

WayFinding

A Story Told Through The Senses

WayFinding:
A Story Told Through The Senses

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Abstract

Architecture often references the five senses through conveying moments and experiences that someone could have in a specific setting. The purpose of this thesis is to dive deeper into how the senses can be engaged and how they relate to the concept of wayfinding.

This thesis explores how engaging the senses can assist in a person's physical and mental wayfinding, specifically through touch, sight, and smell. The building typology best suited to experiment with this was a community center because it is used by a myriad of different people of varying ages, height, mobility, etc. Multiple studies were conducted that centered around different textures, floral fragrances, and light quality.

This is a story that takes you on a journey through a community center and narrates how the different senses are engaged, specifically with regards to wayfinding. In three different chapters you will feel the touch of a wall, follow a path of different fragrances, and see through different perspectives.

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General Audience Abstract

Architecture often references the five senses through conveying moments and experiences that someone could have in a specific setting. The purpose of this thesis is to dive deeper into how the senses can be engaged and how they relate to the concept of wayfinding.

This thesis explores how engaging the senses can assist in a person's physical and mental wayfinding, specifically through touch, sight, and smell. The setting of this thesis is a community center because community centers are used by many different people of varying ages, height, mobility, etc. Multiple studies were conducted that centered around different textures, floral fragrances, and light quality.

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Table of Contents

Introduction	pg. vi
The Story	pg. 1
Chapter 1	pg. 3
Chapter 2	pg. 13
Chapter 3	pg. 17
Conclusion	pg. 28
References	pg. 29



“Every touching experience of architecture is multi-sensory; qualities of space, matter and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton, and muscle.” - Juhani Pallasmaa

“Architecture strengthened the existential experience, one's sense of being in the world, and this is essentially a strengthened experience of self. Instead of mere vision, or the five classical senses, architecture involves several realms of sensory experience which interact and fuse into each other.” - Juhani Pallasmaa



“When we look at the finished building, our eyes, guided by our analytical mind, tend to stray and look for details to hold onto.” – Peter Zumthor

“Vision reveals what touch already knows.” - Juhani Pallasmaa



“All experience implies the acts of recollecting, remembering and comparing. An embodied memory has an essential role as the basis of remembering a space or a place.” - Juhani Pallasmaa

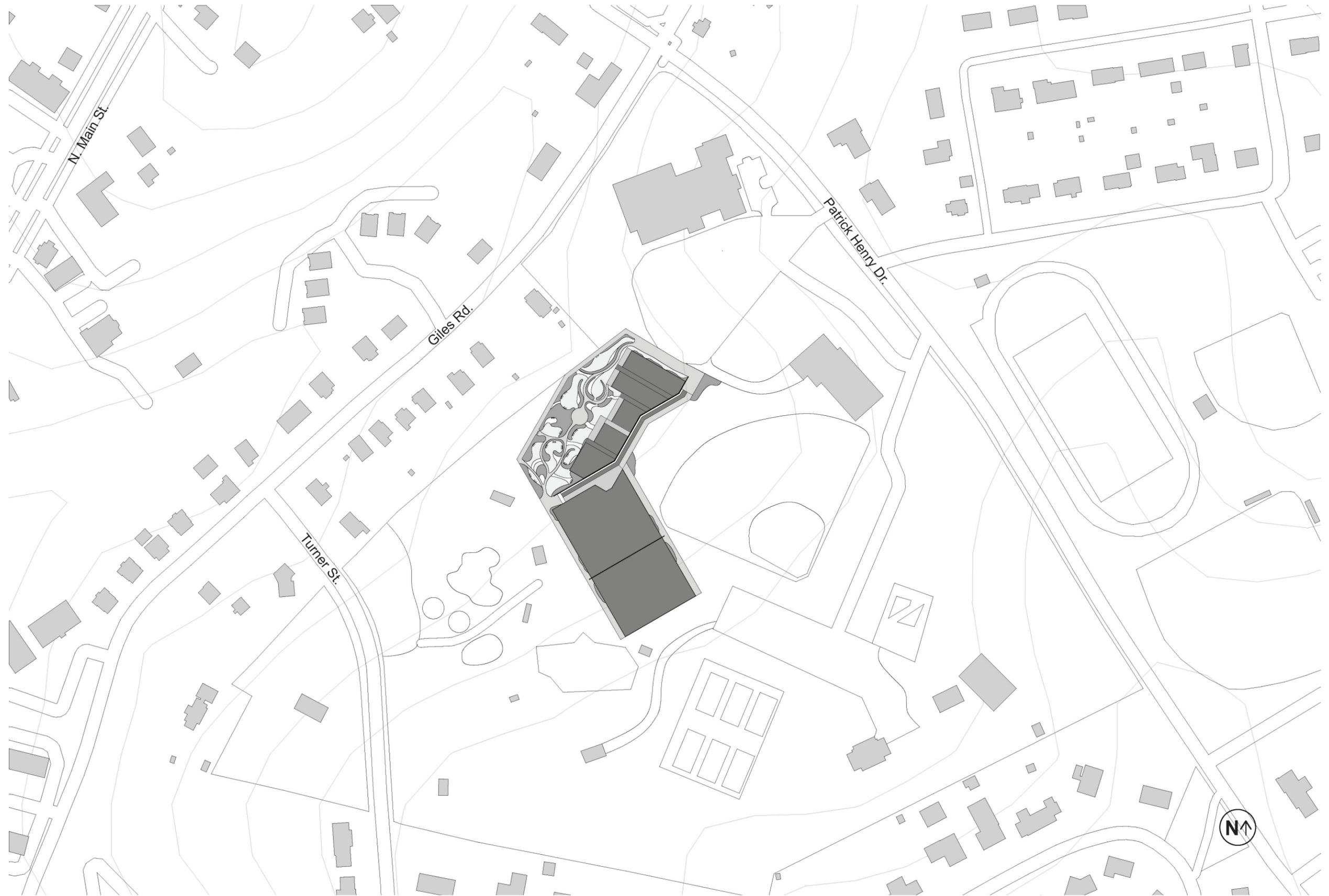
“The most persistent memory of any space is often its smell.” - Juhani Pallasmaa

“Architectural experience brings the world into a most intimate contact with the body.” - Juhani Pallasmaa

This is a story about wayfinding and how the engagement of your senses helps you navigate through this world both physically and mentally, specifically focusing on Touch, Sight, and Smell. The setting takes place in a community center in Blacksburg, Virginia on Patrick Henry Drive. This community center is a place where people of different ages, mobilities, and backgrounds come to enjoy the facility and its myriad of programs.

Here, people experience different journeys told to them by their senses. They will be immersed in their sensational wayfinding with the touch of a wall, the sight of an enticing shadow, a view of an outdoor classroom, and the intoxicating aroma of a blooming garden.

In this story, you will be the main character and your senses will be the author of your journey.

