

REPORT FALL 2020

TABLE OF CONTENTS

COMPETITION OVERVIEW

- Summary
- Design Brief
- Marketing poster
- Participants registration

DESIGN

- 3 Design Awards
- 2 Special Prizes
- 8 Submissions
- 21 Participants

EVALUATION ASSESSMENT

- 8 Judges' scores
- Judges' comments
- Survey analysis
- Student responses

BUGDET/EXPENSES

- Statement

RECORD OF PRINCIPAL INVESTIGATOR

- Andreas Luescher, Ph.D., Chair, Professor of Architecture,
Professor of Teaching Excellence



“I liked the idea of creating a sanctuary that was also compatible with Covid-19 regulations. It made for an interesting topic and idea.”

This opening feedback, from a student who participated in the 12th annual Architecture Student Design Competition, is the best gift an instructor can receive. Supported by a grant from the NCMA Education and Research Foundation, the competition was organized by BGSU’s Department of Architecture and Environmental Design, housed in the School of the Built Environment. Thank you NCMA! This year’s challenge was to explore the historical, architectural, sculptural and environmental aspects of an outdoor space acting as a **COVID-19 Sanctuary**. One can imagine how truly necessary it will be to have a dedicated place to commemorate and reflect what happened, and is still happening to all during this pandemic, especially at a medium-sized public university. Providing an intimate space and safe haven is a priority for our university. The second challenge was since most BGSU architecture classes were transitioned to online courses, except for the design-oriented studios, existing traditional Architectural Material System courses were not applicable. A new avenue had to be found by using the Foundational Design class since offers in person/hybrid format. As a result, in the change of setting and as indicated in the survey, most our sophomores felt the overall design competition was difficult for them. To overcome the barriers, it was necessary to engage the students in hands on learning, for example, going the field and dry-stacking some CMU blocks. In addition, lecturing and encouraging students to remain open to the endless possibilities of expression through intuitive, rational and innovative integrations of CMU’s was important. That engagement resulted in the highest rating/most satisfaction by students because of rapid availability of modelling and presentation materials. Therefore, participants produced some really wonderful models which highlight the various capabilities of traditional concrete masonry units as a building material. We aspired to have the most diverse and largest group of judges from all of fields and walks of life. Of course, having Mike Homan, Vice President Wayne Builders Supply from Greenville and representative of Ohio Masonry Association, to be part of judging was a remarkable touch to recognize the student’s work and their entrance into the world of CMU’s. Not to mention all the goodies Mike brought with him. Thank you, Mike! I will conclude with another student comment: “I enjoyed the amount of freedom we had for the designs.”

