

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Inventory—Nomination Form

For NPS use only

received

5/8/86

date entered

JUN 17 1986

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

1. Name

historic Animal Science Building

and/or common George Hart Hall (the building was renamed in 1983)

2. Location

street & number NW corner, West Quad and Peter J. Shields Avenue N/A not for publication

city, town University of California Davis N/A vicinity of

state California code 06 county Yolo code 113

3. Classification

Category	Ownership	Status	Present Use	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input checked="" type="checkbox"/> educational	<input type="checkbox"/> private residence
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input checked="" type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> no	<input type="checkbox"/> military	<input type="checkbox"/> other:

4. Owner of Property

name Regents of the University of California

street & number University Hall, 2199 Addison Street

city, town Berkeley N/A vicinity of state CA 94720

5. Location of Legal Description

courthouse, registry of deeds, etc. Yolo County Recorder's Office

street & number 625 Court Street

city, town Woodland state CA 95695

6. Representation in Existing Surveys

title None has this property been determined eligible?  yes  no

date  federal  state  county  local

depository for survey records

city, town state

## 7. Description

<b>Condition</b>		<b>Check one</b>	<b>Check one</b>
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved date <u>N/A</u>
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed	(minor alterations only)	

**Describe the present and original (if known) physical appearance**

### SUMMARY DESCRIPTION

The Animal Science Building (Hart Hall) is an office and laboratory building located on the central quadrangle of the University of California, Davis. Constructed in 1928, the building was designed for the University by William Charles Hays, F.A.I.A. It is roughly U-shaped in plan and contains about 40,000 square feet of assignable space. The building is of reinforced concrete and displays a restrained Spanish Revival style. The exterior walls are finished in pinkish-beige cement plaster and are capped by low-pitched hipped roofs of red Spanish tile. The structure is two stories high, except for a three-story tower over the entrance and lobby. The tower is an elongated octagon in plan, and is located at the intersection of the south and east wings. Fenestration largely consists of pairs of double-hung wooden-sash windows. Three large windows in the tower and four balconies on the south and east wings are ornamented with wrought iron railings. Other detailing on the building includes belt courses, a sculptured frieze, pilasters, ornamental ventilation grilles, and brackets. Numerous features of the building (e.g., flashings, gutters, some window muntins, lamps) are of copper. Ceilings in the breezeway connecting the east and north wings and in the vestibule are groin-vaulted. The exterior of the building has been modified only slightly by the addition of a new front door, a wheelchair ramp, stairs at the west end of the north wing, and room air-conditioners. Hart Hall retains its original landscaping and carries on a pleasant conversation with Walker Hall, another William Charles Hays-designed building across the street to the south.

### EXPANDED DESCRIPTION

Please see continuation sheets.

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Continuation sheet Hart Hall

Item number 7 (Description)

Page 1

EXPANDED DESCRIPTION

Hart Hall (formerly called the Animal Science Building) is a reinforced-concrete structure located on the central quadrangle of the University of California, Davis. The building has approximately 40,000 square feet of assignable floor space, partitioned into offices and laboratories (some of which formerly were classrooms). The building was designed by William Charles Hays, F.A.I.A. (1873-1963), a San Francisco architect who was also Professor of Architecture at the University of California, Berkeley, and Supervising Architect for the U.C. Davis campus. Hart Hall was constructed for the university by the K. E. Parker Company in 1928 and was financed by a \$256,897 state appropriation.<sup>1</sup>

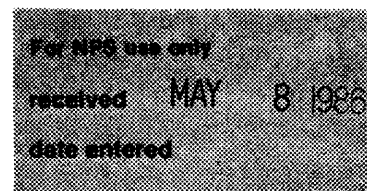
The plan of Hart Hall is roughly U-shaped. The centerpiece of the building, where the main entrance is located, is a three-story tower that is an elongated octagon in plan. The tower sits diagonally in relation to the two main wings, which intersect it at right angles to one another. Each of these wings is two stories high with a semi-basement under part of it. At the end of the south wing is a one-story extension, built at the same time as the rest of the structure. At right angles to the east wing (and parallel to the south wing, but shorter) is the north wing, also two stories high. It is connected to the east wing by a breezeway at the first-floor level and by an enclosed corridor at the second-floor level. As the original plans show, this north wing was an afterthought, although it too was designed by Hays. According to the memoirs of Tracy I. Storer, late Professor Emeritus of Zoology, it was added when the low bid came in under the amount appropriated by the state legislature: the difference was enough to pay for this additional space.<sup>2</sup>

Hart Hall is in a restrained Spanish Revival style. The exterior walls are finished in pinkish-beige cement plaster. The building has low-pitched hipped roofs, some with gables; the roof covering is irregularly laid Medium Cordova (Spanish) Tile. (Small flat-roofed portions of the structure at the west end of the south wing and near the main entrance have composition roofing.) The roofs have a moderate eave overhang with ornamental brackets. Flashings, gutters, vent hoods, and skylight muntins are of copper. Beneath the eaves on the south, east, and north facades and on the courtyard side of the east wing are rectangular ventilation grills with decorative woodwork, below which is a belt-course molding. The windows on the main body of the building are arranged regularly in pairs, with each pair on the ground-floor level separated by an ornamental concrete mullion and each pair on the second-floor level by an unembellished wooden mullion. The rectangular panes in the double-hung wooden-sash windows are arranged in a six-over-six configuration. Double doors with glazing replace pairs of windows at three places on the south wing and one place on the east wing. Above the double doors are pairs of fixed transom windows separated by a half-turned wooden mullion. The doors open out onto second-floor balconies with molded edges and wrought iron railings.

The tower is the most exciting architectural feature. Its main (SE) facade has three pairs of large windows with small, square panes and awning-type sashes; these windows are embellished with wrought iron railings. A pilaster separates each pair of windows on the tower (pilasters also are used on the courtyard side of the building). A one-story pedimented entranceway with tile cornice projects from the main facade of the tower. Small windows and a belt course that becomes a frieze of fourteen cast-cement rams' heads above the entrance

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Continuation sheet Hart Hall

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ornament this part of the structure. The front door is set off by sidelights and by a large fixed transom window with twelve panes. The muntins of these windows are sheathed with copper. The original double doors have been replaced with a single door; but its anodized aluminum material blends well with the surrounding copper, which has darkened with age. The original three steps up to the door have been replaced by a large wheelchair ramp; this somewhat obscures the original large cast-cement planter boxes that flank the entrance.

