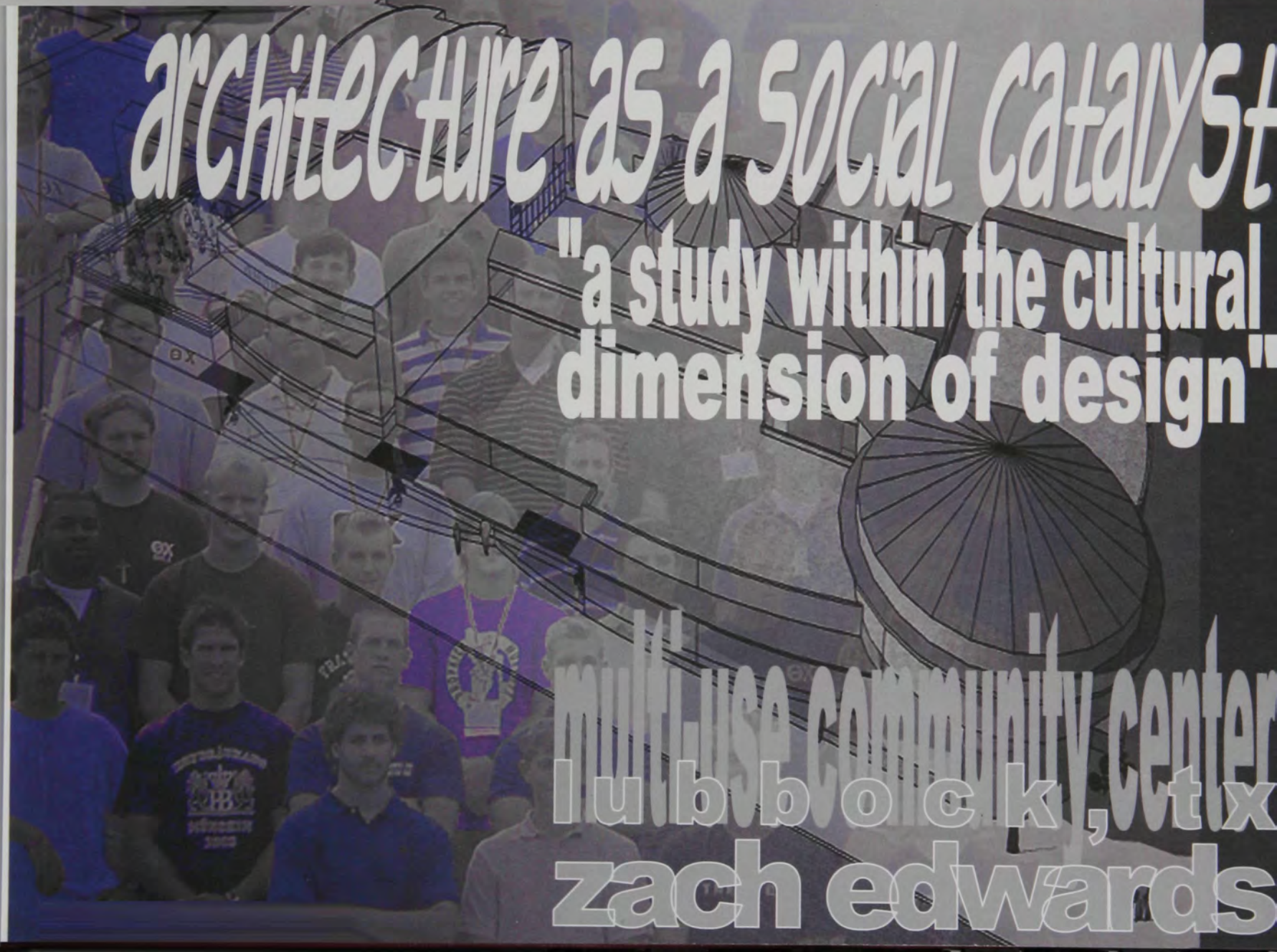
architecture as a social catalyst
"a study within the cultural dimension of design"
multi-use community center
lubbock, tx
zach edwards

"ARCHITECTURE AS A SOCIAL CATALYST"

- a study within the cultural dimension of design -

A MULTI - USE COMMUNITY CENTER

for the Overton Community of Lubbock, Texas

by

Zachary David Edwards

A Thesis

In

Architecture

-Accepted By:-

Submitted to the Architecture Faculty
of the College of Architecture
of Texas Tech University in
Partial Fulfillment for
The Degree of

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Month, Year

MASTER OF ARCHITECTURE

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abstract

thesis statement:

Architecture should function as a social catalyst. Through the clear understanding of compatibility, sustainability, and the additional element of a cultural dimension, architecture should attempt to make a social connection with both those directly and indirectly affected. Through the proper use of accommodation, appropriation, communication and direction, architecture can assume the role of a responsible social process. Thus, the built form, if it is sensitive to the needs of its surroundings, the network it helps create, and the future needs of the users, can promote a true sense of community for its occupants, neighbors, and passer-bys, as well as give direction to the social progress of its society.

scope of project:

A multi-use community center; one of which integrates the cultural dimension of architecture and expresses it as a social art form. It is the intention that the facility act as a catalyst for social betterment by inspiring the community to come together and make them more aware of the culture around them.

context statement:

To be placed in the North Overton neighborhood of Lubbock, Texas wherein both the urban and suburban characteristics will play a role in the design, and where the design can act as a revitalizing catalyst for the surrounding context. The site shall be on the north side of Main Street, between Avenue T and Avenue U.

theory

cat-a-lyst (kt-st)

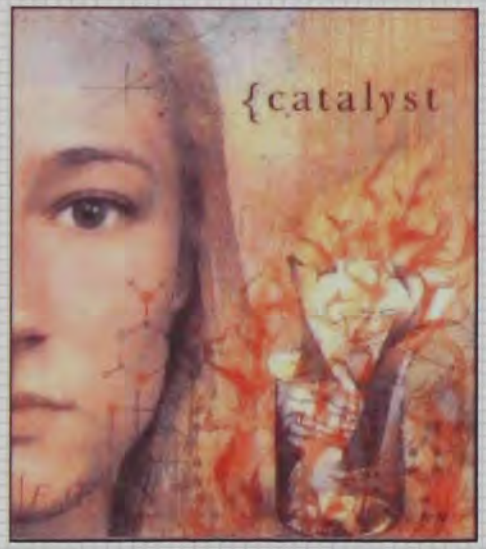
compulsion, desire, drive, impetus, incentive, lash, lust, motivation, passion, pressure, prod, spur, stimulant, urge, whip, zeal

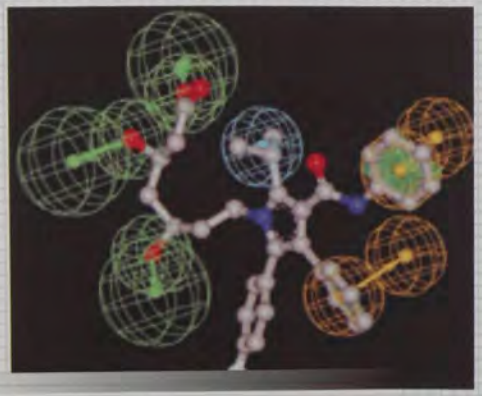
- architecture is a vehicle of social change -

multi-use community center

theoretical_basis

introduction:





All too often it seems, even in education, that the social context of architecture is overlooked. This inward focus and lack of interest in the social role of architecture cannot continue, rather we must look at architecture for what it is: a social act. Architecture is not solely a technical matter; it incorporates a cultural dimension as well. It is a social process from which comes the responsibility to accommodate, appropriate, communicate, and direct society. It is not only the public use of a building that determines its success or failure, but inclusively, it is the supportive interaction of architecture and social sciences throughout the entire design process. If proper care is placed on the design process, the built form can act as a social connection for both those it directly and indirectly affects.

The built form should be compatible with its surroundings in all aspects of design; such as form, tectonics, materials, space, use and function. It should be aware of the context it is joining and take into consideration the context it will help form in the future. Architecture should be sensitive to its function, but at the same time allow for the possibility of change in function that future users might need or want.

Architecture has the opportunity to represent the current condition of society's social progress and status. In order to keep moving forward, architecture, quite often, has to deal with the dysfunctional aspects of society. It must also deal with the psychological and sociological aspects of the community if it is to be a successful and desired addition to the built context. It has the opportunity to promote a true sense of community for its users, neighbors, and passers-by. Buildings exert a tremendous amount of influence, good or bad, on the surrounding community; therefore, it is the duty of the architect to understand the community and their needs in order to provide a good influence and sound design.

supporting theory

Architectural projects have the responsibility to incorporate strong social programs and involve the client in participatory planning. (Bussel 1995, 43) The art of these projects arises from their ability to respond well to the context, resolve planning and site constraints, incorporate user needs, and address societal issues through design.

All designers have one thing in common, their client – the human race. Therefore, we all must accept the fundamental assumption that our work is designed for ,and must be useful, to human beings. (Deasy 1985, 9) Thus, architecture must create a mutually beneficial relationship between the built environment, the natural environment, and humans.

> "The principle reason for building anything is to help people accomplish their purposes as effectively as possible. Human effectiveness in any activity is greatly influenced by social and psychological factors. Environmental designers should use the knowledge of human behavior to create places that help people accomplish their purposes with a maximum of satisfaction and a minimum of friction and frustration." (Deasy 1985, 13)

Various patterns of human nature and compatibility should be incorporated to define the individual buildings and the spaces between those buildings. "As the most social of the arts, architecture has always had the critical role to play in this expression (social dimension), providing the built framework that mirrors, regulates, and defines society." (Slessor 1996, 4)

Architecture, as a form of design, involves the formation and understanding of human needs and wants. "It can act as…an agent for social change." (Slessor 1996, 5) Architecture does not present itself entirely from the thoughts and ideas of the designer, rather it is the result from a process of collaboration, opportunities, and mutually beneficial decisions. This process must attempt to bridge the gap that client, and the end user.

(Fig: 2.1) Key issues of design adapted from White.

(Fig: 2.2) Stranded user diagram adapted from Brown.

supporting_theory

It is architecture's duty to understand the communities it will help form because of the tremendous amount of influence that buildings and site alterations exert on them.

Human behavior, in many aspects such as how we feel or act, is greatly affected by the built environment that surrounds us. If an architect has a better comprehension of the connection between the environment and human behavior then they will be able to create a more pleasing and effective design. The environment influences human behavior in many ways, both positive and negative. "Any environment that is inadequate for its intended purpose, that frustrates and annoys us, or that limits our ability to accomplish our purposes has a direct bearing on human behavior. From finding friends to finding our way, these are all matters that are of great importance to human beings. For any designer to ignore them would be to ignore what human beings are all about." (Deasy 1985, 10) Architects have a responsibility to anticipate, manipulate, incorporate, and avoid, if necessary, the impact of these behaviors.

Human nature and interaction is a complex subject, one that is the focus of entire scientific discipline. Abraham Maslow has condensed a long list of essential factors into a hierarchy of four elements: food and drink needs, security and safety needs, affection needs, and self-actualization needs. (Deasy 1985, 17) These needs are what drive the design process. The public at large has no interest in the distinct aspects of design, but rather if the design can satisfy their needs. This is where communication becomes very important. Deasy explains a series of questions that the design should answer to determine whether the building satisfies any current needs. They are: What is it? What benefit does it offer me? How do I get in? What is inside? and How will I be received? The design process that determines the built form should be a logical and knowledge based effort to communicate to the culture around it. (Deasy 1985, 32-34)

(Fig: 2.3) Divisions of social design adapted from Sommer.

issues theory

one two three four

need to symbolize:

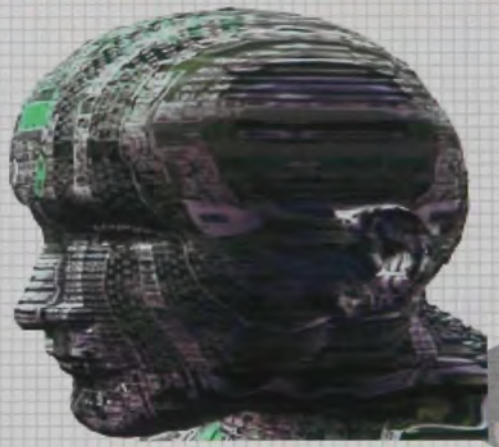
Adopt and reflect society's aims and goals. Advocate for the for the users needs without overlooking the long term architectural value. Represent society and help give it direction.

need to connect:

Create a social connection with the surrounding area that accommodates, communicates, and solicits an appropriate form of social engagement. Be a catalyst for social change and betterment. Promote individual, social, and cultural interaction.

need to respond:

Respond to the context in a responsible way. Through compatibility and contextual interaction, the design should be responsive to the needs of the users and address the social issues of the area. It should portray meaning through its social design.



need to understand:

Incorporate the social sciences into the design process. A more in-depth understanding of human behavior will produce a design that is in line with society's everyday reality.

responses

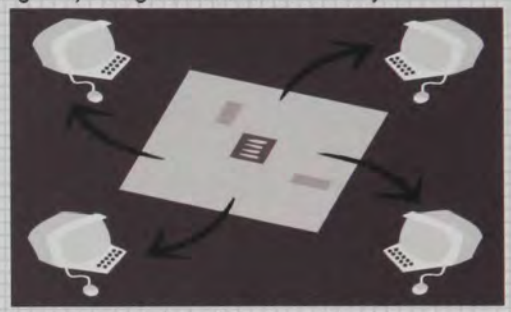
how to symbolize:

Represent the current condition of society's social progress through the use of materials, technology, and building systems. Through use of collaboration, create a form that characterizes those that would use it.

(Fig: 2.4) Design should reflect society.

how to connect:

Be flexible in both the overall design and the design of spatial relationships. Create an interaction of both indoor and outdoor spaces and define those spaces without a blatant separation. Define public and private spaces, and relate to the public/private spaces that surround the design.



(Fig: 2.5) Interaction of design with other spaces.

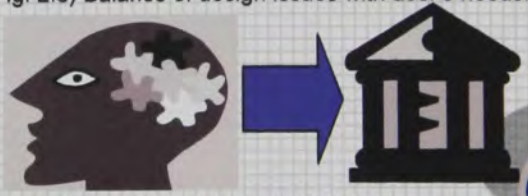
how to respond:

Become a part of the community fabric and create a sense of belonging. Attempt to be compatible with the surroundings massing, size, scale, and materiality. Address the needs of the community through thoughtful and environmentally conscious methods.

(Fig: 2.6) Balance of design issues with user's needs.

how to understand:

Bring the psychological aspect of architecture into the design and attempt to deal with the dysfunctional aspects of society. Create an interaction between the old and the new so that the design will be sustainable for years to come.



(Fig: 2.7) User issues should affect design.

precedents

project: Jingletown Neighborhood Housing
location: East Oakland, California
architect: Pyatok Associates
time period: Completed in 1996

This project used a participatory process for low-income housing. This is a good case study example of how important client involvement is to the design process. Through workshops, the future residents were involved in not only the planning and design of the community, but the acquisition and zoning of the site it was to be built upon. The result was an architecture that respected the context without imitating its surroundings. The design also allowed for future expansion by the individual owners which is a good example of being able to meet the needs of the users long after the project is completed.

The following is a description by the architect:

"These first-time home buyer units face auto/pedestrian courts lined with bollards without curbs to create a plaza feeling. The smaller homes have expandable attics which allow the addition of one bedroom and bath. 20 homes are designed to expand by leaving spaces adjacent to them for future garages with one bedroom above. A central walkway connects the main street with a shortcut to the nearby shopping district. Some homes have living rooms on the second floor and a bedroom on the first floor to allow combination with the garage and entry by the front door for a home-based business. Other homes are paired as duplexes to provide the scale and appearance of the neighborhood's single-family Victorian and craftsman style." (Pyatok Architects Inc. 2004)

(Fig: 2.8) Typical example of a first time buyer unit within project

(Fig: 2.9) Floor Plans

precedents

project: George White Youth Center
location: Boston, Massachusetts
architect: Leers Weinzapfel Asscoiates
time period: Opened in 1995

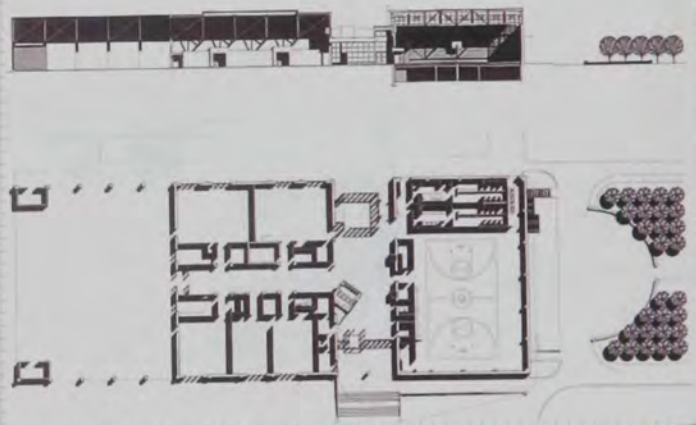
This development center for disadvantaged kids is yet another example of an effort to listen and respond to the needs of the end user. The program of this project came about through a community outreach process. The goal was to create an exciting community magnet for the surrounding neighborhoods. The outcome was a design that provided a safe environment where the kids of the surrounding neighborhoods could exercise both their bodies and minds.

The following is a description of the project by the architect:

> "The Youth Development Center provides a new recreation, social and learning center for young people in a densely populated and multi-racial urban neighborhood. The center includes a multi-use gymnasium and outdoor pool for recreation, educational, meeting and activity spaces for community use, and related administrative and support areas. The project incorporates the structure of an abandoned ice rink- several bays of the original structure were demolished and the gymnasium and entry lobby were built on the original foundations. Clubhouse facilities occupy the remaining vaulted space of the former ice rink with the shed's original bowstring trusses visible overhead." (LWAA 2004)

This project won the 1996 Harleston Parker Medal for most beautiful piece of architecture in the city of Boston.

(Fig: 2.10) Front entrance to the youth center



(Fig: 2.11) Floor Plan and Section

precedents

project: Channel Heights Housing Project
location: San Pedro, California
architect: Richard Neutra
time period: 1941-43

Neutra developed the program and designed this project under his belief that architecture should serve as a catalyst for social betterment. With federal financing, this two-story unit achieved a standard of being both efficient and elegant. Though not flagrantly monumental like many other projects of this time, the project's focus was to be sensitive to the end users, mainly shipyard workers of San Pedro, and gain their acceptance of the end result. This end result was one of the most popular examples of architecture from this time period, characterized by its modern and advanced aesthetic. Its success derived from the use of indigenous materials, mass-produced prefabricated construction, and its unique response to the ever changing climate and topography of California. Richard Neutra saw public housing as

> "a practical means to vindicate theories of Modern Architecture by demonstrating its applicability to the accelerated pace of life brought about by the war. Production bottlenecks... were to be addressed by new building technologies that would reduce construction time. Sanitary and healthful housing would be the foundation for a vigorous, more productive work force, while social planning, cooperative living, and minimal housework would allow more free time for public housing inhabitants" (HACLA 2003)

(Fig: 2.12) Exterior perspective of housing under construction.

(Fig: 2.13) Exterior view of housing and inhabitants.

bibliography

Alexander, Christopher. *A Pattern Language.* New York: Oxford University Press, 1977.

Brown, Stephan A. *Communication in the Design Process.* New York: Spon Press, 2001.

Bussel, Abby. "Architecture in the Public Interest." *Architecture,* April 2004, 27-29.

