CAMPBELL HALL
THE UNIVERSITY OF CALIFORNIA BERKELEY
BERKELEY, CALIFORNIA

HISTORIC RESOURCE EVALUATION
DRAFT

Page & Turnbull, Inc.
San Francisco, CA
June 17, 2003

By
Lex F. Campbell
Page & Turnbull, Inc.

Contributions by Steve Finacom

Prepared for:
University of California Berkeley
Capital Projects
I. INTRODUCTION AND BACKGROUND

This report presents the results of an architectural survey and preliminary historic evaluation of Campbell Hall located at the University of California, Berkeley (U.C. Berkeley). Campbell Hall (1959) was evaluated for its potential eligibility under Criterion C for the National Register of Historic Places. Because the building dates less than fifty years old, the analysis utilized National Register guidance under Criteria Consideration C, Properties that Have Achieved Significance Within the Last Fifty Years. The evaluation was conducted for Capital Projects to provide documentation of the building.

Archival and field investigations were undertaken to compile information regarding the history and a development of the building. Staff at U.C. Berkeley provided a historical summary of the building researched through books, publications, and documents located at the University. Capital Projects provided original architectural plans. These materials were supplemented as necessary through review of secondary source materials including books and publications. Field investigations including 35 mm photographs and survey forms verified the existing location and condition of the building. Data was analyzed utilizing guidance in National Register Bulletin, How to Apply the National Register Criteria for Evaluation (Department of the Interior, 1991).
This report is divided into five sections, including this introduction. Section two includes an historical summary of Campbell Hall developed by staff at U.C. Berkeley. A description of Campbell Hall is provided in section three. Photographs and drawings located in section four supplement the building description and document the general condition of the building. Section five includes the historic evaluation and conclusions.
II. HISTORY

Historical Summary
Campbell Hall was constructed in 1957-59. The building cost $1,238,000 in State of California funds and provided 61,340 square feet of space at completion. Designed by the firm of Warneke & Warneke, it was one of several academic and student service buildings added to the Berkeley campus during the post World War II era.

Building Context
After World War II and through the 1960s, the era of Campbell Hall’s construction, the Berkeley campus grew dramatically. This was an era of considerable expansion of the University’s programs and facilities. Federal and State money for research was plentiful, and many Berkeley campus programs, particularly those in the sciences and social sciences, were able to obtain new facilities to house their expanding teaching and research activities. In the “hard” and physical sciences (including Astronomy, Chemistry, Physics, Earth Sciences and allied disciplines) these new buildings often represented dramatic increases and improvements in the facilities of departments that had not had substantial “new” or “modern” structures at Berkeley since the early 20th, or even the late 19th Century.

Central campus buildings constructed in this era were generally of two types. On the one hand, Post-War buildings increasingly departed from the Beaux Arts / neoclassical character of earlier campus structures and followed a principle, articulated in the 1951 Campus Plan Study prepared by the Office of Architects and Engineers that new campus buildings “should be designed honestly with the materials available, to respond to the organic requirements of the occupants and to create maximum practical internal
flexibility. This approach drove the design character of new buildings in the direction of Modernism.

Buildings such as Alumni House in the International Style, Brutalist Wurster Hall, Barrows Hall, the Earth Sciences Building (now McConic Hall), and several engineering and science buildings were conceived and executed in variations on this idiom. These structures often had flat tops rather than hipped roofs and lacked the campus’s traditional tile roofing. They had windows with metal frames set flush with the facade, plain concrete or stucco exteriors rather than granite or concrete plaster, expansive interior floorplates with large numbers of physically and visually similar spaces, and exterior heights and proportions different from earlier campus buildings.

Some of these buildings were overpoweringly large and symmetrical (such as the ten story cube of Evans Hall or the massive, seven-story bar of Barrows Hall); others such as Wurster Hall were decisively asymmetrical. In several instances these Modernist buildings were positioned in formerly sacred outdoor spaces of the campus, interrupting or disrupting vistas, axes, and formalized outdoor spaces planned in earlier eras.

The second design tradition during the Post-war era involved the continuation of neoclassical structures that harmonized with the earlier Beaux Arts buildings but displayed more simple forms and less ornamentation.

These included campus structures, sometimes described as having a “stripped neo-classical” style, such as Mulford Hall, Lewis Hall, the Library Annex (Bancroft Library) and Donner Laboratory. They presented the viewer with generally symmetrical facades and elevations, punched windows, hipped, red-tile roofs and a classical vocabulary of base, middle, and top. Other similar buildings had been constructed earlier in the 1940s,
including Sproul Hall (originally the Administration Building) and Minor Hall (originally the Emergency Classroom Building).

On all of these structures, however, materials were less-ornate (concrete or cement plaster, rather than granite or marble) than earlier campus buildings from the Beaux Arts era, and ornamental details were minimized or simply suggested, rather than elaborately executed.

Campbell Hall is a something of a hybrid of the two groups. Its flush windows, large expanses of exterior glass, and understated entrance speak to the Modernist tradition, but its siting, general symmetry, shape, and size, elements of exterior ornamentation (including metal grills and raised medallions on the soffitt), exterior coloring, and pitched tile roof are gestures to the neo-classical style.

The physical exterior of the building has not been substantially altered since its construction. It appears to retain original windows, wall panels, roof, and decorative details such as exterior iron railings.

In one respect, the siting of Campbell Hall departed from the intentions of earlier campus planning.

John Galen Howard’s Phoebe Apperson Hearst Architectural Plan for the Berkeley campus envisioned the Mining Circle area as surrounded by a series of structures. On the east, a monumental domed auditorium was to rise. To the north, the Hearst Memorial Mining Building was to be constructed. To the south of the Circle, Howard envisioned a building mirroring Hearst Mining in proportions, character, and placement.