The covered breezeway connecting the east and north wings has rounded-arched openings. One of these has been blocked by the addition of an exterior elevator (the building's original interior dumb waiter has been sealed up); another of the arches has been shortened by the addition of a low stucco wall. The ceiling in the breezeway is groin-vaulted, and the original copper-and-glass suspended lamps are still in place. Besides the added elevator, other small changes to the courtyard side of the building include the addition of a staircase at the west end of the north wing and the construction of a free-standing storage shed for laboratory chemicals. The small panes in some windows have been replaced by a single large pane, and room air-conditioners have been installed in numerous windows.

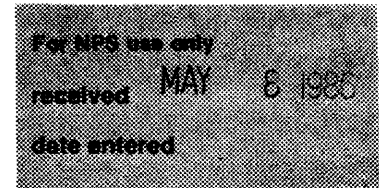
Some interior features deserve mention. The floors in the vestibule and lobby are of red and green tile; those in the rest of the building are of concrete (some have been covered with linoleum). The ceiling in the vestibule is groin-vaulted, and two large oval niches in the vault ends provide ornament. Two octagonal columns in the vestibule display stucco cattle heads on their capitals. Stair railings throughout the building are oak supported by wrought iron. Hays designed many built-in tables, work benches, cabinets, drawers, and other fittings for the building's offices, labs, and classrooms.<sup>3</sup> These are intact in some rooms, but have been extensively altered or removed in others.

After the vestibule and the lobby, which are the most decorated rooms in the building, the most notable interior space is the seminar room on the third floor of the tower. The room, like the exterior of the tower, is an elongated octagon in plan. This shape recalls the first building Hays designed (as a member of the firm of Howard and Galloway) for the U.C. Davis campus.

(continued on next page)

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That building was a show pavilion for animals, which Hays described as "an octagon . . . cut in two and elongated."<sup>4</sup> By using this shape in the new, permanent Animal Science Building, Hays could refer back to the earliest campus architecture and to the livestock-judging roots of the increasingly research- and science-oriented enterprise of animal husbandry.

The setting of Hart Hall contributes to its attractive appearance. Its main (east and south) facades are heavily landscaped. To the south across Peter J. Shields Avenue is another William Hays-designed building, Walker Hall (formerly the Agricultural Engineering Building). Walker Hall was built a year before Hart Hall, and the two structures display the same scale, materials, and stylistic vocabulary. To the east of Hart Hall is U.C. Davis's central quadrangle, an open grassy square dotted with trees and fronted on two other sides by historic campus buildings. To the north of Hart Hall is Wellman Hall, a two-story brick and concrete classroom building erected in 1969. Trees, shrubs, and a bicycle path separate these two structures. To the west of Hart Hall is another two-story reinforced-concrete building, Robbins Hall (1960). The ends of the wings of U-shaped Robbins Hall and those of Hart Hall come close together, enclosing a central courtyard. The courtyard is mostly paved over and used for parking; sycamore trees provide some shade and visual diversity.

FOOTNOTES

1. Verne A. Stadtman and Centennial Publications Staff, The Centennial Record of the University of California (Berkeley: University of California, 1967), p. 156.
2. Tracy I. Storer, From Observation to Experimentation. Interviews conducted by A. I. Dickman. (Davis: Oral History Center, Shields Library, University of California, Davis, 1975), p. 55.
3. Professor Storer, while on a sabbatical trip in 1927, sent Hays a series of detailed blueprints on indoor equipment from the University of Michigan's new Museum of Zoology. Storer reported that "unlike many other architects, he [Hays] was very amenable to these suggestions and incorporated many features directly such as tables supported on pipe legs, movable cabinets, and others." Ibid., p. 63.
4. William Charles Hays, Order, Taste, and Grace in Architecture. An interview conducted by Edna Tartaul Daniel. (Berkeley: Regional Oral History Office, Bancroft Library, University of California, Berkeley, 1968), p. 222.

# 8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input checked="" type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input checked="" type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> architecture	<input checked="" type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

**Specific dates** 1928-1936 **Builder/Architect** William Charles Hays, F.A.I.A.

**Statement of Significance (in one paragraph)**

SUMMARY STATEMENT OF SIGNIFICANCE

The 1928 Animal Science Building (now called Hart Hall) is one of only two surviving examples of the first permanent buildings on the University Farm, now the Davis campus of the University of California. It occupies a prominent location on the campus's historic central quadrangle. Hart Hall is the work of William Charles Hays, F.A.I.A., "an important figure in Bay Area architecture in the early part of this century."<sup>1</sup> The building is a good example of the institutional use of the Spanish Revival style in the 1920s. Hart Hall is important historically for its role in the modernization of California agriculture. In the late 1920s and the 1930s, Davis animal scientists helped lead a scientific revolution in their discipline. During this period, faculty and staff researchers made significant discoveries in the fields of animal reproduction, nutrition, and physiology. Through publication, teaching, and the cooperative extension, this research contributed to the transformation of California's--and America's--livestock sector into a highly scientific-industrial enterprise. The Animal Science Department at Davis has been the only such department in the entire University of California system, and its building is the only one on all the U.C. campuses devoted to animal science. No other structure in California is more closely associated with the state's role in modernizing animal agriculture through research and teaching. Besides being strongly linked to Animal Science, the building is significant as the early home of several other distinguished U.C. Davis departments that later expanded into other quarters: Veterinary Science (which became the only School of Veterinary Medicine in the state), Entomology, Zoology, Genetics, and Animal Physiology. Eminent practitioners of these disciplines, as well as of Animal Science, spent important years of their careers in this building.

EXPANDED STATEMENT OF SIGNIFICANCE

Please see continuation sheets.

# 9. Major Bibliographical References

Please see continuation sheets.

# 10. Geographical Data

Acreeage of nominated property Approx. 2.19 acres

Quadrangle name Davis Quadrangle and Merritt Quadrangle

Quadrangle scale 1:24,000

UTM References

A 

1	0	6	0	8	9	5	0	4	2	6	6	3	7	0
Zone			Easting					Northing						

B 

Zone			Easting					Northing						

C 

Zone			Easting					Northing						

D 

Zone			Easting					Northing						

E 

Zone			Easting					Northing						

F 

Zone			Easting					Northing						

G 

Zone			Easting					Northing						

H 

Zone			Easting					Northing						

**Verbal boundary description and justification** The site is enclosed by a boundary of convenience as indicated on the sketch map. The S and E boundaries follow the N and W curblines of Shields Ave. and West Quad respectively. The N and W boundaries are along the edges of the building. The site is rectangular except for a small notch in the NW corner to exclude Robbins Hall.