Bussel, Abby. "The (Social) Art of Architecture." *Progressive Architecture.* January 1995, 43-46.

Carter, Brian, and Annette Leguyer. "Frontier Visions: Comment." *Architectural Review,* November 2002, 34-36.

Davey, Peter. "In Context: Comment." *Architectural Review,* October 2002, 36.

Davis, Howard. *The Culture of Building.* New York: Oxford University Press, 1999.

Deasy, C.M. *Designing Places for People.* New York: Whitney Library of Design, 1985.

Dutton, Thomas A., and Lian Hurst Mann, eds. *Reconstructing Architecture: Critical Discourses and Social Practices.* Minneapolis: University of Minnesota Press, 1996.

Housing Authority of the City of Los Angeles. 2003. *Pueblo Del Rio: Let's not forget the past.* <http://www.hacla.org/news_links/HistoricalExhibit/HistoricalExhibit.htm>.

Keegan, Edward. "Carol Ross Barney: by building consensus and with limited means, Carol Ross Barney elevates the public realm." *Architecture,* September 2002, 87-93.

Leers Weizapfel Associates Architects, Inc. 2004. *George Robert White Youth Community Center.* <http://www.lwa-architects.com/project_matt.html>.

Marmot, Alexi, and Martin Symes. "The Social Context of Design: A Case Problem Approach." *Journal of Architectural Education* (Summer 1985): 27-31.

Piedmont-Palladino, Susan C. "Building Alternatives." *Perspecta,* no. 29 (1998): 2-15.

Pyatok Architects Inc. 2004. *Jingletown Homes, Oakland, California.* <http://www.pyatok.com/jingletown.html>.

Slessor, Catherine. "Social Life." *Architectural Record,* July 1996, 4-5.

Sommer, Robert. *Social Design: Creating Buildings with People in Mind.* New Jersey: Prentice-Hall, Inc., 1983.

Stein, Karen. "George Robert White Youth Development Center, Boston." *Architectural Record,* June 1996, 88-91.

Stevens, Garry. *The Favored Circle: The Social Foundations of Architectural Distinction.* Cambridge, MA: The MIT Press, 1998.

facility

community center

meeting place used by members of a community for social, cultural, or recreational activities

multiuse community center

· embodiment of a strong social dimension ·

epistemology

existing state:

existing state

A community is a group of people living in the same locality sharing similar interests. A community center takes into account those interests and embodies them into its function. This facility type is one that embraces the social dimension of design, because without carefully planning for the end user, the building could not function as it was intended.

There is a need within a community to have activities and projects generated by the members for themselves. A community center provides the functional and effective space for this to occur. This facility type will serve all the people of a given community, but it is the extremes for which it can play the most important role. Alexander clearly states the need for members of a community, especially the young and old, to interact and learn from each other.

> "Old people need old people, but they also need the young, and young people need contact with the old... If children are not able to explore the whole of the adult world around them, they cannot become adults. But modern cities are so dangerous that children cannot be allowed to explore them freely." (Alexander 1977, 216/294)

The community center will provide a habitat where the adult world and the child's world can be merged together in a safe environment. It will also provide an outlet for children to come together with other children. Alexander also states this as an important need;

> "If children don't play enough with other children during the first five years of life, there is great chance that they will have some kind of mental illness later in their lives... Children need access to other adults beyond their parents, and access to other children; and the situations in which they meet these other adults and other children need to be highly complex, subtle, full of the same complexities and intensities as family life. (Alexander 1977, 342/427)

epistemology

what is a community center?:

what is it?

The foundation by which the community center exists is to serve the educational, social, and religious needs of the community. It is simply a place for the community to come together and enjoy social, cultural, recreational, and religious activities. It seems that within the human culture, there has always been a hunger to have a sense of belonging, a sense of community. The neighborhood, civic, community center is the poster child for this catalyst.

The community center should be an identifiable landmark to both users and non-users. It is an icon of civic focus and social gathering. Community building design is defined as those projects which seek to build new relationships among members in a community and develop change out of the connections these relationships provide for solving user defined issues. The community center building type is a perfect example of this definition and one that can encompass all of the social issues pertaining to the design process.

A community center offers its users a clean, safe, and attractive facility where they can take a class, learn how to cook, learn how to draw, compete in athletics, perform in a dance recital, or host a family reunion. It also provides an outlet for community expression and reflection. It's a place with meeting rooms, assembly space, and recreation areas that are open to the community members as well as available for rent by businesses, organizations, clubs, families or any number of users.

Each community center plays an important role in the culture of the community they belong. The design of one should be viewed as an opportunity to reflect that culture.

synthesis

mission statement:

The goal of this project will be to incorporate a range of societal issues into the programming process in order to design a community center that is feasible for various degrees of use. It is my intention that through the use of these social aspects a solution will be found that acts as a catalyst for social engagement, change, and growth. The center shall serve the educational, social, recreational, and religious needs of community members within and around the Overton area of Lubbock, Texas.

measures of success:

The ultimate measure of success for this facility type is simply how well it responds to its neighborhood context, both physically and socially. Above and beyond this responsibility, the facility would be a success if the following types of outcomes were found:

- The facility is used round the clock, benefiting all age groups and backgrounds.
- The neighborhood comes together as a functional community because of the addition of this community center, thus acting as a social catalyst. People who never interacted with other neighbors before now have a reason to.
- Children are kept off the street and crime/vandalism is reduced within the community.
- More facilities and businesses are built up around the neighborhood fabric the community center helped make.
- The building increases the value of the property within North Overton and encourages more people to move back into the area.
- The facility is an economical as well as social asset to the community, bringing in profits for the community, to use for self betterment, while maintaining an efficient and minimal consumption of resources.

These are just some of the measures that could classify the built program as a success. But as with any architectural project, the real determining factor for success 's the end users and how they perceive the building.

synthesis

issues and goals:

The following objectives were derived as a response to interviews that were conducted with community members from the site's surrounding area. To gain a decent understanding of what the end user would want or need, a sample was taken, ranging from teenagers to grandparents and business owners to stay at home mothers.

one **contextual interaction:**
respect neighbors, positive response, reflect users, promote growth

two **service to others:**
serve the community, facilitate social gathering, provide outlet for expression

three **safety and health:**
high quality of safety for all users, promote healthy growth among users, environmentally conscience design approach

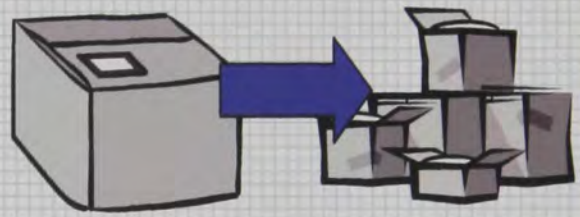
four **ease of use:**
accommodate many types of users, clear communication, wide variety of uses, flexibility, sustainable, proper use of light

five **ownership:**
provide for needs and wants of users, allow for adaptation, be an identifiable icon for the community

systems_analysis

issue_one: contextual interaction

goal: The design will respect the adjacent neighbors and respond to the context in a positive and significant manner. It will reflect the ideals and ambitions of its users and help promote positive growth for the surrounding area.



(Fig: 3.1) Break up volumes to reduce scale down to neighborhood.

performance requirement #1: The facility should be integrated into the community fabric both physically and visually. "Isolated buildings are symptoms of a disconnected sick society." (Alexander 1977, 532)

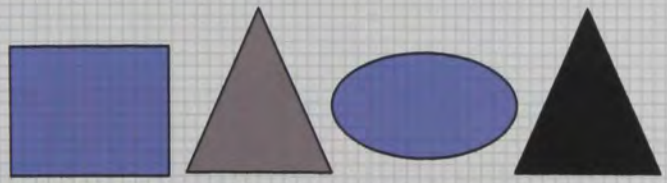
concepts: massing, scale, proportion, orientation, rhythm, materiality, architectural features, strategically placed main access points

(Fig: 3.2) Relate to various scales and proportions around the site

(Fig: 3.3) Understand where the pedestrian and vehicular traffic are coming from.

performance requirement #2: The building should be representative of the community, while at the same time achieving its own identity.

concepts: indigenous material usage, color usage, multipurpose spaces



(Fig: 3.4) Demonstration of how material and color are used to achieve interaction

(Fig: 3.5) No wasted space between buildings, provides nice rhythm for street life.

systems_analysis

issue_one: contextual interaction

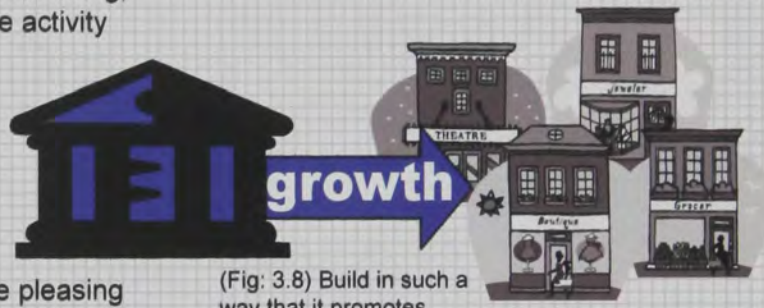
goal: The design will respect the adjacent neighbors and respond to the context in a positive and significant manner. It will reflect the ideals and ambitions of its users and help promote positive growth for the surrounding area.

(Fig: 3.6) Example of highly visible activity spaces.

performance requirement #3: The new construction should add life to the existing community and encourage further growth.

concepts: exciting design, promote a sense of welcoming, pedestrian orientated exterior spaces, highly visible activity spaces

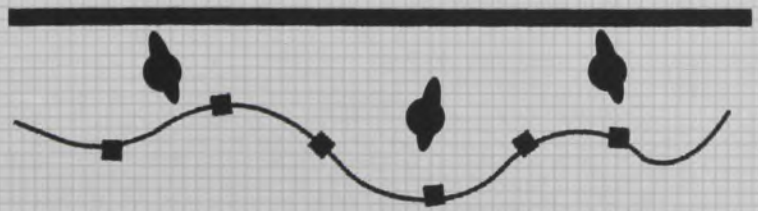
(Fig: 3.7) Design spaces in such a way that people are encouraged to interact.



(Fig: 3.8) Build in such a way that it promotes future growth.

performance requirement #4: The design should be pleasing to the eye and body.

concepts: human proportions, style, ventilation, landscaping, undulating forms



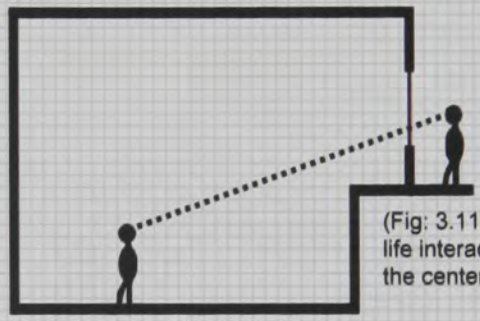
(Fig: 3.9) Undulating forms can create a pleasurable experience

(Fig: 3.10) Structural proportions based on human scale

systems_analysis

issue_two: service to others

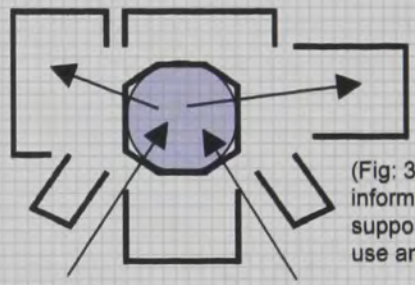
goal: The sole purpose of the building will be to serve the community in various different aspects. It will create the cultural connection needed for social gathering and give the community members an outlet for their interests and desires.



(Fig: 3.11) Street life interacting with the center's life

performance requirement #1: The building will be community oriented so that everyone will feel welcome.

concepts: open to all, information easily accessible, ability to view activities from pedestrian paths



(Fig: 3.12) Centralized information and support for ease of use and comfort

performance requirement #2: The facility will have activity rooms that accommodate a vast array of interests.

concepts: flexible room arrangements, indoor/outdoor spaces, various volumes, acoustically separated

(Fig: 3.13) Outdoor spaces are simply an extension of the indoor space they are adjacent to.

(Fig: 3.14) Volumetric spaces can accommodate different activities on different levels.

systems_analysis

issue_two: service to others

goal: The sole purpose of the building will be to serve the community in various different aspects. It will create the cultural connection needed for social gathering and give the community members an outlet for their interests and desires.

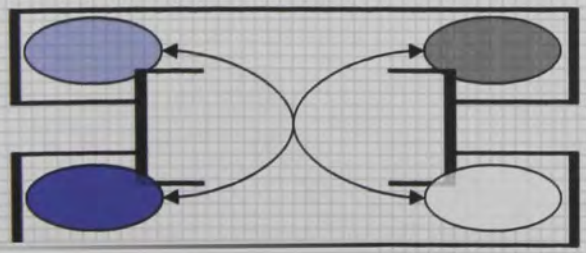
performance requirement #3: The building will have rentable spaces to generate income for the community.

concepts: low income dormitory, assembly space, gymnasium, classrooms and meeting rooms

(Fig: 3.15) Typical two bed dormitory arrangement

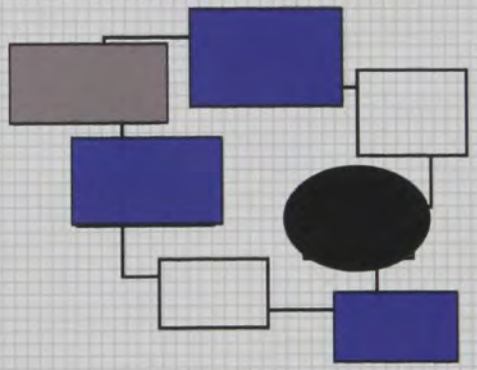
performance requirement #4: The building will have the ability to schedule different events at the same time without interference.

concepts: ability to divide building, clusters of similar activity spaces, nodes of circulation



(Fig: 3.17) Nodes of similar activities placed together with the ability to separate when needed

(Fig: 3.16) A community center that has the ability to give someone the helping hand when they're in need is a community center that will receive a helping hand back in the future.



(Fig: 3.18) Cluster of similar activity spaces that share common space but have their own space too.

systems_analysis

issue_three: safety and health

goal: The facility shall provide a high quality, safe environment for use from community members of all walks of life. It shall provide for and promote the healthy growth of its users. It shall use environmentally appropriate design methods to achieve a healthy building.

performance requirement #1: The design should follow all safety, code, ADA, and common knowledge regulations to achieve a safe facility.

concepts: handrails, walkways, ramps, vertical circulation, fire prevention, pedestrian oriented

(Fig: 3.19) Examples of proper signage along walkways.

(Fig: 3.20) Shallow grade ramps should lead up to all thresholds if they are raised.

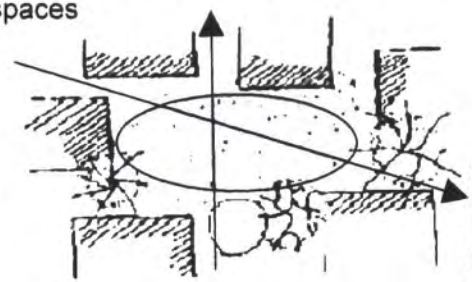
(Fig: 3.21) Handrails and fences should be functional and aesthetically pleasing. Possible green fencing for alley way.

performance requirement #2: The design should promote a healthy life style for its users.

concepts: encourage pedestrian activity, encourage the use of stairs where needed instead of elevators, activity oriented spaces, indoor/outdoor spaces

(Fig: 3.22) Create place along circulation paths for rest, relaxing, and waiting

(Fig: 3.23) Make the journey accommodating



(Fig: 3.24) Paths between buildings become a place of gathering

systems_analysis

issue_three: safety and health

safety & health

goal: The facility shall provide a high quality, safe environment for use from community members of all walks of life. It shall provide for and promote the healthy growth of its users. It shall use environmentally appropriate design methods to achieve a healthy building.

performance requirement #3: The facility shall provide a high quality living environment to promote healthy growth.

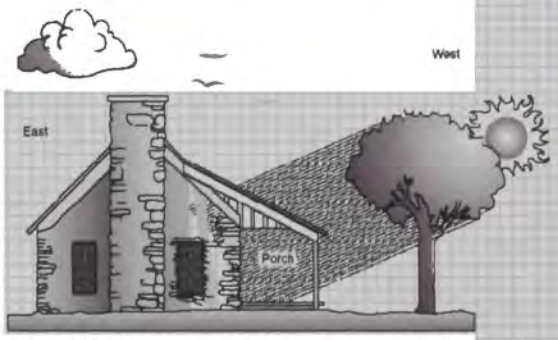
concepts: responsible use of materials, natural energy flows, shading devices, room orientations, ventilation

(Fig: 3.26) Example of how to bring natural light into the middle of the room.

performance requirement #4: The building should have an open spirit, one of coming and going, so as to deter vandalism and keep its users safe.

concepts: ability to be open 24 hours, abundant night lighting, windows into activity spaces, no blind spots, spaces overlooking spaces, defensible space

(Fig: 3.29) Lights shining on the pathway and around the corner at night

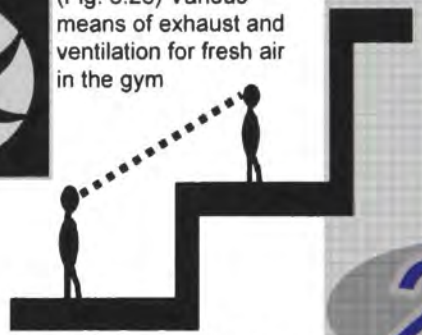


(Fig: 3.25) How vegetation can play a role in energy conservation

ORIENTATION	EFFECTIVE SHADING
North (Pole-facing)	Not required
East	Vertical Device/Louvers (moveable)
South (Equator-facing)	Fixed Horizontal Device
West	Vertical Device/Louvers (moveable)

(Fig: 3.27) Proper use of shading for orientation

(Fig: 3.28) Various means of exhaust and ventilation for fresh air in the gym



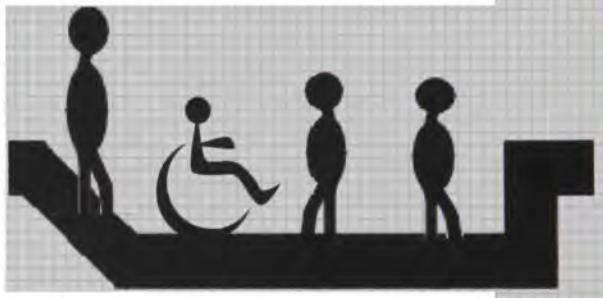
(Fig: 3.30) Elevated path

systems_analysis

issue four: ease of use

ease of use

goal: The design will accommodate users of all different shapes, sizes, and needs. It shall communicate clearly and be geared for all types of users. It will be flexible in order to sustain changes that may occur. It will be comfortably lit with natural light wherever possible.