December 16, 2020 | Bowling Green, Ohio | Andreas Luescher

2020 STUDENT DESIGN COMPETITION

ARCH

Registration:
October 26

Submissions:
November 17

Jury:
November 19

NCMA FDN
EDUCATION & RESEARCH
FOUNDATION

Ohio Masonry Association

BGSU

Info:
Andreas Luescher
aluesch@bgsu.edu

2020 STUDENT DESIGN COMPETITION

ARCH

Registration:
October 26

Submissions:
November 17

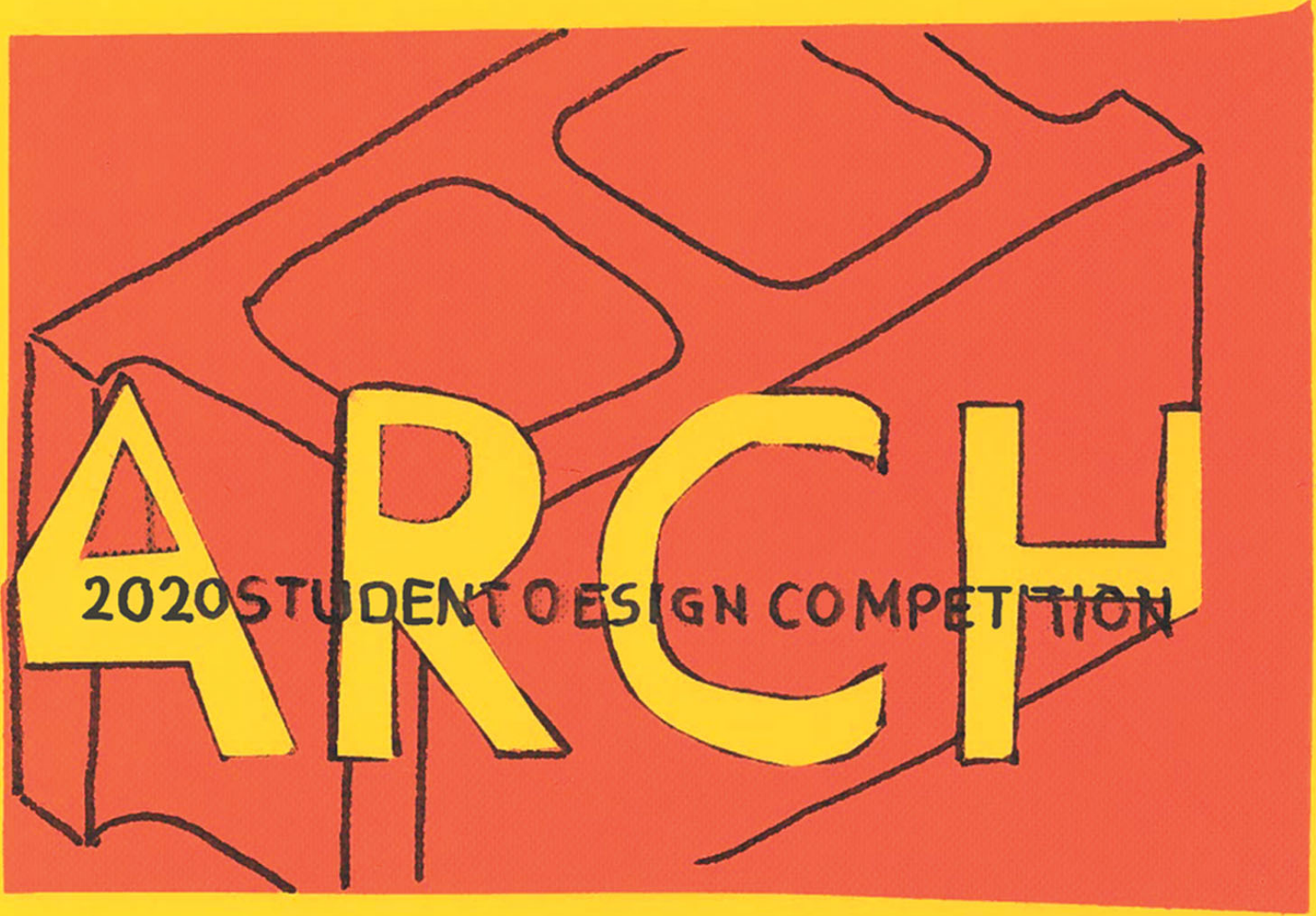
Jury:
November 19

NCMA FDN
EDUCATION & RESEARCH
FOUNDATION

Ohio Masonry Association

BGSU

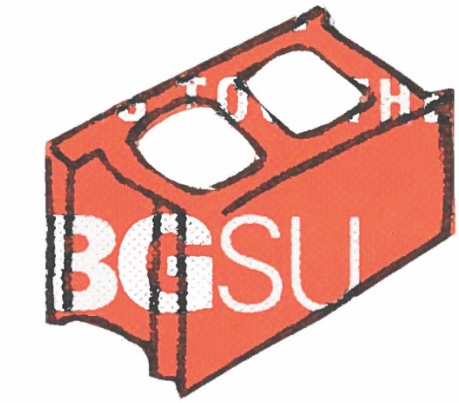
Info:
Andreas Luescher
aluesch@bgsu.edu



2020 STUDENT DESIGN COMPETITION

**2020
ARCHITECTURE
STUDENT DESIGN
COMPETITION
BRIEF**

**DESIGNING
COVID-19
SANCTUARY**



**USING
CONCRETE
MASONRY UNITS**

WHAT DOES THE ACRONYM CMU STAND FOR?

Concrete Masonry

Concrete masonry units (CMU) are precast of portland cement, fine aggregate, and water, molded into various shapes to satisfy various construction conditions. The availability of these types varies with locality and manufacturer.

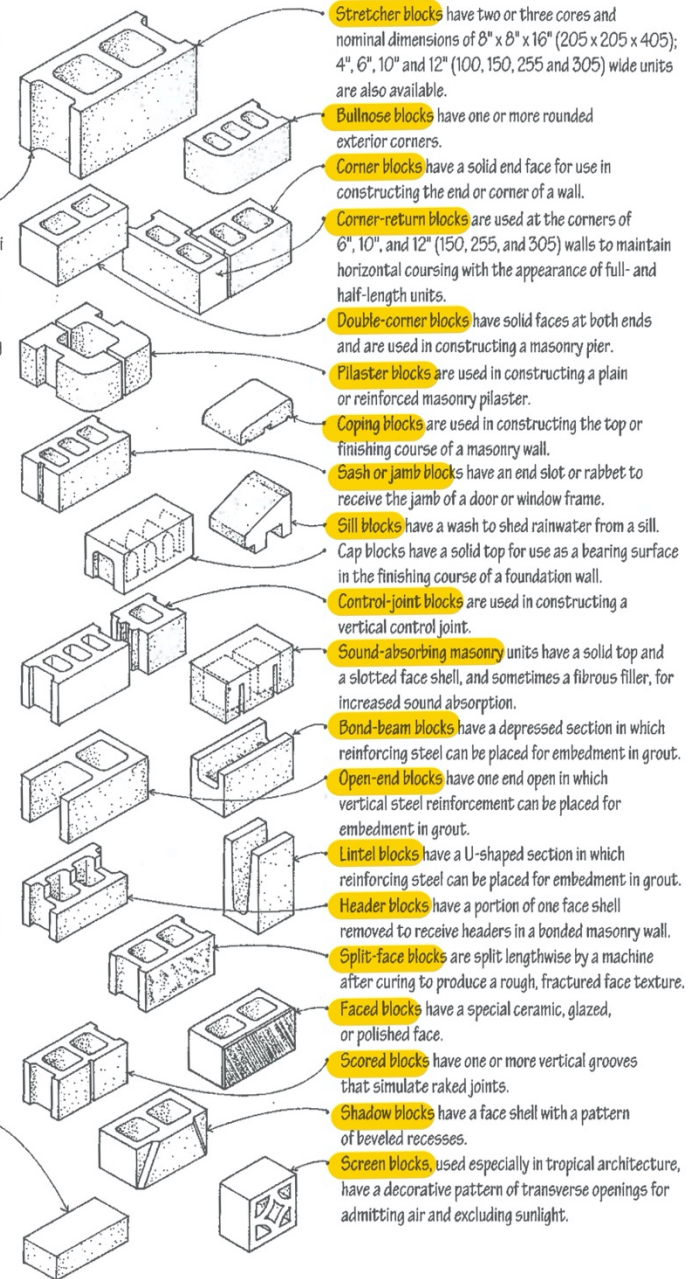
- Concrete block, often incorrectly referred to as cement block, is a hollow concrete masonry unit having a compressive strength from 600 to 1500 psi (4137 to 10,342 kPa).
- Normal-weight block is made from concrete weighing more than 125 pcf (2000 kg/m³).
- Medium-weight block is made from concrete weighing from 105 to 125 pcf (1680 to 2000 kg/m³).
- Lightweight block is made from concrete weighing 105 pcf (1680 kg/m³) or less.

CMU Grades

- Grade N is a loadbearing concrete masonry unit suitable for use both above and below grade in walls exposed to moisture or weather; grade N units have a compressive strength from 800 to 1500 psi (5516 to 10,342 kPa).
- Grade S is a loadbearing concrete masonry unit limited to use above grade, in exterior walls with weather-protective coatings, or in walls not exposed to moisture or weather; grade S units have a compressive strength from 600 to 1000 psi (4137 to 6895 kPa).

