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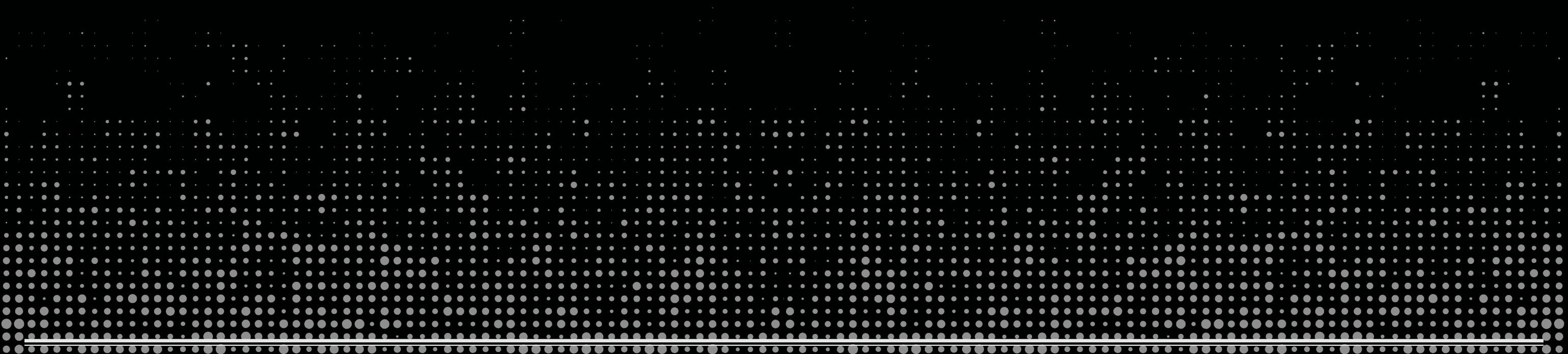
# ***THE GENESIS PROJECT***

Exploring the convergence of Architecture, Music, & Life

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TIMOTHY J HALVORSON · NORTH DAKOTA STATE UNIVERSITY · ALA MASTERS PROGRAM

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# ***THE PROPOSAL***

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## ABSTRACT

Music is an innate human quality that provokes physical, mental, and spiritual responses both consciously and subconsciously, and consequently, has the capacity to change the environment. Architecture can be designed as a vehicle for creating acoustically rich environments and musical opportunities that are desirable for guests and promote social exchange and healing. Architecture can be specifically designed to acoustically tune and direct sound in particular fashions that promote social, physiological, and cultural well being. The Performing Arts & Healing Center challenges conventional perceptions of what “instrument” and “music” are by creating spaces that can be healing and invigorating through the embodied composition of select materials, shapes, and landscaping. The symphony of nature. Further, a variety of interactive musical mediums encourage guests to tangibly engage with music rather than simply stand as observers. The result is a constant stream of activity transforming the Center into an instrument for positive cultural change.

Title: Acoustic Ambiance & The Dynamics of Social Change  
Typology: Performing Arts & Healing Center  
Site: Rochester, MN USA.  
Project Size: 350,000 Square Feet.

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**CONTEXT**

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## PROJECT JUSTIFICATION

This project was selected for a variety of reasons. The first is that it is situated in a rich economic context that is set to be only the second big boom of development in Rochester's entire history. The amount of resources available contributing to this project was more than one could even take in. The city has really been about making this development process transparent from the beginning, putting the power of the project in the hands of the people. A variety of blogs, videos, outreach boards downtown, and a full legislation board have been assigned to oversee this massive undertaking which makes it very exciting times to be a part of it. Having the chance to intern with a local Architecture firm over the summer of 2014, I was able to really experience my site and the greater context of the city. This gave me ample time to meet up with people who are involved with the development process and local citizens acting as ambassadors.

From a personal standpoint, the project intrigues me because of music being my primary passion outside of Architecture. I play the Piano, Alto Saxophone, Drum Set, Guitar, and Vocals. I started playing the piano at age 4 and was constantly tinkering with all the music in the music store that my mom worked at for 23 years. Let's just say I took advantage of the employee discount. Over the years, I have explored just about every genre of music that there is and have found what I most prefer but have a deep appreciation for the power of music and its ability to express and pass along life. My mom also was a huge advocate of music therapy, teaching and selling home organs to senior citizens as a career. The joy and life my mom had from doing what she loved and getting other people involved with that music using accessible music techniques for all ages and skill levels inspired me to use it as my premise in connection with the world renown medical treatment of the Mayo Clinic.

From an academic standpoint, the project encompasses a wide range of skills and knowledge base that demonstrate a comprehensive design. The project pushes the limit being able to not only effectively design, but to be able to effectively communicate and represent the finished design concept. It is a personal conviction that equal weight should be given to both design and representation of that design, because otherwise the richness of the project will fall through the cracks and be lost. In practice this means lost business and lost hours. Because this is primarily an academic project, it is not possible to conduct any sort of post-occupancy tests verifying proposed performance criteria. As a result, the primary means of validation for design decision making will utilize the most cutting edge design software available on the market to verify and justify design decisions throughout the extent of the project.

A brief list of the software utilized on the project includes the following: Revit, 3DS Max, Dynamo, Ecotect, Vasari, Lightroom, Photoshop, Illustrator, InDesign, After Effects, Sketchup, Word, Excel, Powerpoint, Outlook, EASE Acoustic, Audition, ArchGIS, and AutoCAD. Rhino with Grasshopper may be added to the list but needs to establish a working knowledge of the program prior to project integration. My approach is a pure hybrid approach to design that takes the best of all software available and creates a synthesized design process to maximize efficiency and design quality.

Beyond the software, the project demands an in-depth understanding of the nature and function of acoustic design to really be effective. Acoustic design is the primary initiative the project but other aspects include but not limited to: Interactive learning facilitation, sustainable design, urban design, site design and development, and effective social interaction facilitation. The design

also must effectively integrate building systems design including structure, mechanical, electrical, and plumbing. The design is focused on creating spaces of being and atmosphere. This will demand effective interior design development specifically on the concert hall, music therapy rooms, and jazz restaurant components of the project. This project also stretches the effectiveness of the center by housing a wide range of activities at different times of day and different user groups to keep it active and thriving. This is a formidable design challenge to balance a variety of activities and design multi-purpose spaces to maximize usability.

Finally, this project is something that the city of Rochester needs. The center for music fits within its initiative to develop and arts district along the river as well as tying in with its initiatives for education, health living, and entertainment. As mentioned in the premise section, entertainment doesn't have to always be a spectator sport where there is constant state of being sedentary. The facility actively engages guests with a wide range of activities that peak curiosity and the imagination. The primary focus on entertainment is maintaining that a more rich experience is possible by creating an atmosphere of play, free thinking, and exploration in addition to the conventional means of sitting through a classical music performance.

## HISTORICAL CONTEXT

\*Historic information has been received as a combination of the [ <Insert number> ] Rochester Master Plan, [ <Insert number> ] Mayo Clinic Tradition website, and [ <Insert number> ] City of Rochester website. Numbers correspond with references in the project Appendix.

### ROCHESTER BEGINNINGS

Rochester is located at the south fork of the Zumbro River and currently stands as the third largest city in Minnesota with only Minneapolis and St. Paul ahead of it. Rochester was first established in 1854 by George Head as a center for Agriculture and Medicine seeing an initial population boost of 50 up to 1500 within its first 3 years. In 1857, Rochester was named the county seat of Olmsted County, officially establishing it as the center of southeast Minnesota.



W. W. MAYO

The Mayo Clinic was first established in 1864 by Dr. William Worrall Mayo having immigrated to America. His primary reason for initially arriving was examining Civil War draftees. He raised a medical legacy with his two sons, Drs. William James Mayo and Charles Horace Mayo who joined up with their father's practice in 1883 and 1888 respectively. From the beginning, innovation was their standard and they shared a pioneering zeal for medicine. As the demand for their services increased, they asked other doctors and basic science researchers to join them in the world's first private integrated group practice. The Mayo Clinic from its inception has understood the value of having a pooled resource of knowledge between doctors of all specialities. Innovation, collaboration, and learning have always been the cultural foundation for the development of Rochester's history.

### TORNADO DISASTER

In 1883, a disastrous tornado levels the city of Rochester in a matter of minutes leaving nothing but ruins behind. As a result of the high demand, Saint Mary's Hospital opens by a sisterhood who had managed to pool together \$60,000. Because of the demand, the Mayo practice reluctantly collaborated with Saint Mary's filling up every bed and using every lamp available. This was a time for Rochester to find its roots again and rebuild from the ground up.

## INTERNATIONAL CONNECTIONS

Following World War I, international connections were re-established between Mayo Clinic & European practitioners collaborating on the latest and greatest medicine and surgical practices.

## BUILDING THE MAYO CLINIC

On October 9, 1912, the Mayo Clinic established its first building at the corner of 2nd Ave SW and 1st St SW. The building was constructed around the principles, concepts and systems of Dr. Henry Plummer, and reflected his ideal that medical building should not only be efficient, but also warm and inviting to all who enter. It featured rooms and corridors with oak paneling, cork and terrazzo floors, Tiffany stained skylight, and Rook wood tile foundation, ornamental plaster ceilings, and detailed bronze grillwork.

Later it would be demolished in 1989 for the establishment of the Siebens Medical Education Building but key material artifacts were salvaged and incorporated into the new building. The Siebens Building centralizes the majority of Mayo's educational programs and related services. With its completion, the Mayo Biomedical Graduate School was launched housing a student body of 130 Ph.D. candidates.

## THE PLUMMER BUILDING

Named after Dr. Henry S. Plummer, one of the key early innovators in blood medicine for the Mayo Clinic, the building core functionality is centered around the need for medical staff to work both independently and as a team. Reflecting the compassionate spirit of Dr. Plummer, the interior features hardwood panels, rich shades of marble, custom carpeting and beautiful moldings. Themes relating to medicine, America, Minnesota, and Rochester have been carved out of the foundation walls visible as you walk around its base. At the dedication ceremony, a colleague noted: "This building stands as a monument to the ability and genius of Dr. Henry S. Plummer, who has had full supervision of its design and erection, and he above all deserves credit for the detail and arrangement of the interior construction and arrangement of all the scientific and mechanical appliances which make accurate diagnosis not only possible but probable."

The Plummer Building was a major milestone in the establishment of a truly integrated medical practice for the Mayo Clinic. The building was later fully completed with the creation of the Bell Carillon at the top. At the time, this made the Plummer Building the tallest building in Minnesota standing at 295 feet. The Carillon fills downtown with the hymns "Lord, Dismiss Us with Thy Blessing" at 6pm daily and "The Day Thou Gavest Lord is Ended" at 9pm daily. In addition, bell concerts are performed periodically throughout the year.



## MAYO CLINIC TODAY

Today, the Mayo Clinic in Rochester employs 32,000+ in Rochester alone and has established medical campuses in Scottsdale, Arizona and Jacksonville, Florida. The Gonda Building was established at the heart of Mayo Clinic's downtown campus and opened its doors in October, 2001. It houses a wide range of specialty facilities that work hand-in-hand with the Methodist Hospital immediately adjacent to the North. For both patients and practitioners alike, this makes for much more seamless episodes of care and service. The firm of Ellerbe Becket, Inc. designed the Gonda Building to accommodate 30-stories, allowing for an additional 10-stories of development to happen should Mayo need to expand making this the unquestionable heart and core of Rochester's downtown. The expansion projects of the Gonda interior have been in large part to Mayo benefactors introducing high quality art displays and plaques on nearly every floor and space within the building.



The Mayo Clinic has promised to expand their medical practice again with currently \$3 billion staged for investment and development. Between state and other private investors, the pool of money has been matched and swelled to just over \$6.5 billion as Rochester sets its eyes to the 2nd great expansion in its history with project "Destination Medical Center."

## HISTORIC PRECEDENT

### ACOUSTIC HISTORY

- THE BIBLE |** Exodus 26:7 God details how the tabernacle is to be constructed, with acoustical instructions
- 6TH CENTURY BC |** Pythagoras investigates musical tuning and temperament
- 325 BC |** Aristotle writes about the production and reception of sound, and the cause of echoes
- AD 27 |** Marcus Vitruvius Pollio writes *De Architectura*
- MID-16TH CENTURY |** Adrian Willaert works with antiphonal composition for the Cathedral San Marco
- 1650 |** Athanasius Kircher designs a parabolic horn
- MID-17TH CENTURY |** Robert Boyle observes that sound waves require a medium for transmission
- 1673 |** Athanasius Kircher writes *Phonurgia Nova*
- EARLY 18TH CENTURY |** Joseph Sauveur introduces the term acoustics to define the science of sound
- 1725 |** Brook Taylor determines a formula for the relationship between the length, tension, and mass of stretched string with respect to sound frequency
- 1735 |** Sir Isaac Newton attempts to determine the speed of sound in the air

1816	Pierre Simon Laplace formulates the equation for calculating the speed of sound
1822	Architect Charles Bullfinch applies stretched fabric across the dome of the Hall of Representatives to mitigate echoes
1830	Felix Savart fashions a device to measure the limits of human hearing. The siren is used to ascertain the frequency of a musical note by ear
1837	Architect Robert Mills raises the floor of the Hall of Representatives
1839	John Scott Russell presents the principle of the isacoustic curve
1847	Russell delivers lecture, "On the Arrangement of Buildings with Reference to Sound," to Royal Institute of British Architects
1850	Joseph Henry discovers the precedence effect
1862	Helmholtz publishes <i>On the Sensations of Tone</i>
1876	Alexander Graham Bell invents the microphone
1877	Lord Rayleigh publishes <i>The Theory of Sound</i>
LATE 19TH CENTURY	Wallace Clement Sabine is commissioned to design an acoustical solution to Harvard's Fogg Art Museum lecture hall
1895	Sabine hired as acoustical consultant for the Boston Symphony Hall
1918	Riverbank Acoustical Labs established
PRE 1920	The first acoustical tile is patented by Sabine and R. Gustavino
1920s	A number of acoustical materials are developed by various manufacturers
1923	Floyd Watson publishes <i>Acoustics of Buildings</i>
1925	Edgar Buckingham creates a theoretical formulation for sound transmission loss
1926	Warner Brothers presents the first full-length motion picture with synchronized sound
1927	Floyd Watson builds and equips the first anechoic (no echo) chamber
1929	Acoustical Society of America Established
1930s	Paul Sabine (cousin of Wallace Sabine) invents the first sound level meter. Carl Eyring writes <i>Reberberation in Dead Rooms</i>
1931	Johns-Manville Company opens its reverberation room
1933	The Acoustical Materials Association formed

1940s	Owens-Corning Fiberglass Corporation introduces an important new acoustical material <i>Disney's Fantasia</i> uses seven channels located behind the projection screen
1950	Erwin Meyer and his associates at Göttingen University attempt to correlate a desirable sound quality in a room to early reflection patterns
1950s	Karl Krypter published <i>The Effects of Noise on Man</i>
1965	Dolby Laboratories introduces noise reduction techniques for audio recordings
1972	US Congress enacts the Noise Control Act
1974	The US Environmental Protection Agency publishes EPA Levels Document
1980s	Lucasfilm's Tomlinson Holman, founder of THX sound, sets acoustical standards for cinema equipment and the acoustical quality of the theater

\*Historic information gathered from a variety of sources with the primary source from *Acoustics: Architecture, Engineering, The Environment* by Charles M. Salter Associates Inc.

### **PROJECT HISTORICAL PRECEDENT**

The project incorporates a variety of pieces surrounding the science and art of music throughout history. As you can see from some key milestones that have been made throughout the history of acoustics, the project will incorporate an activity set that promotes innovation, creativity, and exploration specifically surrounding the history and art of music. The project will also be a true hybrid design so project precedent will pull from the core design strategy that was effectively implemented. Specifically, study has been drawn from areas concerning the following:

1. Concert Hall & Acoustic Design
2. Interactive Learning Environments
3. Music Therapy

Please refer to the Typological Research section in the Proposal section regarding Concert Hall & Acoustic Design.

### **EXPLORATORIUM® | SAN FRANCISCO, CA**

In 1960, the Exploratorium® opened its doors at Pier 15 in San Francisco, California with the sole purpose of exploring from a place of playful fascination and curiosity about how the world works. Over the past 40 year, the Exploratorium has expanded its program to cover just about every science imaginable. The rennovated pier warehouse facilitates an interactive museum of permanent displays, a bay view restaurant, a school of science and the arts, and a small concert hall venue. The studios are for both academic and resident artist creative projects that have created a constant flux of fresh content and innovative ideas.

The Exploratorium offers a wide range of socially and mentally engaging opportunities for guests as well as an adult night on Thursday nights where drinks are served and adults of all ages get to be kids again exploring science. I was able to make it to this night event in San Francisco during the field trip surrounding my High Rise studio project. While there, I was able to interact and mingle with complete strangers who became instant friends and collaborators in our mutual fascination with the station we were both looking at. Often, one or 2 people would be playing with the station while others simply observed the chain reaction and possibly

would play themselves after observing another. Definitely one of the most engaging and fun times of my entire life so far! The overwhelming popularity of the Thursday night open house has led the Exploratorium to open its doors to the public every single Thursday night.

It's hard to put into words the atmosphere of the night. There was a sense of playfulness and genuine spontaneous joy. There was a sense of chaos because of all the wonderfully creative, interesting things happening all around at the same time. The atmosphere was packed full of life. There was no room for people to get hung up on what others were wearing or any social prejudices. Every person was swept up into the moment and atmosphere of fun, creativity, and innocent fascination. Loud, messy, uncertain, curious, and above all, just plain FUN. To say the least, I left overwhelmingly inspired.

With its long established legacy of creativity and innovation, the Exploratorium is a perfect precedent for the type of activities desired to be incorporated into the project program specifically surrounding music and acoustics. Specifically, the Exploratorium has its own acoustic simulation chamber that invites the public to move about the space and experience a variety of different sounds. There is a station where you can play a Xylophones of different material qualities and all set to a perfect scale so you can't play a wrong note! They also have a station where you can create your own frog croaking symphony. These are just a snippet of some opportunities to engage users of the center.

The primary precedent for studying this facility is its socially and intellectually intriguing opportunities. It acts as a constant source of live and innovation for the city which the world can never have enough of!

\*Discover more about the Exploratorium at their website: [www.exploratorium.edu](http://www.exploratorium.edu)



## SOCIAL CONTEXT

The push by the Mayo Clinic for Destination Medical Center (DMC) comes in light of the cultural context of emerging healthcare competitors around the country. Mayo has been a pioneer in the world of medicine for establishing a fully integrated healthcare practice. The size and scope of their reach knows no bounds and they have been widely successful. However, with population growth and the nature of free enterprise in America, other players in the field of healthcare have stepped up to the plate. They have learned from the Mayo business practice model and have established their own practices within local markets. One of these types is Sanford Medical



right here in Fargo, North Dakota. The added push by Mayo has been a result of economic shifts occurring the marketplace.

The shift has been happening with healthcare centers raising the bar in their cities by making them complete destination points. No longer is it enough to simply have the best care facility within the borders of the healthcare campus, but people are calling for a full healing experience that permeates all the way through into the city in which they inhabit. Mayo has seen this trend happening way in advance. They know they are the best and care deeply about their heritage in Rochester. This push will only solidify their position as the premiere medical destination point around the world.



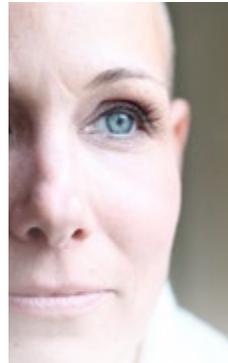
American cities have always been competitive. Born on the frontier in a land of abundance, American cities have had free reign to establish cities as they saw fit with little restriction in terms of space and resource availability. As America has grown, the internal competitive drive of cities has aimed to attract top talent emerging from universities to be able to contribute to their local society and continued success. There have been many periods where developers have taken advantage of this, encouraging people to take out loans to build businesses, strip malls, and houses where the population density was not sufficient to support. It's good to make healthy plans and optimistic goals for urban development, but it seems that urban centers all over the country are still competing for effective employee market share. This tension will slow projected population influx numbers as planners hope.

With that said, the long established tradition of medical excellence and technical innovation with the Mayo Clinic and IBM along with an ideal climate in the Midwest, priority on education, and overall welcoming attitude of people, Rochester offers a lot for prospecting professionals. When reading reviews and comments left by users on the DMC website, I found multiple people converging on the Midwest from all over the country because of the exciting new developments. There are a lot of people aware of DMC and more than willing to jump into the mix and grab a steak of what is happening.

The following pages will give an overview of Destination Medical Center and what that means for the politically and economically for the city of Rochester and the state of Minnesota.



## USER + CLIENT DESCRIPTION



[15.01]

### MEREDITH ABRAMS • The Mayo Clinic Cancer Patient

Age: 48 | Hometown: Pickensville, AL | Favorite Song: Don't Stop Believin', Journey

#### ROCHESTER REASON:

One day when faced with the reality of cancer, Meredith's family and community came around her with financial support to get the best treatment in the world at the Mayo Clinic. Meredith loves working with her hands and helping out her community in any way she can, which is why for the past 21 years she was the Regional Coordinator for Habitat for Humanity. Something about building homes as a symbol of building people's new futures really resonated with Meredith. Whether singing out while painting a freshly dry walled room or inspiring the new homeowners, Don't Stop Believin' was always her life motto inspiring hundreds of families over the years. Now, bed-ridden, energy depleted, and her life dwindling at the hands of cancer, the song takes on a whole new meaning. Meredith with love nothing more than to experience a true Journey concert before her time is up.

Spaces: Concert Venue, Music Therapy Room, Group Therapy Room



[15.02]

### DR. TAVARIS MENDENHALL • The Overworked & Overwhelmed Doctor

Age: 62 | Hometown: Lviv, Ukraine | Favorite Song: Rhapsody in Blue, Leonard Berstein

#### ROCHESTER REASON:

Since the time of his youth, Tavaris always aspired to be a Jazz Flute player but, frustrated by opportunity and lack of a future, his parents would not pay for their son's college education if he pursued this route. So Tavaris decided to go into medicine but never lost his love for Jazz and Big Band music. Many late nights of study were motivated by Coltrane, Sinatra, Tatum, and Berstein. You could say that these fine musicians were Mendenhall's Co-conspirators and constant guiders through his rigorous studies. Eventually he nailed his MCAT exams and was admitted into the Mayo Clinic Residency program. He was the first of his family to make it to America but it was not all that he expected. Dr. Tavaris Mendenhall is now the world leader in cardiovascular surgery but no more happy then when he first left his passion for the flute. If only Rochester had more jazz, big band, and musical entertainment opportunities...

Spaces: Concert Venue, Restaurant with Live Music, Big Band, Practice Rooms, Music Therapy Room



[15.03]

### JIM & RITA MACKLEMORE • The Couple on Date Night

Age: 25 & 26 | Hometown: Ham Lake, MN | Favorite Song: Hero, Enrique Iglesias

#### ROCHESTER REASON:

Jim and Rita are a working couple who came to Rochester because of the job opportunities after college. Jim works for a local Engineering firm downtown and Rita teaches a thriving 2nd grade class at Willow Creek Middle school. Though making good money and expecting their first child soon, Jim & Rita wish they didn't have to make such a huge effort to seek out quality entertainment in Rochester after work hours. The best entertainment or concert venues are over 1.5 hours away to the Twin Cities North. Most nights they are too tired to go back out or make the long journey for high quality entertainment. If only there was concert venue opportunities in Rochester that could break the good, yet mundane routine of Rochester.

