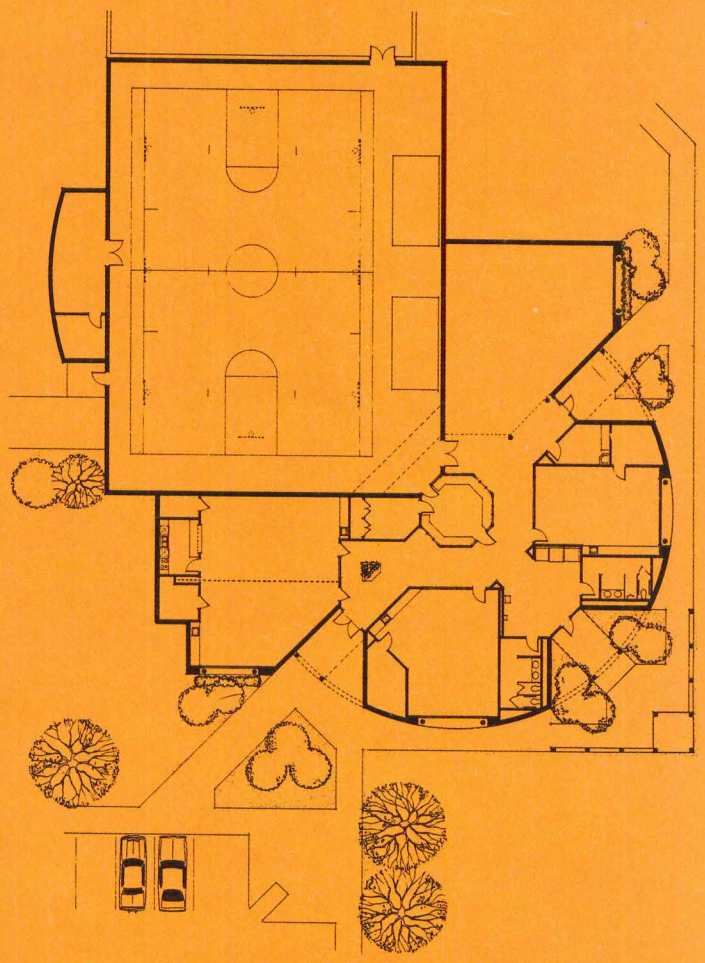
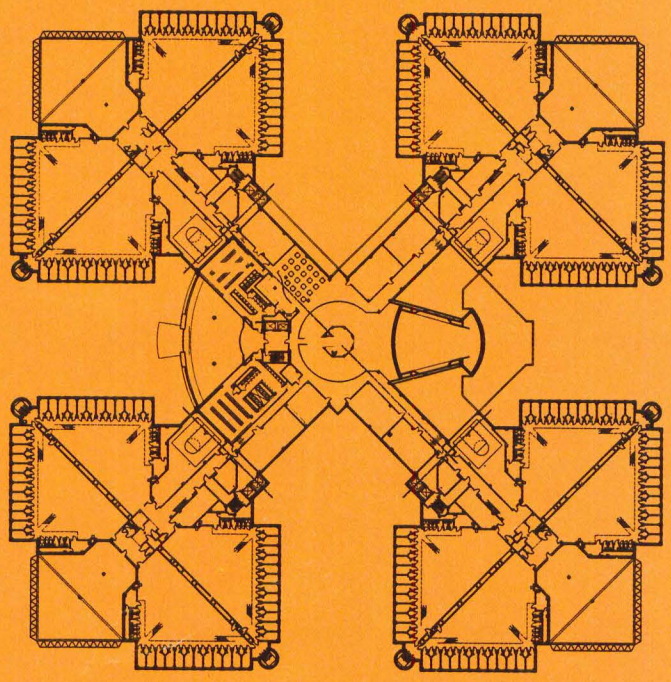
Plans

P/A



Recreation Centers/Prison Facilities



Supplement to P/A Progressive Architecture October 1994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Supplement to Progressive Architecture

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The Next P/A Plans: Daycare Centers/Nursing Homes

In April, 1995, we will publish plans of daycare centers and nursing homes. These can be of any size or location, and can involve new construction or additions to or renovations of existing structures.

The deadline for submission is January 1,1995. Address all submissions to: P/A Plans Editor, P.O. Box 1361, 600 Summer Street, Stamford, CT 06904. Provide a self-addressed stamped envelope to ease our return of graphic materials.

If you submit work, we need clear, unlabeled black-and-white plan and sections in the form of photostats (PMTs, K-5s). Graphic scales, north arrows, and room functions should be supplied on accompanying photocopies of the drawings. We also need two or three photos (prints, slides, or 4x5 transparencies are acceptable) of completed projects or model photos or renderings of unbuilt projects. Be sure to include photo credits where applicable.

We ask that you provide the following information for each project in typed form and in this order. (Please do not italicize, bold, underline, or set tabs; it is also important to orient the text vertically on 8" x 11" paper.)

Project:
(name of project, city, and state)

Architect:
(include credits for people in firm plus the names of associated architects)

Client:
(name and contact person, if relevant)

Program:
(basic description of brief)

Building area:
(net and gross square feet)

Cost:
(per gross square foot, and year of construction, if relevant)

Major materials:
(keep list brief)

Consultants:
(list firm names and specialties)

CAD-developed?
(yes or no)

Architect's statement:
(about 150 words, describing design intent and final design)

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Daycare Centers	5	4	3	2	1
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Any other comments you would like to share with us?

Thank you for your help.
Please fax to (203) 348-4023 or mail to Progressive Architecture, 600 Summer Street, P.O. Box 1361, Stamford, CT 06904

An Alternative Future for Prison Design

Stephen A. Carter **argues that the recently passed crime bill offers architects an opportunity to rethink and improve prison design.**

In its review for the AIA's annual listing of exemplary justice facilities, the screening jury expressed frustration at the trend to "ugly down" correctional architecture. Architects are responding to the current "get tough" attitude towards criminals much the same way politicians are: minimalism. Fortunately, the recently passed crime bill provides designers unique opportunities to change fundamentally the direction of corrections architecture and to provide an alternative future for prison design.

American public opinion, as currently interpreted by policy makers, is that the prison environment – not imprisonment – should punish. Architecture consistent with this principle reduces architects to merchants of mediocrity. Ironically, this becomes a self-fulfilling prophecy. Experience and research confirm that warehousing inmates in hostile, crowded, and noisy environments neither "reduces crime" nor equips inmates to function when they return to our communities. To the contrary, recidivism rates are all too high.

However, the correlation between "minimalist architecture" and inmates unprepared for their release has not yet been reflected in much of the design of correctional facilities. Prison operation and design are grounded in tradition, and public officials, administrators, and architects are hesitant to acknowledge that much of this tradition is irrelevant, if not damaging, to the mission of prisons as vehicles to change troubled and hostile lives.

This is evident throughout the design development process, but especially as it concerns "costs" and an institution's size. We have witnessed a stampede to construct the "cheapest" prison, the mega-sized institutions with 1,000, 2,500, or more beds. These larger, pen facilities, while less expensive to construct, are becoming more dangerous to operate and make it virtually impossible to implement treatment programs.

Still, the return to smaller, more controllable prisons that characterized a "break" with traditional linear-style prisons we saw in the 1970s is unlikely for three reasons: 1) prisons are too difficult to locate; 2) larger facilities seem to have operational economies; and 3) taxpayers are believed to have no interest in providing prisoners with the amenities that smaller prisons offer.

Objective: Cost Effective Prisons

Our challenge as planners and designers is to create prison environments that are socially and economically cost effective. Over 90 percent of those who enter prison return to society. How well they assimilate as productive citizens is largely dependent on how well they accept responsibility for their actions and learn skills of communication, vocation, and time management. In a free society, the environment plays an important role in the development of these skills, and that is especially true of prison environments.

The crime bill provides $7.9-billion in federal grants to states for building and operating prisons and "alternative detention centers." It is bipartisan – the first legislation of its kind passed in six years, the most "progressive" in more than a dozen years. Reflecting the mood of the nation, the crime bill suggests that our correctional future can aim in one of three directions: 1) higher custody and higher technology; 2) special purpose incarceration for the mentally disturbed, geriatric, personally disordered, and youthful offenders; or 3) intensive programming. While the general incarceration facilities will represent the greatest volume of construction, the future of corrections will be defined through more specialized facilities.

Correctional Facilities as Villages

An alternative future for corrections architecture, in the short term, is to design these large institutions as multifaceted villages composed of smaller facilities or communities. Within this framework we can introduce choice, scale, and a sense of dignity at budgets that heretofore were thought to be impossible. By designing smaller prisons within prisons and providing spaces that offer the inmate the opportunity to make choices within a secure setting, we can integrate operations and design in ways that can help produce better-managed and release-prepared inmates. More and more, these prisons can become self-contained communities with a large and inflation-proof economic base that many jurisdictions will see as a benefit, rather than a liability.

This alternative future requires a departure from tradition. While security remains the underpinning of the next generation of prison design, it need not be defined exclusively by expensive construction hardware and redundant technology. Technology is no substitute for direct contact between staff and inmates. Above all else, designers will need to demonstrate how a better managed corrections environment translates into "cost effectiveness," and how "cost effectiveness" can be achieved through informed choices regarding space, materials, construction techniques, and equipment. The old cliche that a better informed client makes for better architecture is particularly relevant to prisons.

This alternative future for prison design in the United States is already an important part of correctional systems in Canada and The Netherlands. Both countries have been more willing to abandon tradition and the monolithic housing unit that has characterized U.S. prisons over the past twenty years. Both countries have acknowledged this: the inmates who return to society will assimilate as productive citizens if they have learned a vocation and to accept responsibility. Officials there realize that being "tough on crime" means providing an environment in prison where inmates may equip themselves for a productive life when they are released back into our communities. **Stephen A. Carter**

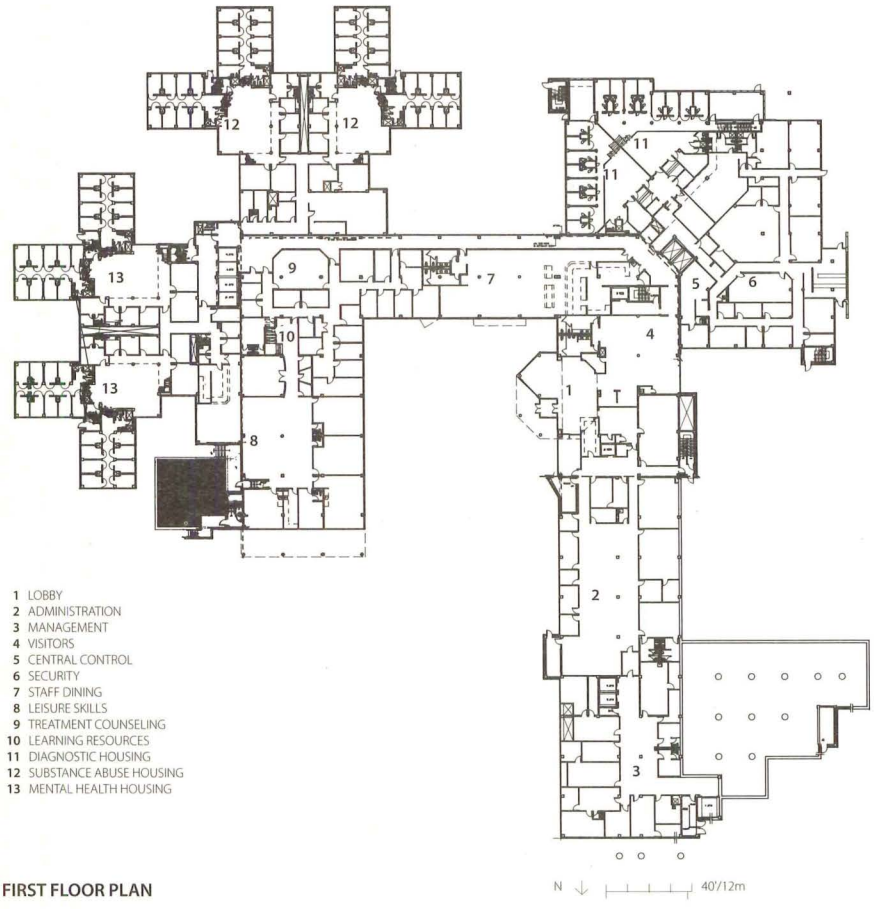
The author is the founding principal of Carter Goble Associates, Columbia, South Carolina, and has extensive planning experience with local, state, and federal prison systems in the U.S. and abroad.

The District Of Columbia Correctional Treatment Facility

Doug Brown

VIEW TOWARD ENTRANCE

Project: The District of Columbia Correctional Treatment Facility.
Architects: Silver & Ziskind Architects, New York (Paul Silver, *partner-in-charge;* Donald Currie, *director of design*, Joel E. Davidison, *project manager).*
Client: Department of Public Works, Washington, D.C. (Edith R. Fitzhugh, *project manager).*
Program: 856 bed correctional facility for the rehabilitation of inmates with a history of substance abuse and mental health problems.
Building area: (net/gross, sq. ft.) 330,000/495,000.
Cost: $141.00/SF
Major materials: Concrete columns, waffle slabs, precast façade, exterior ceramic tile, glass block, two-story aluminum and glass entrance.
Consultants: Jackson & Tull Engineers, structural; John J. Christie & Associates, mechanical/electrical; STV/Lyons, civil; Romano/Gatland, food service; Operational Security Systems, security systems; Office of William B. Kuhl, landscape.
CAD-developed? Yes

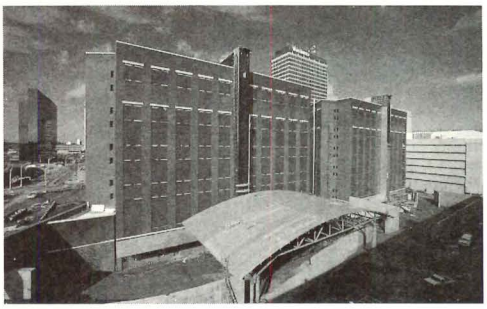


FIRST FLOOR PLAN

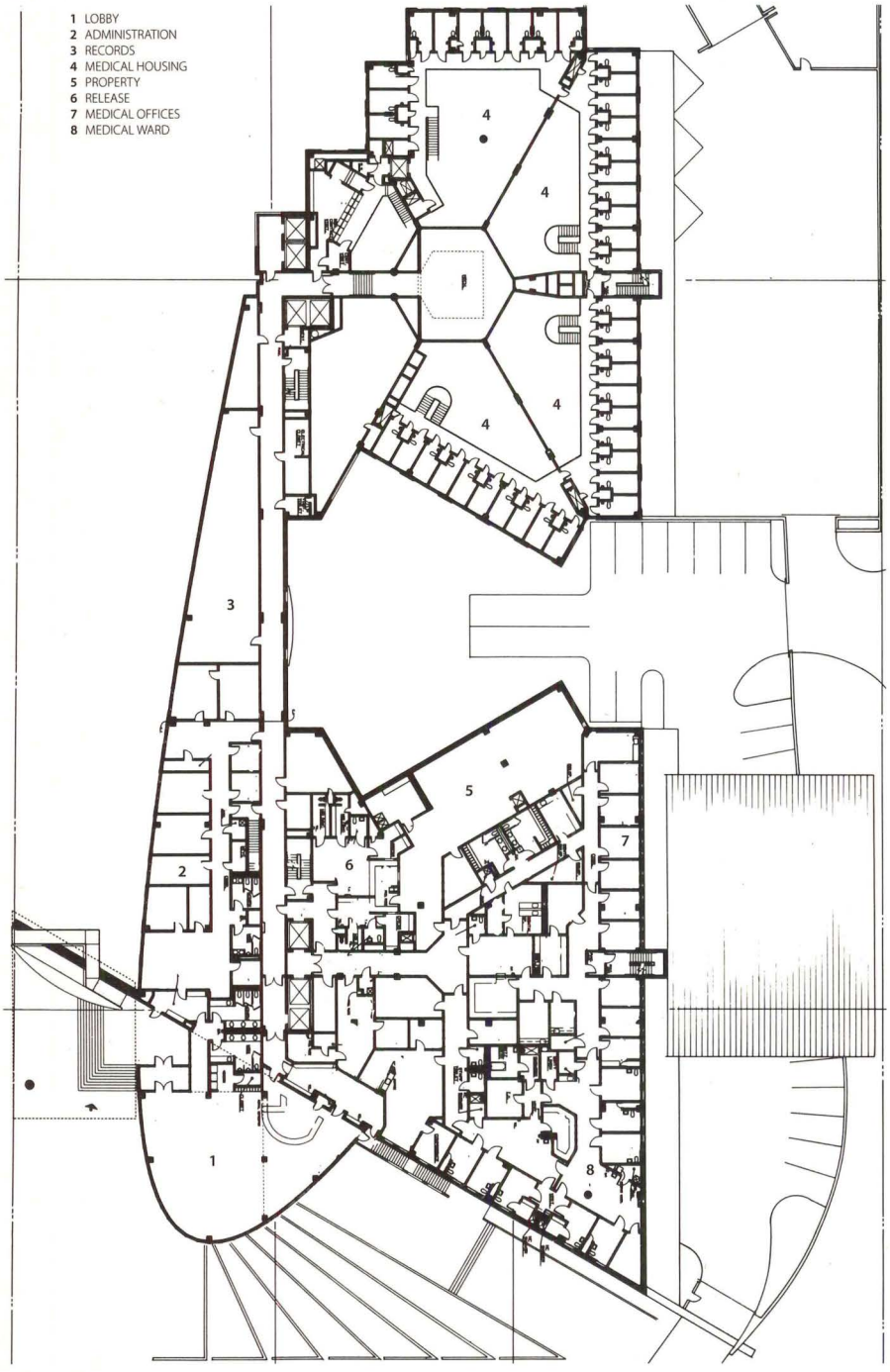
Architect's Statement: The major goal for the design of the first U.S. correctional treatment institution was the creative balance between the needs of security and the creating of a "normalized" environment. The design creates that "normalized" appearance by drawing from the positive features of the Washington urban environment and by having a scale and character appropriate to its surrounding neighborhood. The program separates the major housing functions into individual volumes connected by internal "streets" of support functions. The building reads as a "village" of forms.

The "normalized" design has resulted in housing units that maintain the residential separation of sleeping, eating, and relaxation functions. This is accomplished by joining program support functions as a series of events, utilizing color, graphics, light, and spatial surprise, which successfully replicate streets on the outside. Thus, a richness has been achieved by creating a texture to the building complex rather than depending on large budget materials.

Forsyth County Law Enforcement and Detention Center



REAR ELEVATION



MAIN FLOOR PLAN

Project: Forsyth County Law Enforcement and Detention Center Winston-Salem, North Carolina.
Architects: Rosser International Atlanta, Georgia (Larry Phillips, *designer director;* Kerry Mckerson, *project manager*) in association with Walter Robbs Callahan & Pierce, Architects, Winston-Salem, North Carolina.
Client: Department of Corrections for Forsyth County (Major Michael Schweitzer).
Program: An urban high-rise law enforcement and detention center having 736 individual, steel-module cells in a 12-story, two-tower configuration.
Building area: (gross square feet) 385,000.
Cost: $97per sq ft.
Major materials: reinforced concrete structure, CMU, metal cells, on brick and insulated metal panels, exterior.
Consultants: Sutton Kennerly & Association, structural; Castell Marks, Inc., cost estimating; Wink/Davis Equipment Co., food service; Hilliker Associates, laundry service.
CAD-developed? No.

Architect's Statement: This 10- to12-story high-rise jail located in downtown Winston-Salem provides 736 cells (272 double bunked) to accommodate 1,008 inmates, including all security classifications. Support services include food services, medical, laundry, warehouse, and receiving/release.

The design allows the majority of all services required by the inmates to take place in the housing unit; i.e., dayroom activities, recreation, food services, sick call, and visiting and commissary, thereby reducing requirements for inmate movement within the facility.

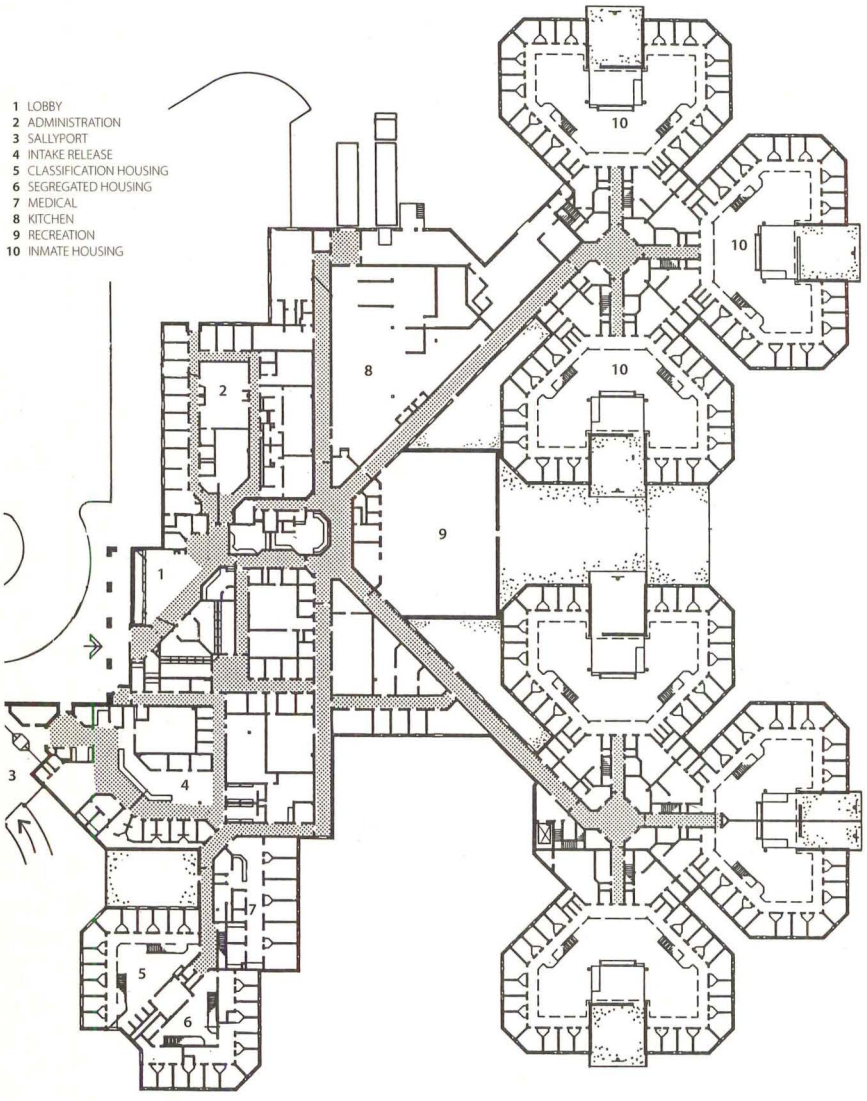
The facility consists of a combination of direct and indirect supervision, which is safer and more efficient than using either system alone. The housing areas are organized into two-level sections of cells around a dayroom where most activities will take place. A control room is in the center of each pod, manned by one officer; another officer will be stationed in each dayroom.

With the innovative application of prefabricated modular cell units, the detention center's construction cost was $97 per square foot, versus the County's budgeted amount of $110. This savings, coupled with the fast-track construction schedule, contributed to an overall savings of $3.3 million.

Cumberland County Jail

Jeff Stevenson

ENTRANCE



FIRST FLOOR PLAN

Project: Cumberland County Jail, Portland, Maine.
Architect: SMRT, Portland, Maine (Arthur P. Thompson, *principal-in-charge;* Philip F. Kaminsky, *project architect/manager*).
Client: Cumberland County Commissioners (Joseph Mazziotti, former Commissioner, Dan Boisot, Chairman).
Program: Provide a self-contained 352-inmate capacity direct supervision jail housing males and females of all levels of security and behavior classifications with medical beds, court facilities, contact and non-contact visiting, flexible program areas, and inmate industry space.
Building area: (net/gross, square feet) 111,800/142,000.
Cost: $19,900,000 ($140 per sq ft.).
Major materials: Brick, concrete masonry units, granite, steel piles, post-tensioned concrete slabs, ACT, MCT, epoxy coatings, gypsum wallboard, steel security windows, wood and steel doors.
Consultants: CRS, Inc. and Curtiss Pulitzer, corrections.
CAD-developed? Yes.

Architect's Statement: Inmates in this new 352-bed facility are managed under direct supervision. The design provides for direct contact between correctional officers and inmates. Access to television, telephone, commissary, and extra visits will be controlled, allowing the pod officer to reward good behavior. As inmates earn better ratings or classifications, they are also provided access to a more normalized living environment. The facility, which houses both men and women, is the first direct supervision jail in the state.

Each 48-bed pod is self-contained, with its own dining area, indoor and outdoor recreation areas, classrooms and workrooms, hygiene area, living spaces, and cells. All goods and services, with the exception of visitors, are brought to the pod, minimizing inmate movement throughout the facility. Access to natural light and view, the use of solid core wood doors, sound control, attention to privacy that does not compromise observability, and a layout that allows multiple simultaneous activities provide a more normalized environment.

Clear site lines within the pods encourage the correctional officer to move throughout the day-rooms, enhancing their interaction with the inmates. Each pod can be managed by one officer. The pods are grouped around cores containing laundry, administration and medical triage facilities.

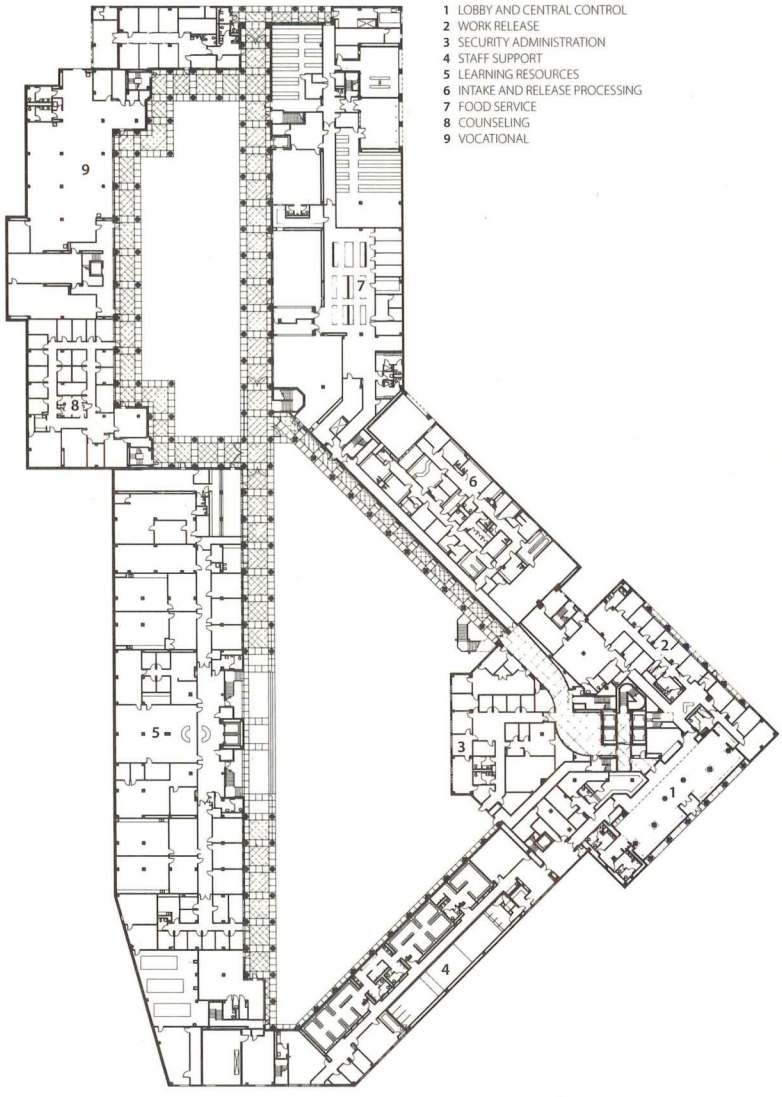
Suffolk County House of Correction

Ed Jacoby

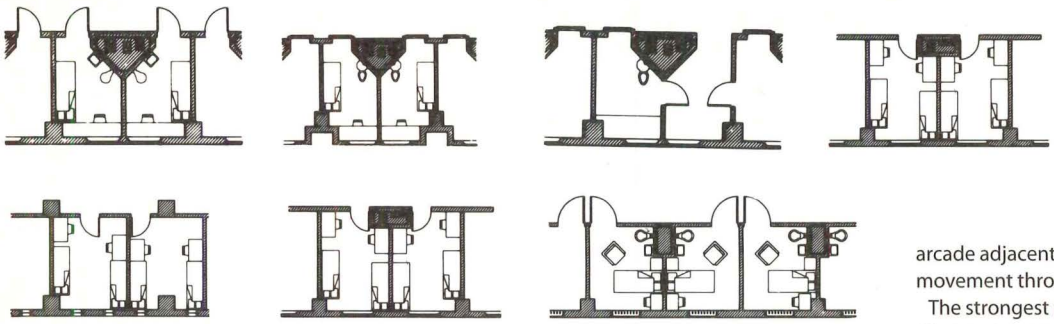
COURTYARD AND HOUSING TOWER

Project: Suffolk County House of Correction, Boston, Massachusetts.
Architect: The Stubbins Associates, Cambridge, Massachusetts (W. Easley Hamner, *principal-in-charge;* C. Ronald Ostberg, *project designer;* Roy A. Pedersen, *project architect;* Peter Blewett, *technical coordinator;* Patrick McCarthy, *production coordinator;* Judy Bennett, Rico Cedro, David Cylkowski, Cynthia Davis, Bent Huld, Desmond McAuley, Charles Nutter, David Paolella, Robert Proulx, Steve Sivak, Daniel Thomas, *project team;* Pat DiPaolo, Karen Modzelweski, Philip T. Seibert, Sarah Springer, *interior design;* Michael Gilligan, Charles Hayter, *landscape design*).
Client: Division of Capital Planning and Operations, Commonwealth of Massachusetts
Program: To design a new prison facility to replace the aging 90-year-old Deer Island House of Correction through an invited design-build competition developed by the Commonwealth of Massachusetts Division of Capital Planning and Operations.
Building area: 420,000 sq ft.
Cost: $110-million (construction cost).
Major materials: The project was constructed with precast concrete as the primary exterior material with an exposed, rich red granite aggregate. Integral to the building's design, precast concrete was used for both architectural and struction elements. At the base of the multi building complex is a heavily rusticated wall designed with standard precast panels, which also encloses the ballfield and provides physical security as well as the image of safety the public expects.
Consultants: Hyman-Stubbins, Inc., design build team; The George Hyman Construction Company, general contractor; LeMessurier Consultants, structural; Syska & Hennessy, mechanical/electrical; Bryant Associates, Inc., civil; Haley & Aldrich, Inc., geotechnical; James H. Webster, Architect, correctional facilities planner; Buford Goff & Associates, security; Aram J. Pothier Group, Inc., food/laundry service; Cerami Associates, acoustical.
CAD-developed? Yes.

