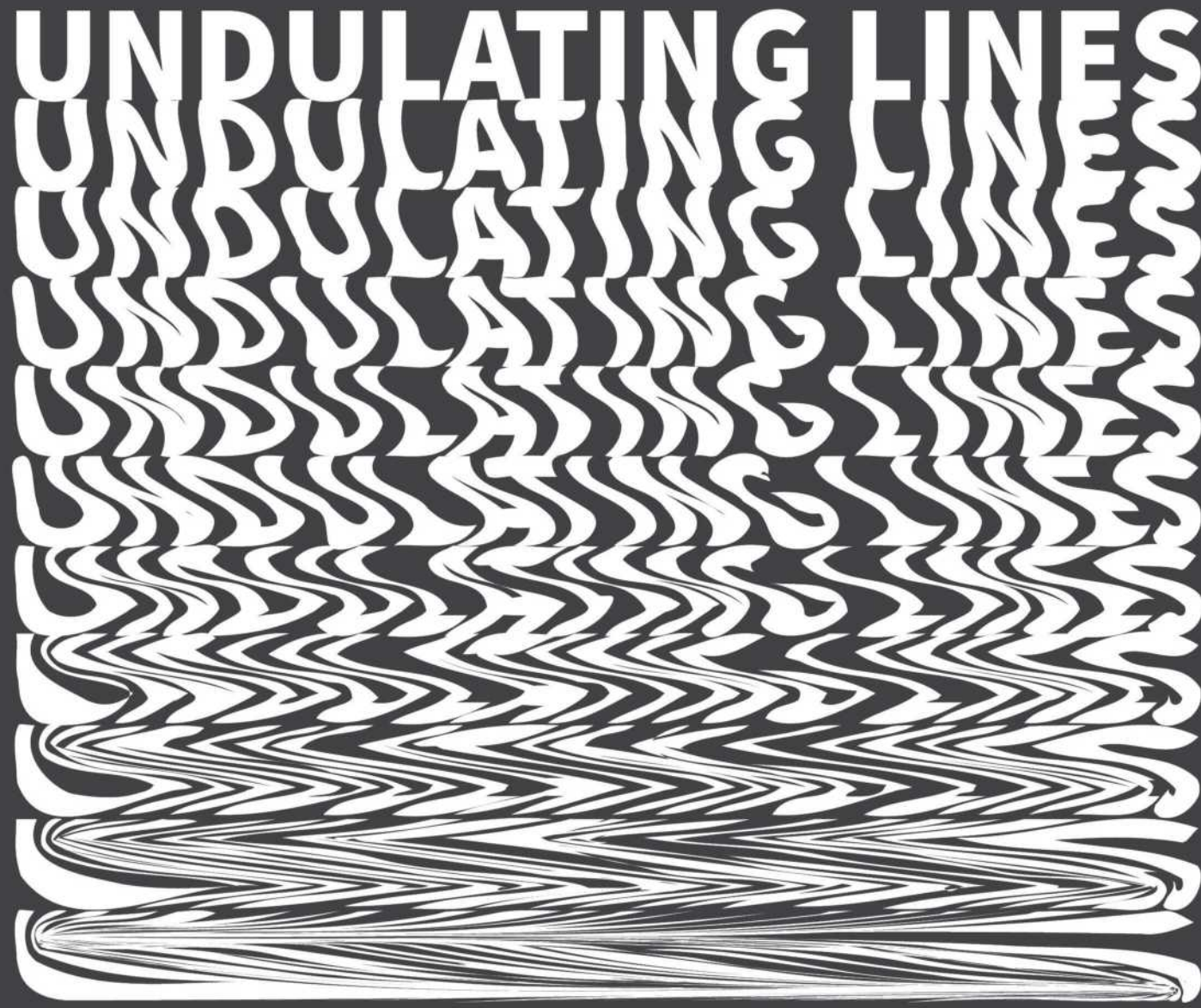
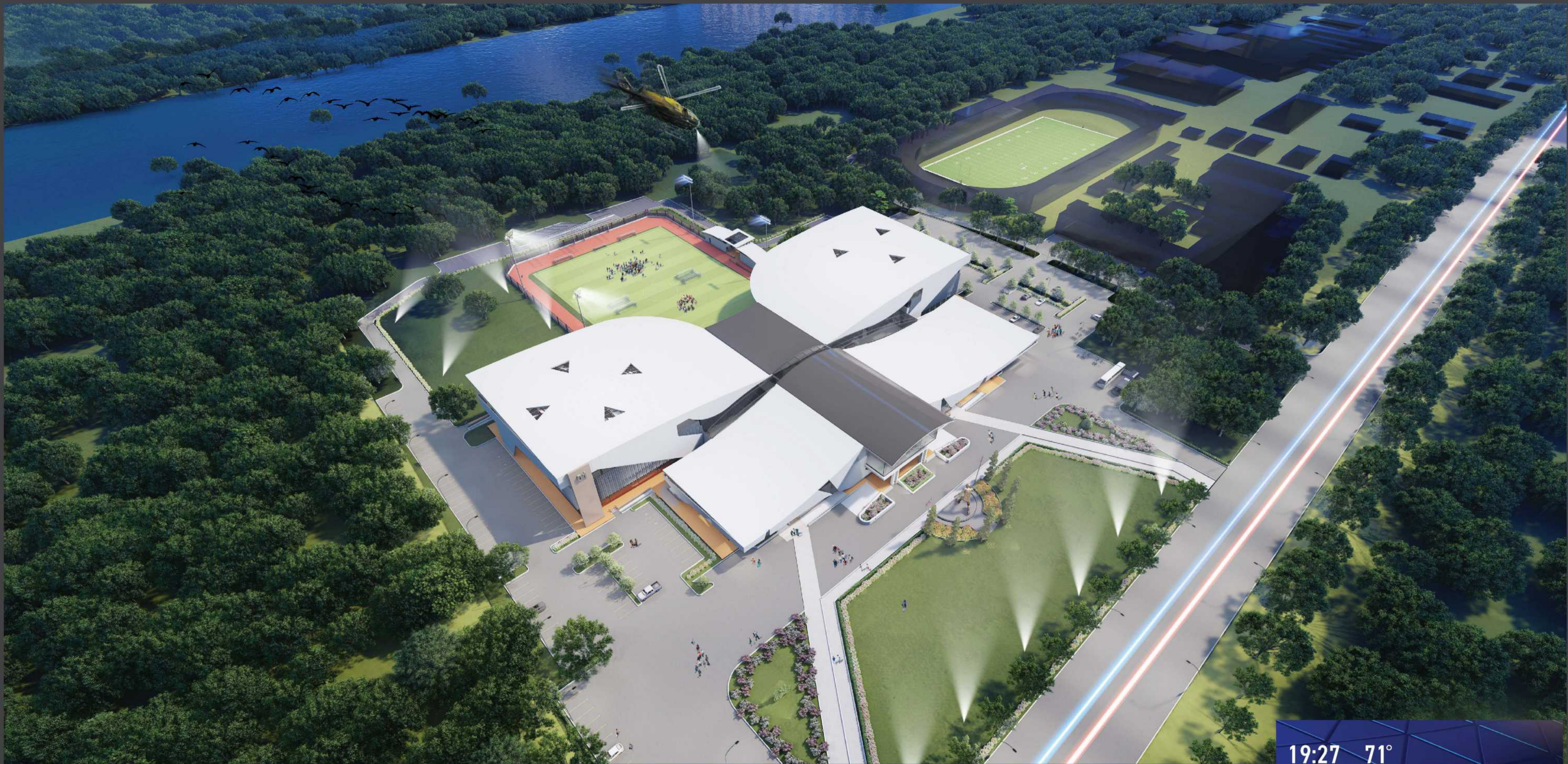


JOSEPH OCHE ALI - YOUTH COMMUNITY CENTER - DAINGERFIELD, MORRIS COUNTY, TEXAS









JOSEPH OCHE ALI - YOUTH COMMUNITY CENTER - DAINGERFIELD, MORRIS COUNTY, TEXAS

## SPORT TODAY: NATIONAL INTRAMURAL SPORTS KICK OFF IN DAINGERFIELD, MORRIS COUNTY



Morris County's new facility selected by the Governor to host the 12 games and the final of the ongoing high-school soccer intramural competition. We are expected to witness over 50 schools from around Texas visit Daingerfield, Morris County for the prestigious competition. We already have our helicopter team covering the opening ceremony.

19:27 71°



Morris County, TX  
Friday, Nov - 2022



SCAN ME



To the Memory  
of My Father & Charlesetta Bruce.

Every Dreamer Out There - Never Give up Because  
You Are The Champion Of The World!

Preface

Neatness in the Messiness

I believe a community is only as strong as its health care resources. I have divided this book into three parts to emphasize on the continuous process of developing this community center in Morris County. The first stage is the integrative dialogue between my committee, my client and myself in-order to understand the problem statement, build a matrix and create a program. The second and third part will show in detail how every decision was made using free hand sketch and computer design.

In writing this book, i have not assumed the reader would necessarily be acquitted with knowledge of architecture. Therefore i have tried to provide as much background raw process and data as necessary to make the story clear and allow the book to stand on its own without leaving gaps that could only be filled with imaginations or trying to reach out to me, but should the reader wish to learn more, the last page provides reference to my contact and reference sources I used.

The biggest question before i started this book became more silent as my ideas began to turn into reality.



PROJECT



**Beverly Austin**  
Chair, Economic & Business Development  
Morris County Collaborative



**Doug Reeder**  
Judge  
Morris County Collaborative



**Charlesetta Bruce**  
Chair,  
Morris County Collaborative



**David Mims**  
Advisor,  
Morris County Collaborative



**Randy Seybert**  
Board Member,  
Morris County Collaborative

CLIENT

PROJECT



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Department of Architecture,  
Center for Health Systems & Design  
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DRPH, FAIA, FACHA, LEED AP  
Ronald L. Skaggs and Joseph G. Sprague Chair of Health Facilities Design  
Director, The Center for Health Systems & Design  
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Architecture, Urban Design, Art, Industrial Design,  
Master of Architecture



**D. Kirk Hamilton**  
FAIA, FACHA, EDAC  
Professor Department of Architecture  
Associate Director Center for Health Systems & Design  
Texas A&M

COMMITTEE



# Architecture as Problem Seeking/Solving

*If you take a look at the County Health Rankings you will see that Morris County ranks 242 out of 244 in overall health.*

*Morris County lacks recreational facilities,  
A doctor: patient ratio of 1:6300.  
Lack of access to nutritious food.  
Lack of quality childcare facilities.  
And a high poverty rate among other social determinants.*

*Our nearest hospital is Titus Regional Medical Center which is 24 miles away.*

*We believe a medical campus will not only solve some of these problems but also attract other businesses and jobs to our area that will influence other economic multipliers as well.*



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Presentation Drawing 65



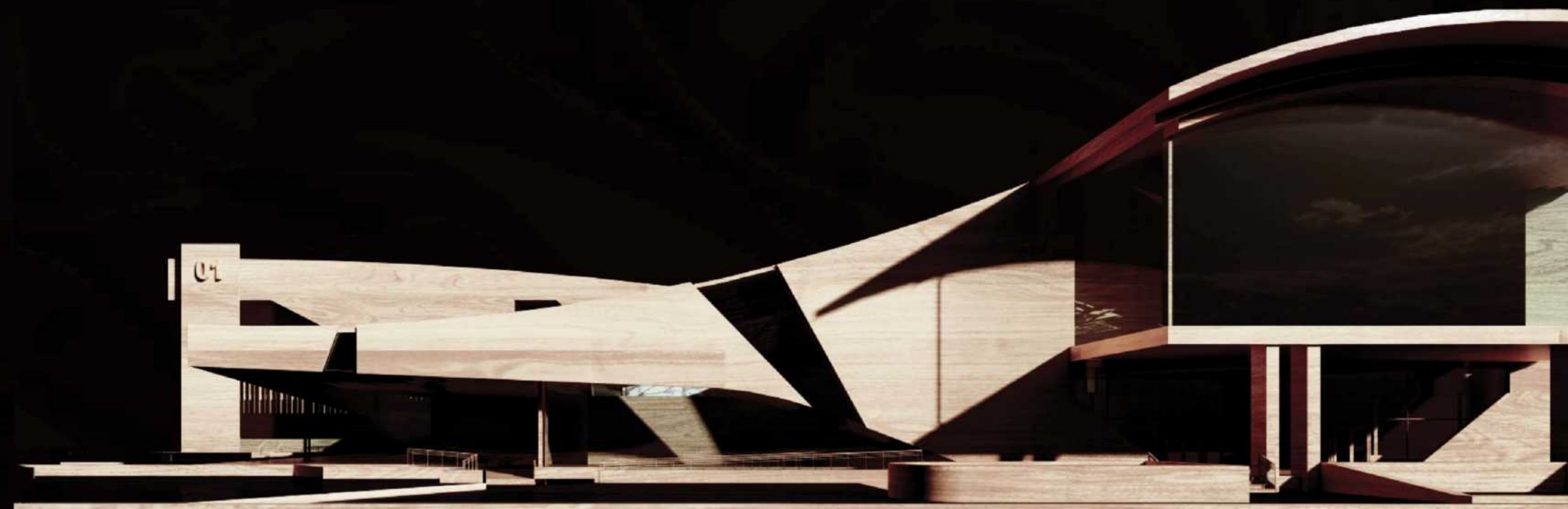
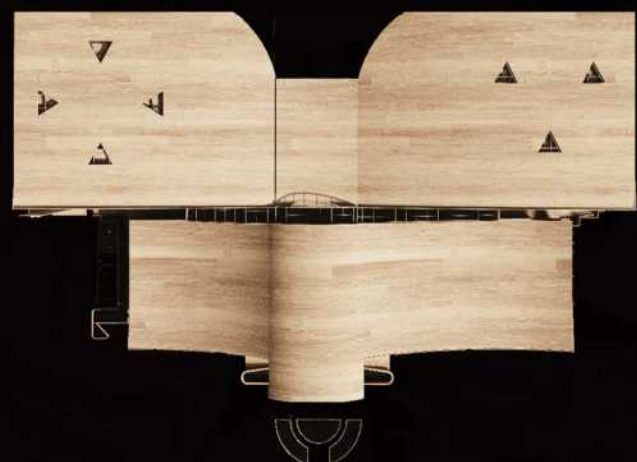
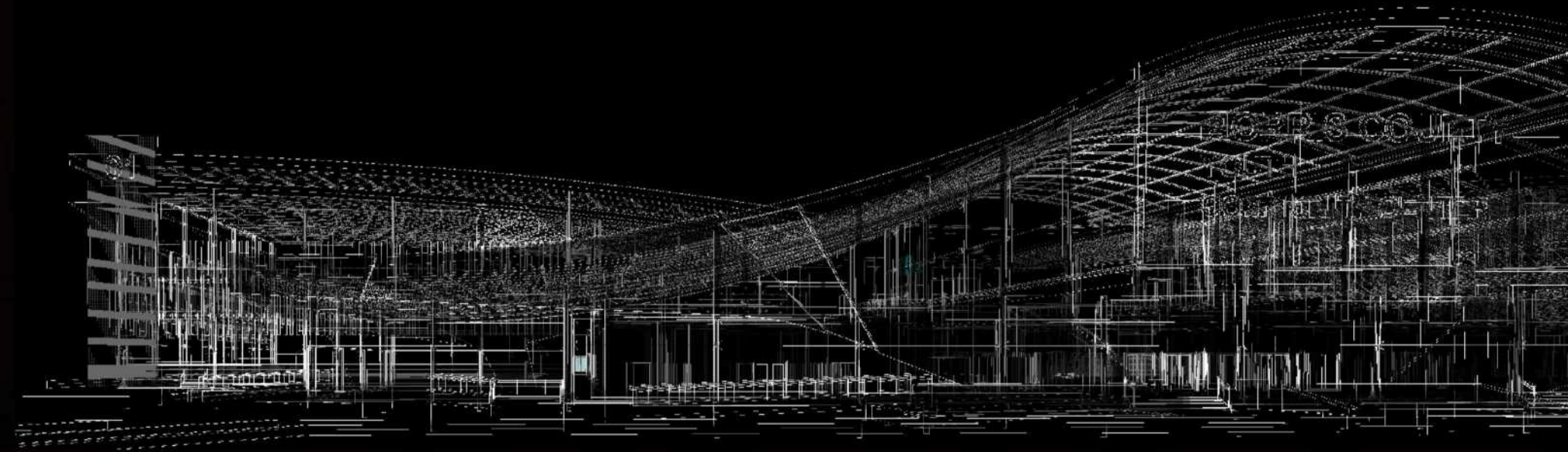
# 01

## Morris County, North Texas, USA

### Digression in Vernacular

These are problems that all architects face, and all architecture must resolve. Let the design produce an excitement and yearn an experimental feel.

A study of vernacular form-making that is inspired by the local Typology.





# THE GROWING COUNTY

## MORRIS COUNTY

33° 7' 12" N, 94° 43' 48" W (33.12, -94.73)  
Population: 12,593 est. (2016) 12,934 (2010)  
Total area: 259 square miles (670 km2)  
252 square miles (650 km2) land  
6.7 square miles (17 km2) water

Morris County is located in northeastern Texas, one county removed from the state's northern boundary and one county removed from the state's eastern boundary. Daingerfield, the county seat and largest town, is fifty miles southwest of Texarkana and 125 miles northeast of Dallas. The county's center lies at 33°07' north latitude and 94°44' west longitude. U.S. Highway 67 traverses the northern part of the county from east to west, U.S. Highway 30 crosses the northwestern part of the county, and U.S. Highway 259 crosses north and south.

The county's transportation needs are also served by two railroads, the St. Louis and Southwestern and the Louisiana and Arkansas, originally constructed in the late 1870s as the Texas and St. Louis and the East Line and Red River, respectively.



According to the U.S. Census Bureau, the county has a total area of 259 square miles (670 km2), of which 252 square miles (650 km2) is land and 6.7 square miles (17 km2) (2.6%) is water.[4] It is the fifth-smallest county in Texas by land area and fourth-smallest by total area.





# THE COMMUNITIES

## A CITY GUIDE

Contiguous Counties:  
Bowie County (N) Cass County (E) Marion County (SE) Upshur County (S) Camp County (SW) Titus County (W) Red River County (NW)

Created and organized in 1875, with Daingerfield as county seat. Named for William W. Morris (1805-1883), who came to Texas in 1849, when the Civil War began in 1861, was in 8th Legislature that armed the state, enacted soldiers' families' relief laws and set up 2,000 mile frontier and coastline defenses. Also in 13th Legislature, 1873-75. Of the 254 Texas counties, 42 bear Indian, French or Spanish names. 10 honor such colonizers as Stephen F. Austin, "Father of Texas." 12 were named for Washington, Clay and other American patriots. 96 were named for men who fought in the Texas War for Independence (15 dying at the Alamo), signed the Declaration of Independence from Mexico, or served as statesmen in the Republic of Texas. 23 have the names of frontiersmen and pioneers. 11 honor American statesmen who worked for the annexation of Texas; 10, leaders in Texas since statehood, including jurists, ministers, educators, historians, statesmen; and 36, men like Morris prominent in the Confederacy during the Civil War. Delta and 8 others have geographical names. San Jacinto and Val Verde were named for battles; Live Oak and Orange, for trees; and Mason for a fort.



### DAINGERFIELD

Daingerfield, the county seat of Morris County, was named for Captain London Daingerfield, supposedly a native of Nova Scotia, but beyond that and a few other facts, Captain Daingerfield remains a mystery man. A spring known locally as Daingerfield Spring was once a popular camp used by Indians such as the Choctaws and Caddoes. Around 1830, Captain Daingerfield and a company of 100 men attacked an Indian village at the spring and, after a long, bloody fight, the Indians were driven away. In those days, it was the custom of settlers to plant cedar trees around the graves of their loved ones. Near the spot where the Daingerfields were buried, large cedars are now growing.



### LONE STAR

Although the area had received settlers decades before, a proper community didn't form until the 1930s. That was when Lone Star Steel (from Dallas) opened a steel mill and modestly named the town after the business. WWII gave Lone Star a shot in the arm with a huge expansion for the war effort. Employees were said to number 6,000 workers. More than a few workers decided to stay after the war ended. The town was incorporated in the 1950s with a population of just over 1,100. The 1980 census showed Lone Star breaking the 2,000 person barrier (barely). The steel plant remained active, but in the 1980s, due to foreign competition, demand caused the plant to lay off half of its 3,800 employees.



### OMAHA

Not named after the city in Nebraska, Omaha had its name drawn from a hat in 1886. Citizens had tired of the town's previous name of Morristown. The eight or so contributors submitted names from their former state of Alabama and Omaha came up the winner. The town had a healthy population of 450 in 1890 and it remains a vibrant community. Land was first purchased for a public school in Omaha in 1892 and a large wooden building near the railroad tracks soon housed three teachers and 165 students. The community formed an independent school district in 1905 and built a new two-story brick structure the following year.



### NAPLES

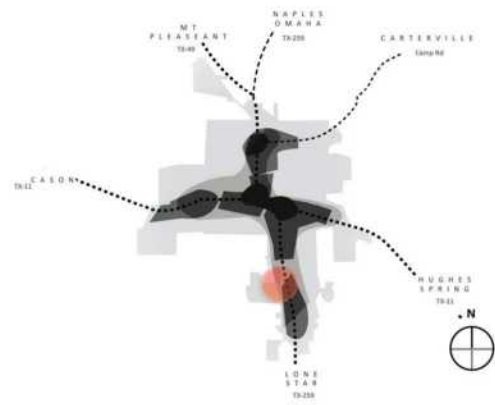
Naples came into being with the arrival of the Texas and St. Louis Railroad in 1880. The small town of Wheatville had been bypassed by the railroad and moved the three miles south, providing the new town with its first residents. The name Naples was chosen from a list submitted by residents in 1895. The following year the population had reached 1,200. Naples incorporated in 1919. The Great Depression hit Naples hard and in 1933 the population had fallen to 843. For the 1950 census, Naples increased to 1,346. In the mid 1960s, nearly half of the population worked at Lone Star, Daingerfield, or the Red River Army Depot in neighboring Bowie County. The 1980 population of 1,908 had decreased to just 1,410 by the year 2,000.



### CASON

Cason is on state highway 11 and the Louisiana and Arkansas Railway, five miles west of Daingerfield in southwestern Morris county. the town grew up around a station on the east line and red river railroad, which was constructed through western Morris county in the late 1870s. Many of the early businesses were transferred from snow hill, three miles north. When the post office, which had been in snow hill, was moved in 1878, the postmaster, William m. Cason named the new town Cason in honor of his father, j. W. B. The population declined between world war ii and 1972 when a population of 160 and five rated businesses was reported. In 1986 the population was estimated at 165, and Cason had four rated businesses. In 1990 and 2000 the population was 173.