List all states and counties for properties overlapping state or county boundaries

state N/A code county N/A code

state code county code

# 11. Form Prepared By

name/title Robin Elisabeth Datel, Ph.D.

organization N/A

date April 1986

street & number 645 C Street

telephone (916) 753-5959

city or town Davis

state CA 95616

# 12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national  state  local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature Kathryn Quattrone

title State Historic Preservation Officer

date May 6, 1986

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I hereby certify that this property is included in the National Register

William B. Bushong  
Keeper of the National Register

6/17/86

Attest:

Chief of Registration

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Continuation sheet Hart Hall

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EXPANDED STATEMENT OF SIGNIFICANCE

History

The Animal Science Department was central to the identity of the University Farm at Davis and continues to be important on what has become a diversified campus of the University of California. The campus was the brainchild of Peter J. Shields, secretary of the California State Agricultural Society. Shields envisioned a "practical establishment for training young men and women interested in agriculture. Raised on a dairy farm in the Sacramento area, he felt such a school should combine the scientific 'whys' and technical 'hows' of agriculture."<sup>2</sup> Foreseeing the benefits to their industries, creamery and livestock interests eagerly supported the passage of the bill to establish a University Farm. Thus began a close association between the University's Davis campus and the state's animal agriculturalists.

The early years of instruction, which began at Davis in 1908-09, emphasized "the most practical needs of the young man who will operate his own farm" and covered "all lines of agriculture," including livestock judging, breeding, and feeding.<sup>3</sup> Many Davis students were not seeking a university degree; they enrolled in a two-year, non-degree program that trained them in applied aspects of animal husbandry.

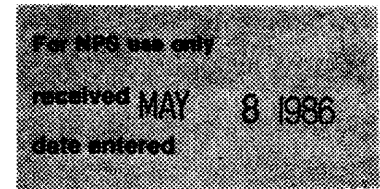
With the appointment of Dr. George H. Hart as head of the Division of Animal Husbandry in 1926, the nature of the educational enterprise shifted away from teaching known principles and techniques toward creating new knowledge through research. Animal science teaching and research increasingly emphasized the underlying basic science disciplines of genetics, nutrition, and physiology. George Hart was one of the first chairmen of animal husbandry in the U. S. to recognize the importance of these basic biological sciences to progress in the discipline.<sup>4</sup> The move toward a more scientific approach to animal husbandry was described by Professor Emeritus of Zoology Tracy I. Storer, who observed it from his office in Hart Hall (which he moved into in 1928 and occupied for three decades):

In earlier years that division [Animal Husbandry] had dealt mainly with the production and exhibition of livestock. It was housed in a small cottage having a single laboratory with limited equipment. Dr. Hart, with varied previous experience relating to livestock, had been in research veterinary medicine on the Berkeley campus. He came to Davis with definite, forward-looking ideas for remodeling the animal husbandry program. He retained the existing staff, experienced with the several kinds of livestock, and added four new members [by the early 1930s]: H. H. Cole (physiology); Harold Goss (biochemistry); Paul R. Gregory (genetics); and Max Kleiber (animal nutrition). The older [production-oriented] and newer [research-oriented] members were encouraged to join variously in cooperative studies. Their careful researches during the next twenty-five years brought the division a national and international reputation for high caliber work in both pure and applied aspects of animal husbandry. . . . Hart's almost immediate declaration [was] that a new building of considerable size was necessary to accommodate the expanded program he envisioned.<sup>5</sup>



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That structure was, of course, the Animal Science Building, later named Hart Hall in honor of the man who had seen its importance to the progress of animal husbandry. The significance of the new building and its laboratory facilities was recognized by Professor Cole, whose first task upon arriving at Davis in October 1928 was to help animal husbandry move into the new building. He remarked on the almost total absence of scientific equipment to be moved.<sup>6</sup> In contrast, the labs in the new building were filled by the new research faculty with the equipment necessary to their scientific work.

Discoveries at Davis relating to breeding, feeding, and physiological problems contributed to the change in California agriculture from traditional, small-scale mixed farming to scientifically operated, large-scale specialized enterprises. The move toward a more scientifically-based animal agriculture can be dated from the appointment of George Hart as chair of the Davis department and from the construction of Hart Hall. The next few paragraphs identify the significant research, both basic and applied, done by Davis animal scientists from the late 1920s to the mid-1930s. The department's faculty and staff published 226 articles on work done during this period in the fields of animal nutrition and feeding, genetics and reproduction, and physiology.

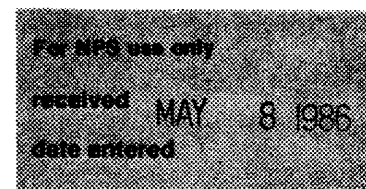
Animal Nutrition and Feeding. A number of studies in the 1930s established Davis's reputation in the field of animal nutrition and feeding. Hart, Guilbert, Goss, Hughes, and Miller demonstrated the importance of vitamin A in the nutrition of livestock and established the minimum vitamin A requirements of cattle, sheep, and swine. Goss, a biochemist, analyzed the chemical constituents of a wide variety of livestock feeds; with Hart and Guilbert he identified important seasonal variations in the nutritive value of range forages and the need for supplements. Regan and Mead worked on appropriate concentrate rations for dairy cattle. Hughes experimented with supplements to the basic swine diet of barley, and Miller identified appropriate supplemental feeds for range sheep. These studies were reported not only in the scientific literature, but also in agricultural bulletins circulated to livestock producers. In assessing the importance of these studies, George Hart explained in 1946 their implications for human nutrition: "eventually a study begun [in 1927] on the open ranges and concerned with the reproductive difficulties of cows revealed the vitamin-A requirements of man."<sup>9</sup>

Basic research in nutrition and animal energetics brought international recognition to Max Kleiber, one of the Animal Science Department's most eminent scientists. The innovative open-circuit respiration chamber that Kleiber built in the Animal Science Building and used extensively in his metabolic research was a point of pride for the department and was included in the description of departmental facilities in the Prospectus of the College of Agriculture from 1930-31 onward.<sup>9</sup> In 1932 Kleiber reported in *Hilgardia* some findings regarding the relationship between body size and metabolism. Later, the following judgment was made of this work: "his hypothesis relating the basal metabolic rate and food utilization to the three quarters power of body weight was one of the major discoveries of the science of nutrition. . . ."<sup>10</sup>

In 1933, Professor Hart was appointed to a university committee on rangeland management, which became involved in an important agricultural controversy over the burning of brushlands and chaparral for conversion into grassland suitable for grazing. "In the end, largely through the efforts of Dr. Hart, with much heated public discussion, a pattern for controlled burning was established under the State Division of Forestry."<sup>11</sup> This policy, first formulated in the 1930s, has had a great effect on the landscape of the California Coast Range and

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Sierra Nevada foothills.