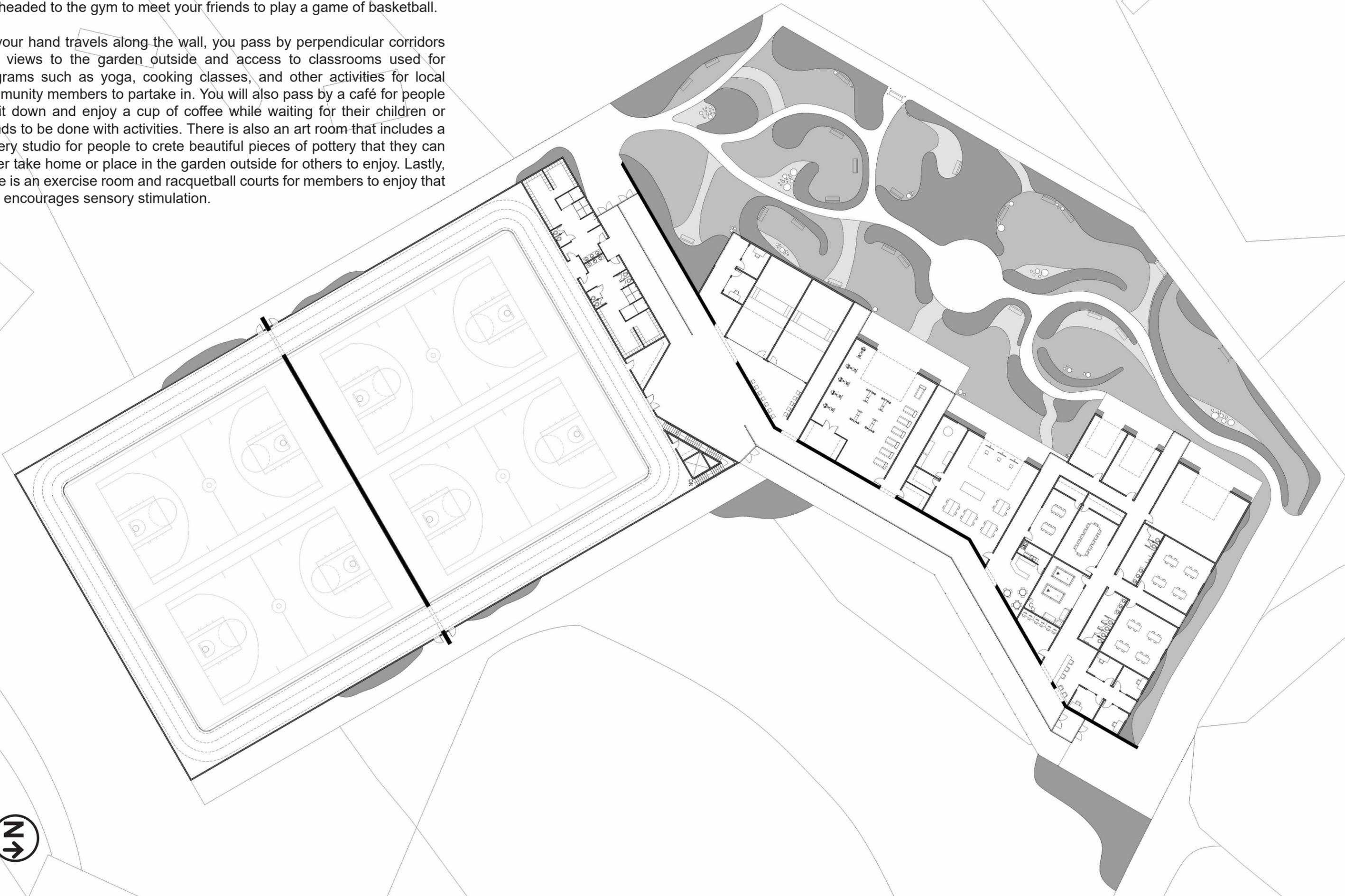


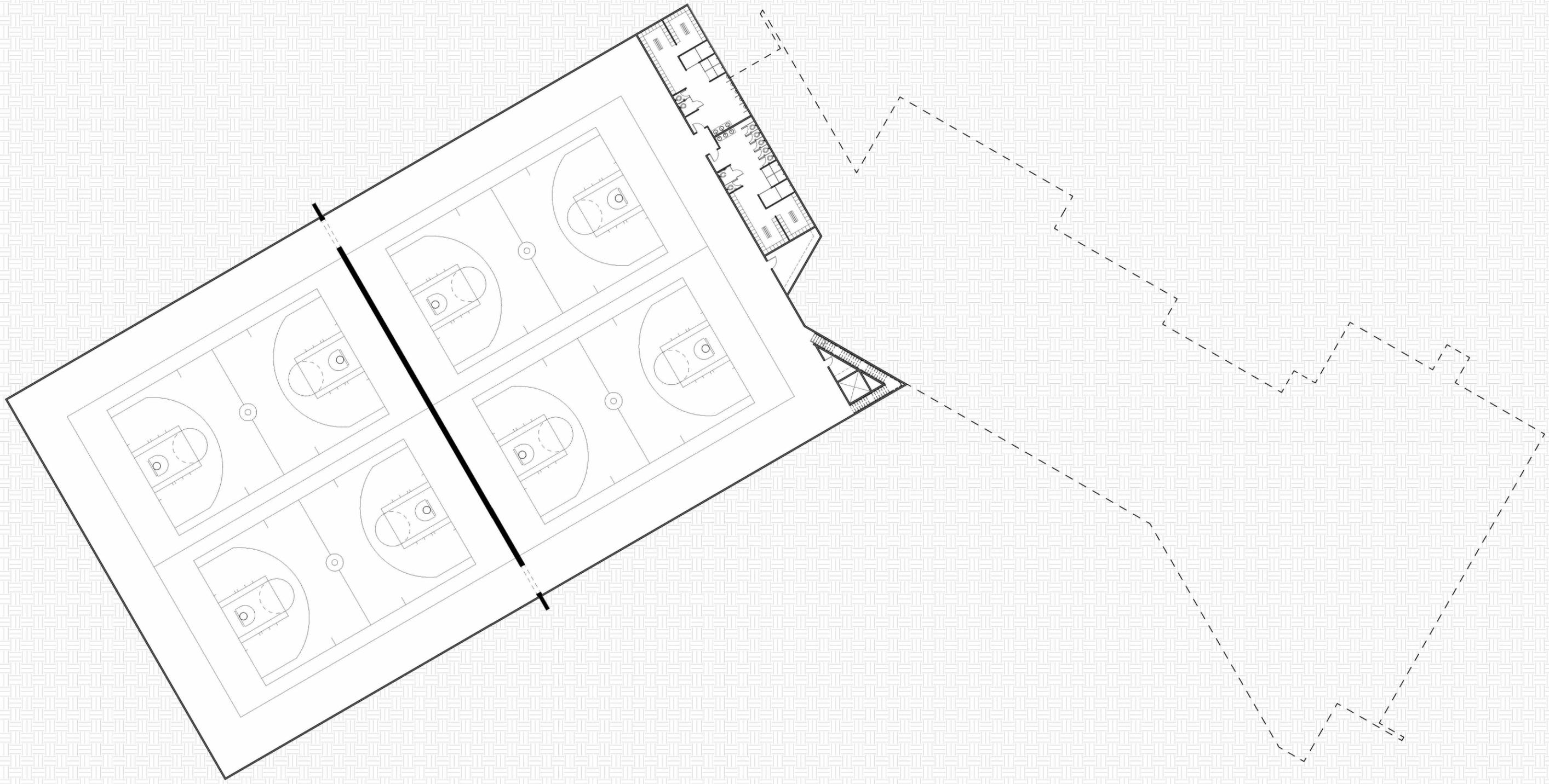
Today you have arrived at the community center in Blacksburg, Virginia. As you approach the entrance, you see a large wall that extends past the building and invites you to enter. As you draw closer to the entrance, the details of the wall become clearer and begin to encourage you to touch it. It's curved pattern with dancing shadows are so enticing that you reach your hand out and feel the concrete crevices mold to your touch. This touch of the wall sparks the beginning of your journey of wayfinding through the senses.

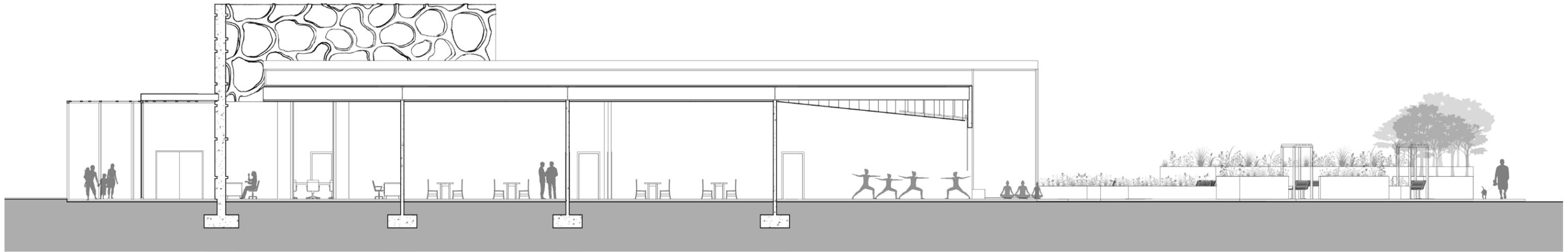


The wall stretches from the main entrance of the community center to the opposite end where the gymnasium is located. On your journey today, you are headed to the gym to meet your friends to play a game of basketball.

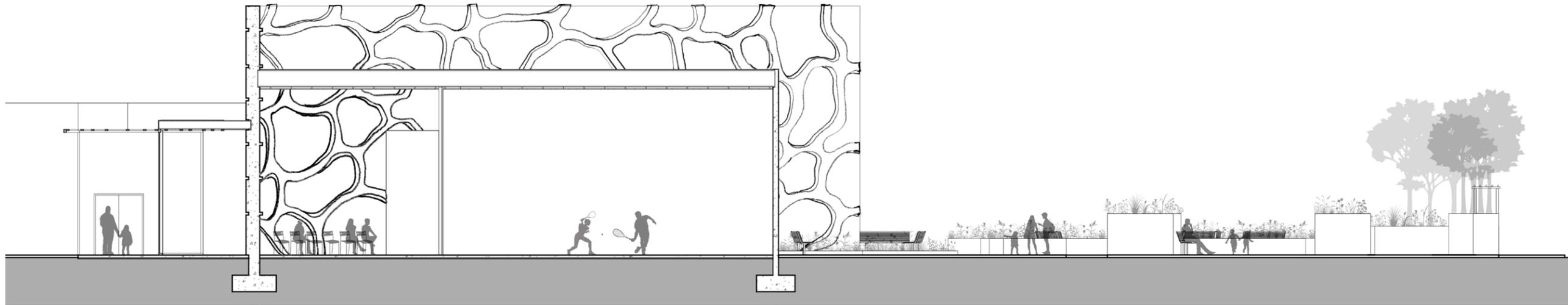
As your hand travels along the wall, you pass by perpendicular corridors with views to the garden outside and access to classrooms used for programs such as yoga, cooking classes, and other activities for local community members to partake in. You will also pass by a café for people to sit down and enjoy a cup of coffee while waiting for their children or friends to be done with activities. There is also an art room that includes a pottery studio for people to create beautiful pieces of pottery that they can either take home or place in the garden outside for others to enjoy. Lastly, there is an exercise room and racquetball courts for members to enjoy that also encourages sensory stimulation.