# ARCHITECTURE STYLE

VERNACULAR

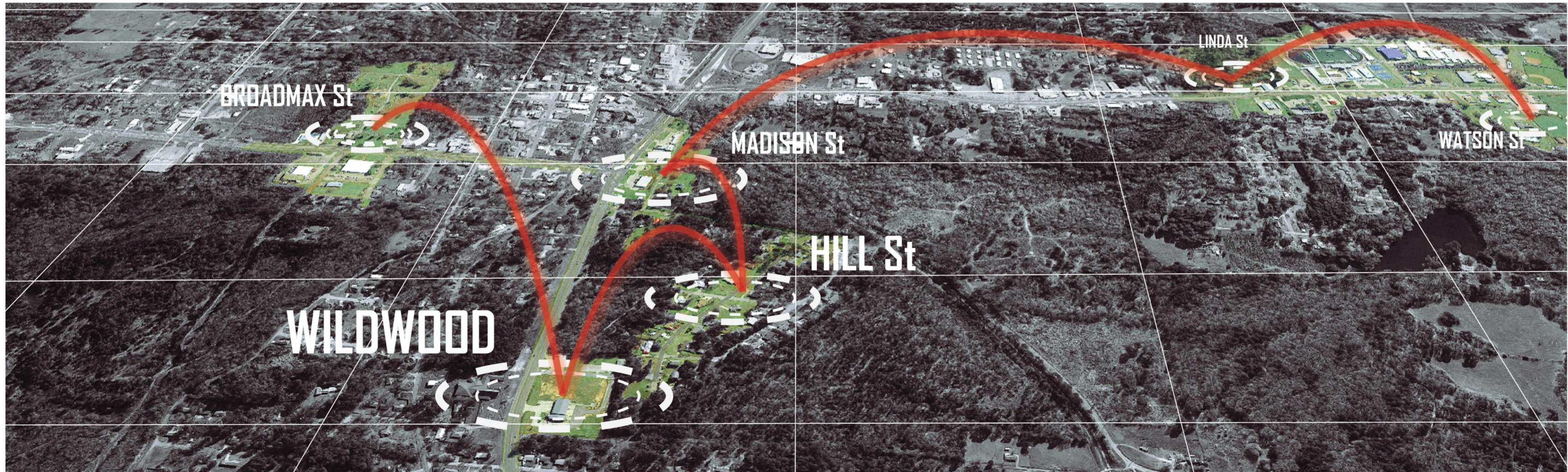
FRENCH COLONIAL



FEDERAL STYLE



ADOBE ARCHITECTURE





# DESIGN CHARRETTE

## MATRIX : PENA METHODOLOGY

Architectural programming is a team effort that requires close co-operation between architects and their clients. Problem Seeking, Fifth Edition lays out a five-step procedure that teams can follow when programming any building or series of buildings, from a small house to a hospital complex. This simple yet comprehensive process encompasses the entire range of factors that influence the design of buildings.

SMART Objectives Language – Specific Skills training for youth and adults and those in low socio-economic groups to prepare for jobs, computer/technology skills, transportation, referrals, food (stipends), childcare, incentives to return to work; Certifications for trainings/verification, professional clothing, interview skills, inclusive package of skills training to offer business a ready workforce; Medical and dental care/support, mental health support/screening. Credit rating improvement, legal issues; Lack of incentives to gain resources for businesses; business sustainability. Safe place to go (Recreational Center) offering teamwork, soft skills development, coping skills, positive engagement w/ one another, interpersonal skills, positive outlook, counseling support; Opportunities to reduce crime and inequities in justice; Lack of Internet access.

**Build on unique rural assets to create diversified economies, and to protect and nurture rural culture and way of life**

**Drive overall community wellbeing as an engine of economic growth**

Build on unique rural assets to create diversified economies, and to protect and nurture rural culture and way of life

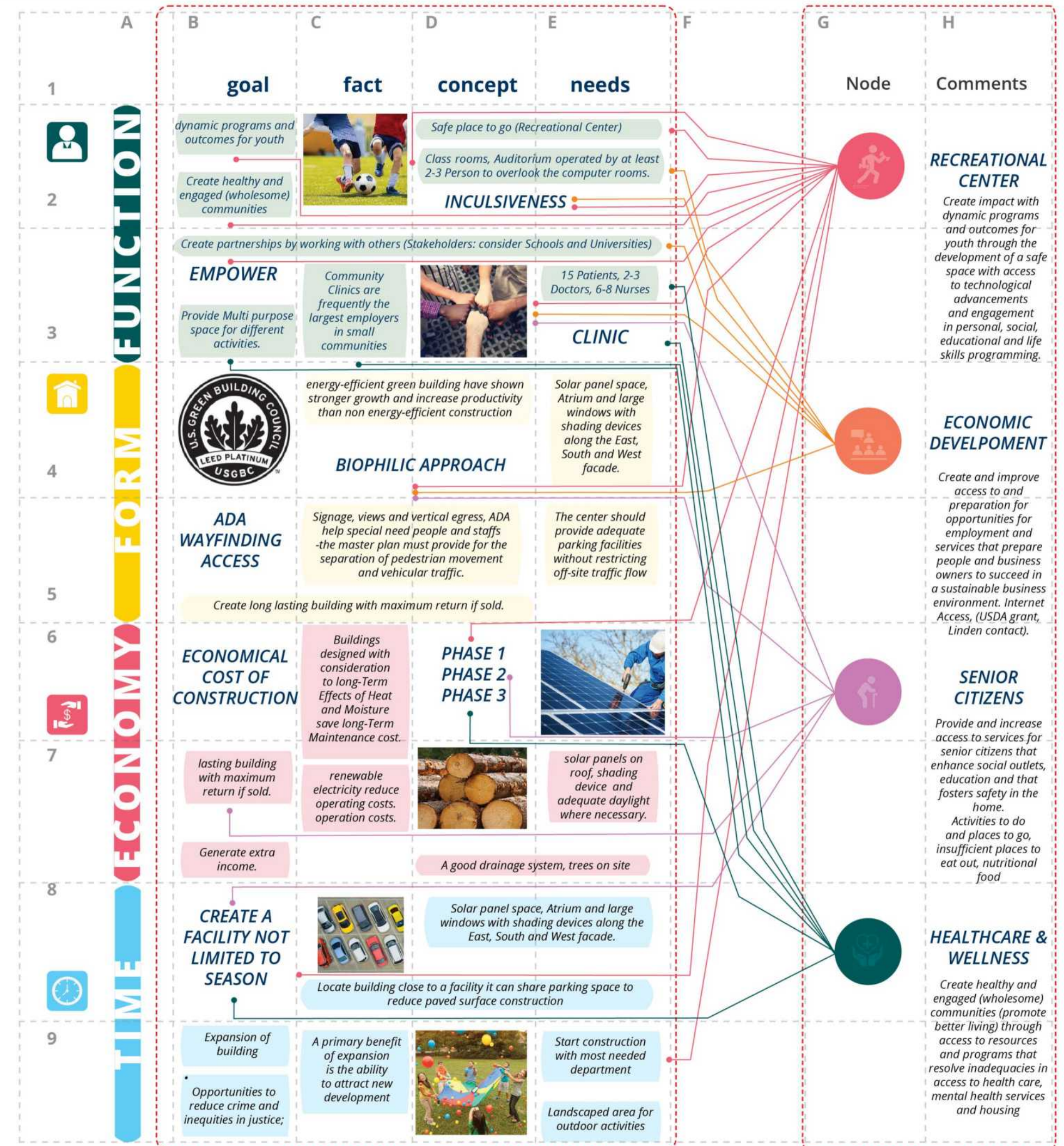
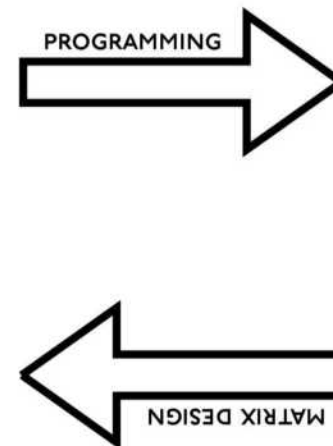
Recognize natural resources are vitally and uniquely tied to rural life and economies, and need to be properly conserved and managed

Drive overall community wellbeing as an engine of economic growth

Strengthen connectivity to resources and the rest of the state economy

People who have been excluded from decision-making, or opinions overlooked, or not heard; complacency from not being heard or promises not kept; formally incarcerated; given up hope. Those without access to critical needs; Delivery service due to lack of access to fresh vegetables;

Educating kids on making healthy food selections; Substandard housing and slum lords unchecked, code enforcement. Trainings & certification for individuals, access to employment, re-entry services (incarcerated, prolonged unemployment) Mental health support; Sub-standard housing; Drug dependency/addiction, lack of recovery services for substance abuse, no support system for opioid abuse; Burdensome prison sentences.





# DESIGN PROGRAM

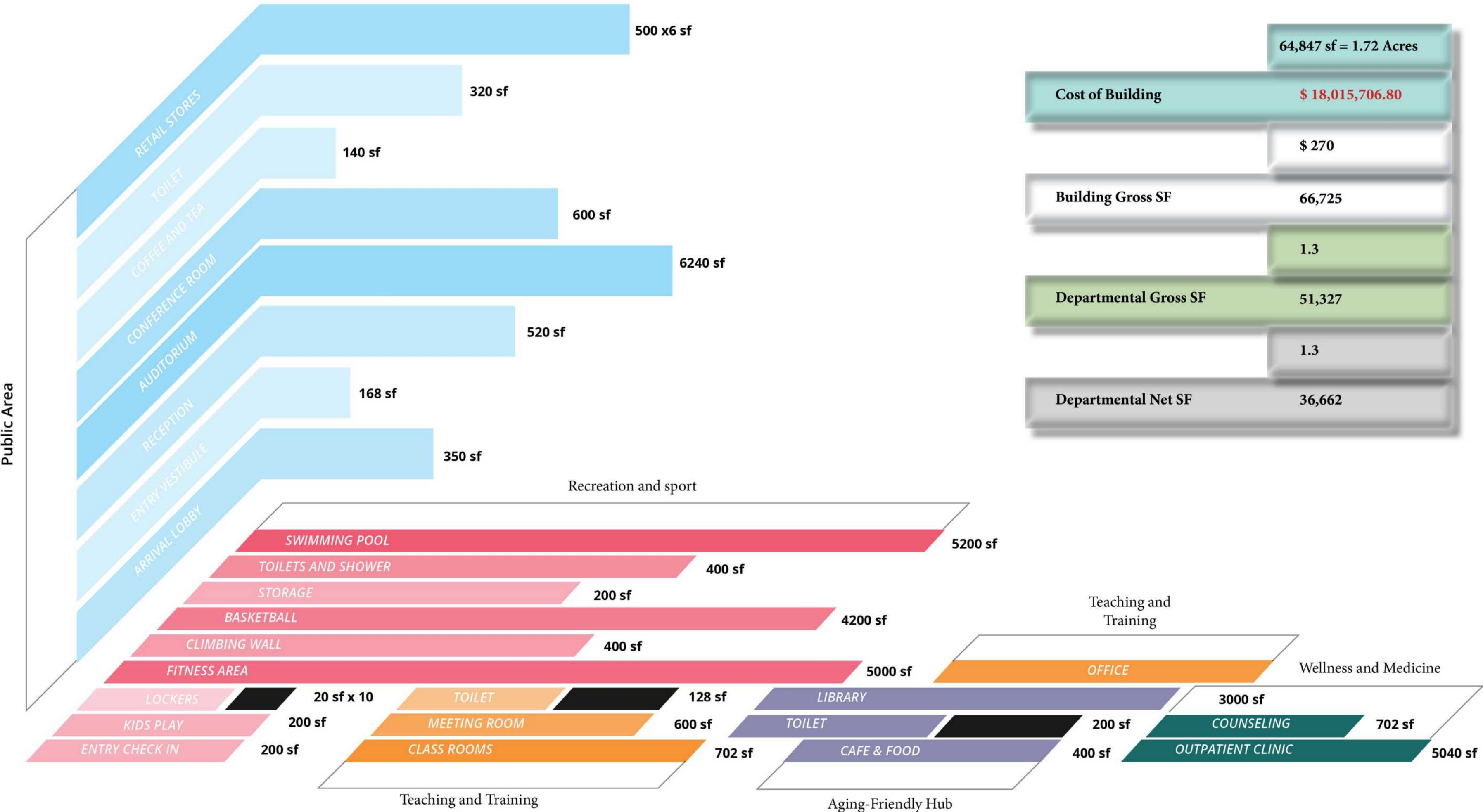
## SPACE AND COST

The space program is divided into four departments to create space zoning in relation to functions and phases.

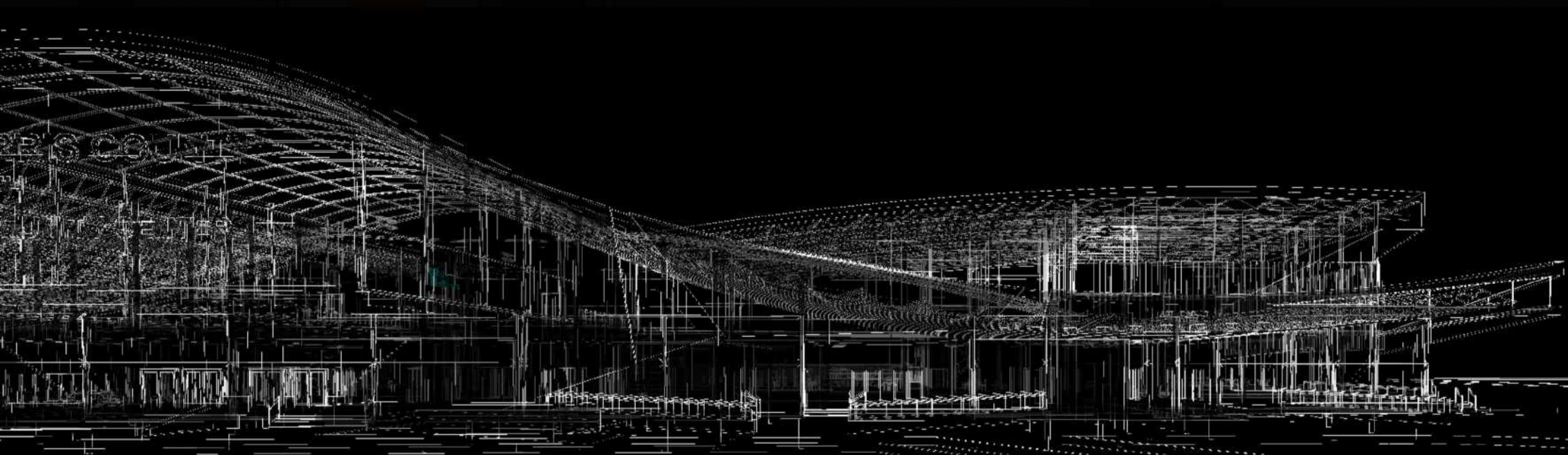
- 1. Red is Recreation and Sport with a net square feet of 18,400 and a gross square feet of 25,760.
- 2. Orange is Teaching and Training with a net square feet of 3,536 and a gross square feet of 4,950.

“18 Million Dollars is good! Lets build this in PHASES!”

- 3. Purple is Senior citizen Hub and Auditorium space with a net square feet of 4,532 and a gross square feet of 6,345.
- 4. Green is Wellness and Health with a net square feet of 5,742 and a gross square feet of 8,039.







02

## CONCEPT, PLANS AND PARAMETRISM

This is not a sentimental work. It understands the past but doesn't seek to replicate it. It responds to gravity, climate and the horizon elemental forces of earth.

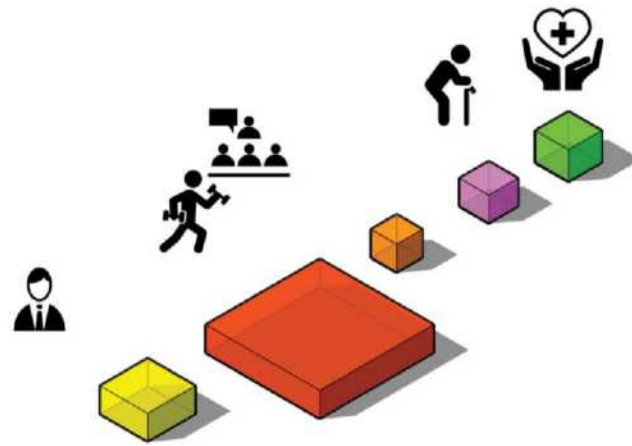




# DESIGN CONCEPT

## SCHEME

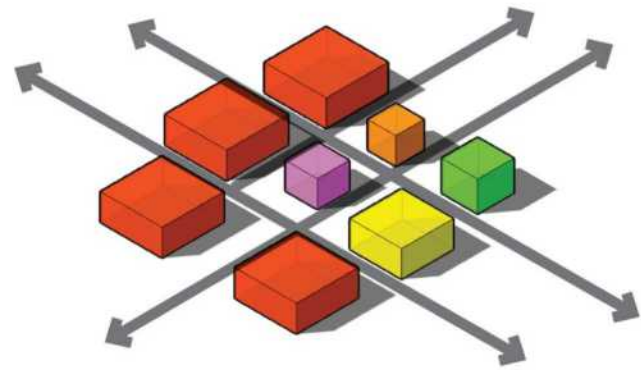
Based on the activity analysis, the community center should be spatially organized to focus all small group activities on the central program area with the transitional spaces integrating the two elements. A hierarchy of characteristics should be established which orders the activities away from the central program area according to size - large to small; active to passive; communal to private.



## LINEAR

The linear scheme is characterized by a single transitional spine along which the activity spaces are arranged; The central program area is centrally located.

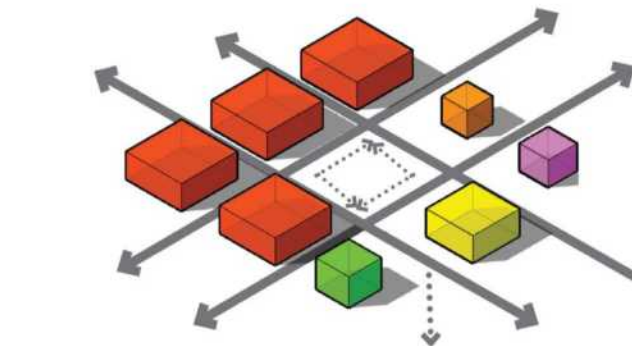
The linear plan maximizes distance between activities which facilitates noise control but inhibits visual control. However, in smaller centers, the proximity of activities necessitates a technological approach to sound control as well as planning considerations.



## DISPERSED

The dispersed scheme scatters spaces to reduce conflicts, uses enclosed spaces to buffer sound and separates open spaces. The transitional space acts as a decentralized link that both connects and separates activities.

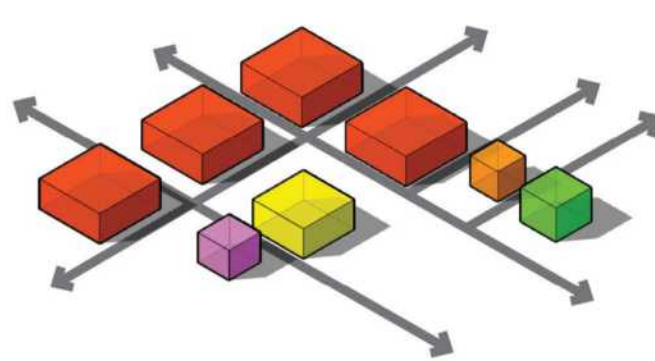
Buffer activities separate the large group area from peripheral small group activities. This arrangement decreases opportunities for social interaction but allows diverse activities to occur within a relatively constricted area.



## CENTRAL

The central scheme places the central program area in a core position with small group activities encircling it; the transitional space separates the two elements.

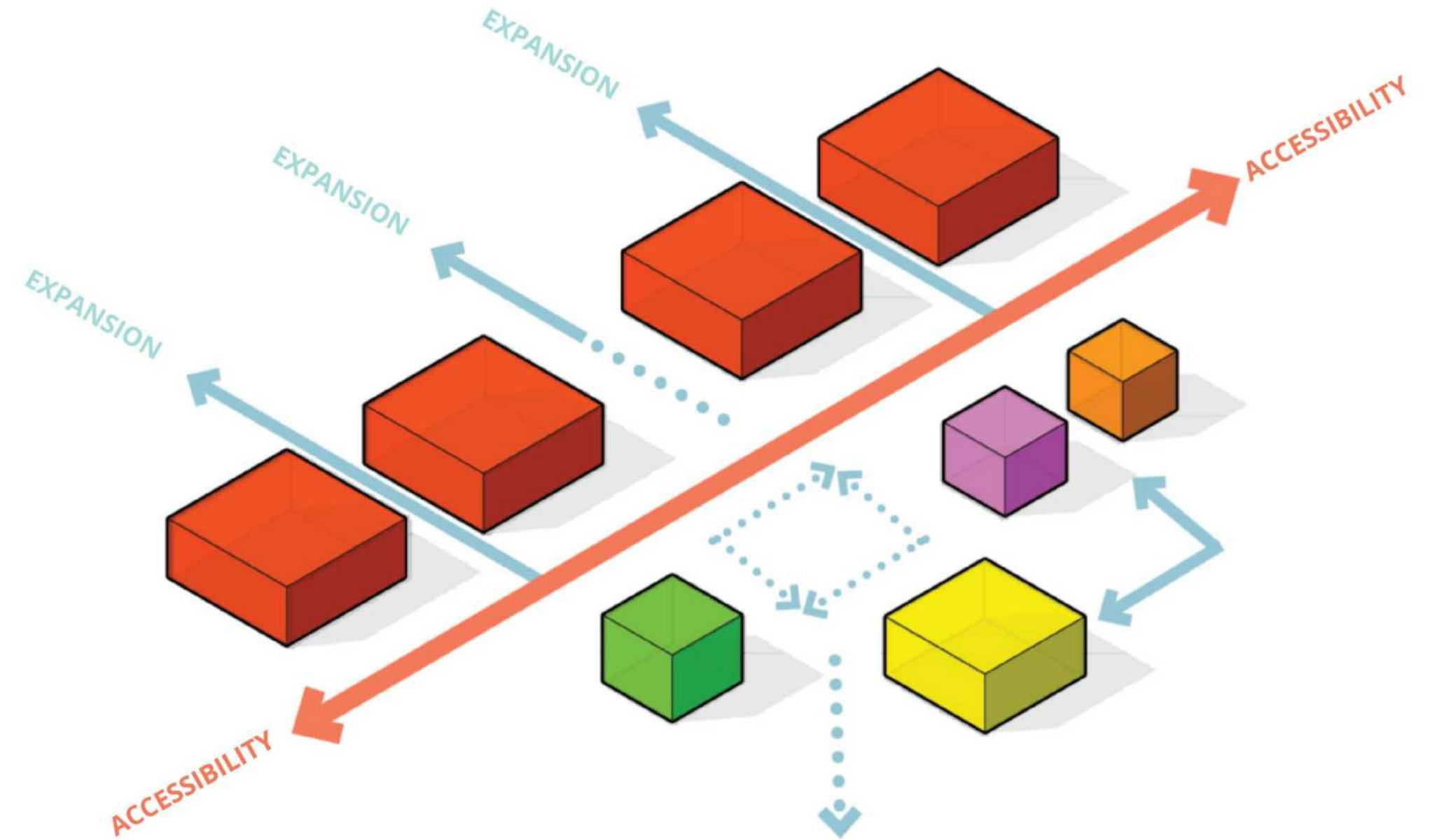
The large group activity area is central and separates conflicting small group activities. Since the large group area is adjacent to all other areas across the transitional area, opportunities for social interactions are maximized.



