	1		102
2	111	Research Lab	140	1		140
2	112	Research Lab	153	1		153
2	113	Research Lab Support	195	1		195
2	114	Research Lab	106	1		106
2	115	Research Lab	89	1		89
2	116	Research Lab Support	144	1		144
2	117	Research Lab	1,589	1		1,589
2	142	Research Lab	735	1		735
2	142A	Research Lab	177	1		177
2	142B	Research Lab Support	53	1		53
2	142C	Research Lab Support	51	1		51
2	143	Instrument Analysis Lab	473	1		473
		Subtotal	5,736			5,736
BUILDING WIDE ELECTRICAL SYSTEMS UPGRADES						
1		64% of Entire Building	40,740			40,740
2		36% of Entire Building	22,917			22,917
		Subtotal	63,657			63,657

Call Hall - Net Square Footage Total	30,002	Plus Building Wide Electrical Systems Upgrade
Phase 1 - Net Square Footage Total	18,619	
Phase 2 - Net Square Footage Total	11,382	

Space Program – Weber Hall Renovations

Phase	Existing		Proposed				Notes
	Occ.	NSF	Occ.	Qty.	NSF/occ.	NSF/space	
WEBER HALL PRIORITY RENOVATIONS							
MEATS LAB & ABATTOIR							
1	MEATS LAB						
	163	Cold Room	1,249	1			1,249
	101	Meat Lab Storage	324	1			324
	101A	Lab Support	118	1			118
	102	Research Lab - Processed Meats	1,290	1			1,290
	102A-D	Lab Support, Smokehouse, etc.	1,036	1			1,036
	103	Meats Lab - Fabrication	1,097	1			1,097
	103A-E	Support, Meat Packing, etc.	1,149	1			1,149
	106	Cold Room	1,149	1			1,149
	106 A-B	Special Class Lab, Support, etc.	367	1			367
			7,779				7,779
1	ABATTOIR						
	159	Abattoir Processing	2,214	1			2,214
	159A	Animal Holding USDA	531	1			531
	159B	Offal Room - Waste	167	1			167
	159C	Abattoir Storage - Cold Room	168	1			168
		Equipment	0				0
			3,080				3,080
	Subtotal						10,859
BUILDING WIDE ELECTRICAL SYSTEM UPGRADES							
1	64% of Entire Building		59,114				59,114
2	36% of Entire Building		33,251				33,251
	Subtotal		92,365				92,365
MEATS CLASSROOM 111							
1	111	ASI Meat Science Classroom	1,270	80	1	15,875	1,270
1	111A	ASI Meat Sci. Classroom / Service	79		1		79
	Subtotal		1,349				1,349
TEACHING LAB 146 (CONVERSION TO OFFICE USE)							
2	146	ASI Instructional Lab	1,179		1	1,179	1,179
2	147	ASI Instructional Lab / Service	252		1	252	252
	Subtotal		1,431				2,780
UNIVERSITY CLASSROOM 123							
2	123	Weber Hall Auditorium	269	254	1	2,541	2,541
2	123A		16		1	16	16
	Subtotal						2,557
ADA-ACCESSIBILITY IMPROVEMENTS							
1	Add double sided elevator						0 East end
1	Add platform lift						0 West end
	Subtotal						0
PUBLIC AND COMMON SPACE FINISHES							
	Circulation / Lobby - First Floor		10,000		1		10,000
	Circulation / Lobby - Second Floor		7,000		1		7,000
	RESTROOMS						
	Rooms 113 and 114		340		1		442
	Rooms 117 and 118		366		1		476
	Rooms 137 and 143		540		1		702
	Rooms 157 and 158		898		1		1,167
	Rooms 207 and 208		327		1		425
	Rooms 236 and 238		354		1		460
1	50% of Areas Above						10,336
2	50% of Areas Above						10,336
	Subtotal						20,673
RESEARCH LAB RENOVATIONS							
1	50% Upgrades to Research Labs		7,000				7,000
2	50% Upgrades to Research Labs		7,000				7,000
	Subtotal						14,000
ARENA RENOVATIONS (TO BE EVALUATED)							
	Arena		3,500	55,000	1	0	0
	Subtotal		55,000				0

Weber Hall - Net Square Footage Total	52,218	Plus Building Wide Electrical Systems Upgrade
Phase 1 - Net Square Footage Total	29,544	
Phase 2 - Net Square Footage Total	22,673	

Project Budget and Timeline

Budget

The estimated Total Project Cost for the renovations to Call and Weber Halls is \$36.6 Million to be implemented in two phases.

