

The Sacred Cycle - Architecture as a Vessel of Light and Spiritual Renewal

Serin Siji

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State University in partial fulfillment of the requirements for the degree of

Master of Architecture
in
Architecture

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ABSTRACT

This thesis explores the integration of sacred space architecture with the symbolism of light and geometry to create a transcendent environment for reflection, healing, and spiritual awakening. Through precise sunpath alignments and the interplay of light and shadow, the design draws on the natural rhythms of the solstices and equinoxes to guide visitors on a journey of introspection and renewal. Key architectural elements, such as the 32 memorial columns representing the victims of the Virginia Tech tragedy, symbolize resilience and transcendence. The use of natural materials, filtered light, and sacred geometry enhances the space's meditative qualities, inviting a deeper connection to both the self and the surrounding environment. The project seeks to honor the past, while fostering healing and a renewed sense of spiritual connection. By merging nature, architecture, and light, this design creates a sanctuary that embodies the cyclical nature of life, offering a timeless space for contemplation and enlightenment.

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GENERAL AUDIENCE ABSTRACT

This thesis explores the design of a sacred space that uses architecture, light, and natural materials to create a place for reflection, healing, and spiritual growth. The project focuses on the symbolic use of light, which changes with the seasons, to connect visitors to the cycles of nature and encourage introspection. Key elements, such as 32 columns representing the victims of the Virginia Tech tragedy, serve as a memorial and a reminder of resilience. The design also incorporates sustainable practices and a deep connection to nature, offering a peaceful, meditative environment where individuals can find solace and renewal. The goal is to create a space that not only honors the past but also provides a place for spiritual awakening and personal transformation.

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INTRODUCTION

This thesis examines the intersection of architecture, light, and symbolism to create a sacred space designed for introspection, healing, and spiritual renewal. Inspired by the natural cycles of the solstices and equinoxes, the design utilizes light as both a physical and metaphorical element, guiding visitors through a journey of reflection and growth. Central to the project is the integration of a memorial to the 32 victims of the Virginia Tech tragedy, symbolizing resilience and transcendence. By carefully considering the geometry of the space, the interplay of natural materials, and the subtle effects of light throughout the year, the project aims to foster a deep connection between the visitor, the architecture, and the surrounding environment. Ultimately, this design seeks to create a sanctuary where the past is honored, and individuals can experience healing and spiritual transformation.

INSPIRATIONAL WORKS #1

Architecture that serves the human soul should be a symphony of light and shadow, movement and stillness—a dance of forms that echo the rhythms of life. Like a figure playing the violin in the dark, its essence emerges not from the brilliance of visibility, but from the harmony of contrasts. It is the interplay of grace and tension, like linen strips falling gently from unseen heights, tethered yet free, grounding the spirit while allowing it to soar.

Such architecture embraces the dualities of the human spirit: the yearning for connection and the solitude of self-reflection, the strength to build and the vulnerability to surrender. It mirrors the raw elegance of existence, where every curve and angle speaks to the poetry of resilience, and every texture whispers the fragility of being.

To reflect the nature of the soul, architecture must transcend mere functionality. It should invite us to dwell not only in physical spaces but within ourselves. Like the violinist shaping music from silence, a building should transform emptiness into a melody of purpose and meaning. It should embrace the imperfection of its materials, the marks of time, and the energy of light filtering through its spaces, creating sanctuaries where the spirit finds resonance.

This architecture is not bound by rules of symmetry or permanence. Instead, it grows, evolves, and breathes with its inhabitants, weaving their stories into its walls. It becomes a canvas for the human spirit, a vessel for our collective dreams, and a sanctuary for the grace within us—a place where the soul, like a dancer in the dark, finds its most profound and graceful expression.



INSPIRATIONAL WORKS #2

Architecture that mirrors the soul is like a boy riding a whale across the clouds—a boundless journey that defies the limits of gravity and reality, lifting the spirit into realms of imagination. It is a sanctuary for dreams, where the weight of the world dissolves and the vast expanse of possibility opens like a sea of sky.

This kind of architecture invites us to transcend the mundane and ride the waves of wonder. It is both anchor and vessel, rooting us in the present while carrying us beyond it. The curves of its form should echo the fluid grace of the whale, powerful yet gentle, while its spaces stretch like clouds, vast and open, inviting exploration and reflection.

It reflects the spirit's yearning to soar, to drift unbound by convention, to navigate the unknown with awe. Here, walls are not barriers but horizons, their edges dissolving into the infinite. The interplay of light and shadow becomes a choreography of daydreams, painting ephemeral patterns across surfaces that invite us to pause, to ponder, to breathe deeply.

This architecture does not merely shelter; it elevates. It whispers to the child within us, reminding us of the joy in curiosity, the power in wonder, and the freedom in unshackled creativity. It becomes a space where the spirit soars on unseen currents, where the architecture itself disappears into the sky, leaving only the profound sense of possibility—a home for the soul, riding on the clouds of its imagination.



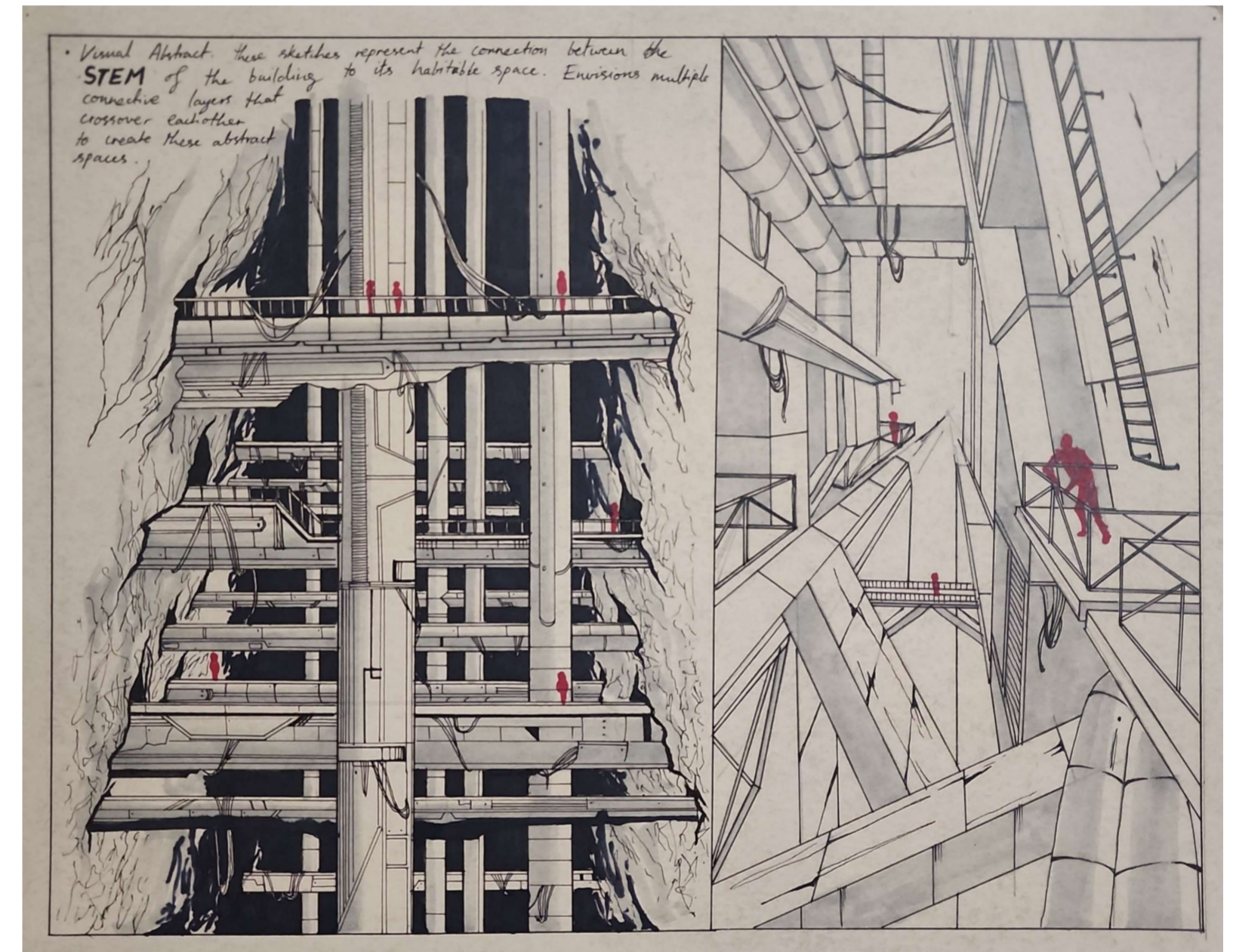
INSPIRATIONAL WORKS #3

This sketch vividly explores the interplay between chaos and order, with light serving as the unifying force that brings these opposing elements into dialogue. The structured, geometric framework of beams and platforms represents humanity's drive to impose order on the world—an intricate lattice of logic and purpose. Yet, this order exists amidst the jagged, untamed chaos of the surrounding rock walls, whose unpredictable contours defy symmetry and control.

Light cuts through this duality, tracing pathways across the layered construction and illuminating pockets of both chaos and order. It accentuates the clean lines and sharp edges of the built environment, reinforcing the sense of precision and intention. Simultaneously, it dances across the irregular textures of the natural rock, revealing its wild beauty and imperfection.

The figures scattered throughout the composition are caught in this tension, navigating spaces where the boundaries of control and disorder blur. They occupy a world that is both meticulously designed and inherently unpredictable—a reflection of the human condition itself.

This sketch suggests that architecture is not merely about conquering chaos with order but about creating a delicate balance between the two. It is in this balance that true harmony is found, where the structured logic of human ingenuity coexists with the raw unpredictability of nature, united by the guiding presence of light.



DUALITY OF NATURE

Physical and Spiritual

Physical and Spiritual: Nature embodies the duality of the tangible and the transcendent. The physical world—its mountains, rivers, and forests—grounds us in reality, while the spiritual essence, found in whispers of wind or the vastness of the sky, calls us to something greater, beyond what the eyes can see.

Grounded by earth and trying to reach into heaven

Grounded by Earth and Reaching for Heaven: Trees root themselves deep within the soil, drawing strength from the earth, yet their branches stretch endlessly toward the sky. This mirrors the human spirit, tied to the physical realm but forever yearning for the ethereal, the divine, the infinite.

A person we let out and a person we conceal

The Person We Let Out and the Person We Conceal: Like the cycles of day and night, we navigate between the self we present to the world and the deeper, hidden self we guard. The external reflects light and interaction, while the internal, shadowed self holds our unspoken truths, fears, and dreams, forming a complete, complex whole.

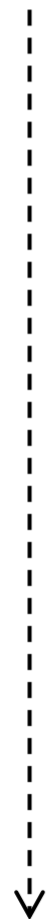
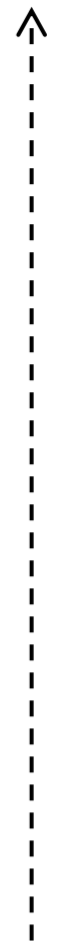
Spring Equinox: Change, resurrection, ascension.

Summer Solstice: Enlightenment and awakening.

SPIRITUAL SEASONAL DYNAMICS OF LIGHT

Autumn Equinox: Balance and death.

Winter Solstice: Creation and birth.



Outward focus (extrospection)

Architecturally, the outward focus of light can be embodied in expansive, open spaces that invite natural light to flood in, creating a sense of vitality and connection to the world outside. Tall windows, skylights, and courtyards allow sunlight to stretch into every corner, evoking a feeling of renewal and outward energy. These spaces encourage interaction, creativity, and community—therapeutic experiences that mirror the solstice’s themes of abundance and growth. The design draws people outward, inviting them to engage with their surroundings and embrace the fullness of life.

CONCEPTUAL FRAMEWORK : QUALITY OF LIGHT

Inward focus (introspection)

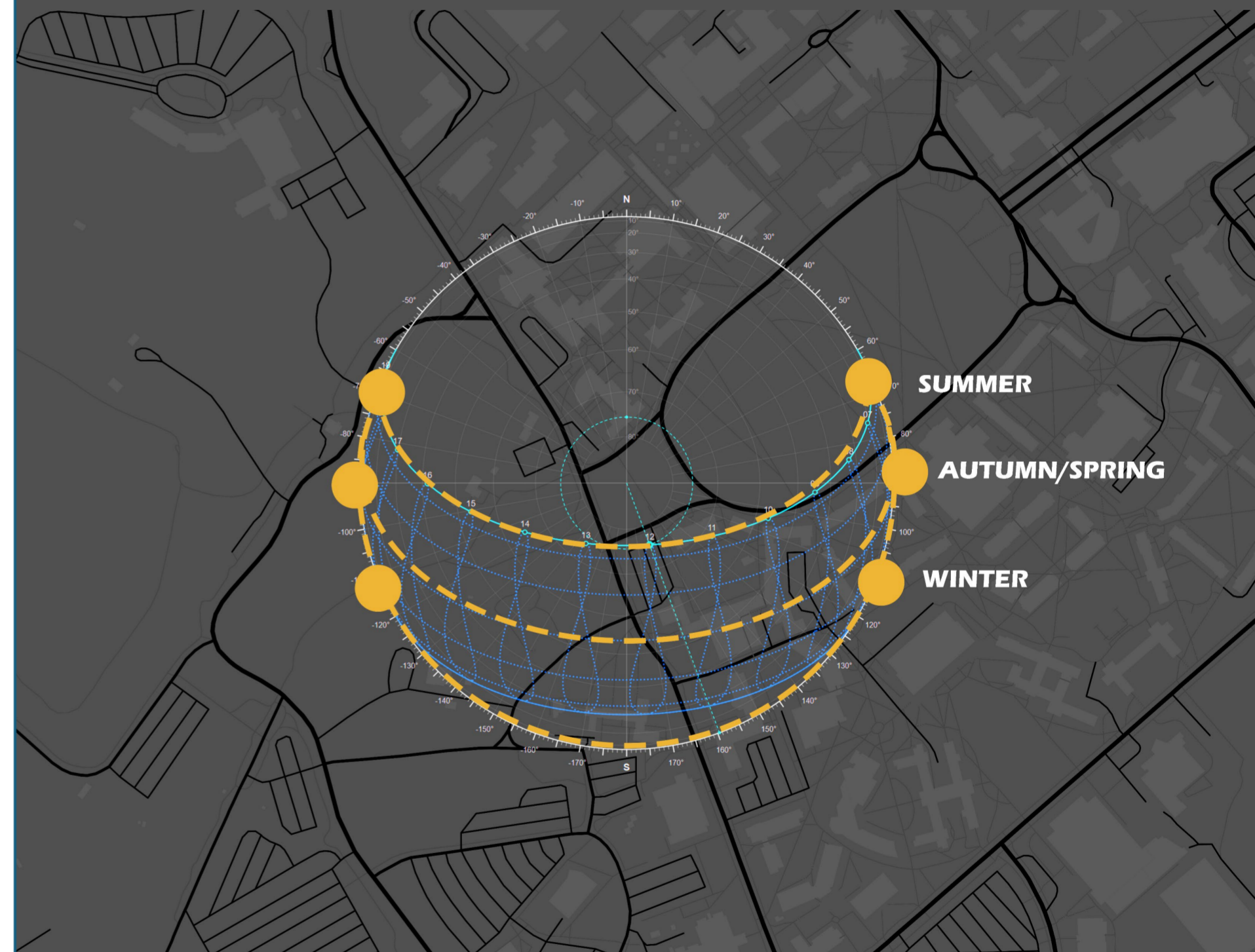
The inward focus of light is reflected in architecture that creates intimate, introspective spaces. Soft, filtered light through narrow openings, warm materials, and enclosed spaces evoke a sense of calm and safety, guiding occupants toward self-reflection and inner peace. The subdued quality of light becomes therapeutic, fostering moments of stillness and personal connection. These designs emphasize inward energy, aligning with the solstice and equinox’s themes of retreat and contemplation, offering a sanctuary where individuals can reconnect with themselves and their inner world.

LOCATION AND SITE SELECTION



Adjacency to Duckpond and Stroubles Creek.

The site, located on the west side of the Drillfield near West Campus Drive, occupies the campus's lowest elevation and features a 100-year floodplain running through it. This strategic placement transforms the space into a central, accessible location for students, reinforcing its role as a therapeutic retreat and interfaith chapel. Acting as a gateway to the Duckpond, the site bridges the natural and built environments, offering serenity and reflection amidst the campus bustle. Its prominence allows it to serve as a visual landmark, standing as a symbolic monument visible from the Pylons, anchoring the design within the campus's cultural and spiritual fabric.



Site: West side of Drillfield,
Near West Campus Drive.
24061, Blacksburg, VA.

SITE'S SYMBOLIC VALUE: connection to the campus community



The Sesquicentennial Grove at Virginia Tech commemorates the university's 150th anniversary, serving as a living tribute to its history and future. The grove connects the past and present by honoring the institution's legacy and offering a space for reflection and growth. The architecture of the site is thoughtfully integrated with the grove, using natural materials like timber and expansive windows to frame views of the trees, fostering a harmonious relationship between the built environment and nature. Pathways lead visitors through the space, connecting the indoor and outdoor realms. As a memorial, the site incorporates elements that reflect Virginia Tech's milestones, such as commemorative plaques, gathering spaces, and design features that celebrate its achievements. This creates a space for visitors to honor the university's history while also reflecting on its future direction. The architecture and grove together form a place where both remembrance and inspiration thrive, linking the university's past with its ongoing legacy and future aspirations.

Level 1 (extrospection)

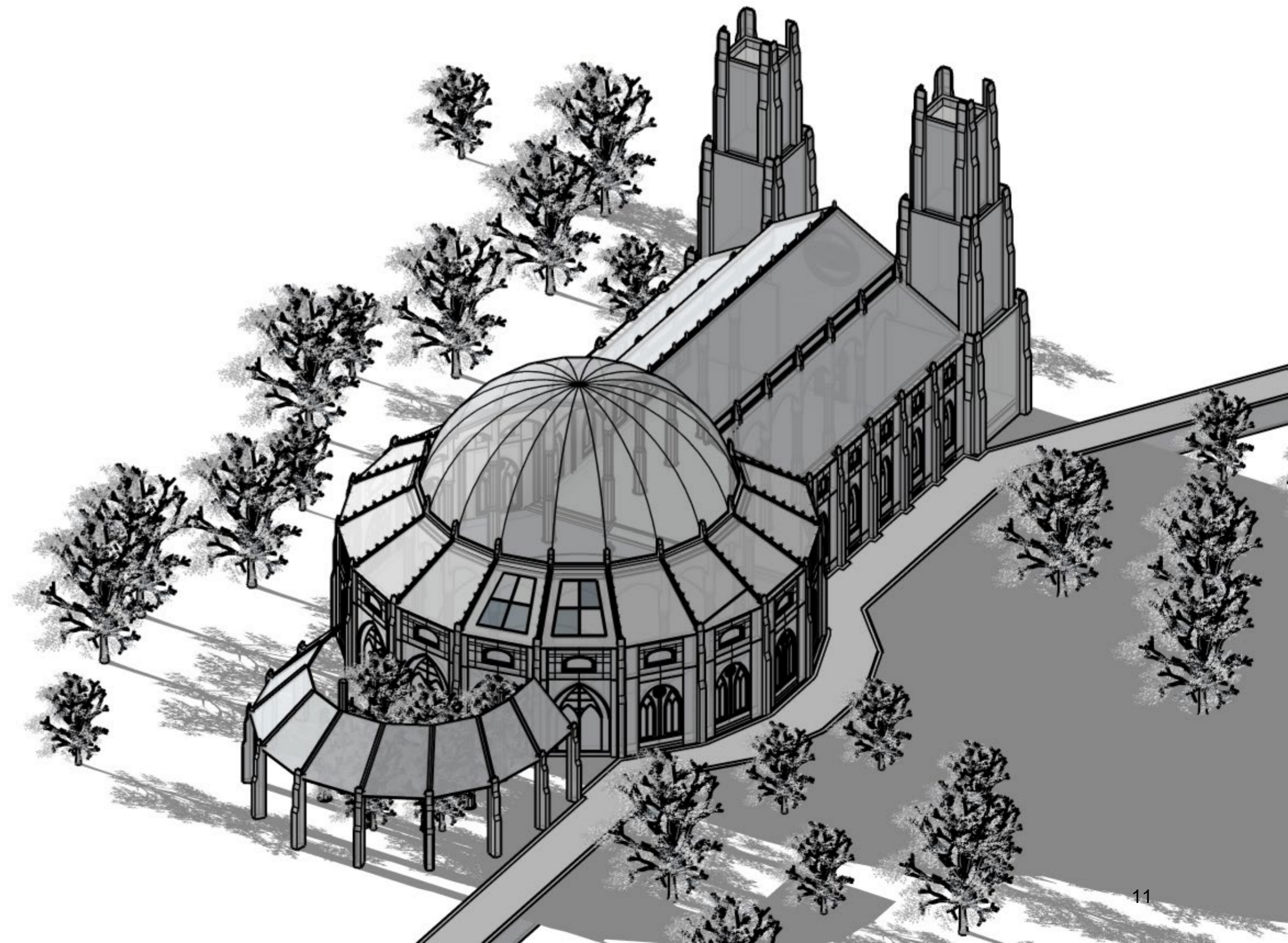
Level 1: Extrospection and Connection Level 1 is designed to encourage extrospection, inviting users to engage with the world around them. Expansive, open spaces flooded with natural light through tall windows, skylights, and courtyards create a vibrant, outward-facing atmosphere. These design elements evoke a sense of renewal, abundance, and growth, reflecting the themes of the solstices. The architecture fosters interaction, creativity, and community, drawing people together to experience life's fullness. It is a space that encourages outward energy, connection, and shared experiences.

CONCEPTUAL FRAMEWORK THROUGH BUILDING LEVELS : QUALITY OF LIGHT

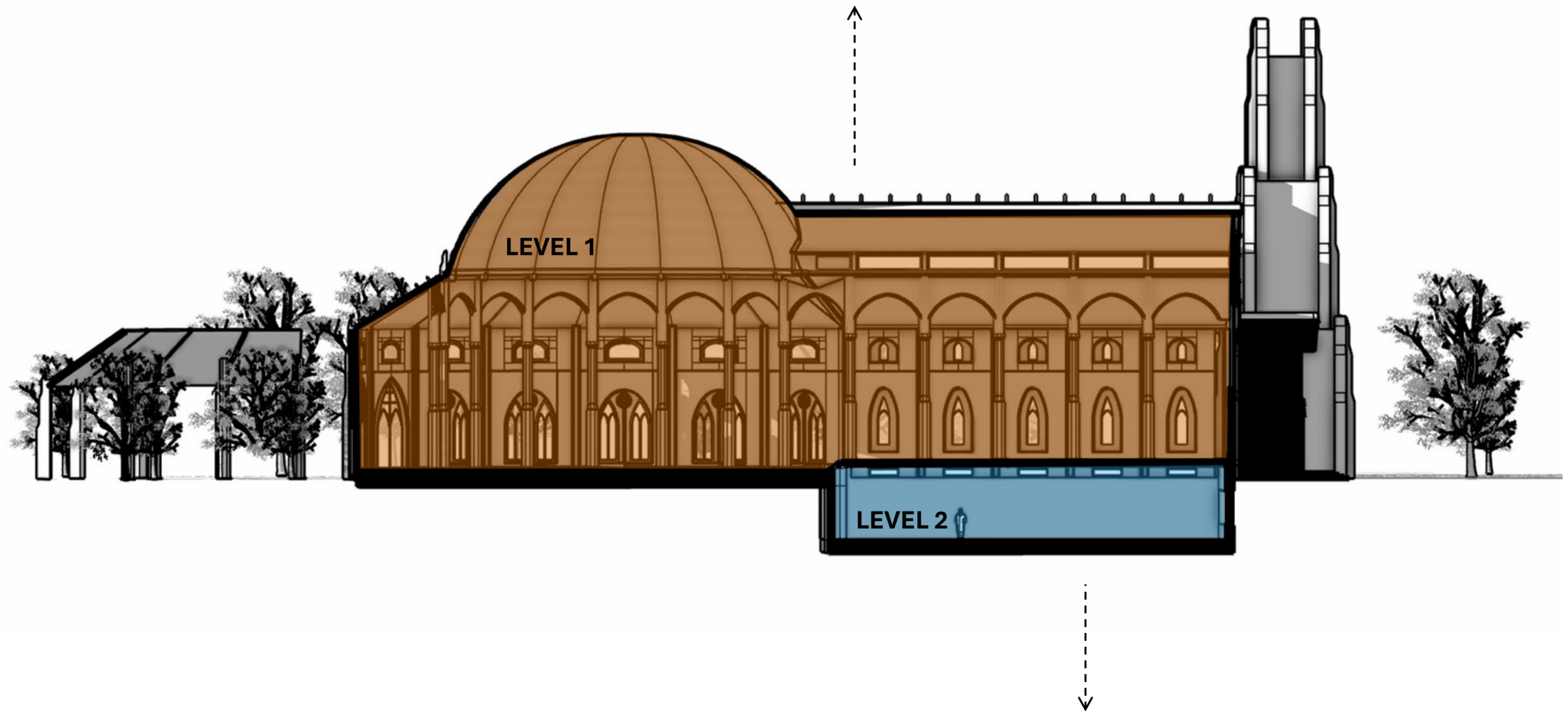
Level 2 (introspection)

Level 2: Introspection and Reflection Level 2 is dedicated to introspection, offering a sanctuary for personal reflection and inner peace. Soft, filtered light entering through narrow openings and warm, natural materials create intimate spaces that evoke calm and safety. The design encourages solitude and stillness, providing areas for self-reflection and connection with one's inner world. Aligning with the themes of retreat and contemplation from the solstices, Level 2 offers a peaceful environment for moments of quiet introspection and personal growth. It is a space that nurtures inner energy and healing.

