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ELHAM FAIRUZ

AMERICAN COLLEGE TOWN MOSQUE



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To mom, for your strength.
To dad, for your perseverance.

To you both, for everything.

*A study of mosque architecture in a small college
town in the United States*

American College Town Mosque

Elham Fairuz

The history of architecture is not
a history of buildings or their styles.
It is a history of ideas and how they
have shaped the way we think about
ourselves and our built environment.

Harry Mallgrave¹

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Committee chair

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Professor Rebecca Hankins
Committee member

acknowledgement.

This project is in this book today only because of all the people who helped me build it. I owe so much to my committee members.

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regret is not being able to do justice to the opportunity you provided for research in laying the foundations of this project.

And without the help and support of Professor Rebecca Hankins, I would still be fumbling in the dark on the history of the Muslim community in the United States. Thank you for taking such great care of me, for helping me navigate and get through this project - through all of its ups and downs. Your patience and enthusiasm were constant, and you stuck with me throughout it all. I deeply value the time I spent working with you.

I would also like to thank Dr. Ahmed Ali for encouraging me to take up the topic of mosque architecture in the United States. And a nod to my studio professor Brian Gibbs, for his guidance and efforts.

Also, a big thank you to everyone who stayed up late and worked with me (you all know who you are), to all my friends who listened, questioned, and reflected with me. I am eternally grateful for the people who got me through this - grateful and blessed to have had the opportunity to call you my friend, teacher or family.

An article from 1952 by Christie G. Thompson introduces the mosque as the "First authentic mosque" to be built in the United States.²

Context

This section introduces the basic premise of this project. This project uses the small college town mosque to move away from the idea of architecture as mere representation—through reproduction of visual styles—to a space-making process by articulating everyday practices within existing means of architectural representation, i.e., through architectural sections.

Subsections are

Introduction

A Little Background on Islam

1.0



THE FIRST AUTHENTIC MOSQUE ever to be built in this country is now under construction at Massachusetts avenue and Belmont road N.W.

A mosque is a Moslem temple and Moslems in this country have always had to convert ordinary buildings into mosques, instead of being able to design and build something new. But the Washington mosque will be built in accordance with the traditions of Moslem architecture and will give Moslems in this part of the world a place of their own in which to worship and study.

The idea of building a mosque here started in 1943, when the Washington Mosque Foundation, Inc., was formed to construct and maintain a new mosque and Islamic institute. This corporation, headed by Mohamed Kamil Bey Abdul Rahim, Egyptian Ambassador to the United States, is sponsored by all the Moslem countries (Saudi Arabia, Egypt, Syria, Afghanistan, Iran, Pakistan and Iraq) and one of its main tasks is to finance the project.

Contributions have come from all parts of the world—including many from Christians—much the

By Christie G. Thompson

Construction of the mosque began in 1949. Built of Alabama limestone, the main body of the structure will be dominated by a tower more than 150 feet high. From a balcony on this tower, known as a "minaret," a man will chant daily at the appointed hours for prayer. (Orthodox Moslems pray five times a day—morning, noon, afternoon, sunset and night.)

The front of the mosque opens into a patio, in the center of which will be a fountain to provide water for ritualistic ablutions. These ablutions are necessary, because the thought of being unclean before God is intolerable to a Moslem.

The patio is flanked by two wings which will house the administrative offices of the institute, as well as facilities for all who wish to study the Islamic teachings, art, or culture.

The institute plans to publish leaflets and other literature dealing with Moslem culture and history, and to provide an auditorium, equipped with the latest motion picture apparatus and an air-conditioning unit, for use for lectures and conferences.

pictures, because the Koran (the Moslem Bible) rigidly forbids any representation of living beings within a mosque. Instead, all decorative art will be restricted to purely conventional motifs—elaborate geometric designs and the like—and to several sentences from the Koran to be inscribed on the walls.

To a Christian, one of the most surprising features of the mosque will be its lack of seats or pews, for a Moslem congregation customarily sits on the floor. This floor will be covered with vivid carpets which, together with the elaborate surface decoration of the walls and the magnificent light fixture, will help create that feeling of light and elegance which is found in mosques throughout the world.

The casual observer will be surprised again when he notices that, although the front patio and the wings are parallel to Massachusetts avenue, the mosque is placed at a slight angle. The reason for this is the front of the mosque is signed by a large, brightly lit sign, the sign is

introduction.

When I begin a design project, and I rummage for inspiration, I often remember my experience of the national assembly building in Dhaka. Through this memory, I have come to associate 'good' architecture with its ability to affect me emotionally; a response, that I've learned, is not only caused by what is visible. And so, as I explored design, the perennial question for me thus became: What qualities of architectural design carry this ability to affect emotions?

My proposal—perhaps even my thesis—is that the emotional impact of a design cannot be found in geometrical or dimensional quantities, but rather in qualities that are better described as social. At its roots, this is a phenomenological way of thinking about architecture. It is the relationships between people—between us—that forge and found our understandings of space and spaces. And as times and contexts around us shift and morph, we become active participants in those changes, and are equally changed by these variations. Architecture then, can also be understood as the practice of creating physical spaces around, for and based on these social relationships.

In the Muslim community, the primary building type associated with society is the mosque. This particular project, therefore, in an attempt to explore this relationship between people and their space, is

focused on a study of the mosque. In the architectural study of mosque history, there is strong emphasis on the stylistic variations and visual representations through architectural forms and expressions. On the other hand, the mosque as a space and an institution, and its association with community has evolved over time through the reproduction of social practices. This reproduction, which is also the "reproduction of culture" (i.e., enculturation), is different from the reproduction of visual elements and styles. Whereas the "reproduction of visual styles" depends on representation, the "reproduction of culture" depends on participation. If we were to think beyond the representation of visual styles, which has its own structure of relationships, can we imagine the way in which the participation in various social practices "structure" the mosque? Can participation (not representation) be the basis of architectural design?

This book accompanies an architectural project that re-imagines the process of designing a mosque by focusing on the structure of social practices. The book is divided into six sections. The first section, this one, introduces the topic. Section 2 gives information on the historical study of mosque architecture, Section 3 introduces, through history and existing surveys, the heterogeneity of the Muslim community in the United States. Section 4 uses the graphical representations as a means to situate practices and habits in spaces. These habits and practices give context to the college town mosque, and this section of the book will help lay the framework for Section 5 which discusses possible iterations for a small college town mosque based on existing structures. Section 6 will draw the conclusions to the possibilities and practicabilities of situating religious and social practices within existing spaces to demonstrate that architectural design could also be generated from a "program" of practices and not just a program of functions.

a little background on islam and architecture.

The mosque is the Muslim community’s religious space. Why is this book interested in mosques, and specifically, why is the interest in the practices of the community? To answer these questions, we will need a little background here that will help with later discussions.

Islam, as we know of it today, as the religion, began in the mid-6th century in the geographical location of what is modern Saudi Arabia. To be more specific, Islam was transmitted by its Prophet, Muhammad (ﷺ), who was a resident of current day Makkah—the site of one of the largest annual pilgrimages today. The pilgrimage, along with a few other practices are the religious requirements of Islam. One of these is the prayer. Muslims pray five times daily, and they face Ka’aba during their prayers. The Ka’aba is a brick structure in Makkah, which Muslims believe was built by Abraham. Through ancestry, Islam claims its place with the other Abrahamic religions.

When the Prophet began teaching Islam, and as the number of adherents grew, and prayer was made an obligation on every Muslim, Muhammad (ﷺ) was known to have prayed at the Ka’aba. No new structure was known to have been built at this time. People would have prayed out in the open, and that would have been the norm. Persecution and threats forced the Prophet (ﷺ) to leave Makkah and travel north towards another city, Yaathrib or Madina, as it is known today. This is where the “architectural” history of the mosque is traced back to.

The mosque is central to this architecture project. As an architectural ‘typology,’ the history of mosque architecture is studied as part of the history of Islamic architecture. This is the only building type that is directly associated with Islam as a religious practice.³ **Although it is one of the most widely studied buildings within Islamic art and architecture, the religion or the text, i.e. the Qur’an, does not require the building of mosques.** The only commandments are for establishing prayer in clean spaces and in clean clothes. Interestingly though, the Qur’an places emphasis on the maintenance and access to the mosque. With no religious prescription for creating dimensioned architectural spaces, the design development of the mosque is directly linked with the activities of the Muslim community from mid-6th century.

The Prophet’s Mosque, Medina, Saudi Arabia

The current mosque retains no resemblance with the first house and courtyard ensemble that provided the Muslim community with a prayer space.

The Ka’aba and Surrounding Mosque, Makkah, Saudi Arabia

Similar to the Prophet’s mosque, the extensive expansion work has left the surroundings of Ka’aba unrecognizable. This image is from the *hajj* of 2008.



Another article from the Evening star showing the ornamental pieces of art that would eventually become part of the mosque.*

History

This section will look at the historical development of mosques and the transformation in mosque designs in terms of architectural 'aesthetics' through precedence studies.

This section will propose that our understanding of mosques and their study leans towards the visual , and leaves out the social and cultural dimensions of the mosque.

The subsections are:

Mosques in History

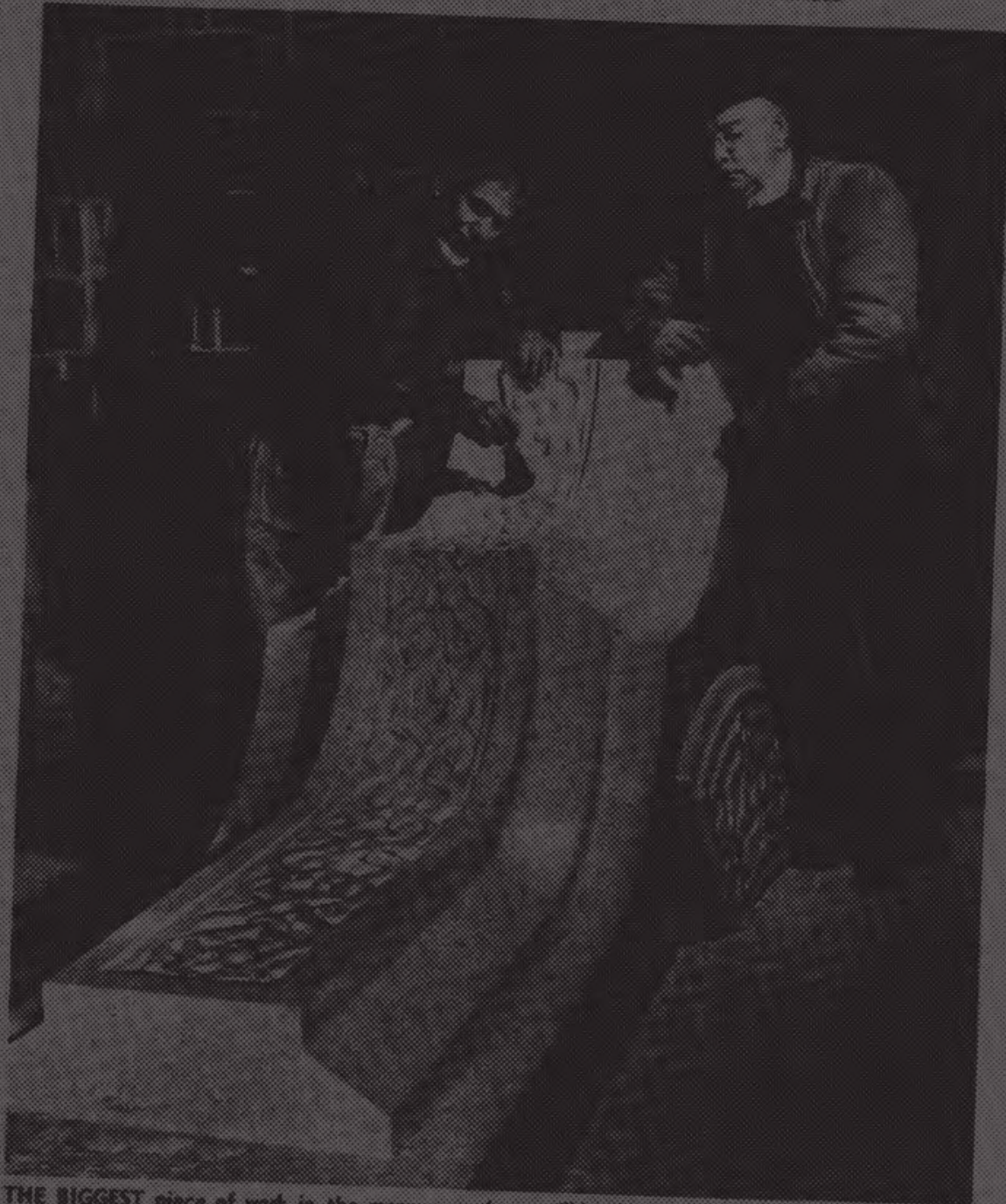
Contemporary Mosques

College Town Mosques

2.0

Mosque Decorations

CONTINUED



THE BIGGEST piece of work in the mosque, perhaps, will be this model of a design for the interior arches. Thomas Houck, construction superintendent, watches as Ahmad Morsi Mohamed cleans the model. Half an arch, it will be duplicated some 40 times to make up more than 20 arches.

here. They still have several months' work ahead of them. Ahmad Ali Khalid and Ahmad Morsi Mohamed were brought here for a reason. Not only are they skilled in true Moslem art, but there are not too many left in the world who do the work by authentic and traditional methods.

They are experts in an age-old, but rapidly disappearing art which, since the seventh century, has put Mohammedan mosques among the world's most beautiful structures.

Naturalism never has been a part of Moslem art. Since the religion discourages the representation of living forms,

Their designs are symbolic of Allah or God, Mohammed and Ali, Omar, Abu-Bakr and Qasim, the men who, according to Moslem religion, were the companions of Mohammed.