This structure would have stood between where Campbell Hall and Tan Hall are located and also covered much of their current footprints. South of this building, what is now referred to as the LeConte Hall / Gilman Hall Axis would not have connected through to Mining Circle on the north but,
instead, would have formed a linear outdoor space open on the south and surrounded on east, north, and west, by academic buildings.

Howard's proposed mirror structure to the Mining Building was never constructed, perhaps in part because there was never an open site at the head of the LeConte/Gilman "axis". This location was occupied from before Howard's time through the 1950s by the old Mining Building (later, the Anthropology Museum).

This Victorian-era structure, constructed in 1879, survived until the late 1950s when it was demolished to allow the construction of Campbell Hall. The open space thus created, east of Campbell Hall, visually connected the LeConte/Gilman axis with the Mining Circle.

In a second respect, however, the siting of Campbell conformed more to the spirit of earlier campus planning than did some of its contemporary structures such as Evans Hall and Barrows Hall. Campbell was aligned with the eastern façade of old LeConte Hall and set back the same distance as Hearst Mining from the University axis, which ran east/west through the center of the Mining Circle.

Campbell, Birge, and Barker
Campbell is linked in time, style, and design with two other science buildings on campus from the same era, Birge Hall (1964 and, like Campbell, by Warnke & Warnke) for the Physics Department and the Biochemistry Building (now Barker Hall, 1964, Wurster, Bernardi & Emmons). All three buildings have similar, although not identical, proportions and a suggestion of hipped roofs employing traditional red tile.

Campbell Hall is the first building completed in this small, three-building, subclass of structures on the Berkeley campus that sought to reflect some traditional design elements and character while also including modern elements and uses.
Perhaps because of its primarily office use, Campbell also has more windows and, in general, a lighter and slightly more refined appearance than Barker and Birge, which are buildings containing numerous laboratory spaces. On the latter two buildings the exterior walls, not the windows, are most visually prominent.

The roofs, truncated on all three buildings so they rise to a uniform horizontal edge, not a peak, were included to conform to the desires of UC Regent and former Dean of Mining Donald McLaughlin, an individual with a powerful influence over Berkeley campus planning policy in the 1950s and 1960s.

McLaughlin, a Berkeley alumnus with personal and professional ties to the Hearst family and mining empire, preferred new Berkeley buildings to reflect the character of the older Beaux Arts structures on the campus. He also felt that an attempt should be made to make the rooftops of campus buildings attractive when viewed from above, since they were prominently visible from the adjacent Berkeley Hills. Tile roofs were reportedly added to several campus buildings in response to his influence; in particular, the roofs of Campbell, Birge and Barker Halls have since informally been called “McLaughlin Hats” in recognition of his influence. The term has sometimes been used derisively by those who believe that it was awkward and unwarranted to attach a traditionally styled red tile roof to a building with a modern character.

In the case of Birge and Barker, the partial hip of the roof serves to conceal mechanical equipment in a well on the flat center of the roof; in the case of Campbell, two small observatory domes are contained within the center well, visible from a distance but not from points close to the Hall.
The Architects

Besides Campbell Hall, the firm of Warneke & Warneke was also responsible for other prominent projects at the Berkeley campus during this period. The firm designed Birge Hall in the Physics complex, the six-story Earth Sciences Building (now McConle Hall), completed in 1961, and the Unit I and Unit II Residence Hall complexes south of the campus, each containing four residential towers grouped around a central dining commons with flared roofs.

The son of a Bay Area architect, John Carl Warneke was born in Oakland in 1919. He received a B.A. from Stanford University and subsequently completed Harvard University's architectural program in one year in 1941-42. After working in his father's firm he opened his own practice in San Francisco in 1947, beginning a decades-long career of public and private projects across the country.

In addition to projects at the Berkeley campus, Warneke's firm designed buildings for the United States Naval Academy and Stanford University, and the UC Santa Cruz campus. Among his high profile public commissions were the new Hawaii State Capitol in Honolulu, the United States Embassy in Thailand, a renovation of the Lafayette Square area adjacent to the White House in Washington D.C., and the grave site of John F. Kennedy at Arlington Memorial Cemetery.

In the greater Bay Area Warneke's firm was also responsible for several buildings at the Asilomar conference center, a major hotel and shopping center in the Monterey area and office buildings in San Francisco. According to one biographical description, he "was one of the most successful contemporary architects...gaining national and international acclaim for his designs of numerous prestigious structures..."

(http://www.asilomarcenter.com/discover/historyarchitecture/warcekebio.html)
Campbell Hall may be considered one of the several academic buildings designed by a prolific architect of public structures, institutional facilities, and commercial properties who was at the peak of his practice in the 1950s and 1960s.

**Purpose and Uses**

Campbell Hall was constructed to house the Departments of Astronomy, Statistics, Mathematics, and the campus Computer Center. The Department of Astronomy has remained in the building since its completion, but the other programs have largely relocated to nearby buildings, particularly Evans Hall.

In recent decades, Campbell has been occupied primarily by Astronomy, astrophysics programs, and various administrative offices associated with the College of Letters & Sciences, including the Dean's Office and L&S advising programs. The L&S program offices and student advising spaces are concentrated on the lower floors, with Astronomy utilizing the upper floors.

When Campbell was constructed, it provided much-needed facilities for the Department of Astronomy, which had been housed since the 1880s in a complex of small wooden structures on Observatory Hill. The Department apparently welcomed the relocation because of the space and modern facilities provided in Campbell and the close proximity of the building to the facilities of the Department of Physics. Astronomy and Physics related informally in the sub-discipline of astrophysics, have increasingly converged in recent decades as the study of the behavior of matter and energy at the atomic and subatomic level is applied to the study of the Universe.