COMBINED CALL HALL AND WEBER HALL RENOVATIONS	
Call Hall Renovations - Phase 1 -Priority	\$9,052,479
Weber Hall Renovations -Phase 1 -Priority	\$15,947,521
Subtotal Combined Project Cost - Phase 1 -(Construction +Soft Costs)	\$25,000,000
Additional Call Hall Renovations -Phase 2 -Priority	\$2,966,271
Additional Weber Hall Renovations - Phase 2 - Priority	\$7,088,479
Subtotal Combined Project Cost - Phase 2 -(Construction +Soft Costs)	\$10,054,750
Total Combined Recommended Budget (Construction + Soft Costs)	\$35,054,750
<u>Sustainability Fund</u>	
Sustainability Fund (4.5%)	\$1,577,464
Total Project Cost Including Sustainability Fund	\$36,632,214

CALL HALL RENOVATIONS (PHASE 1- PRIORITY)			
<u>Construction</u>			
1 Call Hall Dairy Bar (Expand and Renovate)	2,443 SF	\$827 Per SF	\$2,020,000
2 Call Hall Creamery (Renovation and Expansion)	10,530 SF	\$268 Per SF	\$2,824,600
3 Call Hall Public and Common Space Finishes	5,647 SF	\$60 Per SF	\$340,000
5 Call Hall - Electrical Systems Upgrades	63,657 SF	\$32 Per SF	\$2,057,383
<i>Note: Construction costs are escalated for construction start in 3rd Quarter 2024.</i>			
Subtotal Construction Budget			\$7,241,983
<u>Soft Costs</u>			
AV, Instructional Technology, Security		1.00%	\$72,420
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.00%	\$72,420
Furniture		1.50%	\$108,630
Building Permit		0.50%	\$36,210
Owner's Equipment Budget (Dairy Bar, Creamery)		3.92%	\$283,886
AE Services - OFPM 'Complex - Renovation' Project based on State fee table		10.08%	\$729,992
Specialty Consultants Allowance		1.00%	\$72,420
Third Party Commissioning		0.25%	\$18,105
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$54,315
Owner Contingency		5.00%	\$362,099
Subtotal Soft Cost Budget		25.00%	\$1,810,496
Sub-Total Recommended Budget (Construction + Soft Costs)			\$9,052,479
<u>Sustainability Fund</u>			
Sustainability Fund (4.5%)			\$407,362
Total Project Cost Including Sustainability Fund			\$9,459,840

WEBER HALL RENOVATIONS (PHASE 1- PRIORITY)			
Construction			
1 Meats Labs and Abattoir	10,859 SF	\$504.19 Per SF	\$5,475,000
2 Building Wide Electrical Systems Upgrades	92,365 SF	\$36.76 Per SF	\$3,395,217
3 Meats Classroom 111	1,349 SF	\$287.47 Per SF	\$387,800
6 ADA-Accessibility Improvements			\$1,100,000
7 Public and Common Space Finishes	10,337 SF	\$62.88 Per SF	\$650,000
8 Weber Hall Research Lab Renovations /Upgrades	14,000 SF	\$125.00 Per SF	\$1,750,000
<i>Note: Construction costs are escalated for construction start in 3rd Quarter 2024.</i>			
Subtotal Construction Budget			\$12,758,017
Soft Costs			
AV, Instructional Technology, Security		1.00%	\$127,580
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.00%	\$127,580
Furniture		1.50%	\$191,370
Building Permit		0.50%	\$63,790
Owner's Equipment Budget (Dairy Bar, Creamery)		3.20%	\$408,257
AE Services - OFPM 'Complex - Renovation' Project based on State fee table		10.80%	\$1,377,866
Specialty Consultants Allowance		1.00%	\$127,580
Third Party Commissioning		0.25%	\$31,895
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$95,685
Owner Contingency		5.00%	\$637,901
Subtotal Soft Cost Budget			\$3,189,504
			25.00%
Sub-Total Recommended Budget (Construction + Soft Costs)			\$15,947,521
Sustainability Fund			
Sustainability Fund (4.5%)			\$717,638
Total Project Cost Including Sustainability Fund			\$16,665,160

