SECTION 2: COMPETITION CHALLENGE

Background and History

The 2007/2008 Leading Edge Student Design Competition site is located in Santa Barbara, California on the West Campus of the University of California at Santa Barbara.

The Santa Ynez Mountains north of Santa Barbara. This mountain range, running East-to West, parallel with the coast separates Santa Barbara from the interior of California, and provides fresh water in rivers and creeks.

Before European arrival, the California coast was home to many groups of native peoples. The Chumash inhabited the coastal and inland areas between Malibu and Paso Robles from 13,000 years ago until the present. The abundant food supply from the ocean as well as the mild climate made for a relatively gentle environment for a hunter and gatherer culture. The Chumash inhabited villages offshore on the Channel Islands, along the coast, and along creeks in the forested uplands. The mainstay of their diet was fish and shellfish as well as meat from small and large mammals. Similar to other indigenous peoples from California, ground acorns was another important element of their diet. Their population may have exceeded 20,000 people, divided into several language dialects. The Chumash are also known for their use of shell bead money: they are one of the only Native American cultures known to have independently developed the use of money before European contact.

The first Europeans to travel through Santa Barbara were Spanish explorers moving up the coast from Mexico. Juan Rodriguez Cabrillo, generally credited with “discovering” California for Spain, documented his meetings with the Chumash in the area in 1542. More than two hundred years later, in 1782, as the Spanish began to build outposts in California, the Presidio and Mission of Santa Barbara were founded: the presidio to protect the little Spanish settlement of Santa Barbara and the mission to convert the Chumash to Christianity. Mission Santa Barbara is the 10th of 21 missions built in California. While many will claim that the Spanish brought a benevolent civilization to the native peoples, the fact is that the diseases that European settlers inadvertently brought with them, such as measles and small pox, decimated the Chumash people, and along with the enforced loss of their lands and culture, nearly caused their extinction.

Front façade of Mission Santa Barbara. The two towers are unusual for California Missions. Note the Adobe arcaded building on the left.

The Mission Santa Barbara has survived to the present, and unlike many other California Missions, has remained a functioning parish since its founding. The stone building was damaged in two earthquakes: 1812 and 1925. It was enlarged and rebuilt after the first quake, and rebuilt and restored to its original appearance after the second earthquake.

The Presidio protected a small village and harbor that soon grew into a thriving seaport, and was incorporated as a town in 1850. When the Southern Pacific Railroad arrived in Santa Barbara in 1887, it became a traveler's destination, and its reputation as a beautiful seaside resort town was established.

After suffering extensive damage in the same 1925 earthquake that destroyed the mission, city business owners decided to rebuild their downtown entirely in the Spanish Mediterranean Style. This revival style was very popular at the time for residential structures, but was not commonly used in commercial construction. These guidelines have remained in force downtown to this day, resulting in a uniquely-styled downtown business district.

A section of State Street in downtown Santa Barbara showing the Spanish Mediterranean Revival Style Architecture. This style gives the area a charming feel.

Nestled between the Santa Ynez Mountains and the Pacific Ocean, Santa Barbara is now promoted as "The American Riviera". The Mediterranean climate, sandy beaches, nearby mountains, and high real estate values seem to support this comparison. In fact, Santa Barbara and its neighbor Montecito are home to a disproportionate number of the rich and famous, many seeking respite from Los Angeles and Hollywood, which are a relatively short travel distance away.

University of California at Santa Barbara

In 1944 a teacher's college, Santa Barbara College, joined the University of California system as Santa Barbara College of the University of California. This campus was originally envisioned as a liberal arts college, with emphasis on teacher training, however over time, the campus has evolved into a full-fledged university. In 1950 the university purchased the Marine Corps Air Station at Goleta Point outside of the Santa Barbara City limits, and relocated the campus there in 1954. This location is the main campus to this day, a 408-acre site on a mesa above the ocean 9 miles west of Santa Barbara. The site includes a large lagoon near the center of campus, featured prominently in campus photographs on the website. (www.ucsb.edu)

Left: Central UCB Campus with its interconnecting network of bike paths and walkways. Right: Storke Tower, the central campus landmark.

