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## Flourish: Combating Food Insecurity & Promoting Wellness on a College Campus

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# FLOURISH

COMBATING FOOD INSECURITY &  
PROMOTING WELLNESS ON A COLLEGE CAMPUS

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VIRGINIA COMMONWEALTH UNIVERSITY  
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SPRING 2021



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Spring 2021

This thesis is submitted in partial fulfillment of the  
requirements for the degree of Master of Fine Arts at  
Virginia Commonwealth University.

**“Recognizing the need is the primary condition for design.” – Charles Eames**

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# DECLARATION

I've always believed that well designed environments can awaken in us a sense of deep purpose or profound meaning.

Thoughtfully designed spaces help us to discover, imagine, learn, create, reflect and heal.

Great spaces encourage connections between people and ideas.

As designers, it is our responsibility to form spaces that respond to human needs.

The human spaces we create are the summaries of our passion and work.

We have the power to create spaces that shape the human experience, and that is truly a joy and opportunity of a lifetime.

## DESIGN ETHOS:

### WELLNESS

In design, wellness is the art and science of creating built environments with socially conscious systems and materials to promote the balance between physical, emotional, cognitive, and spiritual wellbeing. Human health, wellbeing and comfort should always be key design considerations that support a foundation rooted in sustainable design practices.

### SOCIAL IMPACT

Design can be used to heal, sustain, and empower communities. From providing affordable housing to creating more equitable public spaces, the ways in which designers can help are abundant. Social impact design should aim to address complex challenges through a community-driven approach that places the public interest at the heart of the design process. Designers should incorporate elements of social and environmental justice and engage with the community to ensure many voices shape the project.

### SUSTAINABLE

Sustainable design should seek to reduce negative impacts on our environment, and the health and comfort of building occupants, thus improving building performance. The basic objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments. Sustainable design principles should include the ability to optimize site potential, use environmentally preferable products, protect and conserve water, enhance indoor environmental quality and optimize operational practices.

### INCLUSIVE

Inclusive design is about cultivating places everyone can use. Design should always be judged by whether or not it achieves an inclusive environment. Good design should reflect the diversity of people who use it and not impose barriers of any kind. To accomplish this, designers should look at a number of demographic factors: age, gender, sexual orientation, education, income, religion, cultural beliefs, ethnicity, language, physical capabilities, and mental health. All of these factors can impact how an end user experiences a space.

### CREATIVE

Design should foster creativity. The Ancient Greek Agora, 18th Century British teahouses and early 20th century Parisian cafes have one thing in common, they were some of the most creative spaces in the world at their time. Inventors and scholars, such as Socrates and Edison, exchanged ideas in these spaces, argued about morals, and discussed technologies. These spaces were referred to as the "third place", environments separate from home or work, where people from different fields collided and sparked new ideas.



# RESEARCH

# ABSTRACT

## MOTIVATION

In the past, it has been assumed that students enrolled in college are fairly privileged individuals unlikely to face challenges associated with poverty (Haskett et al., 2020). That assumption has been challenged in the past few decades and a survey released last year by the Hope Center for College, Community and Justice indicated that 45% of today's higher education students face food insecurity (Goldrick-Rab et al., 2019). According to VCU's Dean of Students Office, it is a situation in which a student lacks access to enough nutritious food in order to live a healthy, active life. Food insecurity can negatively impact a student's academic, personal, physical, mental, and social ability to thrive (Daugherty et al., 2019).

## ISSUE

Food insecurity is the limited or uncertain availability of nutritionally adequate and safe food, or the ability to acquire such food in a socially acceptable manner (Payne-Sturges, 2017). This growing health concern has received more attention recently and the number of food pantries on college campuses has increased in response to student food insecurity. However, only a small percentage of food insecure students are actually visiting food pantries and the main barriers to food pantry use are social stigma and embarrassment (El Zein et al., 2018). Food insecurity solutions should be discreet, protect student confidentiality and work to alleviate stigma (Henry, 2017). The need exists for a space on campus that fosters health by providing nourishment and other vital wellness support to cultivate student success. This facility should welcome and support all students in order to avoid isolation or stigma. Design should help to create a sense of dignity for students and raises the question of how an interior environment can be convenient, comfortable, and cater to differences in student population regarding food security?

## METHODS

Research includes case studies of wellness initiatives and centers across college campuses. Interviews with VCU faculty and students that provide insight on feeding student hunger and promoting healthy living were conducted. An understanding of current university efforts to combat food insecurity was attained by researching current VCU student affair initiatives. A literature review about how design can influence student perception of healthiness of dining halls provided insight on factors that impact eating behaviors and food choices.

## RESULTS

Studies of teaching kitchens show that they can be viewed as learning laboratories for life skills—incorporating nutrition education, mindfulness training, movement/exercise, and personalized health coaching (Eisenberg, 2018). Preliminary observation of current university efforts to fight food insecurity reveals the presence of a food pantry but access is limited to in-need students only. Observation of dining hall studies concluded that simple signage interventions may be effective to encourage healthy eating behaviors in a college dining setting (Schindler-Ruwisch & Gordon, 2020). Examining the association between food literacy and security showed that focusing on improving food self-efficacy and skills may help people develop resilience and manage food insecurity better (Begley et al., 2019).

## REFLECTIONS/CONCLUSIONS

This research led to the exploration of a food hub for VCU students that aims to alleviate the presence of food insecurity, increasing healthy food options and education on health topics. A teaching kitchen demonstrates basic nutrition concepts and cooking skills to students, allowing students to develop longterm healthy habits and skills. A healthy dining café offering exclusively fresh, wholesome foods makes healthy meal choices a more accessible option. A market replaces the idea of a traditional campus food pantry and gives all students access to fresh and nutritious foods, avoiding isolation and stigma. Design can make meaningful differences in the lives of college students and has the ability to influence dignity and comfort in higher education environments.



# LITERATURE REVIEW

**Encouraging a healthy transition into adulthood during college is a valuable approach to increasing wellness and health for many developing adults. Therefore, universities have an opportunity to influence student health while also addressing possible barriers to student wellness overall.** The World Health Organization defines wellness using two concerns for an individual: (1) realizing one's fullest potential and (2) fulfilling one's role expectations. Both concerns are dependent on many factors including physical, psychological, social, spiritual, and economic characteristics. Wellness programs on college campuses need to provide support for all of these factors to facilitate lifelong wellness among emerging adults. A focus on the physical elements of wellness programs on college campuses often includes nutrition, physical activity, and stress management (Christianson et al., 2019).

Even though nutrition is one of the key pieces of wellness, not enough college students have the proper knowledge regarding nutritional guidelines and end up falling short of the US Dietary Guidelines for fruit and vegetable intake. **Research has found supporting evidence that links adequate student fruit and vegetable intake to an overall increase in both health and quality of life. Protein, refined grains, solid fats and added sugars are over-consumed.** This overconsumption of non-nutrient rich foods combined with low fruit, vegetable, and fiber intakes contributes to major health challenges including obesity, cardiovascular disease, high blood pressure, type 2 diabetes, some cancers, and poor bone health (Kolodinsky, 2007). However, these negative health outcomes may be preventable with adequate nutrition and physical activity.

While numerous studies have evaluated the dietary patterns of college students, the majority of research in this area has targeted traditional

students. There is limited data, however, about non-traditional groups such as first-generation students. First generation college student populations (as defined by neither parent having a college degree) differ from traditional college students in several ways. They are more likely to be ethnic minorities, working while attending school, taking care of other family members, and come from a lower socioeconomic background (Gorgulho et al., 2012). These unique characteristics, along with additional challenges including limited budgets and busy schedules, put first-generation students at risk for nutrition compromise. **Therefore, effective nutrition interventions must be created that are feasible while considering the constraints of finances and time for all kinds of college students.**

Physical activity is another component of wellness known for benefiting college students' overall health. **Similar to nutrition recommendations, many students fall short of exercising on a daily basis.** Most college students report exercising less than 3 days during the week and students older than 20 years old report participating in less physical activity than those 19 years and younger. Balancing time to relax, socialize, and complete academic responsibilities is reported as one of the main barriers for students looking to achieve and maintain a healthy weight. In addition, a study addressing weight-related behavior change reported that students were looking for greater support from others to find the motivation to exercise. This observation suggests that college campus wellness programs may have a prominent role in promoting and implementing recommended physical activity habits (Christianson et al., 2019).

Understanding the motivations to exercise in the college-age population is key to increasing physical activity in this population. One study suggests different programming strategies would be beneficial to address variations that exist according to age, sex, and race. It recommends health professional design and implementation of sex-specific and race appropriate programs that would motivate students to adopt a more active lifestyle. These strategies could consist of population specific physical activity courses. It also suggests that having similar social group classes can have an impact on exercise adherence rates. Thus, classes that are gender specific (female body conditioning class or male Olympic weightlifting class) may produce higher exercise motivation levels. Moreover, it also proposes that age should be considered when developing exercise programs. So, creating programs and classes that are geared toward the current millennial generation may enhance exercise adherence. It contends that colleges must be mindful with the changing times and offer activities that attract and meet the needs of the current generation. Health educators that are mindful of these differences can promote physical activity within these groups in a more effective manner (Egli et., 2011).

Another element of wellness is stress management. Besides nutrition, stress is another area of wellness where college students lack knowledge. Fifty-two percent of college students have high levels of stress. **High stressors are negatively correlated to both college students' body mass index and quality of life.** Students associate these high levels of stress with the instability that occurs while adjusting to living life on one's own during emerging adulthood. Freedom from parental control can sometimes cause increased stressors, but it also presents an opportunity for students to explore their own values and identity. With the right tools and knowledge,

students may be able to avoid unnecessary stresses associated with emerging adulthood. They could use their college years to grow and learn as individuals to embrace a healthy lifestyle during the college experience. (Christianson et al., 2019).

**Although the effects of college student stress and associated physical and emotional issues have been studied for quite some time, college students today are facing an increasingly difficult variety of challenges that those who came before them may not have encountered.** College students report their most frequent stressors to be changes in sleeping and eating habits, taking on new responsibilities, increased workload and multitasking, financial difficulties, and social pressures. Additionally, contemporary students are dealing with the fast-paced and sometimes overwhelming stimulus of technology, the economic downturn with associated financial stressors, and worries about student debt and future employment. Furthermore, boundless access to technology may give students a false sense of control over their lives when answers are often provided by the touch of a screen, leaving some students ill-equipped to cope with life circumstances they cannot control and technology cannot solve. Many college students use poor coping skills and engage in unhealthy activities such as turning to alcohol or other dysfunctional coping such as withdrawal and excessive sleeping. Poor coping skills and associated mental health issues may have serious consequences including suicide which is the third leading cause of death among young people ages 15–24 years and the second leading cause of death among college students. **Given these important concerns, colleges and universities must provide adequate counseling and support for students (Morgan, 2017).**



**Wellness habits that students develop in college extend far beyond their years at college. Design interventions could address how multiple simultaneous health behaviors affect student health. Understanding the wellness needs and issues of college students will allow more effective development of college campus wellness programs to promote wellness and reduce future health complications for students. Ensuring universal accessibility is key to promoting physical and mental health and social well-being for all students.**

For example, purposefully designed walkways and strategically located parking lots can encourage more physical activity and social interaction and lead to better mental health among students (Architects, 2018).

Active design architecture can help guide college students to make healthier choices on campus and become more aware of their bodies as they travel from building to building. It is defined as any design element that promotes physical, mental, and social wellness among users of a space.

**By designing welcoming and engaging walkways and stairs, and locating outdoor social spaces along paths, student wellness on college campuses is fostered. Before incorporating active design into campus, understanding what exactly doing so entails is crucial.**

Active design covers various wellness concepts. Physical Wellness: Indoor staircases and outdoor walkways encourage more physical activity on campuses. Mental Health: Walkways that wind through quiet outdoor areas offer students calm spaces in which to relax before and after classes. Social Well-Being: Designing community spaces within high-traffic areas encourages students to socialize with their peers. One of the greatest challenges that colleges face when trying to incorporate active design on campus is that they often fail to integrate these concepts. For example, staircases in a building will encourage physical activity, but unless students have a meaningful reason to use the stairs, they're more likely to choose the elevator.

**Wide, central staircases at the front entrance to entice students to use the stairs or build social lounges at the top of staircases that students can see from the ground floor. These features encourage students to stay active, while also supporting social interaction.**

Effective active design creates an intentional framework that goes beyond the physical spaces to promote the behaviors that drive positive outcomes. As with all intentional design choices, active design architecture takes into consideration the particular needs of individuals of all physical abilities.

**Ensuring universal accessibility is key to promoting physical and mental health and social well-being for all students. College students are busy, so their lives often revolve around convenience. For this reason, interior active design architecture must be accessible. To accomplish this, location, visibility, and the social value of indoor spaces should be maximized. Location: Ensure that your indoor staircases are placed as close to the building's entrances as possible. If students have to search for the stairs, they're less likely to use them. Visibility: Add graphic design details, such as bright paint colors and wall art, to make stairs more appealing. Social Value: Create communal spaces within the structure itself to foster social interactions. (Architects, 2018).**

With nutrition being one of the key wellness components, understanding food insecurity among college students is vital. Food insecurity is the limited or uncertain availability of nutritionally adequate and safe food, or the ability to acquire such food in a socially acceptable manner (Payne-Sturges et al., 2017). This growing health concern has received more attention recently and the number of food pantries on college campuses has increased in response to student food insecurity. However, only a small percentage of food insecure students are actually visiting food pantries and the main barriers to food pantry use are social stigma and embarrassment (El Zein et al., 2018).

**Food insecurity solutions should be discreet, protect student confidentiality and work to alleviate stigma (Henry, 2017).**

Previous research shows that students who rent, live on campus or live off campus with roommates are more likely to have lower food security than those who live with a parent. Among socioeconomic characteristics, race and ethnicity has been shown to predict food security in college students as well.

**This prevalence of lower food security in college students has academic and health implications, with low food insecurity being associated with academic absences and lower GPAs.**

Research also has demonstrated that students living on campus had higher daily fruit and vegetable intake. Lower fruit and vegetable intake has been shown to be more prevalent in black students, whereas findings are mixed for gender. Barriers to proper fruit and vegetable intake include costs, access and time constraints. However, there are numerous actions colleges can take to increase student access to fruits and vegetables.

**Given that community-farm participation has been associated with fruit and vegetable intake in US adults, campus farms or gardens could foster greater access to fruit and vegetables for college students. Many campuses include food outlets such as cafes, which do not exclusively service students with meal plans and instead are open to anyone.**

These types of establishments present an opportunity to offer affordable fruit and vegetable meals because universities control the food sold and the contracts that procure it. Meetings held by student organizations often involve food which present an opportunity for schools to reach students with healthier options. Schools should consider reducing the cost of campus meal plans for students living off campus. Finally, health centers and counseling services may consider screening students who may be at risk for low food security (Mirabatur et al., 2016).

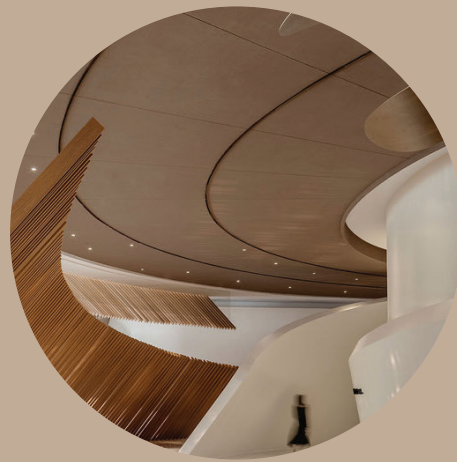
With so many factors influencing student wellness, this thesis exploration will focus on the nutritional and food side of their health. Multiple studies have focused on describing the prevalence of food insecurity in college student populations and have consistently found that these students have higher rates of food insecurity than the national average of 11.8% as of 2017. Food insecurity does not discriminate by location as schools across the country struggle with this issue.