Architect's Statement: Critical to the design was the maximizing of exterior usable area. The design solution attempts to group similar housing groups and link them with support functions. The result is two large courtyards and an outdoor exercise field. The varied building masses also establish a diversity within the campus. The courtyards define security and management zones for control. A covered



FIRST FLOOR PLAN



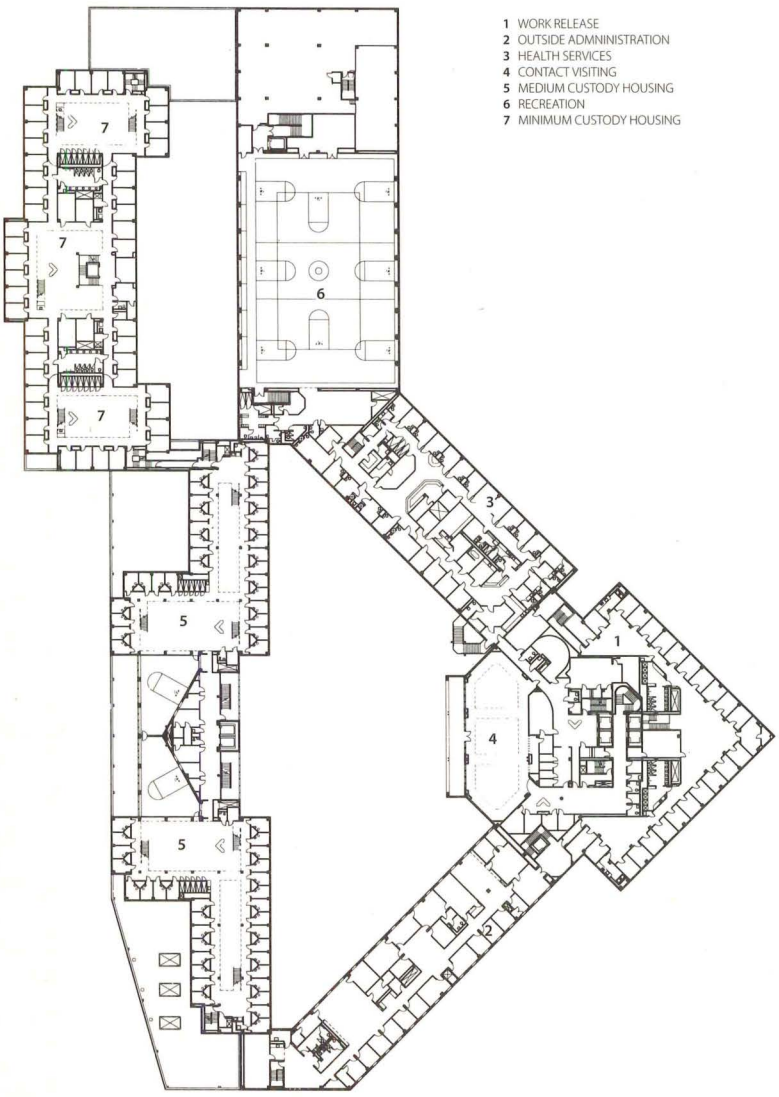
DIVERSITY OF INMATE HOUSING UNITS

arcade adjacent to the courtyards permits easy movement through the facilities in all seasons.

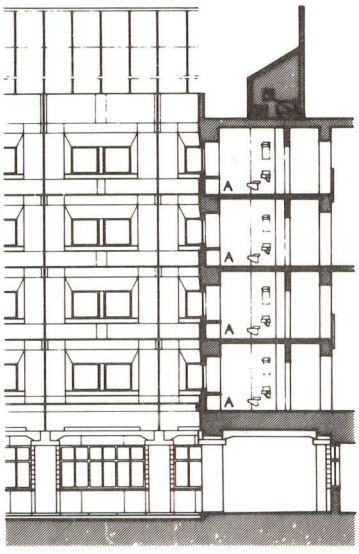
The strongest mass on the 7.68-acre site is an 11-story tower containing the smaller unique population groups. The end elements are individual rooms with the center containing larger group activities spaces, which allow maximum light and views. The base of the tower is the public entrance.

The larger populations, medium and minimum security, are massed along the north edge of the site and are integrated into the perimeter of the institution. The cells are 20 feet above grade. The windows are treated as special design opportunities and are grouped into pairs horizontally and vertically to create a public scale appropriate to the institution and to the views of the adjacent area. There are no cell units whose windows look into other cells. Along this same frontage, the "traditional prison wall" image is developed along the base of the building. A heavily rusticated wall will recall an image of security and safety, which the, public expects. This same wall continues around the outdoor playing field and vehicle service yard. The remaining lower masses group together administrative/staff functions, the dining/kitchen/gymnasium operations, and the clinic/booking processes.

This project was developed through a design-build competition for the Commonwealth of Massachusetts. Construction began April 1, 1989 and was completed for occupancy in December, 1991.



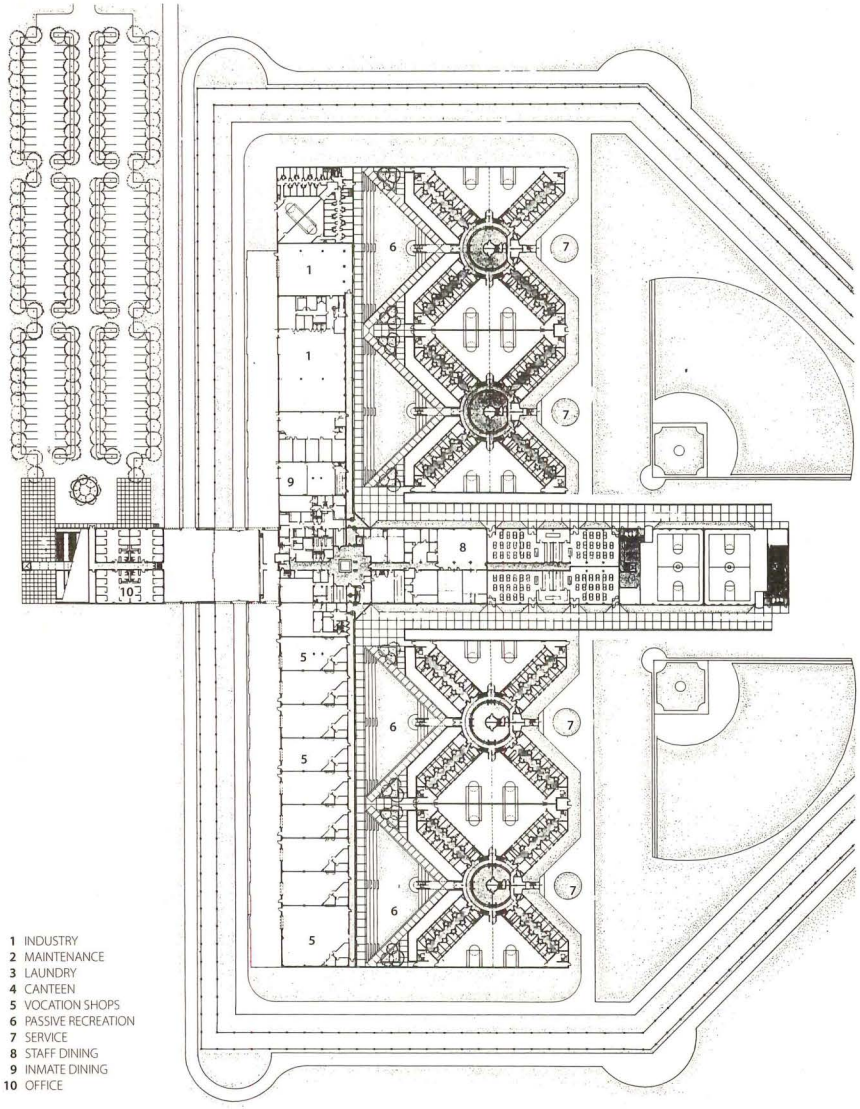
SECOND FLOOR PLAN



SECTION THROUGH CELLS

Eastern Kentucky Correctional Complex

HOUSING UNITS



FLOOR PLAN

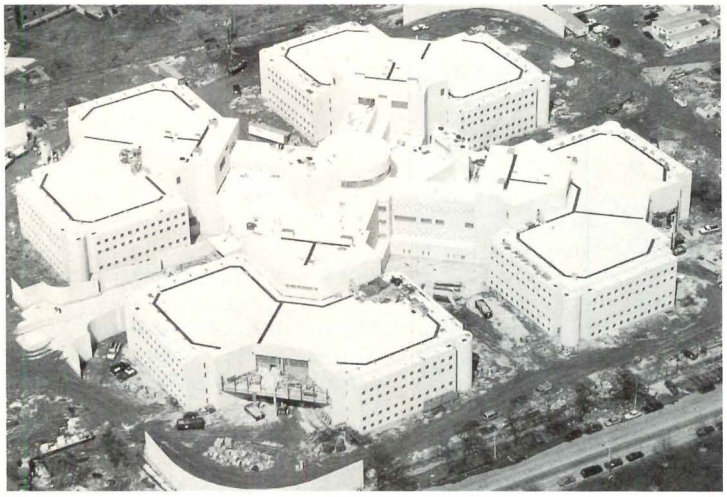
Project: Eastern Kentucky Correctional Complex, West Liberty, Kentucky
Architect: DMJM Architects and Engineers (Peter Krasnow, *design director;* with Jim Lambros, *senior designer;* Ruben Caro, *justice specialist*) with GRW Engineers (Ron Gilkerson, *principal engineer*) Joint Venture.
Client: Commonwealth of Kentucky, Finance Cabinet, Department for Facilities Management, Frankfort, Kentucky.
Program: Two 512-cell medium security facilities (1,024 total), a 50-cell minimum security unit, and support facilities for indoor recreation, industrial, vocational, and educational activities. The building site is limited to a buildable area of less than 40 acres, previously strip mined.
Building area: Phase I: 319,067 (gross square feet); Phase II: 240,969 (gross square feet); Total: 560,036 (gross square feet).
Cost: Phase I: $37.5 million; Phase II: $25.5 million; Total: $63 million.
Major materials: Reinforced concrete housing structure; steel and steel joist support building structure. EIFS over reinforced concrete block exterior.
Consultants: Romano Gatland, food service; Buford Goff & Associates, security; Arnis Inc., cost.
CAD-developed? No.

Architect's Statement: The challenge was to design two distinct, 500-bed medium security facilities, with shared support, on a rugged 40-acre strip coal mine in the foothills of the Appalachians.

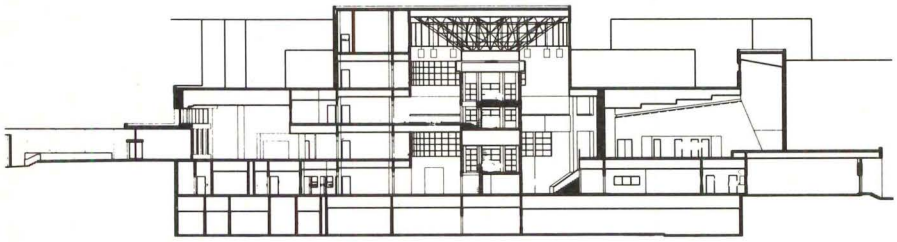
The compact design, with a repetitive cruciform scheme, consists of two-story housing units, each with mezzanine, subdivided into 128-bed unit management/direct supervision groups, and a one- to two-story support core.

Combined with thoughtful attention to color and details, the buildings form a small-scale campus with views of surrounding foothills that provide a rich and varied environment for the inmates, staff, and public.

Cook County Maximum Security Facility

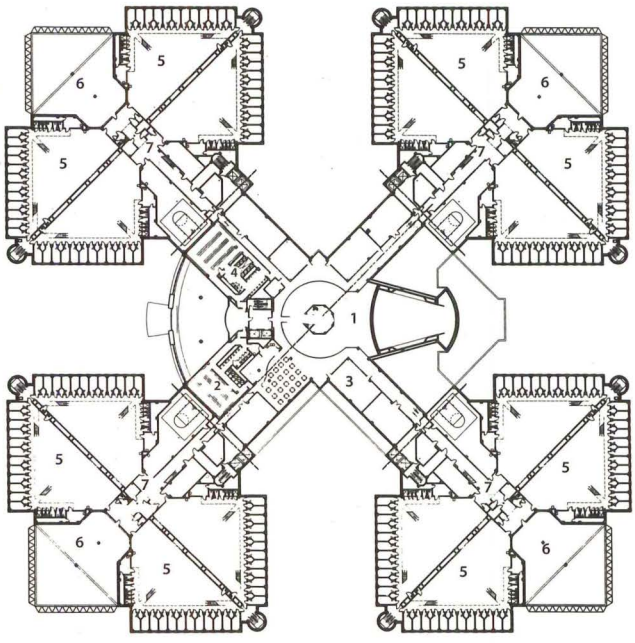


AERIAL VIEW



SECTION THROUGH CORE

1 MASTER CONTROL
2 WOMEN'S LOCKERS
3 TRAINING
4 MEN'S LOCKERS
5 DAYROOM
6 YARD
7 POD CONTROL



FLOOR PLAN

Project: Cook County Department of Corrections Maximum Security Facility, Chicago.
Architect: Roula Associates Architects, Chtd. Chicago.
Client: Cook County Board of Capital Development.
Program: Sixteen-hundred-bed, male, maximum security facility.
Building Area: 685,000 gross sq. ft. on 17.5 acres, 530,000 net sq. ft.
Cost: $92 million construction cost ($134/sq. ft.).
Major materials: Precast concrete skin on steel framing, CMU interior, epoxy floor finishes.
Consultants: Knight Architects Engineers Planners, Inc., engineering and project management; Phillips Swager Associates, security.
CAD-developed? Yes.

Architect's Statement: The Cook County Department of Corrections, Division XI, Maximum Security Facility is to house approximately 1,600 inmates in 800 cells. The jail facility is unique in that it has been designed to function as four separate 400-bed mini-jail "pods," with a central "core" that is the nerve center of the facility. It provides centralized activities to be shared by all four "pods" as well as a central control system that monitors inmate and non-inmate activities without penetrating the inmate security areas.

This prototype facility is a modular-podular design; it lends itself to decentralization of routine, daily inmate activities and efficiently utilizes all scheduled, centralized inmate functions, resulting in reducing staffing.

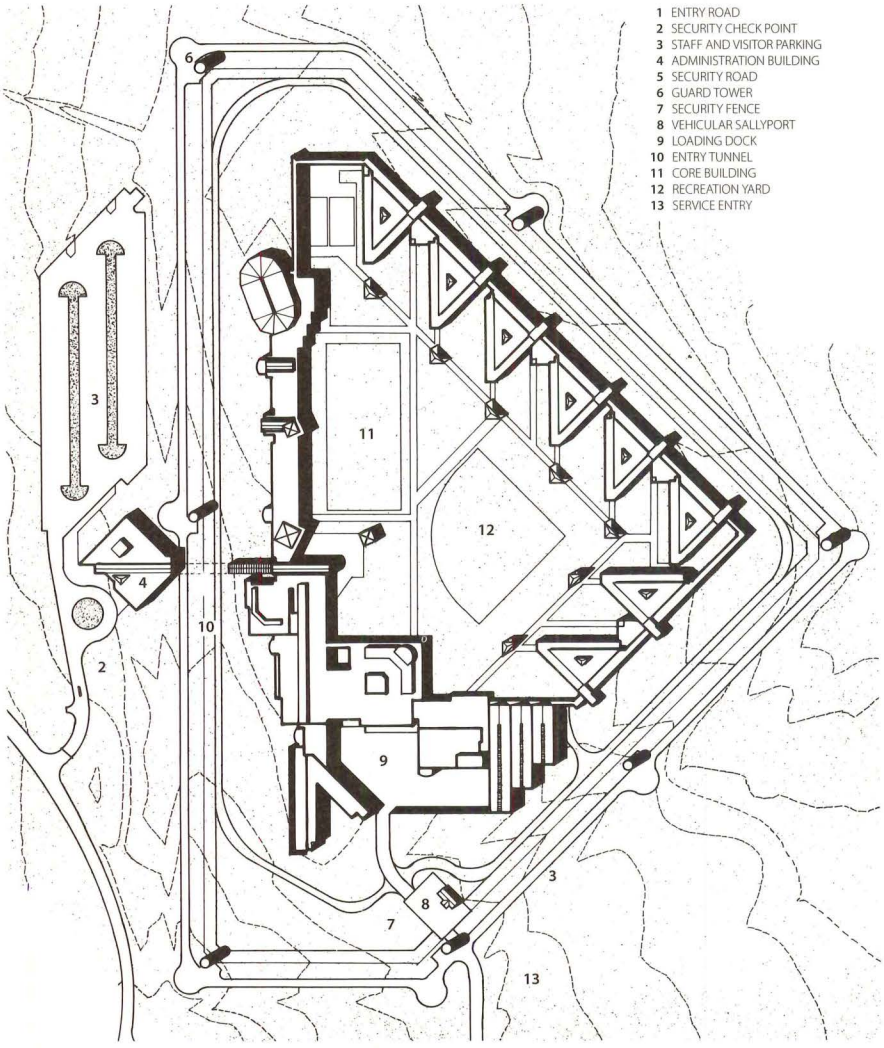
Each mini-jail "pod" consists of a two-level, two-tier complex. Each tier has four housing pod/dayrooms of 48 inmates each and a control tier. Tier one and two both function as decentralized areas, with activities that relate to the housing pods. Each pod at the tier level has access to a separate visitors wing, which allows secure, authorized visitation.

The "core" houses all centralized services for all users: the inmate, the public, and the staff. Their activities are separated by floors so that they do not interfere with each other.

U.S. Penitentiary High Security Prison

Andrew Kramer Photography

CAMPUS OVERVIEW



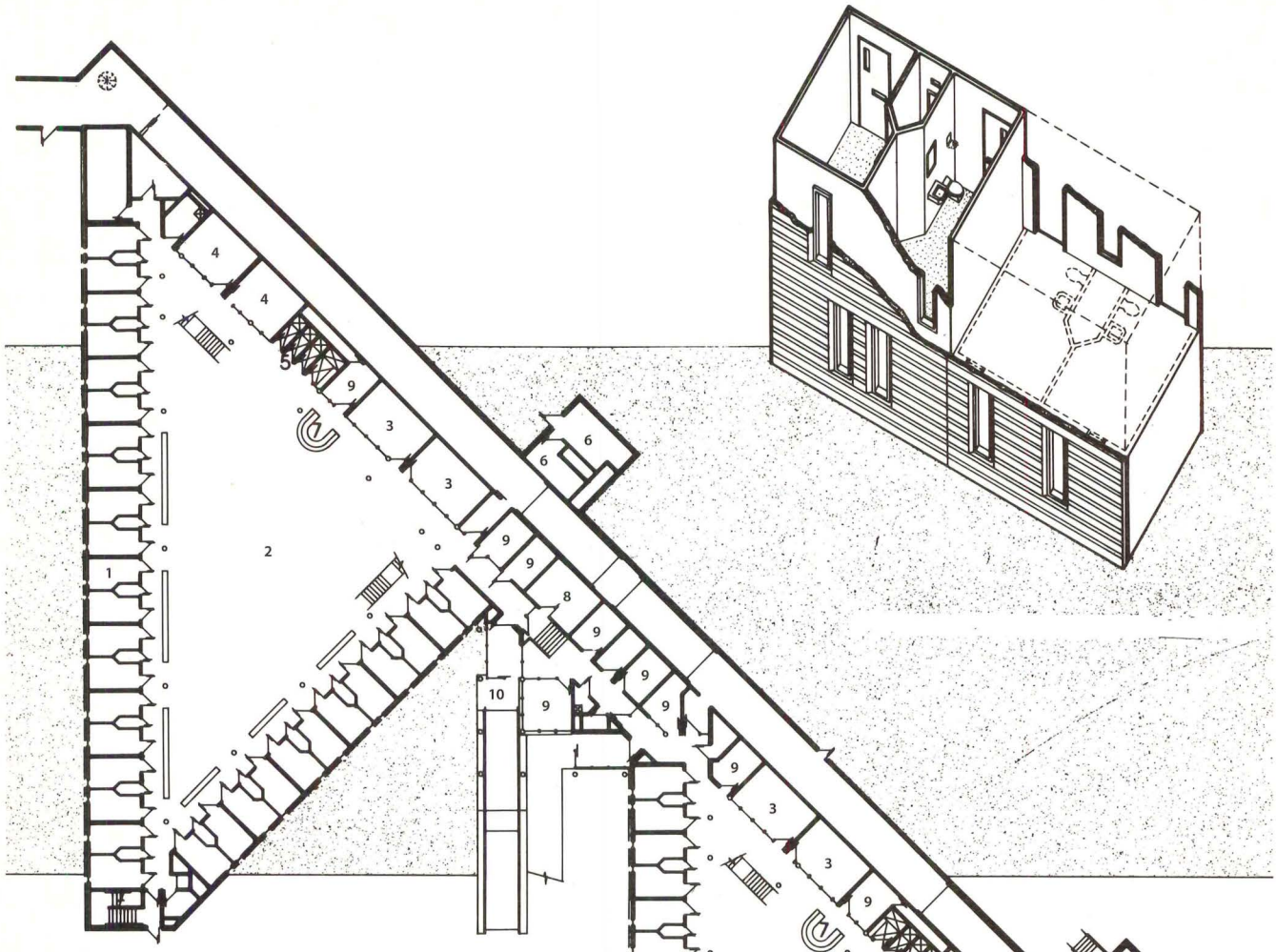
SITE PLAN

Project: U.S. Penitentiary High Security Prison, Florence, Colorado.
Architect: LKA Partners/Lescher & Mahoney/DLR Group Joint Venture.
Client: U.S. Department of Justice, Federal Bureau of Prisons.
Program: High security Federal penitentiary for 586 inmates.
Building area: 390,020 (gross sq. ft.).
Cost: $50,61 8,000.
Major materials: Pre-cast concrete, brick veneer.
Consultants: Lescher and Mahoney/DLR Group mechanical/electrical/security; CTL Thompson, soils; EMK Consultants, survey; Martin/Martin, civil; William Caruso & Associates, food service; Loc-Tec, security hardware.
CAD-developed? Architectural, structural, mechanical, and electrical plans.

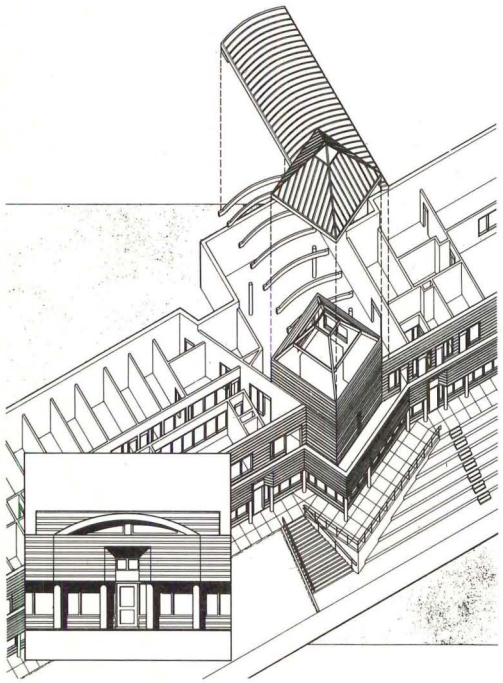
Architect's Statement: This direct supervision, high-security facility includes visitation, administration, health services, educational program areas, and a chapel, gymnasium, commissary, laundry, and barbershop. Inmate housing capacity is 586 beds, approximately 15 percent of which are special management units.

Security is a state-of-the-art electronic system. Control activities are administered at one control station. Additional security is provided by a perimeter fence, seven guard towers, and a patrol road. Inmate cell windows do not look outside of the exterior building line. All exterior recreation facilities for inmates and all inmate circulation is contained within the building perimeter.

The complex is designed as a high-security penitentiary. Materials used in the building are tough, resistant to damage, and easily maintainable. However, interior spaces are designed to be as "normal" as possible and to create an interesting and humane environment. The building exteriors are designed to enhance the sloping, rugged terrain surrounding the facility.



