

# Rohan Kohli

Portfolio 2021

Rohan Kohli is an *architectural* and *graphic* designer.

He holds a *B.S. in Architecture from the University of Virginia* where he was the recipient of The Faculty of Architecture Award for Design Excellence.

He's currently trying to figure things out.

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## Rohan Kohli

Architectural Designer



#### **University of Virginia**

**B.S. Architecture, Minor in Economics** 2015-2019 | Charlottesville, VA

Harvard Graduate School of Design Design Discovery, Urban Planning & Design Summer 2019 | Cambridge, MA



#### **Atelier Ten**

#### Graphic Designer

November 2019 - June 2021 | New York, NY

Managed brand identity across all US offices and produced conceptual and architectural diagrams to help illustrate sustainability strategies for concept - CA-phase project reports

#### **PROSPECT SW Architecture & Development**

Architectural Design Intern

Spring 2019 | New York, NY

Developed construction documentation and collaborated with executives on brand repositioning efforts where I was tasked with ideation schemes, precedent research, and short/long-term business development strategy

#### brightspot strategy

Architectural Design Extern

January 2018 | New York, NY

Worked closely with strategists to visualize data for a spatial redesign proposal and aided in designing a retreat for an architecture firm to reorient internal mission and goals

#### rADical Design Agency LLC

Head of Design

2018-2019 | Charlottesville, VA

Oversaw standards of design quality across all projects of the firm and maintained up-to-date education for designers on the latest graphic / user interface trends



#### **Foundations in Design Thinking**

**Teaching Assistant** 

Spring 2019 | Charlottesville, VA

Guided students in developing their own design processes and instructed several workshops on research methods, data visualization practices, and technical softwares



#### The Faculty of Architecture Award for Design Excellence

Spring 2019 | University of Virginia

#### **Student Leadership Award** Spring 2019 | The 21 Society

#### Certifications & Skills

#### **LEED Green Associate**

November 2020

#### Software

Adobe Creative Suite Rhinoceros 6 Grasshopper AutoCAD Revit SketchUp

#### **Fabrication**

Model Making 3D Printing Concrete Fabrication Sketching

#### Languages

English (Native) Hindi (Limited) French (Limited)

## **Atelier Ten**

Architectural Graphic Design Work

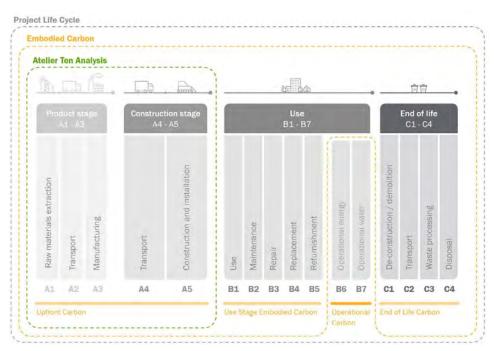


Serving as the primary graphic designer for all of Atelier Ten's US offices, I was responsible for building diagrams, infographics, and drawings for client projects while also upholding the firm's brand identity and online presence.

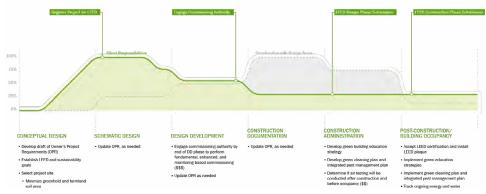
Using Atelier Ten's well known graphic language, I produced internal and external facing diagrams which visualized sustainability concepts,

proposed architectural design strategies, and project-specific administrative information. A variety of final graphics which I produced have been used as marketing collateral for both Atelier Ten and clients we have collaborated with.

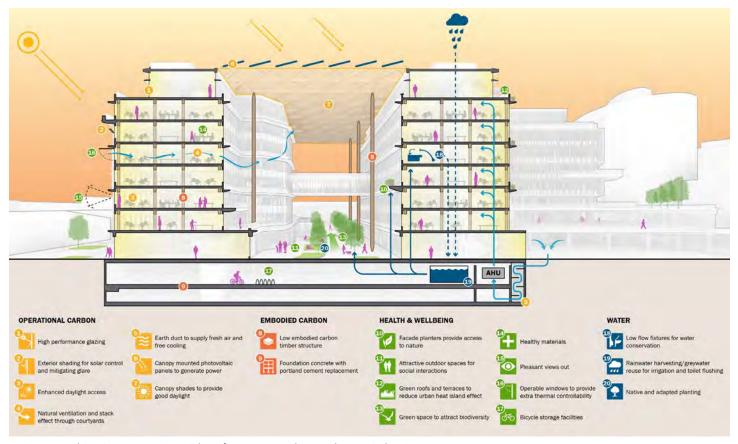
The assortment of graphics encapsulate both architectural and conceptual diagrams I produced during my time at Atelier Ten.



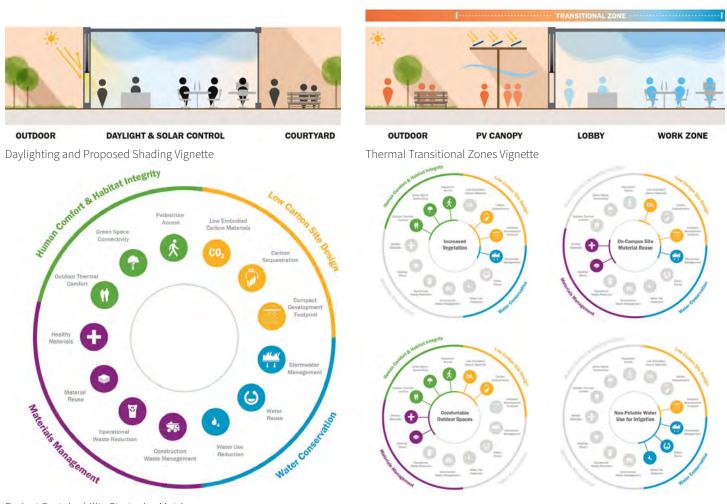
Atelier Ten Project Phase Scope + Embodied Carbon



Achieving LEED certification Timeline

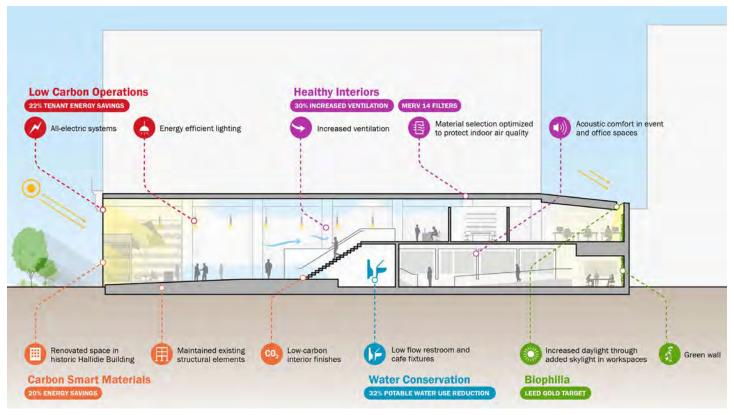


Environmental Section Perspective: High Performance Envelope and Mass Timber Structure