Working in the Western world has been a never-to-be-forgotten experience for both Egyptians. They say they are impressed with the beauty, cleanliness and systematic orderliness of our cities, particularly Washington, but they both admit they will be glad to see their native Cairo again.

Ahmad Ali Khalid is 49. Ahmad Morsi Mohamed is 35. And just as their art and

million edifice completed by fall.

"The language barrier has caused us no difficulty," says Thomas Houck, construction superintendent, "because these men are experts. We have developed a sort of sign language and, somehow, we manage to make ourselves understood. When they start a particular job, you know it is going to be done and done right."

When the day's work ends, they put aside their Western working clothes and allow the long robes like those of their native country. They live at the Egyptian Embassy and, in off hours, are

mosque in history.

Mosque as a religious space has its beginnings in the practice of communal prayers. Art and architecture historians, along with archaeologists, have deliberated over the first architectural evidences of the mosque. But most agree that the Prophet's house in Medina, was the first space used for organized prayers. While the prayer itself constitutes of various movements and sequences, there are other requirements such as ablution—or *wudu*, that require washing of the face and limbs, created the need for designed 'ablution spaces' in mosques. As mosques increased in size, schools or *madrasas* were added. Hospitals, markets or bazaars, the imam's residence, etc., were incorporated under the umbrella of the mosque. In the West today, we have sports areas, student centers, 'modern' school classrooms, playgrounds and day cares built under the banner of the Islamic center.

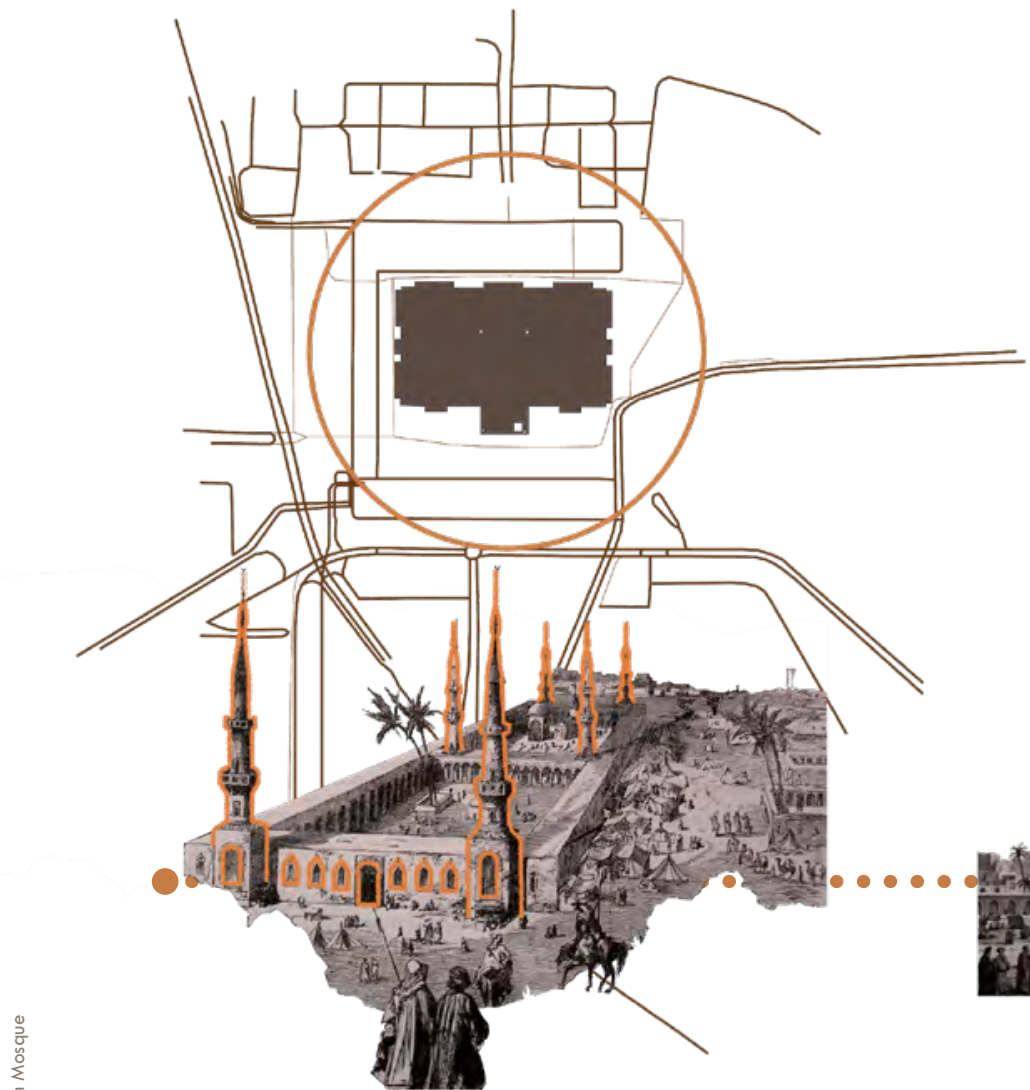
Today, when we begin the design of a mosque and we look to history for guidance and inspiration, we often find that the discourses on design largely deal with the visual and formal elements of mosques. The dome, the minaret, the cavernous spaces, the intricate calligraphy, and lack of images in ornamentation—these seem to dominate the topics of discussion. But if we did look at history, we will also find that the courtyard of the Prophet's housed developed quite organically with the requirements of the

community. The mosque did not function just as prayer space; it was used for deliberations, charity, community discussions, prayers, 'seat of government' and as a resting place for weary travelers. All of these 'practices' have been labeled and demarcated as functions. The third classification deals with the size of the mosque—the size depends on the function. The larger congregational mosques that can accommodate thousands of people were not designed with the same provisions as the mosques that catered to smaller neighborhoods. In the United States, this classification often does not hold. Lastly, the reputé of the designer merits the architectural study of the mosque in our times. While these classifications do well to inform us of how the mosque is and was studied, they do little to provide design guidelines for a mosque in the United States. Here the classification systems are less defined, and issues of 'copy-pasting' designs appear to have complicated the issue.

The variations across classical period were informed through regional and dynastic practices as well as the usual factors of economics and available artisans and craftsmen. The later contemporary mosques are less homogenous—and by this I mean that these later mosques exhibit a lot more 'stylistic' variations. Although not discussed in any detail in this book, a quick search on contemporary mosque design reveals the sheer variety of expressions. Both of the contemporary and the 'traditional' mosques share some basic architectural elements, but they also provide space for particular practices. In the last part of this section we will take a glimpse into how those practices are shaped by the college towns and how best to accommodate them within designed spaces.

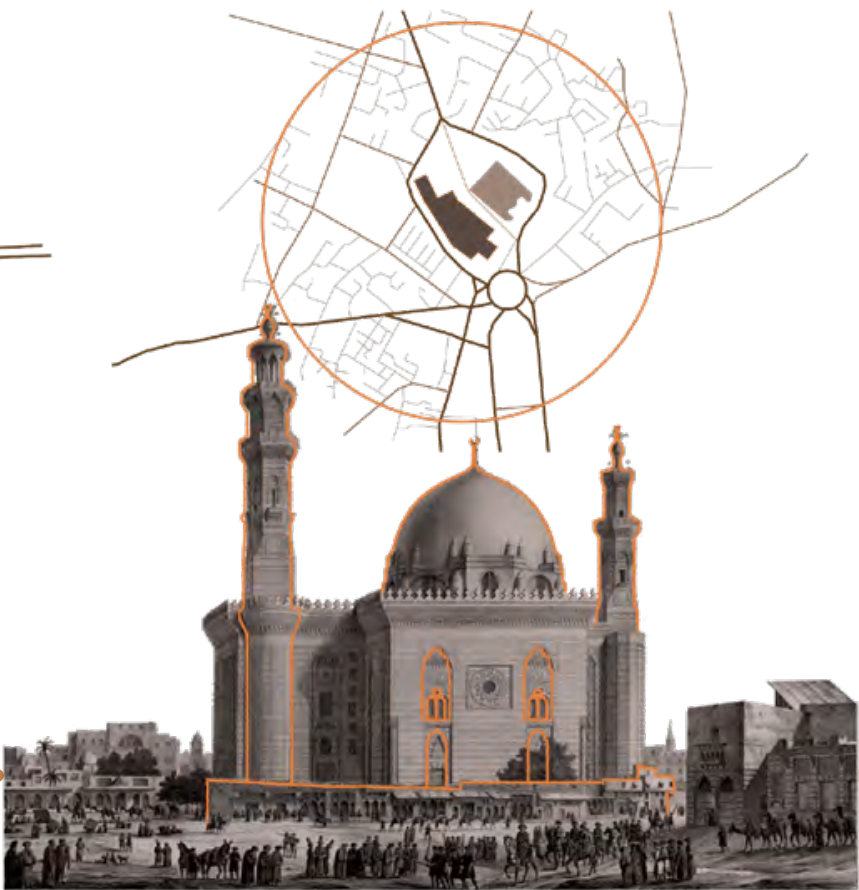
All of the maps in the following section show the current location of the mosque. All the maps show a circle of quarter mile radius to give a sense of scale. The images of the older mosques are from various medium including steel engraving and postcards. The images of the new mosques also show surrounding massing, again, to contextualize and show the difference in the urban grain of the areas. Although none of these are college town or small town mosques, the mosques and their surrounding areas are presented as examples of changes in building scale, difference in geographical context, interpretation of styles, and the use of construction techniques to create the

mosques from the classical Islamic period.



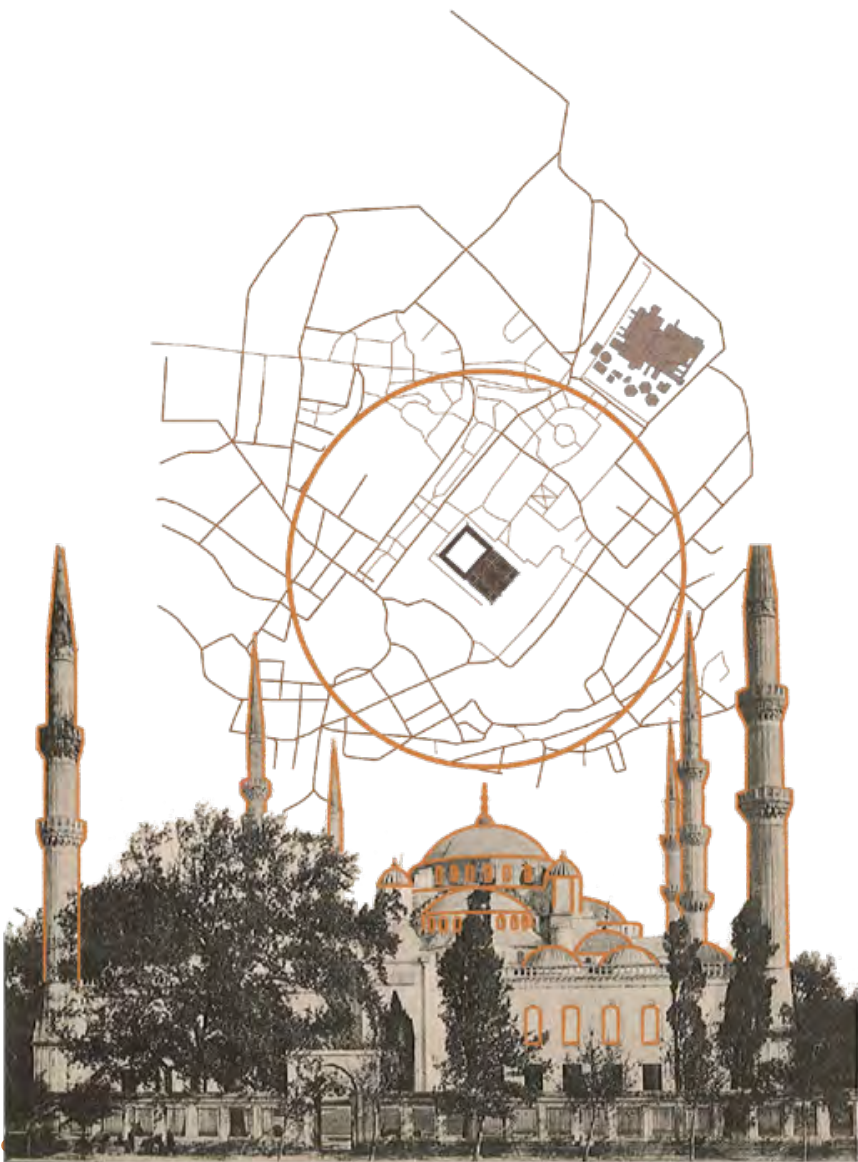
The Prophet's Mosque
Medina, Saudi Arabia
623 CE

This photograph of a steel engraving of the Prophet's mosque, may or may not be an accurate representation of what the mosque looked like before the 19th century. But what it shows are the minarets, the courtyard and the landscape. The map on the top of the page shows the current expansion. The mosque from the steel engraving hardly resembles the current urban context formed through modern design, engineering and construction interventions. This mosque would also be categorized as being situated in a sacred area—a classification not given to all mosques.