**Campus food insecurity should be a concern to university administrators, faculty, and researchers since it negatively impacts academic performance, mental and social health, dietary choices, and overall health status.**

It is a form of early life stress that can have long term health implications since students who experience food insecurity are more likely to have lower serum levels of folate, a nutrient involved in immune system activation and subsequently could be more susceptible to infectious illnesses. With such a high prevalence of food insecurity, one would expect to find an abundance of literature describing evidence-based approaches to address this issue but that is simply not the case. While there are signs of many initiatives on campuses being started, the efficacy and impact of these interventions have not been reported in verified literature.

**Food insecurity is not a modern issue but increasing awareness of it in college student populations is critical and intervention specific research needs to be conducted to start the process of change so that other universities can implement evidence-based programming (Davis et al., 2020).**

Thus for this thesis, the design of a food hub for VCU students will be the focus. The space will include a market, healthy food café, teaching kitchens, lecture spaces, and kitchen library. Overall, it will examine college students and what VCU can offer to its students in order to combat food insecurity and promote overall health and nutrition.



## PRECEDENTS



## THE MARKET @ 25TH

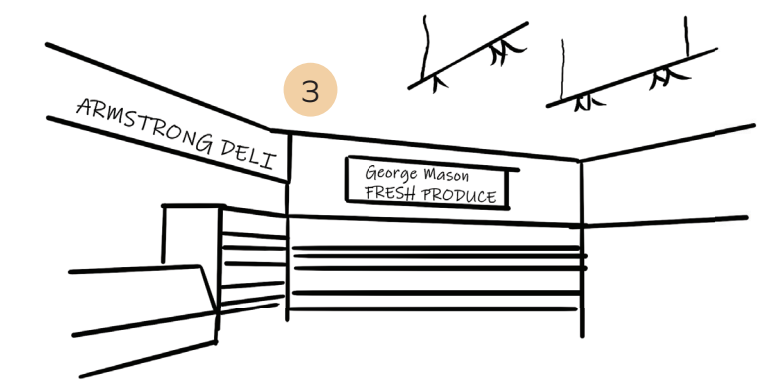
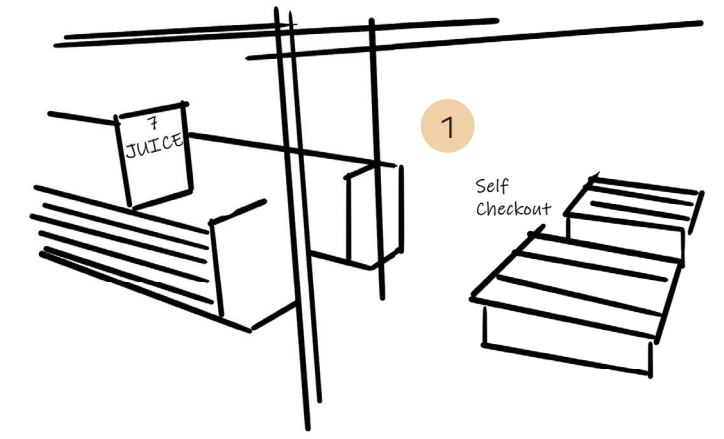
Designer: Freeman Morgan  
 Location: Richmond, VA  
 Date Completed: 2019

The Market @ 25th is a community grocery store project that brings fresh and affordable food options to Church Hill, which has long been classified as a food desert. With a mission to serve the community, The Market @ 25th is dedicated to hiring from within the neighborhood and developing partnerships with local food growers and producers. To support community health, Hope Pharmacy is located within the store and a VCU Health Hub is attached to the store to provide health screenings and education to the public. It also partners with the PBS KIDS Ready to Learn program, which provides educational opportunities and events to teach children the importance of eating healthy.

This project is relevant as a precedent for me due to its mission and program. It is an extremely customer-centered project and creates a welcoming atmosphere to provide a warm, inviting and memorable customer experience. The design of the space both honors and celebrates the extensive and significant history of Church Hill. All the store's aisles and production spaces are actually named after local schools, churches and neighborhoods. Historic photos can be found decorating the walls throughout the space. The space provides the highest level of authentic service to the entire community and develops initiatives to support a culture of community health.

### Wayfinding Analysis

- 1 - Food aisles guide you towards checkout and path of travel is made very clear.
- 2 - Food displays are transparent to the customer and kitchen is open for observation by all.
- 3 - Signage above produce and deli helps with wayfinding and honors Church Hill by utilizing names of local schools and neighborhoods.





## THE GARDEN PAVILION

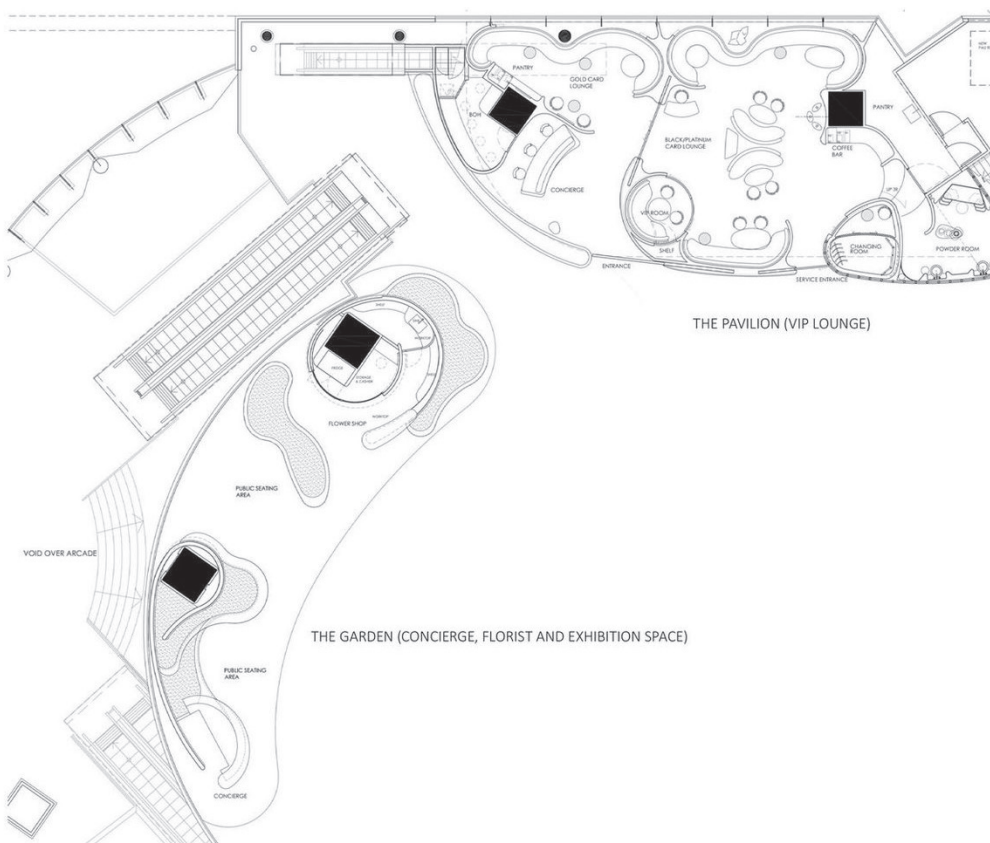
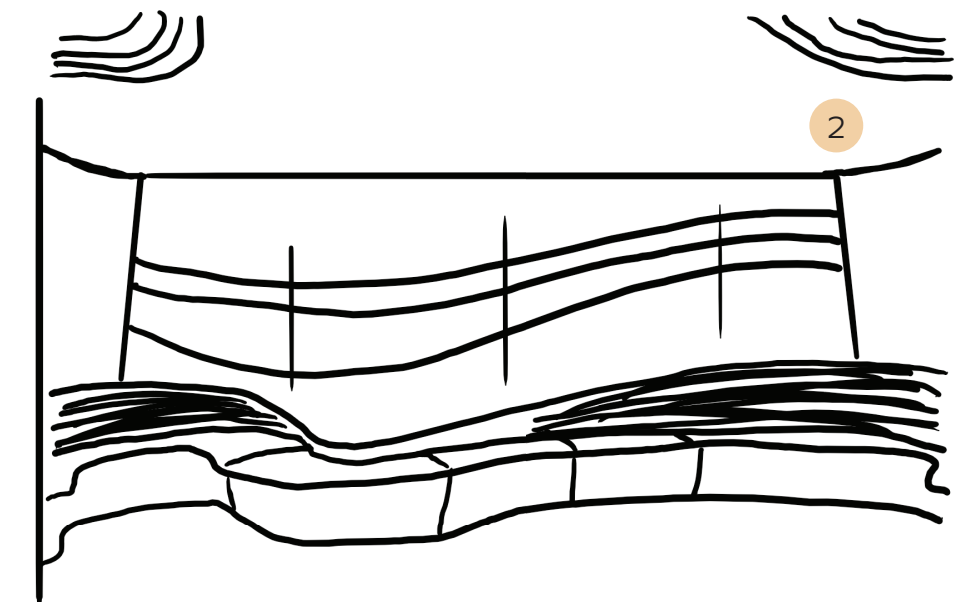
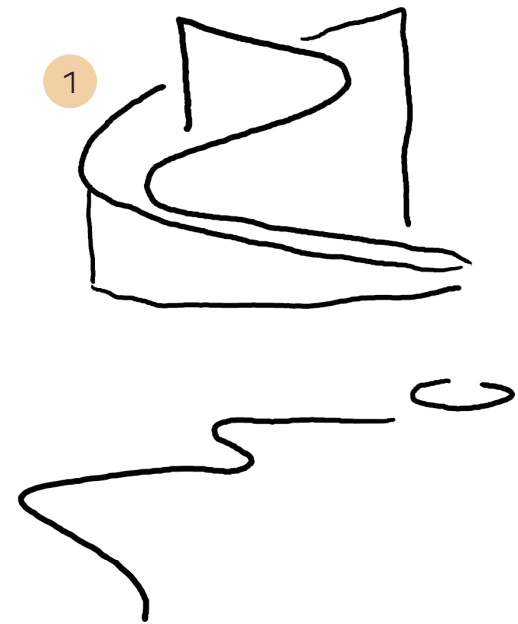
Designer: NCDA  
 Location: Hong Kong, China  
 Date Completed: 2020

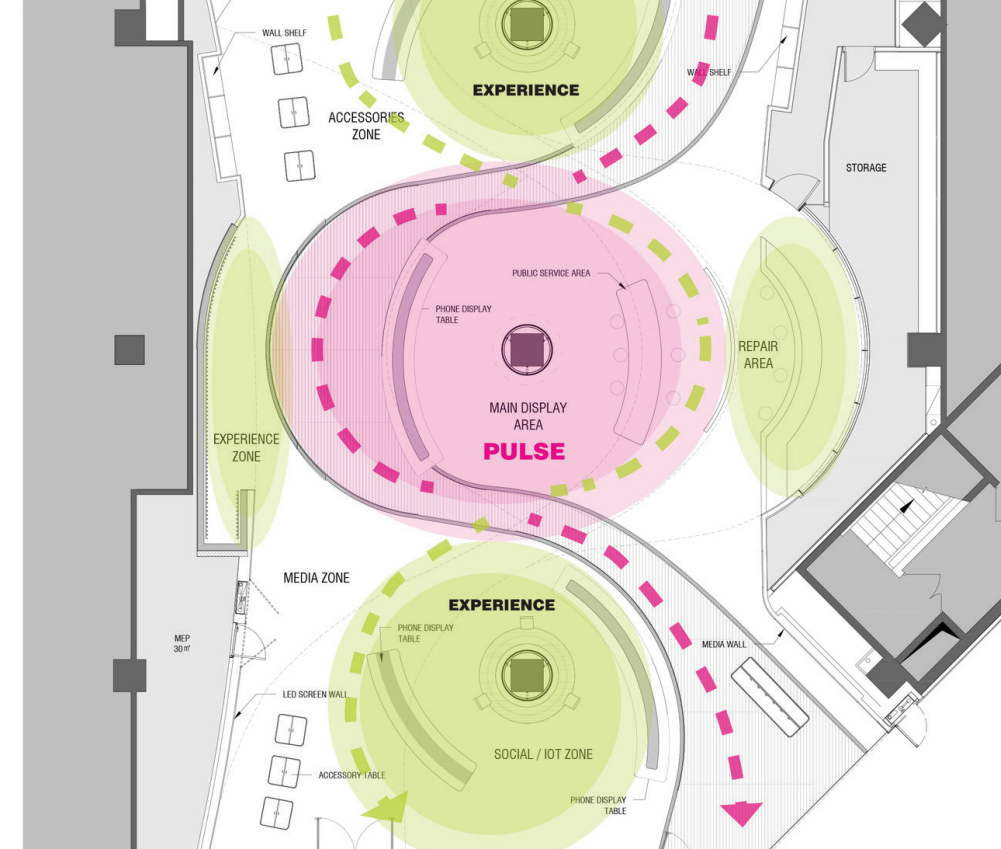
The brief for this project was to create a relaxing getaway and was conceived by the designer as an airy garden-like, contemporary landscape, taking inspiration from the forms of traditional Japanese Zen gardens to create a cocooning escape. The project covers two distinct areas – the first includes a public sculpture garden and is a curving ivory landscape to house a florist, a concierge and an exhibition area for seasonal displays. The second is a private VIP lounge and is a space unfolded through a series of wavy walls, creating intimate spaces with a sense of understated luxury. The entrance to the VIP lounge is marked by a sculptural reception desk with a ceiling feature made of brass and marble. The key requirements are to make this space like a secret garden and foster a private yet welcoming environment. A series of undulating curves are recurring motifs and provide an abstract echo of nature.

This project spoke to me for many reasons but the main one was its form. I am working with the concept of flourishing for my thesis project concept and this will manifest itself through a great deal of curving and sweeping lines that mimic nature and movement. I think this space does a great job of utilizing both curved architectural elements and furniture to create points of interest and support for the overall concept. The design avoids any obvious or simplistic renderings of Japanese gardens, instead providing sensory attributes that incorporate recognizable elements, natural forms and materials such as moss, subtly presented in abstract forms.

### Form Analysis

- 1 - Undulating curves motif provides an abstract echo of nature.
- 2 - Curved sofas are not only comfortable; they also create interest and foster an intimate ambiance that invites interaction.