## AXIAL

The axial scheme combines the intents of the linear and central schemes; the transitional space is divided into two axial paths around the central program area which separate incompatible small group activities.

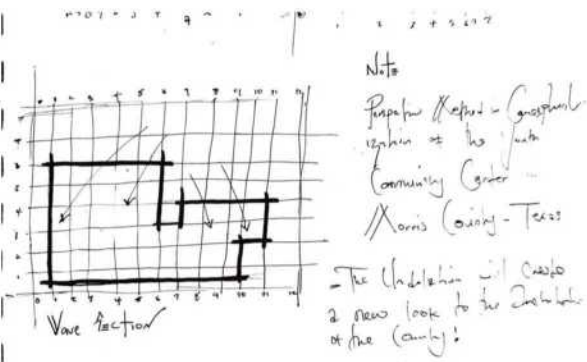
The central large group area separates conflicting small group activities and is adjacent to most areas including the lobby across the transitional area. This arrangement should maximize opportunities for social interaction



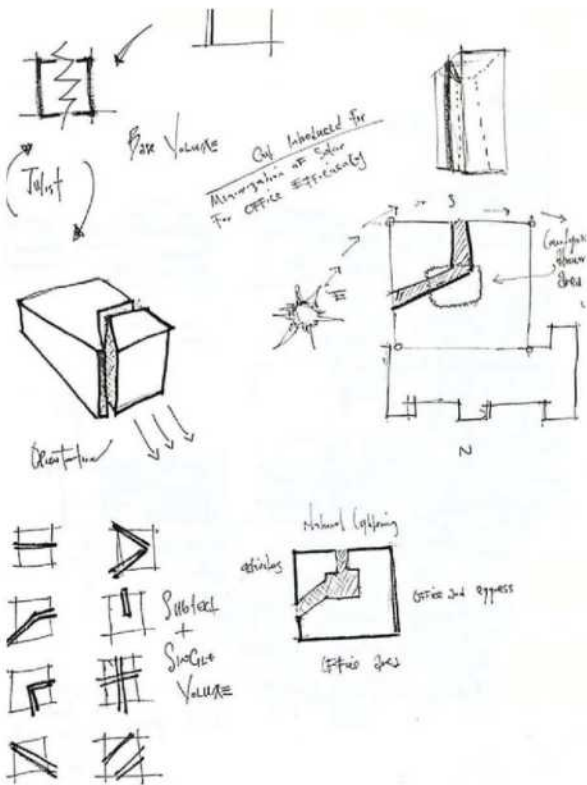


# DESIGN CONCEPT

## ITERATIONS AND ADORATIONS



Several basic spatial organization schemes can be developed by manipulating the transitional space. Each scheme is evaluated in terms of activity in-terrelationships, flexibility of use, adaptation to site and climate variables, and provision for expansion.



Way finding and accessibility will be the approach to the program arrangement . The linear scheme is used here due to its typology of expansion, flexibility and adaptation.

### Here are important things to note:

1. The form is generated from patti-diagrams showing space developed with density and consolidation of program.
2. Way finding for easy accessibility.
3. Volume size based on hierarchy.
4. Material - We will use Wood for floor, Concrete for structure and Steel for large areas.
5. Create a passive solar zone for sustainable lighting
6. Undulate for dynamism and deconstructive architecture - first of its kind in Morris County

### Design Consideration

1. Accommodate level access for people with disabilities.
2. Building and site in harmonious relationship.
3. Use of Soft Colors for a Salutogenic and wellness environment

### EXPANSION POTENTIAL

Can be expanded at either end.

### ACTIVITY RELATIONSHIP

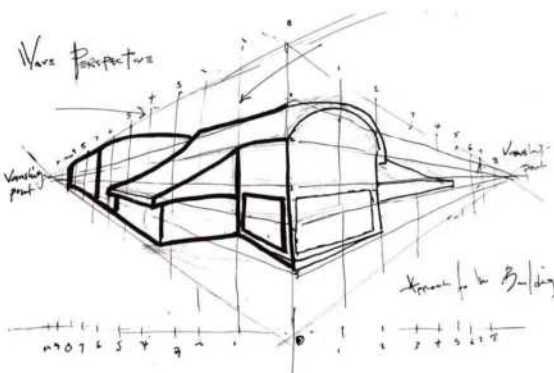
Facilitates noise control.

### FLEXIBILITY OF USE

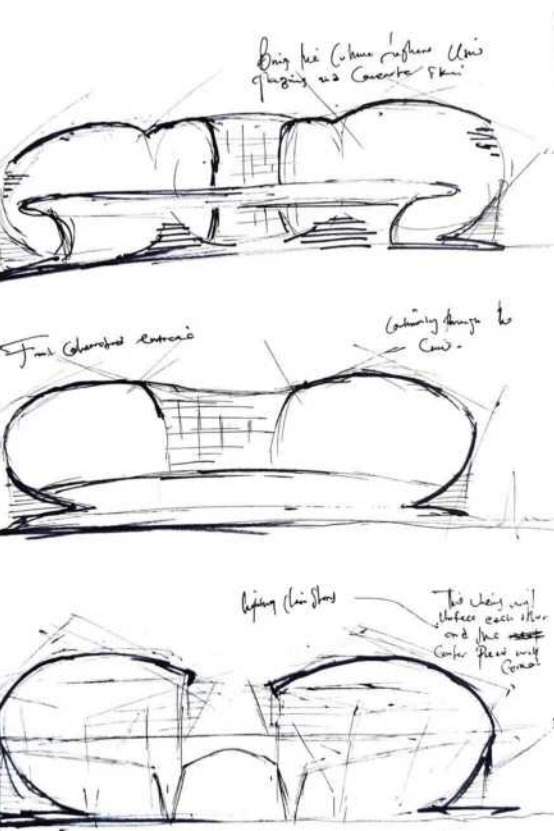
Opportunity for social interaction.  
Highly flexible.

### ADAPTATION TO SITE

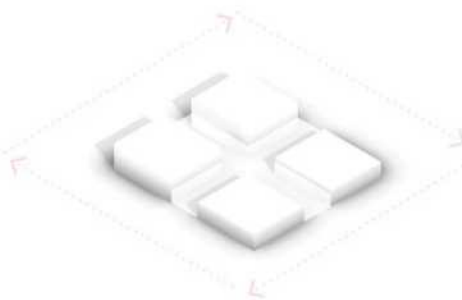
Can be focused outwardly.  
Require solar path orientation  
Suitable for temperate climate.  
Natural cooling results from orientation to prevailing wind.



Highly used areas should be strategically located to draw users past new activities. This arrangement encourages movement, social interaction, and allows direct control of the greatest possible area and the largest number of people.



01. Program



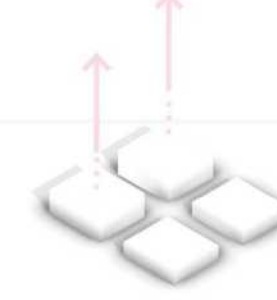
04. Material



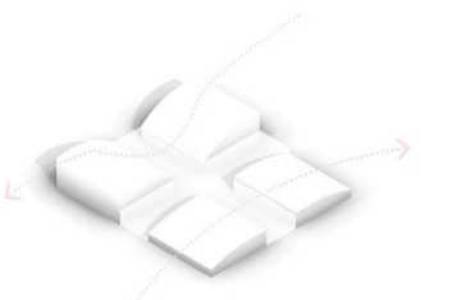
02. Way-finding



05. Daylight



03. Hierarchy

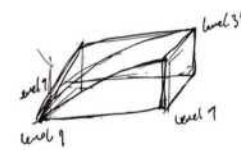


06. Undulate

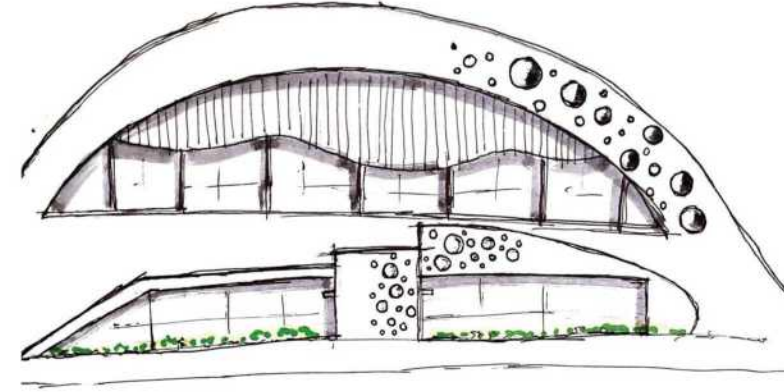
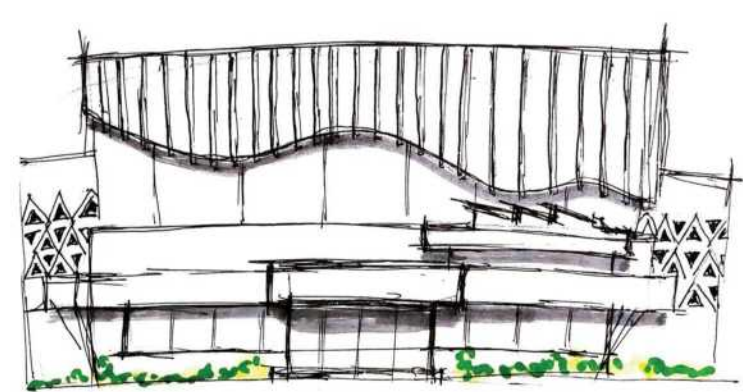
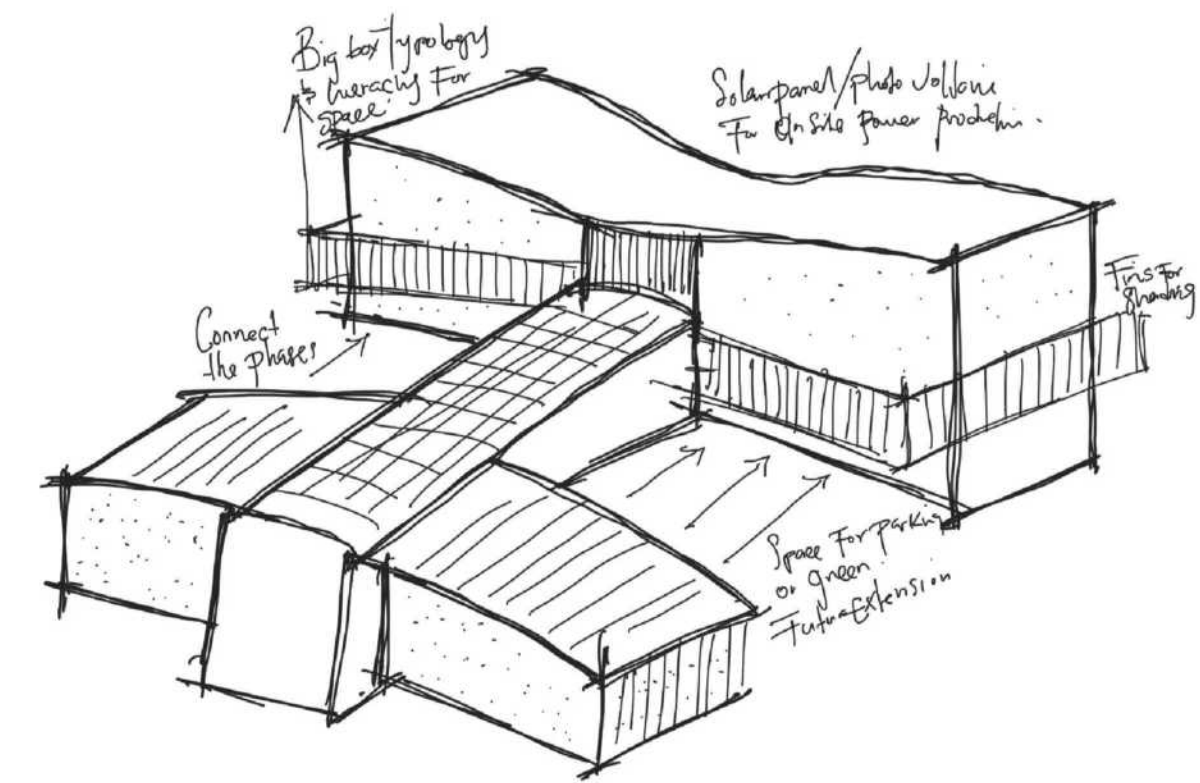
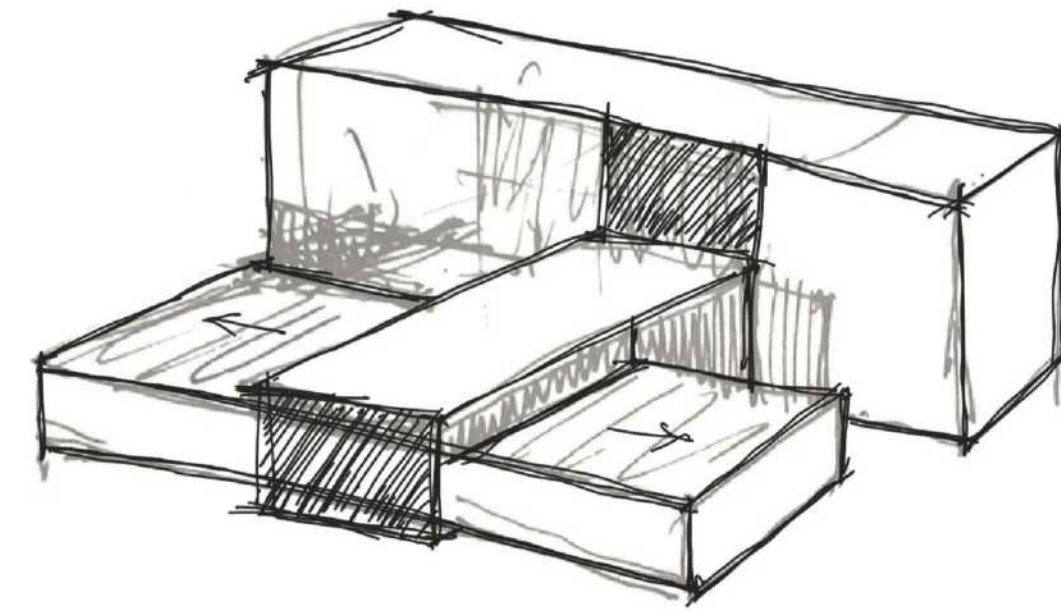
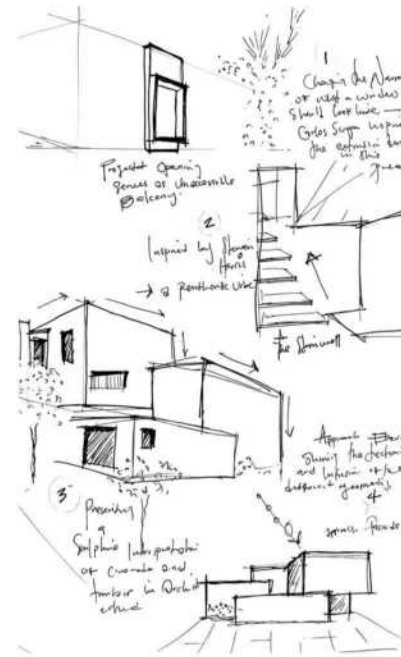
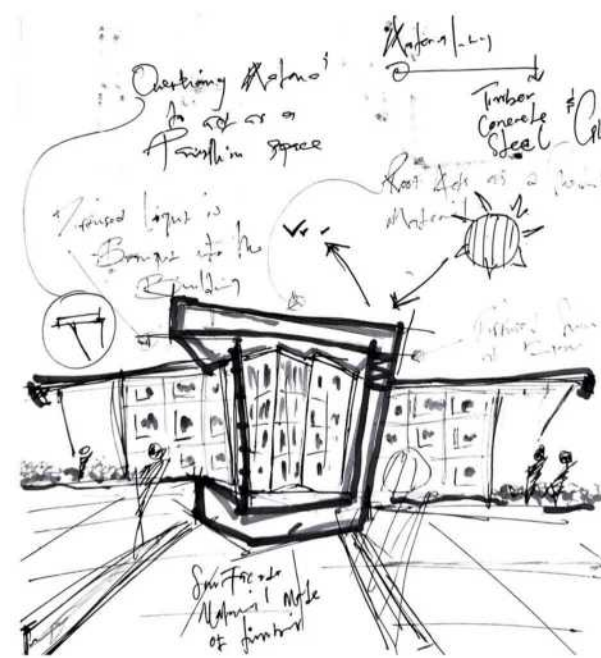




- Meeting Hall
- Classroom x 4
- Kitchen x Dining Area
- Big Informal Space - La Graciosa
- Pavilion, Museum
- Hotel, Room
- Chapel - Small



- ① Public
  - Meeting Hall
  - Classroom x 4
  - Big Informal Space - La Graciosa
  - Pavilion
- ② Semi-private
  - Cafe - Kitchen
  - Chapel
- ③ Private
  - Hotel - 100 rooms

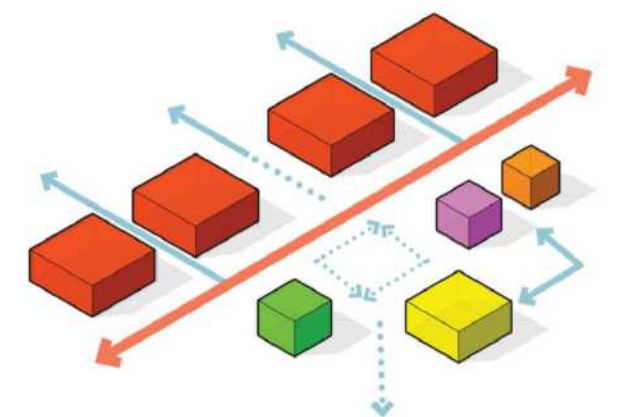


# DESIGN CONCEPT

## SKETCHES & VISUALIZATION

After selecting the linear scheme which best suits the program, I began conceptualizing and sketching because going straight to Revit or Sketch-Up won't give me the freedom like putting pen or pencil to paper.

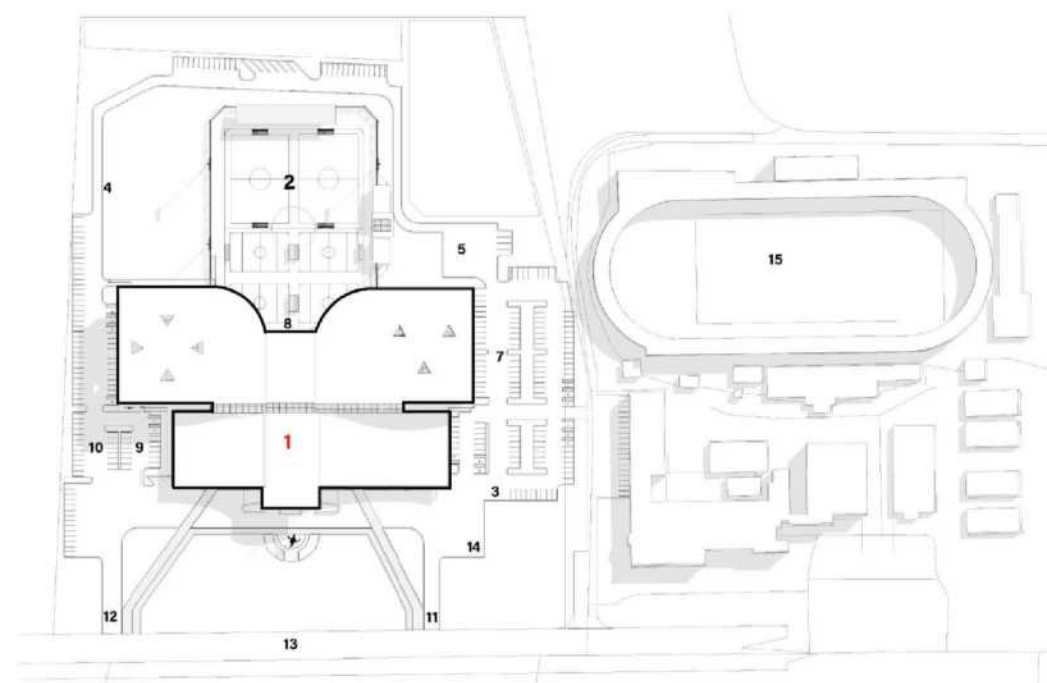
Sketching allowed me use my visual inventive side to solve the program visualization and convey a quick idea of the materiality and sustainable measures. Reacting to the primary principles of conceptualizing this building was not easy.



After going through several sketch iterations, skin to design consideration was next to test how the curves and undulating lines will play out.

A very fluid and non-specific style of architecture was the goal, something parametric like Zaha Hadid's Architectures, a style Morris County hadn't seen before but will it still feels like part of the community and lead them into the future of wonderful things to come.





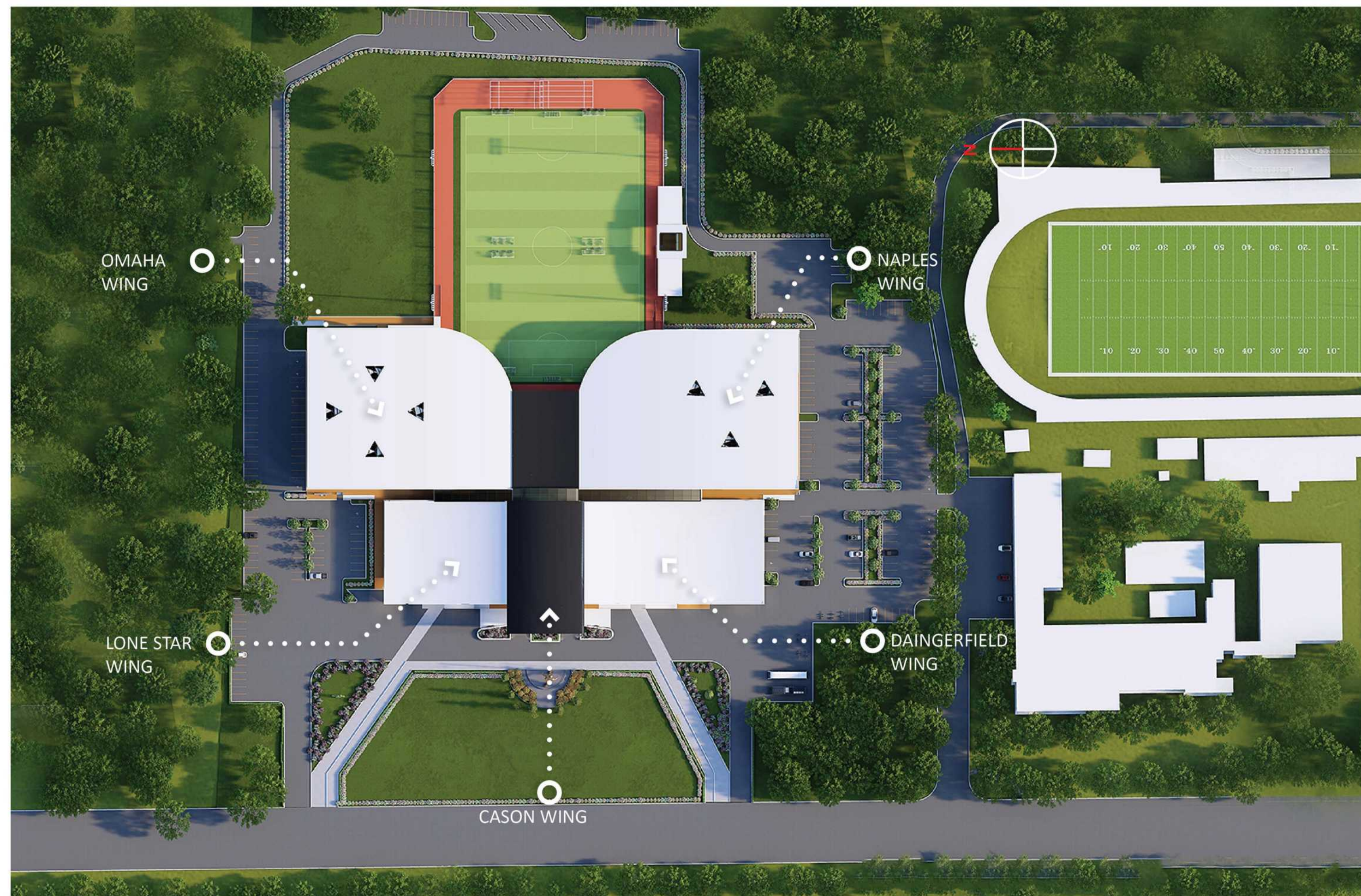
- |   |                             |    |                              |
|---|-----------------------------|----|------------------------------|
| 1 | Main Building               | 9  | 17 Staff Parking             |
| 2 | Soccer Field                | 10 | 73 Parking Space             |
| 3 | Bicycle Racks               | 11 | Site Entrance                |
| 4 | Future Expansion / Activity | 12 | Site Exit                    |
| 5 | Storage - Truck Offload     | 13 | 259 Daingerfield - Lone Star |
| 6 | Mechanical                  | 14 | Bus Drop-Off                 |
| 7 | 108 Parking Space           | 15 | Football Field               |
| 8 | Activity Pavilion           |    |                              |



# BUILDING SITE PLAN

## FUNCTIONS & ACCESSIBILITY

The site plan shows how the site encourages active interaction and pedestrian centered accessibility. This site takes advantage of the multiple transportation choices or otherwise reduced motor vehicle use, thereby reducing greenhouse gas emissions, air pollution, and other environmental and public health harms associated with motor vehicle use. Located next to the high school football field, the Community Center will provide ample parking space on football game days and open field for family activities.