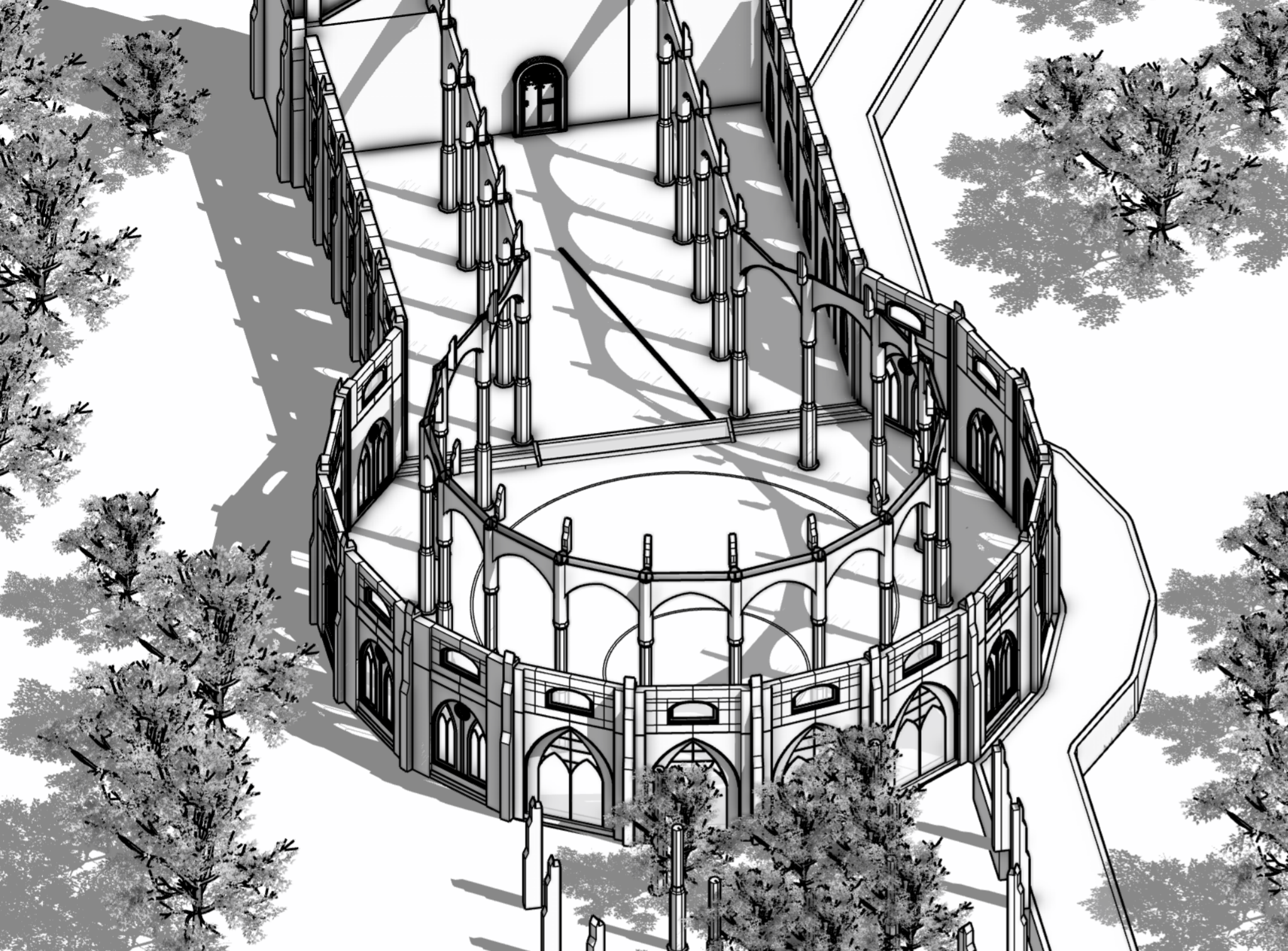
ARCHITECTURAL CANVAS



Level 1 is designed for outward focus of light, reveals your surroundings and the divine around you. Level that depicts *Transcendence*.



Level 2 is designed for inward focus of light, reveals your yourself and creates space for introspection and reveals the divine within. Level that depicts *immanence*.

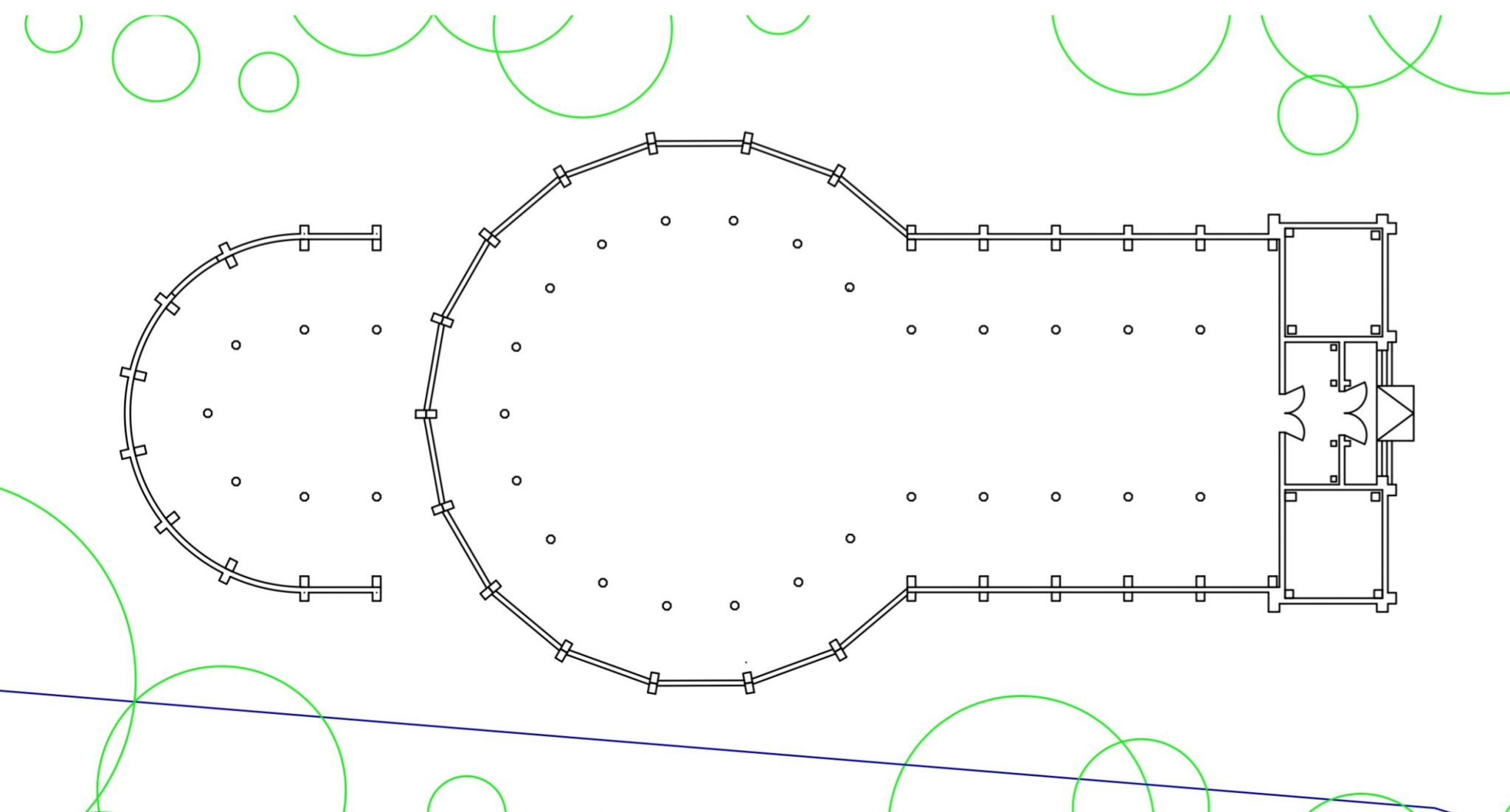


COLUMN DESIGN AND MEMORIALIZATION

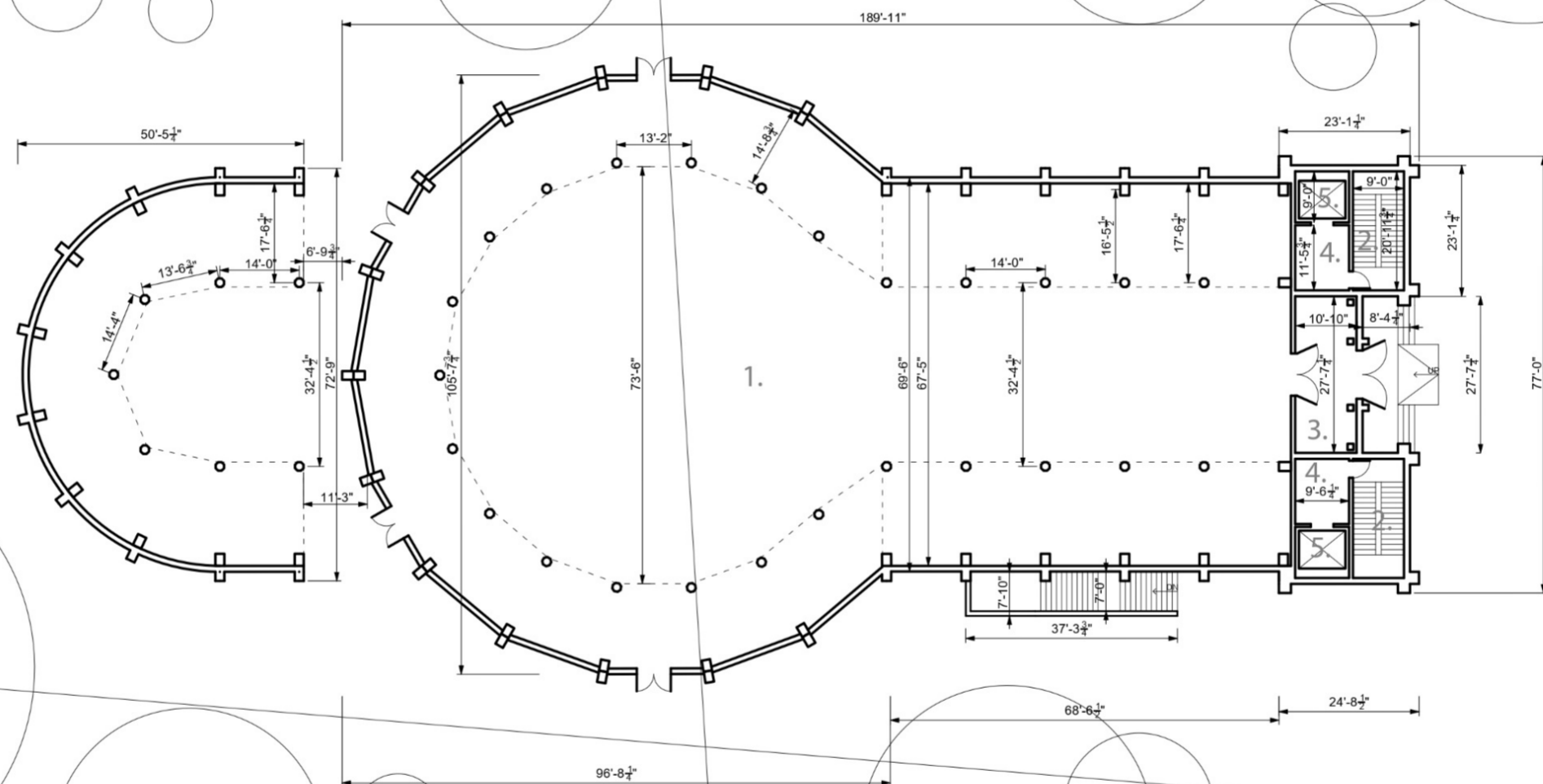
We continue to remember the 32 victims:

Ross A. Alameddine
 Christopher James Bishop
 Brian R. Bluhm
 Ryan Christopher Clark
 Austin Michelle Cloyd
 Jocelyne Couture-Nowak
 Daniel Alejandro Perez Cueva
 Kevin P. Granata
 Matthew Gregory Gwaltney
 Caitlin Millar Hammaren
 Jeremy Michael Herbstritt
 Rachael Elizabeth Hill
 Emily Jane Hilscher
 Jarrett Lee Lane
 Matthew Joseph La Porte
 Henry J. Lee

Liviu Librescu
 G.V. Loganathan
 Partahi Mamora Halomoan Lumbantoruan
 Lauren Ashley McCain
 Daniel Patrick O'Neil
 Juan Ramon Ortiz-Ortiz
 Minal Hiralal Panchal
 Erin Nicole Peterson
 Michael Steven Pohle, Jr.
 Julia Kathleen Pryde
 Mary Karen Read
 Reema Joseph Samaha
 Waleed Mohamed Shaalan
 Leslie Geraldine Sherman
 Maxine Shelly Turner
 Nicole Regina White



The 32 interior columns in the structure are a poignant tribute to the 32 victims who tragically lost their lives in the 2007 Virginia Tech shooting. Each column represents one of the victims, standing as a solemn memorial to honor their memory. The design of these columns not only acknowledges the profound loss but also symbolizes transcendence—signifying a journey beyond death, from sorrow to hope. As the columns rise within the space, they embody the enduring spirit of those lost and serve as a reminder of the importance of mental health awareness and the need for healing. This architectural element acts as both a memorial and a symbol of resilience, offering a space for reflection and a connection to those who have passed, while also fostering growth and renewal for future generations.

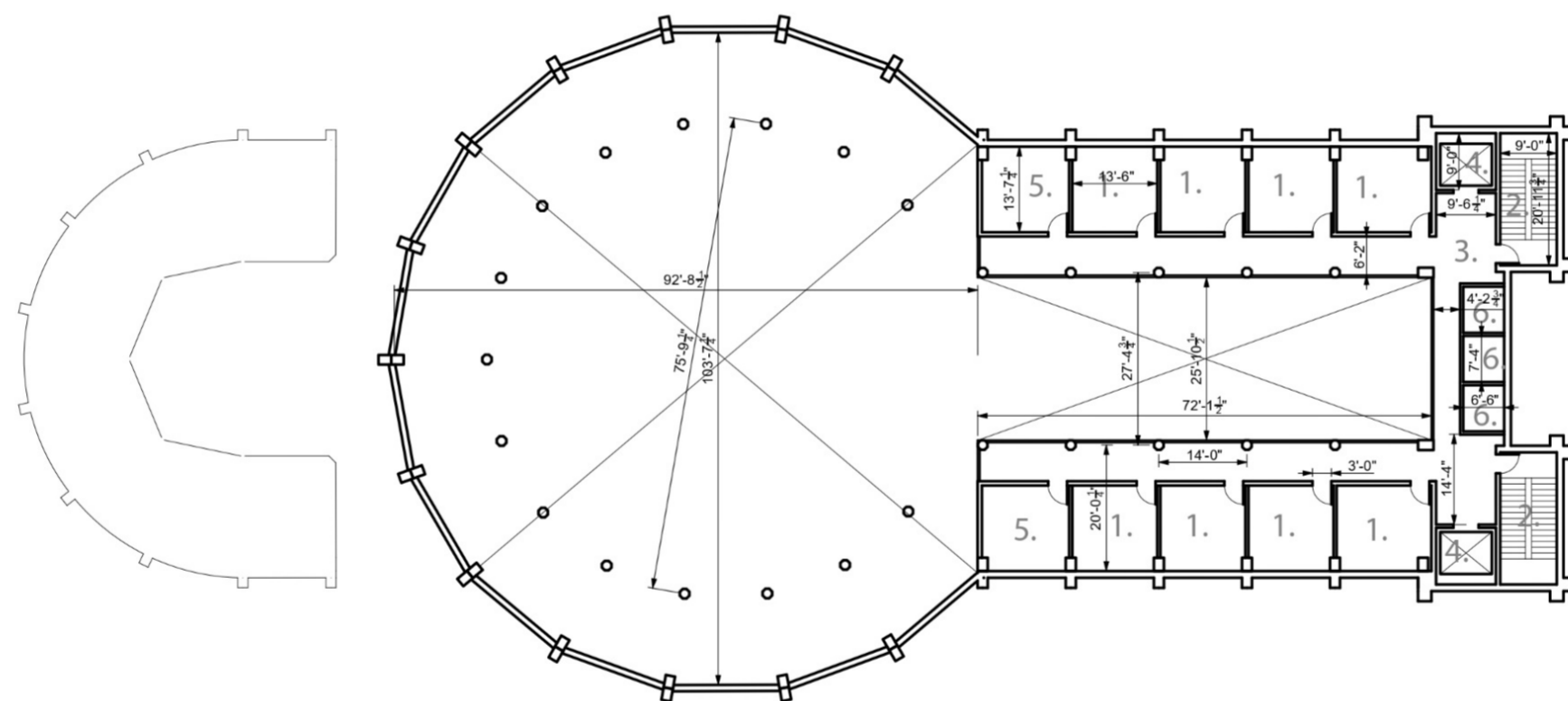


- 1. Hall/ Auditorium - 13227 sf
- 2. Stairs - 188 sf each (376 total)
- 3. Vestibule - 298 sf
- 4. Corridor - 109 sf each
- 5. Elevator - 86 sf each

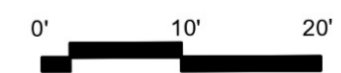
First Floor - 14554 sf

Total Square Footage for whole building - 27517 sf

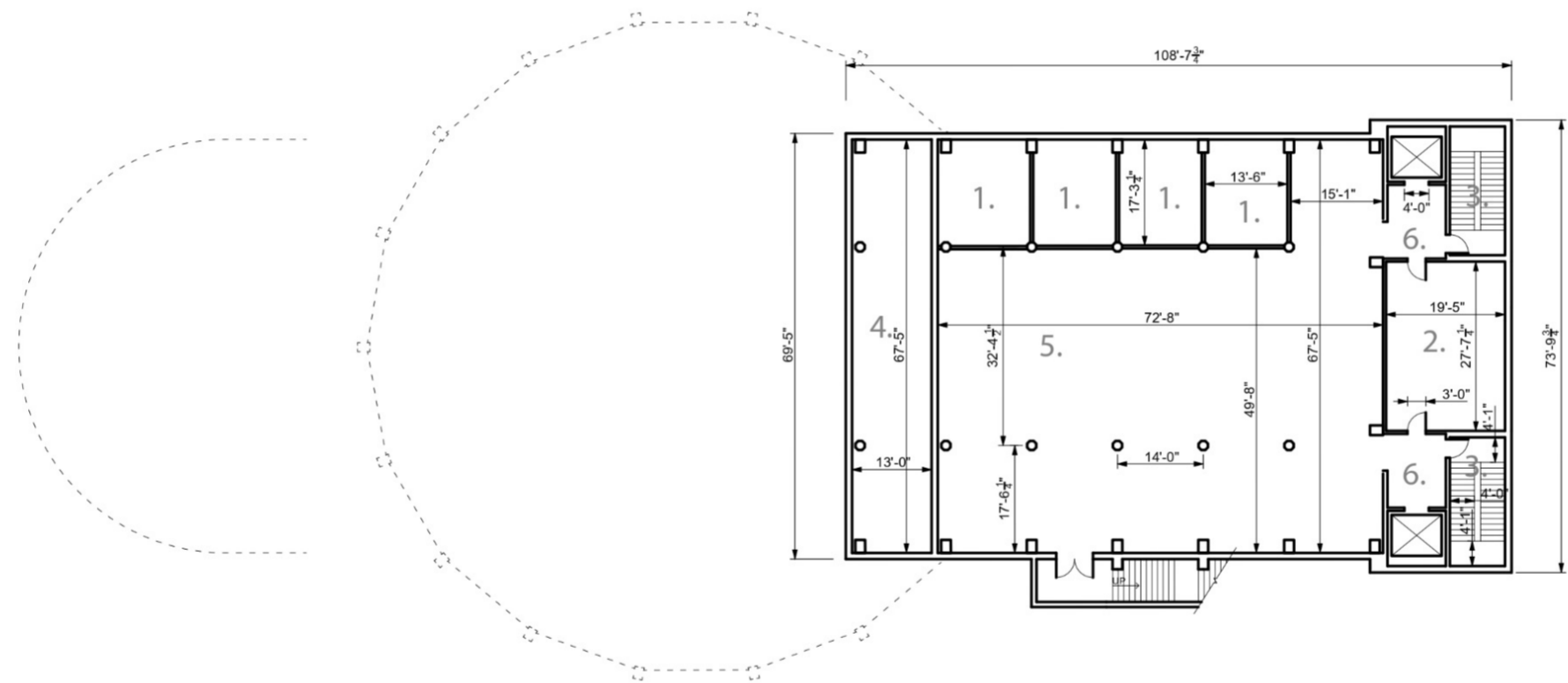
FIRST FLOOR PLAN
1/32" = 1' - 0"



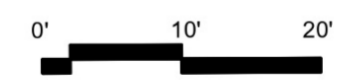
- 1. Offices/ Meeting Rooms - 205 sf each
 - 2. Stairs - 188 sf each
 - 3. Corridor - 1507 sf
 - 4. Elevator - 86 sf each
 - 5. Stairs / Mech - 205 sf
 - 6. Restrooms - 48 sf each
- Second Floor - 4479 sf



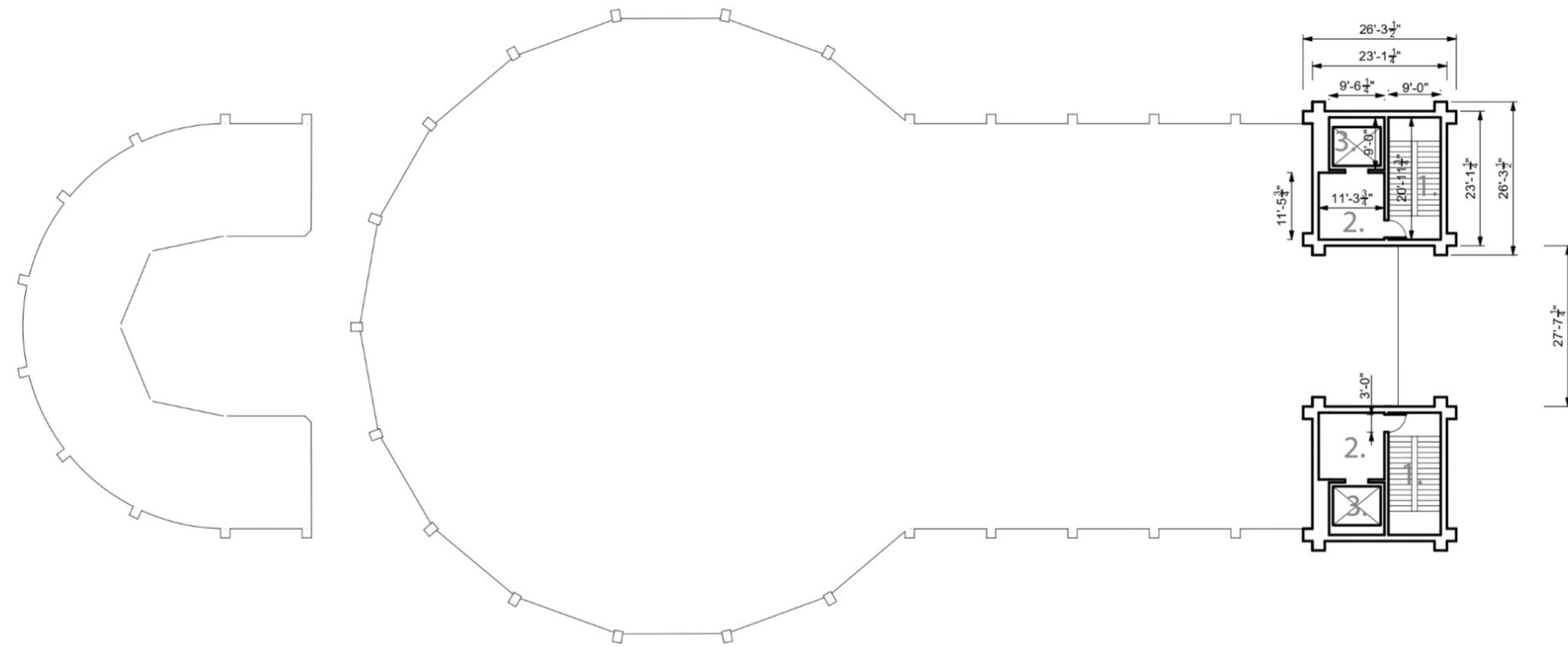
SECOND FLOOR PLAN
1/32" = 1' - 0"



- 1. Sensory Rooms - 243 sf
 - 2. Restrooms - 536 sf
 - 3. Stairs - 188 sf each
 - 4. Mechanical Core - 876 sf
 - 5. Sensory Space - 3894
 - 6. Corridor - 109 sf
- Basement - 7416 sf



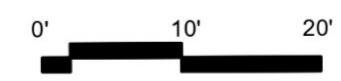
BASEMENT PLAN
1/32" = 1' - 0"



- 1. Stairs - 188 sf
- 2. Corridor - 109 sf
- 3. Elevator - 86 sf

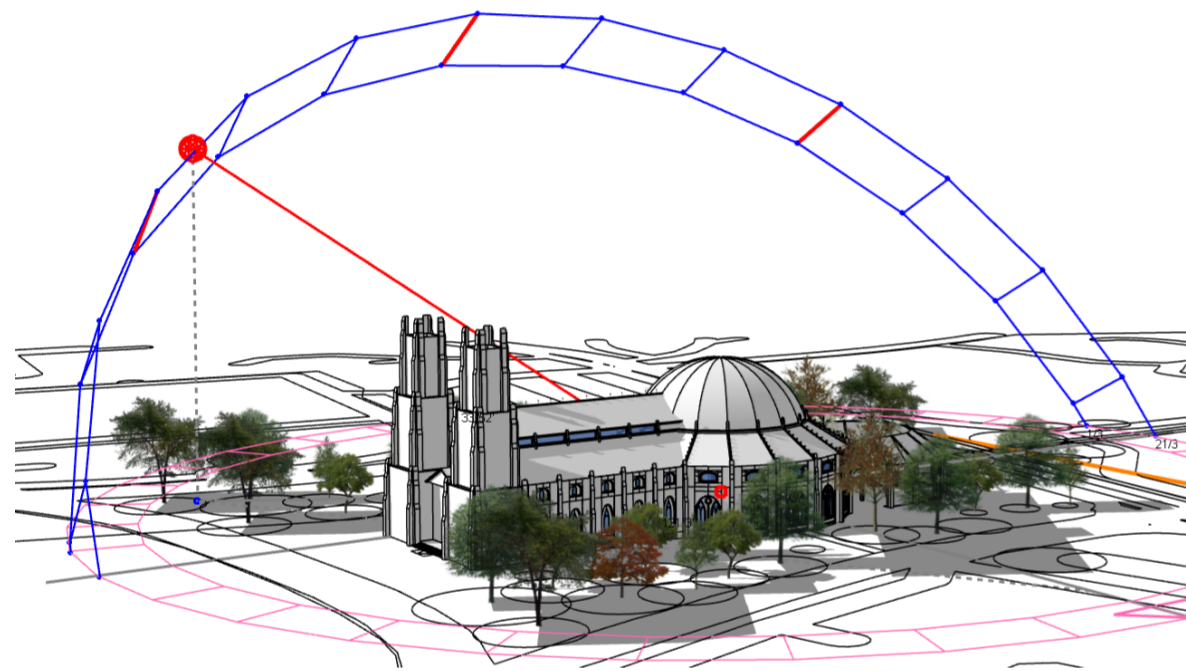
Third Floor - 1068 sf total

534 sf per tower

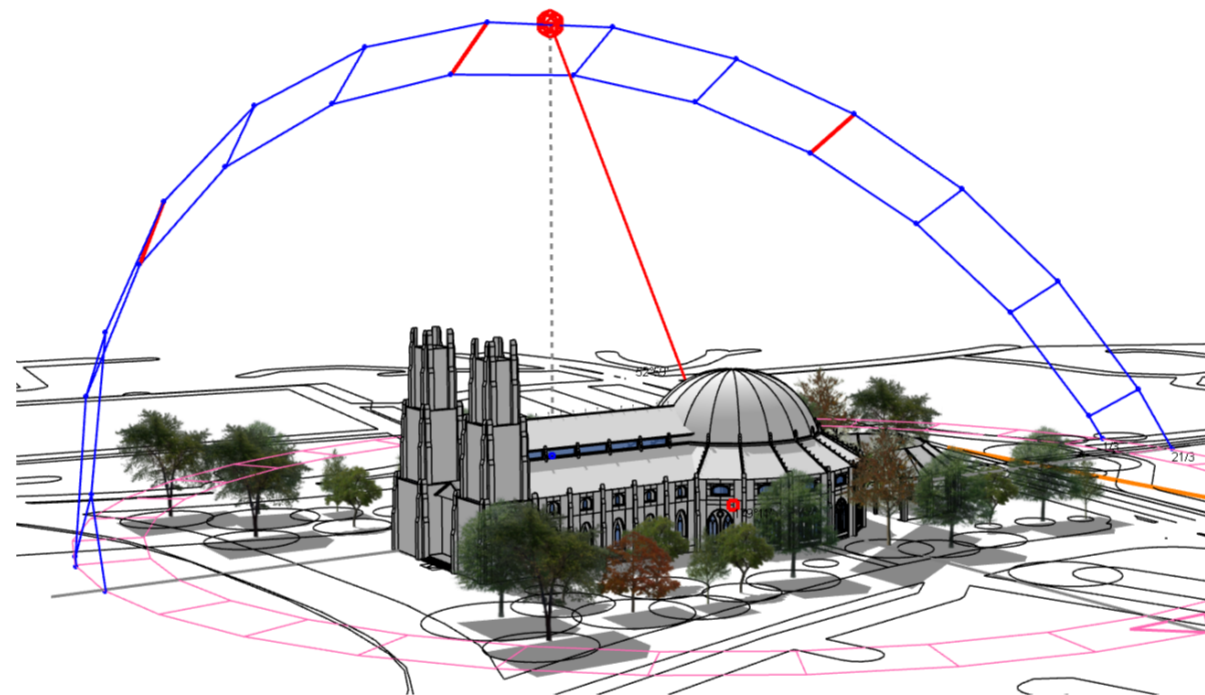


THIRD FLOOR PLAN
1/32" = 1' - 0"