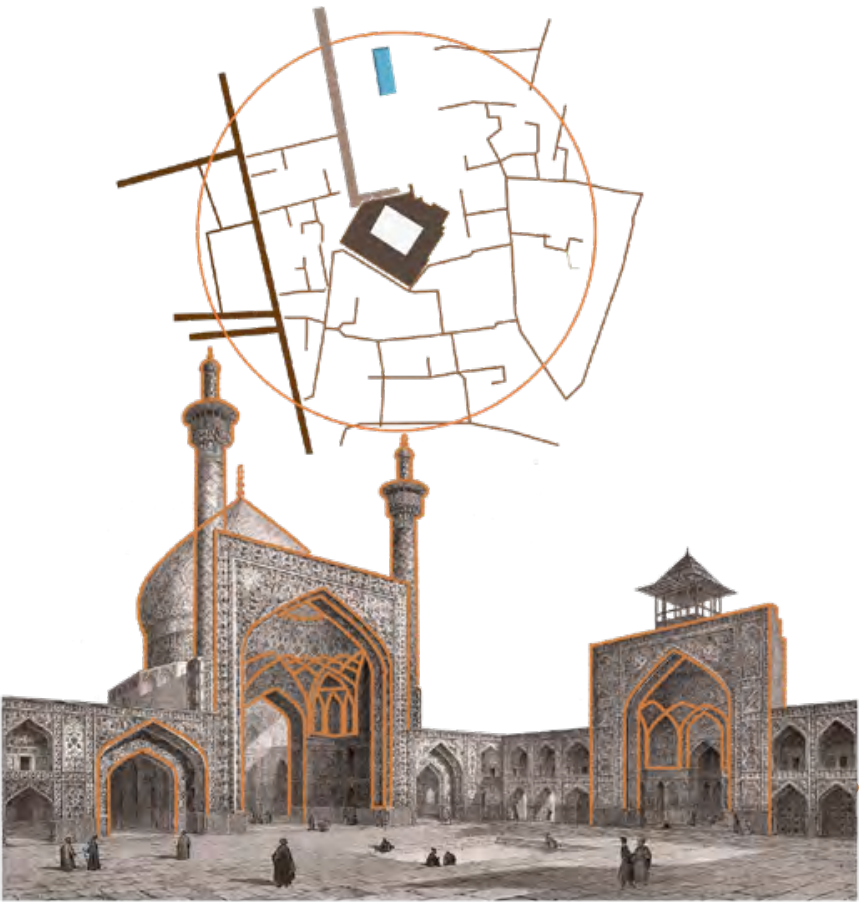
Sultan Hassan Mosque And Madrasa
Cairo, Egypt
1356-1363 CE

Commissioned by Sultan Hassan in the mid-1300s this mosque has four *madrasas* (school) for the *Sunni* orthodox jurisprudence school, a mausoleum, a *sahn* (courtyard) that opens into the major prayer area, and a commercial complex or *souq* on the west. It even housed a hospital when it was built. The entrance to the mosque sits at an angle to the street, thus allowing visual access to the entrance portal. The prayer area and the *sahn* are shielded from the external noises from the street through transition spaces. The outer wall and functional spaces are aligned along the street while the interior prayer space and the madrasa courtyards are oriented towards the *qibla*.⁵



Sultanahmet Cami (Blue Mosque)
Istanbul, Turkey
1609-1617 CE

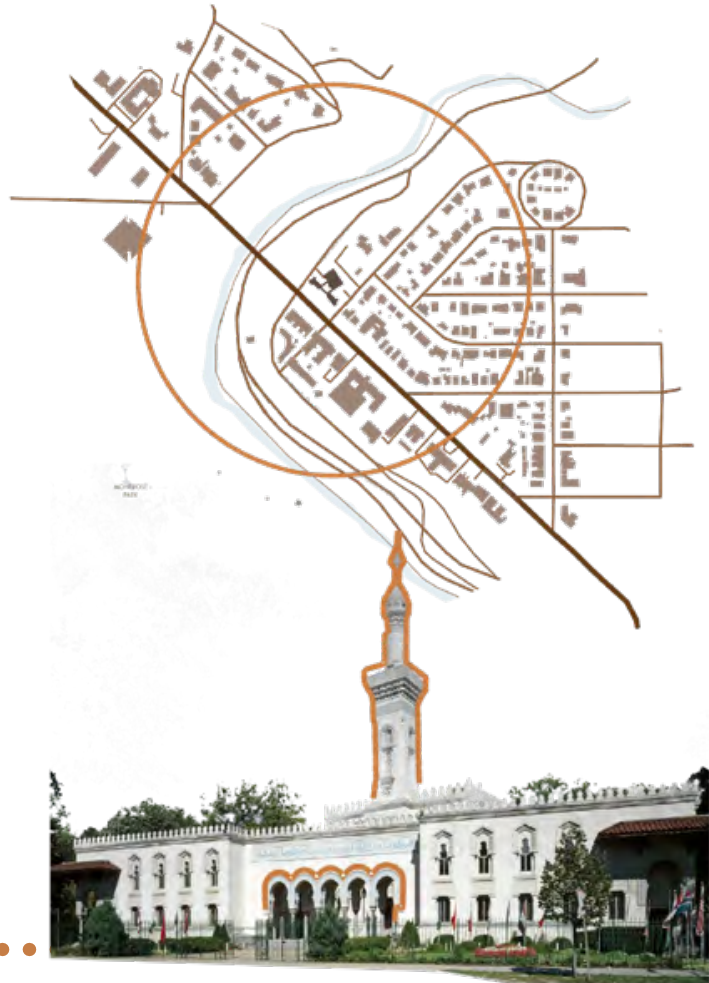
The blue mosque, commissioned by Sultan Ahmed I of the Ottoman Empire, is the iconic mosque whose 'style' is still replicated today. The central dome, and the numerous domes surrounding it, and the long, thin minarets are characteristics of this style. The mosque is part of a larger complex that has mausoleum, school, market area, and a hospital. There is also an entrance that was designed and used specifically for the royalty. The *mihrab* is ornately decorated, *muqarnas* are incorporated at the entrances, and the courtyard acts as the 'foyer' of the mosque. The central dome allows for a voluminous space lit through windows on the exterior wall and also by windows on the main dome.



Imam Mosque
Isfahan, Iran
1612-1638 CE

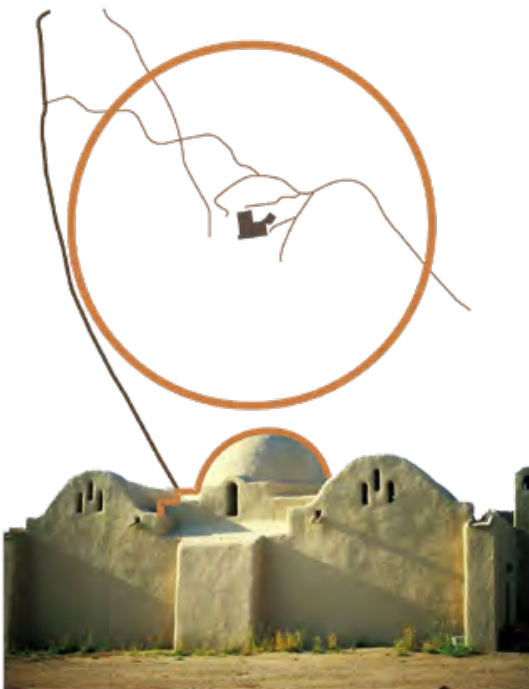
Built by Shah Abbas of the Safavid dynasty, the Imam mosque is a four *iwans* plan mosque built along Isfahan's *maydan*. The front of the mosque, the vestibule, is oriented along the *maydan* but the entirety of the mosque beyond is rotated to face the *qibla*. This mosque too has several entrances, and the plan distinguishes between winter and summer prayer areas. The exterior of the mosque is a hub for social and commercial activities, and the gardens and pools in the *maydan* form part of the urban context of the mosque.

contemporary mosques.



Islamic Center
Washington D.C.
1957

The Islamic Center of Washington D.C. is probably the first mosque in the United States sponsored by foreign countries. Direct efforts by the diplomatic community was instrumental in the founding and construction of the mosque. The absence of a mosque to perform funerary functions for a Turkish diplomat instigated the efforts for building this mosque. Stylistically, the mosque draws on existing traditional motifs to recreate the styles for the minarets and arches. The mosque has a library, and conducts various classes. It was designed by Mohammad Rossi.



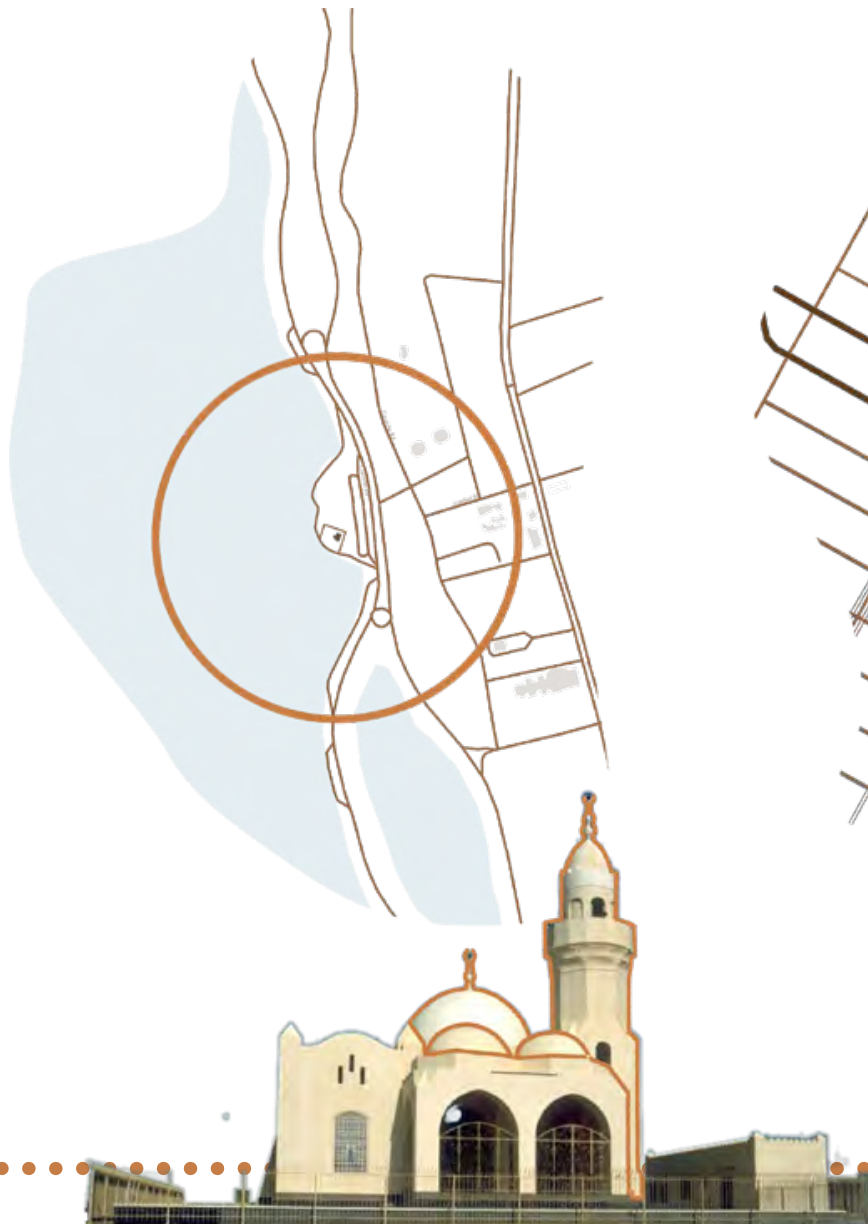
Dar al Islam Center
Albuquerque, New Mexico
1980

Designed by Hassan Fathy, the dar al Islam was conceived by an American-born Muslim and a Saudi businessman. The center mainly serves the community in the surrounding remote areas. The Nubian adobe construction techniques used by Fathy are similar to the local building traditions, but existing building codes and regulations played a role in the unfinished construction. The interior of the mosque is not ornamented and the simplicity and sculptural quality of the building is characteristic of Fathy's work.⁶



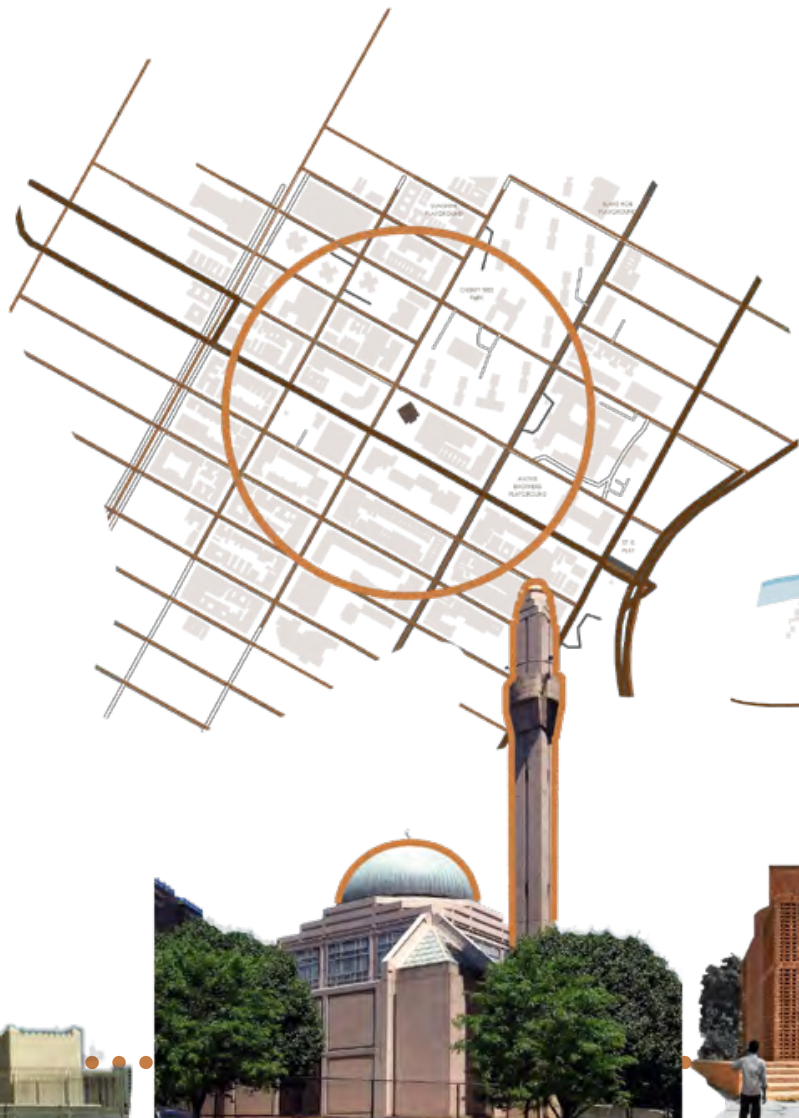
Islamic Center of North America
Plainsfield, Indiana
1982