## OPPO FLAGSHIP STORE (INTERNATIONAL)

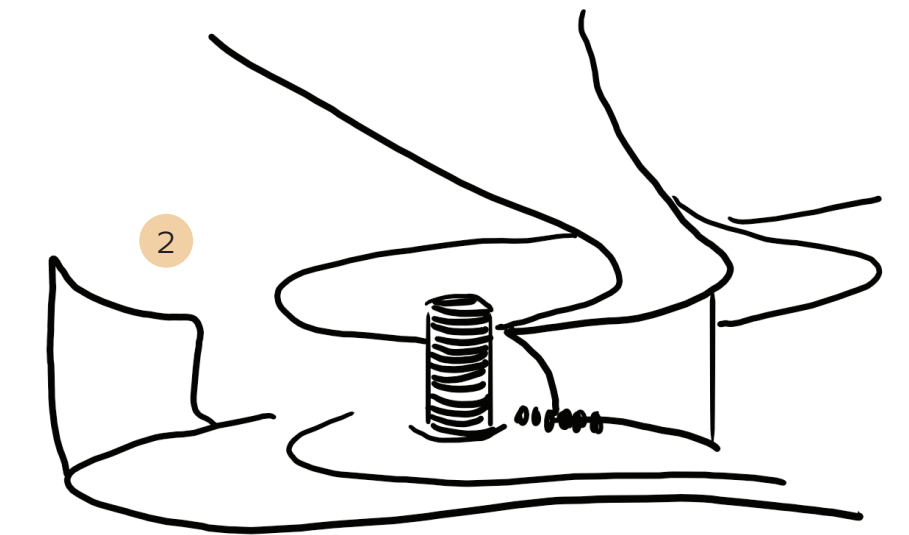
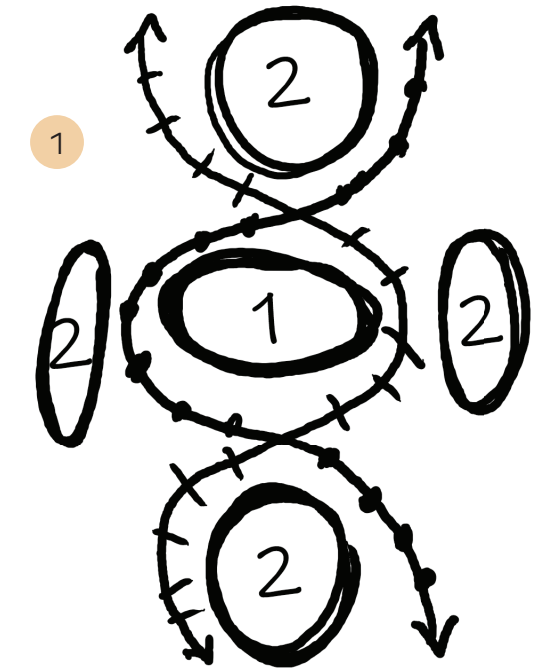
Designer: UNStudio  
 Location: Guangzhou, China  
 Date Completed: 2020

This space is a flagship store for OPPO, one of China's leading mobile phone brands and the world's leading smart device manufacturer and innovator. The challenge of designing this space is to develop a contextual strategy that respects the qualities of the city, while also representing brand values. With the ambition to create a gathering space that blurs the boundaries between public space and commerce for OPPO's new and existing customers, UNStudio introduced an "Urban Park" concept. This concept creates an inclusive environment that meets the needs of the various people who visit the store.

The overall concept and form of this space caught my attention because the interior is designed as a "borderless" interactive environment, where meandering routes surround a central resting point, creating different rhythms of motion and allowing customers to browse, take their time, pause and try products in the store. My thesis space is unique because there will be few physical partitions and the goal will be to incorporate fluid and continuous geometry in the space. Green granite terrazzo flooring is used to create meandering paths through the store, while integrated 'pathways' of lighting in the ceiling mimic this fluid flow and frame the different areas and displays from above. These pathways in the floor and ceiling further serve to guide visitors intuitively along various routes as they wander through and around the space.

### Space Planning Analysis

- 1 - Interior is split into two different zones: pulse (displays) and evolution (experiences).
- 2 - Charging seats are installed around translucent pillars. Referencing social clusters around trees in a park, these seating elements provide comfortable areas for customers to relax and socialize.

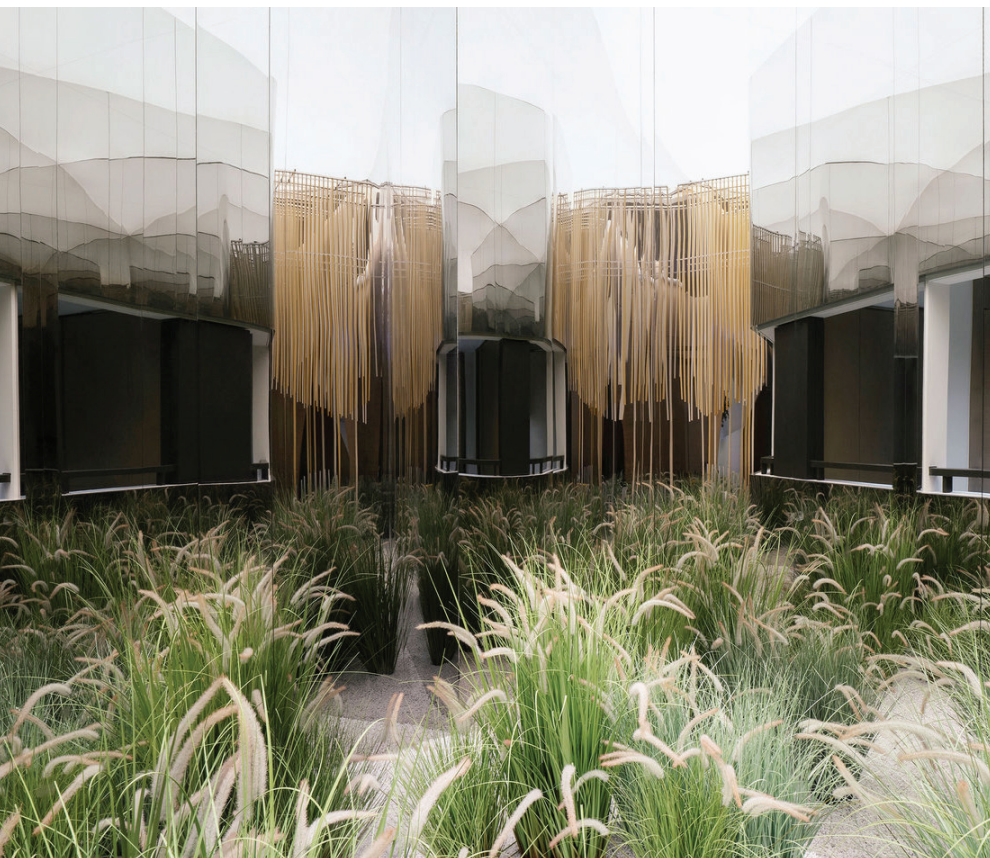
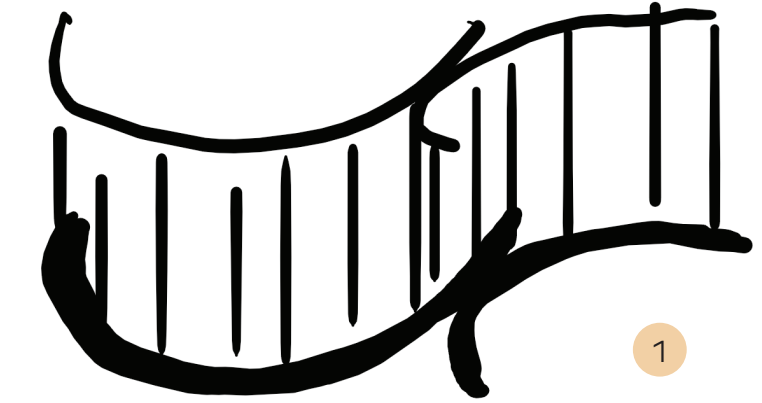




## THE FLORESCENCE SHOWROOM

Designer: Karvone Design  
 Location: Guangzhou, China  
 Date Completed: 2020

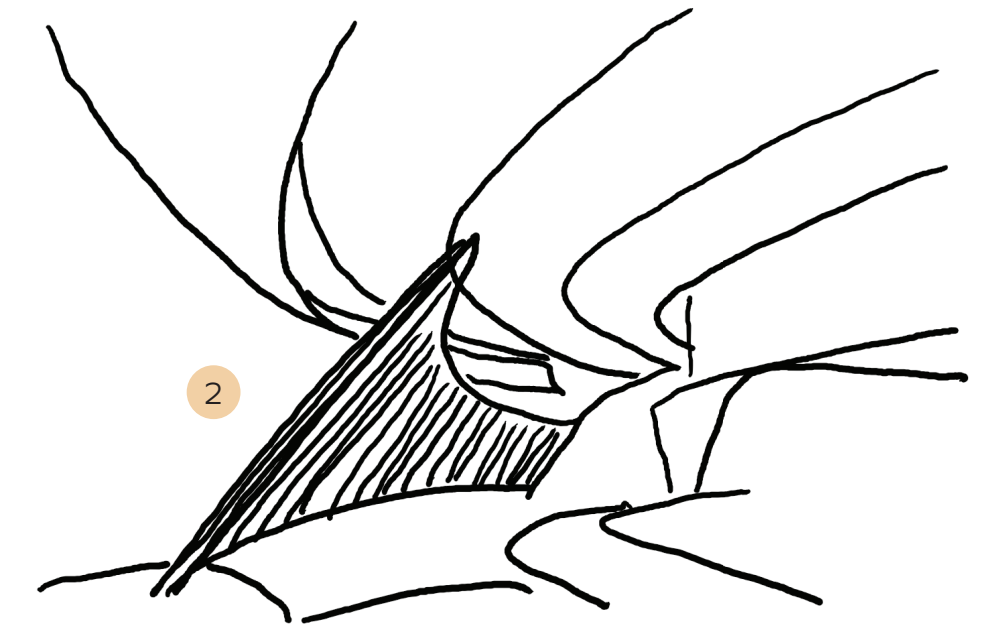
One Design created a super city showroom for the future new city of Huadiwan. The design started with studying the unique regional cultural memory of Huadiwan followed by extracting and deriving the flower-themed IP for the project. The extensive use of curved shapes and open-space layout help create a wrap-around space experience. The whole space is shaped like a blooming flower, which is an element featured throughout the design. The large white flower petals in the reception area are the statement piece of the design while other elements such as the themed pendants and the background wall in the sandbox area are different interpretations of the flower theme.

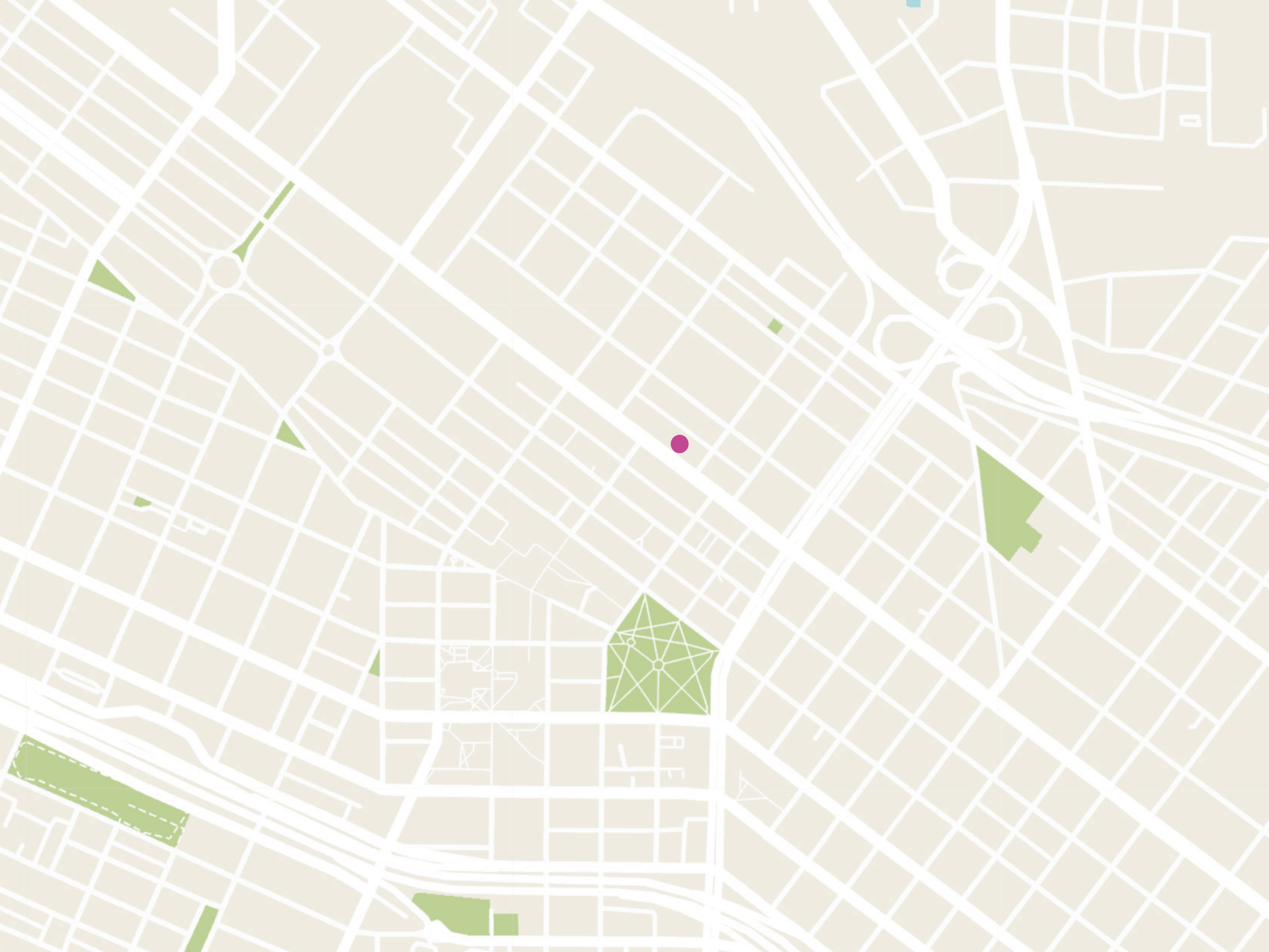


The concept of florescence is what made me select this project as an inspiration space. I am working with a very similar concept and I found that this team drove their design in a similar direction as I have and analyzing their design decisions was quite interesting. Both of our projects utilize extensive curved shapes and an open-space layout to help create a wrap-around space experience. They include seven modules of themed scenes, including floral art, coffee, books, bakery, children and parents, among others. These are integrated to offer visitors multiple experience options and create a holistic atmosphere for living, allowing people to immerse themselves in it and increasing people's awareness of the future urban community life. The extensive use of curved shapes and open-space layout help create a wrap-around space experience.

### Concept Analysis

- 1 - Entire space is shaped like a blooming flower and follows a concept of florescence. The extensive use of curved shapes and open-space layout help create a wrap-around space experience.
- 2 - Ceiling design supports and follows blooming flower concept and celebrates the curved shapes used on the floor design of space.





**SITE CONTEXT**

# NEIGHBORHOOD + BUILDING HISTORIES



**Address:** 814 W Broad St, Richmond, VA 23220

**Building:** VCU Arts Depot

**Neighborhood:** Carver

Carver Neighborhood - With both industrial and residential historic districts, Carver is one of Richmond's historically significant neighborhoods located near the city's center and adjacent to VCU. Broad Street acts as a path that connects VCU to downtown and also an edge, separating the campus from the Carver neighborhood. The area spans nearly 54 square blocks and is bordered by Lombardy Street to the Northwest, Belvidere Street to the Southeast, Interstate 95 to the Northeast and Broad Street to the Southwest. Carver began to take shape in the early 1800's when John Buchanan began to break up the 500 acre estate and sell the smaller parcels. By the middle of the century, many of Richmond's working class (tradesmen, merchants, and skilled laborers) had begun building homes for their families. The first homes were mostly built as attached brick rowhouses — some with storefronts — in the Italianate style with several examples of the Greek Revival and Queen Anne styles following shortly thereafter. Additional rowhouses, detached homes and some of the larger buildings came along late that century and in the early 1900s. The industrial district was built on the Western side of the neighborhood between 1890 and 1930. These structures were built in a variety of architectural styles including Art Deco, Colonial Revival, Gothic Revival, Italian Renaissance, Queen Anne, Romanesque and Second Empire. Given its close proximity, Carver has been strongly influenced by VCU and its community in more recent years. The Stuart C. Siegel Center was a significant catalyst for change when it was opened in 1999. The University's remarkable growth since then has continued to encourage investment in the area.

