

# The Healing Garden

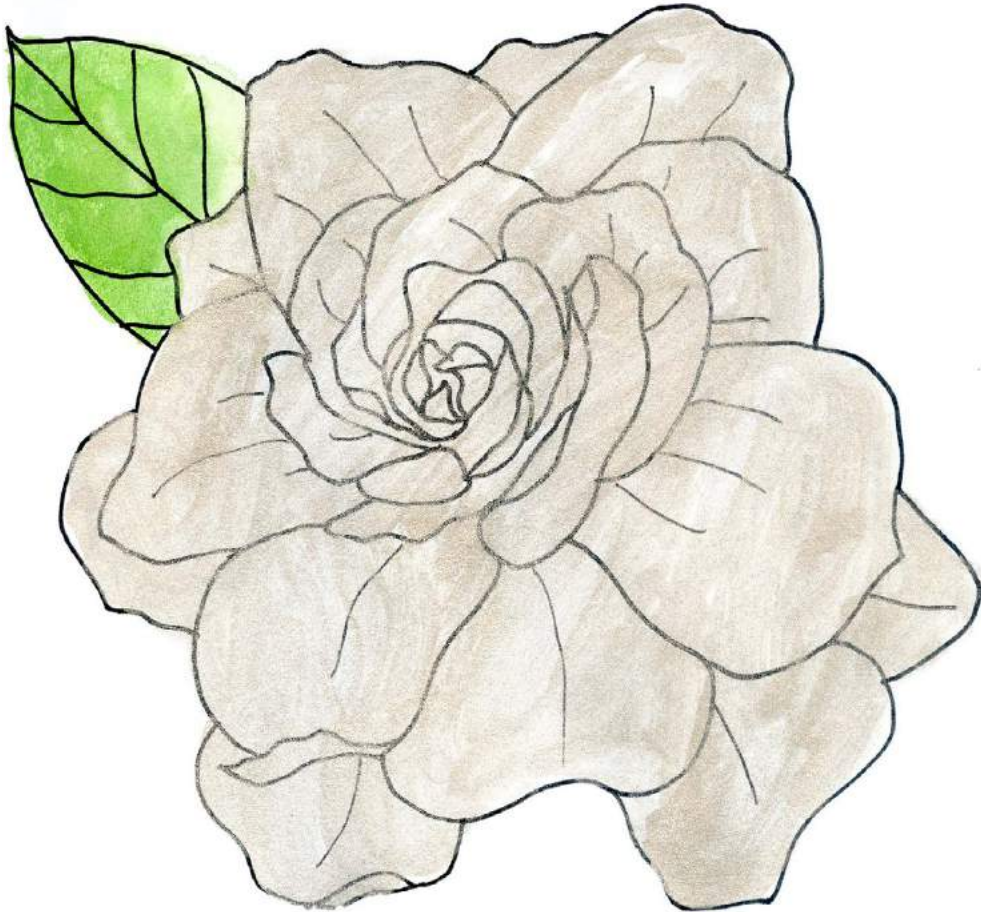
Studying Components of Healing Gardens and  
Expressing Them in Public Environments





# The Healing Garden

Studying Components of Healing Gardens and  
Expressing Them in Public Environments



**Whitney Mullins**

Master of Landscape Architecture Thesis

“It had not been a garden of hidden meanings.

But now her new perception of the garden  
opened up new levels of feeling, and she  
began to re-examine her emotions.”

Tachihara Masaki, *Wind and Stone*

## Dedications

To my heavenly father for giving me opportunities to learn and give back to the world given to us.

To my mother and grandparents who have supported me through my life.

To my sister and cousin that brightened my days with random chats.

To my friends who always knew just what to say when I needed to laugh or cry.

To my classmates who helped me grow in my passion and inspired me to be who I am.

To my professors that pushed me and helped me to see the world differently.

To every person I met along the way -- you've all given me a piece I will treasure forever.

To Auburn University -- Truly a family worth being a part of.  
War Eagle.



## Abstract

According to Robert Ulrich, as pointed out by Betsy Severtsen in her article about healing gardens, our world's physical environment is being more widely accepted as a direct influence on a person's overall health -- mental, physical and spiritual, their stress levels, and even their mood or outlook on the world. Throughout time, gardens referred to as healing gardens have been designed and implemented to improve the quality of life for a specific user group.

The purpose of this thesis is to study these gardens and test if they can be successfully integrated into public spaces in order to become a beneficial healing environment for user groups of various ages, mental and physical states, and to provide different types of spaces for the visitors to use in many ways. This study states that landscape architects can take these concepts from healing gardens and successfully implement them within a public frame for a variety of user groups. The importance of the spirit of the place being brought out by the healing garden, as well as the details of the design being sensitive to a regional populations views or beliefs, is imperative when designing a healing garden that will engage the public.

This study explores theory surrounding healing gardens, gardens and healing gardens throughout time and the qualities they possess, what kind of site may be suitable for these kinds of implementations, and, through design tests, what the successes, implications, and obstacles that may come along with creating these kinds of places. for public use.





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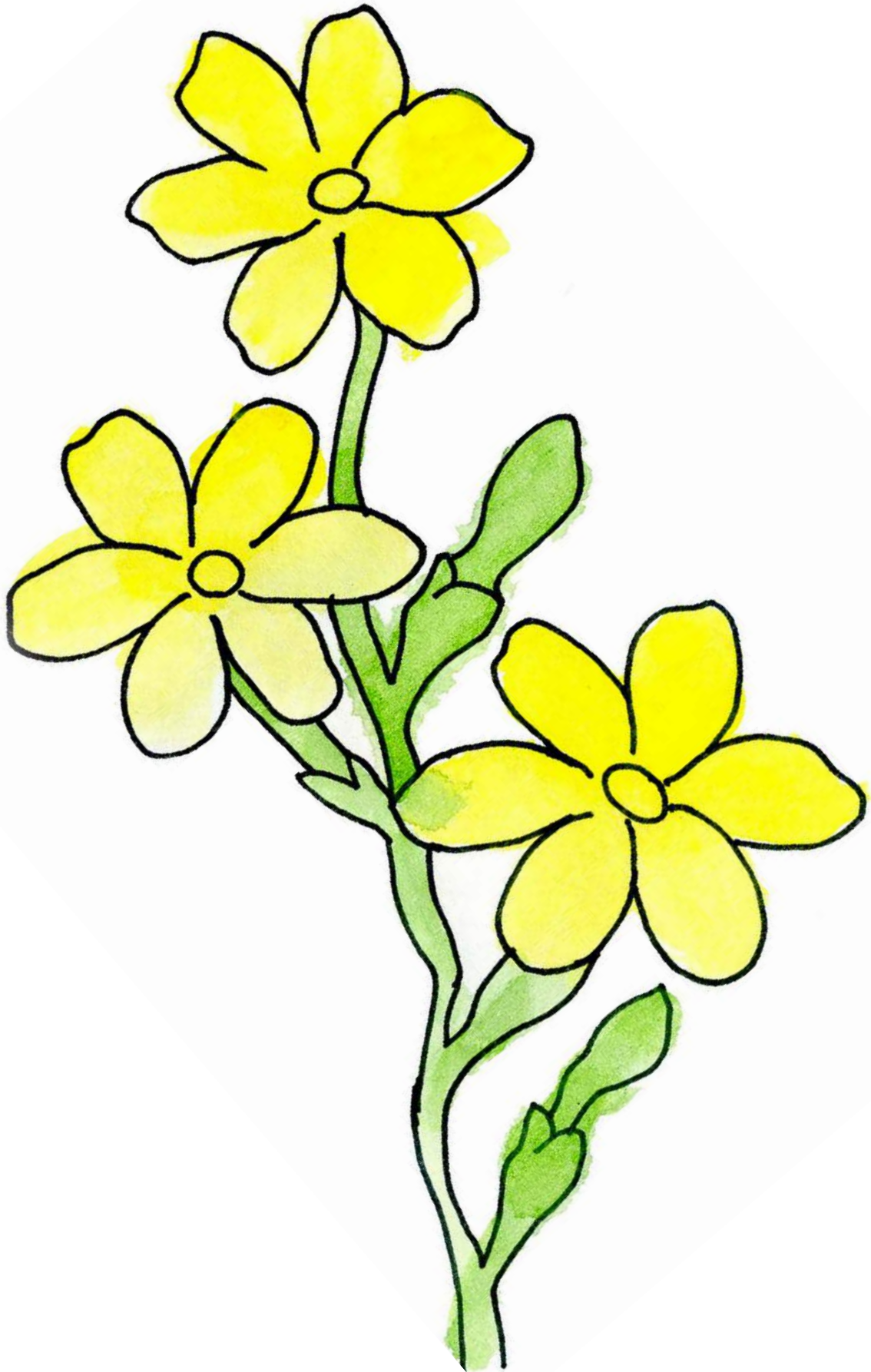
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## Garden Defined

The most beautiful thing about gardens is their ability to mean different things to different people. Private gardens are places where one can cultivate their feelings and beliefs in the form of elements interacting with the senses laid out in a way that appeals to their connection with the environment. These types of gardens are intended for personal use and definition. Public gardens also cultivate feelings and beliefs of an individual, but are not typically changed to meet each user's needs. Instead, they provide a special connection with the environment that can reach more than one specific type of person even if it may create a different kind of feeling or memory with each visit.

Gardens typically have a variety of rooms that are connected with transitional zones throughout. Each room may have a slightly different layout resulting in a variety of ways for its many users to interact with it physically, mentally, and spiritually. These gardens can connect to a person by being physically cultivated by them, or by simply allowing a place for the user to reflect and enjoy the life happening around them.





## Healing Defined

A person may be considered healthy if they are not suffering from an illness or injury, but they may also be healthy if their mental condition is free from stress and not being subjected to a strain caused by other aspects of life. To heal is to alleviate mental or physical pain and suffering. How one is healed or maintains their health is part of the way in which one heals.

Healing can be a physical, emotional, or spiritual experience. It is something that can be obtained through means such as medication, meditating, and praying, it can be an emotional expression through crying, yelling, and laughing, or it can even be achieved by physical manifestation of emotions through means such as exercising, painting, or investing time into any hobby they may enjoy. Studies pointed out by the University of Minnesota have shown that emotional and physical healing has been improved at an increasing rate when the activity is accomplished while spending time outside in nature.

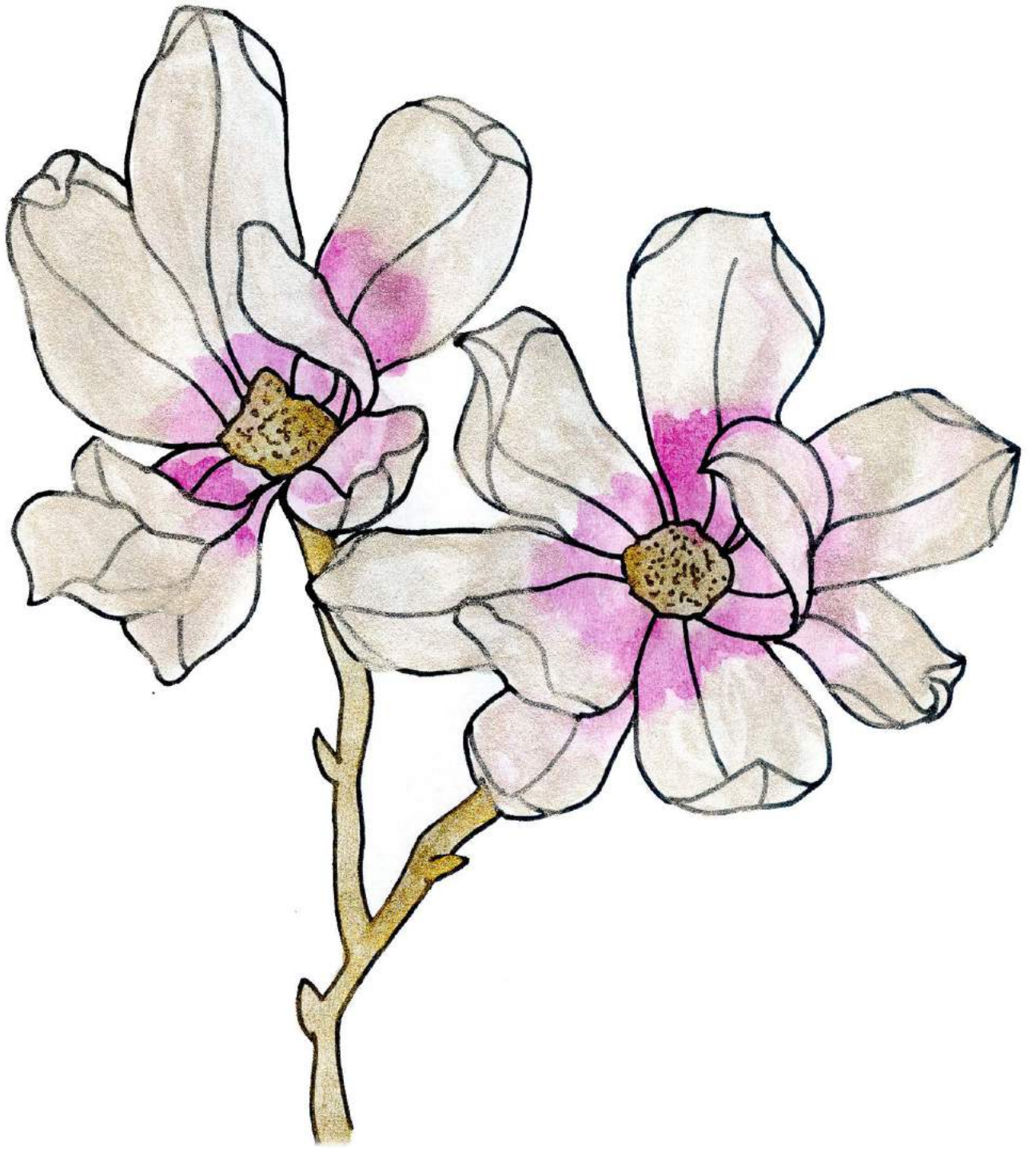
## Healing Garden

Combining these two terms "healing" and "garden" creates for an even more ambiguous definition, but allows for a very powerful space to be created. By taking the rooms and connection provided in gardens and marrying them to the idea of mental, physical, and spiritual healing through various activities and experiences, a space that is dedicated to one user group and type of healing may be picked out and implemented near facilities where patients may need to be exposed to this environment.

Healing gardens related to facilities dedicated to providing a specific kind of treatment are growing in popularity as well as gardens being provided as a commons for medical facilities in general. There seems to be an opportunity for these kinds of gardens to be provided for public access in order to provide an opportunity for this kind of healing to many different ages, and physical and mental states.