Designed by Gulzar Haider, the mosque internalizes through design, the elements otherwise observed on the exterior of a mosque. The architect recalls having pursued a design intent where the interior of the mosque with its geometric spaces and hidden domes provided a familiar space for the Muslim community. The exterior of the mosque is "hidden," almost in plain sight, and gives away neither its purpose nor its function.⁷



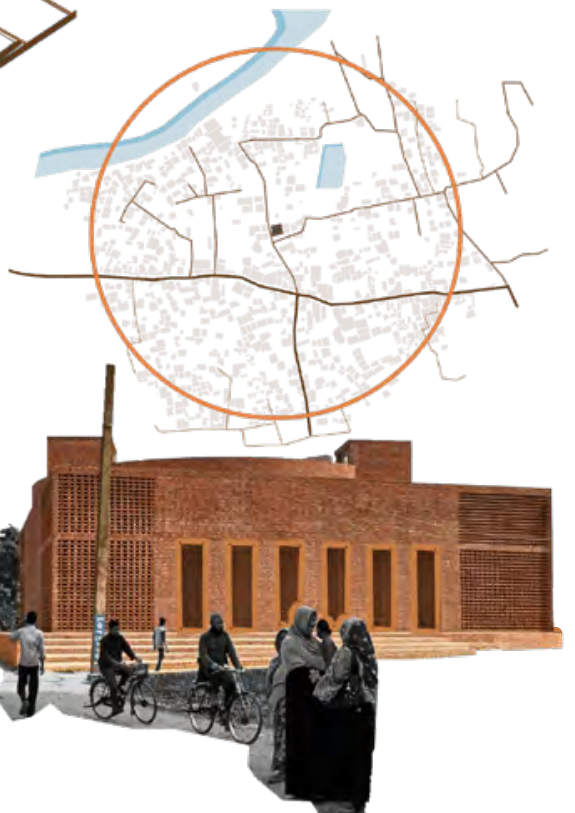
Corniche Mosque
Jeddah, Saudi Arabia
1986

Part of a landscape development project, the corniche mosque is one in a series of three mosques built along the sea. Designed by Abdul Wahed El-Wakil, the mosque is a small, simple, sculptural building. The dome construction techniques used are similar to those of Hassan Fathy. The mosque is in a urban area, but away from residential communities and caters to those who visit the park and surrounding landscaped areas.



Islamic Cultural Center
Manhattan, New York
1991

Designed by SOM, and the first purpose built mosque in New York, this 'modern' interpretation of a mosque sits at an angle to the existing urban grid. The dome and the minaret, added on at the request of the mosque committee, serve as the identifying features of the building. The vierendeel trussed structure allows for column free interior spaces,⁸ and the *mihrab* is designed as a collection of geometric glasses with calligraphy on them. The mosque serves the surrounding area, and is frequented by those who work in the vicinity.



Bait ar Raouf Mosque
Dhaka, Bangladesh
2012

Designed by Marina Tabassum, the mosque design responds to the requirements of orientation through a cube-in-a-cylinder-in-a-cube configuration. The inner cube is rotated to face the Ka'aba while the outer skin conforms to the site. The geometrical configuration creates hollow pockets of light while maintaining visual privacy. The two storied structure provides rudimentary spaces for ancillary functions but provides a spacious prayer hall for men.

college town mosques.

College towns here, indicate those small towns that grew around public institutions and away from metropolitan centers. The unique locations, demographic makeup, and a partially transient population are some of the characteristic features of these areas.⁹ To analyze the differences between the designed mosques and these college town mosques, five mosques, or rather, Islamic centers from around the United States, were chosen. Since the design scope is limited to the Bryan-College Station area, whose character as a college town is defined by the presence of the Texas A&M University, four other universities that are peer-institutes of Texas A&M University were chosen.

The college town of Berkeley, home to the University of California, Ann Arbor, home to University of Michigan, Urbana-Champaign, home to the University of Illinois, and West Lafayette, home to the Purdue University are all classified as college towns using the criteria described above. Except for the University of Michigan, all the other universities are land grant universities. All five universities, including Texas A&M University, are public institutions and have been attracting Muslim students since the 1950s because of their academic programs and repute. The setting up of the Muslim Students' Association (MSA) and the eventual founding of a mosque by students and alumni of the respective institutions is typical in these universities. All of the mosques are directly or indirectly associated with the MSA and are accessible from the college campus, but only Urbana-Champaign has a mosque on campus.

The design of the mosques and the information regarding their design is obscure compared to the designed mosques discussed above. The demographic data available on Muslim students is also meager. The mosques however, seem to follow a certain pattern that resembles the growth of other small town mosques in the United States. In all of the images on the right, the mosque designs appear to aspire to emulate something, perhaps history. But in these recreations of spaces, even in the designed spaces, the affective qualities of architecture seem to have escaped the efforts of reproduction.

College town mosques and their prayer spaces.
(From top to bottom)

- Berkeley mosque
- Islamic Center of Ann Arbor
- Central Illinois Mosque & Islamic Center
- Islamic Society of Greater Lafayette
- Islamic Center of Bryan-College Station



the mosque in bryan-college station.



Similar to many other mosques in the United States, the Islamic Center of Bryan College Station (ICBCS) as a community organization has its roots in the desire for a group of Muslims to come together for their communal prayers. A handful of students used to gather in a nearby apartment before the congregation got too large. In the 1980's, the community bought land next to the existing apartments, and built the first two-story building that has the prayer spaces. The second building was added in 2016 as an extension to the existing building. This second building has an indoor basketball court and a student center. While both the buildings are 'purpose-built' the exterior of the building does not utilize the usual visual elements, i.e., the dome and the minaret. Ablution, office and other ancillary spaces are squeezed in around the prayer area. The women's prayer space is separated using a one-way glass screen with an operable glass door. The men's area and the basketball court serve as community gathering and outreach areas. The court also serves as spill over area for men, especially during Friday prayers.

The mosque is located in a residential area close to the university campus and is accessible through university transport. The maintenance is carried out and funded by community volunteers and group serving on the mosque board and committee.

The growing community has expressed the need for expanding into other buildings, either through a new mosque building or by moving into an existing structure. The lack of a cemetery, parking spaces, school or playground had been raised as requirements in a new facility. The existing mosque serves the Sunni Muslim community, and works with ISNA and the MSA.

Interior of the ICBCS

The men's prayer space in the old building with the *mihrab* and *qibla* wall on the left.

The qibla wall of the ICBCS

The extruded form of the *mihrab* is the only exterior visible indication of the building's 'function.'



An article titled "The Amazing Spread of Islamism" from 1912, showing snippets from Mecca. The article discusses conversion and spread of Islam, pan-Islamic ideologies, and the geographical presence.³⁰

Community

This section will look at the history of Muslims in the United States, followed by a brief analysis of the demographic data from existing surveys. The second part of the section will introduce college towns as a geographic locale.

The section will conclude by looking at the Muslim community in Bryan-College station.

The subsections are:

Muslims in the United States

Demographics

3.0



muslims in the united states.

Muslim presence in America can be traced back to the early 16th century. An older African American community existed here before the immigration boom of the 1960's. Organizations and built mosques became common in the late 20th century, although the earliest extant purpose-built mosque is reported to have been built in 1934. Many early Muslim communities appropriated existing spaces to create communal prayer areas. In college towns, Muslim students often formed groups to gather and pray and eventually purchased land to build the mosques in use today. These trends in history, of forced or voluntary migration, have directly influenced mosque design in the United States. For one, the earliest Muslim Africans brought to the Americas through slave trade continued to practice their religion, mostly through individual efforts. Without the opportunity to establish visible architectural footprints, the 'architectural visibility' of this community was mostly under-studied. Contrastively, on the Southeast coasts of the United States, one can find the presence of *mudejar* and Moorish architecture, brought and build by the Spanish. While these architectural styles are often associated with Islamic architecture in general, and often proliferated in mosque designs in Al-Andalus, their presence in the United States was not an indication of the Muslim presence.

The late 19th and the rest of the 20th century saw an

increase in the number of Muslims coming to the United States. The fall of the Ottoman Empire and the prevalent colonial period had perked interest in the 'Orient.' As the 20th century rolled in, the founding of nation-states, the independence of the oil producing countries in the Middle East, and the general advent of industrialization and modernization increased the interest in 'visible' mosque architecture in the United States. Within the country, the Immigration and Nationality Act of 1965 created opportunities for a greater number of people to migrate into the United States. At the same time, the Civil Rights movement and the involvement of groups like the Nation of Islam also impacted the growth and representation of the Muslim community.

Some of the largest Muslim organizations today were also found during this period. The Muslims Students' Association (MSA) which has a chapter in most large universities in the United States, was formed in 1963 and now caters to Muslim students in these educational institutions. Other organizations like the Islamic Society of North America (ISNA) are also directly or indirectly involved in community outreach, education, research and community building activities. The involvement of the students is, as expected, most visible in college towns. These small college towns, outside and away from the metropolitan centers provide an insight into the mosque building activities of the Muslim community. The community here is also not the subject of extensive surveys or research. In the recent years, and especially after 9/11, there has been renewed efforts in gathering data on the Muslim community, and some of this show up as ethnographic studies that can provide insight into the architectural study of mosques in the United States.

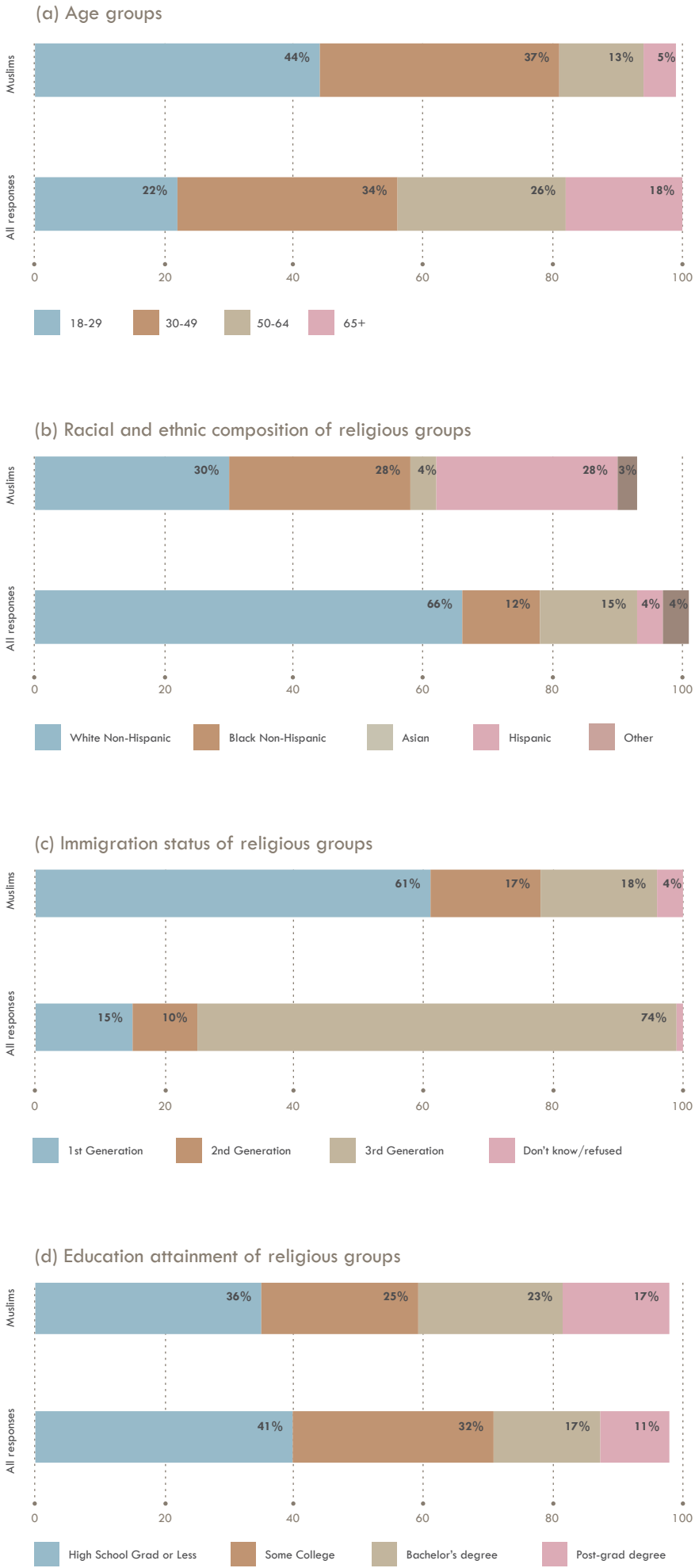
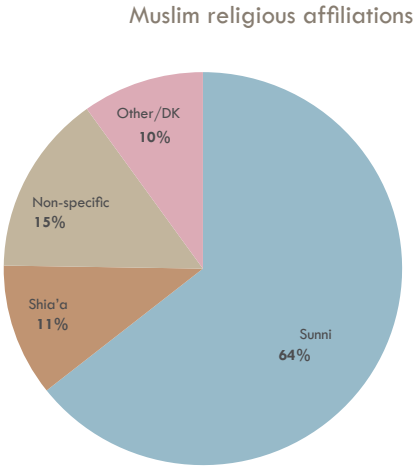
The mosque building practices of the Muslim community are constantly changed and transformed through social, cultural and economic contexts. In the United States, the heterogeneity of the community and the effects of globalization on architectural practice has affected mosque design. **While these changes are visible through architecture in the large metropolitans, or in the initiating patron or the community's choice of the architect,** the social practices of the college town community may provide better opportunities in understanding how this community builds and understands their social and religious spaces.

data.