In addition to office and teaching facilities, two small observatory domes were incorporated into Campbell Hall. However, it was apparently soon decided that the Berkeley campus was no longer a useful location for astronomical observation because of the weather and increasing urban light
pollution. A new observing facility, named Leuschner Observatory like its campus predecessor, was constructed at the University's Russell Tree Farm property in Lafayette, Contra Costa County, east of the Berkeley campus. It began operation and instruction in 1965.

Background on Astronomy Department
Astronomy research and instruction at the Berkeley campus began in the 1870s, when Astronomy was a required course for engineering students. Astronomy was initially taught by George Davidson, natural scientist and chief of the Pacific Division of the U.S. Coast and Geodetic Survey, soon followed by Frank Soule, who taught mathematics, civil engineering, and astronomy. Soule led the astronomy program for about two decades until the early 1890s when he assigned teaching to Armin O. Leuschner, a mathematics instructor. Leuschner went on to head the department until 1938. During his tenure Astronomy at Berkeley achieved distinction in the field, particularly by producing graduate students and for work on the discovery and computation of orbits of comets and "minor planets" (commonly known as asteroids today).

The Berkeley Astronomy Department was complemented by the University's Lick Observatory, built in 1888 and at the time of its completion one of the premier facilities for astronomical observation in the world. The astronomy programs at Berkeley and Lick were interwoven. Advanced students received instruction at Berkeley but did much of their actual observational work using the excellent facilities at Lick. Of those graduates awarded PhD's by the Department of Astronomy between 1898 and 1965, about half had held research fellowships at Lick Observatory. (Centennial Record, page 80)

In addition to Leuschner Observatory, Astronomy added another remote facility—the Radio Astronomy Laboratory at Hat Creek in north/central California—in 1958, during the period Campbell Hall was being constructed.
The Department of Astronomy had expanded to a faculty of ten by the mid-1960s when Campbell Hall was new, teaching ten undergraduate courses and accommodating about 110 majors, including 45 graduate students (Centennial Record, page 80). There are currently (2003) nearly two-dozen active faculty and emeriti associated with the Department as well as numerous research and administrative staff, some located in Campbell Hall and others at research sites beyond the campus. During the 2002-03 the Department offered more than twenty courses, ranging from upper division Astronomy classes to general interest survey courses for non-majors.

In recent decades, during its occupation of Campbell Hall, the Department of Astronomy has undertaken teaching and research in a varied range of fields, as shown by a summary of the current research groups and research centers located within the Department. These include: the Radio Astronomy Lab (and Hat Creek Observatory), Theoretical Astrophysics Center; Center for Adaptive Optics; Center for Integrative Planetary Science: Search for Extrasolar Planets; The Pulsar Group; the Astrophysical Fluid Dynamics Group; and the Center for Star Formation Studies.

Faculty associated with the Department have participated in the design and management of research satellite programs and a wide array of other research projects in astronomy and related disciplines. Faculty and departmental researchers have access to some of the best observing facilities in the world, including the Keck Telescopes in Hawaii, jointly managed by the University of California and the California Institute of Technology.

Of particular public note in recent years has been the search for planets orbiting other stars. The Berkeley team, led by Professor Geoffrey Marcy, is widely recognized as an international leader in this relatively new field.
In recent decades Astronomy has also become increasingly allied with the physically-adjacent Department of Physics. Several faculty hold joint appointments in Physics and Astronomy. This convergence has resulted in an intellectual and programmatic connection between activities in Campbell Hall and the Le Conte Hall / Birge Hall complex.

Specific discoveries in astronomy and allied fields associated with the Berkeley Department and directly connected to work in Campbell Hall have not been researched. However, because of the long history and broad associations and accomplishments of the Astronomy Department and its faculty, it is possible that many advances in the field over the past four decades could be linked, at least in part, to people who have worked in Campbell Hall and research that took place there.

**William Wallace Campbell**

Campbell Hall is named for William Wallace Campbell, who served as the tenth President of the University of California. His term lasted from 1923-1930. Campbell was one of two UC presidents to bridge the period between the retirement of Benjamin Ide Wheeler in 1919 (after 20 years as President) and the presidential tenure of Robert Gordon Sproul (1930-1959).

Campbell was, by training and avocation, an astronomer. Educated at the University of Michigan, he came to the University of California’s Lick Observatory in the 1890s and served as Director there from 1901 to 1923, when he became UC President.

“Campbell maintained the Lick Observatory in the front rank of the world’s observatories. His achievements and publications in astronomical research were awarded wide recognition” (Centennial Record, p.16.). When he was offered the University’s presidency he made his acceptance contingent on the opportunity to continue a formal connection to Lick Observatory.
Campbell's pre-Depression tenure as UC President is regarded as "a period of quiet and prosperity (when) the University grew tremendously, aided by generous private gifts." (Centennial Record, p.17). The conversion of the University's "Southern Branch" into the UCLA campus took place during his administration, launching the University of California as a true multi-campus system.

At the Berkeley campus, substantial growth and construction occurred or was initiated during his tenure; buildings included the Southwest Athletic Project, Life Sciences Building, Bowles Hall (which began the University's residence hall system), International House, Giannini Hall, and Hearst Memorial Gymnasium.

Campbell retired as President and as director of Lick Observatory in 1930. In 1931 he became President of the National Academy of Sciences and guided it through the early years of the Depression. In 1938, suffering from poor health, he committed suicide in San Francisco.