# BUILDING PHASE I

The immediate scope that provides the quickest response to the County Youth Empowerment Objective



# BUILDING PHASE II

This phase provides the economic scope to give back to the County and at the same time, create more space for learning



# BUILDING PHASE III

This phase creates a healthy and engaged (wholesome) community (promote better living) through access to resources and programs that resolve inadequacies in the access to health care and mental health services.



# PLANNING: PHASE 1,2,3

## INITIAL COST PLAY

The project can be divided into a series of smaller projects spaced out over a period of months or even years, and the construction crew will focus each area of renovation before moving to the next.

## ADVANTAGES

- Less initial risk:** The overall project is split into smaller, more affordable pieces. You may be able to move forward without a guarantee of future funding.
- Less impact on cash flow:** Costs are spread over a longer period of time.
- Shorter construction time:** A smaller scope of work results in an abbreviated construction schedule.

- Take advantage of high interest rates:** The phased construction method allows shorter duration loans.
- Shorter construction time:** A smaller scope of work results in an abbreviated construction schedule.
- Less Down Time/ Continued Income:** Even if earnings are reduced, the money that continues to come in will help to offset construction costs. Also, you can start generating income from the completed phases while the others are in progress.

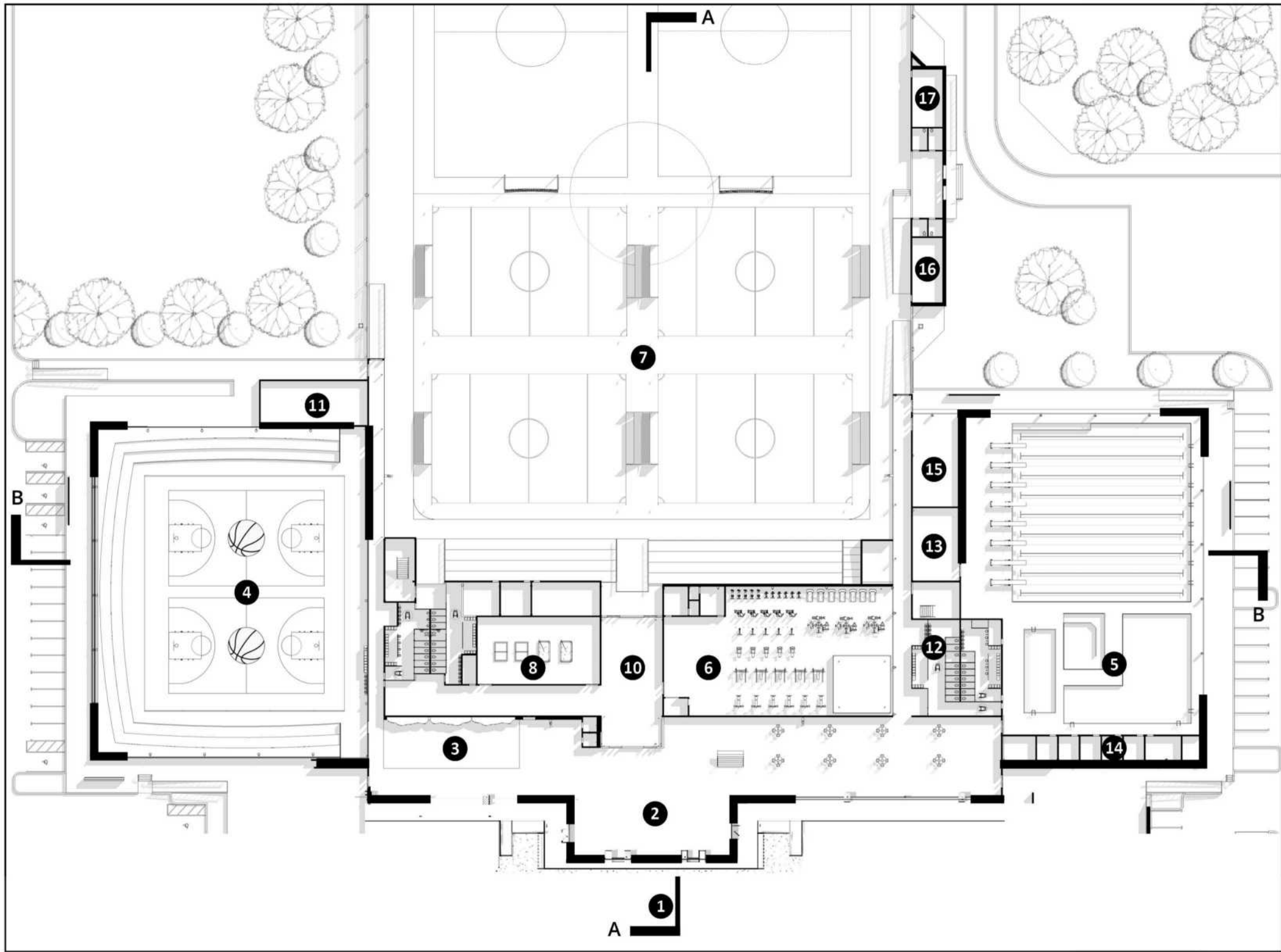
- First Phase “Mock-Up”:** The first phase can show how the rest of the project will go and allow for fine-tuning of details early in the process. Quality and efficiency may increase in future phases as processes are repeated.
- Work out Bugs:** Completing smaller portions provides the opportunity to get insight into problems you may encounter in other phases.

## DISADVANTAGES

- Higher Complexity:** More meetings, more drawings, more trips to the site, more administrative time, more coordination, etc.
- Longer overall construction time:** an inherent part of delaying construction of certain parts of the project. Delays in any one phase will likely impact all the others.
- Scope creep:** because the work is completed over time, it is more tempting to change the design.

- Higher overall cost:** decreased efficiency, increased inflation, multiple deliveries, need for temporary barricades, requirement for separate phase permits, and other factors drive the price up. There are potential costs for temporary utilities during shutdowns or cut-overs, and to maintain building systems.
- Decreased Efficiency:** more confined workflow. Dust, debris, construction traffic, work schedules and noise must be managed.

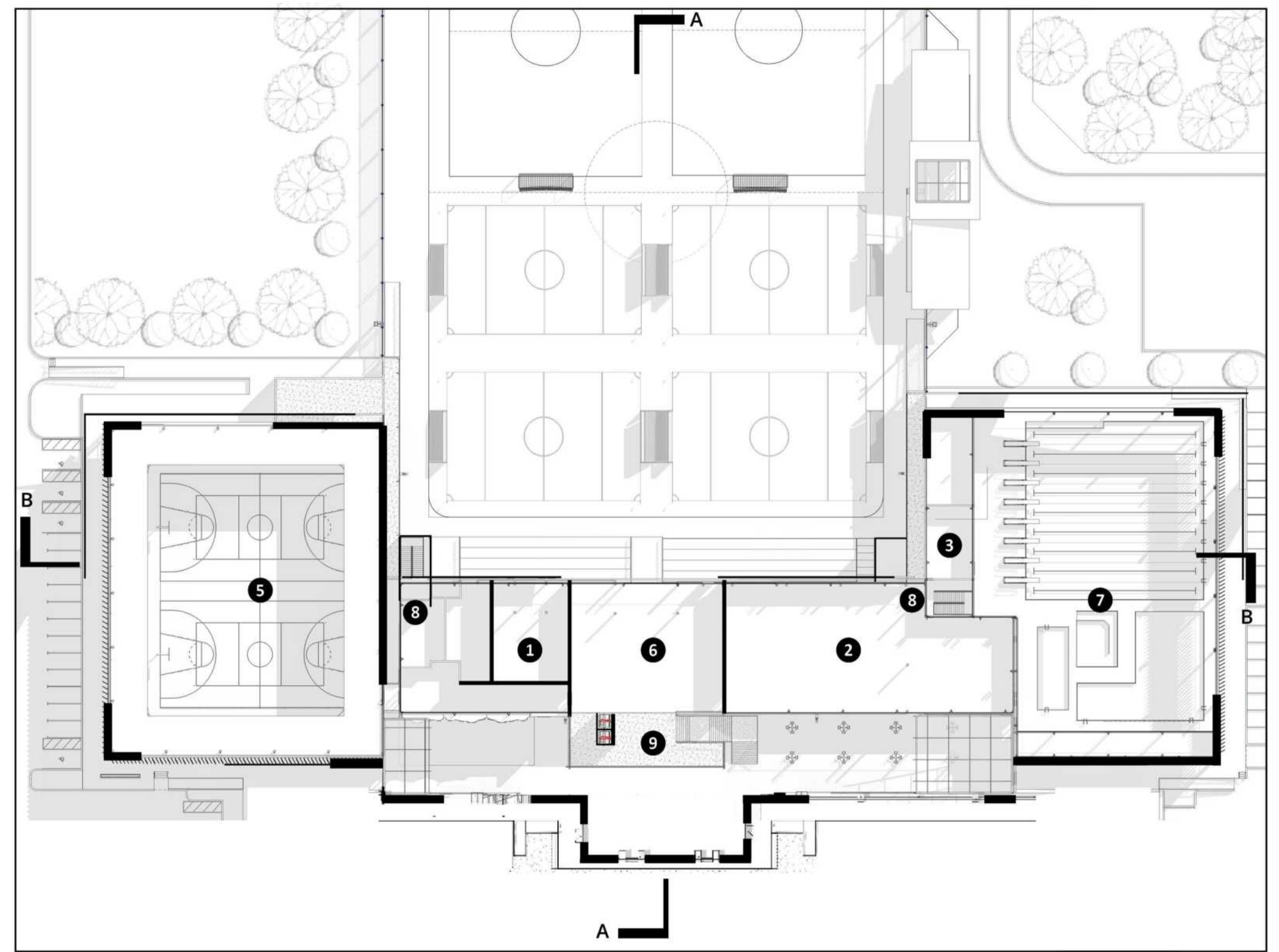
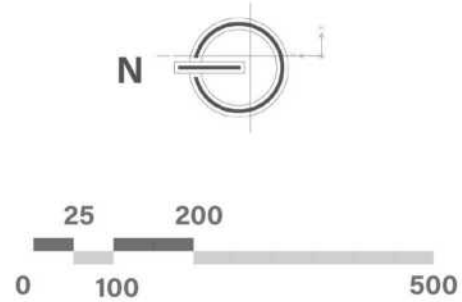




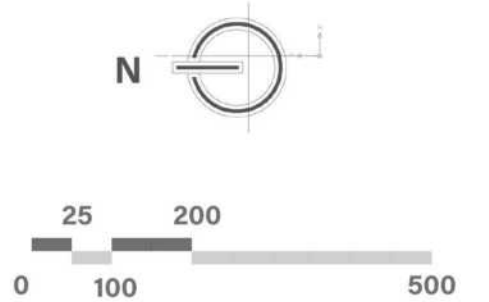
# DESIGN FLOOR PLAN

PHASE I FIRST FLOOR PLAN

- |                 |                           |
|-----------------|---------------------------|
| 1 Main Entrance | 9 Changing Room/ Toilets  |
| 2 Waiting Area  | 10 Sport Pavilion         |
| 3 Climbing Wall | 11 Gym Store              |
| 4 Gymnasium     | 12 Pool Toilets           |
| 5 Swimming Pool | 13 Pool Fitness Area      |
| 6 Fitness Area  | 14 Pool Changing          |
| 7 Soccer Area   | 15 Pool Mechanical        |
| 8 Game Room     | 16 Home Changing / Locker |
|                 | 17 Away Changing / Locker |



- |                     |                       |
|---------------------|-----------------------|
| 1 Children Area     | 7 Swimming Area       |
| 2 Library           | 8 Fire Stair Case     |
| 3 Mini Daycare      | 9 Staircase/ Elevator |
| 4 Toilet and Locker |                       |
| 5 Running Track     |                       |
| 6 Open Studio       |                       |

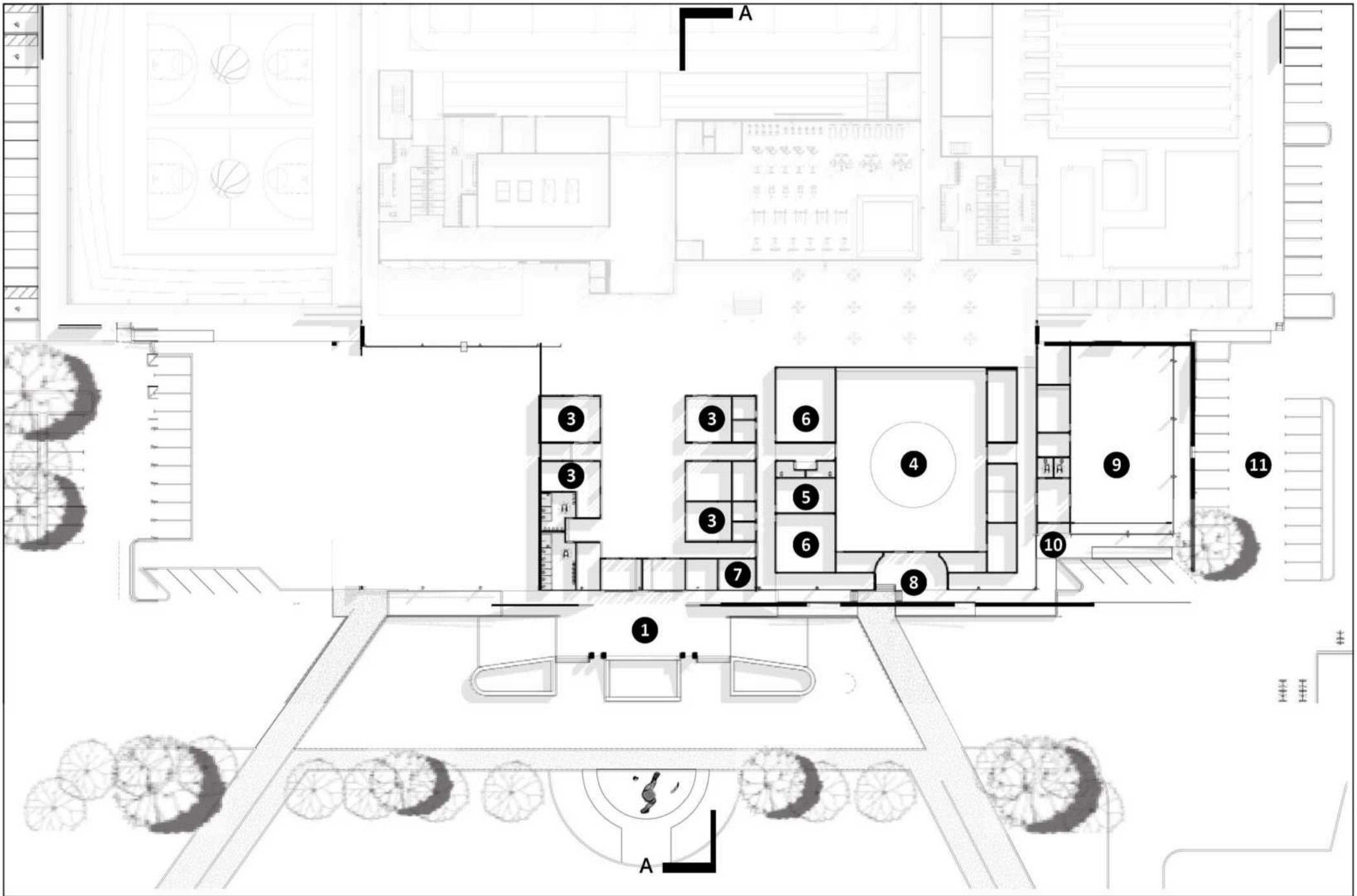




Senior citizens using the Olympic pool for morning Cardio water practice (Water aerobic).



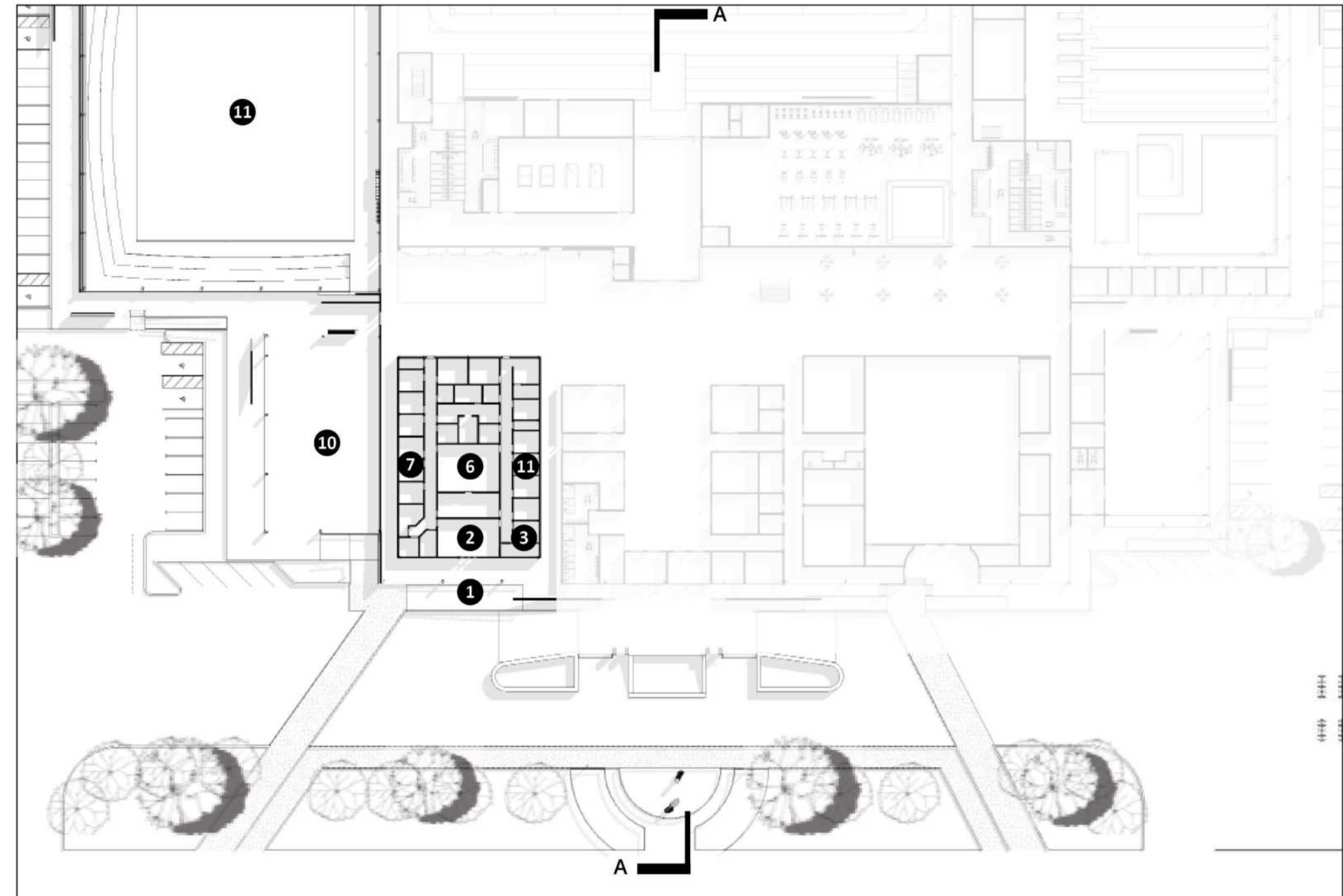
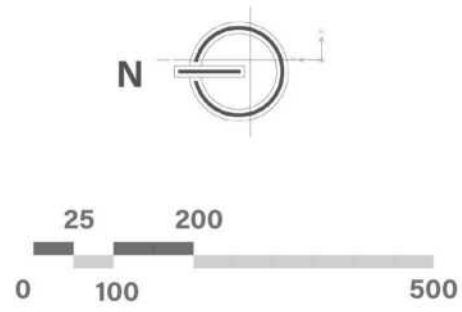




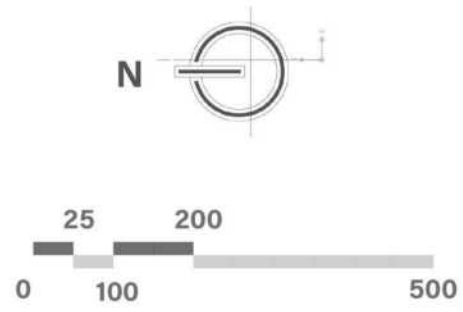
# DESIGN FLOOR PLAN

PHASE 2 & 3 FIRST FLOOR PLAN

- |   |                 |    |                         |
|---|-----------------|----|-------------------------|
| 1 | Drop Off        | 8  | Auditorium Entrance     |
| 2 | Retail Corridor | 9  | Senior Citizens Hub     |
| 3 | Retail Stores   | 10 | Senior Citizen Entrance |
| 4 | Auditorium      | 11 | ADA Parking             |
| 5 | Classroom       |    |                         |
| 6 | Conference Room |    |                         |
| 7 | Office          |    |                         |