CMU Types

- Type I is a concrete masonry unit manufactured to a specified limit of moisture content in order to minimize the drying shrinkage that can cause cracking.
- Type II is a concrete masonry unit not manufactured to a specified limit moisture content.
- Concrete brick is a solid rectangular concrete masonry unit usually identical in size to a modular clay brick but also available in 12" (305) lengths; concrete brick units have a compressive strength from 2000 to 3000 psi (13,790 to 20,685 kPa).





WHICH
PROFESSIONAL
ASSOCIATION
SPONSORS THE
CMU DESIGN
COMPETITION?



NCMA
FDN

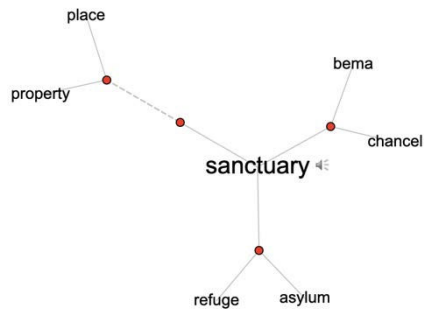
EDUCATION & RESEARCH
FOUNDATION

13750 Sunrise Valley Drive
Herndon, VA 20171-4662

O 703.713.1900
F 703.713.1910

ncma.org/foundation

WHAT IS THE DESIGN



Folly, (from French **folie**, "foolishness"), also called Eyecatcher, in **architecture**, a costly, generally nonfunctional building that was erected to enhance a natural landscape.

www.britannica.com • Visual Arts • Decorative Art
Folly | architecture | Britannica

DESIGNING COVID-19 SANCTUARY

This project is designed to focus on the physical properties of the materials and the logic of construction techniques. Concrete masonry is often looked upon as a lesser material choice while in reality, in the hands of a creative designer, they can provide a texture, scale, and massing not found in other materials. In many areas, concrete masonry is the most common and most attainable material available to designers and constructors. Obtaining knowledge about the versatility of concrete masonry will make you a better designer.

Concrete masonry comes in a variety of sizes, shapes, finishes, and colors traditionally produced by Ohio NCMA Producer Members. Finishes can include split face, scored, ribbed, and ground face. Concrete masonry bonding can be as varied as any clay product. Each Design Team should research the material and select shapes, sizes, and finishes and develop their eventual design based on their research.

Program

You, as designers, will be asked to explore the historical, architectural, sculptural and environmental aspects of an outdoor space acting as a **COVID-19 Sanctuary** that will be assigned. Architectural history is full examples of interior spaces incorporating outdoor spaces. Windows do this of course, but in Le Corbusier's roof garden at the Villa Savoye outside Paris (1928-30), the sky is utilized as walls and ceiling. Donald Judd's minimalistic art spaces in Marfa, Texas do the same.

It is up to you to design a structure that goes beyond the traditional boundaries of (closed) architectural space by integrating the surrounding landscape and environment in the completed piece. Each design folly must specifically address condition(s) and reference(s) as follow:

- a) a ground plot approximately 8'x 8'
- b) at least a two steps difference in height between ground and platform
- c) a panoramic opening that frames the surroundings like in a painting
- d) reference Sol LeWitt's work (1928-2007)
- e) http://en.wikipedia.org/wiki/Sol_LeWitt

WHERE IS THE SITE?



Sol LeWitt – Madison Square Park -2005

DESIGNING COVID-19 SANCTUARY

The site for the **COVID-19 Sanctuary** will be next to Parking Lot 19 on Poe Street across from the Wood County Airport. The parking lot and its contents, the trees, the small man-made hill and the airport facility should all be considered as elements of your design.



MERGING PERIODS

The design of this piece merges ancient Roman architecture with early 20th-century modernism. The design process is shown through a series of diagrams and a physical model. The design process is shown through a series of diagrams and a physical model.

Concepts and initial ideas come from the site's history and the surrounding context. The design process is shown through a series of diagrams and a physical model.

High-quality content with this piece to add to the overall presentation. The design process is shown through a series of diagrams and a physical model.

Photo: Ben Bore, Barcelona Pavilion

Courtesy: J. P. P.

16

16

WHAT ARE THE SUBMISSION REQUIREMENTS?

All entries must be submitted without identifying marks (logos, text, insignia, or images) on any presentation component. Any submission that contains written or graphic material that in any way identifies the student authors will be disqualified.

No visible sign of the submission's authors (students) in any way, shape or form on any presentation components.

Teams must upload their completed submission into Share One or send it through WeTransfer (<https://wetransfer.com/>) compiled as a single PDF file of the presentation boards (images should be at 150dpi, as a tiff or jpg image but no large than 200dpi).

Deliverable: Board Size

Two (2) 20"x 20" boards to be presented together as a single 40"x 20" landscape formatted presentation. Each board must be mounted separately on 1/4" white foam board. Each board must include the group's registration number in the lower right-hand corner of the board using a 48-point font.

Required drawings and model:

Board One (left board in overall presentation):

Precedent study, process sketch(es), analytic diagram(s), proposal rendering (digital modeling)

Board Two (right board in overall presentation):

Technical documentation (plan, section, elevation, details, etc.)

Must have at least physical model.

Text:

Required brief design statement (max. words 120)

WHO ARE THE JUDGES?



WHAT ARE JUDGING CRITERIA?

Representative
Architecture
Department

Kerry Fan

Ph.D., Teaching
Professor,
BGSU

Representative
Allied Field of
Architecture

**Charles
Kanwischer**

Director, Prof
School of Art

Representative
Construction
Department

Robert Austin

P.E., Ph.D.,
Assistant
Professor,
BGSU

Representative
Construction
Department

**Wilfred
Roudebush**

Emeritus Assoc.
Prof. Construction

Representative
Local Architects

Alex Schrinel

Project Designer,
Buehrer Group
Architecture &
Engineering

Representative
BGSU Alumni in
Architecture

Kristi Peiffer,
BGSU Senior

Project Manager
of Design

Representative
Ohio Masonry
Association

Mike Homan

Vice President,
Wayne Builders
Supply,
Greenville, OH

Representative
Ohio Architects

Sam Kunkle
Architect

- a) Aesthetic Concept (the visual appeal of the design, including: overall appearance; the use of color, shape, and texture; and integration with the surrounding landscape)
- b) Innovative Use of Concrete Masonry Materials (novel use of standard concrete masonry products)
- c) Functional Use of Concrete Masonry Materials (how well the design utilizes the various capabilities of traditional concrete masonry units as building material)
- d) Constructability (how well the design takes into consideration its ability to be actually built)



WHEN ARE THE DEADLINES?