Animal genetics and reproduction. In 1930 Professors Cole and Hart reported their discovery of pregnant mare serum gonadotropin (PMSG). PMSG was important because it provided the first biochemical means of detecting pregnancy in mares (which made possible greater efficiency and success in horse breeding programs). The initial discovery at Davis was followed by ten years of studies by Cole and others on the biological aspects of PMSG, including its source and distributive mechanism in the body. Davis researchers established that this hormone could be injected in other species, such as swine, to induce estrus and ovulation and could be used therapeutically on animals with reproductive problems. This research also had a bearing on human medicine insofar as it contributed to the general understanding of gonadotropic hormones (which exist in primates as well as equidae).

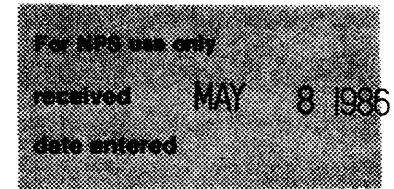
In 1935 Cole and Miller published work on the estrus cycle of the sheep, which helped to more accurately establish the optimum time in the cycle for insemination. Contributions such as this one helped make artificial insemination an increasingly important technique in livestock reproduction, a technique that considerably tightened the control of science over animal husbandry. Professor Miller conducted a number of cross-breeding experiments to identify the most desirable type of cross-bred lamb, considering growth rate and mutton characteristics at time of slaughter. Regan and Mead, through the inbreeding of Jersey cattle, helped "develop lines that would maintain a high level of milk production and would have no undesirable hereditary characteristics."<sup>12</sup> Through this work they uncovered many deleterious recessive autosomal genes. Gregory was concerned with dwarfism in cattle, which posed a threat at the time because small, squat bulls often were awarded prizes and bred widely.

Animal physiological problems. In 1931, Mead and Regan described the physiological manifestations in calves of diets lacking in roughage. In 1936 Mead and Goss reported on eight years of investigations on the role of roughage in the diet of ruminants and on physiological problems, such as bloat, associated with the lack of this dietary component. In 1931 Guilbert and co-workers demonstrated that forage conditions at certain seasons often contribute to phosphorus deficiency in livestock. The implications of phosphorus deficiency for food utilization were further explored by Kleiber, Goss, and Guilbert. Mead and Regan and Hart identified in cattle the various abnormal conditions that could arise because of vitamin A deficiency; Professor Howell studied vitamin A deficiency in horses; and Hughes discovered the implications of vitamin A deficiency for reproductive sows. Hughes also began in the the 1930s his outstanding investigations into the vitamin B complex as related to swine growth and metabolism and the physiological problems associated with its deficiency. These investigations of nutritional deficiencies and discoveries of ways to remedy them by Davis researchers helped improve the quality and health of commercial livestock throughout the state and beyond.

The results of the work just discussed, and other scientific knowledge about animal agriculture, were disseminated to the livestock industry through California Cooperative Extension. This organization was started in 1913 with headquarters at U.C. Berkeley. Extension agents have provided a liaison between research people and producers, and reams of Extension publications have efficiently disseminated research results to those who can use them. The animal-science researchers at Davis worked from the start with county agents and with the extension service's first livestock specialist, L. H. Rochford of Berkeley. (The Davis campus received its first livestock specialist, Reuben Albaugh, in 1949; he was assigned an

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office in the Animal Science Building.) Rochford was a joint author on several publications of Davis animal science faculty during the 1930s; typically he would collaborate on those with appeal to his particular audience, the livestock producers.

Although Cooperative Extension was the chief means of contact between the Department of Animal Science and the California livestock industry, another important means was the livestock show. Several of the Davis faculty, including Professors Miller (sheep), Hughes (swine), and Howell (horses), were skilled livestock judges who appeared at shows, fairs, and auctions up and down the state. Professor Hughes coached the very successful "Cal Aggie" student livestock judging teams until 1931-32. They competed in livestock-judging contests as far away as the Pacific International Livestock Exhibition in Portland, one of the biggest in the country. Among the graduates from the animal husbandry program in the early 1930s were Lindsay "Big Red" Jewett and Alyce Williams Jewett, who went on to become livestock judges known throughout California.

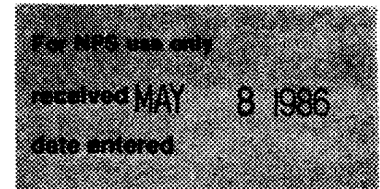
Although the Animal Science Building has been most strongly associated with its namesake department, Animal Science, and with the livestock industry, it also has been important in other ways. Several departments and numerous individuals significant in the history of the Davis campus of the University of California have called the Animal Science Building home. Upon its completion in 1928, the building housed (in addition to Animal Husbandry) the divisions of Veterinary Science, Entomology, and Zoology (which had cooperated with Animal Husbandry in planning the structure). Offices and laboratories for these disciplines were located there. Classrooms in the building were adequate for most courses taught by these divisions until after World War II. Animal Husbandry, now called Animal Science, remains the primary occupant. The north wing housed Veterinary Science until, in 1949, it became the School of Veterinary Medicine and moved out. Entomology occupied space in the Animal Science Building until 1948-49, and Zoology until 1969. The building also was the early home of Genetics on the Davis campus; in fact, Genetics was taught by professors of Animal Science until 1950. Animal Physiology's roots also are there: although that department was not created at U.C.D. until 1964, animal physiology research and teaching began on the campus in 1929 with the appointment of Drs. Harold Cole and Max Kleiber to the Division of Animal Science. Faculty in Poultry Husbandry had offices elsewhere, but they participated in the weekly meeting of the journal club established soon after the building opened. Each Wednesday at noon, members of the divisions of Animal Science, Zoology, and Poultry Husbandry would gather in the tower room for lunch, after which one person would review articles from several recent periodicals in the fields of animal science, biology, and biochemistry.<sup>13</sup>

A measure of the importance of Hart Hall (Animal Science) is the eminence of the people associated with it. Eight (of forty-five) individuals for whom structures on the UCD campus have been named had offices in that building (Professors Cole, Freeborn, Haring, Hart, Hughes, Kleiber, Regan, and Storer). Eight (of forty-four) professors named as Faculty Research Lecturer--the highest honor bestowed by the Davis Division of the Academic Senate--had offices there (Professors Cole, Kleiber, Goss, Cameron, Bailey, Stebbins, Wright, and Green). So did two of the three men who have served U.C. Davis as chancellor (Professors Freeborn and Meyer). Two-thirds of these people had offices in Hart Hall in the 1930s or earlier.