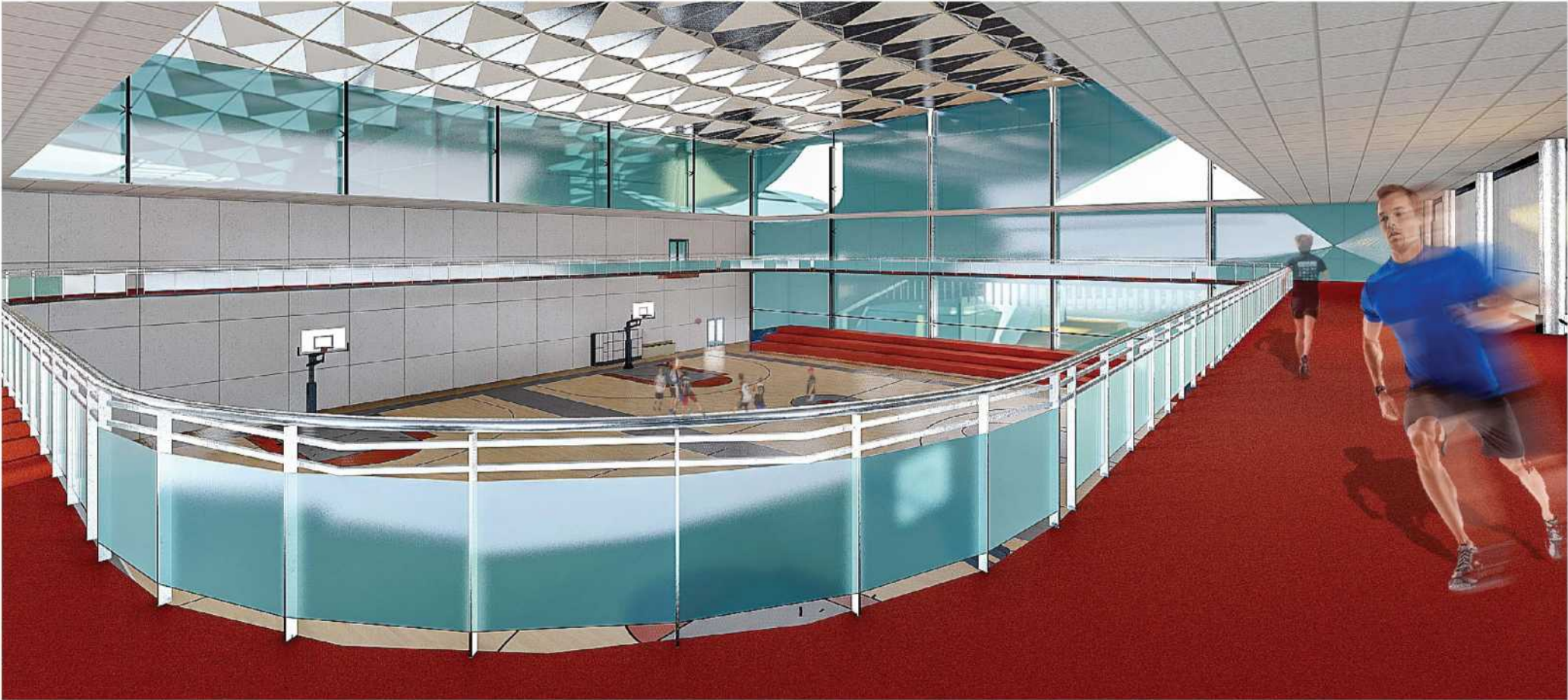
- |   |                             |    |                                   |
|---|-----------------------------|----|-----------------------------------|
| 1 | 4 Doctors Mini Clinic       | 10 | Store / Activity - Surge Capacity |
| 2 | Waiting Area                | 11 | Gym Transform to Emergency Bed    |
| 3 | Medical Record Room         |    |                                   |
| 4 | 6 Exam Rooms - 3 Per Doctor |    |                                   |
| 5 | 6 Exam Rooms - 3 Per Doctor |    |                                   |
| 6 | Laboratory                  |    |                                   |
| 7 | 4 Doctor's Office           |    |                                   |







Daingerfield basketball team having a team practice  
with lone star basketball team



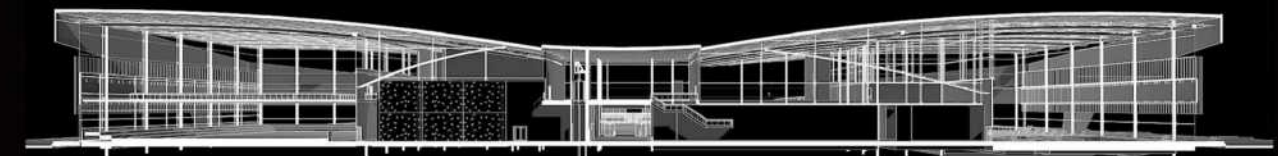
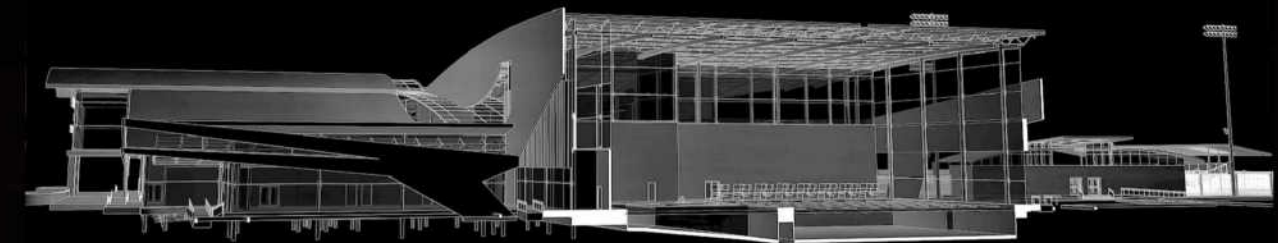
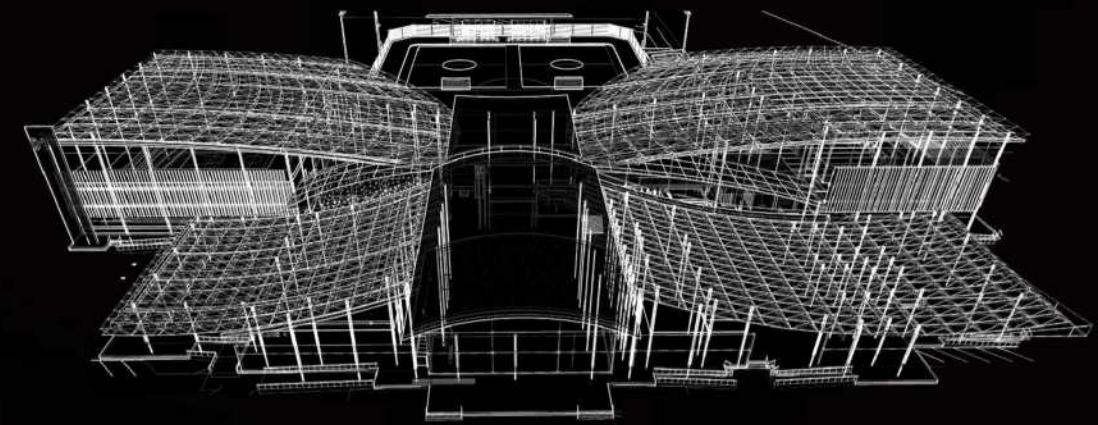
Running track above the basketball court



# 03

## STRUCTURE, TECTONICS & TACOS

The form feels primitive, simple and wavy which was derived from careful study of the history of Morris County. There's a pragmatism to the structure; a sense of inevitability, as if there's no other.





# DESIGN PHASE ELEVATIONS

PHASE EVOLUTION



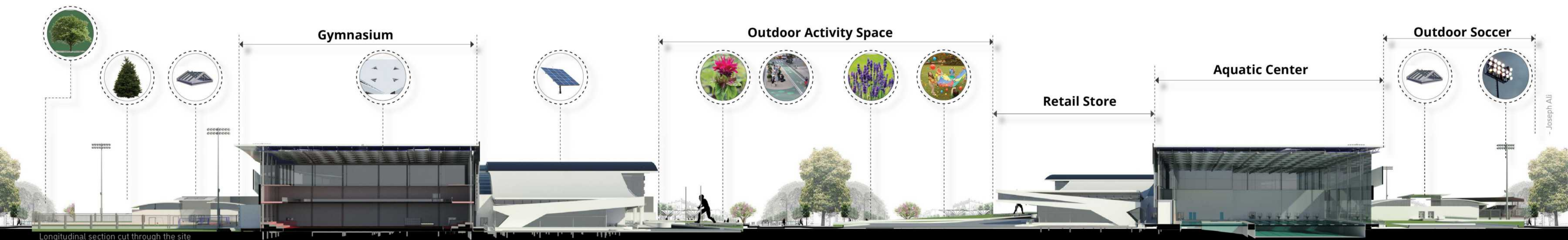
View showing phase 1

Longitudinal section of phase 1



View showing phase 2

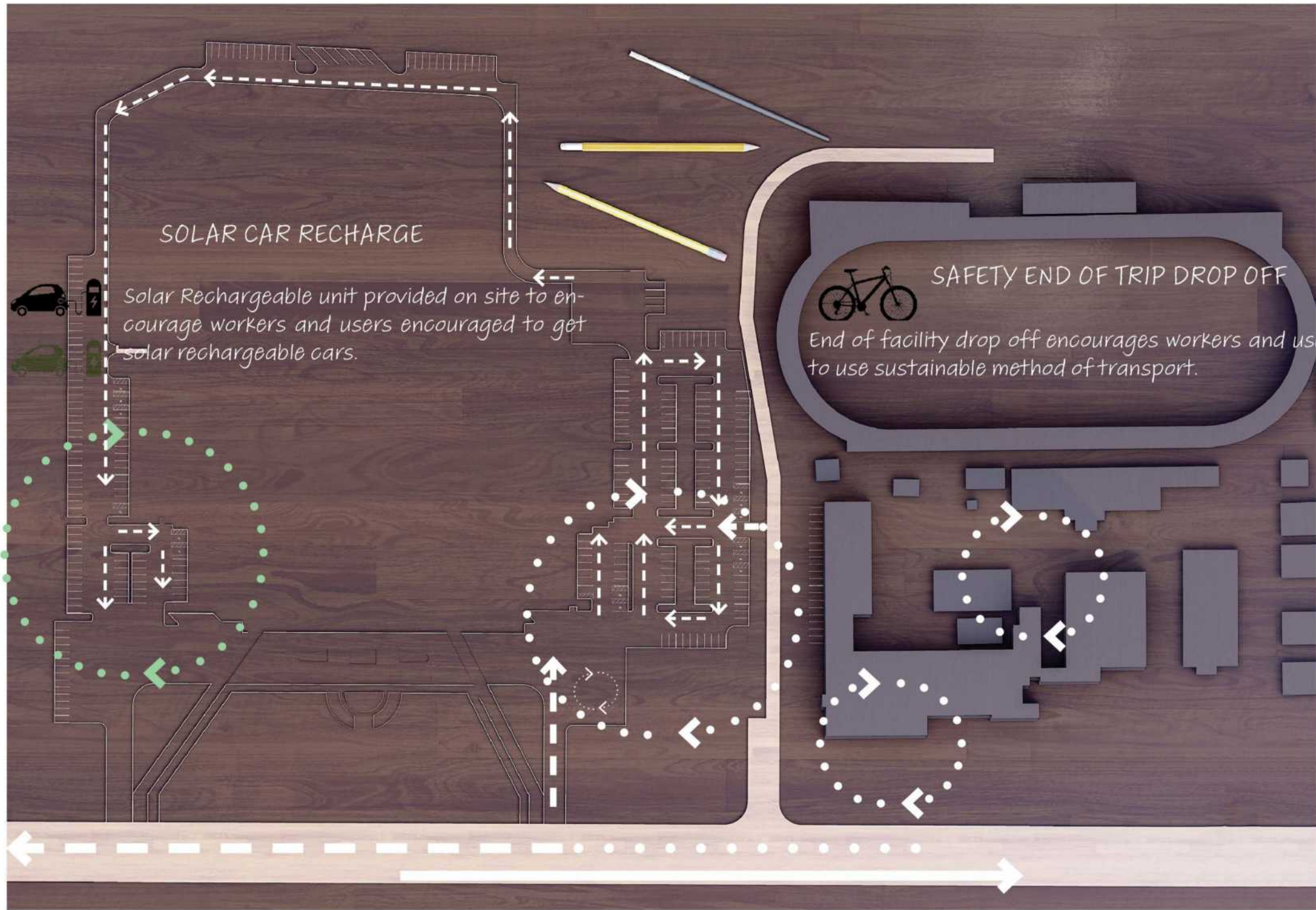
Longitudinal section of phase 3



Longitudinal section cut through the site

- Joseph Ali





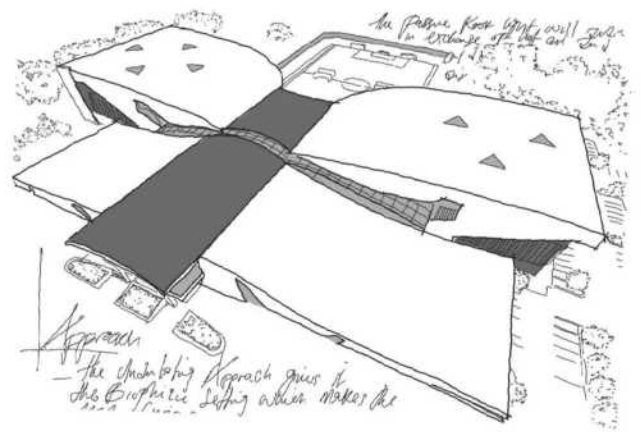
# DESIGN SUSTAINABILITY

## SITE AND TRANSPORTATION: LT LEED

### LT CREDIT: GREEN VEHICLES

BD&C : 1 Points

Designate 5% of all parking spaces used by the project as preferred parking for green vehicles. Clearly identify and enforce for sole use by green vehicles.



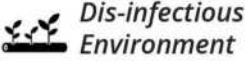
### LT CREDIT: DENSITY & DIVERSE USES

BD&C : 1-6 Point

Conserve land and protect farmland and wildlife habitat by encouraging development in areas with existing infrastructure. To promote walk-ability, and transportation efficiency and reduce vehicle distance traveled. To improve public health by encouraging daily physical activity.



**Harvest Water Management**  
All sewerage and water collected is dispersed to drains and donated to surrounding native gardens



**Dis-infectious Environment**  
Utilize Biophilic approach to walkway and corridors to promote curiosity in users and continuous flow in functionality pattern.

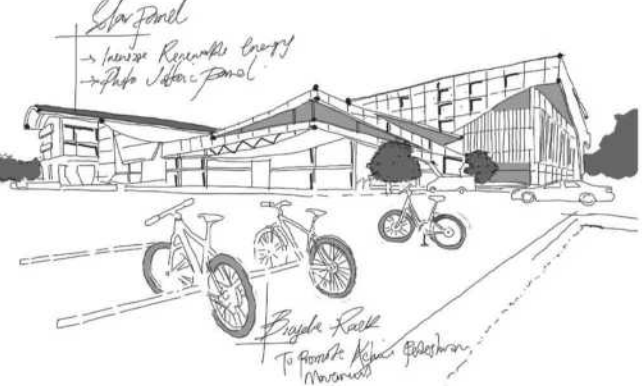


**Low Water Vegetation**  
When water restrictions are implemented, Low water plants will tend to survive and thrive, while more ornamental plants may be unable to adapt.

### LT CREDIT: BICYCLE FACILITY

BD&C : 1 Point

Design or locate the project such that a functional entry or bicycle storage is within a 200-yard (180-meter) walking distance or bicycling distance from a bicycle network



### LT CREDIT: ACCESS TO QUALITY TRANSIT

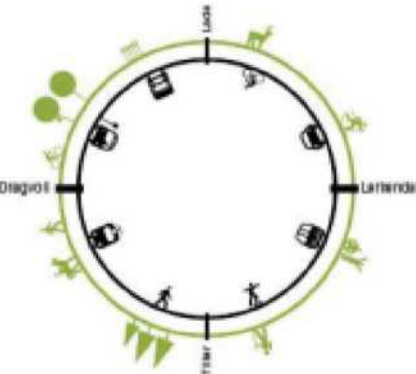
BD&C : 1-6 Points

Develop the community center in location shown to have multi-modal transportation choices or otherwise reduced motor vehicle use, thereby reducing greenhouse gas emissions, air pollution, and other environmental and public health harms associated with motor vehicle use.

### CREDIT: REDUCED PARKING FOOTPRINT

BD&C : 1 Point

Provide preferred parking for carpools for 5% of the total parking spaces after reductions are made from the base ratios.



### LT CREDIT: HIGH-PRIORITY SITE

BD&C : 2-3 Point

Priority Designation

### LT: SENSITIVE LAND PROTECTION

BD&C : 2-3 Point

Development of environmentally sensitive land and reduce the environmental impact.



# DESIGN SUSTAINABILITY

## ENERGY, WATER & AIR QUALITY

### SS CREDIT: PROTECT / RESTORE HABITAT BD&C : 1 Point

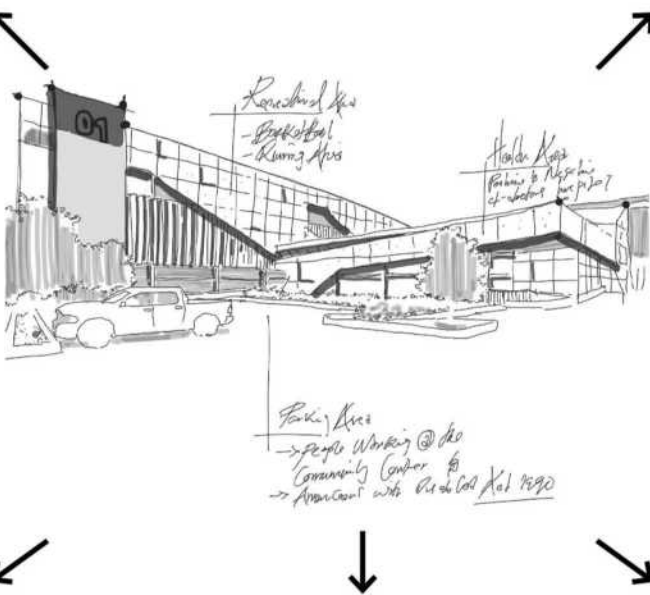
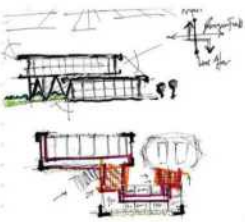
Using native or adapted vegetation, restore 30% (including the building footprint) of all portions of the site identified as previously disturbed.

### SS CREDIT: OPEN SPACE BD&C : 1 Point

Provide outdoor space greater than or equal to 30% of the total site area (including building footprint). A minimum of 25% of that outdoor space must be vegetated

### SS CREDIT: RAINWATER MANAGEMENT BD&C : 1-3 Points

To assess site conditions before design to evaluate sustainable options and inform related decisions about site design. Reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site



### SS CREDIT: HEAT ISLAND REDUCTION BD&C : 1-3 Points

To minimize effects on micro-climates and human and wildlife habitats by reducing heat islands.

Non-roof Measures (Paved area covered by trees or shaded)  
High-Reflectance  
Roof Vegetated  
Roof Install a vegetated roof.



#### Photo-voltaic Panels

Photo-voltaic cells provide more than 30kW of energy to power all elements of the building with surplus power feeding back to the other buildings



#### Deciduous Trees

Deciduous trees provide shade during summer and lose their leaves in winter; allowing the sunlight to penetrate the building



#### Ventilation System

Natural ventilation will be used unless extreme weather when active ventilation (HVAC) will be used. Sosa has a moderate climate of 35°C Max in June to Oct.

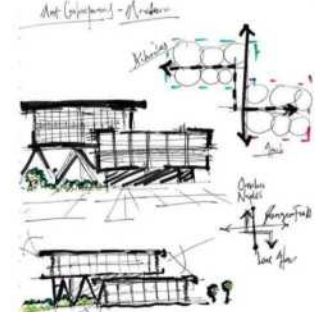
### SS CREDIT: LIGHT POLLUTION REDUCTION BD&C : 1 Point

Increase night sky access, improve nighttime visibility, and reduce the consequences of development for wildlife and people

### CREDIT: OUTDOOR WATER USE REDUCTION BD&C : 1 Point

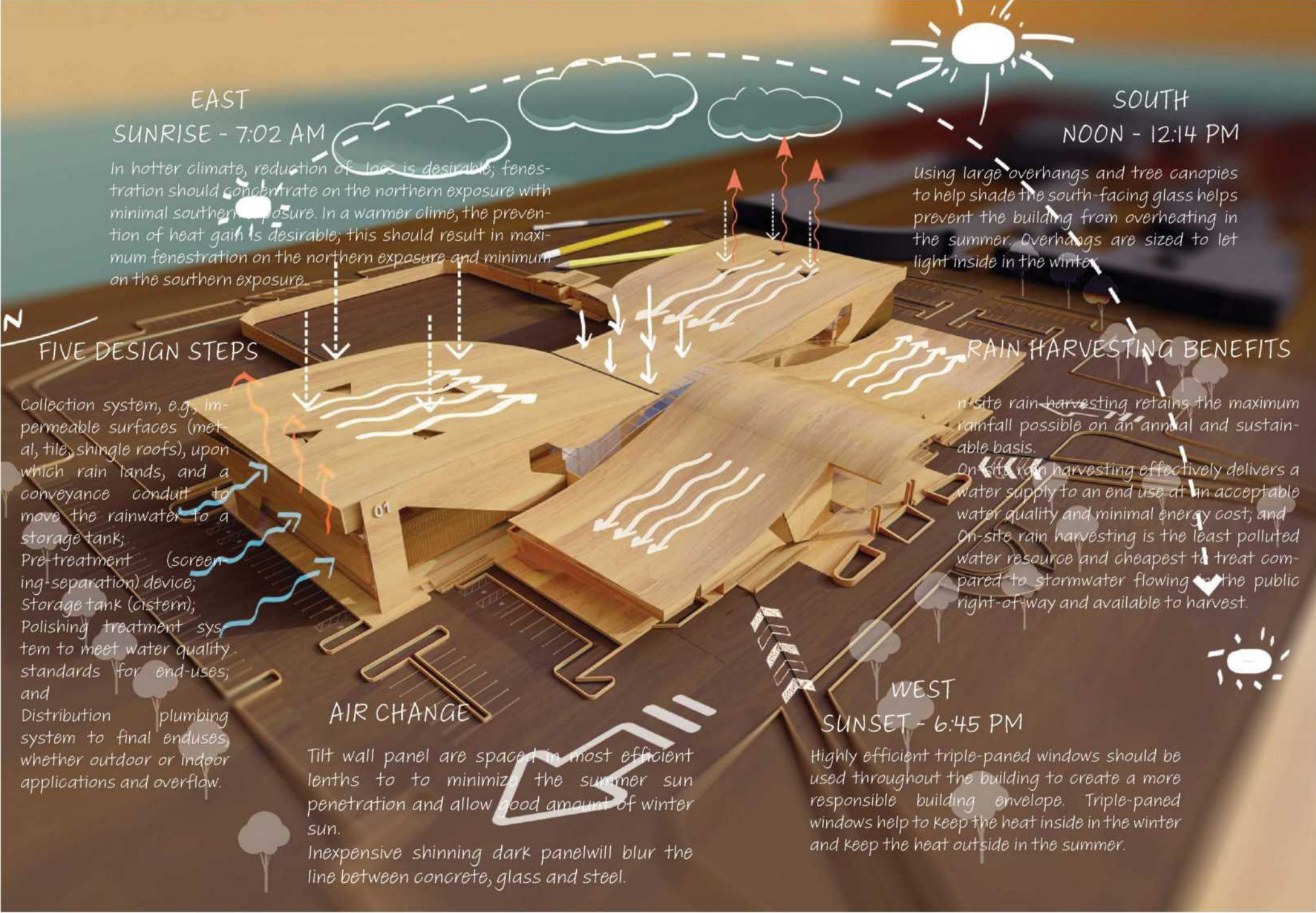
Reduce outdoor water consumption. Reduce the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month.

