Wing Chao
CORPORATE ARCHITECT

Disney Developer

In 1953, as he contemplated the design of a new kind of amusement park in Anaheim, California, Walt Disney consulted Los Angeles architect Welton Becket. Legend has it that after Becket toured Disney’s animation and motion picture studios, he told the famous film producer to forget about commissioning an architect.

With its set designers, art directors, and animators, the company had all the talent Disney needed; Disney then formed the original “Imagineers,” a group of about 20 people culled from the studio, to design Disneyland. The company has relied on in-house design talent ever since to create its theme parks around the world, and today the Imagineers number 3,000, of which 70 are architects.

But Disney’s most celebrated design is now cultivated by the Disney Development Company, the entertainment conglomerate’s real estate arm. It was established in 1984 with the arrival of Walt Disney Company Chairman and CEO Michael Eisner, a self-described architecture buff. “In a company such as ours, architecture and design are part of our very fabric, interwoven into the environments we create,” explains Eisner. “Architects are smart, well-educated, and recognize good ideas. I’ll trade a good investment banker for an architect any day.”

The chairman’s appreciation of architects is reflected in the Disney Development Company, which is responsible for everything Disney builds except the theme parks, which are handled by the Imagineers. The development company master-plans the company’s vast real estate holdings in California, Florida, Japan, and France; it determines land use, interviews outside architects for new building commissions, and invites architects to compete for the design of guest facilities. Disney development’s in-house architects manage projects throughout design and construction.

The senior vice president for master planning, architecture, and design at Disney Development Company, Wing Chao, FAIA, is such an architect. Born in Chungking, China, Chao holds degrees in architecture and urban planning from the University of California, Berkeley and Harvard University. He joined Disney in 1972 after working for the architecture firms of Charles Luckman and John Carl Warnecke in Los Angeles. After two years at Disney World in Orlando, Chao spent a decade working as an Imagineer in Oakdale, California. In 1984, he moved to Disney Development and began working on projects such as Michael Graves’s Swan and Dolphin hotels and Robert A.M. Stern’s Casting Center and the Yacht and Beach Club Resorts (ARCHITECTURE, June 1991, pages 90–93). More recently, Chao directed Graves’s Team Disney Building in Burbank, California (ARCHITECTURE, June 1991, pages 80–89); Arata Isozaki’s Team Disney Building in Orlando (ARCHITECTURE, April 1991, page 30); and a conglomeries of hotels, restaurants, and other attractions for the recently opened 5,000-acre Euro Disneyland near Paris, designed by such architects as Stern, Graves, Antoine Predock, and Frank Gehry. Today, Chao divides his time between Orlando and Paris, and is about to start new projects in Anaheim, where a second theme park is being designed for Disneyland. He is also coordinating efforts to expand Disney World’s hospitality facilities in Orlando with several new hotels (right) designed by Antoine Predock and...
Vacation Club
Walt Disney World
Orlando, Florida

THE DISNEY VACATION CLUB AT WALT DISNEY World in Orlando, Florida, is a new venture for the company in vacation time-sharing. Although club members don’t actually own a unit, the design is geared to make the Vacation Club buildings variegated in appearance to suggest individual houses (top left). Of the 478 units planned for construction, 197 have been completed, along with a hospitalist house (above), which contains a restaurant, snack bar, convenience store, pool, sauna, and a big, comfortable living room that can be used by club members. The residential units were designed by Bassenian/Lagoni of Santa Ana Heights, California, while Richard Nagy Martin of Newport Beach, California, designed the hospitality house.

The club’s theme, which was determined by Wing Chao, Michael Eisner, and Pete Rummell prior to hiring an outside architect for design, is the colorful architecture of Florida’s Key West. The design architects for the residential units consulted with Chao and studied Key West architecture before starting design work. The two- and three-story buildings (left), which are sited diagonally to one another to create vistas of the nearby golf course and other recreational areas, contain a variety of studios and one-, two-, and three-bedroom units that range in size from 410 square feet to 2,360 square feet. Different types of decorative exterior siding, pastel colors, and metal roofs with varying slopes and heights suggest separate houses. —M.J.C.
Robert A.M. Stern, among other architects.

Rather than rely on in-house talent for its resorts and vacation centers, Disney seeks outside architects for their freshness and creativity. "I could hire 50 creative people to be inhouse architects and do these projects," says Chao, "but it would be a Disney product. When Stern or Rossi designs buildings for us, we're making the public aware of architecture."

Typically, a project will start with a brainstorming session among Chao, Eisner, and Disney Development President Peter Rummell to determine the project's theme. For the recently completed Disney Vacation Club in Orlando, for example, the theme evolved from discussions about popular vacation spots. "We get a lot of our ideas from the New York Times's Travel section," explains Chao. When they decided to model the club on the Victorian and Caribbean styles of Key West, Chao and Rummell spent a day walking around the Florida island, noting the different pastel shades, wood siding, ornament, and metal roofs of its buildings.

After determining a project's theme, Chao may invite three or four architects to submit design schemes. Invited architects are selected based on past work for Disney, or through magazines, books, exhibits, or word of mouth. More ideas are discussed, more architects may be consulted, and, finally, one architect, or, more commonly, a team of architects (one firm responsible for design, the other for production of construction documents) is chosen. As designs develop, they are critiqued by Disney's finance, operations, resort management, marketing, and Imagining staff, according to Chao, who is constantly in contact with the architects himself, faxing ideas back and forth and guiding development. Robert Stern, now a member of Disney's corporate board of directors, has been through a number of these presentations and likens the experience to an audition. "They're made on a soundstage, with rows of chairs occupied by people from the company," notes Stern. "Decisions about a building's design are made with the same level of involvement as those made about a movie, by watching the rushes."