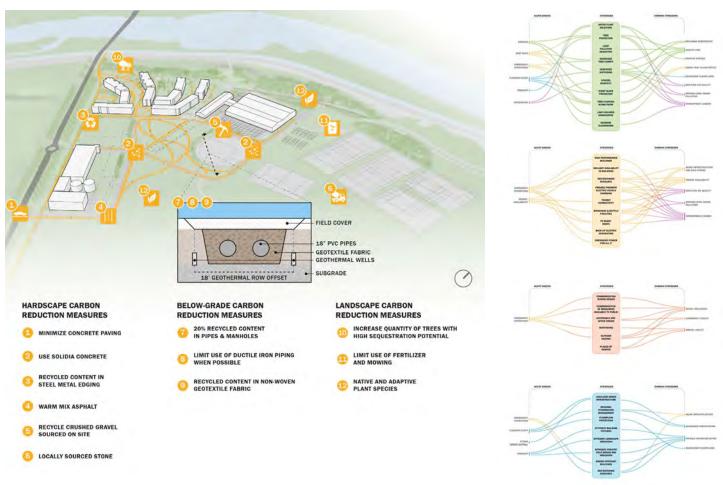


Project Sustainability Strategies Matrix

5

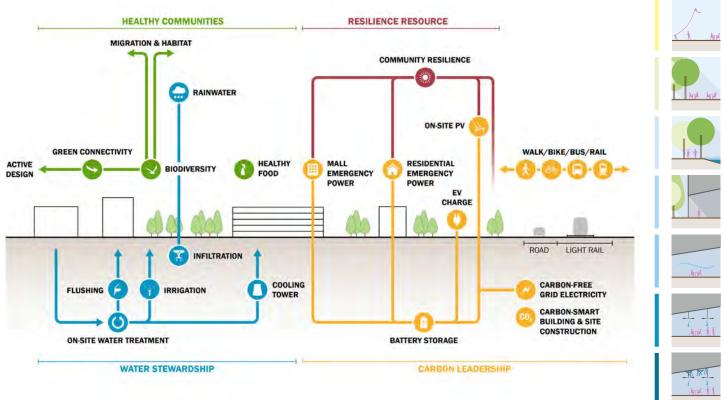


**Environmental Section** 

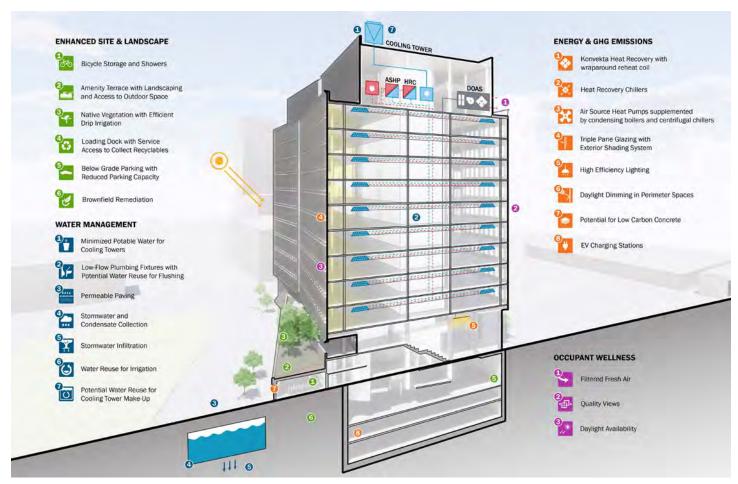


Masterplan Perspective: Embodied Carbon Reduction Strategies

Sustainability Strategies Alluvial Diagram Set



Masterplan Concept Section: Sustainability Flows



Environmental Section Perspective: Proposed HVAC System Design

## Watan

A Study of the South Asian American Diaspora & A Case for Spatial Identity Development at UVA

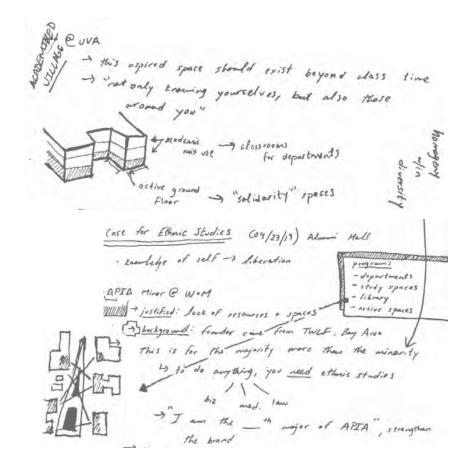
Thesis Studio Spring 2019 Within the United States, there is an increasingly growing number of South Asian migrants. As these individuals begins to take root - and have been taken root since the early 20th century - the generations to come have found themselves in limbo between two lives.

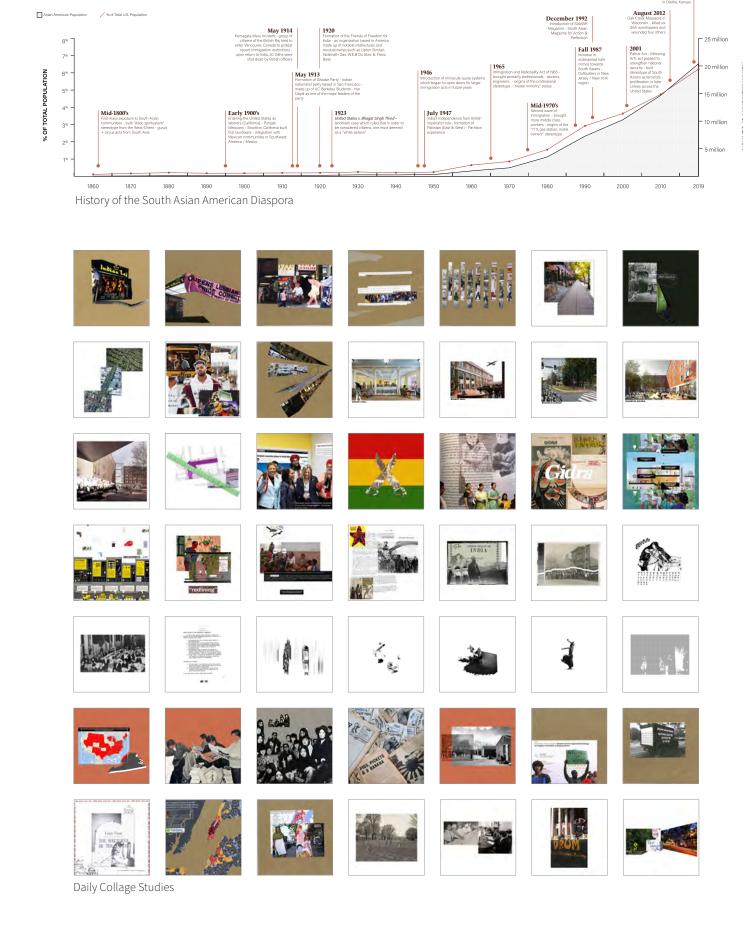
The goal of Watan is to explore and understand the ways in which South Asian American identities form and to provide a framework, system, or guide to cultivate, maintain, and cohesively mobilize generations to come.