(Fig: 3.31) Wide corridors through the main vein of circulation.

performance requirement #1: The facility will provide for clear and easy, yet exciting, way finding that is accommodating to any and all users.

concepts: self explanatory, proper signage, ADA accessible, accommodating pathways, efficient system of corridors

(Fig: 3.32 & 3.33) Examples of proper signage for ADA accessibility and the stair locations

(Fig: 3.34) Communication is key to easy way finding

performance requirement #2: The buildings main access points will be easily accessible and clearly defined.

concepts: use of entry icon, use of material, only entry's have set backs along street edge, change in proportion to rest of building, pedestrian pathways, relationship to bus stops, responsible use of urban parking

(Fig: 3.35 & 3.36) Clearly defined space and activity

(Fig: 3.37) Use of entry icon to draw people in

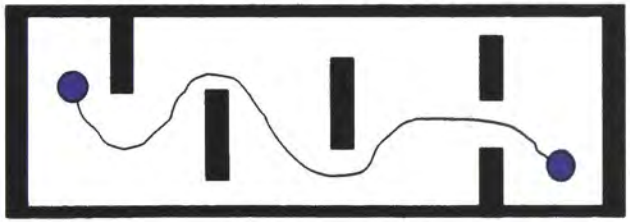
systems_analysis

issue_four: ease of use

goal: The design will accommodate users of all different shapes, sizes, and needs. It shall communicate clearly and be geared for all types of users. It will be flexible in order to sustain changes that may occur. It will be comfortably lit with natural light wherever possible.

performance requirement #3: The building will be flexible in plan to allow for functional changes that may occur in the future.

concepts: feasible structural grid, partition walls, expandable levels, replicable design

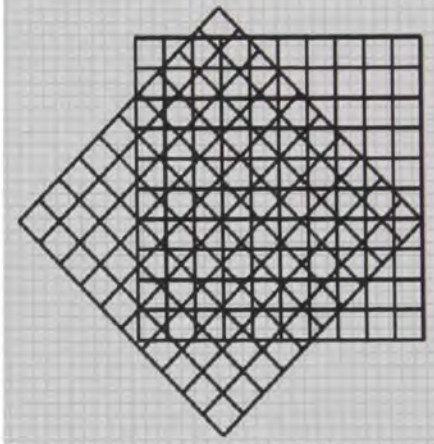


(Fig: 3.38) Partition walls can break up larger spaces in order to increase functionality.

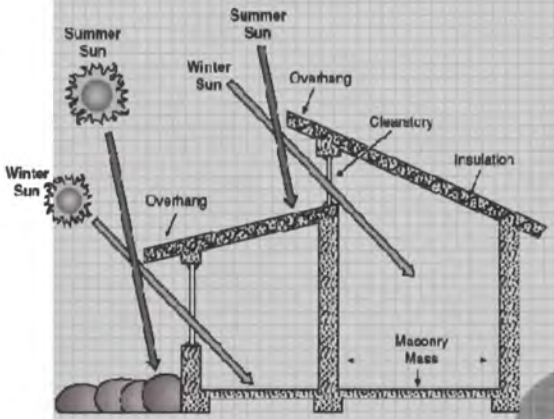
performance requirement #4: Each room in the building will have natural light and artificial light will be added as a supplement where needed to achieve necessary light level.

concepts: clerestory windows, light from two sides, interior light wells, courtyards, shading louvers where needed

(Fig: 3.40) In high activity rooms, natural light should come from at least two sources.



(Fig: 3.39) Interlocking grid structure has ability to take on changes in the future



(Fig: 3.41) Sun angles illustrating direct solar gain

systems_analysis

issue_five: ownership

goal: The design process will take into account the needs and wants of the users in order to give them the facility they need and can call their own. It will provide the necessary means of adaptation in order to give a sense of ownership to its users. It will help give an identity to the surrounding area and promote a sense of pride.

performance requirement #1: The design should contain architecture and landscape design that celebrates the local history, climate, ecology, and building practice.

concepts: cultural imagery, shading devices, materials, wind response

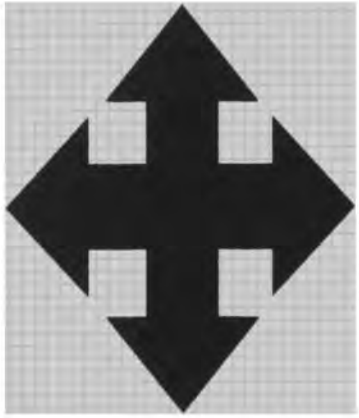
(Fig: 3.43) Embrace the flat nature of the site and make it a design asset.

performance requirement #2: The facility should create a lasting relationship and impression with its occupants, neighbors, and visitors.

concepts: iconographic devices, clear sense of belonging

(Fig: 3.45) Will the building belong once the new has worn off?

(Fig: 3.42) Relate to the agricultural culture that exists in west Texas through the use of indigenous materials and agricultural products.



(Fig: 3.44) The community center must be outward focusing

systems_analysis

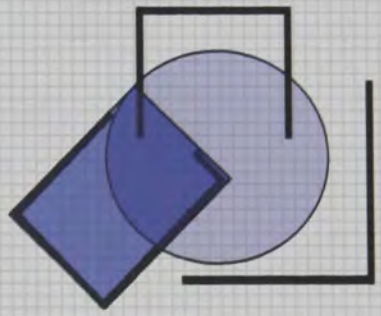
issue_five: ownership

ownership

goal: The design process will take into account the needs and wants of the users in order to give them the facility they need and can call their own. It will provide the necessary means of adaptation in order to give a sense of ownership to its users. It will help give an identity to the surrounding area and promote a sense of pride.

performance requirement #3: The design should be as diverse as those community members that would use it.

concepts: array of systems, unique connections



(Fig: 3.46) Unique spatial connections

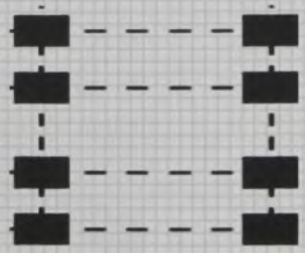
(Fig: 3.47) By using simplistic methods and materials such as prefab, you are allowed to focus more on the design and how the building comes together

(Fig: 3.48) Provide places for personalization such as murals designed by the community

performance requirement #4: The design should be able to be customized to the users needs so that they do not feel like an outsider.

concepts: defensible space, ability to personalize, allow for decoration without destruction

(Fig: 3.49) Spaces such as lockers give people a sense of ownership.



(Fig: 3.50) Sensible structural bays will allow for easier future adaptations

synthesis

organization and layout:

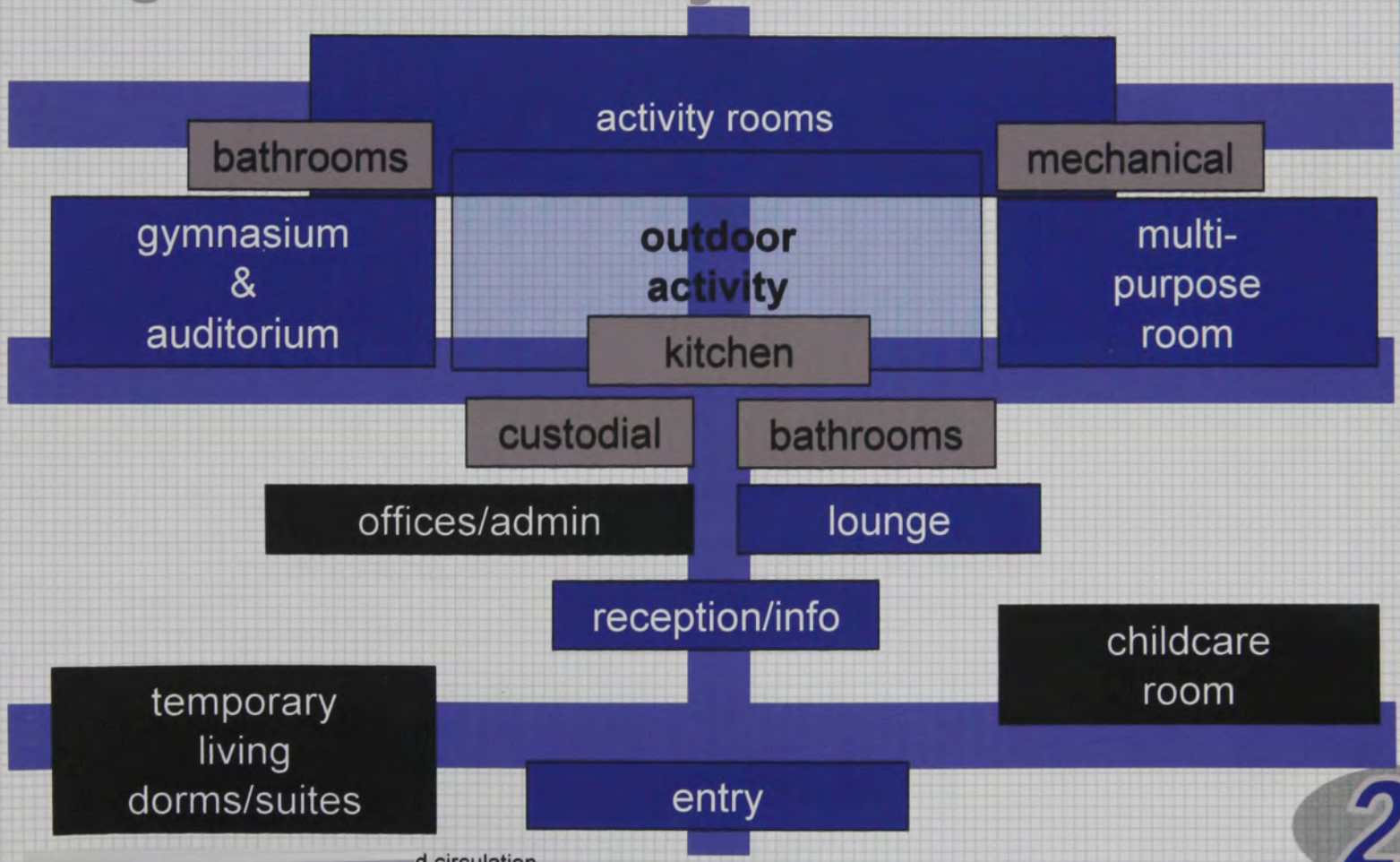
organization & layout

facility

key:

public | utility | private

circulation



d circulation

three multi-use community center

activity_analysis

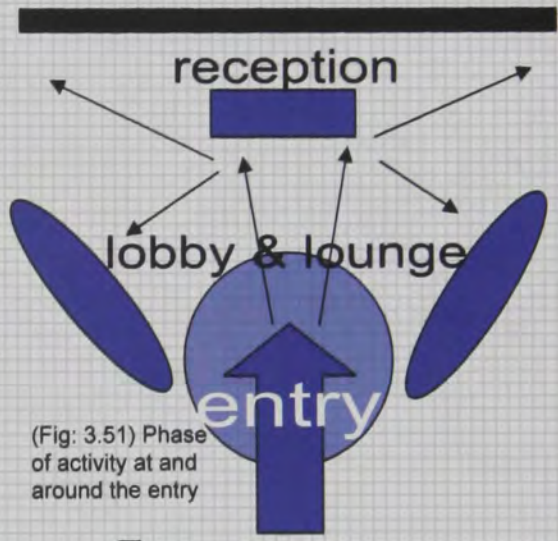
issue_one: entry

entry

serves as the first impression and transition area for the user
(7 sq. ft. per person)

design response:

- It should be highly identifiable to all users and non-users
- It should be a clear and definable space
- It should be a comfortable space to be in and congregate
- In order to create interaction, it should be open to everyone
- It should be somewhat private to highly active spaces to give a sense of safety
- Other areas of the immediate building should be visible
- It should serve as the main axis point not only for circulation, but safety and security, accessibility, and flexibility



(Fig: 3.51) Phase of activity at and around the entry

issue_two: circulation

circulation

assists the users in moving from space to space effortlessly
(22% of net assignable sq. footage)

design response:

- It should promote ease of way finding through accessibility and flexibility
- There should be clear definitions between public and private spaces
- There should be a clear line of vision through and between communal spaces as well as place making along these paths
- All signage and materials should be clearly identifiable and assist with circulation
- All areas should be ADA accessible
- There should be no dead-end corridors

(Fig: 3.52) Make circulation as simple and pleasurable as possible

activity_analysis

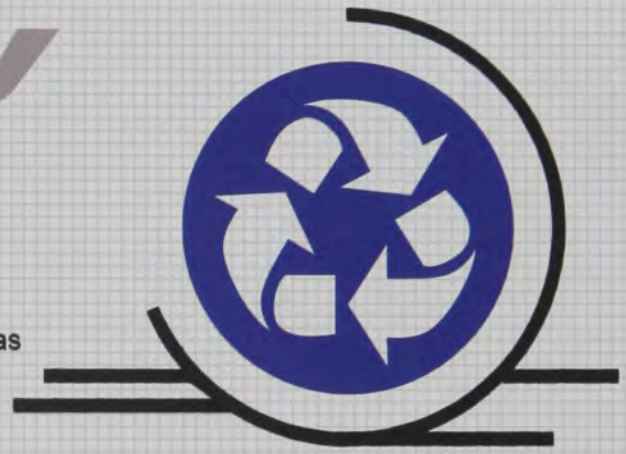
issue_three: activity space

activity

indoor and outdoor spaces for recreation
(50-150 sq. ft. per user, depending upon activity)

design response:

- Safety should be the first concern within these spaces
- No area should be obstructed from view, this should encourage interaction as well as provide for proper supervision
- Proper attention to ventilation should be made in these areas of high activity
- As much natural light should be used as possible
- The acoustical nature of these indoor areas should be considered since they will hold noisy activity
- There should be plenty of places to sit and rest
- There should be room to within the space to congregate before/after the activity
- These areas should be very adaptable to allow for various different types of recreation



(Fig: 3.53) Three major factors affect the functional aspects of the design of the activity areas: safety, adaptability, and natural energy flows

issue_four: work spaces

work

provides for the administrative services to take place
(40 sq. ft. per person)

design response:

- A certain amount of privacy should be given to these spaces
- They should be distanced from all activity spaces
- The arrangement of these spaces should be flexible so as to change with the users needs
- Sufficient lighting is needed so as not to warrant eye fatigue

(Fig: 3.54) There is a business side of the community center and they need special attention to make sure their needs are met so they can do their jobs well and keep the center alive and well.

precedents

project: Levy Senior Center
location: Evanston, Illinois
architect: Ross Barney + Jankowski
time period: 2002

This project is different from most of the senior centers in the United States. It's much more modern, it's entirely geared toward the seniors, and its programming is excellent for the seniors. This is in large part due to Carol Ross Barney's design process of client and end user integration. Many of the senior that use the facility today helped design the building through dialogue with the architects. The success of the center is attributed to meeting the user's programmatic needs and obtaining their input throughout the entire process.

The following is a description of the building from the architect:

> "The facility will be a showcase for natural lighting and passive solar control. Glass enclosed pavilions contain classrooms and meeting rooms. A translucent fiberglass skin allows diffused light to enter the main multipurpose room. Sweeping roofs and wood wall shutters protect occupants from glare and the heat of direct sun radiation. The interior courtyard provides additional activity space for the Senior Center program. The building is scaled to complement the residences across the street. This flexible building will allow the entire site to grow beyond the immediate needs of the Senior Center toward an ultimate vision of a centralized recreation and community facility for all citizens of Evanston." (RBJ Architects 2004)

(Fig: 3.55) Exterior perspective of Levy Center

(Fig: 3.56) Exterior perspective with wooden louvers

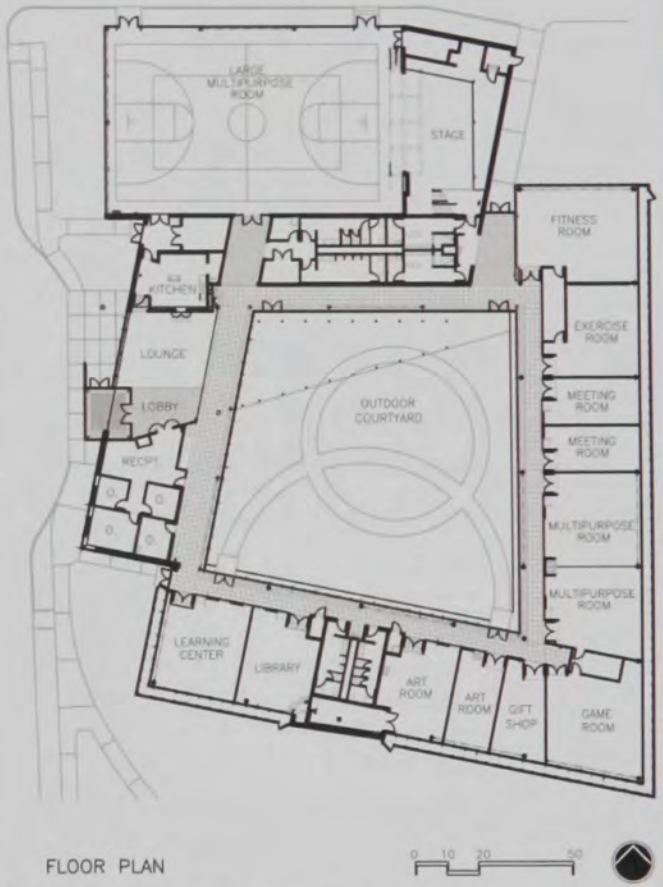
Levy Senior Center Continued:

Other responsible considerations were made during the design process of this project such as the following described by the architect:

> "The Center was designed to minimize its impact on the environment. The compact footprint of the building was placed so that existing trees could be preserved. An existing parking lot that served the park's playing fields was reused in order to preserve open, green space and to create a more sustainable development of the site." (RBJ Architects 2004)

This project received the 2003 Merit Award from the Chicago Building Congress.