ADDITIONAL CALL HALL RENOVATIONS (PHASE 2 - PRIORITY)			
Construction			
3 Call Hall Public and Common Space Finishes	5,647 SF	\$60 Per SF	\$340,000
4 Call Hall Level 1 Research Lab Renovations (Office Backfill)	5,736 SF	\$150 Per SF	\$860,000
5 Call Hall - Electrical Systems Upgrades	63,657 SF	\$18 Per SF	\$1,173,017
<i>Note: Construction costs are escalated for construction start in 3rd Quarter 2024.</i>			
Subtotal Construction Budget			\$2,373,017
Soft Costs			
AV, Instructional Technology, Security		1.00%	\$23,730
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.00%	\$23,730
Furniture		1.50%	\$35,595
Building Permit		0.50%	\$11,865
Owner's Equipment Budget (Dairy Bar, Creamery)		3.20%	\$75,937
AE Services - OFPM 'Complex - Renovation' Project based on State fee table		10.80%	\$256,286
Specialty Consultants Allowance		1.00%	\$23,730
Third Party Commissioning		0.25%	\$5,933
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$17,798
Owner Contingency		5.00%	\$118,651
Subtotal Soft Cost Budget			\$593,254
			25.00%
Total Recommended Budget (Construction + Soft Costs)			\$2,966,271
Sustainability Fund			
Sustainability Fund (4.5%)			\$133,482
Total Project Cost Including Sustainability Fund			\$3,099,753

ADDITIONAL WEBER HALL RENOVATIONS (PHASE 2-PRIORITY)			
Construction			
2 Building Wide Electrical Systems Upgrades	92,365 SF	\$20.96 Per SF	\$1,935,783
4 Weber Hall Teaching Lab 146 (Conversion to office use)	2,780 SF	\$77.34 Per SF	\$215,000
5 University Classroom 123	2,557 SF	\$438.01 Per SF	\$1,120,000
7 Public and Common Space Finishes	10,337 SF	\$62.88 Per SF	\$650,000
8 Weber Hall Research Lab Renovations /Upgrades	92,365 SF	\$18.95 Per SF	\$1,750,000
9 Weber Arena Renovations (To be evaluated if Arena remains)	55,000 SF	\$0.00 Per SF	TBD
<i>Note: Construction costs are escalated for construction start in 3rd Quarter 2024.</i>			
Subtotal Construction Budget			\$5,670,783
Soft Costs			
AV, Instructional Technology, Security		1.00%	\$56,708
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.00%	\$56,708
Furniture		1.50%	\$85,062
Building Permit		0.50%	\$28,354
Owner's Equipment Budget (Dairy Bar, Creamery)		3.20%	\$181,465
AE Services - OFPM 'Complex - Renovation' Project based on State fee table		10.80%	\$612,445
Specialty Consultants Allowance		1.00%	\$56,708
Third Party Commissioning		0.25%	\$14,177
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		0.75%	\$42,531
Owner Contingency		5.00%	\$283,539
Subtotal Soft Cost Budget			\$1,417,696
Total Recommended Budget (Construction + Soft Costs)			\$7,088,479
Sustainability Fund			
Sustainability Fund (4.5%)			\$318,982
Total Project Cost Including Sustainability Fund			\$7,407,460

The estimated cost to demolish Weber Arena in its entirety is in addition to the costs presented. If a portion is retained for adaptive reuse, demolition costs would be adjusted accordingly.

WEBER ARENA DEMOLITION			
Construction			
Arena Building Demolition & Site Utility Cap	55,000 SF	\$6.82 Per SF	\$375,000
<i>Note: Construction costs are escalated for construction start in 3rd Quarter 2024.</i>			
Subtotal Construction Budget			\$375,000
Soft Costs			
Abatement		10.00%	\$37,500
Data Cabling & Equipment (Rough-in and Pathways in construction)		1.00%	\$3,750
Building Permit		0.50%	\$1,875
AE Services - OFPM 'Complex - Renovation' Project based on State fee table		8.00%	\$30,000
Project Management (KS OFPM, KSU FPM, Project Reimbursables)		1.50%	\$5,625
Owner Contingency		10.00%	\$37,500
Subtotal Soft Cost Budget			\$116,250
Total Recommended Budget (Construction + Soft Costs)			\$491,250

Funding

The project has been approved to proceed by the President's Cabinet and is anticipated to be funded through a combination of private and industry gifts and federal grant matching funds.