The diversity of the Muslim community is well portrayed in the demographic studies. In the surveys conducted by Pew, the Muslim community can be described as younger, and more diverse when compared to other religious groups who participated in the survey. Less than half the Muslim population identify as non-Hispanic Whites, and equal more than quarter of the population identify as non-Hispanic Blacks. Majority of the Muslims in the United States are also born abroad, and specifically come from Asia-Pacific regions. Equal proportions of the foreign born population comes from the Middle East and North Africa. A quarter of the Muslims are currently enrolled in college, and about forty percent of the population reported having attained a college degree. More than half of the respondents also claimed affiliation with Sunni sect of the religion. Just a little less than a quarter of the Muslim community are comprised of converts, a majority of whom are African Americans. Mosque attendance in the community is highest among African Americans and among men. Almost half of the community attends some or all of their prayers in the mosque. Almost half of the community also suggested that women's prayer space should be separate from that of men.¹¹

The mosques in the United States are also growing in number. While most mosques are in metropolitan cities, there is a growing trend of building mosques in other urban areas away from the centers. **Most mosques were built the 1980's and over half of these were built by purchasing existing buildings. Only about thirty percent of all mosques were purpose-built.** This building trend is similar for the Sunni and the Shia'a community.¹²

The Muslim community in Bryan-College Station is an amalgamation of many ethnicity and origins. The people come together to pray, break fast during Ramadan, study, and play. They come together based on their faith and religious traditions. The community is heterogeneous in terms of their occupation and origin, but they follow a pattern of usage of religious spaces that can be traced through their cultural understanding of 'traditional' Islamic principles. While many of these understandings can be inferred from the demographic surveys, the questions asked to respondents are not aimed at exploring the architecture of the mosque as the social and cultural



This article appeared in the San Francisco Call in 1903, and gives an account of a certain Englishman who had converted to Islam and was actively pursuing others in his community in order to spread Islam.³³

American College Town Mosque

4.0

This section will provide the alternative to the reproduction of visual representation as an method to approach design. The first part introduces the ideas of practice and the next part shows sketches of everyday practices of the Muslim community as performed in their mosques.

Practices

habits and practices, and representation.

The last few sections, hopefully, provided a window into mosque architecture and Muslims in the United States. Based on the data and the information, what should be the approach to designing a mosque? Should we go look for standard dimensions and functional spaces in our “standard dimensions” books and begin designing on a given site? Site analysis is no doubt important, but if we looked at the data, does choosing a new site for a new mosque building coherent with the existing practices? Also, in the college town, where the funding is from within the community and the patron is the community itself, what should be the architectural representation? Unlike mosques designed by individual architects (who have their own ‘styles’) or by global architectural firms, these small college town mosques cannot usually afford the luxurious and ‘faithful’ reproductions of the image of the mosque. The affordability is not just in terms of finances but also in terms of the perception. The community made up of individuals who experience and understand space similar to and different from others within the community. They carry their own representations of the mosque. How then, can architecture reconcile and represent this heterogeneity of the Muslim community?

If the criteria for analyzing Muslim religious architecture cannot be fully accomplished through well-

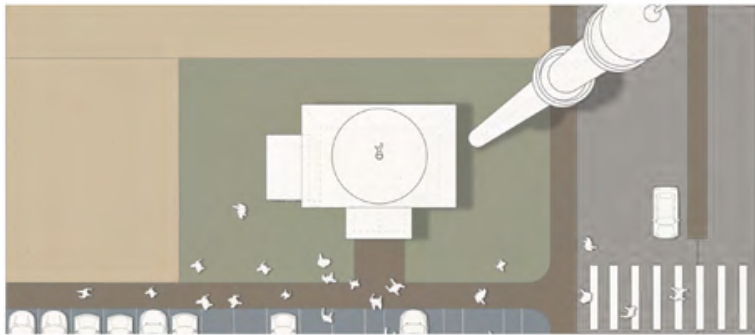
known and oft-attributed architectural expressions such as domes and minarets alone, there must be other means of situating this type of architecture. Although visual expressions are important in recognizing mosques, the context in which they are placed often dictates those representations. If we considered the church as an analogy where the cross’s presence generally identifies the building as a church, irrespective of whether it is modern or traditional stylistically, the following observation becomes more meaningful. Consider the contrasting situation where the use of domes, minarets, crescents, or stars might identify the building as ‘arabesque’ or ‘Moorish’ but does not necessarily indicate a mosque’s presence.

Conversely, a building could be a mosque and not have any of these architectural features. The affective space created in the mosques through the utilization of these elements could perhaps be replicated through other methods. **Or because the understanding of affective space is embedded in the culture of the community and the people, we could look at anthropology to understand what this affective space means for this college town community.**

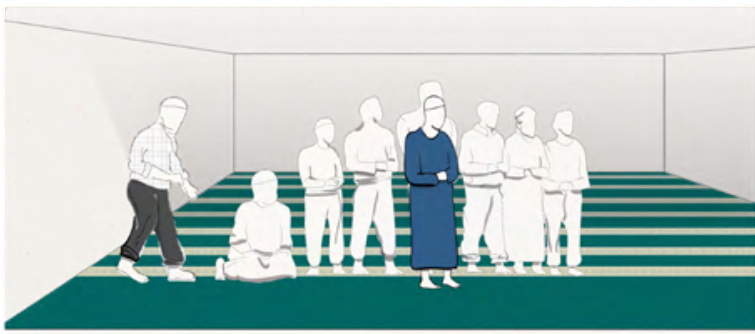
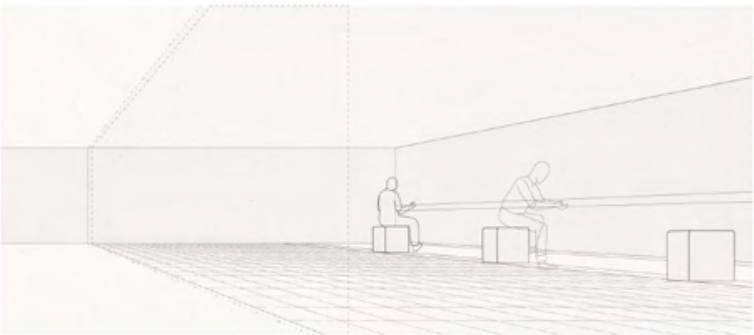
The relationship between these individuals that make up this imagined community, have much to tell. The mosque is a communal place as much as it is a religious space. The people who gather and use the space relate to themselves and others through certain habits and practices. These individuals through collective participation, act as agents that create and give meaning to the spaces they appropriate. If we could move beyond our understanding of spaces as reproductions of representation, i.e. through the use of conventional architectural symbols of walls, doors and windows, and in case of mosques, through symbols of domes, minarets and arches, then we could possibly look at the underlying reasons that create spaces. The design exercise then begins, not from the table of form and function, but from situating oneself in the particular community’s narrative frame, thus creating a plan of practices.

practices in spaces.

Movement



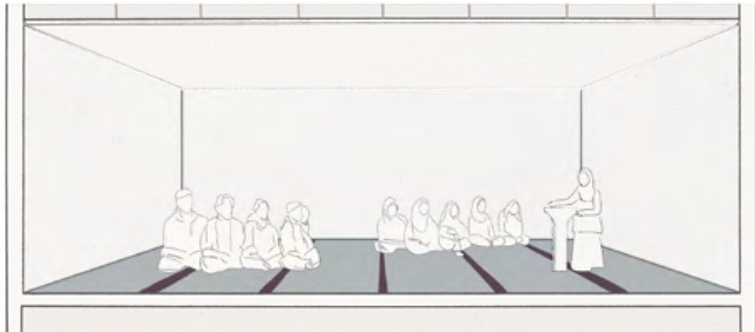
The Prayer



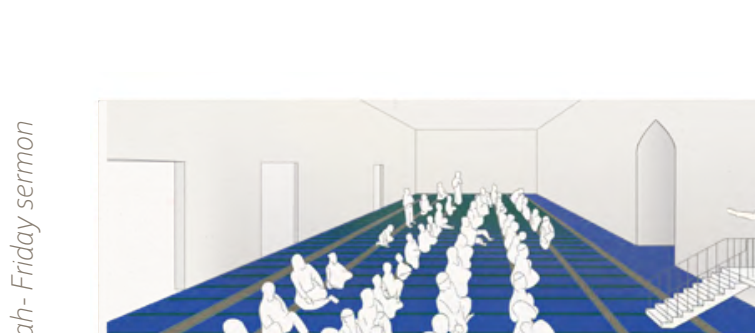
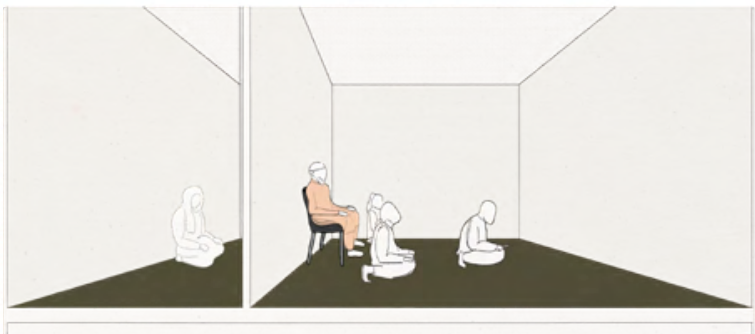
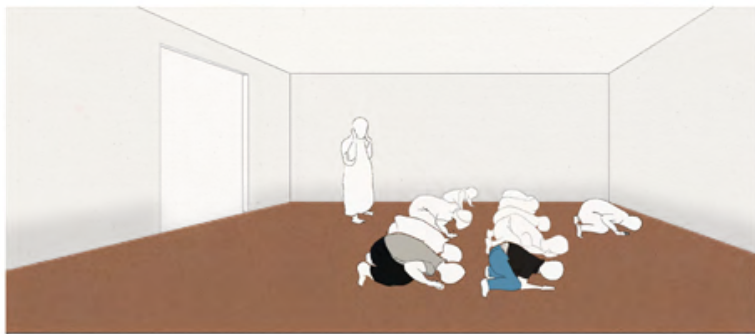
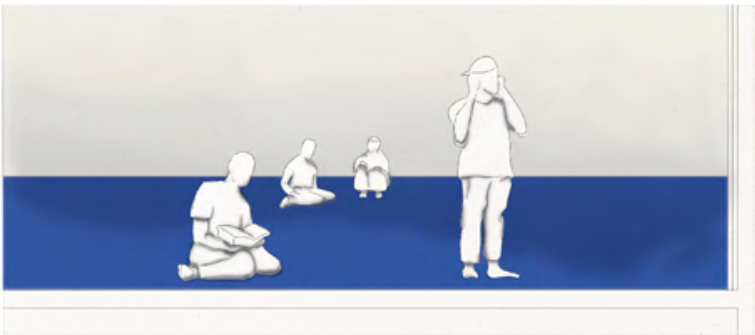
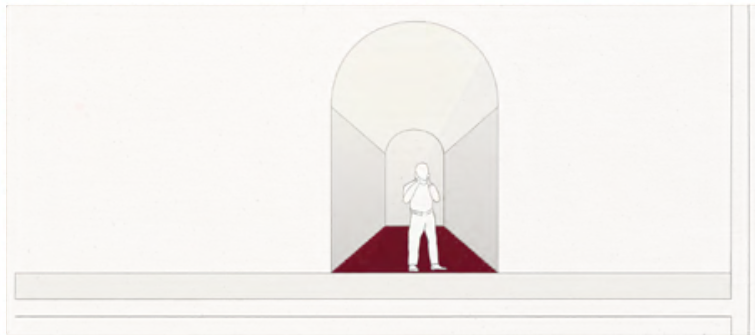
Children



Women



The following images were drawn to depict both religious and social practices. Each image is a one-point perspective in the hope that these can be changed, fixed, and added to as different communities engage in adding and subtracting, and adapting the representation of practices that best suit their needs.