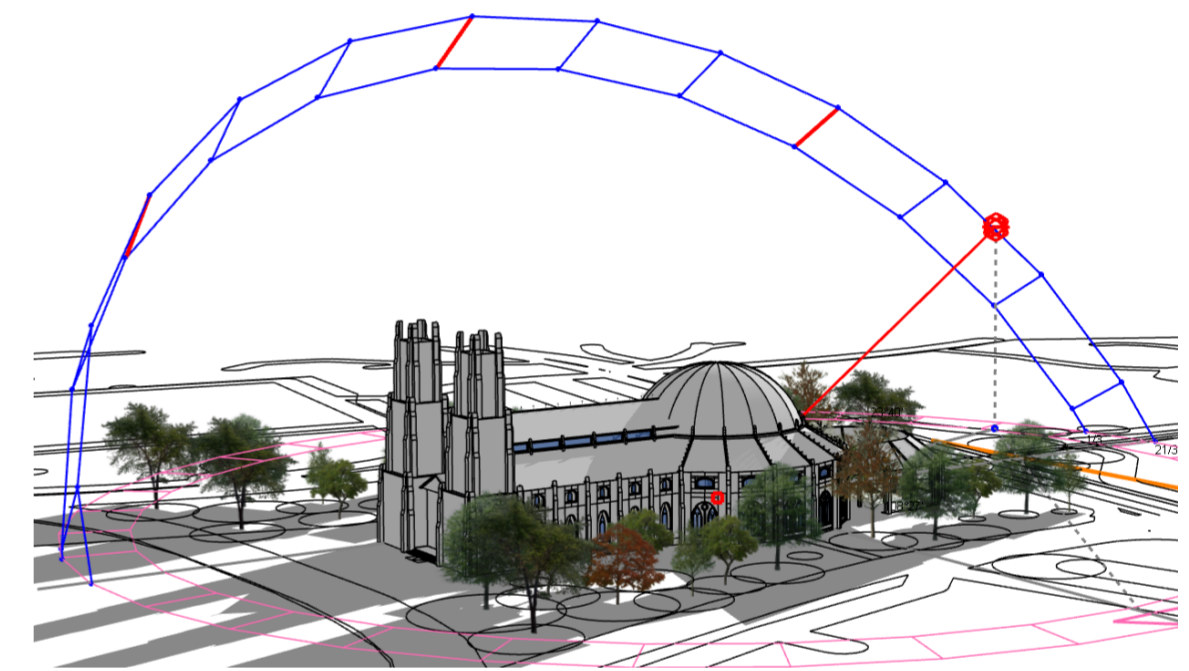
Spring Equinox



Morning
Spring equinox - 9:30am
Azimuth 109.36, Altitude 23.72

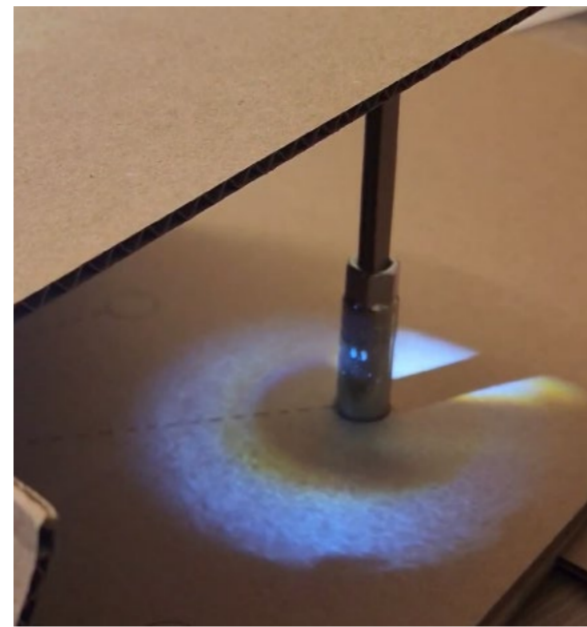
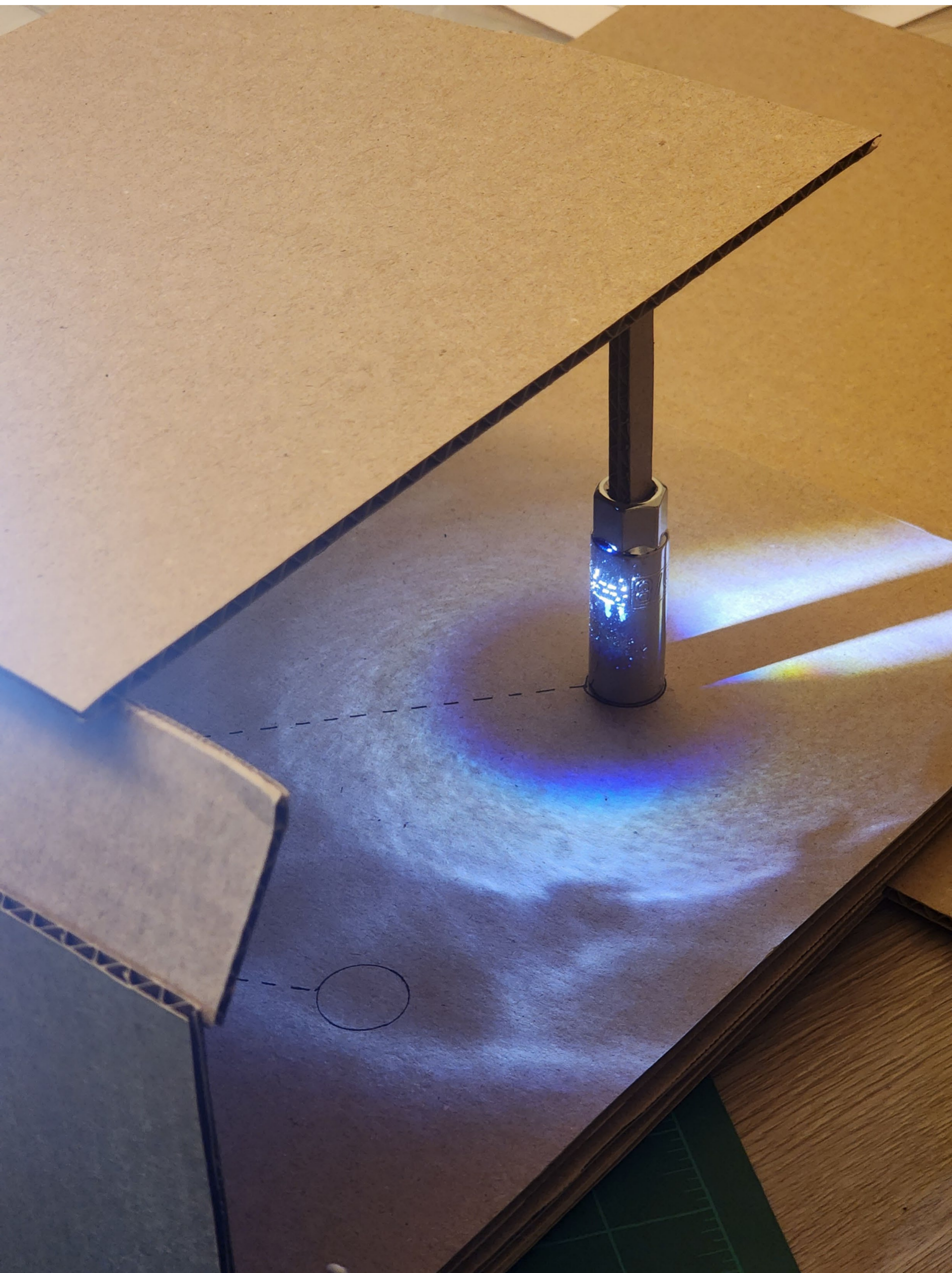


Noon
Spring equinox - 12:30pm
Azimuth 156.41, Altitude 50.48



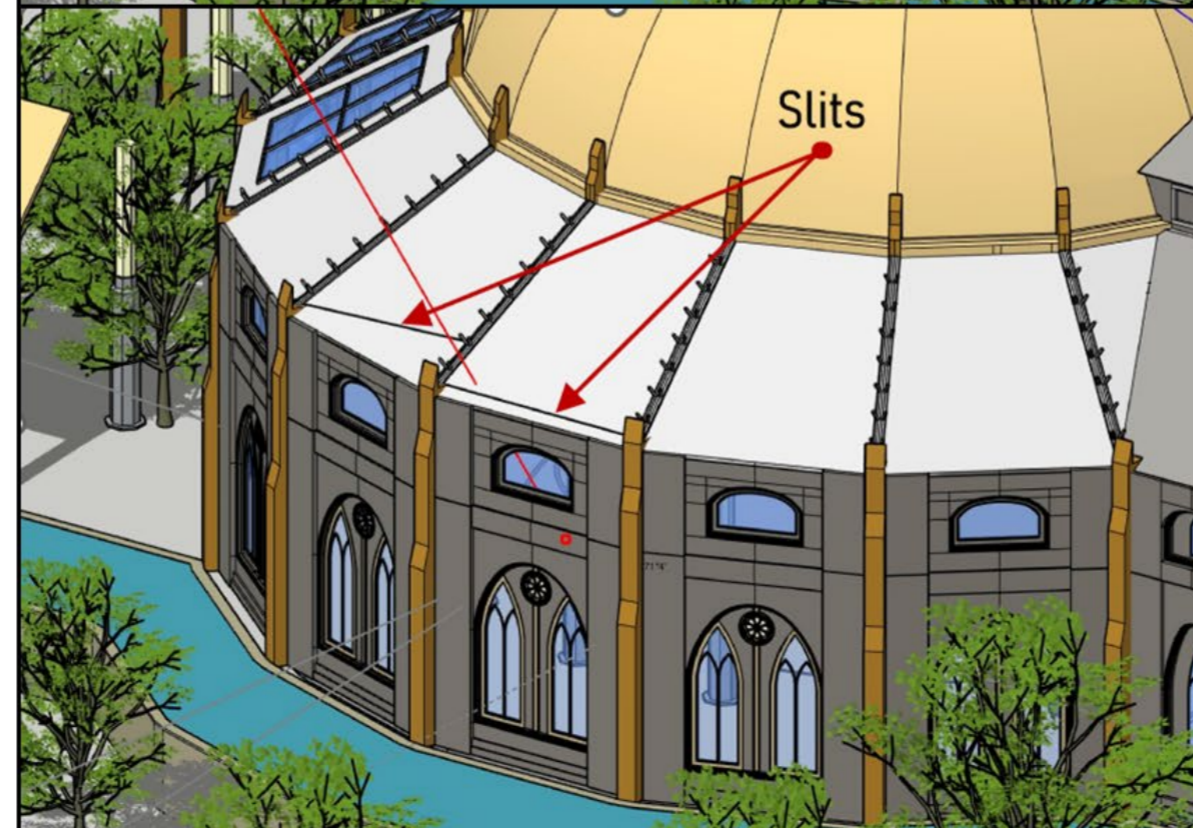
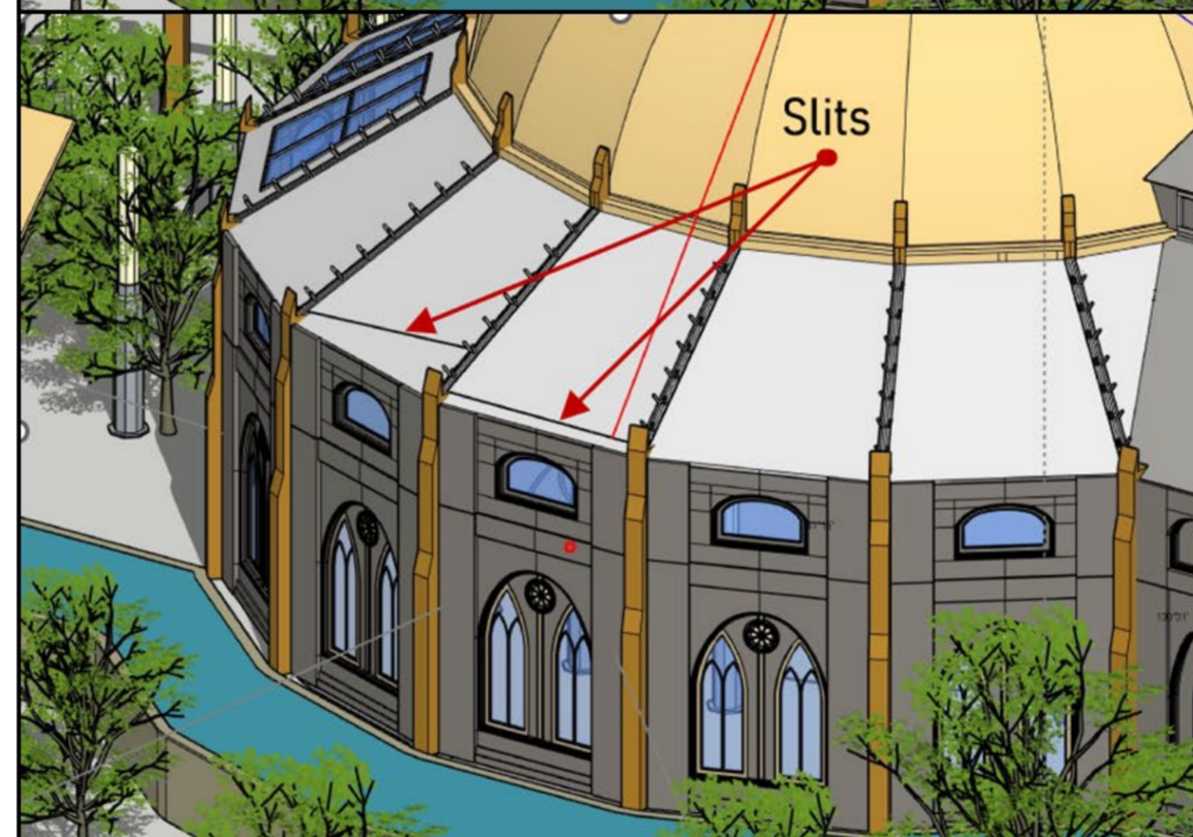
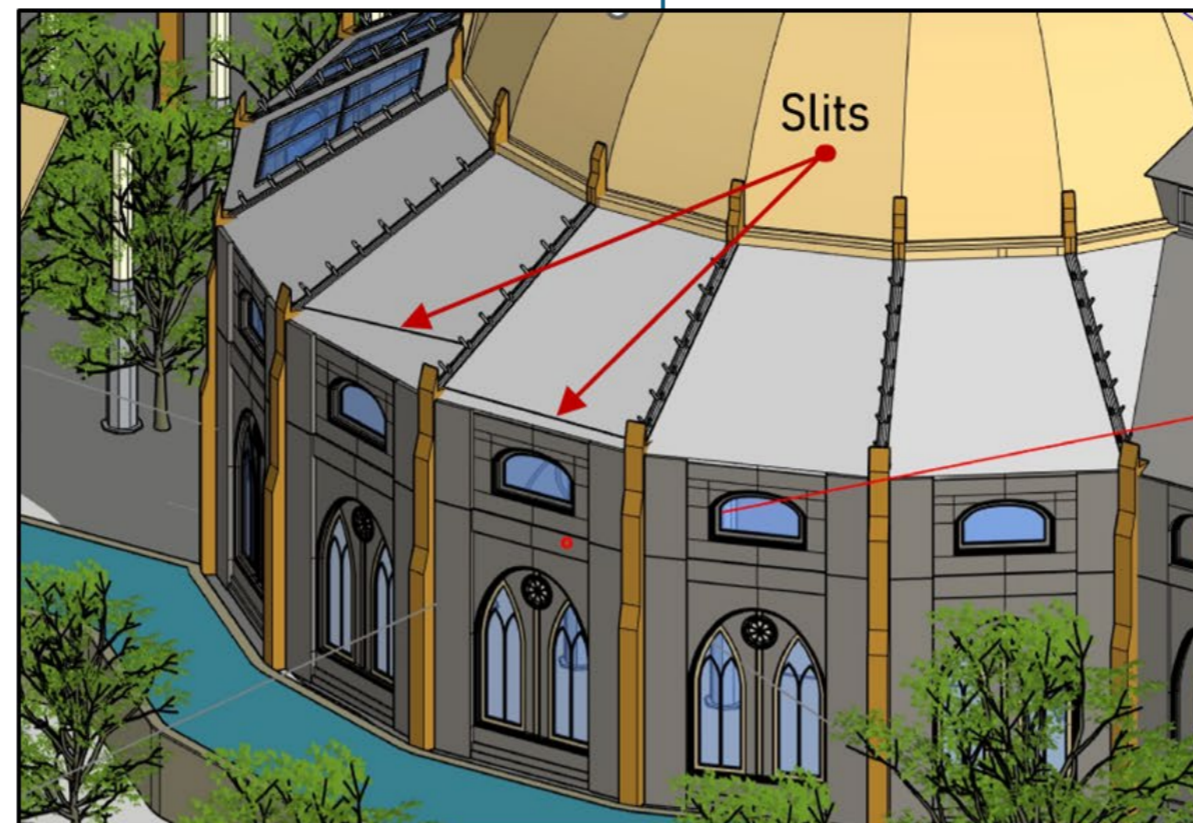
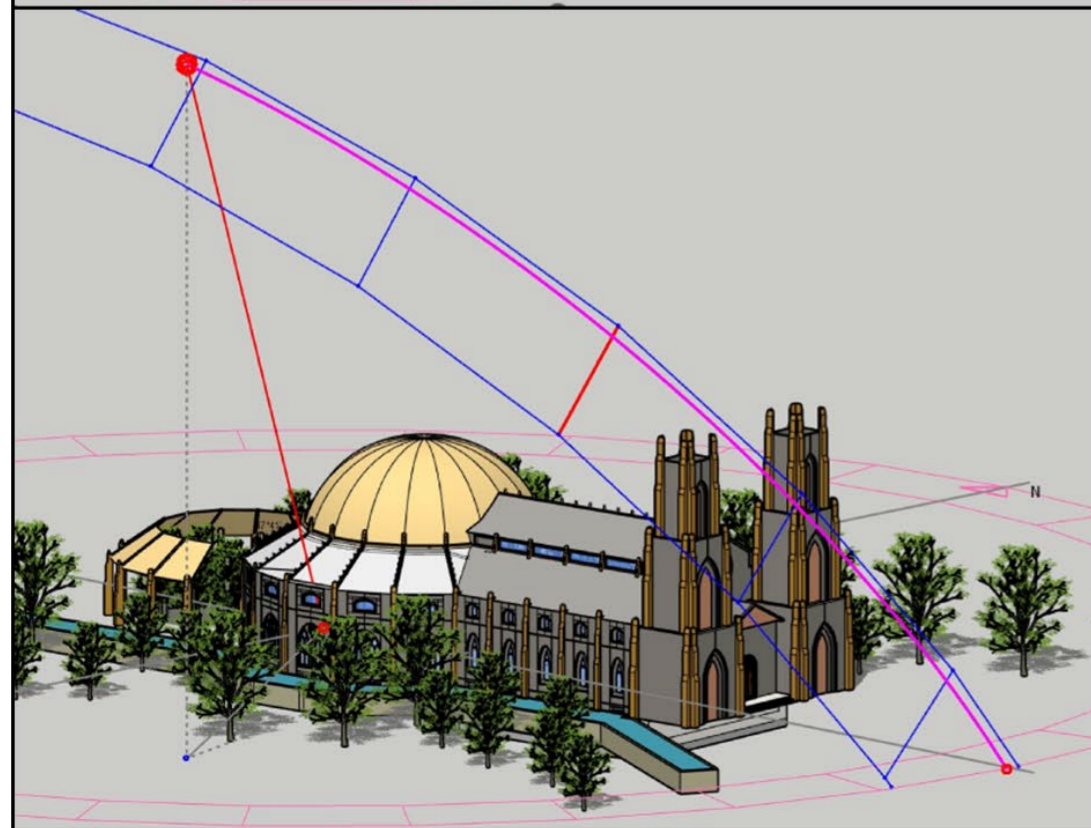
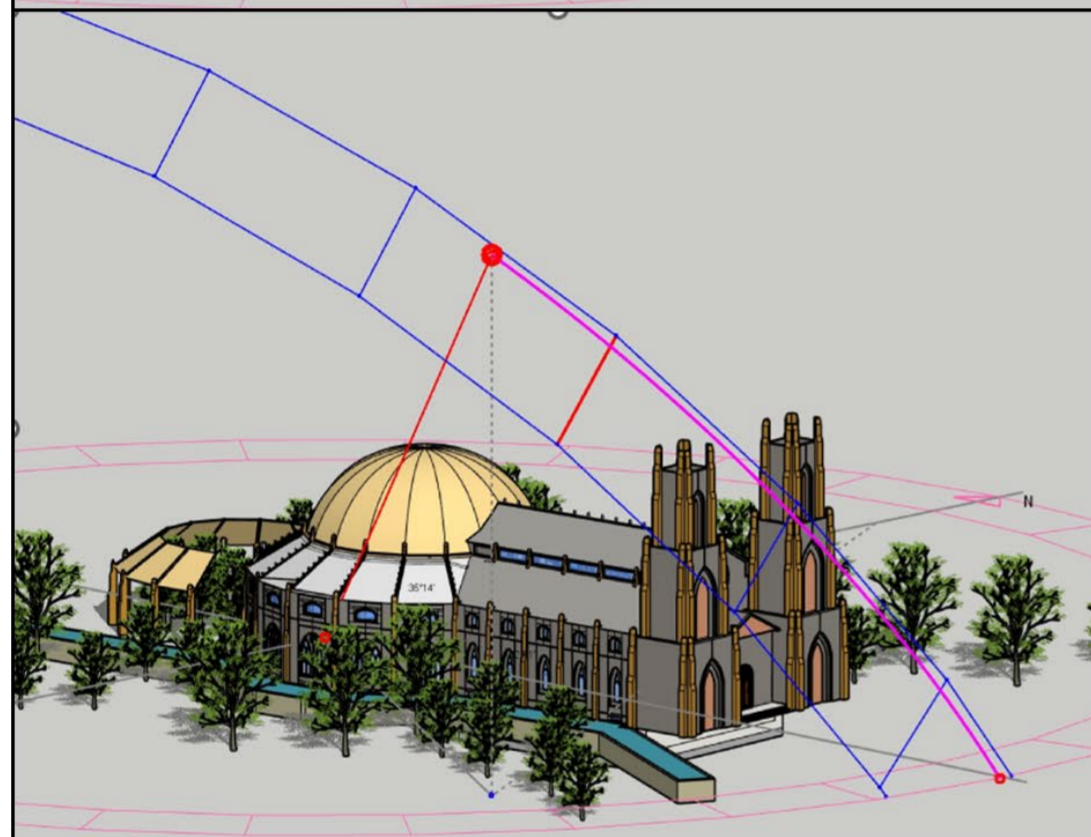
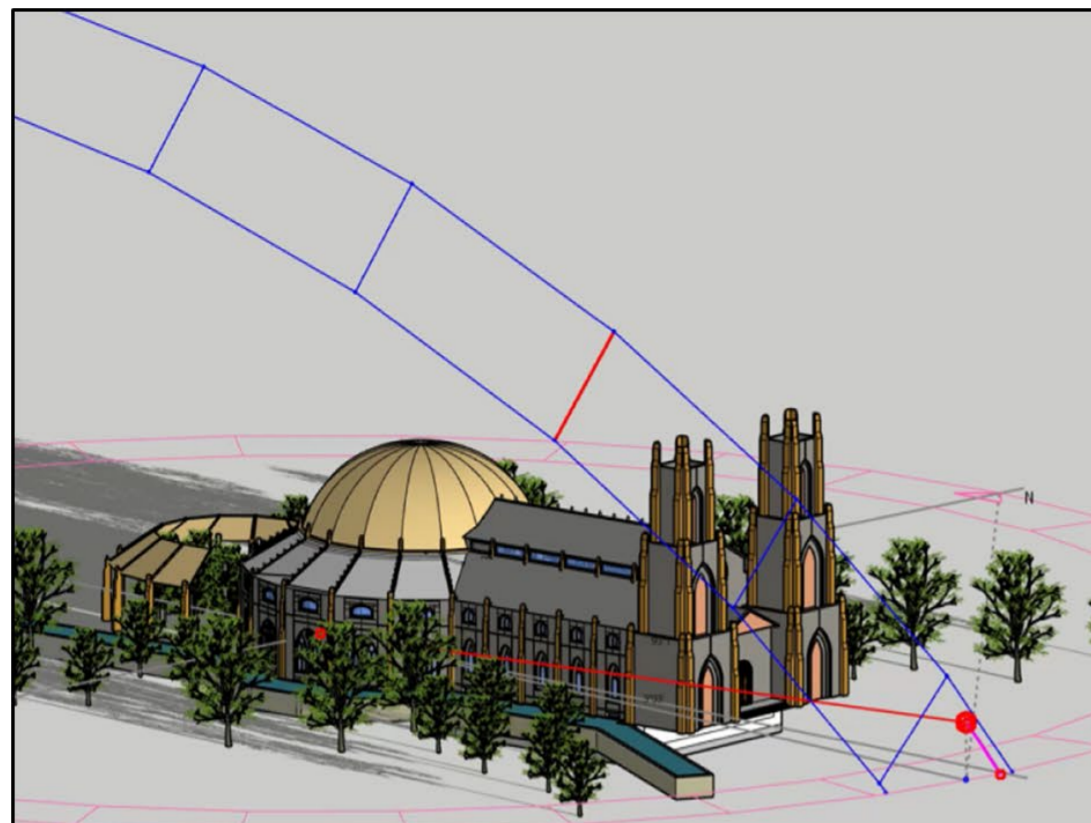
Evening
Spring equinox - 4:30pm
Azimuth 239.21, Altitude 34.26