The university consists of 17,000 undergraduate students, 95% of whom are from California, 3,000 graduate students and approximately 1,000 faculty members. The university offers approximately 200 majors and degrees to their students. In an acknowledgement of its location, Santa Barbara weather is featured prominently on the university web page, and links to updated surfing conditions are not difficult to find.


Left: The beach and bluffs from Coal Oil Point, looking east toward Isla Vista and the campus beyond. Right: surfers walking up the beach to where the best waves are.

Housing students in one of the most expensive real estate markets in the country is a challenge for the university. Santa Barbara County has allowed development to occur in several parcels adjacent to the campus, most notably Isla Vista, an unincorporated town directly west of the main campus. This very dense community of 18,000 residents is comprised of 95% rental housing, and the residents have a median age of 21 years old. Isla Vista School, an elementary school built by the Goleta School District, serves the children of Isla Vista and adjacent housing areas. This school borders our competition site. In addition to Isla Vista, the County also allowed a private developer to build two 10-story dormitory towers off campus. These dorms, Francisco Torres, are the tallest structures in the area, and visible from the competition site.

Francisco Torres Dormitory towers photographed from Los Carneros Road. Note the marshy creek in the foreground, typical of the coastal mesa area. These towers are the tallest buildings in the West Campus Area.

Aerial view of the coastline at UCSB. Note the dense development in Isla Vista bordered by West Campus on the left and the main campus on the right. Devereux Slough is the large sandy area above the West Campus text in this image.

West Campus

West of Isla Vista is West Campus, the site for this year's Competition Challenge. This area, located on a mesa above the ocean and bounded by a coastal slough, has a rich natural environment with many historical elements still extant. The mesa hosts an upland grassland with riparian fingers feeding the Devereux Slough. It once contained numerous vernal pools which, along with the slough, supported much wildlife including migrating birds and waterfowl. The shores of the slough was also the site of one or more Chumash Villages.

Devereux Slough on the edge of West Campus. The slough results when the mouth of a stream or creek is blocked from draining to the ocean by coastal dunes. Winter storms usually break through the dunes each year and allow the fresh water in the slough to drain. This photo was taken when the slough was relatively full. The aerial photo above was taken when the slough had drained.

After the Spanish moved into the area it became part of a Spanish Land Grant, Rancho de Los Dos Pueblos. The land was grazed heavily by cattle for many years, destroying most of the vernal pools. In 1919, 500 acres was purchased by Colin Campbell, who built an estate on the mesa overlooking the ocean. Many of the original buildings and roads from the Campbell Ranch are still present on the West Campus, including the Campbell Barn that will be part of Challenge 1. In 1945, the Campbell Ranch was purchased by Helena Devereux, who established a west coast branch of her Devereux School for physically and emotionally disabled children and adults. The Devereux School used the Mediterranean-style Campbell House as their administrative building, and built residential buildings around it (See West Campus Plan). In the 1960s, the Devereux Foundation began selling portions of their property to the University, which established West Campus. These sales were completed in March 2007 when the university purchased the last parcel including the buildings. For the near future, the Devereux School will lease back some of the buildings from the university and continue in operation, but the original Campbell House, (now named Jacobs Hall, after a donor who paid for its renovation) will now be under University Control.

The courtyard of the old Campbell House. It was built in the 1920s in a Spanish or Mission Revival Style. The Devereux School used this building as their main administrative building.