A widely accepted definition among scholars researching these types of gardens is that it is a garden or landscape designed for a specific population, place, and intended positive health outcome. The design and program are informed by research done based on data received from the intended location.

The following 3 types of healing stemmed from a combination of other theories being combined by Ulrika Stigsdotter and Patrick Grahn as well as the garden room characteristics that follow. This resource proved to be an invaluable combination of widespread theory surrounding healing gardens.







## Emotional Healing

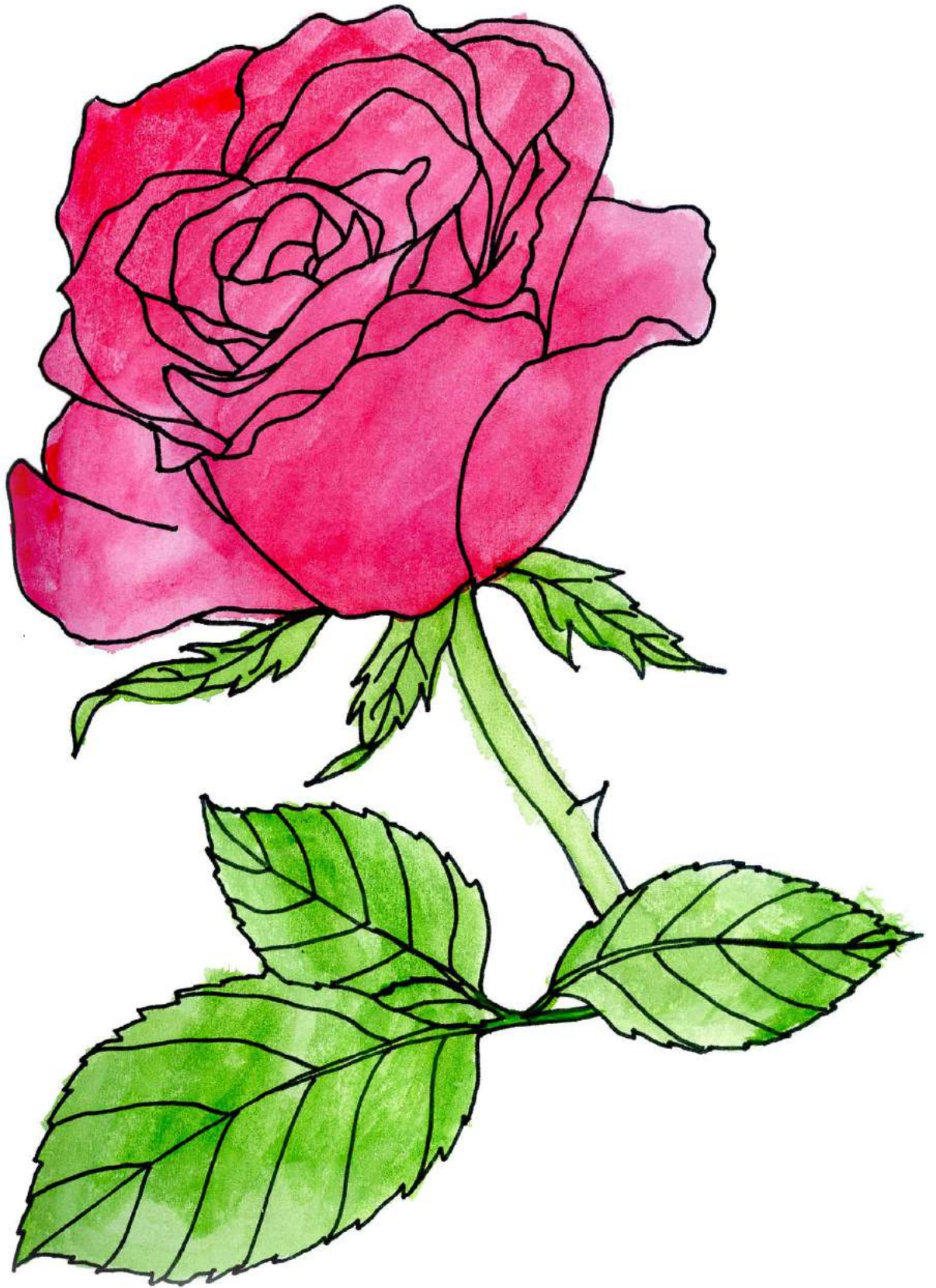
This theory stems from the belief that humans are from nature, thus have an improved quality of life when surrounded with nature. This reduced stress level and improved overall well being is believed to be rooted in the cognitive energy expended during spontaneous attention and directed concentration. The most common examples for these types of energy being expended is taking a walk in nature vs. taking a walk in a big city. When walking through nature, you are aware of your surroundings, but typically feel no imminent threat causing you to pay extra attention to anything in particular. When a sudden noise is made or a different view is noticed, this kind of attention is effortless and takes much less of a toll on your brain ending in an overall refreshed feeling.

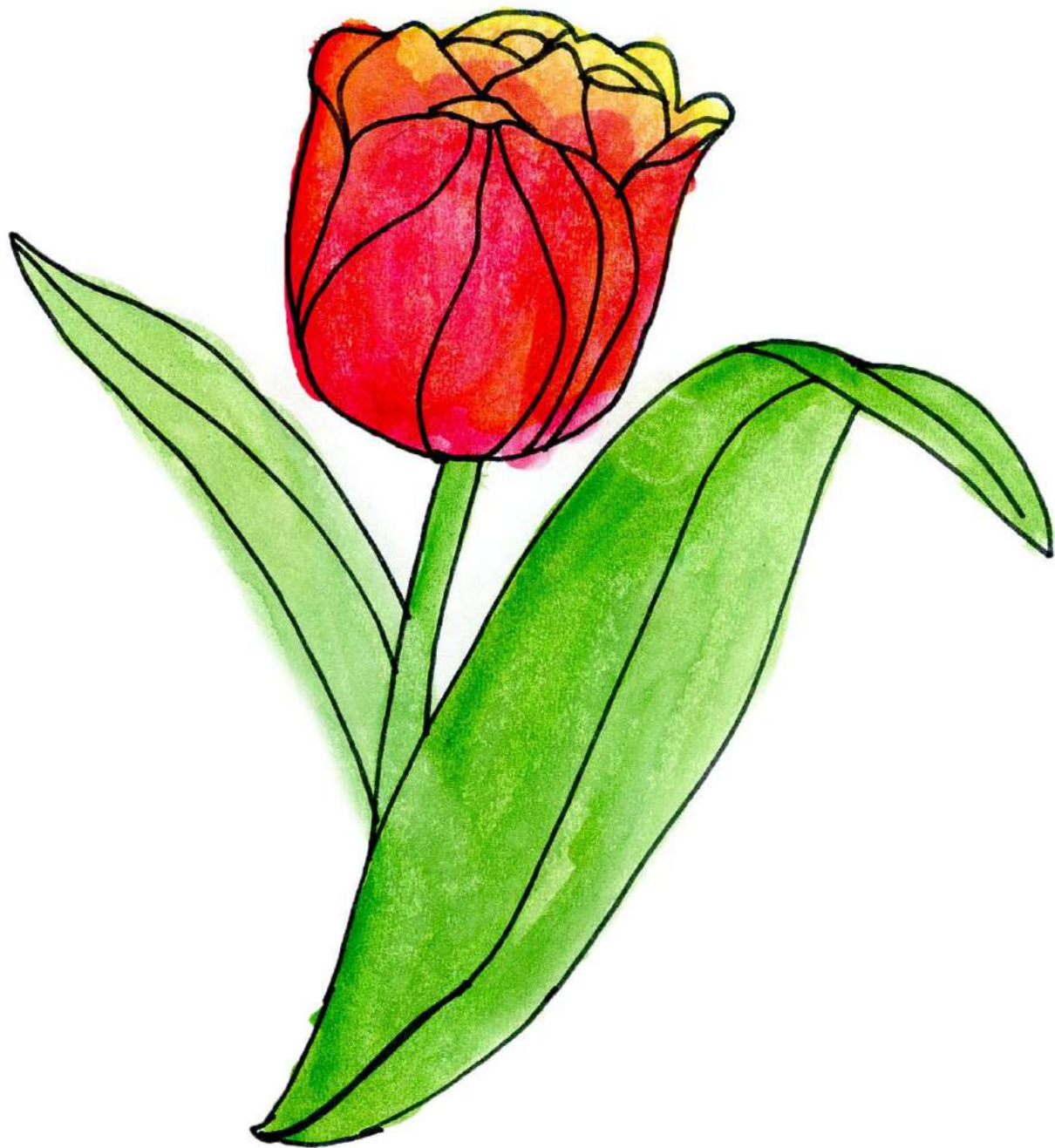
This is a much different experience than when walking through a big city. Typically lots of people, cars, and noises or smells are grasping for your attention and causing your mind to be much more alert. This kind of directed concentration allows you to make decision about when to cross the road, who to speak to, where to walk, etc, but it also takes a much heavier toll on your mental well-being and can cause emotional fatigue much more quickly than spontaneous attention. This also stems from the saying that nature makes few demands - that is that plants, rocks, and water cannot be let down by you. They will not run away from you, speak to you, or be upset over something you do. This kind of relationship is low risk.

## Horticultural Healing

The horticultural theories find themselves rooted in the belief that working with the garden is rewarding because you receive physical healing through being active, spiritual enlightenment in growing with the life you are helping to cultivate, and emotional healing by being surrounded by the end product you have created. The entire process of working with the garden to create life is believed to be rewarding. This healing from physical labor in the garden is useful for some, but may not be good for all types of healing needs.

Another piece of horticultural theory is that there are specific plants that have medicinal and emotional healing effects for the user. Some can be used to help with burns, infections, headaches, sore throat, stress levels, ability to sleep well, depression, and some even been thought to help keep certain cancers at bay. It is important if including these types of plants in a garden that they are either clearly marked with what they are, or there are no plants in the garden that would cause a negative effect if ingested.





## Experiential Healing

A person's experiences throughout their life, especially their early years, play a vital role in their character as an adult. By designing in such a way that involves various sensual stimulants, there is a higher chance of a person being able to relate this place back to an experience in their life. These restorative effects are triggered by past experiences and memories, and can cause a deeper connection to the place they are in. The feelings can be sentimental, happy, or even fill the person with sorrow, but would allow for a deeper and meaningful connection through these experiences enhances the chance of mental or spiritual healing.

This kind of healing does not just stem from the memories and experiences a person is bringing with them, but also the memories that are being made within the garden. The different activities and user groups coming together within the space is a large part of what makes this theory so special. It is about the emotional connection the landscape and the experiences or activities one performs within the landscape. Through a person's past and how they interact with a space in their present, can greatly impact their emotional health levels and carry through to their overall well-being and experiences in the future - potentially even becoming a vital memory.

# Designing For Mental Health

There are four main types of involvement based on mental health and capacity at the time you are visiting the garden.

## 1. Outgoing Involvement

This is the highest level of involvement one can achieve. Typically the leader of a group, or joining a group of strangers you may have just met. This level of mental health allows for a variety of experiences in a public garden. This requires an outgoing personality and a low level of stress mentally and physically.

## 2. Active Participation

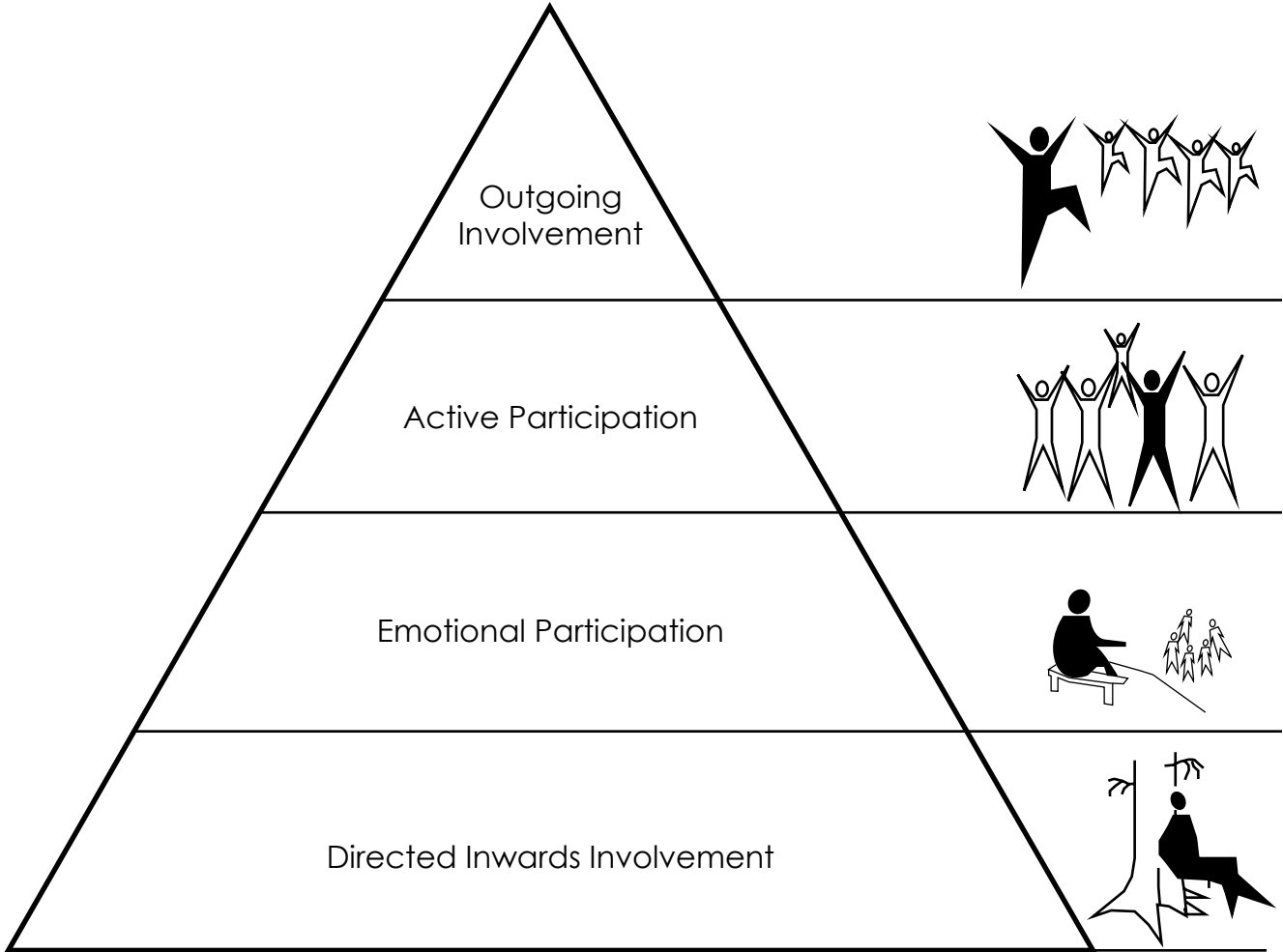
The second level on the pyramid is most closely associated with the follower archetype. This person is part of a larger group and actively involved in physical or emotional ways, but will not want to be the person in charge, and may not be up to initiating conversation with those they pass by.