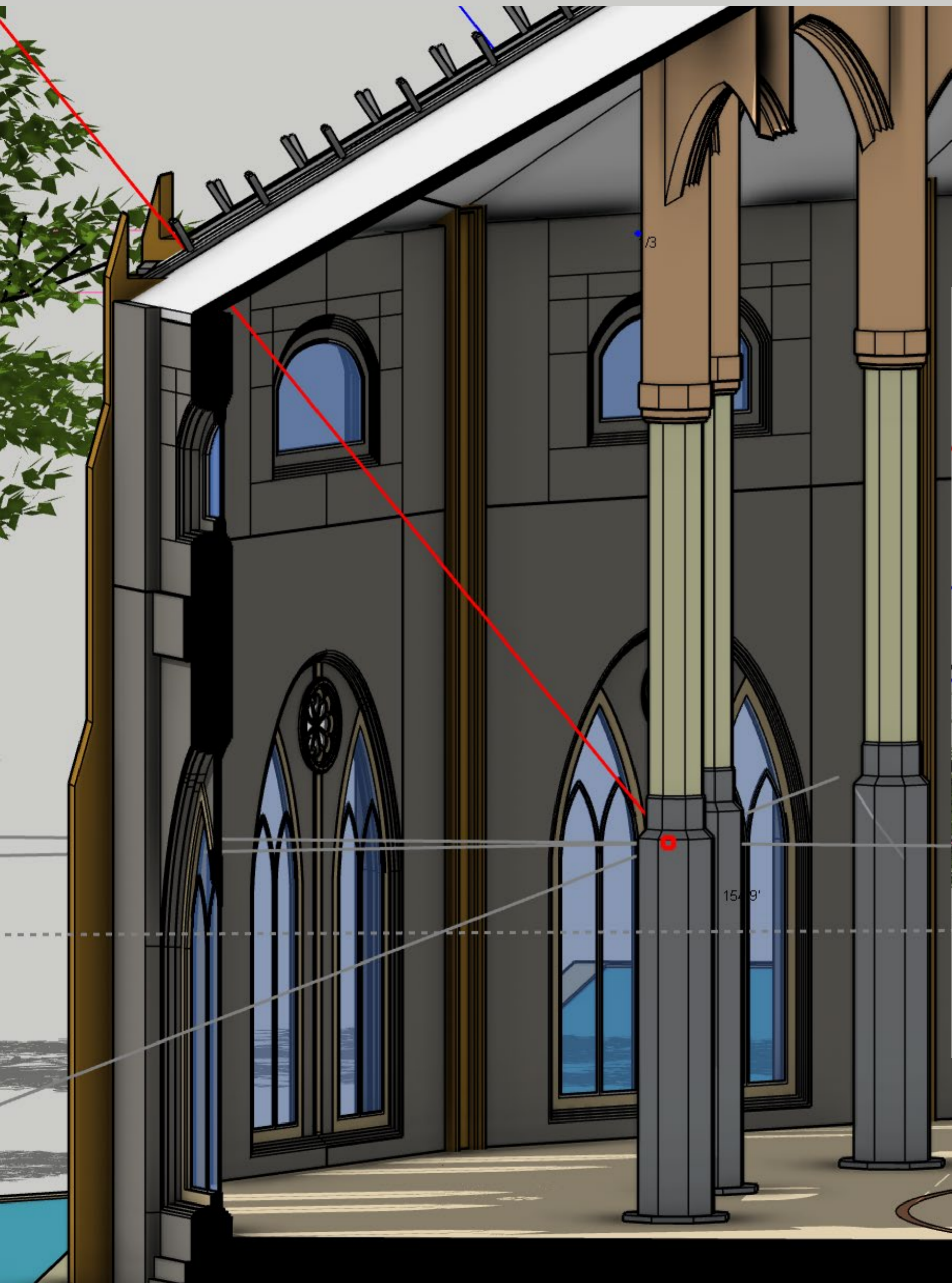
HALOS OF REMEMBERANCE

During the spring equinox, the dome's architectural design comes alive with profound symbolism. Slender slits in the dome's skirt allow beams of sunlight to filter through, striking the brushed steel bases of the 32 interior columns. As the light touches the polished metal, it scatters softly, creating radiant halos at the foot of each column. This ethereal display symbolizes the transcendence of the 32 victims, as if their memory is illuminated and elevated by the interplay of light and structure. The moment captures a sense of hope and renewal, transforming the space into a sanctuary where light itself becomes a poetic expression of remembrance and spiritual ascent. The gentle halos serve as a timeless tribute, embodying both the beauty of life and the enduring legacy of those lost.

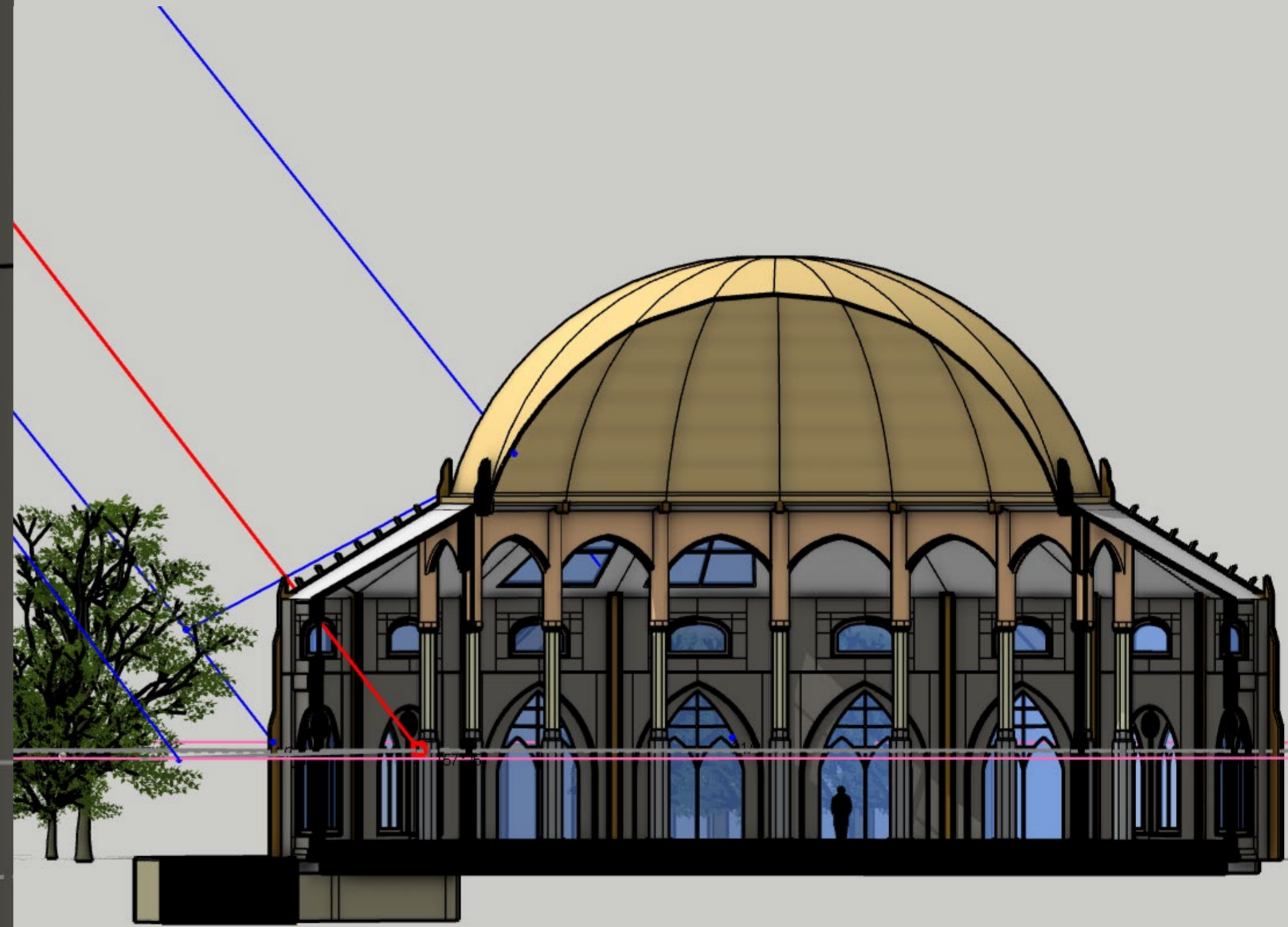


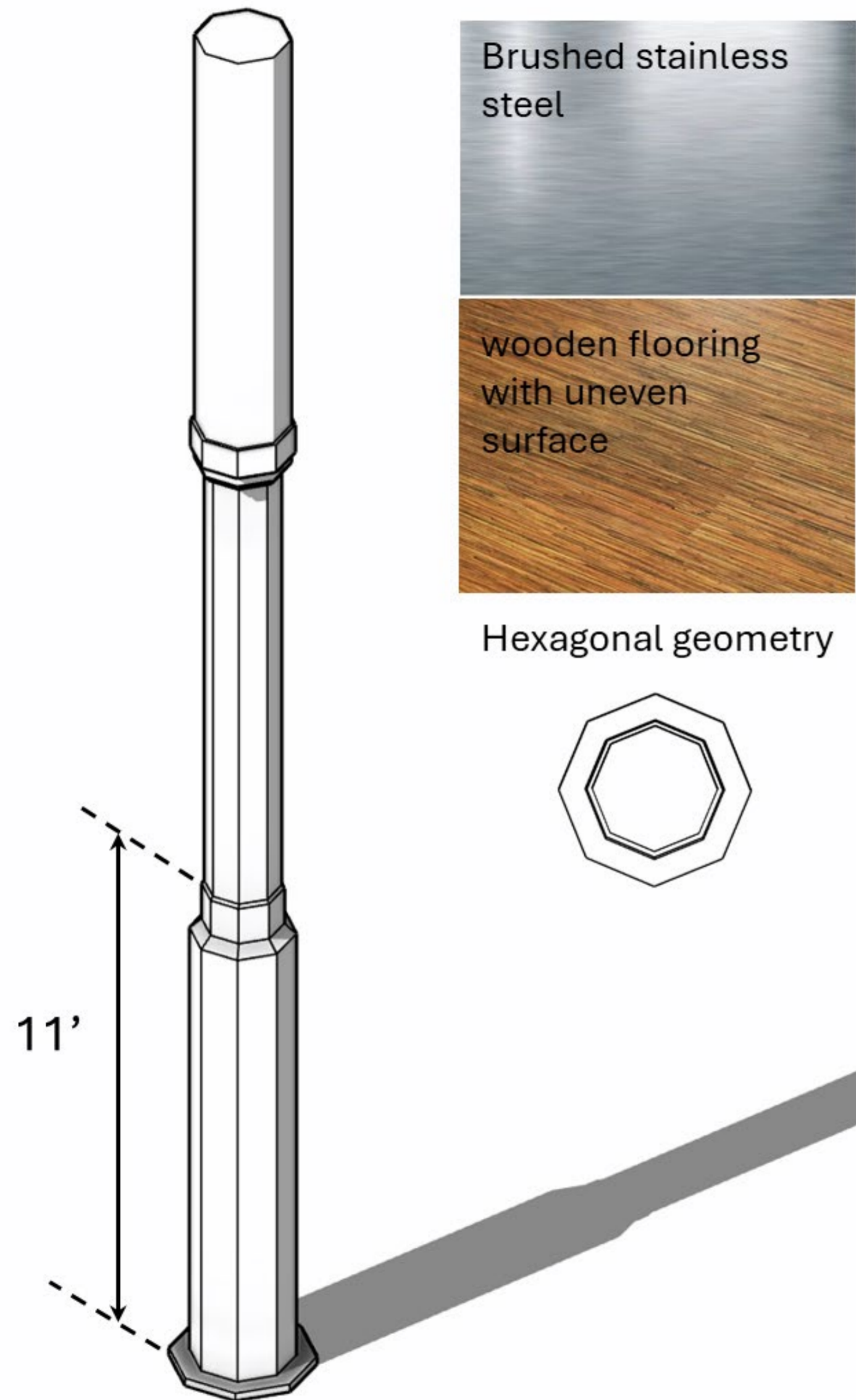
CELESTIAL ALIGNMENT

The journey of sunlight through the precisely engineered slits in the dome is a harmonious blend of architecture and celestial alignment. These slits are carefully positioned based on meticulous calculations of the sun's path during the spring equinox, taking into account the exact azimuth and altitude of the sun. As the sunlight travels through, it creates a mesmerizing display of light and shadow, perfectly timed to mark the equinox. The resulting imagery showcases the union of nature and design, as the light traces its path across the dome, culminating in the creation of halos at the bases of the columns. This interplay of light serves as a testament to the thoughtful integration of solar geometry and the structure's transcendent purpose.



Spring equinox - 12:30pm
Azimuth 156.41, Altitude 50.48

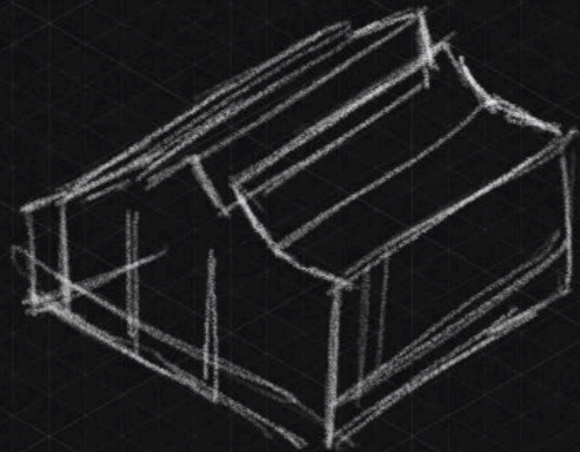
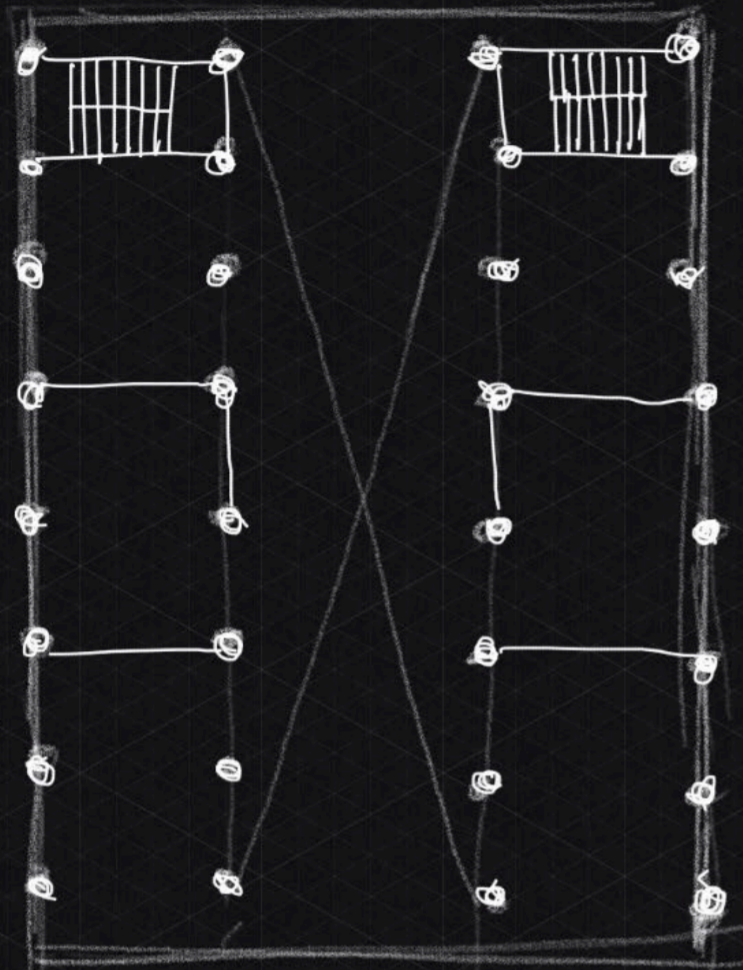




Material Alchemy: Crafting the Halo Effect

The materials of the columns are meticulously chosen to enhance the ethereal quality of the halo effect during the spring equinox. The brushed stainless steel base of each column creates a glittering effect as sunlight touches its surface, scattering the light in a delicate, shimmering display. The bevel edge at the top of the steel base amplifies this phenomenon, refracting the light into a symmetrical flower-like pattern that radiates outward with stunning precision. The surrounding wood flooring further accentuates this visual impact, its warm tones and subtle grain reflecting the scattered light to enrich the overall brilliance of the halo. Extensive experiments revealed that for this phenomenon to occur, the steel base must stand precisely at 11 inches in height. This precise measurement ensures the interplay of light, material, and geometry is perfectly calibrated, transforming the space into a living, luminous memorial. The resulting effect not only celebrates the transcendence of those honored but also creates a moment of awe and connection for all who experience it.

GREAT HALL.



- light representing ascension.

- light filling up a space.

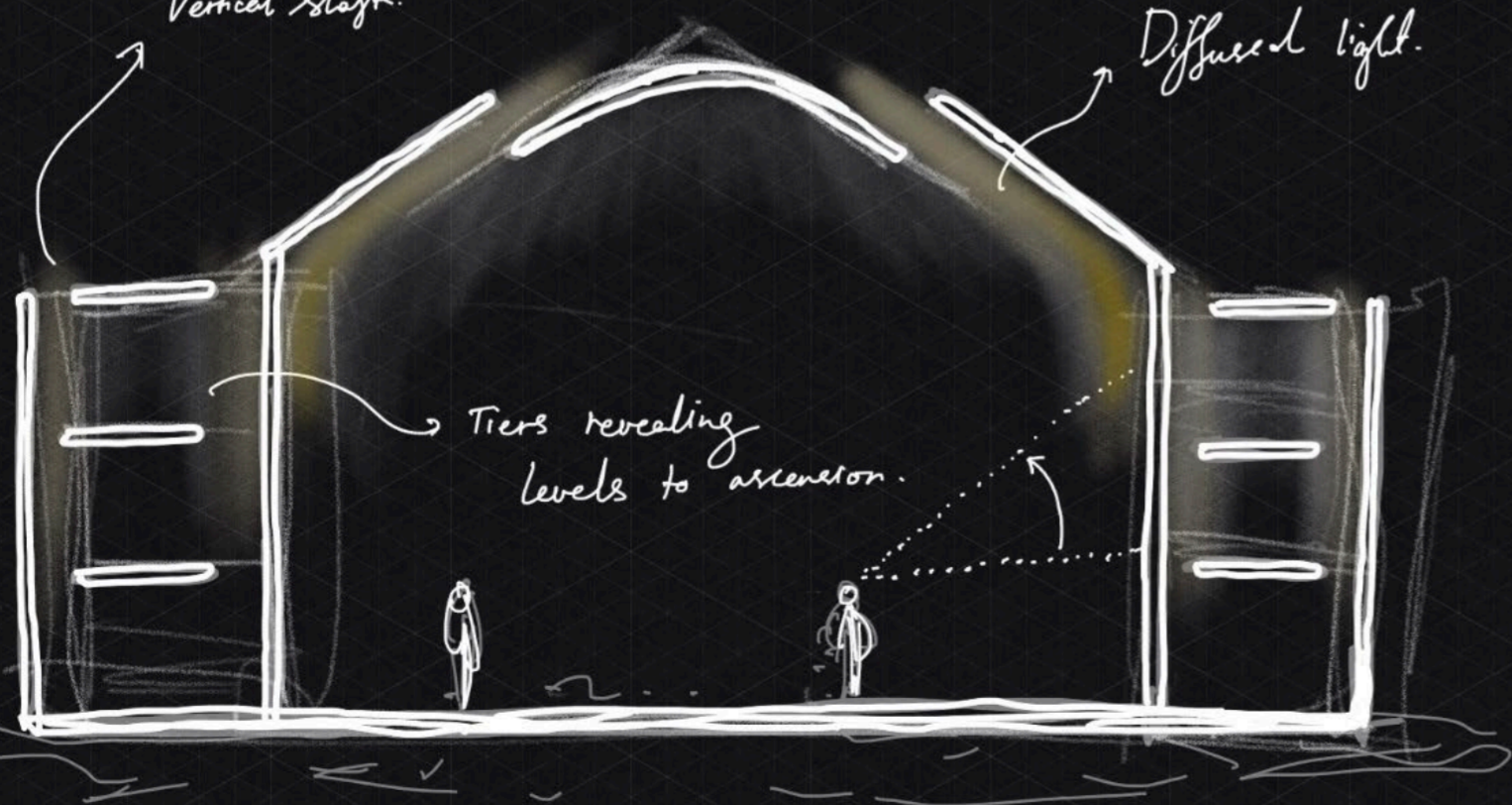
"Evoking Hope"

Sense of Elevation or Change.

Vertical shafts.

Diffused light.

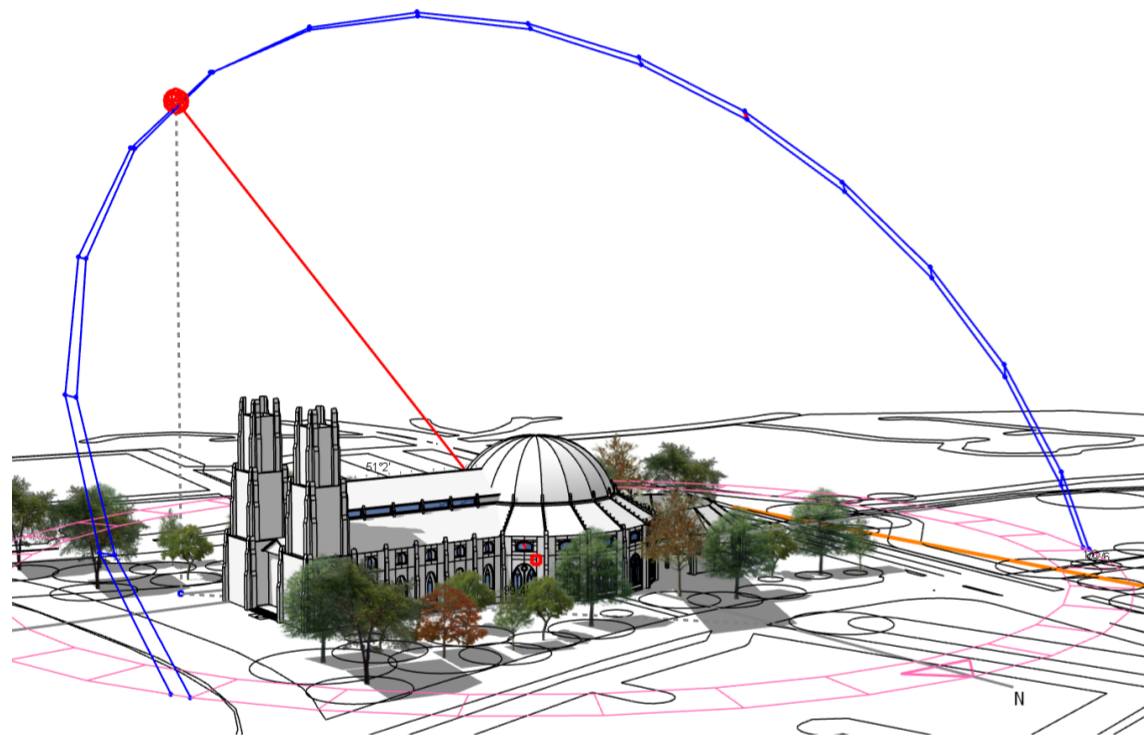
Tiers revealing levels to ascension.



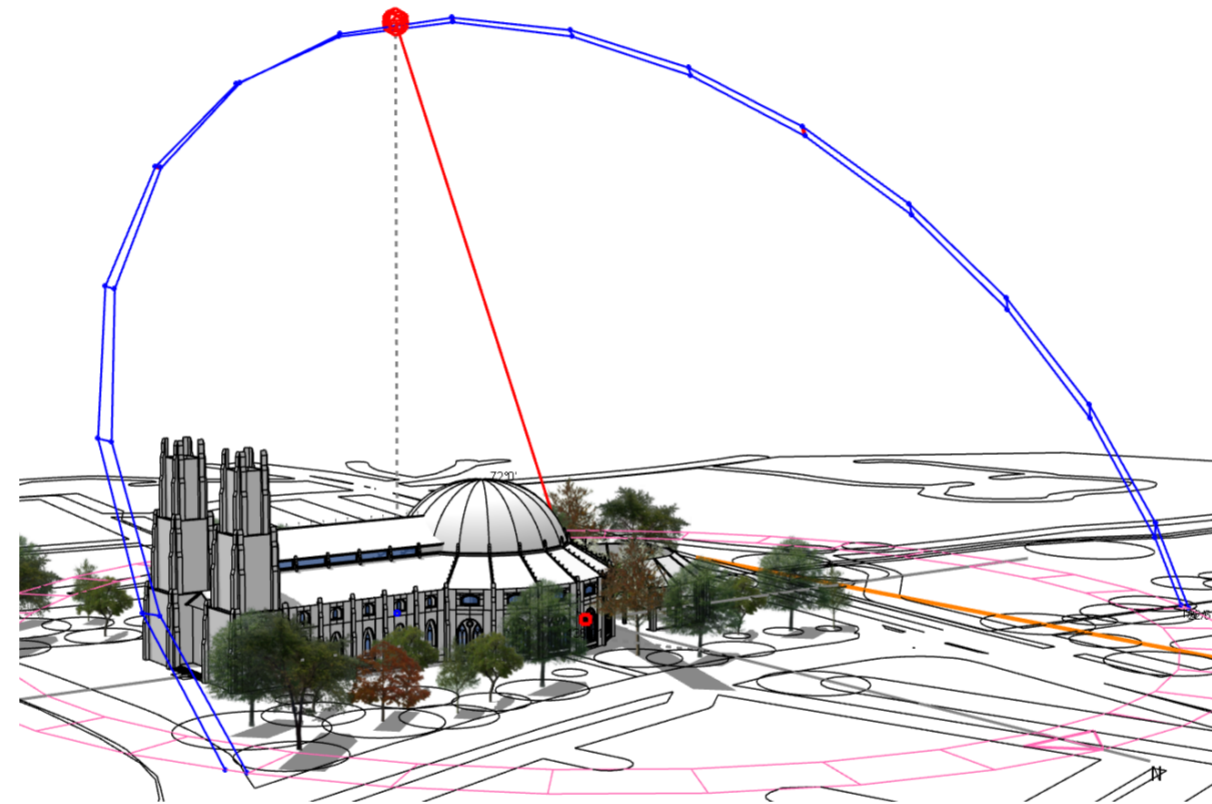
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- **Quality of Light: Vertical shafts of light**, often soft and ethereal, that seem to come from above.
- **Description:** Light representing ascension through a halo that surrounds the columns that marks the student memorial columns and transformation would be designed to flow from above, invoking the feeling of rising or connection to the heavens. **Vertical light shafts** were often used to symbolize this upward movement, with light passing through elevated openings, such as **domes, skylights**, or high windows, subtly drawing the eyes upwards.
- **Examples:**
 - In the **Pantheon** in Rome, the oculus allows a beam of sunlight to pour down through the center, symbolizing a connection between the earth and the heavens.
 - In **Byzantine churches**, like Hagia Sophia, the dome allows light to cascade down, creating a sensation of spiritual elevation.
- **Mood:** Serene, transcendent, inviting, evoking hope and spiritual transformation.