TYPICAL HOUSING UNIT



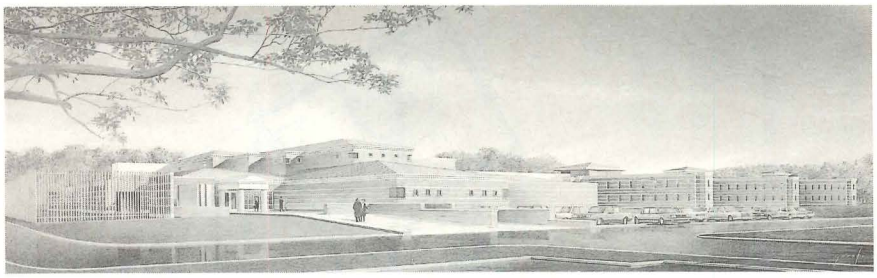
CORE BUILDING AXONOMETRIC

N

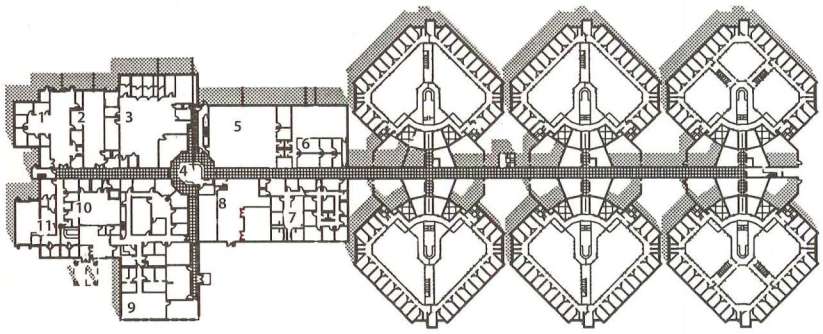
40'/12m

1 INMATE CELL
2 MULTI-PURPOSE/DAY ROOM
3 MULTI-USE ROOM
4 TV ROOM
5 SHOWERS
6 MECHANICAL/ELECTRICAL
7 CONTROL DESK
8 SUPPORT SPACE
9 OFFICES
10 HOUSING UNIT ENTRY

Special Management Facility



RENDERING

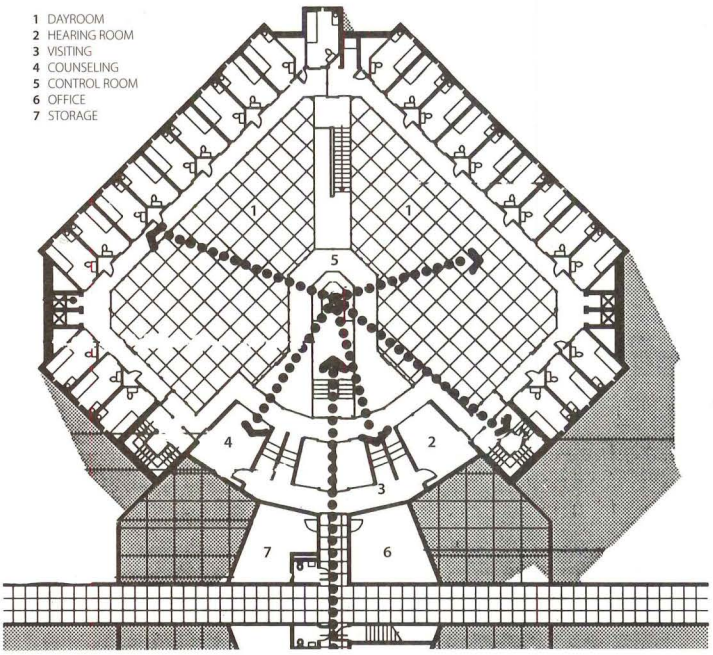


FIRST FLOOR PLAN

N ← 40'/12m

1 MAINTENANCE
2 COMMISSARY
3 FOOD SERVICES
4 CENTRAL CONTROL
5 GYM
6 INMATE PROGRAMS
7 MEDICAL
8 MECHANICAL
9 MANAGEMENT
10 VISITORS
11 INTAKE AND PROCESSING

1 DAYROOM
2 HEARING ROOM
3 VISITING
4 COUNSELING
5 CONTROL ROOM
6 OFFICE
7 STORAGE



TYPICAL HOUSING UNIT

N ← 20'/6m

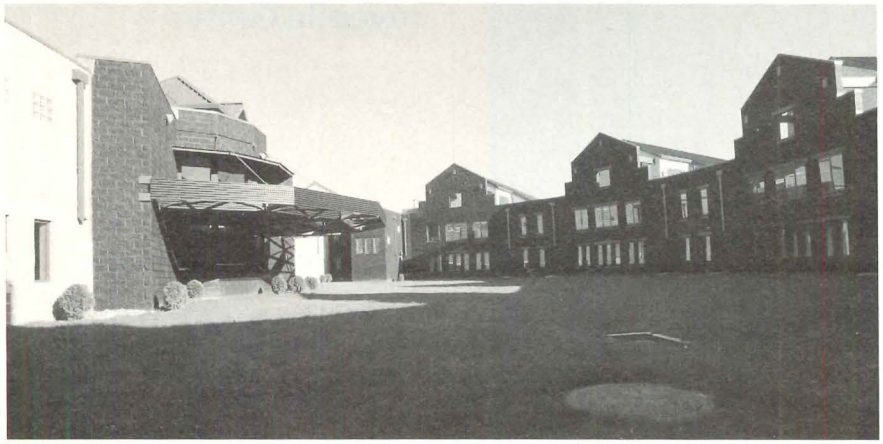
Project: Special Management Facility, Somers, Connecticut.
Architect: Helmuth, Obata & Kassabaum, New York (William A. Long, Jr., *principal/project manager;* Joseph V. Bahan, *project architect/designer;* Michael DelSordo, *construction administration;* Gregory R. Smith, Steven Kennedy, John F. McGuire, and William Blackwell, *project architects;* Andre Kneel, *team member*).
Client: State of Connecticut, Department of Public Works.
Program: The program called for a 300-cell "Super Max" administrative/punitive segregation facility. The facility is situated on approximately 670 acres of land owned by the State of Connecticut.
Building area: (net/gross, sq ft) 111,432/173,970.
Cost: $240 per gross square foot; construction complete in 1994.
Major materials: Masonry veneer with masonry backup, precast concrete cells, and standing-seam metal roof.
Consultants: Westcon & Mapes, Inc., structural, mechanical and electrical; Systech Group, Inc., security; Romano-Gatland, Inc., food service; Scharf-Godfrey, Inc., cost; Correctional Services Group, Inc., programming.
CAD-developed? Yes, 85%.

Architect's Statement: The facility is a new freestanding, 300-cell administrative and punitive segregation facility intended to house the most problematic, violent inmates until they can be safely retumed to general confinement correctional facilities. An essential client requirement was the capability of using only indirect supervision for all inmate housing areas and the minimizing of the amount of inmate movement within the facility as a whole.

The housing units are developed in three steps, from the most restrictive to the least restrictive, with two 50-cell housing pods for each step. Each housing pod consists of two tiers, with associated dayroom, outdoor recreation, decentralized visiting, and other support spaces. The primary design criteria were to provide visual supervision of all cell doors and inmate-occupied spaces, and control of all movement within the housing pod from the control room.

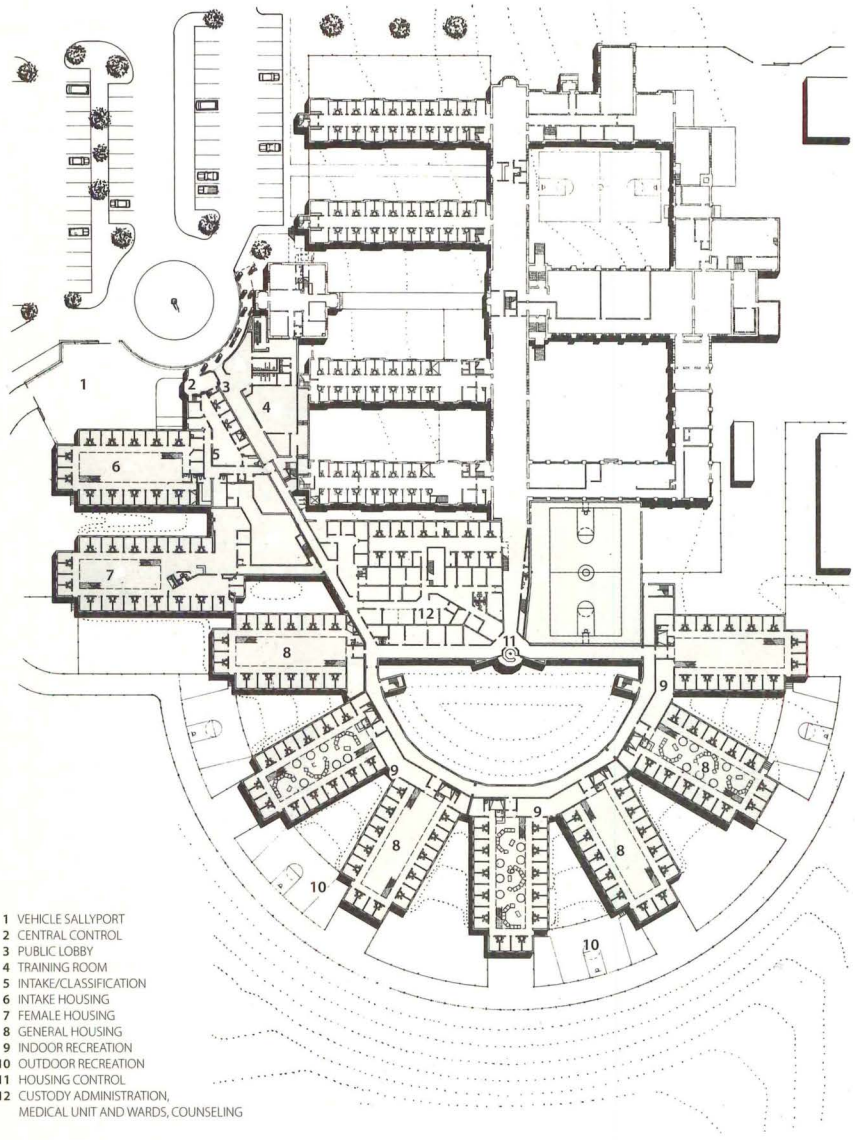
A two-level central circulation spine is used to organize the configuration of the overall facility. Inmate circulation is limited to escorted movement on the first floor only. The second floor permits circulation of visitors, attorneys, and facility staff to and from other areas of the facility without inmate contact.

Berks County Prison Expansion



Jon Beckett

VIEW OF COURTYARD



FIRST FLOOR PLAN

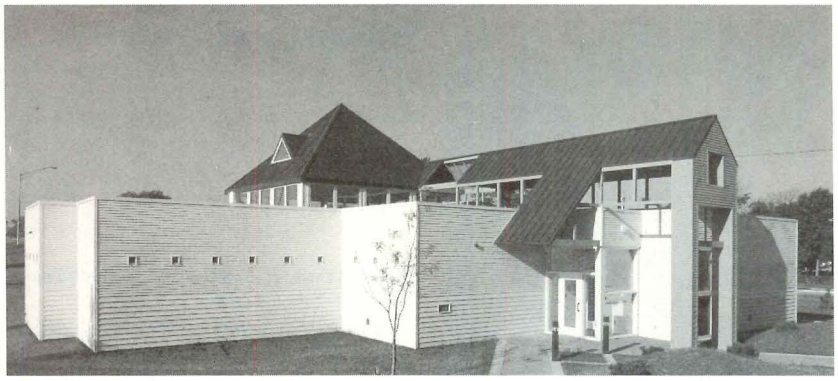
Project: Expansion of the Berks County Prison, Leesport, Pennsylvania.
Architect: USA Architects, Planners & Interior Designers, P.A., Somerville, New Jersey, in joint venture with the STV Group/Weber Group, Pottstown/Reading, Pennsylvania (Paul Swartz, Armand Christopher, Mark Coan, Sandra Fritz, Francisco Melendez, William Miller, Linda Balto, Louis Rodolico).
Client: County of Berks, Reading, Pennsylvania (Commissioners Glen Reber, Ernie Miller, and Anthony Carabello, and Warden George Wagner).
Program: The expansion of the Berks County Prison included the addition of 440 cells and the renovation of 280 cells, to increase the rated capacity. Expansion also included the addition of a new medical/dental clinic, mental health unit, counseling center, multi purpose room, intake/classification center, and staff support comprising locker rooms and a training center.
Building area: (gross/net square feet) 115,000/99,375 new construction; 60,000/42,595 renovations.
Cost: $25,000,000
Major materials: Concrete masonry units, precast concrete plank, metal roofing, security hollow metal, and structural steel.
Consultants: All within the joint venture, USA provided architectural services and STV provided engineering.
CAD-developed? Primarily.

Architect's Statement: According to the client, Warden George Wagner, the expanded new institution's objective was to depart from a "timeworn physical structure that dictated the use of a linear supervision method," and to "replace internal physical boundaries with behavioral boundaries, while remaining a secure correctional facility."

The primary design goal was to convert a 65-year-old linear facility to a new direct supervision institution, while increasing the inmate population from 288 to 720. The addition's radial design allows Housing Control to directly observe inmate and visitor movement across a semi circular courtyard, 90 feet in diameter. The courtyard's sunscreen alleviates glare, and its walls are painted black to absorb direct sunlight.

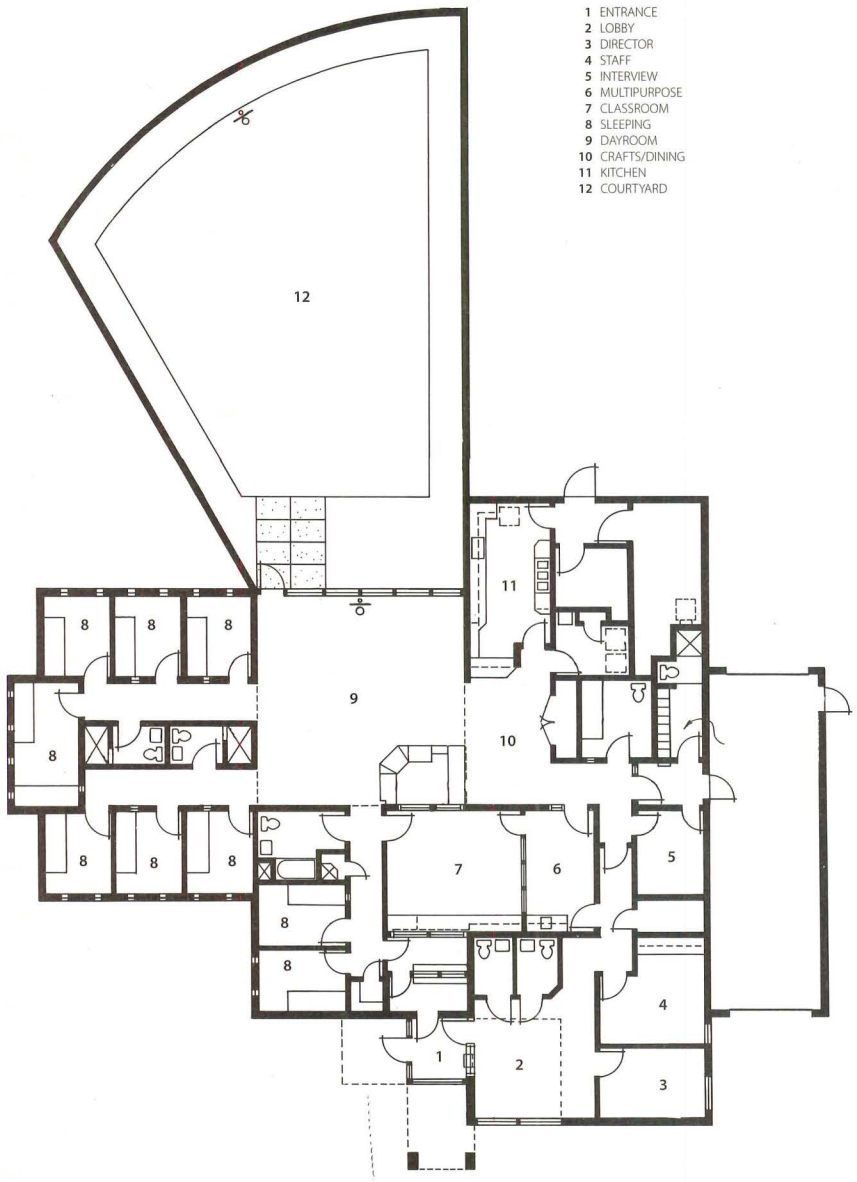
The existing prison is historically important and its expansion required approval by the Pennsylvania Historic and Museum Committee, which found the addition "very sensitive to the design, scale, and materials of the historic prison building."

Southwest Iowa Juvenile Center



Tom Kessler

VIEW OF ENTRANCE FROM NORTH



FLOOR PLAN

Project: Southwest Iowa Juvenile Center, Council Bluffs.
Architect: Krhounek Povondra Architects, Omaha, Nebraska (Albert Povondra, *principal designer;* J. Michael West, *project architect*).
Client: 28E Board, 4th Judicial District (Phyllis Mulkey, director).
Program: An association of nine county governments was formed to develop a regional juvenile detention facility that would provide a safe, secure, and humane environment for incarcerated youths. The client required a 10-bed facility that could be easily expanded, with a non institutional image that would fit into the residential neighborhood.

Efficient deployment of staff, visual supervision of the youths, and an emphasis on daylighting the interior were important requirements. Outdoor and indoor, active and passive recreation were also to be incorporated. The client association required the facility to be buffered from an adjacent public parking lot as well as from the surrounding residential properties. The secure spaces were to be oriented away from public access and scrutiny; however the building's entry had to be clearly defined and readily accessible.
Building area: (net/gross, square feet) 3,510/4,500.
Cost: $597,000 (completed 1990).
Major materials: Concrete block, steel joists and metal deck, vinyl siding, metal and rubber roof, painted block with metal frames.
Consultants: TWC Engineering, mechanical; Pinhero Engineering, electrical; Thompson, Dreessen & Dorner, structural; Dossie Mitchell, security.
CAD-developed? Yes.

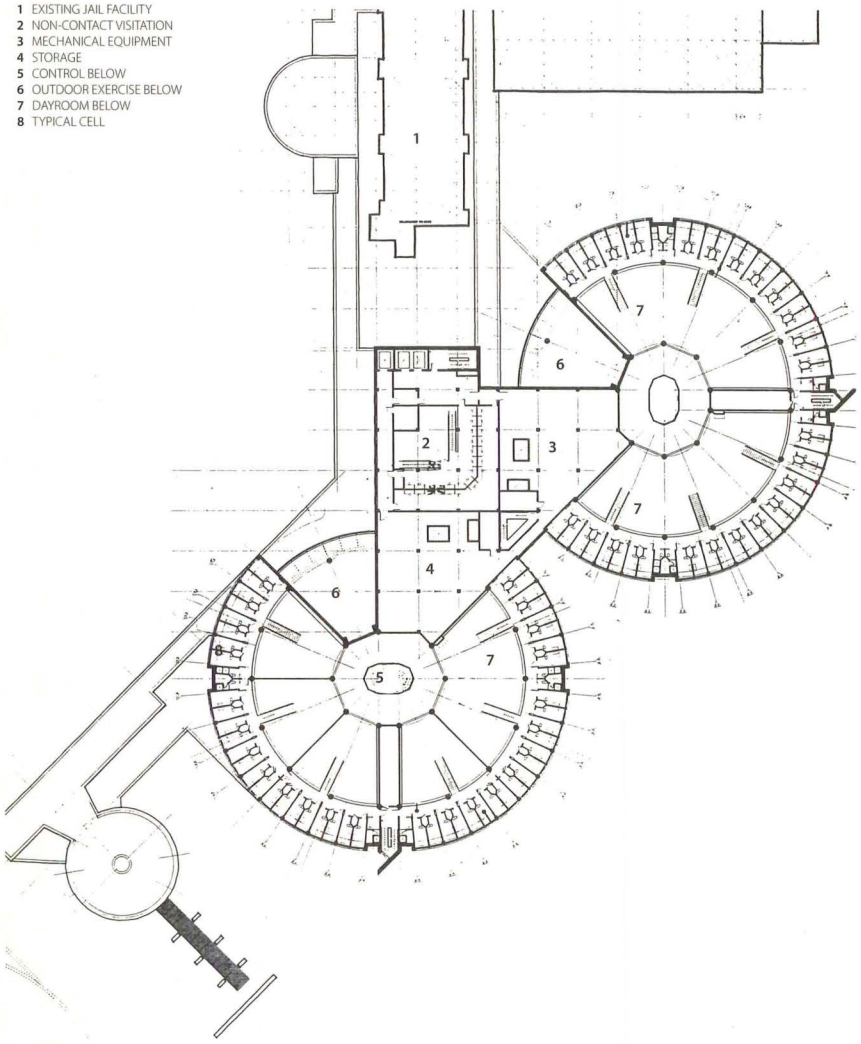
Architect's Statement: The facility's plan (expandable to the east) is dominated by the dayroom, a multi use area designed for active and passive recreation that contains an elevated staff control post strategically placed for observation. The two-story space features clerestory windows on all sides and two triangular dormer windows. A glazed south wall opens to the landscaped courtyard. The extensive use of daylighting contributes to a normalized living environment for juvenile detainees.

The exterior walls are clad in maintenance-free vinyl siding to harmonize with the surrounding structures. Landscaping and earth berms were utilized to buffer the facility from the adjoining parking lot and residences. The project won a 1991 Honor Award for Design Excellence from the Nebraska Society of Architects.

Kent County Correctional Facility

Glen Calvin Moon

VIEW OF EXPANSION FROM NORTH

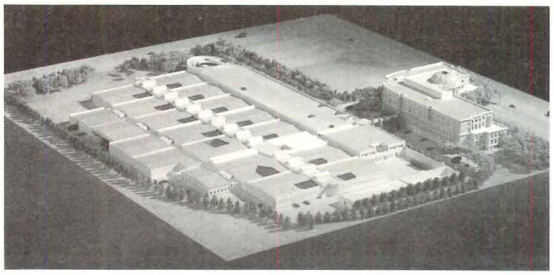


SECOND FLOOR MEZZANINE PLAN

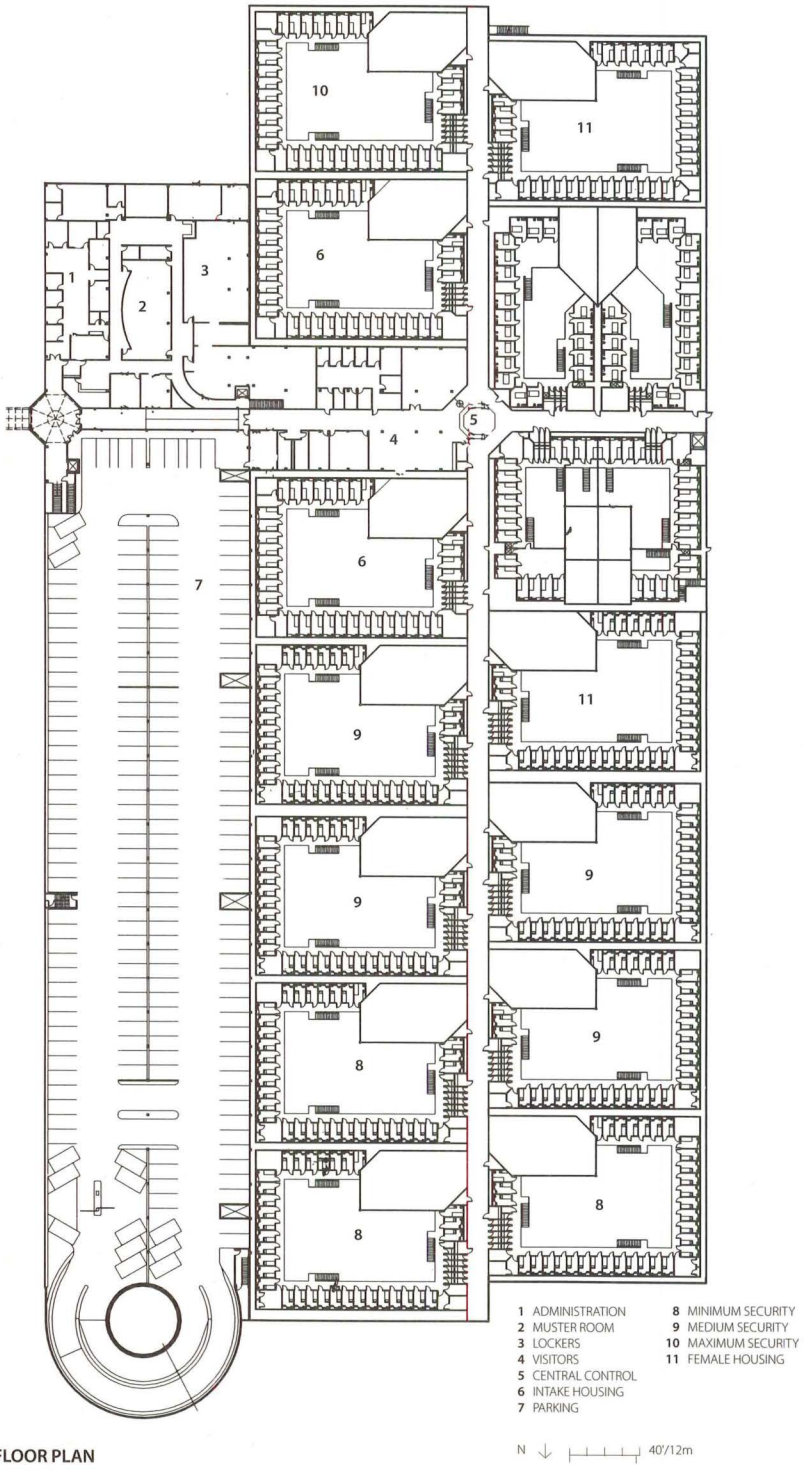
Project: Kent County Correctional Facility Addition and Renovation, Grand Rapids, Michigan.
Architect: Henningson, Durham & Richardson, Inc., Dallas, Texas (Gerry Genrich, Sharon Schmitz, *architects*; Bernard Bortnick, *design architect*; Ahmad Soueid, Roger Stewart, *programmers*; Pamela Caubarreaux, *interior designer*; Steve Chandler, Wilma Dohanich, *mechanical engineers*; Steve Sedlacek, *plumbing engineer*; Charles Hyman, *electrical engineer electronic security*; Vince Ellwood, *landscape architecture/site work*; Cliff Isom, *physical security*; Teresa Dellies, *structural EIT*; Steve Punch, *structural engineer*).
Associate Architects: Neumann/Smith & Associates, Southfield, Michigan (Kenneth Neumann, *design architect*; Patrick Macoska, Richard Mysliwiec, *architects*). The Design Forum, Grand Rapids, Michigan (Neale Baumann, Bill Skallos, *architects*).
Client: Kent County Building Authority (James Leach, County Architect).
Program: The addition contains 480 single cells in a pod arrangement that affords direct and indirect supervision. The existing jail was renovated to upgrade support services and meet a 1,200-inmate capacity in the future. Support services for the entire facility include food services, laundry, medical, visitor processing, staff services, training, intake/transfer/release processing, religion, education, recreation, and central plant.
Building area: (gross sq ft) 51,961 renovated area; 276,677 addition.
Cost: $105.27 per gross sq ft. (1993).
Major materials: Brick and concrete masonry units, concrete, detention glazing.
Consultants: Parametrix, Inc., cost estimating; Foodesign Associates, Inc., food service.
CAD-developed? Yes.

Architect's Statement: The project team's primary goal was to develop a design that minimizes inmate movement to services and enhances the resident's out-of-cell time. New construction included two 480-single cell housing towers with individuals cells clustered around a common dayroom. Each housing pod comprises 48-bed management units with an enclosed control station and pod support spaces. The pod enables the pairing of two 48-bed housing units, providing several opportunities for efficient use of staff. Likewise, an aggressive programming and conceptual effort led to a renovation design that enables fewer staff to supervise more inmates, with construction cost-savings of $13 million.

King County Regional Justice Facility



MODEL



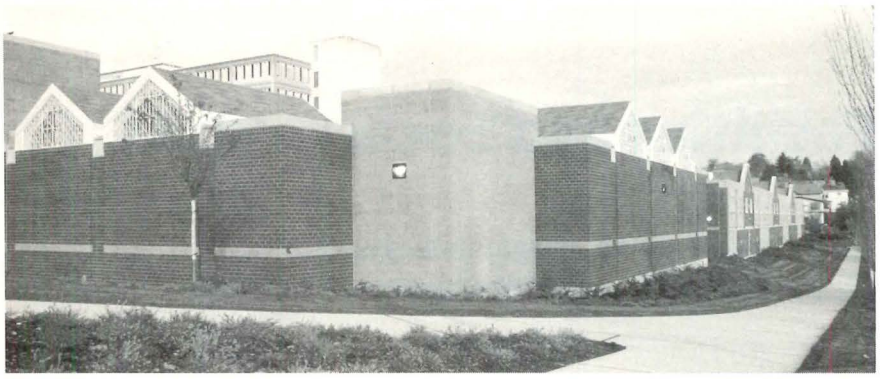
FIRST FLOOR PLAN

Project: King County Regional Justice Facility, Kent, Washington
Architect: TRA Architects, Seattle, WA in association with Hellmuth, Obata & Kassabaum (HOK), San Francisco, CA (Jerry Ernst, *project principal;* Bill Valentine, *project manager;* Clifford Ham, *project manager;* Alan Bright, *project designer;* Chuck Oraftik, *justice planner.)*
Client: King County.
Program: New justice complex includes 23 courtrooms, 896 detention beds, central plant, and a 700-car parking facility.
Building area: (net/gross square feet) 355,500/572,000.
Cost: $ 88,200,000.
Major materials: Limestone, bricks, precast concrete.
Consultants: TRA, mechanical, electrical, landscape; HOK, security electronics/ communications; Skilling Ward Magnusson Barkshire, structural; Summit Technologies, civil; and Hong West, geotechnical.
CAD-developed? Yes.