### EA CREDIT: RENEWABLE ENERGY PRODU. BD&C : 1-6 Points



Use renewable energy systems to offset building energy costs.

Provide Reduce fossil fuel energy usage by increasing self-supply of renewable energy.





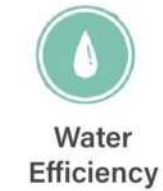
## SITE SELECTION AND TRANSPORTATION: LT LEED

21

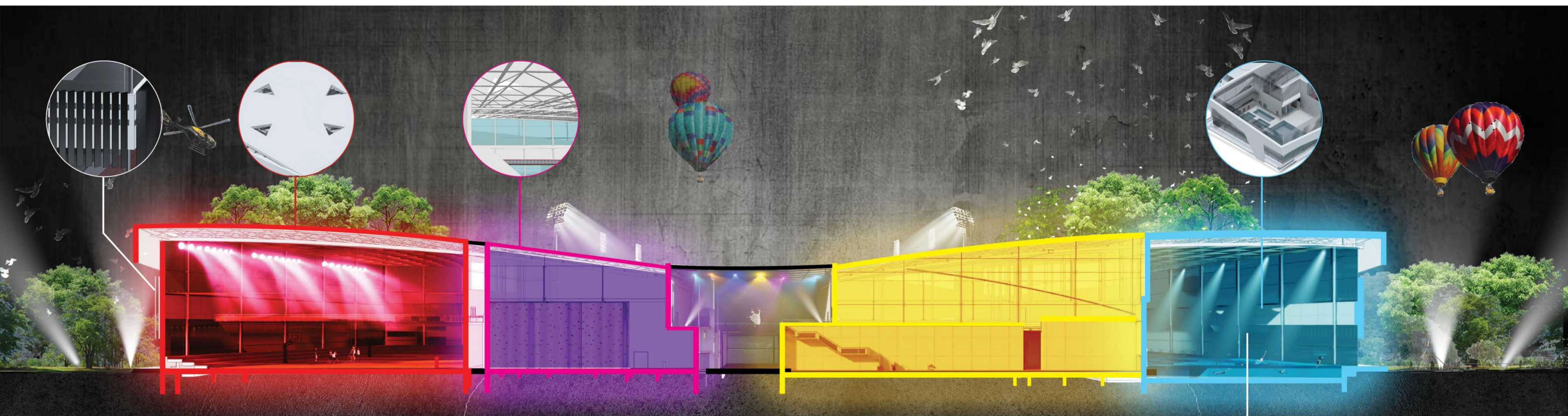


## ENERGY, WATER & AIR QUALITY

16







# PROGRAM SECTION

TRANSITIONAL SPACE

## GYM – JUXTAPOSITION EFFECT

The big box wing typology proposes a solution that beautifully expresses the characteristics of the vernacular in Morris County leading into the future. Irrespective of the size, the materiality and elements are simple, humble and inexpensive.

## SPACE FRAME – CONTEXT

The gymnasium and swimming center utilize interior elements which are geometrically in contrast with the organic movement of the users through the space. The structure expresses a certain futuristic feel and essence of Texas barns.

## FITNESS AREA

The idea of situating the fitness area between the gymnasium and the swimming center is to open the view to the soccer field so that the fitness center users can get a sense of what happens and also have no sense of confinement.

## LIBRARY

This big organic box will be supported by wooden columns painted gray, which show an ingenious system of joints. The result is a fascinating modern space, giving way to the glass frame to carry its own load with the support of the spider load bearing glass.

## INTERIOR & EXTERIOR SERENITY

The play between geometric and organic space creates a profound atmospheric rhythm. Also, the gymnasium can transform into a bed setup for the surge space and other emergencies like hurricane and storm. Due to the beautiful relationship between the exterior and interior, active energy use can be reduced without discomforting the users.

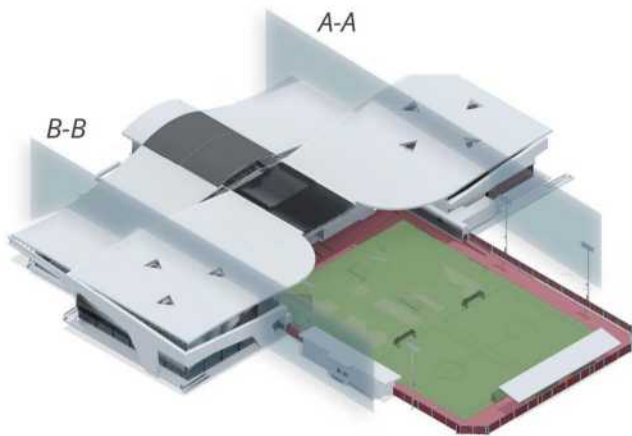


# DESIGN PROGRAM

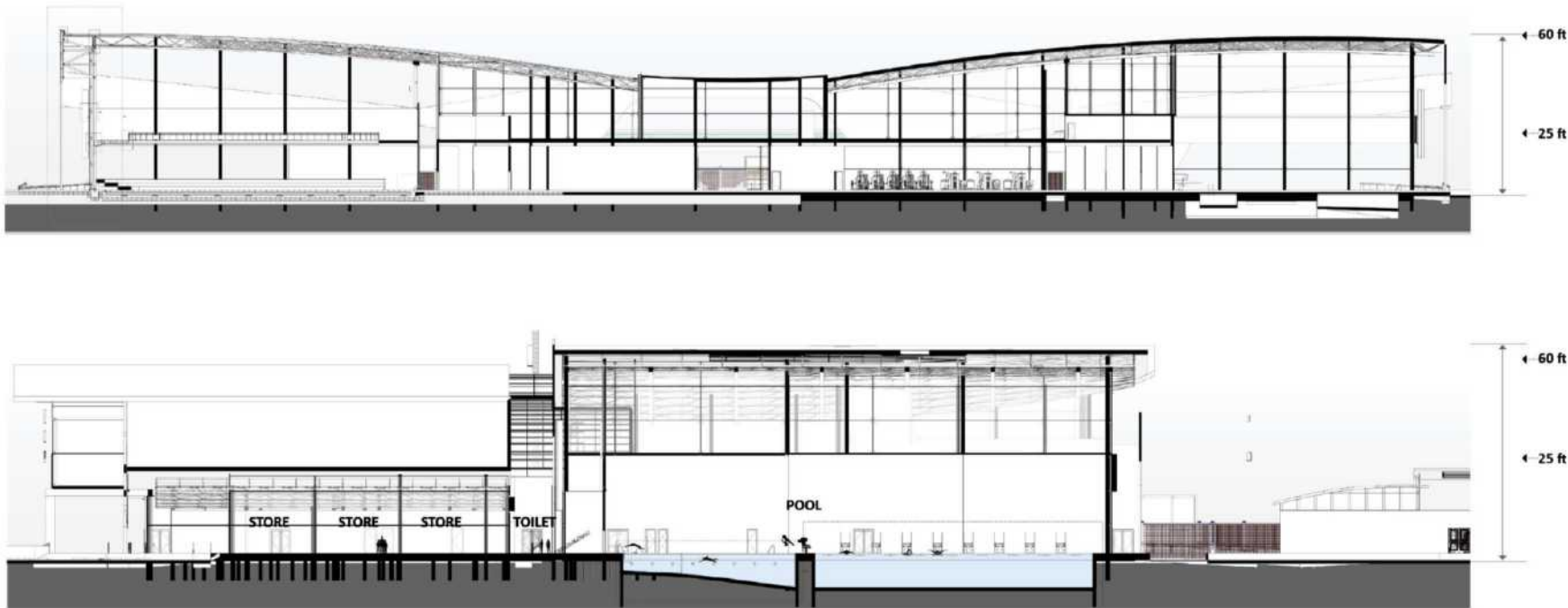
## SPACE AND COST

All spaces are designed with high consideration to accommodate level access for people with disabilities. The clinic will serve as a dynamic space since it may be forced to transform into a surge capacity space. Utility supplies like electricity, air and water will be run in the ceiling. Also, the gymnasium can be transformed into a negative and positive pressure room depending on the surge emergency. Structurally, strong horizontal datum is established to sink the concrete into the timber using glass and inexpensive steel for shading device.

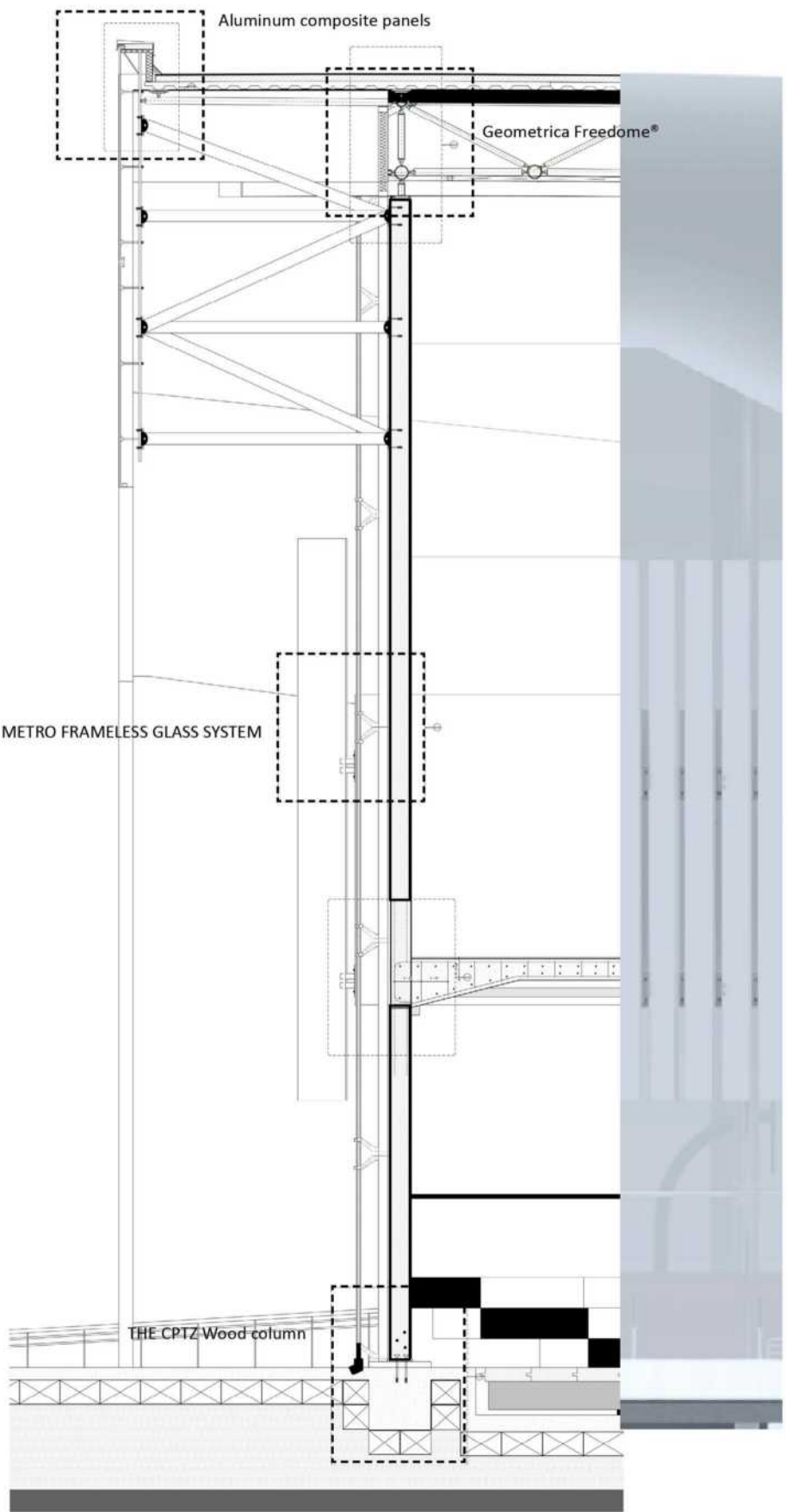
Roof cantilevers provide shading to the café and entertainment deck, while high level roofing and skylights allow natural lighting to flow through the building.



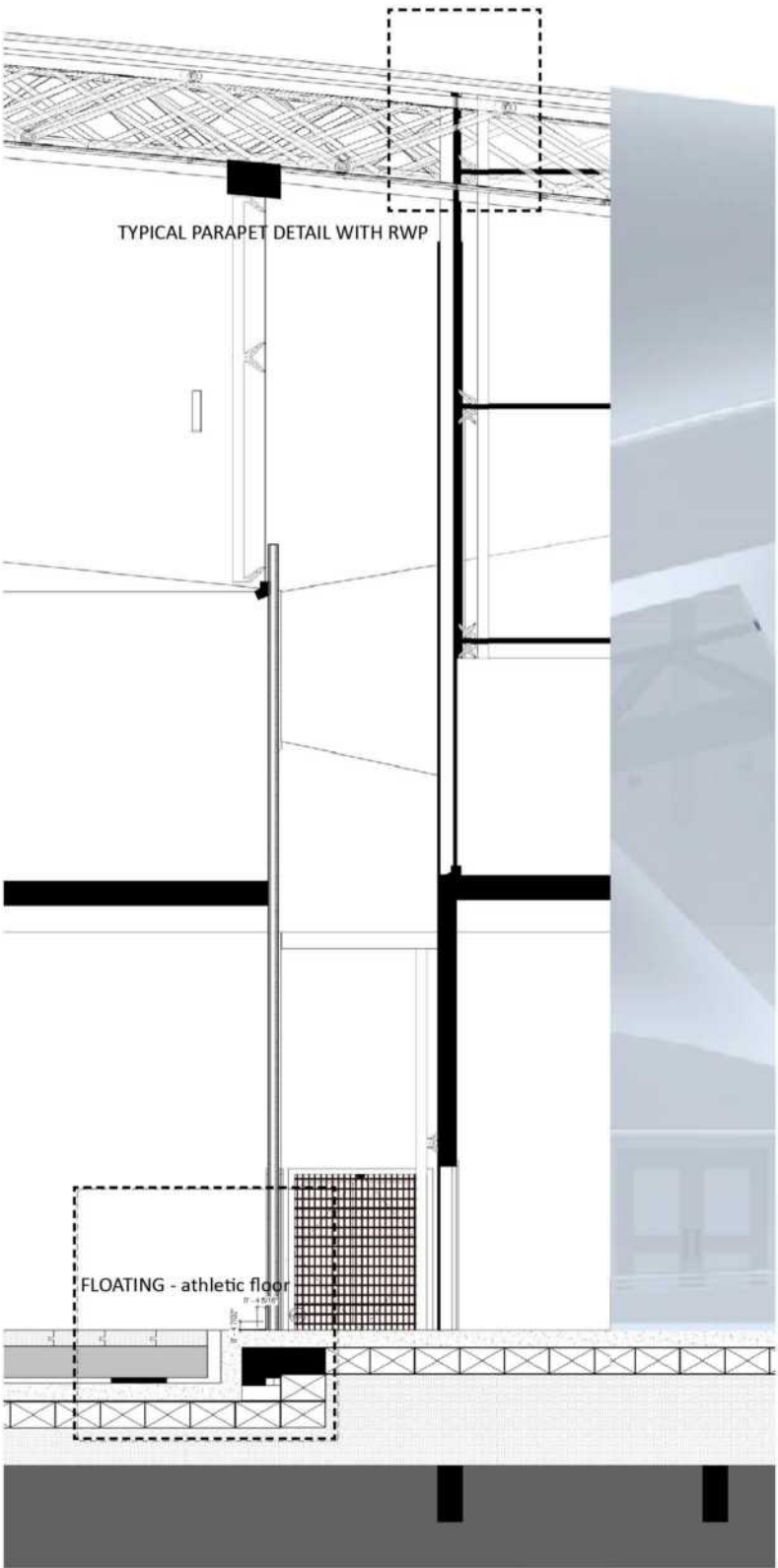
Folding doors, floor-to-ceiling glass windows and skylights fill the interior with natural light as smart indoor-outdoor interplay creates multiple activity zones for both adults and kids alike. Parallel refurbished aluminum fins have been used to control the amount of daylight. The mechanical utility supplies like electricity, air and water will be run in the ceiling so that the relationship between the containing space and contents are unhindered.



## WALL SECTION



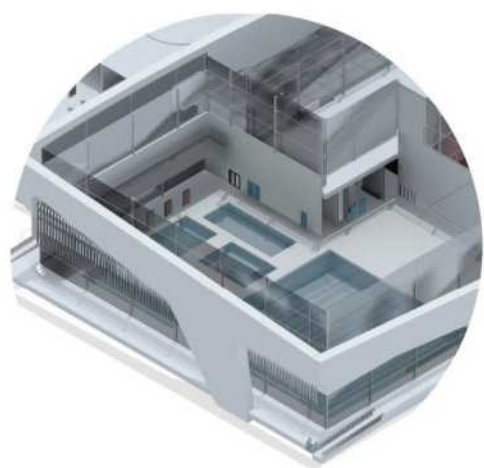
## WALL SECTION



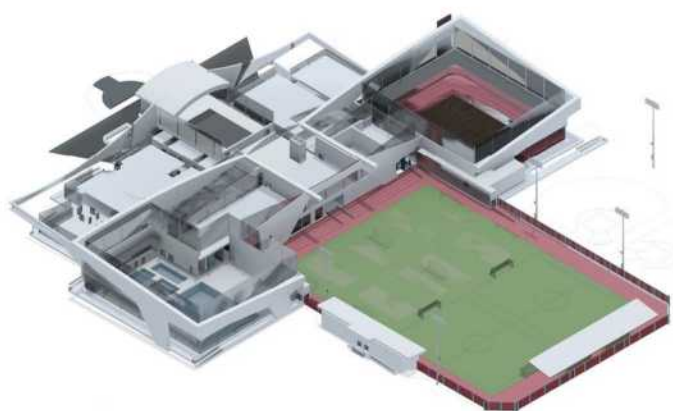


# SECTION: WALL / DETAILS

CONSTRUCTION DRAWING

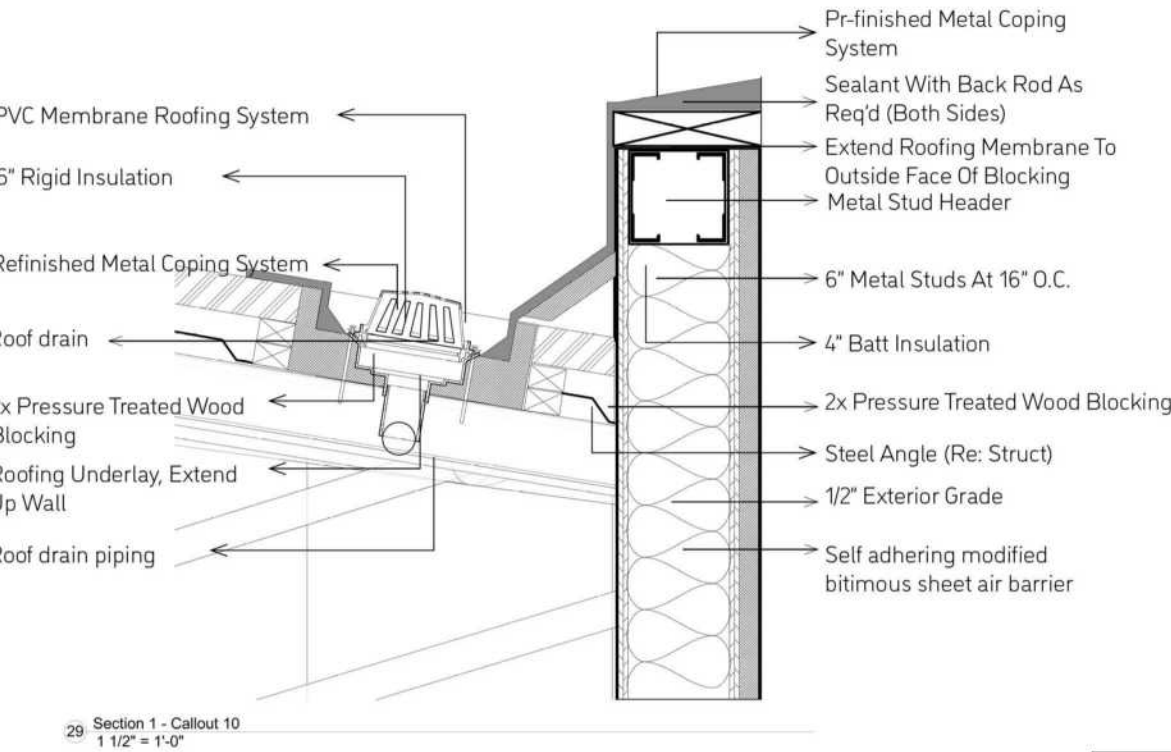


The project creates a porous campus open field that facilitates visual and physical access to ample events. Creativity, criticality, and teamwork require spatial porosity. Transparency of space inspires user trans-disciplinary dialogues. Here, the concept to revolutionize big-box typology from inside as building form is kept simplistic and lightweight for the climate. The humanistic landscape is created by the interior's programmatic and spatial sophistication rather than the outside.