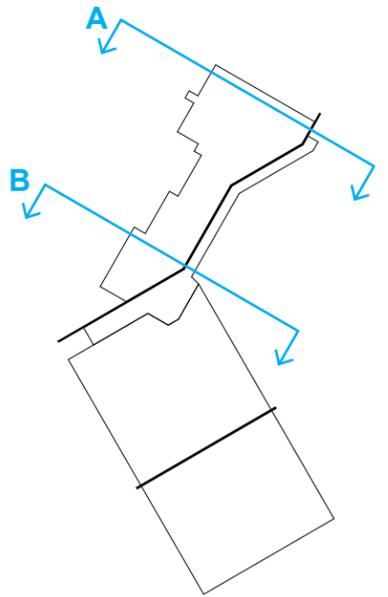


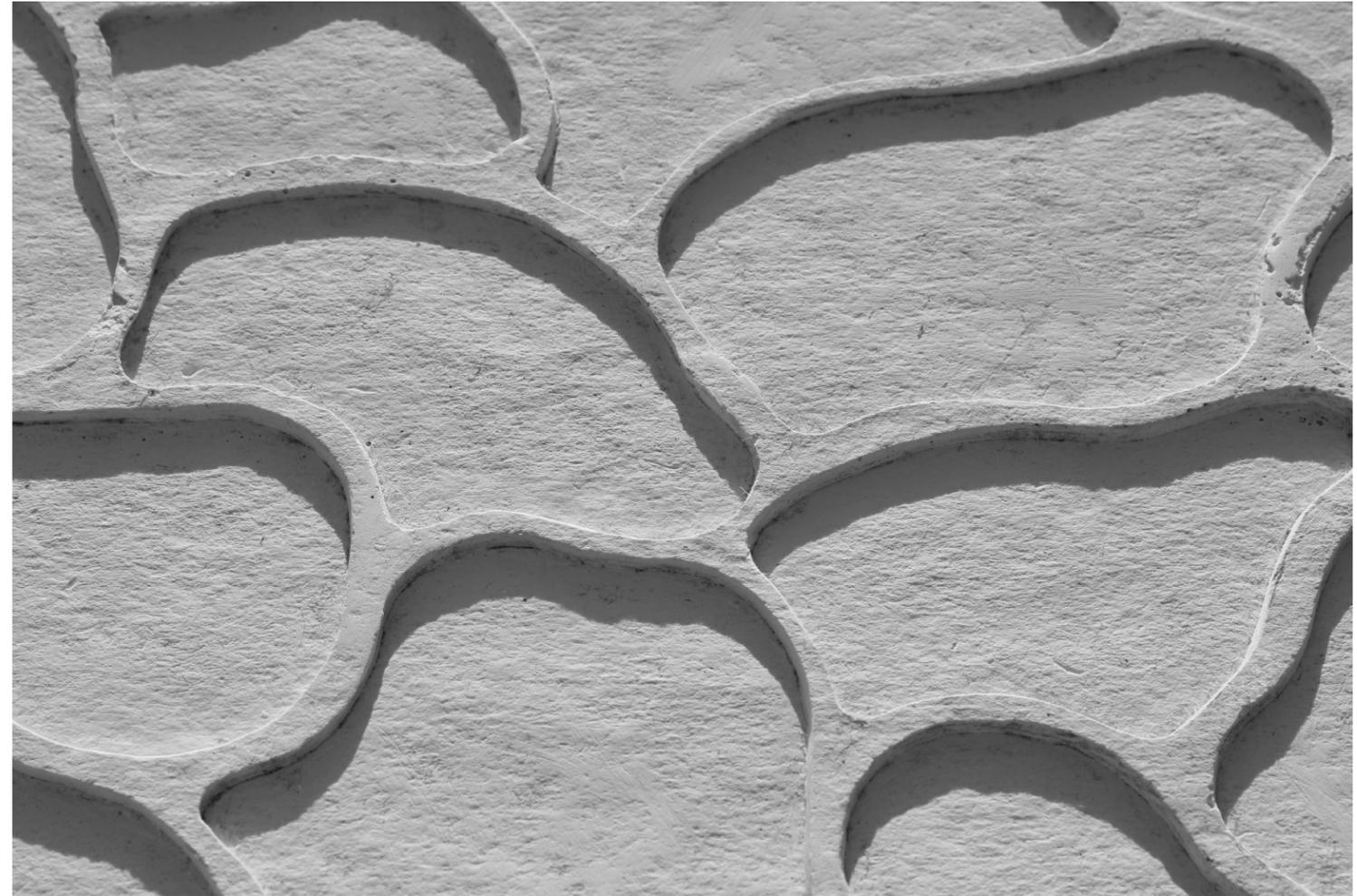
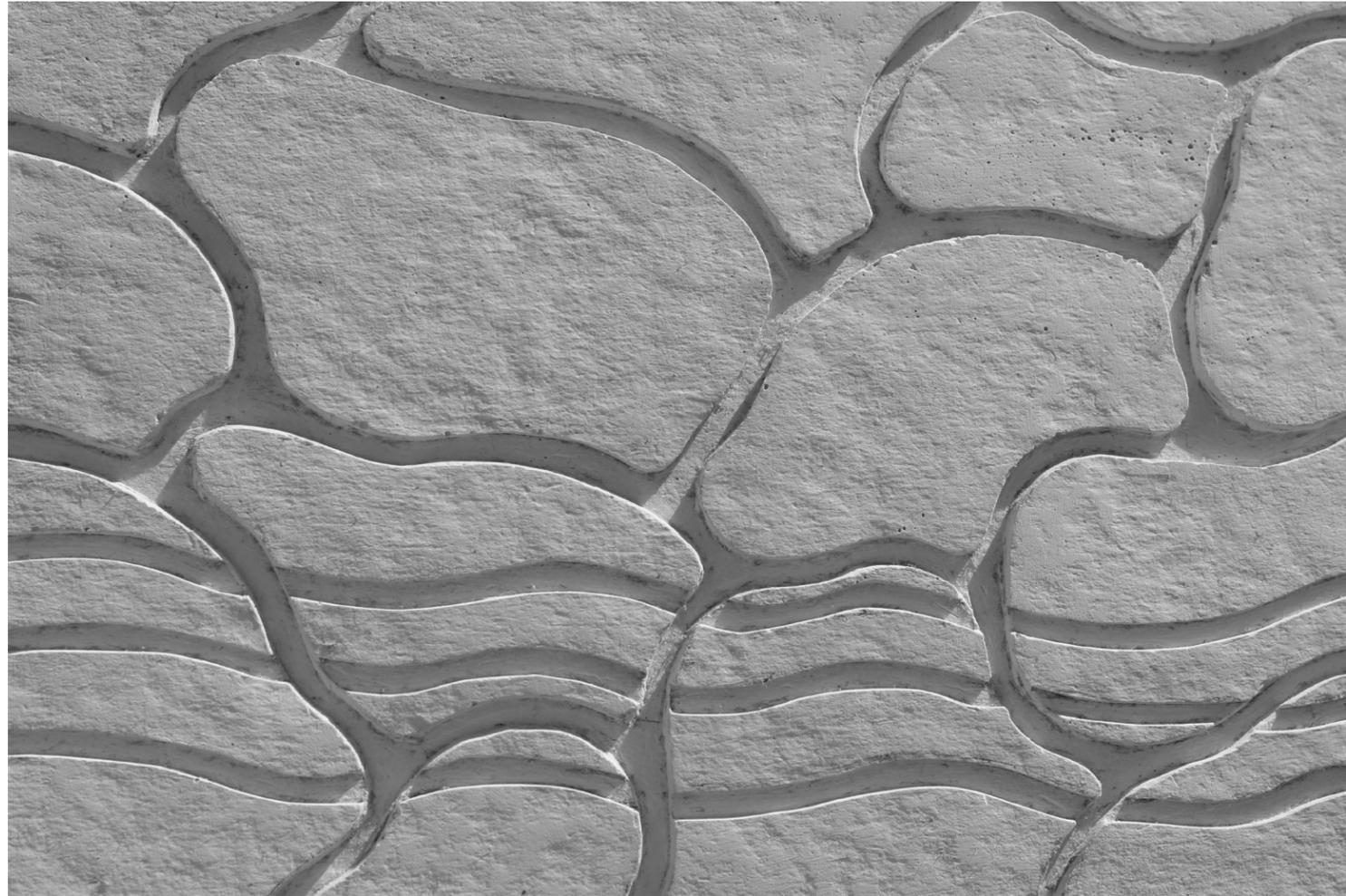


A Building Section
 Left to Right: Entrance, Administrative Offices, Multipurpose Rooms, Garden



B Building Section
 Left to Right: Main Hallway, Waiting Area, Racquetball Court, Garden