When Campbell Hall was planned the Regents decided to attach his name to it, continuing a tradition of assigning the names of leading University administrators and faculty to academic buildings on the Berkeley campus. (Several of Campbell's predecessors and successors as President, including LeConte, Wheeler, Gilman, Barrows, and Sproul have Berkeley campus buildings named in their honor.)
III. BUILDING DESCRIPTION

Campbell Hall is located on the University of California, Berkeley campus at the intersection of Mining Circle and University Drive. The building is situated on the south side of University Drive grouped closely with LeConte and Birge Halls, a collection of science classrooms, offices, and laboratories. A pedestrian plaza that terminates at the circle is located to the east side of the building dividing Campbell, LeConte, and Birge Halls from Tan and Gilman Halls to the east. Campbell Hall's siting and massing is symmetrically oriented with that of Tan Hall across the pedestrian plaza. The venerable Hearst Memorial Mining building is located across the circle to the north.

Figure 1: Location of Campbell Hall at U.C. Berkeley.
Campbell Hall occupies a rectangular ground plan seven bays wide and twelve bays long. The steel and concrete frame building rises on a concrete foundation to six stories where it terminates in a hipped clay tile roof. The building façade is finished with cast stone panels that mirror the underlying structural grid of columns and floor slabs. The façade and massing of the building project a uniform composition and strong symmetry. The building’s classically influenced design and tile roof echo regional and contextual influences from other buildings on the U.C. Berkeley campus.

Horizontal rows of square windows punctuate all four building facades rendering a uniform fenestration and strong figure-ground contrast between the walls and openings. All the windows are similar if not identical in configuration. The fixed, steel nine-light windows include operable casement and hopper units. At the southeast corner of the building, metal louvered screens are furnished in the openings in lieu of windows. The louvers designate the location of an internal stairwell.

Each façade is derived from classical tripartite composition exhibiting a base, shaft, and cornice. The ground floor or base is distinguished by a row of recessed steel windows and surmounted by a projecting concrete stringcourse. The ground floor is followed by four identical floors characterized by cast stone cladding that mirrors the structural grid punctuated by uniform rows of steel windows. The sixth floor and top of the building is marked by a concrete stringcourse and slightly recessed band of windows with steel balconettes. This configuration is completed with a hipped roof and overhanging eave that tops the building. Inset pre-cast panels that contain a circle motif and concrete rafters ornament the eave soffit. The overall uniformity and repetition of the façade is slightly moderated by the insertion of centrally located concrete balconies and steel balustrade just above the first floor.
Campbell Hall is oriented towards University Drive with the primary entrance centrally located on the north elevation. The recessed entrance is comprised of a set of glazed, two-light aluminum double-doors surmounted by a single-light transom bearing the words “Campbell Hall.” Aluminum storefront windows in the adjacent bays flank the doors. A balcony that serves as a canopy projects over the entrance. The entrance is formally located at the top of a set of concrete stairs that ascend from University Drive. A secondary public entrance is located on the east elevation within the third bay from the north. The recessed entrance contains a set of aluminum doors identical to those on the north entrance. A building stairwell exit comprised of a single, two-light aluminum door and side light surmounted by a transom is located on the south elevation.

The south and west elevations of the building contain an external stairwell and L-shaped concrete areaway that provides access to a basement service entrance located on each elevation. Each entrance is comprised of a single aluminum door surmounted by metal louvered vents. The building wall at the basement level also is punctuated by six-light aluminum casement sash and louvered vent openings.

The primary north and secondary east entrances open into a modest sized vestibule and elevator lobby that generally serves to provide functional access to the rest of the building. On the first floor, a corridor that projects from the elevator core terminates at a library and offices that adapt an open plan. On floors 2-6, the building plan is generally organized around an O-shaped interior corridor that projects from the central elevator core lobby. The internal corridor is loaded on either side with offices, labs, toilet rooms, and service spaces. An internal stair from the sixth floor accesses a roof top penthouse that includes two metal domed observatories. The building includes a full basement with labs, offices, and mechanical rooms. Two stairwells: one located in the southeast corner of the building and the second located adjacent to the centrally located elevator shaft provide egress from the building.
The entry vestibule is finished with gypsum board walls and ceiling. On the walls, wood trim frames several display boards. The east wall contains a fabric wainscot. Fluorescent light units are mounted on the ceiling. The lobby floor is comprised of linoleum tiles with a rubber base. Similar to the lobby, other finishes in the public areas of the building include gypsum board walls, linoleum floors, and fluorescent lighting. Acoustic tile ceilings are found in some spaces.

Field survey suggests Campbell Hall exhibits relatively few changes since its construction. On the exterior several windows have been modified to accommodate vents. Some interior offices and corridors have been refinished with gypsum walls and tile floors.
III. DOCUMENTATION: PHOTOS AND DRAWINGS
Photo 1: North and east elevations (2003).
Photo 2: East and south elevations (2003).
Photo 3: North (Main) entrance.
Photo 4: East entrance.
Photo 5: South entrance.
Photo 6: Ground floor windows and balcony.
Photo 7: Window and balcony detail.
Photo 8: Eave detail.
Photo 9: Exterior basement well, west and south elevations.
Photo 10: First floor entry vestibule and elevator lobby.
Photo 11: First floor entry vestibule.
Photo 12: Typical hallway.
Drawing 1: North and East Elevations (before revisions).

Warnecke & Warnecke, 1957.
Drawing 3: Long and Cross Sections.

Warnecke & Warnecke, 1937.
IV. HISTORIC EVALUATION

The following analysis discusses the potential individual eligibility of Campbell Hall for the National Register of Historic Places (National Register) under Criterion C. The National Register, which includes districts, sites, buildings, structures, and objects, is the Nation's inventory of historically significant resources. The National Register is the most broadly accepted measure for determining the National, State, or local significance of resources. Data regarding resources eligible for the National Register provides baseline information important to planning efforts at the Federal, State, and local levels of government, including environmental impact analyses under the CEQA. Concurrently, eligibility for the National Register is an accepted threshold for determining the eligibility of resources for local and State historic resource inventories. Resources eligible for the National Register would also be eligible for the California Register of Historical Resources.