Hart Hall also housed at various times professors who were hired to teach the letters and science courses on the agricultural campus. John Kenneth Galbraith, now a nationally famous

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Harvard professor (and former U.S. ambassador to India) taught economics and agricultural economics at Davis during 1932-33 and occupied an office in the Animal Science Building.<sup>14</sup> While Galbraith and other early letters and science instructors were not Animal Scientists, their use of the building contributes to its overall significance to the Davis campus and to California higher education.

Architecture

After all, the visibly permanent, the outward signs of a University are its campus, its buildings and equipment. Faculties and administrations change; student bodies run their four year rounds. The buildings, growing in number and usefulness, distinguish, if they do not make, the institution.

--William Charles Hays<sup>15</sup>

William Charles Hays, the designer of Hart Hall, was "an important figure in [San Francisco] Bay Area architecture in the early part of this century."<sup>16</sup> He was important partly because of his association with many of the leading architects of his day. When he retired he received "numerous telegrams and letters . . . from all over the world."<sup>17</sup> Hays had taken his undergraduate degree at the University of Pennsylvania in 1893. He worked for short periods of time for several well-known architectural firms in Philadelphia: Frank Miles Day, Keen and Mead, and Cope and Stewardson. His work immediately came to the attention of the leading East Coast architects of the time when he won, in conjunction with Milton Bennett Medary, Jr., the design competition and commission for the University of Pennsylvania's Howard Houston Hall, the first student-union building in the United States. (Among the jurors for this competition were Charles Follen McKim of McKim, Mead, and White; Thomas Hastings of Carrere and Hastings; and William R. Ware, head of Columbia University's School of Architecture.) Hays won the John Stewardson Memorial Travelling Fellowship, which enabled him to complete his professional studies at the American Academy in Rome and at the ateliers of Godefroy-Frenet and Laloux in Paris.

Hays met and knew many prominent architectural figures of his time through his foreign travels and his active participation in the T-square Club of Philadelphia, the Architectural League of America, and the American Institute of Architects. Parts of Hays's oral history read like a Who's Who of American architecture. He declared at one point, "I have seen it all--personally, I knew all of the great names. McKim, Stanford White, Tommy Hastings, John Carrere, D. H. Burnham, and the Boston fellows, even to dear old R. Clipston Sturgis, Sr."<sup>18</sup> Among the West Coast architectural fraternity whom Hays knew were John Bakewell, Jr., Walter D. Bliss, Arthur Brown, Jr., Ernest Coxhead, William B. Faville, George W. Kelham, Bernard Maybeck, Julia Morgan, and Willis Polk. Like a number of these more famous designers, Hays struggled with the important architectural issues raised by the transition from historicism to modernism and by the search for an appropriate regional style for northern California.<sup>19</sup> Hays's buildings link the Davis campus to an important era, important people, and important ideas in the history of American and West Coast architecture.

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Hays's buildings at Davis are an important part of his total architectural work. He was Supervising Architect for UCD for a quarter of a century, from 1918 to 1944 (and his work on campus buildings dated back to 1907, when he was a member of the Howard and Galloway firm). Hays designed buildings for college campuses throughout his long career. Besides Howard Houston Hall at Penn, he worked on buildings at Princeton, Bryn Mawr, Stetson, Washington University in St. Louis, and Washington State University.<sup>20</sup> For the University of California, he designed Giannini Hall at Berkeley and the Medical and Dental Buildings at San Francisco.<sup>21</sup> Hays's close association through the years with John Galen Howard (who invited him to come to California in the first place) gave him the opportunity to contribute to Howard's designs for the Berkeley campus. Hays made important suggestions about the spectacular reading room in Doe Library (Berkeley), and later did the same for the reading room in Shields Library (Davis). Both rooms are among the most distinguished interior spaces on their respective campuses. Hays also did prototypical dormitory designs for use on several University of California campuses.<sup>22</sup> Besides Hays's campus work, he designed the First Presbyterian Church in San Francisco, the First Presbyterian Church in Oakland, office buildings, school buildings, fraternity houses, residences, and several structures for the Bohemian Club (of which he was a member).<sup>23</sup>

Hart Hall has significance as one of a dwindling number of Hays buildings on the UCD campus. In the 1920s Hays designed what often are called the first permanent buildings for UCD. Earlier campus buildings, many of which were designed by the firm of Cunningham and Paliteo, were small wood-frame, brown-shingled structures (except for that firm's masonry library-classroom building, which developed structural problems and had to be replaced). Hays's designs, in contrast, were for large concrete structures. The first two of these were the Dairy Industry Building (later called Roadhouse Hall) and the Horticulture Building, both completed in 1922 and demolished in recent years. The other two large classroom and office buildings that he designed were Agricultural Engineering (Walker Hall) and Animal Science (Hart Hall), completed in 1927 and 1928 respectively. These occupy prominent sites (adjacent to each other) on the campus's central quadrangle. Hays also designed the Physical Education Building (now called Hickey Gym), but it represents a later phase of campus development (1938) and does not occupy a prominent position on the quad. A number of smaller buildings at UCD also are attributed to Hays. These have suffered various fates: some have been torn down, some have been greatly altered, and others, including the attractive but inconspicuous Central Heating Plant and the horse barn, have survived to this day in close to their original form. None of these other structures, however, possesses the same combination of character, important site, and historical meaning that give Hart Hall special significance.

FOOTNOTES

1. Charles Hall Page and Associates, Splendid Survivors (San Francisco: California Living Books, 1979), p. 178
2. Verne A. Stadtman and Centennial Publications staff, The Centennial Record of the University

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of California (Berkeley: University of California, 1967), p. 153.

3. Ibid.

4. H. H. Cole, Adventurer in Animal Science, Interviews conducted by Reuben Albaugh, Irving I. Geschwind, and Hubert Heitman (Davis: Oral History Center, Shields Library, University of California, Davis, 1977), p. 42.

5. Tracy I. Storer, From Observation to Experimentation, Interviews conducted by A. I. Dickman (Davis: Oral History Center, Shields Library, University of California, Davis, 1975), pp. 54-55.