(Fig: 3.57) Exterior perspective of front entrance



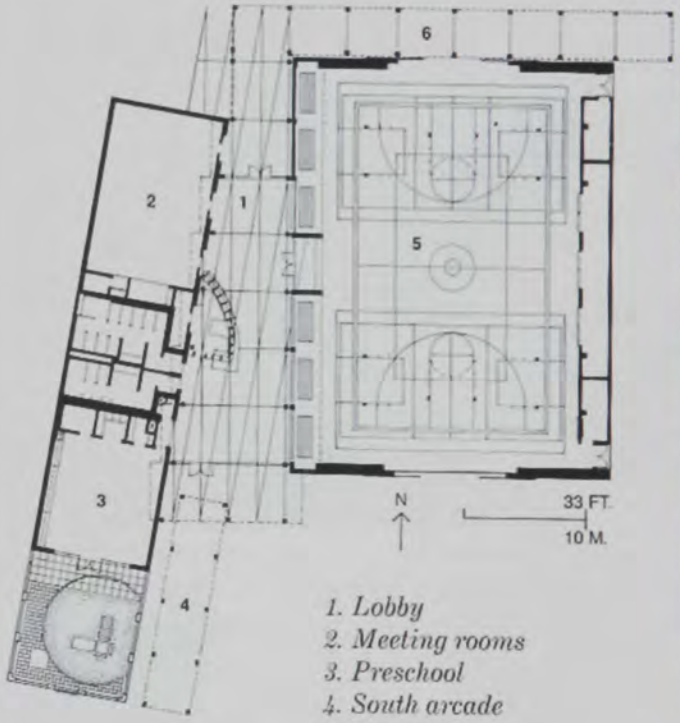
(Fig: 3.58) Floor plan of the Levy Center

precedents

project: Irvington Community Center
location: Fremont, California
architect: ELS/Elbasani & Logan Architects
time period: 1995

The measure of success for this community center, as it should be with any community center, was how well the design responded to the neighborhood context, how it dealt with vandalism and durability, and how it dealt with the types of uses that would be provided. This center was a home to the neighborhoods learning programs, athletic events, church groups, community meetings and so forth. In dealing with the designs compatibility with the neighborhood context, the architect, Donn Logan, stated that "It's a residential neighborhood, so the volumes relate more to the school buildings across the street than anything else." (Linn 1996, 82) Another big aspect to maintaining community acceptability was how the exterior appearance of the building was perceived. The most important thing to the architects was the material usage. They did not want the building to seem too hard through the use of very modern materials; instead they used softer materials, such as wood, that the community would associate with.

ntrance



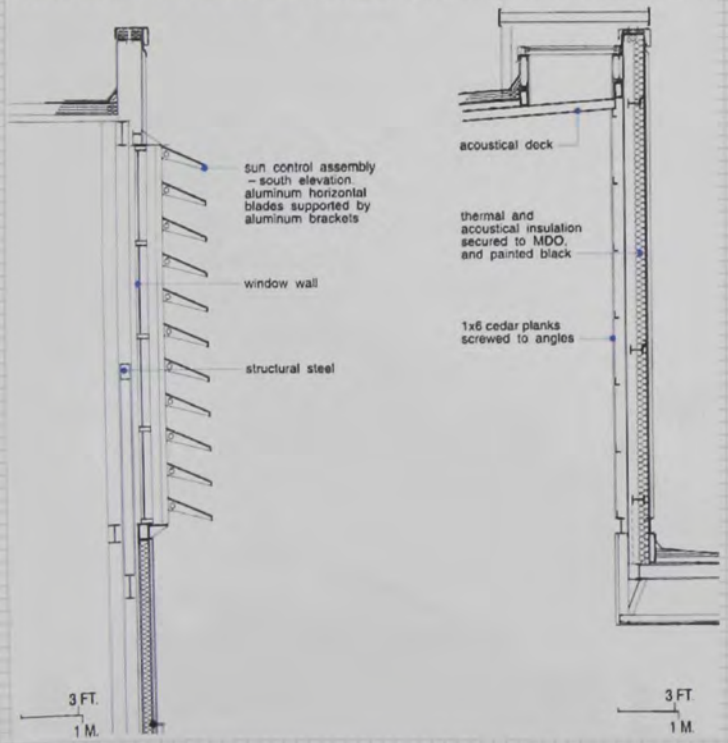
1. *Lobby*
2. *Meeting rooms*
3. *Preschool*
4. *South arcade*
5. *Gymnasium*
6. *North arcade*

(Fig: 3.60) Floor plan of the Irvington Center

precedents

Irvington Community Center Continued:

Within the 14,500 square foot center, spaces are dealt with in a pleasing manner. From separating the noisy athletic spaces from the quieter classrooms to day-lighting spaces with clerestories to shading southern exposed glazing with louvers to bringing the outside in with steel barn doors, the design achieves an overall scheme that fits perfectly with the community's needs and wants.



ades (Fig: 3.62) Detail of noise control

(Fig: 3.63) Exterior view of gymnasium & barn doors

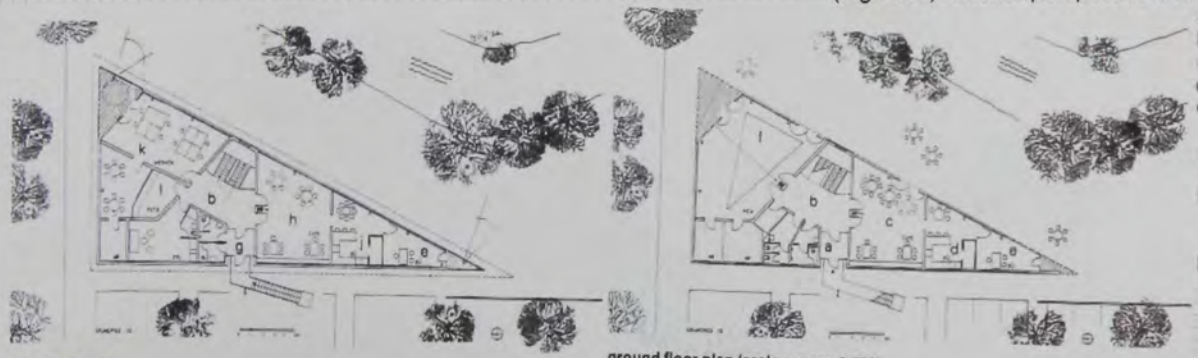
(Fig: 3.64) Interior view of gymnasium & barn doors

precedents

project: Turkish Triangle Community Centre
location: Ober-Ramstadt, Germany
architect: Hans Waechter, Muhltal-Trautheim
time period: 1996

For an extremely economical price this project fits a lot of programming into its compact two-story frame. Designed primarily for the Turkish population of this small German town, the centre has added new life to the community. It has become a centre for everyone because of the incredible amount of activities that are crammed into the tight amount of space. It uses economical materials that simple yet used in unique ways. The success of this building comes from its designers desire and commitment to produce a community building that would be appreciated by its users. Through its night and day use and community ownership, the centre has been extremely successful in remaining a safe environment with an open spirit.

(Fig: 3.66) Exterior perspective of the community center



first floor plan

ground floor plan (scale approx 1:670)

a main entrance
b hub
c café
d kitchen
e office
f multi-purpose
g entrance to Turkish community association
h community association café
j upper kitchen
k social and recreation
l dark-room

center

bibliography

Alexander, Christopher. *A Pattern Language.* New York: Oxford University Press, 1977.

Brown, Stephan A. *Communication in the Design Process.* New York: Spon Press, 2001.

Dawson, Layla, Martin Meade, Henry Miles, and Hugo Sinclair. "Social Service." *Architectural Review,* July 1996, 31-55.

Deasy, C.M. *Designing Places for People.* New York: Whitney Library of Design, 1985.

Keegan, Edward. "Carol Ross Barney: by building consensus and with limited means, Carol Ross Barney elevates the public realm." *Architecture,* September 2002, 87-93.

Linn, Charles. "Irvington Community Center, Fremont, California." *Architectural Record,* June 1996, 82-87.

Marsh, Dr. Andrew. 2003. *Efficient and sustainable design.* <http://www.squ1.com>.

Rifkind, Carole, *A Field Guide to Contemporary American Architecture.* New York: Dutton, 1998.

Ross Barney + Jankowski Architects, Inc. 2004. *Portfolio, Complete: Levy Senior Center.* <http://www.rbjarchitects.com/escc.asp>.

Sommer, Robert. *Social Design: Creating Buildings with People in Mind.* New Jersey: Prentice-Hall, Inc., 1983.

Renewable Energy. *Passive Solar Design for the Home; SECO Fact Sheet No. 17.* Austin: State Energy Conservation Office, 2003.

Webb, Michael. "Care in Kyoto." *Architectural Review,* October 2003, 70-72.

space

summary

all usable spaces inside the building to be designed as well as all spaces on the exterior that need planning

- future state of the facility -

multi-use community center

•Special Performance by Singer/Songwriter Terry Allen
•Over 100 Booths Full of Artwork and Fine Crafts
•Five Art Galleries
•Three Music Stages

spaces_needed

interior spaces:

main entry (w/ lobby, lounge, & reception):

activities: sitting space, information kiosk, vending machines, gathering, relaxing, waiting
users (#): visitors, community members, wanderers, staff and employees (1-10)
goals: serve well as the first impression and transition area for the user, act as an axis point for circulation, security, safety, accessibility, and flexibility

office space and administrative support (1 large office, 2 smaller, copy/break room):

activities: administrative services, guest services, working, meetings
users (#): staff and employees only (1-15)
goals: provide a quiet and secure space for those running the center

small activity rooms (6 total):

activities: arts & crafts, fitness & exercise, game & multimedia, teen activity room, meeting & community, learning/classroom
users (#): community members, students, families, organizations, businesses (1-25 persons per room)
goals: maintain a high level of safety while space planning for a wide range of activities, these rooms should be acoustically and somewhat visually secluded from the rest of the building.

child care room (w/ private bathrooms and storage):

activities: daily child care for toddlers and up, secondary entrance for this space
users (#): children, parents, staff and employees (1 staff for every 3 children)
goals: provide a simple and efficient space where workers can keep a watchful eye over the children while they play and socialize with each other

large dividable multi-purpose activity room (w/ storage along walls and within closets):

activities: wide open space, play activity, assembly, receptions
users (#): community members, organizations, clubs, families (1-60)
goals: function as the interim, medium space that gives users an option of size between the smaller meeting room and the larger gymnasium

spaces_needed

full size gymnasium (w/ ample storage within closets on either side of gym):

activities:	ample space around court w/ plenty of sitting and standing room out of the way, basketball court, other sports and athletic activities, large assemblies, garage/barn doors for outside access
users (#):	community members, athletes, assemblies (1-150)
goals:	provide for the main activity of team sports day in and day out, maintain a durable nature and adapt to changing functions in an efficient manner

kitchen and service (storage, freezer, and separate entrance/exit):

activities:	full service facility, cooking, preparing, entertaining
users (#):	staff and employees, families (1-15)
goals:	provide for the smallest of food preparation to the largest of banquets, perform as an efficient and professional kitchen with durable materials and hardware, allow for ease of cleaning and moving about while cooking

public restrooms (2 sets of men's & women's with toilets, sinks, and hand dryers):

activities:	"privacy", washing, cleaning, freshening up
users (#):	any center user (1-6 persons per restroom)
goals:	give adequate space for the users needs, supply easy to clean surfaces, incorporate natural lighting and ample ventilation

private restrooms (1 set of men's & women's with a toilet, sink, and hand dryer):

activities:	"privacy", washing, cleaning, freshening up
users (#):	staff and employees only (1-4 persons per restroom)
goals:	give adequate space for the users needs, supply easy to clean surfaces, but allow for a more comfortable, at home, feel

family changing rooms (2 rooms with changing stalls & shower):

activities:	changing clothes, diaper change, showering, washing up, staging area for ceremonies
users (#):	families with children, elderly, lessees, staff and employees (1-8 persons per changing room)
goals:	give users a private, comfortable, quiet place to enjoy, allow for the rooms to be secure so there's an "at home" comfort

spaces_needed

utility space:

activities:	mechanical, custodial, electrical, equipment, storage
users (#):	staff and employees, service workers (1-3 persons per space)
goals:	give adequate storage, clean-ability, access, and security from children

temporary living dorms/suites (2- 2 bedroom dorm style suites w/ bathroom and living space):

activities:	living, sleeping, eating, relaxing (1-4 persons per suite)
users (#):	underprivileged citizens, those in desperate need, low income renters
goals:	give certain community members a chance to catch their breathe during a hard time in their life, provide a comfortable space where residents can share living quarters with others and help each other out with their problems

exterior space:

outdoor recreation/courtyard:

activities:	shaded patio for eating, relaxing and gathering, smoking area, playground area, green space, trees to give enclosure
users (#):	any center user (1-50)
goals:	give an open and safe green space to the members of the community, provide cool shady areas for sitting and open grassy areas for playing

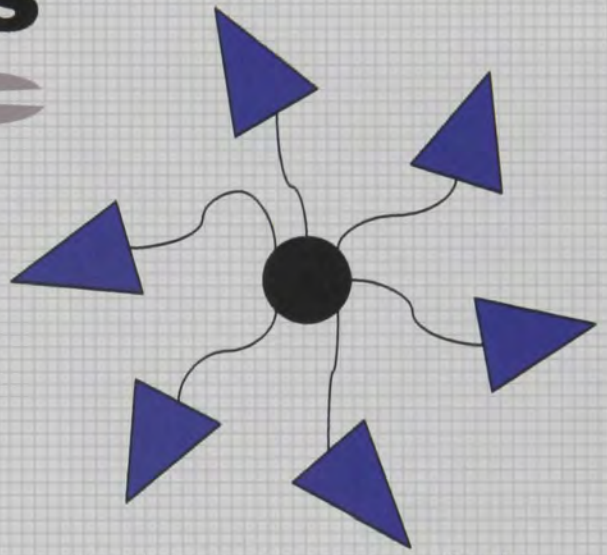
spatial_analysis

issue_one: public spaces

spaces open to anyone anytime unless already occupied:
main entry, lobby, lounge, reception, small activity rooms, large dividable multi-purpose activity room, full size dividable gymnasium, circulation

design response:

- provide sense of openness
- common land for everyone
- ample personal space for gathering
- room to move around comfortably
- wide circulation corridors
- high volume ceilings
- majority of light will be natural from at least two sides



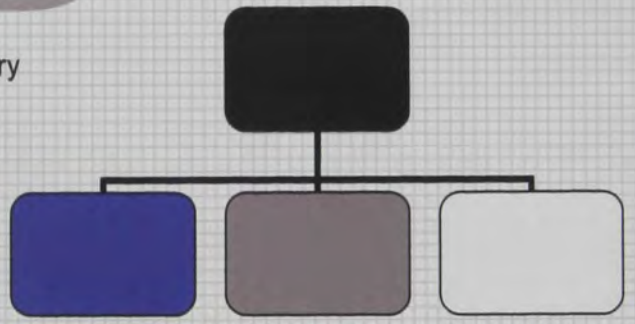
(Fig: 4.1) Public spaces are the centrifuge that everything else spins off, once the public spaces are worked out, the other spaces will fall in place.

issue_two: private spaces

spaces that are only open to those authorized to use them:
staff offices and administrative support, childcare, temporary living dorms/suites

design response:

- give a sense of seclusion
- separated acoustically and visually
- natural light from above
- lower volume ceilings
- obtain security through layers of access
- provided as a safe zone



(Fig: 4.2) Multiple private spaces may only be accesses through one layer of control to maintain security.

spatial_analysis

issue_three: indoor/outdoor space

spaces developed along the buildings edge and in between buildings: outdoor recreation/courtyard, large dividable multi-purpose activity room, circulation

design response:

- provide overhangs to the south
- incorporate courtyards within the core of the design
- provide vegetation to give soft barrier to alley or street
- detail awnings or porticos along the south side of the building
- provide spaces that overlook the outdoor spaces and spaces that the courtyard overlooks

(Fig: 4.3) Examples of how to create comfortable outdoor spaces either through man-made or natural means.

issue_four: service space

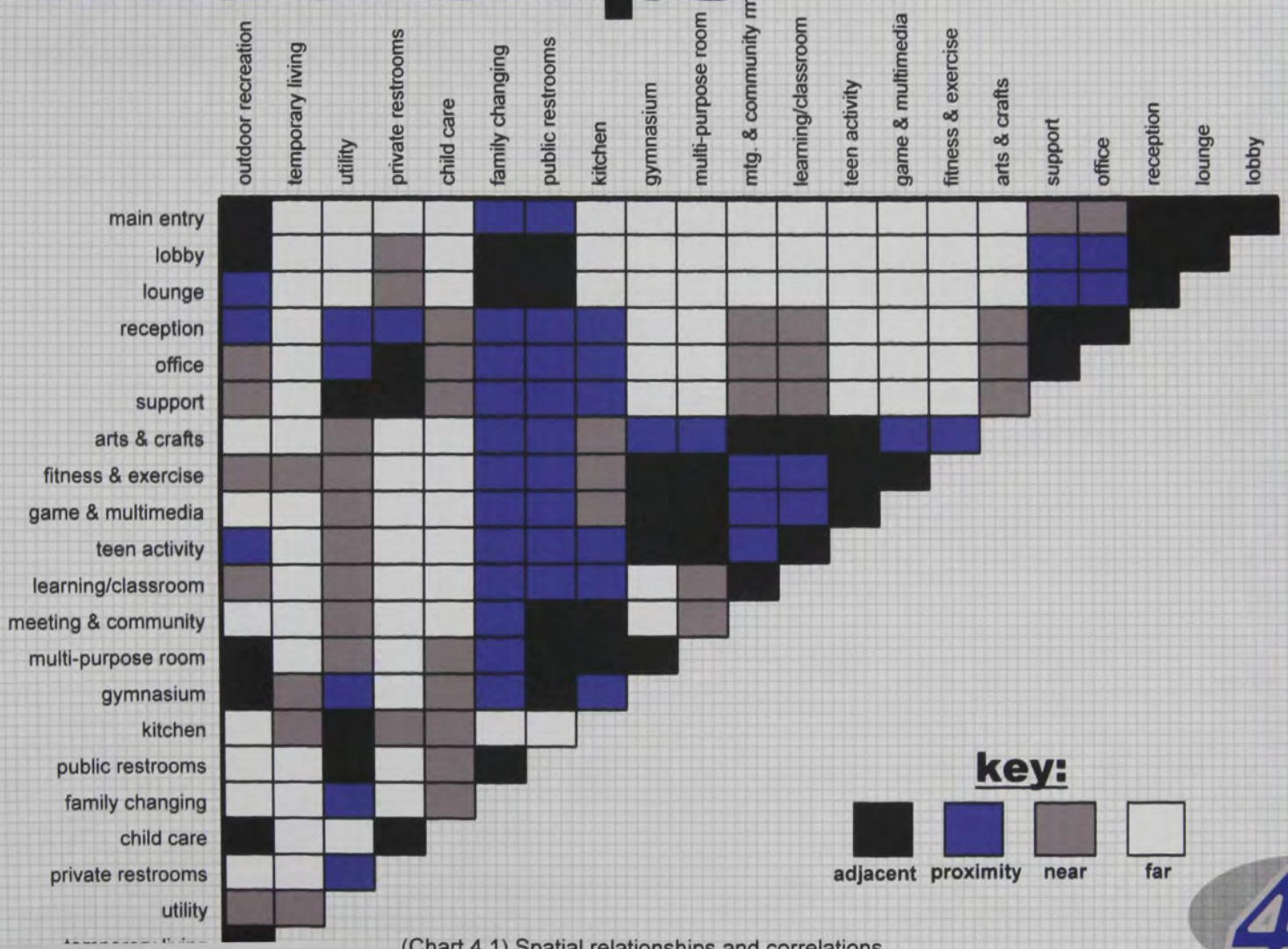
spaces dedicated to serving the needs of the users and facility: kitchen, public restrooms, family changing rooms, utility: mechanical, custodial, electrical, and equipment

design response:

- service access should be separate from pedestrian circulation
- restrooms should be evenly distributed within the facility
- give proper service access without using main entrance
- abundant artificial lighting since there will be little to no natural light in these more secure areas
- provide for adequate exhaust and ventilation for fumes, smoke, or chemicals that are used

(Fig: 4.4) Equipment should be easy to access but carefully thought out in the design process so that they aren't a burden to the rest of the facility.

relationships



(Chart 4.1) Spatial relationships and correlations

space_summary

assignable interior space:

main entry w/ lobby, lounge, & reception:	1100-1300 ft²
office space and administrative support w/ private restrooms:	700-800 ft²
small activity rooms:	4400-5700 ft²
arts & crafts (800-1000 ft²), fitness & exercise (1100-1500 ft²), game & multimedia (800-1000 ft²), teen activity room (500-600 ft²), meeting & community (600-800 ft²), learning/classroom (600-800 ft²)	
child care room w/ private restrooms:	1400-1600 ft²
large dividable multi-purpose activity room:	1600-1800 ft²
full size dividable gymnasium:	5700-6100 ft²
kitchen and service:	700-900 ft²
public restrooms:	1000-1200 ft²
2 sets of men's & women's @ 500-600 ft² each set	
family changing rooms w/ shower:	400-500 ft²
2 rooms at 200-250 ft² each	
utility space:	500-600 ft²
temporary living dorms/suites:	1800-2400 ft²
2- 2 bedroom dorm style suites, each sleeping 4 people w/ bathroom & living space @ 900-1200 ft² ea.	
net assignable interior space:	19,300-22,900 ft²
circulation (22% of net assignable indoor space):	4246-5038 ft²
mechanical (7.5% of net assignable indoor space):	1448-1718 ft²
walls (10% of net assignable indoor space):	1930-2290 ft²
gross indoor square footage:	26,924-31,946 ft²

exterior space:

outdoor recreation/courtyard:	5000-7000 ft²
total designed square footage:	31,924-38,946 ft²

space

multi-use community center

context

surrounding

ambience, background, text,
vocabulary, relation, conditions,
connection, framework, lexicon,
situation, substance

- existing state of physicality -

multi-use community center

existing state

what is the context?:

what is it?