Jumu'ah - Friday sermon



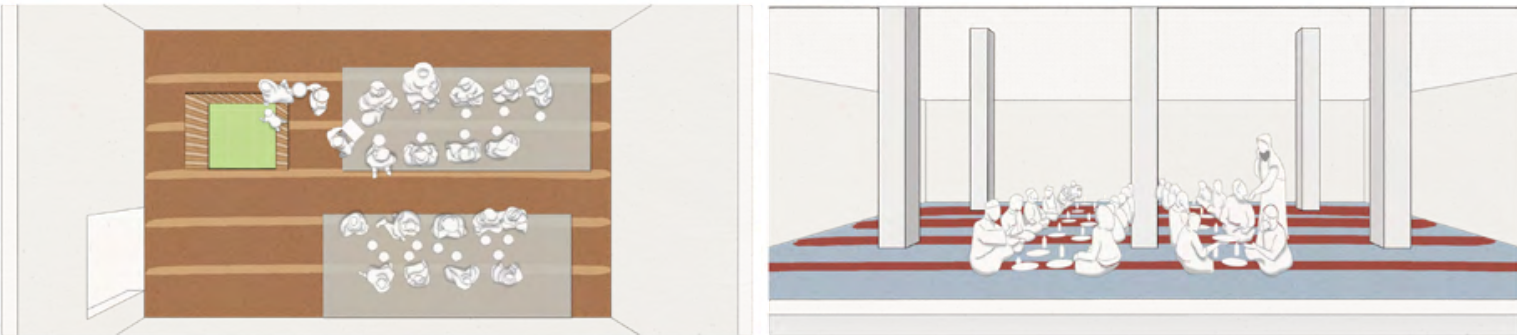
Separation



Sitting in

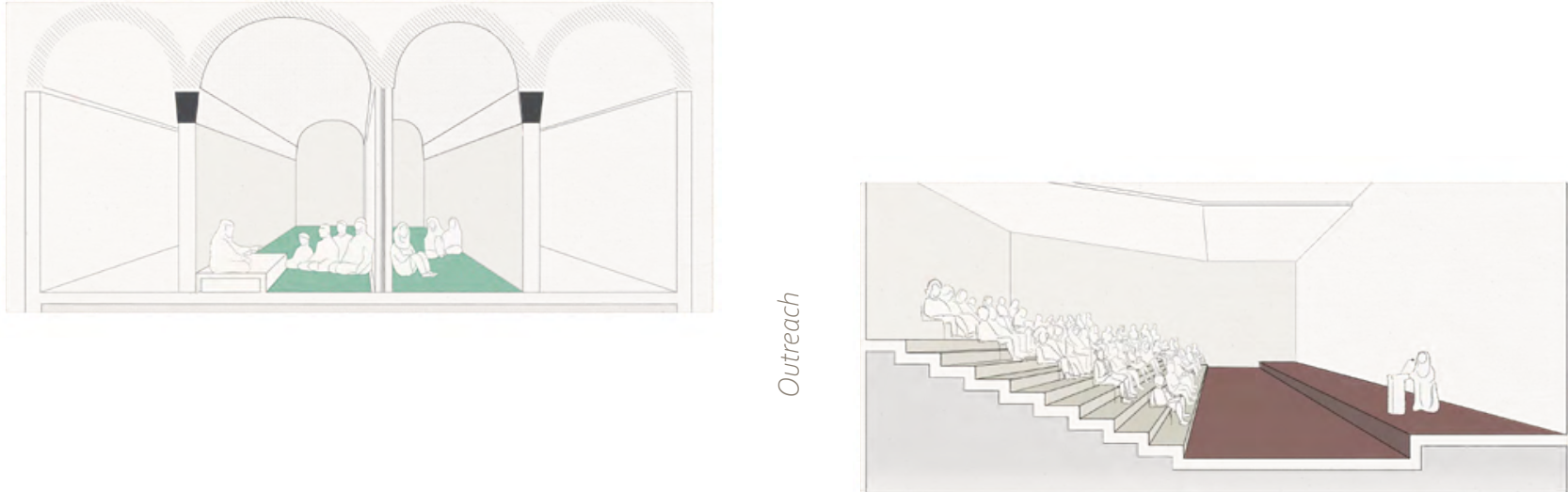


Breaking fast



These sketches are meant to illustrate not just the practices of the people, but also the relationships they have with their spaces. Of note, are the lines of the carpet that dictate formal orientation, the use of columns, the raised platform that gives credence to and space for speech, the varied degrees of barriers, and the community engagement among the different members and age groups. While these one-point perspectives are framed by the horizontal cut planes of the roof and the floor, beyond this frame, are the narrative plot of the community, that will be used to translate practice into architectural space.

Outreach



Personal time



Symbols



Spaces

This section will explore the building ‘typologies’ that can become mosques. The design rationale, development, and finally the adaptive reuse of existing spaces will conclude this section.

5.0

design.

While we can definitely label the mosque as a building ‘typology’, one may ask, what is it a typology of? Is it a typology of functions? Construction methods? Architectural style? Although the last question may be far fetched, consider these questions in the following scenario. If a warehouse is building ‘typology’ (industrial building type or metal building type), what happens when the warehouse, whose primary function we assume is storage, is leased to a Muslim community, or a Christian community or even a small startup company? Does the warehouse still retain its ‘typology’? Is it still an industrial building type?

The intention here is to suggest that the mosque is not just a building typology based on function, rather, it is a ‘typology’ of practice. Though we are used to understanding and studying the excellent mosque examples in history and from contemporary times, in the context of an American college town, choosing to analyze the community to arrive at a design seems more pertinent. And, even though there have been questions about whether the American mosque has a style or is a genre of its own, the answer to which has usually been in the negative,¹⁴ it has also been suggested that the fact that most mosques in North America are appropriated spaces, should give us an inclination towards not rejecting the idea that even appropriated spaces could eventually

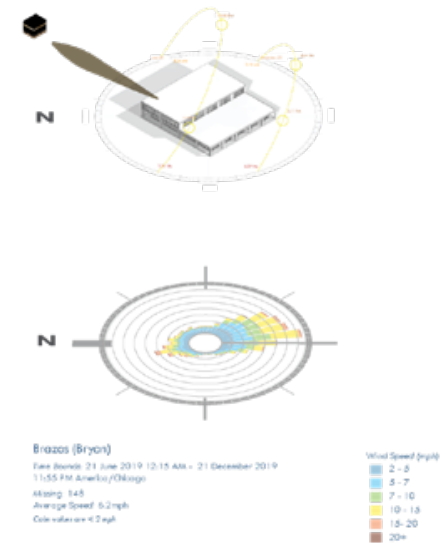
become a building tradition.¹⁵

The images in the last section are not placed in any particular space. The perspectives are generic, and do not denote specific materials or details. The intent in this section is to create a program of these practices and build a mosque inside out in an existing space. The data from mosque surveys, and the comments from ethnographic surveys¹⁶ provided the rationale for choosing existing buildings to situate mosques. Additionally, the idea that practices and communities can appropriate existing spaces to create or add meaning and value that resounds with their understandings of space also provided grounding for choosing existing structures. Although data could not be found on what percentage of existing mosques were created within which types of buildings, six buildings were chosen based on the list of existing mosques.

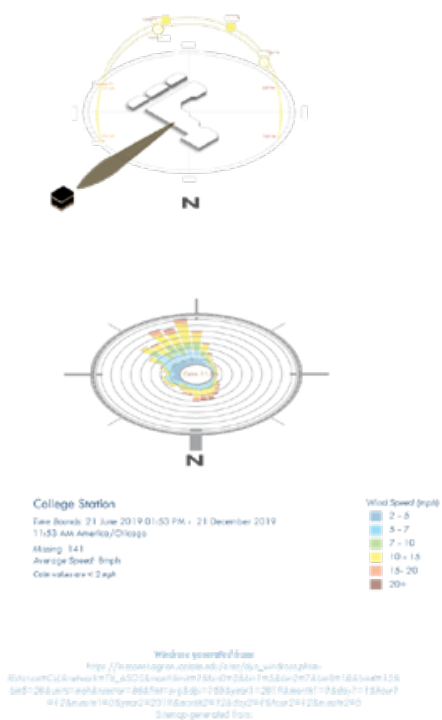
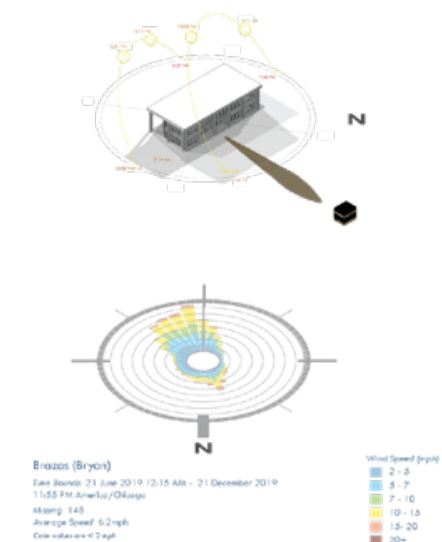
These buildings were selected based on listings or online brochures of real estate companies. Some of the buildings were open for rent (Office I, Office II, Store I, Warehouse), while the others were open for reuse either through interventions or through complete demolition (Store II and School). The buildings were then topically analyzed by their enclosure, structure, plate, volume, plan, location, and orientation. Choosing existing buildings ensured that the building ‘typologies’ under analysis could be reused as method for situating new mosques in existing buildings.

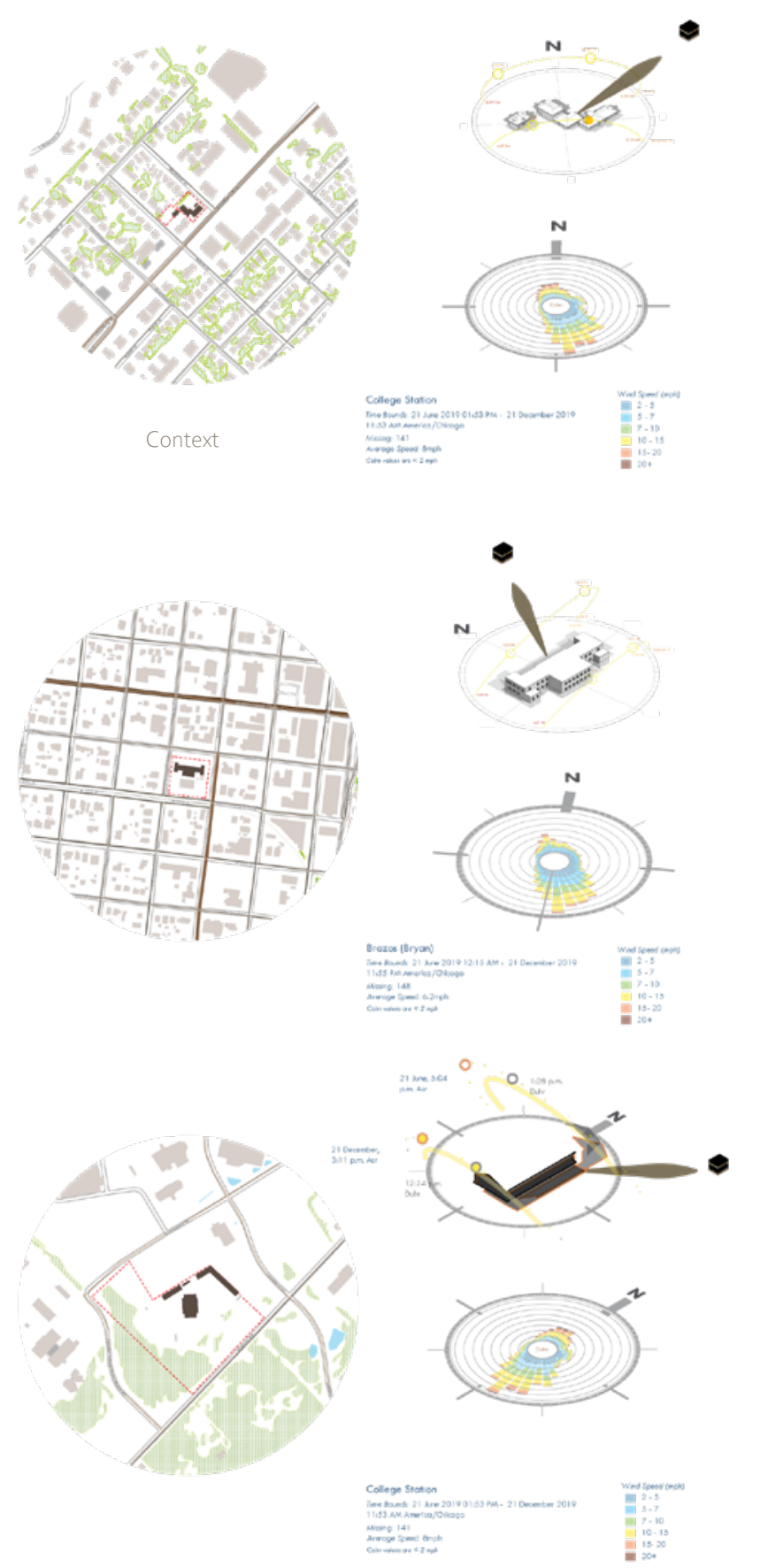
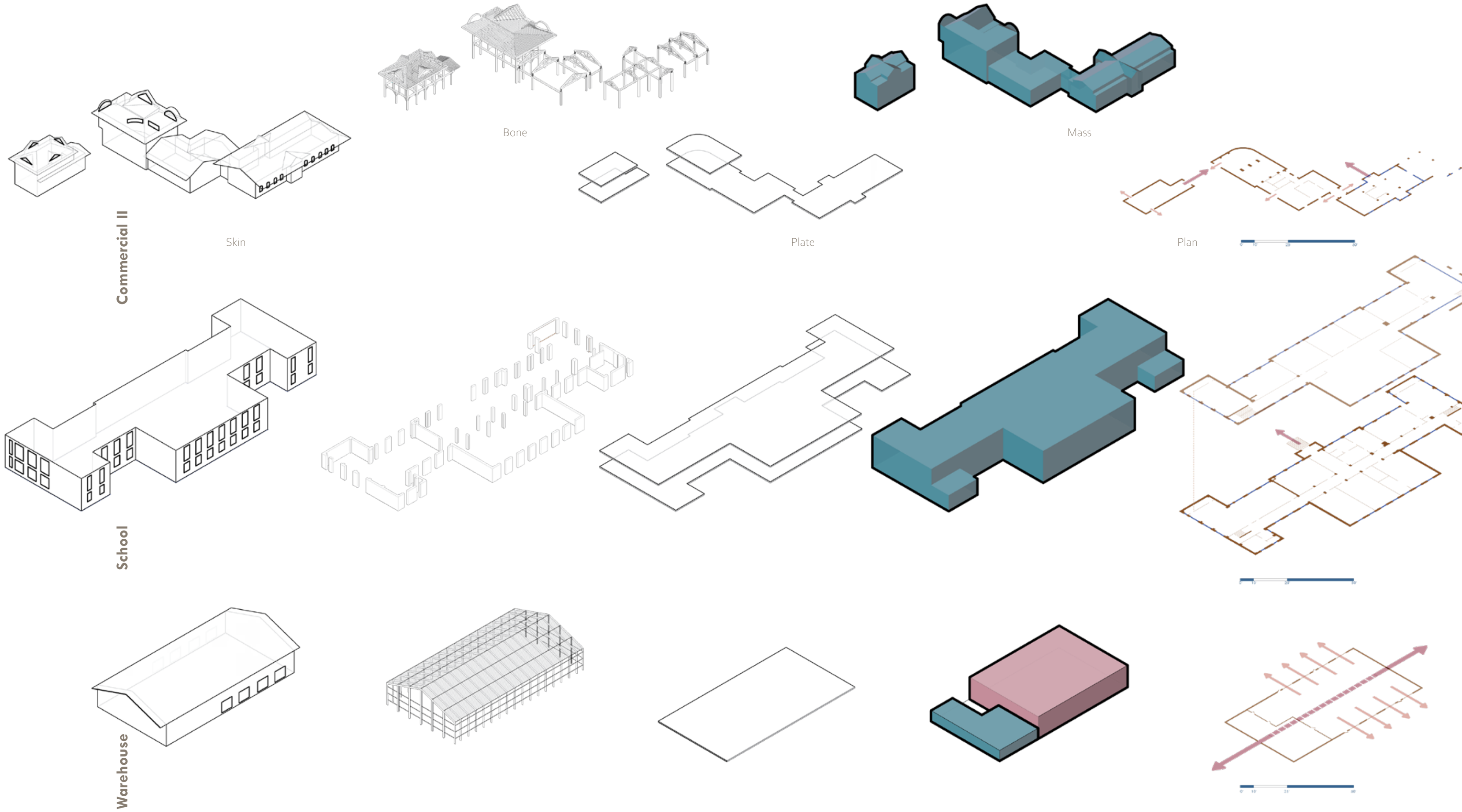
Of the six buildings analyzed, three were considered for proposing a ‘mosque.’ Store II, the School, and the Warehouse were considered viable options for creating new spaces that would embody practices different from those for which these buildings were initially built. The Warehouse was chosen as the final option for the design process.