Some portions of the West Campus have been preserved as open space (See the Coastal Open Space Plan, a separate download). The university set aside a natural reserve area in the 1970s, Coal Oil Point Reserve. This reserve includes the Devereux Slough and so bounds the current West Campus. The area is named for the Oil Cracking Plant that briefly was in operation on adjacent property. On the other side of West Campus, Isla Vista Parks and Recreation purchased land and is in the process of restoring it as open space: Camino Corto Open Space and Del Sol Vernal Pool Reserve. These sites are directly adjacent to the Isla Vista Elementary School. Students use paths in the open space to walk to school. The Camino Corto property borders directly on our Competition site.

Campbell Barn as seen from Slough Road looking east. Camino Corto Open Space is beyond the white board fence.

Campbell Barn

The Campbell Barn was designed in the 1920s, in an English Polo Barn Style, by Mary Craig, an important regional architect. Architectural drawings for the Barn will be available to entrants in the competition. After the university purchased the barn, it was used by student and faculty equestrians to house their horses and hay. However an earthquake in 1978 caused significant damage to the barn's foundation. Since that time the building has been "red-tagged" by the local building official, and closed until structural repairs making the barn safe for access have been completed. The barn remains one of the oldest buildings on campus and with its links to the Campbell Ranch and Mary Craig, it qualifies as a historic landmark. The Challenge 1 program will adapt the barn for re-use as a display space, and the Challenge 2 program will design housing and tack rooms for a new university student equestrian program.

The Future

Since the university first acquired the West Campus Property in 1967, there has been much discussion of how to develop it. Expanding housing and services to students and faculty is a very high priority, and so faculty housing was built between Isla Vista and the Devereux School property (see West Campus Plan), and the Child Care Center was built near Isla Vista School. But the university has yet to significantly address the intersection of open space and historical structures in West Campus. This year's competition will serve as a proposal for how to manage some of the competing interests of development, historical preservation, environmental education and open space management on the Old Campbell Barn Site.

Climate

As has been mentioned above, Santa Barbara's weather is the classic Mediterranean climate, with mild temperatures in the winters, warm temperatures in the summer, and about 300 days of sunshine a year. Average high temperatures are 74 degrees, while average lows are in the 50's. Summer high temperatures are mediated by coastal fog in the mornings and cooling breezes from the west in the afternoons. Cold winter winds tend to come from the east or east-southeast as the weather data in Section 6 indicates.

Precipitation comes as rain almost exclusively in the winter months. The annual precipitation is approximately 15 inches. Santa Barbara boasts that there is no "off-season" in their weather, it is beautiful year-around.

Demographics

This demographic information obtained form the 2000 US Census suggest that Santa Barbara and Isla Vista are more heavily Caucasian areas relative to the rest of California. It is interesting to note that the student population in Isla Vista is somewhat more diverse than Santa Barbara (more Asians and African Americans), but still less diverse than California as a whole.

	Percent of Residents in Santa Barbara	Percent of Residents in Isla Vista	Percent of Residents in California
White	74	69.5	59.5
African American	1.8	2.1	6.7
Native American	1.1	0.6	1.0
Asian	2.8	11.6	10.9
Pacific Islander	0.1	0.2	0.3
Other	16.4	10.2	16.9
Mixed Race	3.8	5.8	4.7
Hispanic or Latino	35	20	32
Not Latino	65	80	68
Median Age (yrs)	34.6	21	33