Monday October 12
Monday October 19

Marketing effort to attract all students
Registration opens

OPEN TO ALL STUDENTS

Monday October 26

Registration closed

TEAM CAN BE MAXIMUM 4 STUDENTS

Tuesday October 27

Notify NCMA FDN of names of the entrants

PLEASE REGISTER WITH ANDREAS LUESCHER

Tuesday November 10

Dry run of the submissions

QUESTIONS DIRECT TO ALUESCH@BGSU.EDU

Tuesday November 17

Final submissions

~~**TENTATIVE SCHEDULE BECAUSE COVID-19**~~

Thursday November 19

Jury deliberation and public announcement

~~**TBA EITHER IN PERSON OR ONLINE**~~

**Tuesday November 24
@2:00-4:00PM**

**Jury deliberation and public announcement
Reception for the winning projects**

YEAH VIRTUAL COVID-19 PARTY

TBA

Optional to build 1:1 mock-up
AT LEAST ONE MIGHT GET BUILD LATER

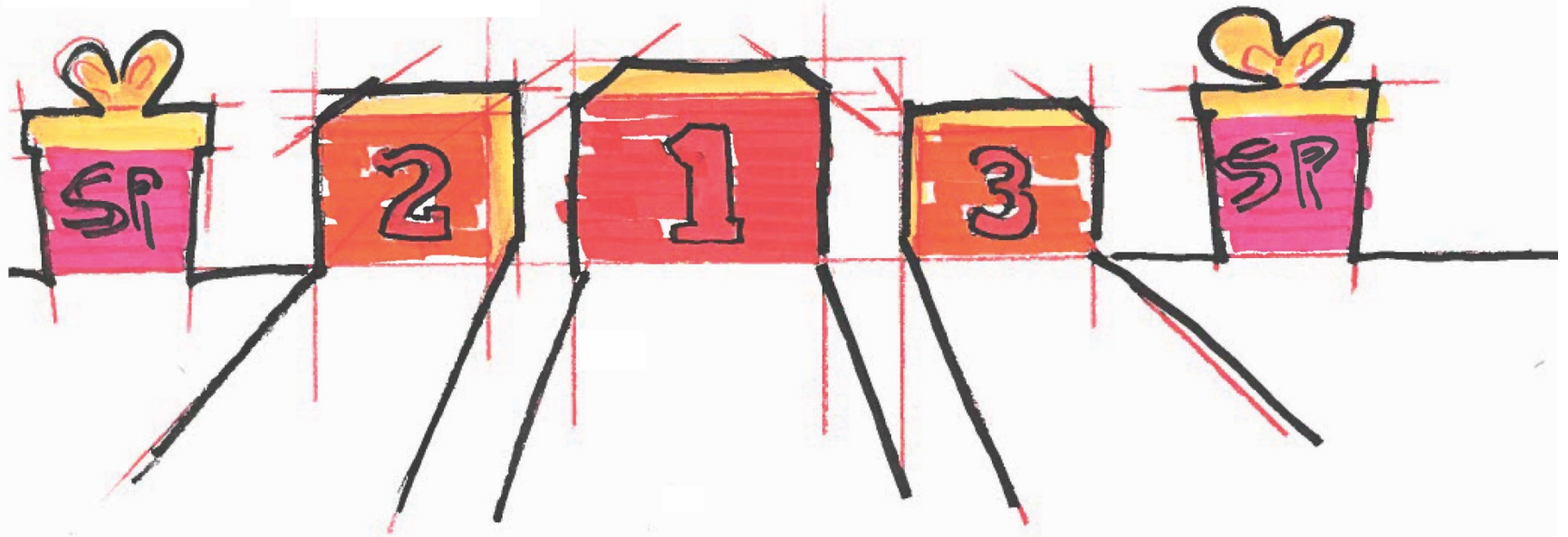
**SPECIAL PRIZE
BEST RENDERING
\$200.00**

**SECOND PRIZE
OVERALL DESIGN
\$600.00**

**FRIST PRIZE BEST
OVERALL DESIGN
\$800.00**

**THIRD PRIZE
OVERALL DESIGN
\$200.00**

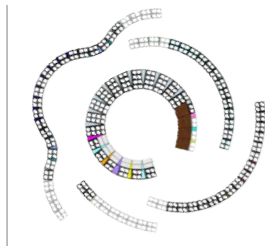
**SPECIAL PRIZE
BEST MODEL
\$200.00**



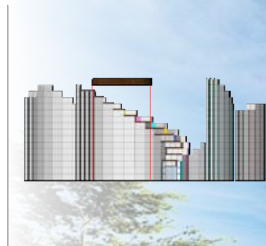
**WHAT ARE THE
PRIZES?**



SECTION A



PLAN



SECTION B



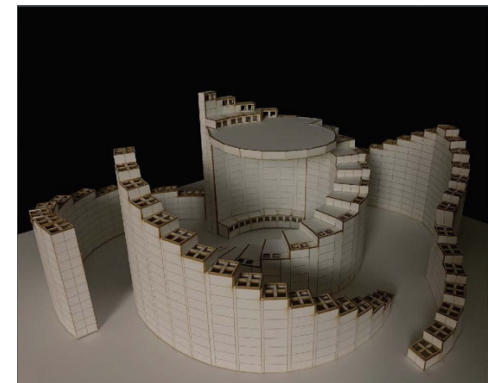
Within the past few months we have seen restaurants close, university students leave campus, church services be cancelled and families torn apart. The FKK found that, "More than one in three adults in the U.S. have reported symptoms of anxiety or depressive disorder during the pandemic..."¹ Our society has been radically changed in an incredibly short period of time and as designers it is arguably more important now than ever to create social good through our work. While no public space can serve as a substitute for human interaction, our COVID-19 sanctuary is meant to imitate *different types of hugs*.