## 3. Emotional Participation

This level of involvement is one that wishes to be alone in their activities, but may reach out emotionally to others. They may do this by smiling or acknowledging those that pass by without too much interaction, but it is most typical of this participation to involve watching other people's activities and letting the emotions you perceive from them drive your healing.

## 4. Directed Inwards Involvement

The lowest level of involvement is for the people that want a quiet place to reflect on themselves and their life. These people may simply want to be in silence with nature, to read a book, or to meditate. This kind of reflection allows for a deeper emotional and spiritual healing while relying very little on the physicality, but still supplying the initiative to get up and walk in nature.



# Healing Garden Elements

This collection of elements for designing a healing garden is collected through a variety of books written by Marni Barnes, Clare Cooper Marcus, Naomi Sachs, and others.

- Engagement with nature (i.e. water, vegetation, animals, fresh air)
- Vegetation to hardscape ratio of at least 70:30
- Sense of control (easily navigable and with some areas for privacy)
- Opportunities for social interaction
- Opportunities for physical activities
- If not all areas are accessible, at least allow some to be viewable from other accessible points in the garden
- Variety of rooms for spatial feelings
- Curvilinear paths in order to allow for a constant flow - no dead end paths



# My Theoretical Framework

In this section I have laid out the different frameworks that I see available to work with, and filled in the circle next to the ones I will be working with.

## 3 Types

- Emotional Healing
- Horticultural Healing
- Experiential Healing

## Involvement Based on Mental Health

- Outgoing Involvement
- Active Participation
- Emotional Participation
- Directed Inwards Involvement

## User Groups

- Niche User Group
- Not Defined

## Location

- Private Use
- Private Near Healthcare Facility
- Public Near Healthcare Facility
- Public Use

## Additional Design Elements

- Adds to the genius loci - sense of place
- Relies on interaction through the senses

## Room Feeling Studies

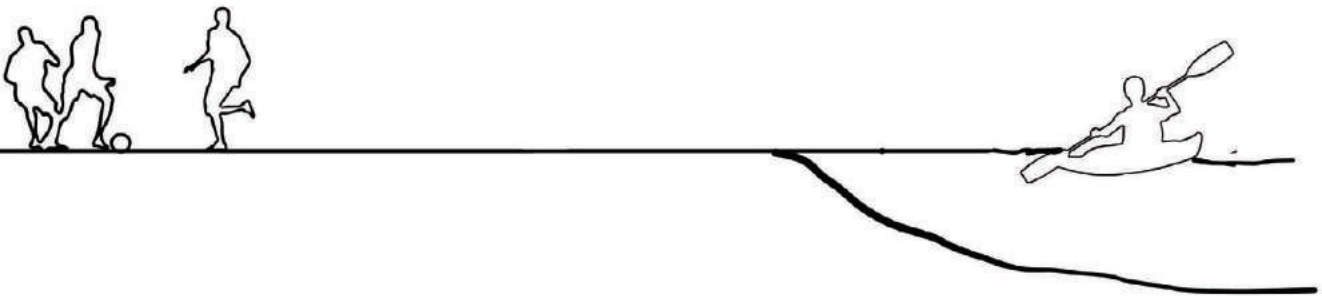
Creating multiple rooms that change in feeling based on spatial and elemental characteristics is important for providing a variety of potential experiences for the users of the space. In order to do so, I read descriptive adjectives of what different rooms may feel like then translated those into sections that displayed what I understood each room to feel like based off of the descriptors I read. These sections are by no means the only way these rooms could be designed in order to create these different feelings, but this was a good conceptual starting point for me to start envisioning the way these spaces may look to create a specific feeling or programmatic use.





## Common

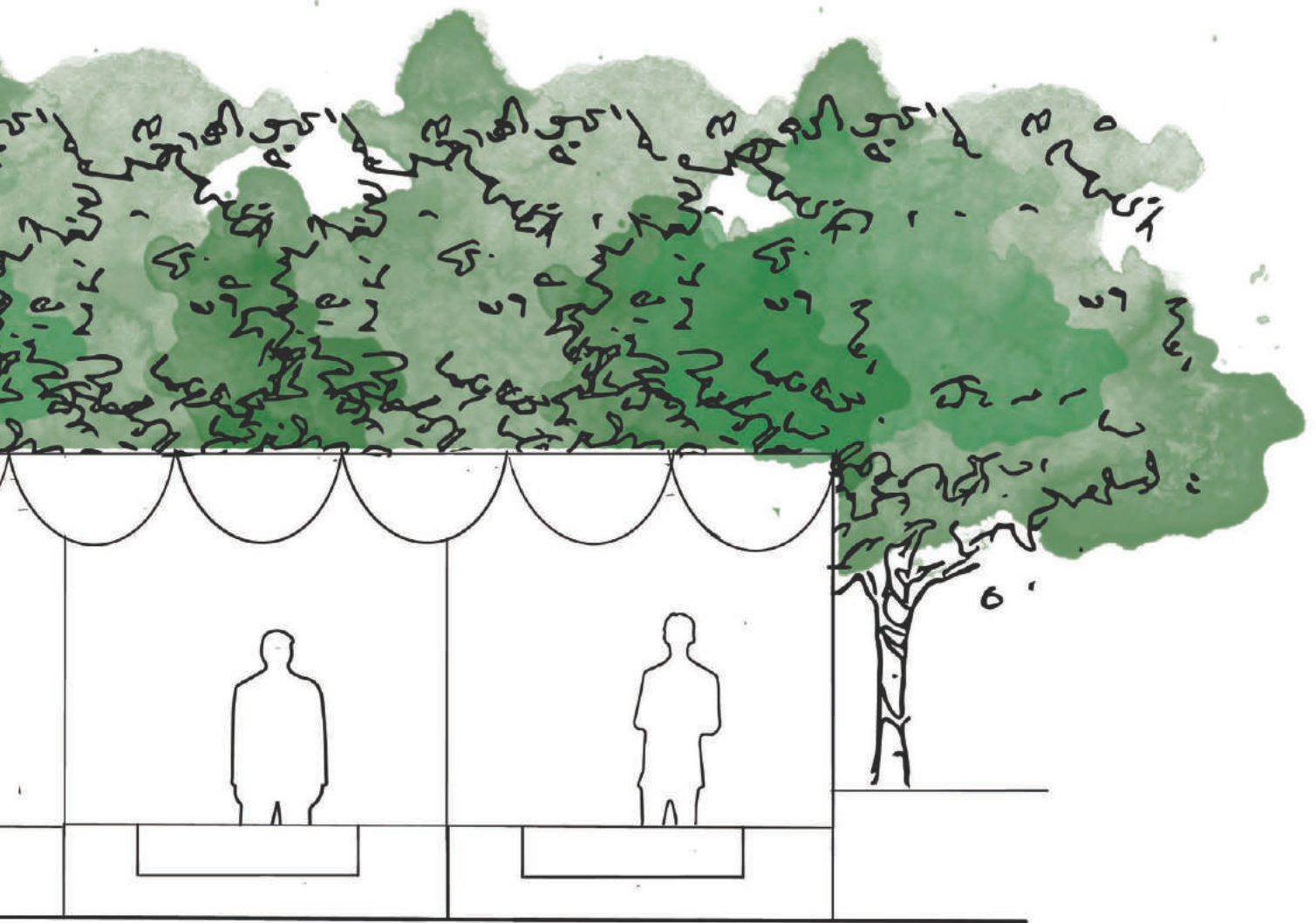
This room would allow for open space that could be used for sports, picnics, group gathering, or other activities. This kind of room would also allow vistas for those that wish to participate emotionally with what is happening in the open field. The space should be simple, yet inviting, allowing for those that wish to dwell in it refuge from any atmospheric conditions.



## Festive

This kind of room would have a more formal layout with space for seating as well as space for events to be held that can be set up and taken down within the existing framework. Some events that may be held there could be farmer's markets, art shows, concerts, or even theatrical performances. This space should be able to provide the bones for a space on its own even when a festival or reason to gather is not being held.









## Pleasure

This garden room should be safe and allow for directed inwards involvement. The room may be separated from the rest of the space with a hedge wall or barrier of some sort, or it may be left open with tight vegetative plantings to give the illusion of separation. The privacy may be provided by the canopy of a tree such as a willow. Should provide a variety of colors and textures in order to supply the user with interest and catch their attention while not being overwhelming. This will create a relaxing space for reflection and potentially meditation. This would be more of a private space.



# Rich

This room is intended to be for experiencing a variety of different flora and fauna and the way they interact with each other along with the sounds you may hear. The rich experience is intended that you see many plants you may have never seen before, or not known what they were. It is not exactly didactic, but it could be informational in a way to expose the users to new species they may enjoy.







## Serene

This room is meant to be a place for solitude, but in a way that also allows for social interaction. Maybe it borders another room and allows for sounds of water, wind, and bird song to add to the conversation between users. This type of room would not be used for large gatherings as the spaces available would be more limited or intimate. This type of spatial quality could provide for inwards or emotional involvement.



# Space

Describing this room's spatial qualities was one of the more challenging ones. Different could be one word used to describe this kind of room. Something that makes you feel like you are no longer in the same space you were in before entering it. Something that takes your mind to a new place and allows for a new way of thinking. Maybe in an open field it is a grove of trees, or maybe in the woods it is an opening with a new ground cover





# Wild

This kind of room would be more in tune with an unkempt feel. Messy vegetation, worn paths, vegetation growing up through paths, no noticeable planting pattern, and maybe something that makes it feel adrenaline rushing. Are the trees planted closely together? Can you see over or through the vegetation? Can you see the way you are headed? This is more about the mystery or excitement of being in this space.









## Garden Studies

Through researching healing gardens, I wanted to explore other types of gardens and see if they possessed the elements to become public healing gardens - even if they aren't considered healing gardens at all. The elements and feelings they provide are what intrigued me, and what proved to be helpful in moving forward with my design and thinking about elements of healing gardens.

I picked a selection of five gardens through time and in different parts of world to see which elements tied them all together.

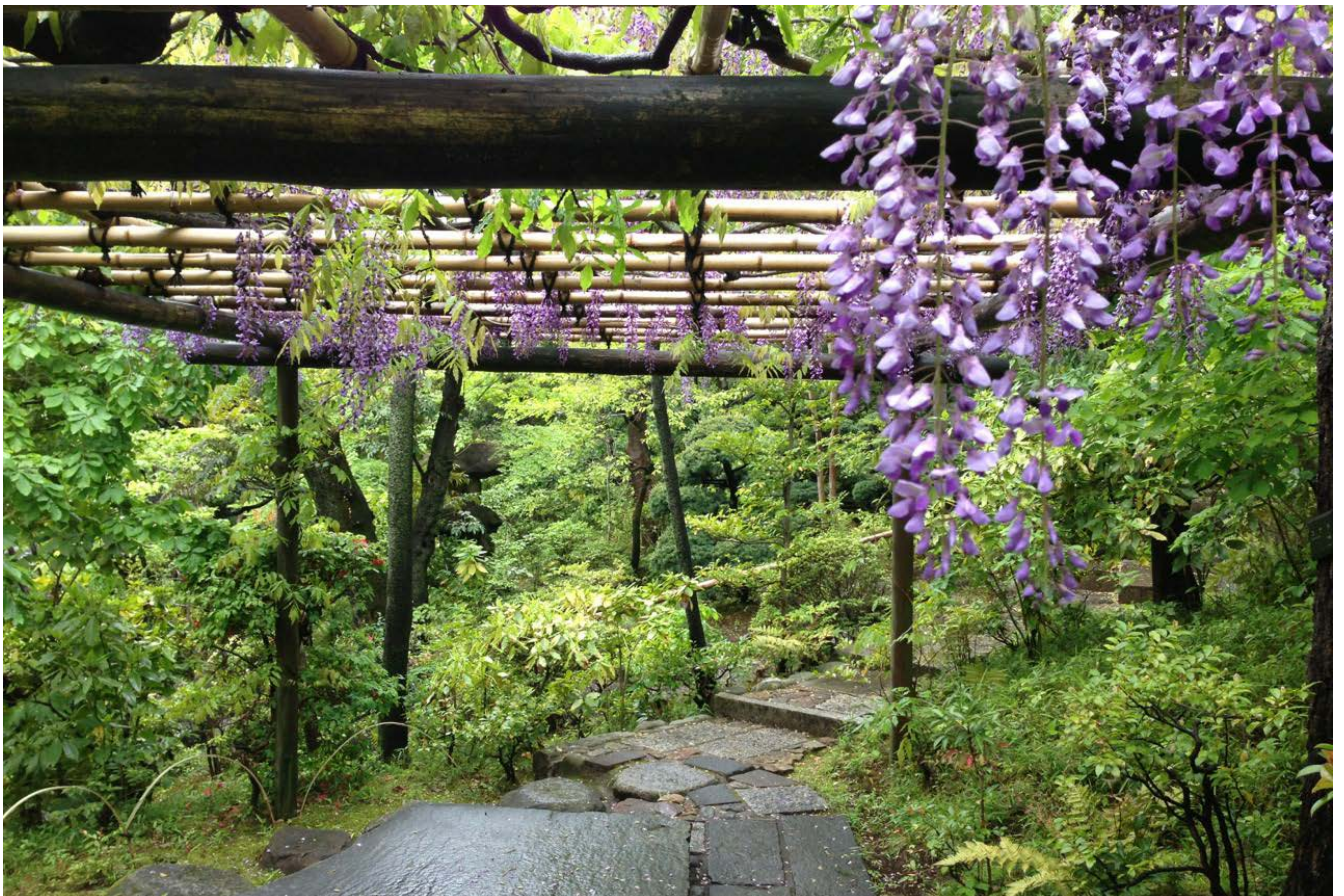
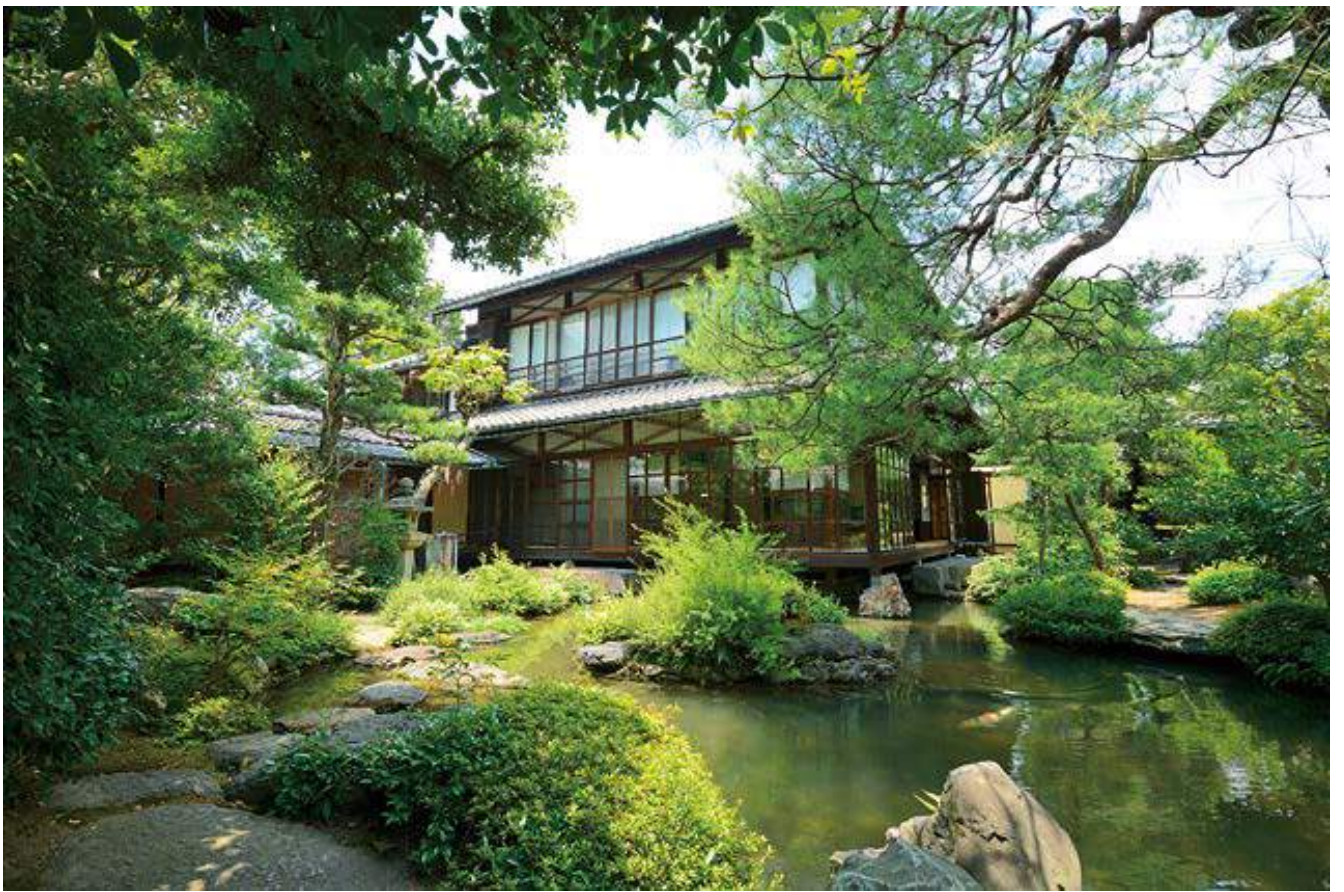