Chao maintains that in cultivating the work of outside architects, the "wow factor," as he calls it, is always a guiding design principle. "The first time you see Disneyland's Magic Kingdom castle, you say, 'Wow,'" explains Chao. "We want to make sure that every time you turn a corner, you have that experience, even when you go back to your hotel room."

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Bonnet Creek Golf Club
Walt Disney World
Gwathmey Siegel & Associates

DISNEY CONSIDERED FOUR ARCHITECTURAL firms before selecting Gwathmey Siegel Associates to design the golf club's clear, modern structure. "We first considered traditional country-club architecture," explains Wing Chao, "so we had a couple of Geogian schemes, but they didn't seem right."

Give the context of natural landscapes, the idea of creating a contrasting, sculptural object in the landscape seemed promising. "We looked at Philip Johnson's Glass House in New Canaan, Connecticut, which is surrounded by trees, as inspiration," says Chao.

Sunk into a hill, the two-story building appears as one story when approached from the southwest. A crisply detailed porte cochere of thin steel frame and translucent fiberglass arcs over the entry. The splayed walls of the foyer lead to a round skylit core, from which the building's functions are visible: a pro shop to the north, whose ribbon window frame sliver views of the golf course; a grill and banquet room to the east, overlooking lake on the building's northeast side; an locker rooms to the northeast and south. The building also acts as a gateway to the golf course, with a long flight of stairs extending to the building's lakeside. Bold, deep colors each applied to a separate element, are no the typical muted colors of Disney World but serve to distinguish the building among the rolling, green hills. Chao praises the golf club as a "jewel in the landscape."

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Golf club bridges sloped site with pro shop, locker rooms, grill and banquet facilities (facing page, top). Steel and fiberglass porte cochere (above) defines southeast elevation, while two-story northeast elevation (facing page, bottom) overlooks lake.

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Michael J. Crosbie
DISNEY WORLD'S CONTEMPORARY HOTEL, designed by Welton Becket in 1971, is an icon of "futuristic" architecture, with a 15-story atrium through which a monorail glides. But the future is not what it used to be, and 20 years later, the Contemporary's interior appeared frayed, if not downright depressing. Philadelphia-based Daroff Design introduced bright new colors, materials, and dynamic geometries that would make even the Jetsons feel at home.

"We had to live up to the name 'Contemporary,'" says Wing Chao in describing the renovation. "An initial scheme showed a clean, Modern design, but we thought it was too commercial and would soon look outdated. Then we started looking at the work of contemporary artists Andy Warhol, Frank Stella, Jasper Johns. How could their esthetic be applied to three-dimensional space?"

Daroff Design met the requirements by skewing and radiating grids on walls and floors to give the illusion that the lobby is in constant motion, shifting within its container. The 18,000-square-foot space was expanded by glazing three structural bays on the exterior to capture needed daylight. Ceilings were dropped around core elements such as elevators and the reception desk to make ceilings appear higher elsewhere. Curved walls in synthetic stone and perforated metal act as sculptural objects, playing off carpet patterns and furnishings. Colors throughout were chosen to coordinate with Gwathmey Siegel's new convention center next door.

—M.J.C.
ARCHITECT DOUGLAS GARDNER ADMITS THAT HE TOOK on the role of architect with Maguire Thomas Partners, the Los Angeles-based real estate giant, with some trepidation. After 13 years with I.M. Pei & Partners, where he had begun practice fresh out of Yale Architecture School in 1975, Gardner feared he “might be disenfranchised from the design process.” But the 41-year-old architect explains, “I was surprised to discover that my influence on architecture is more potent working here than it might be in conventional practice.”

Maguire Thomas Partners, with a staff of about 225 and offices in Los Angeles, Dallas, and Philadelphia, specializes in mixed-use development in urban settings. Started in 1965, the development company has completed approximately 19 million square feet of projects, including the Solana office and commercial park in Dallas/Fort Worth by Legorreta Arquitectos and Leason Pomeroy Associates, and Plaza Las Fuentes in downtown Pasadena by Moore Ruble Yudell, Lawrence Halprin, Gruen Associates, and Barton Myers Associates. Gardner first associated with Maguire Thomas while he was working in Pei’s office on Commerce Square in Philadelphia: approximately 2 million square feet of office space and a public plaza. The architect was impressed with the developer’s philosophy, which is that responsible design contributes to the life of a city. Instead of constructing isolated office towers with little connection to their surroundings, the company has developed challenging, complex projects that incorporate pedestrian open space, parks, mixed uses, and sensitive scale.

Upon joining Maguire Thomas in 1989, Gardner became project manager of Playa Vista, a mixed-use development planned for a 1,000-acre site on the west side of Los Angeles, just southeast of Marina del Rey. The project will combine residential, office, retail, recreational, and educational uses with open space (facing page) and is being planned by a cast of designers noted for their urban work, including Andres Duany and Elizabeth Plater-Zyberk; Moore Ruble Yudell Architects; Legorreta Arquitectos; Moule & Polyzoides Architects and Urbanists; and Hanna/Olin landscape architects.

Maguire Thomas develops its projects using a team approach, with an architect often serving as project manager. The Playa Vista team comprises about 15 people within the company: financial, accounting, and property management personnel; public policy experts; a construction manager; and support staff. Gardner has supervised continual meetings with planning, engineering, transportation, and environmental protection bodies, from the California Coastal Commission to the Army Corps of Engineers. He and Nelson Rising, the company’s partner-in-charge of Playa Vista, have also spent many hours presenting and discussing the design with local community groups. The site borders five L.A. communities, each with a half dozen neighborhood organizations. “They often call us, curious about the plan,” admits Gardner. “We make presentations and keep them updated about the design.”