The National Register Criteria distinguish the range of resources and the type of significance that can qualify a property for listing in the Register. The Criteria are summarized: "The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and;

Criterion A (Event): That are associated with events that have made a significant contribution to the broad patterns of history; or

Criterion B (Person): That are associated with the lives of persons significant in our past; or
Criterion C (Architecture): That embody that distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: That have yielded, or may be likely to yield, information important in prehistory or history.

Properties must meet at least one of the Criteria by being associated with an important historic context and by retaining historic integrity. The National Register identifies a broad range of resources and serves as a national standard for determining historic value.

The current historic evaluation is limited in scope to evaluating Campbell Hall under National Register Criterion C, that is, properties that may be significant for design or construction. Because of the relatively young age of the building, a limited amount of historical data and perspective are currently available to evaluate the significance of the building under Criteria A and B. Adequate historical perspective may provide some insight towards the significance of Campbell Hall under Criterion C.

The historic evaluation will utilize guidance provided by the National Register with particular attention to the National Register Criteria Consideration G, Properties that Have Achieved Significance Within the Last Fifty Years. Ordinarily, individual properties less than fifty years old such as Campbell Hall are not eligible for the National Register. Individual properties less than fifty years old must meet the threshold of “exceptional importance” as defined by Criteria Consideration G, Properties that Have Achieved Significance Within the Last Fifty Years. Individual properties that meet one or more of the National Register Criteria for Evaluation (Criteria) and rise to the level of exceptional significance may be considered eligible for the National Register. Properties that are integral parts of a National Register eligible historic district (contributing) do not need to meet the special requirements under the Criteria Considerations (Department of the
The scope of this report was not designed to assess the potential for Campbell Hall to contribute to a National Register District (potential or existing). However a brief discussion will address this potential.

**Individual Eligibility**

The National Register Criteria exclude properties that have achieved significance within the last fifty years unless they are of exceptional importance (ibid, p. 41). The phrase “exceptional importance” is applied to the extraordinary importance of an event or to an entire category of resources so fragile that survivors of any age are unusual (ibid, p.42). Exceptional importance may apply to resources exceptionally important on a local, State, or national level within an historic context. For this reason, a property that has achieved significance within the last fifty years can only be evaluated when sufficient historic perspective exists to determine that the property is exceptionally important within its historic context. Sufficient perspective requires an adequate amount of scholarly research and evaluation, and must consider the historic context and the property’s role in that context (ibid, p.42). In the case of Campbell Hall, that context would be post World War II campus planning and building design.

Campbell Hall was completed in 1957-59 at the University of California, Berkeley to house the Department of Astronomy. Designed by the firm of Warneke & Warneke, it was one of several academic and laboratory buildings added to the Berkeley campus during the post World War II era. The six-story building was completed in a contextual modernist style utilizing modern building materials and techniques but drawing some stylistic influence from the Beaux-arts, tiled roof building common on the Berkeley campus. The building has undergone few changes since its construction.
Campbell Hall is directly associated with the expansion of the University of Berkeley campus in the post World War years. It represents efforts to accommodate the rising student population as well the expansion of physical science departments and research centers. Contextually, is associated with the expansion of the Berkeley campus (local and State) as well as the national boom of college campuses and programs following World War II. Campbell Hall was designed by the prolific Bay area architecture firm Warneke & Warneke, a firm responsible for numerous institutional and commercial buildings throughout the United States. Potential areas of significance include architecture, education, and science.

Archival and field research conducted during this investigation indicates that Campbell Hall would not be exceptionally important under Criterion C and would not be individually eligible for the National Register. Current archival research indicates that Campbell Hall is not an exceptional example of an academic building that embodies distinctive characteristics of a type, period, or method of construction. Current historic data suggest that Campbell Hall is not the exceptional work of a master architect or firm. Nor does the building possess exceptionally significant high artistic value. Data was not available to assess whether the equipment associated with the two Campbell Hall observatories rises to the level of exceptional importance.

The completion of Campbell Hall falls within an important period of growth for the U.C. Berkeley campus and colleges throughout the United States. Its location and design represents efforts to maintain the important U.C. Berkeley campus Beaux-Arts plan and uniformity of style, yet to provide a modern, functional, and affordable space for a rapidly expanding campus and academic and research programs. While these thematic associations are notable, there is nothing to suggest the building's design rises to the level of exceptional importance as defined by the National Register. Many buildings of similar aptitude and purpose were constructed during this period of growth. The building's design does not represent an exceptional design or style but is rather a common synthesis of competing
modern (International Style) and regional design approaches that continues on the campus to this day. Other modern buildings at U.C. Berkeley that fall within this design tradition include LeConte, Brige, and Tan Halls suggesting that Campbell Hall is neither unique nor threatened as a rare design type.

Campbell Hall represents the work of the accomplished and well-known architecture firm Warnecke & Warnecke, however, current data does not suggest that the firm and their accomplishments rise to the level of a master of exceptional importance. The firm is primarily known for its prolific institutional and government work perhaps reaching its zenith in the Hawaii State Capitol in Honolulu. However, evidence does not suggest their work, as represented in Campbell Hall advanced any new exceptional styles, techniques, or theories in architecture. Numerous other similar examples of their academic institutional work still exist on college campuses including U.C. Berkeley.

District Eligibility – Contributing Building

The scope of this report was not designed to assess the potential for Campbell Hall to contribute to a National Register District (potential or existing). Therefore, the extent of this analysis is limited to the identification of further areas of study that may reveal the potential contributing status of Campbell Hall to an historic district.