# Nezu Museum Garden

This museum sits between the busy Omotesando District in Tokyo and the gardens. The building acts as a block to the loud noise and distracting sights of the city. The room pictured below shows the connection the culture values between the outside garden space and the indoor room meshing and becoming one large space. The building may provide protection from weather, but you do not feel cut off from the surrounding nature. The textures and colors from the vegetation and materials used enhances the sense of place and provides different feelings as you walk through the gardens surrounding the museum.

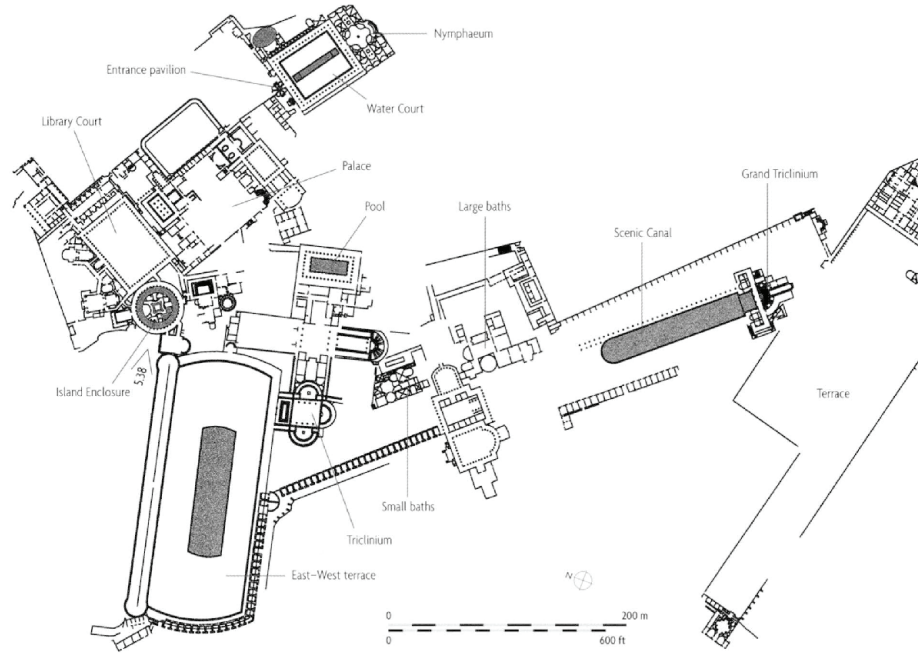
- Engagement with nature
- High Vegetation to Hardscape Ratio
- Sense of control
- Opportunities for social interaction
- Opportunities for physical activities
- Accessible
- Variety of Rooms
- Enhances Sense of Place
- Sensual Interaction



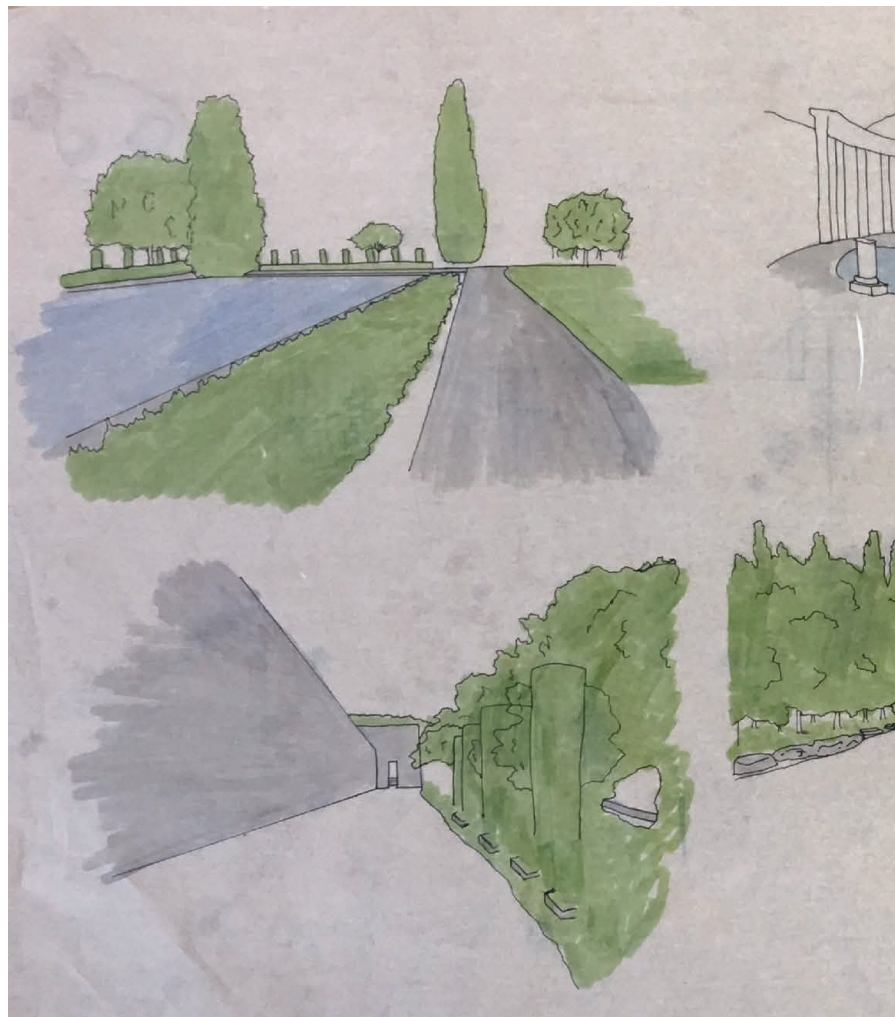


# Hadrian's Villa

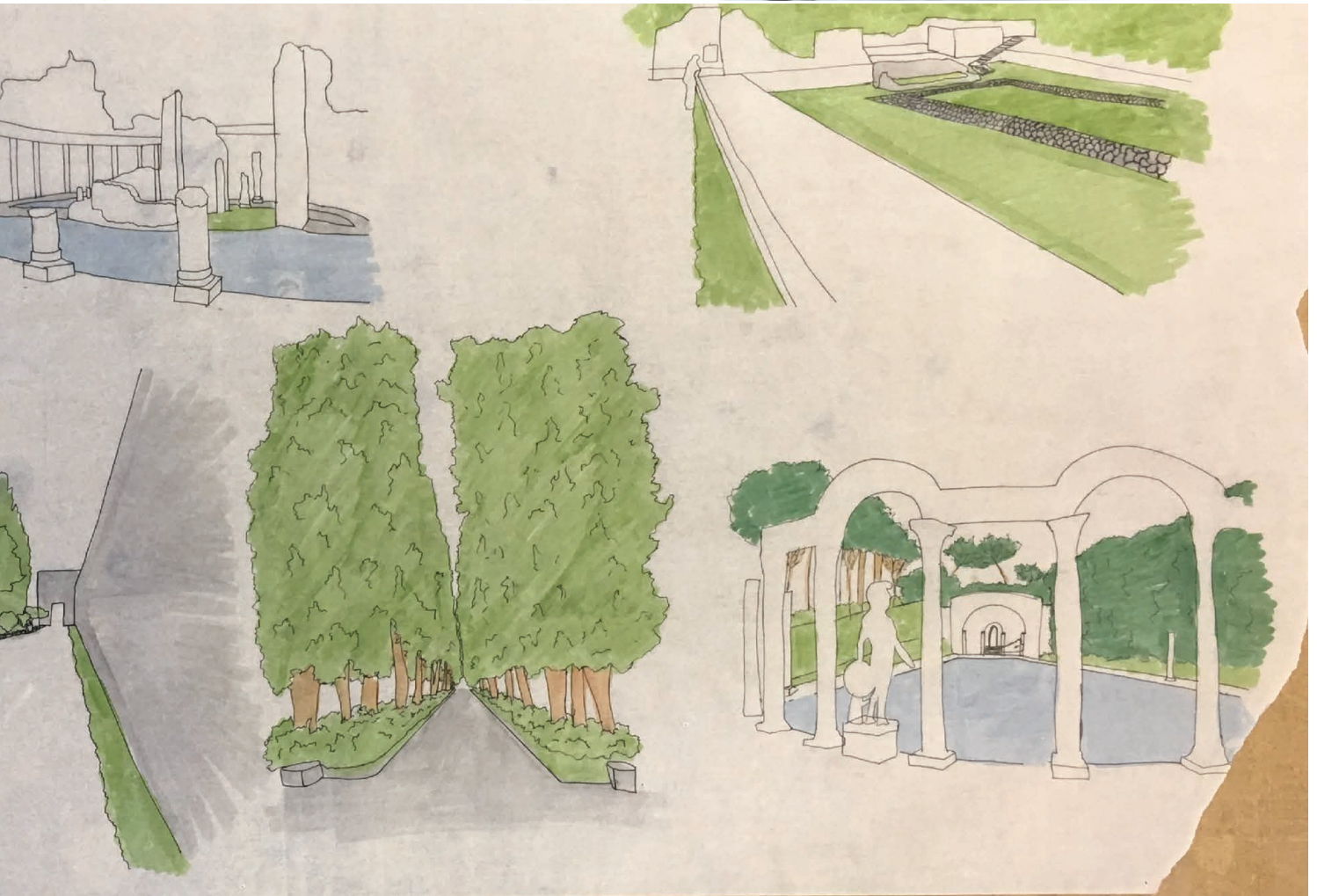
Originally built for Emperor Hadrian of Rome, this Villa was meant to be a place for Hadrian to retreat to for a break from the stresses of ruling. While this is a bit large scale, it is still a good example of the varying garden rooms, and connection to nature that is so important in a healing environment. The middle drawing on the top was an Island Hadrian used to be secluded, but surrounded with vegetation and water. The amount of space, corridors, and rooms allows for ample privacy, and, when in use, some spaces were only available to Hadrian. The space today is more of a tourist landmark, but in the time it was used, it would have been a place fit for a ruler to refresh and relax.



- Engagement with nature
- High Vegetation to Hardscape Ratio
- Sense of control
- Opportunities for social interaction
- Opportunities for physical activities
- Accessible
- Variety of Rooms
- Adds to the genius loci - sense of place
- Relies on interaction through the senses



- - - - - Attraversamento di arco  
 Through the archaeological site  
 ..... Percorso sotterraneo  
 Underground itinerary



# Hidcote

As the pictures show, there are so many spatial feelings within this English garden. The garden rooms are a big part of this design, and the attention to detail regarding textures and colors creates unique and special places. Open space, private space, space that feels different from the rest, vistas, and a rich variety of vegetation.