Architect's Statement: The heart of a modest suburban community is the site for this huge Detention and Courts complex. The overall design evolved from four primary objectives: 1) visually integrate a 1,280 cell (Phase II) detention center into a quiet close-knit neighborhood; 2) create an architectural focus and anchor for redevelopment of the adjacent business district; 3) advance the state of the art in direct-supervision detention; and 4) successfully reconcile the project needs with very limited financial resources.

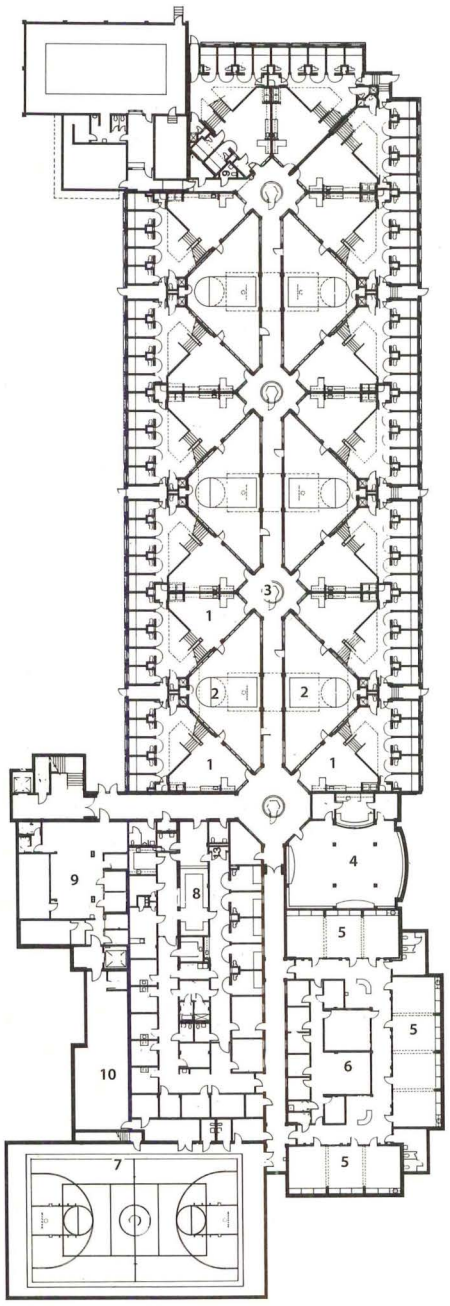
This project illustrates one of the most recent developments in direct-supervision design – the "Borrowed Light" concept. In past detention projects all cells were required to have small slit windows to the outside, while dayrooms had little, if any, daylight. Using today's direct-supervision approach, most inmates spent virtually all of the daylight hours in the dayroom and were in their cells only during the night hours. The "Borrowed Light" approach provides a daylight bonanza in the dayrooms (not the cells) where inmates and staff can obtain maximum benefit. On this project, housing modules have large, individual, secure exercise yards, which provide each dayroom with 1,400 sq ft of south-facing, inexpensive (non-secure) windows. This, in turn, floods the dayroom with sunlight and creates a barrier-free indoor/outdoor space. Cells have no windows directly to the outside, but "borrow" light from the dayroom via a 16 sq.ft. vision panel in each cell.

King County Youth Services Detention Facility



James Van Gundy

VIEW ALONG SOUTH ELEVATION



1 DAY ROOM/SLEEPING ROOM
2 COURTYARD
3 CONTROL STATIONS
4 LIBRARY
5 CLASSROOMS
6 OFFICES
7 GYMNASIUM
8 HEALTH SERVICES
9 KITCHEN
10 STORAGE

N ← 40'/12m

LOWER FLOOR PLAN

Project: King County Youth Services Detention Facility, Seattle, Washington.
Architect: INTEGRUS Architecture, Seattle WA (Kirklund Wise, *design principal;* Larry Hurlbert, *project manager;* Mark Miller, *project architect;* Don Stamp, Miranda Newbauer, *design team;* Patrick Sullivan & Associates, Claremont, CA, *design provocateur).*
Client: King County Department of Youth Services, Seattle, WA (Dick Carlson).
Program: This 150-bed direct-supervision facility emphasizes natural daylight in an active, safe, and secure interior environment. The two-level structure is organized along an interior circulation spine, which allows a high level of staff and youth interaction. The sleeping rooms, clustered in modules of ten, open directly onto partially covered recreational courtyards that admit sunlight while protecting participants from the rain. Youth have immediate access to housing, recreation, and health care, under direct supervision. The gabled roof line, exterior
masonry construction, and new landscaping fit in with the residential neighborhood.
Building area: (net/gross, square feet) 58,000/92,000.
Cost: $13,561,000 (without site work), $147.40/gross square feet.
Major materials: Steel frame and metal deck diaphragm system; exterior walls: brick masonry, concrete masonry units, and precast concrete.
Consultants: CTS Engineers, structural; Alpha Engineers, electrical and mechanical; MW Consulting Engineers, security electronics; Don Shimono & Associates, landscape; George Bundy & Associates, food service; Roger Roen Associates, cost estimating.
CAD developed? No.

Architect's Statement: The facility was conceived as a series of functional spaces, (housing, school, health care, gym, etc.) linked together along a linear interior "street." Each functional space is expressed in a similar but unique way. with a limited architectural palette of colors, materials, and forms; this allows the visitor to identify each of its principal elements from the exterior. The interior spatial organization is also designed so that the identity of each principal element is readily recognized, helping youth become quickly oriented.

Each of the 15 housing modules has 10 sleeping rooms. Youth and staff interact in a home-like environment in "family-sized" groups. Each housing unit is organized in a two-tier configuration, with five sleeping rooms on each level.

Recreational Facilities and Social Trends

Architect *Al Oberlander* sets out the programming issues and the design concepts critical to the success of recreational facilities.

Few building types reflect social shifts and trends as directly as recreational facilities, which serve all age groups and all economic classes. Some believe that fitness trends and wellness lifestyles are the driving force in the growth of this industry, but that is only partially true. Other influences are: demographics, family lifestyle changes, community, safety, security, and control.

An Evolving Program

The growing demand for recreational facilities with a range of services, equipment, and programs can be linked to a variety of social trends. Baby Boomers, for example, are aging and becoming more concerned with health issues, with the result that an increasing number of facilities are being built. Similarly, a resurgence of "family values" is influencing the types of spaces now commonly found in both public and private facilities (leisure pools, family changing areas, child care, youth fitness equipment, games areas, children's programming). The public's growing desire for a sense of community, the desire to "belong," has also affected the types of services offered; recreational facilities have responded by providing lounge areas, restaurants, juice bars, pro shops, and meeting rooms.

Among the most significant requirements for the design of recreational facilities are safety, security, and control; these are often the seeds from which conceptual design grows. Current trends go well beyond the traditional control counter to an "open" design. This creates a facility that is "self-policing," where participants have views into many activity areas, assuring that only appropriate activities take place within a given area. This concept also applies to stairwells. Proper site lighting and landscaping are also important. Safety concerns, as well as inclement weather conditions, have also increased the demand for indoor jogging and walking tracks.

A Flexible Design

The nature of societal trends requires that facilities be designed to adapt to constant change. Without this flexibility, a recreation facility built today may be obsolete in five years. For example, the rise and fall of a sport such as racquetball, which grew tremendously in the 1970s and leveled off in the 1980s, has resulted in unused courts being converted to new uses.

Design Concepts

Taking into consideration the public's changing concerns and interests, architecture for recreation should embrace some key design concepts common to most types of facilities. An easily understood circulation pattern is important to user comfort and can help sell a facility to a clientele that likely has several gyms or clubs from which to choose. A related issue is openness; a facility that is visually accessible not only promotes safety, but also encourages use. An often overlooked result of openness is the enhancement of the social environment. The need "to see" and "to be seen" as part of the wellness trend can play a significant role in the marketability of a facility. The family nature of some facilities is also enhanced by openness, adding a perception of closeness and security.

At the same time, visual accessibility must be balanced with a carefully considered zoning strategy; simultaneous use is often critical to the success of a facility. A spectator event, such as a swim meet or a basketball game, may necessarily occur during hours of open recreation. Adequate separation needs to be addressed to allow continued use by individuals not involved in the event to protect "members space" from spectators and to prevent injuries.

Another design issue is the layout of fitness areas and jogging tracks. The desire to work out on fitness equipment and to walk or jog as a cool down prior to moving to another piece of equipment requires that these two areas be located adjacent to each other. The separation of ability levels within the fitness area is also an essential planning issue. The separation of "power lifters" from recreational lifters can encourage use by both types of participants. Glass walls are often sufficient to create a psychological barrier.

User Comfort Issues

The main focus of all quality-of-environment issues is user comfort, and comfort goes far beyond room temperature. Selection of proper artificial lighting, for example, is critical, and the particular source and type depend on the type of activity. Control of glare from natural and artificial lighting is crucial to all sports, especially those involving a ball. Glare also creates problems for lifeguards because it can prevent them from seeing the bottom of the pool. Other user comfort issues are: smell (the elimination of odors is critical); acoustics (excessive noise should be controlled, but some sounds of activity may be allowed to escape to public areas to add to the dynamics of a facility); and materials (products specific to the needs of various sports are readily available; an inappropriate material can result in personal injury, user discomfort, or excessive maintenance).

Exterior Character

Recreational facilities serve their community at the discretion of the user and must be appropriate and aesthetically pleasing. The size of most recreational activity spaces results in a large building mass, a given that must be addressed in urban areas. The entrance offers the designer a critical opportunity for creating street appeal for the facility. The slope of the roof and the articulation of large wall surfaces are also important challenges.

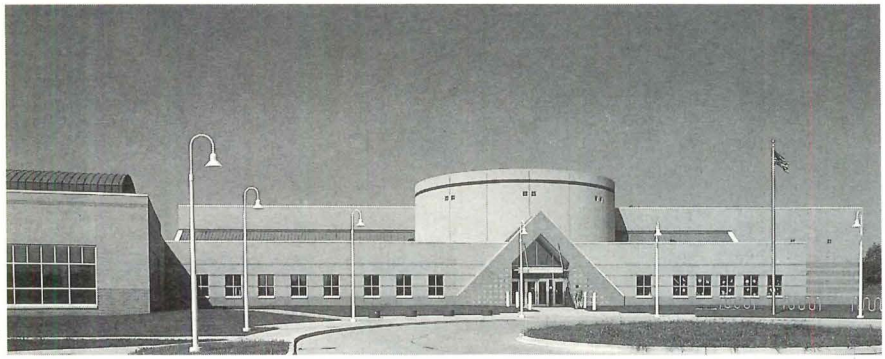
A Social Hub

Architects who design recreational facilities face unique and complex challenges, but they also enjoy the opportunity to enhance both the built environment and the human experience. Such buildings are no longer simple design and planning exercises, but require an in-depth knowledge of functional and social needs. They are becoming the social hub for much of our society, and, as such, play a major role in shaping our communities.

Al Oberlander

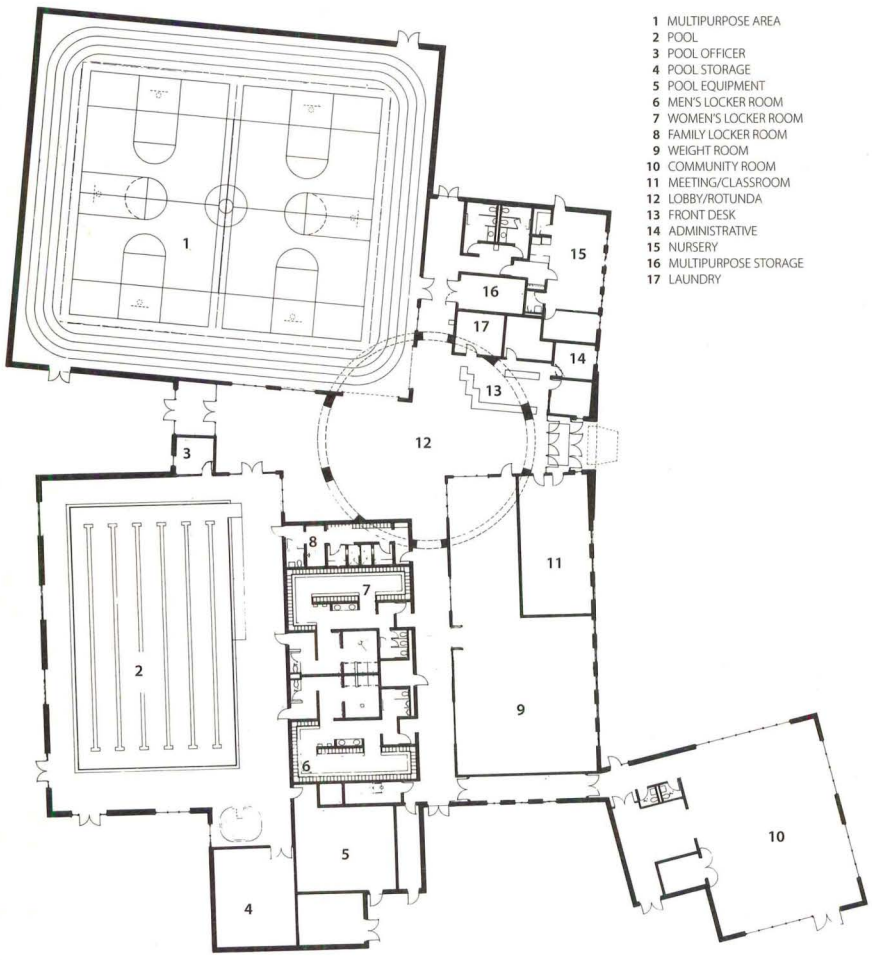
The author is a principal and project designer with RDG Bussard Dikis of Des Moines, specializes in the design of community and college/university sports and recreational facilities.

Altoona YWCA/ Community Center



King An

VIEW OF THE ENTRANCE



FLOOR PLAN

Project: Altoona YWCA/Community Center, Altoona, Iowa.
Architect: RDG Bussard Dikis, Des Moines, Iowa (R. Allan Oberlander, Paul W. Klein, Hosea Liminata, William Catrenich).
Client: The City of Altoona, Iowa.
Program: Community Center with multipurpose rooms, pool, weight rooms, classrooms, nursery, and support.
Building area: 40,670 square feet.
Cost: $3,083,600.
Major materials: Exterior: masonry bearing wall, brick face with concrete masonry unit back, steel bar joist, precast stone, EIFS on rotunda.
Consultants: Councilman Hunsaker & Associates, pool; Kimmel Jensen Wergerer Wray, mechanical/electrical;Crose Gardner Associates, site/landscape; Shuck Britson, structural.
CAD- developed? No.

Architect's Statement: After extensive study of community needs, the City of Altoona elected to build a new Communlty Center/YWCA. The project is designed to be completed in phases, and will ultimately include outdoor recreation fields and activity areas.

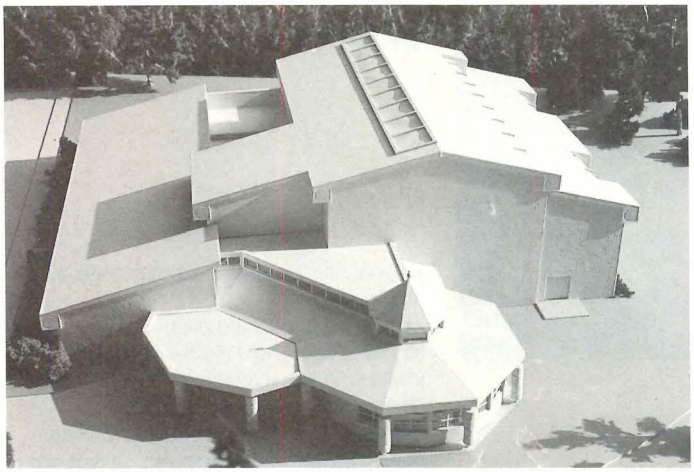
The facility is owned and funded through a referendum by the City of Altoona. Operational tasks, monies, and maintenance costs are the YMCA's responsibility.

The community center and meeting room/ classroom are designed to allow these spaces to function after hours and still maintain security in the remaining portion of the building. A family locker room is incorporated in the design, in addition to the traditional men's and women's lockers. Ramped access to the pool is provided to accommodate the disabled and small children. A large outdoor sundeck is available at one end of the pool and an area for a future spa is provided on the pool deck.

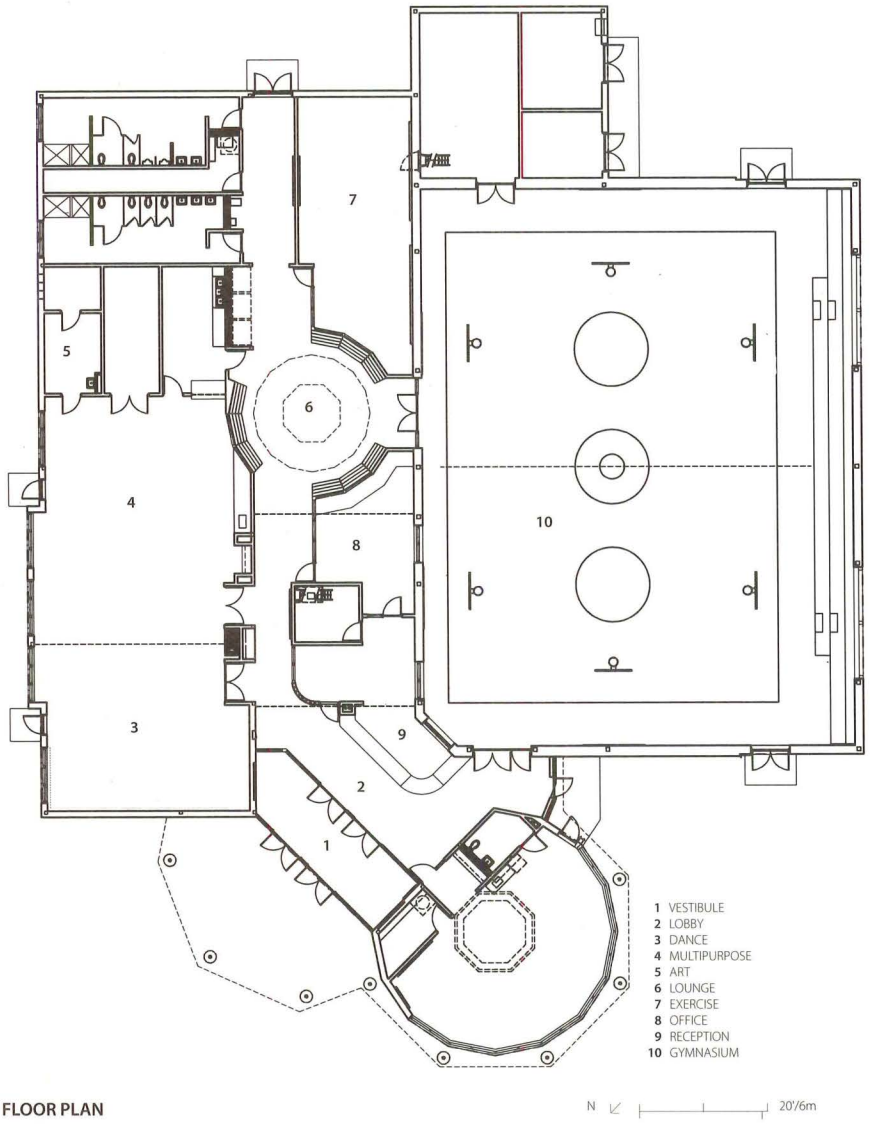
The multipurpose gymnasium is designed to meet diverse needs. A custom-designed wood floor system provides a cushioned floor for aerobics and use by the elderly, but remains rigid enough to provide good rebound for basketball.

The lobby/rotunda contains a centralized control desk which has views into all major activity areas including the pool, the multipurpose gymnasium, and exercise/fitness. The lobby also functions as a gathering space and an area for small game activities.

The Community Center at Cedar Heights



MODEL VIEW

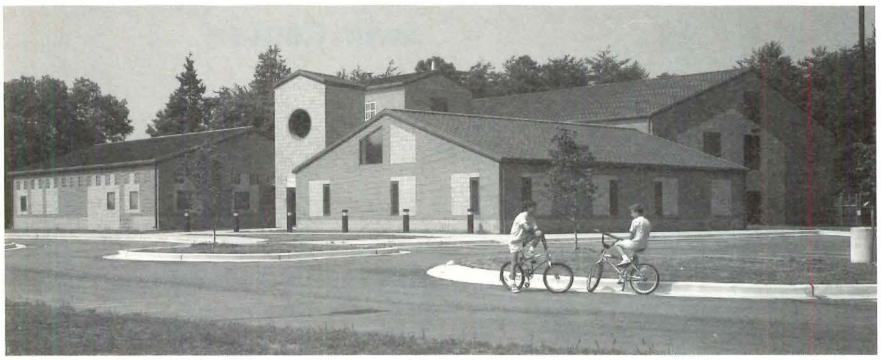


FLOOR PLAN

Project: The Community Center at Cedar Heights Neighborhood Park, Prince George's County, Maryland.
Architect: Integrated Design & Construction, Silver Spring, Maryland (Albert H. McCoubrey, III, *principal-in-charge;* Joseph W. Brady, Vincent Cox, Mark A. Graves, Andrea D. Hartranft Matthew T. Hjermstad, Robert A. Laird, Richard W. Podrasky, II, Patrick J. Santerre, *design team*).
Client: The Maryland-National Capital Park and Planning Commission Parks and Recreation Department, Prince George's County.
Program: Gymnasium with regulation basketball and volleyball courts, multipurpose/dance room, preschool, weight and exercise machine room, art room, administrative offices, and support spaces.
Building area: (gross square feet) 17,000.
Cost: $179 per sq ft.
Major materials: Steel framing, masonry walls (with split-faced CMU and exterior glazed face clay masonry units as exterior finish); prefinished metal roofing; translucent wall and roof panels; GRC column covers and fascia panels.
Consultants: Integrated Design & Construction, mechanical and electrical; ADTEK Engineers, structural; R. M. Jones and Associates, civil; Slater Associates, landscape; T. L. B. Associates, geotechnical.
CAD-developed? Yes.

Architect's Statement: The new community center is located on an undeveloped parcel of park land that buffers a residential area from an adjacent commercial/industrial area. The design of the center is intended to reduce the mass of the building and create a friendly environment for the surrounding community. The preschool is separated from the main mass of the building and has its own identity and scale to give the children a sense of their own space. The gymnasium and the multipurpose rooms are separated by a "Main Street" corridor running the full length of the building. The center of the corridor features a circular lobby space that serves as a natural gathering place, forming the hub from which major recreational activities generate. The central hub is covered by a domed rotunda, providing natural light below. Clerestories, skylights, and translucent panels in the roof and walls fill the preschool, gymnasium, and public spaces with natural light. The building exterior features a prefinished standing-seam metal roof with a fascia design formed from molded GRC panels. The façades are split-faced concrete masonry with accents of exterior glazed clay masonry.

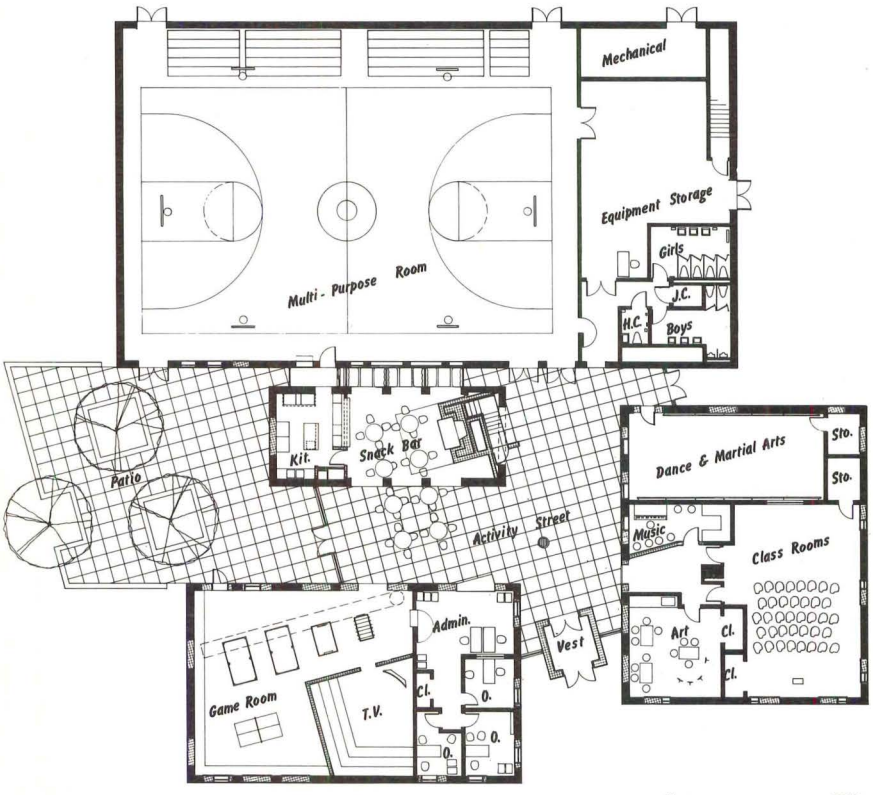
The Fort Meade Youth Recreation Center



EXTERIOR FROM SOUTH

Photos: William E. Mathis

ACTIVITY STREET



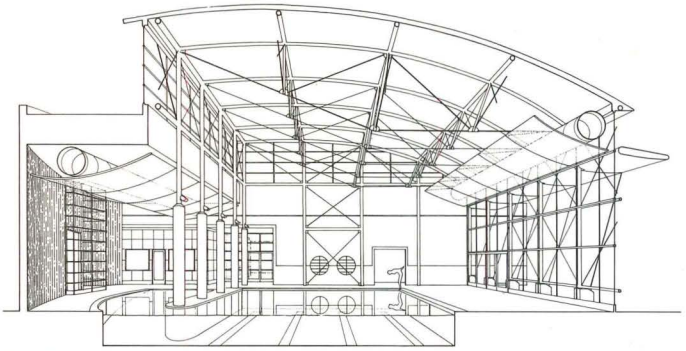
FIRST FLOOR PLAN

Project: The Fort Meade Youth Recreation Center, Fort Meade, Maryland.
Architect: Cooper Lecky Architects P.C. (W. Kent Cooper, *principal-in-charge;* Robert Sangine, *project manager;* Michael T. Foster, *project architect*).
Client: Baltimore District, Corps of Engineers.
Program: Youth recreation, ages 6–19; this disparate group needed a special identity so that mixed uses could function under one roof.
Building area: 23,000 square feet.
Cost: $92 per sq ft; $2,116,000 total.
Major materials: Brick, concrete block, Kalwall skylight, standing-seam metal roof.
Consultants: James Posey Associates, mechanical/electrical/plumbing; F.D.E., structural; Krouse Associates, civil.
CAD-developed? No.

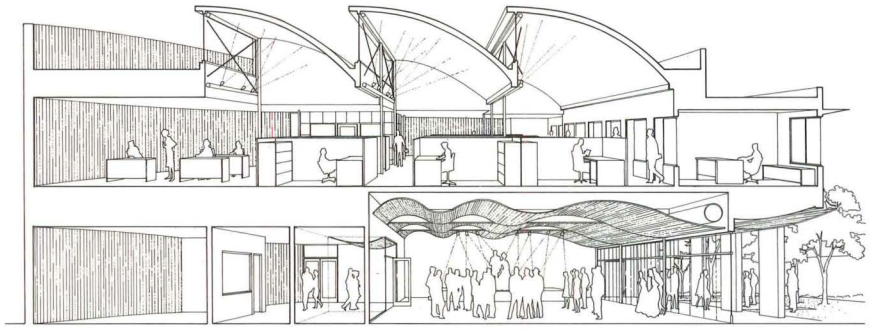
Architect's Statement: Sited on a large military base, this recreation center for the children of military personnel takes its design cues from the seemingly endless rows of red-brick, gabled-roof, World War II structures that adjoin it. Several such prismatic buildings have been massed, each housing a separate function; all are connected by a skylighted roof, creating a "mainstreet" atrium.

Youths, ages 6 to 19, use the facility and identify with different activities. The challenge is to serve each age group equally while providing enough zoning to give the illusion that each group has its own territory, and at the same time providing unobtrusive adult supervision. Compatible social, recreational, and educational spaces are grouped to foster interaction. The atrium provides a preview area for each activity zone including a multipurpose room for athletics, dances, banquets, and amateur theater productions. The interior main street extends to large outdoor play areas.