National Register guidance states: "Properties which have achieved significance within the past fifty years can be eligible for the National Register if they are an integral part of a district which qualifies for National Register listing." The property must fall within the district's Period of Significance and must be associated with the district's defined Areas of Significance. Properties may be considered an integral part of a district when there is sufficient perspective to consider the properties as historic (ibid, p.43). It must be demonstrated that: 1) the district's Period of Significance is justified as a discrete period with a defined beginning and
end, 2) the character of the district's historic resources is clearly defined and assessed, 3) specific resources in the district are demonstrated to date from that discrete era, and 4) the majority of district properties are over fifty years old (ibid, p.43).

Archival research revealed that no National Register Historic Districts are currently identified on the U.C. Berkeley campus. At present, a Multiple Resource Area including seventeen building, structures and sites associated with the early twentieth century plan and development of the campus has been nominated for the National Register. The period of significance for the properties dates from 1860-1927. The areas of significance include archeology (prehistoric), agriculture, architecture, education, landscape architecture, politics/government, social/humanitarian, theatre, and mining.

The historical parameters established by the Multiple Resource Area nomination do not include Campbell Hall within its period of significance. Further research and analysis would be required to determine the potential for a National Register District to exist on the U.C. Berkeley campus. Furthermore, strong justification would be necessary to extend the period of significance to include newer structures such as Campbell Hall.
References Cited

Books & Publications

Department of the Interior

Helfand, Harvey

Stadtman, Verne

Turner, Paul Venable

Warnecke & Warnecke

Web Sites

HISTORICAL SUMMARY

Campbell Hall was constructed in 1957-59. The building cost $1,238,000 in State of California funds and provided 61,340 square feet of space at completion. Designed by the firm of Warneke & Warneke, it was one of several academic and student service buildings added to the Berkeley campus during the post World War II era.

BUILDING CONTEXT

After World War II and through the 1960s—the era of Campbell Hall’s construction—the Berkeley campus grew dramatically.

This was an era of considerable expansion of the University’s programs and facilities. Federal and State money for research was plentiful, and many Berkeley campus programs, particularly those in the sciences and social sciences, were able to obtain new facilities to house their expanding teaching and research activities. In the “hard” and physical sciences (including Astronomy, Chemistry, Physics, earth sciences and allied disciplines) these new buildings often represented dramatic increases and improvements in the facilities of departments that had not had substantial “new” or “modern” structures at Berkeley since the early 20\textsuperscript{th}, or even the late 19\textsuperscript{th}, century.

Central campus buildings constructed in this era were generally of two types.

On the one hand, Post-War buildings increasingly departed from the Beaux Arts / neoclassical character of earlier campus structures and followed a principle, articulated in the 1951 Campus Plan Study prepared by the Office of Architects and Engineers that new campus buildings “should be designed honestly with the materials available, to respond to the organic requirements of the occupants and to create maximum practical internal flexibility.” This approach drove the design character of new buildings in the direction of Modernism.

Buildings such as Alumni House in the International Style, Brutalist Wurster Hall, Barrows Hall, the Earth Sciences Building (now McCon Hall), and several engineering and science buildings were conceived and executed in variations on this idiom. These structures often had flat tops rather than hipped roofs and lacked the campuses’ traditional tile roofing. They had windows with metal frames set flush with the façade, plain concrete or stucco exteriors, rather than granite or concrete plaster, expansive interior floorplates with large numbers of physically and visually similar spaces, and exterior heights and proportions different from earlier campus buildings.

Some of these buildings were overpowereingly large and symmetrical (such as the ten story cube of Evans Hall or the massive, seven-story bar of Barrows Hall); others were
unabashedly asymmetrical such as Wurster Hall. In several instances these Modernist buildings were positioned in formerly sacred outdoor spaces of the campus, interrupting or disrupting vistas, axes, and formalized outdoor spaces planned in earlier eras.

The second design tradition during the Post-war era involved the continuation of neoclassical structures that harmonized with the earlier Beaux Arts buildings but displayed more simple forms and less ornamentation.

These included campus structures, sometimes described as having a “stripped neoclassical” style, such as Mulford Hall, Lewis Hall, the Library Annex (Bancroft Library) and Donner Laboratory. They presented the viewer with generally symmetrical facades and elevations, punched windows, hipped, red-tile roofs and a classical vocabulary of base, middle, and top. Other similar buildings had been constructing earlier in the 1940s, including Sproul Hall (originally the Administration Building) and Minor Hall (originally the Emergency Classroom Building).

On all of these structures, however materials were less-ornate (concrete or cement plaster, rather than granite or marble) than earlier campus buildings from the Beaux Arts era, and ornamental details were minimized or simply suggested and executed, rather than elaborately executed.

Campbell Hall

Campbell Hall is something of a hybrid of the two groups. Its flush windows, large expanses of exterior glass, and understated entrance speak to the Modernist tradition, but its siting, general symmetry, shape, and size, elements of exterior ornamentation (including metal grills and raised medallions on the soffit), exterior coloring, and pitched tile roof are gestures to the neoclassical style.

The physical exterior of the building has not been substantially altered since its construction. It appears to retain original windows, wall panels, roof, and decorative details such as exterior iron railings.

In one respect, the siting of Campbell Hall departed from the intentions of earlier campus planning.

John Galen Howard’s Phoebe Apperson Hearst Architectural Plan for the Berkeley campus envisioned the Mining Circle area as surrounded by a series of structures. On the east, a monumental domed auditorium was to rise. To the north, the Hearst Memorial Mining Building was to be constructed. To the south of the Circle Howard envisioned a building mirroring Hearst Mining in proportions, character, and placement.