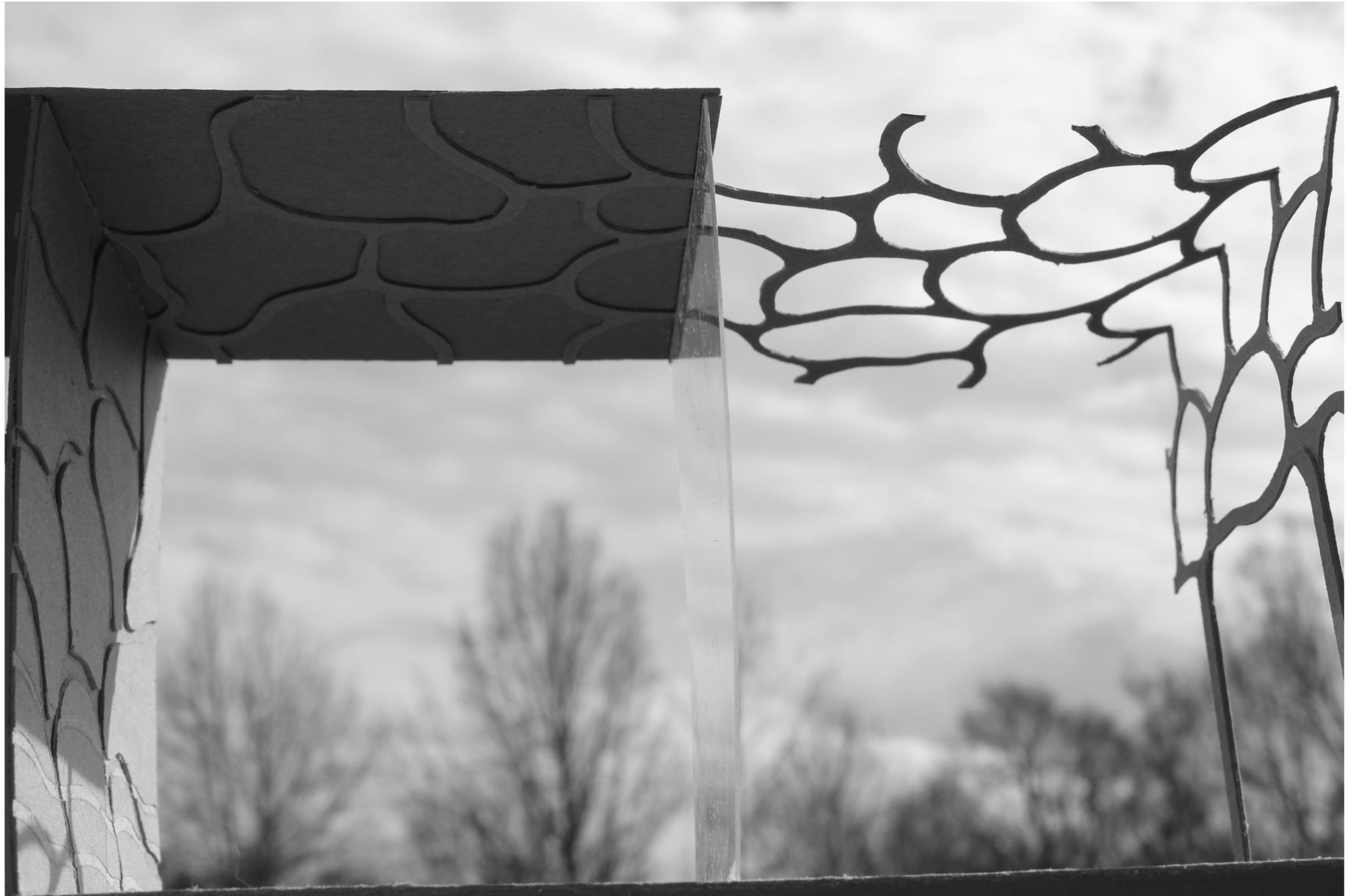


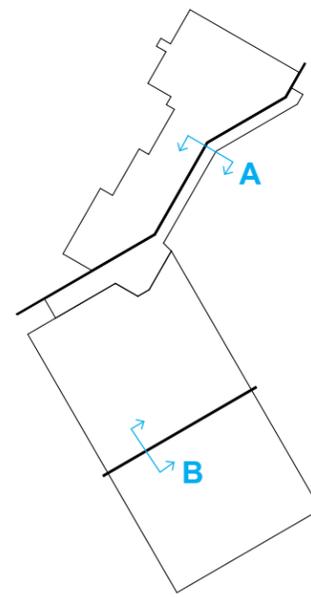




Tile Study

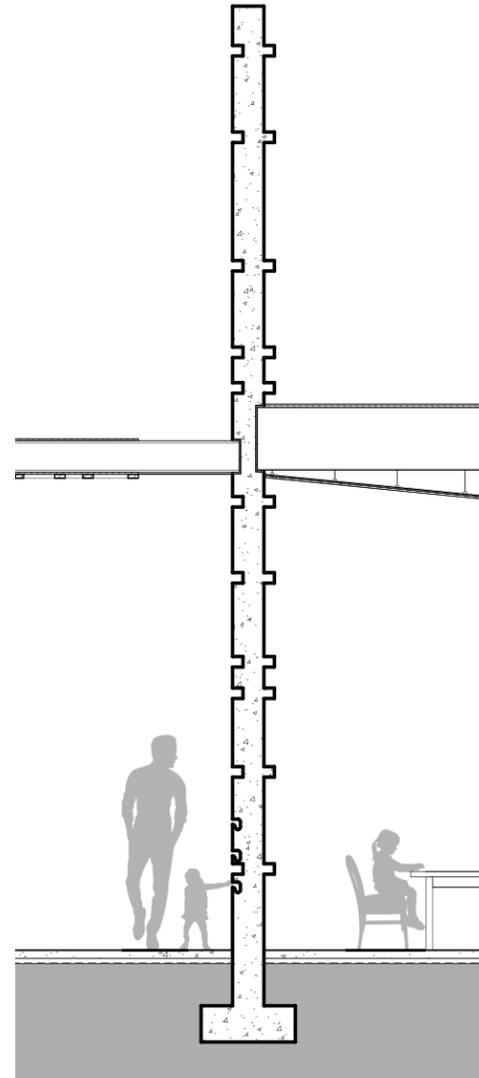
The wall not only extends vertically past the building, it also extends the hallway to the outside. The pattern on the wall reaches the ceiling and then peels away from the wall where it then extends across the ceiling and then outside, becoming a plywood lattice structure for people to walk under.



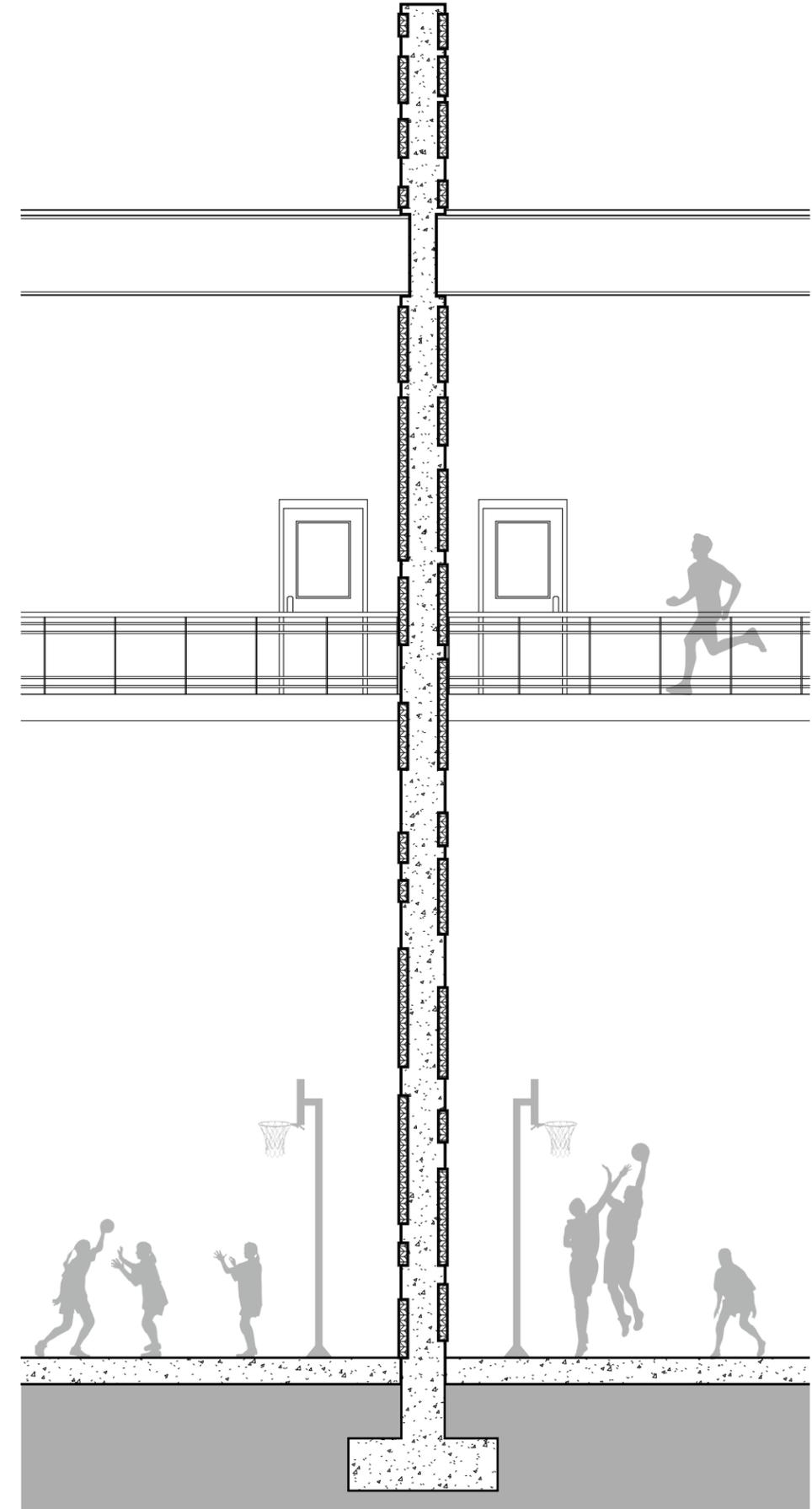


At the end of the hallway, you finally reach the gym. As you walk inside, you see the running track in front of you and head downstairs where the basketball courts are located. While walking downstairs, you notice that there is another wall with an interesting pattern on it, but this one is made of wood.