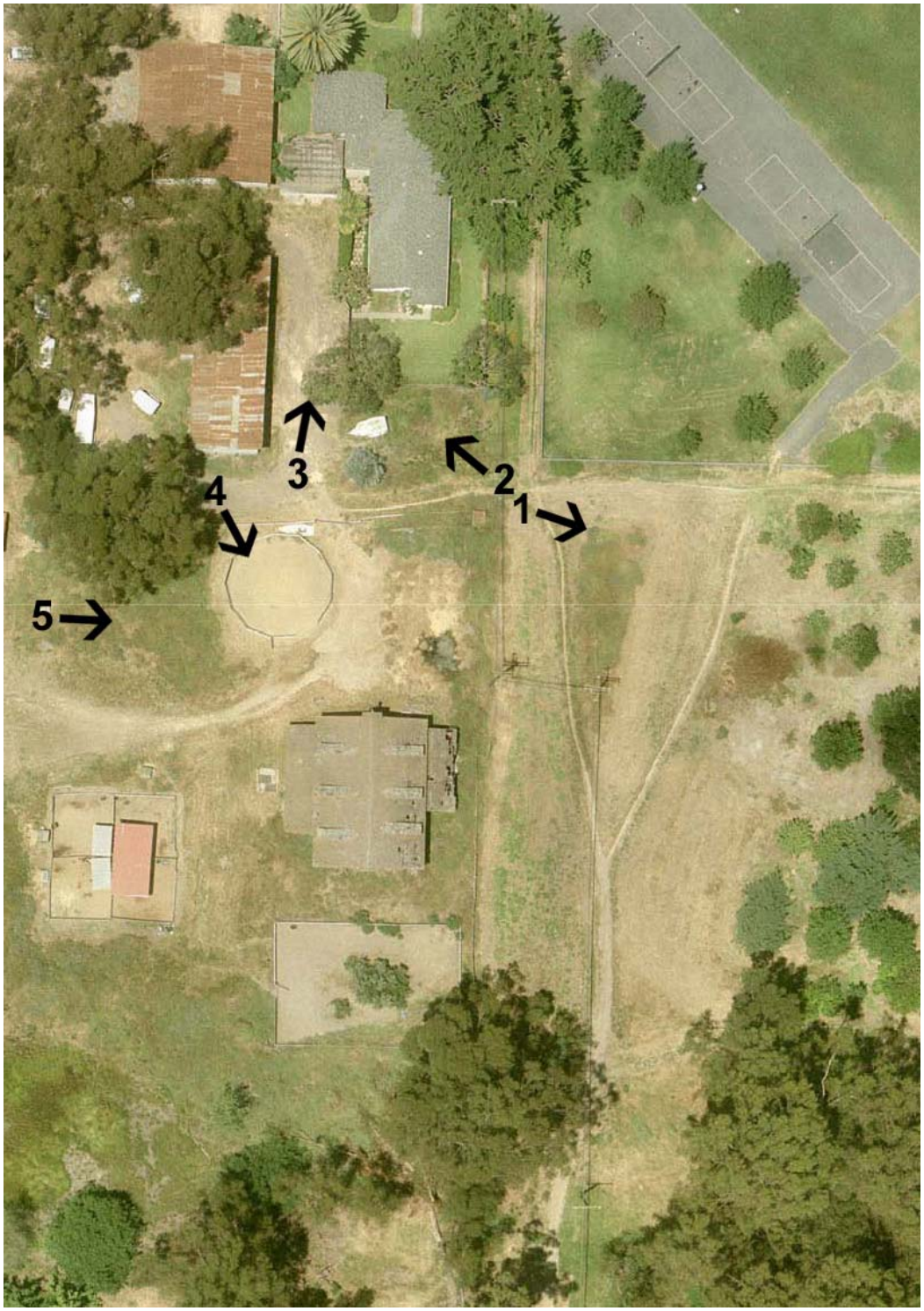
Utility Providers

Power: Southern California Edison

Gas: Southern California Gas Company

Water: Goleta Water District which uses surface water from the Cachuma Reservoir on the Santa Ynez River as well as ground water from district-owned wells.

Solid waste: Santa Barbara County Waste Management District. Solid waste is buried in Tajiguas Landfill.



Aerial View of the Competition Site. North is up in this photo. The numbers and arrows refer to the Site photos which follow. The Campbell Barn is approximately in the center. Damage to the roof of the barn is visible. The trees at the bottom are the edge of a riparian zone which feeds the North Finger of the Devereux Slough. The circular fence at the 4 arrow no longer exists. The Caretakers House (Rudy House) is the gray roofed structure at the top. The black asphalt areas at the top right are paved ball courts for the elementary school playground.