In working with the design team, Gardner finds that he most often wears the hat of developer. He sets the agenda and controls the team’s quarterly meetings, guides the design, and clarifies development priorities. “At the end of the day, Buzz Yudell of Moore Ruble Yudell explains that Gardner’s guiding role has Playa Vista grounded in the reality of complex urban design. “He can represent all of a situation, knowing how architects fit into the development company’s goals, and things built within existing political financial restraints.”

Gardner claims that his experiences with corporate architecture have made him aware how architects may significantly affect design if they step out of their practitioner role. As he points out, architects often become involved in the design building only after important decisions a program, site, and size have been decided.

“The conventional role of the architect reactive: to respond to a given set of parameters, rather than defining what those parameters are,” notes Gardner. “Working as an architect within a development company, I influence fundamental issues—transportation, land use, building program—that ultimately are translated into built form.”

—Michael J. CRC
Playa Vista
Los Angeles, California

The design of Playa Vista, a large industrial tract southeast of Marina del Rey, attempts to reverse conventional planning: density, restrictive zoning, and reliance on automobile transport. The 1,000-acre development will create seven distinct neighborhoods, each with its own mix of housing, offices, retail, hotels, schools, and recreation uses—all within a five-minute walk of a residence. An internal public transit system, bicycle paths, and pedestrian routes will link the neighborhoods. Fully 40 percent of the acreage will be left as open space, including 260-acre wetland preserve, linear parks systems, playing fields, jogging paths, and waterfront areas.

Playa Vista will comprise approximately 13,000 multifamily residential units, mainly based on the courtyard housing common in Los Angeles. Streets will be heavily planted with trees and vegetation native to the region. The development will also incorporate an “ecological infrastructure” to help relieve the strain on the region’s present system with its own recycling facilities and wastewater and solid-waste treatment systems.

Douglas Gardner attests, “Securing entitlements for this project is a major undertaking, and the approval process is numbing complex.” Gardner has supervised planning, coordinated consultants, and negotiated with public agencies for approvals for the project. “Los Angeles has a reputation for ‘anything goes’ in terms of development,” says Gardner, “and for not dealing with growth responsibly. Playa Vista will demonstrate that it needn’t be the case.” Construction is scheduled to begin in the spring of 1993, with completion in 1995.
Backwoods Craft

DEEP IN THE OZARK MOUNTAINS, NOT FAR FROM MUTTON Hollow Craft Village, Baldknobbers Hillbilly Jamboree Show, and Haunted Hayrides, a rustic mountain retreat artfully blends 19th-century craftsmanship with late 20th-century technology. While many visitors may think it has been there forever, the 201-room backwoods getaway has taken shape over the past four years. That’s a tribute to owner John L. Morris and the in-house staff he employs to design and build every structure on the 300-acre parcel.

Big Cedar Lodge is one of several subsidiaries of Bass Pro Shops, the 21-year-old sporting-goods retailer and manufacturer best known for Bass Pro Shops Outdoor World, a giant hunting and fishing emporium in Springfield, Missouri. Founded by 44-year-old Morris, an avid hunter, fisherman, and conservationist, the retail operation has grown into a 315,000-square-foot extravaganza that bills itself as “the world’s largest sporting-goods store by reputation.” A large part of its appeal is its hybrid nature—part fisherman’s paradise, part department store, part aquatic museum. Drawing more than three million visitors a year, it rivals St. Louis’s Gateway Arch as the number-one tourist attraction in the “Show Me” state.

capitalizing on the phenomenal growth of his first business, Morris branched out into related areas over the past 15 years, launching Tracker Marine, a designer and manufacturer of power boats; Redhead, a sportswear maker; American Rod and Gun, a wholesale supplier; and Outdoor World Travel, a travel agency specializing in adventure trips. After years of commissioning architectural firms for specific projects, he decided nearly five years ago to form an in-house office to oversee the company’s many building projects, and hired Thomas W. Jowett to serve as its director. Jowett, 39, a native of Independence, Missouri, who was educated at the University of Nebraska, first met Morris while he was director of design for a Kansas City firm commissioned by Bass Pro Shops; he went to work for Morris’s company in November of 1987.

Jowett was joined eight months later by Donald Briggs, a 35-year-old Muskogee, Oklahoma, native who studied at the University of Arkansas. Before coming to Bass Pro

(Left to right): Donald Briggs, Jan Burch, Guy Essary, Thomas Jowett, Rene Wade; Jeff Masters (seated in front)

Big Cedar Lodge
Ridgedale, Missouri

FROM THE MINUTE VISITORS DRIF through the entrance gate and up the winding trail that leads to the registrati house for Big Cedar Lodge, they are treated to an Ozark original. Constructed on land that was once the private getaw of railroad magnate Harry Worman at later used as a dude ranch, the lodge consists of more than three dozen buildings, that overlook Table Rock Lake, a man-made body of water that has become a reginal center for hunting and fishing. rustic restaurant and community build (facing page, top) frame a pool that ove looks the lake below. The four-story Va ley View Lodge (facing page, bottom right), the largest single building on the property, is reminiscent of an Adirondac lodge, with starburst patterns in cedar wood the eaves. A site plan by Bass Pr Shops’ architecture department (facing page, bottom left) shows how the build ings are clustered on the former Worma estate, whose original residence has been converted into a registration area and gift shop. After four years, the community is mixture of recycled older buildings and new ones built nearby, with styles ranging from Tudoresque to Late Victorian that reinforce a symbiotic relationship to the surrounding landscape. “One of our primary objectives has been to touch the human emotions by creating a strong feeling of place,” maintains in-house architect Donald Briggs.
Shops, Briggs recalls, he worked for five companies in five years, specializing in custom houses, commercial work, and ecclesiastical design. In 1989, Morris hired Rene Wade, a Springfield native and graduate of the town’s recently accredited Hammons School of Architecture at Drury College. Rounding out the department are design coordinator Jeff Masters, who is pursuing an interior design degree; construction supervisor Guy Essary; and office manager Jan Burch.