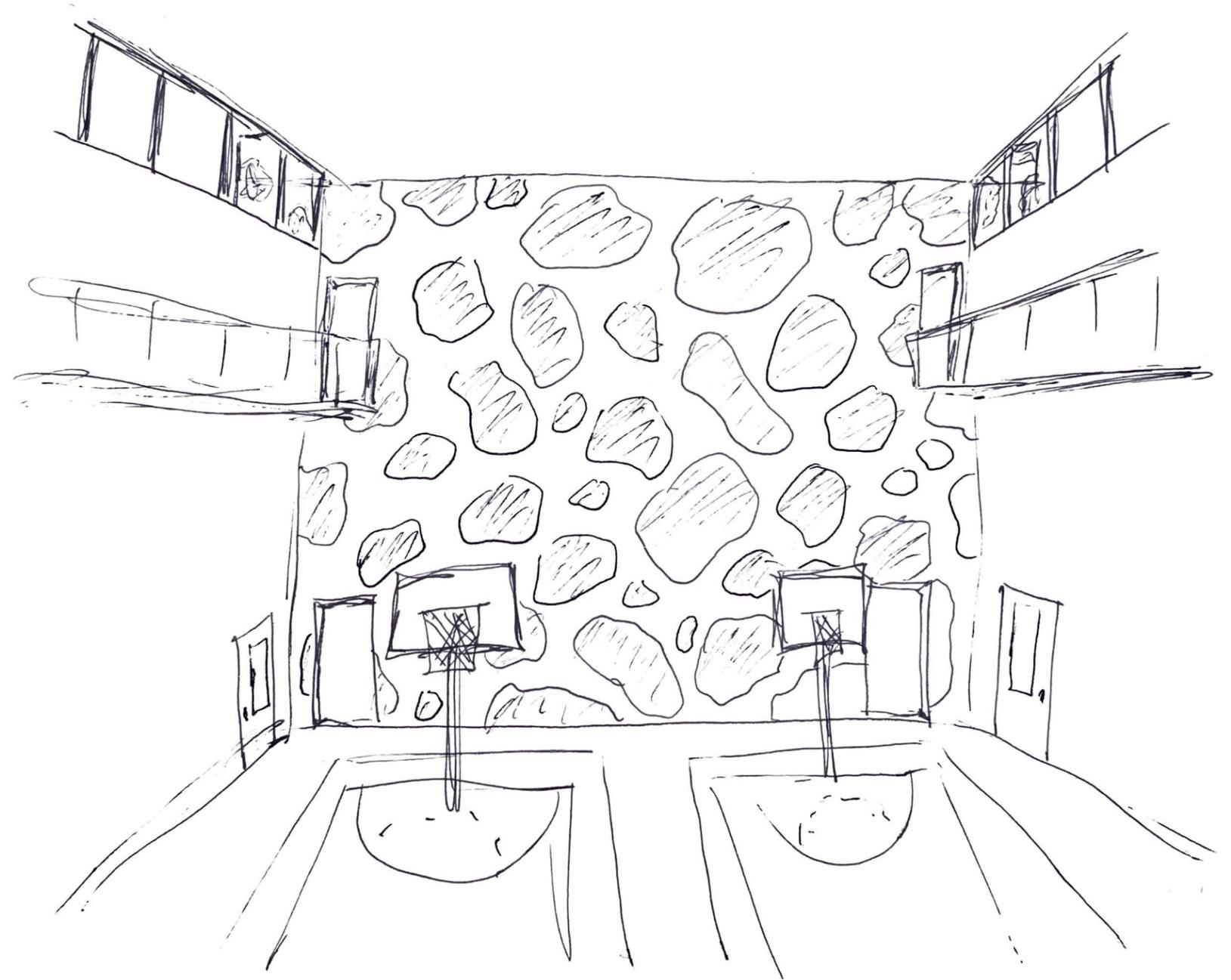
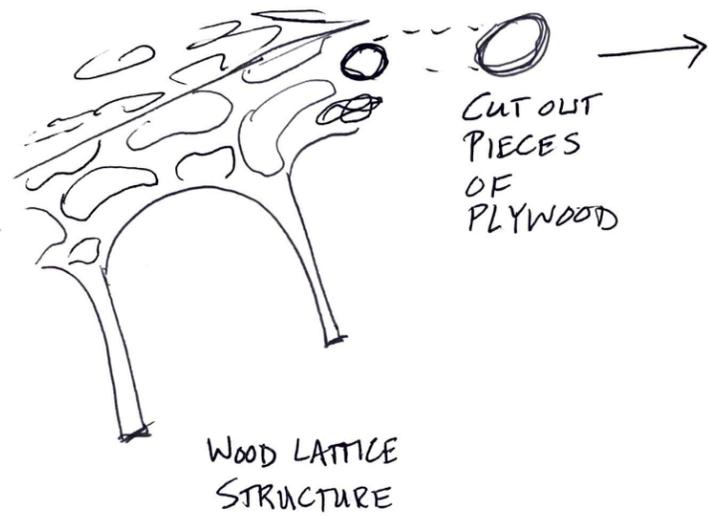
The pieces of plywood cut out of the exterior lattice structure running parallel to the previous wall have been reused and placed on the gym wall. This wall acts as a load bearing wall and separates the four courts so that there are two on each side of the wall.



A Wall Section



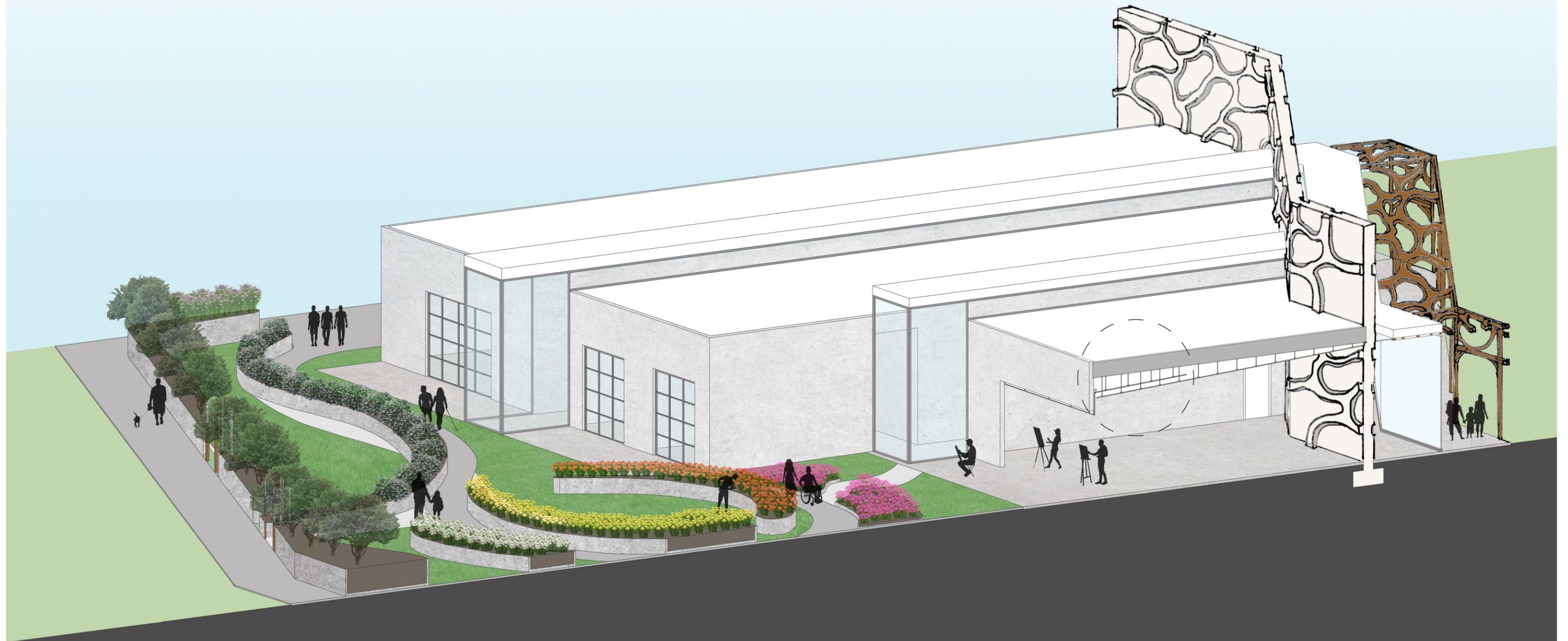
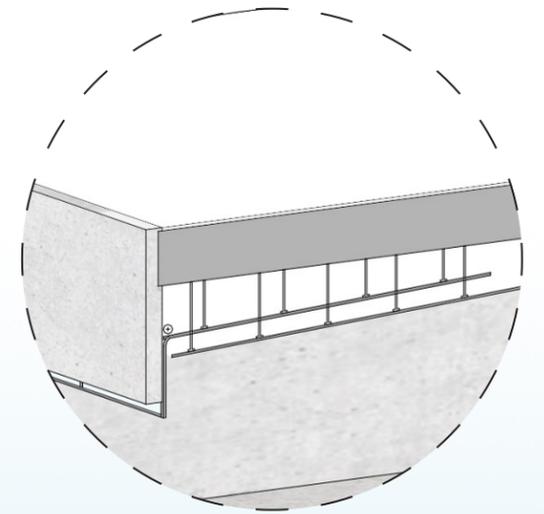
B Gym Wall Section



After you have some fun playing a game of basketball with your friends, you say goodbye and move on to the next chapter of your journey.

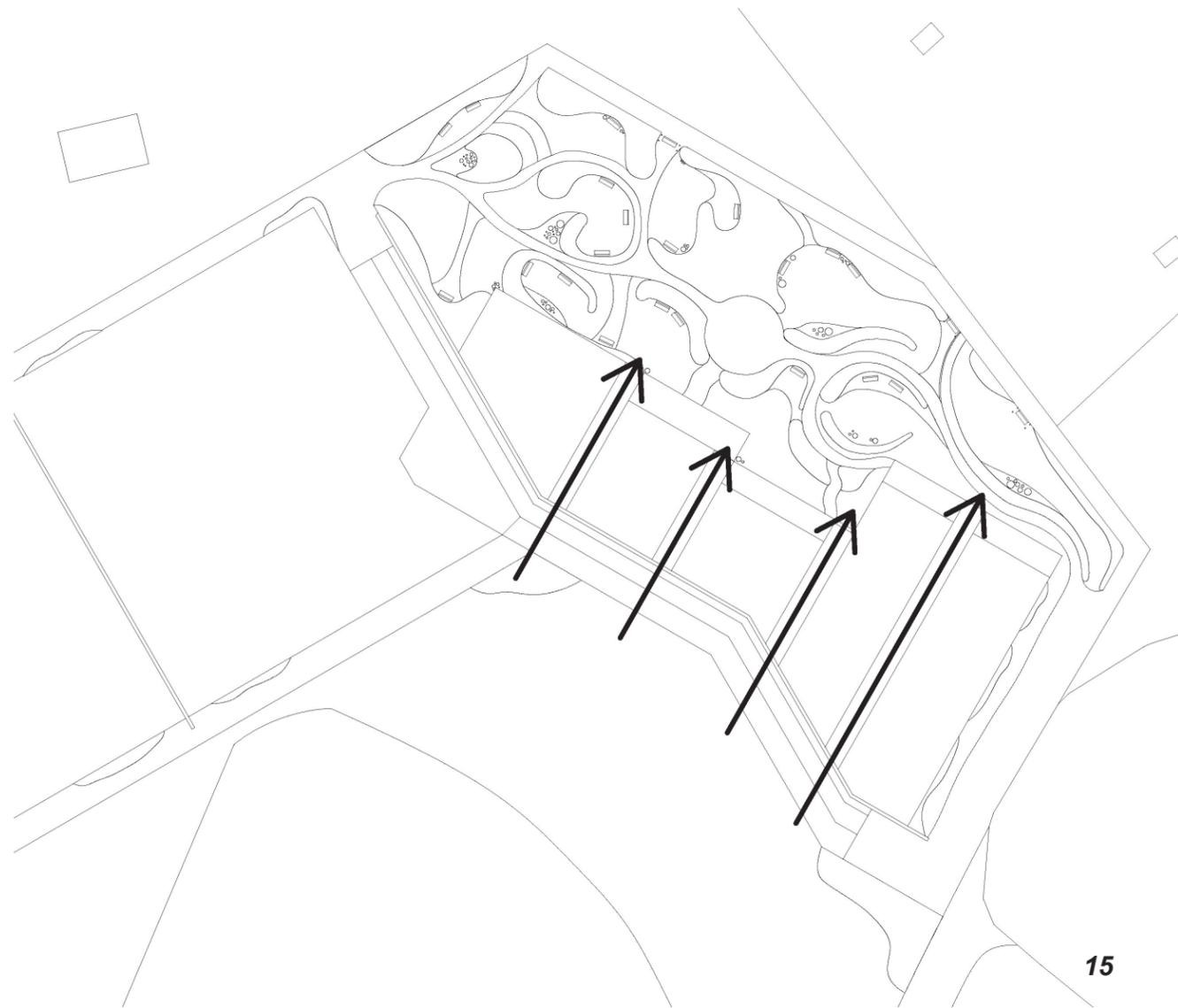
Your weekly game of basketball with your friends always enables your creativity so you love to visit the art room afterwards. In the art room, you can engage in painting, drawing, sketching, or even throwing some pottery on the wheel. When the weather is nice outside, like today, you can open the garage door that extends the view to the garden outside. This view to the garden creates a beautiful perspective for people to practice their artistic skills on, as the landscape is always changing as seasons change.