Maintenance

Call Hall and Weber Hall contain 100% mission critical space. Capital renewal, maintenance and utility costs are already accounted for within university expenditures. The annual costs of

operations, maintenance, and utilities for the renovated areas within both buildings are estimated as follows. (Area of building-wide electrical upgrades is not included.)

PHASE 1

Call Hall

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 18,619 SF	\$ 60,139
Utilities	\$3.50 x 18,619 SF	\$ 65,167
Total Annual Cost		\$125,306

Weber Hall

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 29,544 SF	\$ 95,427
Utilities	\$3.50 x 29,544 SF	\$ 103,404
Total Annual Cost		\$198,831

PHASE 2

Call Hall

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 11,382 SF	\$ 36,764
Utilities	\$3.50 x 11,382 SF	\$ 39,837
Total Annual Cost		\$76,601

Weber Hall

Description	Cost/sf	Total
Operations and Maintenance	\$3.23 x 22,673 SF	\$ 73,234
Utilities	\$3.50 x 22,673 SF	\$ 79,356
Total Annual Cost		\$152,590

Tentative Timeline / Schedule

Date

Phase 1:

KBOR Program Approval	November 2022
Selection of A/E	February 2023
CMAR Selection	May 2023
Design/Construction Documents	March 2023 – December 2023
OFPM Final Approval	December 2023

Bidding and Construction (20 months total)

January 2024 – August 2025

Move-In / Occupancy

Varies by Renovation Scope Item

Phase 2:

Phase 2 implementation will follow Phase 1 project initiation as additional funding is identified.

Project Description

Livestock Competition Arena and Horse Unit

Introduction

This program outlines a request to build a new Livestock Competition Arena that supports the College of Animal Science (ASI) teaching and extension efforts.

Livestock Research Arena

The first phase of the facility enhancement includes a new Livestock Competition Arena located adjacent to the Stanley Stout Center, Purebred Beef Unit, K-State Rodeo facilities and the outdoor Burtis Arena, and the Sheep and Meat Goat Center.

The addition of the Arena to the Animal Science department will further enhance the academic programs at K-State that prepare students for work in the agriculture industry. In addition to training the next generation of animal scientists and supporting discovery and translation thereof to technology, these areas are the base for the ASI extension program in accordance with K-State's land grant mission. Kansas animal agricultural industries produced a total economic output in excess of \$24 billion in 2020 and employed almost 64,000 Kansans. This facility will include a Livestock Competition Arena that will dramatically improve recruitment of future students across the campus through support of youth activities, the learning experience for students at Kansas State University, and outreach to stakeholders of the animal industries in Kansas. This venue will work for countless activities.

The new Livestock Competition Arena will also provide a safe and efficient environment to host events such as the annual Collegiate Rodeo – a fundraiser event that is put on by and benefits the student members of the K-State Rodeo Club. Planning and producing the event allows students to learn about event organization and fundraising. Students from many regional community colleges and universities participate in the event and it would be excellent to host these individuals in a modern, high-quality venue. Increased use by ASI courses, other student clubs, youth- and university-level educational events (equine 4-H programs, Livestock Showcase, etc.) will enhance educational and recruitment opportunities. This facility will have the capability to support external and/or adult animal events from a statewide, regional, and perhaps national perspective as scheduling allows, increasing the exposure of K-State to its stakeholders. This facility, when combined with the surrounding facilities and a future multi-use (stall) building, will truly create a hub for ASI and a destination for current and future students, and our stakeholders from Kansas, the region, and nationally.

This new facility will absorb some academic, youth and stakeholder functions of existing Weber Arena in Weber Hall. A smaller livestock pavilion and animal holding rooms will be retained at Weber Hall as part of an adaptive reuse plan for Weber Arena allowing for improved livestock teaching and research functions. The new Livestock Competition Arena will project a modern animal sciences department and allow K-State to compete against peer institutions' infrastructure investment and recruit the next generation of students. Improved safety and comfort for all users of the unit by replacing aging facilities with more structurally sound and functional buildings will also enhance the animal sciences department's reputation.