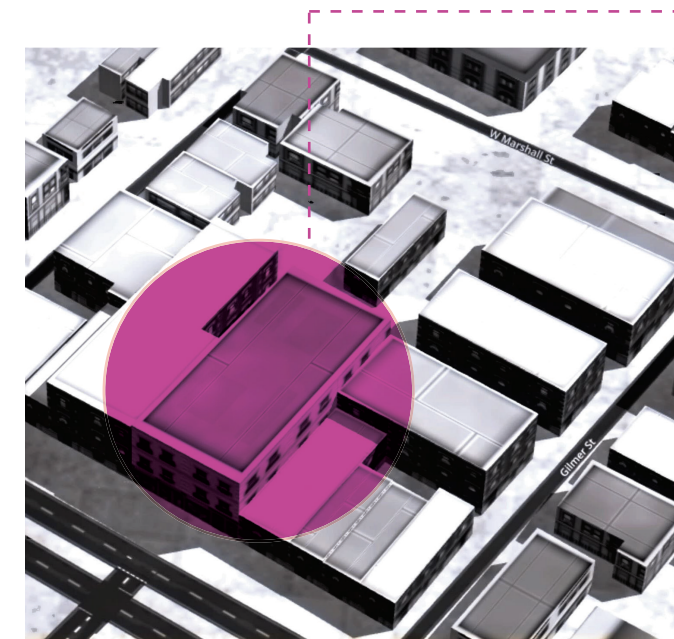
VCU Arts Depot Building - Like hundreds of sturdy old Richmond buildings, the Depot wasn't intended for its current use. It was opened in 1907 as the southern terminus of the Richmond & Chesapeake Bay Railway. Passengers entered from Broad Street through the grand arch and ascended a steep, covered but open-air staircase to reach second-floor boarding platforms. With 1907 being the Jim Crow period of segregation, these platforms were flanked by two waiting rooms, one for blacks and one for whites. Before ascending the stairs, passengers might have popped into one of two ground-level shops to purchase refreshments for their journeys. When the station opened, Atlas Confectionery and Lunches occupied the easternmost retail space. The trains rolled over Carver and Bacon's Quarter Branch via a concrete trestle and followed a route along today's Brook Road and on to Ashland. The railway proved unprofitable and by 1938, the property was purchased by the Richmond Glass Company. The site consisted of four buildings: the large terminal/storefront building facing Broad Street and three storage buildings to the rear, two of which were connected during the rehabilitation with the construction of a new infill addition; it now serves as a multidisciplinary space for VCU. The Depot and the Depot Annex opened in Fall 2014 and together they provide nearly 30,000 square feet of new space for the School of the Arts. The buildings house a student gallery, a commercial space, kinetic imagining studio classrooms, a dance studio and ample space for interdisciplinary projects.



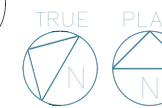
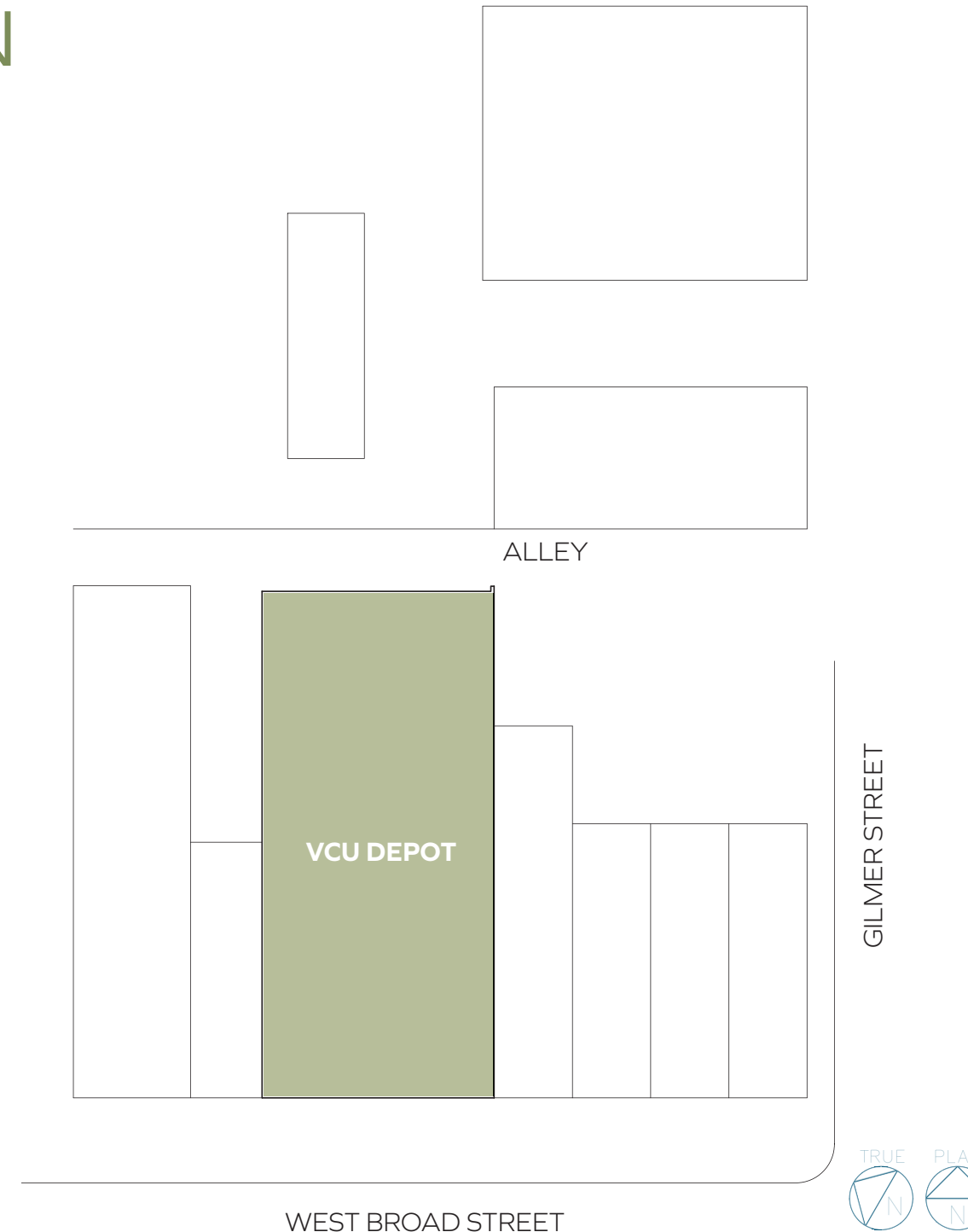
# VICINITY RESTAURANT ANALYSIS

VCU students lead busy lives and having convenient access to healthy food options is critical to helping them make nutritious choices. Based on the vicinity of the site, there are plenty of restaurants available but most of them are fast food options. There is a need for more healthy restaurant options in a centric location to campus so that students can easily visit these smarter options on a daily basis.

 Nearby Restaurants



# SITE PLAN



# BUILDING EXTERIOR



Front Facade



Back Facade



Back Alley



Main Entry



Secondary Entry



Brick



Booths

# BUILDING INTERIOR



Wood Stairs



Concrete Floor



Exposed Brick



Offices



Conference

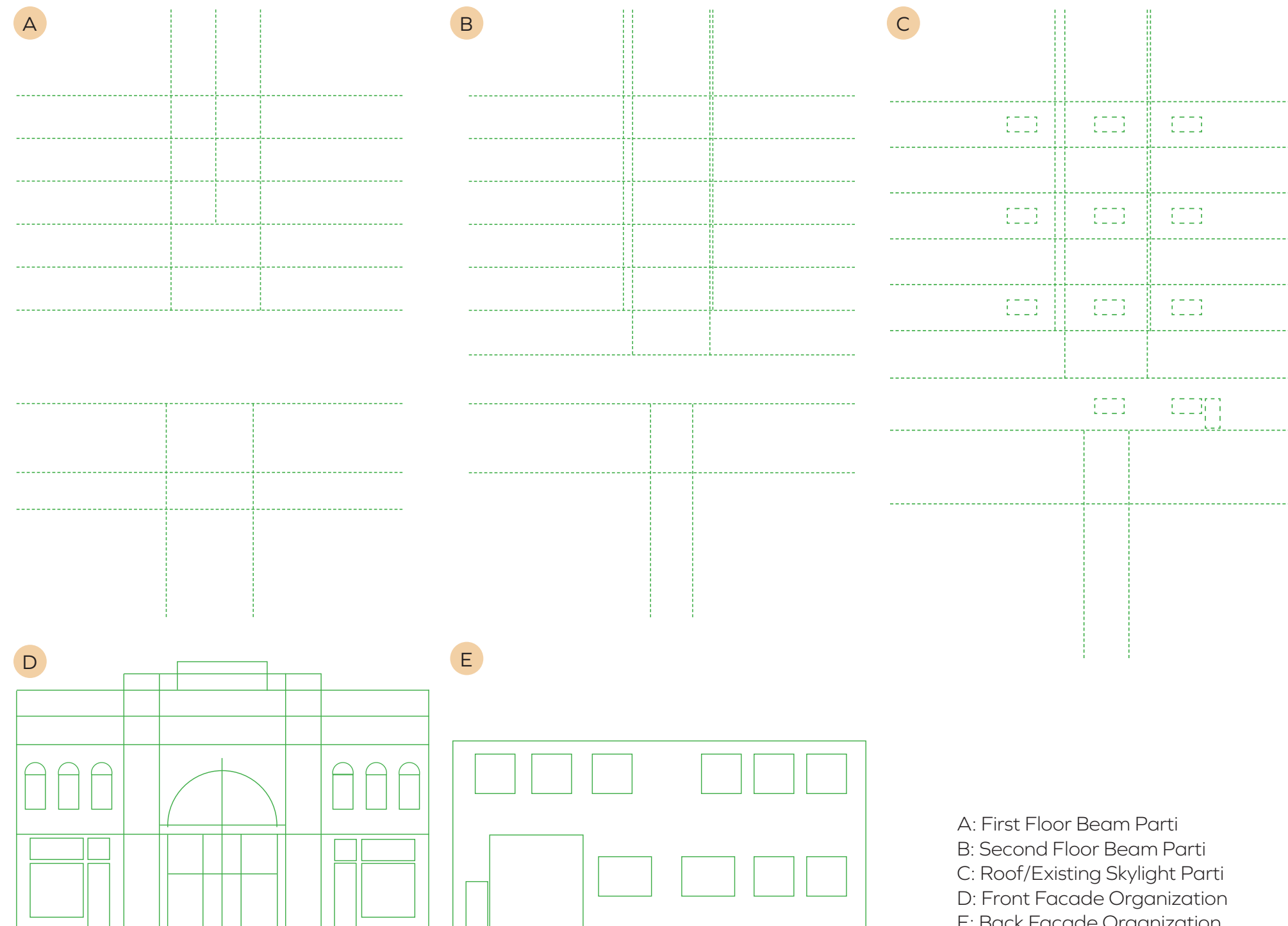
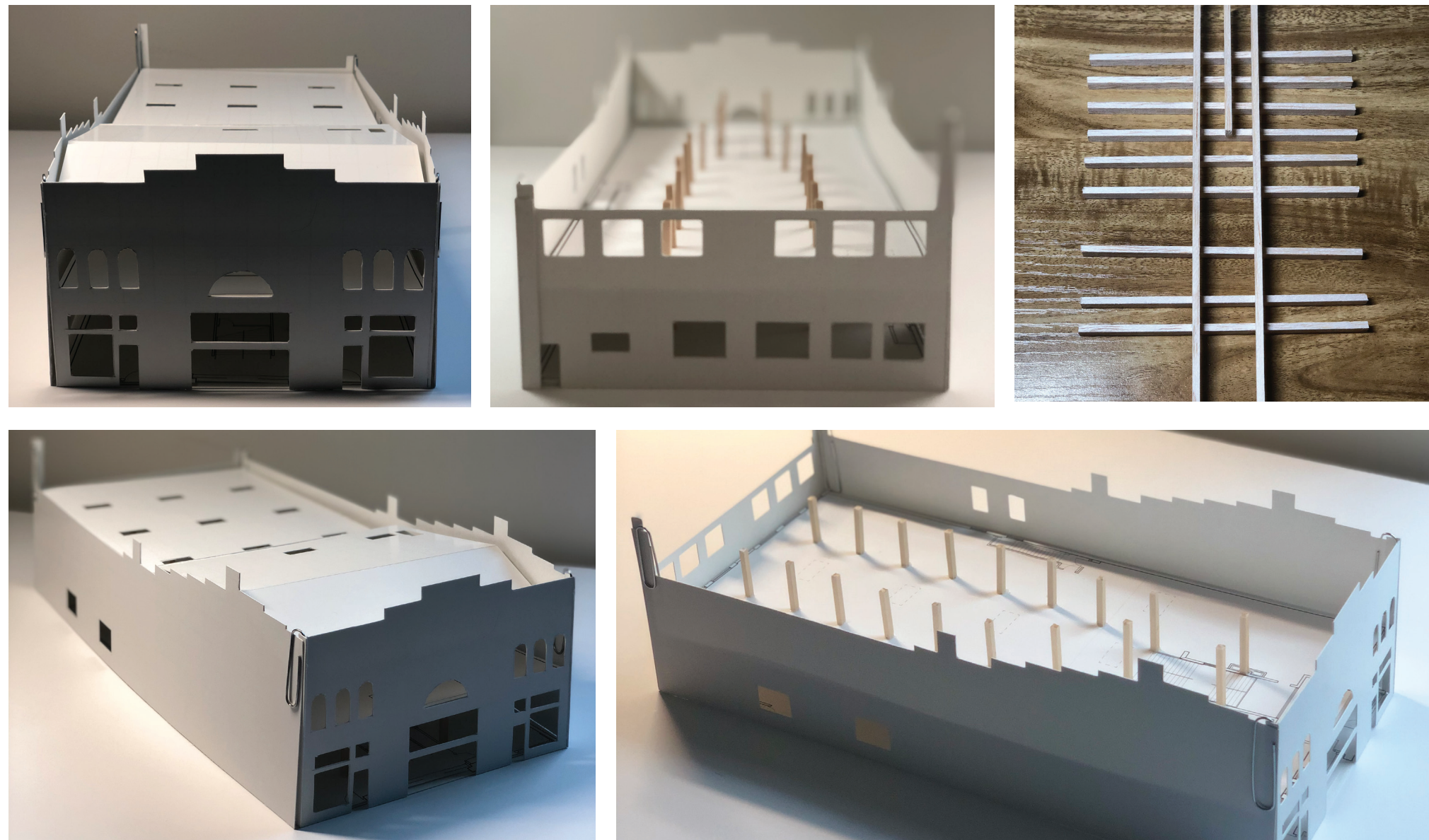


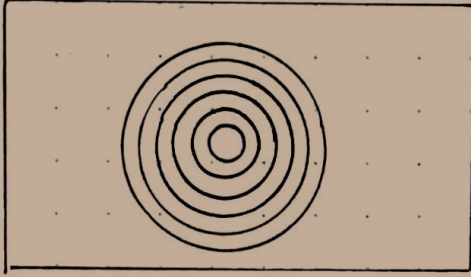
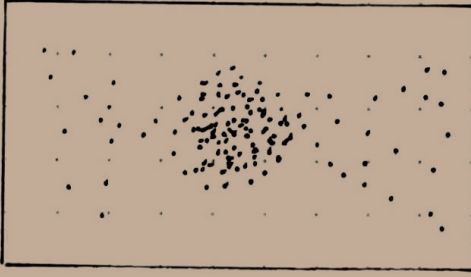
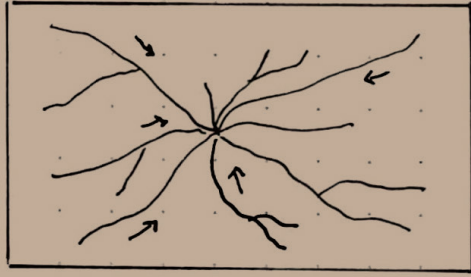
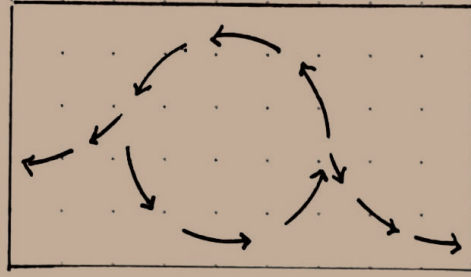
Classroom