6. Cole, Adventurer in Animal Science, p. 37.

7. The count of faculty publications for 1928-1937 is derived from: University of California College of Agriculture Division of Animal Husbandry Publications, Volumes I to VI (1926-1937). This series is a chronological compendium of faculty publications. The following discussion of research contributions is based on the publications compiled in these volumes and in volume VII (1938-1939). Volume VII was consulted because publication typically reported research began some years earlier. Also used were the textbooks of Cole and Cupps, Cole and Garrett, Kleiber, and Wagon, Albaugh, and Hart; the oral histories of Albaugh and Cole; and recent interviews with Albaugh and Heitman (see Bibliography for details).

8. George H. Hart, "Wealth Pyramiding in the Production of Livestock," in California Agriculture, edited by Claude B. Hutchison (Berkeley: University of California Press, 1964), p. 81.

9. "Prospectus of the College of Agriculture," University of California Bulletin, 3rd series, v. 24, no. 5 (October 1930), p. 45.

10. Max Kleiber, An Old Professor Ruminates, Interviews conducted by A. I. Dickman (Davis: Oral History Center, Shields Library, University of California, Davis), p. ix (introduction).

11. Storer, From Observation to Experimentation, p. 93.

12. Hart, "Wealth Pyramiding in the Production of Livestock," p. 86.

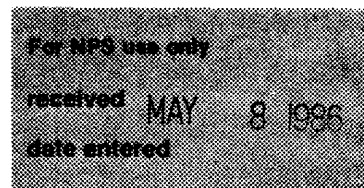
13. Ibid., p. 56.

14. Cole, Adventurer in Animal Science, p. 114.

15. William Charles Hays, "The Architect's Viewpoint," The Architect and Engineer 103, no. 1 (October 1930), p. 104.

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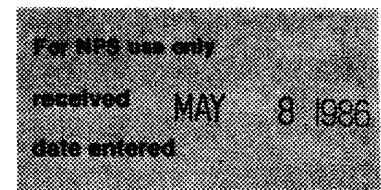
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16. Charles Hall Page and Associates, Splendid Survivors, p. 178.
17. "Friends Honor William Charles Hays," Architect's Bulletin of the State Association of California Architects, Northern Section (June 1943), p. 36.
18. William Charles Hays, Order, Taste, and Grace in Architecture, An Interview conducted by Edna Tartaul Daniel (Berkeley: Regional Oral History Office, Bancroft Library, University of California, Berkeley, 1968), p. 233.
19. Hays, "The Architect's Viewpoint," pp. 104-106.
20. "Who's Who in This Issue," The Architect and Engineer 103, no. 1 (October 1930), p. 23.
21. "Portfolio of Special Building Types: The Medical School Clinics, The University of California, San Francisco, California--William C. Hays, Architect," The Architectural Record 76, no. 1 (July 1934), pp. 20-24.
22. William Charles Hays, "Dormitory Plan Study for the University of California," authorized by the Regents of the University of California, (Mimeographed, October 1944).
23. G. P. Simonds, K. H. Cardwell, V. A. DeMars, M. A. Goodman, and H. Moise, "William Charles Hays, 1873-1963, Professor of Architecture, Emeritus," University of California In Memoriam, April 1964.

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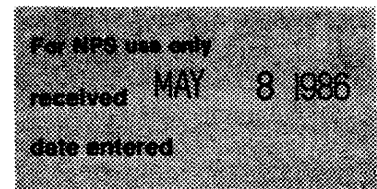
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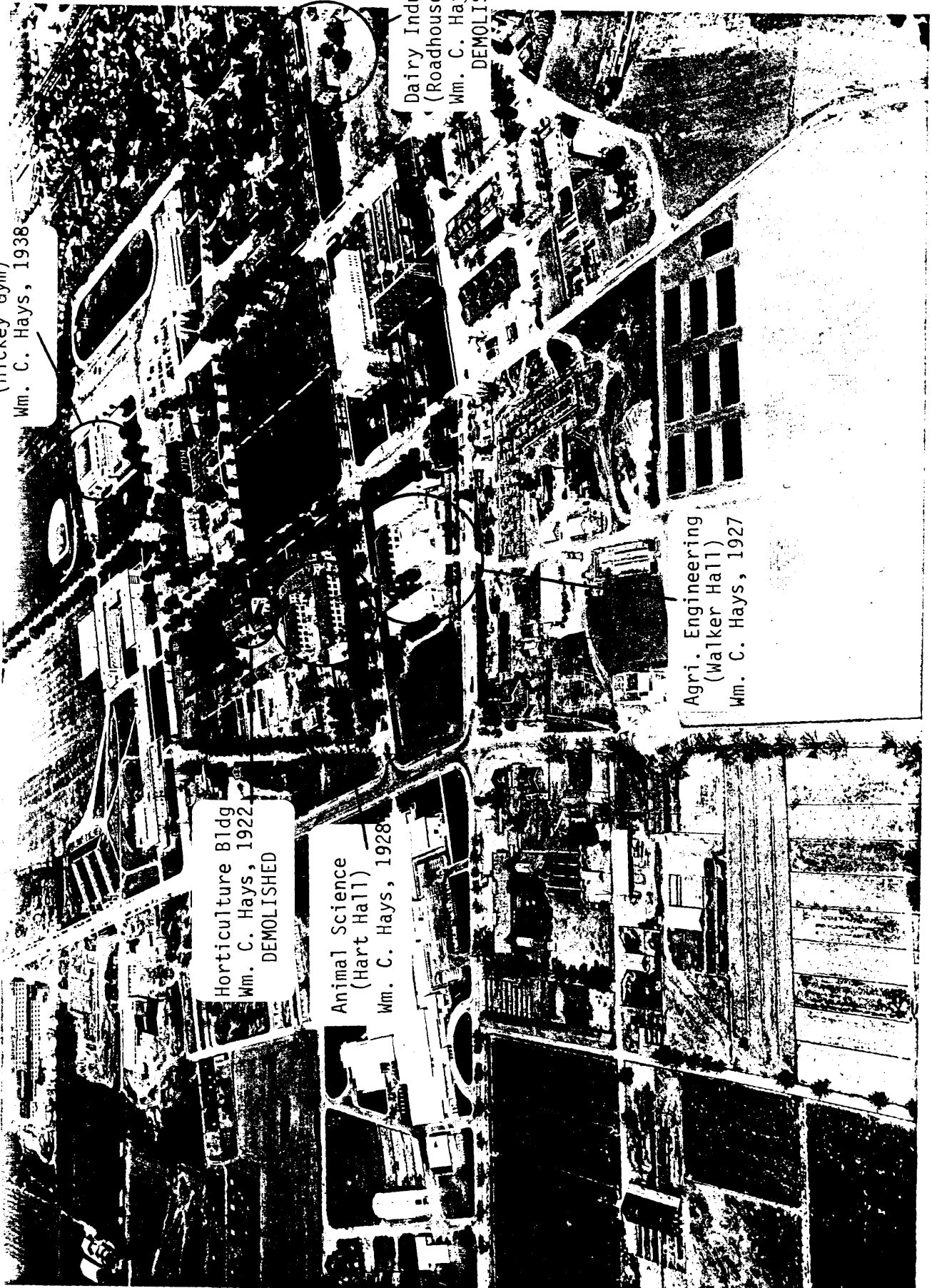
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(Hickey Gym)  
Wm. C. Hays, 1938