- Engagement with nature
- High Vegetation to Hardscape Ratio
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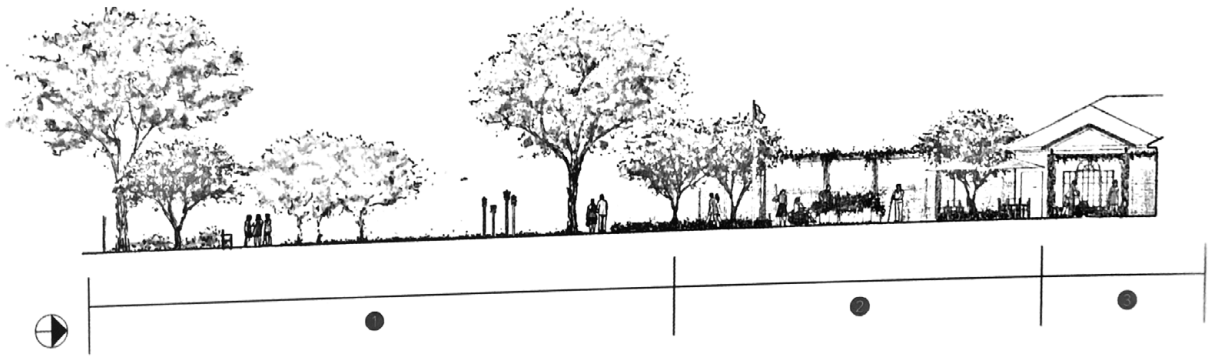


# Healing Garden at the Life Enrichment Center

As the grounds of an Adult Day Care facility, this healing garden is tailored for an adult user group with varying mental, physical, and neurological conditions. Dirtworks Landscape Architecture designed the garden to be made up of 3 distinct spaces varying in size, physical demand, complexity, and sensual interest.

- Engagement with nature
- High Vegetation to Hardscape Ratio
- Sense of control
- Opportunities for social interaction
- Opportunities for physical activities
- Accessible
- Variety of Rooms
- Adds to the genius loci - sense of place
- Relies on interaction through the senses





# Biltmore

The gardens surrounding Biltmore consist of various trails through formal and informal gardens, less obvious paths that lead to more private spaces, and even some hills you can climb to reach a field and gaze at some amazing views. These gardens provide public and private space, refuge from weather conditions, interaction with a variety of plants - including a greenhouse, and encourages exploration.

- Engagement with nature
- High Vegetation to Hardscape Ratio
- Sense of control
- Opportunities for social interaction
- Opportunities for physical activities
- Accessible
- Variety of Rooms
- Adds to the genius loci - sense of place
- Relies on interaction through the senses





**Conservatory**

### A living tapestry of colors and textures

Landscape architect Frederick Law Olmsted had designed the Terrace Walled Garden as a flower and vegetable garden that included many varieties of fruit. However, George Vanderbilt preferred a garden of ornamentals, not utility, and filled it with an array of colorful plants and beautiful blooms. More than a century later, it fulfills the same purpose: all include many of the flowers in the original plan list. The flowerbeds change seasonally.

1. Trellis
2. Seasonal Color
3. Pattern Beds-to spring, these beds are filled with an array of tulips. Warm summer weather brings a variety of ornamentals, white gladioli, and orange, purple and yellow flowers. In autumn, ornamental pumpkins and gourds are planted in the beds.
4. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.
5. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.
6. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.
7. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.
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10. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.
11. Victorian Bedding-Decorative flower beds with ornamental plants and flowers.





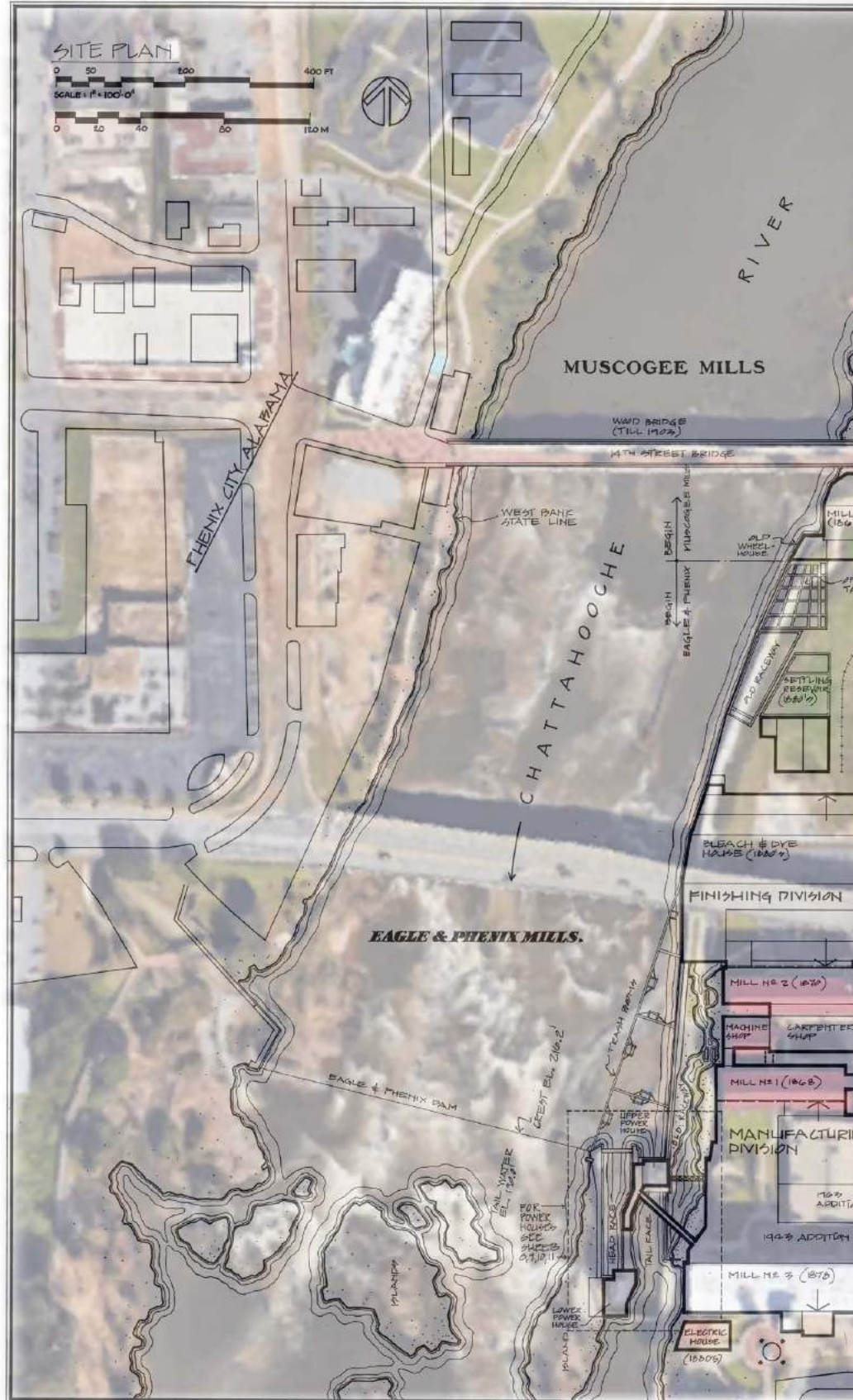


## Site Location

The Chattahoochee Riverwalk in Columbus, Georgia is a 22 mile walking and biking trail along the Chattahoochee River. You can see many people running, walking their dogs, taking casual strolls with friends, riding their bikes, skateboarding, or sitting and watching the people participating in water recreation at any given point during the day. This trail being in place along such a dynamic river is why I chose this site to test out the design of a healing garden. The site already accommodates those who wish to use it for physical healing, and there is some emotional participation already happening with those watching kayakers or white water rafters, but I wanted to expand upon these ideas and provide more rooms and opportunities for activities along with the existing infrastructure.

# Site History

In order to test this, the location needed to be somewhere open to the general public that provides interest to the existing community, and is not adjacent to a medical facility. The Riverwalk seemed perfect as it is a 22-mile walking and biking trail that has become increasingly popular since its initial opening in 1992, and had its most recent addition in 2011. This trail has brought the community a place to go for physical health needs. Upon the removal of Eagle Phenix Dam in 2012 and City Mills Dam in 2013, the river was "reactivated" and allowed to flow. The city implemented a customizable whitewater experience called the "wavershaper" which allows the water levels to fluctuate between 800 and 13,000 cfs for a variety of experiences and difficulties along trails in the water. Once users began frequenting the site for kayaking and white water rafting, many visitors began sitting out on and open rock they could find to get closer to the action and watch the adventurers. Because of this, an addition to the existing island was added to allow for people a safer way of viewing the individuals partaking in water sports. The city officials have said they believe the removal of the dams is what has helped Columbus become revitalized and act as a destination point again for travelers. This also allows for an opportunity to allow users of a healing garden to grow and reflect within themselves as the city continues to better itself.







# MUSCOGEE MILLS

A TEXTILE MILL HAS OPERATED AT THE SITE OF MUSCOGEE MILLS (WATER POWER LOT NO. 1) SINCE THE EARLY 1840'S. IN THE ANTEBELLUM PERIOD, THE COWETA FALLS FACTORY, THE FIRST TEXTILE MILL WITHIN THE CITY, WENT THROUGH A SUCCESSION OF OWNERS AND WAS BURNED DOWN BY GENERAL A. WILSON'S RAIDERS IN 1865. GEORGE P. SWIFT PURCHASED THE PROPERTY AND ORGANIZED THE MUSCOGEE MANUFACTURING COMPANY IN 1869. BEGINNING WITH A SMALL LOT, THE COMPANY WAS FORCED TO ACQUIRE PROPERTY IN A PIECE MEAL MANNER AND GRADUALLY EXPAND. THE MILL COMPLEX INCORPORATED A GREEK REVIVAL PERIOD (1840) BRICK HOUSE AND A 1908 PUBLIC LIBRARY INTO ITS OPERATION. NEVERTHELESS, IT HAS MAINTAINED A STABLE, EFFICIENT PRODUCTION PRIMARILY MANUFACTURING TICKING AND TOWELING.

THE COMPANY'S WATER RIGHTS WERE LIMITED AND ONLY THE FIRST TWO MILLS WERE POWERED BY THE RIVER. STARTING WITH MILL NO. 3 IN 1887 THE REMAINDER OF THE ADDITIONS WERE POWERED BY STEAM OR ELECTRICITY. AFTER A PROLONGED DISPUTE, MUSCOGEE RELINQUISHED ITS WATER RIGHTS TO THE EAGLE & PHENIX IN 1914 IN RETURN FOR 500 HP OF ELECTRICAL ENERGY PER DAY. IN 1963 FIELDcrest CORPORATION BOUGHT THE MILLS AND CONTINUES TO RUN THEM EXCLUSIVELY AS A TOWEL MANUFACTURING OPERATION.

THE ENTIRE FRONT STREET FACADE OF THE EAGLE & PHENIX AND MUSCOGEE MILLS, FROM MILL NO. 3 OF THE FORMER TO MILL NO. 2 OF THE LATTER, REMAIN AS THEY LOOKED IN THE 1890'S WITH FEW MINOR CHANGES.

[J.B. KARFUNKLE - HISTORIAN]



FROM ITS INCEPTION IN 1851, THE DYNAMIC GROWTH OF THE EAGLE MILL REPRESENTED THE MOST IMPORTANT FACTOR IN COLUMBUS' INDUSTRIAL DEVELOPMENT. IN 1869 THE EAGLE MILL ABSORBED THE FAULTERING HOWARD FACTORY (1847) AND BECAME THE TOWN'S LARGEST EMPLOYER. DURING THE CIVIL WAR THE EAGLE MILLS FURNISHED A VARIETY OF PRODUCTS TO THE CONFEDERACY. IN APRIL 1865 FEDERAL TROOPS BURNED BOTH FACTORIES.

DURING THE NEXT TWO DECADES THE RESURRECTED EAGLE AND PHENIX MANUFACTURING COMPANY CONSTANTLY EXPANDED. MILL NO. 1, WITH A GREATER CAPACITY THAN BOTH THE OLD EAGLE AND HOWARD FACTORIES, BEGAN MANUFACTURING IN 1868; A SLIGHTLY LARGER MILL NO. 2 STARTED IN 1870; AND MILL NO. 3 - EQUAL TO NO. 1 AND 2 COMBINED - STARTED OPERATING IN 1878. IN 1889 THE EAGLE AND PHENIX MILLS WERE THE LARGEST PRODUCERS OF TEXTILE GOODS IN THE SOUTH, AND DURING THE ENJOING DECADE "NEW SOUTH" ADVOCATES FREQUENTLY CITED THOSE MILLS AS AN EXAMPLE OF A SUCCESSFUL SOUTHERN ENTERPRISE.

THE EAGLE AND PHENIX EVENTUALLY DOMINATED THE WATER POWER LOTS WITHIN THE ORIGINAL CITY OF COLUMBUS. UTILIZING SOME OF THAT POWER, THEY ILLUMINATED MILL NO. 3 WITH ARC LIGHTS AS EARLY AS 1880. THE ELECTRIC GENERATORS, INSTALLED IN 1914 AND 1920, STILL SUPPLY A MAJORITY OF THEIR POWER REQUIREMENTS. THE COMPANY SUFFERED FROM BOTH ECONOMIC AND LABOR TROUBLES DURING THE DEPRESSION OF THE 1890'S, WENT INTO RECEIVERSHIP, AND WAS REVITALIZED BY 1915. FROM THAT DATE UNTIL 1947, REEVES BROTHERS, INC., WHO PURCHASED THE PROPERTY, CONTINUED TO OPERATE THE NORTHERN PORTION OF THE MILL AS A TEXTILE FINISHING PLANT AND THE LOWER HALF AS A TEXTILE MANUFACTURING PLANT.