Alchemy Coffee

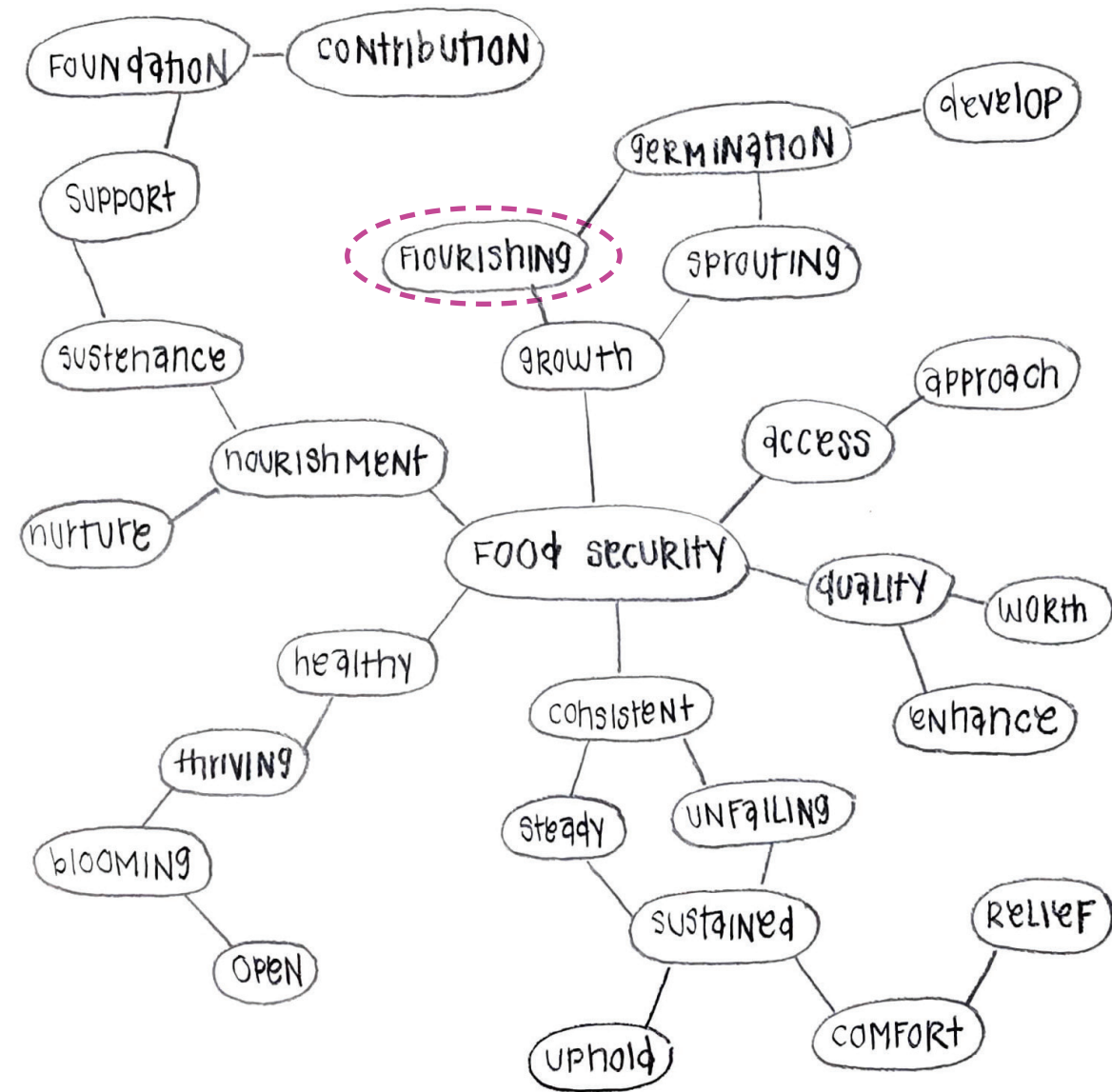
# BUILDING PARTI MODELS & DIAGRAMS





**CONCEPT**

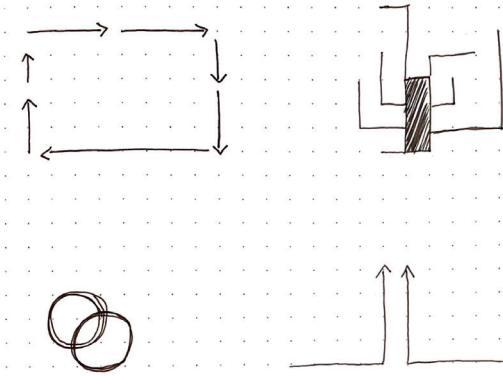
# INITIAL BRAINSTORMING



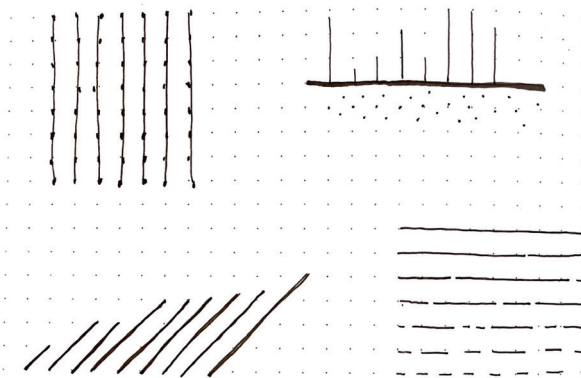
## dichotomies

- availability vs. scarcity
- accessible vs. unattainable
- adequate vs. insufficient
- acceptable vs. deficient
- uncertainty vs. sureness
- nutrition vs. deprivation
- prosperity vs. restriction
- seen vs. invisible
- crisis vs. breakthrough
- consistent vs. unsteady
- support vs. hindrance

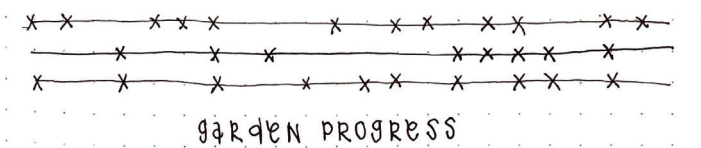
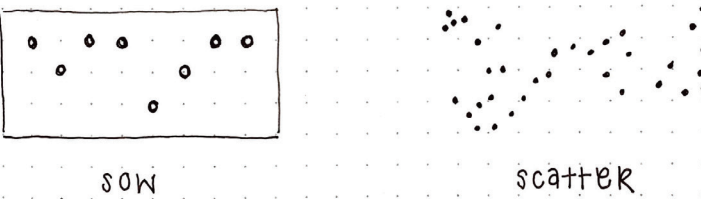
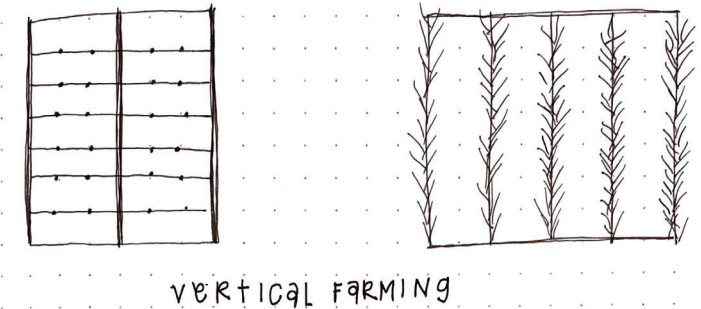
### sustained



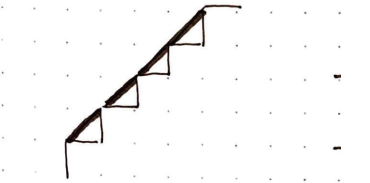
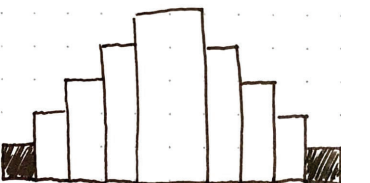
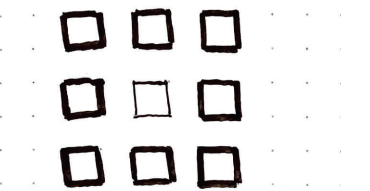
### growth & cultivation



### cultivate



### SUPPORT



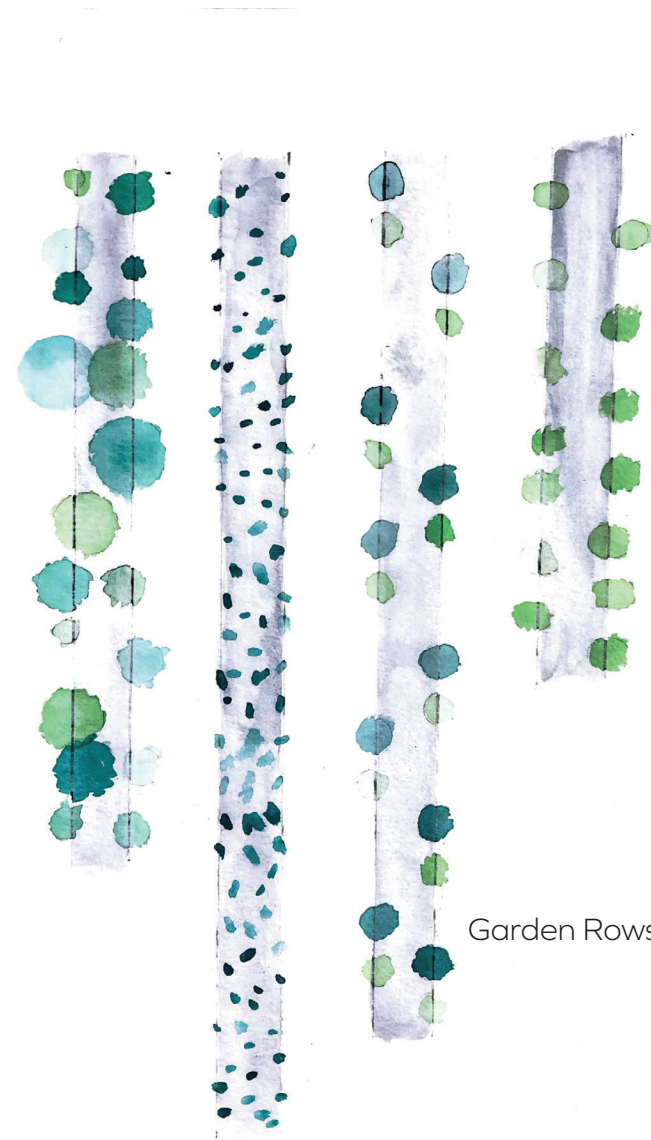
# GROWTH EXPLORATIONS



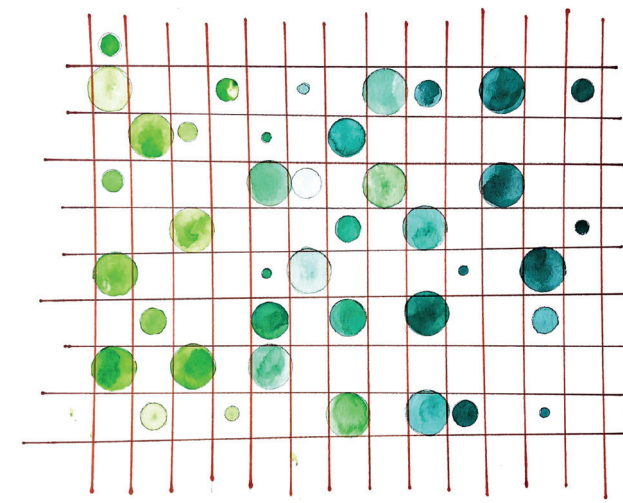
Nutrient Layers



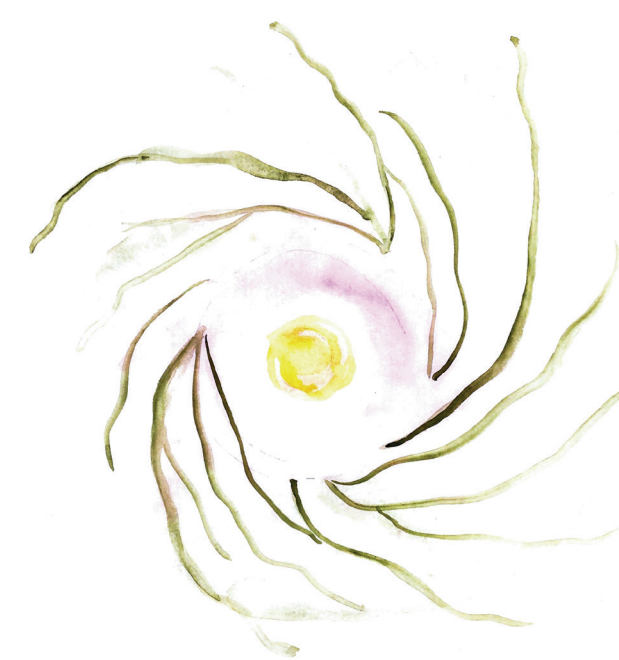
Planting



Garden Rows



Sprout Patterns



Organic Flourishing

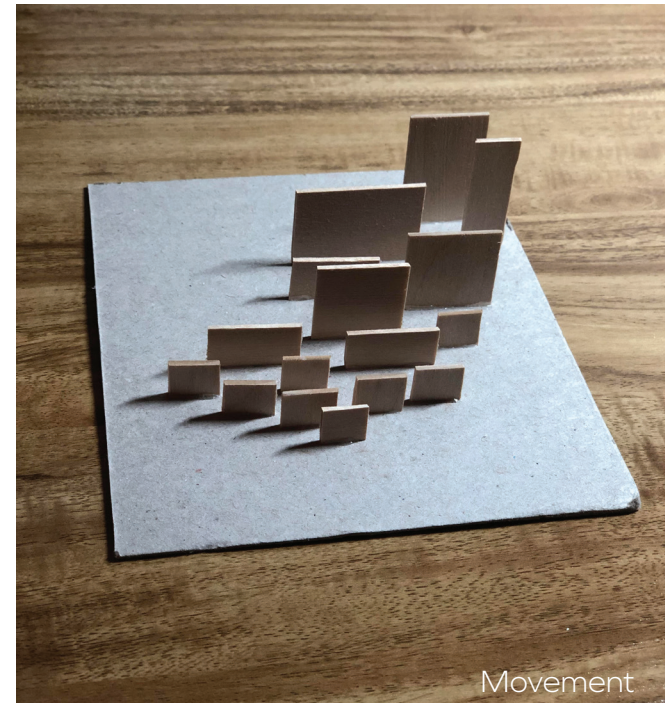


Growth Progression

# FINAL CONCEPT

The project celebrates **FLOURISHMENT**.

Statement: Flourish exists as a VCU student food hub that provides a combination of diverse interventions to support student population food security through heightening access, learning and awareness. All students deserve to not only attend college, but to accomplish this in a healthy and sustainable way. The goal of the center is to help all students thrive and flourish.