The site analysis is the most important stage in planning a contextually, economically, environmentally responsible and efficient design. The relationship of the site to its surroundings - the local climate, topography, vegetation & soils, drainage & erosion, and links to local infrastructure such as transportation and goods & services - must be fully understood. Other important factors that should be influential to the design during the site analysis are the major access points to the site and the effects the new facility will have on the local community.

Location and orientation are important issues to address when deciding how the built form will fit into the site. Views reinforce the experience of the building, therefore the buildings orientation within the site should attempt to maximize views of natural features and minimize views of dead space and support facilities. For many occupants, the outlook from their space or public areas such as the spaces within this community center is a major factor in their enjoyment of the site and it can add considerably to the ambience of a building. Proper orientation will also facilitate energy efficiency and ultimately make the building a more comfortable environment for its occupants. Also, by making use of naturally occurring climatic controls, it is feasible to reduce the amount of dependence on artificial forms of heating, cooling and ventilation.

Lubbock is the heart of West Texas. It is the economic center to a 25-county region that is home to more than 500,000 people. It has a strong, diverse economy that finds its roots in agriculture, manufacturing, and wholesale/ retail trade, as well as government, education, and health care. It is a major regional center for business and industry, primarily because of its location in the heart of the South Plains of West Texas and Eastern New Mexico. This location provides its residents with easy access to the Southwest, the Rocky Mountains, and the Great Plains Region. Lubbock is the largest city in West Texas and it is the ninth largest city in the state.

existing state

neighborhood fabric:

The Lubbock downtown area has experienced positive economic growth in the years past, but just like many other downtowns across the nation, it has gradually been losing its hold as the center of activity and magnet for social interaction. Those that once inhabited the downtown area have since moved out into the suburban sprawl and left the inner urban city ghost town. This effect has transcended into the neighborhoods surrounding the downtown area as well, specifically the Overton neighborhood where the proposed site for this project is located.

Overton (the area between University and Avenue Q & 4th Street and 19th Street), specifically North Overton which stops at Broadway Avenue, has become a depreciated neighborhood dominated by landlords that don't seem to care and poorly maintained low, medium and high density residential and commercial sectors. Like downtown, residents outside the district no longer have a reason to visit or spend time in the area. Instead, the residents that do live there are those who cannot afford to move elsewhere in the Lubbock area. As one will notice through the demographic study, this neighborhood is currently a low income and heavy minority dominated area. In fact, the areas mean household income as of 1999 was only $17,791, with a 2.25 average household size. Compared to the rest of the city, who's household income was $31,844, this are is fairly poor. According to the 2000 census, approximately 32% of the families living in this area were below the poverty rate.

Significant buildings and spaces that play an important role within this area are mainly educational or civic institutions and parks. They are as follows: Texas Tech University, Lubbock HS, Richard Milburn HS, Ramirez Elem., LISD Natatorium, Broadway Church of Christ, Lubbock Women's Club, Lubbock City Library, Pioneer Park, and Overton Park.

existing state

population demographics:

demographics

	North Overton	Zip Code	City
population:	4,725	10,936	199,564
% male:	55%	xx	49%
% female:	45%	xx	51%
white/anglo:	24.2%	54%	61.3%
hispanic:	46.6%	23%	27.5%
african american:	15.7%	14%	8.7%
american indian:	0.3%	1%	1%
asian:	11.4%	5%	xx
other:	1.8%	3%	1.5%

	1990	2000	2004	
city population:	186,206	199,564	206,290	(positive growth)
north overton:	5,939	4,725	< 4,725	(negative growth)

north overton educational stats:	>high school degree	= 79.5% of area population
	>bachelors degree	= 26.6% of area population
	>graduate degree	= 9.3% of area population
	unemployed	= 6.0% of area population

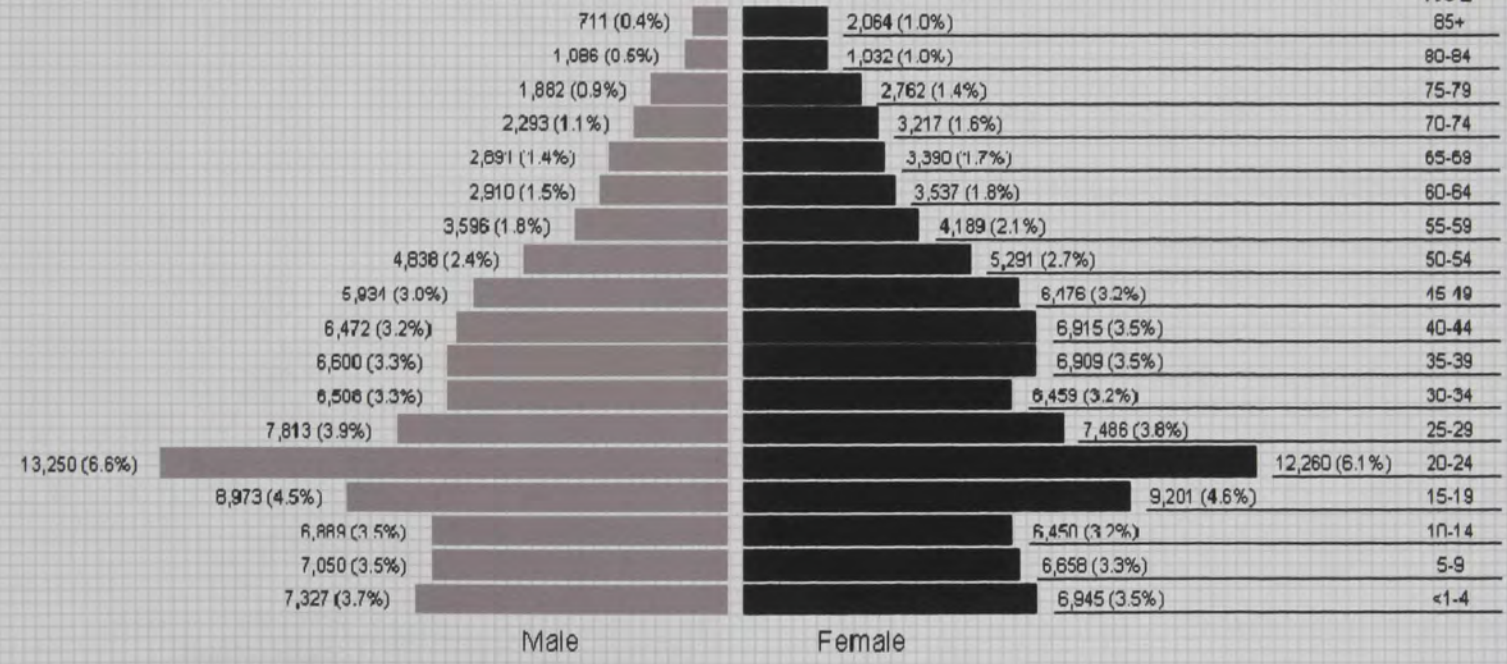
(Chart 5.1) Population, race, and educational demographics of neighborhood, zip code, and city.

existing_state

age demographics: demographics

median age:

North Overton:	**25.1**
Zip Code:	**27.2**
City:	**29.7**



Note: % is a percentage of the Lubbock City Total Population (199,564)

Source: 2000 Census of Population and Housing

(Chart 5.2) Age demographics of city, with median averages for neighborhood, zip code, and city.

existing state

climatic averages and records:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Temp. (°F)	38.2	43.3	51.1	59.9	69.1	77.0	79.7	77.9	70.9	60.7	48.1	39.8
High Temperature (°F) Comfort Zone < 80°F	52.0	57.9	66.3	74.8	**82.9**	**90.0**	92.0	**90.0**	**83.5**	74.5	61.7	53.4
Low Temperature (°F) Comfort Zone > 55°F	**24.4**	**28.8**	**36.0**	**45.1**	55.4	63.9	67.5	65.8	58.3	**46.9**	**34.4**	**26.1**
A.M. Humidity (%) Comfort Zone < 80%	72	71	67	67	74	76	73	76	79	77	73	72
P.M. Humidity (%) Comfort Zone > 20%	52	52	45	43	48	48	49	52	54	51	50	51
Precipitation (in) Yearly Ave. = 18 in	0.5	0.7	0.8	1.3	2.4	3.0	2.2	2.4	2.6	1.7	0.7	0.7
Days w/ Precipitation	4	4	4	5	7	7	7	7	6	5	3	4
Snowfall (in)	2.6	2.5	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.2	1.3	2.0
Wind Speed (mph)	12.0	13.2	14.6	14.7	14.1	13.6	11.4	10.2	10.6	11.3	11.8	11.8
Wind Direction (from)	WSW	WSW	South	South	South	South	South	South	South	South	South	SW

records:

High Temperature:	**114°F (6.27.1994)**
Low Temperature:	**-17°F (2.8.1933)**
Wettest Year:	**40.53 in. (1941)**
Driest Year:	**8.73 in. (1917)**
Max Snow Depth:	**17 in. (1.21.1983)**

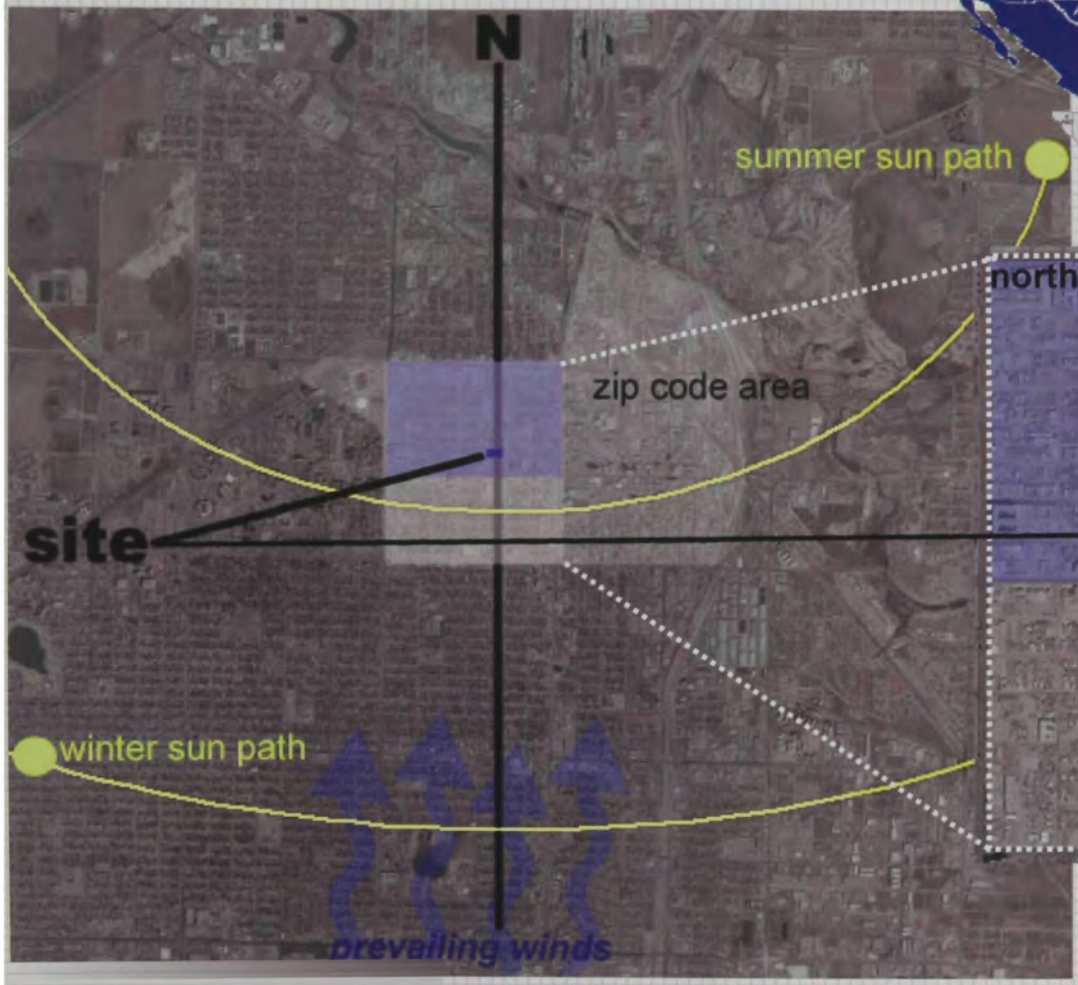
miscellaneous info:

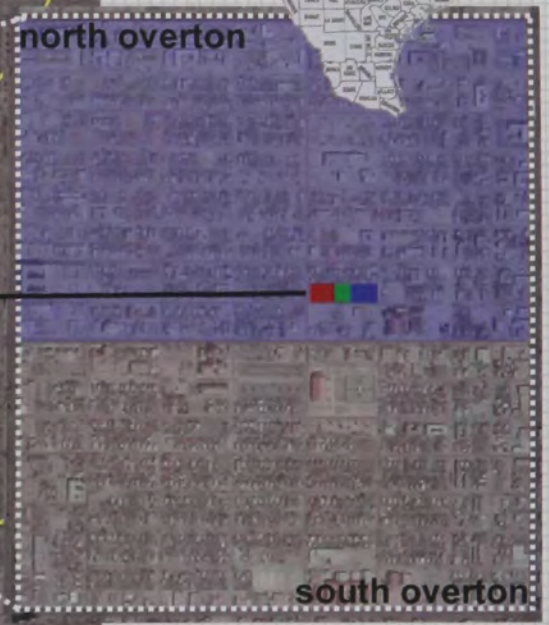
Climatic Region:	**Semi-Arid**
Elevation:	**3241 ft.**
North Latitude:	**Approx. 34°**
West Longitude:	**Approx. 102°**

(Chart 5.2) Monthly climate and weather averages along with records and location information

site_analysis

satellite imagery:



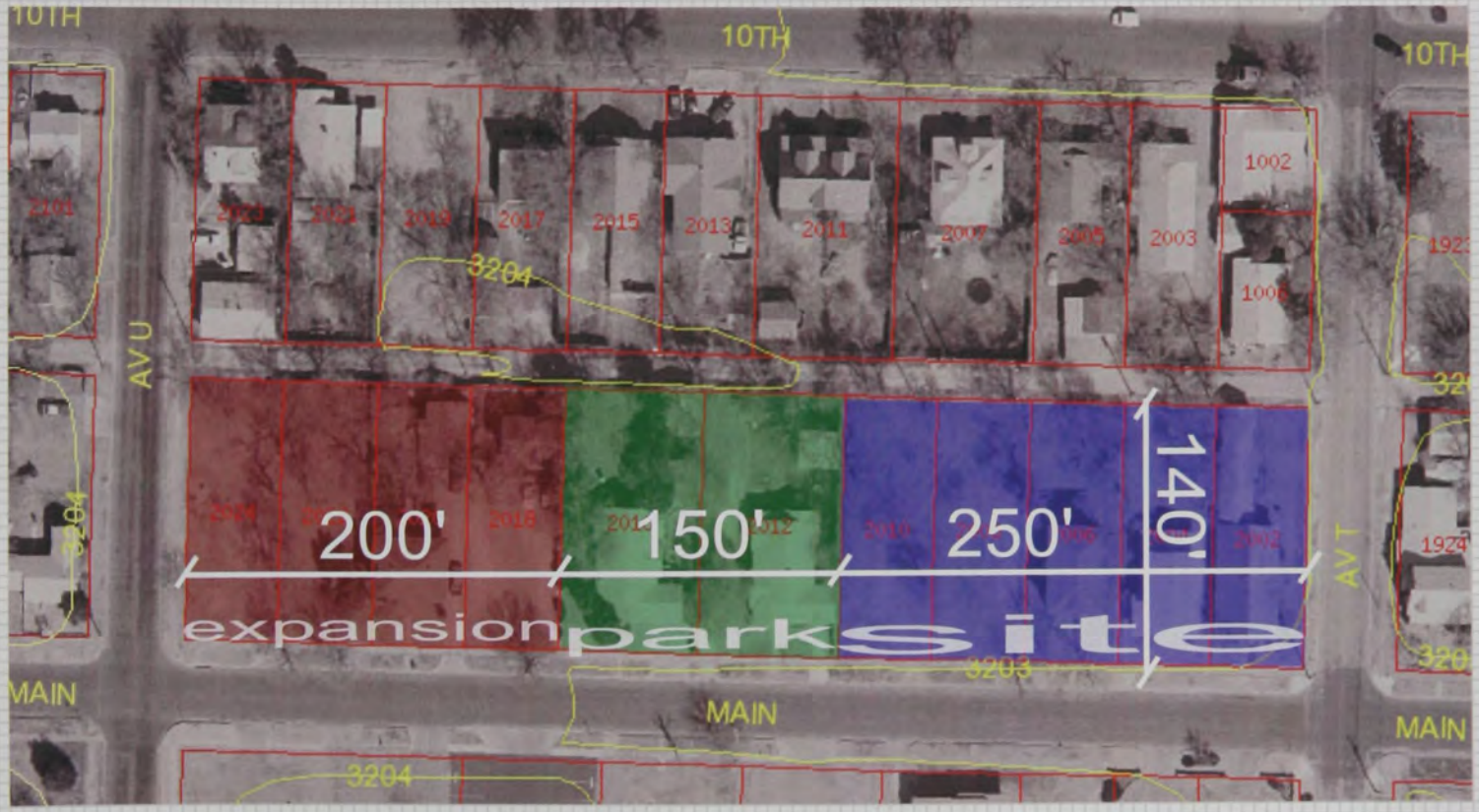


(Fig 5.1) Satellite imagery of location and site with sun paths and prevailing winds

multi use community center

site_analysis

topographical map:



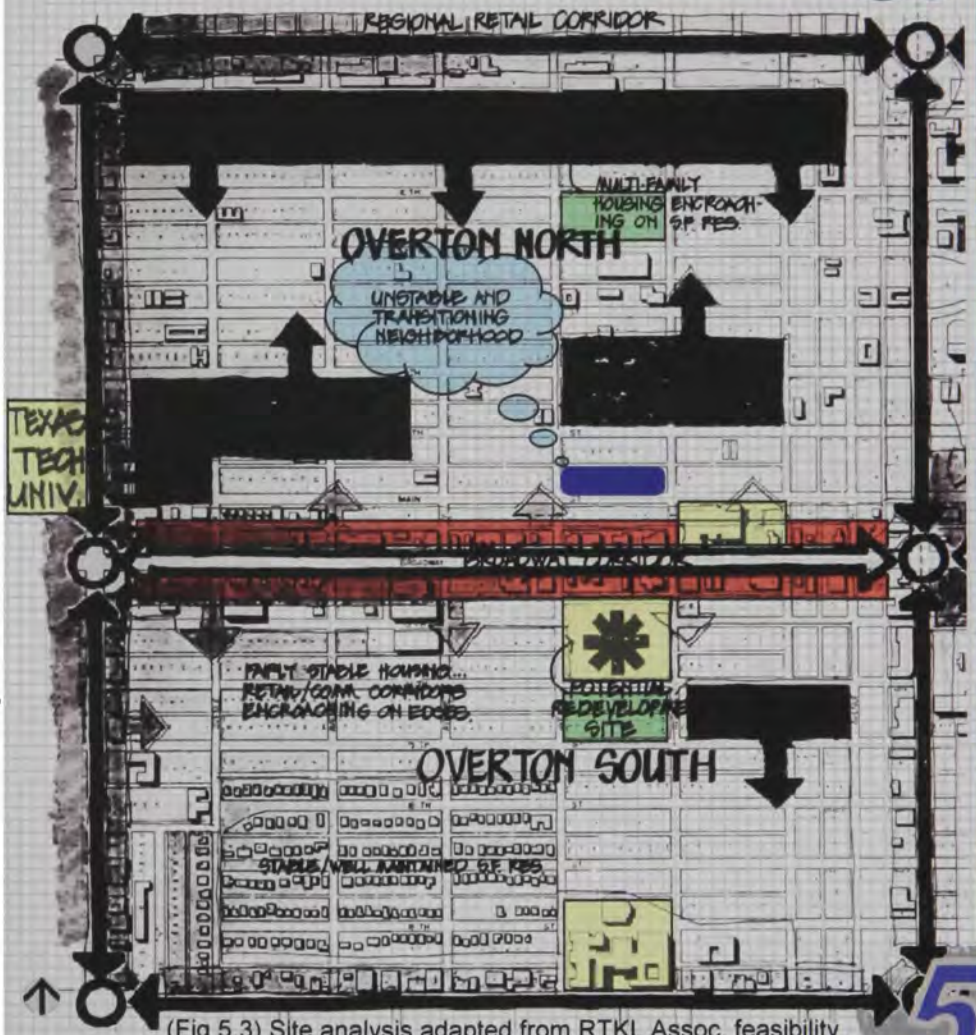
(Fig 5.2) Topographical map with lot locations, dimensions and street labels.