sanctuaryX

1st Prize and Special Prize: Model

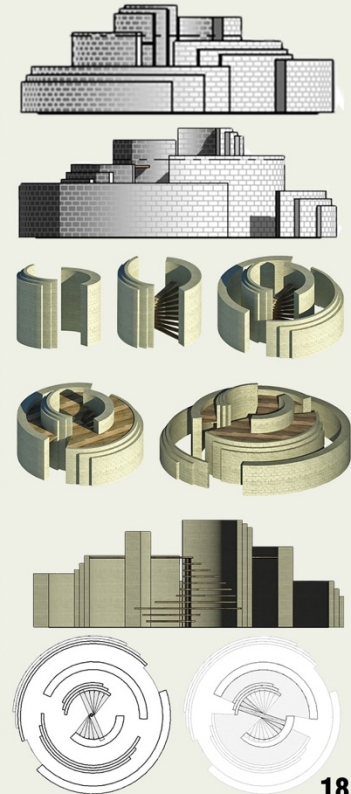
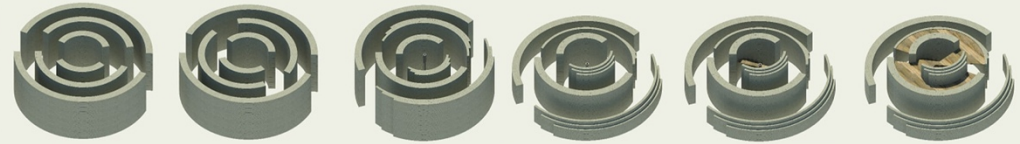
Team: Kiana Fitzpatrick, Laura Miles and Shannon Bachmann



BASTION KREIS



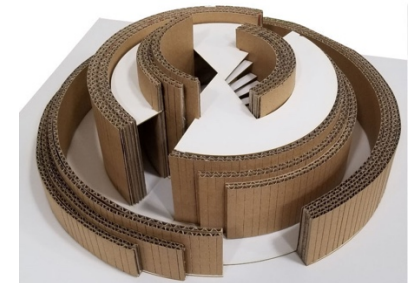
The intent of this design is to symbolize solitude, without taking the sense of freedom away. This sanctuary style piece executes this intent by providing comfortable and secure walkways in a rotation based on the main center point. Adding different depths to the alternating walls in this piece allows for a more imaginative journey around the interior as one works their way towards the center of the piece, where there is an elevated area to have a full 360° view of the surrounding landscape. Wooden stair steps were arranged in a spiral formation at the center of this sanctuary, placed in a way to where they almost seem to be levitating. Once arriving at the elevated platform, one will notice the walls, but in a different way than how they were viewed from the interior of the sanctuary. There are three layers of walls placed within each other, with the center set of walls being the tallest, while the other sets of walls descend in height as they become further away from the center of the piece. This is to give the subject a great sense of hierarchy and freedom while at the top of the sanctuary.



18

2nd Prize

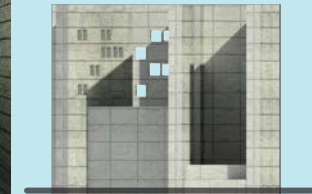
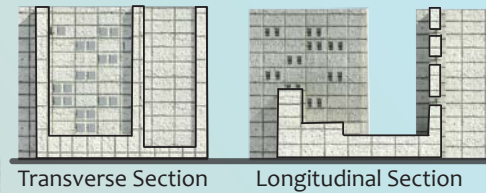
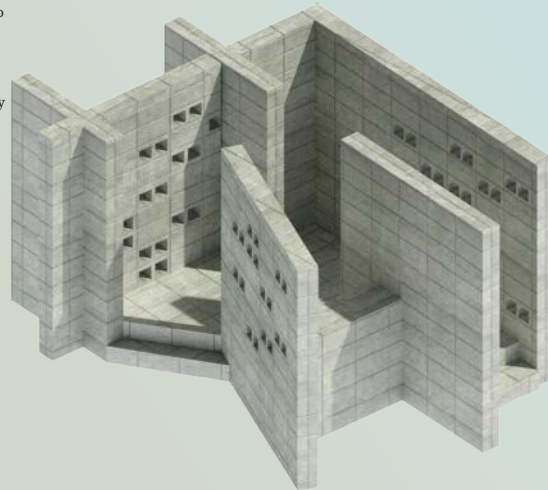
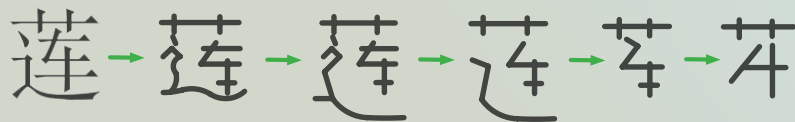
Team: Evan Goodwin, Cody Ellerbrock and Garrett Leckrone



Blossoming Hope

Our design is based off the idea of the Chinese symbol for "Lotus" and its meaning revolving around Buddhism. "Lotus" or "Lián" is a significant symbol in Chinese culture because it is said the flower rises from the mud and blooms in exquisite beauty, giving people hope. This relates to our current situation because even though Covid-19 is still very present, we are able to come together and rise up to overcome the mud and murky waters that come with our current situation.

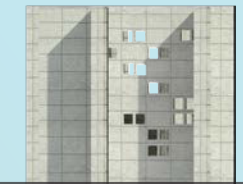
Entering our sanctuary, you are first greeted with a single lotus flower surrounded by 3 concrete walls, symbolizing hope when there is none, then continuing the path there is a single elevated space that gives you 3 different linear views to the outside.