Site Description(s)

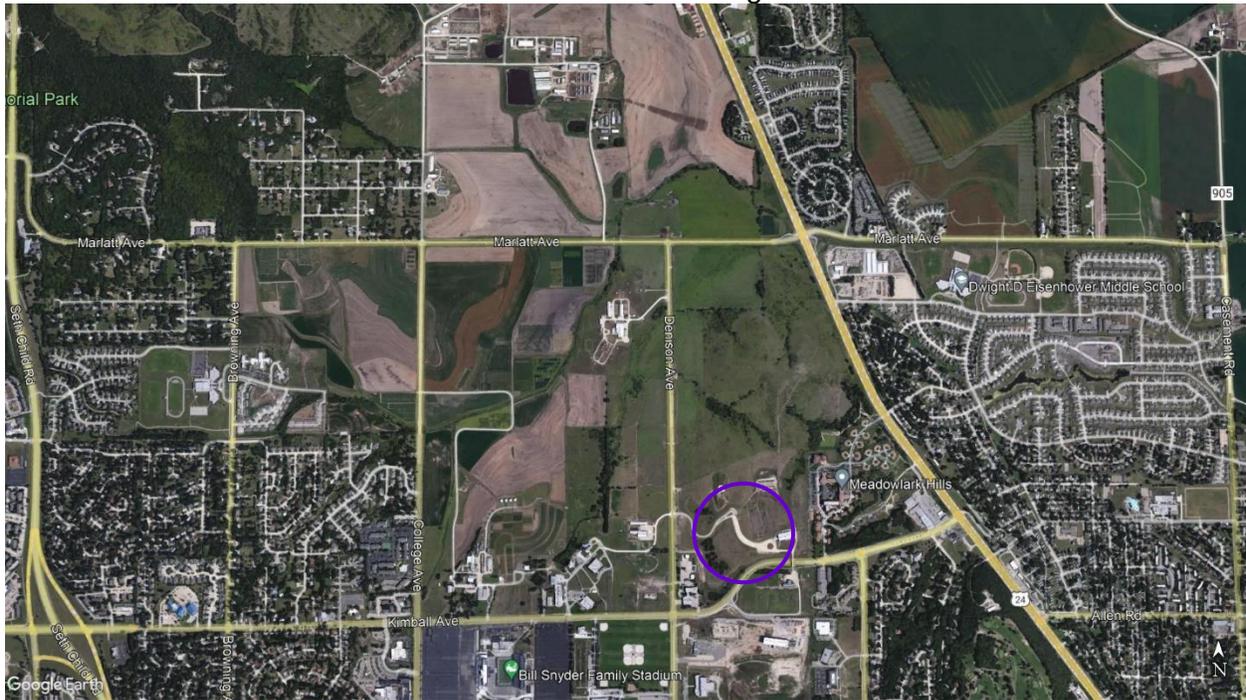
The site for the new Livestock Competition Arena is currently used as activity and parking support for events linked with the Stanley Stout Center, Rodeo Team facilities and the Purebred Beef Unit. The Livestock Competition Arena would occupy this space and adjacent areas would

be developed to replace lost parking and further expand capacity to support the activities in that area. The Weber Hall Arena currently serves as a site for some of the functions described above for the new facilities but will be razed upon construction of the GFGCI building. This space is adequate for some functions but is too small for rodeo events and does not project a modern, well - designed facility that would be achieved with the newer facility.

Since Weber arena serves multiple purposes, it is inadequate for many of the needs of the department. For example, it is currently set up for rodeo practice with all the chutes, dirt floor and pens to support this function. Rodeo practice creates dust that makes the space too dirty for students to sit in the bleachers. Nevertheless, the introductory ASI labs must be held in this space. After the KSU Rodeo in late February, university personnel have under two weeks to remove the dirt floor and replace flooring with shavings in preparation for Cattlemen’s Day (500-800 attendees) and subsequent youth events. In the fall this annual cycle restarts. For recruiting and retention of students and large departmental functions our current facilities are ineffective.