Through daily collage studies, Watan seeks to understand the history of South Asian American community development and begins to interrogate the societal structures which have maintained an existing status quo at the University of Virginia.

The Watan Master Plan on Brandon Avenue is a conceptual programmatic proposal to build a strong and unique environment for various marginalized groups at the University of Virginia.

By finding homogeny within diversity, the plan allows individual identities to form in their own respective spaces while encouraging interaction amongst those new identities.



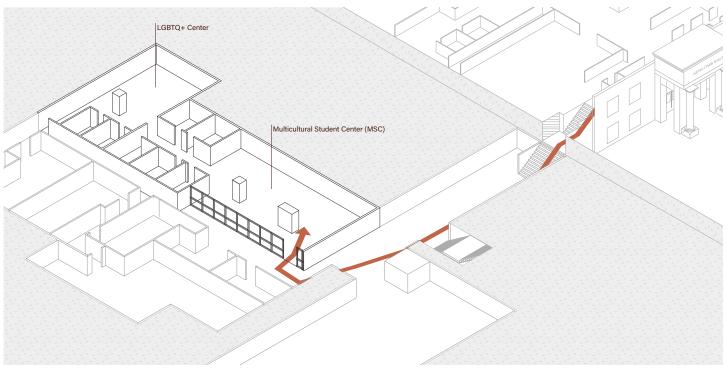


## **Analysis: Existing Student Resources**

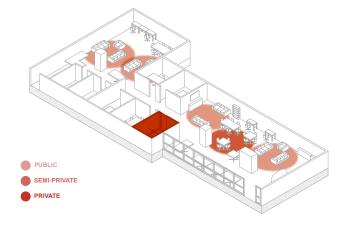
The Multicultural Student Center (MSC), opened in 2016, seeks to build collaborative spaces for underepresented minorities at the University.

Since its creation, the MSC has been a key player in helping to build a united front across various ethnic backgrounds through its consistent presence on Grounds, and support of different student body activism.

The LGBTQ+ Center, opened in 2001, provides a safe space for historically marginalized sexual and gender minorities at the University. It also is a central institution to raise awareness & inclusion across Grounds for these minorities.

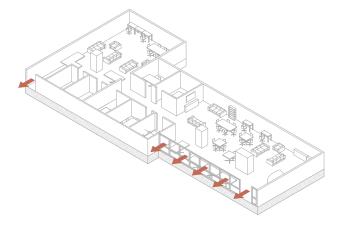


The Multicultural Student Center (MSC) & the LGBTQ+ Center in Newcomb Hall at the University of Virginia



## **Spatial Programs**

The cramming of various spatial programs into a small area makes it difficult for various programs to be utilized at a singular point in time.



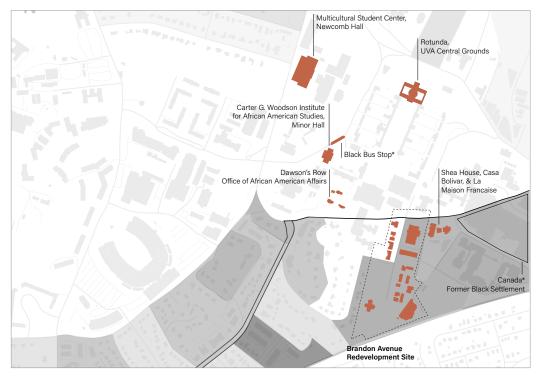
## Permeability

The inability for visitors of Newcomb Hall to quickly find the Multicultural and LGBTQ+ Centers is further emphasized by the lack of visibility directly into those spaces.

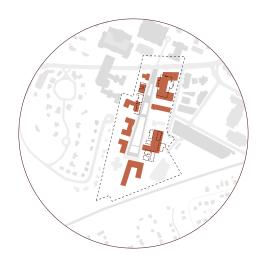
#### Analysis: Brandon Avenue Site Redevelopment

Considering its prime location relative to Jefferson Park Avenue, a residential hotspot primarily for East, Southeast, and South Asian students, its proximity to language & culture houses, and its existence

upon Canada - a former free black settlement, the Brandon Avenue Redevelopment is considered to be the most optimal location for the planning of an ethnic neighborhood. Within the Watan Master Plan, the allocation of space for cultural student centers, a library & resource center, and activities buildings all help to promote identity development spaces at the University.

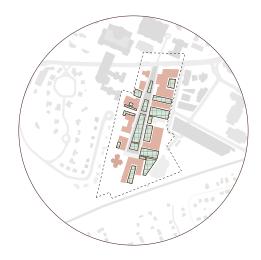


Identity Development Spaces at the University of Virginia



## **Building Additions and Subtractions**

The redevelopment seeks to remove smaller buildings and large parking lot space and construct larger housing and academic mixed-use buildings, allocating active ground space for commercial use.

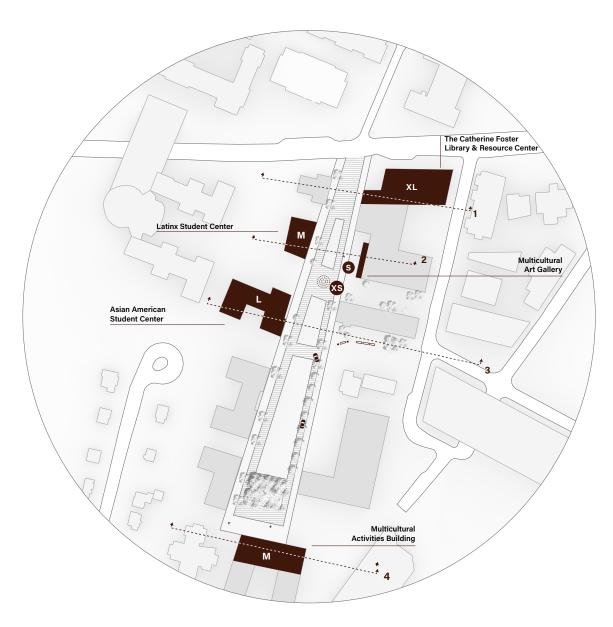


## Green Space Availability

With the implementation of the new Brandon Avenue Redevelopment project, the University hopes to expand the amount of public green space into the creation of a green corridor with the larger Lawn region of the campus.