The Bass Pro Shops team also manages a full-time staff of cabinetmakers, ironworkers, and other craftsmen, and hires additional consultants as needed. All demonstrate the kind of homegrown talent that is in touch with the region’s traditions. “We’re from Missouri and we’re trying to capture Missouri,” says Tim Burrows, a 45-year-old metal artisan who had his own welding shop before joining Morris. “We want to leave something for others when we’re gone.”

The staff works out of the corporate offices of Bass Pro Shops, which is located in the shopping mall next to Outdoor World. The design studio is visible through a storefront window—a sign of its importance within the organization. Jowett is in charge of management and design, and Briggs is his chief designer. Wade works on construction documents and signage for the various properties, and Masters handles exhibit work, fixtures, and other store design. All spend time in the field, overseeing construction and working alongside contractors and craftsmen.

Although they recently completed a new manufacturing facility for Tracker Marine and are planning to expand Outdoor World, much of the staff’s attention these days is devoted to Big Cedar Lodge, 50 miles to the south of Springfield in Ridgedale, Missouri. There, Jowett, Briggs, and the design team are trying to create a landscape that is unique to Morris and blends well with the landscape. The lodge is located on a private island on Table Rock Lake, surrounded by forested hills.

Collaboration between architects and craftsmen at Big Cedar Lodge is evident throughout the complex. A cypress, ponderosa pine, and mahogany stairway in the community building (top left) leads to the “grand view” room (center left), with exposed wood roof trusses. A large stained glass window provides views of the lake from one of the guest cottages (bottom left), which also features a taxidermy menagerie. To create the lighting (facing page), in-house architect Donald Briggs drew rough sketches (facing page, left column) to give craftsmen Tim Burrows and Jay Wood an idea of the size and character of the fixtures, then allowed them to develop the designs on their own. Deer antlers, turtle shells, and other natural forms convey hunting and fishing themes. “I think of it as Ozark-itecture,” says Briggs.

Edward Gunni
Campus Steward

Although the state’s economy is struggling like the rest of the nation’s, the nine campuses of the University of California (UC) system are engaged in their biggest building program since the 1960s. With $3 billion worth of construction projects currently under way and plans on the boards for a 10th campus in the Merced-Modesto region, construction at UC, funded largely by state bond issues passed in the late 1980s, has turned the nine schools into modern-day WPA projects. According to Michael J. Bocchichio, the architect who serves as assistant vice president-facilities administrator of the entire UC system, “Governor Wilson views building within our university system as one way to stimulate the state’s economy. We have to grow to meet demand.” The state guarantees a spot at the University of California to the top 12 percent of graduating seniors; the class of 2005 is expected to exceed the class of 1992 by as much as 23 percent.

That growth has pushed architects working within the UC system to new prominence, as both stewards of their respective campuses and as agents for commissioning leading architects from around the country. The campus architect whose university environment may be most affected by the need to accommodate more students is Frank Zwart of the University of California, Santa Cruz.

Set among 2,000 acres of Northern California coastal forest and grassland, the university now boasts 10,000 students and anticipates a 50 percent increase by 2005. The institution comprises eight distinct colleges, each with its own architectural as well as academic identity, surrounding a campus core of science and library buildings. UCSC is also a haven for social and environmental activists; both students and townspeople were arrested in a recent protest against cutting trees for new buildings. Zwart, a former UCSC student with an abiding interest in preserving the campus’s pristine environment, admits, “The best of our buildings extraordinarily respect the land. As the campus gets larger, that’s harder and harder to do.”

Since opening in 1965, UC Santa Cruz has followed a long-range development plan by John Carl Warnecke and Associates and Anshen + Allen, for which the grandfather of landscape architecture, site planning, and preservation in California, Thomas Church, served as a consultant. That plan and its three subsequent revisions provide the impetus for a long tradition of buildings in harmony with their surroundings.

Zwart sees his challenge as shepherding the school’s inevitable growth while protecting its environmental legacy. A second-generation California native who graduated with a math degree in 1971, Zwart’s first response to a professor who suggested a career in architecture was that he didn’t want anything to do with the buildings being constructed at the time. Yet he had only to look around at Santa Cruz’s new campus, at Joseph Esherick’s Stevenson College and Hugh Stubbins’s Porter College, to be inspired. Zwart began Princeton’s architecture program in 1973, one of two Santa Cruz students in a class of 15.

Housing studies of the UCSC campus (right) by the team of William Turnbull Associates, Community Development By Design, LSA Associates, and Lyndon/Buchanan Associates are designed to respect natural areas.
"It may sound corny," Zwart confesses, "but I feel that my choice of profession is in large part due to having studied here, and I feel very close to the campus. It's a chance to repay a kind of debt." Zwart joined the campus architecture staff in 1985 after working for several small firms on both coasts; he was hired to head the 28-person office after a nationwide search in 1988.

The current $100 million building program under Zwart's stewardship includes a physical sciences building by Moore Ruble Yudell and McLellan Copenhagen; a music facility by Antoine Predock; Esherick Homsey Dodge and Davis's Colleges Nine and Ten, and Zimmer Gunsul Frasca Partnership's earth and marine sciences building. With only a third of its land presently developed, UC Santa Cruz clearly has room to accommodate future state-of-the-art facilities as well.