Spaces: Concert Venue, Restaurant with Live Music, Plays, Musicals



[16.01]

### MITCH CADWELL • The Music Enthusiast

Age: 43 | Hometown: Rochester, MN | Favorite Song: New York, New York, Frank Sinatra

#### ROCHESTER REASON:

Mitch is an avid music collector who owns his own record shop in town. Despite his affinity for so many types of music, he finds it difficult with the limited amount of entertainment and bands that make their way to Rochester. Most musicians are local bands who play just for fun and occasionally put on a performance at the local karaoke bar or outdoor venue in the summers. Mitch likes to refer people to great new bands but always has to defer to concerts up in the Twin Cities. If Rochester was an appropriate venue and established a stronger cultural presence in Minnesota, then better bands would want to come for performances. *“It’s one thing to hear it on a record, and it’s another thing entirely to hear them live. I just hope I get that chance before my time is up.” -Mitch Cadwell.*

Spaces: Jazz Bar, Concert Hall, Musicals, Big Band



[16.02]

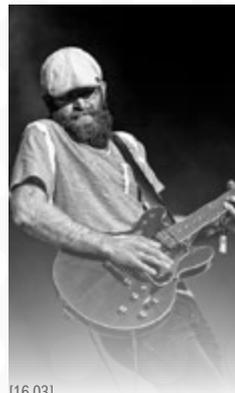
### JENNIFER STRATTON • The Music Educator

Age: 31 | Hometown: Marshall, MN | Favorite Song: Pipe Bag, The Haggis Horns

#### ROCHESTER REASON:

Jennifer was born and raised in Marshall, a fairly small town in Southeastern Minnesota. When first introduced to the piano at age 4, it was like she had found her missing half. Music was the heartbeat of everything she did and her complete obsession all throughout school. If she wasn’t practicing 1 of her 7 instruments, she was tuned in with her iPod. It was only fitting then that she choice to become a music educator with her career. Her passion for music has catapulted her into studying the affects of music on the body and exploring more effective ways to teach and learn music. Her research caught the eye of Mayo Clinic bringing her to Rochester in 2010. Since then, she was an integral part in the program and design process for the Performing Arts Center and was named the first ever Doctor of Music and Medicine. It is with great pleasure that she takes over the Music Development Division of the Mayo Performing Arts & Healing Center for her continued contribution to both music and science.

Spaces: Music Therapy Rooms, Interactive Rehearsal Rooms, Group Learning Environment, Lab



[16.03]

### HAPPY GREYSON • The Street Performer Seeking a Stage

Age: 34 | Hometown: Spring Valley, MN | Favorite Song: Pride and Joy, Stevie Rae Vaughan

#### ROCHESTER REASON:

If there was one thing that brought more joy to Happy, it was having a guitar in his hands. Clarence “Happy” Greyson was given his nickname by his friends when they formed their first garage band in 2nd grade. A natural talent, Happy took after the likes of Stevie Rae Vaughan and Eric Clapton in his funky fresh style of guitar. Unfortunately, his dreams of making it big on the stage never quite took off like he had wanted even after moving to Rochester to pursue a self-promoted record label. Happy now works at a local factory producing parts for medical equipment and spends his nights setting up gigs and performing wherever he can find a stage around town.

Spaces: Outdoor Performance Space, Jazz Bar, Practice Room, Group Music Room



[17.01]

### MILES KINGSTON • The Outdoor Enthusiast

Age: 28 | Hometown: Huntington Beach, CA | Favorite Song: In the End, Linkin Park

#### ROCHESTER REASON:

Miles Kingston is a trainer at a local cross-fit gym. Like most, he enjoys getting outside as much as possible and mixing up his exercises by running or biking new trails. Like Miles, most in Rochester want to have a better reason to come to downtown after work hours. Having a better destination at the end of a run or walk would be ideal and would create a more intriguing experience while keeping active. Having better paths and a better urban environment downtown is ideal.

Spaces: Urban Streetscape, Park, Bike Rack, Good Paths



[17.02]

### GLADYS TREMAINE • The Stressed Out Mom

Age: 33 | Hometown: Little Rock, AR | Favorite Song: Don’t Worry, Be Happy, Bobby McFerrin

#### ROCHESTER REASON:

Gladys Tremaine is a hard working full time mom with 3 kids and only 1 in school. During the days, her husband works at IBM leaving her to work with the kids and work on the house. Beyond that, Gladys is taking classes at the local University of Minnesota college downtown to earn her Master’s of Business. She knows eventually they are going to need more money to pay for college for her kids and her husband’s income simply doesn’t cover it all. Gladys would really appreciate a place she could go for some stress relief, community interaction with fellow moms, and a place for her kids to play during the day.

Spaces: Music Therapy Room, Community Group Space, Outdoor Park, Café, Interactive Learning



[17.03]

### TIMOTHY PAXTON • The Violinist

Age: 29 | Hometown: Banbury, UK | Favorite Song: Prelude from Bach’s Cello Suite No. 1

#### ROCHESTER REASON:

Timothy Paxton is first chair on the traveling London Symphony Orchestra. Trained at The Julliard School for Performing Arts in New York City, Timothy is quickly becoming the next biggest thing since Yo Yo Ma hit the scene. Intrigued by the new Performing Arts Venue in Rochester, MN, Timothy finds himself on tour to this new destination point. He had heard of the world famous treatment and innovations coming out of Rochester for medicine but nothing else. Timothy is excited to visit this new American Cultural Center brimming with life and worthy of his talents.

Spaces: Concert Hall, Practice Room, Group Rehearsal Room, Changing Room, Service Entry, Parking



[18.01]

### CASSIDY MEYERS • The Wedding Party

Age: 24 | Hometown: Rochester, MN | Favorite Song: You're The One That I Want, Grease

#### ROCHESTER REASON:

Cassidy Meyers was one of those girls who always played dress up and wedding with her friends growing up. She always looked forward to the day that she would marry her prince charming and have the best wedding ever. It was all about the freshest flowers, the best service, the perfect dress, and the perfect venue. When Cassidy was little, her dad took her downtown to Peace Plaza where she caught her first glimpse of a real bride coming out of the Kahler Grand Hotel. At that moment she made up her mind to have her wedding there. But when the Performing Arts Center was built along the riverfront, her affections shifted and she could have the absolute perfect wedding she had always dreamed about. The location, the views, the service, and the size provided made it the ideal choice.

Spaces: Auditorium, Reception Hall/Restaurant, Bar, Gardens, Kitchen, Parking



[18.02]

### MAXWELL EASTON • The Conductor

Age: 65 | Hometown: New Haven, CT | Favorite Song: Ode to Joy, Beethoven

#### ROCHESTER REASON:

Maxwell Easton is the conductor for the traveling London Symphony Orchestra. Over the decades of his research and practice of music, nothing quite intrigued him more than the challenge of conducting over 60 musicians simultaneously and leading them into the highest heights and softest whispers that a song could evoke. His single greatest passion was to bring an audience to tears with the elegance of the song or lift their spirits with a booming grande finale! With that, it is imperative to have a concert venue that enhances the sound of the song to reach its full potential. If everything is in tune and properly aligned, then musicians can really produce their best work. With this in mind, Maxwell adjusted their tour schedule to include the new Performing Arts Center in Rochester, Minnesota because of its cutting edge innovations in optimizing acoustical performance. Maxwell wanted to be the first to taste this wonderful new space.

Spaces: Concert Hall, Orchestra Pit, Rehearsal Hall Space, Practice Rooms, Loading Dock



[18.03]

### ROSARIA RODRIGUEZ • The Caterer

Age: 19 | Hometown: Juarez, Mexico | Favorite Song: The Great Escape, Boys Like Girls

#### ROCHESTER REASON:

Rosaria immigrated with her parents to the states when she was 12 years old. Leaving behind their old life in Juarez, her dad picked up a factory job in Rochester, MN but the plan all along was to give their daughter a shot at a real life in America. Rosaria currently attends the University of Minnesota in downtown Rochester and works part-time as a Caterer for events at The Mayo Performing Arts Center & Mayo Civic Center to make ends meet. Rochester has won her heart and she aspires to be a nurse at the Mayo Clinic while still actively getting involved with the Music Therapy activities she has witnessed at the Performing Arts Center.

Spaces: Kitchen, Restaurant, Venue Space, Service Entry, Parking



[19.01]

### LISA GRAHAM + FAMILY • The Family

Age: Varies | Hometown: Rochester, MN | Favorite Song: Let It Go, Frozen

#### ROCHESTER REASON:

Lisa Graham and her family are your typical American, wholesome, Midwestern family. Lisa and her husband grew up in Rochester and decided to stay because of the solid economy, great schools, and proximity to their grandparents. Despite these solid reasons for staying, Lisa and her family wish there were more opportunities for entertainment in Rochester for the whole family. They are partial to Disney on Ice, High School Musical, and Frozen as a musical. Good thing they like ice because this is Minnesota! This Christmas season, Lisa is looking forward to taking her family to a show at the new Performing Arts Center and doing some ice skating at the adjacent park. She is really happy that Rochester created these activities over the past couple of years because it has really brought a new spark to life at home!

Spaces: Concert Venue, Musicals, Outdoor Activities, Restaurant, Interactive Learning, Practice Rooms



[19.02]

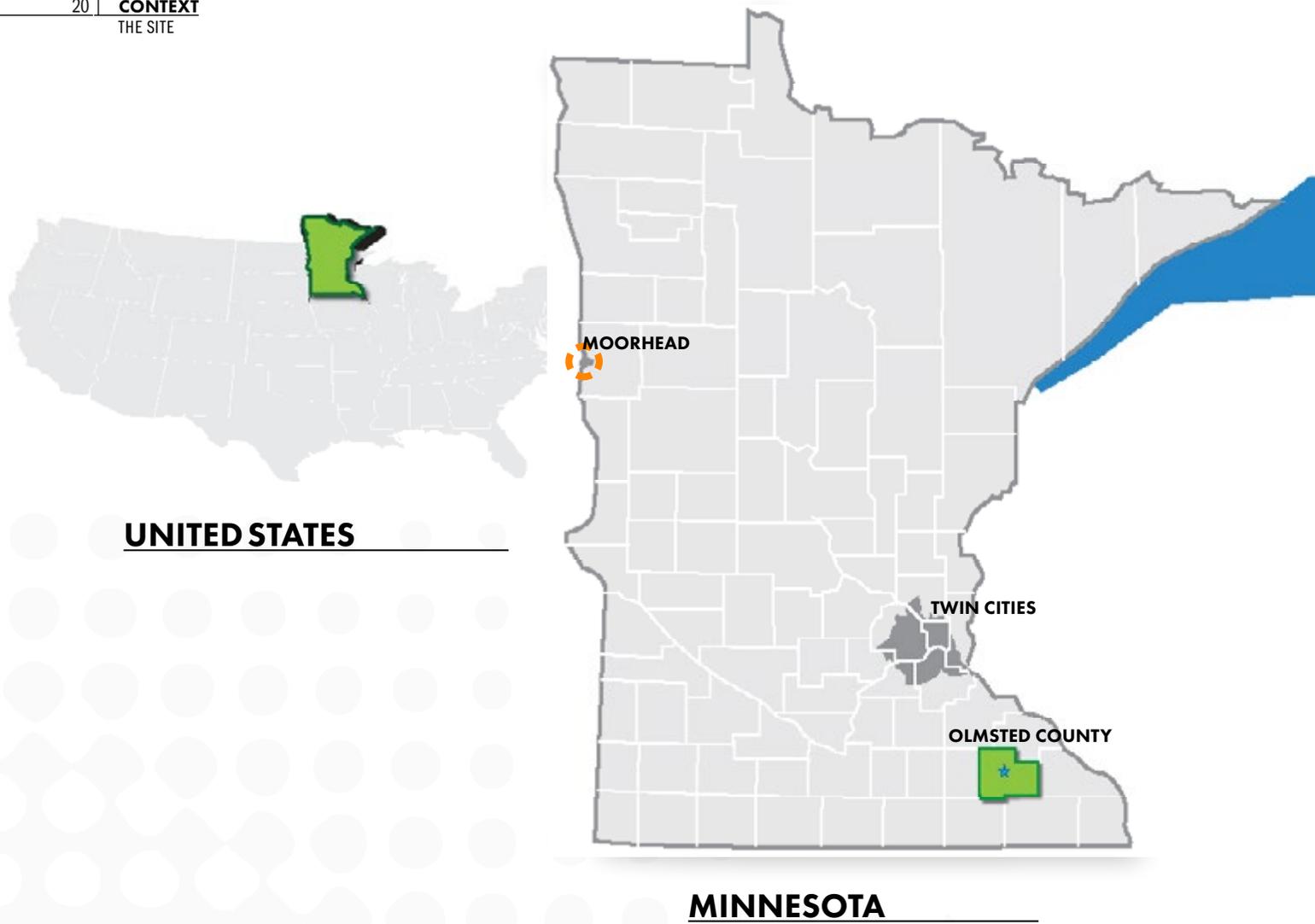
### AHMED HAJJAR • The International Visitor

Age: 26 | Hometown: Dubai, UAE | Favorite Song: Power of Love, Celine Dion

#### ROCHESTER REASON:

Ahmed Hajjar is a well-respected businessman from Saudi Arabia. Because family is such a high priority in his culture, when his father became sick with a rare form of Tuberculosis, they decided to fly him out to the Mayo Clinic for the best treatment in the world. Word had spread that Mayo was the place to go if you could afford the treatment costs. Ahmed now finds himself remotely managing his business but still having lots of down time while he prays for his father's swift recovery. Ahmed doesn't want to be far from his father in case were to suddenly happen to him and so resists going out of Rochester. Unfortunately, he wishes there were more entertainment options to fill his time and help connect him into the community better.

Spaces: Concert Venue, Group Music, Practice Rooms, Restaurant with Live Music, Park



**UNITED STATES**

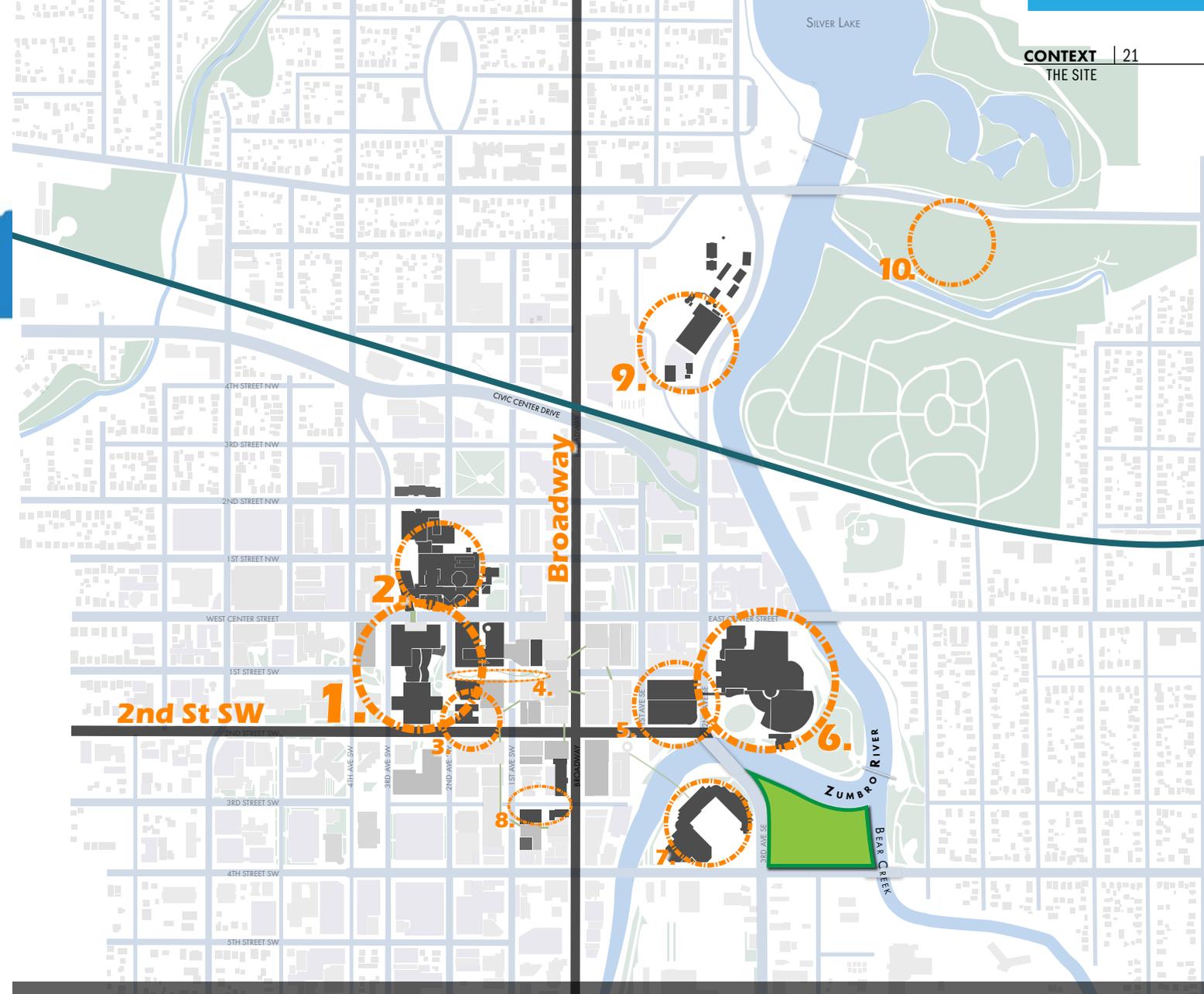
**MINNESOTA**

**THE SITE | MACRO**

Located in the heart of downtown Rochester and on the banks of the Zumbro River, the site chosen is prime real estate for development. The broader context of Rochester's Economy fits within the Destination Medical Center master plan or "DMC" for short. This plan has been building for years now and is ready for coming to fruition to launch Rochester into its next big growth spurt. Between the city, state, and private investors, the investment pool has reached nearly \$6 billion dollars and in-depth meetings have been ongoing on a quarterly basis for the past year to gather feedback from the community. Very soon RFP will be sent out for various projects. Chief among the project on the docket include:

1. Performing Arts Venue
2. Public Mass Transit Station
3. Downtown living quarters
4. Development of 2nd Street as Urban Promenade

As the project progresses into programming phase, in-depth study will be conducted into the forecasted urban impact a Performing Arts Center posed will have on the city economically, socially, and culturally.



**ROCHESTER**

- |  |   |
|--|---|
| 1. <a href="#"><u>Mayo Gonda Building</u></a>      | 6. <a href="#"><u>Mayo Civic Center</u></a>           |
| 2. <a href="#"><u>Mayo Methodist Hospital</u></a>  | 7. <a href="#"><u>Rochester Government Center</u></a> |
| 3. <a href="#"><u>Plumber Building</u></a>         | 8. <a href="#"><u>Historic 3rd street</u></a>         |
| 4. <a href="#"><u>Peace Plaza</u></a>              | 9. <a href="#"><u>Silver Lake power Station</u></a>   |
| 5. <a href="#"><u>Rochester Public Library</u></a> | 10. <a href="#"><u>Silver Lake Park</u></a>           |

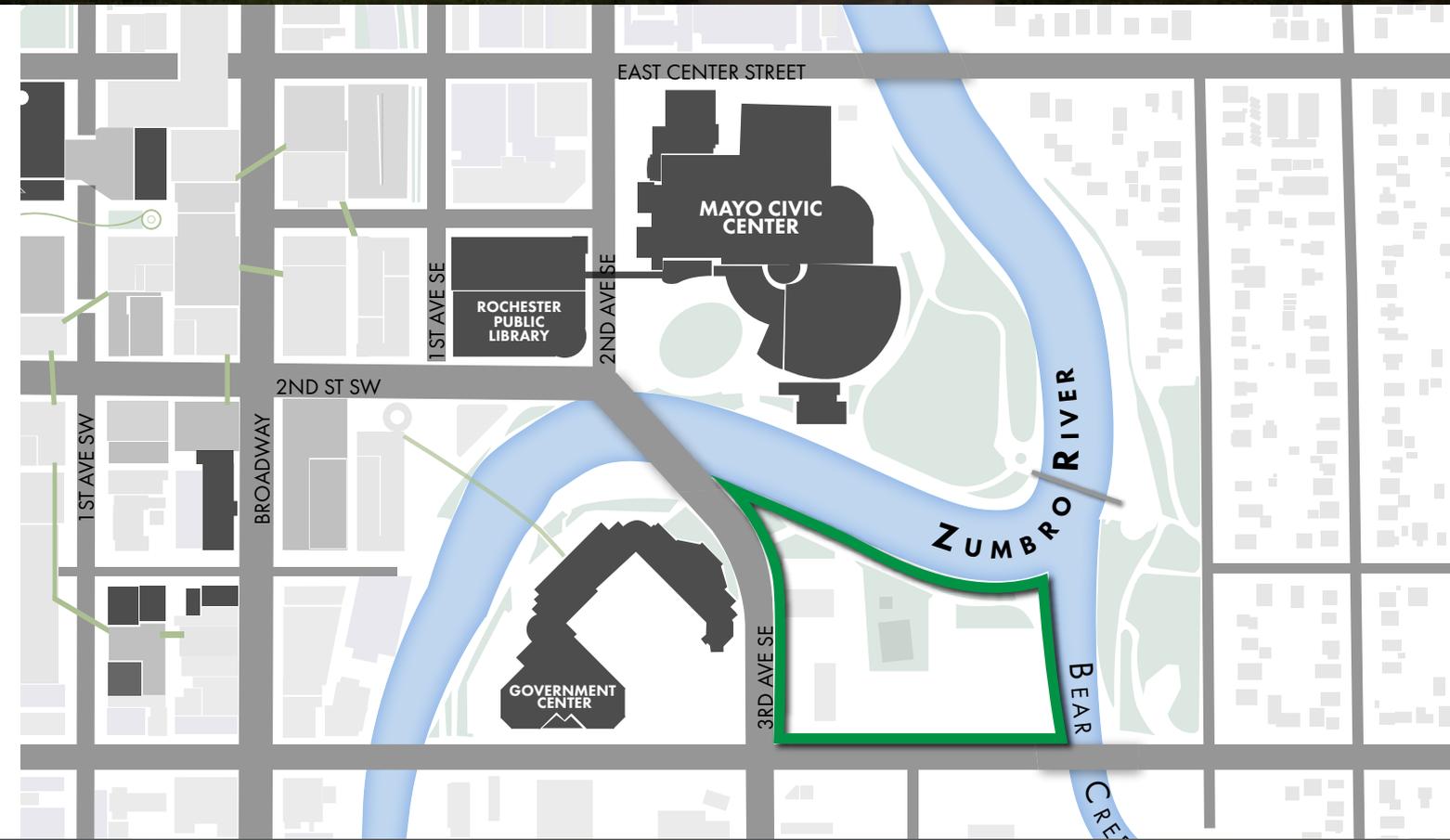


## THE SITE | MICRO

This particular site was selected for various reasons. It is located within the dedicated borders to qualify to DMC funding, it is within a 10 minute walk from 1st Avenue NE which is the prime street for walking. Further, it is sited at the junction of Bear Creek and the Zumbro River, making it the hot spot for wildlife, specifically ducks and Canadian Geese. The riverfront has long been neglected having Broadway be the edge of downtown and people only venturing as far as the Mayo Civic Center when attending an event.