Office 1



Office II





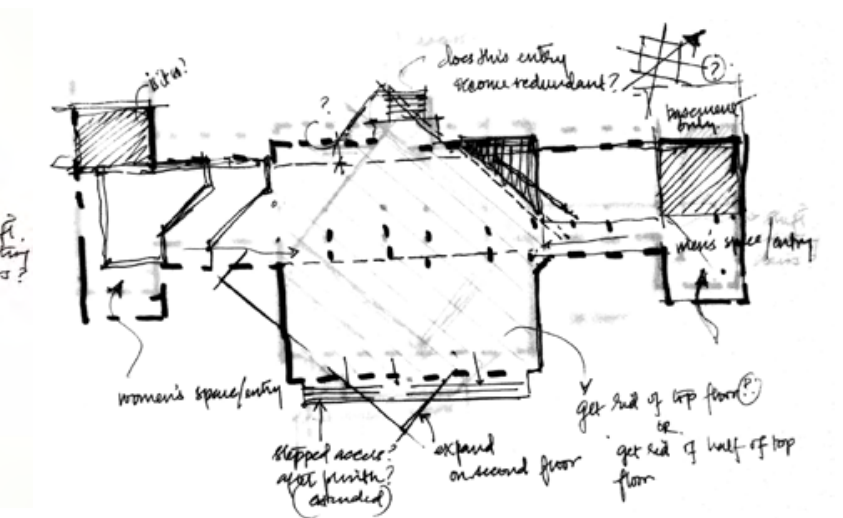
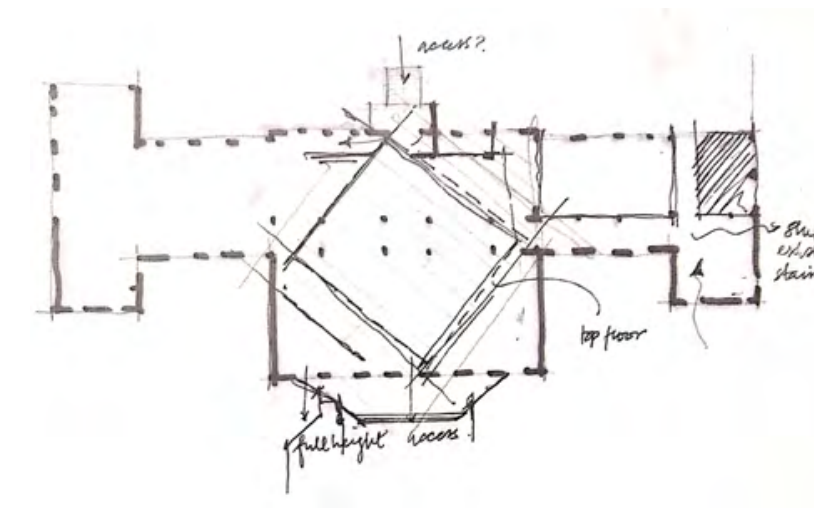
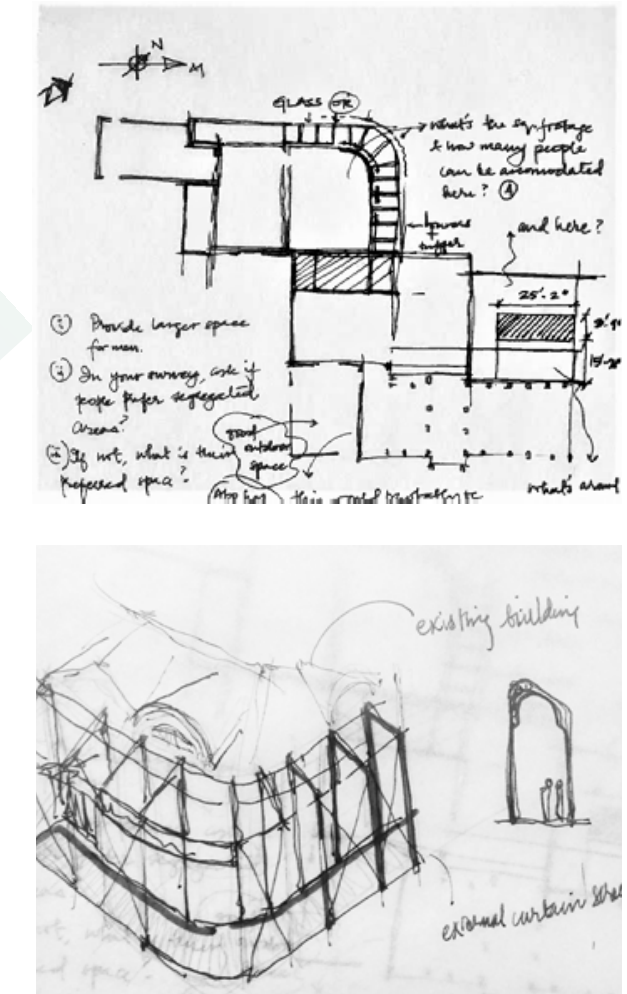
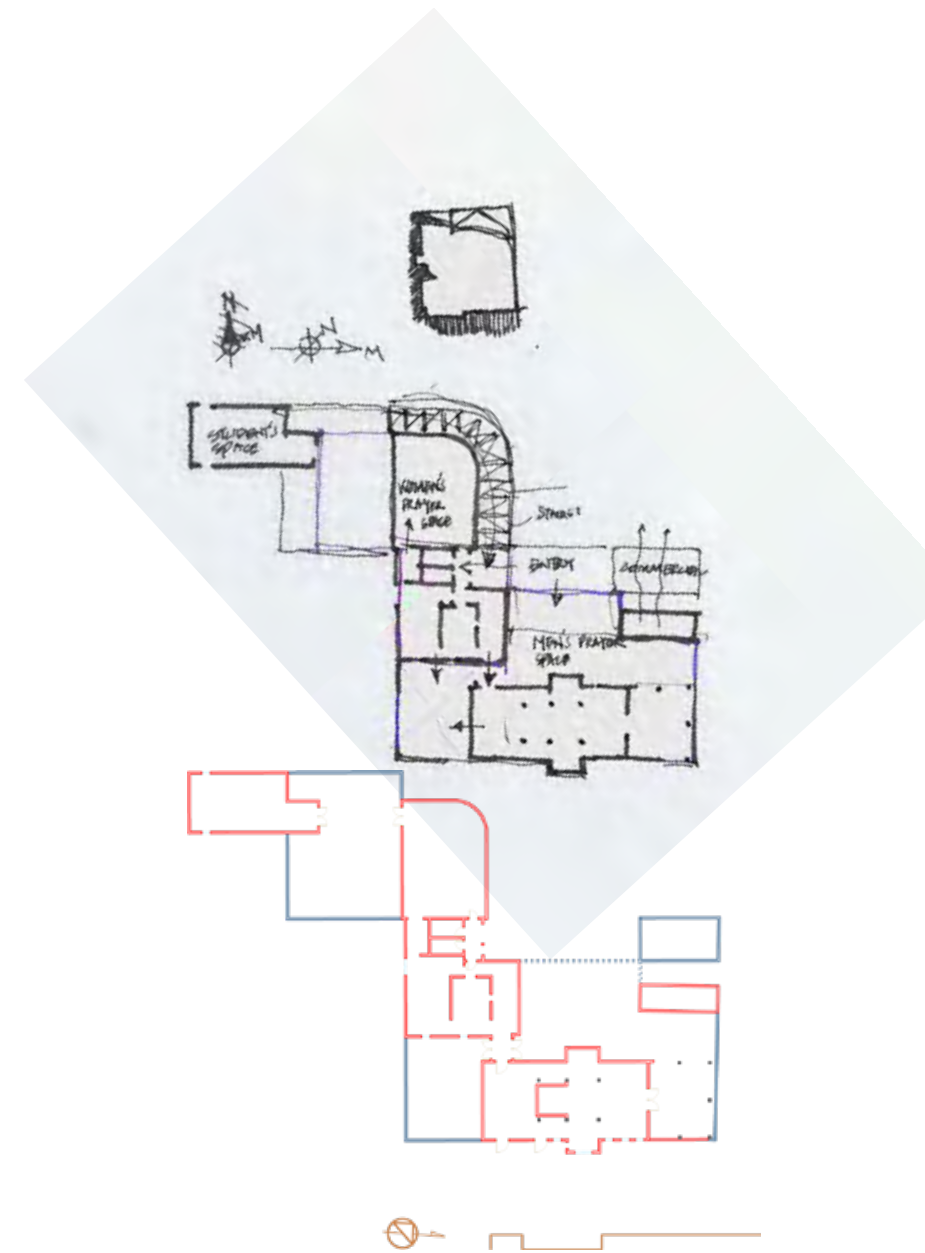
Wind speed generation
11:03 AM America/Chicago
Altitude: 141
Average Speed: 14.1
Color scale: 0.2 mph

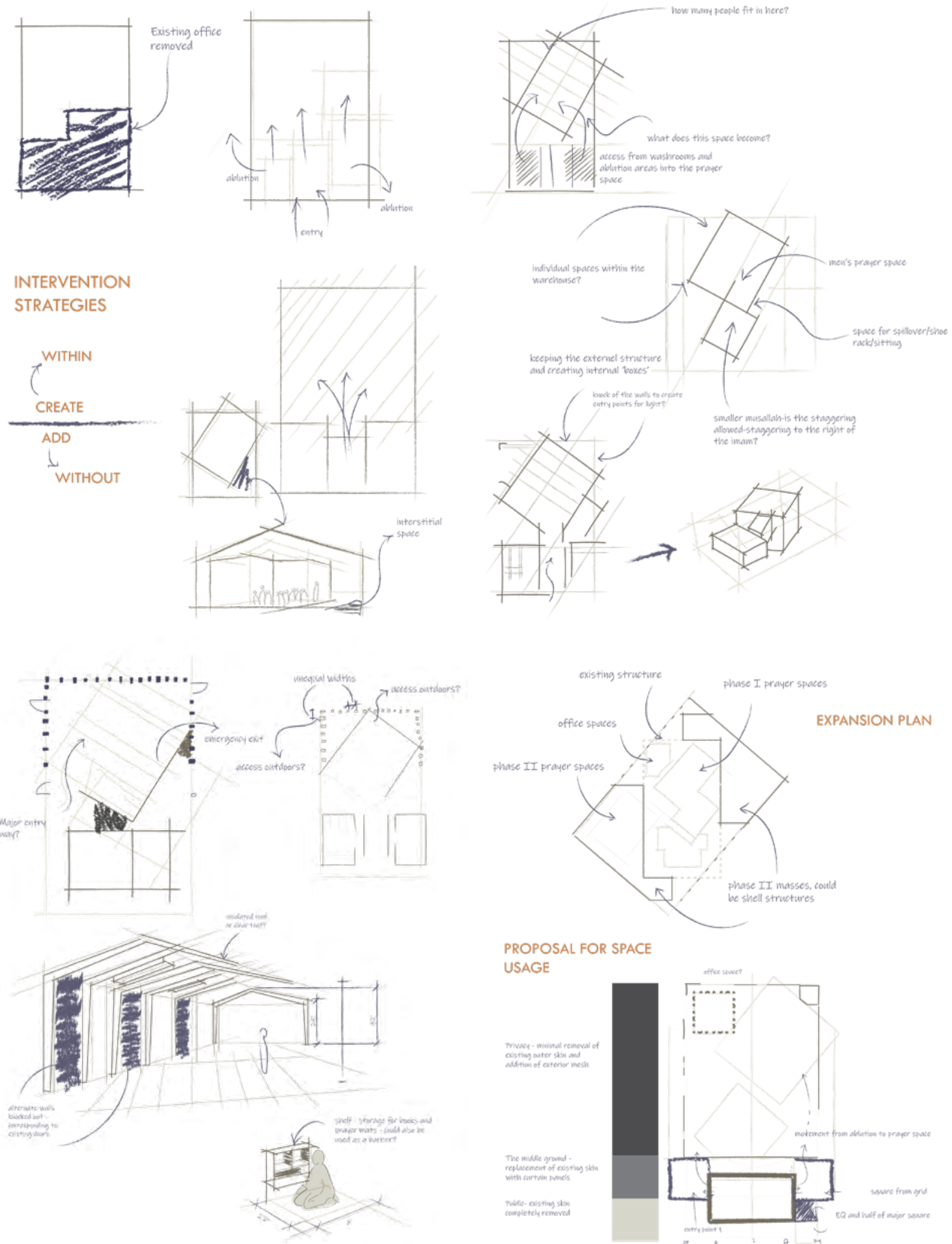
rationale.