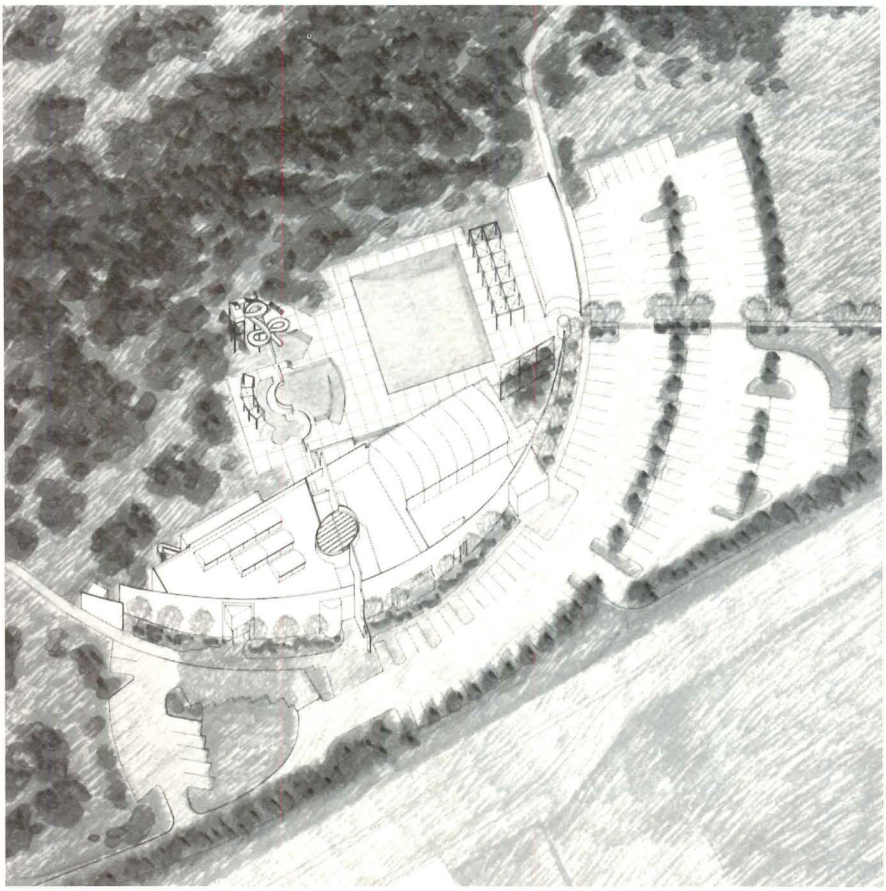
A kinetic sense of energy in the space is achieved by rotating some of the design elements from their normal orthogonal geometry, and infilling the typical punctured façades with unexpected materials.



SECTION, INDOOR POOL



SECTION, OFFICES/COMMUNITY ROOM



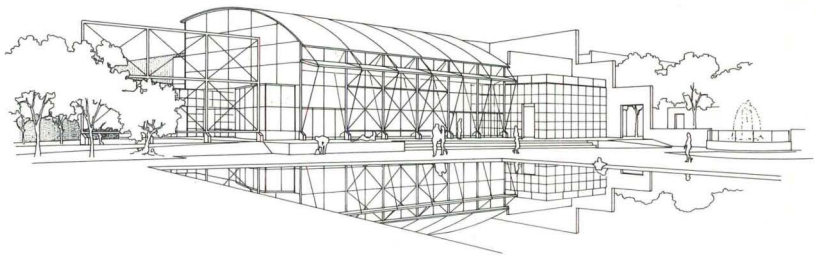
AXONOMETRIC, SITE AND BUILDINGS

Live Oak Community/ Swim Center

Project: Live Oak Community Swim Center, Santa Cruz, California.
Architect: ELS, Elbasani & Logan Architects.
Client: County of Santa Cruz.
Program: One 25 yard by 25 meter outdoor lap pool, outdoor recreational/instructional pool with water slide, one 1,800-sq-ft indoor pool, one 2,000-sq-ft communlty room, locker rooms, concession building, 10,000-sq-ft Parks Department offices.
Building area: 27,000 gross sq ft.
Cost: $6.2 million.
Major materials: Steel frame, reinforced concrete foundation wlth piles and slabs on grade, cedar board siding; concrete masonry walls for concession building.
Consultants: Ove Arup & Partners California, building engineer; Royston Hanamoto Alley & Abey, landscape architect; Councilman Hunsaker & Associates, pool consultant; Mesiti-Miller Engineering, civil engineer; The Sports Management Group, programming.

Architect's Statement
Surroundings: Adjacent middle school planned to east; light industrial uses across railroad tracks to north.
Schedule: Completion date May 1995.
Site plan: The site plan features a gently curving layout, which gives continuity to cross-site auto and pedestrian circulation, and at the same time buffers the building from a neighboring industrial area and opens it to pools, courtyards, and trees. The concept was developed as a response to four maJor concerns:
1. Promoting a synthesis wlth the State Park to the south and west;
2. Screening unattractive industrial and noisy railroad uses to the north, while providing circulation through the awkward site to a prominent entry;
3. Diminishing the impact of the 170-space parking lot;
4. Enhancing views of the riparian zone to the south.

Building concept: A curving screen wall embraces views of nature and turns away from nearby tilt-up buildings and railroad tracks. The building serves three program uses.
1. Aquatic Center: an indoor pool and spa serve children, the disabled, senior citizens, and those requiring a swimming alternative in cold weather. The outdoor lap pool serves both fitness swimming and family recreational uses. Another outdoor recreation pool accommo-



OUTDOOR POOL, INDOOR POOL IN BACKGROUND

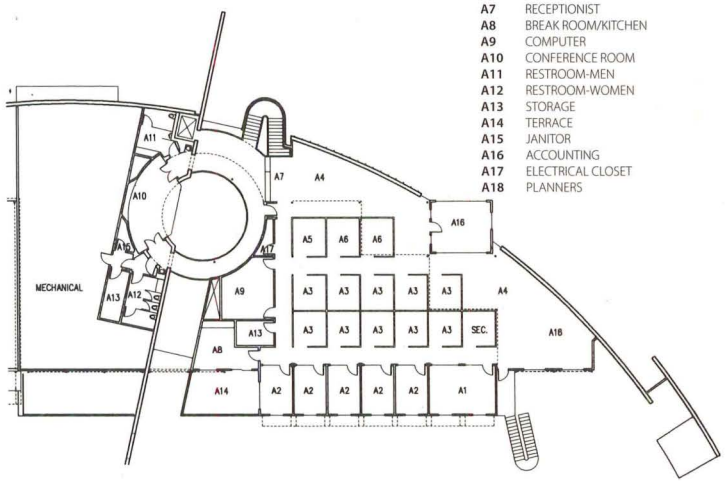
dates beginning swimmers and wading and features a water slide/splash area.

2. Community Center: the community room looks out into an enclosed garden and towards the riparian preserve. It will be available for meetings, weddings, and other social events.

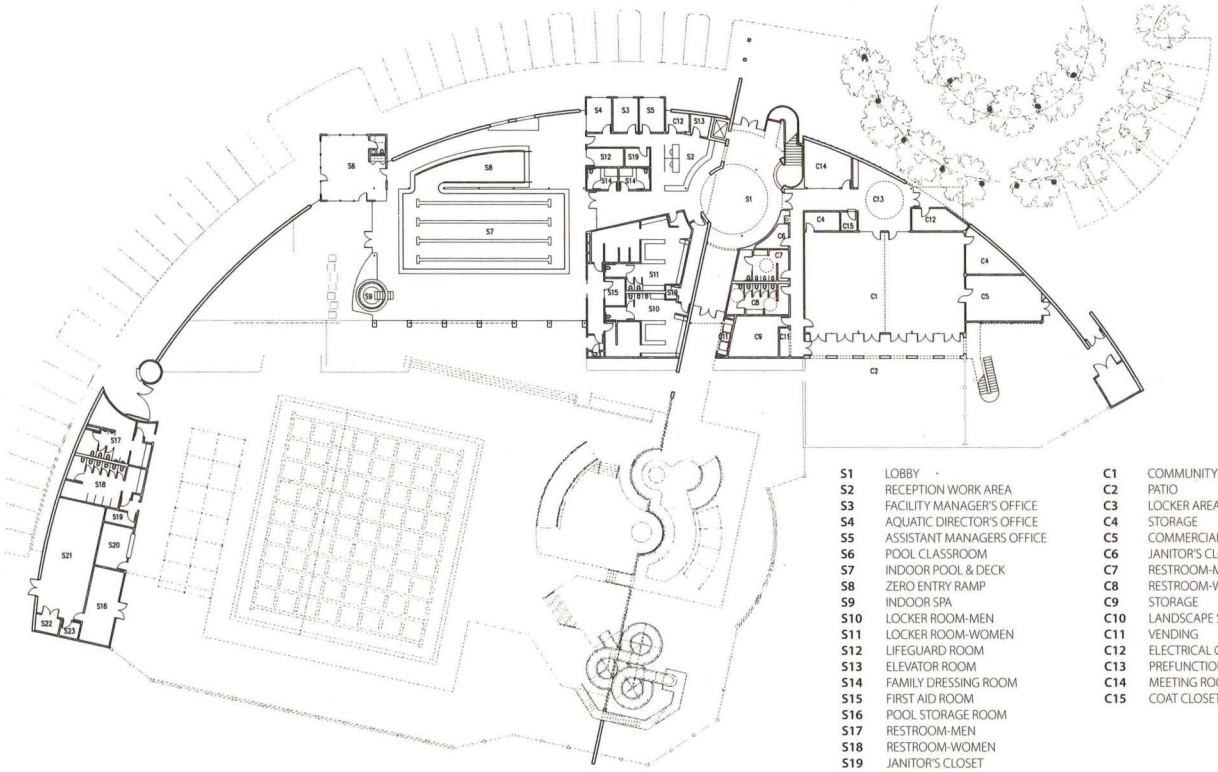
3. Parks & Recreatlon Offices: offices for the County Parks & Recreation staff and the Center staff are located above the Community Center. Most of their views look towards the wooded section of the site.

The curving form is penetrated by a diagonal wall that defines the main entrance and makes a clear demarcation between aquatic and community functions. Each use has a view of the other, but can be accessed separately. A curving sculptural form containing the water slide terminates the entry wall and is the visual focus for the outside swimming area.

The predominant building form, the curving wall, is clad in cedar boards, which will weather to a driftwood gray color. Flowering plants will grow on stainless steel espaliers to a height of eight feet. The wall's openings illuminate the indoor pools, the main building, and the pool classroom.

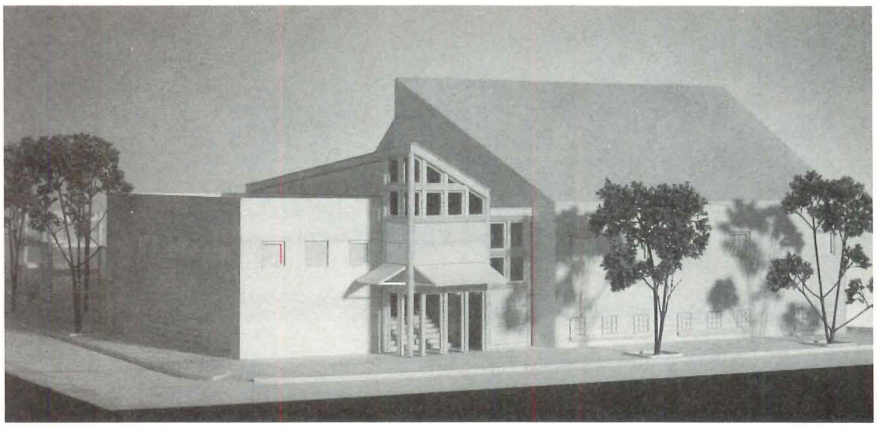


SECOND LEVEL PLAN

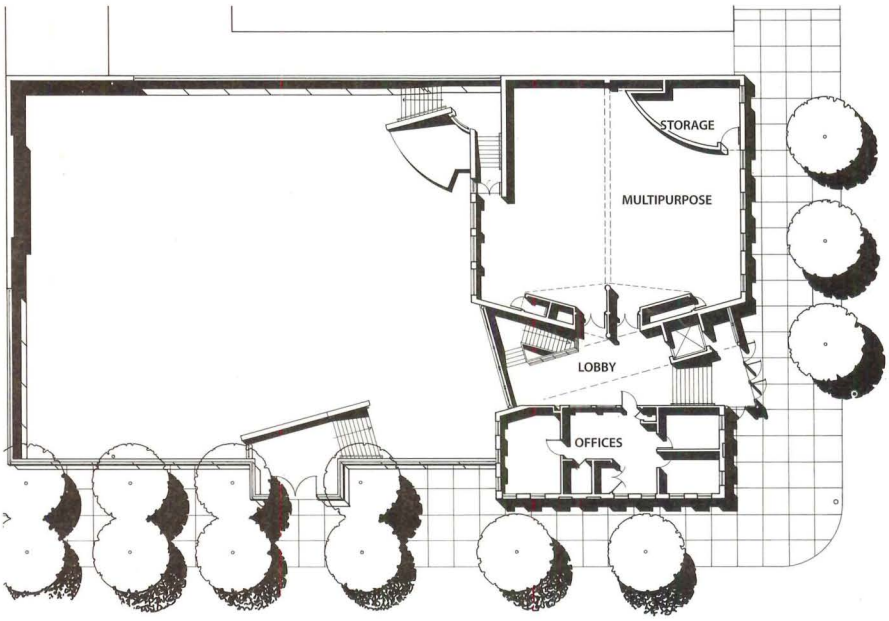


GROUND LEVEL PLAN

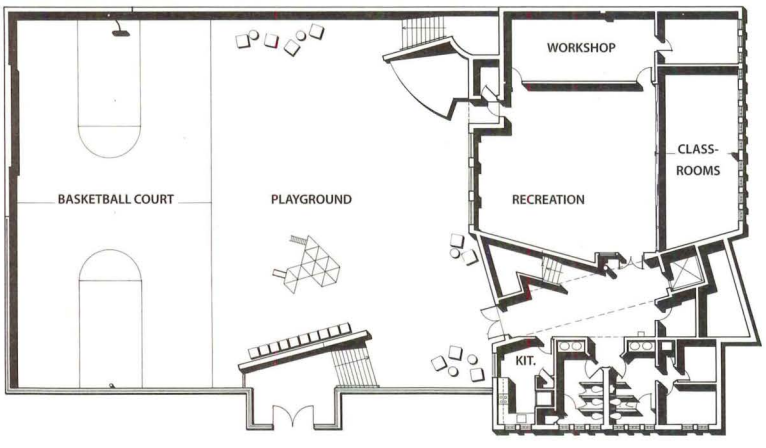
Mary Mitchell Family and Youth Center



NORTHEAST VIEW



FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

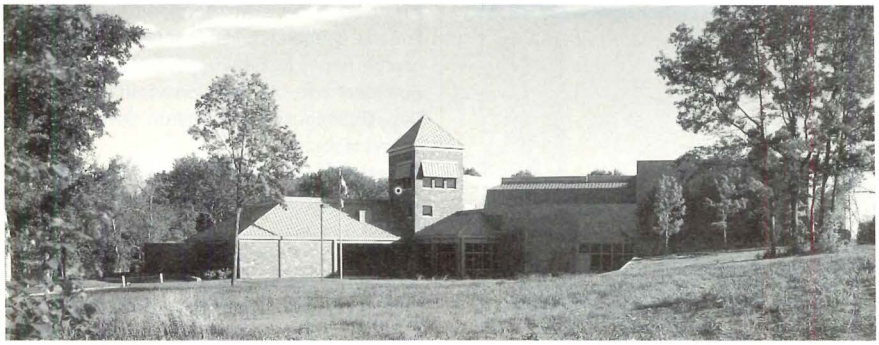
Project: Mary Mitchell Family and Youth Center, Bronx, New York.
Architect: Hirsch/Danois (David L. Hirsch, *principal-in-charge;* Michael Weiner, *project manager).*
Cllent: Department of General Services, New York, (Bola Odunsi, project manager).
Program: Multipurpose public space, a recreation room, classrooms, workshops, and office facilities, in addition to a playground and a basketball court.
Building area: 8,000 sq ft.
Cost: $2.3 million, $280 per sq ft.
Major materials: Exterior: standing-seam metal roof, painted exposed steel members, aluminum frame windows, and brick. Interior - exposed brick-faced lobby walls, terrazzo floors, exposed metal panel mechanical space cover, gypsum wallboard walls in all rooms with VCT floors.
Consultants: ElectroMechanical Technical Group, mechanical engineering; Albert P. Kung Consulting Englneers, structural engineering; Ray Firmin, construction cost consultant.
CAD-developed? No.

Architect's Statement: When the Mary Mitchell Family and Youth Center outgrew its original facilities, the Center and the City of New York commissioned Hirsch/Danois to design a new building to provide a major multipurpose public space, a recreation room, classrooms, a workshop, and office facilities for community and family counseling and program administration.

The design of the two-story building is organized by a dramatic wedge-shaped lobby and staircase enclosed by gridded walls of glass and steel structural components. This lobby links two load-bearing masonry structures, the larger containing the major public spaces, the smaller housing offices, support, and mechanical spaces. It also connects the major street entry with the sunken, protected playcourt.

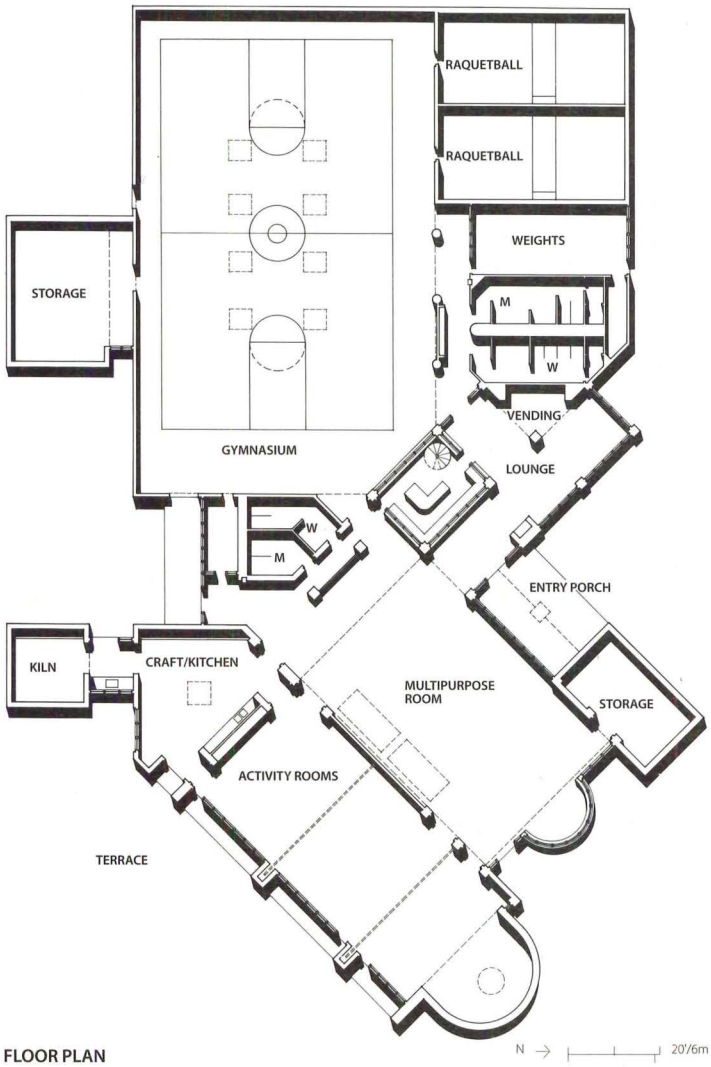
The ceiling for all sloped roof areas is structured with an exposed bar joist and metal deck overlaid with insulation and a metal roof covering. Welded tubular steel members frame the glazed entry elements, with metal infill panels bolted to channels. The multicolored entry is played against the gray brick façade of the surrounding forms.

McKinney Community Center



Craig Blackmon

VIEW FROM SOUTH



FLOOR PLAN

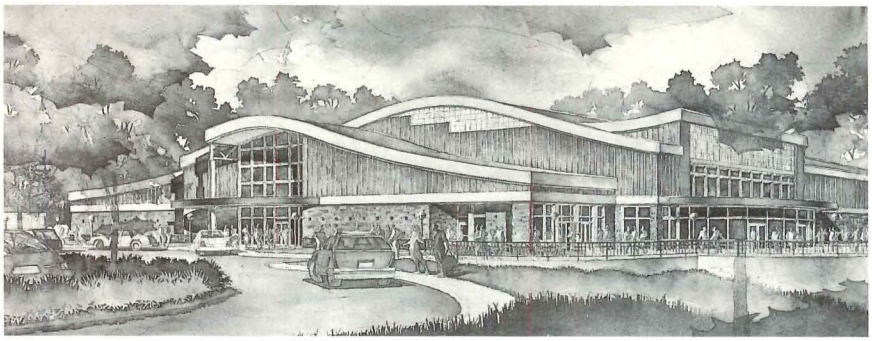
Project: McKinney Community Center, McKinney, Texas.
Architect: Architects Phelps/Wood, Frisco, Texas (Arthur V. Phelps, Lawrence Wm. Wood, and Jim T. Wilson, Jr., AIA).
Client: City of McKinney (Don Paschal, City Manager; Larry Offerdahl, Director of Parks and Recreation).
Program: Gymnasium, racquetball courts, weight room, lounge, control center, multipurpose room, activity rooms, craft room, kiln room, janitor, restrooms, and storage rooms.
Building area: Net, 22,000 square feet; gross, 23,100 square feet.
Cost: $51.95 per square foot (gross) in 1986.
Major materials: Exterior: stone, tilt-wall concrete, standing-seam metal roof. Interior: stone, tilt-wall concrete, vinyl composition tile, maple, gypsum drywall. Structure: exposed laminated wood beams and deck.
Consultants: Hennessey and Associates (structural); Caffey-Sayers and Associates (mechanical/electrical/plumbing).
CAD-developed? No.

Architect's Statement: A landscape strategy lies behind the design of the McKinney Community Center. Since the site is between a wooded park to the east and a major highway to the west, the building turns its back on the highway and opens up to the park.

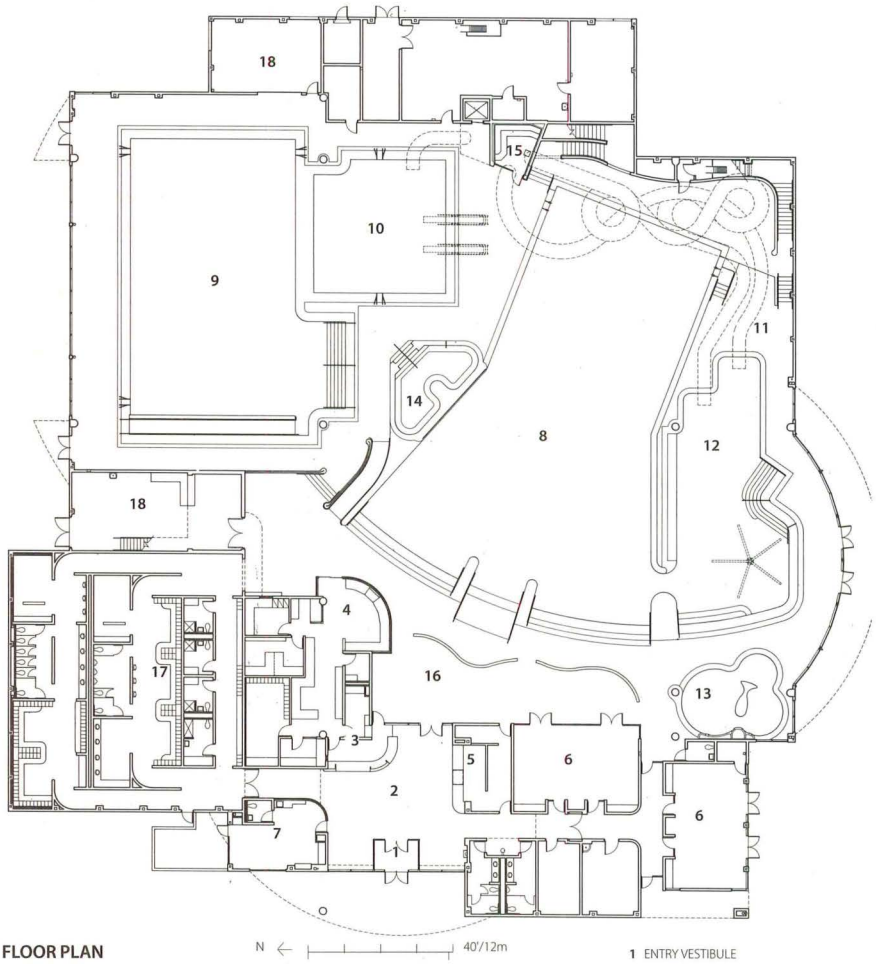
On the highway side of the site the gymnasium, racquetball courts, weight room, and restrooms are built into the hill, with exposed, tilt-up concrete walls. In the center, the tower marks the main entrance and the point at which the building turns toward the park. Within the tower is the control center that includes all monitoring systems and a scorekeeper's loft. The multipurpose room, craft rooms, and activity rooms, with flexibility of size and function, lie to the east. The activity rooms extend out onto a grass terrace nestled in the woods.

The primary material for the eastern half of the building is an indigenous stone that integrates the building with its natural setting beyond. Furthermore, this half is articulated into a series of smaller and more individualized masses. Deep overhangs and porches modulate the intense Texas sun. Throughout the building, the roof structure is a lightly whitewashed assembly of exposed wood deck and laminated wood beams.

North Clackamas Aquatic Park



RENDERING OF ENTRANCE



FLOOR PLAN

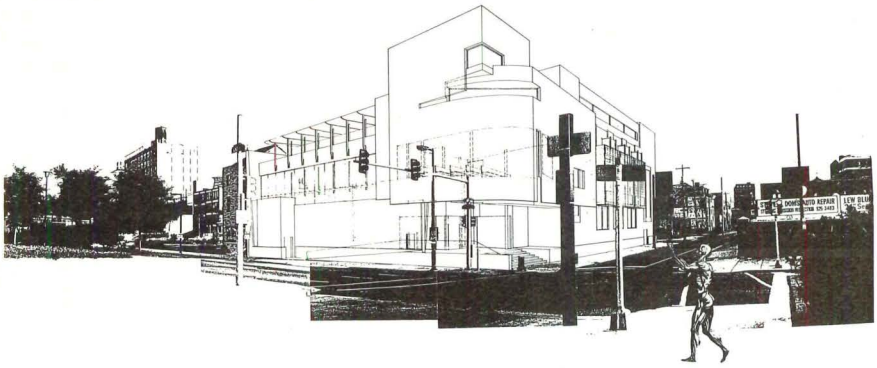
1 ENTRY VESTIBULE
2 LOBBY
3 ADMISSIONS
4 CENTRAL CONTROL
5 CONCESSIONS
6 MEETING ROOMS
7 DAYCARE
8 WAVE POOL
9 LAP/COMPETITION POOL
10 DIVING POOL
11 WATER SLIDES
12 SPLASH/DOWN INTERACTIVE PLAY POOL
13 KIDDIE POOL
14 WHIRLPOOL
15 SAUNA
16 VIEWING AREA
17 LOCKER ROOMS
18 STORAGE

Project: North Clackamas Aquatic Park, Milwaukie, Oregon.
Architect: Robertson/Sherwood/Architects, Eugene, Oregon (Carl Sherwood, principal-in-charge; Randy Nishimura, Project Manager; Jim Robertson, construction administration; Dave Guadagni, Brian Hamilton, Darin Dehle, *project team*).
Client: North Clackamas Parks and Recreation District (Roger Brown, director; John Hartsock, project manager).
Program: A new indoor recreational aquatics center with a wave-action pool, diving pool, a competition/lap pool, a spa pool, a family play area, a wading pool, and three water slides. Other spaces include four community rooms, dressing/shower facilities, daycare center, concessions and lobby.
Building area: (gross square feet) 45,400.
Cost: $7.2 million, including sitework (1994).
Major materials: Exterior insulation and finish system, ground-face, split-face and glazed concrete masonry units, glue-laminated beams, wood decking, steel trusses, PVC roof membrane, glazed aluminum curtain wall, translucent fiberglass panels, acrylic skylights.
Consultants: Herrick & Richards, structural; Manfull-Curtis, mechanical; Interface Engineering, electrical; CS Acoustical Engineering, acoustical; J.F. Dworkin & Associates, roofing; Todd Construction, contractor.
CAD-developed? Yes.