The site beautifully frames the downtown skyline at all times of day and is directly adjacent to the 3rd Avenue bridge. Currently, the site is occupied by a small office building and is used as the grounds for the local farmer's market on Saturday's which is essentially just drive up trucks and tents that could easily be re-located to a nearby parking lot to the south.

An intriguing Architectural language already exists for the structure to fit within, having the Government center to the West, Rochester Public Library on the North West, and finally the Mayo Civic Center to the North just on the other side of the river. Just on the East side of the river begins Residential housing with houses that have been there for decades and owners who don't want to give them up. Urban Development studies will be conducted to prospect the urban influence that results from placing the Performing Arts Center on this site, specifically if it will allow for the river to be opened up on both side for development the residential homes could be displaced or converted to downtown living condos. The intent is to fully transform this particular stretch of the riverfront into a lively Arts District for the whole city creating a dynamic triad relationship between the adjacent Library and Civic Center.



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# ***THE PROGRAM***

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## TYPOTOLOGICAL RESEARCH

When selecting the primary projects for typological research, the major factors taken into consideration were the following:

1. **TYPOTOLOGY:**  
Concert Hall or Theater Venue
2. **CONTEXT:**  
Urban downtown setting on city's primary body of water.
3. **IMPACT:**  
Project kickstarted major urban renewal within the city and immediate context.
4. **ICON**  
Project was accepted into city as a cultural icon furthering its success. Explorations in form and function were conducted to better understand the underlying nature of iconic structures.

The following project were given special consideration for typological research:

- 1) The Sydney Opera House in Sydney, Australia
- 2) The Guthrie Theater in Minneapolis, Minnesota
- 3) Elbe Philharmonic Hall in Hamburg, Germany.

Of the 3 cases observed and analyzed, the Guthrie Theater and Elbe Philharmonic Hall were studied first through direction observation then followed up with analysis of technical drawings. Notes, sketches, and observations were made in the field focusing the areas of urban influence, social impact, and acoustical performance from a qualitative aspect. The following pages describe in detail the reasoning for each case selected and explores a variety of areas to help inform the design solution.



## 01 - SYDNEY OPERA HOUSE

### SUMMARY

Since the first sketch was submitted by Jørn Utzøn, the arches of the Sydney opera house stole the hearts of the Australian board members and the world would soon follow. Through much controversy and seemingly endless work for Jørn Utzøn and his team, the project was finally completed in 1967 to solidify the Opera House as the crown jewel of Australia.

### STRUCTURE

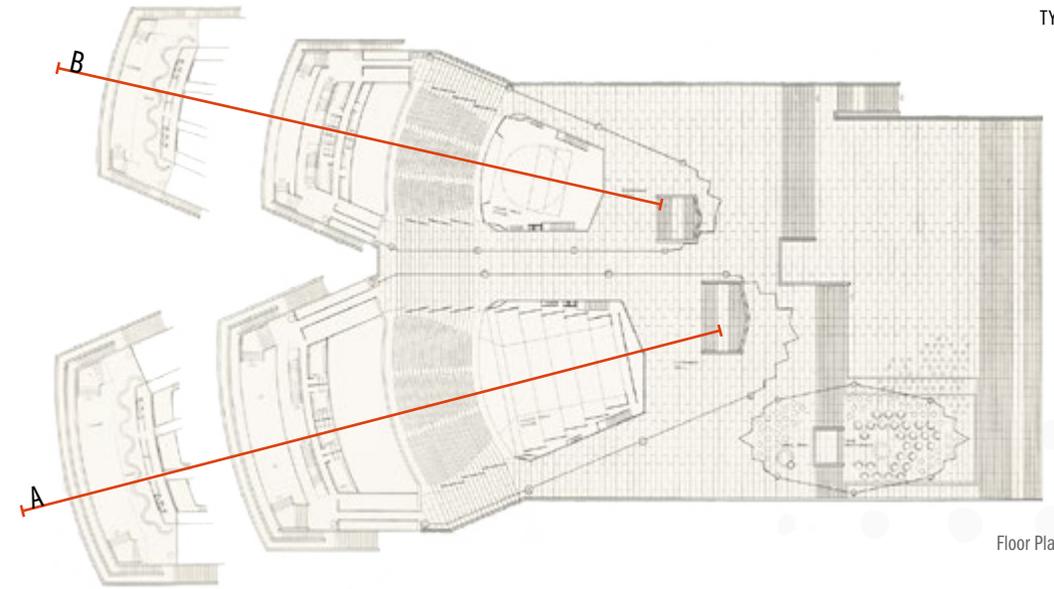
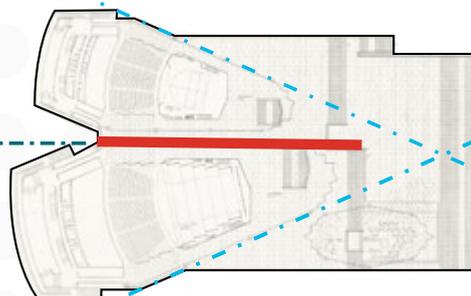
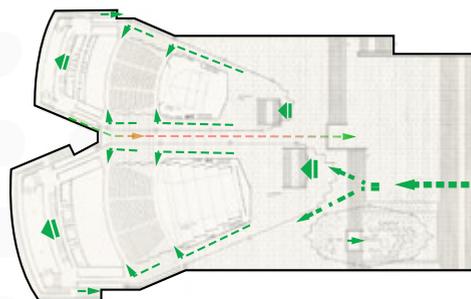
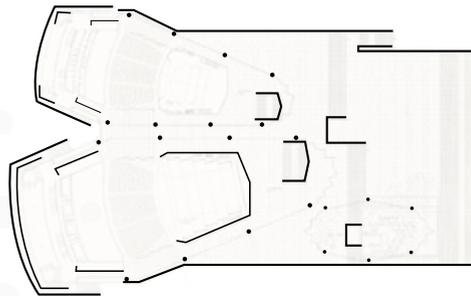
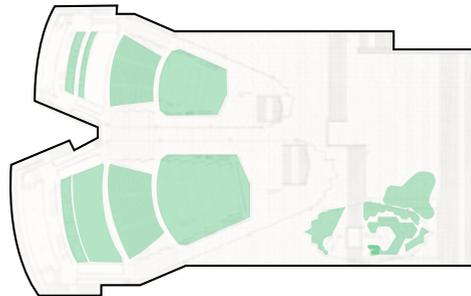
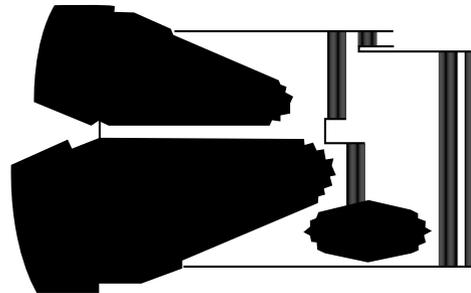
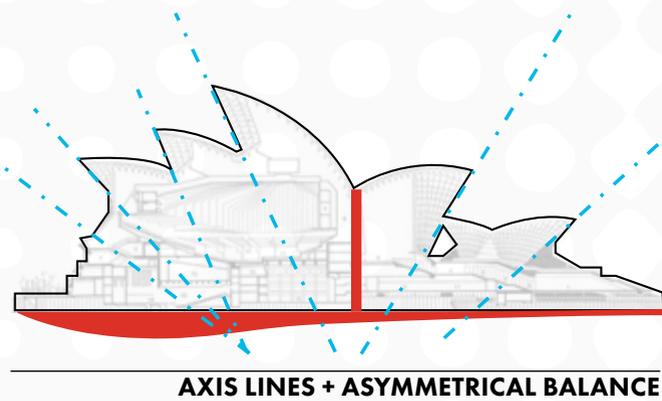
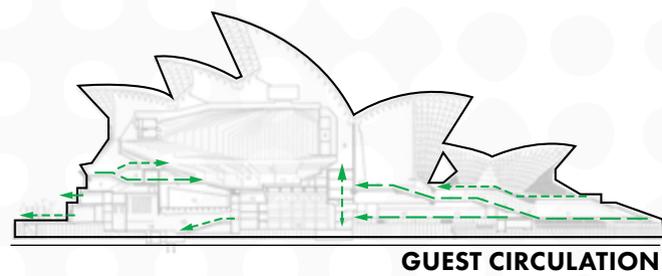
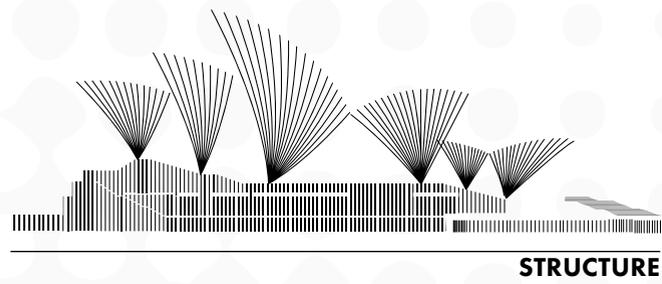
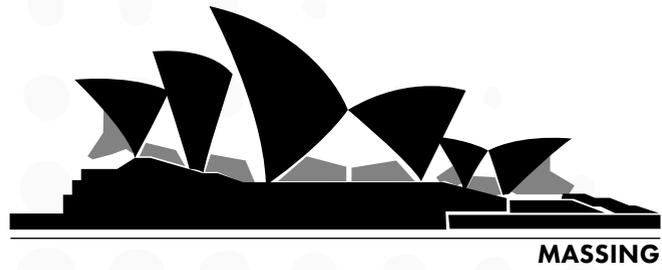
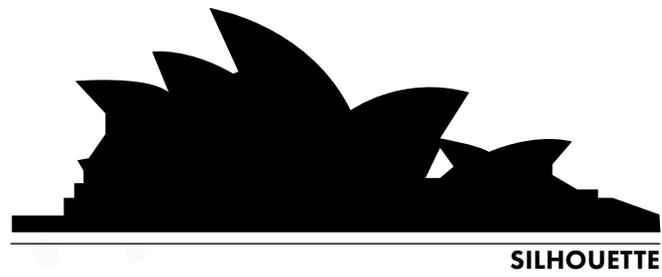
Arguably the biggest issue to solve in such a monumental building was the structure to achieve the iconic form. After 4 years of struggle by Utzøn and the engineering team prototyping every conceivable design, Utzøn had an epiphany. He looked at a sphere, and through a series of quartering and slicing the sphere, the design vision could be achieved. This revolutionized the design by allowing for precast arches to be introduced, simplifying the construction to only a few module types. The structure consists of a rib network of arches stacked in a radial section pattern meeting at a single pile on their respective sides, then finished with a unique precast tile mix to clad the outer structure elegantly in white.

### URBAN IMPACT

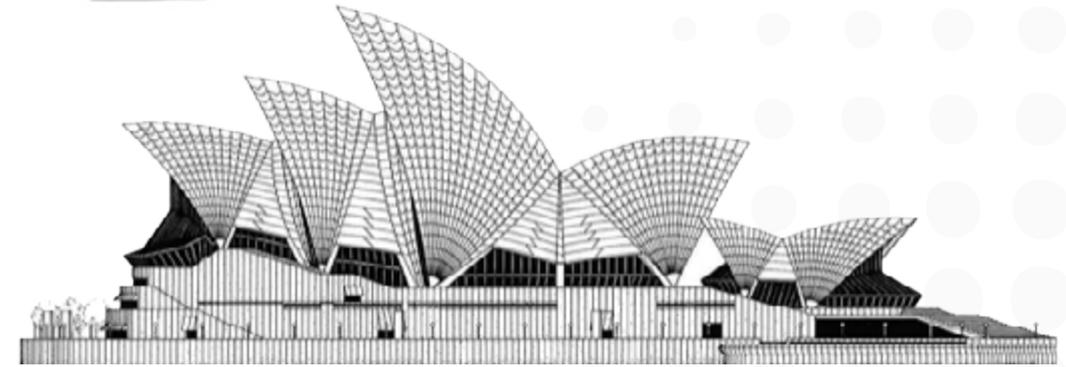
The Sydney Opera House became the single culturally defining artifact through which the country now found its identity. Thrust into the Sydney Harbor, the Opera House stands as a beacon for all comings and goings on the nearby bridge crossing and incoming ships. To the south, immediate redevelopment was undertaken with hotels and condos to accommodate the fresh supply of tourists and new residents coming to the city as a result of its completion. Located on the city's primary water connection and resulting urban renewal, the Opera House is a prime example for the type of design that is possible in my project scenario.



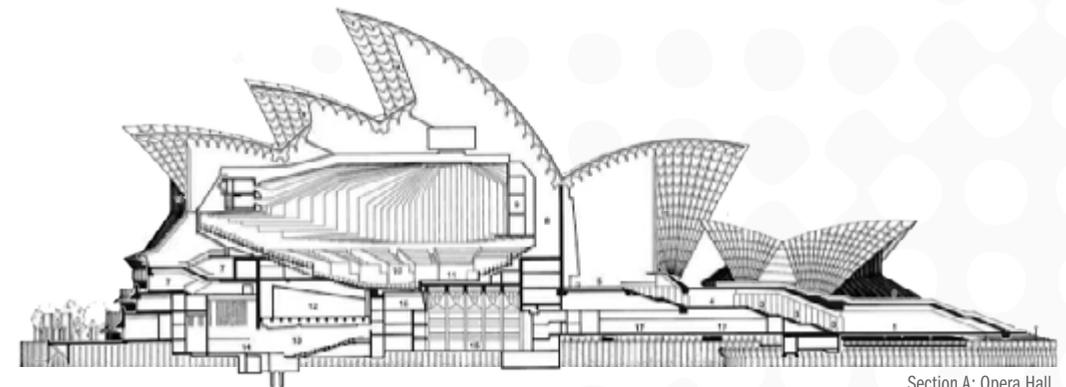
LOCATION	Sydney   Australia
ARCHITECT	Jørn Utzøn
YEAR COMPLETE	1973
SIZE	194,000 square feet
TYPE	Concert Hall + Grand Opera
KEYWORDS	Harbor, Icon, Urban Renewal, Structure



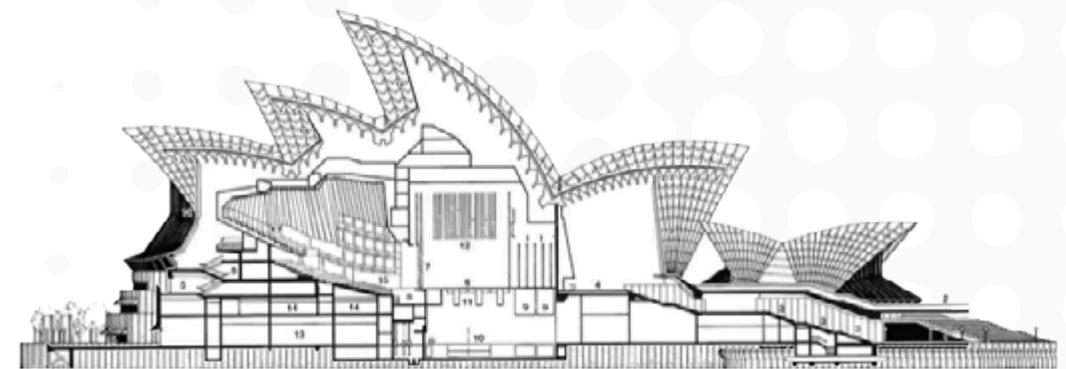
Floor Plan



West Elevation



Section A: Opera Hall



Section B: Concert Hall

## 03 - ELBE PHILHARMONIC HALL

### SUMMARY

In 2007, the city of Hamburg set off on an adventure to become the city of music with construction starting on the Elbe Philharmonic Hall. Already Hamburg has 2 other major music venues, but this latest creation would be likened to the Sydney Opera House. Built at the point of the outdated harbor, the Philharmonic Hall stands visible from entering the harbor by freight boat, cruise line, or train line to the east. Further, the structure stand high enough to be visible from Der Alster to the North. It is no question that all eyes are on the already iconic new concert hall. The outset of this massive development undertaking has kickstarted the Urban Renewal plan for Hafencity, a brand new city created integrated into the old warehouse district of Hamburg. The picture below gives a snapshot of the area being developed.

### ACOUSTICS

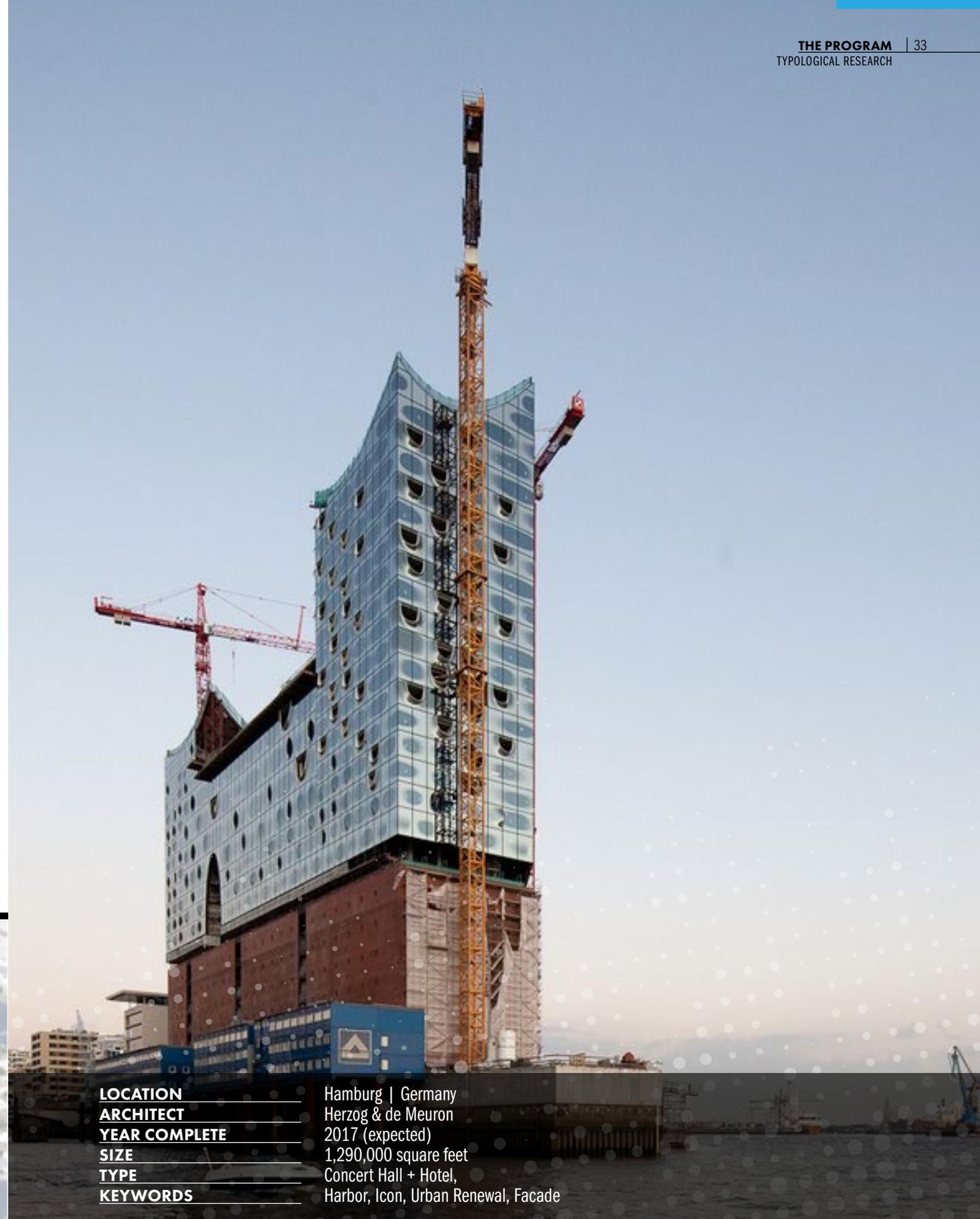
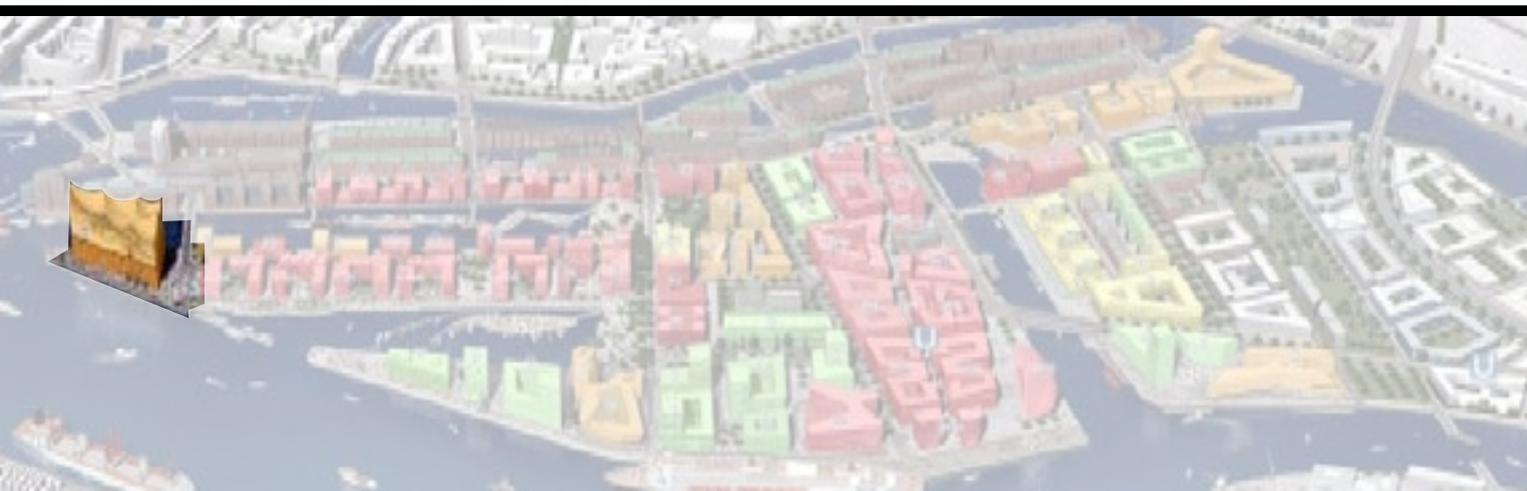
Acoustic Design was conducted by Yasuhisa Toyota, the world-renown specialist who did acoustic renovations for the Sydney Opera House in Australia, acoustic design for the Disney Concert Hall in Los Angeles, California, and also the Suntory Hall in Tokyo, Japan. Special white acoustic tiles were crafted and resemble the roof structure is micotized form. The entire Grand Hall of 2,200 seat capacity was built off site and then hoisted as 1 piece off of barges in the Harbor and set into place at the core of the building much like an egg nestled in a nest. A high level of acoustic precision was able to be achieved doing this construction off site.

### LOCATION

The Elbe Philharmonic Hall is located the the pinnacle point of the Harbor of Hafencity and represents the new crown and focus of Hamburg. This Concert venue was selected because of its impact to spur urban renewal and development and its unique form to be considered an icon and symbol of the city. Hamburg was developed primary as a port city and likewise will be a strong connection to how Rochester was developed along the river.