Movement



Rising



Cyclical



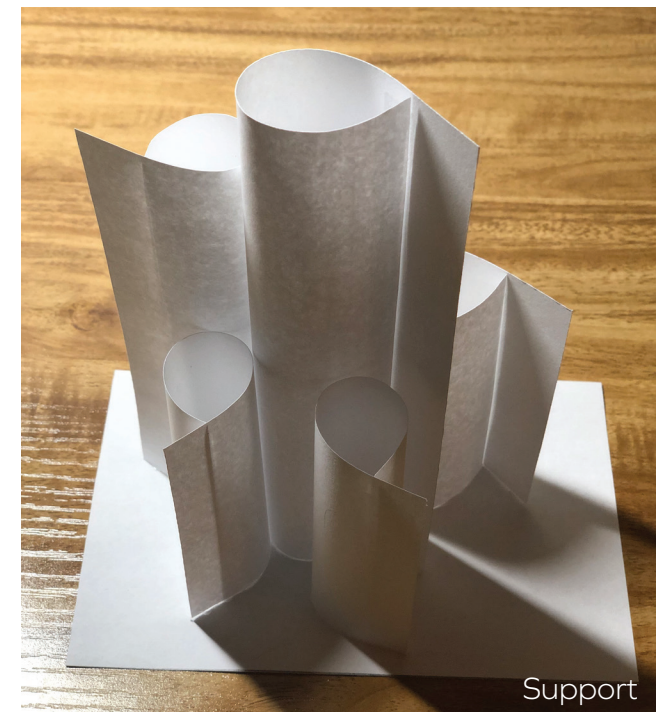
Cultivation



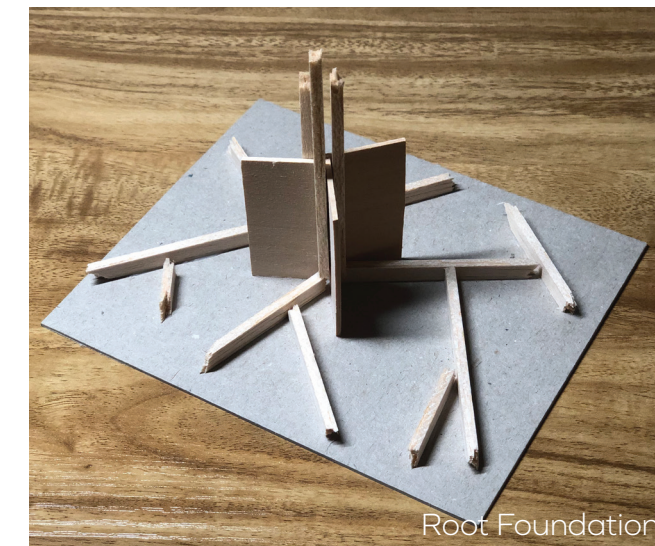
Synthesis



Sprouting



Support



Root Foundation



Strong Verticality



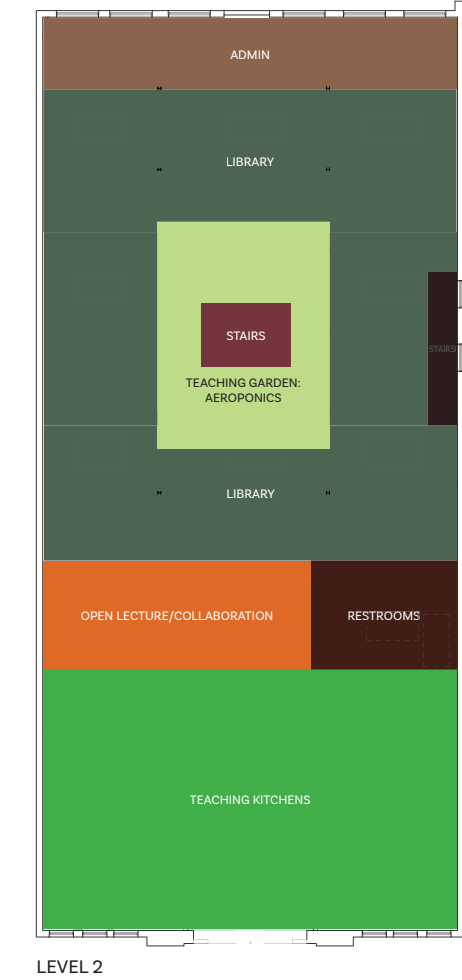
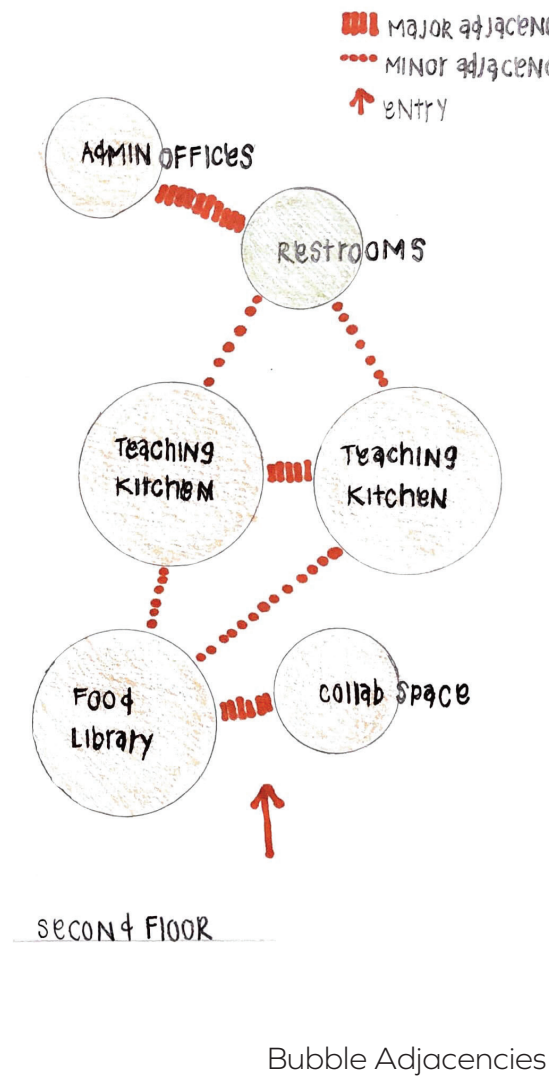
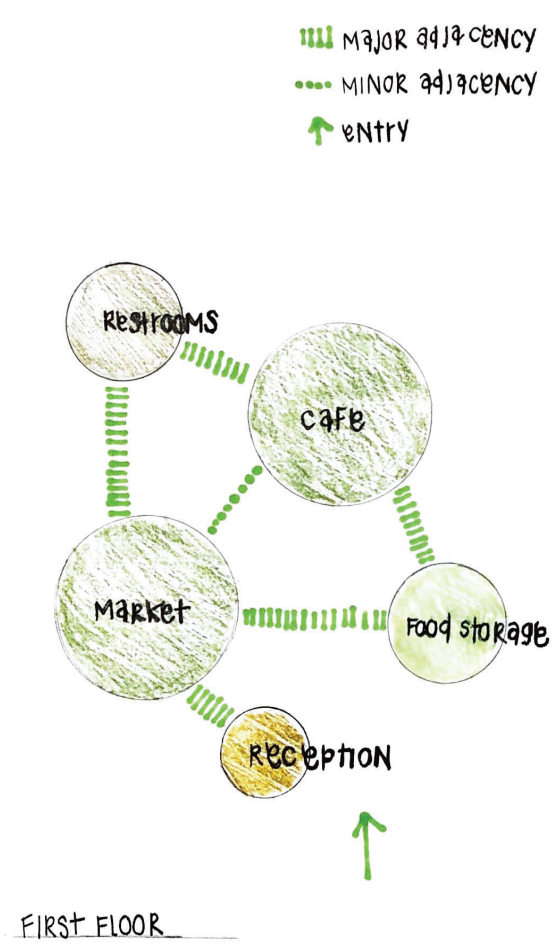
**SCHEMATIC DESIGN**



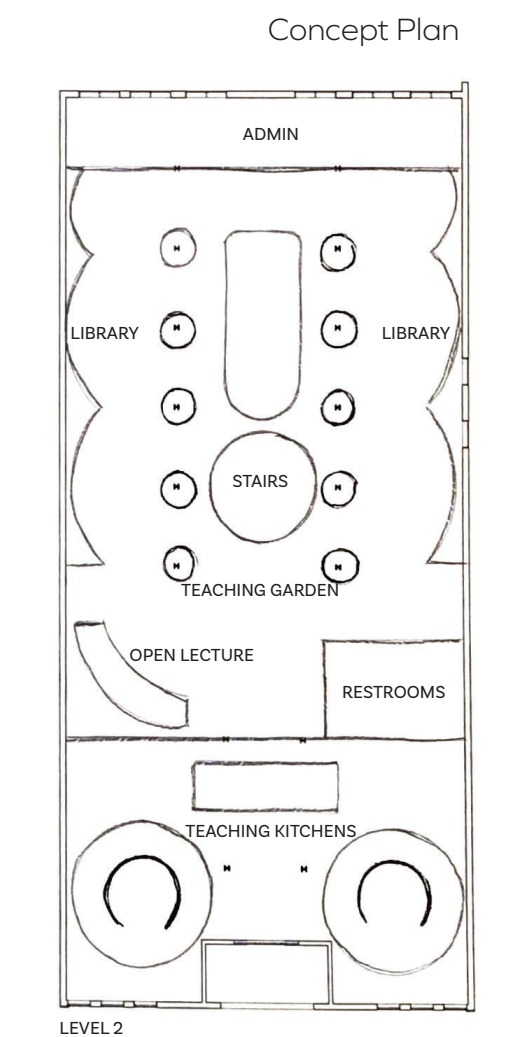
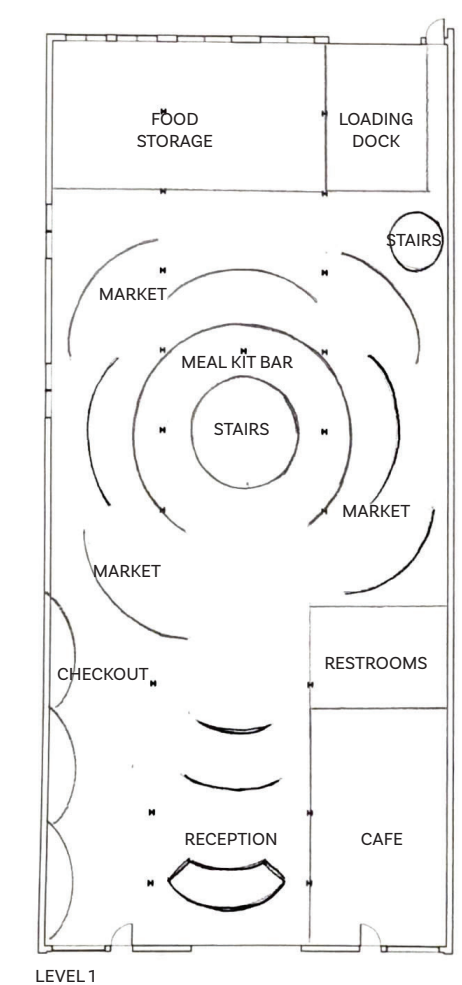
# PROGRAM + CODE

WELCOME DESK	WAITING/LOUNGE	CAFE	MEAL KIT COUNTER	MARKET	FOOD STORAGE	TEACHING KITCHEN	LECTURE	TEACHING GARDEN	LIBRARY STACKS	READING NOOK	ADMIN OFFICES
100 SF Occupant Load: 1 Group B Occupancy	250 SF Occupant Load: 15 Group A2 Occupancy	1200 SF Occupant Load: 70 Group A2 Occupancy	200 SF Occupant Load: 2 Group B Occupancy	3150 SF Occupant Load: 53 Group M Occupancy	1000 SF Occupant Load: 3 Group M Occupancy	700 SF Occupant Load: 14 Group B Occupancy	450 SF Occupant Load: 22 Group B Occupancy	2,250 SF Occupant Load: 45 Group B Occupancy	350 SF Occupant Load: 4 Group B Occupancy	200 SF Occupant Load: 4 Group A2 Occupancy	1280 SF Occupant Load: 13 Group B Occupancy
Desk where students can go for questions and to check in for guest speaker lectures, teaching kitchen and garden classes.	Seating lounge area where students can sit and wait if they are picking up a meal to go or if they are waiting for a class to begin.	Cafe that includes a kitchen that offers nutritious menu options, seating for dining and a menu kiosk for easy and quick ordering.	Adjacent to the market, this counter allows for meal kit preparation to occur by Flourish staff and serves as a place where students can pick up the kits they have ordered.	Large central grocery space that sells healthy food items that students can easily access, includes no checkout required easy entry/exit. Refrigeration, dry good, and cafe/deli areas are included.	Freezer, refrigeration and shelving to safely house market stock.	Demonstration/teaching kitchen will educate students in evidence-based nutritional concepts and cooking skills to optimize health during their time in college and throughout a lifetime	Transparent lecture space allows guest speakers to gather and collaborate with students, educating them on nutrition, health and food topics.	Indoor vertical farming garden, containing multiple garden towers that grow food supply that is utilized in the teaching kitchen, market and cafe. Students can attend garden classes and learn about growing their own sustainable food items.	Shelving contains displays for books that students can read and check out to learn more about food security, literacy, and sustainable food systems.	Lounge sitting area where students can sit and enjoy reading books found in the library stack collection.	Administrative offices containing both single and collaborative workspaces for those in charge of running the food hub.