site_analysis

civic/ institution | parks/ green space | business | community influence

site design considerations:

- Take full account of the local climate
- Be of assistance to and aesthetically caring to the natural environment and the cultural/social context
- Strengthen and demonstrate environmental responsiveness
- Enhance appreciation and awareness of the environment
- Maintain or, where it has been disturbed, restore biodiversity
- Minimize pollution of soil, air and water
- Use renewable indigenous building materials wherever possible
- Increase efficiency in the use of materials, energy and other resources
- Use life-cycle analysis in decision making about materials and construction techniques
- Minimize the consumption of resources, especially non-renewable ones
- Maximize the use of materials with low embodied energy
- Identify opportunities for reuse and recycling
- Identify opportunities for water conservation and reuse
- Minimize potential safety hazards; and
- Provide full access to people with physical or sensory impairment



(Fig 5.3) Site analysis adapted from RTKL Assoc. feasibility study of downtown Lubbock conducted in 1989.

site_pictures

context

multi-use community center

synthesis

issues and goals: issues & goals

one **identity:**
create strong spirit of community, meet needs of users, provide sense of pride and belonging, become a central facility that will eventually bring life back to the area

two **compatible fit:**
use site as starting point for design, develop design from the contextual issues that arise, become part of the neighborhood fabric

three **accessible, functional, flexible:**
give pleasure and ease to the journey to and from the site, understand the need for future additions and the changes they will bring, make pathways strong

four **recognize:**
understand the past, present, and future culture of the surrounding area, determine what affects and characterizes the context, recognize both the suburban and urban issues facing the design problem

five **sensitive:**
respect areas that are public and private around and on the site, make it clear what areas are accessible and what are not, become an attractive addition to the neighborhood, be economically feasible within the design and construction methodology, provide "accessible green" for the community (Alexander 1977, 304-305)

context_analysis

issue_one: identity

goal: create strong spirit of community, meet needs of users, provide sense of pride and belonging, become a central facility that will eventually bring life back to the area

performance requirement #1: Become a place where people go to see others and to be seen themselves. (Alexander 1977, 169)

concepts: places to gather outside, interaction of site with context

performance requirement #2: Stand out as an exemplar building through function and meeting the needs of the program.

concepts: work well with site, traffic, and users

(Fig 5.4) Give people a good, safe place to gather and mingle on their way to and from work, or anytime they might just be out. This will help to create a street life that is virtually non-existent within Lubbock.

issue_two: compatible fit

goal: use site as starting point for design, develop design from the contextual issues that arise, become part of the neighborhood fabric

performance requirement #1: Enhance appreciation and awareness of the environment.

concepts: maintain/improve the natural environment around site

performance requirement #2: Attempt to deal with issues of social status and diversification.

concepts: create a building that anyone could feel comfortable in

(Fig 5.5) Create a place for all different activity styles, moods, backgrounds, and cultures.

context_analysis

issue_three: accessible, functional, flexible

goal: give pleasure and ease to the journey to and from the site, understand the need for future additions and the changes they will bring, make pathways strong

(Fig 5.6) Strong pathway accentuated by repeated forms with an inward focus.

performance requirement #1: Create a form that could be repeated if necessary and one that fits the mold of the community

concepts: simple geometry, materials, and connections

performance requirement #2: Provide full access to people with physical or sensory impairment

concepts: total site adaptation, not just getting to the front door, texturing the walk around the building

issue_four: recognize

goal: understand the past, present, and future culture of the surrounding area, determine what affects and characterizes the context, recognize both the suburban and urban issues facing the design problem

(Fig 5.7) Create a reason for people to get out of there house and do something

performance requirement #1: Create a place for people to stay instead of leave the Overton area.

concepts: wide variety of activities, moods of spaces, and interaction

performance requirement #2: Take a piece of urban life and mix it with suburbia.

concepts: what makes people leave the inner city....find a way to offer it back to them

context_analysis

issue_five: sensitive

goal: respect areas that are public and private around and on the site, make it clear what areas are accessible and what are not, become an attractive addition to the neighborhood, be economically feasible within the design and construction methodology, provide "accessible green" for the community

performance requirement #1: Minimize the consumption of resources, especially non-renewable ones

concepts: material choice, construction methods, pre-fabricated assembly

performance requirement #2: Identify opportunities for reuse and recycling.

concepts: recycle the culture of the neighborhood, use old material in a new way, use old construction methods with new materials

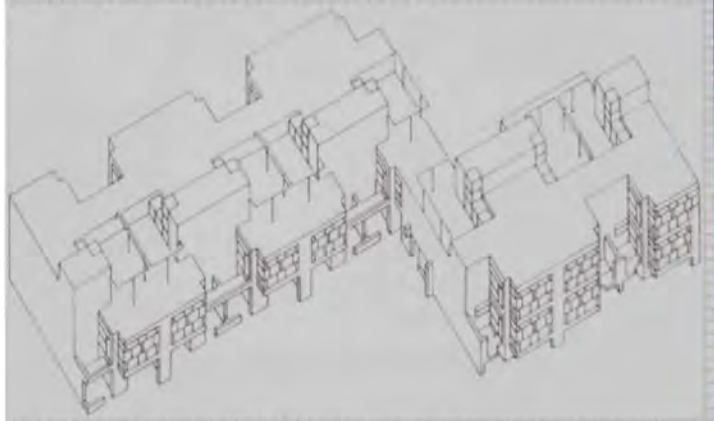
(Fig 5.8) Understand the impact new construction can have on the surrounding area and attempt to do everything possible to ease the shock it can have.

project: Diagoon Houses
location: Delft, Holland
architect: Herman Hertzberger
time period: 1971

This project was one that took on the role of appropriation. The architect came up with the "form", but left the design and ultimate function up to the interaction of the form and user. This created a space designed through active intervention. In order for this space to be significant, it is totally dependent upon the way in which the user reacts to the form. Hertzberger explains that "it is the capacity to absorb, carry, and convey significance that defines what form can bring about in the users, and conversely." (Hatch 1984, 13)

It is this interaction, between user and form, that determines whether or not a building serves its purpose or not. Architects must attempt to positively affect this interaction, not only with form, but with our surroundings as well. It's the duty of every designer to create an environment that is relevant to its users, to create a warm, hospitable and appropriable world. If this is the case, then Hertzberger argues, "Everything that is given a deliberate form should function better, should do its work, be appropriate for the job expected of it by different people in different situations at different moments." (Hatch 1984, 14)

(Fig: 5.9) Axonometric of Diagoon project

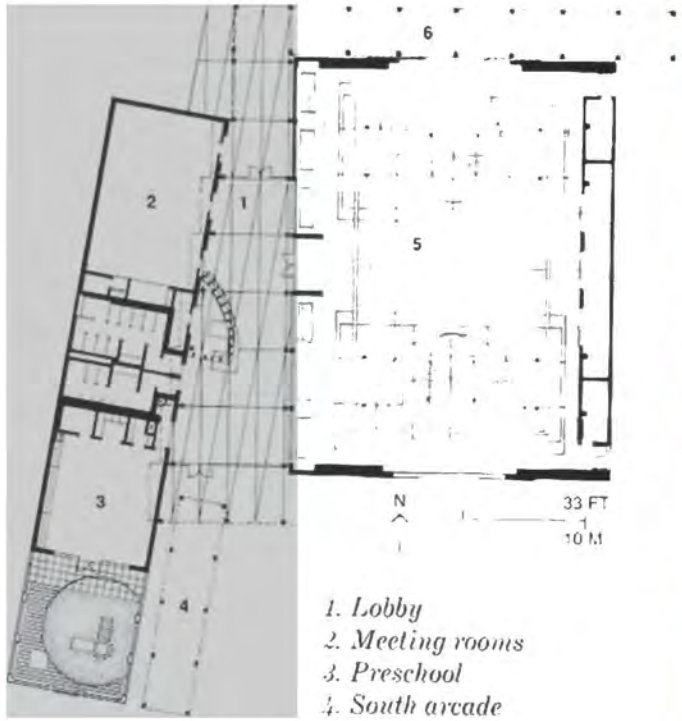


(Fig: 5.10) Axonometric of Diagoon project

project: Irvington Community Center
location: Fremont, California
architect: ELS/Elbasani & Logan Architects
time period: 1995

The measure of success for this community center, as it should be with any community center, was how well the design responded to the neighborhood context, how it dealt with vandalism and durability, and how it dealt with the types of uses that would be provided. This center was a home to the neighborhoods learning programs, athletic events, church groups, community meetings and so forth. In dealing with the designs compatibility with the neighborhood context, the architect, Donn Logan, stated that "It's a residential neighborhood, so the volumes relate more to the school buildings across the street than anything else." (Linn 1996, 82) Another big aspect to maintaining community acceptability was how the exterior appearance of the building was perceived. The most important thing to the architects was the material usage. They did not want the building to seem too hard through the use of very modern materials; instead they used softer materials, such as wood, that the community would associate with.

(Fig: 5.11) Exterior perspective of front entrance

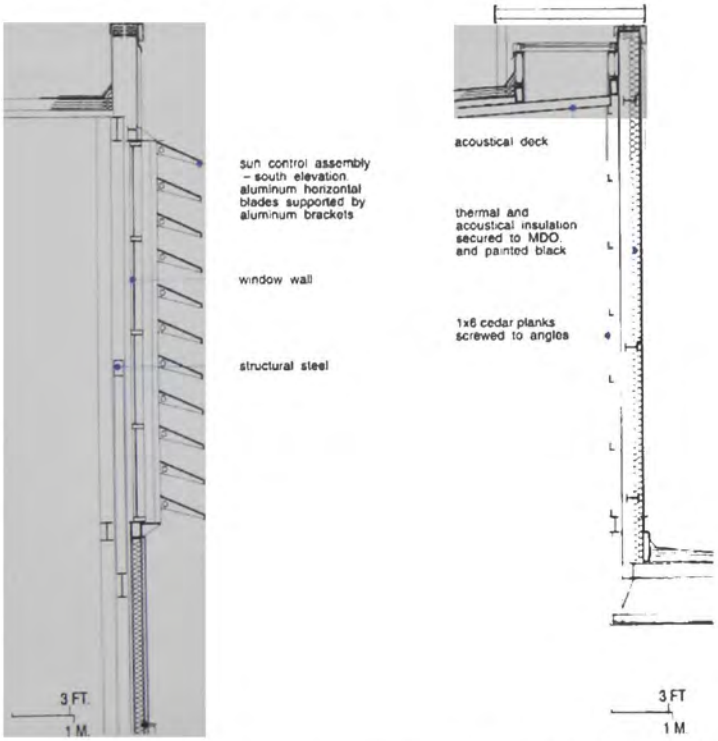


1. Lobby
2. Meeting rooms
3. Preschool
4. South arcade
5. Gymnasium
6. North arcade

(Fig: 5.12) Floor plan of the Irvington Center

Irvington Community Center Continued:

Within the 14,500 square foot center, spaces are dealt with in a pleasing manner. From separating the noisy athletic spaces from the quieter classrooms to day-lighting spaces with clerestories to shading southern exposed glazing with louvers to bringing the outside in with steel barn doors, the design achieves an overall scheme that fits perfectly with the community's needs and wants.



(F... ...es (Fig: 5.14) Detail of noise control

(Fig: 5.15) Exterior view of gymnasium & barn doors

(Fig: 5.16) Interior view of gymnasium & barn doors

bibliography

Alexander, Christopher. *A Pattern Language.* New York: Oxford University Press, 1977.

City-Data. 2004. *Lubbock, Texas.* <http://www.city-data.com/city/lubbock-texas.html>.

City of Lubbock. 2002. *Lubbock Virtual City Government.* <http://planning.ci.lubbock.tx.us>.

Davis, Howard. *The Culture of Building.* New York: Oxford University Press, 1999.

Hatch, C. Richard, ed. *The Scope of Social Architecture.* New York: Van Nostrand Reinhold Company, 1984.

Hill, Jonathan, ed. *Architecture – The Subject is Matter.* New York: Routledge, 2001.

Keegan, Edward. "Carol Ross Barney: by building consensus and with limited means, Carol Ross Barney elevates the public realm." *Architecture,* September 2002, 87-93.

Linn, Charles. "Irvington Community Center, Fremont, California." *Architectural Record,* June 1996, 82-87.

Microsoft Corporation. 2004. *TerraServer USA.* <http://www.terraserver.microsoft.com>.

response

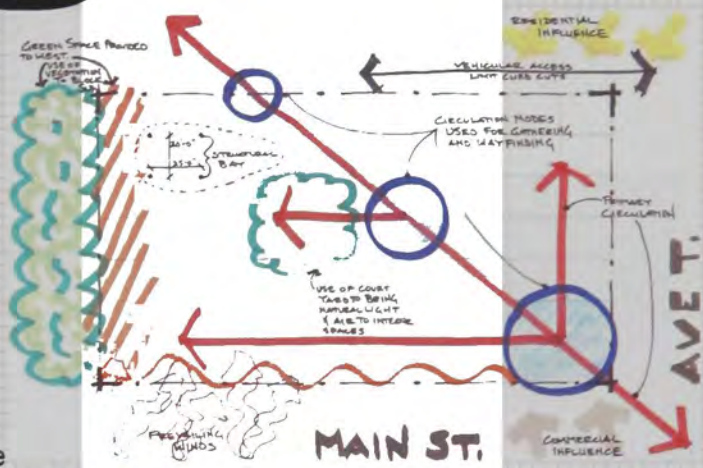
series of actions, changes, or functions bringing about a result; steps of a prescribed procedure; address, answer, notice, react, remark, reply

- development & implementation -

process

Many of the social issues that were identified throughout the programming phase were dealt with and addressed through the use of feasibility studies and interviews conducted with community members in and around the Overton neighborhood. It became clear that the objective of any new addition to this area should be to promote, maintain, and support the common good and social welfare of the people of the Lubbock Community, and to bring about civil betterment and social improvements.

Strong associations with sustainability and compatibility were made and therefore had much to do with the initial design concepts. Other factors that drove initial design ideas consisted of: finding a structural modular that fit well within the site for ease of adaptation, incorporating healthy outdoor spaces for users, understanding where community influences would come from, making circulation within and around the facility more enjoyable and accommodating through the use of gathering nodes, and making the building pedestrian friendly by limiting the number of curb cuts and placing the parking towards the back alley.



site analysis

color coding:

high activity | public space | semi-private | private

ain entry w/ bby, lounge, & reception

fice space and administrative ipport w/ private restrooms

mall activity rooms

child care room w/ private restrooms

large dividable multi-purpose activity room

full size dividable gymnasium

kitchen and service

public restrooms

family changing rooms

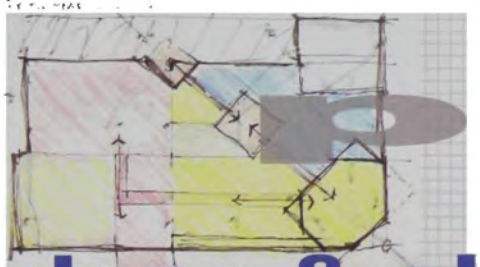
utility space

temporary living dorms/suites

process

functional space planning:

ed parti



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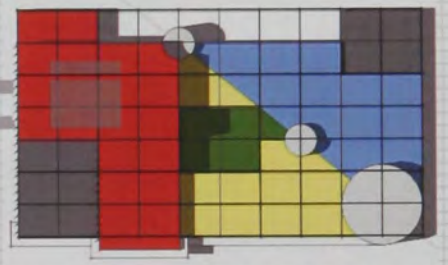
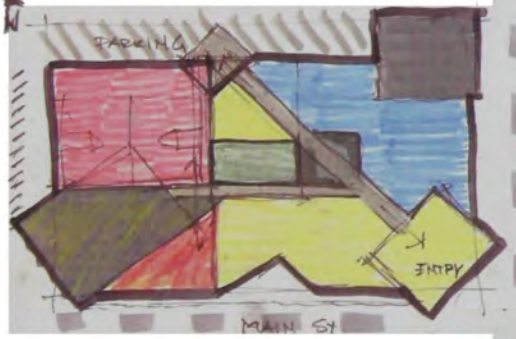
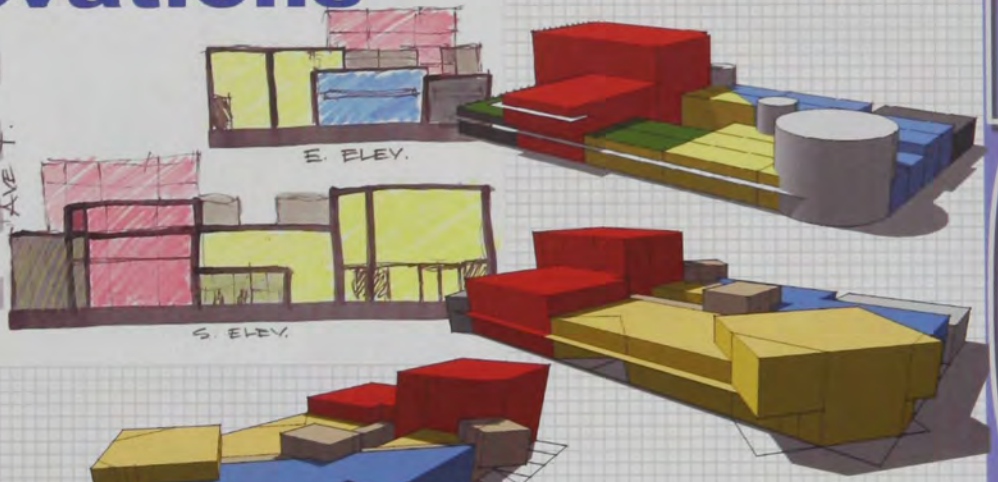
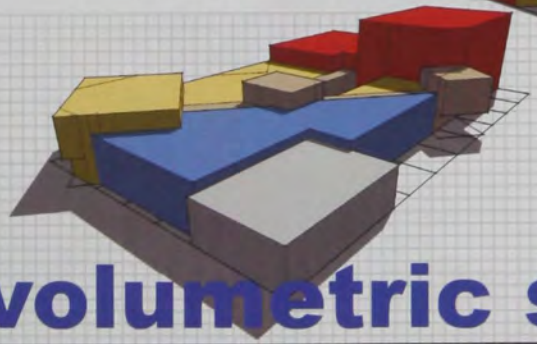