### STRUCTURE

Study in acoustic design for material composition and formation was studied as well as the dynamic facade paneling system that reflects the surrounding water. The roof structure is particularly interesting and will be studied in further detail during the design phase. The project utilize and adaptive reuse of an old harbo warehouse, but enhances it to become something much greater for the city as a whole.



#### LOCATION

#### ARCHITECT

#### YEAR COMPLETE

#### SIZE

#### TYPE

#### KEYWORDS

Hamburg | Germany

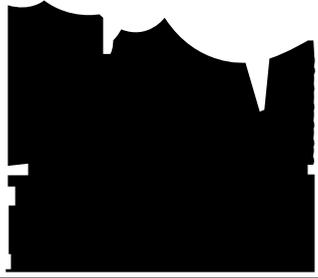
Herzog & de Meuron

2017 (expected)

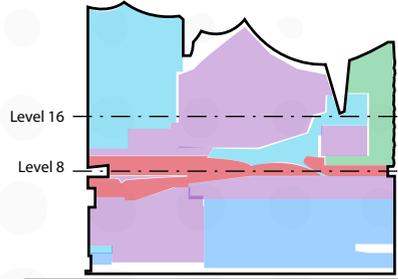
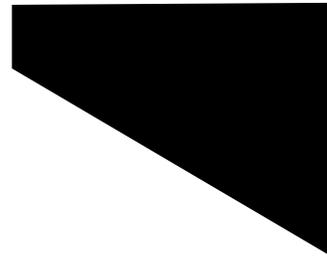
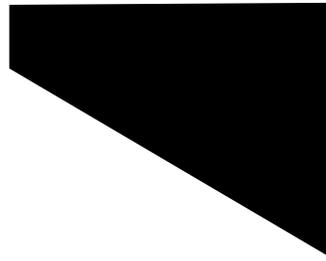
1,290,000 square feet

Concert Hall + Hotel,

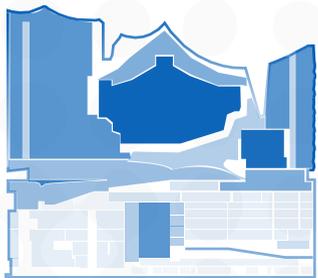
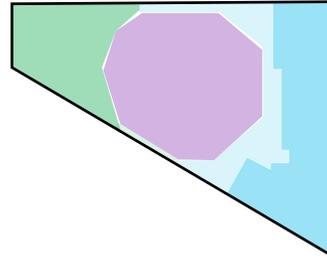
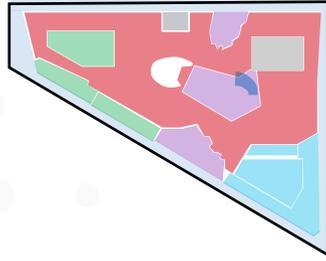
Harbor, Icon, Urban Renewal, Facade



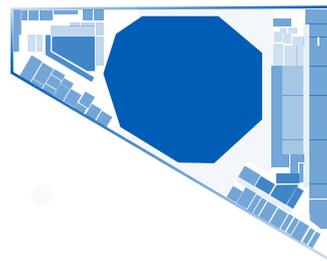
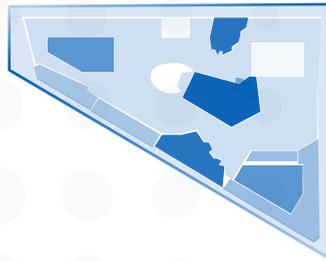
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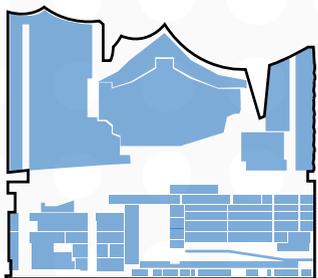
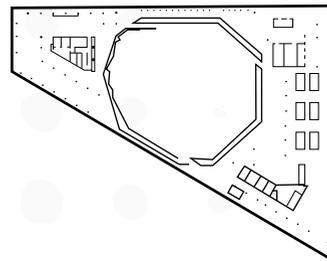
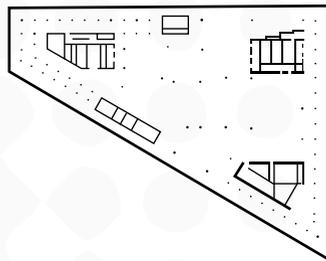
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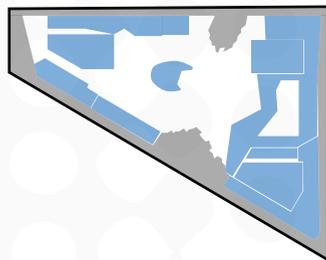
HIERARCHY



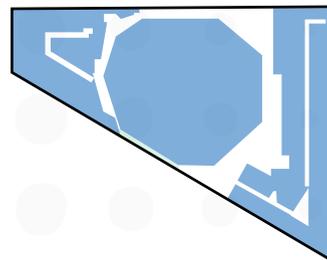
STRUCTURE



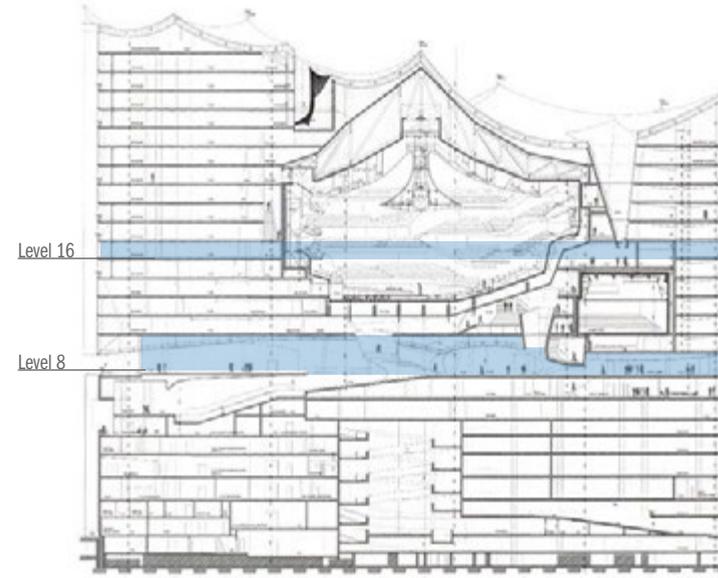
CIRCULATION TO USE



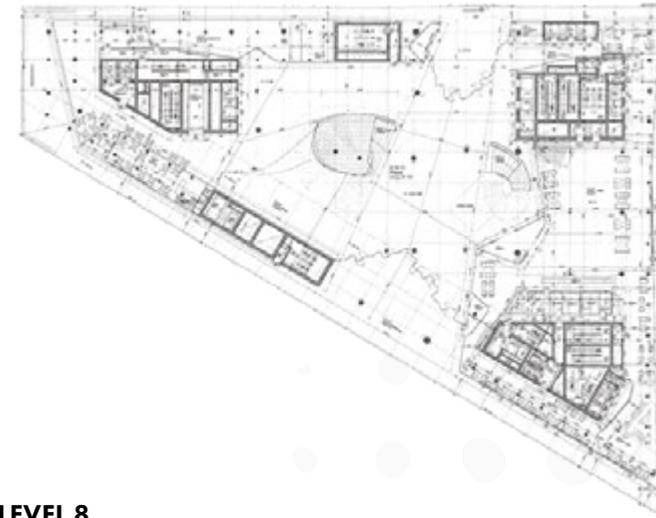
LEVEL 8



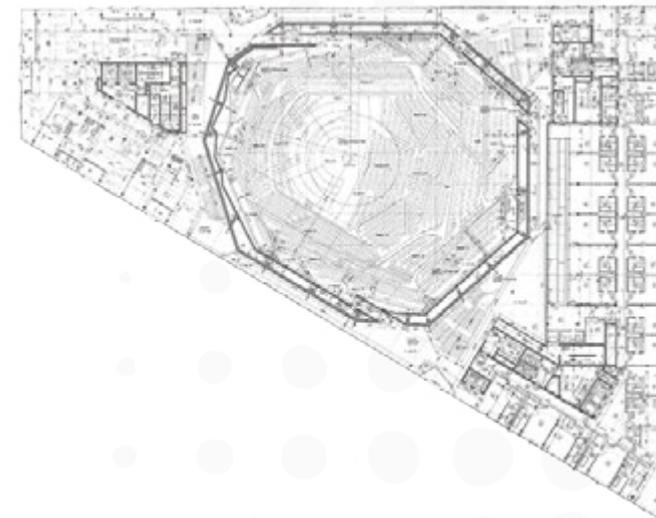
LEVEL 16



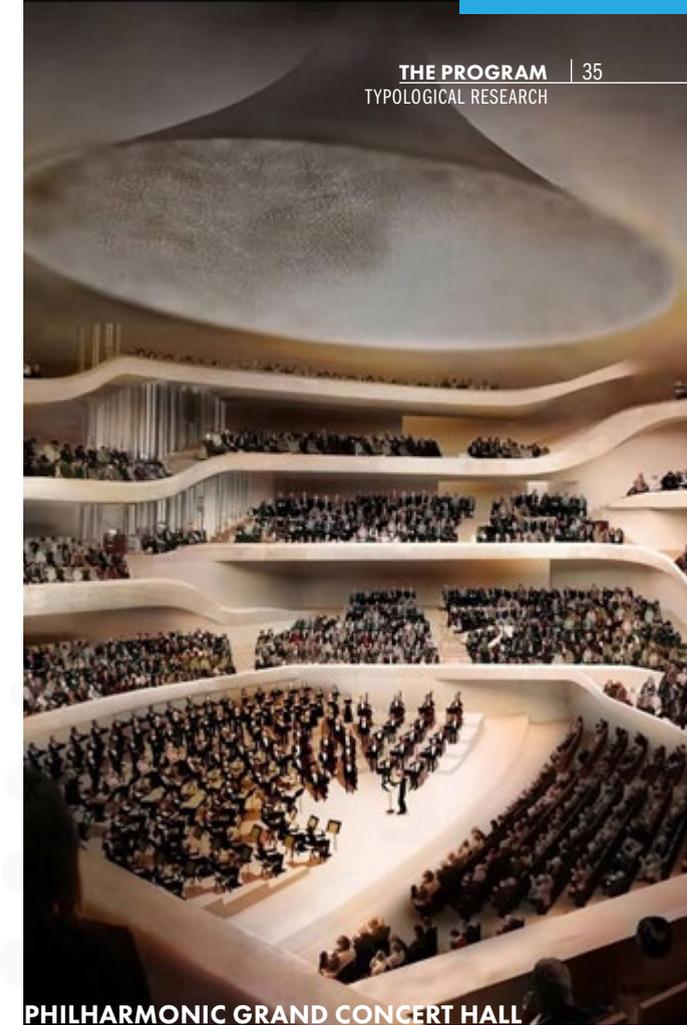
SECTION



LEVEL 8



LEVEL 16



PHILHARMONIC GRAND CONCERT HALL



EXTERIOR WAVE FAÇADE

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***THEORETICAL  
PREMISE***

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## THEORETICAL PREMISE

### THE SCIENCE OF PLAY



STUART BROWN

Stuart Brown is founder and president of the National Institute for Play near Monterey, California. He is also Co-author of *Play: How It Shapes the Brain, Opens the Imagination, and Invigorates the Soul*. From his book and interview with Krista Tippett with OnBeing.org, Stuart shares some profound insights to how play is an essential part of life. The following content is derived off his work and discussion while on the air.

**WHAT'S THE POINT?** Play is an essential factor to human development socially, mentally, and emotionally. In a world that is rapidly changing with advancement of technology and innovation, it is imperative to train people to love learning and to be able to learn how to learn so they can be self-sufficient and adaptable over the course of a lifetime. Architecturally, the design must work hand-in-hand with a rich activity set that fosters and evokes imagination and creativity. Because humans are innately wired to play and adapt for a lifetime, the Center for Music & Innovation will facilitate an environment that is simultaneously entertaining and mentally stimulating. Play breaks down social blockades and, at the adult level, encourages the exchange of ideas and opinions. Creating an environment that provokes curiosity about the world of music and acoustics has the potential to bring people of different backgrounds together through a mutual fascination. It can be argued this already happens with concert hall venues, but where they fall short is in creating an atmosphere that is extremely conducive to social interaction and, subsequently, idea cross-pollination.

Architecture, in conjunction with an effective program and a city that encourages the arts and innovation, has the potential to be culturally very influential.

### CASE + POINT: CLOSE TO HOME

**WHAT'S THE POINT?** Being exposed to the wide range of strategies used to actively engage her students and the concepts of music therapy have made me a firm believer in this powerful combination of learning and music therapy. Between her many student success stories over the years and implementing them in my personal life, I am confident in the positive benefits of music in human life.



JUDY HALVORSON

### THE HUMAN CONNECTION TO THE ARTS

The beauty of the arts has always been about human expression trying to discover, portray, remedy, and communicate the infinite variety and simple commonalities that life brings our way. The arts have always been the pursuit of expressing truth and the embodiment of experience and emotion through

which others can commune with and understand. From the simplest sketch or painting to the most extravagant mural to sculpture to music and to dance- the beauty of the arts is its ability to connect to the heart and our association with it.

The arts are fundamentally a medium through which to communicate a message. Most often that message ties into the core of humanity expressing injustice, political realities, spiritual or religious contexts, war, and deep emotion or relationships to name a few. The arts have been a means of historical documentation, but it is most often birthed out of a desire to express or communicate a state of being. It is in this place where a particular state is captured in a form of art that others can resonate with.

The artist is the expert of expression. When a person is impacted by a particular work, it is because the artist has captured something that the person experiencing the art can resonate with. This subjective exchange is extremely beautiful. It's the message without words that is able to communicate something so profound.

When speaking about his music and the event of a concert, Yo-Yo Ma stated: "It's not about how many people are in the audience. It's not about proving something. It's all about sharing in something." People could come to a concert to be a critic and write reviews, to analyze the social atmosphere from a psychological and sociological point of view, or to study just how "virtuous" a musician is with their instrument performing their craft. But all that aside, the core of music is to experience something and be taken to another dimension. It's allowing music to take you places that stimulates your mind, heart, and emotions. It's allowing for it to provoke your imagination and stir a sense of wonder. It's about recognizing where you are at and providing hope and joy toward an answer in the future.

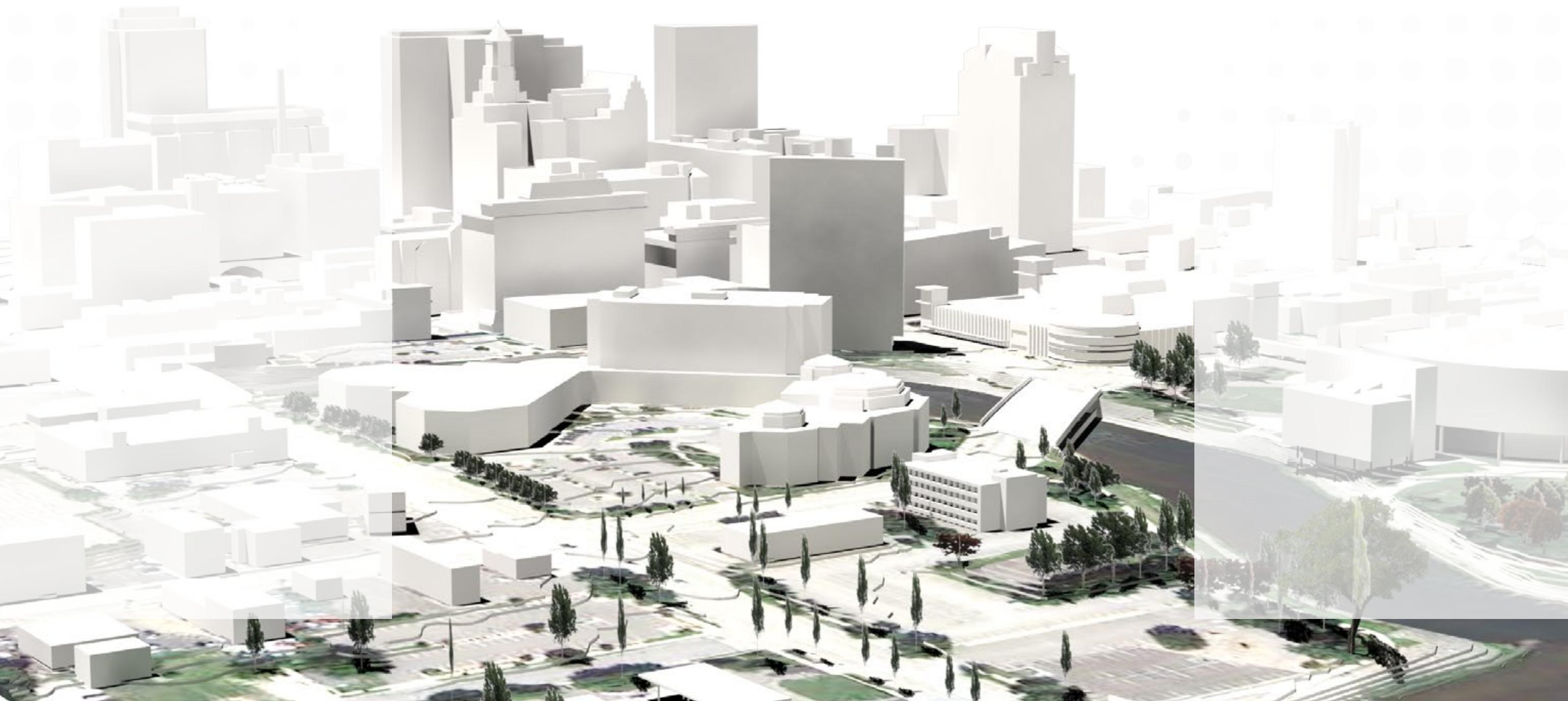


YO-YO MA

Cellist Yo-Yo Ma is one of the most famous musicians in the world raised as a child prodigy performing from the age of 5, and graduated from the Julliard School and Harvard University enjoying a prolific career having won 15 Grammy Awards. In addition to his numerous Grammys, Ma has also received the National Medal of Arts, the Presidential Medal of Freedom, and the 2014 Fred Rogers Legacy Award. In his art, Yo-Yo Ma resists fixed boundaries. He would like to rename "Classical Music" just "Music," born in improvisation and traversing territory as fast and as fluid as the world we inhabit.

### WHY WE NEED MUSIC

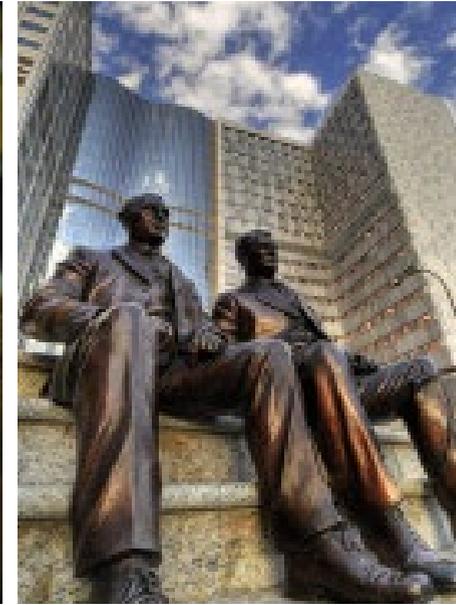
Ma describes music as being a transfer of life and that humans having being trying to express the infinite varieties of life for millenia. Music is one of the oldest and most fundamental aspects of being human and has been used for a variety of means over the course of human history. Ultimately, life has constant crescendos and decrescendos, ebbs and flows, high points, and melodies, breaks and