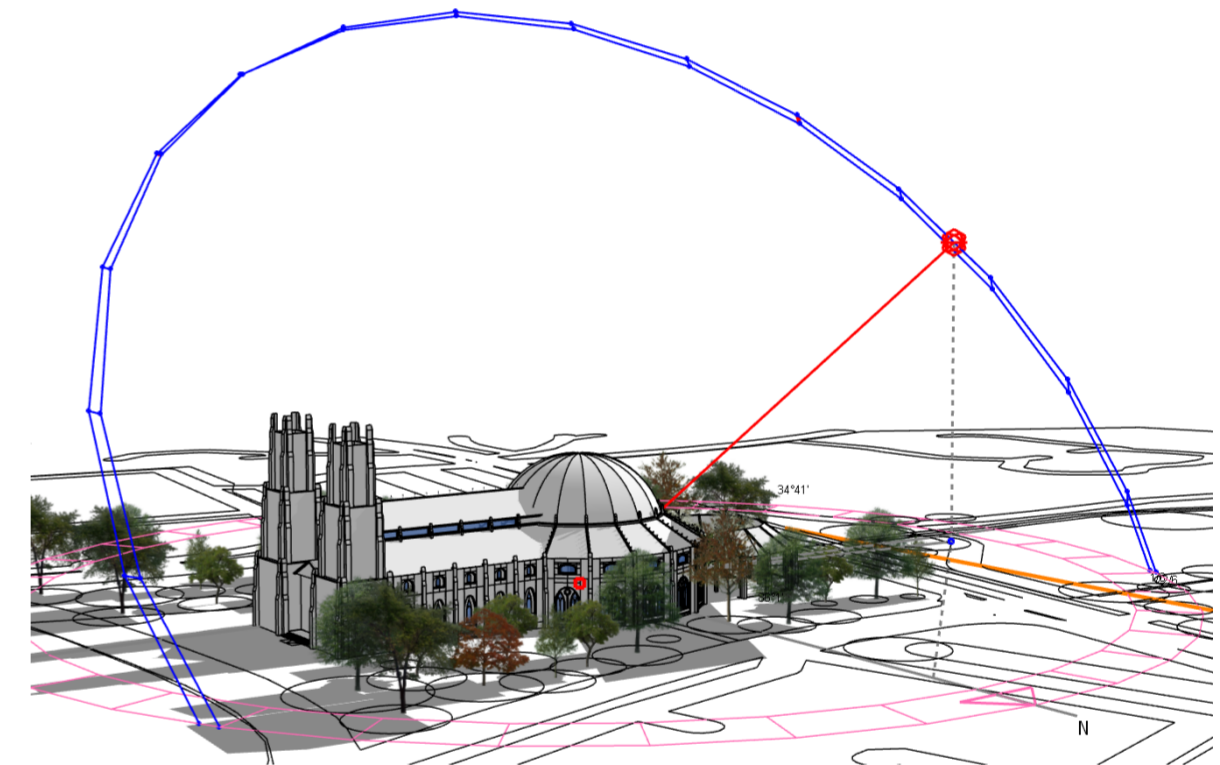
Summer Solstice



Morning
Summer solstice - 9:30am
Azimuth 88.13, Altitude 38.63



Noon
Summer solstice - 12:30pm
Azimuth 136.47, Altitude 72.07

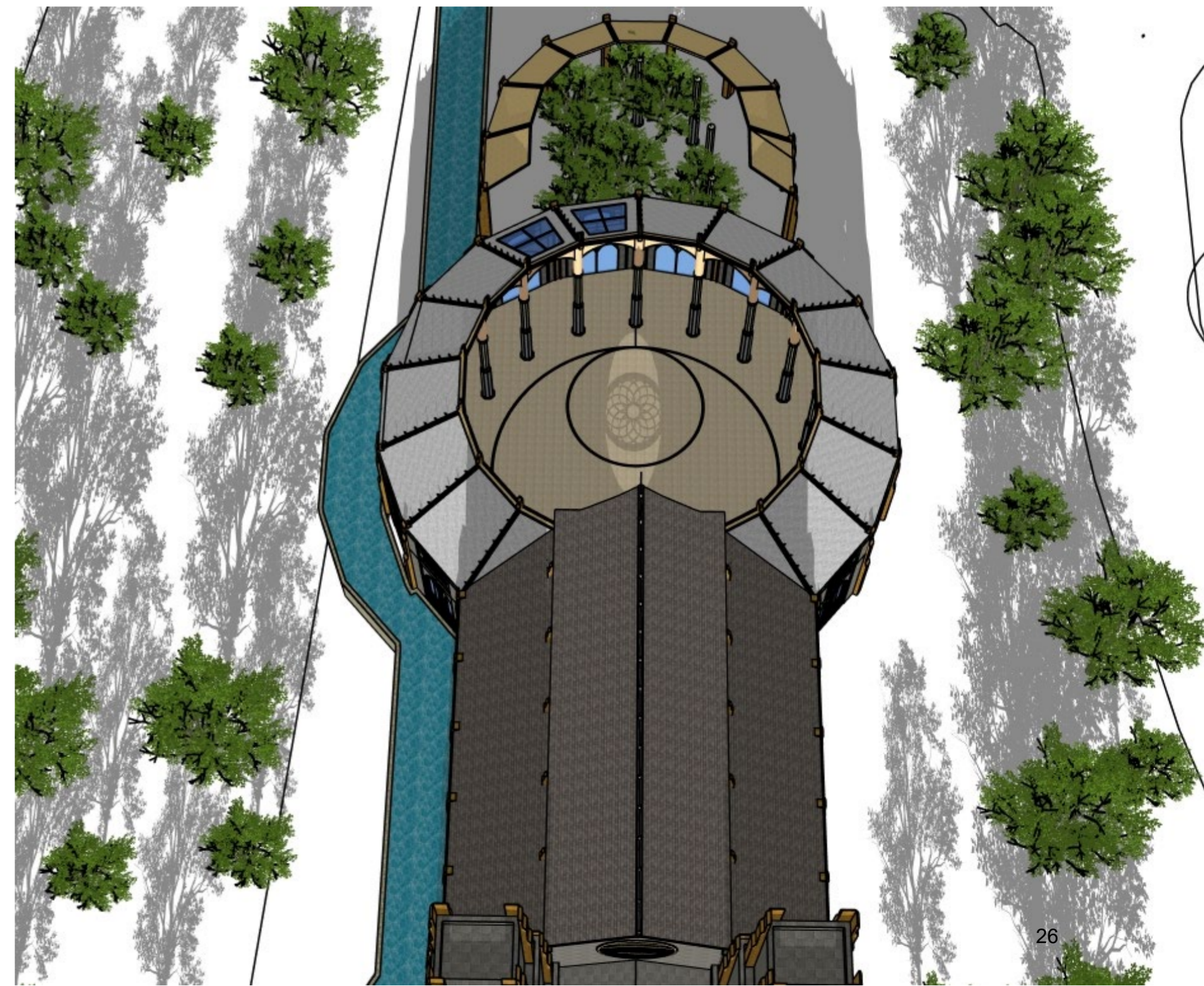
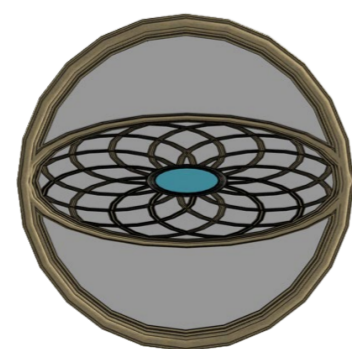
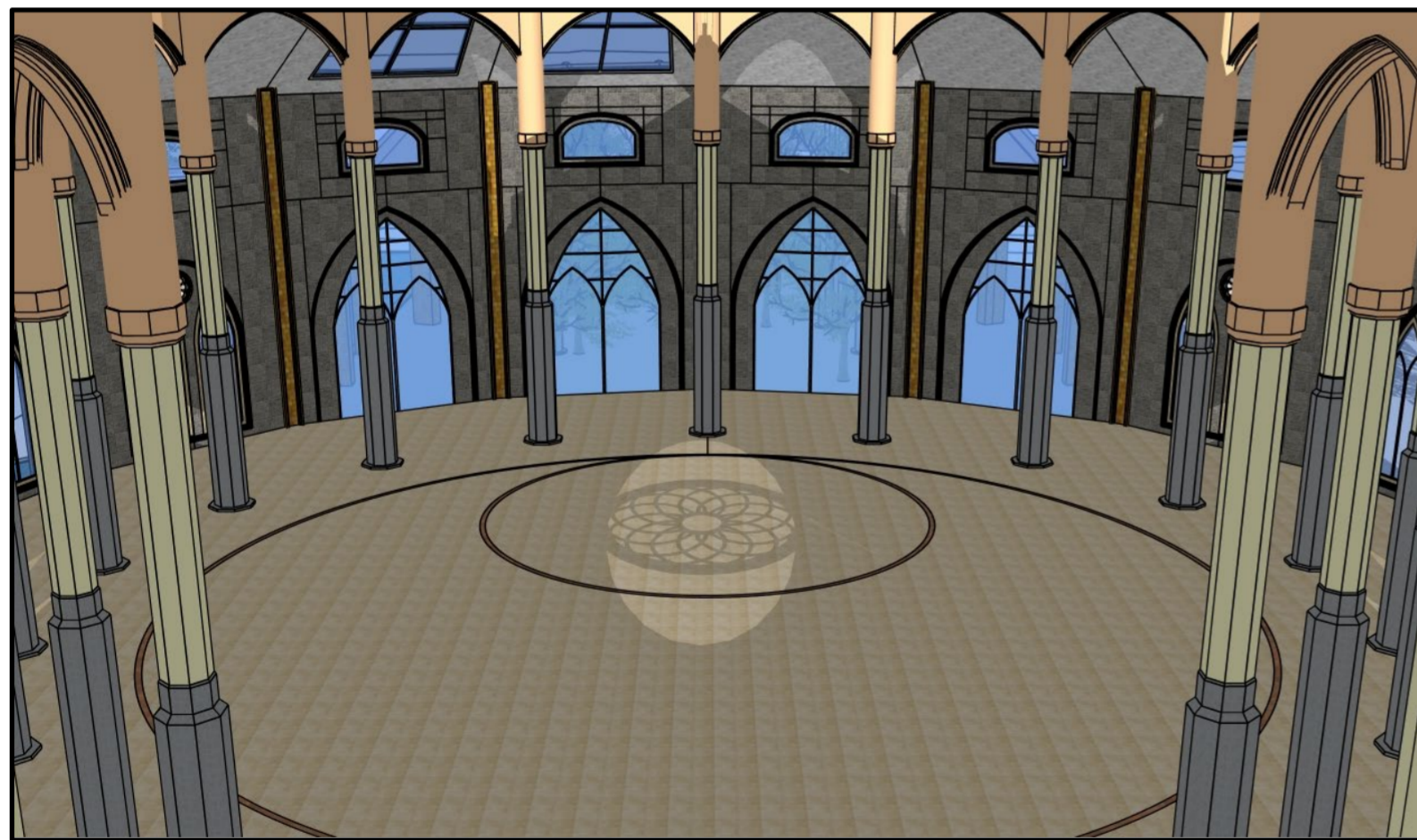


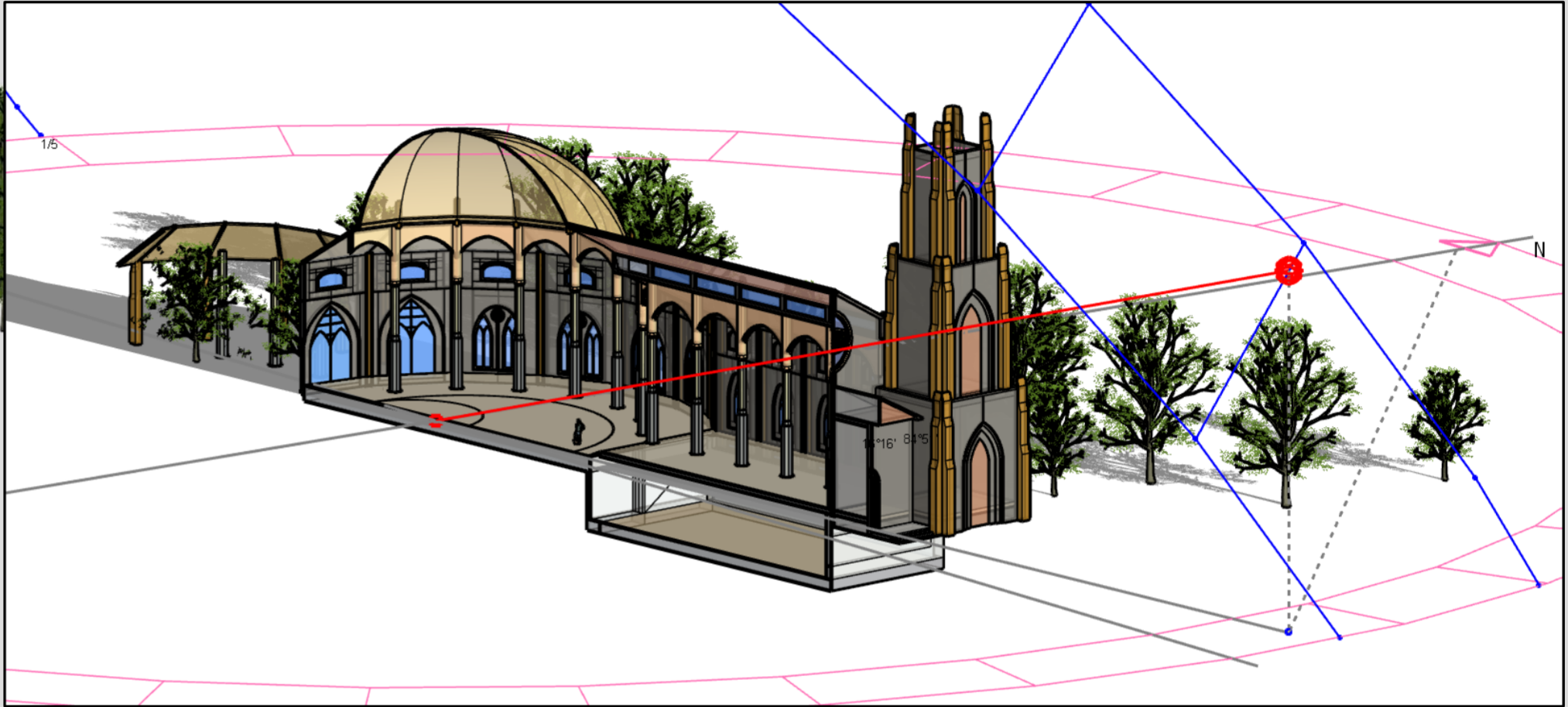
Evening
Summer solstice - 4:30pm
Azimuth 264.49, Altitude 47.94

Illuminating Divinity: The All-Seeing Eye and Solstice Light

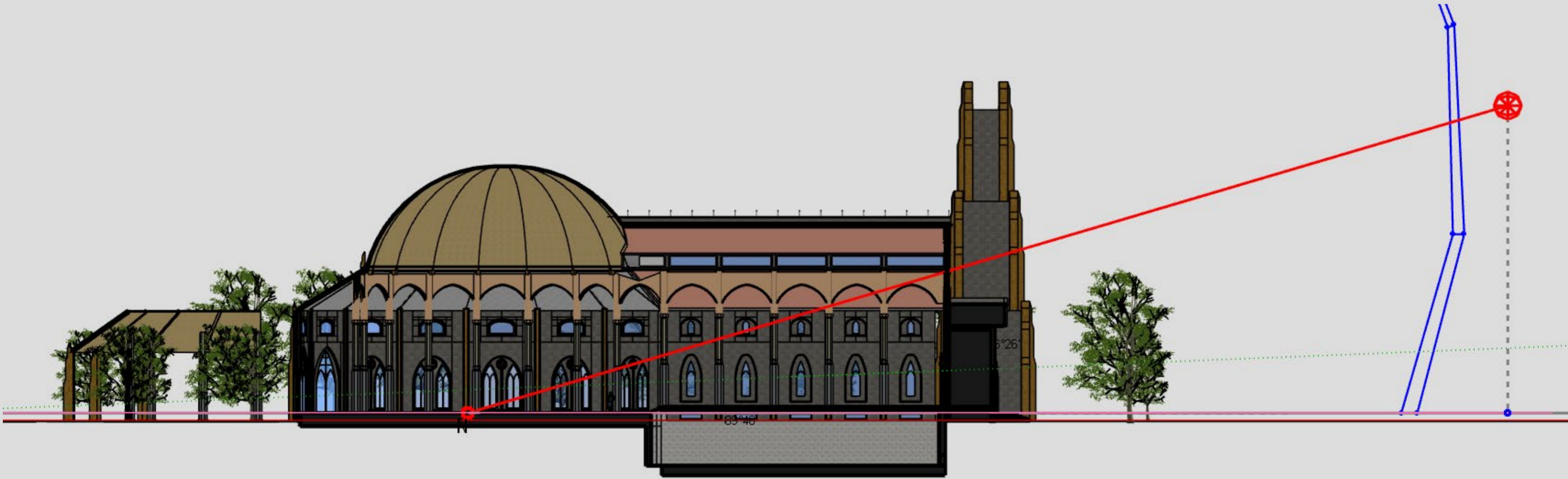
During the summer solstice, sunlight streams through the rose window, casting its intricate design onto the altar in a breathtaking display. As the light passes through, the depiction of the all-seeing eye within the rose window aligns perfectly on the altar, forming a traditional circular rose pattern. This phenomenon is achieved through the precise angular interplay of light and shadow, revealing the hidden symbolisms embedded within the architecture. The careful calibration of the window's geometry and the sun's solstice trajectory brings this spiritual moment to life, blending celestial alignment with human craftsmanship.

The all-seeing eye, a universal symbol of divine presence and higher consciousness, carries profound spiritual significance. In this context, it represents an outward focus, encouraging transcendence by connecting the physical and metaphysical realms. The eye's alignment on the altar symbolizes a gateway to spiritual awakening, reminding visitors of the interconnectedness between earthly existence and the infinite. This sacred interplay of light and symbolism invites all to reflect on their journey toward enlightenment and renewal.

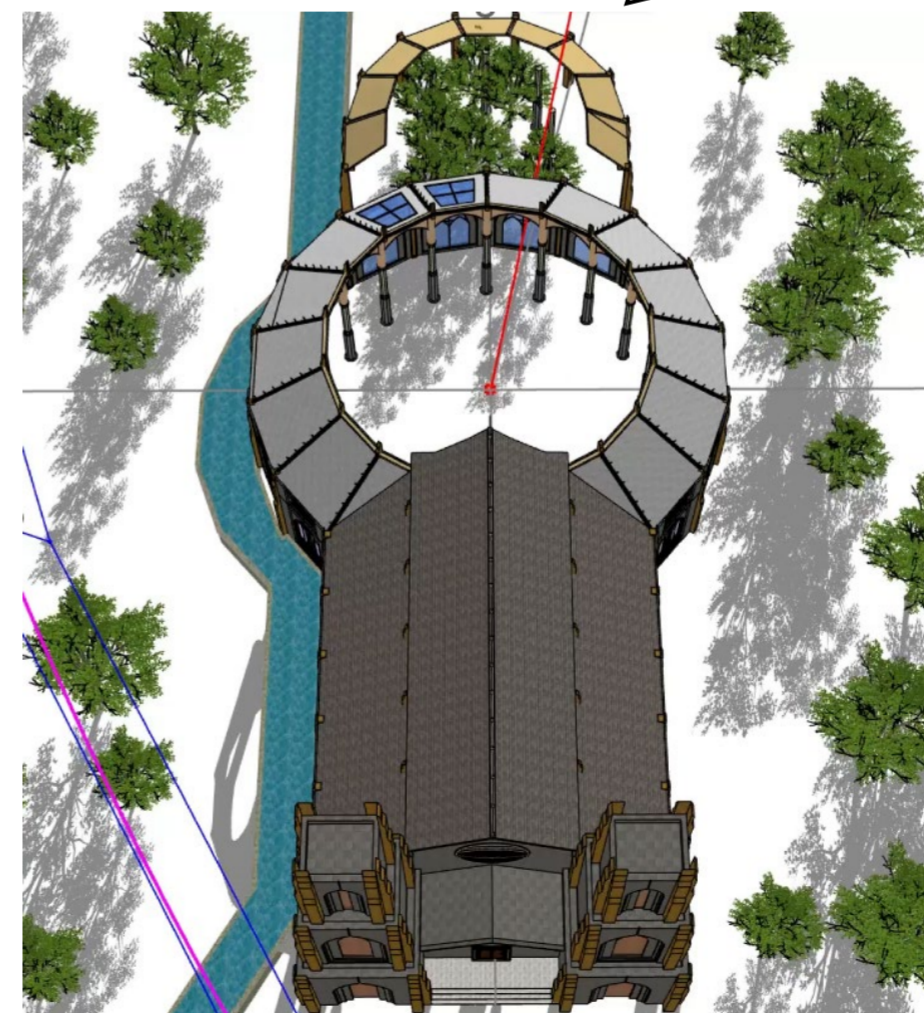
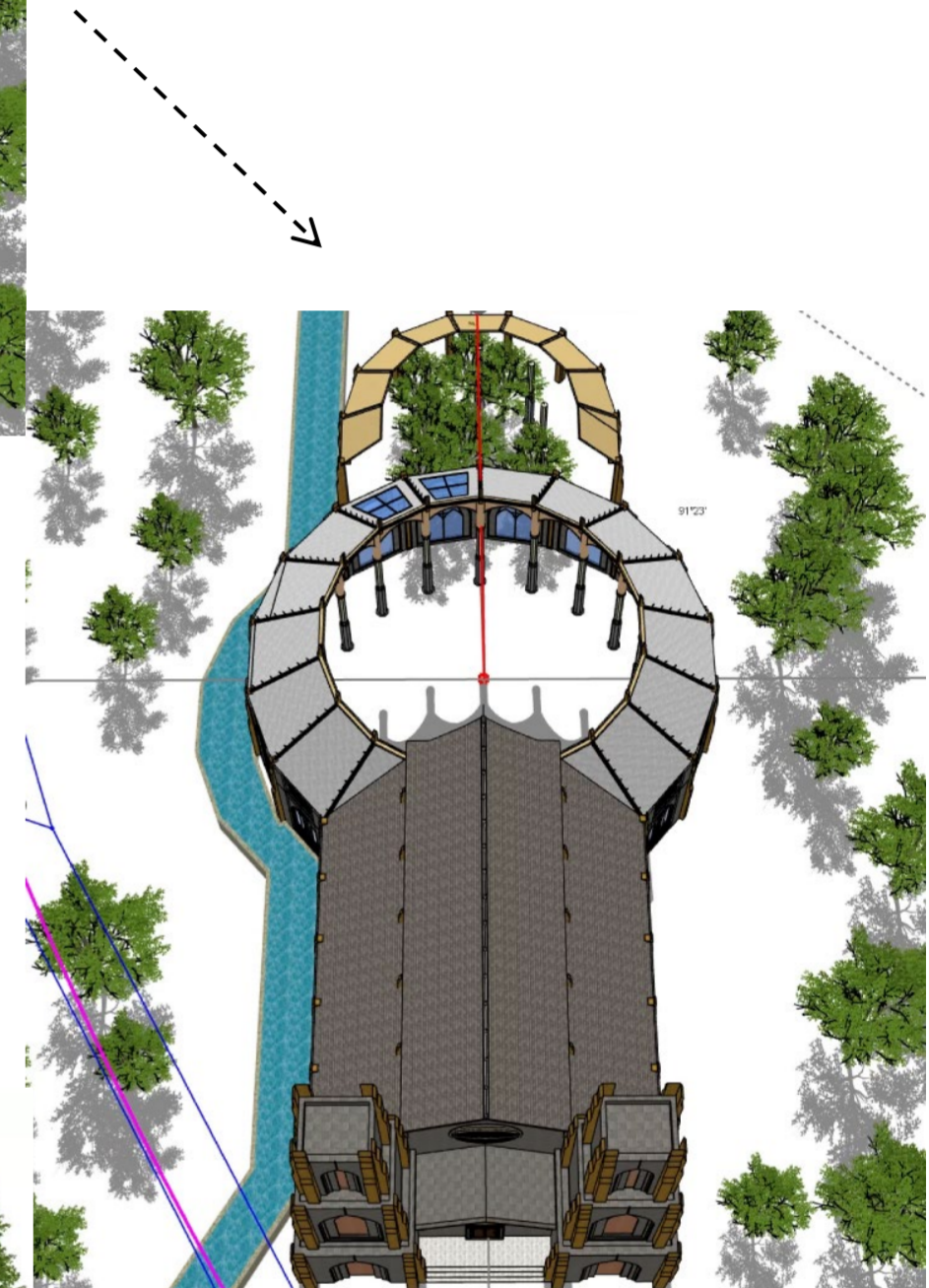
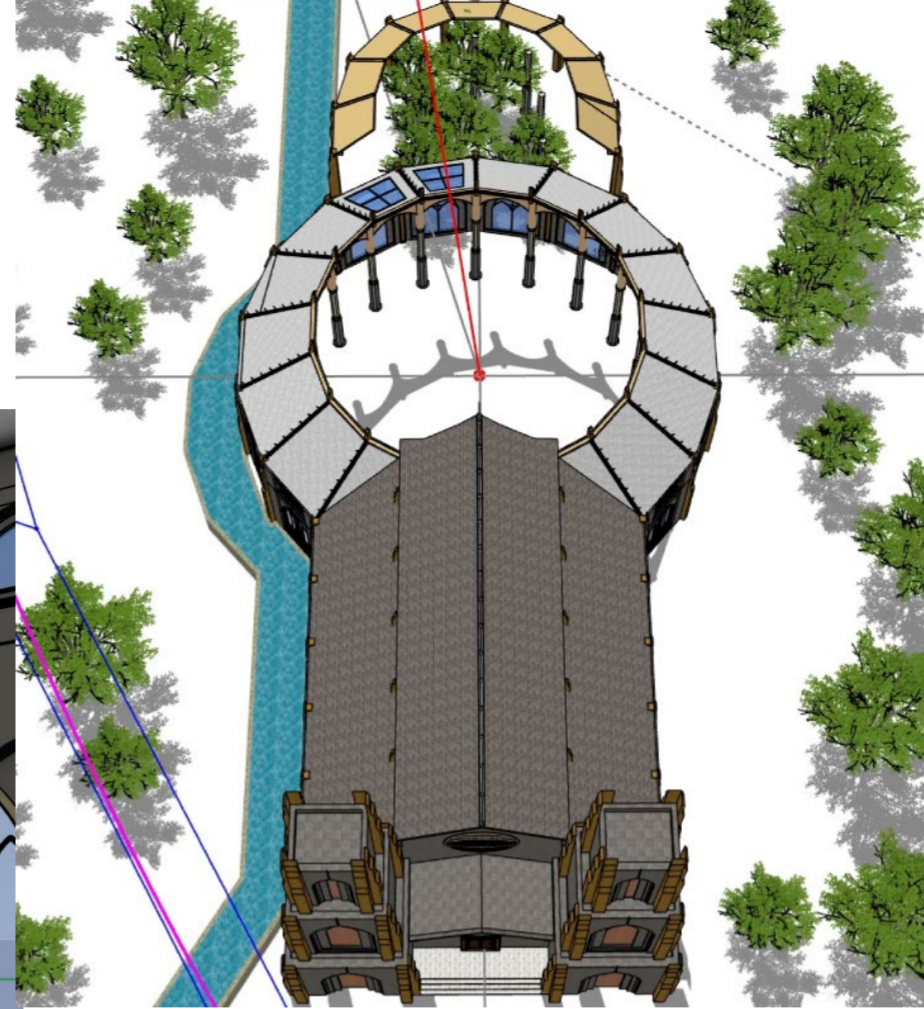
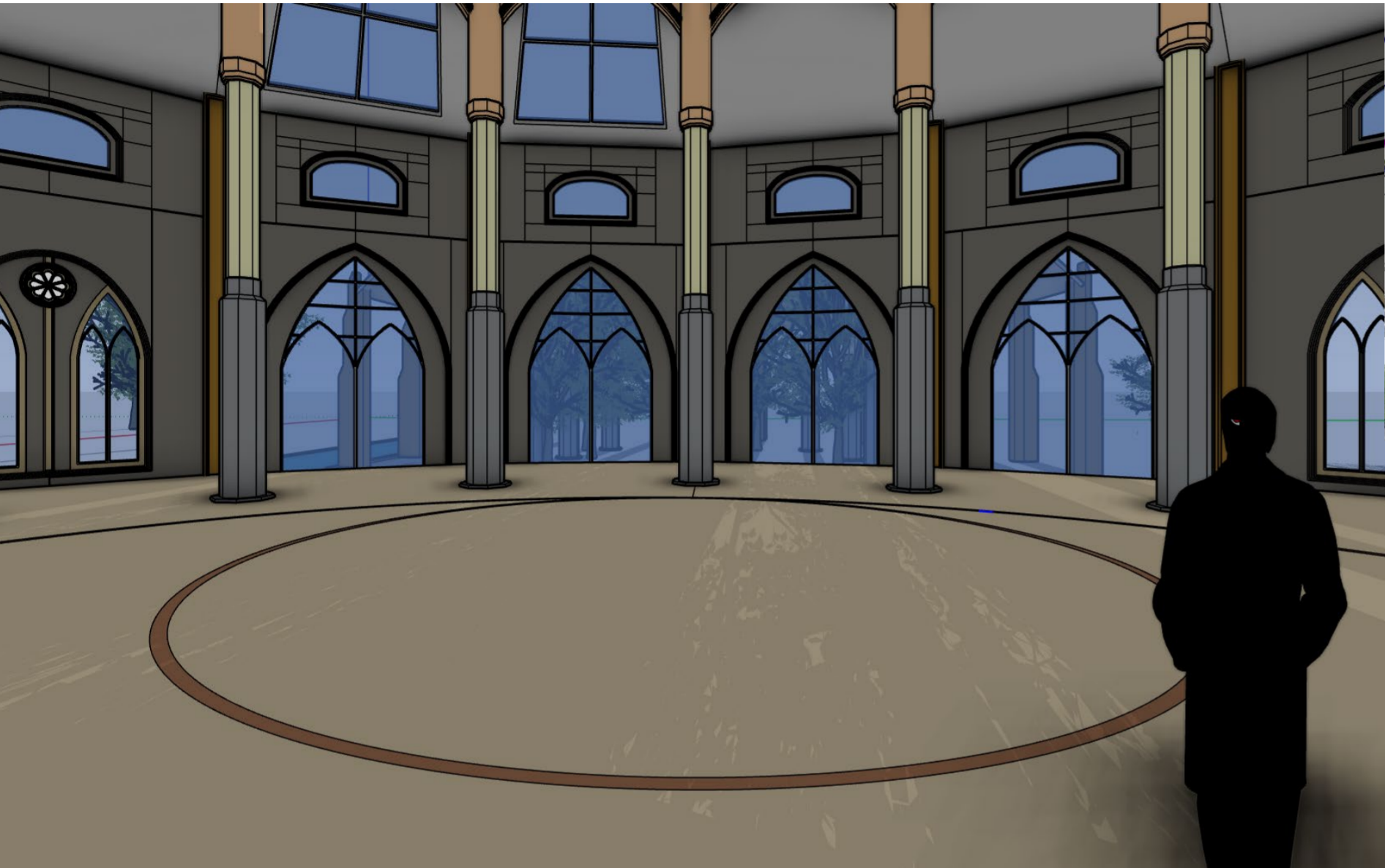