Horticulture Bldg  
Wm. C. Hays, 1922  
DEMOLISHED

Animal Science  
(Hart Hall)  
Wm. C. Hays, 1928

Dairy Industry  
(Roadhouse Hall)  
Wm. C. Hays, 1921  
DEMOLISHED

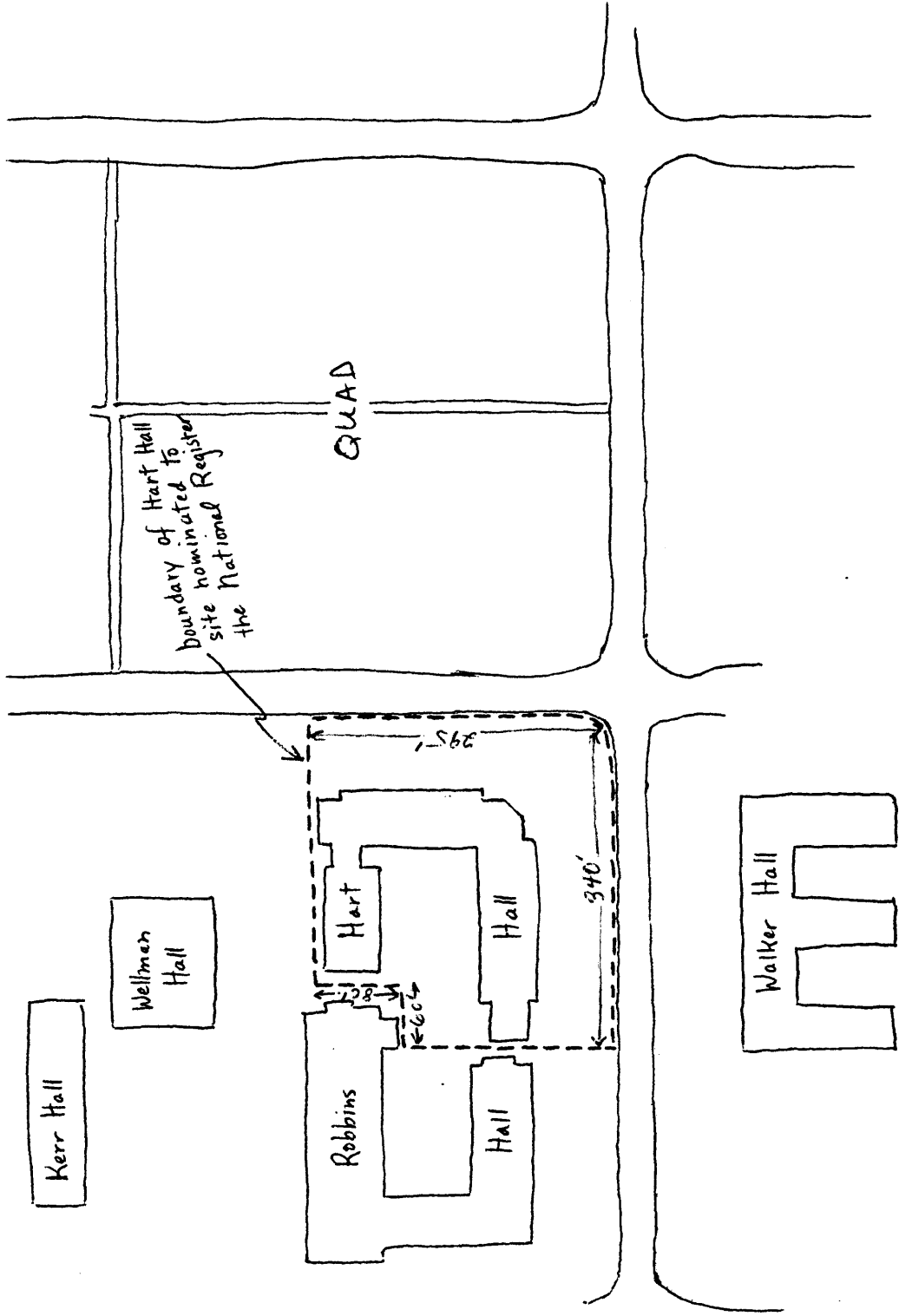
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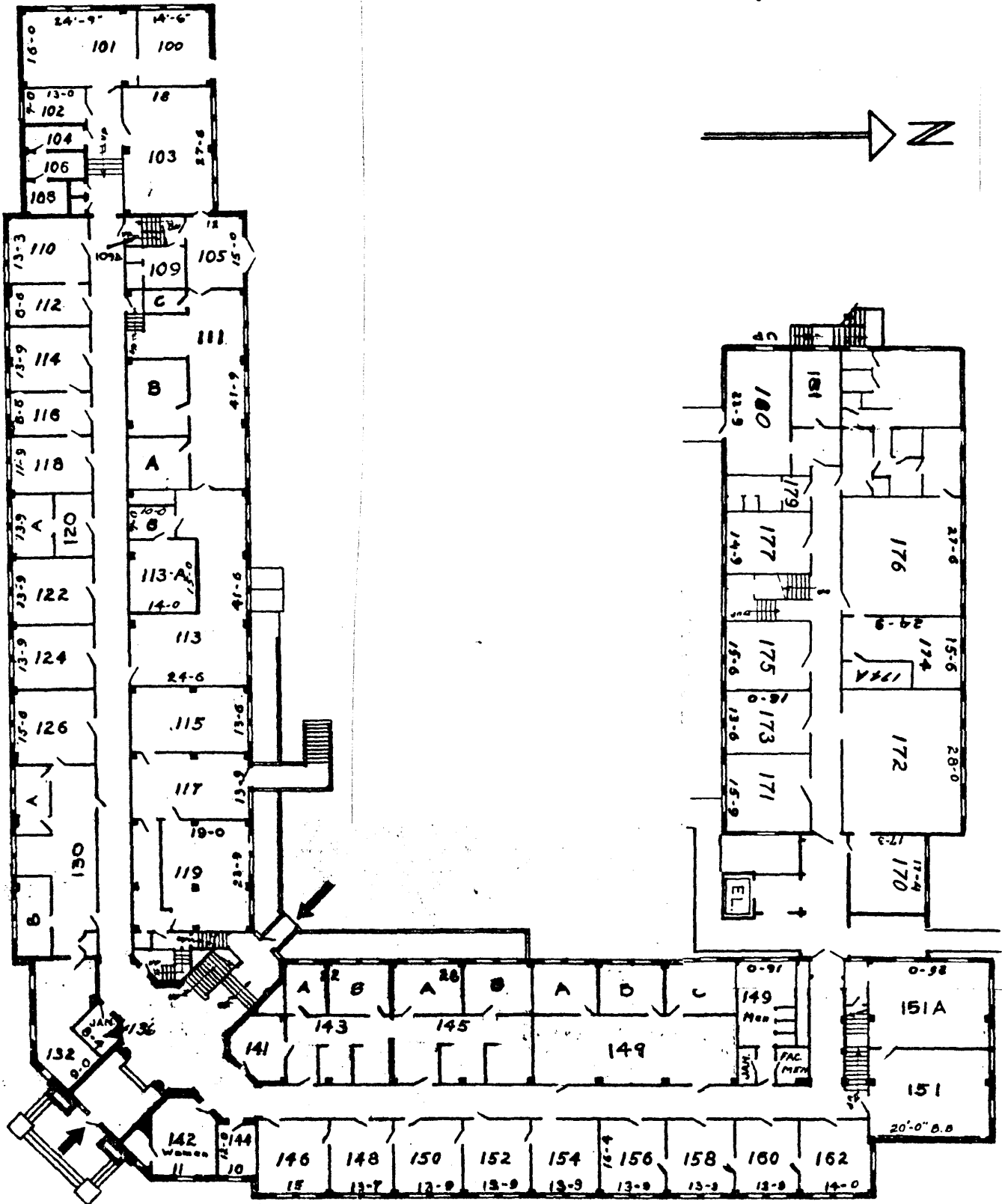