[JOHN & LUFOLD - HISTORIAN]

DELINEATED BY: MARGARET W. 1977  
 COLUMBUS GEORGIA RECORDING PROJECT  
 OFFICE OF ARCHITECTURE AND HISTORIC PRESERVATION  
 NATIONAL PARK SERVICE  
 UNITED STATES DEPARTMENT OF THE INTERIOR  
 HISTORIC AMERICAN ENGINEERING RECORD  
 GA - 33  
 SHEET 12 OF 13  
 GEORGIA  
 FRONT AVENUE INDUSTRIAL DISTRICT SITE PLAN  
 FRONT AVENUE BETWEEN 8th & 15th STREETS  
 MUSCOGEE COUNTY  
 COLUMBUS  
 IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, OFFICE OF ARCHITECTURE AND HISTORIC PRESERVATION

# Existing Conditions

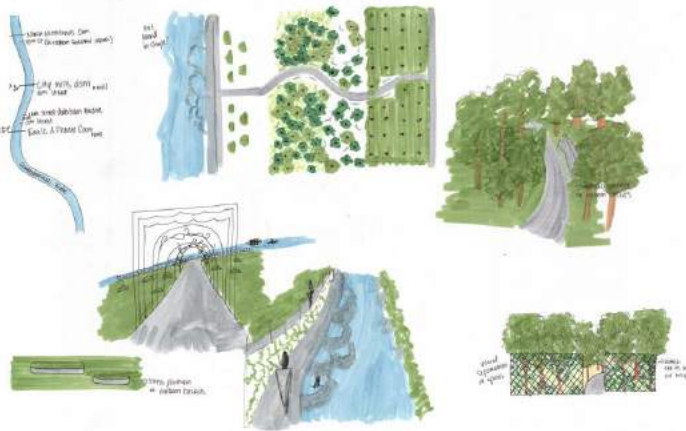
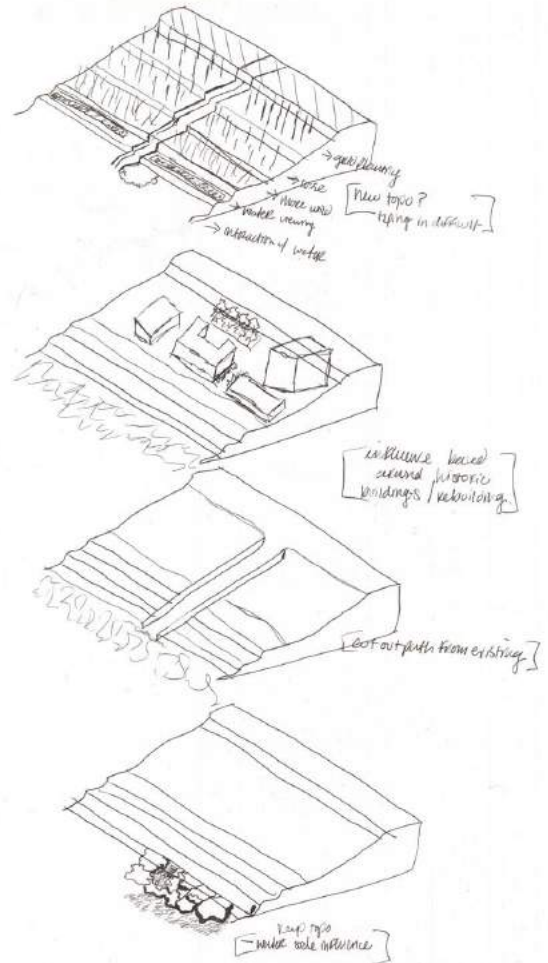
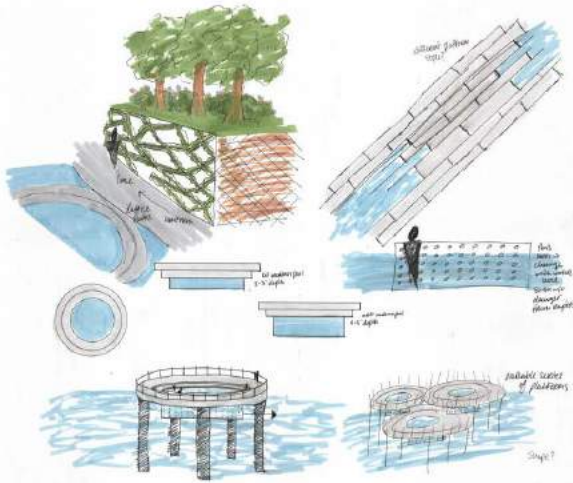
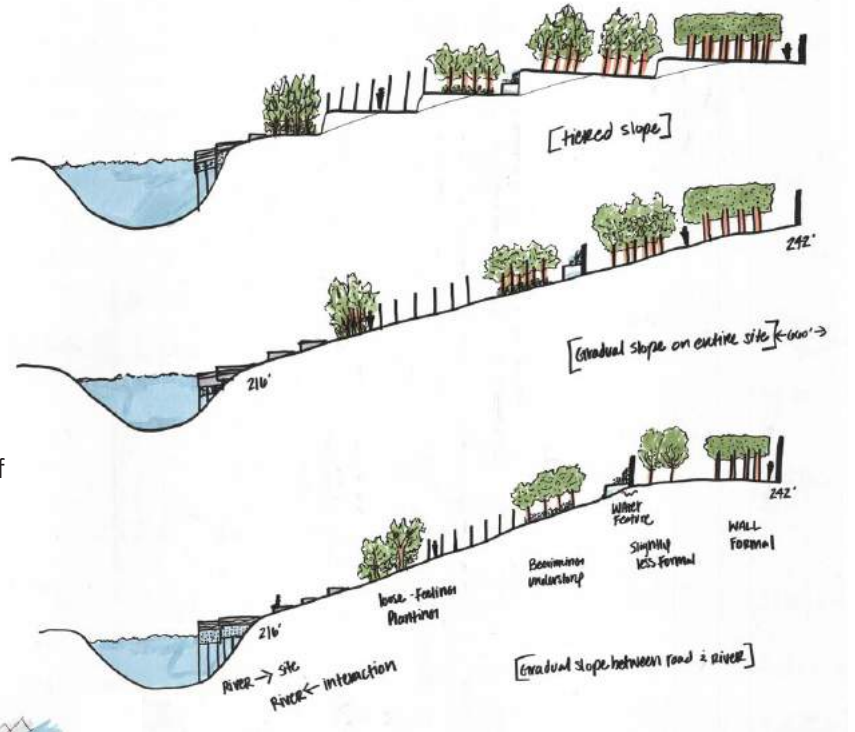
The existing site already has a great infrastructure for adding to in order to strengthen the sense of place and to allow for more programmatic uses near the relatively new pedestrian bridge and the existing island many use for people watching. The existing riverwalk has a good 15-20' drop separating its user from interacting with the river along the piece shown. An access road runs below the existing riverwalk along the river. A rocky edge follows the length of the site, and some of the remains from the original dam and mill run are still present along the site. There is a path that leads to a locked gate where it seems there used to be access the mill, but it has since been barred and posted with do not enter signs. I wanted to create a design that would provide access to the water for some users, reconnect to the riverwalk, provide private and public spaces to be able to be used along the site, and connect to the island for a coherent path.

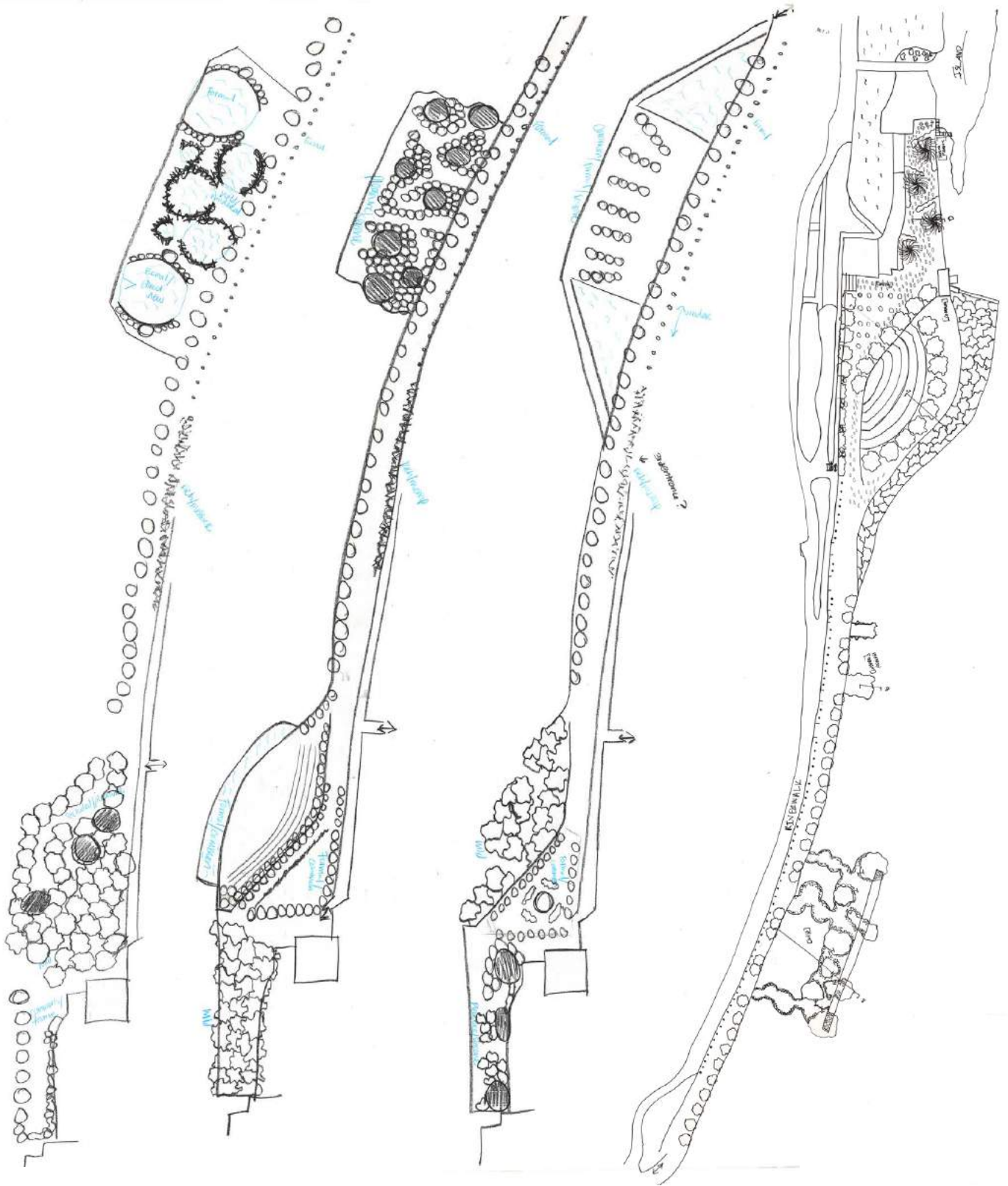




# Importance of Location

I began by testing different ways I could grant access to the river from the riverwalk by changing the grading of the site. After a few sketches and sections of different ways this could work, I eventually moved on to transforming the access road into my river access road. I wanted to keep my design interactions focused to along the river as I feel it is the most important piece to this site for allowing healing environments. You can't walk this site without being surrounded by the sounds of rushing waves. After making the shift from the larger site to the access road, I began sketching out different layouts each of the rooms could have as well as which rooms may be able to fit well in different locations along the site. These drafts ended up contributing to each other as I took elements from each of the ones shown and combined them for the site plan.

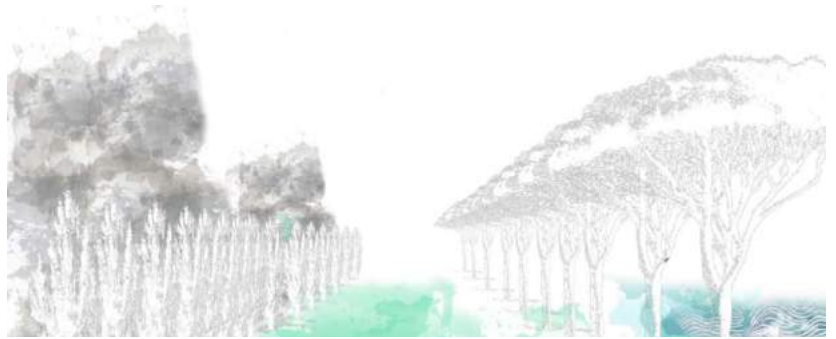




## Healing Garden Exploration

While designing potential layouts for the different rooms along the site, I used Adobe After Effects in order to create 3d feeling animations of these layouts and edited them along the way to allow the videos to influence my the design in plan. Walking through the rooms and creating a sense of how they may look with different textures and colors, or how they may feel when laid out differently with concern to spatiality helped to make design decisions about the rooms themselves.

These QR codes are fast links (or the URL is under the stills) of each garden room I studied in After Effects, and the spatial qualities I have ended up with thus far.



<https://vimeo.com/215106920>



<https://vimeo.com/215107138>



<https://vimeo.com/215106985>

# Site Plan

There are four main areas of the site plan. First is the corridor along the river. The corridor is lined on the side with the wall with evergreen trees to soften the hard edge and help your attention draw towards the dynamic river opposite of the rock wall. The site is incredibly hot during the summer, so the side close to the river will be lined with a tree intended for shade that will be limbed in such a way to provide for viewing of the water from the walk. The first room from the pedestrian bridge is the "wild" room. This room will allow for users to relax in the river without fear of being swept away by the rapids. The existing mill run remnants will be added to and a stone pathway will lead visitors out into the river. Planters will be carved out of the tops of some of the stone in order to allow for vegetation to grow around and into these

pools to add to the adrenaline of being part of a rushing river. The next room will be the common and festive spaces combined.. The festive space has more of a formal layout with stone tables and chairs available for gathering while the common area has a reverse gabeon basket amphitheater and a green space adjacent to that allowing for vistas of the river, gathering, playing sports, and other activities. The final garden room combines the ideas of the pleasure and serene rooms into one. This room contains willows that offer refuge within their canopy for private reflection while also having space next to them for social interaction if just looking for a more intimate spatial feeling. Each willow is surrounded by a mix of perennials to provide extra textural and color interest throughout the seasons.