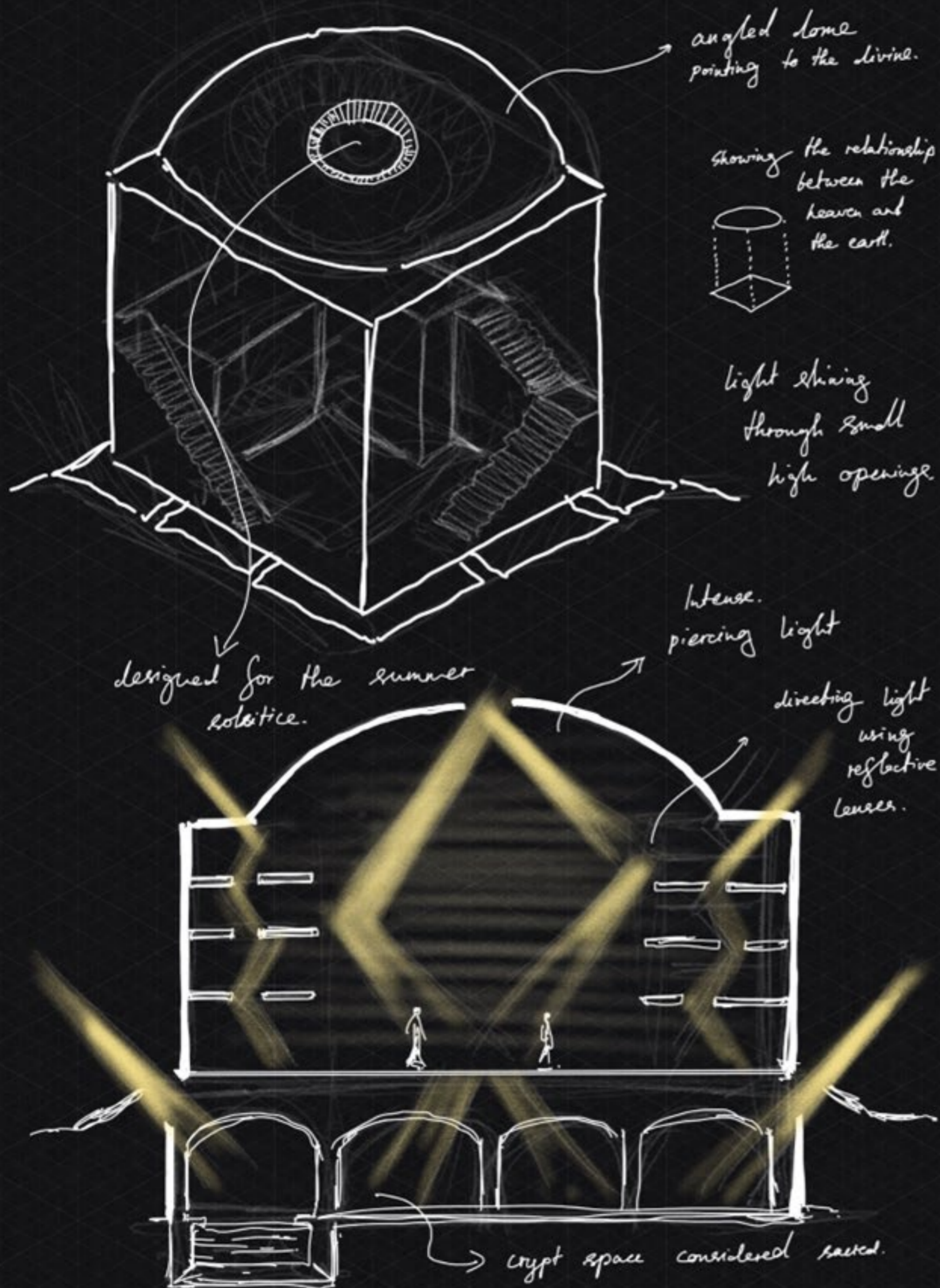
Morning
Summer solstice - 8:00am
Azimuth 88.13, Altitude 38.63



Nature's Canvas: Revealing Divine Geometry in Light and Shadow



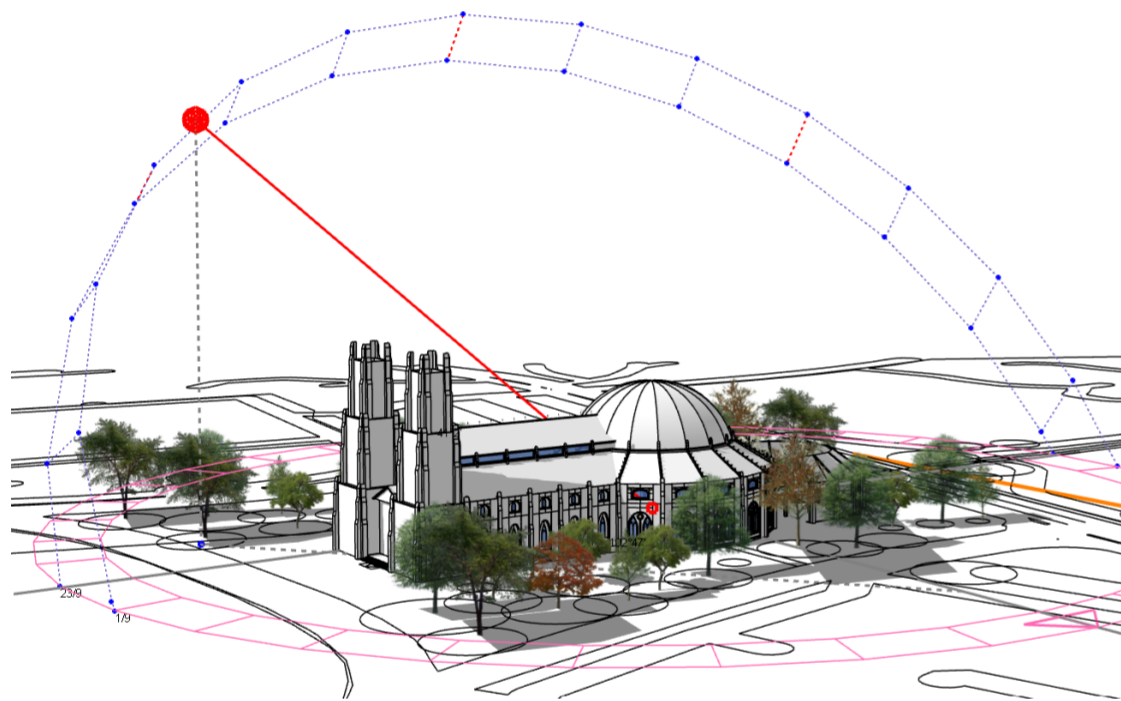
During the summer solstice, sunlight filters through the canopy of trees, casting intricate shadows onto the floor, which acts as a natural canvas. The interplay of light and shadow reveals the organic geometry of the tree branches and leaves, creating a dynamic pattern of shapes and lines. This fleeting artwork celebrates the revelation of divine geometry present in nature, showcasing the harmony and interconnectedness of the natural world. The interplay invites viewers to pause and reflect on the beauty and complexity around them, emphasizing the sacred relationship between light, nature, and the human spirit.



Enlightenment (Illumination, Knowledge)

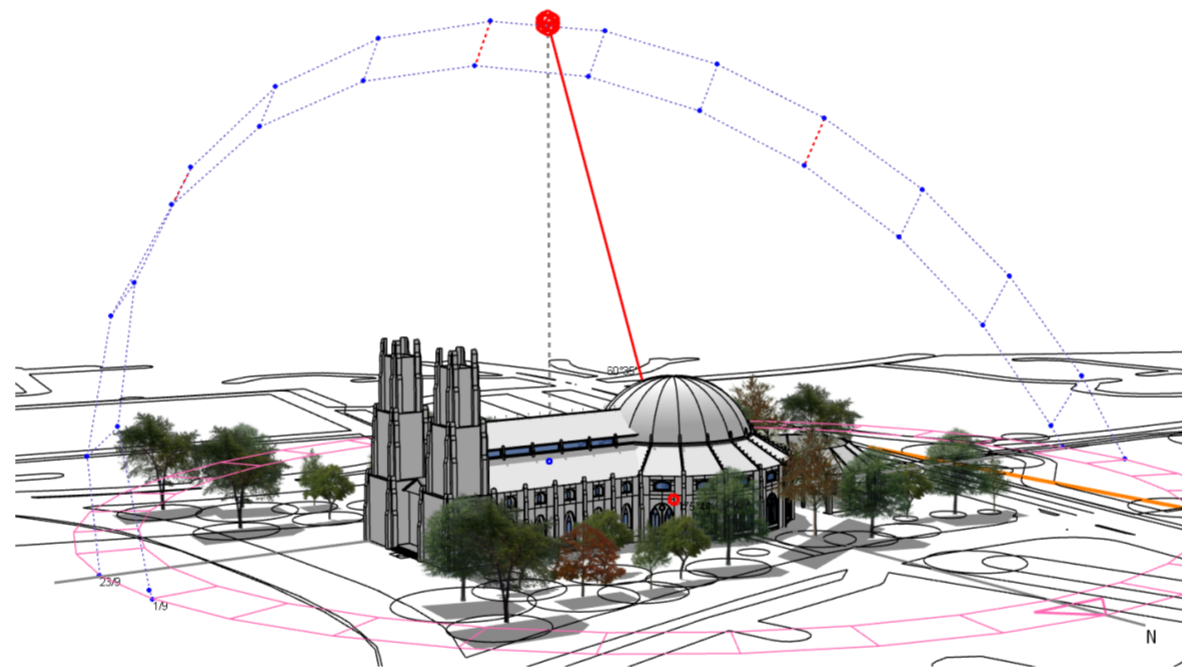
- **Quality of Light: Bright, direct sunlight** piercing through the darkness, often with high contrast.
- **Description:** This light not only pierces through the the rose window into the altar but also has geometry of the green spaces flow into the spaces and can showcase whats outside and our connection to nature.
- **Examples:**
 - In **Egyptian temples**, shafts of sunlight illuminated statues of gods during solstices, symbolizing divine revelation.
 - In **Greek temples**, light would stream into the inner sanctum (cella) from limited sources, emphasizing the presence of the divine.
- **Mood:** Awe-inspiring, divine, transformative, evoking clarity and understanding.