## Proposal

The Watan Master Plan is an addition to the Perkins + Will Master Plan which dedicates the business-intended active ground floor spaces for "identity development spaces" - those which help to stimulate and strengthen the unique individualities of nontraditional students. By congregating all of these spaces in one area of the University, the Master Plan promotes the development of a united front in the battle against white supremacy and discriminatory practices in the larger Charlottesville community



#### **Programmatic Recommendations**



Public Art Installations, Urban Interventions, Outdoor Exhibitions



Workshop Spaces, Art Studios, Large Lecture Halls



Art Exhibitions, Coffee Shops, Prayer Rooms



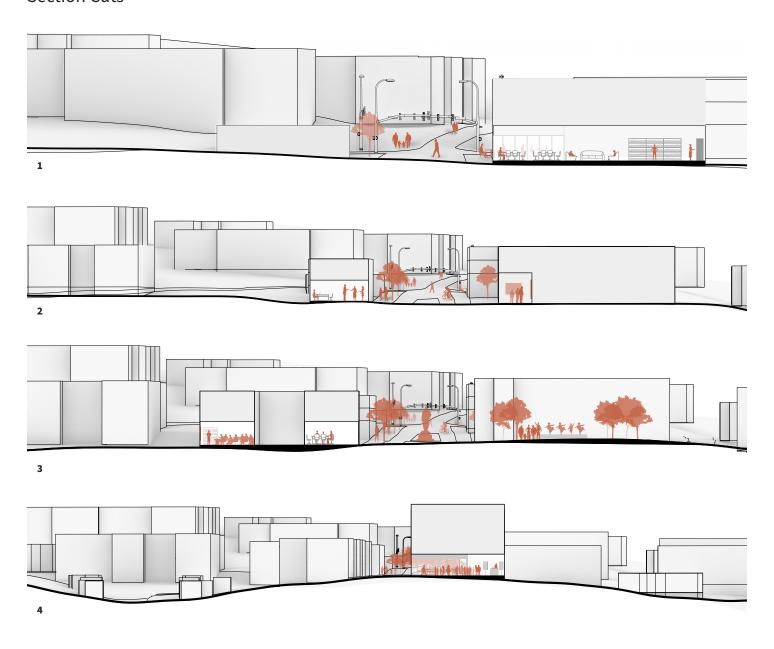
Libraries, Multipurpose Rooms, Event Spaces, Auditoriums



750-3000 ft<sup>2</sup>

Ethnic Studies Offices, Classrooms, Study Areas, Social Spaces

## **Section Cuts**



# Collage Renders





## **AV Hill Initiative**

Designing for Fleets of Shared Automated Vehicles

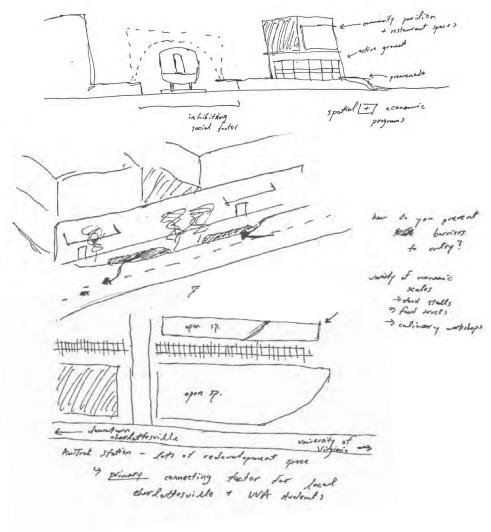


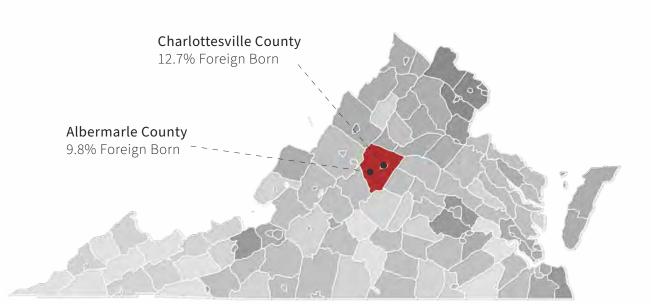
The AV Hill Initiative is a spatial programming proposal designed to build a more cohesive community for all by simultaneously providing various economic opportunities for underprivileged demographics. In preparing for the inevitable implementation of mass automated vehicle (AV) systems, the initiative seeks to conduct social change through a juxtaposition between culture and technology.

The program seeks to alleviate these social disparities in four parts:

providing educational culinary workshops for Charlottesville immigrants, creating a scalable business mode of entries to maximize the business market, developing a rentable AV market, and promoting a pedestrian village that connects university students with the local community.

By using cuisine as a resource to bring civic engagement between communities, we are capable of bringing a more intimate and uplifting center for an entire populous.







Foreign Born Population Density

African American Population Density

Foreign Born in Poverty Population Density



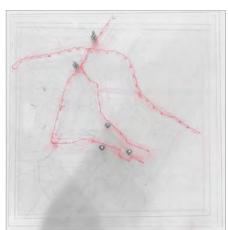
White Population Density

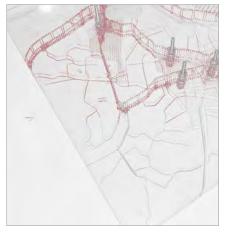
## Site Research: Charlottesville & Urbanized Albemarle



#### **Boundaries & Frontiers**

- 1. Route 29
- 2. West Main Street
- 3. Preston Avenue
- 4. Route 250
- 5. AmTrak Railroad

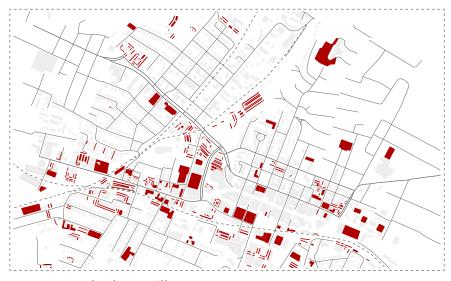




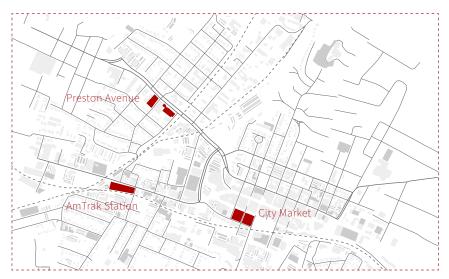
Boundaries & Key Sites Model Study (Etched Plexiglass & Threaded Yarn)



**Urbanized Albemarle**Parking Lot Area Distribution

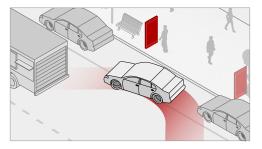


**Downtown Charlottesville**Parking Lot Area Distribution

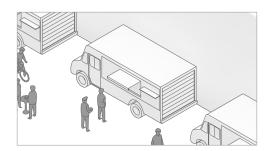


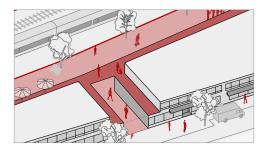
**Downtown Charlottesville** Key Redevelopment Sites

#### **Programmatic Proposal**









#### Rentable Private Automated Vehicle (AV) Market

One of the primary hinderances for underpriveleged socioeconomic classes to seek out better job opportunities is the lack of reliable transportation. Given the diminishing importance of parking lots with the implementation of AV's, a new market would generate in which private owners of AV's would rent their car out for a reasonable price to those of lower economic statuses, allowing them to travel directly and reliabily to potential new job centers.