Zwart plays a hands-on role in all stages of the architect selection process, but his is by no means the final say. Once a project for the campus has been approved by the state's board of regents, Zwart's office advertises it in local newspapers, requesting that firms submit statements of interest. He and his staff screen 40 to 70 responses, narrowing the field to 20-25 firms which are sent questionnaires. These firms are asked for references from clients and contractors, and are required to prove prior experience on similar building projects. The responses are evaluated by Zwart and his staff, who cut the submissions down to 10, which are sent to a selection committee comprising the campus architect, another architect from Zwart's staff, members of the department—including students—requesting the building, and the university's director of capital planning. The group narrows the field to the four or five firms that will actually present their qualifications to the selection committee, which then chooses an architect by consensus. "People come to similar conclusions very quickly," Zwart notes. "A lot of proposals come across as being too corporate, and people will say, 'That's not right for Santa Cruz.' The campus is a real lesson in the power of good design."

Over the next decade, Zwart would like the campus's growth to appear seamless, preserving the natural beauty that the 42-year-old architect learned to respect as a student 25 years ago. "When you are a campus architect, you live with what you do," Zwart muses. "For projects that are great successes, that's terrific. For those that are less successful, you have painful reminders of what needs to be better next time." —HEIDI LANDECKER
Science Library
Esherick Homsey Dodge and Davis

ORIGINALLY SELECTED IN THE EARLY 1980s to build an addition to an existing science library, Esherick Homsey Dodge and Davis (EHDD) was on the job when Frank Zwart was hired as associate architect in the office he now heads. As funds came through for a new library, Zwart worked with the librarians to help convey their program needs to the architects, serving as a liaison between the users and the design team throughout the project. He credits the architects with making that an easy task, adding, “They broached creative solutions to fit the user’s needs.”

Situated on a ridge called Science Hill, the Science Library demonstrates one of Zwart’s priorities: creating open spaces within the campus core. With landscape architects Nishita & Carter, who designed the landscape of earlier Santa Cruz colleges when they worked for Lawrence Halprin, EHDD included a tree-shaded plaza at the library’s entrance. This public space links the library to an existing science laboratory and classroom building on the site and creates a gathering point for science students.

The architects solved the problem of building on a wooded slope without removing too many trees by arranging the library into a sawtooth footprint. The building steps down the hillside, its main entrance located on the second floor, which is level with the site’s highest point. Special functions such as periodicals, reference services, and the card catalog are also organized on this level, which is sandwiched between the stacks on the first and third floors. The primary reading spaces are positioned along the northeast side of the building, where the sawtooth perimeter and steel-framed glass walls afford the best views of surrounding trees. “We developed these corner reading areas as open, treehouse-type spaces that thrust out into the woods,” asserts EHDD project designer and manager Todd Sklar, who adds that he kept a picture of his childhood treehouse at his desk while working on the library.

The periodicals room, which is extremely important to students and faculty engaged in scientific research, is elevated on a concrete column (facing page, bottom). In the interest of retaining a simple, maintenance-free structure, the architects chose concrete bearing walls supporting waffle slabs. The architects clad stair towers and elevator shafts in copper to provide a visual accent and link the building with nearby copper-rooted buildings.
College Unifier

WHEN CAMPUS ARCHITECT MAXWELL BOONE HELLmann, AIA (known as Boone), arrived at the University of California at San Diego (UCSD) in 1985, he was planning to attend law school. Although he now is in charge of UCSD's $638 million capital improvements program; directs a staff of 75 architects, engineers, accountants, and support people; oversees $200 million worth of projects currently under construction; and recently received his AIA chapter's annual Corporate Architect award, Hellmann still seems somewhat astonished by his professional success. The 37-year-old architect clearly loves his work, but adds that he "fell into this job by accident. I never even knew this career existed."

An architect trained in both the theoretical program of the University of Oregon and the nuts-and-bolts program of the University of Idaho, Hellmann began working in 1977 for his father's 15-person Reno, Nevada, firm, Raymond Hellmann, Architect. The younger Hellmann says his father's practice designed "everything from doghouses to hospitals"—that is, from a kennel for the humane society to an addition to a local VA hospital. Hellmann passed the state licensing exam in 1980; that same year, his father was diagnosed with cancer, leaving 26-year-old Hellmann, the youngest registered architect in Nevada, responsible for running the firm. "It was trial by fire," says Hellmann. He survived, and even successfully administered a large commission for a western regional headquarters for the Gannett newspaper conglomerate. After his father recovered and returned 18 months later, Hellmann decided to start his own Reno firm with another architect; but his experience with large projects left him dissatisfied with the residential work his young firm was able to secure.

Always interested in construction litigation, Hellmann began thinking about law school, a goal he had pursued briefly as an undergraduate a decade earlier. He was considering Western State University's law program in San Diego when, coincidentally, he heard about a job opportunity as a project manager on the UCSD campus. He applied, was hired as associate architect with the school's Office of Facilities Design and Construction in 1985, and planned to begin law school the following year.

But as one of the first new architects hired by UCSD, Hellmann arrived just as California's strong economy facilitated much-needed development on the 23-year-old campus. The recession of the 1970s had precluded any new construction, and California demographics had miscalculated the size of the student population for the 1980s. By the middle of the decade, the UC system was running out of room. When Hellmann was promoted in August 1986 to assistant director of design, he "put law school on the back burner."

As right-hand man to Assistant Vice Chancellor (the campus architect's official title) Charles Powers, Hellmann's responsibilities included hiring architects and engineers to support what was clearly going to be the biggest building program since UCSD moved to its present site, a former U.S. Marine Corps training camp, in 1962. Because the office lacked a sense of architecture as a service profession, Hellmann recruited design and engineering professionals with private-practice experience. In the mid-1980s, he was involved in commissioning buildings by Kaplan McLaughlin Diaz, Charles Moore, and the relatively unknown Antoine Predock.