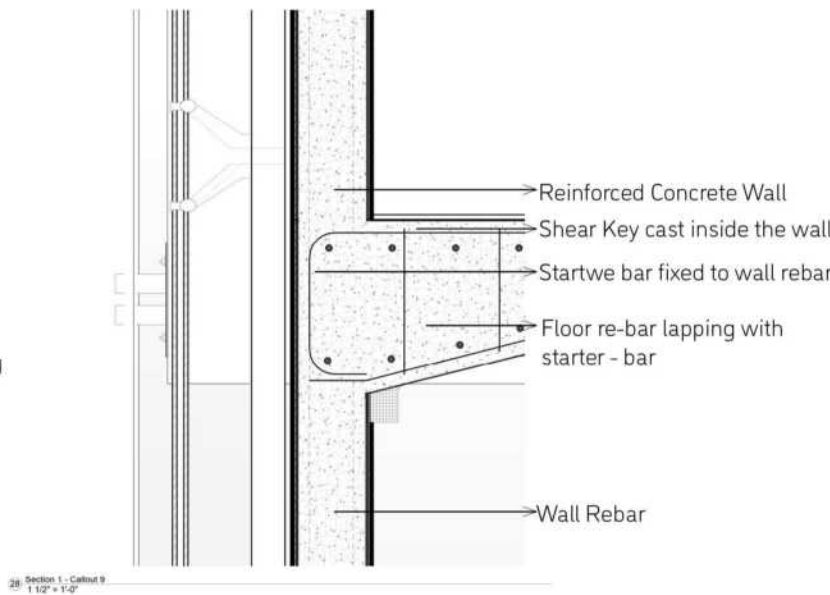


## TYPICAL PARAPET DETAIL WITH RWP

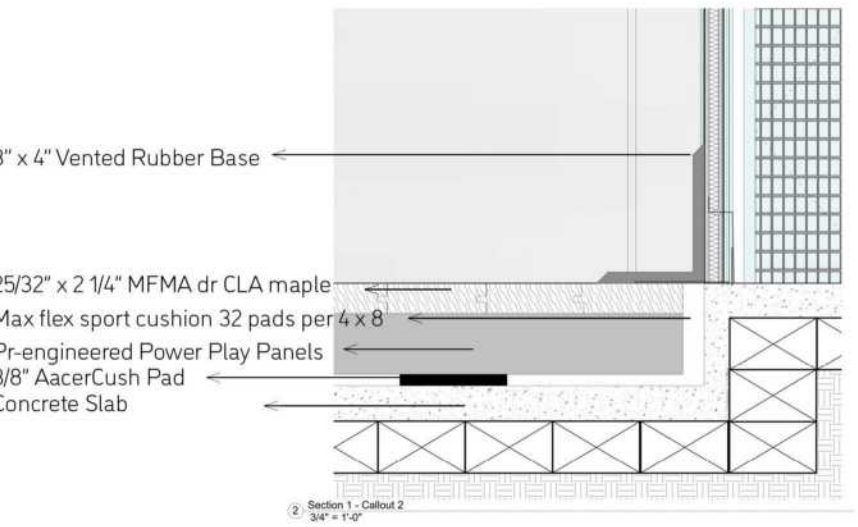
Aluminum composite panels



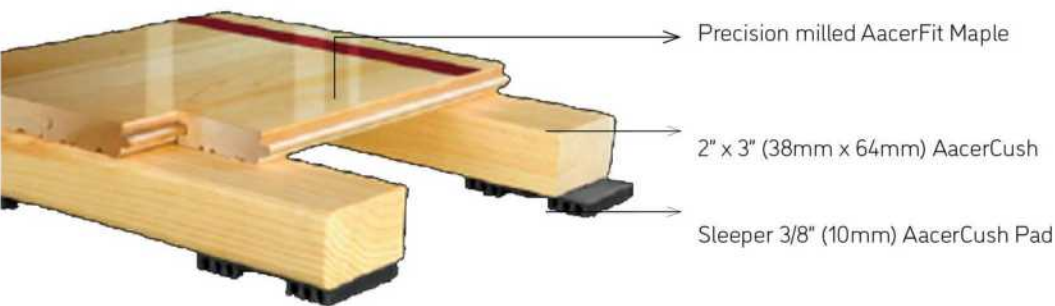
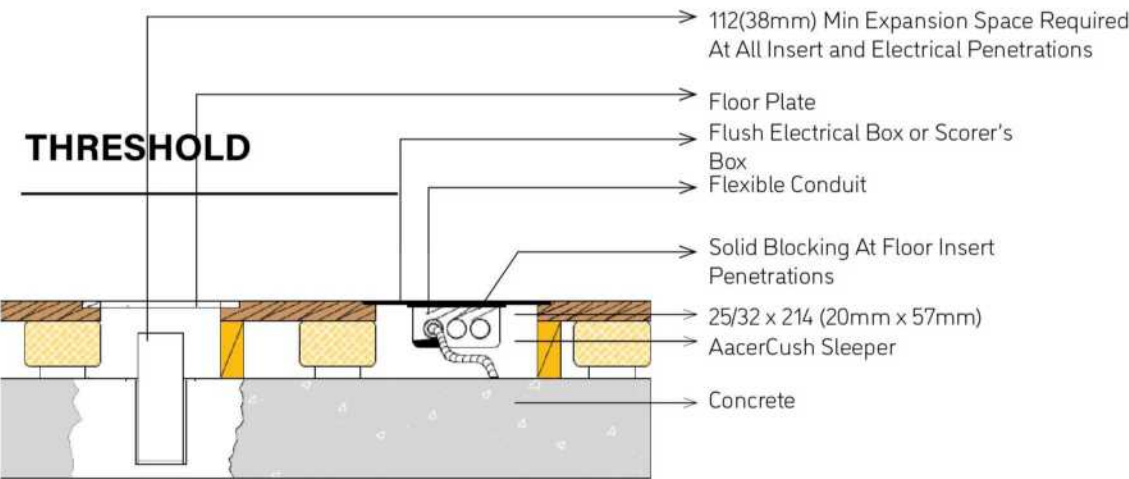
## CANTILEVER RUNNING FLOOR



## FLOATING - ATHLETIC FLOOR



## THRESHOLD

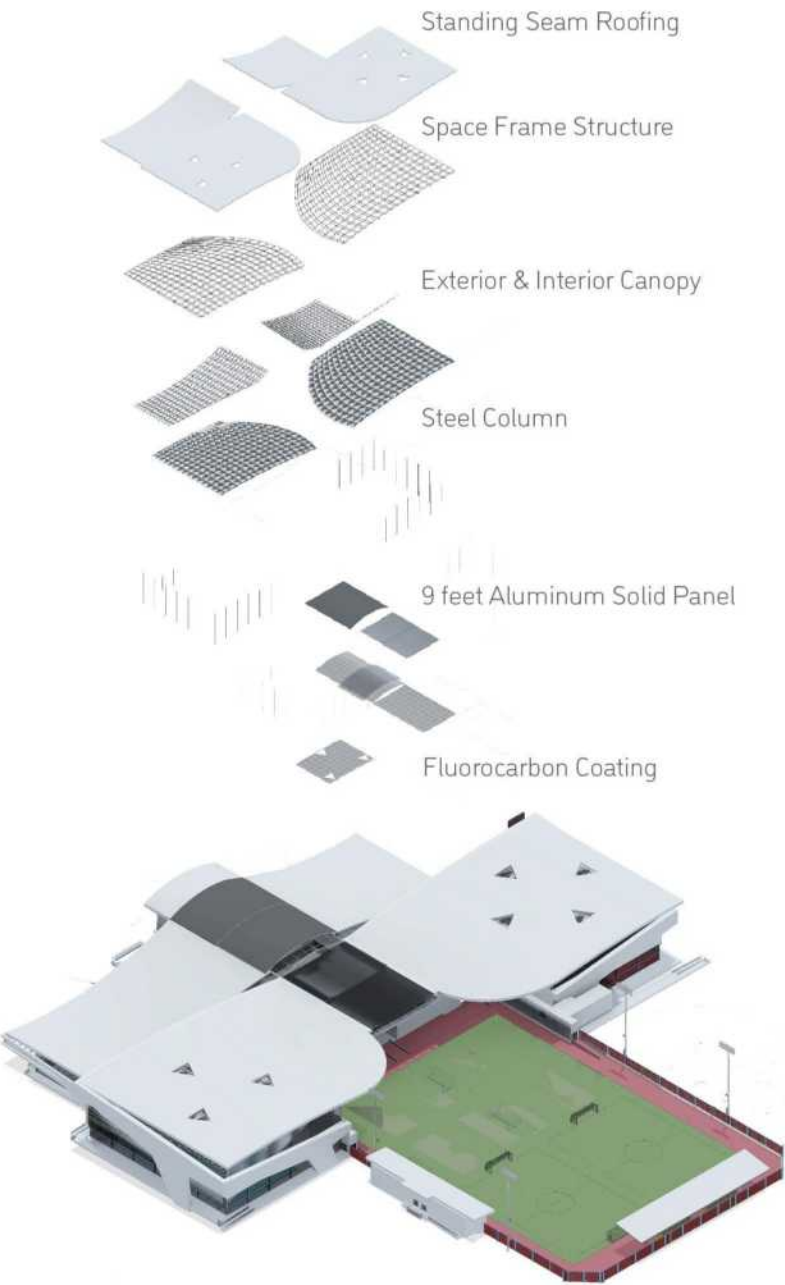




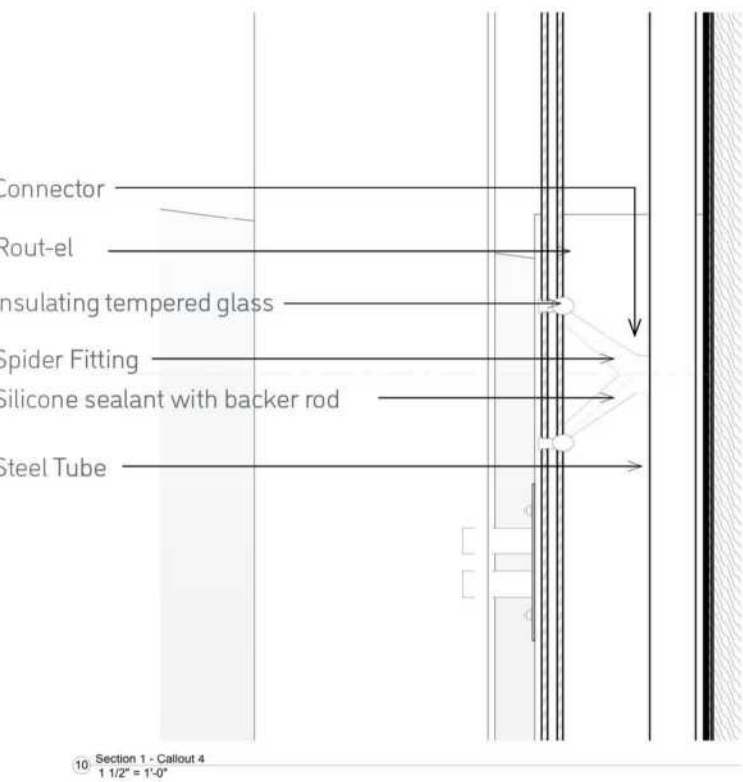
# SECTION: AXONOMETRY

## CONSTRUCTION DRAWING

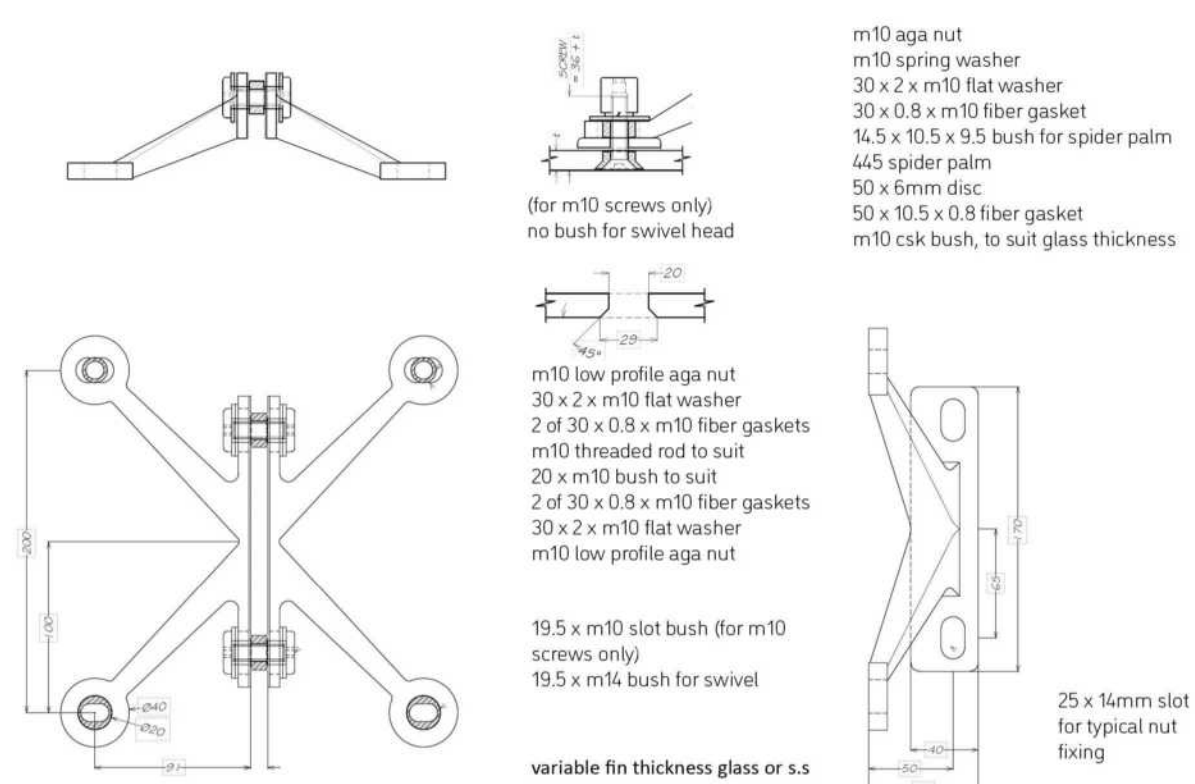
Its undulating roof recreates the curve seen on the facade of adobe buildings. The austere metallic architecture declaration of the project, along with its parametric syntax, reflect the technical and aesthetics that the future of architecture in Morris County is aiming for.



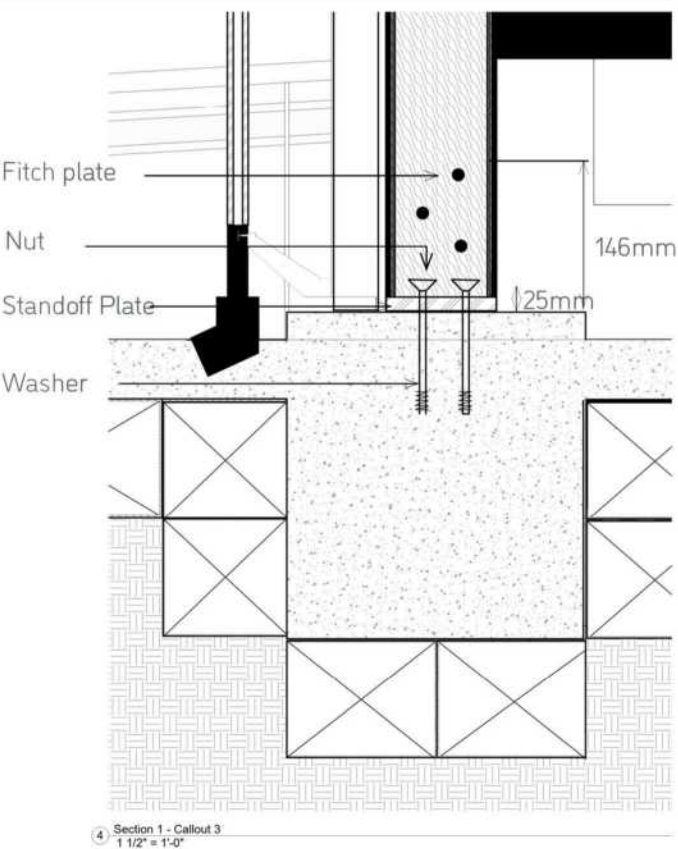
## METRO FRAMELESS GLASS SYSTEM



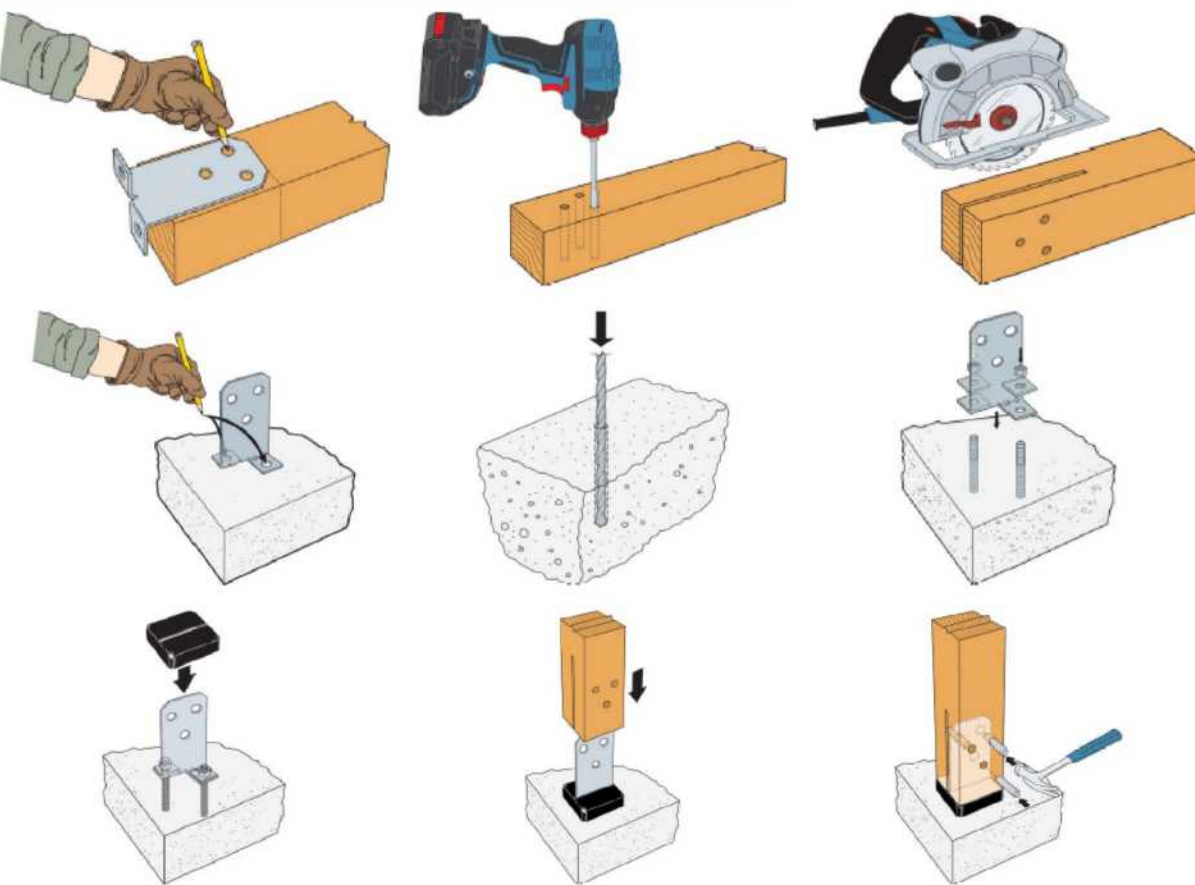
## 445 SPIDER SERIES CONSTRUCTION DETAIL



## THE CPTZ CONCEALED POST BASE



## CPTZ CONSTRUCTION DETAIL

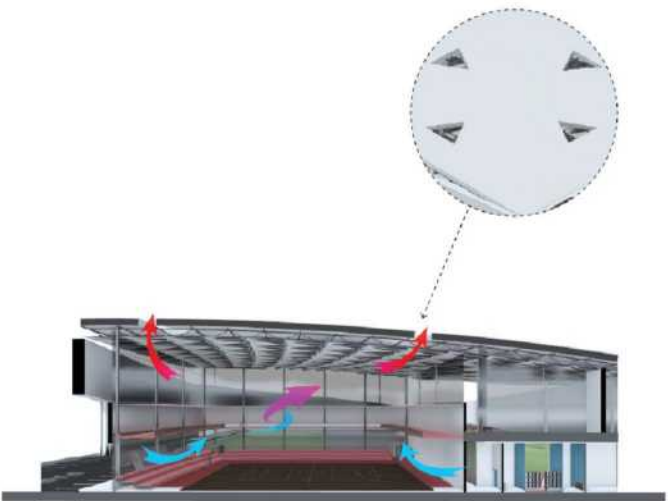
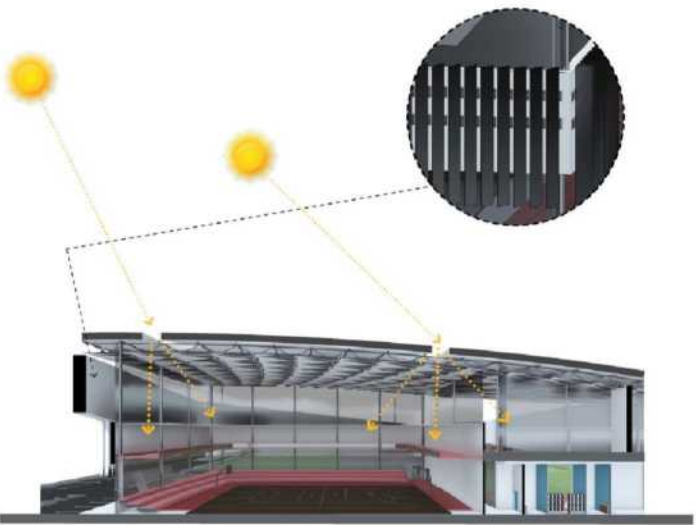




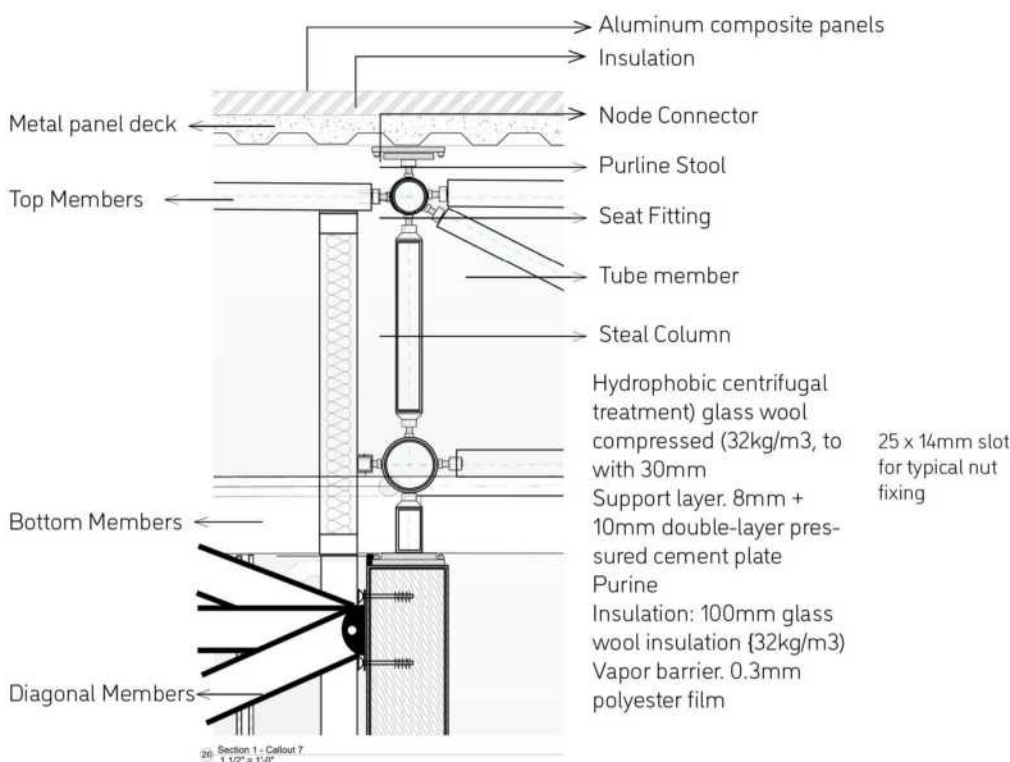
# SECTION: WALL / DETAILS

## CONSTRUCTION DRAWING

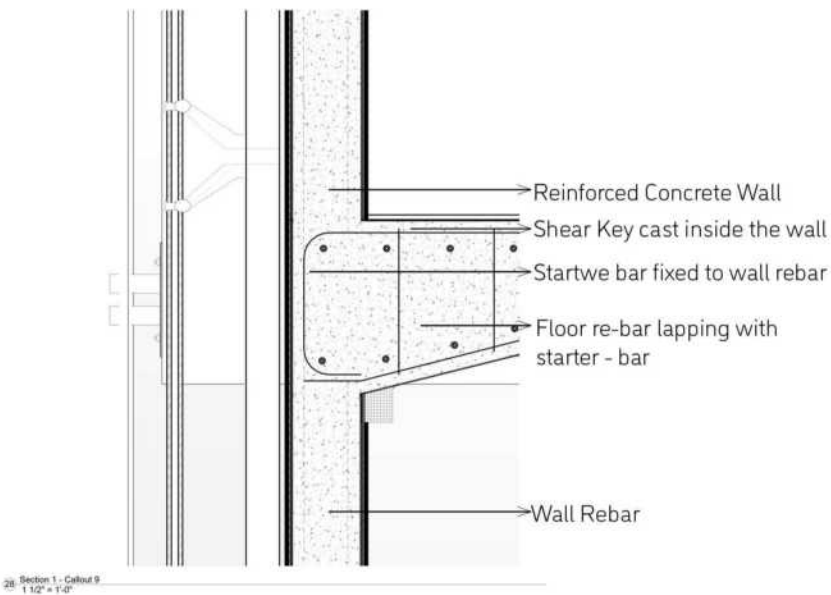
Tilt wall panel are spaced in the most efficient lengths to minimize the summer sun penetration and allow good amount of winter sun. Inexpensive shinning dark panels will blur the line between concrete, glass and steel.