# Rochester: Image of the City



PLUMMER BUILDING



GONDA BUILDING



SILVER LAKE



ZUMBRO RIVERWALK



RIVERWALK AT MAYO PARK



GONDA BUILDING LOBBY

# Rochester: Image of the City



PEACE PLAZA: MARRIOTT



PLUMMER BUILDING



PEACE PLAZA



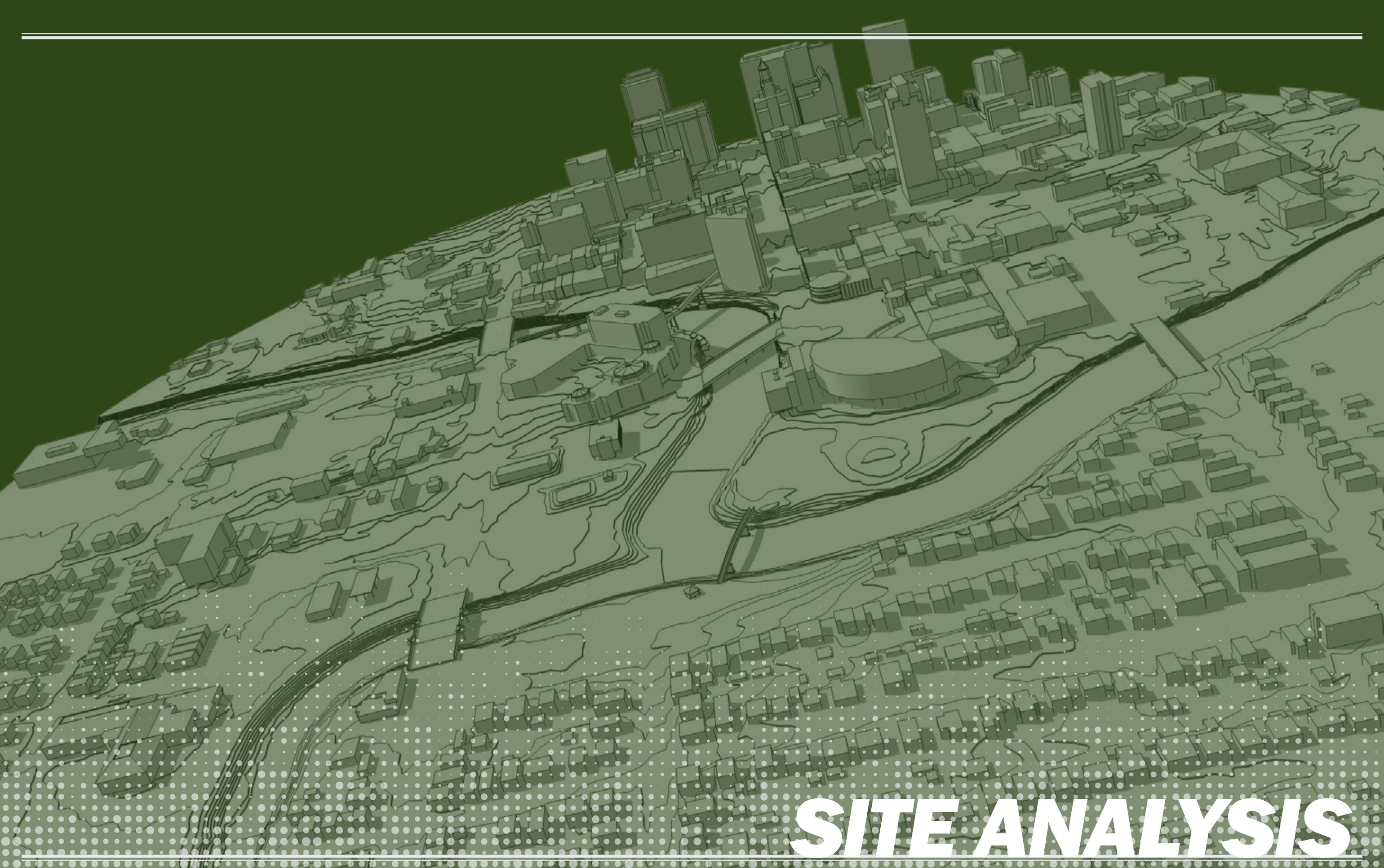
MCGOON'S COMEDY CLUB | 2ND ST



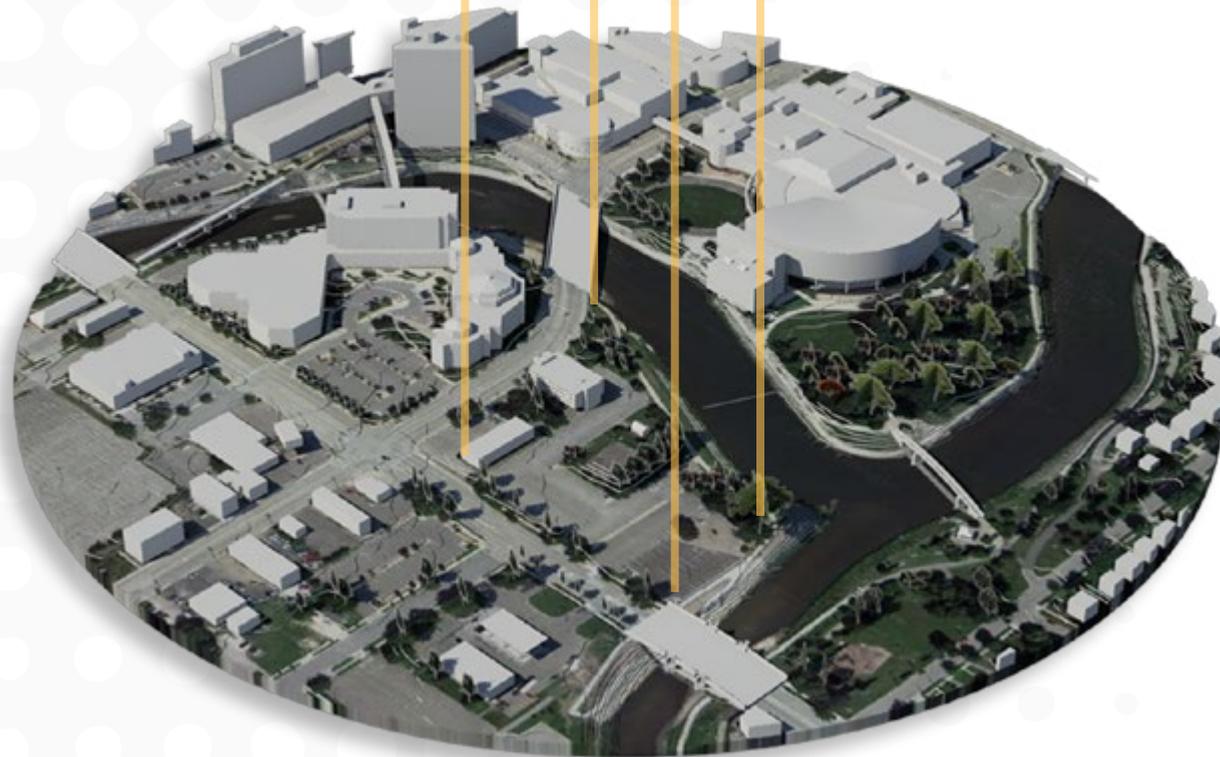
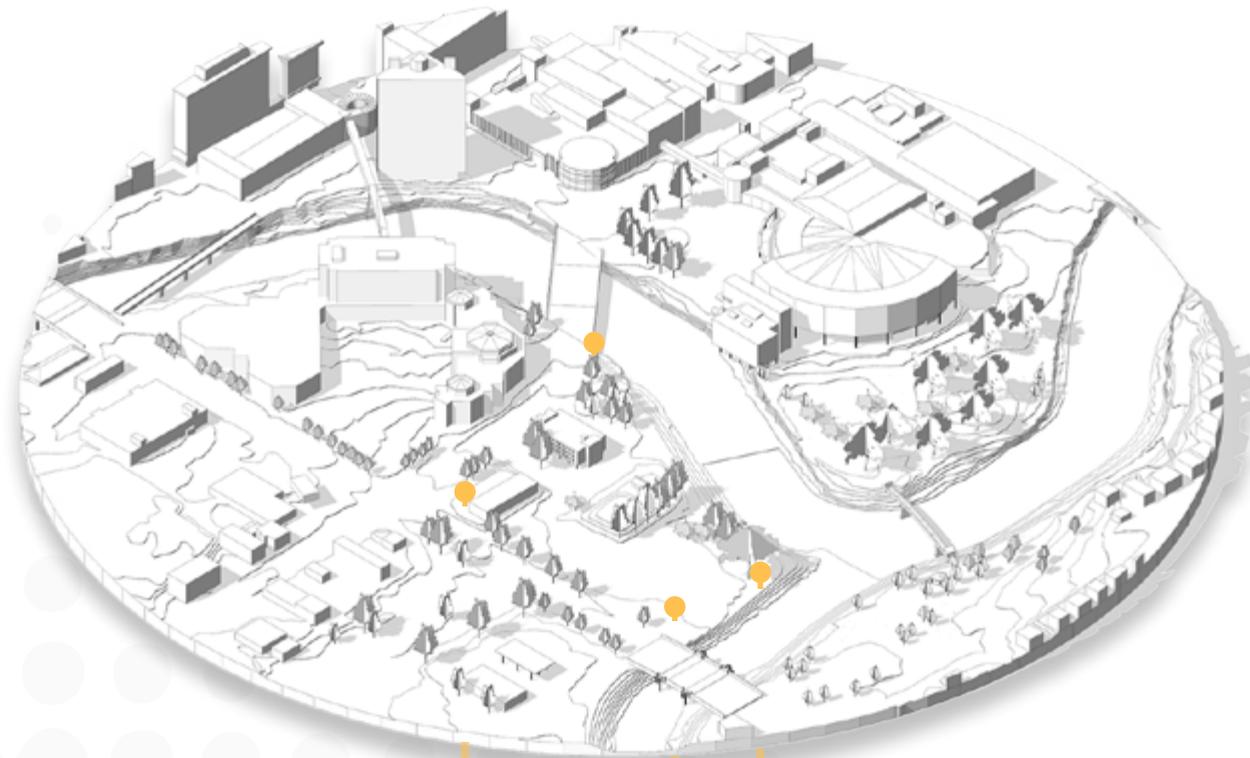
CREATIVE SALON | 1ST AVE



PEACE PLAZA



# **SITE ANALYSIS**



# The Site

## QUALITATIVE OVERVIEW

### HUMAN USE

The site has 2 built structures on it. One is a simple 3-story office building with a small parking lot and not more than 6 tenants. There is also a small auto-body shop that is essentially 5 garage doors and space for a small office on the southwest side of the lot.

Immediately adjacent to the site is a gas station, liquor store, and patchy spots of development for temporary living apartment units. After talking with a local biker frequenting through the site, I discovered it had a reputation of being a sketchy part of town and most people did not find potentially living there desirable.

### WEEKEND USAGE

Summers get the most activity with the weekly Farmer's Market setting up shop in the parking lot. Also, the Mayo Civic Center puts on "Rock the River" concerts on Sunday afternoons which also attract some people to set up folding chairs on the project site rather than in Mayo Park where the event is happening. Seems like they know where the real party is.

### WHAT TO KEEP

For the existing inventory of the site the following is a list of things to keep:

- Large Oak Tree on Northeast corner of site
- Site lines to Plummer Building
- Site lines to Gonda Building
- Site lines to Mayo Park
- 4th Street bridge
- Road structure for both 4th St SE and 3rd Ave SE

### SITE CHARACTER

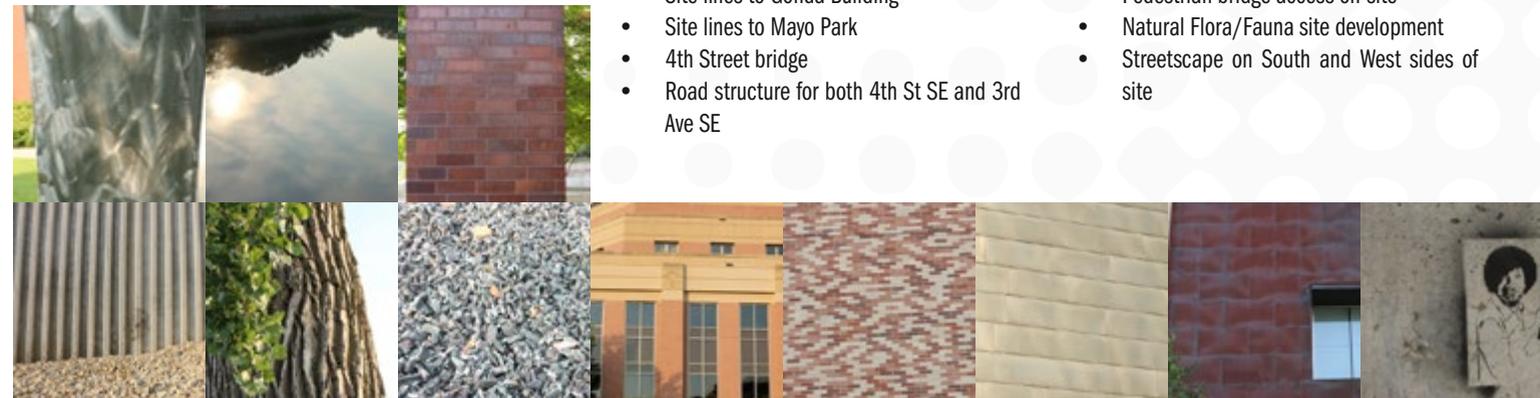
The site is rich with character. There is a constant stream of activity in and through the site with people jogging along the river path, people hanging out at the gazebo, or the ducks and geese interacting on the river. After observing the site every day on my way to work, I noticed that the birds prefer to stay right at the conjunction of the 2 streams of water. Though sometime loud and obnoxious, the birds provide constant life to the site both visually and acoustically.

### WHAT TO ENHANCE

For the existing inventory of the site the following is a list of things to enhance:

- 3rd Ave bridge connection to site
- River level access and paths
- Pedestrian bridge access on-site
- Natural Flora/Fauna site development
- Streetscape on South and West sides of site

### MATERIALITY





## ON-SITE BUILDINGS



At present, there is only a small, 3-story office building currently occupying the site. It sits on a host of concrete piles and is completely replaceable in every sense of the word. There is also a small auto-body shop on the southwest part of the site.



The current parking lot that is on-site is actually used for the weekly summer Farmer's Market that attracts people from all around the region supplying the freshest produce right off Minnesota grown crops. The primary reasoning for this site is because it is easily accessible with 4th Street to the south and also having it in a recognizable location within the city across from the Civic Center. There is a suitable alternative parking lot to the southwest that will work just as well.

## RESIDENTIAL



One of the older residential communities exists just across the river. With the development of the Performing Arts Center, it is important to promote the community to actively participate with the center. Design consideration will be taken regarding acoustic and visual privacy, as well as increased traffic densities.

## Building Context

### MAYO CIVIC CENTER



The Mayo Civic Center was first built in 1938 and is primary cultural landmark of Rochester. It is a multi-purpose event facility housing a large 3,000 seat auditorium, exhibit hall, and 7,200 arena for basketball and wrestling. On Sundays during the summer months, it hosts an event called "Rock the River" that draws hundreds of visitors every week. It lies at the center of any major entertainment within the area including the local minor league baseball team to the north.

### OLMSTED GOVERNMENT CENTER



The Olmsted Government Center is the heart of the planning department for the entire county beyond the boundaries of Rochester. Housed in this building is the district courts, Board of Commissioners, Community Corrections, Community Services, Environmental Resources, Property Records and Licensing, Public Health Services, Public Works, Planning Department, and Sheriff's Office.

### ROCHESTER PUBLIC LIBRARY



Immediately adjacent to the Mayo Civic Center is the Rochester Public Library. It is a 2 story structure that has a variety of activities throughout the day including having access to eBooks, kids book readings, residence artist workshops, and assistant technology workshops to learn basic computer programs for a professional career. The library has an initiative called "Bookmobile" that drives a hybrid truck incorporating solar panels, LED lights, and recycled rubber floors and drives around the city allowing neighborhoods to have access where otherwise people couldn't get access.

# Downtown Context

- PROPOSED DMC INFILL PROJECTS
- MAYO CLINIC DOWNTOWN
- CULTURALLY SIGNIFICANT
- OLMSTED COUNTY GOVERNMENT CENTER
- ROCHESTER PUBLIC LIBRARY
- RESIDENTIAL
- COMMERCIAL (ADJACENT)

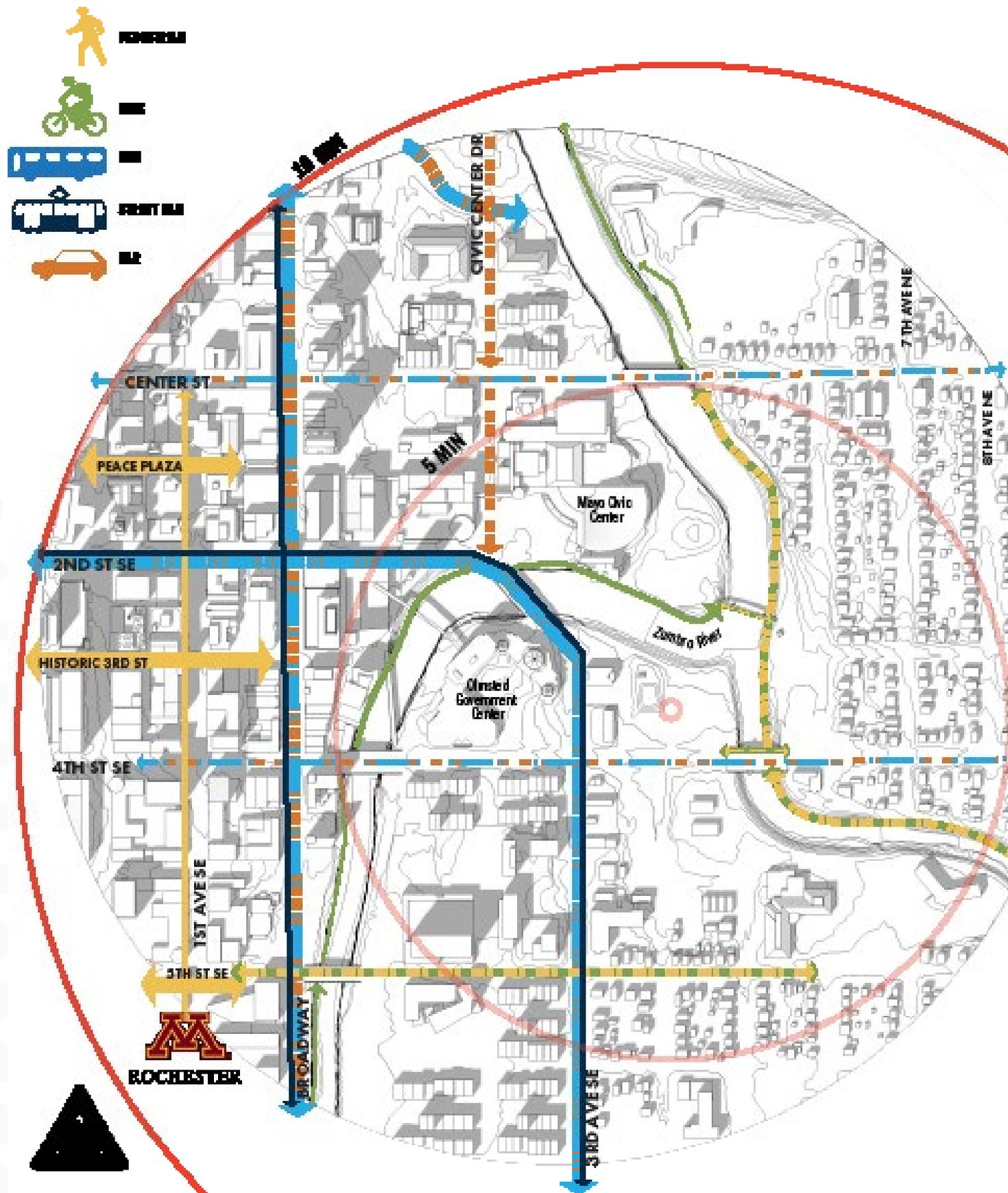


## SUMMARY

This is a map showing the urban context of my site. Highlighted in green is the planned infill locations in conjunction with DMC. Most notable of these is the immediately adjacent downtown living community that would bring a lot more pedestrian traffic on-site heading into downtown to the north and the prosed University of Minnesota Rochester expansion to the West.

The existing residential neighborhood to the east is a major consideration because the development of the center could increase the amount of traffic on-site. The project must take into account not only the downtown influences but also being situated on the edge of one of Rochester's oldest neighborhoods.

Highlighted in yellow are the most culturally influential buildings in Rochester referring to the 1) Mayo Civic Center, 2) Plummer Building, and 3) The Kahler Grand Hotel. Also, highlighted in red is the Mayo Clinic's Gonda Building and Methodist hospital which are at the very core of downtown. Key to this will be trying to establish connections from the project site back to downtown as much as possible.



## Traffic Patterns + Walkability

### SUMMARY

The Destination Medical Center initiative is a major urban renewal push for redevelopment. At the heart of any successful city is having a walkable downtown area that promotes chance encounters, explores the variety of stores and scenery, and overall creates a more interesting environment. Rochester is fortunate to have its downtown scaled appropriately to the pedestrian as it was established, which allows for any major demolition overalls to be avoided.

The site plan to the left incorporates the projected use of Street cars in conjunction with a boosted busing system along the primary circulation corridors. The mixed line work depicts a hybrid street accommodating multiple means of travel.

The project site has been intentionally selected within the 10 minute walking radius of Peace Plaza and Historic 3rd Street which comprise the heart of the city. With plans to expand the mass transit infrastructure and already existing means of travel to and through the site, this was by far the best choice for the Performing Arts Center.

### PEDESTRIAN

As you can see from the map, the primary pedestrian traffic happens along 1st Avenue SE between Peace Plaza and Historic 3rd Street. With the expansion of the University of Minnesota Rochester to the south, pedestrian traffic will extend to the additional node along 5th Street SE. A pedestrian and bike bridge is planned to connect across the river between the new downtown residential community and the UMR campus.

### BIKE

Currently there are a number of hybrid streets in Rochester incorporating biking, bus, and car. These are 4th Street SE, Center Street, and 2nd Street SE, which is currently being developed. The river access is also heavily used by bikers and is the primary biking highway that seamlessly avoids stop lights and competing commuter cars.

### CAR

As you can see from the map, the primary corridors of access for the car are 2nd St, Broadway, and also Civic Center Dr to the north. Efforts will be made to create effective parking accommodations in light of growth patterns and best use of available space to promote a thriving urban fabric.

### BUS + STREET CAR

Bus lines exist already and have primary connections through downtown. With the proposed development of the Transit center to the north, there will be opportunities for park and walk. The 3rd Avenue connection is the primary access point to my site but 4th St SE is also a primary access point for Rochester residents.

### PRIMARY TRANSIT CORRIDORS

#### 2ND STREET SE

2nd Street SE is the primary access point for transit to access downtown from Highway 52 to the west. The majority of all traffic entering downtown will enter by this corridor. Development has already begun creating this into a "complete street" incorporating bus, bike, car, and pedestrian. With the St. Mary's hospital to the west, this is another primary urban development initiative posed in the master plan.

#### BROADWAY

Broadway is known as the highway into Rochester's downtown for all the locals. This is a full 6 lane wide road dedicated to vehicular traffic and turns into a bottle neck traffic jam during rush hours during the daily mass exodus of Rochester's downtown.

#### 4TH STREET SE

Though not as dense as 2nd Street, 4th Street is a fairly heavy

trafficked connection point for back to residential to the east as well as the Rochester Technical College.

#### 5TH STREET SE

With the development of a new downtown living community just to the south of my site, a primary pedestrian/bike connection is planned to bridge the Zumbro River and connect to the UMR campus life.

#### ZUMBRO RIVER + BEAR CREEK

The river acts as a primary means of commuting for bicyclists as it offers uninterrupted travel along a scenic creek often teeming with life. As bridges were already built to span the river, it presents opportunities to engage with the river and get to work at a reasonable pace. After business hours, the river walk always has people along it as far North as the power plant and Silver Lake. Re-establishing the connection the Riverfront with Downtown is a primary initiative of this project.