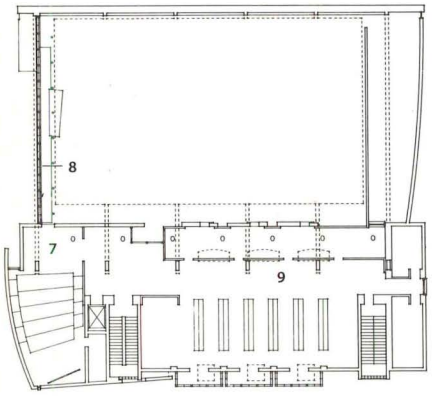
Architect's Statement: The North Clackamas Aquatic Park is an example of the current trend towards provision of diverse swimming environments that attract a wide range of users. The building is the centerpiece of a large regional park, and the first major undertaking for the North Clackamas Parks and Recreation District, formed in 1990.

The building's location on the edge of the regional park and its proximity to a nondescript retail strip allowed the architects considerable flexibility in determining the form of the structure. Its wave-like roof is a signature gesture that asserts the Aquatic Park's presence as a civic landmark and suggests the nature of activities found within. The shape of the roof is consistent with the major elements of the program, rising and swelling over various zones of the natatorium, according to the scale of the pools below. Generous areas of glazing illuminate the space, accentuate the rhythmic wave forms, and visually connect the natatorium to the park.

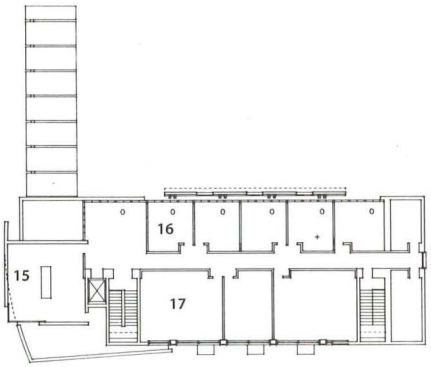
Philadelphia Chinatown Community & Recreation Center



VIEW FROM SOUTHEAST

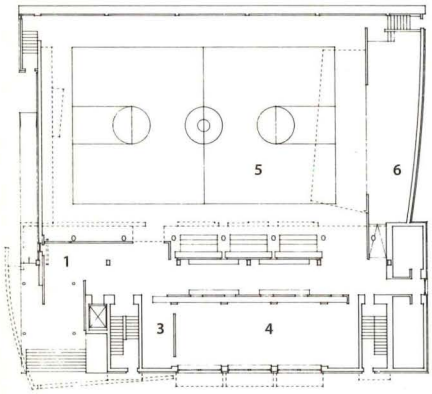


SECOND FLOOR PLAN



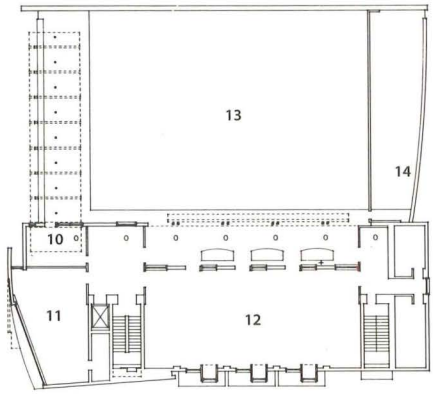
FOURTH FLOOR PLAN

1 ENTRY
2 GALLERY
3 RECEPTION
4 OFFICES
5 MAIN HALL
6 STAGE
7 LECTURE HALL
8 CATWALK
9 LIBRARY
10 DIRECTOR
11 MEETING ROOM
12 COMMUNITY ROOM
13 ROOF TERRACE
14 MECHANICAL
15 MEETING ROOM
16 OFFICES
17 CLASSROOMS



FIRST FLOOR PLAN

N → 40'/12m



THIRD FLOOR PLAN

Project: Philadelphia Chinatown Community & Recreation Center, Philadelphia, Pennsylvania.
Architect: Wesley Wei Architects (Wesley Wei, *principal;* Andrew Phillips, Douglas Patt, Cary Paik, *design team*).
Client: Philadelphia Chinatown Development Corporation (Ceceilia Yep, executive director).
Program: A new 35,000-square-foot center to accommodate a multipurpose community room/gymnasium, locker rooms; library/ resource center; meeting/class rooms; day-care/senior citizen center; client offices ; roof-top playground/terrace.
Building area: 35,000 gross sq ft.
Cost: not available at this time.
Major materials: structural steel, concrete block/brick, glazed aluminum curtain walls and windows, stucco.
Consultants: not available at this time.
CAD-developed? No.

Architect's Statement: This 35,000-sq-ft facility is located immediately north of Philadelphia Chinatown in an area now occupied by wholesale commercial, light industrial, and auto-related uses. The client, Philadelphia Chinatown Development Corporation (PCDC), is a not-for-profit community organization whose members have been responsible for the coordination, fundraising and management of five major construction projects over the past ten years.

Philadelphia Chinatown's existing facilities suffer from the pressures of internal growth. Simultaneously, its perimeters have been compromised by three major urban redevelopments. Future growth for Chinatown is now possible only by crossing the Vine Street Expressway defining its northern edge. As a catalyst for growth in this area, PCDC's desire is to create a new center for the community. Our intention is to design a building accommodating a variety of community activities while serving as a collective community symbol at this edge that is becoming a center.

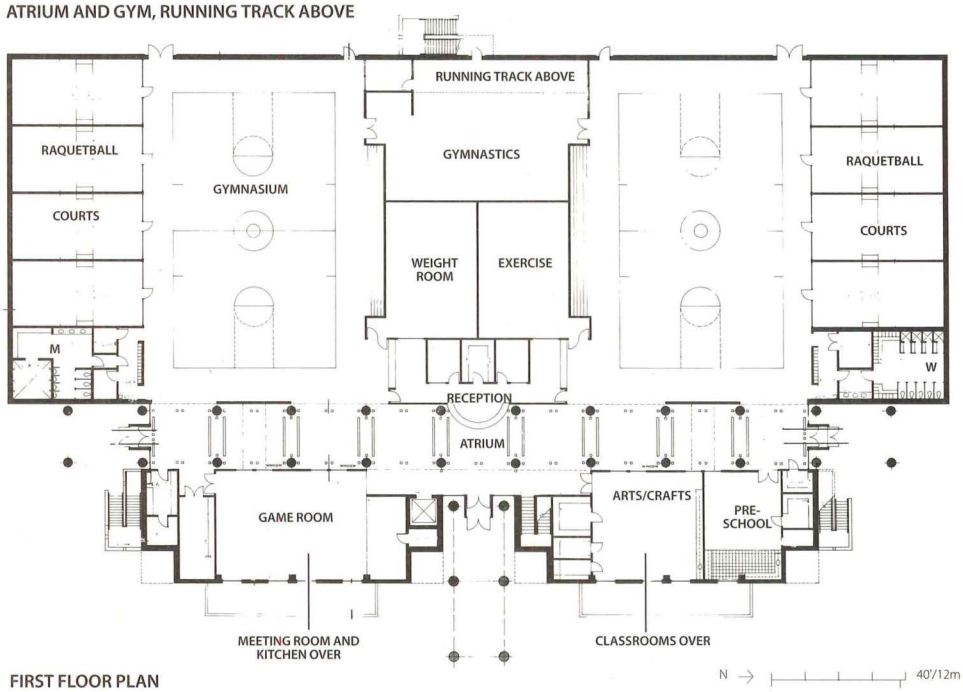
Hovering above the corner entrance, the *head* houses large meeting rooms on the second and third floors and affords views back towards the community to the south. The *body* of the building houses figures of space: the gallery, library stacks, carrels, and workrooms.

The structural ribs for the vessel of the recreation/meeting hall are interwoven with the piers for the body of the building. This spatial juncture acts laterally as an inhabitable threshold and vertically as a virtual threshold to the roof garden above.

Plano Recreation Center

FRONT VIEW

ATRIUM AND GYM, RUNNING TRACK ABOVE



FIRST FLOOR PLAN

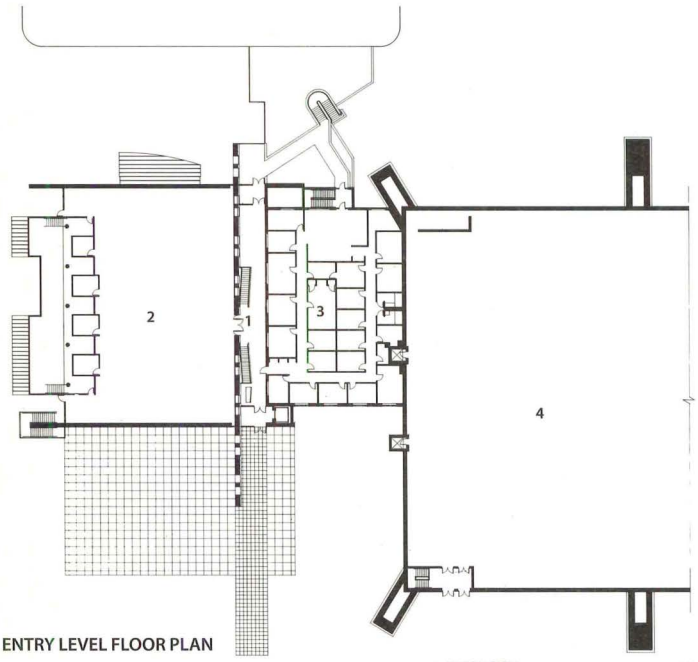
Project: Plano Recreation Center Plano, Texas.
Architect: HKS Architects Inc.
Client: City of Plano, Texas.
Program: Municipal recreational complex including two full-sized basketball gymnasiums, eight racquet ball courts, a running track, an exercise room for free weights, a gymnastics and aerobics facility, a restaurant and dining room, an arts and crafts room, conference and administrative offices.
Building area: 48,000 sq ft.
Cost: $3,500,000 total ($72.91 per sq ft).
Consultants: MEP: Steve Dunn & Partners.
CAD-developed? No.

Architect's Statement: Concepts

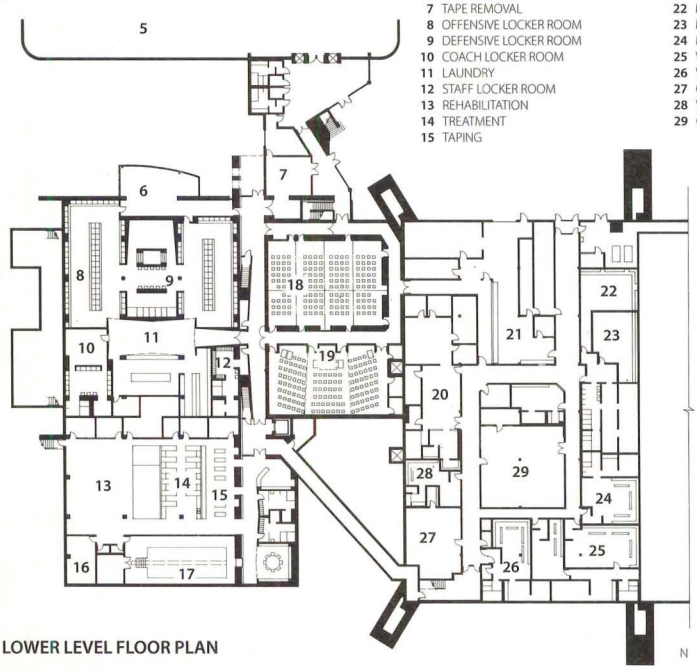
- Simplify circulation with a central atrium that ties all spaces together visually and allows the central desk to control all entrances.
- Place small elements of the complex in a two-story wing in front, clad in brick to break-up the massiveness of the building and relate better to its residential neighbors.
- Use gyms to circulate to minor spaces to save square footage and dollars.
- Locate all parking as close to the front door as possible.
- Work with the different volumes to create a single but interesting form.

University of Iowa Recreation Building Addition

SECTIONAL PERSPECTIVE LOOKING EAST



ENTRY LEVEL FLOOR PLAN



1 ENTRY LOBBY
2 STRENGTH TRAINING
3 EXISTING FOOTBALL OFFICE BUILDING
4 EXISTING RECREATION DECK
5 EXISTING PRACTICE FACILITY
6 NEW MEETING ROOMS
7 TAPE REMOVAL
8 OFFENSIVE LOCKER ROOM
9 DEFENSIVE LOCKER ROOM
10 COACH LOCKER ROOM
11 LAUNDRY
12 STAFF LOCKER ROOM
13 REHABILITATION
14 TREATMENT
15 TAPING
16 HYDROTHERAPY
17 THERAPEUTIC POOL
18 EXISTING MEETING ROOMS
19 NEW MEETING ROOMS
20 GENERAL SPORTS MEDICINE
21 EQUIPMENT/LAUNDRY
22 MEN'S TRACK LOCKER ROOM
23 MEN'S BASEBALL LOCKER ROOM
24 MENS COACH'S LOCKER ROOM
25 WOMEN'S SOFTBALL/FIELD HOCKEY
26 WOMEN'S TRACK LOCKER ROOM
27 CLASSROOM
28 WOMENS COACH'S LOCKER ROOM
29 GENERAL SPORTS WEIGHT ROOM

N 40'/12m

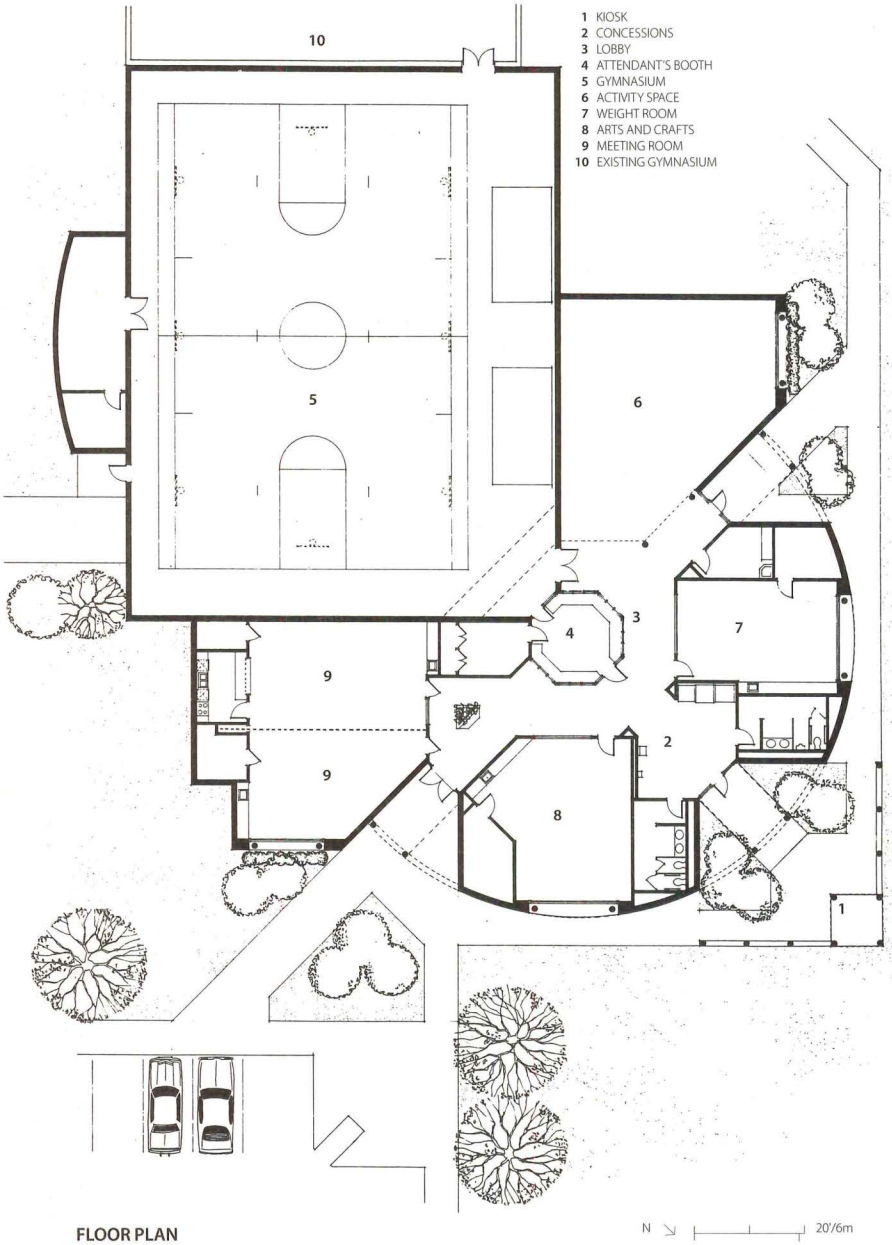
LOWER LEVEL FLOOR PLAN

Project: University of Iowa Recreation Building Addition, Iowa City, Iowa.
Architect: Herbert Lewis Kruse Blunck Architecture, Des Moines, Iowa (Rod Kruse, Rick Seely, Paul Mankins).
Client: University of Iowa.
Program: An addition to the university's existing student recreation facility intended to house expanded strength training, sports medicine, and locker room facilities.
Building area: (gross square feet) 40,000 addition, 7,500 remodel.
Cost: $110/sq. ft.
Major materials: Concrete foundation, exposed structural steel trusses, metal roof deck, galvalume standing seam roof, cement plaster, ribbed metal siding, light-weight concrete block.
Consultants: Sink Combs Dethlefs, sports facility; Shuck-Britson, structural; Aivine & Associates, mechanical and electrical; Cost Planning Management, cost.
CAD-developed? Yes.

Architect's Statement; This facility was conceived as a simple, clearly expressed structure on a site adjacent to an existing student recreation facility. It will house the university's expanded strength training, sports medicine, and football facilities and operate as a stand-alone building reserved for student athletes. It is organized along a single spine, articulated by a 30-foot-high battered wall, visually terminated by an existing pneumatic practice facility. The public entry is announced by the wall, which extends outside the building, and a steel canopy. In addition to its important structural and processional roles, the wall separates the strength training room from the entry hall and serves as a depository for memorabilia associated with student athletic activities and events at the University of Iowa. Two-sided showcases, built into the wall, allow visitors to view student and team awards and trophies and to glimpse the strength training room beyond. Entry to the strength training room is provided through a pair of 15-foot-high doors. Once inside, continuous clerestory glazing provides daylight and accentuates the facility's bow-string roof structure. Two stairways, running along the battered wall, provide access to the sports medicine and football locker room facilities on the lower level. Sports medicine is located below the entry plaza and includes a therapeutic swimming pool, and rehabilitation and physical therapy spaces. The football facility includes locker rooms, equipment distribution and storage spaces, and a players' lounge.

Rutherford Park Community Center

VIEW FROM THE NORTH

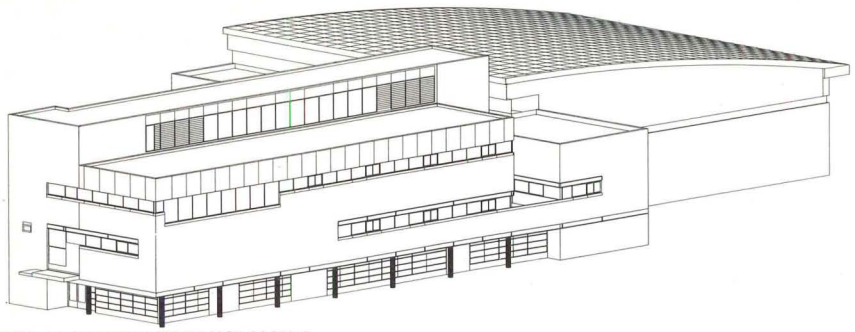


FLOOR PLAN

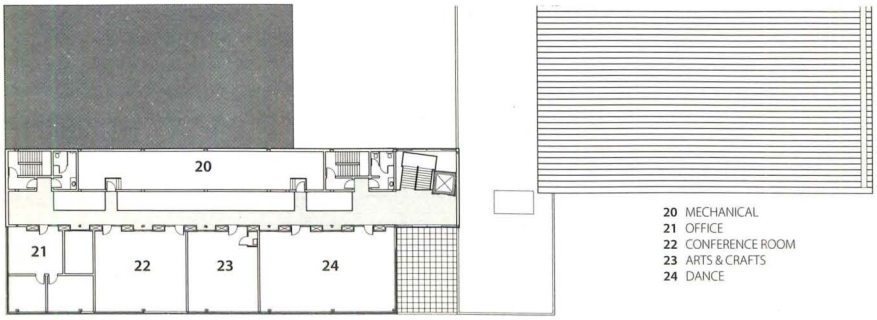
Project: Rutherford Park Community Center, Mesquite, Texas.
Architect: Wiginton Fawcett Hooker Jeffry Architects (formerly Hobbs Wiginton Fawcett Architects), Dallas (Jerry Fawcett, *design principal*).
Client: City of Mesquite, Texas (Gary Moore, Director of Parks and Recreation).
Program: A new multipurpose recreational facility to serve as a prototype for future municipal community centers. The center's gymnasium is linked to an existing elementary school.
Building area: (Net/gross sq ft) 12,200/44,600.
Cost: $60/sf (1987).
Major materials: Face brick, standing seam metal roof, aluminum storefront and glass, custom CMU.
Consultants: Randy L. Cooper, structural; R.G. Freeman & Associates, mechanical, electrical, plumbing; City of Mesquite, PARD, landscaping.
CAD-developed? No.

Architect's Statement: The city's community centers are specifically developed to provide after-school activities for children and to meet the needs of all other citizens of the community. This facility was designed to serve as a prototype for future community centers that would provide solutions to meet the needs of municipal centers and elementary schools. Its gymnasium connects directly to an elementary school, provides space for the school's physical education requirements, and acts as a play area during inclement weather. Two separate main entries are provided: one for children coming into the center after school and one oriented to the parking lot for adults arriving by car. This not only helps separate age groups but also keeps children safely away from automobile traffic. Inside, children's activities are located on the school entry side and spaces for adult-oriented activities are on the parking lot entry side. All spaces and activities are in the visual control of the attendant's station, providing safety and security. The new facility's form, mass, material, and colors were developed to relate to the existing school.

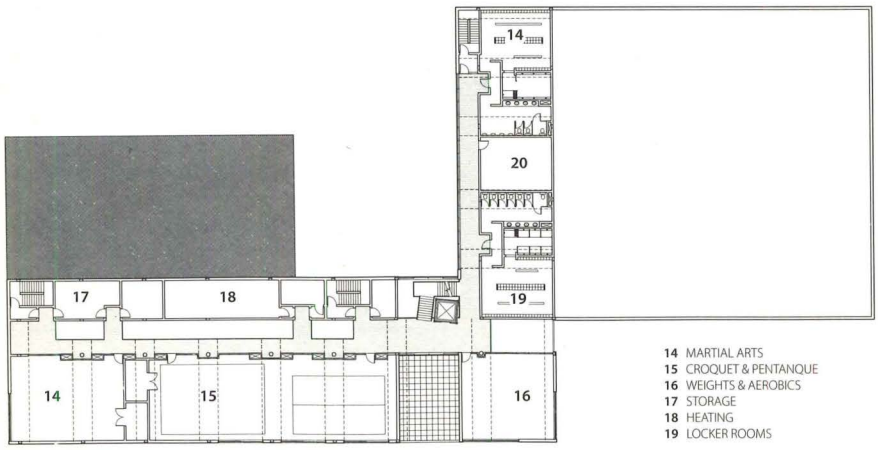
Ste-Marie Recreation Centre



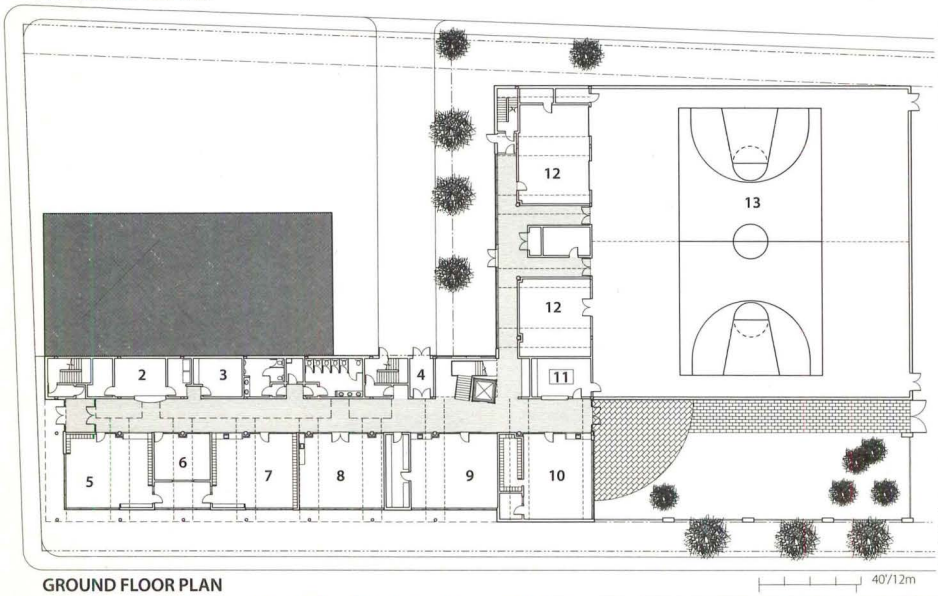
EXTERIOR SHOWING ENTRANCE CORNER



THIRD FLOOR PLAN



SECOND FLOOR PLAN

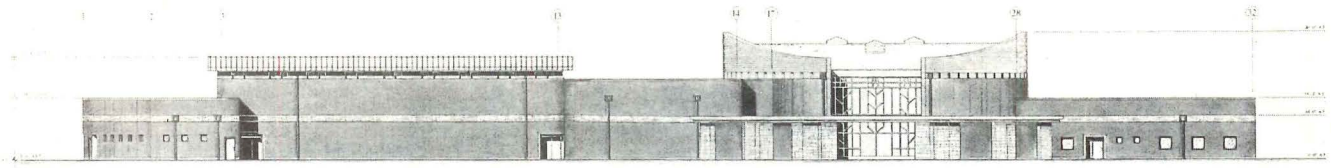


GROUND FLOOR PLAN

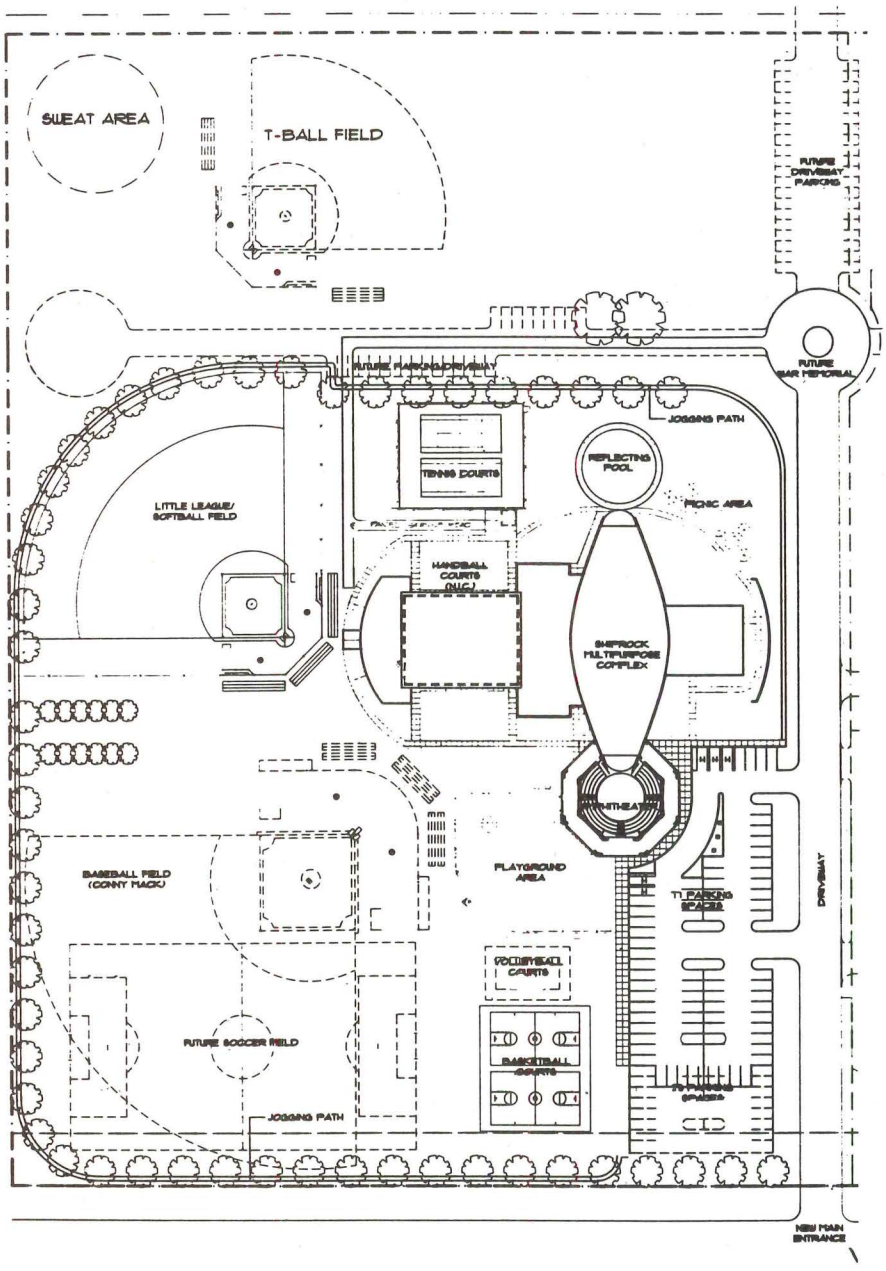
Project: Ste-Marie Recreation Centre, Montreal, Quebec.
Architect: Rubin & Rotman Associates ,with Saia & Barbarese, Architects, Montreal, Quebec.
Client: City of Montreal
Program: To provide: 1) a recreation component consisting of a double gymnasium with locker rooms and storage as well as rooms dedicated to nautilus, martial arts, dance, and indoor croquet; 2) a community component consisting of specialized rooms for various age levels as well as a woodworking shop and a plastic arts facility; 3) an administrative component consisting of offices and a meeting room.
Building area: 45,000 square feet gross, 34,000 square feet net (not including circulation).
Cost: $133 per square foot.
Completion: December 1995.
Major materials: Masonry (concrete block with brick highlights), aluminum windows, curtain wall, corrugated aluminum panels.
Consultants: Gemec Inc., structural, mechanical and electrical.
CAD-developed? Yes, 100%.