The process of campus-building took off rapidly, but not without problems. UCSD's 1,600-acre site includes three components: to the west, Scripps Institute of Oceanography, which is positioned along Pacific coastal bluffs; West Campus, which straddles a coastal ridge; and East Campus, a chaparral marked by canyons and arroyos that fill with water in the rainy season, supporting lush vegetation. A much-loved, 363-acre eucalyptus grove runs through the center of the campus, and vistas of the ocean to the west and the Cuyamaca foothills to the east are possible from West Campus. As sites for new buildings began to be cleared, UCSD's articulate and environmentally conscientious academic community grew concerned about the lack of planning that seemed to surround new campus development.

In the resulting turmoil, Powers decided to return to private consulting, and Boone Hellmann stepped easily into the office's top post in November 1987. One of his first tasks was to assist in the preparation of a new master plan by Skidmore, Owings & Merrill, Richard Bender (dean of UC Berkeley's School of Architecture), landscape architect Emmer Wemple, and others. As a result of the detailed campus plan, completed in 1989, canyons, groves, and arroyos are protected, and areas for further development and preservation are delineated. Throughout, the goal of preserving the neighborhood identity of UCSD's five different colleges is paramount.

Hellmann's mandate includes shepherding huge building projects, such as the recently completed Molecular Biology Research Facility by Moore Ruble Yudell (ARCHITECTURE, March 1991, pages 78-81) through the UC system's Byzantine design review and approvals process. On campus, Hellmann is a member of the Capital Outlay Space Advisory Committee, which reviews departmental
requests and establishes priorities for new facilities. Based on the committee’s recommendation, the university submits a funding request to David P. Gardner, president of the UC system, whose office establishes systemwide priorities. Once approved, building projects are sent to the legislature for funding, and then advertised in major regional newspapers, from which 50 to 70 responses are received.

Often, the respondents are a who’s who of architectural firms: James Stewart Polshek and Partners, Richard Meier and Partners, and Frank O. Gehry & Associates have all applied. The UC system doesn’t need to advertise heavily to attract this kind of competition. “There’s a phenomenal grapevine,” Hellmann explains. “The university constructs 100-year buildings and pays its bills on time.”

Hellmann administers a screening and selection committee comprising architects from his office, the campus planning office, the university’s budget office, user representatives, and a member of the design review board, a UCSD anomaly currently made up of outside architects Joseph Esherick, William Turnbull, Rob Quigley, and Ignacio Bunster-Ossa of Wallace Roberts & Todd. The selection committee creates a short list of architects, who present their ideas and credentials to the committee, which awards commissions by consensus.

As to why star architects are often chosen, Hellmann explains, “It’s hard not to be impressed by the experience of renowned firms.” He adds that since the university hires its faculty from among top academics all over the world, it is not surprising that it commissions prominent architects as well.

Although the campus was established on its present site at about the same time that the University of California began construction of its Santa Cruz campus, San Diego lacked the early, preservation-minded, long-range development plans that governed the northern campus (see pages 62-65). As a result, San Diego’s different colleges, though academically similar to UCSC’s, have never seemed part of a unified whole. Hellmann’s goal for the future is to knit these disparate colleges into a cohesive fabric. He foresees creating walkways, rows of eucalyptus trees, and unifying elements that will link the various college “neighborhoods” with a central university core. “My vision,” Hellmann muses, “is to get rid of the stigma that UCSD doesn’t hold together. To do that, landscape is even more important than bricks and mortar.”

—HEIDI LANDECKER

Viewed from the UCSD campus, the Campus Services Complex (top) is a linear structure that contains a post office and graphics and communications offices. Curved southern elevation (above) directs visitors to parking on the west side of the building; a high steel trellis marks its most heavily traveled entrance. Cylindrical forms designate entrances (left), which are linked by walkways that also lead to overlooks facing the arroyo.

CAMPUS SERVICES COMPLEX–SITE PLAN

PHASE 1
1 PPS ADMINISTRATION
2 TELECOMMUNICATIONS
3 GRAPHICS
4 MAIL SERVICES

PHASE 2
5 GROUNDS MAINTENANCE
6 GARAGE TRANSPORTATION
7 LOCK/KEY SHOP
8 PPS STORES

9 PLUMBING SHOP
10 CARPENTRY SHOP
11 MECHANICAL SHOP
12 ELECTRICAL SHOP
13 GROUNDS ADMINISTRATION
**How do you get superior design for some warehouses?** asked Boone Hellmann, in seeking architects for a campus services building and new biology field station on a 17-acre site near a major freeway. He resolved the problem by choosing Anshen + Allen, which seemed intrigued by the challenge of designing an unglamorous project on a highly visible site. Hellmann’s mandate required designing two very diverse buildings: the Biology Field Station, which consists of labs, offices, and six greenhouses, and Campus Services, which houses the university’s post office, telecommunications, and graphics and printing services. Anshen + Allen’s solution was to design esthetically complementary buildings that create a cohesive unit on the site.

Hellmann collaborated with principal David Rinehart and senior designer Dennis McFadden to develop a three-phase scheme that places the complex at the edge of a natural arroyo. The first, completed phase of the project includes the 140,000-square-foot Campus Services building on the southern portion of the site, with an axial north-south linear footprint. To the north, the Biology Field Station is oriented along an east-west spine, with a south-facing entrance.

The Campus Services Complex comprises five buildings linked by walkways and courtyards. Cylindrical forms mark the main entrances to the one-story ensemble, and the concrete block walls appear to rise from the arroyo. Mail sorting is housed behind a curved facade at the southernmost end of the building, designed to direct visitors around to the entrances. Brightly colored awnings along the western elevation shield office windows from summer sun and distinguish the facade with a man-made element.