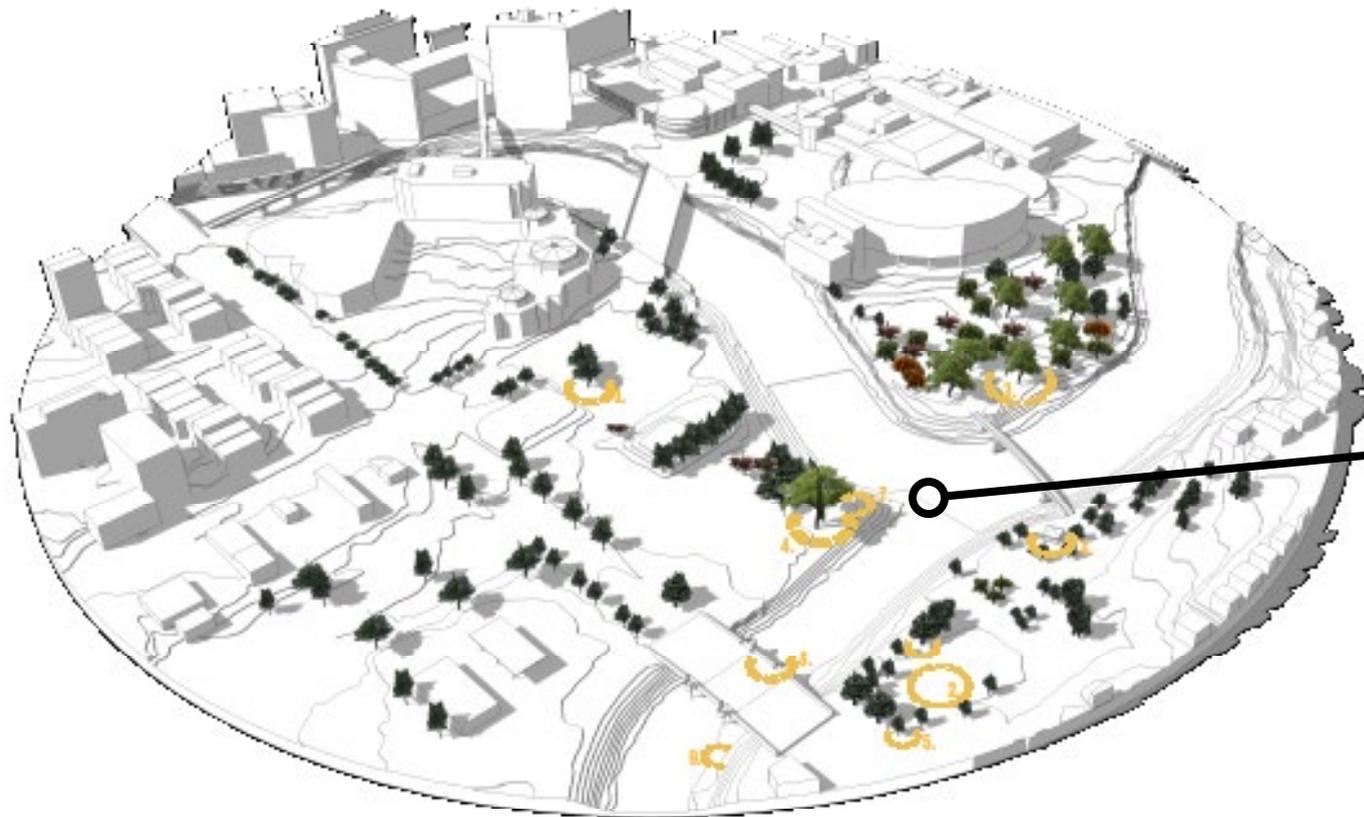
RIVER ROCK OUTCROPPING



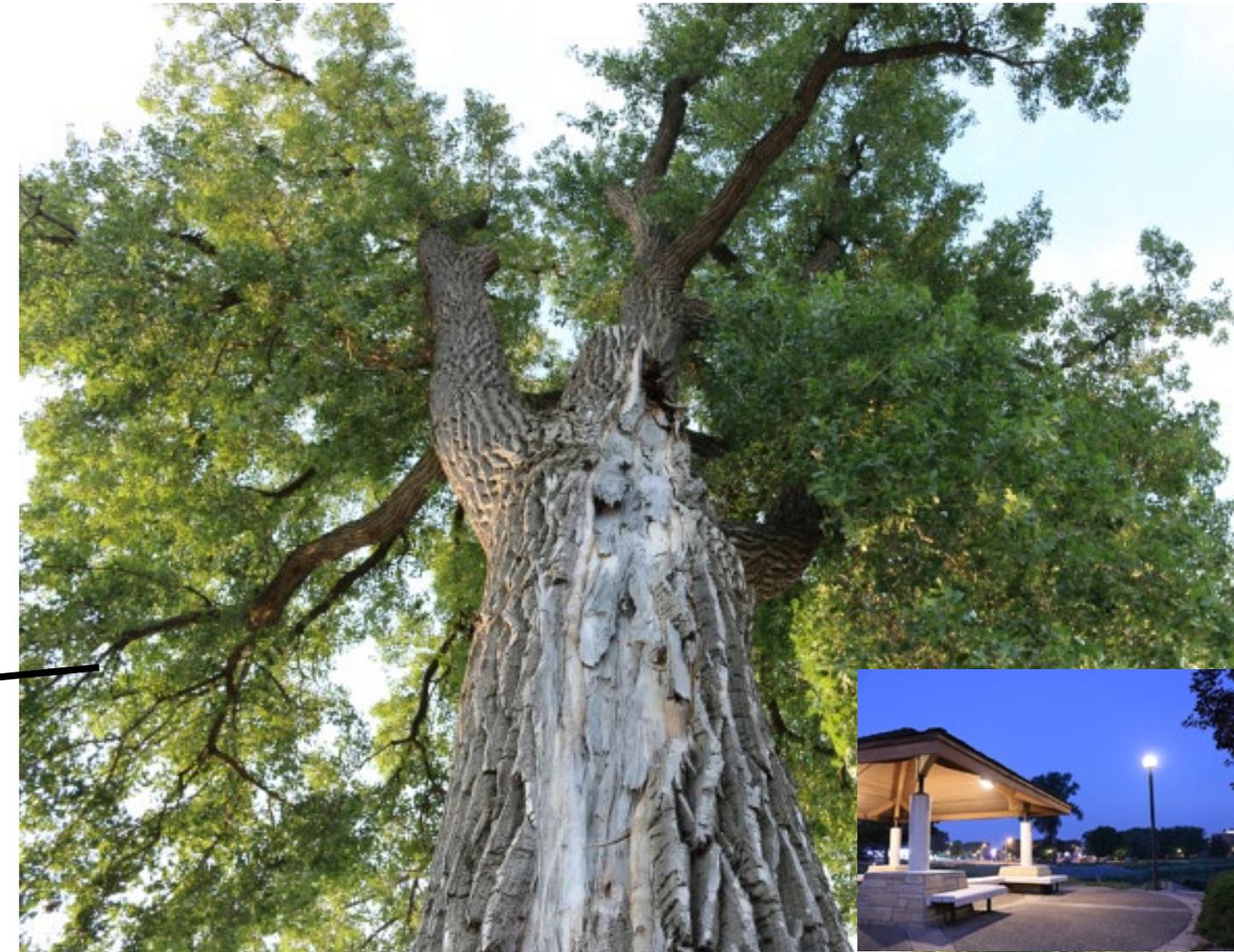
RIVERFRONT FAUNA



TREES AT #1



# Site Inventory



4. ON-SITE OAK

5. EVERGREEN

6. GAZEBO



1. MAPLE



2. MAYO PARK PLAYGROUND



3. MAYO PARK



7. PATH & BENCHES



8. MAYO HONEY SUCKLE



9. RIVERFRONT FLORA

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***PROGRAM***

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# Space Inventory

	NUMBER	SQUARE FT	CONSIDERATIONS	TIME OF DAY																							
				6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
<b>SITE DEVELOPMENT</b>																											
<b>RIVERFRONT</b>																											
Outdoor Amphitheater		See below.																									
Pathway Quality																											
Skyway Accessibility																											
<b>STREETSCAPE</b>																											
Sidewalk quality			Easements																								
<b>GARDEN</b>																											
Internal Courtyard		6000 ft <sup>2</sup>																									
Healing Gardens			Sound Levels, Accessibility, Symphony of Nature																								
<b>MUSIC</b>																											
<b>CONCERT HALL 1</b>																											
Backstage	800 Seats	9,700 ft <sup>2</sup>																									
Audio/Visual Booth		2500 ft <sup>2</sup>																									
Seating		800 ft <sup>2</sup>																									
CONCERT HALL 2	150 Seats	2,000 ft <sup>2</sup>																									
BLACK BOX THEATER	150 Seats	2,000 ft <sup>2</sup>	Double opening wall glass & solid to garden level																								
OUTDOOR AMPHITHEATER	100 Seats	2,000 ft <sup>2</sup>																									
<b>JAZZ BAR + RESTAURANT</b>																											
Kitchen	120 + 100	6,100 ft <sup>2</sup>																									
Small stage		2000 ft <sup>2</sup>																									
Seating variety		500 ft <sup>2</sup>																									
CAFÉ	35 Seats	750 ft <sup>2</sup>																									
Family Friendly Spaces		3600 ft <sup>2</sup>																									
Kid Zone		750 ft <sup>2</sup>																									
<b>LEARNING</b>																											
<b>INTERACTIVE</b>																											
Acoustic scenarios around site	5 zones	2000 ft <sup>2</sup>	Most likely mixed with other space allocations																								
Acoustic treasure hunt / Exploration	25 guests																										
<b>MUSIC LIBRARY</b>																											
Digital Availability	75 guests	2500 ft <sup>2</sup>	Like Spotify only better																								
Mini Museum about Music History																											
<b>GROUP PLAY</b>																											
Jam Sessions	45 guests	3500 ft <sup>2</sup>																									
Drum Circles	15 + 15+ 10	3 Rooms	Class Therapy																								
Other Instruments																											
<b>INDIVIDUAL PLAY</b>																											
Practice Rooms : Lessons	120 guests	12,000 ft <sup>2</sup>																									
Immersive Studios		12 Studios	Sound types, instrument opportunities																								
Easy-Play Stations																											
<b>MUSIC THERAPY</b>																											
GROUP PLAY	55 guests	12,000 ft <sup>2</sup>																									
MAYO CLINIC PATIENTS	25 guests	3500 ft <sup>2</sup>	Accessibility, Health Infrastructure, Immersive...																								
30 guests		3500 ft <sup>2</sup>																									
<b>SUPPORT SPACES</b>																											
<b>CIRCULATION</b>																											
Skyway Access		10,000 Ft <sup>2</sup>																									
Parking	480 spots	90,000 ft <sup>2</sup>																									
Service Entry		500 ft <sup>2</sup>																									
Storage		5000 ft <sup>2</sup>																									
Lobby		3600 ft <sup>2</sup>																									
Bathrooms	1 staff	1600 ft <sup>2</sup>																									
Coat Check	1 staff	1000 ft <sup>2</sup>																									
HVAC + Mechanical Room	1 staff	1200 ft <sup>2</sup>																									
<b>ADMINISTRATIVE</b>																											
Administrative Offices	5 staff	1000 ft <sup>2</sup>																									
Box Office / Reception	5 staff	1000 ft <sup>2</sup>																									
<b>TOTALS</b>	<b>1,750</b>	<b>180,040 FT<sup>2</sup></b>																									

■ = Front End (Public)  
■ = Semi-Public  
■ = Open Office  
■ = Closed Office  
■ = Back End Activity

# Organization Chart

■ = Front End (Public)  
■ = Semi-Public  
■ = Open Office  
■ = Closed Office  
■ = Exclusive Private Suite

	NUMBER	SQ FT	TYPE	STAFF DESCRIPTION	TIME OF DAY
<b>ADMINISTRATION</b>					
<b>CREATIVE DIRECTOR</b>	<b>27</b>				
Receptionist	1	- ft <sup>2</sup>	Blue	In charge of coordinating with shows, events, and venue spaces to facilitate shows and needs of traveling staff to achieve creative vision.	
Support Technicians	3-5	- ft <sup>2</sup>	Cyan	Receives calls and assists Director in coordination duties.	
<b>LIBRARIAN</b>	1	- ft <sup>2</sup>	Blue	In charge of carrying out direction of Creative Director for stage adjustments.	
Administrative Assistant	1	- ft <sup>2</sup>	Blue	Coordinates room leasing and overseas music library resources.	
<b>TECHNICAL DIRECTOR</b>	1	- ft <sup>2</sup>	Blue	Receives calls and assists Director in duties and operations.	
Lighting Designer	1	- ft <sup>2</sup>	Blue	Oversees carrying out any and all changes done to concert halls and venue spaces.	
Audio Designer	1	- ft <sup>2</sup>	Blue	Coordinating with traveling shows & event planners to plan and implement creative visions or ensure facilities are primed to receive traveling show and has resource & technology available for incoming team to use.	
Video/LED Designer	1	- ft <sup>2</sup>	Blue		
Scenic/Stage Designer	1	- ft <sup>2</sup>	Blue		
Spotlight Technician	2	- ft <sup>2</sup>	Blue		
<b>OPERATIONS DIRECTOR</b>	1	- ft <sup>2</sup>	Blue	Oversees maintenance of grounds, interior facilities, plumbing & HVAC	
Maintenance Staff	10	- ft <sup>2</sup>	Blue	(1) Plumbing + HVAC, (4) Site Grounds, (4) Interior Facilities	
<b>GUEST SERVICES</b>					
<b>INFORMATION + TICKETS</b>	<b>46</b>				
Tour Guides	2-4	- ft <sup>2</sup>	Orange		
CAFÉ	3	- ft <sup>2</sup>	Orange	Rotation shifts with 2 staff and 3 during peak hours	
SECURITY	4	- ft <sup>2</sup>	Blue	Closed office security desk for backend monitoring of all facilities	
<b>DIRECTOR OF VOLUNTEERS</b>	1	- ft <sup>2</sup>	Blue	Coordinates ushers, eyes-on security, and volunteers helping event	
Administrative Assistant	1	- ft <sup>2</sup>	Blue	Receives calls and assists Director in duties and operations.	
Ushers	20-25	- ft <sup>2</sup>	Blue	Responsible for receiving guests and directing to assigned seating. Also helps with being eyes on-site security. Part-time during shows + Events.	
Coat check handlers	1-4	- ft <sup>2</sup>	Orange	Receives baggage and coats prior to show or events kept secure.	
<b>BOOKING OFFICE</b>					
<b>DIRECTOR OF COMMUNITY ENGAGEMENT</b>	<b>2</b>				
Administrative Assistant	1	- ft <sup>2</sup>	Blue	Oversees coordinating with local publicity and media in addition to outreach even planning working between Creative Director + Potential talent and scheduling of shows.	
Receives calls and assists Director in duties and operations.					
<b>HUMAN RESOURCES</b>					
<b>ACCOUNTING</b>	<b>3</b>				
<b>DIRECTOR   CFO</b>	1	- ft <sup>2</sup>	Blue		
Financial Assistant	2	- ft <sup>2</sup>	Blue	Assists Director in duties and operations.	
<b>MUSIC DEPARTMENT</b>					
<b>RESOURCE DIRECTOR</b>	<b>120</b>				
Music Teachers (Group)	1	- ft <sup>2</sup>	Blue	Coordinates leasing of rooms space for practice, lessons, and music therapy.	
Music Teachers (Individual)	2	- ft <sup>2</sup>	Green		
Music Therapists	10	- ft <sup>2</sup>	Green		
Group/Class Leader	5	- ft <sup>2</sup>	Green		
BOOKINGS	2	- ft <sup>2</sup>	Green		
Bands (backend)	8 + 5	- ft <sup>2</sup>	Orange	Jazz, Rock, Alternative, Country having band and incoming support crew	
Orchestras	50-70	- ft <sup>2</sup>	Blue	Philharmonic Orchestra with complete percussion, base, and string support	
Ensembles	2-6 + 2	- ft <sup>2</sup>	Blue	Small classical ensembles able to meet in space outside jazz bar	
Soloists + Conductors	5-8	- ft <sup>2</sup>	Purple	Sizing conditions account for max 3 shows running simultaneously on a night	
<b>JAZZ BAR + RESTAURANT</b>					
<b>MANAGER</b>	<b>40</b>				
Bands (Stage)	1	- ft <sup>2</sup>	Cyan	Jazz, Rock, Alternative, Country having band and incoming support crew	
Bar Tender	8 + 5	- ft <sup>2</sup>	Orange	Max 3 for busy T.O.D and servicing bar with variety of drinks + appetizers	
Chef (Head)	1-3	- ft <sup>2</sup>	Orange	Oversees specialty meals and ensuring everything is running smoothly	
Sous Chef	1	- ft <sup>2</sup>	Orange	Oversees organization, order, cleanliness, and training of staffing in kitchen	
Chef de Partie	1	- ft <sup>2</sup>	Orange	Line cook receiving prepared food and pssing to 'Expediter' for service	
Chef Support	1	- ft <sup>2</sup>	Orange	Butcher, Commis, Fish, Fry, Grill, Roast, Roundsman, Sauté, & Pantry	
Front Of House	6-10	- ft <sup>2</sup>	Orange	Servers, Caterers, Hostess	
Security Guards	6-10 + 2	- ft <sup>2</sup>	Orange	Door Check + Bouncers intermixed in crowd (Gig nights only)	
<b>LOADING DOCK</b>	2-4	- ft <sup>2</sup>	Orange		
Trucks (Event + Service)	2 + 2 + 1 + 1	- ft <sup>2</sup>	Orange	Event Semi (75') + Delivery (35') + Coach Bus (45') + Trash Pickup	
<b>TOTAL</b>	<b>240</b>				

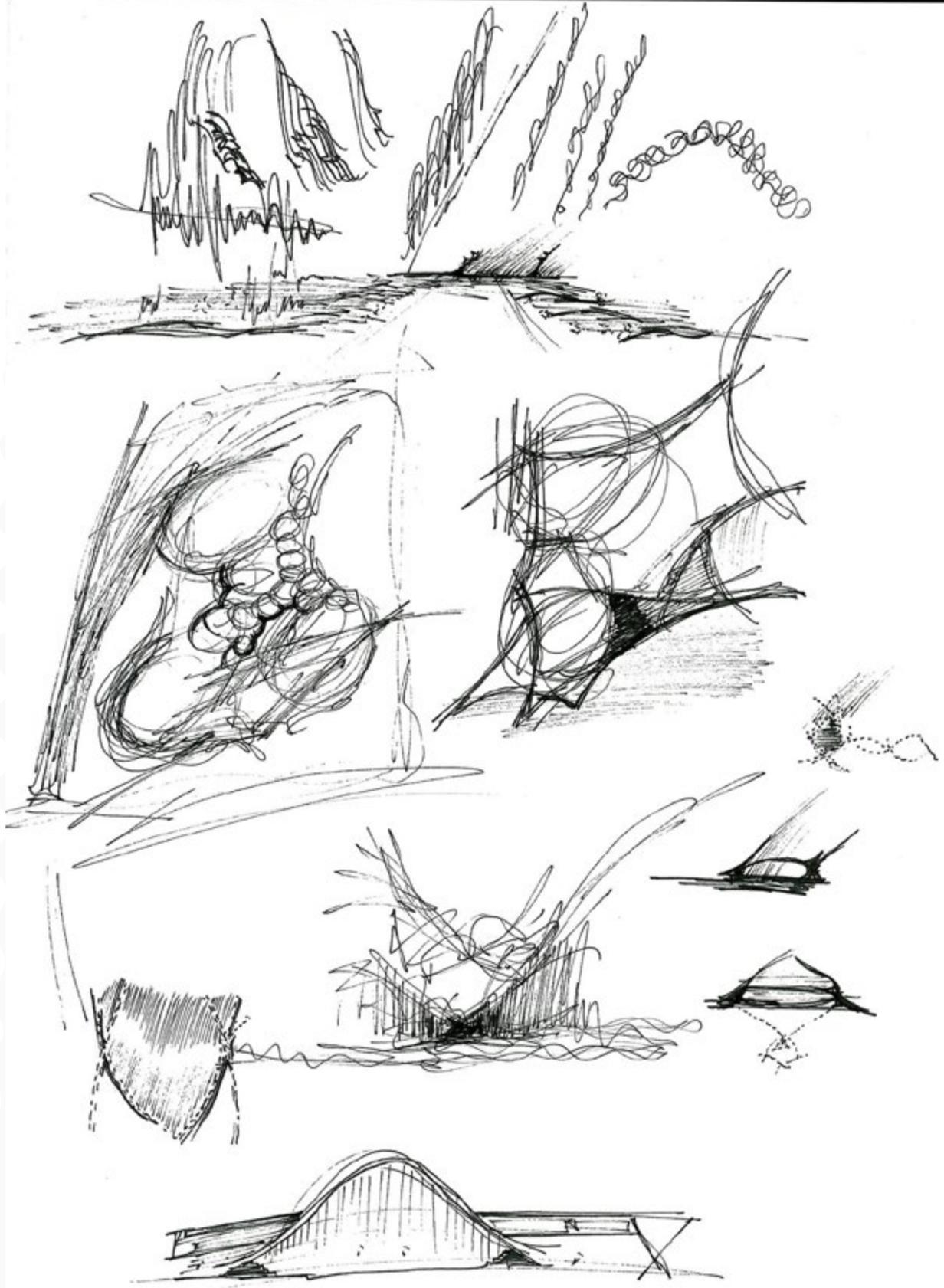
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***THE SOLUTION***

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The Beauty of a Blank page...

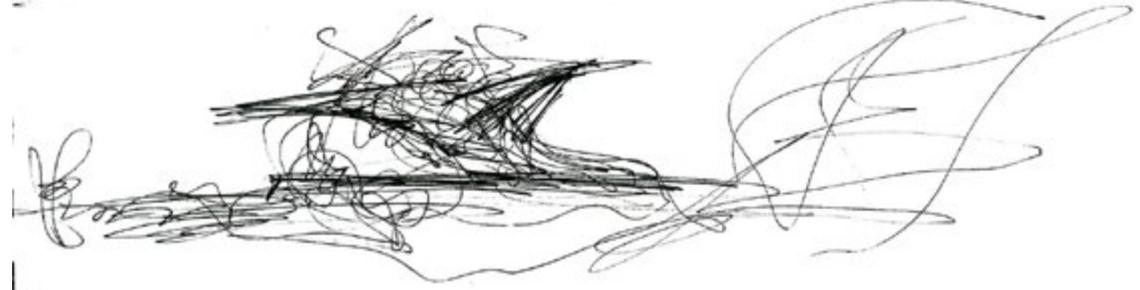


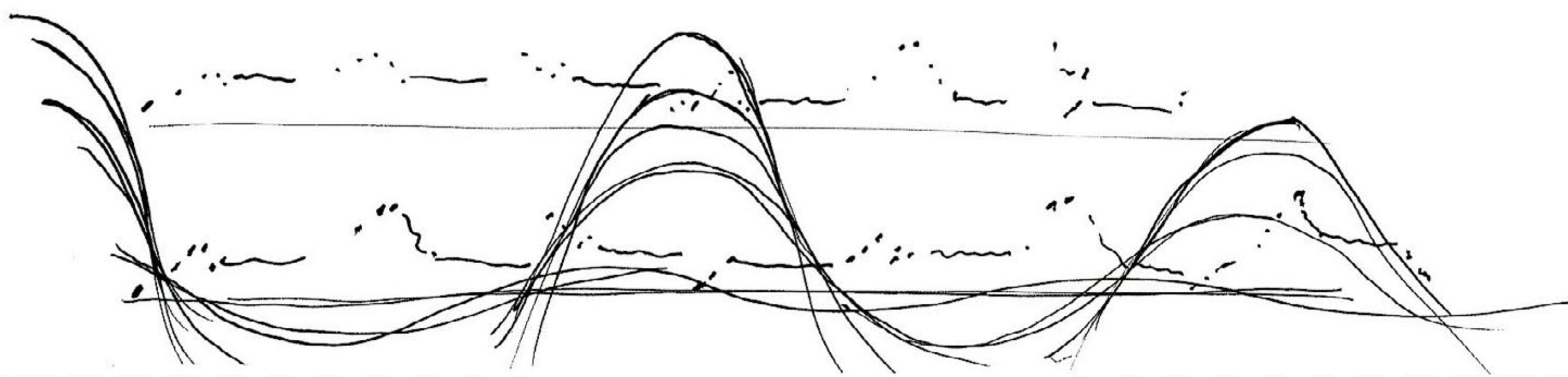
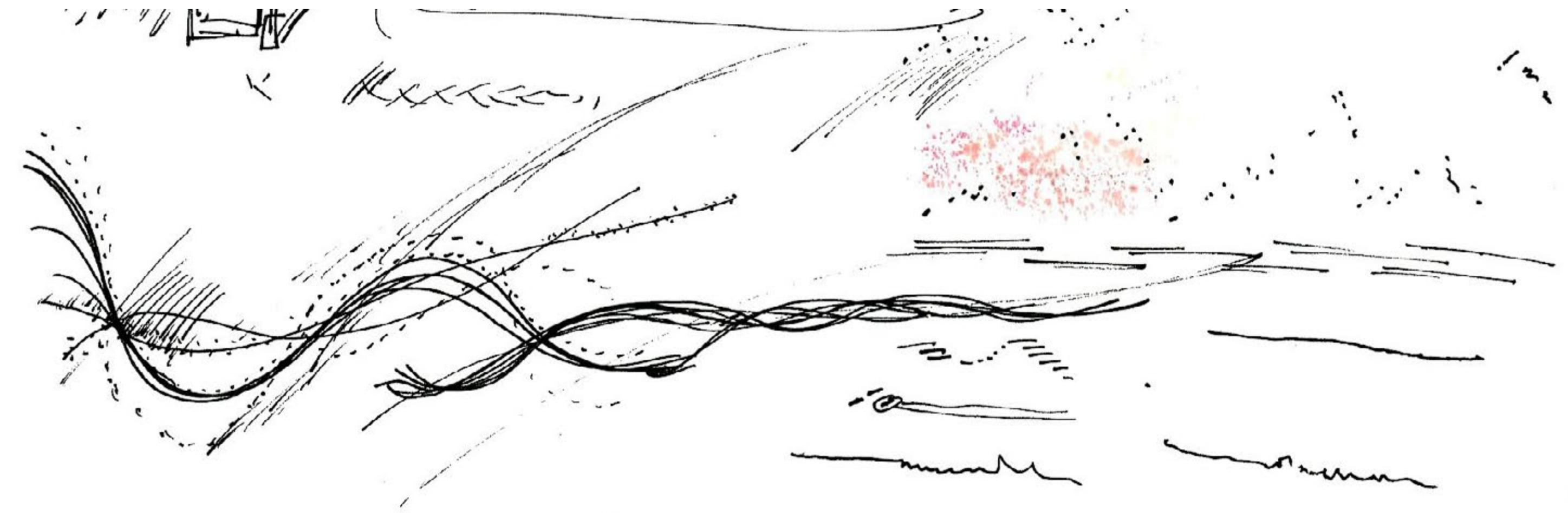
*Faith*