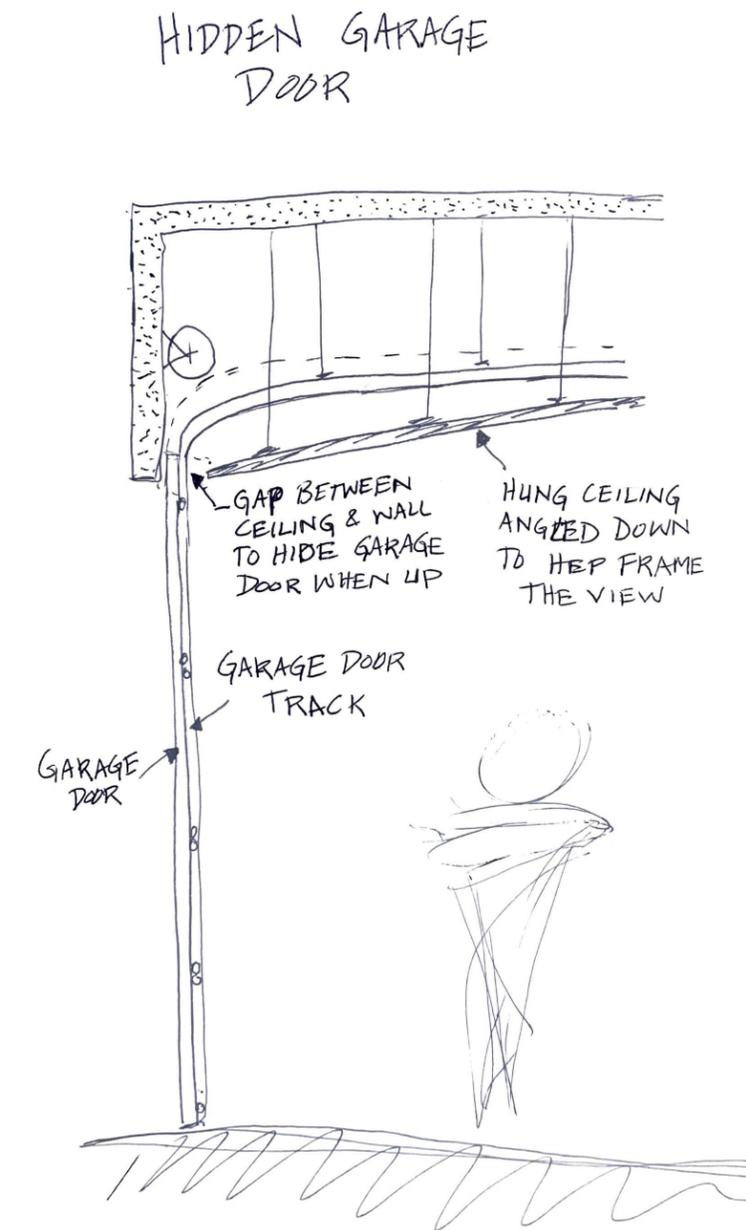
Other rooms along the garden also include garage doors to allow for classes to extend past their interior boundaries, and into an outdoor classroom.



On your way to the art room, you see down the corridor where you capture a view of the garden. It appears as if it is an extension of the building and is another room for you to visit.

Each hallway shows a different perspective of the garden and create different moments that can be enjoyed throughout the community center. During these moments, each perspective changes while the garden stays still; appearing as different moments in time.





Disappearing garage door detail

You finally arrive to the art room and open the garage door. As it disappears into the ceiling, an unobstructed view is opened up to the outside. This creates a perfectly framed view to paint a perspective, especially with those flowering shrubs blooming in the foreground. With the garage door open, you can see the interior concrete floor spilling outside and extending past its traditional boundaries to expand into a larger, outdoor, classroom.

Once you finish your project in the art room, it is time to embark on your final chapter.



Pottery located in the Hahn Horticulture Garden at Virginia Tech

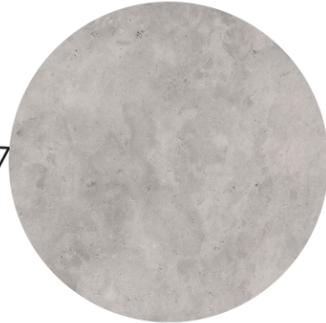
Locally Made Pottery and Sculptures

Pottery or sculptures can be placed around the garden. These items add intimate connections to the garden by community members who made them and now have a memory associated with the gardens.



Gravel

Gravel is used to create more direct paths to specific places in the garden. Visitors can follow the paths to a nice place to sit and smell the flowers or they will find local 'relics' placed within these designated spots.



Concrete Floor

Concrete is used for the interior and exterior flooring. The interior floors spill out into the grass and allow for classrooms to extend to the outdoors and include the garden into their programs.

As you walk in the garden, you begin to take in the beautiful floral scenery and its abundance of different aromas. The flowering garden flows from one end to the other like a river and you have noticed that the blooming floral landscape changes every season and the enticing aromas transform with it. While strolling through the garden, you also notice that there are places carved away within the scented areas for people to sit and take a moment to take in their surroundings.

FRAGRANT FLOWERS BY COLOR

RED	ORANGE	YELLOW	GREEN	BLUE	PURPLE	PINK	WHITE
• CAMELLIA JAPONICA "KRAMER'S SUPREME"	• ORANGE CHRYSANTHEMUM	• YELLOW ROSEFORM	• BASIL	• BLUE CHRYSANTHEMUM	• LILAC	• ORIENTAL LILY	• CASABLANCA LILY
• RED CHRYSANTHEMUM	• HONEY PERFUME ROSE	• BEGONIA - YELLOW	• ROSEMARY	• BLUE JASMINE	• PURPLE CHRYSANTHEMUM	• CAMELLIA "FRAGRANT PINK"	• CAMELLIA "CINNAMON CANDY"
• GARDEN PHLOX	• JUST JOEY ROSE	• CAMELLIA BEGONIA	• MINT	• DELFT BLUE HYACINTH	• CITY OF BRADFORD HYACINTH	• CAMELLIA JAPONICA "HERME"	• CHARLIE'S WHITE PEONY
• CHOCOLATE COSMO	• FREESIA	• YELLOW CHRYSANTHEMUM	• CHOCOLATE MINT	• IRIS 'BLUE RHYTHM'	• PURPLE JASMINE	• PINK CHRYSANTHEMUM	• GARDENIA
• "HENRY BOCKSTOLCE" PEONY	• MARIGOLDS	• CHOCOLATE DAISY	• THYME	• VIOLA	• GARDEN PHLOX	• PINK JASMINE	• KOREAN SPICE BUSH
• FRAGRANT CLOUD ROSE		• RADIANT PERFUME ROSE			• FRAGRANT PLUM ROSE	• HERITAGE ENGLISH ROSE	• MOCK ORANGE
• ELEGANT/PINEAPPLE SAGE		• "BARTZELLA" ITOH PEONY			• LAVENDAR	• GARDEN PHLOX "BRIGHT EYES"	• SWEET OLIVE
• FREESIA		• WINTERSWEET SHRUB			• ANGEL FACE ROSE	• "DOCTOR ALEXANDER FLEMING" PEONY	• SWEETBAY MAGNOLIA
		• HAMAMELIS			• BERGAMOT	• "GAS PLANT (BURNING BUSH SHRUB)"	• WHITE CHRYSANTHEMUM
		• HYPERICUM			• IRIS UNGUICULARIS	• STOCK (MATTHIOLA)	• MADAME PLANTIER ROSE
		• SWEET OSMANTHUS			• FREESIA	• BUTTERFLY BUSH	• GARDEN PHLOX "DAVID"
		• BROOMS (GENISTA)			• BUTTERFLY BUSH		• LILY OF THE VALLEY
		• FREESIA					• "DUCHESS DE NEMOURS" PEONY
		• GOLDENROD					• ORANGE JESSAMINE JASMINE
		• VIOLA					• MADAME ALFRED CARRIERE ROSE
							• WINTER HONEYSUCKLE
							• CHRISTMAS/SWEET BOX (BLACK BERRIES)
							• MEXICAN ORANGE SHRUB
							• LEMON CATNIP
							• KOREAN SPICE VIBURNUM
							• FREESIA
							• BUTTERFLY BUSH
							• STOCK

The garden is designed to incorporate a variety of different flowering fragrances that will take visitors on a physical and mental journey. The different fragrances incorporated throughout the garden are spicy, sweet-spicy, sweet, sweet-citrus, citrus, and herbal.

Throughout the seasons these flowers and their varying aromas will change which will provide many opportunities to experience different fragrant journeys. The floral aromas are pleasurable to our sense of smell and may also be familiar fragrances that transport us back to a past memory. When our nose remembers, so do our other senses. We can mentally transport our present selves to a previous experience and remember the smell, the setting, or a texture. Our sense of smell is so powerful because with one breath, our entire body is engulfed by a fragrance and instantly sent into a trance of the past.