Autumn Equinox



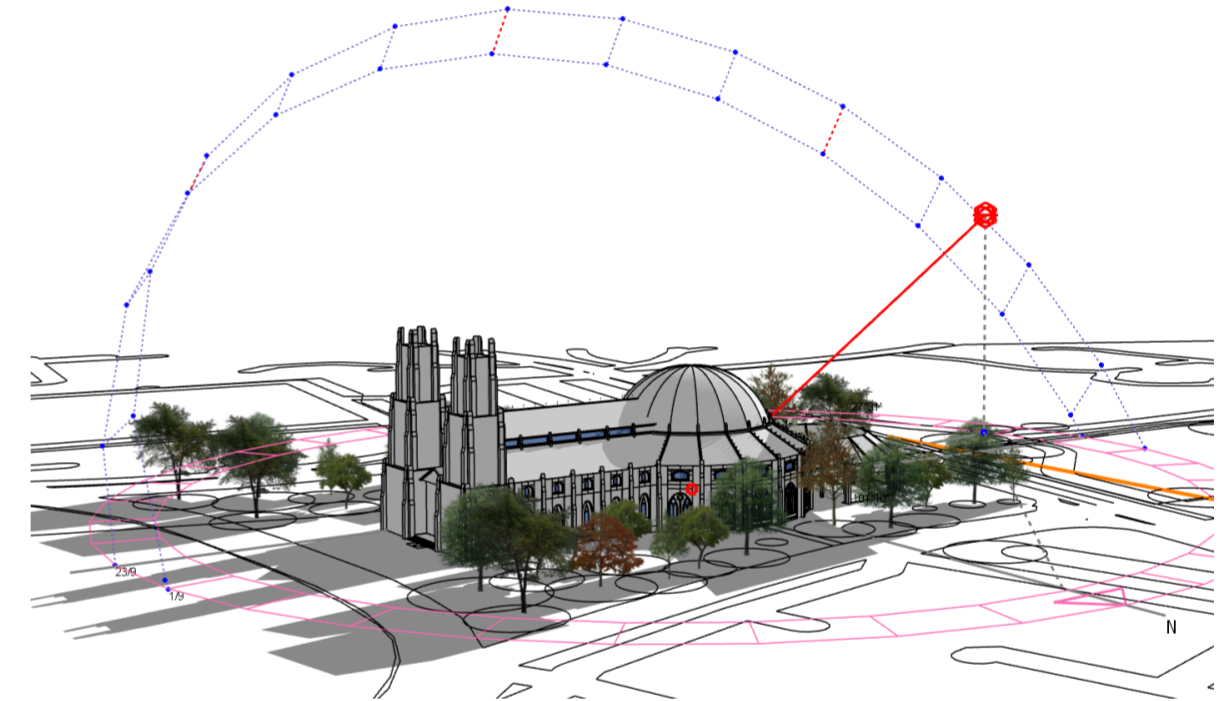
Morning

Autumn equinox - 9:30am
Azimuth 112.07, Altitude 26.47



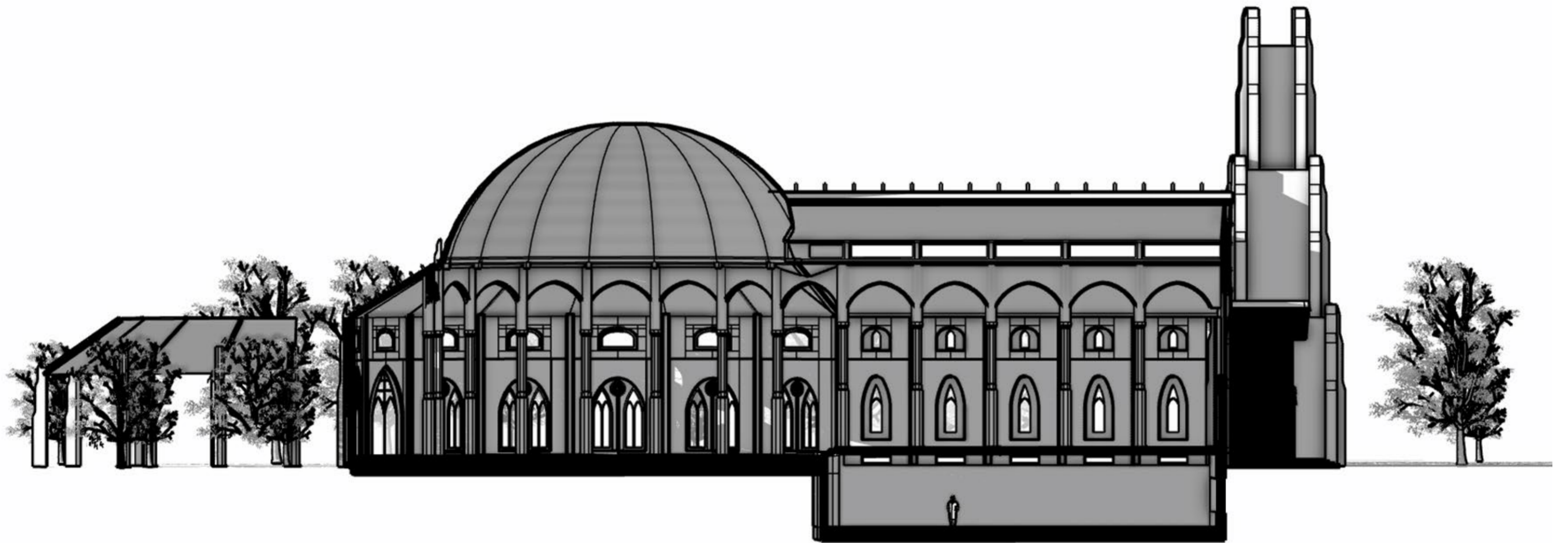
Noon

Autumn equinox - 12:30pm
Azimuth 162.07, Altitude 51.43

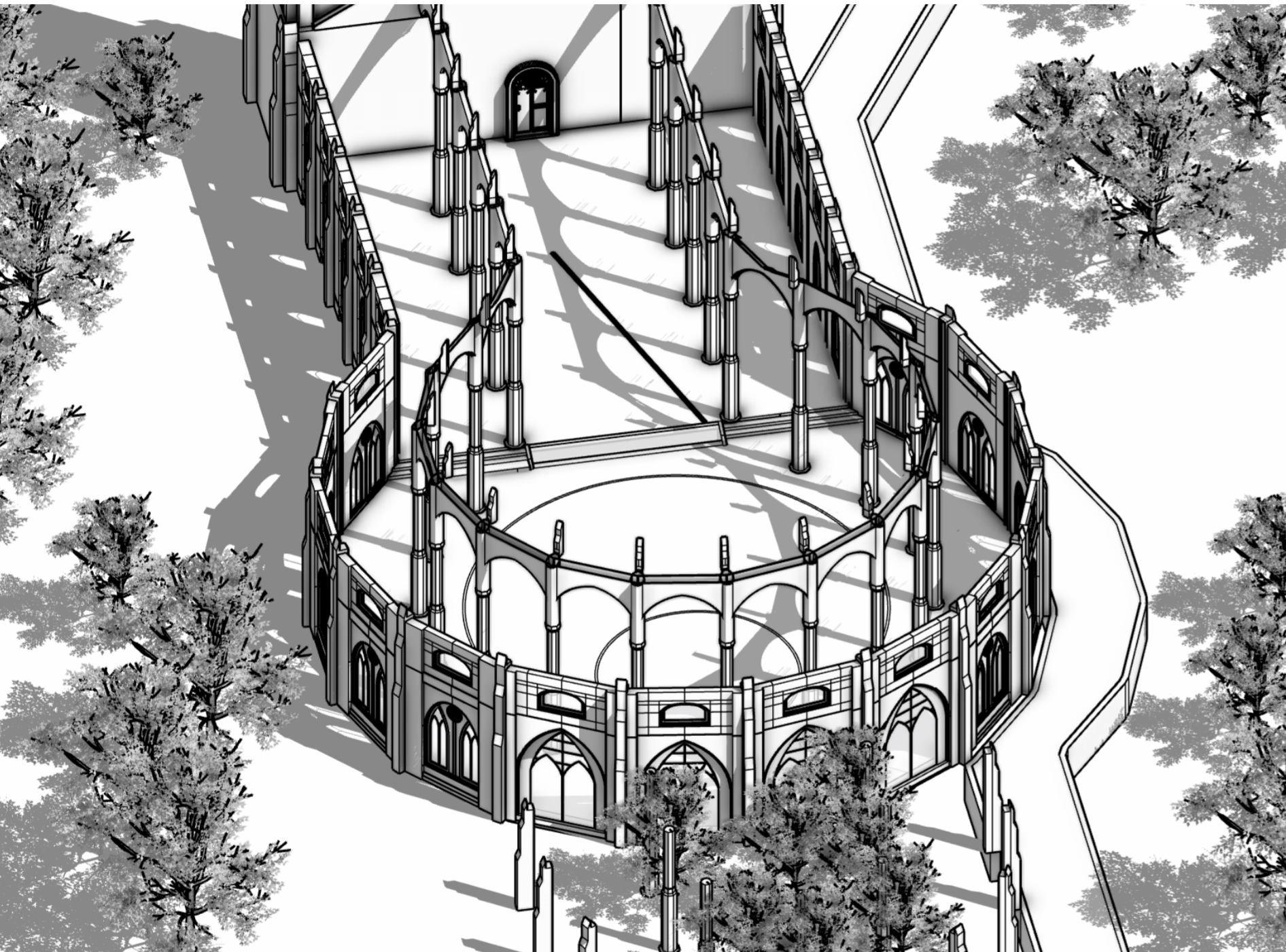


Evening

Autumn equinox - 4:30pm
Azimuth 242.19, Altitude 31.53

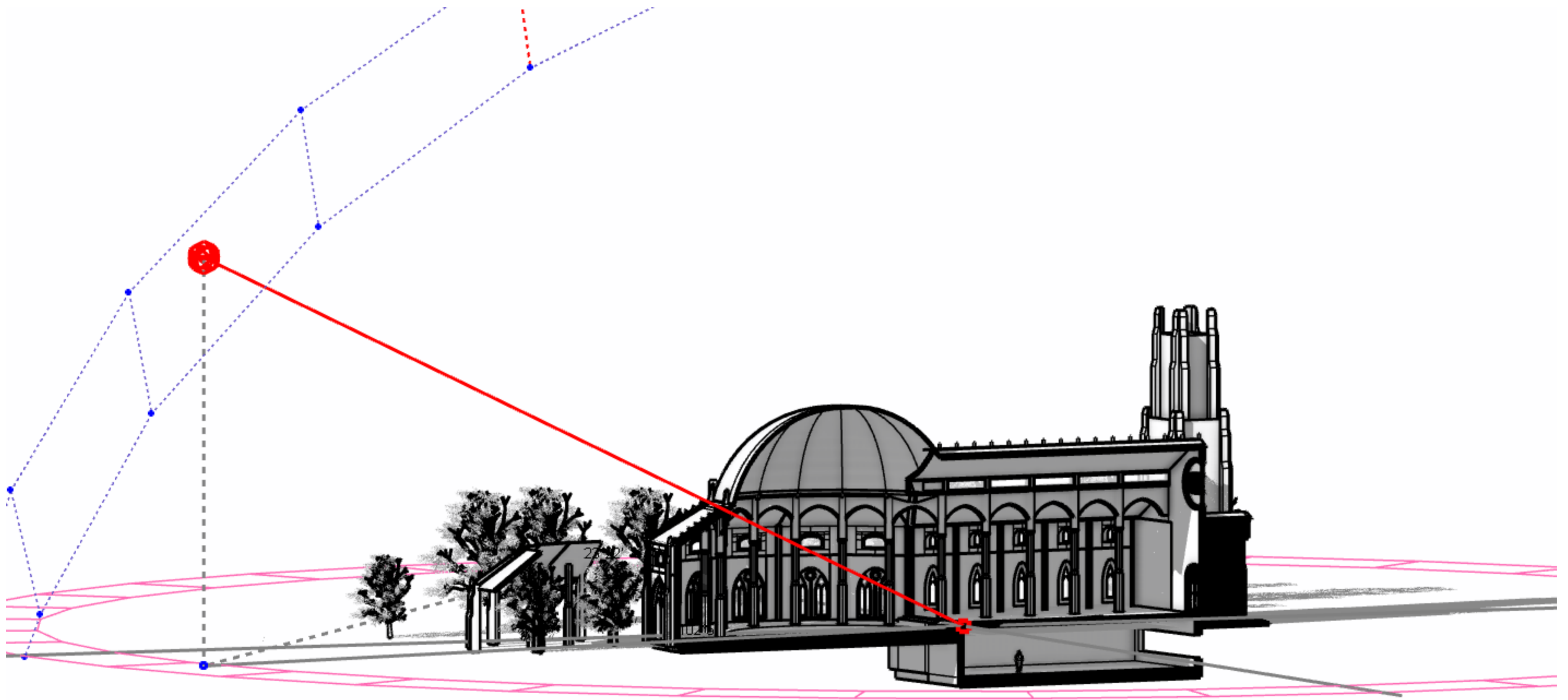


Equinox Light: Illuminating the Crypt's Geometry

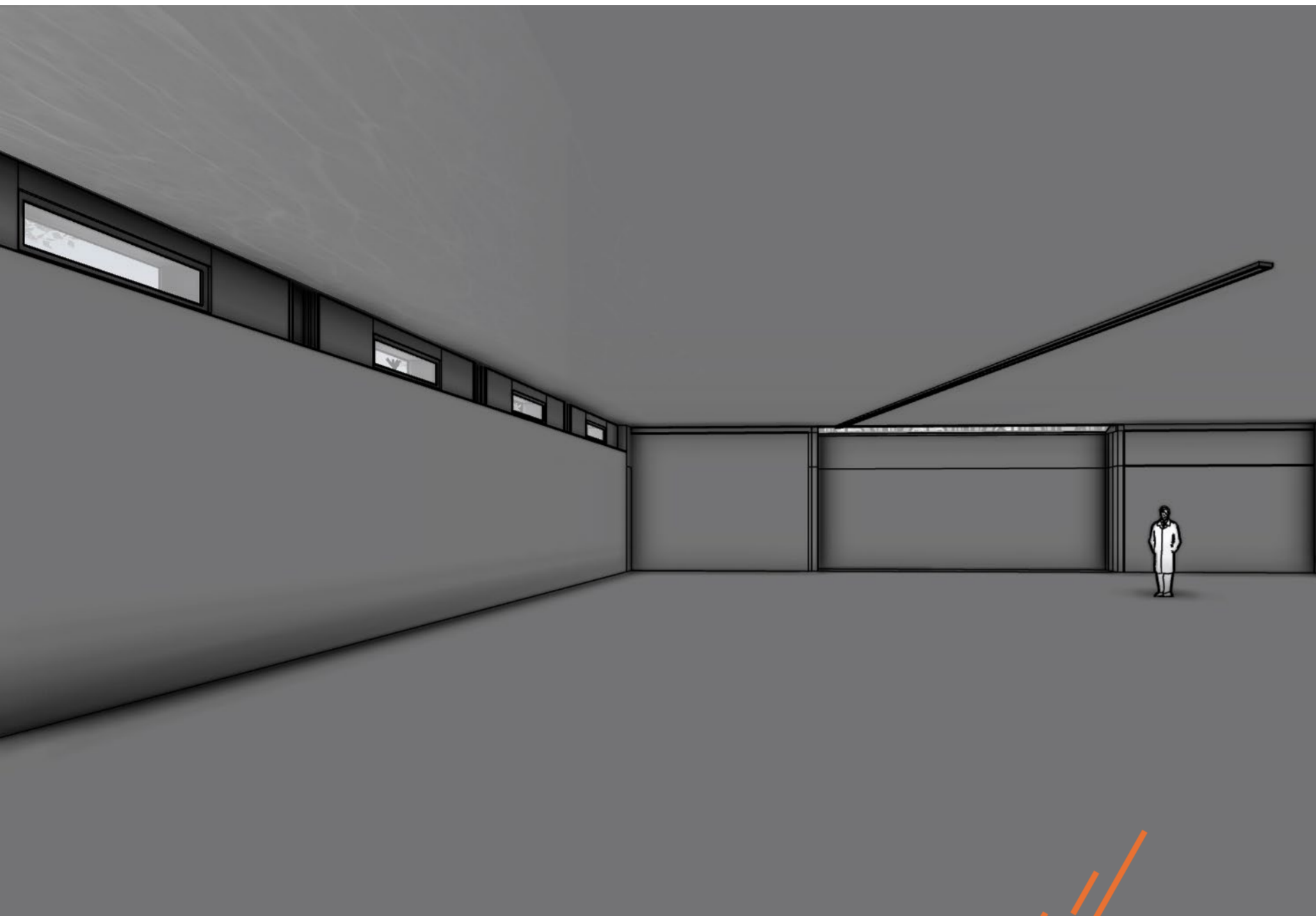


During the autumn equinox, a carefully positioned glass slit in the floor allows natural light to enter the structure, casting a soft, filtered glow onto the basement or crypt below. As the sunlight passes through the slit, it aligns with the geometry of the space, highlighting the architectural details and materiality of the crypt. The light flows gently through the structure, creating an atmosphere of calm and introspection. This subdued light emphasizes the subtle textures of the materials—whether stone, wood, or metal—and the carefully crafted geometry, which together invite contemplation and inner reflection.

Architecturally, the slit serves not only as a functional element but as a spiritual one, allowing for a quiet, meditative illumination of the crypt's sacred space. The soft, diffused light encourages a sense of retreat and solitude, creating an intimate environment where light and shadow interact to evoke a deeper connection to the space and its purpose. The interplay of light with the crypt's design fosters a space for personal introspection, aligning with the themes of reflection and inner peace that the autumn equinox embodies.

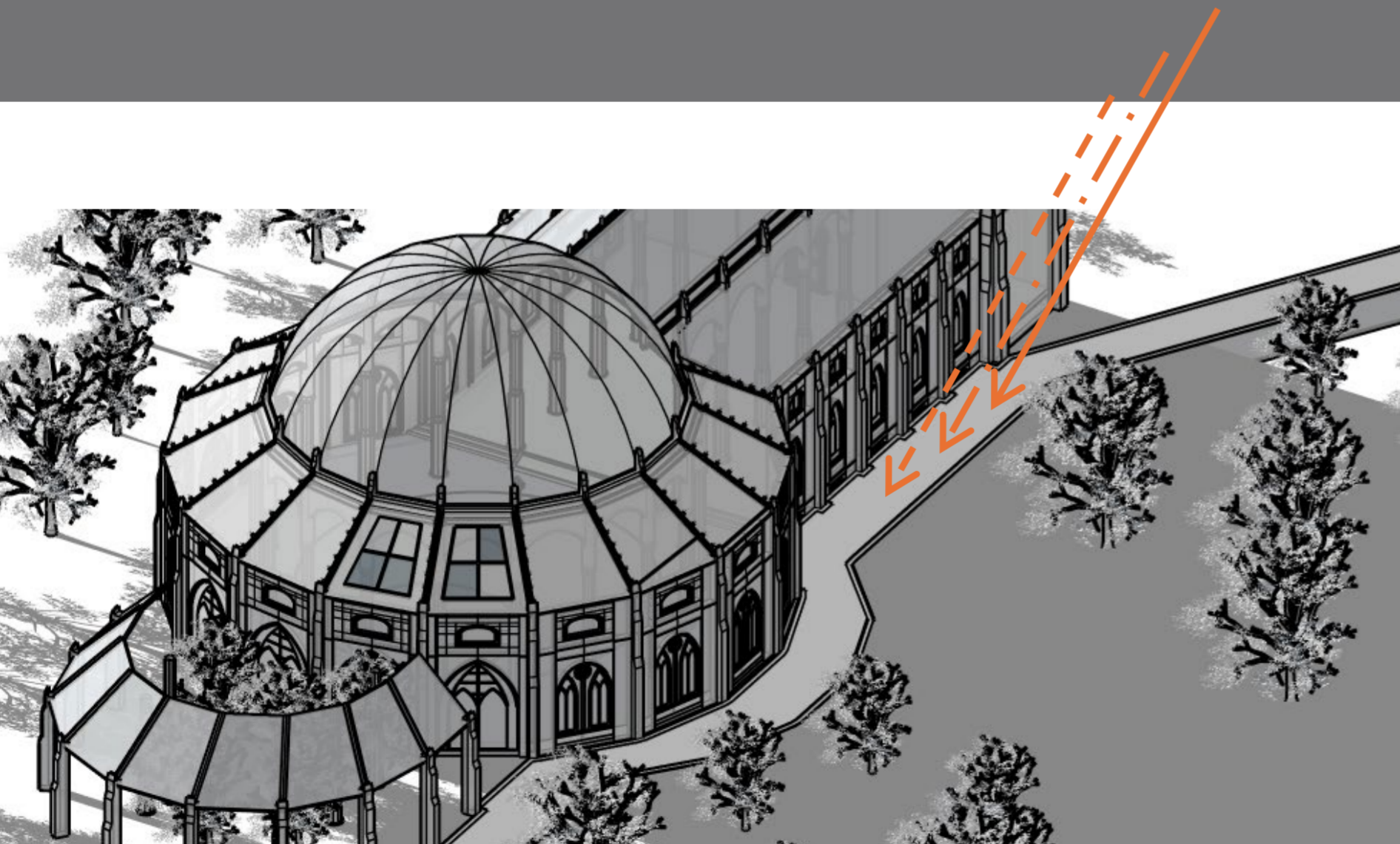


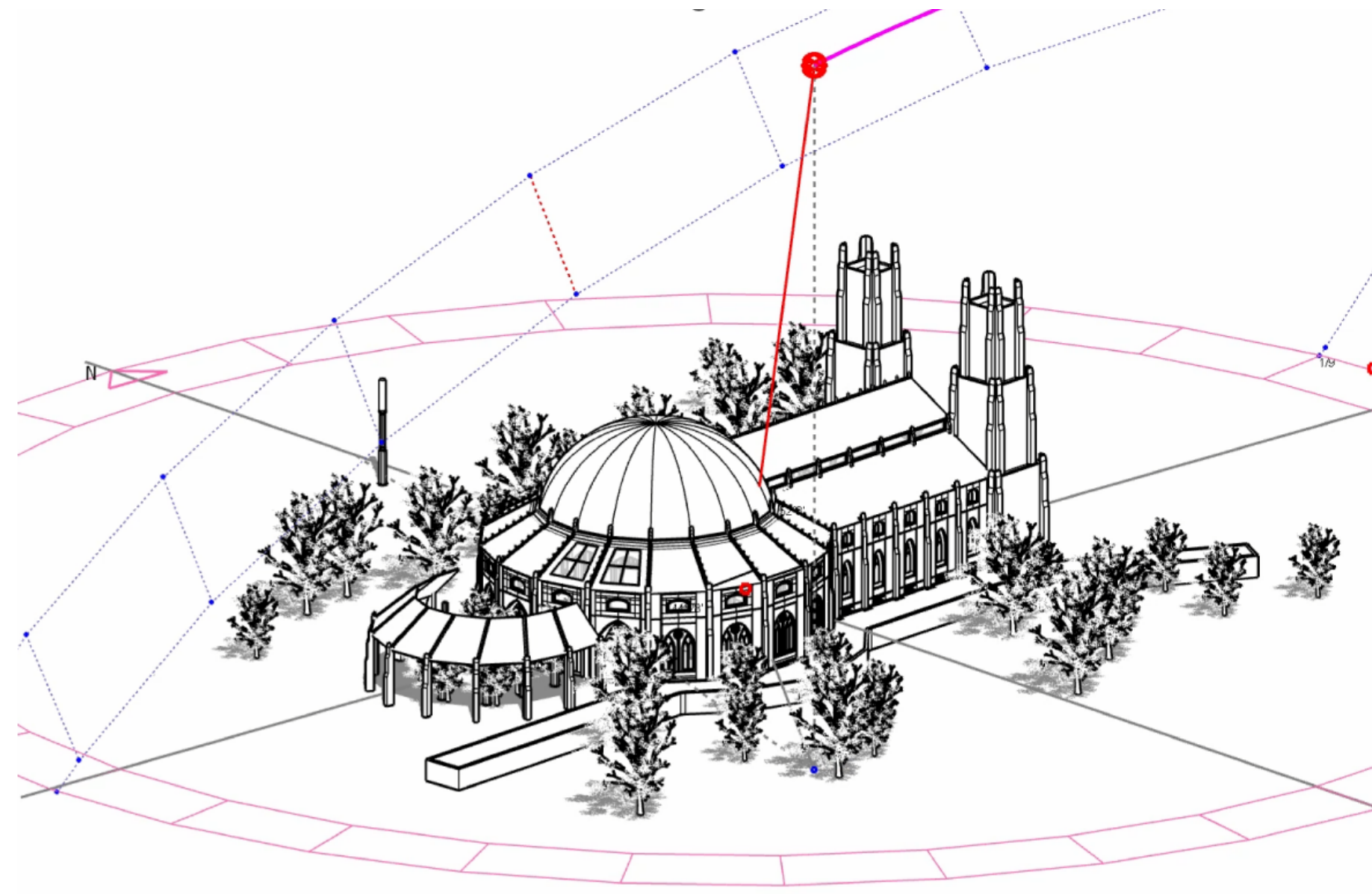
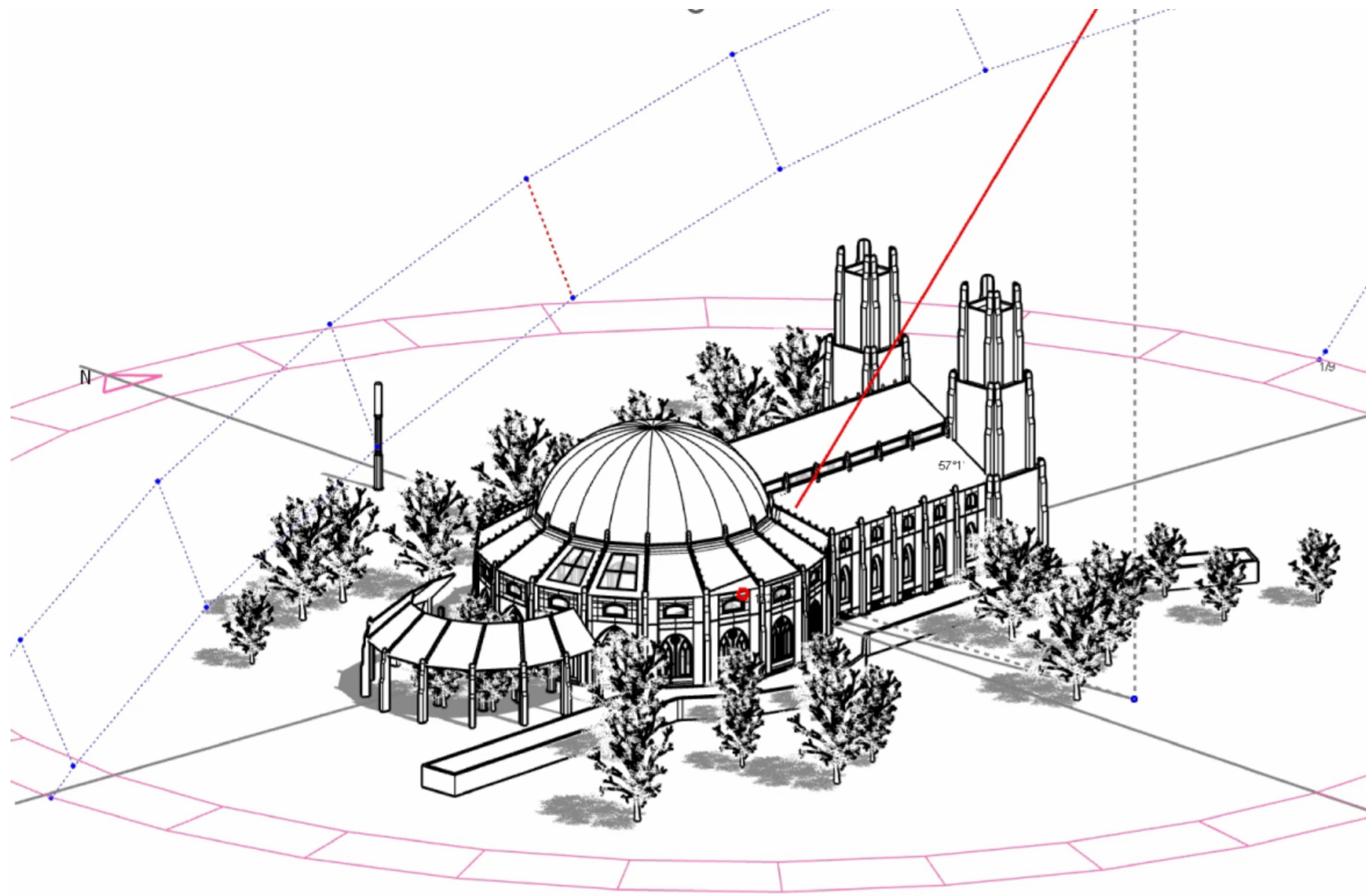
Evening
Autumn equinox - 4:30pm
Azimuth 242.19, Altitude 31.53



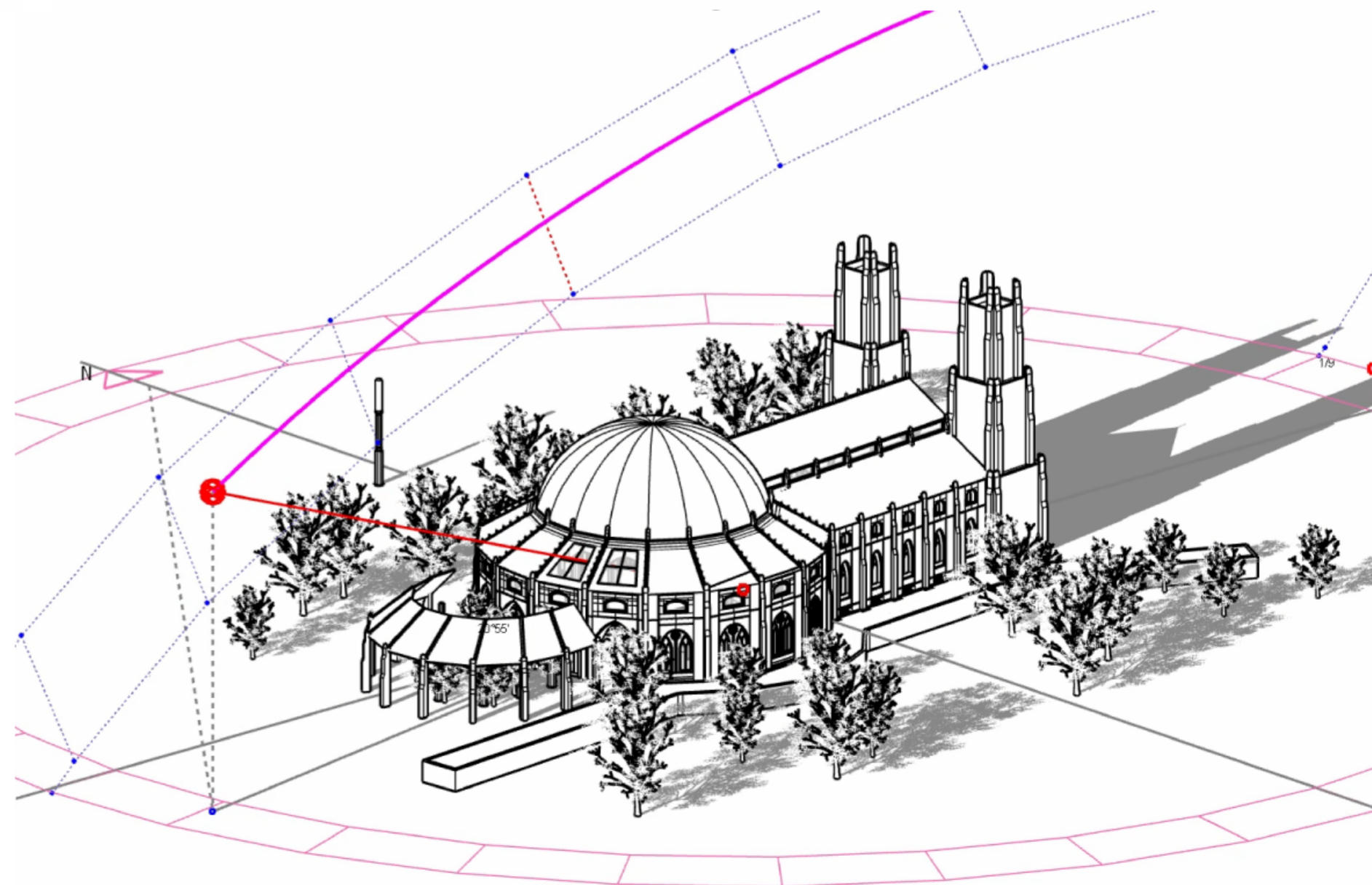
Reflections of Serenity: Creek Light and the Crypt Ceiling

As the autumn light flows through the creek next to the building, the movement of the water reflects the sunlight, casting shimmering patterns of light onto the ceiling of the crypt. The gentle, undulating waves of the creek create a calming effect, with their rhythmic motion and soft light dancing across the ceiling. This natural interplay between water and light transforms the crypt into a sanctuary, where the reflections on the ceiling evoke a serene, meditative atmosphere. The shifting patterns invite introspection, guiding visitors to a deeper connection with themselves and the space. The dynamic yet soothing quality of the light fosters moments of quiet reflection, allowing light to become a metaphor for inner contemplation and spiritual clarity.



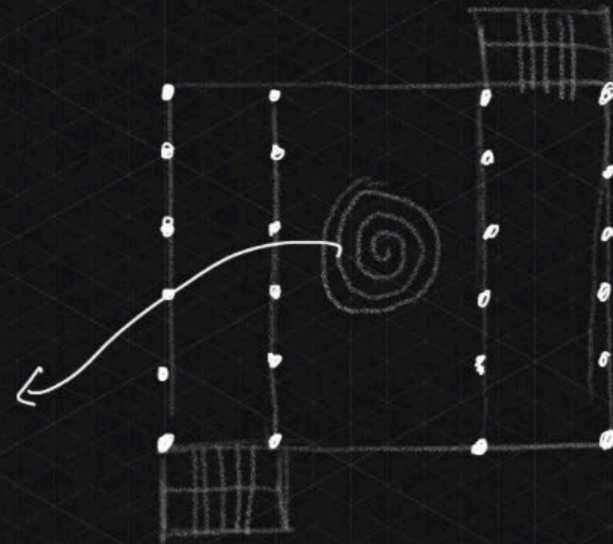


During the autumn equinox, the windows on the dome skirt allow the evening light to enter the building, casting a soft, golden glow that travels through the structure. As the sun sets, the light filters through these windows, gently cascading down from the roof to the floor, gradually leading towards the crypt below. The carefully positioned windows capture the low-angle evening light, creating a peaceful progression of illumination that enhances the reflective atmosphere of the space. The light guides visitors down toward the crypt, accentuating its sacred geometry and creating a serene pathway for contemplation. This natural lighting effect mirrors the passage of time and the cyclical nature of life, inviting quiet introspection and a deeper connection to the architectural and spiritual significance of the space.