#### **Culinary Workshops**

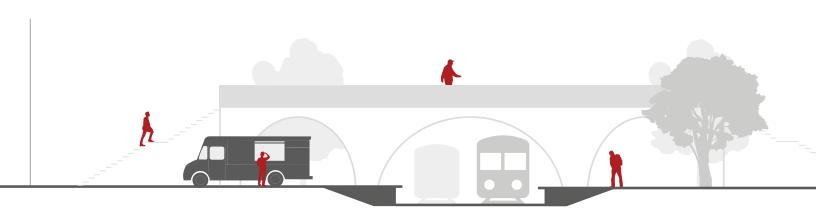
As AV technology advances, there will be a push for alternative job opportunities. Utilizing existing buildings or constructing new ones, vocational workshops can be conducted in order to build a workforce centered around new skills. Using foreign cuisine as a driver not only for economic advancement but also to diversify the culture of Charlottesville would emphasize programs centered around the culinary arts.

## Variety of Economic Scales

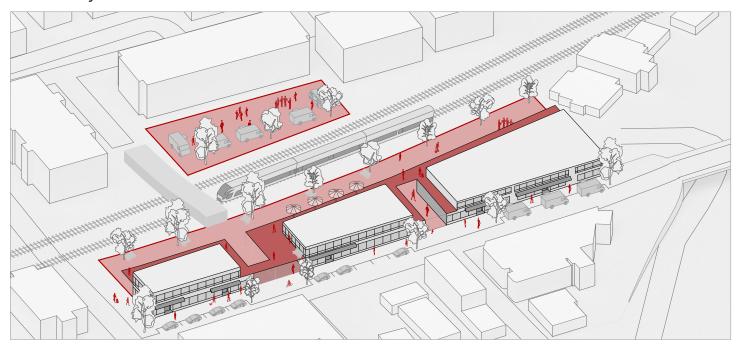
A hinderence in seeking alternative forms of employment is the high barrier of entry for a new job field. In order to fix this concern, the site should provide various economic scales to incorporate a broader demographic range. An example of this is the simultaneous implementation of temporary and the permanent business spaces.

## Pedestrian Villages

Utilizing the key boundaries across Charlottesville and Urbanized Albemarle, multi-use centers would be implemented at first to foster a sense of community amongst our diverse set of residents. Not only will these regions allow for increased exposure and interaction between various socioeconomic classes, but will also create more intimate scenarios amongst visitors through the promotion of walking over driving.



## Case Study: Amtrak Station



#### **Massing Diagrams**



Connecting Communities
Identify the various
communities the initiative
is attempting to connect
and thus apply it to the

programming of the site



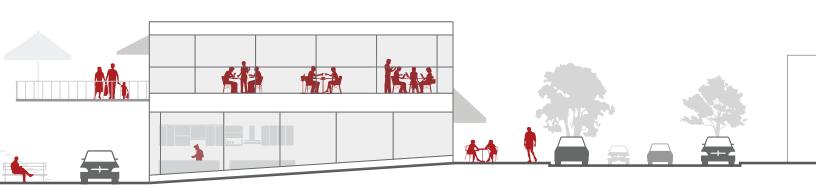
Unique Site Features
Prioritize all inherent
features of the site and
either utilize them as tools
or overcome them as
obstacles to fit community
in question



Framing Frontier
Delineate spatial
circulation of the site while
also framing important
features to reclaim the
boundary as a frontier.



Varying Spatial Block Sizes Incorporate different sizes of programmatic blocks in order to construct a versatile site which adapts to its environment



## **Warehouse District**

Permeating the Industry Buffer of East Cambridge

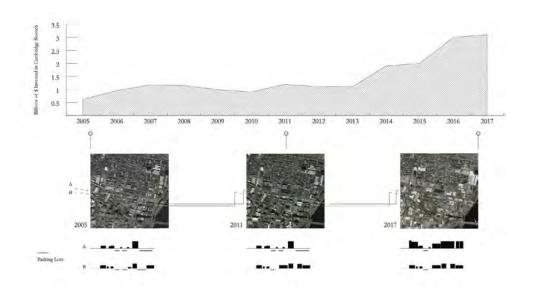
GSD Design Discovery Summer 2019 The Warehouse District is an urban design proposal which looks to transform the Eastern Cambridge light industry buffer into a mixed-use focal point of affordable housing units and street retail boutiques in an attempt to combat the growing city-wide housing crisis and create a destination point for residents, employees and visitors alike.

The site was identified by a deep analysis of Boston's Transferrence Development Rights Regions - areas whose intention is to preserve primarily residential areas from encroaching industry and business.

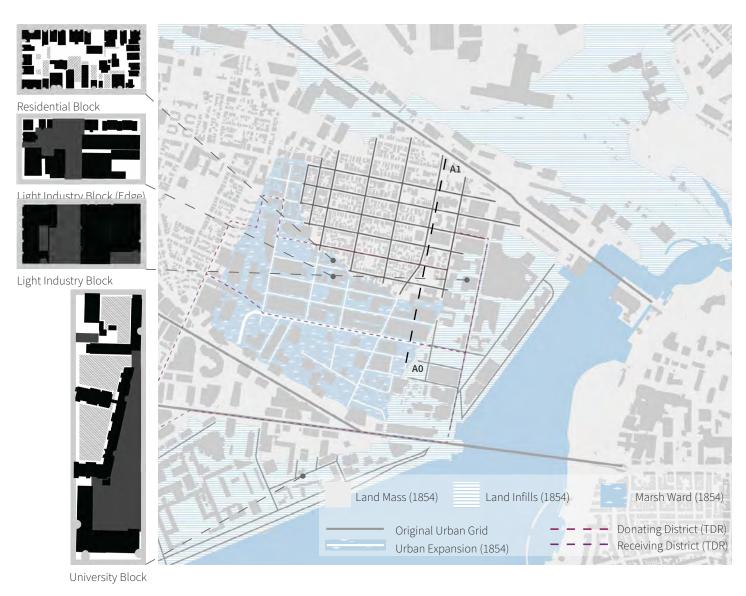
The mid-19th century saw an industrial boom in the region, requiring a lot of recently land-filled waterways to be allocated for manufacturing processes. Today, these blocks are repurposed for biotech & software companies.

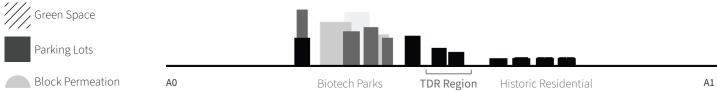
As a way to protect the historic northeastern residential neighborhoods, TDR regions have been deployed which allocate light industry warehouses to act as a buffer between the biotech hub and the neighborhood. These districts, however, fail in properly integrating these block typologies as they continue to favor the industry rather than the residents of the historical neighborhood.

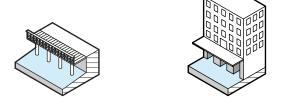
The Warehouse District proposal is comprised of three complementary facets - a repurposed street retail core flanked by an intermixing of housing and office & research complexes. By understanding the large opportunities available in the region - both with the existing structures and the large number of parking lots - this region is an ideal development site for a hub that can address problems at a local and city-wide scale.