COMPETITION PROGRAM

The 2007/2008 Leading Edge Competition will be located on the West Campus of University of California at Santa Barbara. Challenge 1 entrants will design a 25,000 sf History and Nature Center on a 17,500 sf site with display space in the historic Campbell Barn nearby. Challenge 2 entrants will design a 4,500 sf 3-unit student residence building on a 1,800 sf site.

Note: While the site and the Campbell Barn are real, the program for this competition has been created solely for the purposes of the competition. It does not reflect the intentions of UCSB, the Goleta School District, or Isla Vista Parks and Rec. The UCSB student equestrian team is hypothetical.

The site is not open to the public, and the barn especially is closed because of its unsafe structural condition. Do not attempt to visit or enter the barn.

Competition Site Description

The competition site is located at the intersection of the Isla Vista School Playground, the Camino Corto Open Space, and West Campus area. Just north and west of the site is the UCSB Orfalea Family Children Center, a day care center for children of UCSB students and faculty, and southwest of the site is the remaining Devereux school and residence.

Site View 1. This photo is taken from Location 1 on the Aerial Photograph. It shows the back fence of the Elementary School on the left and the east side of the barn on the right. One of the informal walking paths through the open space is clearly visible along the playground edge. The trees in the distance are native oaks and other trees that have been planted to begin to restore the open space. Exotic Eucalyptus trees are on the right. In the foreground is the location of a proposed new vernal pool to be associated with the Environment and History Center.

The site for both competitions will be located directly north of the Campbell Barn. An approximately 4,000 sf plaza of permeable paving and landscaping will be planned in front of the barn. On the north side of the plaza will be the site for the Challenge 1 History and Environment Center. On the west side will be the site for the Challenge 2 Student Residence. These areas are shown on the Competition Site Plan (see AutoCAD download file).

For the purposes of Challenge 1, the site and plaza should be considered flat and free of surface groundwater. Entrants should assume that the three existing buildings within or

adjacent to the Challenge 1 site: 364 Rudy House, 359 and 356 West FM and CARP Storage, and 357 Barn (see the West Campus Site plan for reference to these numbers) will be removed. The line of Eucalyptus trees to the west of the Challenge 1 site follows the access road and was probably planted by the Campbell family. While these trees are not native to this area, they will be retained adjacent to the site.

Site View 2: This photo was taken from Location 2 in the aerial photo. On the right is the elementary school fence. On the left is the white wood fence that follows the access road. Note the eucalyptus trees lining the road on the left side background will be retained. For the purposes of the competition, assume that the residential building and the corrugated metal sheds obscured by trees in this photo will be removed to make way for the Challenge 1 program.

The Challenge 2 site, across from the Challenge 1 site, slopes downward away from the barn in a westerly direction approximately 8 ft across the 30 ft width of the site (See site photo 4). A new retaining wall will be constructed to control the elevational change between the Access Drive and Fire Lane, and the Challenge 2 Site. (Students are not responsible for structural design of the retaining wall.) The Competition Site plan includes a simple section of the site. Use this section in your design. In order to simplify the topographical issues, entrants are to assume that this section is continuous across the full length of the Challenge 2 site.

Site Photo 3. This view, taken from location 3, gives a better view of the sheds and residence currently on the Challenge 1 site. Assume that the trees around the house and sheds will also be removed. Note that for the purposes of the competition, the Challenge 1 site is flat.

Design Challenge 1

Students entering Design Challenge 1 are invited to design an Environment and History Center. The center will be comprised of a 25,000 sf new building, an exterior plaza, and the reuse of an existing approximately 3,500 sf historic barn building. The new building will be located on the site given in the Competition Site Plan.