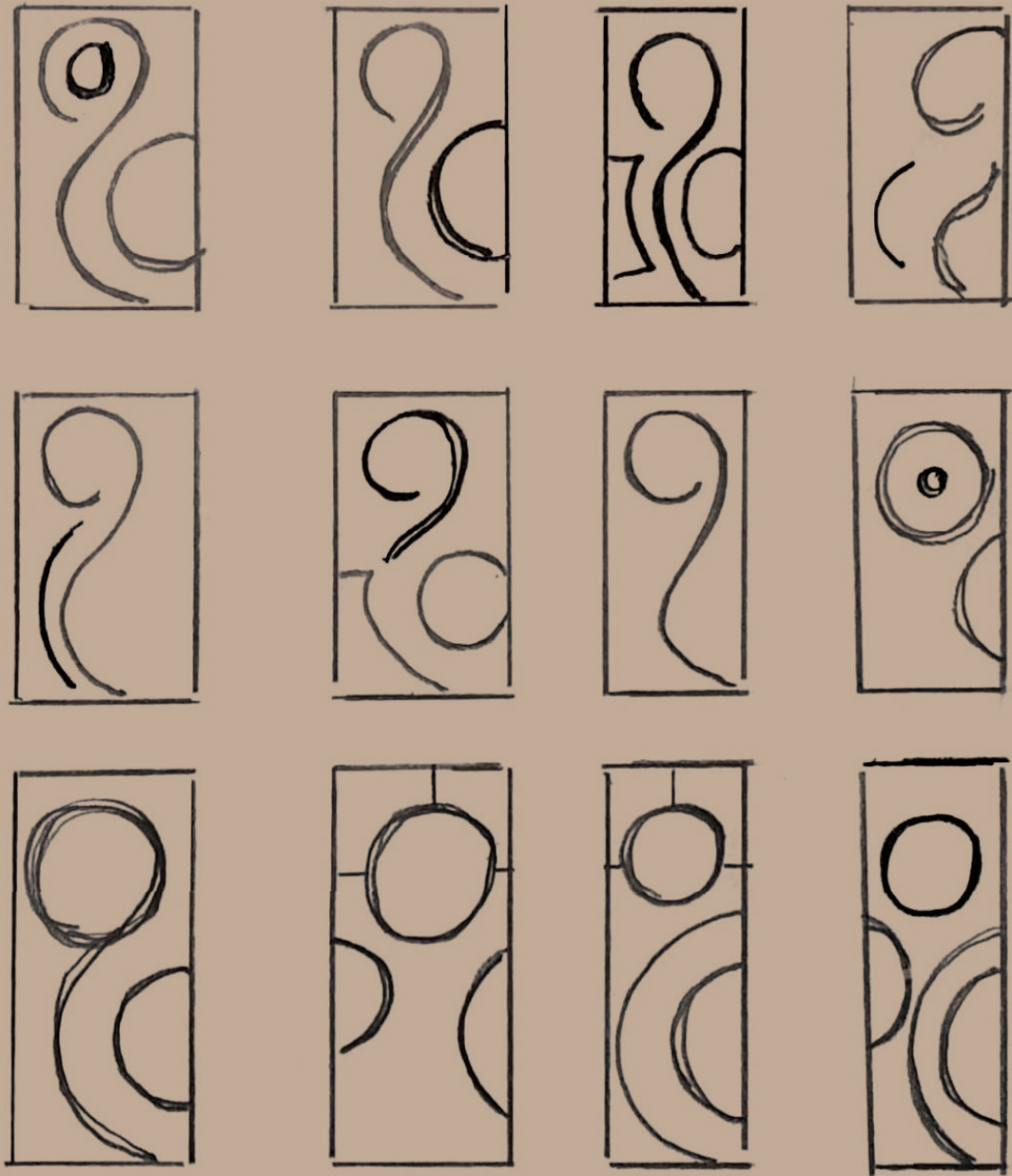
# SPACE PLANNING & ADJACENCIES



Block Plans

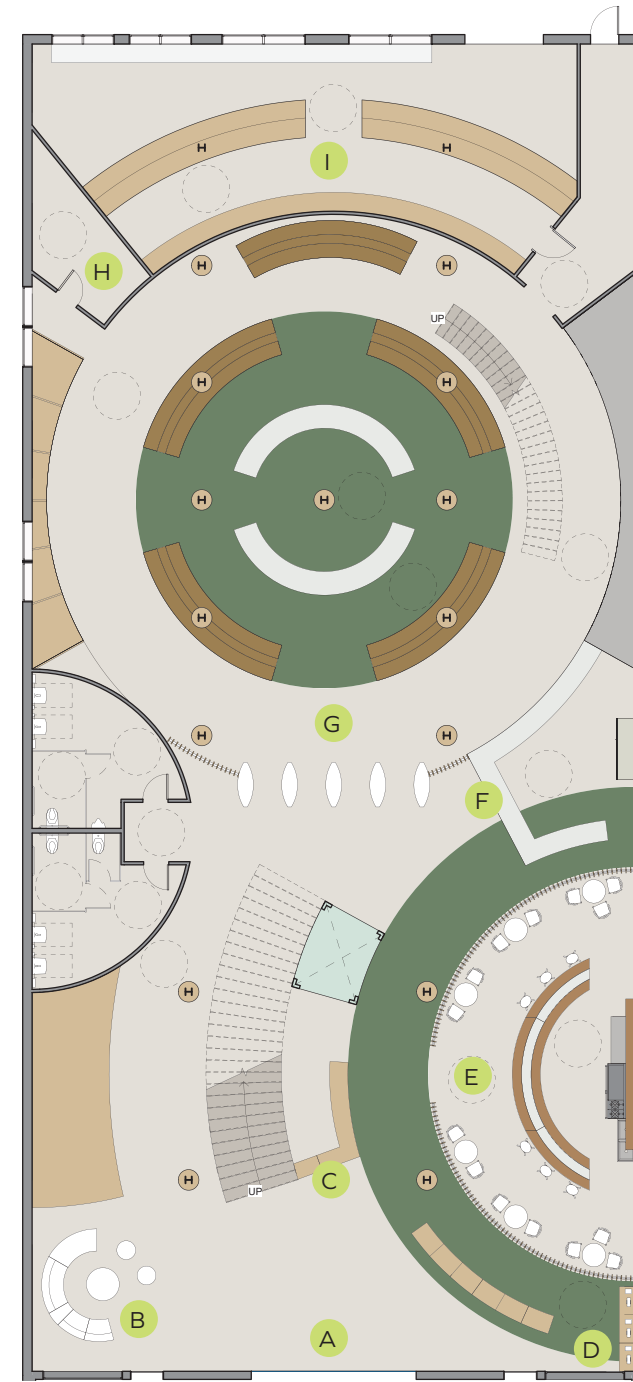


Concept Plan



**DESIGN DEVELOPMENT**

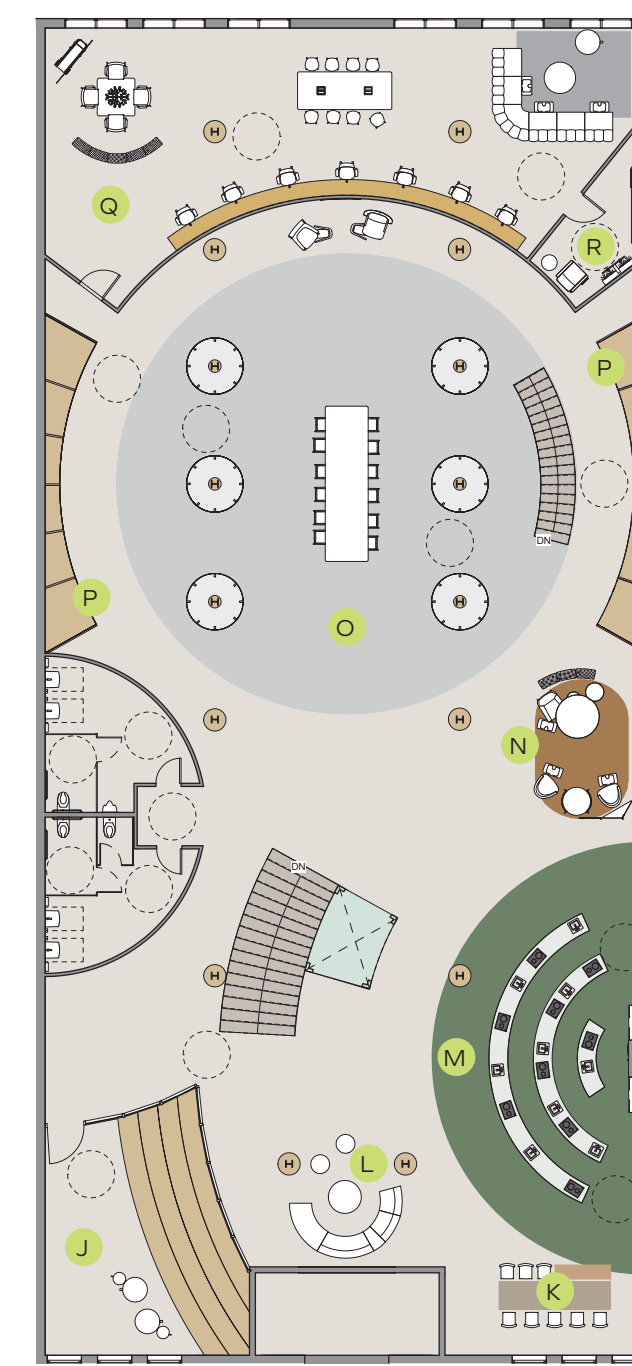
# PLANS



LEVEL 1

## PLAN KEY

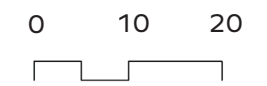
- A: Main Entry
- B: Waiting Lounge
- C: Welcome Desk
- D: Order Kiosk
- E: Nutritious Cafe
- F: Meal Kit Counter
- G: Market
- H: General Storage
- I: Food Storage



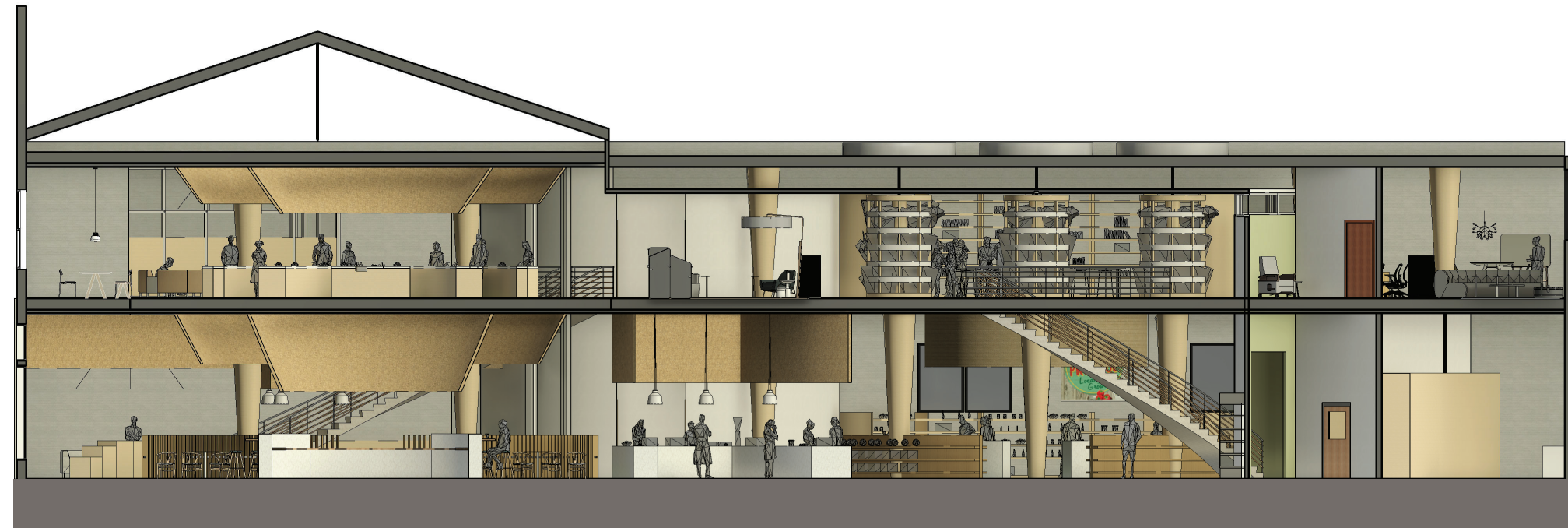
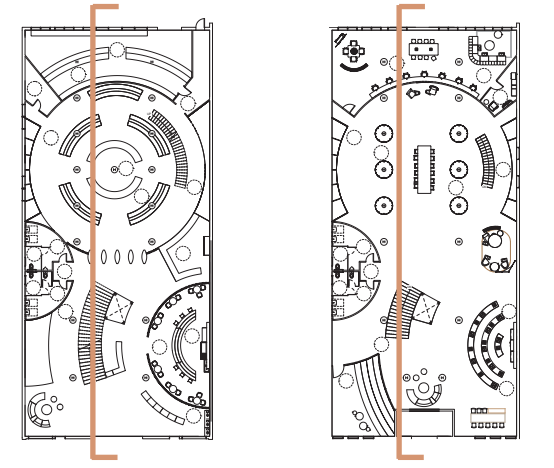
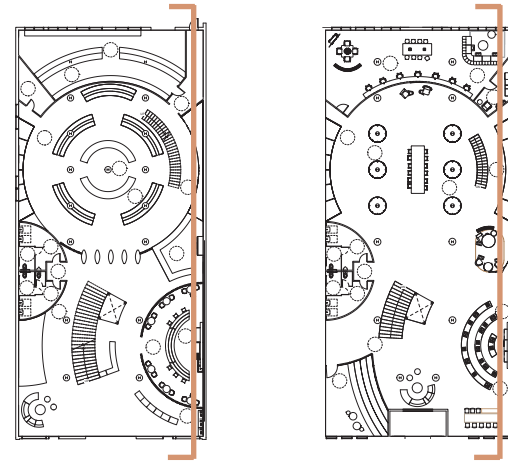
LEVEL 2

## PLAN KEY

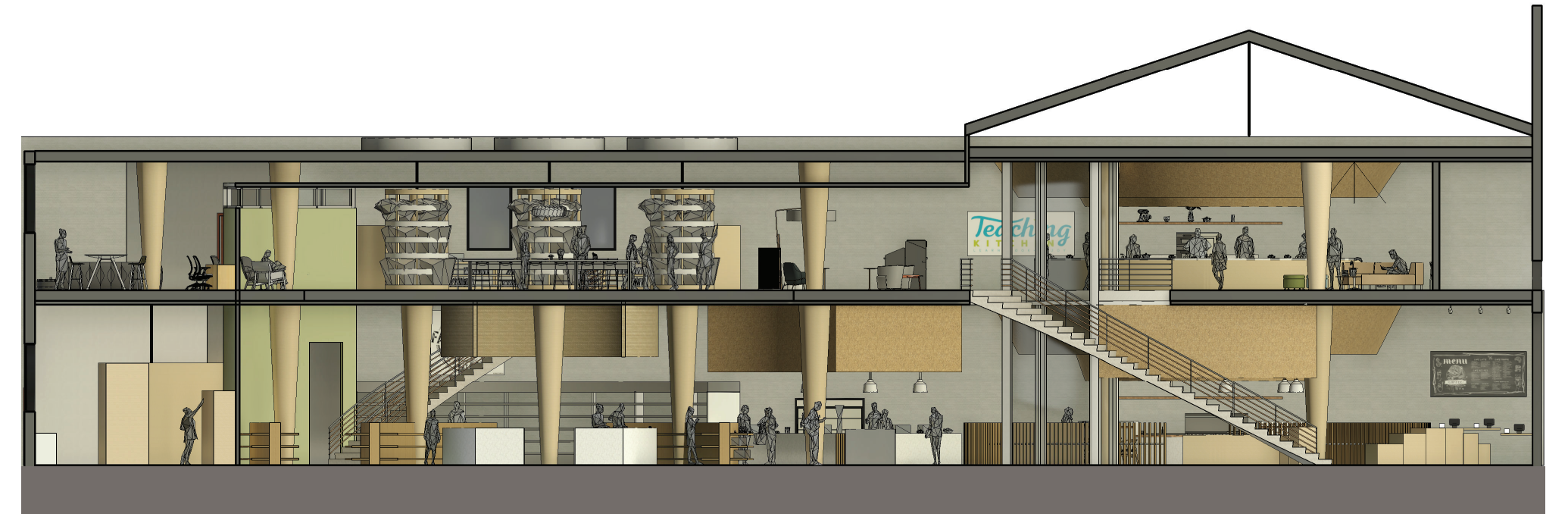
- J: Lecture
- K: Communal Table
- L: Waiting Lounge
- M: Teaching Kitchen
- N: Reading Nook
- O: Teaching Garden
- P: Library Stack
- Q: Admin Offices
- R: Wellness Room



# LONGITUDINAL SECTIONS



WEST FACING VIEW



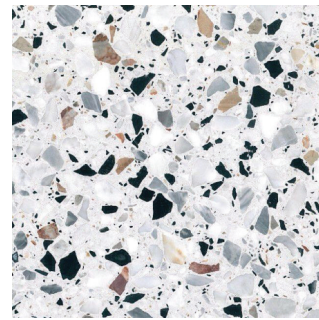
EAST FACING VIEW

# WEST SECTION PERSPECTIVE



# ENTRY & WELCOME DESK

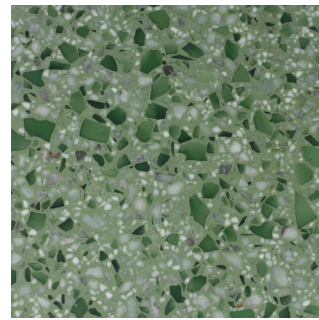
When students arrive at Flourish, they are greeted by the welcome desk. This warm and inviting component is custom designed and built into the main staircase, which allows for easy second floor access and encourages physical movement. One also immediately gets a sneak peak at the food growth that takes place in the space. A custom large planter holds a plethora of herbs that are able to be planted and harvested indoors thanks to overhead grow lighting.



GREY TERRAZZO  
Floor



CONCRETE  
Polished Floor



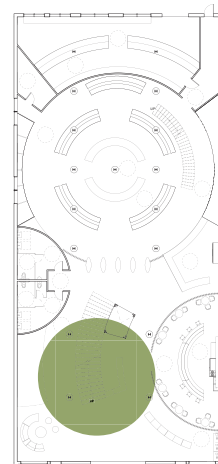
GREEN TERRAZZO  
Floor



KNIT  
Suspended Grow Light  
Eureka



VALCO  
Ceiling Suspended  
Eureka



MEAL KIT  
LUNCH  
7:30-11:00



# NUTRITIOUS CAFE

The cafe serves as a healthy and convenient food option for all students. Its geometric shape is inspired by the curvilinear form of the flourish concept and its material and color palette is derived from earth tones. A self ordering kiosk allows one to quickly review the menu and either order food to eat in the dining space or take to go. A change in floor material allows for easy wayfinding, along with a custom planter display to guide kiosk ordering traffic flow.