parti

plans & elevations







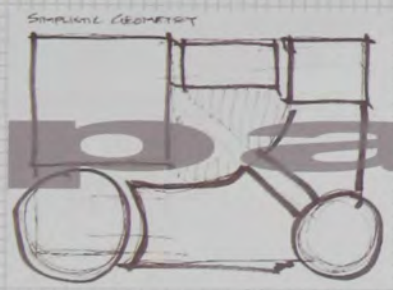
volumetric studies

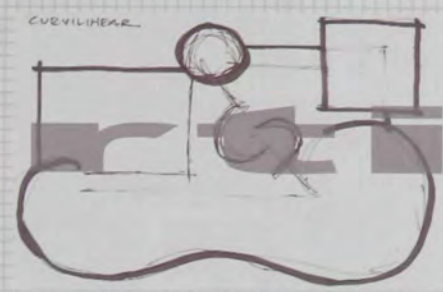
63

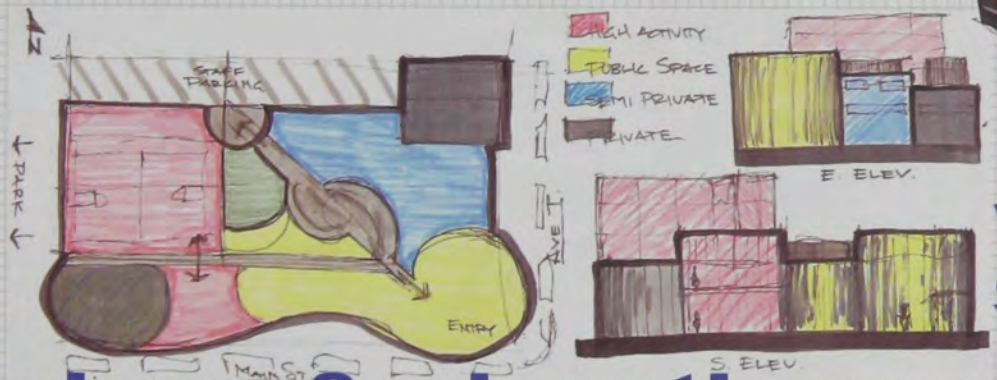
multi-use community center

process

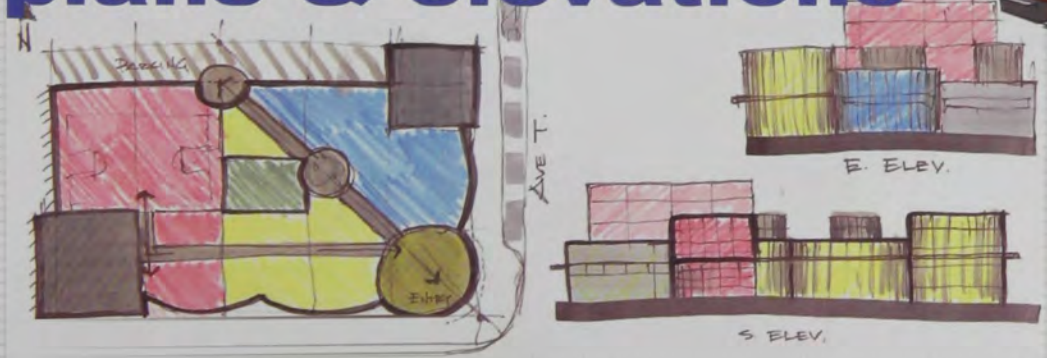
part







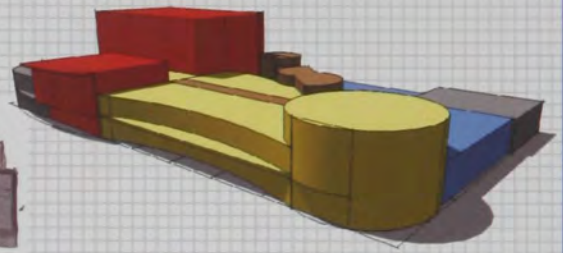
plans & elevations



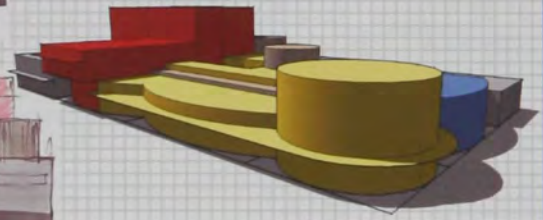
design

color coding:

high activity	public space	semi-private	private



volumetric studies

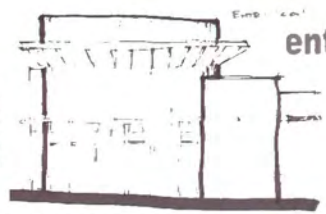


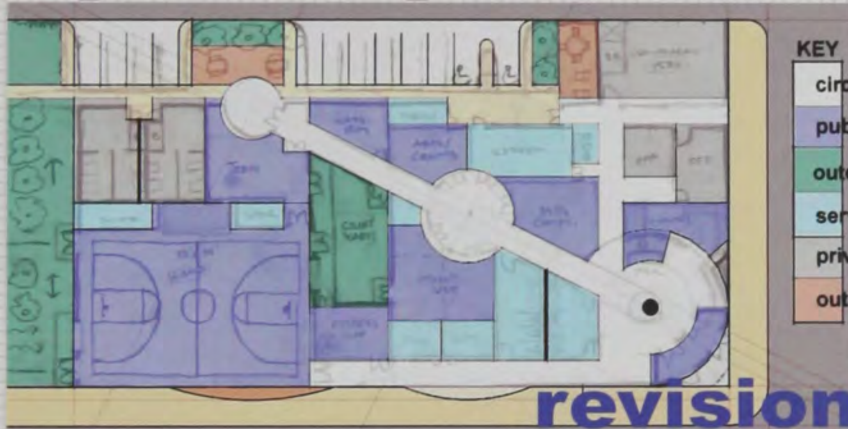
MIXUS

mixed-use community center

design process

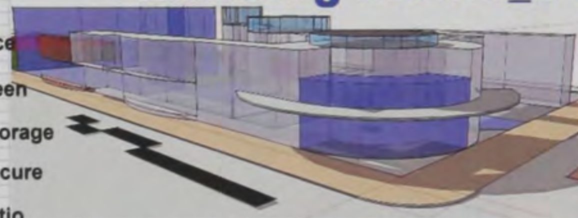
plan development: space planning

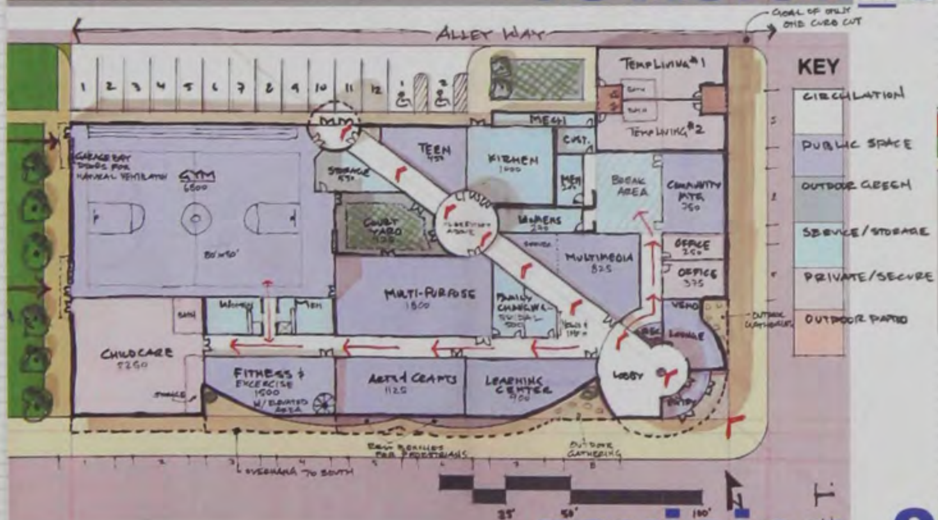




revision_01

massing model_01





revision_02

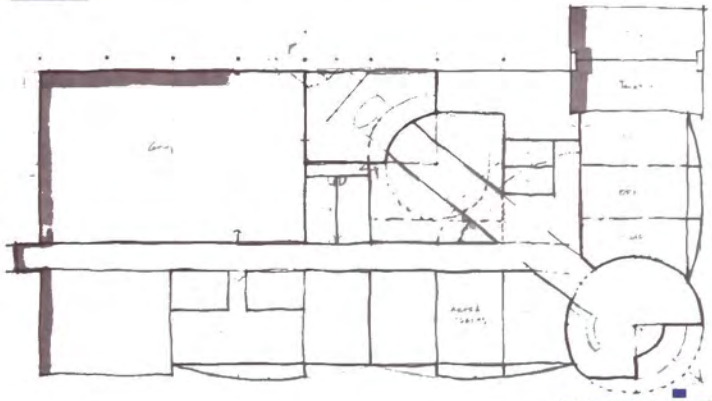
massing model_02

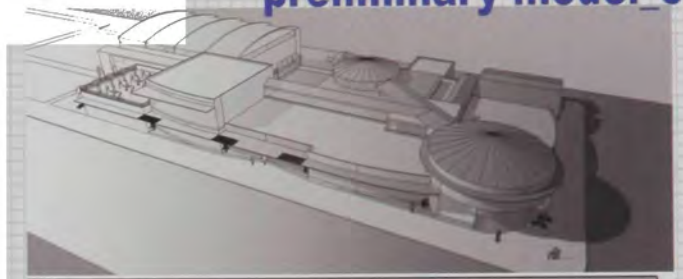
multi-use community center

process

design

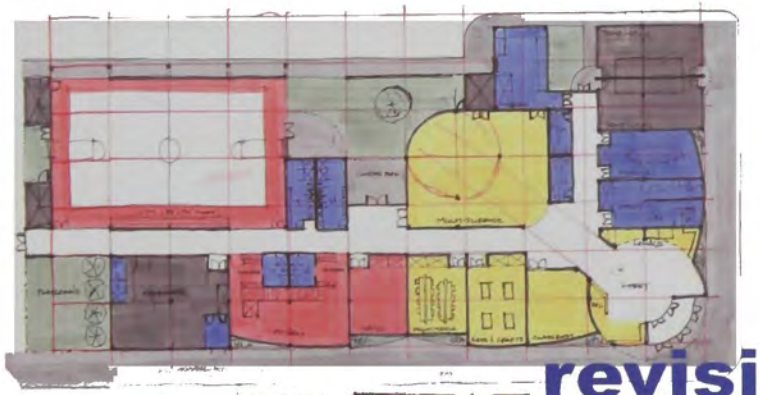
preliminary model_03





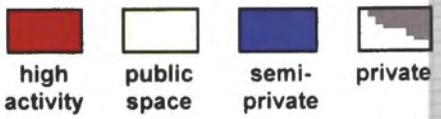
revision_03

model roof plan_03



ideas for material usage

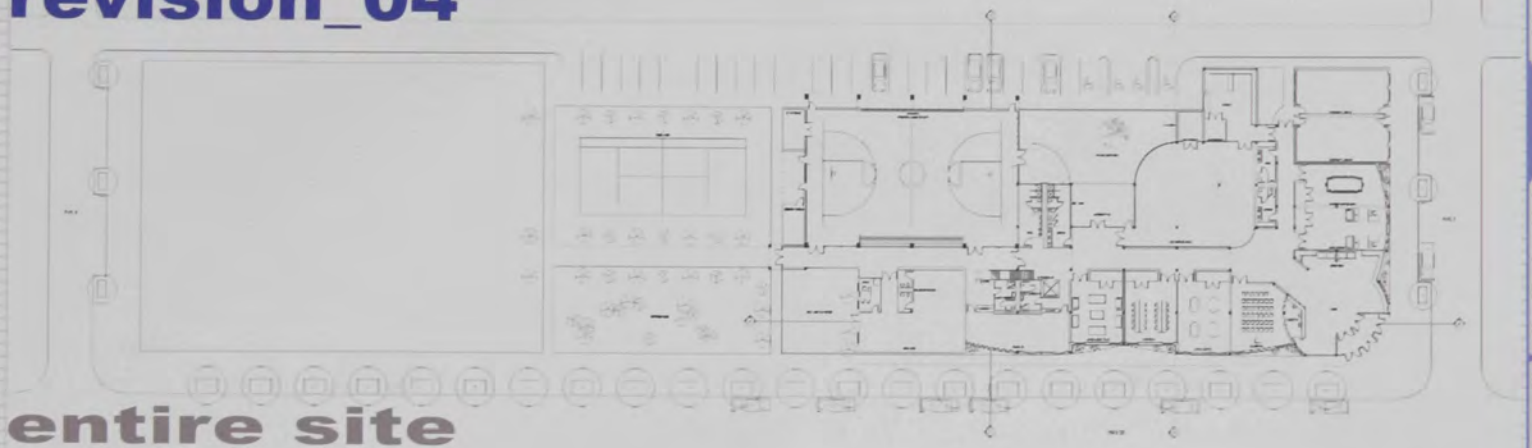
revision_04



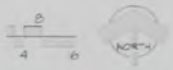
fitness & childcare alternatives

process

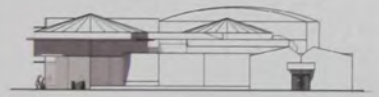
revision_04



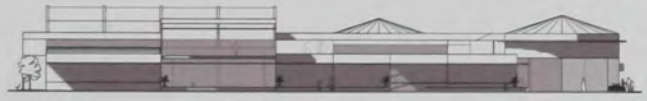
entire site



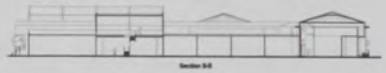
sections



East Elevation



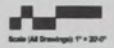
South Elevation



West Elevation

North Elevation

elevations

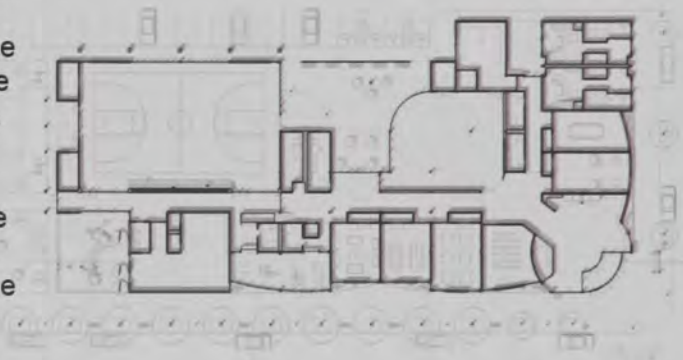


response

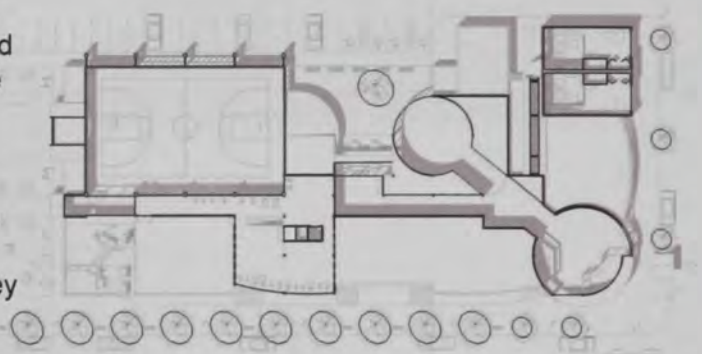
Throughout the schematic design phase and continuing through design development, there was the constant need to address how the facility's spaces related to each other, how the spaces functioned together, and how the building related to the surrounding context in height, shape, volume, and abstraction.

Great care was given to how the building was approached, especially by the pedestrian. An entry icon was used to mark the entrance, as well as give space on it's façade for a marquee and/or advertisement. The entrance was given significant attention primarily because of what it was inviting the user to; an accommodating facility that was open to all. A bus shelter and bike racks were incorporated into the southeast corner's streetscape to encourage other forms of transportation besides the automobile.

Spaces within the building were given appropriate ranking according to importance, amount of traffic, and how private or secure they needed to be. From this point, they could then be arranged and orientated within the building to facilitate the greatest amount of synchronization. Spaces that were related in function were allowed to share spaces in order to efficiently maximize floor space as well as give spaces dual functionality. This made for minor adaptations and deletions in the space programming that were originally thought to be necessary. Spaces were also organized in such a way that they were easy to use and allowed for efficient transitions between them. The main overall focus for the interplay between indoor spaces as well as between indoor and outdoor spaces was the sight lines between these spaces. Understanding that seeing people using a space attracts them to that space, there needed to be this visual interaction not only for attraction but security as well.



floor plan_01

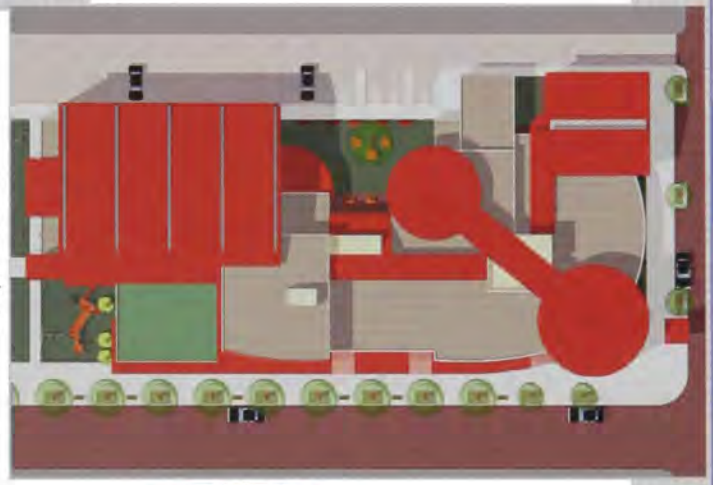


floor plan_02

response

Relating the community center to the rest of the context consisted of concentrating on forms, massing, scale, rhythm, material usage, and colors. Without copying what had already been done in the area, the "feel" of the building needed to take on a warm welcoming atmosphere.

The building took on various construction methods to achieve different goals. The majority of the building was given a steel frame for ease of construction, cost, and allowed for the different geometric shapes. It also made for the easiest means of spanning the gymnasium, accomplished through the use of bowtie buttresses. The only areas that had a different structure were the childcare area and the temporary living. They were constructed with load bearing, split face cmu walls. This achieve a structural, visual, and auditory separation from the rest of the building that needed to be achieved programmatically. The facades also took on different materials to break up the face, giving some rhythm to the streetscape. The entire building was given a 2'-8" base made from four courses of concrete masonry units. This gave the building a unified look between the different façade materials. Where curved walls existed on the façade, stucco was used as the fenestration to achieve a hand worked and indigenous feel that is common to the geographic area. Straight walls were constructed of a brick veneer that related to the cmu's modular, but also related to the stucco and mass and texture. A red metal, standing seam roof was used to relate to the Spanish tile used in the area, but give the build a sustainable, reliable and energy efficient means of protection. A green roof over the childcare area was supported with metal open web joists and gave the upstairs exercise facility an outdoor space to expand its functionality. This area also gave an interplay between the street level and the second level of the f



description

The outcome of the design was a comprehensive collaboration of the needs and wants of community members, my impression and personal insight to what the community center needed to accomplish, and the input and expertise of faculty members and advisors. The end product, ***The Overton Community Center***, addressed and accommodated the requirements of the end user. The consensus of the community public, that was determined through interaction and interviews with individuals from the area, was a general concern for the safe, enjoyable use of the building by all walks of life.