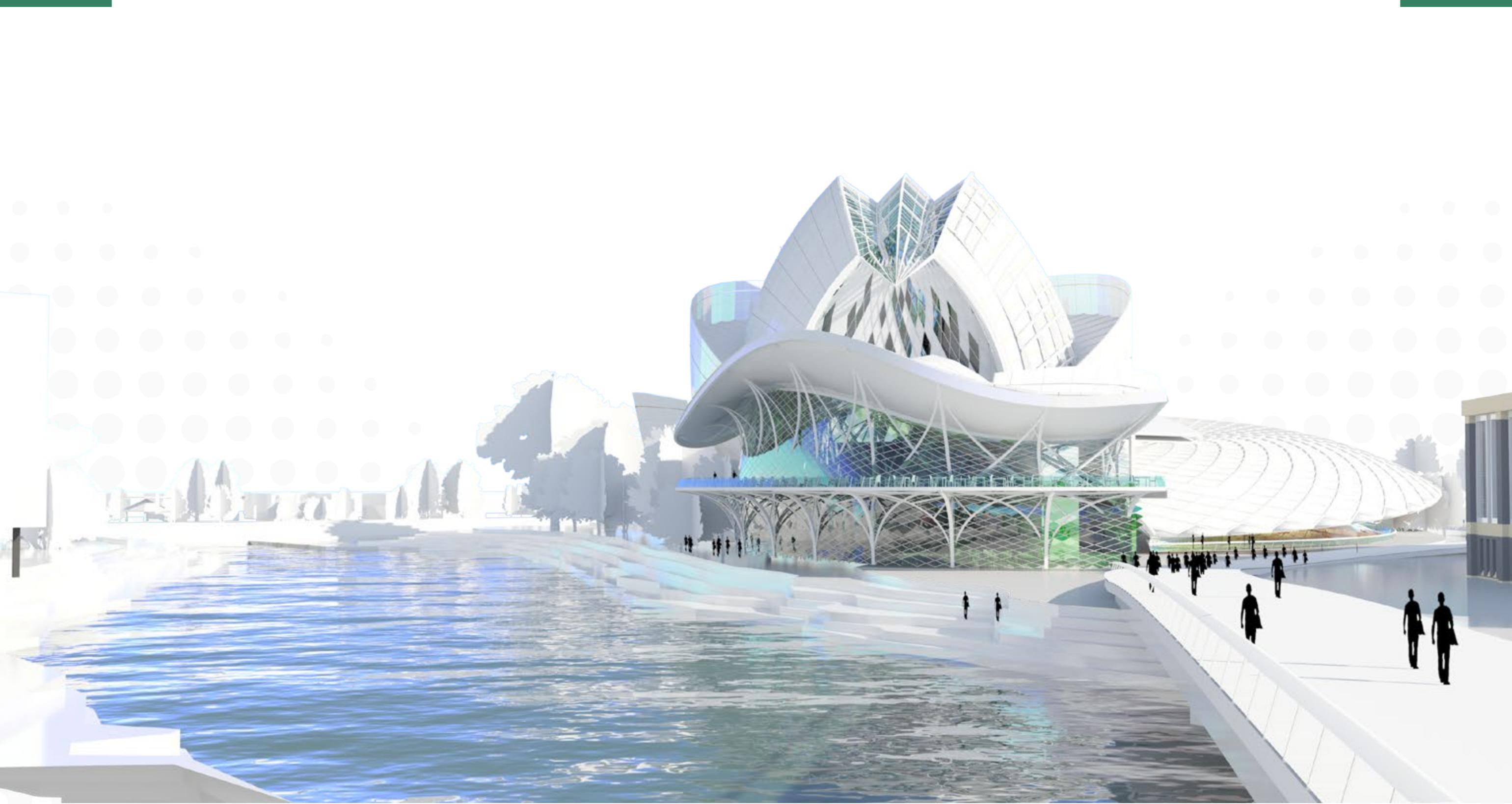
Where are our hours?  
You prepare a table before me in the presence of my enemies.  
You anoint my head with oil... my cup overflows.  
Such is goodness and mercy will follow me all the days of  
my life... and I will dwell in the house of the Lord...

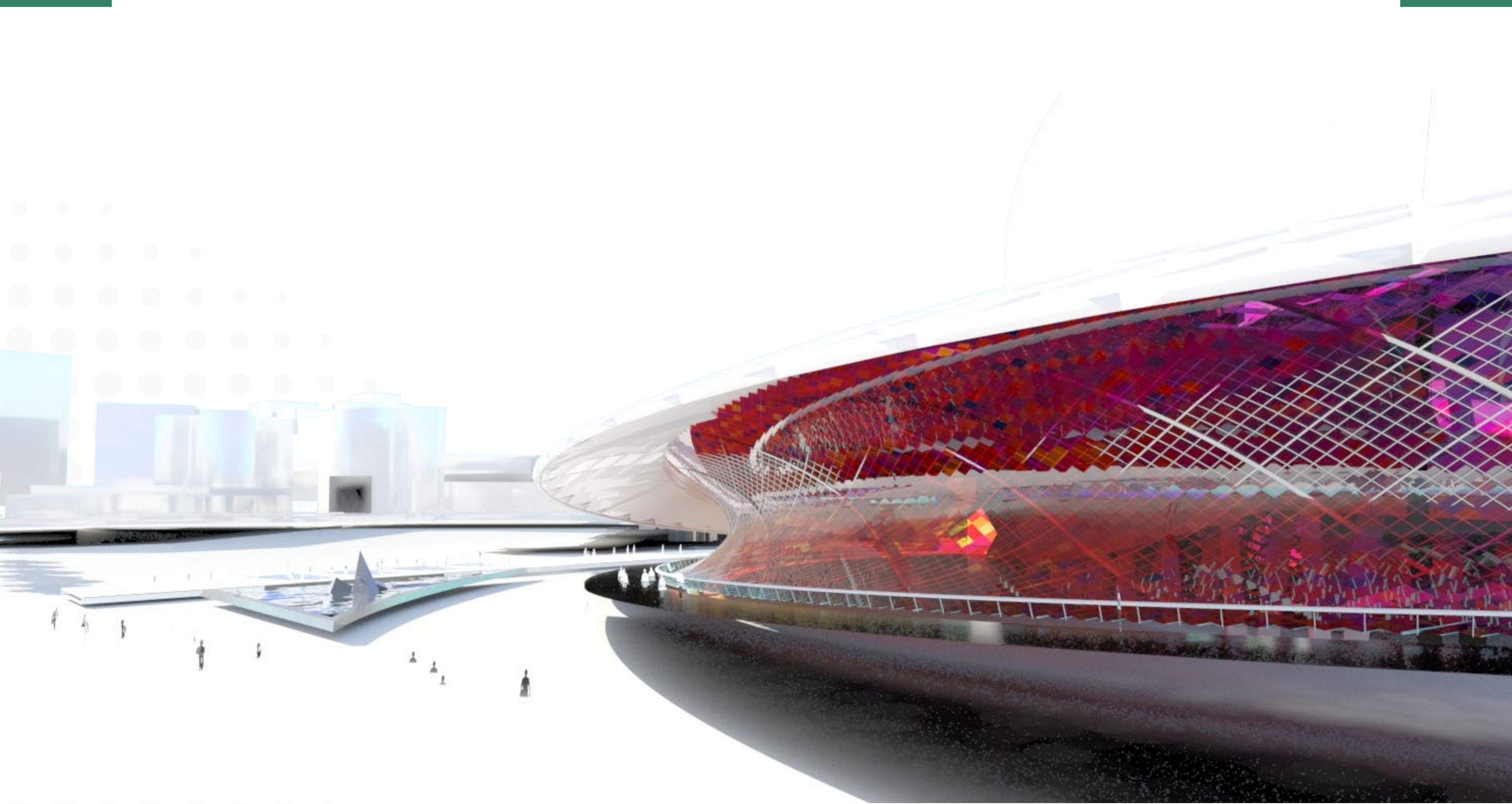
*Psalm 134*  
*Faith*

They call it Psalm 134

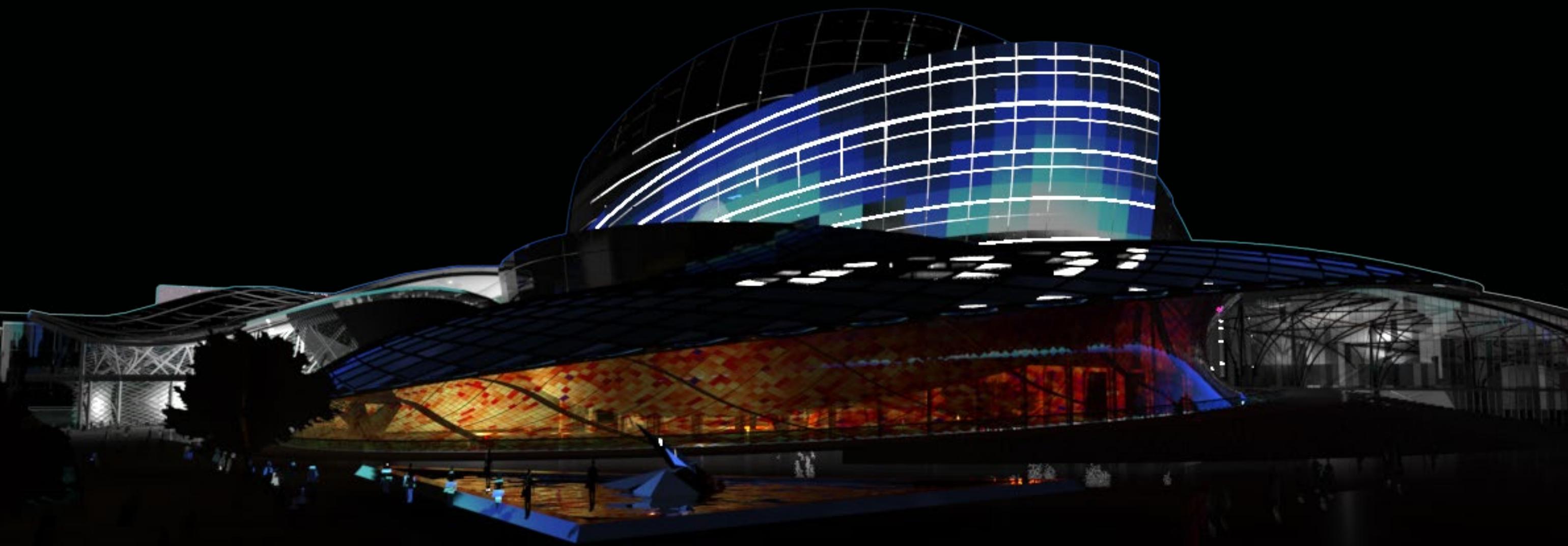


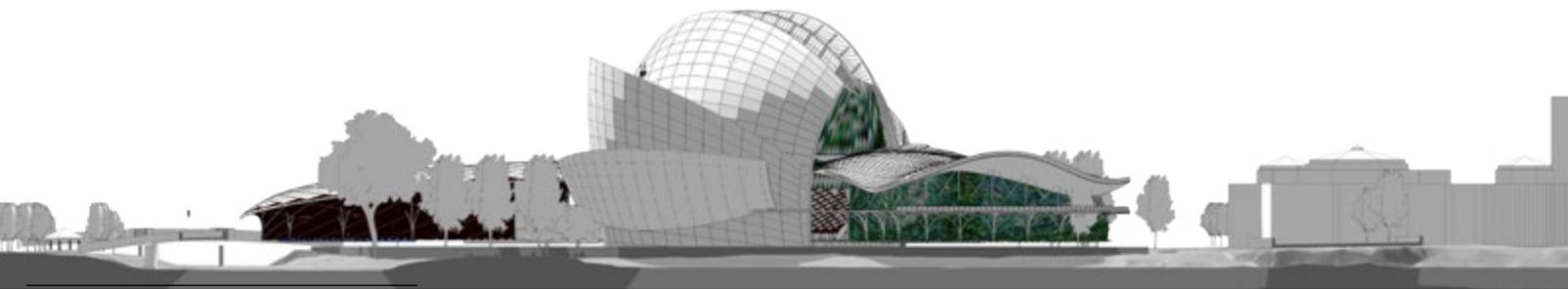




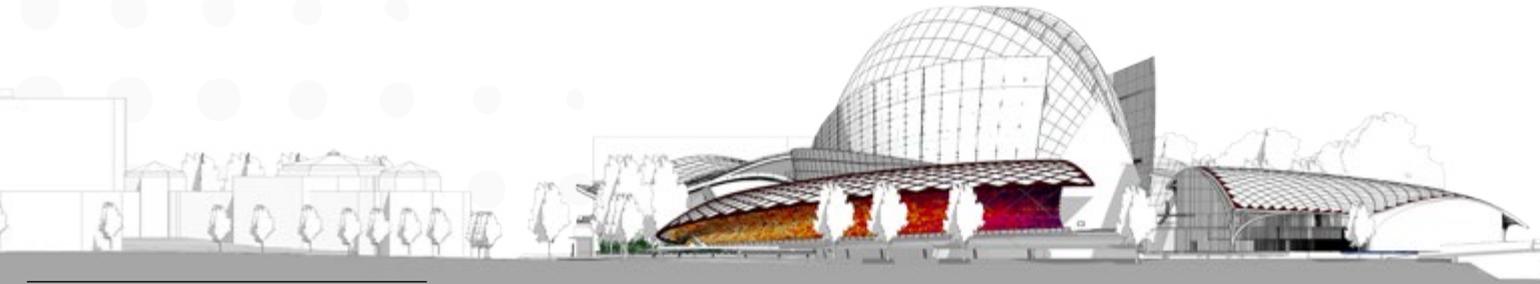




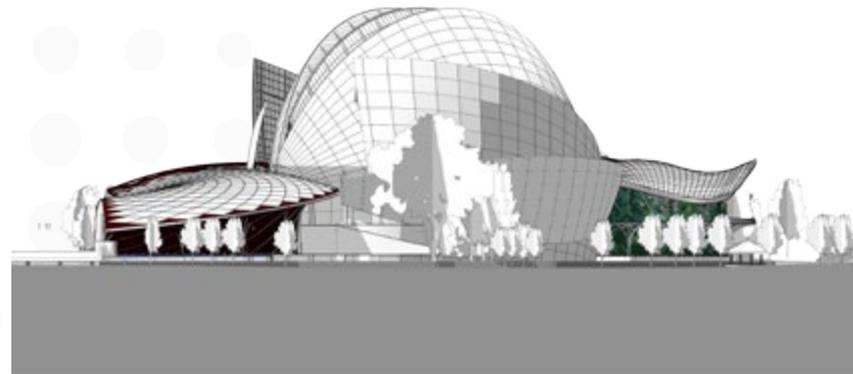




**NORTH ELEVATION**



**SOUTH ELEVATION**



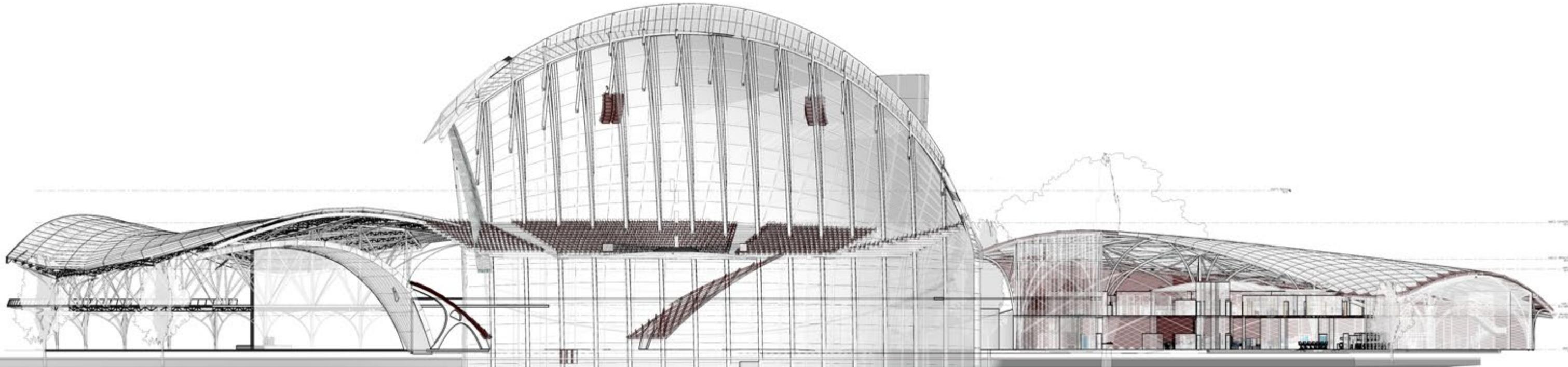
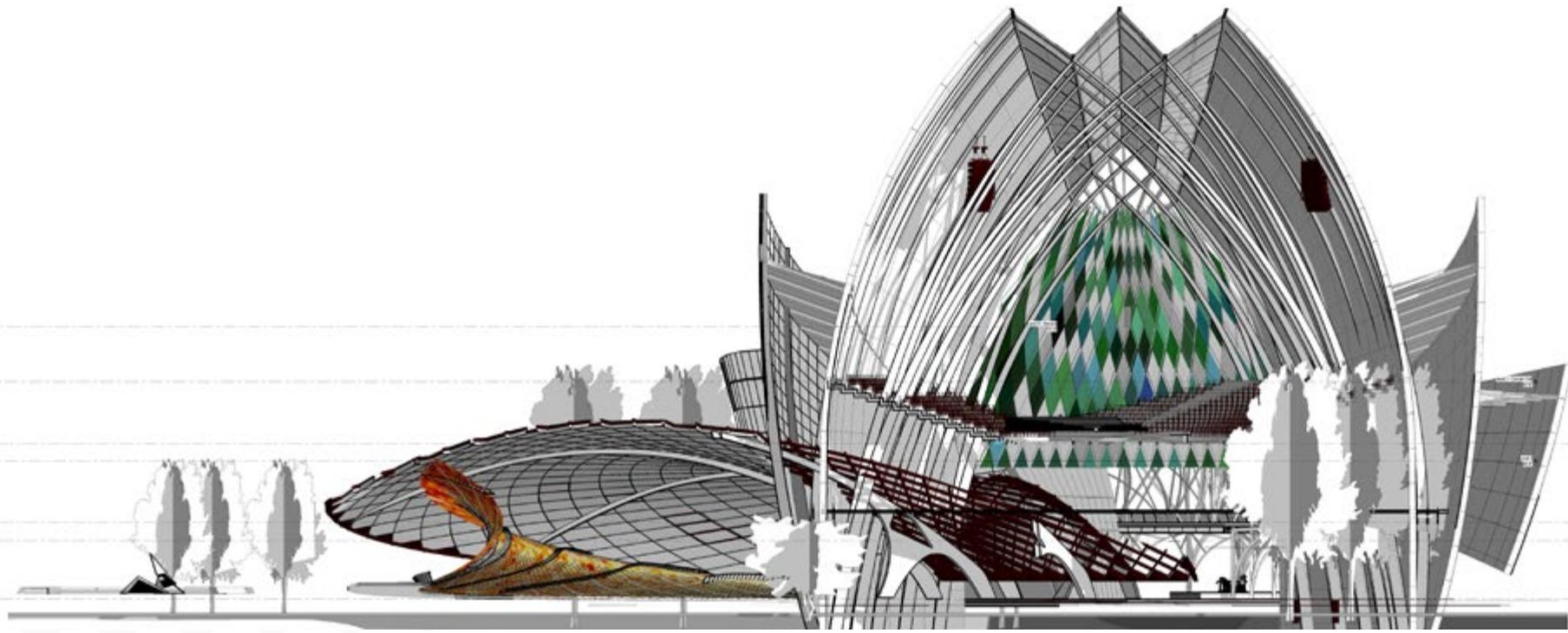
**EAST ELEVATION**