Fall 2015



Fall 2016



Spring 2017





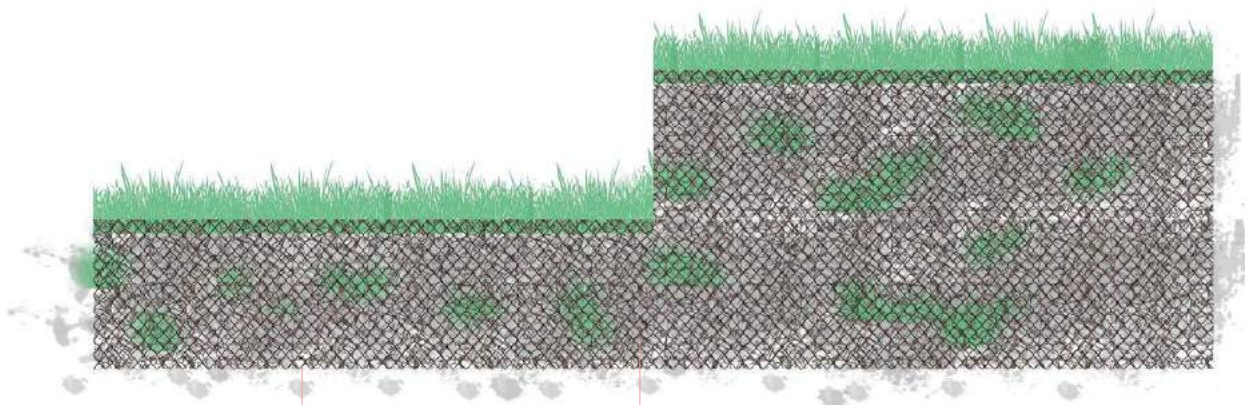
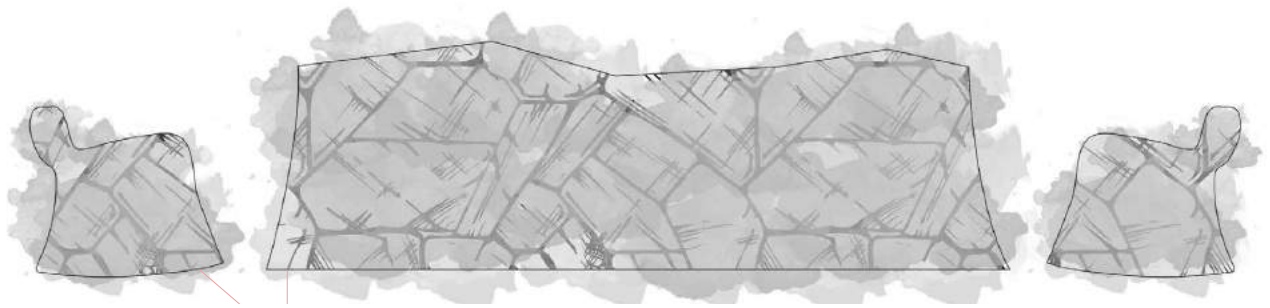




## Common / Festive

Combining these two rooms across a topographical change allows for separation of space and privacy while also granting opportunities for mixed use on special occasions. The High point of this area has stone tables and chairs in a formal layout which can provide a gathering, meeting, or festive use space. The path through the festive space allows for interaction with passerbys, and the change in topography makes this a good place for watching the action happening below. Markets and live shows could happen here adjacent to the old mill. The renewed connection to the riverwalk makes this an immediate point of interest for any entering the site through this threshold. The common space uses gabeon baskets (as are common to the existing riverwalk) to create these seating steps down to the open green space of the room. Tree Canopy allows for more private space near the rocky edge to look out onto the water more intently than if on the steps or lawn.

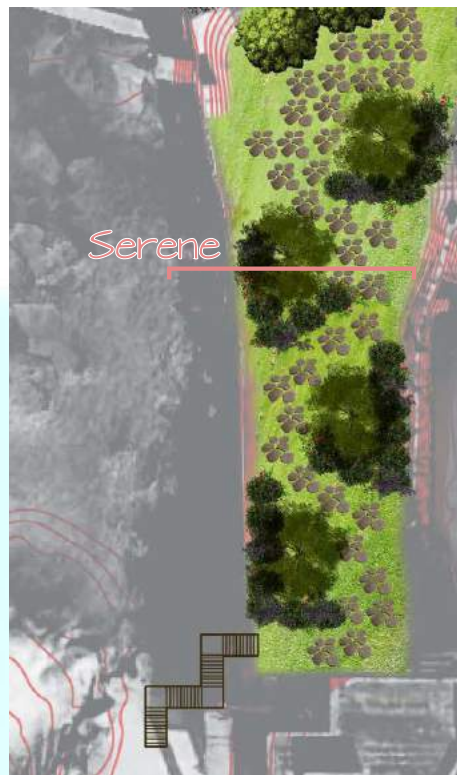




Gabion Basket Seating Wall    Soil and Stone Mixture

## Serene / Pleasure

The laid stone paths with no clearly defined edge allow for the blending of the more private and open areas within the serene pleasure garden mix. Space under a willow tree can be occupied by users seeking directed inwards involvement or a group of people wishing to occupy a quieter space. The river is still visible and audible from this room, but it is not meant for physically interacting with. The colors, textures, sounds, and scents given off by the vegetation are what is important in this garden. Sensual interaction and a space allowing for inward reflection is the kind of healing a serene garden is programed for.

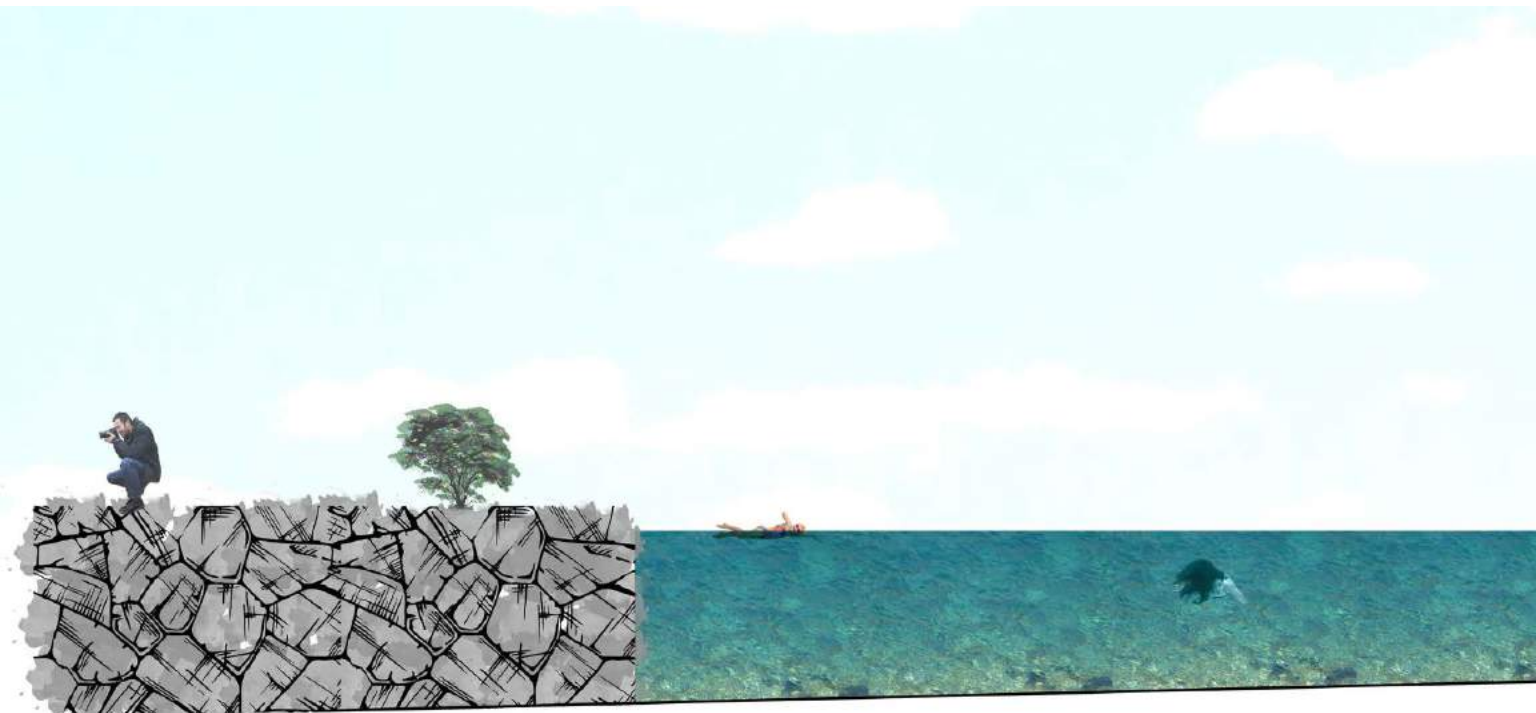
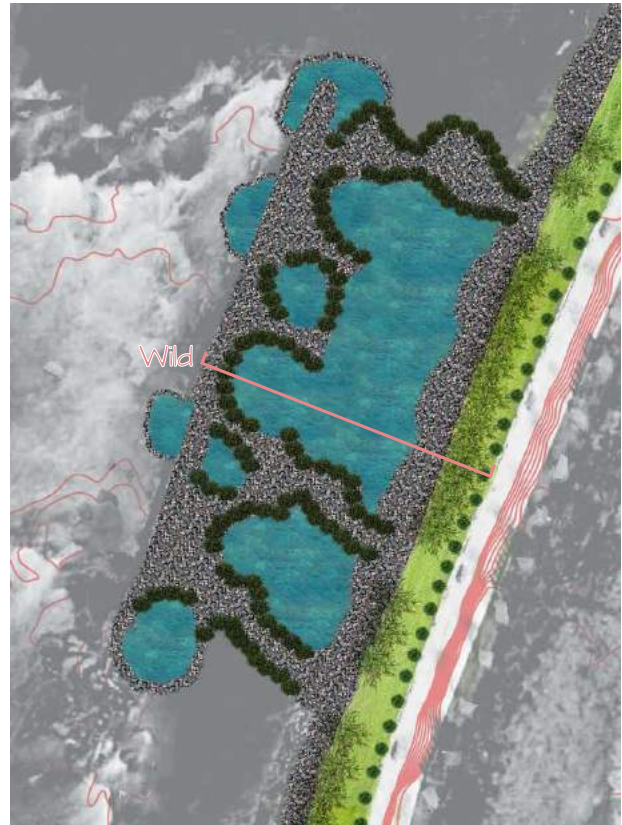


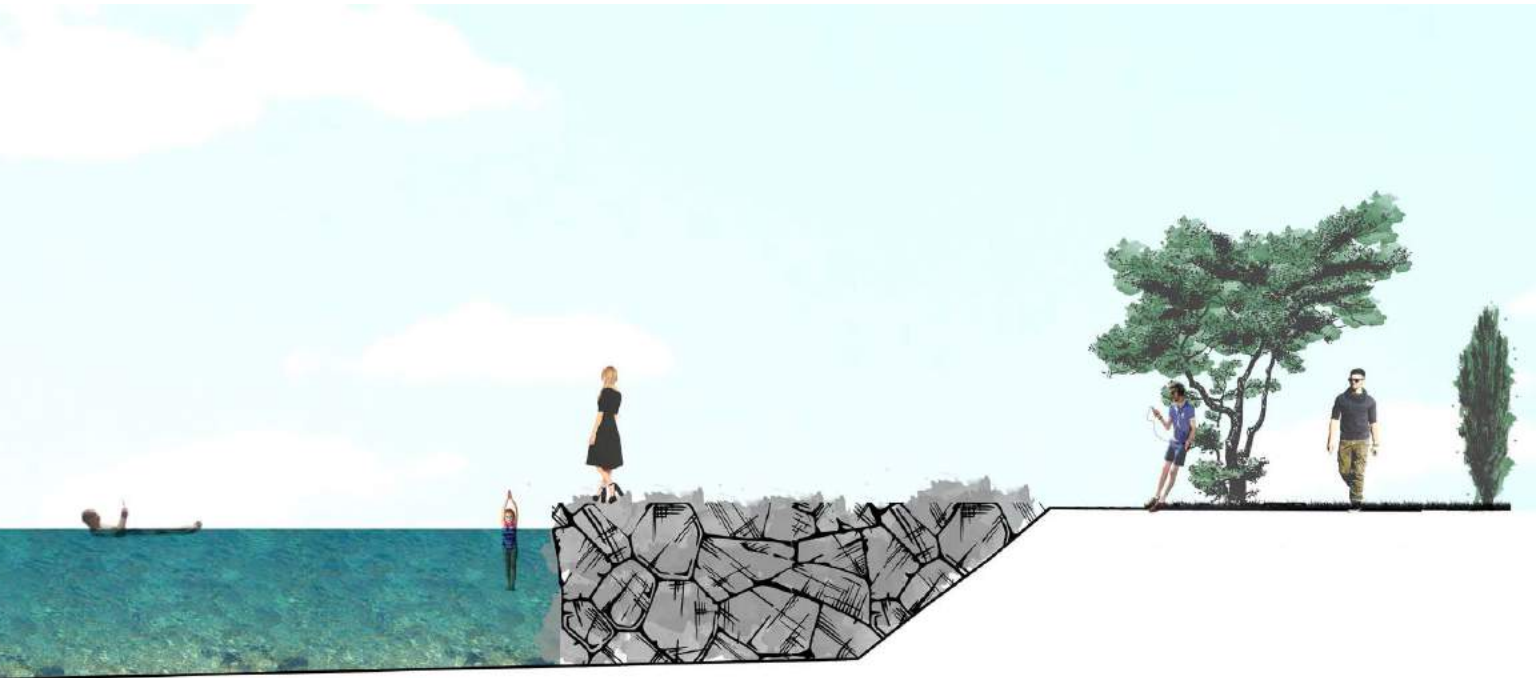
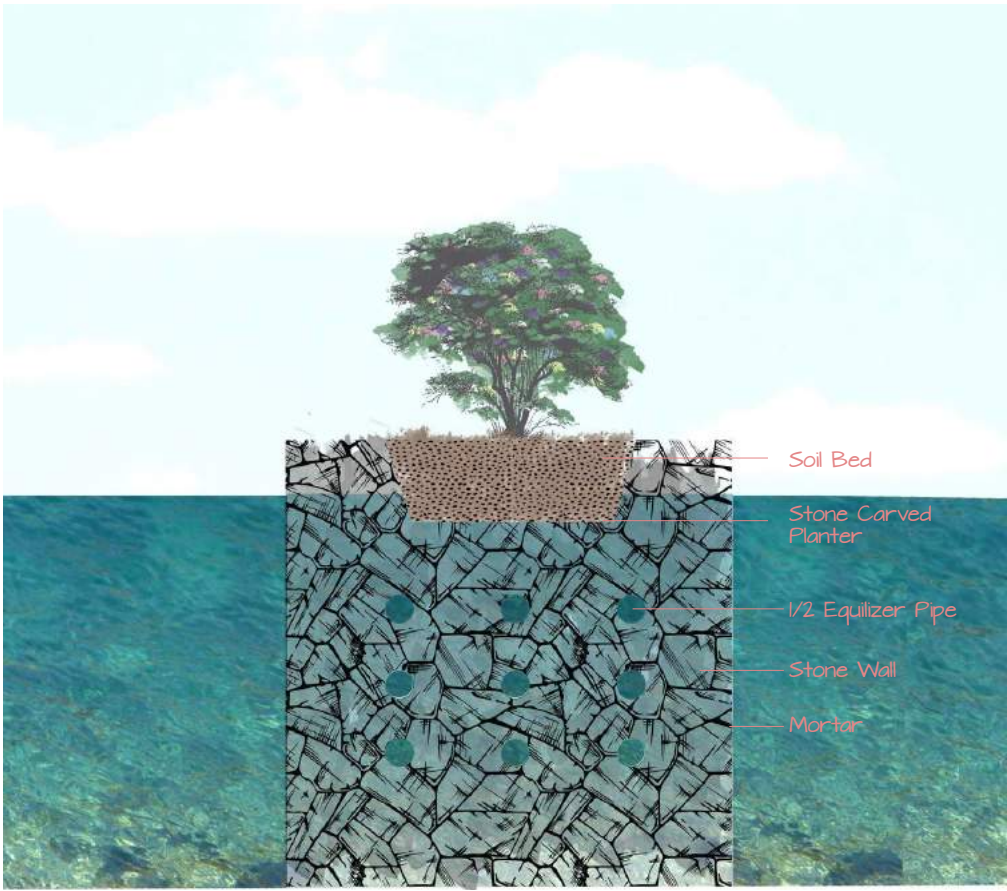


Laid Stone

# Wild

Due to the rushing nature of the river, it is typically not advised people interact with the water unless partaking in water sports. So, what about the people that enjoy being in the water? Using stone and mortar like the remnants of the mill run wall to connect to the access road allows for a kind of stone boardwalk for those that wish to be closer to the river. For those that wish to wade or swim in the river, when the water level is high enough, forming these pools within the boardwalk could allow for this. By carving out pieces of the stone to allow for equalizing pipes to be put in place, the river would be allowed to occupy the pools and create these pockets that rise and fall with the existing river's conditions. The paths and pools would be surrounded with vegetation planted in carved out planters within in the stone in order to hide and reveal views of the river as well as other pools. The different locations and sizes of the pools allow for different social interactions, and different dynamics when interacting with the river to accommodate many comfort levels.