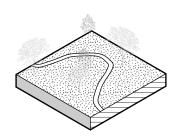


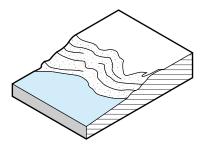
Block Typology Analysis



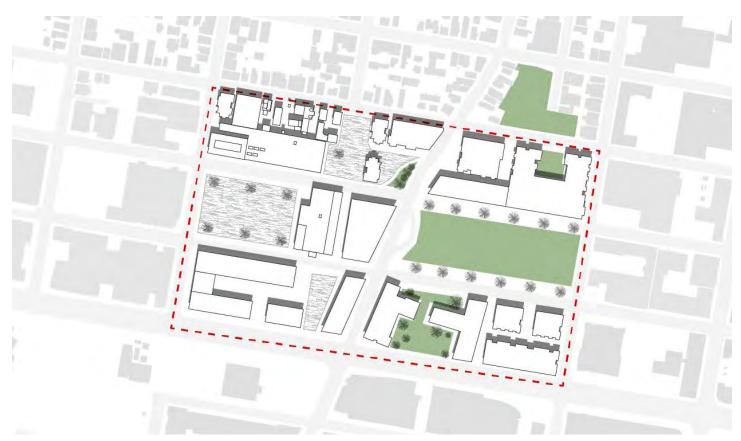








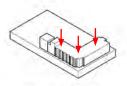
Riverfront Block Typology Analysis



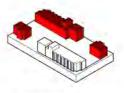
Final Site Plan



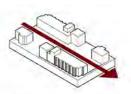
Activate Interior



Rescale Footprints



**Densify** Perimeter

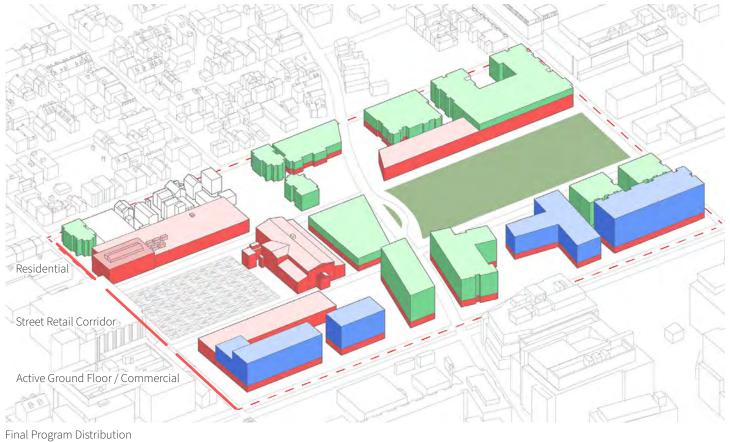


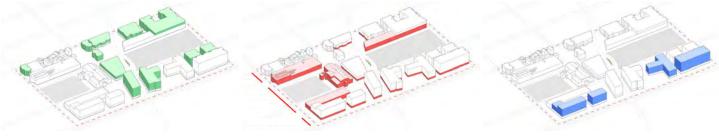
Emphasize Permeability

Block Design Strategy



Permeability Analysis

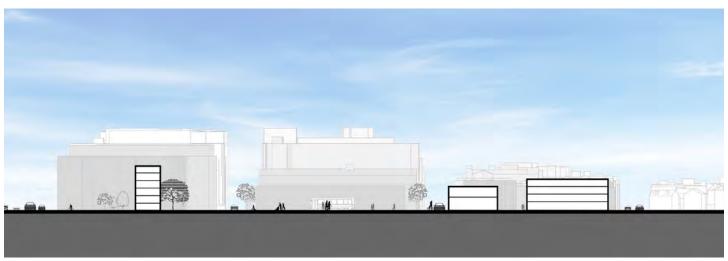




Affordable Housing Units

Street Commercial Core

Large Commercial/Biotech



Concept Section

# **Studio Complex**

Residential Housing Complex Design



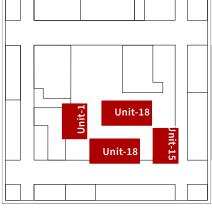
The city of Lynchburg, Virginia is in a state of transition. Its makeup remains strongly divided between its identities of history and a necessity to thrive economically. This is primarily evident in the disparity between Main Street and Jefferson Street - the former represents its original role as the center for commercial activity within the city and the latter has taken form as the newly forming competition for retail and entertainment.

Dividing these streets is Commerce Street – a road primarily lined with empty parking garages, originally intended to serve consumers shopping on Main Street. Currently, Commerce Street acts solely as a means of navigation through Lynchburg's urban environment.

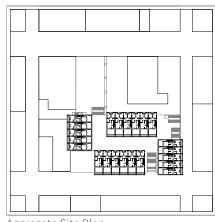
The Studio Complex seeks to alleviate the disparity between Jefferson Street and Main Street by reconsidering the role of Commerce Street. Sitting atop an existing parking garage on the block between 10th and 11th Street, the complex provides a new circulatory method that not only provides additional housing and commercial space but introduces the visitor to new insights of the historic city.