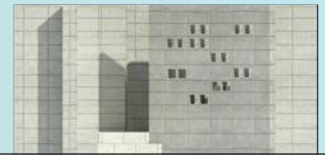
North Elevation



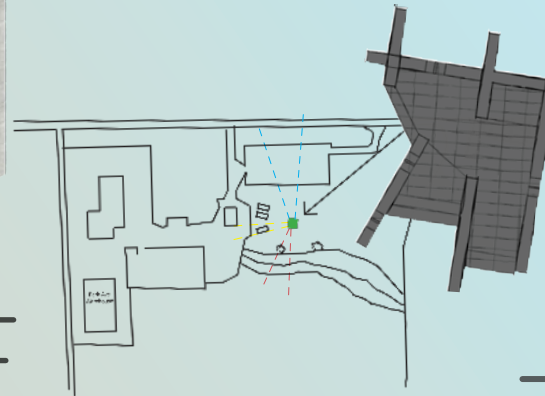
West Elevation



South Elevation



East Elevation 22



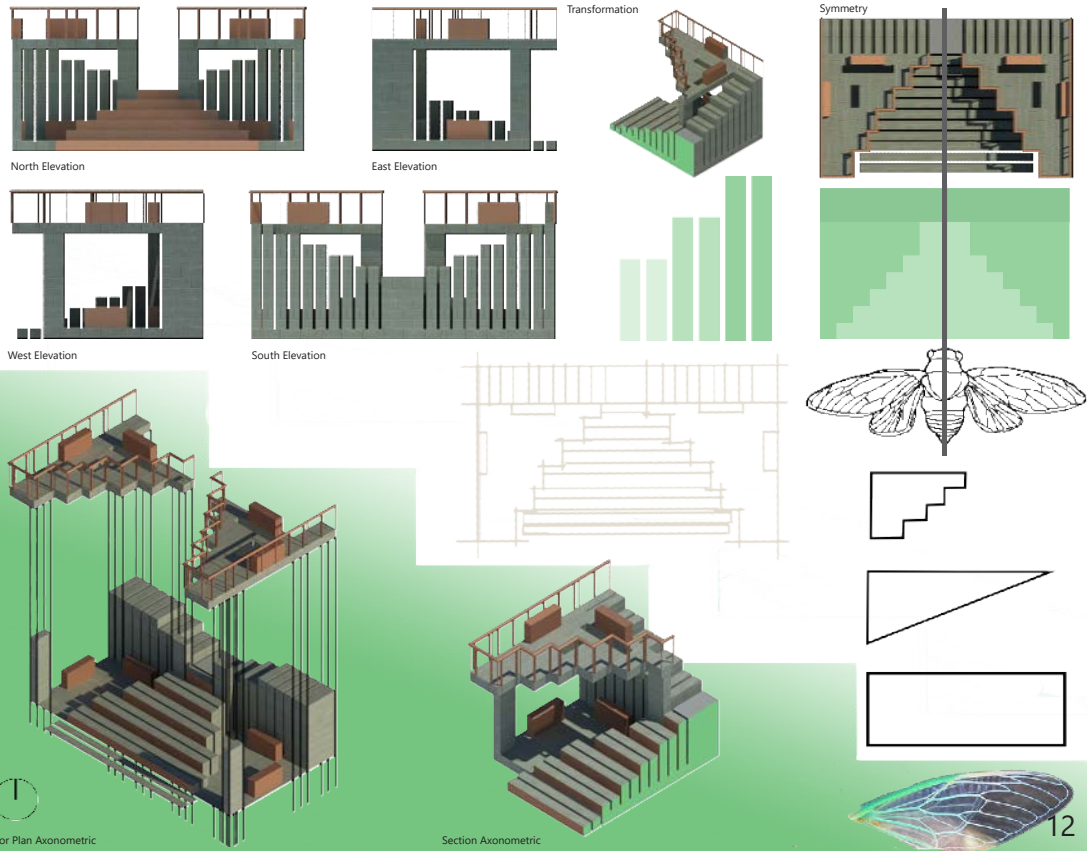
3rd Prize

Team: Olivia Grcic and Kaden Hilinski



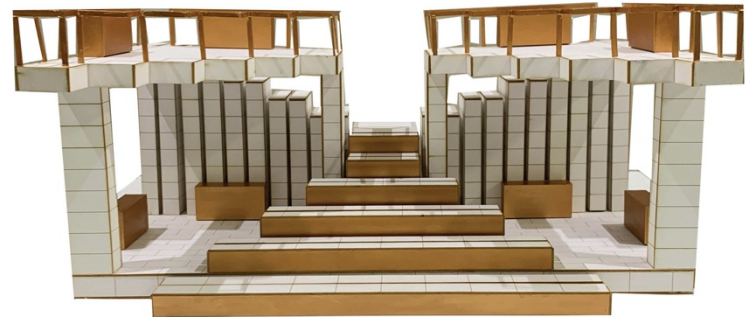
Wings of the Cicada

Wings of the Cicada is a design created to encourage outdoor connections and social distant conversations. The design of this easily accessible meeting place is a very modern, geometric design based on a very loud but contained insect called the Cicada. The Cicadas wings are very fragile but self-cleaning. To add our own self-cleaning effect to the design, we have placed copper, a natural bacterial fighting agent, to all the most touched places in the structure. The copper is used not only as a bacterial fighting agent but also as a way to show the bright and beautiful colors of the Cicada wings. We have created a very spacious, welcoming, and safe place for people to connect to others and the world around them.