FLOWER BLOOM SCHEDULE

	WINTER	MID-SEASON	SPRING	MID-SEASON	SUMMER	MID-SEASON	FALL	MID-SEASON
RED		• KRAMER'S SUPREME		FREESIA	CHOCOLATE COSMO		CHRYSANTHEMUM	
				ELEGANT SAGE	FRAGRANT CLOUD ROSE			ELEGANT SAGE
ORANGE				FREESIA		HONEY PERFUME ROSE	CHRYSANTHEMUM	
					JUST JOEY ROSE	MARIGOLDS		
YELLOW	WINTERSWEET SHRUB		CHOCOLATE DAISY	"BARTZELLA" ITOH PEONY	HYPERICUM		CHRYSANTHEMUM	
	HAMAMELIS	BROOMS (GENISTA)		RADIANT PERFUME ROSE				
			FREESIA	SWEET OSMANTHUS	YELLOW CAMELLIA BEGONIA			
					GOLDENROD			
GREEN				BASIL				
				ROSEMARY				
				MINT/CHOCOLATE MINT				
				THYME				
BLUE			HYACINTH		IRIS 'BLUE RHYTHM'		CHRYSANTHEMUM	
					JASMINE			
PURPLE			HYACINTH	STOCK (MATTHIOLA)	BERGAMOT		CHRYSANTHEMUM	IRIS UNGUICULARIS
	IRIS UNGUICULARIS			FRAGRANT PLUM ROSE	GARDEN PHLOX			
			LILAC	JASMINE				
			LAVENDAR		BUTTERFLY BUSH			
				FREESIA	ANGEL FACE ROSE			
PINK		"SCENTATION"	MADAME ISAAC PEREIRE ROSE	DR. ALEXANDER FLEMING PEONY	HERITAGE ENGLISH ROSE		CHRYSANTHEMUM	
		"FRAGRANT PINK"		"HERME"	LOWISE ODIER ROSE		BUTTERFLY BUSH	
			VIBURNUM	JASMINE	STOCK (MATTHIOLA)	LOWISE ODIER ROSE		
					GERTRUDE JEKYLL ROSE	GARDEN PHLOX		
					GAS PLANT	ORIENTAL LILY		
WHITE			KOREAN SPICE BUSH	MADAME PLANTIER ROSE			CHRYSANTHEMUM	
	WINTER HONEYSUCKLE		SWEET OLIVE	CHARLIE'S WHITE PEONY	MADAME ALFRED CARRIERE		BUTTERFLY BUSH	SWEET OLIVE
	CHRISTMAS/SWEET BOX		SWEETBAY MAGNOLIA	LILY OF THE VALLEY	JASMINE			CAMELLIA "CINNAMON CANDY"
	CAMELLIA "CINNAMON CANDY"		LILY OF THE VALLEY	MEXICAN ORANGE SHRUB	MEXICAN ORANGE SHRUB			
			ORANGE JESSAMINE	KOREAN SPICE VIBURNUM	LEMON CATNIP			

FLOWER TYPES BY FRAGRANCE

EARTHY/HERBAL	SWEET	SWEET-CITRUS	CITRUS	SWEET/SPICY	CHOCOLATE	SPICY	"OLD ROSE"
CHRYSANTHEMUM	CASABLANCA LILY	SWEETBAY MAGNOLIA	MOCK ORANGE	MADAME ALFRED CARRIERE ROSE	CHOCOLATE COSMO	HONEY PERFUME ROSE	GERTRUDE JEKYLL ROSE
LAVENDAR	GARDEN PHLOX	RADIANT PERFUME ROSE	ORANGE JESSAMINE	YELLOW ROSEFORM BEGONIA	CHOCOLATE DAISY	FRAGRANT CLOUD ROSE	DUCHESS DE NEMOURS PEONY
ROSEMARY	LILY OF THE VALLEY	HERITAGE ENGLISH ROSE	GAS PLANT	KOREAN SPICE BUSH	CHOCOLATE MINT	CAMELLIA "CINNAMON CANDY"	
MINT	CAMELLIA JAPONICA "KRAMER'S SPECIAL"	MADAME ISAAC PEREIRE ROSE	JUST JOEY ROSE	VIBURNUM		DAPHNE X TRANSATLANTICA (SIBIRIAN HONEYSUCKLE)	
THYME	CAMELLIA "FRAGRANT PINK"	ELEGANT/PINEAPPLE SAGE	MADAME ISAAC PEREIRE ROSE	HYPERICUM		GARDENIA	
BASIL	CAMELLIA JAPONICA "HERME"	"BARTZELLA" ITOH PEONY	"BARTZELLA" ITOH PEONY	STOCK (MATTHIOLA)		GOLDENROD	
MARIGOLD (MUSKY)	CAMELLIA JAPONICA "SCENTATION"	ANGEL FACE ROSE	MEXICAN ORANGE SHRUB	PINK DIANTHUS			
	HYACINTH	SWEET OSMANTHUS	IRIS 'BLUE RHYTHM'	KOREAN SPICE VIBURNUM			
	FRAGRANT PLUM ROSE		LEMON CATNIP	BROOMS			
	LOWISE ODIER ROSE						
	MADAME PLANTIER ROSE						
	AUTUMN DAMASK ROSE						
	JASMINE						
	LILAC						
	ORIENTAL LILY						
	DR. ALEXANDER FLEMING PEONY						
	CHARLIE'S WHITE PEONY						
	SWEET OLIVE						
	WINTERSWEET SHRUB						
	WINTER HONEYSUCKLE						
	IRIS UNGUICULARIS						
	CHRISTMAS/SWEET BOX						
	HAMAMELIS						
	FREESIA						
	BUTTERFLY BUSH						
	VIOLA						
	JOE PYE WEED						

Right now it is spring time, so the garden's aroma would look something like this. There is a mixture of all types of fragrances to be enjoyed and the colorful foliage would create a lovely picture.

- Spring**
- Earthy/Herbal
 - Citrus
 - Sweet-Citrus
 - Sweet
 - Spicy-Sweet
 - Spicy



- Summer**
- Earthy/Herbal
 - Citrus
 - Sweet-Citrus
 - Sweet
 - Spicy-Sweet
 - Spicy



In the Summer, the foliage will still be bright and colorful and the different types of aromas that were there in the spring carry over into the summer with very little change.

- Fall**
- Earthy/Herbal
 - Citrus
 - Sweet-Citrus
 - Sweet
 - Spicy-Sweet
 - Spicy

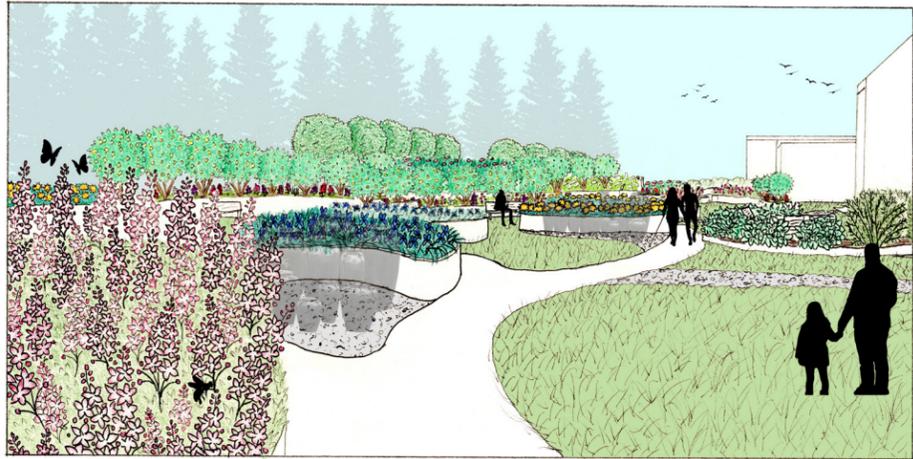
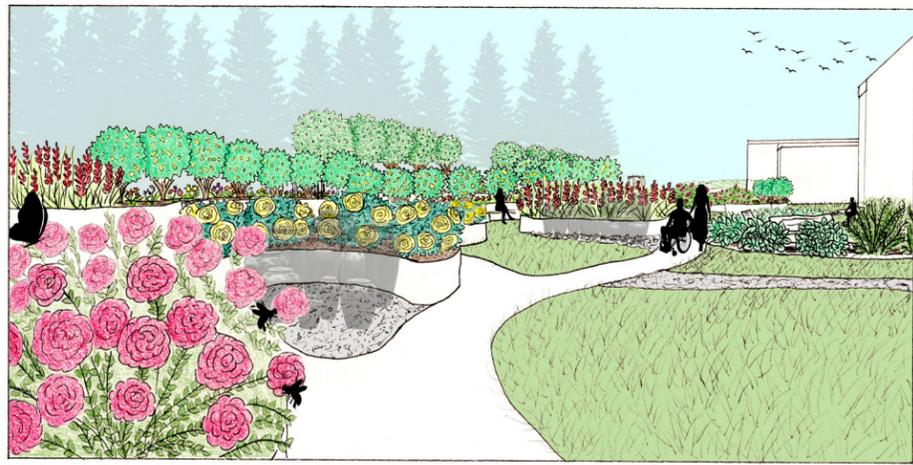


The Fall is where we start to see more of a change in aromas, specifically those that are no longer available and forcing us to wait until next Spring to enjoy the aromas of citrus or sweet-citrus smelling flowers.

Normally Winter is when trees and shrubs are bare and the bright flowers from past seasons have withered away and died. This garden, however, has been planned for the maximized amount of aroma that is possible for this time of year. There are still not a lot of flowering plants, but there is a decent amount of aroma and foliage that can be enjoyed.

- Winter**
- Earthy/Herbal
 - Citrus
 - Sweet-Citrus
 - Sweet
 - Spicy-Sweet
 - Spicy





As you walk through the garden, you notice people sitting among the foliage and enjoying their colorful and aromatic surroundings. They appear to be enjoying themselves and you love to sit amongst the vibrant foliage, but you are headed to another spot in the garden that is more private.