This structure would have stood between where Campbell Hall and Tan Hall are located and also covered much of their current footprints. South of this building, what is now referred to as the LeConte Hall / Gilman Hall Axis would not have connected through to Mining Circle on the north but, instead, would have formed a linear outdoor space open on the south and surrounded on east, north, and west, by academic buildings.
Howard’s proposed mirror structure to the Mining Building was never constructed, perhaps in part because there was never an open site at the head of the LeConte / Gilman “axis”. This location was occupied from before Howard’s time through the 1950s by the old Mining Building (later, the Anthropology Museum).

This Victorian-era structure, constructed in 1879, survived until the late 1950s when it was demolished to allow the construction of Campbell Hall. The open space thus created, east of Campbell Hall, visually connected the LeConte / Gilman axis with the Mining Circle.

In a second respect, however, the siting of Campbell conformed more to the spirit of earlier campus planning than did some of its contemporary structures such as Evans Hall and Barrows Hall. Campbell was aligned with the eastern façade of old LeConte Hall and set back the same distance as Hearst Mining from the University Axis, which ran east/west through the center of the Mining Circle.

CAMPBELL, BIRGE, AND BARKER

Campbell is linked in time, style, and design with two other science buildings on campus from the same era, Birge Hall (1964 and, like Campbell, by Warneke & Warneke) for the Physics Department and the Biochemistry Building (now Barker Hall) (1964, Wurster, Bernardi & Emmons). All three buildings have similar, although not identical, proportions and a suggestion of hipped roofs employing traditional red tile.

Campbell Hall is the first building completed in this small, three-building, subclass of structures on the Berkeley campus which sought to reflect some traditional design elements and character while also including modern elements and uses.

Perhaps because of its primarily office use, Campbell also has more windows and, in general, a lighter and slightly more refined appearance than Barker and Birge, which are buildings containing numerous laboratory spaces. On the latter two buildings the exterior walls, not the windows, are most visually prominent.

The roofs, truncated on all three buildings so they rise to a uniform horizontal edge, not a peak, were included to conform to the desires of UC Regent and former Dean of Mining Donald McLaughlin, an individual with a powerful influence over Berkeley campus planning policy in the 1950s and 1960s.

McLaughlin, a Berkeley alumnus with personal and professional ties to the Hearst family and mining empire, preferred new Berkeley buildings to reflect the character of the older Beaux Arts structures on the campus. He also felt that an attempt should be made to make the rooftops of campus buildings attractive when viewed from above, since they were prominently visible from the adjacent Berkeley Hills. Tile roofs were reportedly added to several campus buildings in response to his influence; in particular, the roofs of Campbell, Birge and Barker Halls have since informally been called “McLaughlin Hats” in recognition of his influence. The term has sometimes been used derisively by those
who believe that it was awkward and unwarranted to attach a traditionally styled red tile roof to a building with a modern character.

In the case of Birge and Barker, the partial hip of the roof serves to conceal mechanical equipment in a well on the flat center of the roof; in the case of Campbell, two small observatory domes are contained within the center well, visible from a distance but not from points close to the Hall.

THE ARCHITECTS

Besides Campbell Hall, the firm of Warneke & Warneke was also responsible for other prominent projects at the Berkeley campus during this period. The firm designed Birge Hall in the Physics complex, the six-story Earth Sciences Building (now McCon Hall), completed in 1961, and the Unit I and Unit II Residence Hall complexes south of the campus, each containing four residential towers grouped around a central dining commons with flared roofs.

The son of a Bay Area architect, John Carl Warneke was born in Oakland in 1919. He received a B.A. from Stanford University and subsequently completed Harvard University’s architectural program in one year in 1941-42. After working in his father’s firm he opened his own practice in San Francisco in 1947, beginning a decades-long career of public and private projects across the country.

In addition to projects at the Berkeley campus, Warneke’s firm designed buildings for the United States Naval Academy and Stanford University, and the UC Santa Cruz campus. Among his high profile public commissions were the new Hawaii State Capitol in Honolulu, the United States Embassy in Thailand, a renovation of the Lafayette Square area adjacent to the White House in Washington D.C., and the grave site of John F. Kennedy at Arlington Memorial Cemetary.

In the greater Bay Area Warneke’s firm was also responsible for several buildings at the Asilomar conference center, a major hotel and shopping center in the Monterey area and office buildings in San Francisco. According to one biographical description, he “was one of the most successful contemporary architects...gaining national and international acclaim for his designs of numerous prestigious structures...” (http://www.asilomarcenter.com/discover/historyarchitecture/warcekebio.html)

Campbell Hall may be considered one of the several academic buildings designed by a prolific architect of public structures, institutional facilities, and commercial properties who was at the peak of his practice in the 1950s and 1960s.

PURPOSE AND USES

Campbell Hall was constructed to house the Departments of Astronomy, Statistics, Mathematics, and the campus Computer Center. The Department of Astronomy has
remained in the building since its completion, but the other programs have largely relocated to nearby buildings, particularly Evans Hall.

In recent decades, Campbell has been occupied primarily by Astronomy, astrophysics programs, and various administrative offices associated with the College of Letters & Sciences, including the Dean’s Office and L&S advising programs. The L&S program offices and student advising spaces are concentrated on the lower floors, with Astronomy utilizing the upper floors.

When Campbell was constructed, it provided much-needed facilities for the Department of Astronomy, which had been housed since the 1880s in a complex of small wooden structures on Observatory Hill. The Department apparently welcomed the relocation because of the space and modern facilities provided in Campbell and the close proximity of the building to the facilities of the Department of Physics. Astronomy and Physics—related informally in the sub-discipline of astrophysics—have increasingly converged in recent decades as the study of the behavior of matter and energy at the atomic and subatomic level is applied to the study of the Universe.

In addition to office and teaching facilities, two small observatory domes were incorporated into Campbell Hall. However, it was apparently soon decided that the Berkeley campus was no longer a useful location for astronomical observation because of the weather and increasing urban light pollution. A new observing facility, named Leuschner Observatory like its campus predecessor, was constructed at the University’s Russell Tree Farm property in Lafayette, Contra Costa County, east of the Berkeley campus. It began operation and instruction in 1965.