Architect's Statement: Unable to purchase the adjoining property, the Ste-Marie Recreation Centre was shoe-horned into a narrow urban site, with the gymnasium spilling over into the public park at the rear. The primary entrance was dictated by the City to be on the main street (Ontario). In response to these constraints, a linear spine circulation system was devised, providing a physical and visual link between the street and the park. This corridor, reinforced by linear skylights and openings, also divides the public rooms from the service segments of the program. The public elements are transparent,with glazing to the exterior and to the interior "street" in contrast to a solid block wall separating the corridor from the functional spaces. The main hall leads to an enclosed outdoor space (play area for the children) and continues through to the park. The main stair and elevator are twisted slightly to highlight their location and to provide the hinge between the principal corridor and the passage to the gym.

Shiprock Multipurpose Center



EAST ELEVATION



SITE PLAN

Project: Shiprock Multipurpose Center, Shiprock, New Mexico.
Architect of Record: The Navajo Nation Design and Engineering Services (TommyYazzie, *project director;* Harrison Martin, *project manager).*
Associate Architect: TSDG/Southwest (Albert A. Damon, Jr., *principal;* Thomas B. Todd, R.A., *project manager).*
Client: The Navajo Nation, Navajo Nation Department of Youth Community Services (DYCS), (Duane Chilli Yazzie, Councilman).
Program: Recreation, 16,850-sq-ft(gymnasium, game room, exercise room, weight room, showers/lockers, two club rooms, first aid, snack bar); auditorium (3,230 sq ft); cultural center, 22,660 sq ft (great hall/gallery, podium and stage, ticket office, library, children's library, study carrel, book warehouse, administration, conference rooms); clinic.
Building area: 49,000 gross square feet.
Cost: $10 million
Major materials: Native sandstone veneer, glulam beams, concrete masonry walls.
Consultants: TSDG/Southwest, structural, mechanical, interior design; Design and Engineering Services, The Navajo Nation, civil engineering; Campbell-Anderson Associates, quantity surveying.
CAD-developed? This project was completed using AutoCAD Release 12.

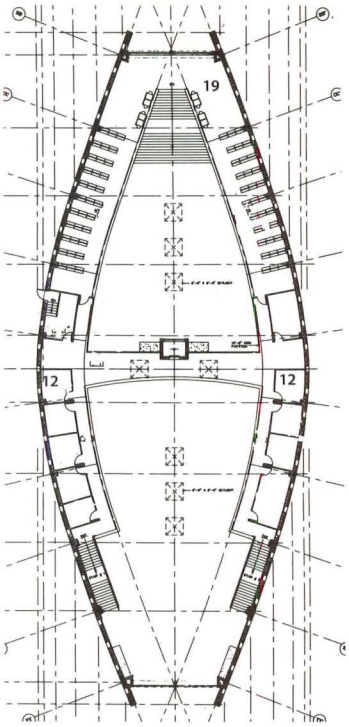
Architect's Statement: The Shiprock Multipurpose Center was designed to serve as a recreation center for youth and as a multipurpose center to accommodate the diverse cultural, educational, and health needs of young people within the Navajo Nation. To meet programmatic needs and enhance cost and space efficiency, flexible space was incorporated into the building so that many of the spaces can serve several purposes. The most important design consideration, however, was to make the building appealing to today's Navajo youth while reinforcing their cultural heritage. This was accomplished by drawing upon Navajo symbolism and culture to shape the very design of the facility.

Cardinal points and their associated meanings dictated the location of various programs. The colors associated with those cardinal points play key roles in the color palettes used for the interiors. The North (represented by black and

meaning rest and recovery) is the location of the health clinic. A Navajo sweat lodge is located nearby so that traditional Native American medicine can be practiced in conjunction with "modern" medical practices. At the west end (represented by the color yellow and symbolizing wisdom and patience) are the library, the children's library and reading rooms. The south end (turquoise), representing hard work ethic and growth, includes the gymnasium, exercise room, and lockers. The main entrance is on the east (white) side of the structure, in keeping with the tradition of east entrances in Navajo facilities.

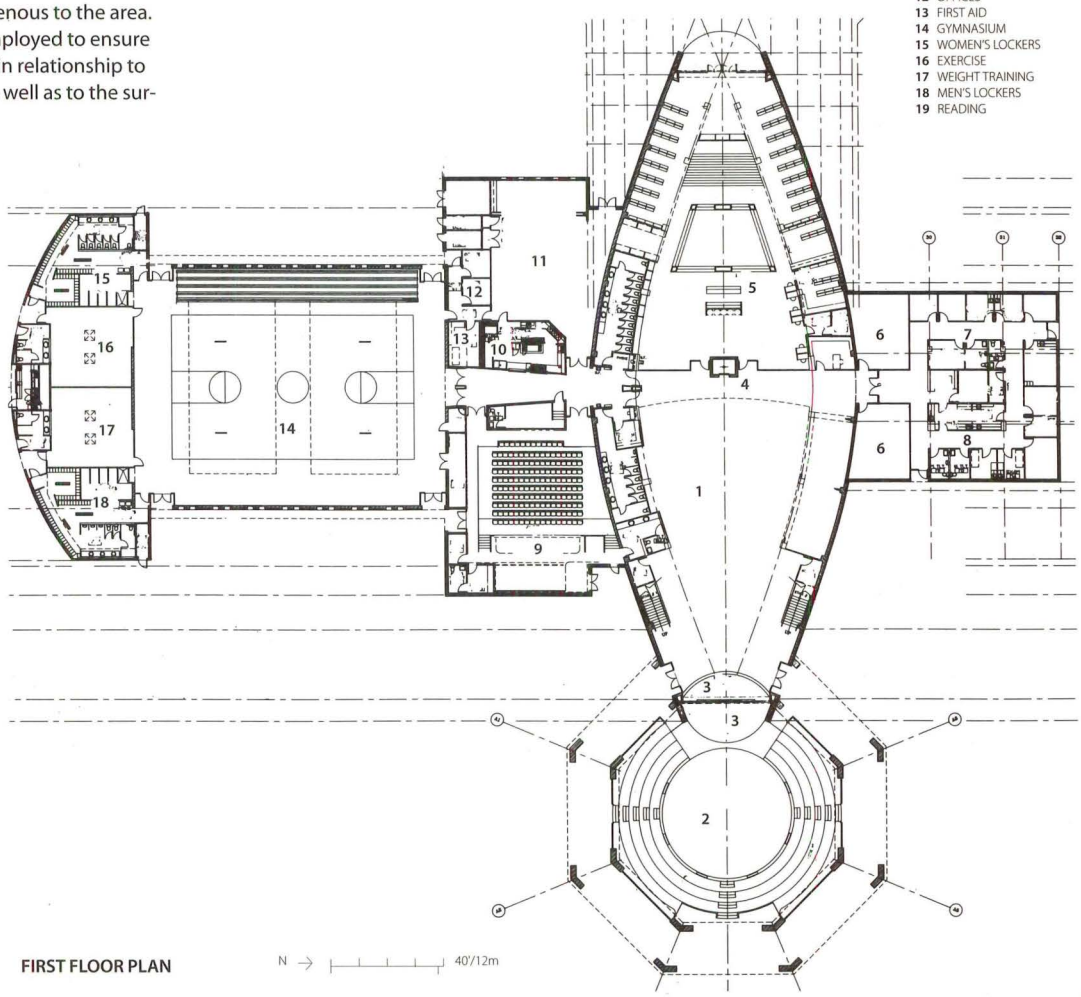
Navajo symbolism also influenced the massing of the facility. The east-west massing of the multipurpose center is designed as two Navajo bows that are tied together, representing the strength of the Navajo Nation. At the east end is an octagonal amphitheater, and at the west end is a reflecting pool. The octagonal shape used in the amphitheater, as well as those used throughout the facility, reflects the shape of the traditional Navajo home, the hogan. The reflecting pool is symbolic for the Navajo because it refers to the reflection of one's life. The interior of the facility is a walking mural of shapes and figures that depict Navajo spiritual and physical symbols.

The building will be constructed and furnished using natural materials indigenous to the area. Great sensitivity has been employed to ensure that the facility is contextual in relationship to other buildings in the area as well as to the surrounding landscape.



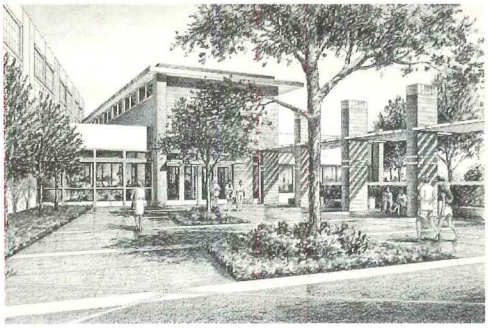
MEZZANINE FLOOR PLAN

1 GREAT HALL
2 AMPHITHEATER
3 PLATFORM
4 ELEVATOR
5 LIBRARY
6 CLASSROOM
7 COUNSELING
8 CLINIC
9 AUDITORIUM
10 FOOD CONCESSIONS
11 GAME ROOM
12 OFFICES
13 FIRST AID
14 GYMNASIUM
15 WOMEN'S LOCKERS
16 EXERCISE
17 WEIGHT TRAINING
18 MEN'S LOCKERS
19 READING



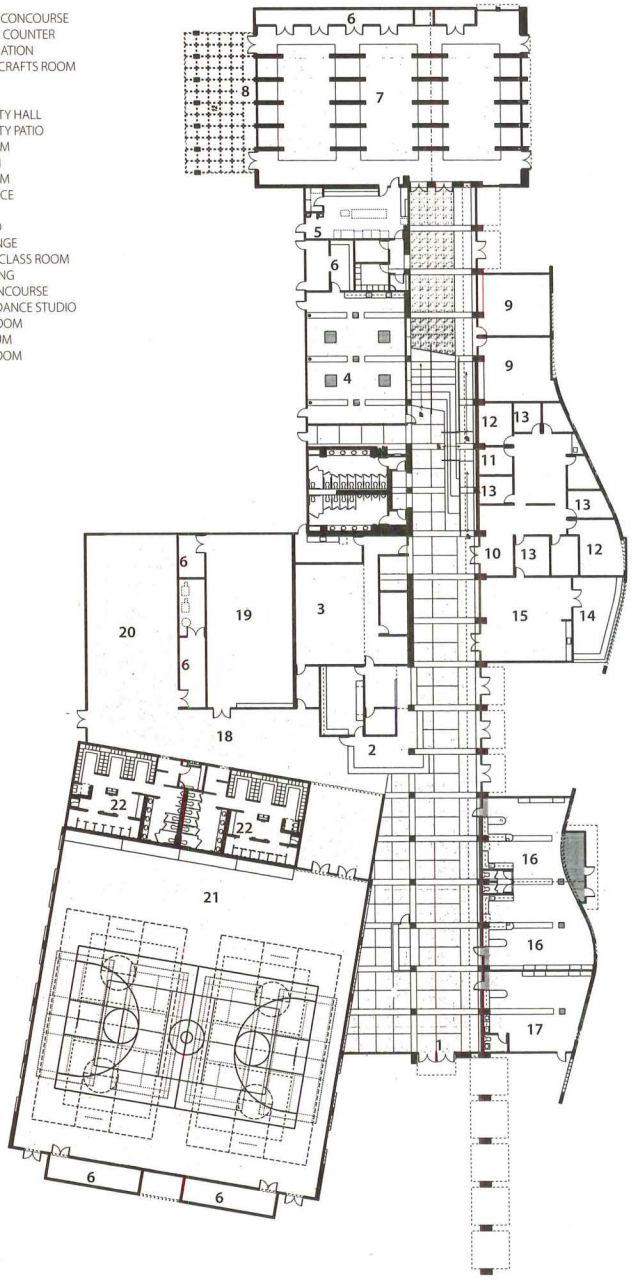
FIRST FLOOR PLAN

Brea Community Center



RENDERING OF ENTRANCE

1 ENTRANCE CONCOURSE
2 RECEPTION COUNTER
3 ADMINISTRATION
4 ARTS AND CRAFTS ROOM
5 KITCHEN
6 STORAGE
7 COMMUNITY HALL
8 COMMUNITY PATIO
9 CLASSROOM
10 RECEPTION
11 WORKROOM
12 CONFERENCE
13 OFFICE
14 TEEN PATIO
15 TEEN LOUNGE
16 TINY TOTS CLASS ROOM
17 BABY SITTING
18 SPORT CONCOURSE
19 AEROBIC/DANCE STUDIO
20 FITNESS ROOM
21 GYMNASIUM
22 LOCKER ROOM



FLOOR PLAN

Project: Brea Community Center, Brea, California.
Architect: LPA, Inc., Irvine, California (Leason F. Pomeroy III, Steven Kendrick, Wendy Rogers, Young Min, Ken Murai, Christine Lentz, Carlos Soria, Al Gabay).
Client: City of Brea.
Program: A facility to house a 12,000 sq-ft gymnasium, a fitness room, an aerobics room, locker rooms, a 400-seat community hall, meeting rooms, an arts and crafts room, a youth and family consortium, a teen room, a baby sitting room, a tiny tots room, and offices.
Building area: (gross square feet) 51,770.
Cost: $116/gsf.
Major materials: Concrete tilt-up with open web trusses, metal deck, wood sports floor, wood frame structure, EIFS exterior finish, CMU, blue-green glass, gypsum board, wood floor, carpet, vinyl composite tile.
Consultants: Culp & Tanner, structural; R.E. Wall, electrical; Tsuchiyama & Kaino, mechanical; ASL, civil; R.W. Smith, food service; O'Connor Con-struction Mgmt., cost; Purcell + Noppe, acoustical; Stoutenborough, Inc., design; Patrick Quigley, lighting; Paul A. Magil Associates, A/V and security; Sports Management Group, programming; Meyer & Assoc., landscape; and Richard Posner, art.
CAD-developed? Yes.

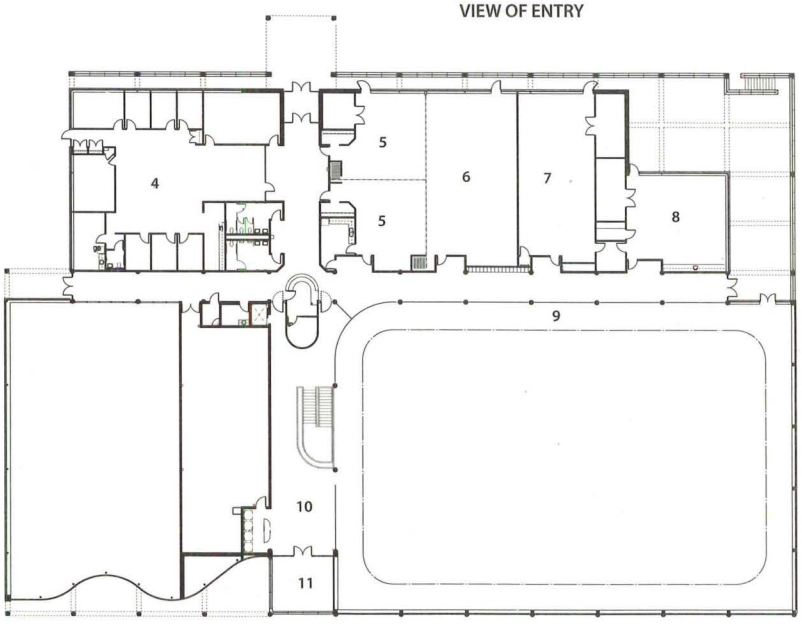
Architect's Statement: As a focal point for the City of Brea, this project is intended to be a place where the community is invited to play, learn, and socialize. The major functions are organized around a central concourse that serves as the primary circulation space and lobby, providing a physical separation between the community center's three distinct uses: meeting, family, and recreation. The concourse's glass wall, transparent by day and lanternlike by night, provides a warm invitation to the neighborhood. The axis of the concourse terminates at a community hall, which opens on both sides to adjacent courtyards. Addressing nearby houses, the gym is at the rear of the complex and is skewed to create a wider entry statement from the parking lot. Small classroom spaces are placed behind a serpentine wall, visually reducing the length of the spine and creating a friendly edge to the community plaza. The building is located on a 4.5-acre sharply sloping site with an underground easement limiting the buildable area. Site amenities include a community plaza with pedestrian drop-off area and a community hall patio and arts patio.

Washtenaw County Recreation Center

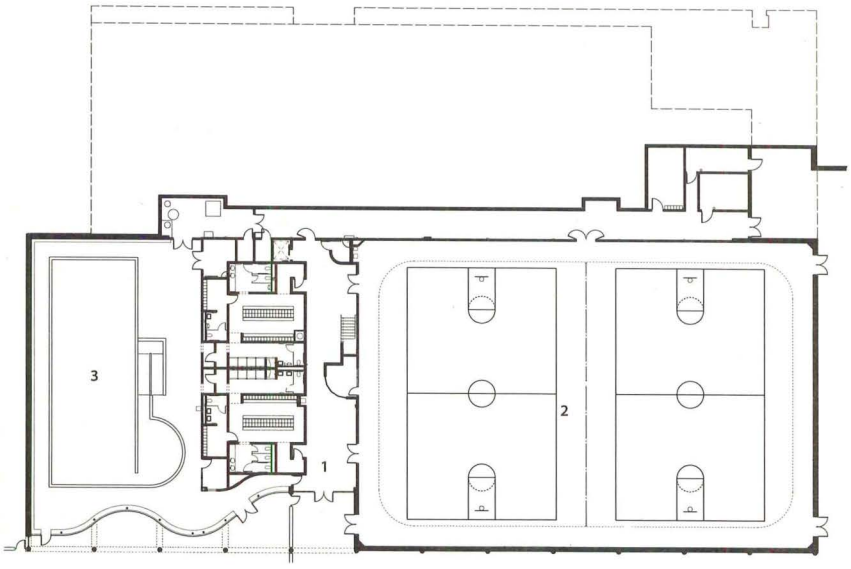
Gary Quesada/Balthazar Korab, Ltd.

VIEW OF ENTRY

1 LOWER LOBBY
2 GYMNASIUM
3 NATATORIUM
4 OFFICE
5 MULTIPURPOSE
6 DANCE
7 EXERCISE
8 ARTS AND CRAFTS
9 RUNNING TRACK
10 LOUNGE
11 DECK



UPPER LEVEL PLAN

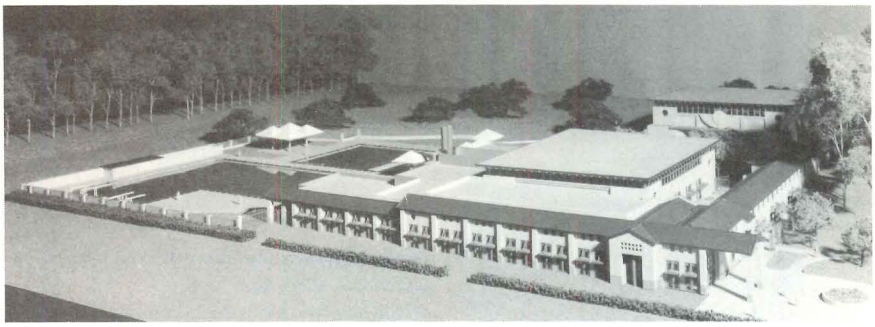


LOWER LEVEL PLAN

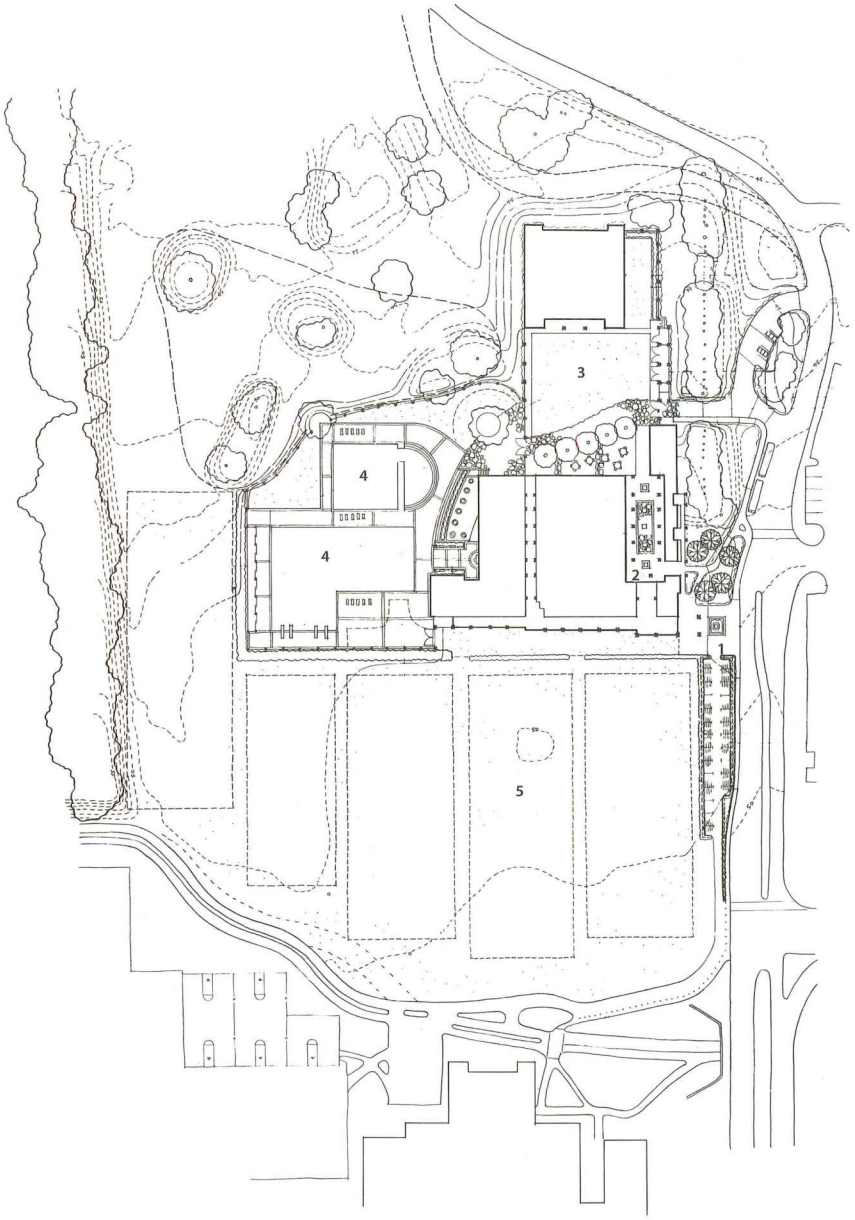
Project: Washtenaw County Recreation Center, Ann Arbor, Michigan.
Architect: TMP Associates, Bloomfield Hills, Michigan (John J. Castellana, *principal-in-charge,* David W. Larson, *project designer,* Thomas V. Kowalski, *project manager*).
Client: Washtenaw County Parks and Recreation, (Fred Barkley, Director).
Program: A county recreational facility with a gymnasium, pool, and other activity spaces.
Building area: (gross/square feet) 52,000.
Cost: $5,629,353.
Major materials: Structural steel frame and open-web joist; laminated wood beams and wood decking; split-face concrete block; cedar clapboard siding; aluminum window sash; glass block; ceramic tile; maple flooring; rubber sports flooring; asphalt shingles; single-ply EPDM roofing.
Consultants: EAM Engineers, electrical and mechanical; Palakowski and Brown, landscape; Paddock Pool Equipment Company, pool.
CAD-developed? No.

Architect's Statement: The goal for this county facility was to provide recreational and social opportunities for a cross section of the community. The new building sits on a prominent corner of a 150-acre park and functions as the gateway to this well-known outdoor amenity. Wood is used symbolically to reinforce the building's image as a park facility, and the gambrel trusses in the main entry hall are a direct reference to an existing barn that was repositioned on the site as part of the overall building composition. Spaces are organized around a main entry hall that frames a view to the wooded park beyond. The facility includes a dance studio, which can be divided into three smaller multiuse spaces; a weight room; an arts and crafts room; a gymnasium with two full-size basketball courts that can be separated by a curtain; an indoor elevated running track; and a four-lane, 25-yard indoor pool equipped with a ramp for barrier-free access. A semicircular bay at the end of the ramp entry allows bathers to sit on a bench and relax in a "jacuzzi" type jet massage area. A serpentine glass block wall admits glare-free natural light into this space. Its curving form is expressive of the aquatic activities occurring within and contributes to the playful atmosphere of the building.