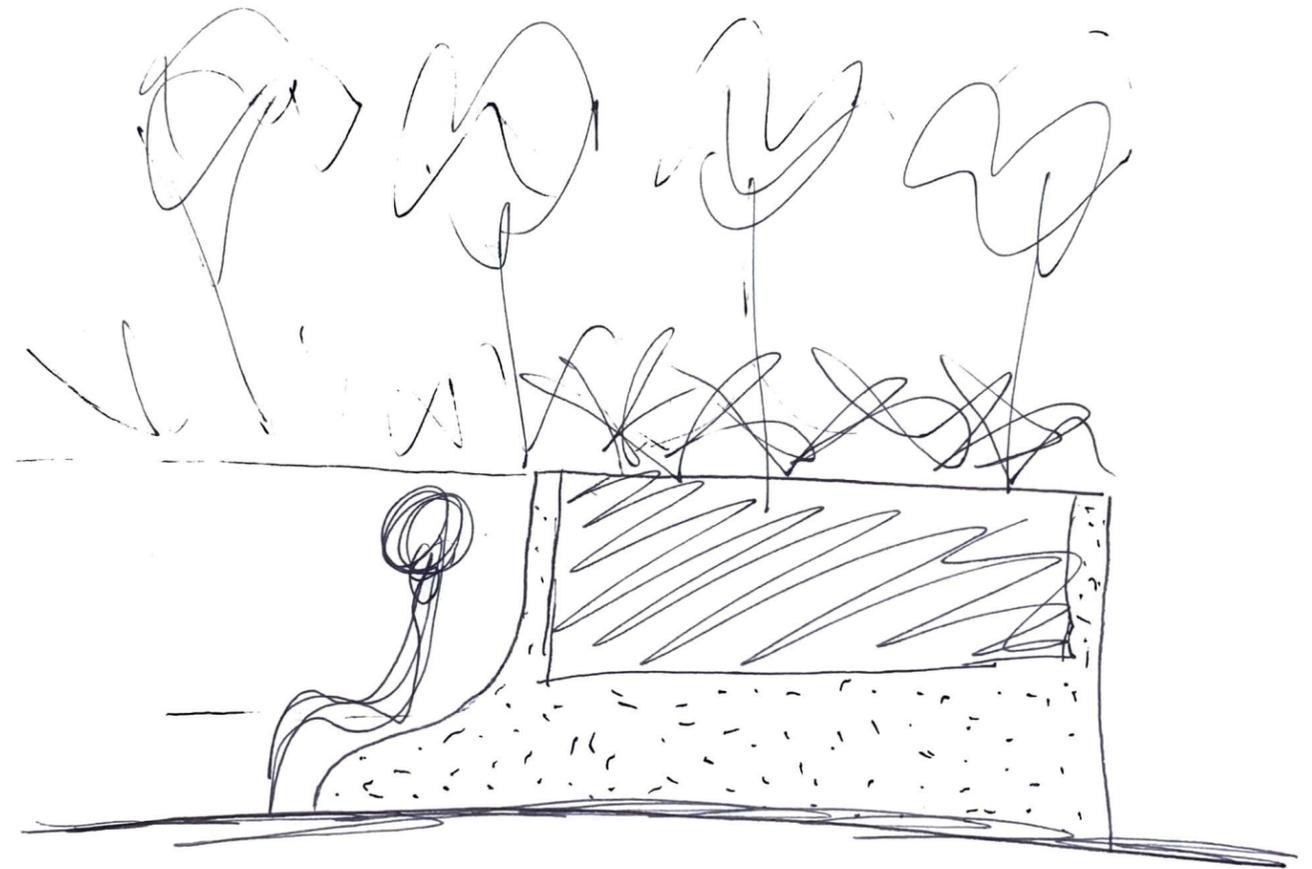
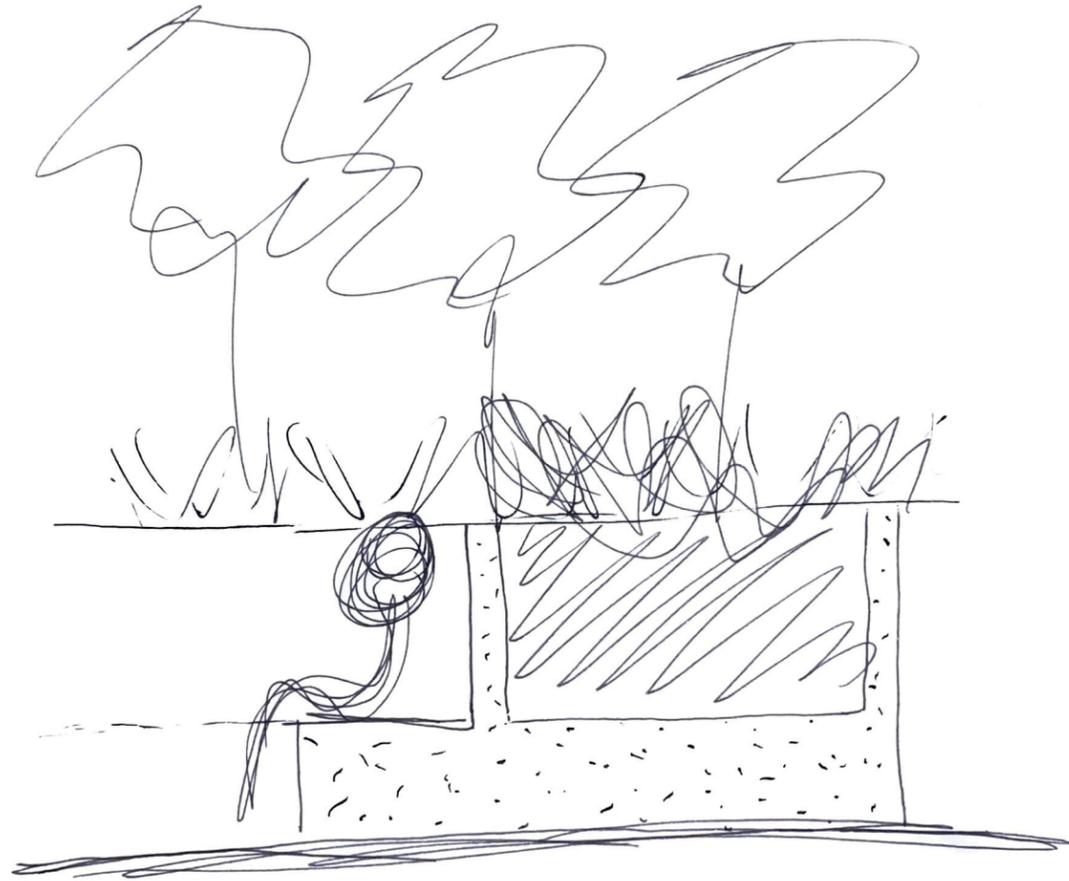


As you turn a corner, you touch the tall concrete plant bed and run your hand along the tiles that make up the trim. You take a moment and stop to feel the tiles and run your hand along the crevices where the shadows tell a story of the texture upon them. The touch of these tiles remind you of the wall inside the community center and how you followed it along your journey. You might even take note of the color and how the light hits them in just the right spot. The glare from the sun and the shadows cast on this plant bed even have you thinking about a future painting or drawing.

You finally reach the bench and take everything in. In this moment you're sitting outside on a nice day surrounded by colorful foliage and engulfed by a sweet fragrance. This is your favorite place in the garden because its secluded spot allows you to think and reflect on your day, week, month, even your year. It's also the perfect spot in the spring because you are surrounded by blooming freesia flowers that remind you of the garden your mother planted when you were little. This sweet memory marks an end to your journey here at the community center and it is time to leave. However, you know that the next time you come back there will always be that special spot where you can be present, but transported to a memory of the past.



Planter Wall Seating



Conclusion

I began my journey through the senses with an interest in the senses and how people use them to navigate through architecture. I then started asking myself questions when thinking of someone who might not be able to engage one of their senses. How can I guide someone if they can't see or hear? Can the other senses then be engaged to help with navigation? What about smell; can I guide someone through scent, and if so how? These questions helped guide me in my journey of the senses and also helped me write this story.

Through my sense of touch, I have learned that touching an object is similar to visually seeing it. When we see a particular object or texture, our initial thought is to touch it. The act of touching something helps us to better understand what we are seeing. Like Juhani Pallasmaa said, "The hands are the sculptor's eyes, but they are also organs for thought." Our hands help us to 'see' better and be able to analyze the texture or object much further than our sight is able to. Once we touch something, our eyes are able to remember it. Because our hands are telling our eyes what they see, our hands are the organs that are truly seeing the object. Our sight is being told what it feels. Once the hands have told the eyes what they truly see, the eyes store the information like a file cabinet and remember it for the future.

Of the five senses, sight is the most communicative to all the other senses. Sight helps us to see things that affect our other senses such as a texture or a food and, through memory, we are immediately able to experience those seen objects in full effect. Pallasmaa said, "*Vision reveals what touch already knows.*" We can see a texture and already know what it feels like without having to touch it because we have touched it before. Sight is the most dominant of the senses because it is the quickest to react to present day experiences, but it also responds to the other senses. The smell of a familiar fragrance often leads us to envisioning where or what the familiar smell came from so that we not only remember the smell, but also the story behind the smell. Our senses help tell a story; sight is the author that sets up the narrative while touch, smell, taste, and sound are the characters and the settings that help to tell it.

Smell was the most challenging of the senses for me to address. After questioning how to guide someone by smell, I then had to ask myself, what makes smell so different from the other senses? Maybe a fragrance reminds someone of a loved one, or an experience a person had that brings them joy once they remember it. Whatever it is, smell is linked to memory, and that is what makes it an important sense to remember when designing in architecture. Pallasmaa describes scent as "*the most persistent memory of any space*" because "*the nose makes the eyes remember.*" When it comes to architecture scent is not a focal point, but it is actually a powerful tool. Scent can have an intimate reaction with someone that a visual or even a tactile sense cannot have. A memory can be unlocked by scent which then makes someone confront their reality in space and time, a concept that Pallasmaa believes makes the sense of smell so important. A present fragrance becomes a past memory.



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