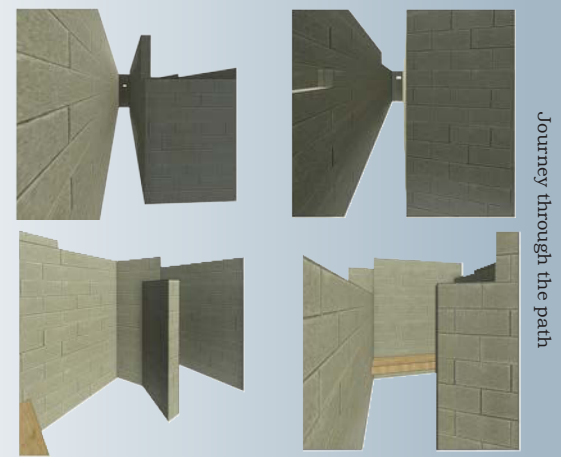
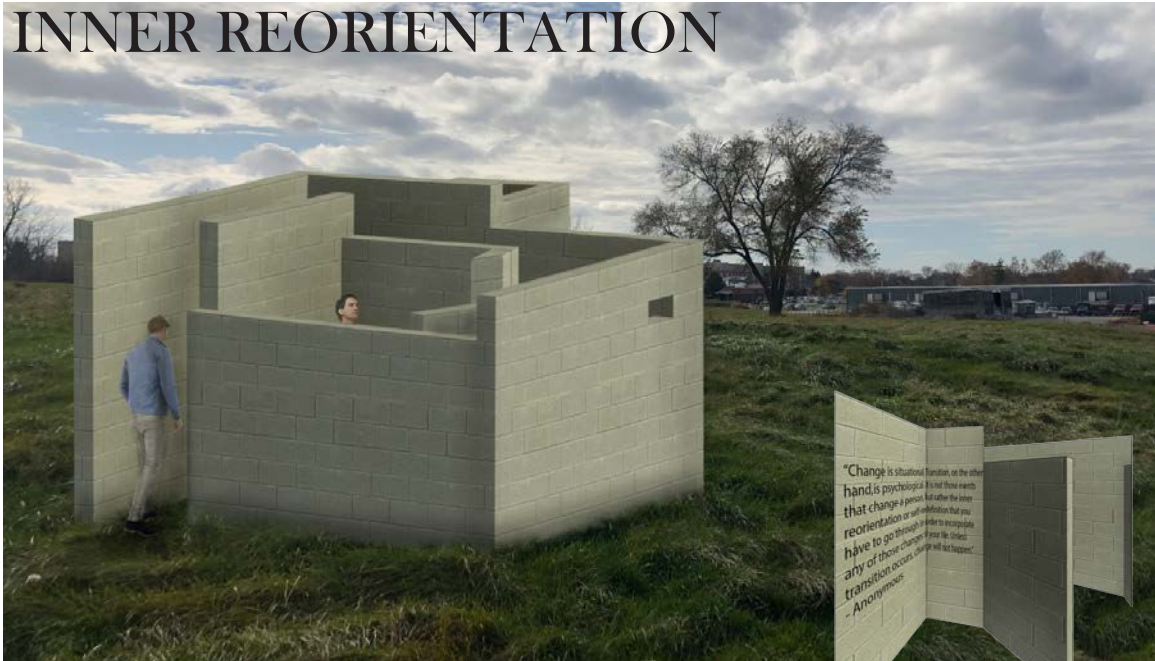


Special Prize: Rendering

Team: Megan Rease, Lydia Murrey and Joshua Davids



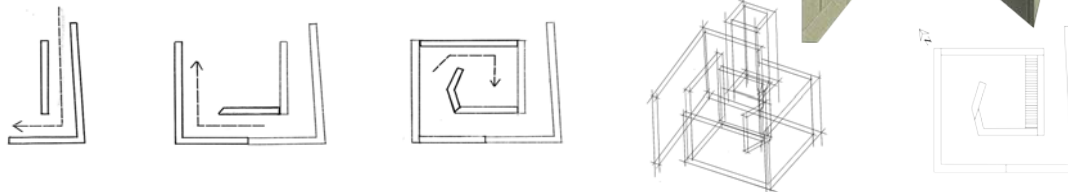
INNER REORIENTATION



Journey through the path

COVID-19 impacts each generation differently; this virus drastically changed daily life. The eldest generation lives fearfully in self-isolation, those middle-aged live less concerned, and the youth is unfazed by this global pandemic. The behavior of each generation is represented by an amount of darkness.

Tall walls with a narrow entryway are uncomfortable; the surrounding darkness is the seclusion of COVID-19. Transitioning to the next generation, there is a small opening of light looking into a void of isolation. The medium-sized walls allow more light and partially open the path. At the end of this path, there is another window looking at freedom. The structure opens with short walls allowing light to pour into a sanctuary marking the end. Within the sanctuary, individuals reflect on personal and global change.