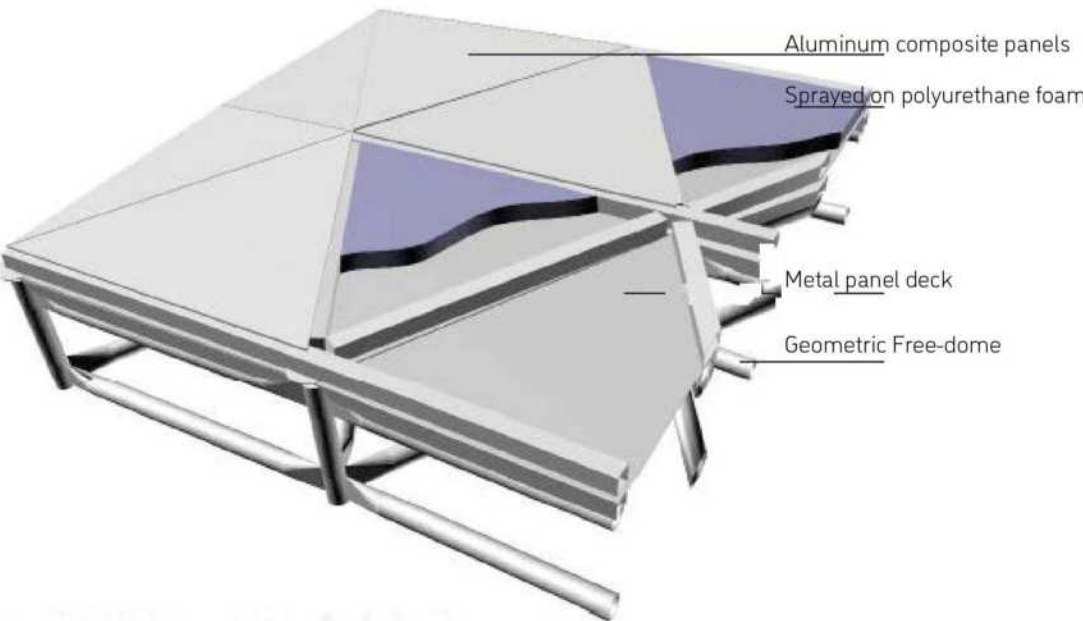
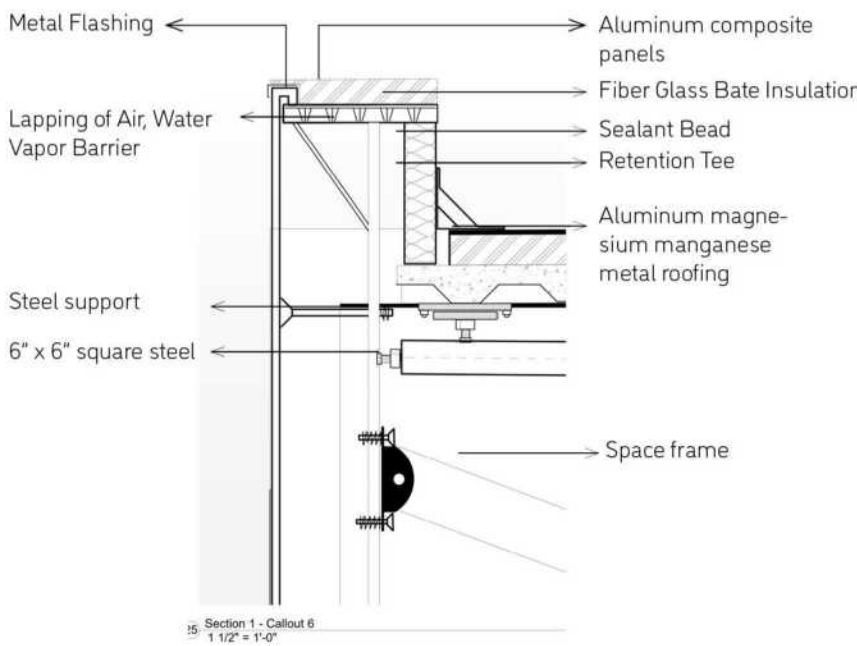
## SLIM - LINE PANEL - GEOMETRICA FREEDOME



## CANTILEVER RUNNING FLOOR

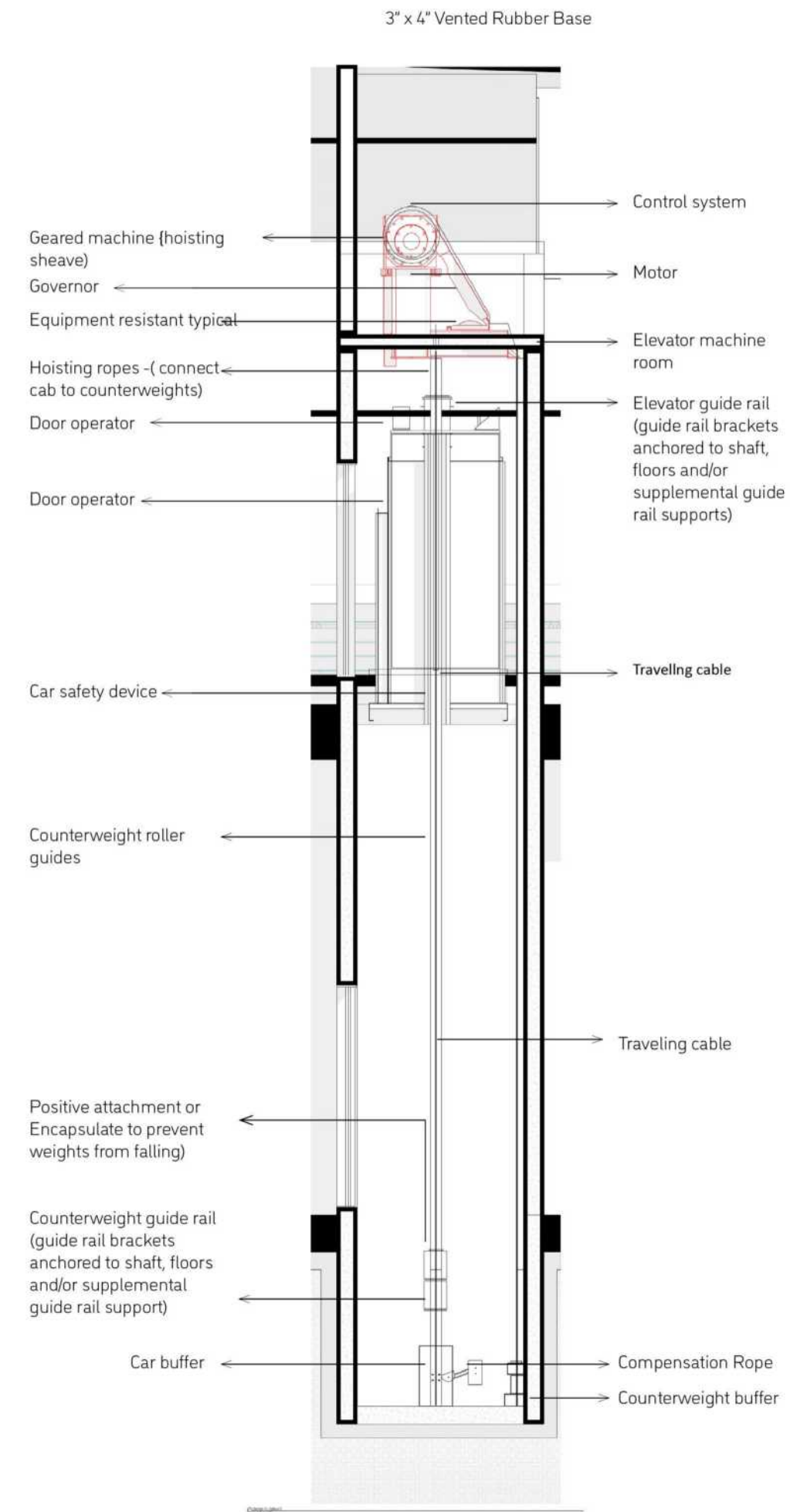
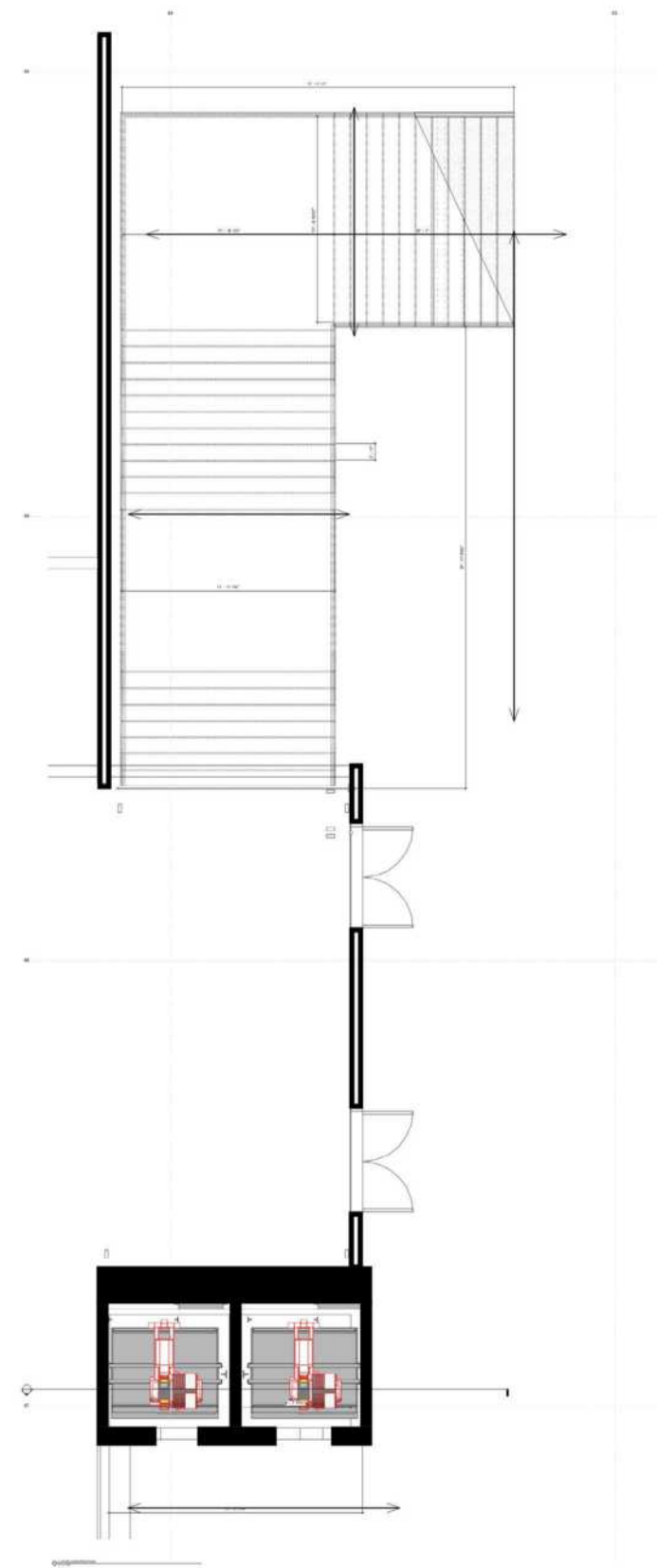
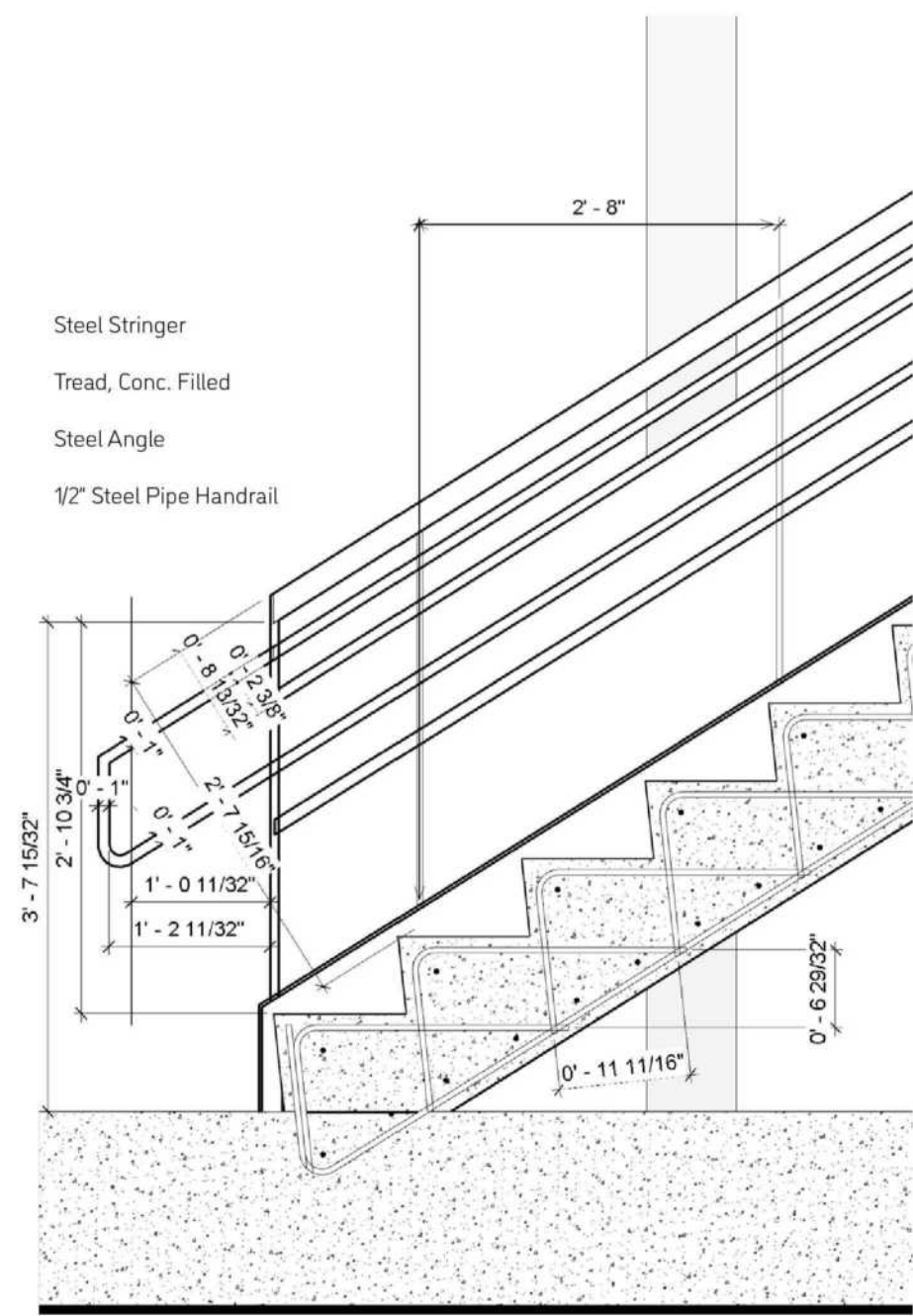


## ROOF CONNECTION DETAIL





SECTION:  
WALL / DETAILS  
CONSTRUCTION DRAWING







Approach perspective view showing community center pedestrian sidewalk



Perspective showing statue of David Mims



Rear perspective view showing kids playing soccer in the outdoor soccer field



Tourists are given a tour round the newly built youth community center





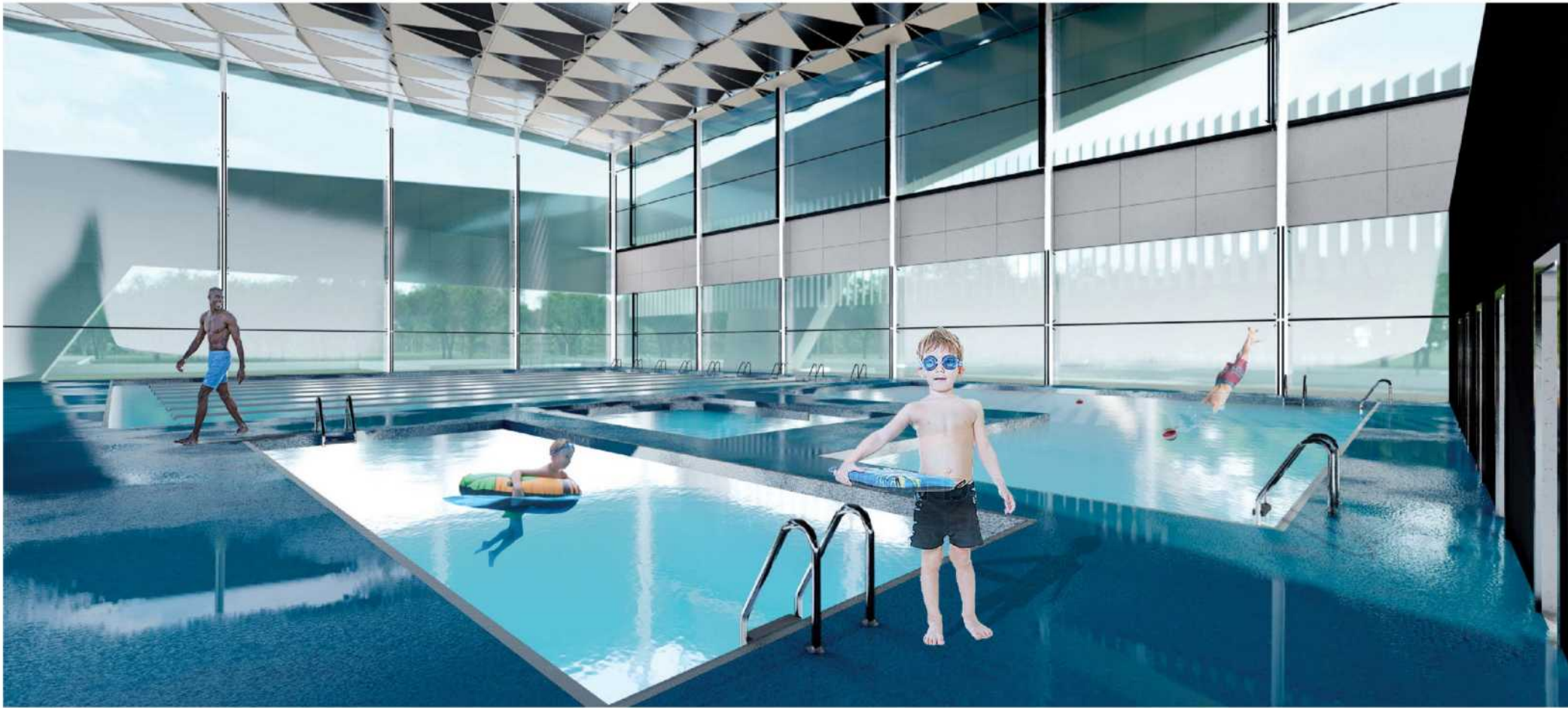
People interacting with the Retail stores space



Retail store - female toilet



Central corridor space with provided seating space for users



Aquatic center





Climbing wall in the central corridor next to the basketball court



Main staircase connecting the first and second floor



View from the third phase parking space.





Alternative render showing community center at night time.



Ariel perspective showing the community center from back





JOSEPH OCHE ALI - YOUTH COMMUNITY CENTER - DAINGERFIELD, MORRIS COUNTY, TEXAS

**SPORT TODAY: NATIONAL INTRAMURAL SPORTS FINAL IN DAINGERFIELD, MORRIS COUNTY**



After 12 competitive soccer games in the new youth community center in Daingerfield, Morris County. We have a Winner! CONGRATULATIONS!!!

21:45 71



Morris County, TX  
Fri / 25 Nov 2022





# ABOUT THE AUTHOR

Joseph Oche Ali is a second-year master of an architecture student, currently one of the lucky 12 pursuing a certificate in architecture for health (Center for health system and design) and an extra certificate in sustainability at Texas A&M University. He is a member of the Texas A&M UNICEF chapter and director of graphics for SHEA (Student Health Environments Association for health). He teaches Visualization 284 (Adobe creative suite - InDesign and illustrator) at the Department of Visualization and strong advocate for Architecture for health, sustainability, and post-conflict/reconstruction Architecture. Upon his graduation, he will resume the role of Architectural Design Professional at HKS Inc in Dallas.

Expertise: Architecture Medical Planning and Programming in Metric and Imperial System, Health Track and Sustainability, BIM and Visual Analysis, Revit, Sketch-Up, Layout, AutoCAD, RHINO, Lumion, Modeling, and Fabrication.  
Others: Adobe Creative Suite (Photoshop, InDesign, Illustrator) Hand Sketching, and Visualization.

Born in an African humanitarian-centered family, Joseph has always found helping people and organizations become the best version of themselves, and seeking solutions to a simple Utopian world. At the age of 14, his mum introduced him to volunteering for Women Empowerment Initiative in Nigeria. He continued serving his community by working with UNICEF in Africa before transferring to Texas A&M University for his Master of Architecture.

# AFTERWORD: SOURCE

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(n.d.-h). Hashem T. Obeidat, LEED AP BD+C | M Arch. Candidate. Issuu. [https://issuu.com/hashemthaer/docs/final\\_portfolio\\_-\\_professional](https://issuu.com/hashemthaer/docs/final_portfolio_-_professional)





# AUTHOR’S ACKNOWLEDGEMENTS

## For Morris County

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# AFTERWORD: SOURCE

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“ Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above yourselves, not looking to your own interest but each of you to the interest of others!! ”

*Philippians 2:3-4*





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