The center will serve a dual role of research and education about the environment and history of the West Campus area. It will be open to the public as well as to students and faculty of UCSB and will host programs for UCSB students, adults, and kids, educating them about this special area. It will partially serve as a visitor's center for the Camino Corto Open space, and will explain the special nature of the vernal pools in the area. A new vernal pool will be constructed on the east side of the plaza on the Camino Corto property to serve as a demonstration pool for the center. Example programs that could be hosted or presented in this center could include: Archeology of the Site, History of the Chumash Inhabitants, History of the Mission Rancho Period, History of the Campbell Ranch and the remaining buildings on site, History of the Barn and its construction, Ecology of the Coastal Region, Animals and Plants of this special area, the Devereux Slough and its unique environment, Ecology of Vernal Pools, Ecology of the Shoreline, Agriculture on the site throughout history, etc.

Because of its multiple roles of teaching, display, and research, the new building will have a number of classrooms, a library, and two display spaces, one in the lobby entry way. The primary display space, however, will be across the plaza in the Barn.

The original drawings of the barn show a main building with 5 bays, the center aisle for hay storage flanked by two rows of stalls for the animals, and access aisles on the outer side of the stalls. The lean-to structures on the sides of the barn enclosed a separate stall for sick animals, a kitchen, 2 box stalls, and a harness room.

Left: Front or north side of the Barn, showing main entry doors. Right: Closer photograph of the west side of the barn. See the plans for dimensions and details. The flood light attached to the middle dormer will be removed when the exterior renovation is completed.

Left: The south or back side of the barn. Right: the east side of the Barn. This side has the most damage to the structure, with the exterior wall of the Sick Stall partially collapsed. The roof is degraded in this area, and the chimney is no longer standing. Repairs to the exterior of the building are not in the scope of this competition.

The Barn's status as a potential Landmark Building requires that its exterior construction, color, and finish not be modified. All the existing doors and windows must be maintained and re-used as much as possible. All changes to the building required by the adaptive re-use must be on the interior. In order to be as sustainable as possible, students are encouraged to re-use the interior structure of the barn. Part of the intention of using the Barn as display space is also to display the inside of the barn as it was when it was in use. Thus, retaining the open rafters, the three aisle ways, and the stall construction is desirable when adapting the barn. The lofts that were built over the stall areas were probably accessed by a wood ladder and were most likely used to store hay and additional feed. The program does not require that visitors access these lofts, however if the designers choose to make the lofts part of the display function, then disabled access must be provided by adding either an elevator or a ramp. As this would constitute a significant change to the barn construction, entrants are discouraged from using the barn lofts for a public function. The repair of the barn exterior is not part of the scope of the Competition. Students may assume that the exterior and the roof have been fully restored back to their original condition.

Left: Interior of the barn, looking north. Note the stalls on the ground level and the partial lofts above. The high doors were used for ventilation and for bringing in hay to the lofts over the stall areas. Right: Looking south along the west side stalls with the "Runway" or exterior access aisle on the right. Note that the interior partitions that would normally enclose the stalls have been removed over the years.

Looking south toward the rafters and hay lofts above the stalls. The roof framing is similar, but not entirely consistent with that shown in the cross sectional drawings.

Any discrepancies between the photos of the barn and the drawings of the barn will be disregarded. In the case of major discrepancies, students are to use the design and dimensions shown in the drawings.

The plaza will be constructed of permeable paving or some other sustainable alternative. Entrants will assume that the plaza can be constructed on grade with the entrance to the barn, so that the main barn doors on the north side may be used as disabled access. The paving material should be strong enough to allow for temporary vehicular access, when deliveries are made to the barn or the student residences of Challenge 2. Appropriate landscaping should be added to the plaza.

As always with public buildings, all public spaces must be accessible to disabled persons. Exterior entrance stairs are to be avoided, and interior elevators or ramps are to be provided in addition to stairs to reach the upper floors.

Design judges will be looking for the new building to be sensitive to the barn's design and to acknowledge its agricultural and historic elements without directly copying them. The new building should take its place in the history of the site and the composition of the new plaza without overwhelming the barn or the residences.