Oak  
Custom Slat Partition



Light Ash  
Custom Planter Display



PAINTED BRICK  
Exterior Existing Walls



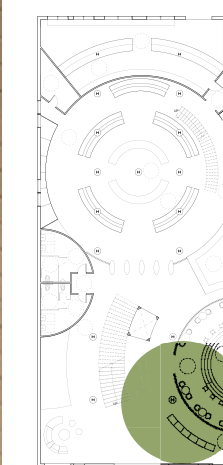
BLOOM  
Pendant Bar Lighting  
Eureka



ENE  
Cafe Table  
Coalesse



WISHBONE  
Handwoven Chair  
Coalesse





# MEAL KIT COUNTER

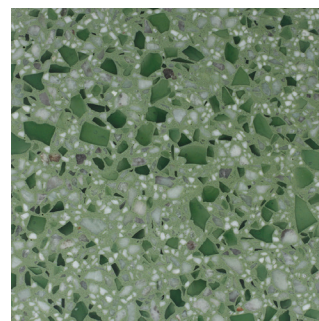
The meal kit counter is located adjacent to both the market and the cafe. It provides ample space for the Flourish staff to prepare meal kits that students have ordered for the week. Students can then easily and quickly pick up their kits. The custom cork canopy helps to define the space and the signage on the canopy aids in wayfinding as well. Cork material is incredibly sustainable and for this reason was chosen considering the mission of the food hub prioritizes sustainability.



CORK  
Custom Canopies



WHITE MARBLE  
Custom Counter



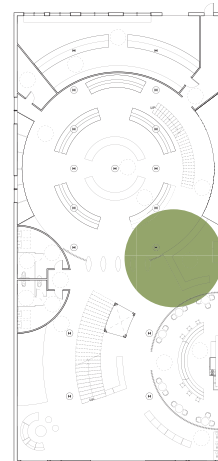
GREEN TERRAZZO  
Floor



VALCO  
Ceiling Suspended  
Eureka



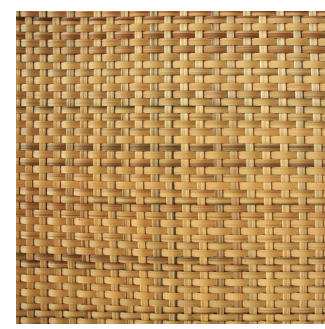
EGM  
Food Refrigeration  
Empura



# MARKET



The focal point of the first floor is the market. The atmosphere here is intended to be pleasant and inviting to all students. Entry and exist is controlled by electronic speed lanes that allow students to shop without the pain of traditional checkout. Food items they choose are automatically logged via their school account and this allows for a great deal of autonomy. Signage on speedlanes directs traffic. Curvilinear custom shelving and displays reinforce flourishment.



Rattan  
Custom Market Canopy



Light Ash  
Custom Columns



OAK  
Custom Food Shelving



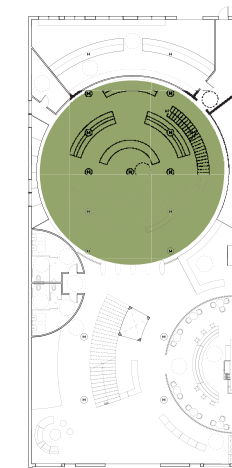
GREAT GREEN  
Accent Wall Paint  
Sherman Williams



ONICO  
Track Lighting  
Zumtobel



SPEEDLANE  
Optical Turnstile  
Boon Edam

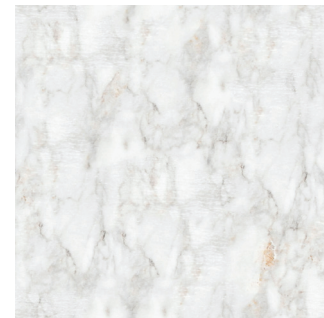


# TEACHING KITCHEN

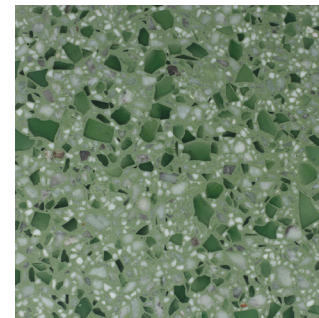
The teaching/demonstration kitchen allows students to attend live cooking classes where they learn formative and valuable skills from a culinary chef. The custom counter workspaces follow similar form to the cafe on the first floor and accommodate students attending classes on their own or with friends. Adjacent to the kitchen is a lounge where students can wait for their classes to start and a communal dining table where a class can gather to eat their cooked meals.



LIGHT ASH  
Custom Workspaces



WHITE MARBLE  
Custom Countertops



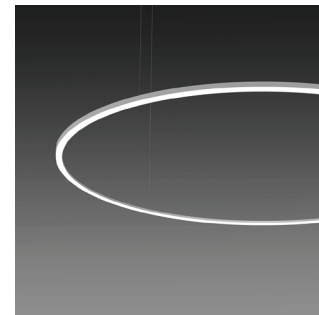
GREEN TERRAZZO  
Floor



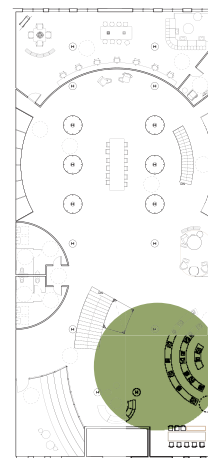
CIRCA  
Wedge Lounge Seating  
Coaleese



TOPO  
Mobile Lounge  
Steelcase



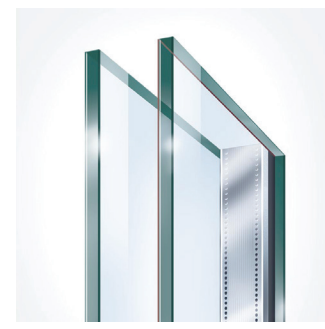
MOONRING  
Ceiling Suspended  
ALW



# LECTURE



The "open" lecture space is purposely enclosed in glass to allow for transparency and showcasing of the guest speaker events that take place here. Custom stair seating allows students to informally gather around for the discussions and the presenters have workspace on the wall to aid them in their lecture teachings. This space is located next to existing front facade windows to allow in plenty of natural sunlight and is surrounded by greenery and inviting signage.



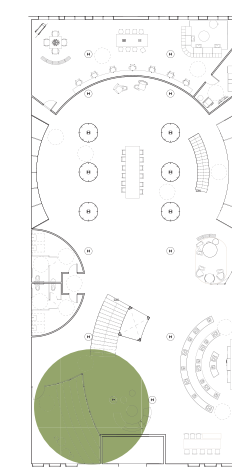
GLAZED GLASS  
Curtain Wall



GALVANIZED STEEL  
Wall Mullions



OAK  
Custom Stair Seating



GRASSHOPPER  
Workspace Wall Paint  
Sherman Williams

# TEACHING GARDEN

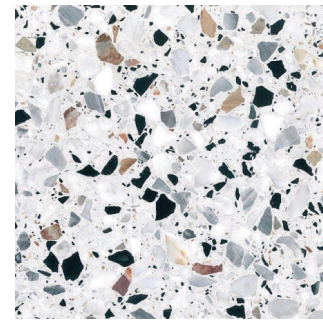
A large portion of the second floor is dedicated to the food hub's indoor teaching garden. The entire interior is intended to be a living, breathing, growing space. The food cultivated and harvested in the garden is used to fuel the cafe, market and teaching kitchen. The custom planter towers optimally utilize the height of the space and are constructed of sustainable materials. Surrounding the garden are library stacks that further help in educating students on food systems.



Ocean Bound Plastic Custom Garden Tower



Light Ash Custom Garden Tower



GREY TERRAZZO Floor



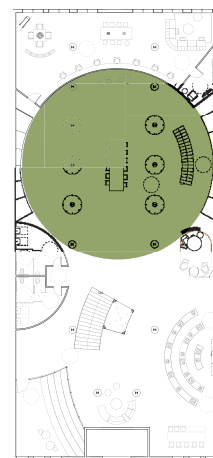
BLOOM Pendant Bar Lighting Eureka



ENEA Cafe Table Coalesse



WISHBONE Handwoven Chair Coalesse



# CUSTOM STRUCTURE DETAILS

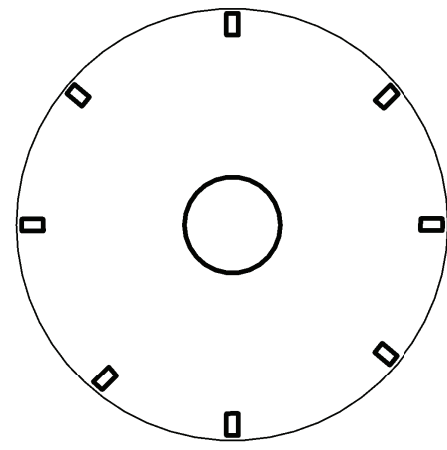
## GARDEN TOWER



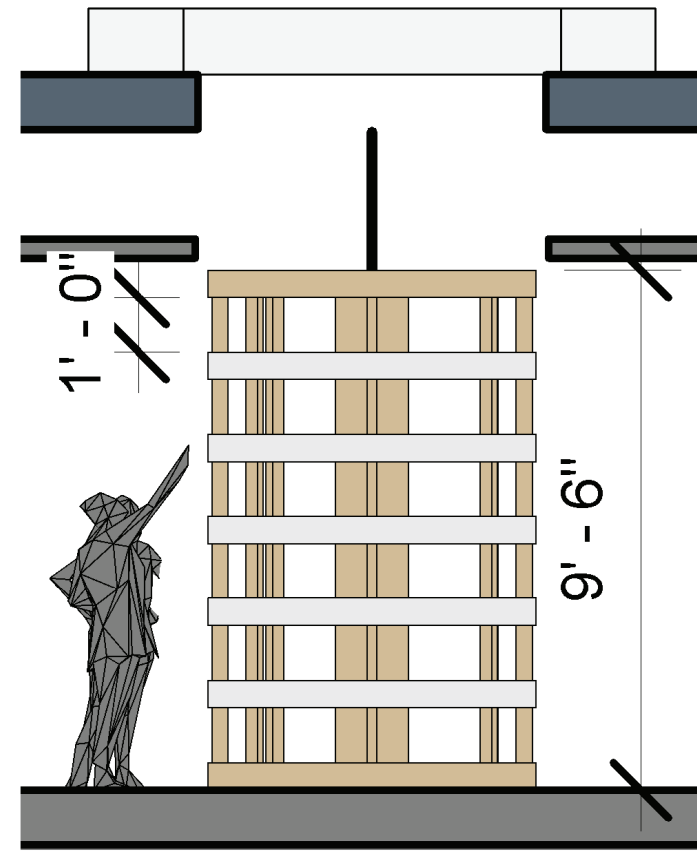
WHITE ASH  
Support



OCEAN BOUND PLASTIC  
Planter Layered Shelves



PLAN



ELEVATION



PERSPECTIVE

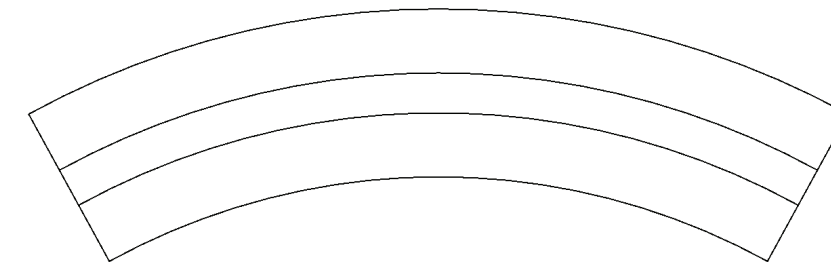
## MARKET SHELVING



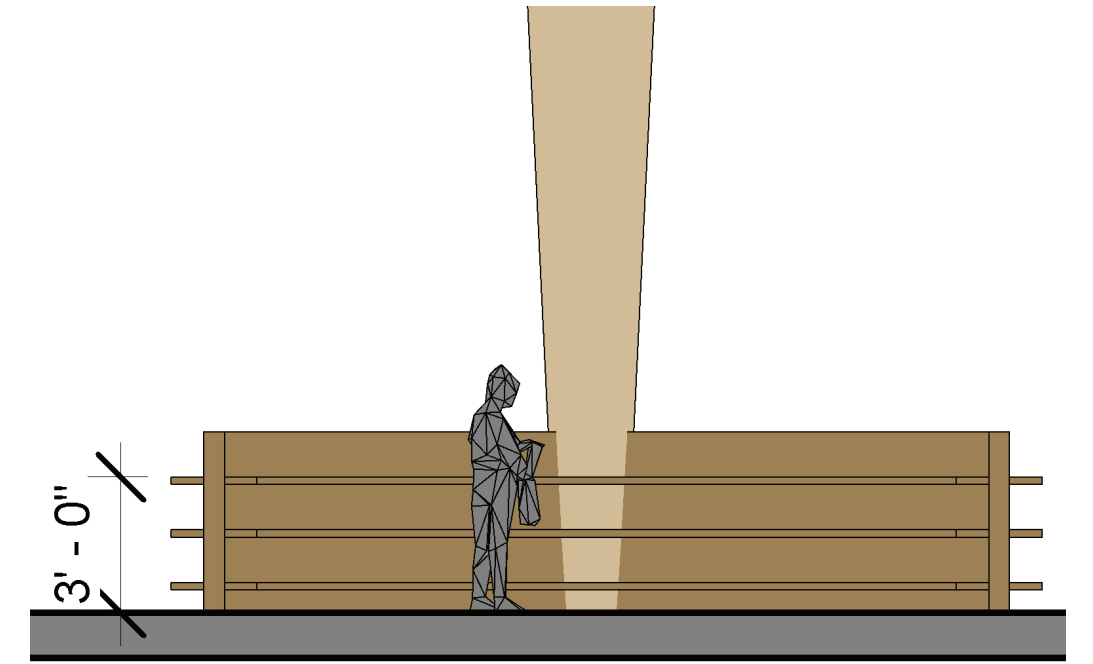
OAK  
Support + Shelves



WHITE ASH  
Supporting Column



PLAN



ELEVATION



PERSPECTIVE

## FINAL THOUGHTS

The goal of this project has always been to celebrate the flourishing of VCU student health and wellbeing, physically and mentally. Access to safe and nutritious food is a human right and there is always more that we can be doing to ensure those in need get the nourishment they so deeply require. Flourish came to life in order to serve as a food hub where all VCU students can go to not only gain access to nutritious food but also where they can expand their cooking skills and literacy to aid in developing longterm healthy habits and skills. The process of growing and learning about food informed the strategies within the project to heighten learning around a sustainable food system. Overall, the space aims to make students feel empowered while they gain access to the food, knowledge and support they need during their college journeys.

# ACKNOWLEDGMENTS

I am beyond thankful for all of the people that helped this project come to life, including:

VCU Interior Design Faculty for providing me with constant encouragement, wisdom, and inspiration over the past two years: Roberto Ventura, Lexy Holcombe, Kristin Carleton, Camden Whitehead, Emily Smith, Sara Reed, Caroline Eddy, Eleanor Barton, Jillian Chapin, Annie Frankfort, Melinda Harvey, Rob Smith, and Christiana Lafazani.

VCUarts Director of Operations, Dinkus Deane, for personally touring me around The Depot and providing necessary construction documents.

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Family & Friends for the endless love and support, you all mean the world to me.

Special thank you to Timothy Reinaldo, Hokie, and Leo for supporting my dreams and keeping me sane during this chapter of life.

# IMAGE CREDITS

Title: [https://unsplash.com/photos/hX\\_hf2IPpUU](https://unsplash.com/photos/hX_hf2IPpUU)

08: <https://www.pexels.com/photo/person-holding-brown-chopsticks-and-white-ceramic-bowl-4778630/>

11: <https://www.pexels.com/photo/cotton-sack-with-apricots-near-books-on-table-4397898/>

18: <https://richmondmagazine.com/restaurants-in-richmond/food-news/opening-soon-market-at-25th/>

20: <https://design-anthology.com/story/garden-pavilion>

22: <https://www.unstudio.com/en/page/14281/oppo-flagship-store-guangzhou>

24: <https://www.archdaily.com/949574/the-florescence-karvone-design>



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