The entrance is offset from the rest of the building through the use off a cylindrical form whose curvilinear surfaces are continued along the streets façade to give an undulating nature to the street life. This form is carried through to the roof level with a circular roof set above the rest to allow for clerestory windows in the main entrance. This idea was also used to bring natural light into the multipurpose room as well as throughout the circulation corridors.

The more semi-private rooms are located off of the east corridor for security as wells as the programming need to be adjacent to the multipurpose room, reception area, kitchen, and bathrooms. At the end of this corridor is the rear alley entrance/exit which opens into a small entrance courtyard that is also used by the temporary living unit tenants.

The temporary living units are double height loft style units that can be partitioned to allow for adaptability in tenant use. The second level is an open bedroom with study area and a bathroom. It overlooks the first level that consists of a living area and efficiency kitchen. This portion of the living unit can be partitioned from the rest of the first level, which consists of a small two bed bedroom and study area along with a full bath to [illegible] apartment.

description

Along the south face of the building are shading devices that shade the glazing to the multipurpose rooms and fitness areas in order to avoid direct solar gain and make the rooms more comfortable. There are sections of the shading devices that allow for some light to pass through to let the landscaping receive light. These landscaping areas were created by the recess in the undulating and curved exterior walls. The fitness room is one of the few double levels within this facility. It's location is directly accessible by the gym, locker area, family changing, and restrooms. Its second level is access by the stairway directly off of the main circulation corridor. The second level covers this corridor, creating an interior bridge and balcony that overlooks the gymnasium. This helps satisfy the programmatic need for a visual interplay between spaces. There is also the exterior exercise area that is accessed at the top of the stairway on the second level.

The childcare room is located at the west end of the corridor which gives the room an adjacent exit to the exterior. This gave the opportunity for the childcare area to have its own secure playground area to allow for the children to get outside during the day.

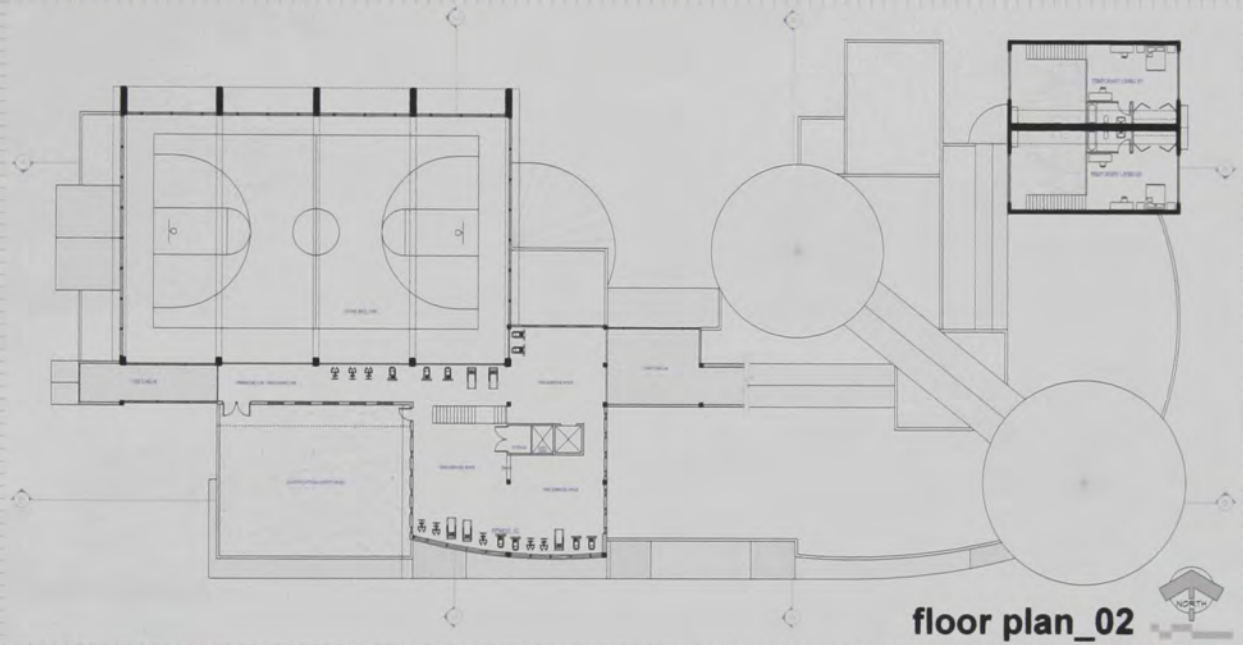
The multipurpose room is a very open area that can also be closed off for private needs. It is directly adjacent to the courtyard which also borders the patio and gymnasium. The courtyard is located on the north side of the building which allows for the most comfortable climate. It is visually separated from the parking with a green vegetation wall that also acts as a security and privacy separator from the alley. Many aspects of the design for this building incorporated social gathering and a community identity. Wall murals located in strategic spots along the buildings façade act as an outlet for community expression

description

plan solution:

floor plan_01

description



floor plan_02

design description

elevations:

south

north

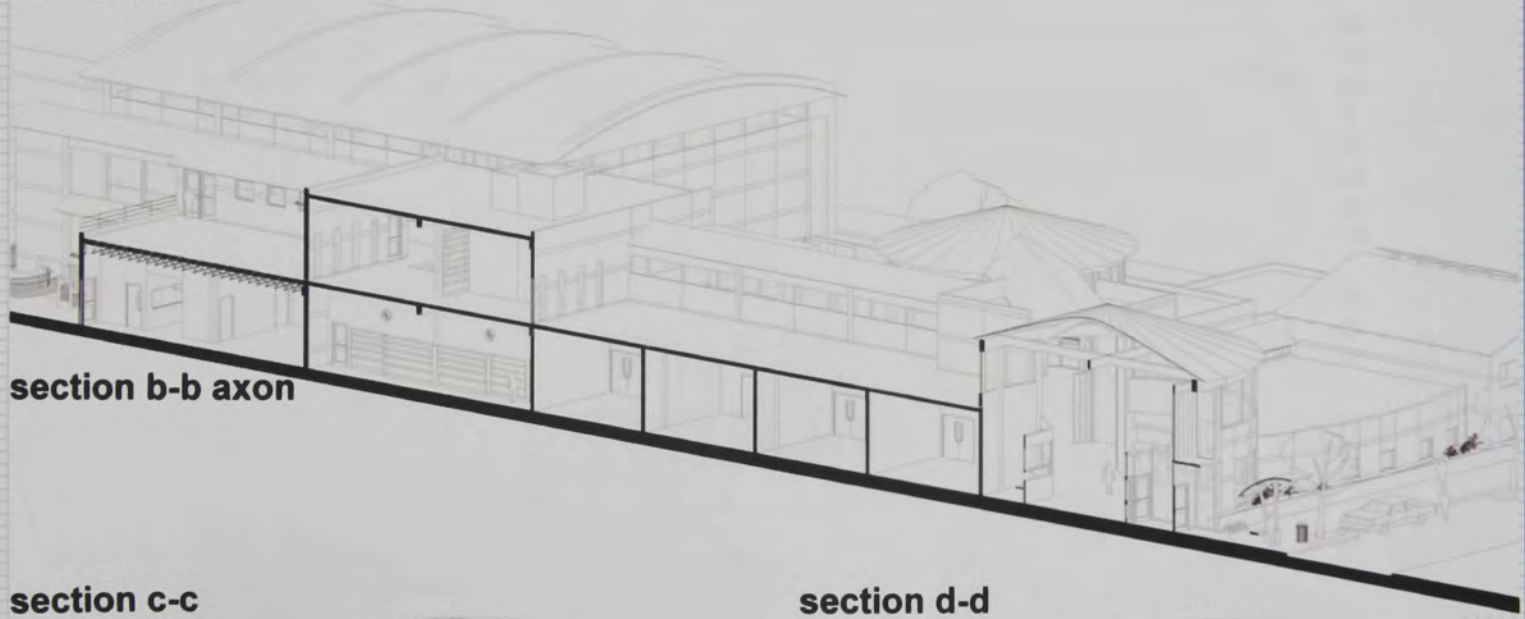
west

east

description

sections:

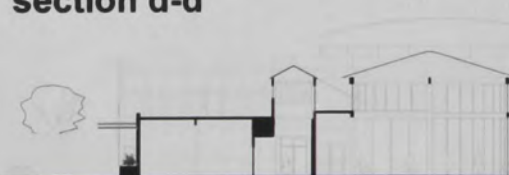
section a-a



section b-b axon

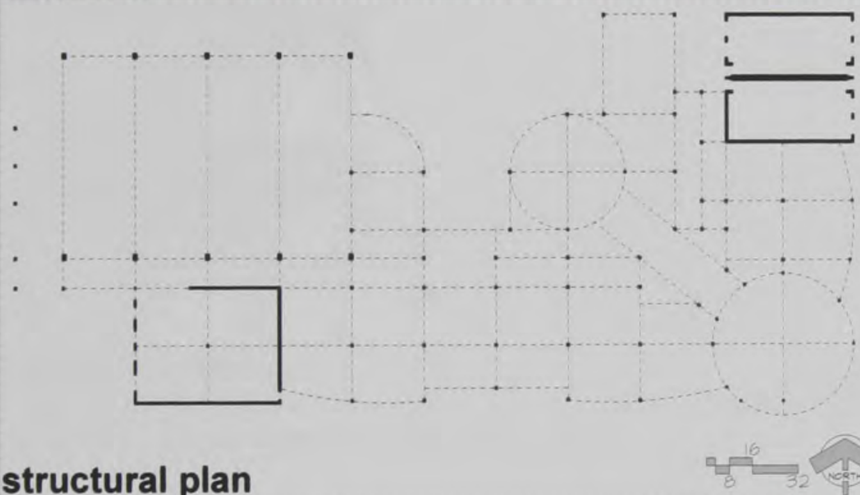
section c-c

section d-d

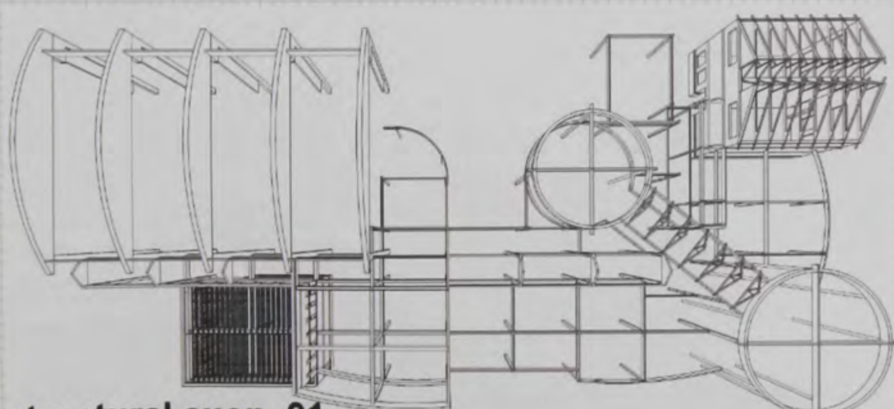


description

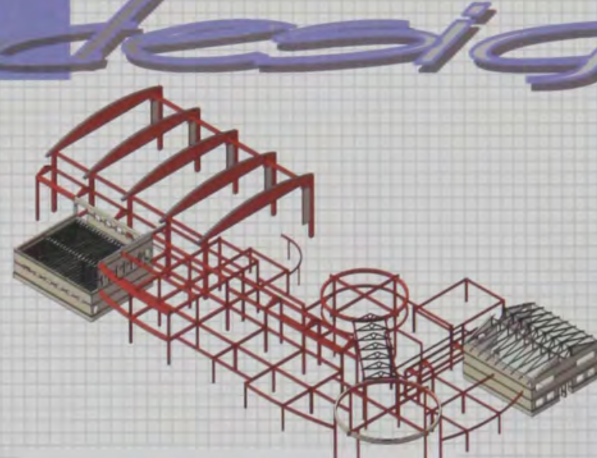
structural: structural



structural plan



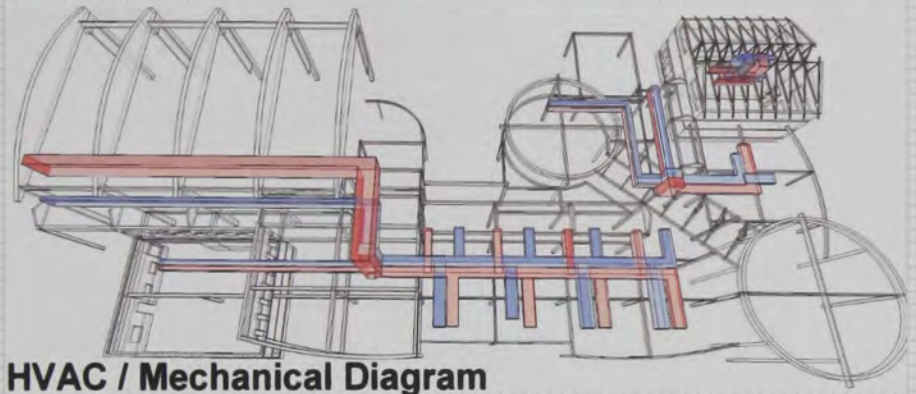
structural axon_01



exploded structural axon

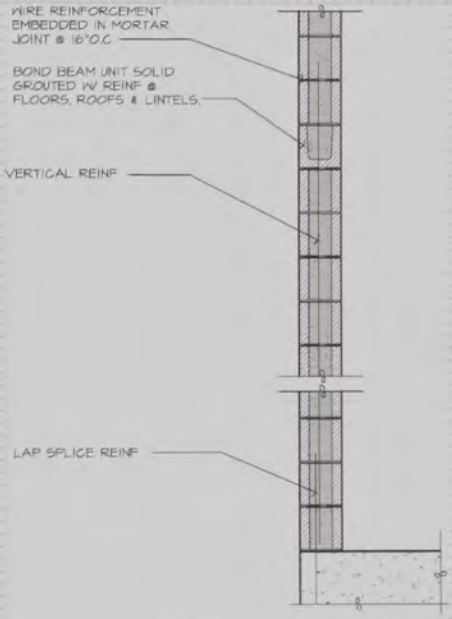
description

mechanical & details:

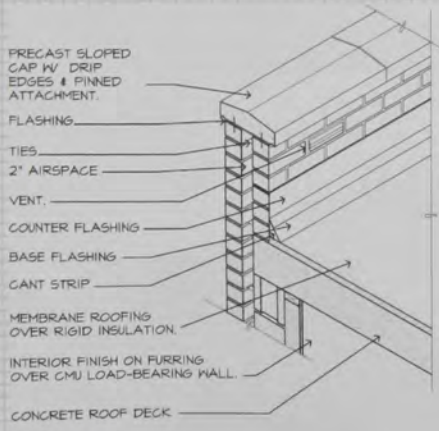


HVAC / Mechanical Diagram

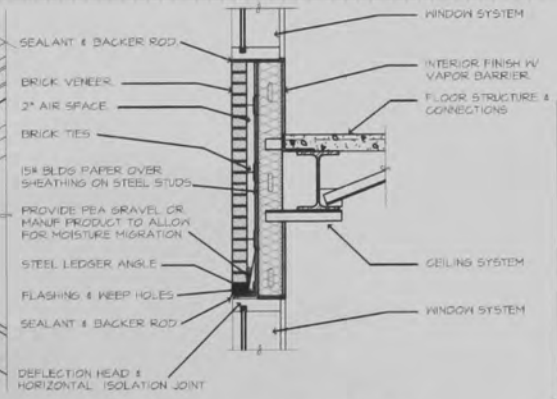
- **Rooftop slit system units**
- **Separate systems for living units**



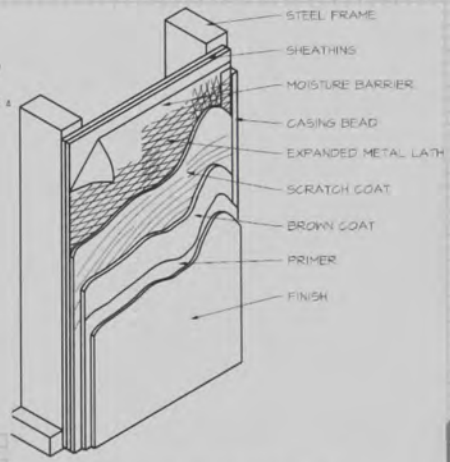
CMU WALL SECTION



TOP OF WALL DETAIL



BRICK VENEER DETAILS



STUCCO SYSTEM COMPONENTS

design
Xcess
77

description

perspectives:

southeast birds eye view

view down corridor and into multipurpose room

view from lobby space

southeast street level view of entrance

description

southwest birds eye view

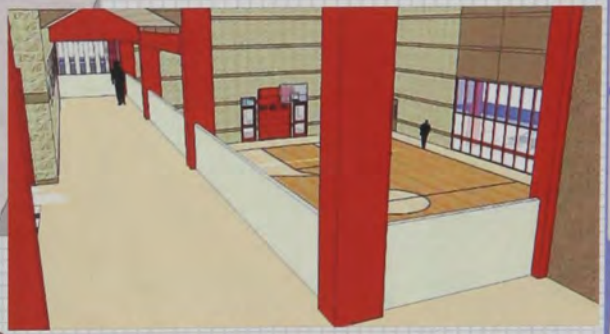
view from gym level looking up at balcony of fitness area

view of gym area

southwest street level view

description

northeast birds eye view

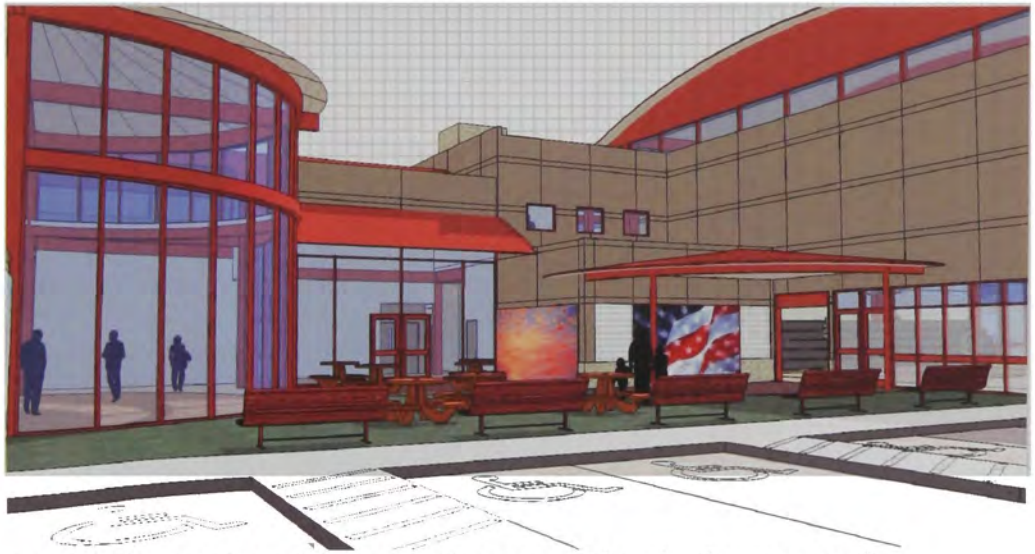


view from interior bridge looking over balcony into gym

northwest view from alley parking

description

street level view of south façade



view into courtyard *(green wall removed for viewing purpose)*

thank you

texas tech university college of architecture

...to all the professors, teachers, staff, and my advisors from the college of architecture: I send you my sincerest thanks for all the years of support and guidance...I could not have made it, nor been as successful without your generous assistance...

sincerely,

Zach Edwards

zach edwards

class of 2005
college of architecture
texas tech university