A more detailed program of suggested square footage for both buildings is given below:

Program Element	Sf (each)	SF (total)
Environment and History Building		
Entrance Lobby/display space	2,000	2,000
Entrance Kiosk and Gift Shop	200	200
Classroom (adults)	1,000	1,000
Classroom (kids)	1,500	1,500
Laboratory Classroom (adults)	1,000	1,000
Laboratory Classroom (kids)	1,500	1,500

Lab Prep Room	500	500
Additional display space	1,500	1,500
Lecture Hall	2,000	2,000
Restrooms (1 of each type for each floor)	350	1,400
Library	1,500	1,500
10 Faculty/staff Offices	150	1,500
Administration Area: reception Director's office, Administration office, Conference room, Copy Room	1,200	1,200
Vending Machine/Break Room	500	500
Receiving Area/Delivery Entrance	500	500
Subtotal Interior space		17,800
Plus 40% for circulation		7,120
Total Interior Space E&H Bldg.		**24,920 sf**
Barn		
Display Space	2,000	2,000
Entrance Kiosk/office	200	200
Managers Office	150	150
Staff Break Room	200	200
Gift Shop	300	300
One unisex public toilet	150	150
Total Interior Space – Barn*		**3,000* sf**

*Note that the required program for the barn is less than the existing square footage in order to allow for circulation, mechanical spaces, and inefficiencies in designing a re-use project. These square footages assume that the loft areas are not re-used.

The classrooms will be standard classrooms with moveable furniture. Adults are separated from kids because of the different sized furniture required, and different displays that would be included in the classroom. The laboratory classrooms will have tables for microscopes, at least one sink, and room for plants and small animals housed in cages and aquaria around the edges of the room. The classrooms may be grouped in any way the designers prefer.

The height limit for the new building is 45 feet. No setback from the site boundary is required, but no part of the building, including stairs, ramps, or roof overhangs may extend beyond the site boundary.

Entrants are expected to design the exterior portion of the Challenge 1 site as well as the plaza between the building and the barn, and to include as many sustainable and energy efficient features as possible. Bicycle racks should be placed near the entrances to the building and perhaps on the plaza.

Successful entrants must recognize that in terms of heating and cooling needs, classrooms and museums are internally loaded spaces, like offices, with high heat loads from lighting, equipment, and assembled people. Thus even in a relatively benign climate like this location, solar heat gain should be avoided at all times of the year. Daylighting without glare and appropriate passive ventilation are the most important energy issues. Reducing the heat load and the energy used for electric lighting by providing natural light and ventilating the space passively when appropriate can significantly reduce energy costs. A properly designed building in this climate should require a minimum of heating and little cooling throughout the year. On the other hand, a poor design will result in an uncomfortable building with relatively high heating and substantial cooling requirements.

The Competition Site AutoCAD file may be downloaded from the website. The Environment and History building may be placed anywhere on the Challenge 1 site, however designers are encouraged to have the main entrance acknowledge the barn. A secondary entrance facing Isla Vista School is also desirable.

Even though the site plan suggests a place for disabled parking adjacent to the project site, parking design is not part of the competition, and entrants are not required to design the parking. The university will be providing charging stations for plug-in hybrid cars and a bus/tram stop nearby the site.

See the Submission Requirements Section for a description of the required drawings, exercises, and presentation formats.

Site Photo 4: This photo, taken at location 4, shows the Challenge 2 site. Note that the round exercise ring in the aerial photograph is no longer present and has been replaced by a fenced hay storage area. This area is partially covered by a gray tarp. Note the slope of the site in a westerly direction. Entrants are to use the site section in the Competition Site Plan AutoCAD file to determine the slope of the site.

Design Challenge 2

Students entering Design Challenge 2 are invited to design a 4,500 sf 3-unit student residential building on a 1,800 sf site. The residence will be designed for members of a future student equestrian team. (Note: This building will acknowledge the agricultural setting and will be connected to new corrals, paddocks and riding areas west of the site.)