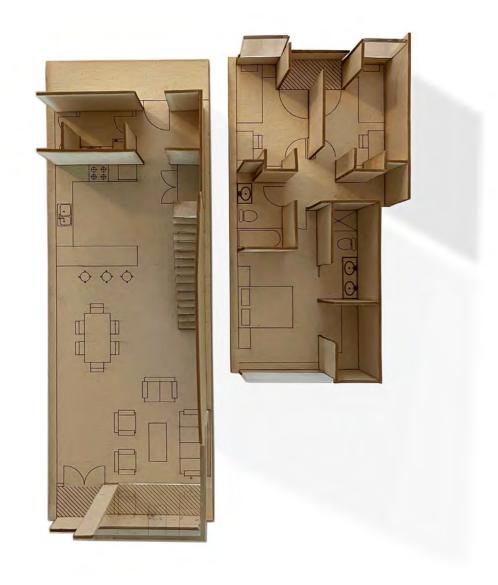
Parking Lot Row Distribution



**Building Footprint** 

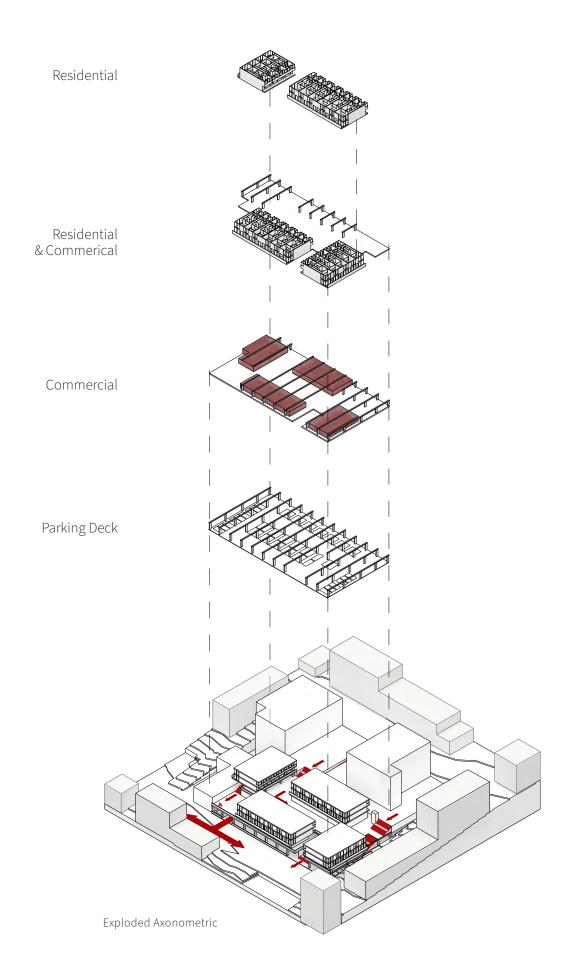


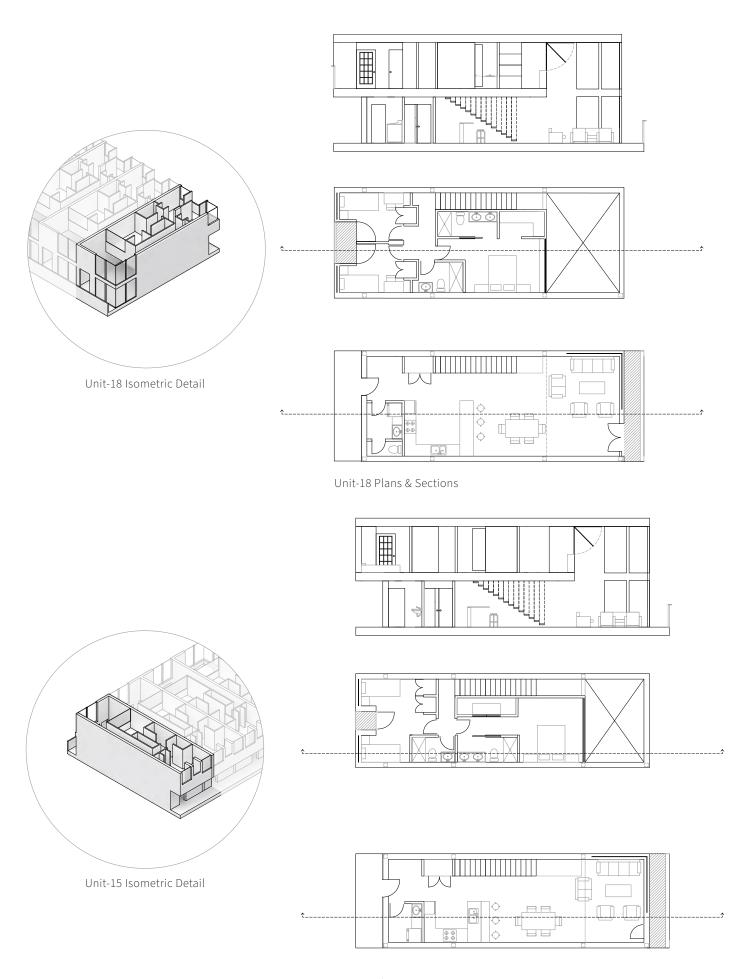
Aggregate Site Plan





Unit-18 Model (Chipboard & Plexiglass)





Unit-15 Plans & Sections

## **Hillside Platforms**

Customizable Concrete Fabrication Systems

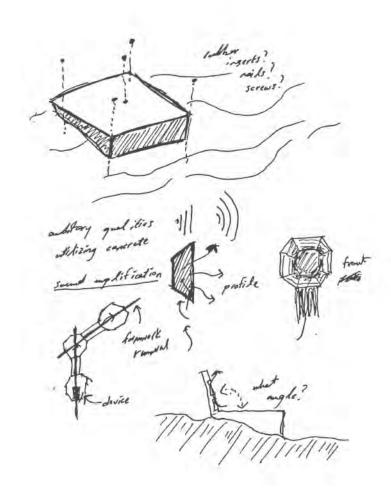


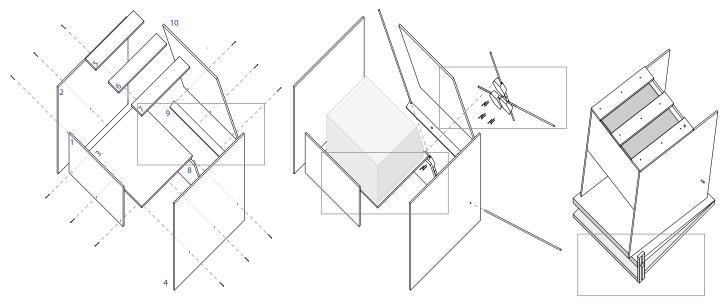
Hillside Platforms is a customizable concrete lounge chair fit to any desired topographic slope as well as in creating a natural sound amplification system.

To create the sound system the interior formwork pieces are placed strategically within the head rest of the chair to allow amplification to run from a user's phone up to their ears. The interior formwork pieces consist of dovetail jointed tunnel parts along with tapered hexagonal-

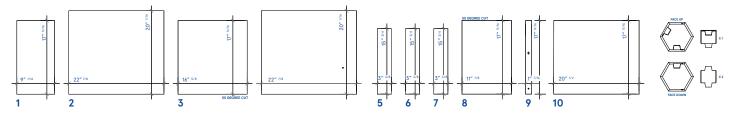
shaped amplifiers which release with the exterior formwork once rods are removed.

To fit the topographic slopes desired, the wedge system works by matching the grade of the slope measured. In this sense, the piece can be customized to sit downhill or uphill, dependent on the specific site conditions and which view the user would like to have. The formwork uses foam in order to make the piece lighter and therefore easily movable on site.