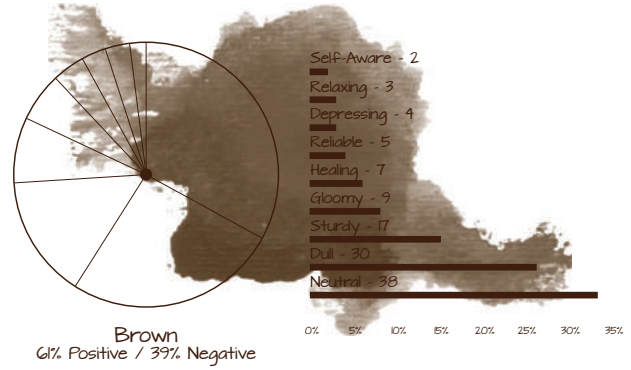
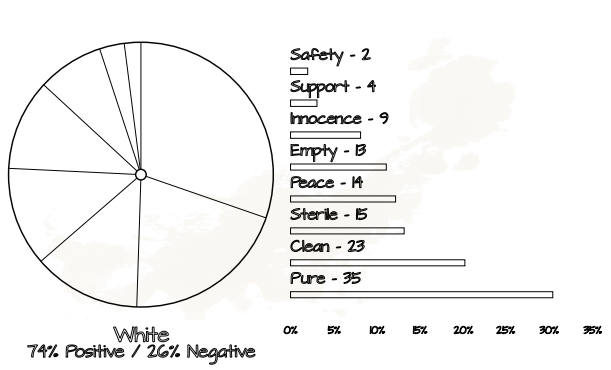
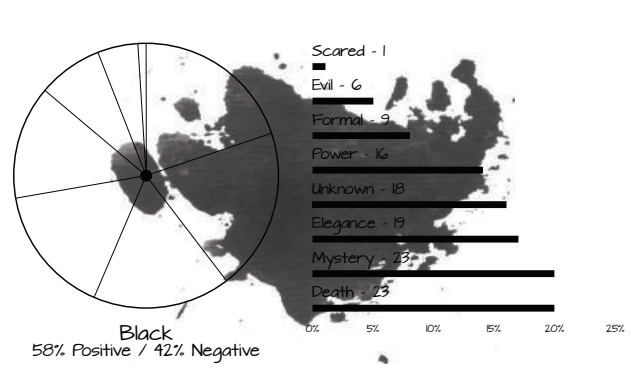
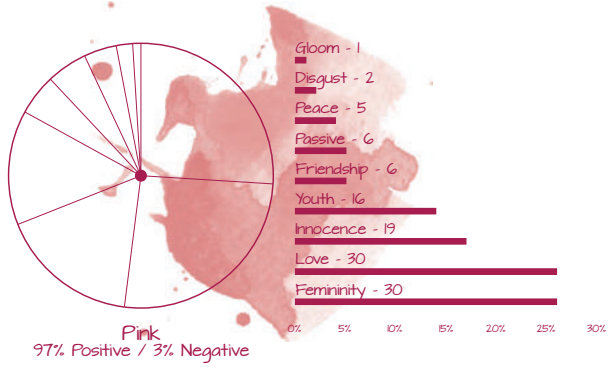
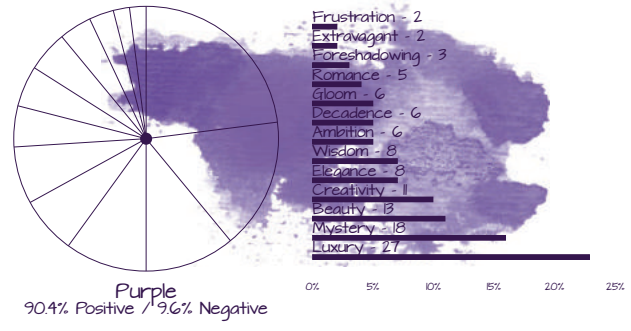
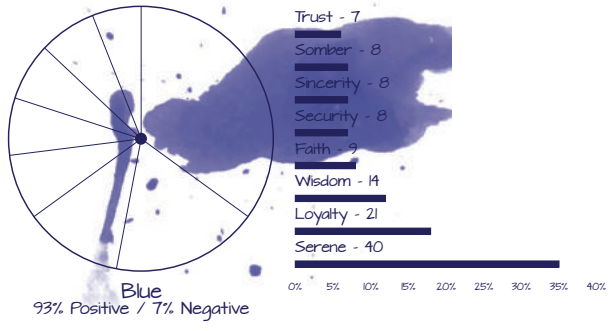
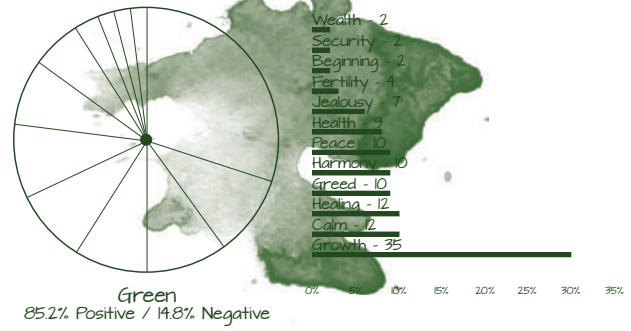
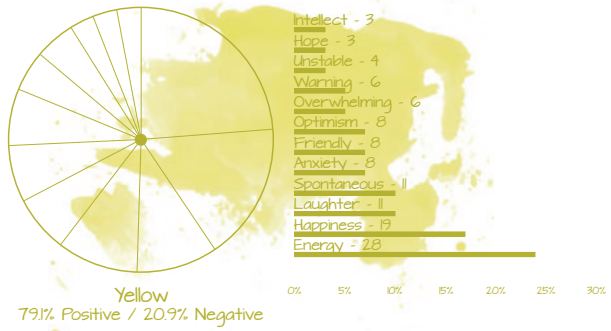
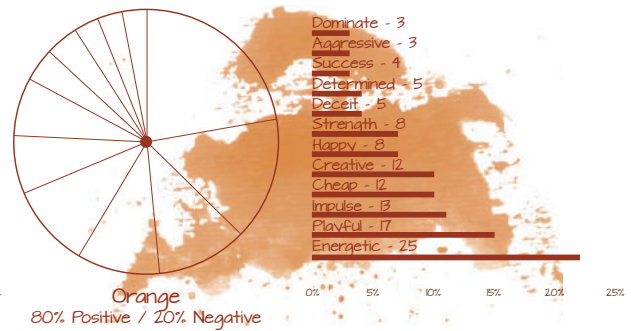
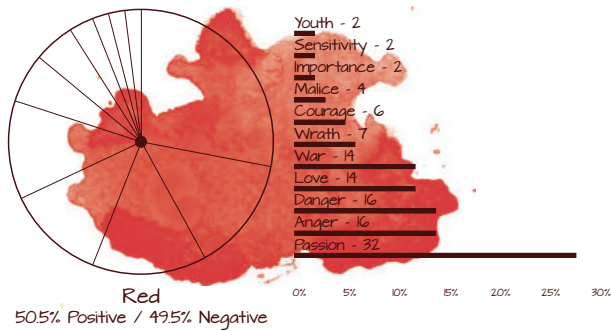


## Color Theory

Healing gardens are all about curating a connection between the user and the space they are in. In order to design for a diverse user group in this way, it is important to understand their perception of various things you may add. One example of this may be color theory. Using words from surveys completed by psychologists on this matter, I created my own survey and sent it around the Auburn area. Using the watercolor splotches you see here and providing the words shown as options, these are the results based on the 115 random people that took the survey available online. This test is by no means all inclusive, but it is a valuable example of the things you can learn by becoming involved with the users you are intending to design for. Different surveys like these could be curated to understand preferred material choices, comfort level when looking at pictures of different spaces, comfort level in proximity to others, or maybe even find out what mental involvements potential users may be most looking for in order to design spaces proportionally to the results.

Based off of the color theory results, the designer would be able to carefully select plants with certain bloom colors that fit well within the site.







*Agastache rugosa* 'Heronwood Mist'

Drought Tolerant  
Blooms Summer through Fall  
Attracts Bees, Butterflies, and Hummingbirds  
Does Well in Planters



*Agave chrysantha* 'Golden Flowered Century Plant'

Drought Tolerant  
20" Flower Attracts Bees, Butterflies, and Hummers  
Full Sun - Little to no Summer Water



*Astroemeria* 'Red'

Drought Tolerant  
Blooms On and OFF Year Round  
Does Well in Planters



*Aquilegia chrysantha* 'Yellow Queen'

Blooms From Spring til Mid-Summer  
Attracts Butterflies and Hummingbirds



*Aquilegia yabeana*

Long Bloomer - Begins in Spring  
Attracts Butterflies and Hummingbirds  
Does Well in Sun



*Aster carolinianus* 'Carolina Climbing Aster'

Blooms September through November  
Attracts Butterflies



*Astilbe chinensis* var. *taquetii*

Late Summer Bloom  
Does Well in Shade



*Campanula portenschlagiana* 'Wall Bellflower'

Blooms Spring - Summer  
Does Well in Planters - Even Cracks in a Wall  
Afternoon Shade



*Clematis* 'Rooguchi'

Blooms Late Spring to Early Fall  
Attracts Butterflies, Bees, and Hummingbirds  
Shade Loving Plant



*Fuchsia* 'Mendonoma Belle'

Drought Tolerant  
Shade Loving Plant  
Attracts Hummingbirds



*Geum coccineum* 'Koi'

Drought Tolerant  
Blooms Spring-Fall  
Attracts Bees and Butterflies  
Does Well in Planters



*Helleborus orientalis* 'Yellow Lady'

Drought Tolerant  
Blooms in Late Winter



*Helleborus* 'Peppermint Ice'

Drought Tolerant  
Shade Loving Plant  
Winter-Spring Bloom



*Holodiscus discolor* 'Oceanspray'

Drought Tolerant  
Fragrant Flowers - Butterflies  
Edible Flower and Seed



*Iris douglasiana* 'PB&J'

Drought Tolerant  
Shade Loving Plant



*Mirabilis longiflora* 'Angels Trumpets'

Drought Tolerant  
Nocturnal Bloom (Open between 5PM-10AM)  
Pollinated by Moths



*Myosotis palustris* 'Water Forget-Me-Not'

Attracts Bees  
Sun Loving Plant - Good For Hotter Climates  
Late Spring Bloom



*Primula auricula* 'Spumoni'

Honey Scented Flowers  
Shade Loving Plants  
Does Well in Planters



*Primula auricula* 'Mr. Sunshine'

Honey Scent  
Does Well in Planters  
Love Morning Sun



*Primula veris* 'Sunset Shades'

Drought Tolerant  
Early Bloomer  
Does Well in Planters



*Rosa chinensis* 'Mutabilis'

Drought Tolerant  
Different Bloom Colors at Once  
Does Well in Planters



*Rosa eglanteria* 'Sweet Briar'

Drought Tolerant  
Green Apple Scent  
Fruit Attracts Birds, Makes Tea and Jelly



*Rubus calycinoides* 'Creeping Raspberry'

Drought Tolerant  
Groundcover with Edible Orange Berries  
Tolerates Sunny Areas



*Salvia patens* 'Gentian Sage'

Bloom Summer - Fall  
Part-Shade

## Design Manifesto

Can healing gardens be successfully implemented into public spaces? While I believe this answer is going to vary based on the location, I do believe that it is possible in the case of Columbus, Georgia to nest a place for mental and spiritual healing within their framework for physical healing along the Chattahoochee River. The story of the city and the river improving their conditions over the year adds to the personal connection users may feel while within the garden. Based off of the design criteria generally accepted and my additions, I believe the current design stands as such:

- Engagement with nature
- High Vegetation to Hardscape Ratio
- Sense of control
- Opportunities for social interaction
- Opportunities for physical activities
- Accessible
- Variety of Rooms
- Adds to the genius loci - sense of place
- Relies on interaction through the senses

While studying other gardens, I felt that accessibility was the hardest to accomplish while also providing the other criteria. Maybe in order for a healing garden to be successful in certain locations, not all criteria can be met. I think the most successful healing gardens would be able to provide them all.

## Concluding Remarks

Moving forward with this research and project, I would continue to push the design of the garden rooms and begin to create more surveys for public involvement in the project. These are the kinds of design strategies I hope to implement in practice. I think keeping the clients or user groups needs in mind should be first and foremost in the curation of spaces.

Continuing to tease apart the elements of healing gardens, further defining the various rooms that could be available, and continuing to study gardens throughout history are all important to strengthening the definition of healing gardens and being able to successfully implement them for a broader spectrum of users.





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# Images

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Stigsdotter, Ulrika, and Patrick Grahn. "What Makes a Garden a Healing Garden?" American Horticultural Therapy Association, n.d. Web. Sept. 2016.

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Mansfield, Stephen. Japan's Master Gardens. Tokyo: Tuttle, 2011. Print.

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<https://s-media-cache-ak0.pinimg.com/originals/68/43/20/6843207e5f146ce80a1334e9a1301aed.jpg>

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Photography by Britton Garrett

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Kamp, David A. Healing Garden. Mulgrave: Images, 2016. Print.

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