The Biology Field Station includes a narrow rectangle of offices and labs containing cold rooms and growth rooms with special lighting for plant experiments. Like the Campus Services building, the structure features concrete block walls and trellises.

When the second phase of the project is completed in 1994, the one-story buildings will be flanked on their eastern side by a row of greenhouses to accommodate university maintenance crews. The final phase will comprise garages, creating a coherent enclave that meets Hellmann’s goal of preserving neighborhoods within a unified campus.

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**The Biology Field Station comprises two concrete bearing walls that enclose a steel-framed volume (above center) containing laboratories and offices. Greenhouses are located to the north and are used for agricultural experimentation. Two openings in southern elevation (top) connect to breezeways (above) that lead to greenhouses. At the easternmost end of the building are shade houses, required by the university’s population-control biologists for research with animals.**

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<th><strong>BILOGY FIELD STATION SITE PLAN</strong></th>
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**ARCHITECTURE / MAY 1992 69**
Master Planner

FOR CAMPUS ARCHITECT CHARLES WARNER "DUKE" OAKLEY, AIA, flexibility, patience, and an ability to steer through mountains of bureaucracy are all in a day’s work. His job includes overseeing some $1.1 billion worth of projects currently in programming, design, working drawings, or construction at the University of California, Los Angeles (UCLA), one of the nation’s top research institutions. Under his surveillance is the largest building program of all the nine colleges in the UC system, on one of the smallest campuses, with the system’s largest student population. Where UC San Diego (pages 66-69) supports 18,000 students on 1,600 acres and UC Santa Cruz (pages 62-65) houses 10,000 on 2,000 acres, UCLA maintains a steady population of 35,000 on 419 acres. Oakley likens the dense, urban campus to a small city. "But where else," asks the director of Capital Programs, Design & Construction, "does an architect get the chance to visualize a comprehensive environment and receive the tools to make it real?"

Established in 1929 on a group of north-south-running ridges that reminded its earliest architects of Italian hills, UCLA’s campus, with its Lombardian Romansque central core, is also the second oldest in the system. Therefore, a portion of Oakley’s budget goes to renovating and replacing older structures, many of which have their own architectural identity and emotional appeal. For instance, the site of Pei Cobb Freed & Partners’s Anderson Graduate School of Management, now under construction, impinged upon 9 wooded acres that belonged to the Corinne A. Seeds University Elementary School (UES), a private school built on campus in 1946. A much-loved school for faculty children, the UES included several classrooms designed in the 1980s by Richard Neutra. Oakley commissioned a study of the Neutra buildings, revealing that the late Modern master had designed them in partnership with California architect Robert Alexander, as expansions to Alexander’s original complex for the school.

Oakley’s staff analyzed the site, and, in the end, came up with a scheme that meant razing three of the Neutra-Alexander buildings. “Not without regrets,” Oakley admits. “It’s sort of like growing up.” A new, state-of-the-art school building has been designed by Los Angeles architect Barton Phelps. As if completing a circle, Phelps included Alexander, now retired, on the design team. Such history and density necessitate sound planning and urban design for new buildings, so Oakley administers a thorough pre-RFP process. His staff, which includes 40 architects, carries out a feasibility study and develops a detailed master plan. They pick the site, determine circulation, underground utilities, landscape and parking, and they develop the program. “We then take our best shot at two or three conceptual designs for the project,” explains Sarah Jensen, associate director of Capital Programs, Design & Construction, and they then estimate costs to see if the project matches its funds. “By the time the architect is selected,” Jensen maintains, “we have a good set of master-planning guidelines, a good existing-conditions survey, a program, and a budget.” The in-house design is abandoned, but commissioned architects are required to work within the master plan drawn up by Oakley and his staff.

“Getting a design on paper isn’t the answer for me,” says Oakley, who has used a wheelchair for mobility since a sports accident at Dartmouth College left him a paraplegic. “I want to get the project built.” For the 47-year-old architect, getting a project built means seeing it through the state funding cycle, gaining approval from users, administration, academic senate, and California’s Board of Regents, and then bringing together users and architects to get them talking the same language. According to Oakley, that process is the challenge: "If you want to bring about your ideas of quality architecture and good campus design, you have to get it built.”

Architects whose buildings are now part of the UCLA campus attest that constructing them was no easy task. Barton Phelps, whose addition to the university’s rare books library was completed in 1990, describes UCLA’s democratic approvals process as a bureaucracy that tends to work against good architecture. “Duke walks the line between that bureaucracy and his heartfelt concerns about trying to do the best buildings possible. That’s an enormously stressful, continually compromised position that a lot of architects wouldn’t be able to tolerate. But he is fundamentally interested in the greatest good for the most people.” Part of the reason architects appreciate Oakley is that he understands their frustration with the university’s endless meetings and red tape. When Phelps called to complain about a hang-up on the library project, Oakley soothed him, commenting, “If it makes you feel any better, this week I’ve received calls like this from Harry Cobb, Robert Venturi, and Craig Hodgetts.”

However, as Los Angeles architect Rebecca Binder points out, Oakley also gives architects free rein, affording them the responsibility they require to do their best work. Binder’s addition to the Ackerman Student Union will incorporate much-needed space into the 30-year-old Welton Becket-designed building, as well as reconfigure both streetscape and scale along Westwood Plaza, the
campus's most important pedestrian zone. "He gives us good directions and the latitude to get the work done," Binder asserts.