ANIMAL SCIENCE BUILDING (HART HALL)

Northwest corner, West Quad and Peter J. Shields Avenue  
University of California, Davis, Yolo County California

U.C. DAVIS





FIRST FLOOR PLAN  
 Scale 1/30" = 1'-0"

3207  
 B041

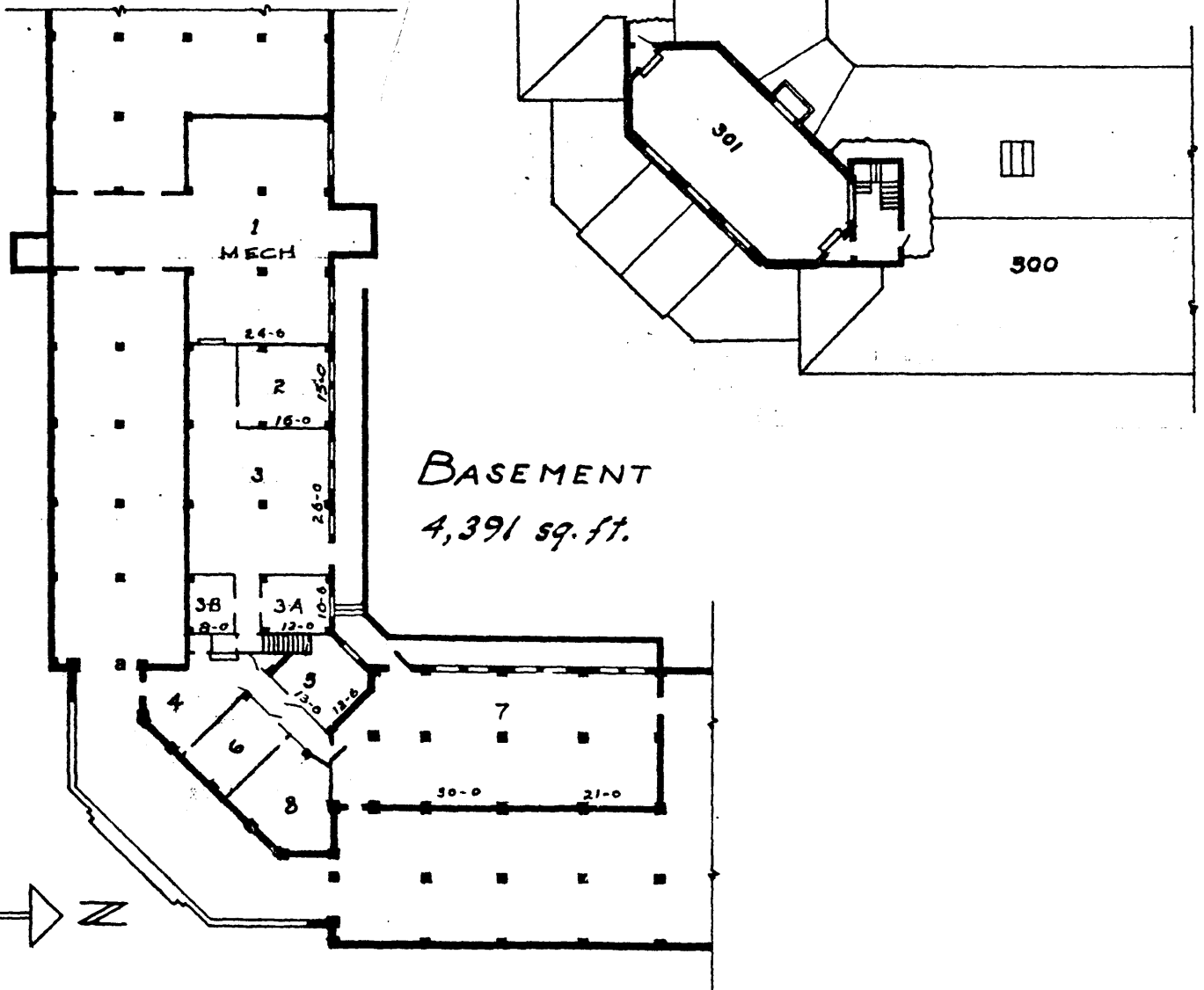


ANIMAL SCIENCE BLDG.

DAVIS  
C.A.A.N. 3207

ATTIC

1,220 sq. ft.



BASEMENT

4,391 sq. ft.

500

501

MECH

24-0

2

16-0

3

24-0

3B

8-0

3A

12-0

10-6

5

13-0

13-6

7

30-0

21-0

8