Overall Site Map

Livestock Research Arena circled at South-East/Lower Right



Existing Facilities

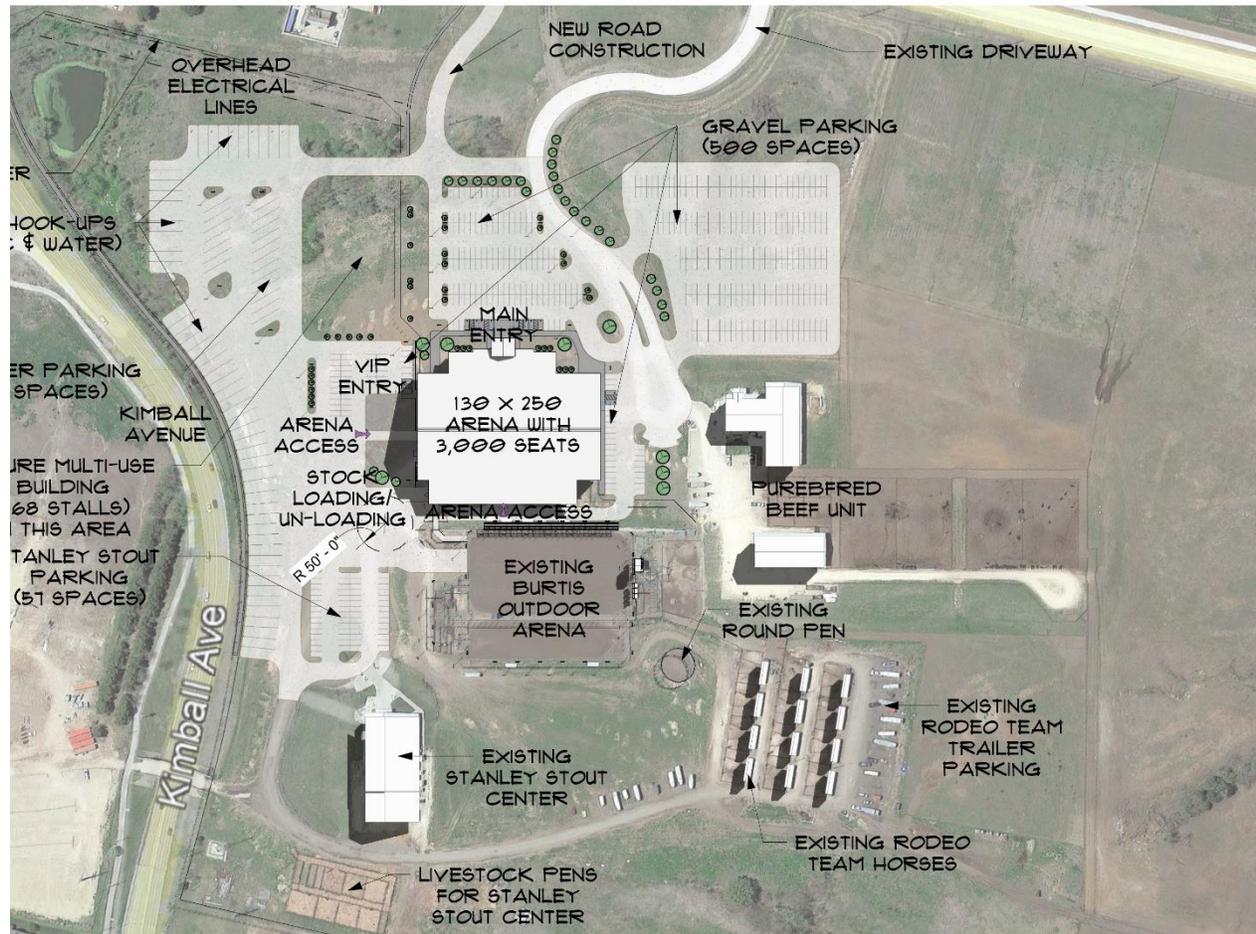


Existing Weber Hall

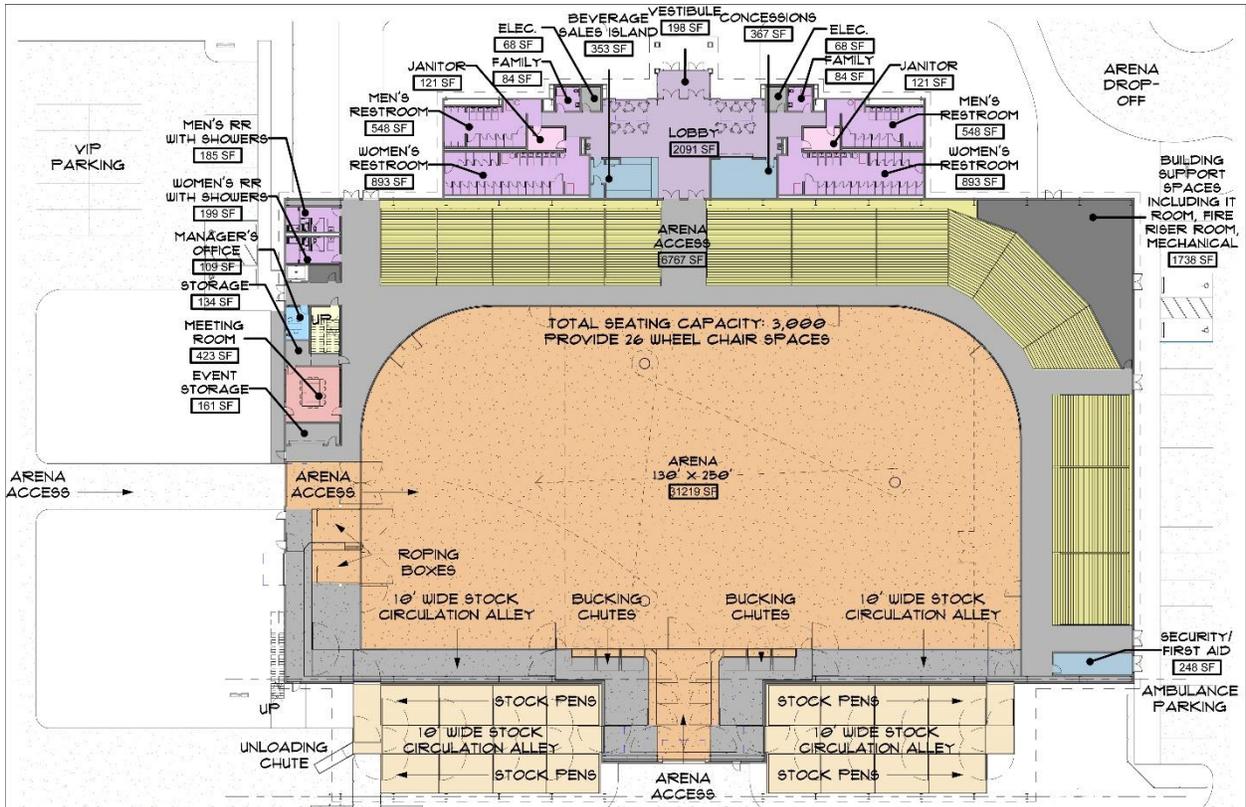
Project Description – Livestock Competition Arena

The Livestock Competition Arena will feature a fully enclosed 130'x250' arena equipped with bucking chutes and roping boxes along with 3,000 bleacher seats, and a lobby with a concessions serving area and restrooms. A second floor VIP area, accessed from either a stairway or elevator, includes windows that view both the Livestock Competition Arena as well as the staging area. Building facades will be light-colored metal panels in keeping with the existing Stanley Stout and Purebred Beef Unit buildings, as well as light-colored metal panel roofs. The arena building features native limestone on the front entrance along with an entry canopy. There is a continuous ridge vent along with three cupolas with exhaust fans to assist with circulating air in the arena. Louvers for fresh air intake are located on both the East and West elevations.

Livestock Competition Arena Site (Phase One of Master Plan)



Livestock Competition Arena Ground Floor Plan



Southeast Aerial



Overall Entry



Main Entry



Arena from Mezzanine



Arena from Bleachers



New Construction – Space Descriptions

The Livestock Competition Arena for the Animal Science Department features a 130 feet x 250 feet Arena with bleacher seating with a capacity of 3,000 seats that includes 26 wheelchair spaces. There are 16 covered stock pens along with bucking chutes, roping boxes, and 10-foot-

wide circulation alleys with access to all the pens and the arena. To assist with competitions and student needs, there is a Manager's Office, a Meeting Room, Event Storage, restrooms with showers, and a Security/First Aid room with direct access to the ambulance parking. In the main entry, guests will walk into an open Lobby that features a Concessions serving, as well as some open seating for enjoying purchases from the Concessions. There are also restrooms on both sides of the lobby as well as janitor closets. The second floor features a VIP area that has windows that look into the Arena. The VIP area also has several seating options including lounge seating and bar seating. Inside the VIP Area is a private bar that can be utilized for competitions and private events. To access the second-floor VIP Area, there is a staircase and an elevator that both open to an Elevator Lobby. The Elevator Lobby has a coat hanger area and opens to a corridor for the restrooms and a Caterer Staging area. Adjacent to the VIP area is an open Mezzanine Viewing Area with an Announcer's/Music/Camera Area. There is an exterior stair with access to the Mezzanine for competitors, team managers, and judges to use to check in and submit paperwork. Necessary support spaces include mechanical, electrical, elevator equipment room, IT, storage, and a fire riser room as required per building code.