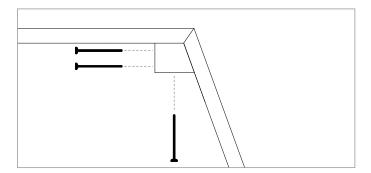




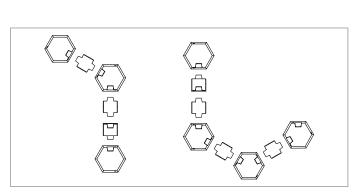
Formwork Assembly



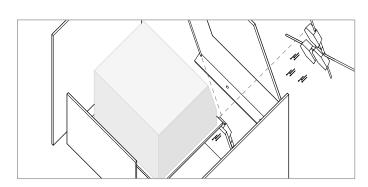
Formwork Part List



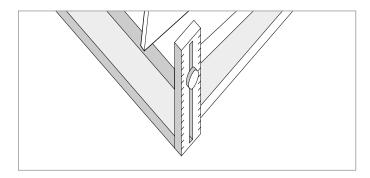
Mitered Edge Detail



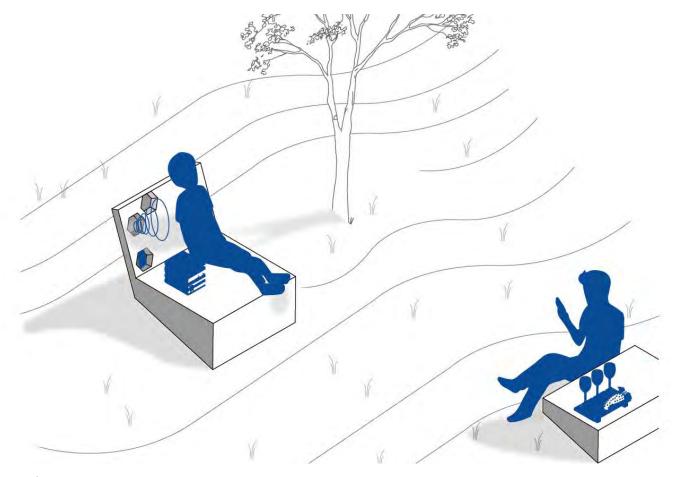
Audio Tunnel Layouts



Foam Insert to Minimize Concrete Use



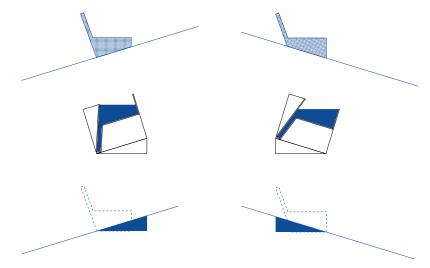
Topographic Wedge



Conceptual Design Axonometric



Concrete Pouring Instructions



Pouring Technique Relative to Landscape Topography



Formwork Disassembly



Final Design on Site at the University of Virginia



Final Design on Site



Final Design Side Profile

## Questioned

Black//Blue: Exhibition Documenting the Work & Impact of Carter G. Woodson



Carter G. Woodson was a scholar of black history who argued in his magnus opus, The Miseducation of the Negro, that black bodies are being culturally indoctrinated through our American education system to believe they are racially inferior to whites. Mr. Woodson has had a profound impact on our higher education institutions and the fundamental methods of teaching.

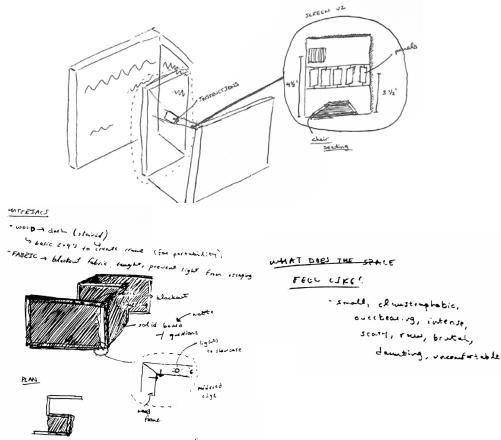
Since then, progress has been made. But to claim our environment is progressive is naive. Instead, we must acknowledge the shortcomings of today to create a stronger tomorrow.

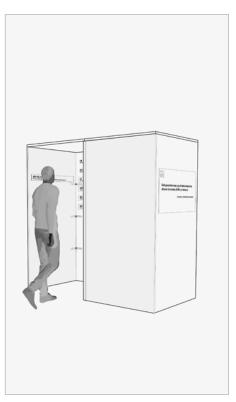
The Questioned exhibit sets the foundation of progress through

engagement in critical discussion. Two visitors enter and are greeted with a series of

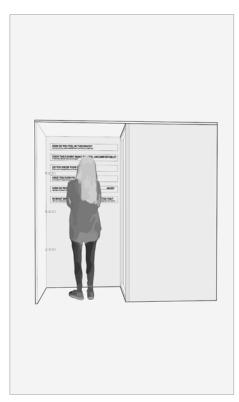
leading questions. They are left to engage in a discussion which elaborate on their initial answers. The screen which divides the space seeks to aid these talks in two ways - by forcing the individual to ask themselves these questions and to allow a degree of anonymity when asking them to another.

By entering the space, the visitor is agreeing to be truthful and open. One must be strong in their convictions so as to convey them to others but cautious enough so pride does not get in the way of acknowledging shortcomings.







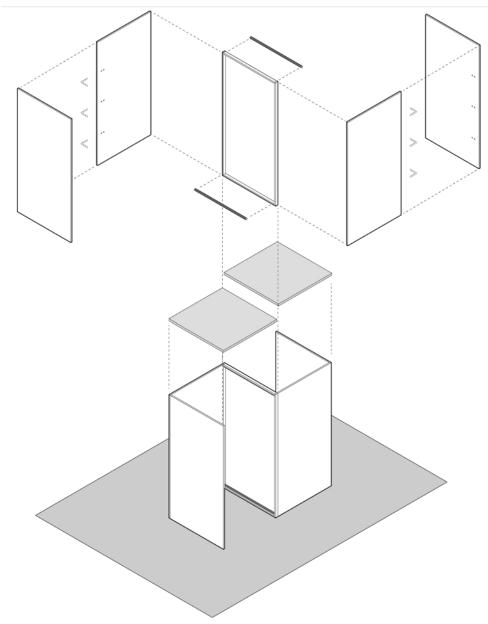


**Experiential Vignettes** 

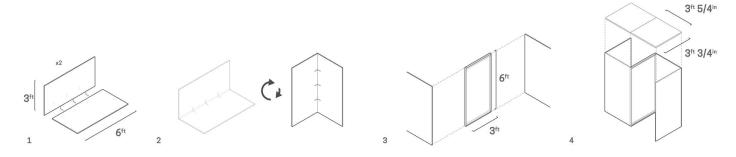
HOW DO YOU FEEL IN THIS SPACE?  How has what you experienced different from what you expected?
DOES THIS EXHIBIT MAKE YOU FEEL UNCOMFORTABLE? In what ways? Do you feel a sense of guilt?
DO YOU KNOW YOUR OWN HISTORY? What is your heritage? What are the alternative histories?
HAVE YOU EVER FELT LIKE A TOKEN? An outsider? A target of judgment because of your own race?
HOW DO PEOPLE SPEAK ON YOURNESS?  How does this affect the ways in which you navigate your environments?
IN WHAT WAYS HAVE STEREOTYPES AFFECTED YOU?  How have existing social infrastructures affected the way you see yourself in comparison with others?
ARE YOU COMPLICIT? Do you turn a blind eye to your surroundings? Do you address wrong when you see it?

**Guiding Discussion Questions** 

# HOW DO YOU FEEL IN THIS SPACE? How has what you experienced different from what you expected? WHAT DOES MISEDUCATION MEAN TO YOU? How can you take the words of Mr. Woodson's texts and apply them in a modern context? DO YOU LIKE THE TERM "PEOPLE OF COLOR"? What about other categorizing terms? ARE WE RIGHTEOUS? How ambivalent are we, as a society? Do we rationalize wickedness as a by-product of "progress"? WHERE DOES YOUR POWER ORIGINATE? What factors have contributed to your status? What factors have hindered your success? WHAT DOES WHITE SUPREMACY MEAN TO YOU? What are some examples of white supremacy? ARE YOU COMPLICIT? Do you turn a blind eye to your surroundings? Do you address wrong when you see it?



Exploded Assembly Axonometric



Assembly Instructions



Final Design: Interior Space



Final Design: Exterior



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Final Design: Details

wahaan kaun hai teraa, musafeer, jaayegaa kahaan?

there is no one of your own, oh traveller, where will you go now?