BACKGROUND ON ASTRONOMY DEPARTMENT

Astronomy research and instruction at the Berkeley campus began in the 1870s, when Astronomy was a required course for engineering students. Astronomy was initially taught by George Davidson, natural scientist and chief of the Pacific Division of the U.S. Coast and Geodetic Survey, soon followed by Frank Soule, who taught mathematics, civil engineering, and astronomy. Soule led the astronomy program for about two decades until the early 1890s when he assigned teaching to Armin O. Leuschner, a mathematics instructor. Leuschner went on to head the Department until 1938. During his tenure Astronomy at Berkeley achieved distinction in the field, particularly by producing graduate students and for work on the discovery and computation of orbits of comets and “minor planets” (commonly known as asteroids today).

The Berkeley Astronomy Department was complemented by the University’s Lick Observatory, built in 1888 and at the time of its completion one of the premier facilities for astronomical observation in the world. The astronomy programs at Berkeley and Lick were interwoven. Advanced students received instruction at Berkeley but did much of their actual observational work using the excellent facilities at Lick. Of those graduates awarded PhD’s by the Department of Astronomy between 1898 and 1965, about half had held research fellowships at Lick Observatory. (Centennial Record, page 80)
In addition to Leuschner Observatory, Astronomy added another remote facility—the Radio Astronomy Laboratory at Hat Creek in northcentral California—in 1958, during the period Campbell Hall was being constructed.

The Department of Astronomy had expanded to a faculty of ten by the mid-1960s when Campbell Hall was new, teaching ten undergraduate courses and accommodating about 110 majors, including 45 graduate students. (Centennial Record, page 80) There are currently (2003) nearly two-dozen active faculty and emeriti associated with the Department as well as numerous research and administrative staff, some located in Campbell Hall and others at research sites beyond the campus. During the 2002-03 the Department offered more than twenty courses, ranging from upper division Astronomy classes to general interest survey courses for non-majors.

In recent decades, during its occupation of Campbell Hall, the Department of Astronomy has undertaken teaching and research in a varied range of fields, as shown by a summary of the current research groups and research centers located within the Department. These include: the Radio Astronomy Lab (and Hat Creek Observatory)l Theoretical Astrophysics Center; Center for Adaptive Optics; Center for Integrative Planetary Science: Search for Extrasolar Planets; The Pulsar Group; the Astrophysical Fluid Dynamics Group; the Center for Star Formation Studies.

Faculty associated with the Department have participated in the design and management of research satellite programs and a wide array of other research projects in astronomy and related disciplines. Faculty and departmental researchers have access to some of the best observing facilities in the world, including the Keck Telescopes in Hawaii, jointly managed by the University of California and the California Institute of Technology.

Of particular public note in recent years has been the search for planets orbiting other stars. The Berkeley team, led by Professor Geoffrey Marcy, is widely recognized as an international leader in this relatively new field.

In recent decades Astronomy has also become increasingly allied with the physically-adjacent Department of Physics. Several faculty hold joint appointments in Physics and Astronomy. This convergence has resulted in an intellectual and programmatic connection between activities in Campbell Hall and the LeConte Hall / Birge Hall complex.

Specific discoveries in astronomy and allied fields associated with the Berkeley Department and directly connected to work in Campbell Hall have not been researched. However, because of the long history and broad associations and accomplishments of the Astronomy Department and its faculty, it is likely that many advances in the field over the past four decades could be linked, at least in part, to people who have worked in Campbell Hall and research that took place there.
WILLIAM WALLACE CAMPBELL

Campbell Hall is named for William Wallace Campbell, who served as the tenth President of the University of California. His term lasted from 1923-1930. Campbell was one of two UC presidents to bridge the period between the retirement of Benjamin Ide Wheeler in 1919 (after 20 years as President) and the presidential tenure of Robert Gordon Sproul (1930-1959).

Campbell was, by training and avocation, an astronomer. Educated at the University of Michigan, he came to the University of California’s Lick Observatory in the 1890s and served as Director there from 1901 to 1923, when he became UC President.

“Campbell maintained the Lick Observatory in the front rank of the world’s observatories. His achievements and publications in astronomical research were awarded wide recognition.” (Centennial Record, page 16.) When he was offered the University’s presidency he made his acceptance contingent on the opportunity to continue a formal connection to Lick Observatory.

Campbell’s pre-Depression tenure as UC President is regarded as “a period of quiet and prosperity (when) the University grew tremendously, aided by generous private gifts.” (Centennial Record, page 17). The conversion of the University’s “Southern Branch” into the UCLA campus took place during his administration, launching the University of California as a true multi-campus system.

At the Berkeley campus, substantial growth and construction occurred or was initiated during his tenure; buildings included the Southwest Athletic Project, Life Sciences Building, Bowles Hall (which began the University’s residence hall system), International House, Giannini Hall, and Hearst Memorial Gymnasium.

Campbell retired as President and as director of Lick Observatory in 1930. In 1931 he became President of the National Academy of Sciences and guided it through the early years of the Depression. In 1938, suffering from poor health, he committed suicide in San Francisco.

When Campbell Hall was planned the Regents decided to attach his name to it, continuing a tradition of assigning the names of leading University administrators and faculty to academic buildings on the Berkeley campus. (Several of Campbell’s predecessors and successors as President, including LeConte, Wheeler, Gilman, Barrows, and Sproul have Berkeley campus buildings named in their honor.)

Partial References:


Campbell Hall
Second Floor Plan

261  265  201  201A

259
257
253
249
247
245
241

254  252

239
237

235  233  231
Campbell Hall

Sixth Floor Plan