Phase 1 of the site includes plans to provide 500 gravel parking spaces for spectator, 79 trailer parking spaces, 58 that have RV (electric and water) hook-ups. There are 57 new parking spaces for the Stanley Stout Center. There is a new gravel drive located between the new arena and the Burtis Outdoor arena for access to both as well as horse/livestock loading/unloading into the new arena. Additional /grass areas on site will be utilized as overflow parking during events.

Space Projection / Summaries

Arena First Floor		
Name of Space	Size of Space	
Vestibule	198	SF
Lobby	2,091	SF
Concessions	334	SF
Beverage Sales Island	353	SF
Electrical	68	SF
Electrical	68	SF
Family Restroom	84	SF
Family Restroom	84	SF
Janitor	121	SF
Janitor	121	SF
Women's Restroom	893	SF
Women's Restroom	893	SF
Men's Restroom	548	SF
Men's Restroom	548	SF
Arena Seating Access	6,767	SF
Arena (130' x 250')	31,219	SF
Bleacher Seating - 3,000 Seats / Circulation	10,335	SF
Men's RR with Showers	185	SF
Women's RR with Showers	199	SF
Elevation Equipment	66	SF
Manager's Office	109	SF
Storage	134	SF
Meeting Room	423	SF
Event Storage	161	SF
Arena Access / Interior Stock Circulation	7,354	SF
Security/First Aid	248	SF
Building Support Spaces	1,738	SF
MEP	50	SF
MEP	50	SF
MEP	38	SF
Janitor	38	SF
Covered Stock Pens / Circulation	7,524	SF
Net to Gross	1.07	
First Floor Total	78,312	SF

Arena Second Floor		
Name of Space	Size of Space	
Elevator Corridor	499	SF
VIP Area	1164	SF
Bar	112	SF
Mezzanine Viewing Area	665	SF
Men's Restroom	80	SF
Women's Restroom	86	Sf
Announcer / Music / Camera Area	672	SF
Net to Gross	1.19	
Total	3,899	SF

Budget

Estimate of Project Costs		
Construction		
(Construction Cost, etc.)		\$19,228,969.00
Design Fees		
(Architect, Engineer, other Consultants)		\$1,502,798.00
FF&E		
(Furniture, A/V, equipment, etc.)		\$375,000.00
Miscellaneous Costs		
(Admin. fees, internal labor, etc.)		\$255,950.00
Contingency		
(%)		\$961,448.00
	Subtotal	\$22,324,165.00
Foundation Costs – UAF (5% of donated funds)		\$1,200,000.00
Foundation costs – Estimated Interest on loan against pledges		\$1,000,000.00
Building Sustainability Fund (10% of project costs)		\$1,910,397.00
	Total	\$26,434,562.00

Funding

The project will be funded with Foundation, federal ARPA monies (if appropriated) and departmental and university Funds. Building sustainability funds will originate from philanthropic gifts and be held in an endowment specifically to capitalize the renewal requirement for the building after construction.

Maintenance

Capital renewal costs will be funded from the building sustainability fund (above). The annual costs of operations, maintenance, and utilities for the 66,368 SF are estimated as follows, and will be financed through revenues generated from competition revenues and university resources. There is an anticipated savings in utilities and maintenance expenses from the elimination of Weber Arena.

Main Annual costs of operations, maintenance and utilities are estimated as follows:

Description	Cost/sqft	Total
Operations and Maintenance	\$3.23 x 82,211 SF	\$265,541.53
Utilities	\$3.50 x 82,211 SF	\$287,738.50
Total Annual Cost		\$553,280.03

Tentative Timeline / Schedule	Date
KBOR Program Approval	November 2022
Selection of A/E	February 2023
CMAR Selection	May 2023
Design/Construction Documents	March 2023 – December 2023
OFPM Final Approval	December 2023
Bidding and Construction (20 months total)	January 2024 – August 2025
Move-In / Occupancy	