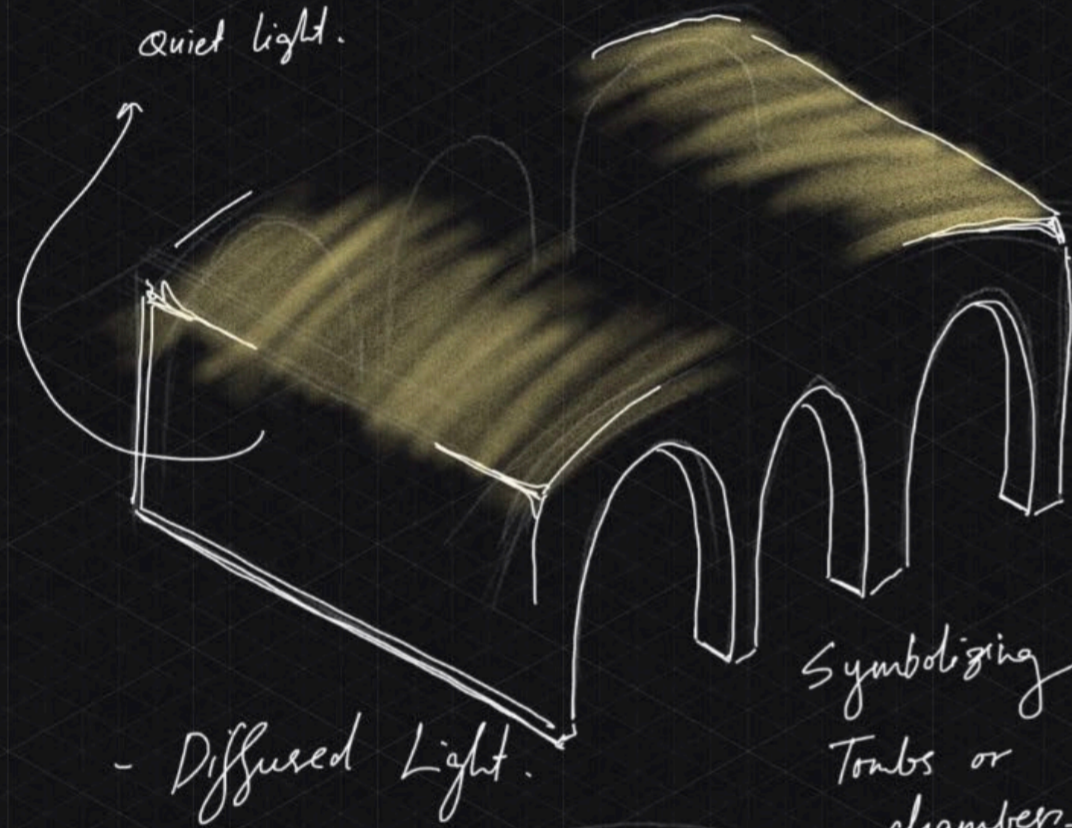
CRYPT

Earth coupled labyrinth
allows for heated floors
with quite light



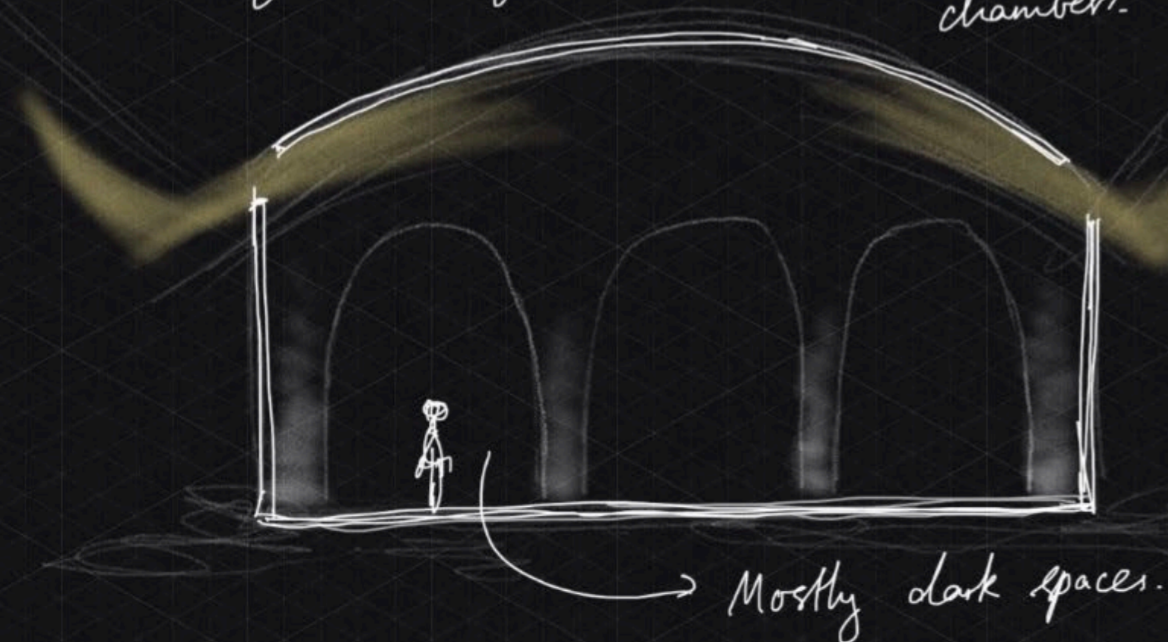
- Allows for self reflection.

quiet light.



- Diffused Light.

Symbolizing
Tombs or
chambers.

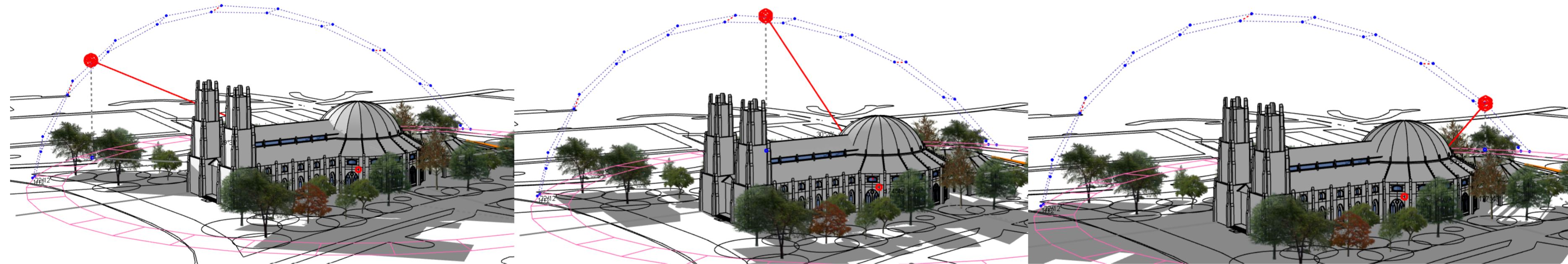


→ Mostly dark spaces.

Balance and Death (Equilibrium, Finality, Duality)

- **Quality of Light:** **Balanced light** that evenly illuminates the space without strong contrasts, often muted and diffused.
- **Description:** For ancient cultures, balance and death were often seen as natural and inevitable parts of the cycle of life. Light in this context would be even, calm, and steady—neither harsh nor dim. This could be achieved through **diffused light** coming through multiple openings or reflective surfaces that create an equilibrium of illumination. In some cases, it might shift towards twilight-like tones, representing the transition between life and death, light and dark.
- **Examples:**
 - In **Mesoamerican temples**, such as those of the Maya, the light during equinoxes would perfectly balance shadow and light, symbolizing the balance between life and death.
 - In **Egyptian tombs**, such as in the Valley of the Kings, muted and even light was used to create a tranquil, eternal atmosphere, symbolizing the soul's journey through the afterlife.
- **Mood:** Calm, stable, quiet, contemplative, evoking the cyclical nature of existence and the balance between life and death.

Winter Solstice



Morning
Winter solstice - 9:30am
Azimuth 139.52, Altitude 17.39

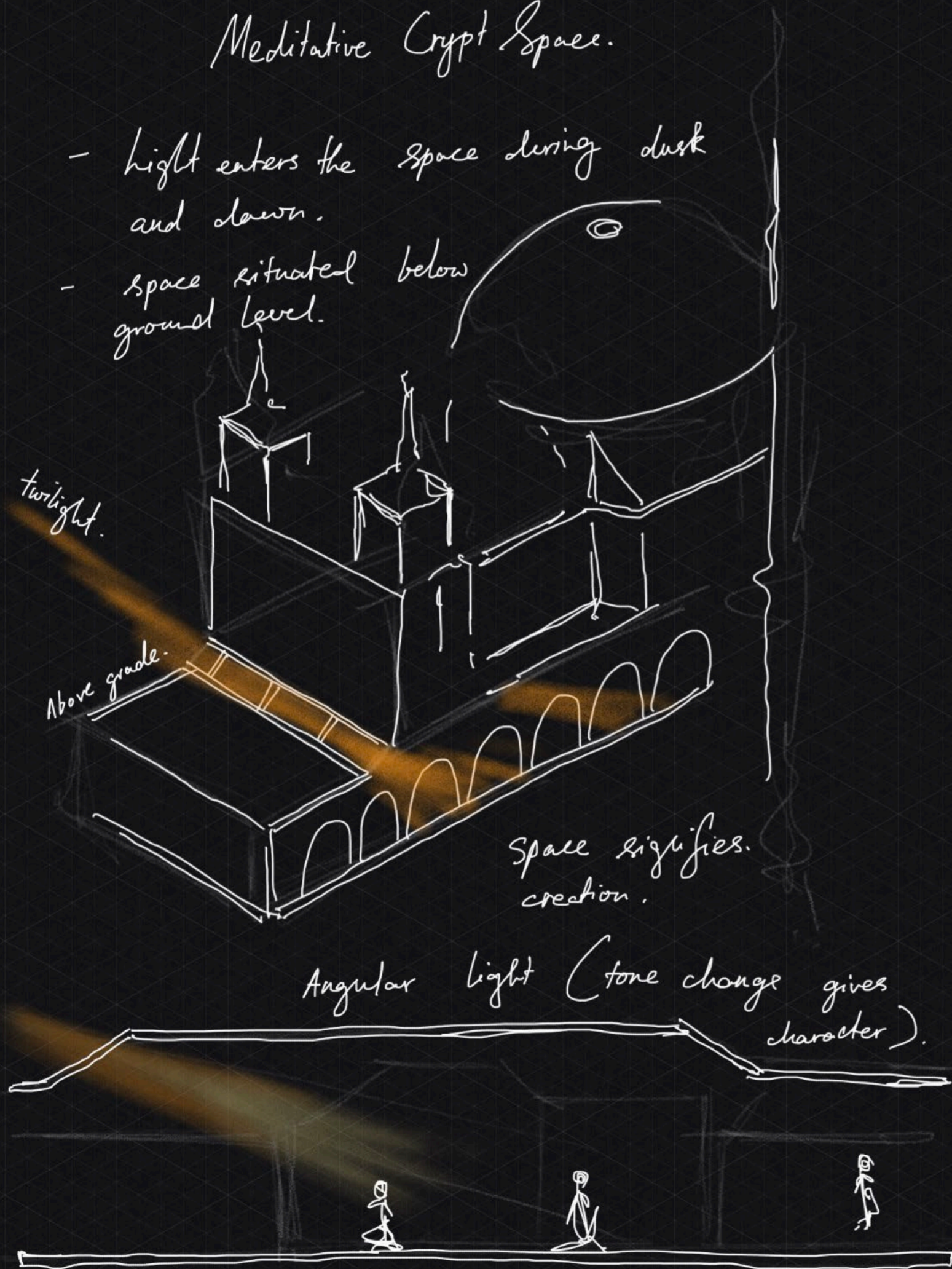
Noon
Winter solstice - 12:30pm
Azimuth 182.63, Altitude 29.32

Evening
Winter solstice - 4:30pm
Azimuth 234.83, Altitude 5.71

CRYPT

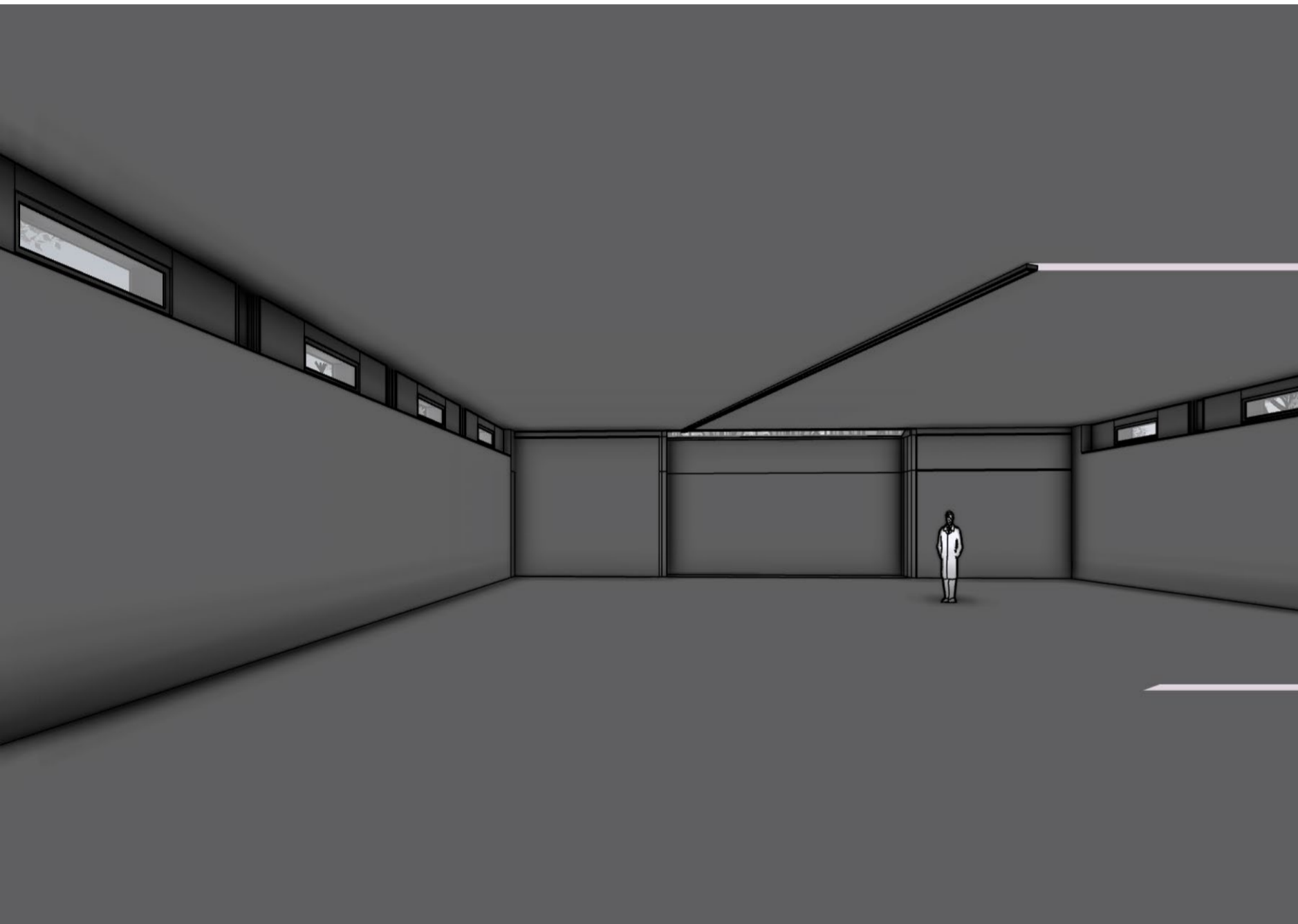
Meditative Crypt Space.

- light enters the space during dusk and dawn.
- space situated below ground level.



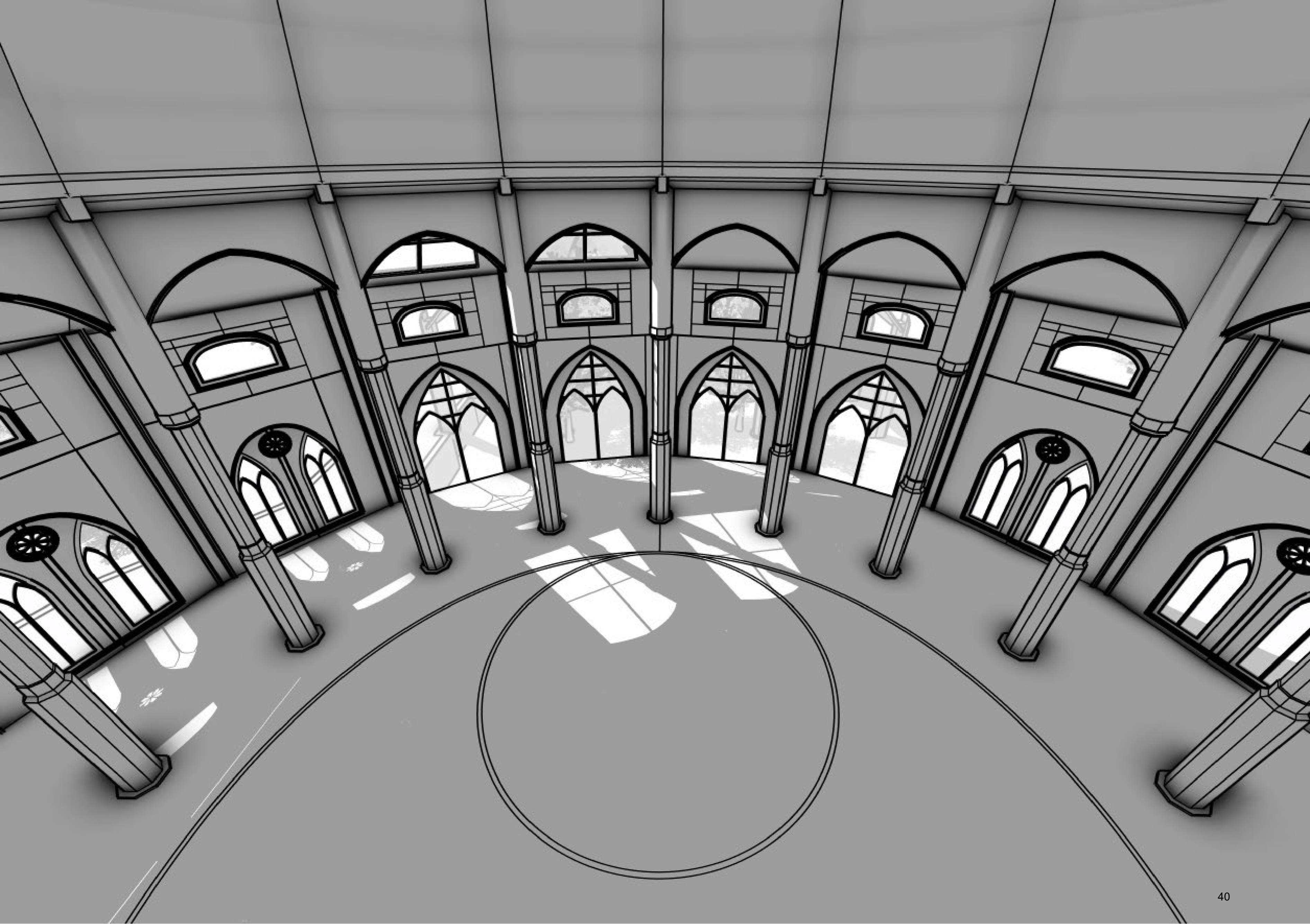
Creation and Birth (Emergence, New Beginnings)

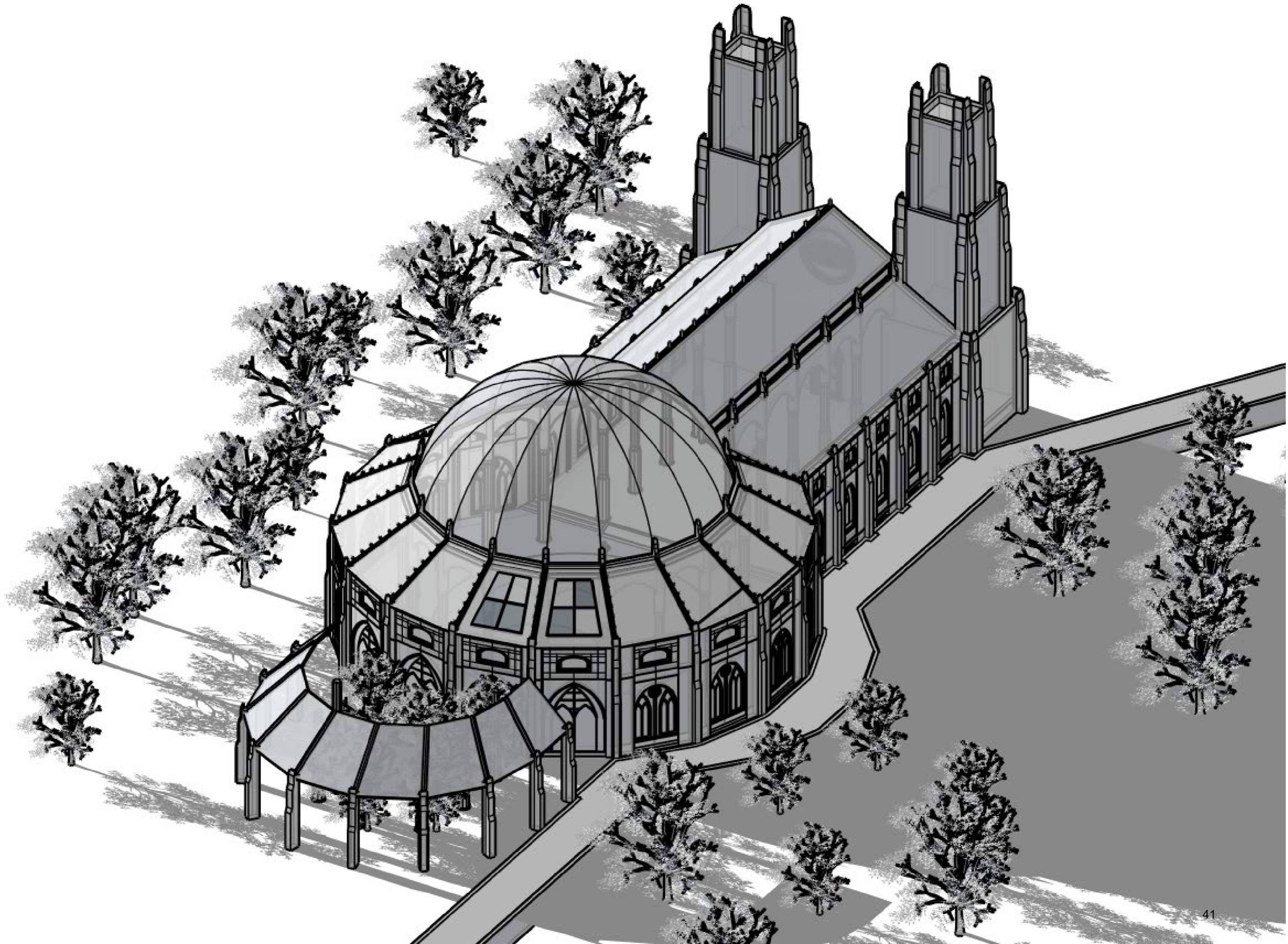
- **Quality of Light:** Soft, diffused light that gradually fills the space, often with a warm tone like dawn.
- **Description:** Light symbolizing creation or birth would be gentle, glowing, and often suffused through layers, mimicking the first light of the morning or the emergence from darkness. This kind of light would filter through **screens, lattices, or translucent materials** like alabaster, creating a nurturing and soft ambiance. The idea is that the space is coming to life, just as new life emerges from darkness into the light.
- **Mood:** Gentle, warm, nurturing, evoking a sense of new life, growth, and creativity.

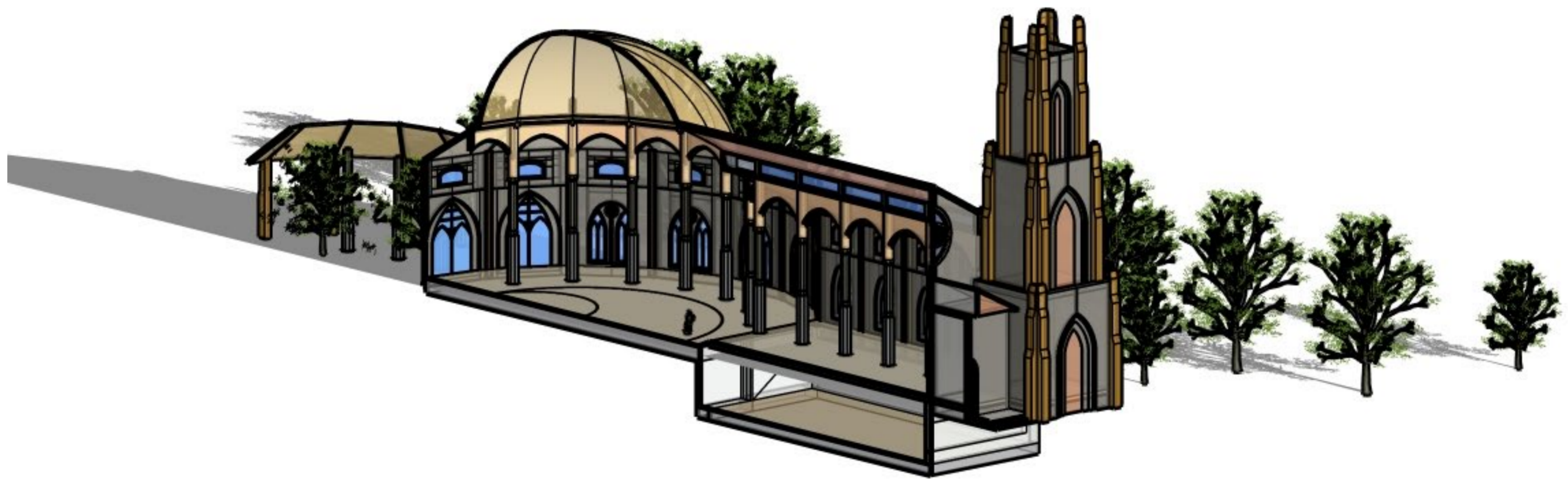


Solstice Light: A Journey of Creation and Renewal

During the winter solstice, the tonal light that enters the crypt carries an orange hue, symbolizing creation and the warmth of renewal. This soft, warm light filters through the glass ceiling, gradually illuminating the space in a gentle, calming glow. As it falls across the crypt's interior, the light reveals the intricate geometry of the space, highlighting the careful design of the walls, columns, and angles. The orange tone evokes a sense of comfort and rebirth, creating an environment conducive to meditation and reflection. This carefully timed light not only enhances the architectural beauty of the crypt but also invites a deep, spiritual experience, offering a moment of renewal and introspection for those who enter. The interplay of light and geometry fosters a sacred atmosphere, aligning with the solstice's themes of introspection, transformation, and connection to the cycle of life.







IMPACT AND VISION

The vision behind this thesis project is to create a transcendent space that embodies both remembrance and renewal, serving as a place for deep reflection and spiritual connection. The design is grounded in a harmonious interplay of light, material, and geometry, with each element carefully calibrated to reflect the themes of the solstices and equinoxes. The architecture acts as a canvas for light, with its intentional use of sunlight at different times of the year symbolizing themes of growth, transcendence, introspection, and creation. At the heart of the project is the integration of nature, with elements such as the Sesquicentennial Grove and the surrounding landscape becoming active participants in the experience of the space. The structure's interaction with light—whether through the precise slits in the dome, the reflections of the creek, or the fall of sunlight through the windows—creates a dynamic, evolving relationship between the natural world and the built environment. This delicate balance encourages a sense of awe and reverence, while also offering a sanctuary for introspection. The 32 columns within the space stand as a powerful memorial, each one symbolizing a victim of the Virginia Tech tragedy, while also signifying the resilience and enduring spirit of those lost. The project seeks to honor the past while inspiring transcendence, using light and material to form a living memorial that fosters healing, introspection, and growth. Ultimately, this project aims to create a space where architecture is more than just a physical structure—where it becomes a vessel for spiritual awakening, a place where light and geometry guide visitors through a journey of remembrance, renewal, and connection to the larger human experience. It is a vision of harmony between the built environment and nature, an invitation to pause, reflect, and be renewed.

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- This journal article explores the use of light in sacred architecture, emphasizing how it can symbolize the divine and create a transformative atmosphere.

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