Recreation and Aquatics Center



MODEL VIEW FROM THE SOUTHEAST



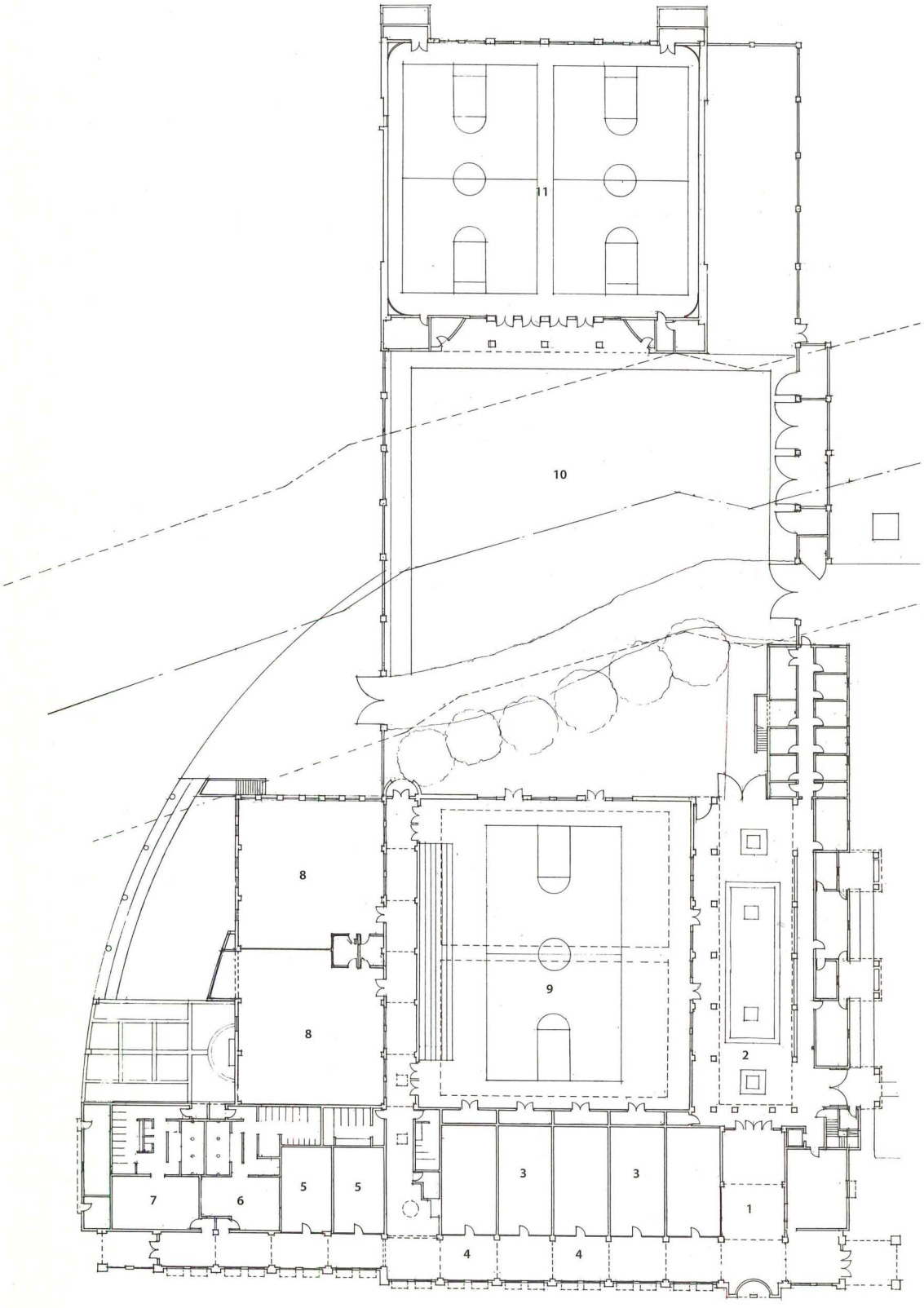
1 ENTRY PLAZA
2 LOBBY COURTYARD
3 GARDEN COURT
4 POOL
5 EXISTING PLAYING FIELDS

N 100'/30m

SITE PLAN

Project: Recreation and Aquatics Center, University of California Santa Barbara, Santa Barbara, California.
Architects: Sasaki Associates, San Francisco (Nelson Scott Smith, Patricia Sonnino, Clint Fulton, *architecture team*; Owen Lang, Harry Akiyama, Timothy Deacon, Joanna Fong, *landscape architecture team*) in association with Grant Pedersen Phillips Metsch Sweeney (Roger A. Phillips, Stephen Metsch, Cheryl E. Stuebing, James E. Moore IV, *team members*).
Program: The complex serves as a center for recreational and team sports for the university. A gallery and two major courtyards link indoor and outdoor activities, providing circulation and social areas.
Client: University of California Board of Regents (Thomas Tomeoni, Director of Facilities Design, Jon Spaventa, Director of Physical Activities and Recreation).
Building area: (net/gross, square feet) 45,100/55,500.
Cost: $122/gsf.
Major materials: Precast concrete; integrally colored stucco; glued laminated beams with exposed wood decking; metal roofing; aluminum color-coated windows and sash; hardwood, slate, and tile flooring; colored precast concrete pavers.
Consultants: Rutherford & Chekene, structural; Archer Spencer, mechanical, electrical, plumbing; Aquatics Design Group, pools.
CAD-developed? Yes.

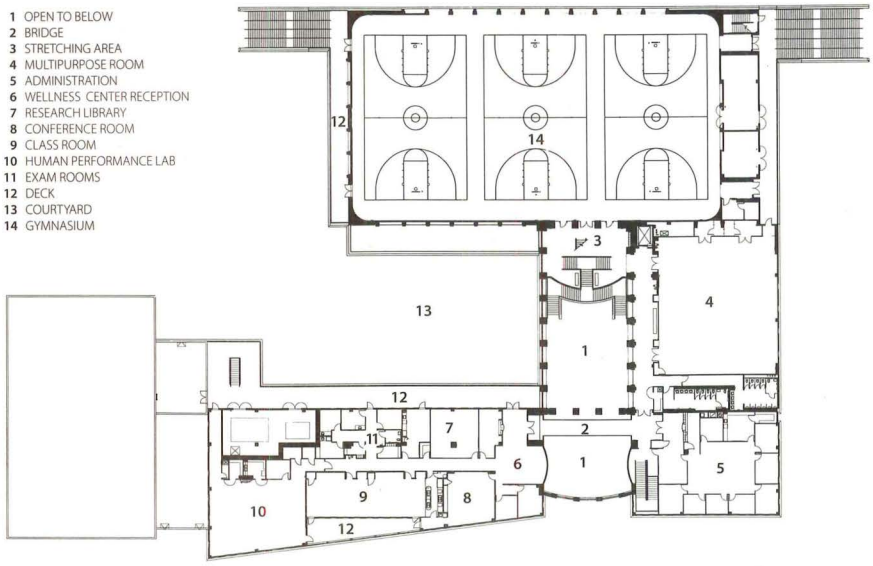
Architect's Statement: Based on the region's vernacular architecture, the complex is an assemblage of integrated indoor and outdoor "rooms" that are complementary in form and use. These rooms include, as organizational elements, an internal gallery and two courtyards that provide circulation, structure, and access control. The gallery is a viewing area for the glass-fronted racquetball courts and the playing fields it parallels. The lobby courtyard acts as a central social and activities space. The larger, garden courtyard provides well-defined, but extremely flexible space: part is hard-surfaced, for table sports, barbecues, and fire access; part is grass-surfaced for badminton, volleyball, and relaxation. The two pools are sited for views of the mountain range to the north and the playing fields to the south. The plan provides views and natural light for the building. Existing trees are preserved, and native plant materials link the complex to its context of oak savannah and eucalyptus windrow.



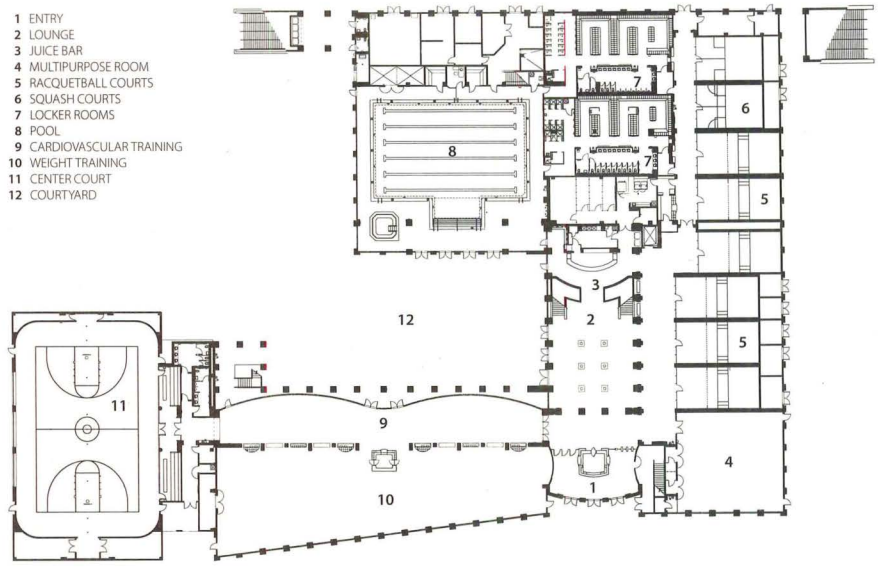
FIRST FLOOR PLAN

George A. Smathers Student Wellness Center

RENDERING OF ENTRANCE FACADE



SECOND FLOOR PLAN



FIRST FLOOR PLAN

Project: George A. Smathers Student Wellness Center, Coral Gables, Florida.
Architect: The Russell Partnership, Miami (Daniel Tinney, *principal in charge;* Joel Seeley, *associate;* Richard Jones, *intern architect;* Christina Gutierrez, *architect;* Mike Nichols, *intern architect*).
Client: University of Miami (Raphael Peruyera, facilities administration).
Program: A facility to house squash, racquetball, and basketball courts; a multipurpose space, a pool, a running track, a gymnasium, and a weight room.
Building area: (net/gross, square feet) 85,200/120,000.
Cost: $108/sf.
Major materials: Keystone, precast concrete, maple flooring, terrazzo, quarry tile.
Consultants: Parkin Architects, design; Williams Engineering, civil; Bradshaw Gill Fuster & Associates, landscape, Lawrence F. Brill, structural; McDowel Engineering Consultants, mechanical; Rowley Int'l., aquatic; Cini-Little International, food service.
CAD-developed? Yes.

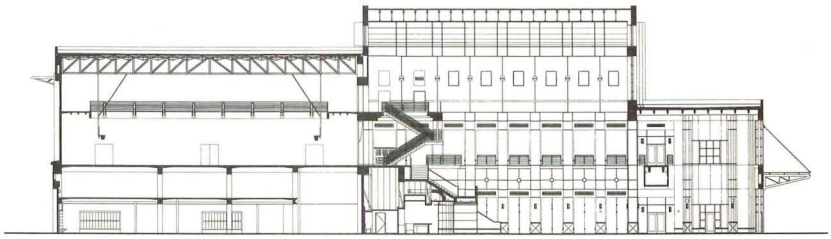
Architect's Statement: The Student Recreation and Wellness Center is sited in accordance with the campus master plan. The new facility is organized along two major axes, a north-south axis that parallels an existing canal and pedestrian pathways, and an east-west axis that links the pathways and vehicular drop-off to the new main entrance.

The facility is generally organized at grade in relation to the campus master plan for pedestrian circulation and services. The main entry plaza, located on the east side of the first level, is at the intersection of the footbridge that spans the canal from the vehicular drop-off and the pedestrian pathway from the dormitories. The landscaped and paved exterior plaza offers a shaded outdoor gathering space.

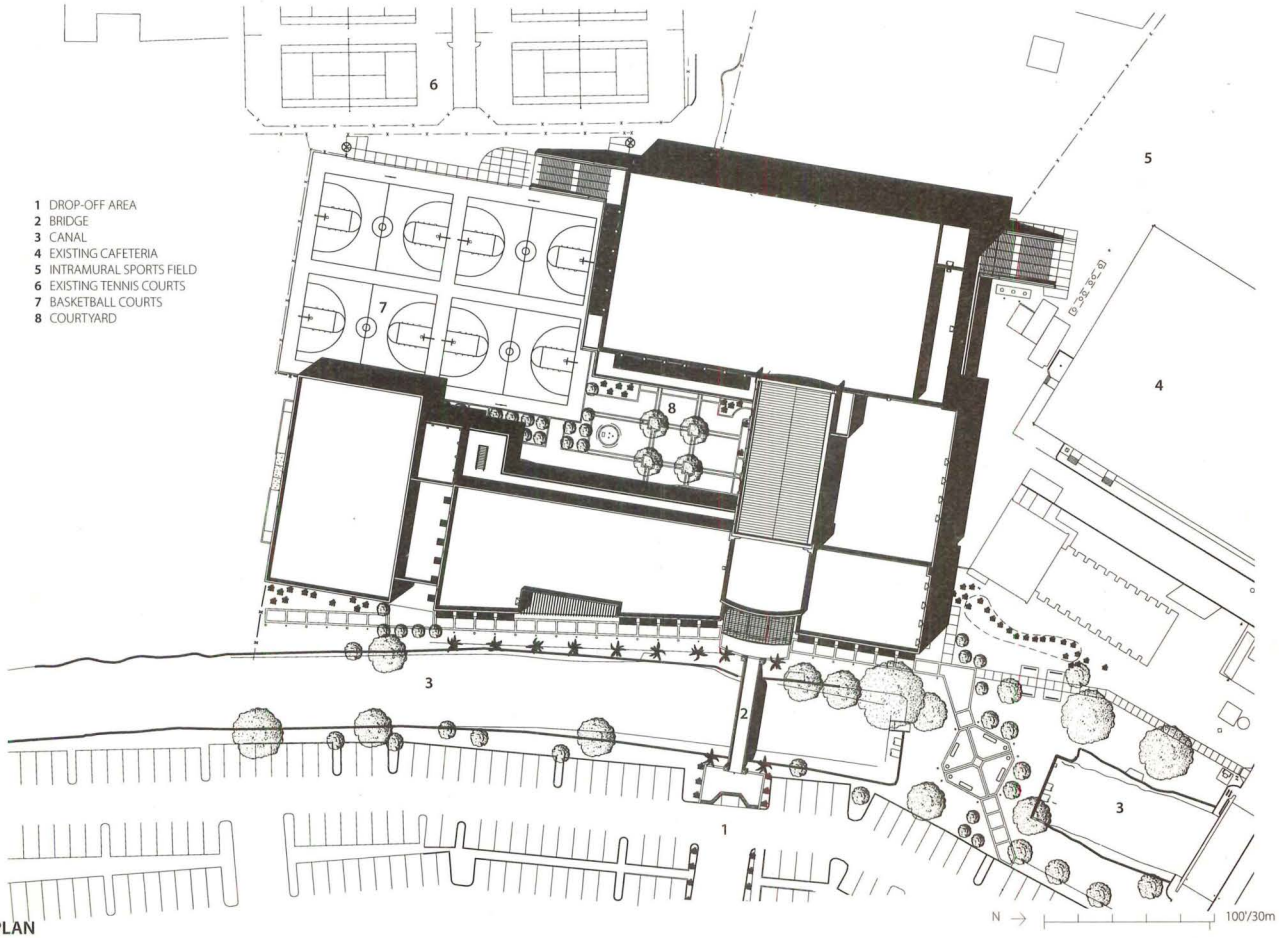
The first floor is organized into three zones: indoor activities, lounge/lobby, and outdoor activities. The lounge/lobby, oriented along the east-west axis, functions as the major entrance and control point. This zone unites the different functional areas of the new facility. From the control point, a variety of spaces are visible, including a weight room, a multipurpose room, outdoor courts, a courtyard, a natatorium, racquetball and squash courts, and the viewing corridors on the second and third/jogging track levels above.

The building's massing is based on the honest and direct expression of rectangular volumes articulated with punched windows and colonnades as set forth in the campus design guidelines. The size and proportion of windows have been used to express different functions such as offices or large-scale activity spaces. The massing has also been developed to define a clearly identifiable building entry related to the campus circulation system. Visual connection to the building is established by locating the weight/fitness area adjacent to the canal pedestrian pathways. Windowless spaces such as the racquetball courts are located at grade adjacent to the Commons service area. Another important consideration in the building massing was to ensure that the courtyard received a good amount of natural light and was open to the prevailing breezes. Placing the main gymnasium on the west side of the site also helps to minimize the impact of this mass from the canal's pedestrian pathways .

RENDERING OF LOUNGE



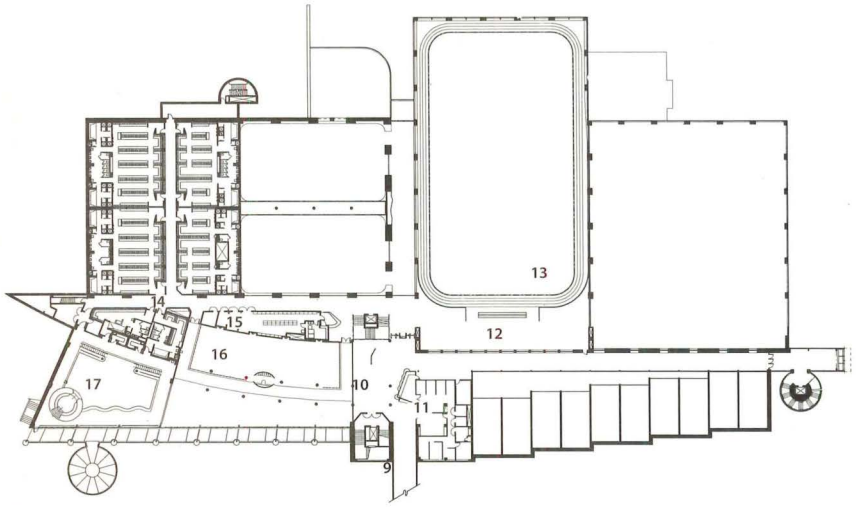
SECTION



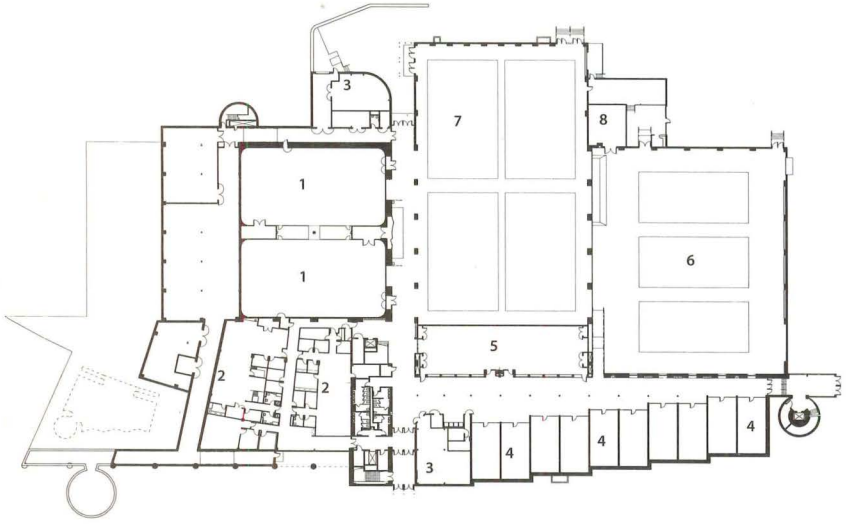
SITE PLAN

Gary Center Student Recreation Facility

VIEW FROM ENTRANCE



SECOND FLOOR PLAN



FIRST FLOOR PLAN

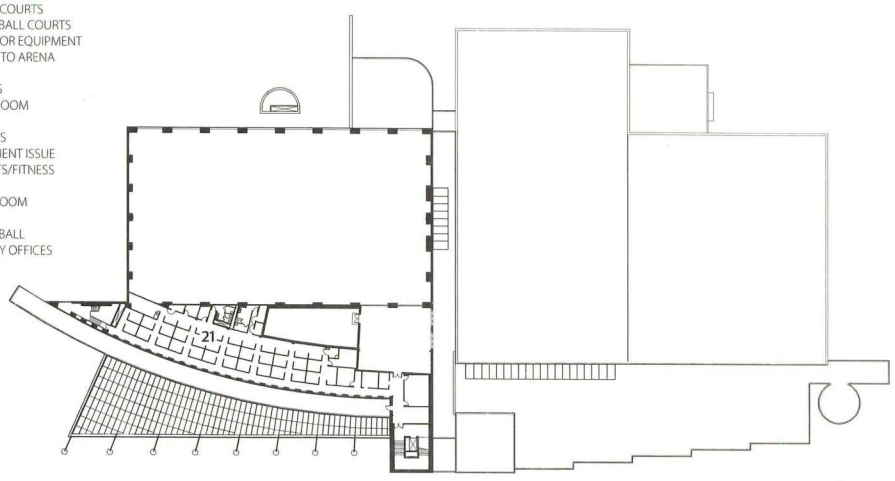
Project: Gary Center Student Recreation Facility at Western Michigan University, Kalamazoo, Michigan.
Architect: Smith, Hinchman & Grylls Associates, Detroit (Carl Roehling, *project executive;* Mike Tomasik, *project manager;* Jerry Reinbold, *project designer;* Bob Anderson, *project architect;* Z.Y. Liu, *project structural;* Roger Yamamoto, *project mechanical;* Mike Weingartz, *project electrical*).
Client: Western Michigan University (Evie Asken, Director of Campus Planning).
Program: First phase of a multiphase sports and recreation complex. This phase includes the renovation of indoor tennis courts and basketball courts and the addition of new activity spaces (multipurpose, basketball/tennis, racquetball courts, pool, weight room/fitness spa, etc.), support spaces (lockers, storage), physical education labs, classrooms, and office space.
Building area: (net/gross) 160,600/220,000.
Cost: $106/gsf (1994).
Major materials: Brick masonry (smooth and textured), insulated glass curtain wall and skylight, translucent plastic glazing system, aluminum panels.
Consultants: Rosser-Fabrap, sports facilities programming and equipment planning.
CAD-developed? Yes.

Architect's Statement: The Gary Center is the first phase of a multiphase sports and recreation complex located at the eastern edge of the campus at a major campus entry point. An important goal of the project was to enhance the overall campus by creating a new entry image. This facility, programmed with significant student involvement, is intended to promote a high degree of student interaction. The students wanted an open, airy, sun-filled facility that would project a festive image expressive of the active nature of its program. Constructed on a sloping site, the program is organized on four levels with grade entries on the first and third levels. Controlled access to all activity spaces occurs at the center of the second level. The multiple levels are open to one another and are connected by generous circulation spaces open to adjacent activity spaces. The swimming pool and fitness center are tucked under an expansive glass enclosure, a segment of a truncated cone in form. Bold tent-striped masonry walls and vertically banded glass project a festive image; the dynamic geometry of the skylight and the curving masonry wall are expressive of the action contained within.

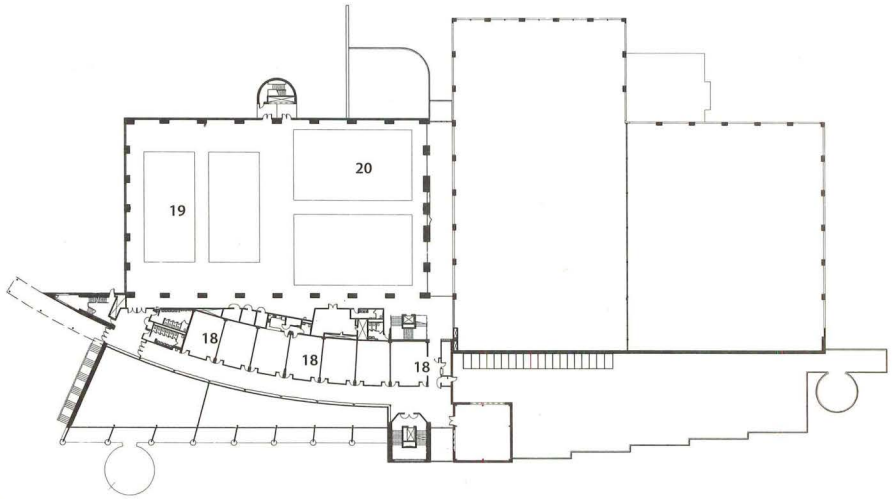
MULTIPURPOSE BASKETBALL/TENNIS

SWIMMING POOL

1 MULTIPURPOSE/HOCKEY
2 PHYSICAL EDUCATION LABS
3 STORAGE
4 RACQUETBALL COURT
5 AEROBICS STUDIO
6 TENNIS COURTS
7 BASKETBALL COURTS
8 OUTDOOR EQUIPMENT
9 BRIDGE TO ARENA
10 LOBBY
11 OFFICES
12 GAME ROOM
13 TRACK
14 LOCKERS
15 EQUIPMENT ISSUE
16 WEIGHTS/FITNESS
17 POOL
18 CLASSROOM
19 TENNIS
20 BASKETBALL
21 FACULTY OFFICES



FOURTH FLOOR PLAN

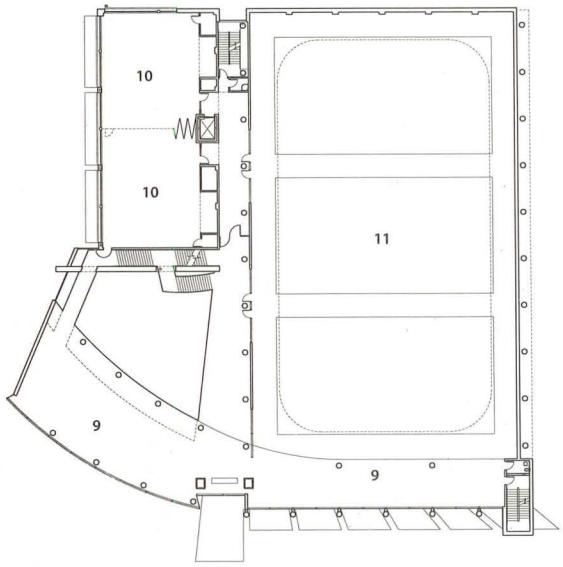


IRD FLOOR PLAN

October 1994

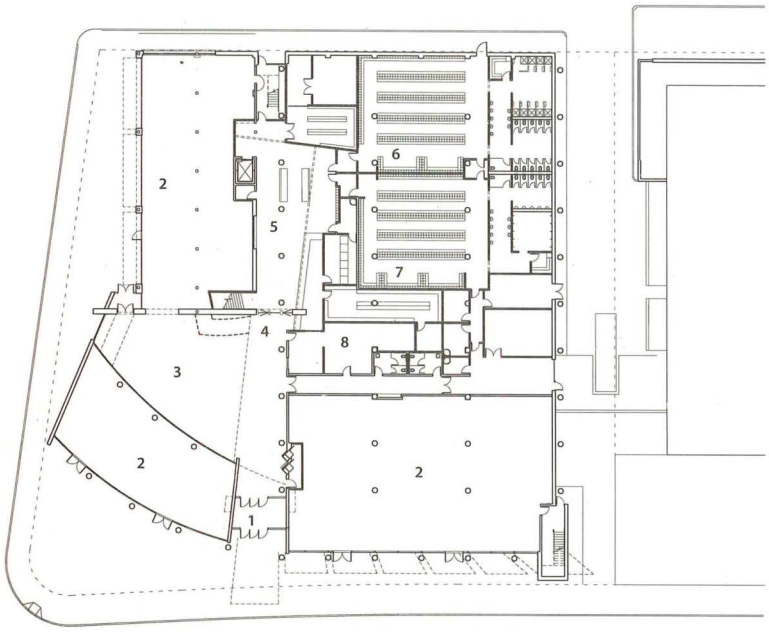
Northeastern University Student Recreation Center

RENDERING OF HUNTINGTON AVENUE FACADE



1 MAIN ENTRY
2 RETAIL
3 ATRIUM
4 SECURITY CHECKPOINT
5 LOBBY
6 WOMEN'S LOCKER ROOM
7 MEN'S LOCKER ROOM
8 ADMINISTRATION
9 FITNESS
10 AEROBICS
11 GYMNASIUM

LEVEL TWO



LEVEL ONE

Project: Northeastern University Student Recreation Center, Boston, Massachusetts.
Architect: HNTB Corporation, Boston, Massachusetts (Gregory M. Detmer Stephen A. Smith, Elise R. Gispan, Desmond J. McAuley, Jesse K. Miguel Edward C. Benner, Gordon M. Schirmer, Cheryl V. Cummings, Paul W. Bergquist, Mark S. Curtin, *project team;* Dongik Lee, *renderer*).
Client: Northeastern University (John A. Curry, President, John A. Martin, Vice President, William E. Mallon, Jr., Business Manager).
Program: Sited at an active urban intersection in the heart of the Northeastern campus, the Recreation Center will contain recreational facilities for the students and retail facilities for students and the neighborhood population.
Building area: (net/gross, square feet) 64,783/82,022.
Cost: $9.9-million (estimate).
Major materials: Glass, ground-face block, glazed block (interior), steel.
Consultants: Zaldastani Associates, structural; R. G. Vanderweil, Inc., mechanical; Solutions Engineering, life safety and code; Jerry Kugler Associates, lighting; Cavanaugh Tocci Associates, acoustics; Pressley Associates, landscape; Turner Construction Company, cost estimating and construction.
CAD-developed? Yes.

Architect's Statement: This project is highly influenced by urban design issues of placemaking, form, integration, and volume. Today a large sign identifying Northeastern University stands on the site. Huntington Avenue, in downtown Boston, is a busy urban street that bisects a campus of anonymous and utilitarian masonry buildings. Northeastern wants to replace the sign with a building that strongly signifies the university and its location in the urban fabric. A curving glass wall faces the intersection of Huntington Avenue and Forsyth Street, a campus crossroads. This wall is angled five degrees from the vertical to create a focal point and engage the intersection; at night, th wall will display the activities contained with At the gymnasium end of the façade the gla wall is enclosed within a muscular framewo exposed structure; the asymmetrical bow-string-truss-supported roof rises to the n east, admitting light to the activity space below. The large, potentially imposing v of the gymnasium is raised above stree and wrapped with glazed activity spa visually reducing the impact of the b scale and massing.