Two residences will have a minimum of 1 bedroom and the third should have a minimum of 2 bedrooms. Bedrooms should be sized for at least two students, so that a 1 bedroom unit will house a minimum of two students. The residences should be townhouse style with their main entrance on the east, uphill, or plaza side. Since no food service is available nearby, the kitchen and dining areas of these residences should be sized for full cooking capabilities.

Site Photo 5. This photo is taken from location 5 on the aerial photograph give a better view of the hay storage enclosure, and the board fence on the north of the site. Note that the wide angle setting used in this photograph tends to exaggerate the steepness of the hill.

Since UCSB provides housing for disabled students in other locations on campus, these units do not have to be fully accessible, and may have second story bedroom areas accessible only by stairs. However, partial accessibility for visiting family members and other non-residents is always desirable and is a hallmark of good design.

The back or west side of the units will have horse tack and feed storage rooms at ground (or basement) level. These rooms should be accessible via a stair from the inside of the residence. They should also have large doors opening west, big enough to allow a horse to be brought in if necessary for grooming or saddling.

Tack rooms should have saddle racks, 4x4 rails extending out from the wall about 30 inches, and spaced on the order of 4 ft on center in one or 2 rows. Each student may own 3 or 4 different saddles and need to store each of them on a rack. They should also have racks for bridals, halters, leads, and other tack, and a drying rack for drying off blankets and saddle pads. Floor space should be available for storage of traveling trunks used to store equipment when riders travel to shows and competitions. A feed storage room should be a separate room where oats and special feed is stored in 35 gallon cans. The room should also have shelving to store diet supplements, and medicines. See the photos below.


Left: Saddle racks in a shared tack room. The 4x4 posts are mounted perpendicular to the wall to allow air to circulate around the saddles. Some of these saddles are hanging on metal bars. Right: Bridle racks on a wall. Simple wood pegs 3 inches long and 12 inches on center are acceptable to hang bridles.

In addition the residence building should have one office for the administration of the Equestrian Team. This office should have an exterior entrance, either on the east or west side of the complex, and be approximately 150 sf.

A list of suggested program components in the residences is given below. The size of components is left to the designer's discretion.

Program Elements (each unit)
Front Porch, entry area
Living Area
Dining Area
Kitchen
Washer/Dryer Area
Bathroom
Bedrooms
Exterior balcony (facing west, upper level)
Tack room (facing west)
Feed Storage Room (facing west)
Program Element (shared)
Administration Office

Most grooming and saddling will take place in the exterior area outside the tack rooms. That area should be supplied with tie bars at 36 to 48" in height for tying horses while they are being groomed. Cross Tie posts, stout poles with tie rings 36 to 48" in height, placed 8 ft apart for tying a horse from two sides are also useful. These area will be west of the competition site.

The units may be stepped back or articulated to preserve solar access, however all portions of the building, including entrance stairs and roof overhangs must be within the

site boundary. No setback is required. The height limit from the lowest floor is 50 ft, but keeping the uphill side of the building in scale with the height of the barn is desirable.

Design Judges will be looking for a design that acknowledges the agricultural and historical nature of the barn, but that does not directly mimic or copy elements of it. Good designs are those that acknowledge the historical features, but do so with modern elements and detailing.

Successful designs will incorporate passive strategies to take advantage of passive ventilation and provide plenty of natural light without glare. Passive solar strategies are appropriate for heating residential structures, however entrants should keep in mind that this climate is quite benign, and that solar gain should be used sparingly to prevent overheat conditions. Passive ventilation will be the key to summer cooling. Special attention should be paid to limiting odor from the tack and feed rooms in the residences. A properly designed building will require minimal heating and cooling year around.

Parking will be provided in an adjacent area and is not part of the competition scope.

See the Submission Requirements Section for a description of the required drawings, exercises, and presentation formats.