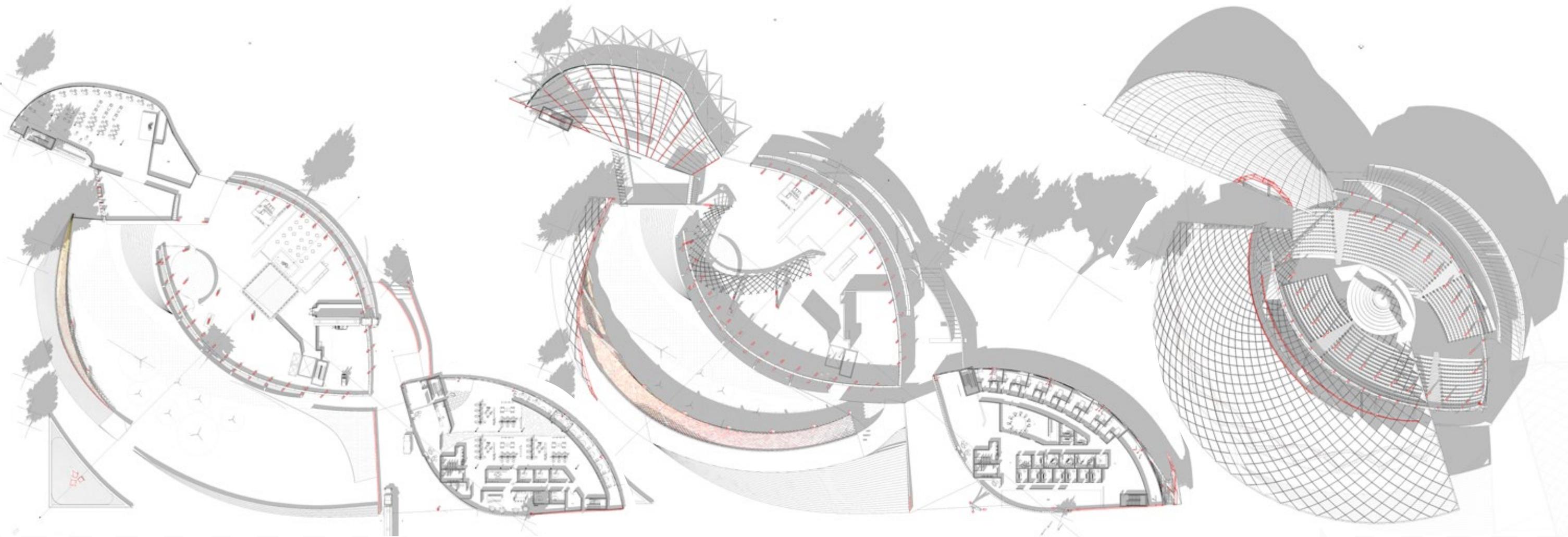


**WEST ELEVATION**



**SITE PLAN**

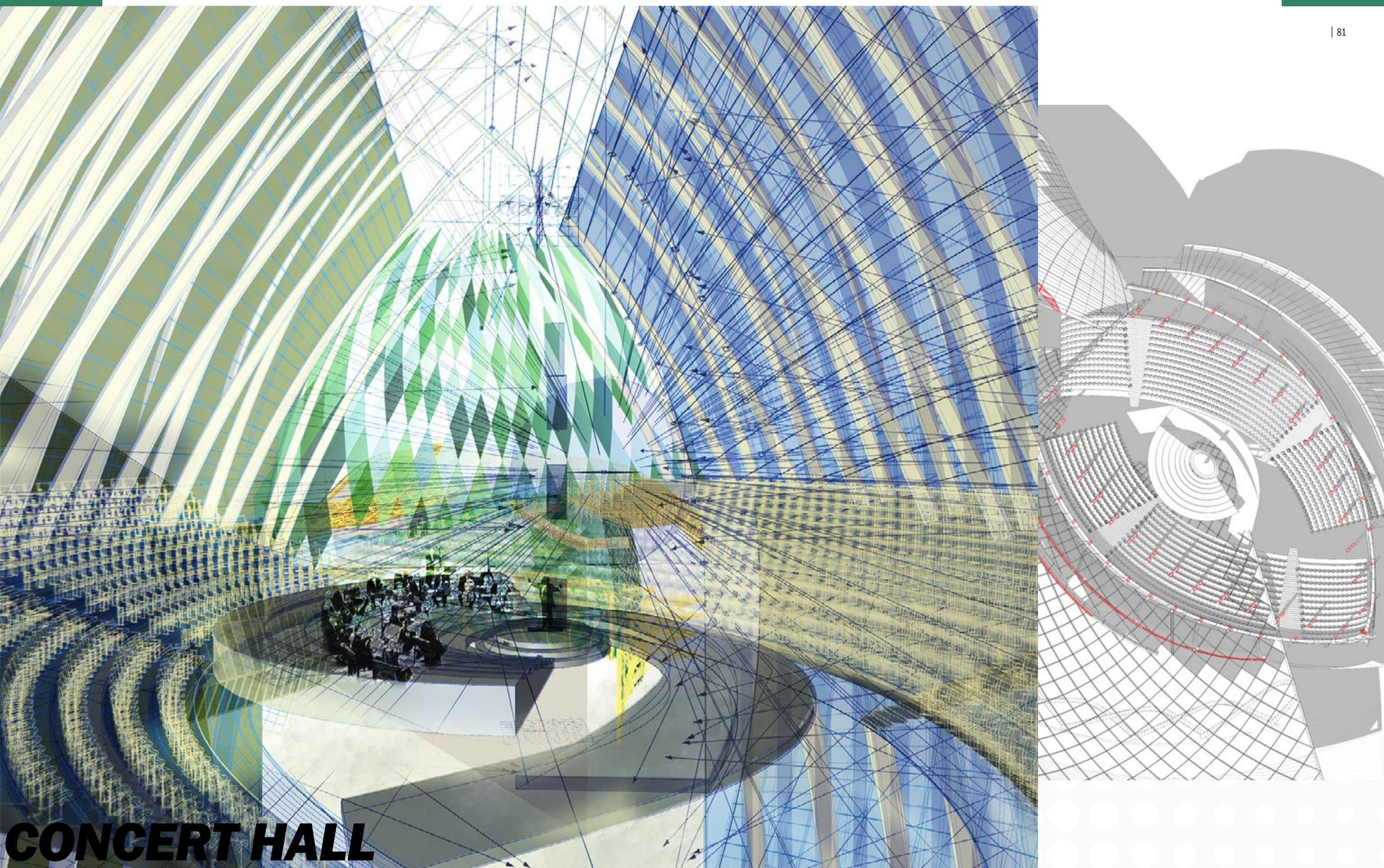




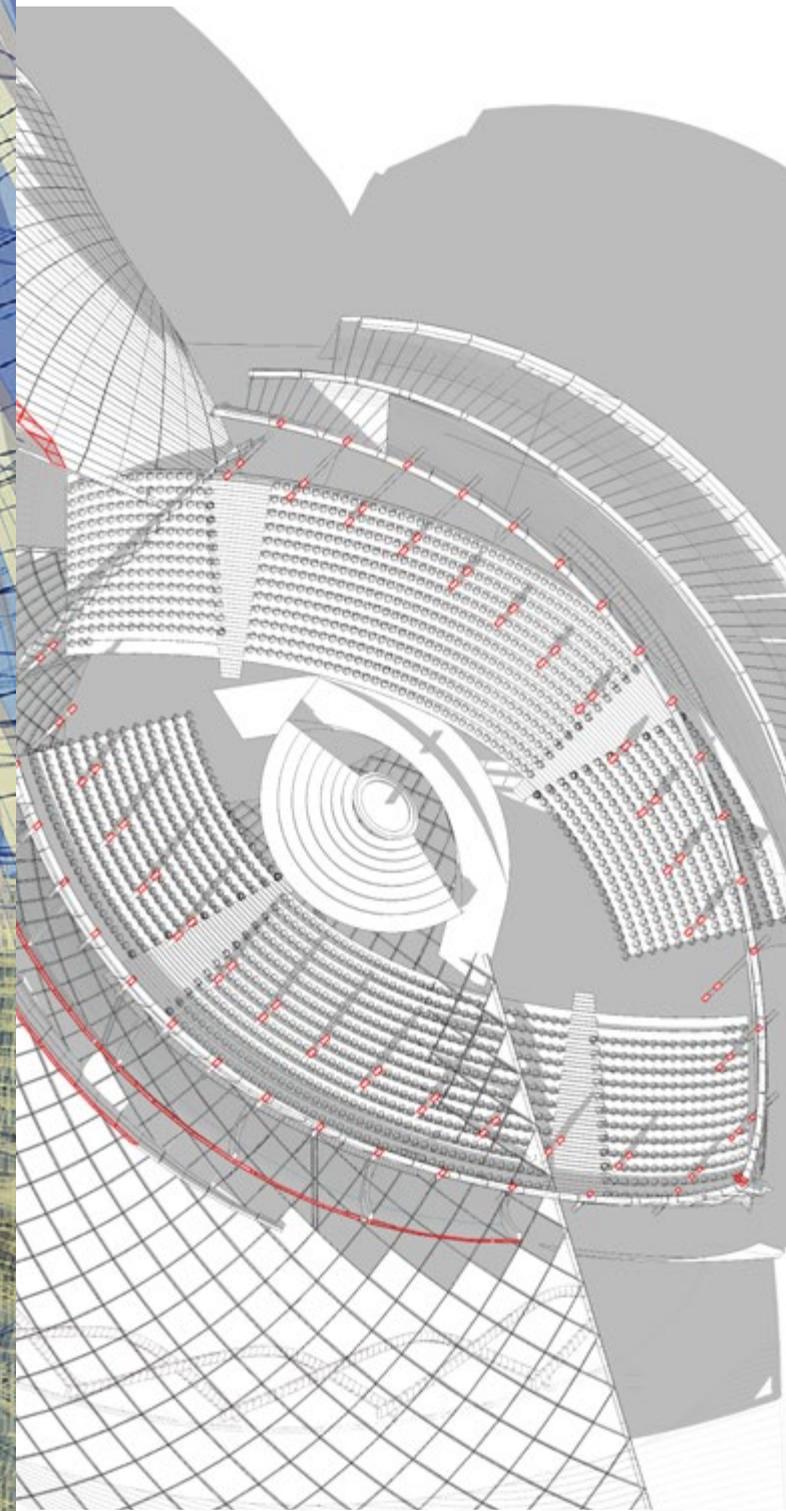
**LEVEL 0 - INTERACTIVE MUSEUM + JAZZ BAR**

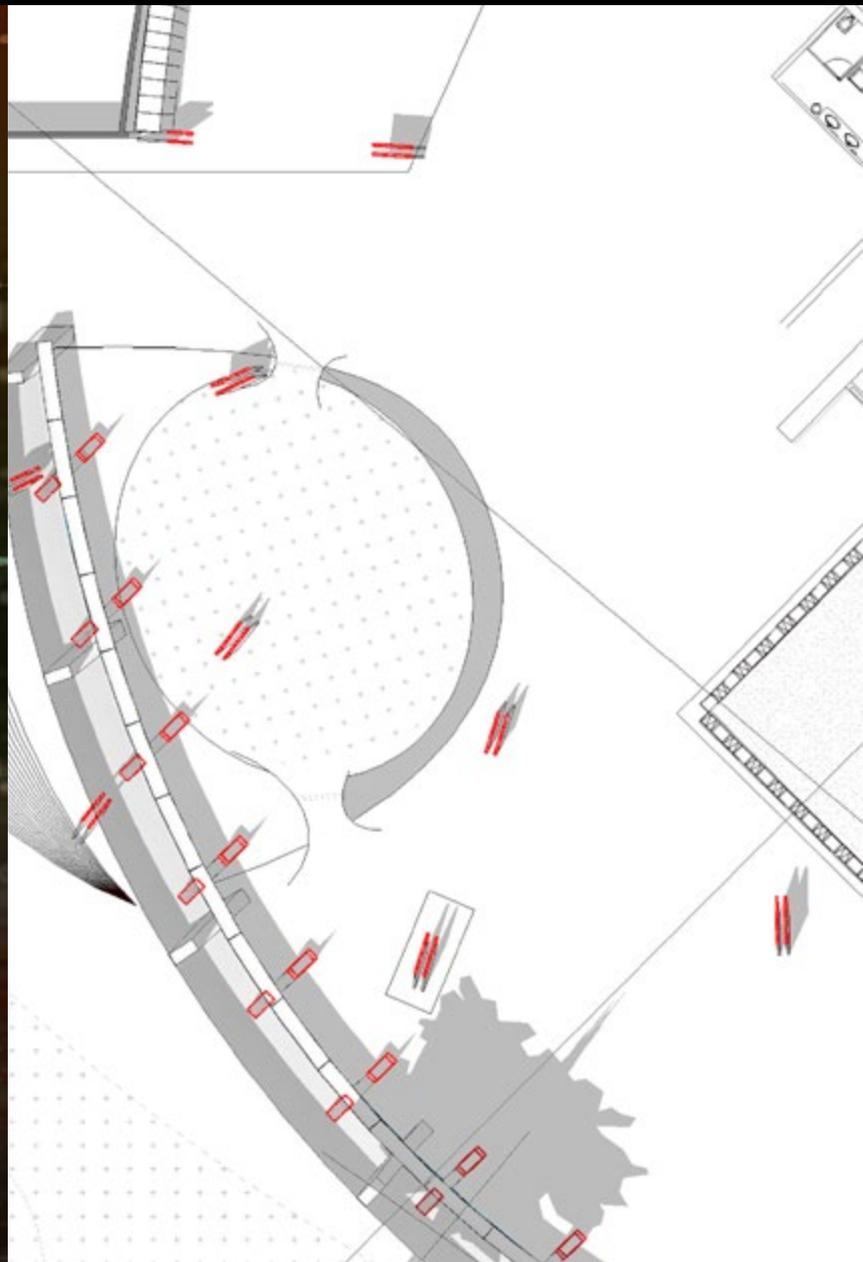
**LEVEL 1 - RECEPTION + MUSIC THERAPY**

**LEVEL 3 - CONCERT HALL**



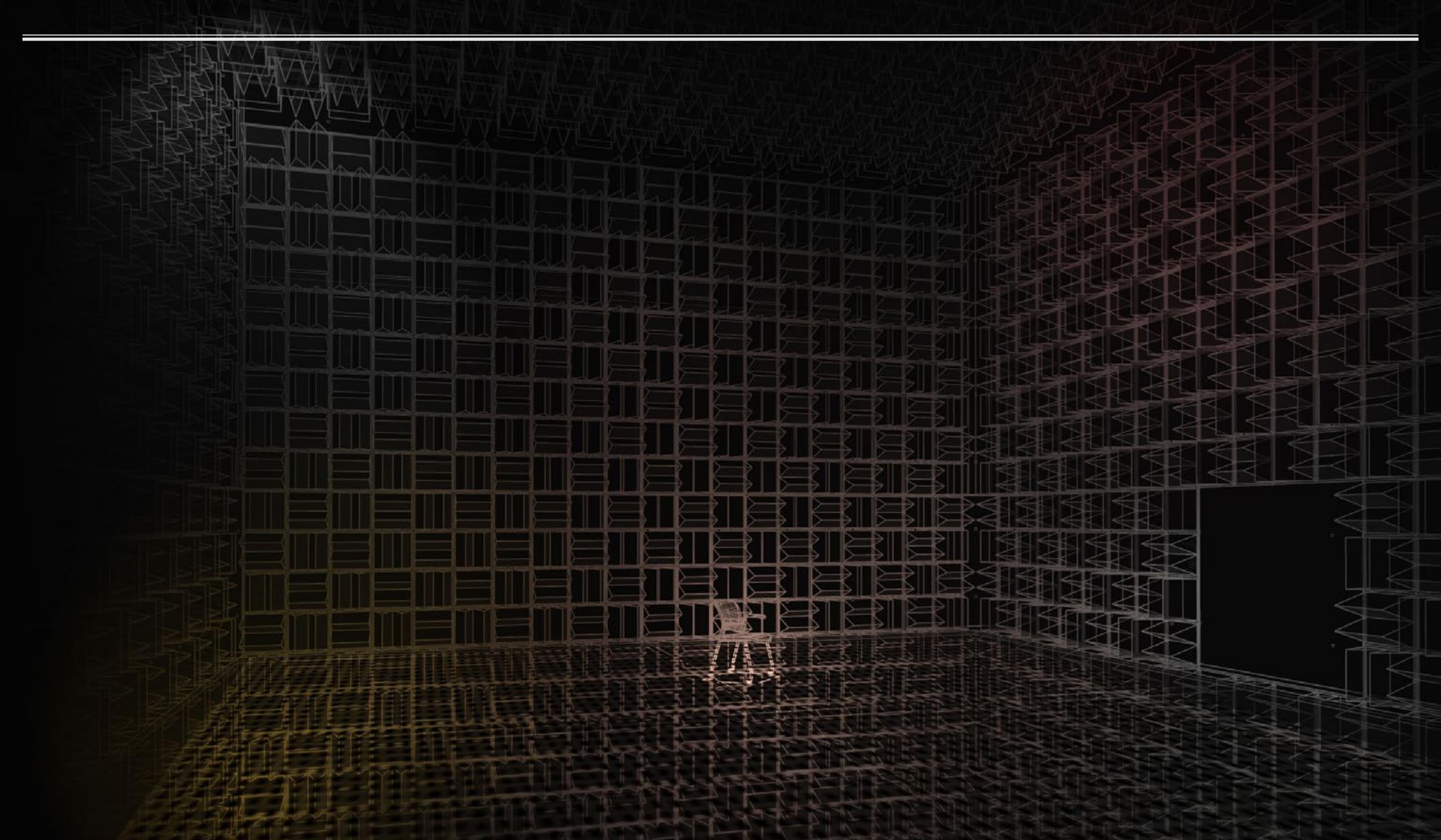
# CONCERT HALL



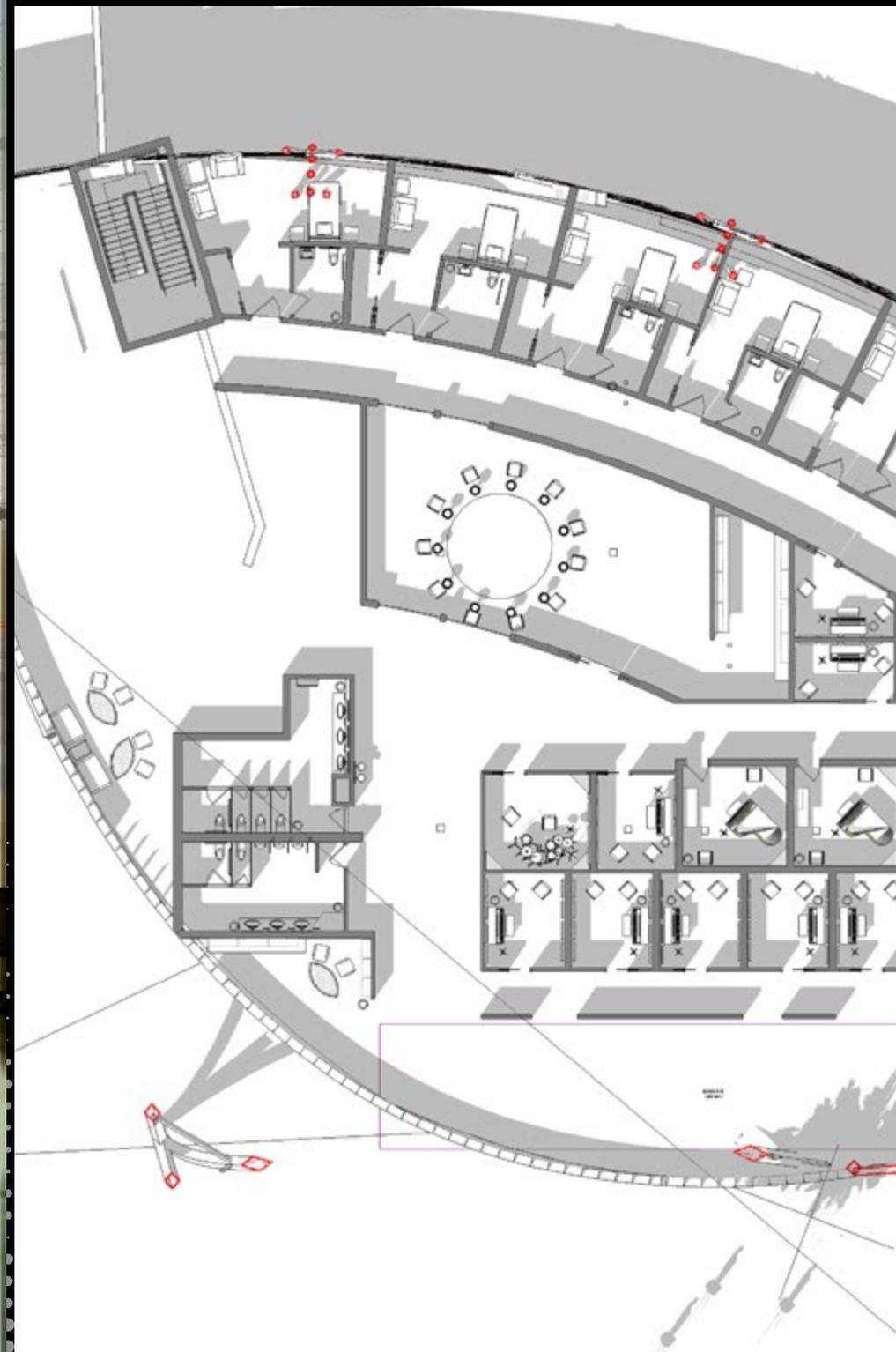


**THE CAVE**

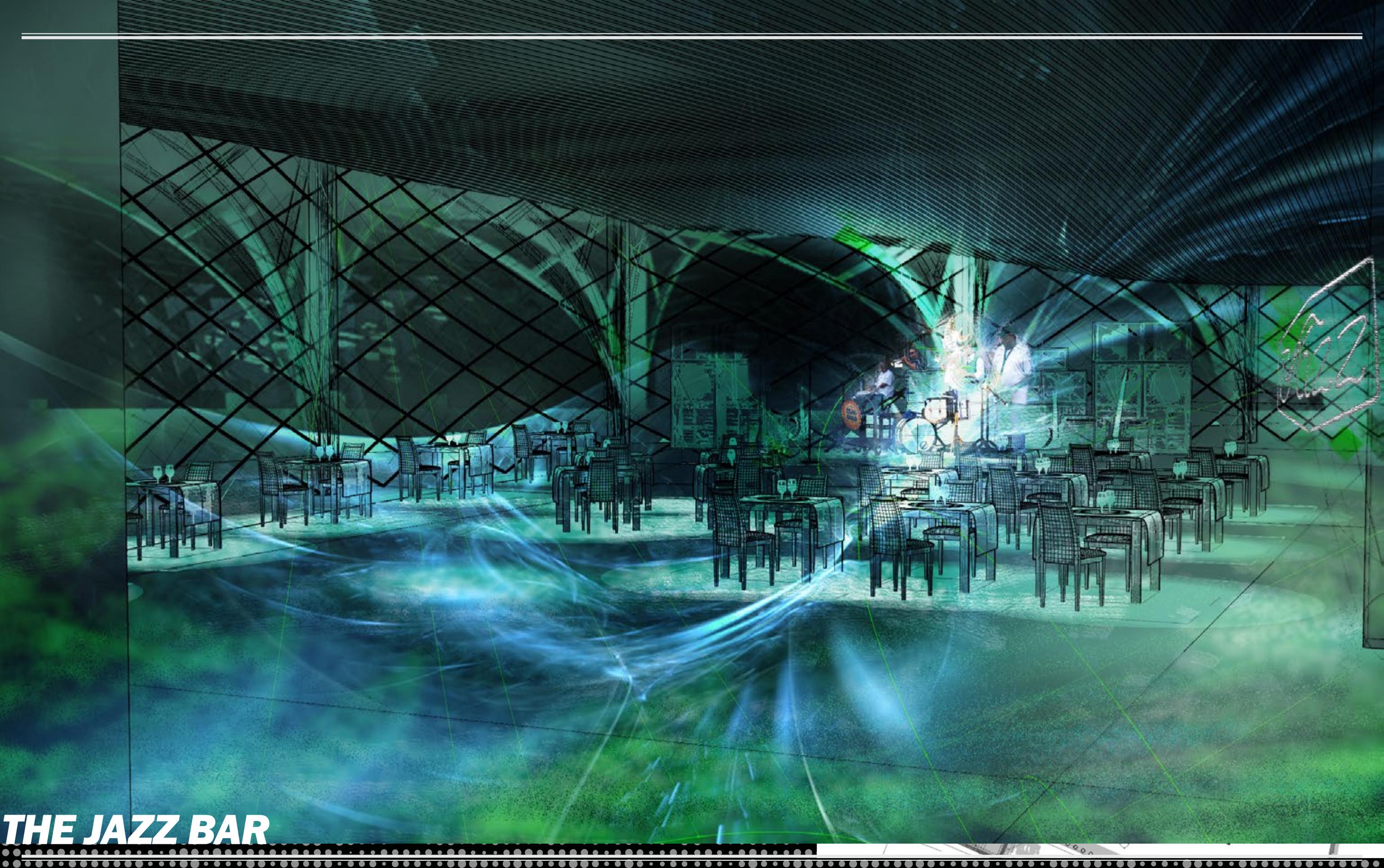
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A photograph of an anechoic chamber, a room designed to eliminate reflections of electromagnetic waves. The walls, floor, and ceiling are covered in a dense grid of dark, pyramid-shaped electromagnetic wave absorbers. In the center of the room, a simple metal chair is positioned, its form slightly blurred and dimly lit. The overall atmosphere is dark and futuristic, with a strong sense of isolation and technical precision.

***THE ANECHOIC CHAMBER***



**MUSIC THERAPY WING**



**THE JAZZ BAR**