Oakley's experience uniquely positions him to appreciate the university's history as well as its present needs. Before joining UCLA, he studied architecture under Louis Kahn at the University of Pennsylvania, practiced for eight years with John Carl Warnecke & Associates, served as consultant to UCLA's campus architects, and took charge of the Campus Architects and Engineers office six years ago. Retaining the title of campus architect, he was promoted to director of Capital Programs, Design & Construction in 1990, bringing building construction under his purview. He first came to the campus in 1984 as project designer and director for Warnecke's renovation of Royce Hall, the 1929 Lombardian Romanesque building that, as the architect notes, "appears on all our trays and coffee mugs." Yet Oakley recognizes that UCLA, which began as a commuter college for teachers, now needs modern medical and scientific facilities to compete with the other top research institutions in the nation. "When I took sociology at Dartmouth 30 years ago," Oakley quips, "you didn't need a lab. Education has changed, and architects who want to compete have to change too."

A committed Modernist, Oakley nevertheless recognizes a need for blending new and old into a unified campus ensemble. "In the '50s and '60s, architects unwilling to go against the Modernist tide created a campus that lacked coherence and a sense of identity," he admits. He describes that last phase of campus-building, which ended in the early '60s, as a series of ad hoc choices that eroded the order established by the original architects or the Neo-Romanesque campus core. "Whatever we accomplish in the period of my tenure," Oakley muses, "I don't think we can err on the side of too much order."

To that end, Oakley perceives his current projects as a series of individual places that, together, will make a sum greater than the parts. "When I look for architects, I want people who have proved that they can design in such a way that the whole is strengthened." For instance, shortly after awarding the Mac-Donald Research Laboratories to Robert Venturi, the university commissioned Andhen + Allen to design another laboratory at the end of a nearby walkway. "Their approach is dialectically opposite," Oakley admits, "but the bones of what they do, how they feel the building functioning as a part of the campus, are the same." —HEIDI LANDECKER
Northwest Housing
Esherick Homsey Dodge and Davis,
Gensler Associates, Antoine Predock, and
Barton Myers, Architects

Charles Oakley likens UCLA's 1960s high-rise dormitories to Pruitt Igoe, the country's most infamous public housing complex. For a new, 1,200-bed residential complex, his department determined that new housing could be inserted among the existing dormitories by relocating tennis courts. Working with the housing administration, Oakley and his staff came up with the idea of a student village, with a central commons and cafeteria building, open spaces, snack bars, and cafés. To avoid uniformity in such a large complex, Oakley's office advertised for diversity of architectural expression and coordinated planning, best carried out by a team of architects. Los Angeles architect Barton Myers, who teaches at UCLA, created a team including his own firm, Antoine Predock, and Esherick Homsey Dodge and Davis (EHDD) as design architects, with Gensler & Associates designated "executive architect," or liaison with the university. The team was selected because of EHDD's housing experience, Predock's inventiveness, and Myers's familiarity with UCLA, as well as the solid reputation of Gensler & Associates, the firm that signed the contract with the university and was responsible for the completion of all phases of the project.

"We wanted to respond to UCLA's complex mosaic of cultures," Myers explains. The team arranged the residences as three 400-unit complexes, each organized into "houses" of 50 units around a courtyard. The dorms will be served by Myers's Commons Building (center of plan), to be completed, along with his rectangular dormitory (right in plan), in summer 1992. Completed buildings include Antoine Predock's residences and café, configured around a sloping triangular courtyard (facing page, center). EHDD's complex includes eight irregularly configured houses, each with its own entrance, central stair, and living room.

Oakley's challenge included arbitrating budgetary disputes between the housing office and the design architects, several of whom remain dissatisfied with the resolution of their projects. George Homsey laments the loss of trellises that would have softened his firm's residences, while Antoine Predock regrets the university's color palette. Oakley admits that the project probably fails to meet its designers' expectations, but wishes "the architects could understand how much better off we are with their housing than we were before."
Gordon and Virginia MacDonald Medical Research Laboratories
Venturi, Scott Brown and Associates and Payette Associates, Architects

Before any architects were commissioned for the 155,000-square-foot research laboratory for UCLA's medical school, Duke Oakley and his staff conducted a detailed master plan of the southern edge of campus, an area located between the medical school complex and the main campus. A parking lot was designated a site for two science buildings enclosing a courtyard, with a walkway along their northern perimeter to connect UCLA's main thoroughfare to the Court of the Sciences on the ridge above. Before advertising for an architect, the office researched successful labs around the country and sent RFQs to several architects noted for their labs. "Forty bad labs wasn't as good a recommendation as one good one," notes Oakley. The team of Venturi, Scott Brown and Payette Associates had recently finished the Lewis Thomas Laboratory at Princeton, so they were asked to submit a proposal, and were ultimately selected by a committee of users, administrators, and Oakley himself.

Oakley describes the next phase of his work as representing "the users of the walkways and open spaces." Although funding was only secure for one structure, Venturi was asked to include a scheme for an eventual second building on the site, defining the plaza between them. Oakley administered a series of meetings between users and designers, including one between Venturi and UCLA chancellor Charles E. Young. "Venturi explained his building as a loft space full of labs wrapped with a brick skin," Oakley recalls, "and described how, in his mind, this was what a lab should be in the waning days of the 20th century."

Venturi's design accommodates Payette's flexible interiors, and its patterned brick exterior (facing page) recalls UCLA's Lombardian Romanesque central core. Limestone was selected to clad the first three stories of the building (top left) because the architect felt its light color would cheer the courtyard. A staircase leads up through an arch, angled slightly away from the building, pointing the way to a new walkway that will create an important east-west axis for the campus. At the base of the stair, a two-dimensional UCLA brine surmounts a pedestal (facing page). Glazed tiles and steel columns adorn the arcade (above left and center left) to create a pedestrian scale at ground level.