Team: Taylor Jensen, Eleena Kammeyer and Brandon Sickless





Open Spacing



Highway Sound Barrier



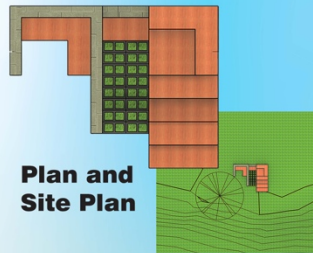
Ancient Inca Ruins



Casa R+ - Ooiio



Tornado House - Ooiio

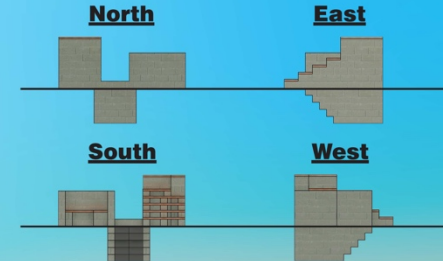


Plan and Site Plan

Longitudinal Section



Elevations

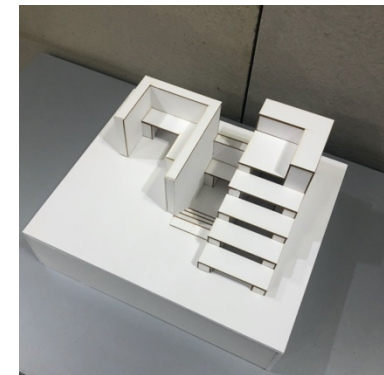


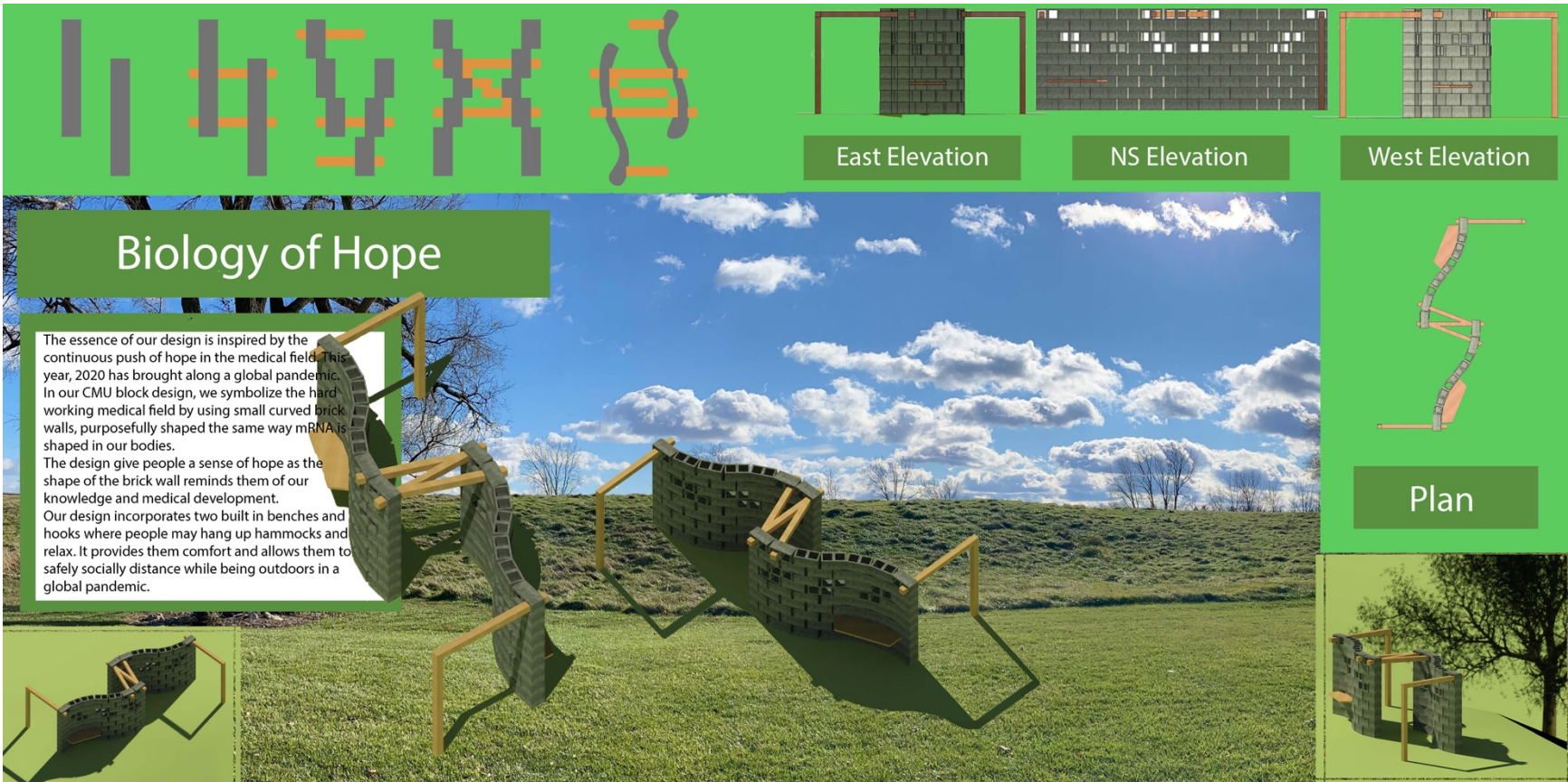
The design of this structure focuses on creating a space that is relaxing and allows for an escape from the pandemic. It still has the precautionary standards met, but they are not the focus of the structure. By optimizing the space, limiting the wind and noise, and focusing on the best view, the CMU structure creates a relaxing environment where people can sit down and do homework, enjoy being outside, or simply get away from the everyday stresses.

To optimize the space and still meet COVID distancing standards, the structure has changes in elevation to extend the spacing and walls to act as barriers between people, but also to block wind, some work and road noise, and the unattractive views.

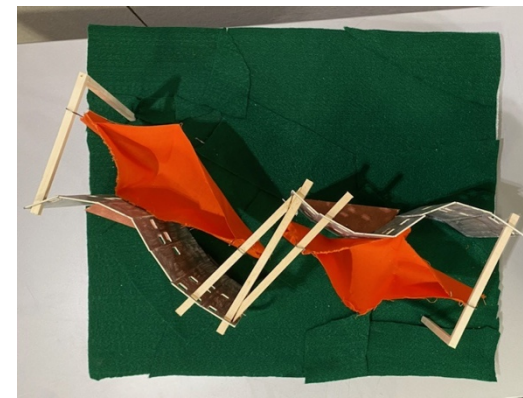


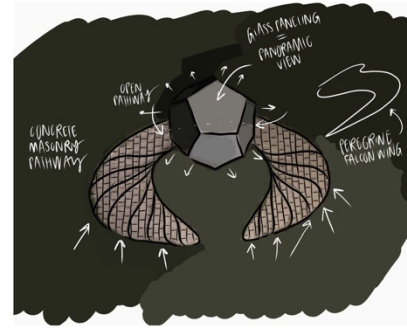
Team: Nathaniel Carter





Team: Sarah Schutz, Kathryn Sopko and Kevin Pflieger

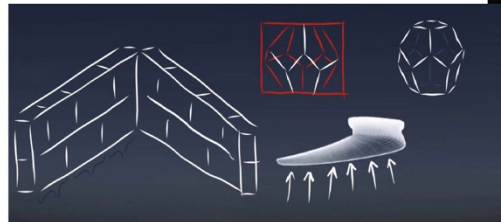
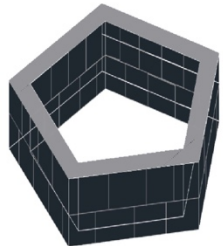




FALCON NEST

Once a falcon, always a falcon, where we soar with speed and courage. Symbolic to BGSU's iconic mascot, the peregrine falcon's wings design is relayed by two concrete masonry unit walkways situated within campus grounds. The center dwelling mimics the unconventional peregrine falcon nests which are found atop cliff edges in geometric depressions.

Glass paneling allows our user a panoramic view of the field atop the hill. The design's two separate pathways allow our users freedom to roam from the bottom to top of the hill. Inclusive to the interior, physical distancing is achievable with benches set apart with the dwelling base height of nine feet. The design is the ultimate falcon nest and achieves the sheltered experience of a subtle home away from home.



Team: Micaiah Nelson, Isiah Brewer and PaSean Wimberly