Store II used to be part of the old College Station train depot and currently houses the Knox gallery, among other commercial spaces. This project already has a strong character regarding its location, history, material, and current use. Store II also has the smallest usable floor area, and unlike Store I, there is no similarity in the massing or floor plates. This existing plan demanded precise alterations in the form of additions. Moreover, the building's enclosure proved to be a challenge to replicate; the addition would have to use different enclosure systems, but the structure could be repeated outwards and into the deck. The most inefficient in this design would probably be the ablution spaces and washrooms, or maybe further inquiry could solve the problem.

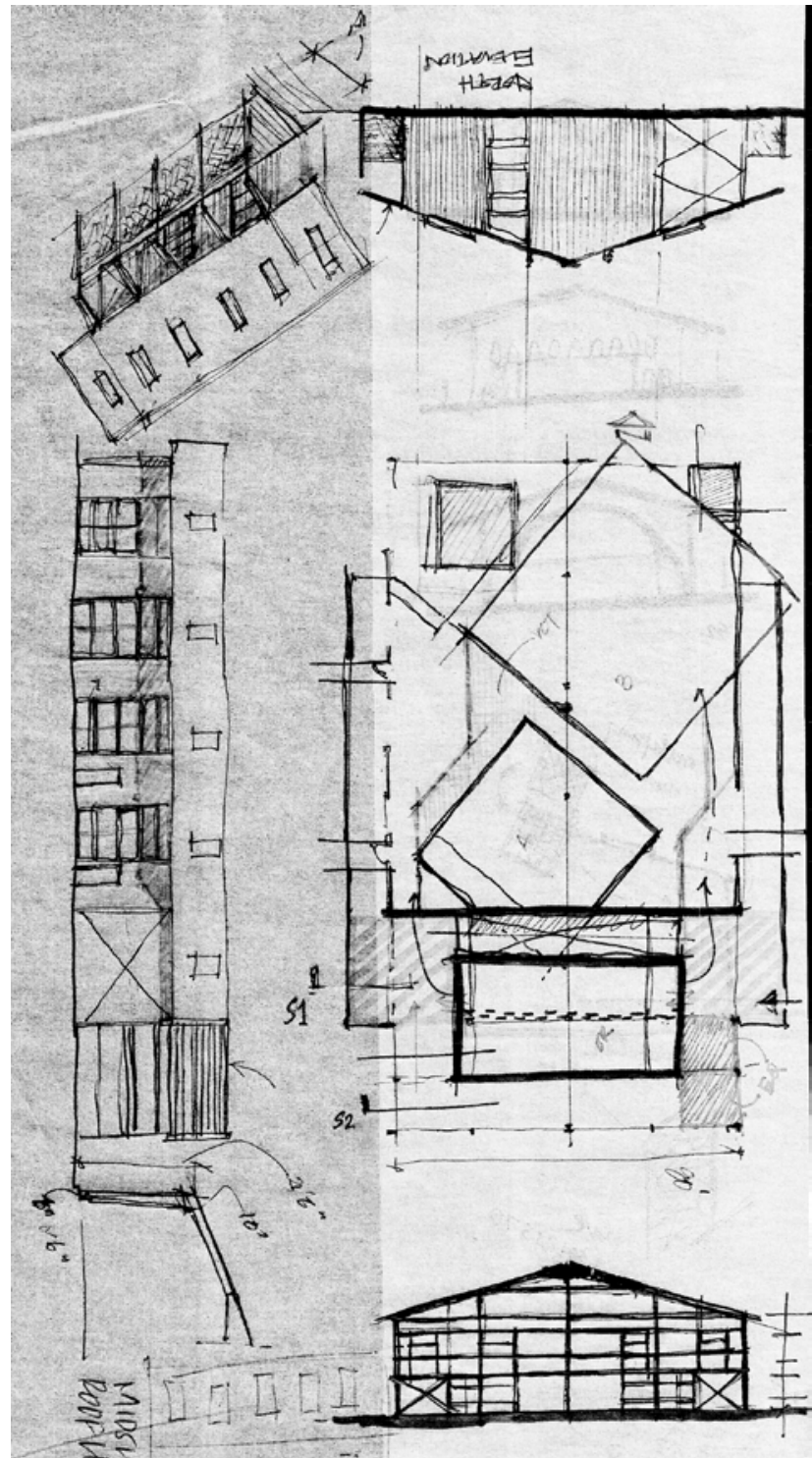
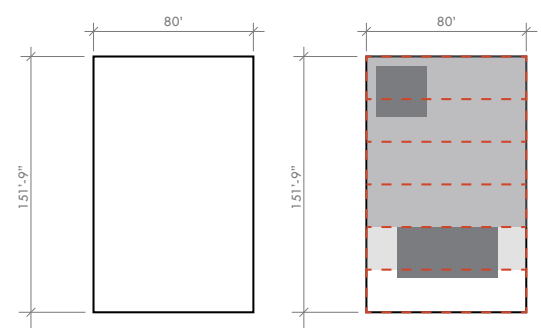
The School was considered for a couple of reasons. This building has some historical value that makes it optimal for an adaptive reuse project. This building also has a strong character and presence, and to situate a mosque in this building would be an exercise in modification, addition, and subtraction in its plan, volume, and enclosure. With its large central square-shaped area, the building's form provides exciting opportunities to orient a space within a strongly oriented physical structure. The building's symmetry would play well in situating the gender-separated areas, where the central space becomes the gravitational center of the design.

The Warehouse was chosen for its vast space, the steel structure, the versatility of such a structure, and the sheer outrage of having to think of a mosque designed in a warehouse that is hardly thought of in general architectural considerations as having the qualities of affective space. The Warehouse could become the "storage" to situate the various practices. This building probably has the weakest character and presence and would require the most invasive additions in insulation and air conditioning, although there is pre-existing blanket insulation along the entire interior space. The Warehouse was not designed for human habitation; yet, it could be used and opened up to hundreds of people for religious and community activities. It might be worth noting that in the United States, it is not unusual for prefabricated steel structures to be used for 'designing' new mosques.

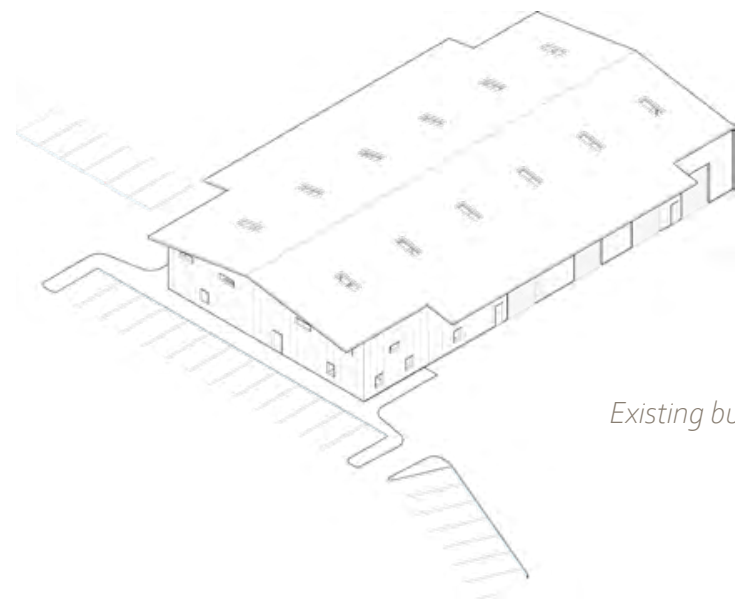




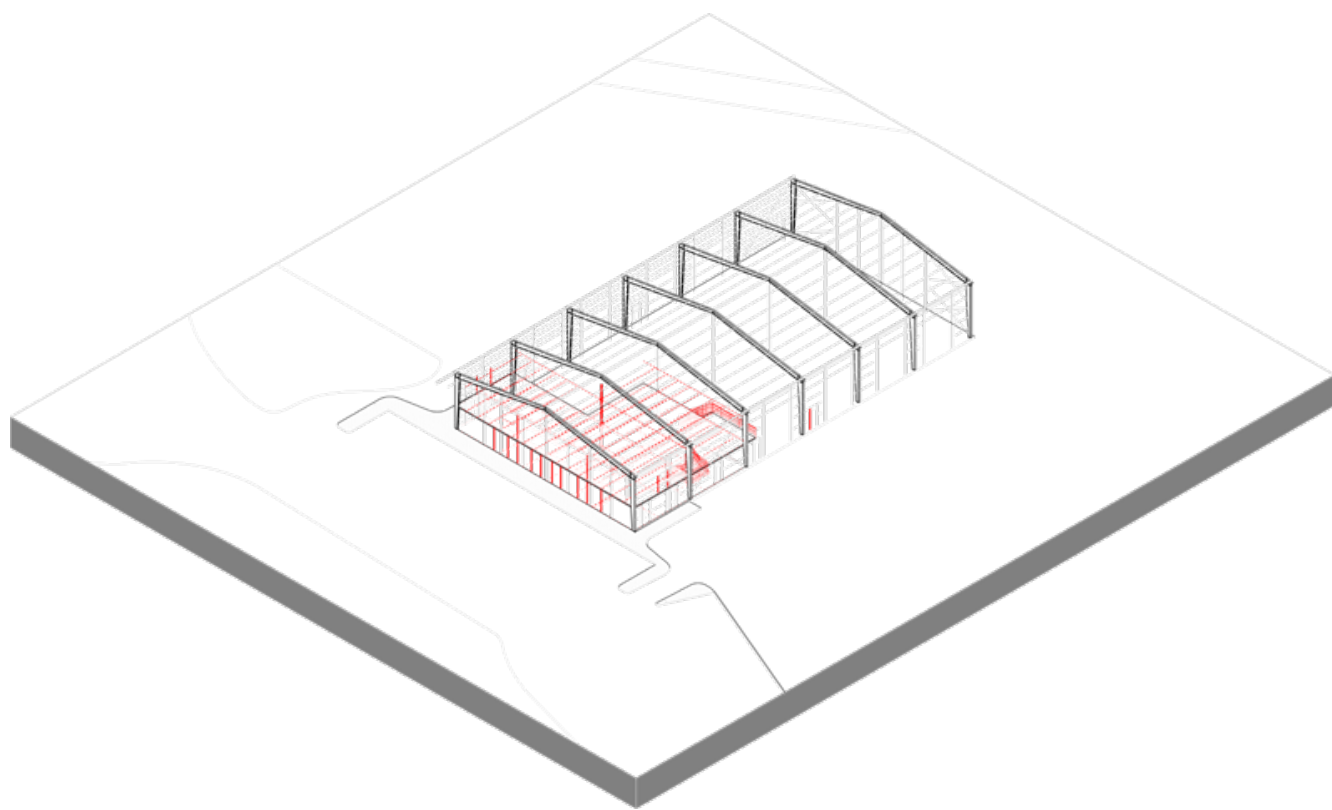
schematics.



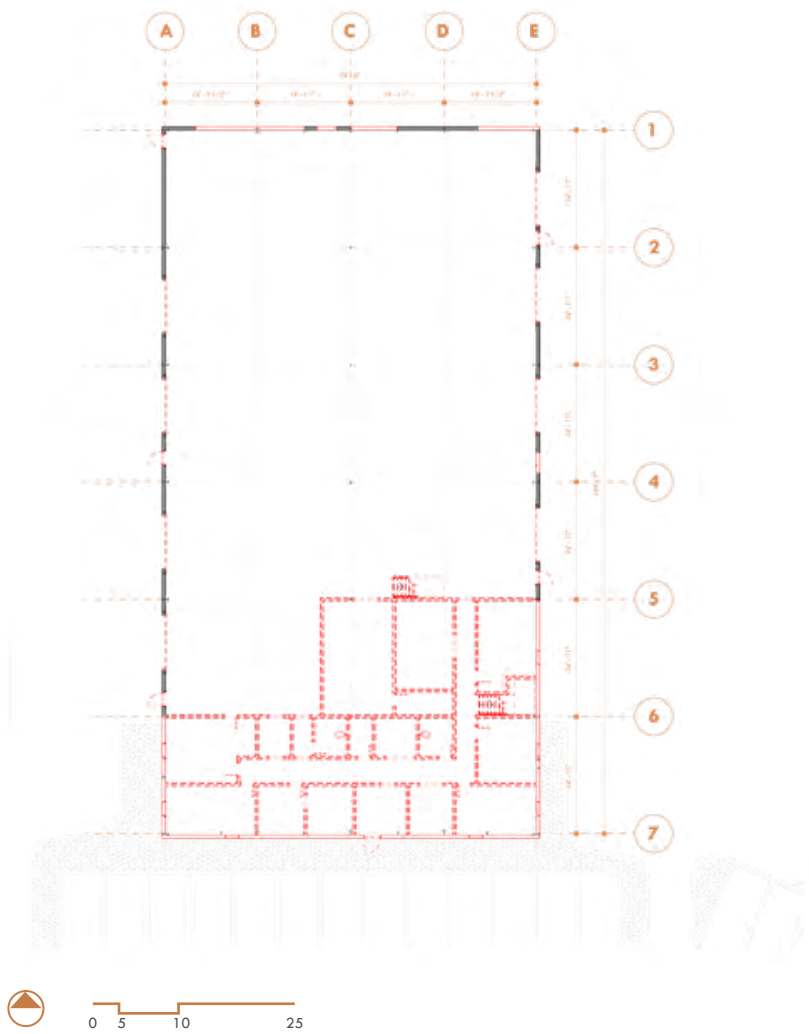
drawings.



Existing building.



Existing building without roof. Elements to be demolished are in red.



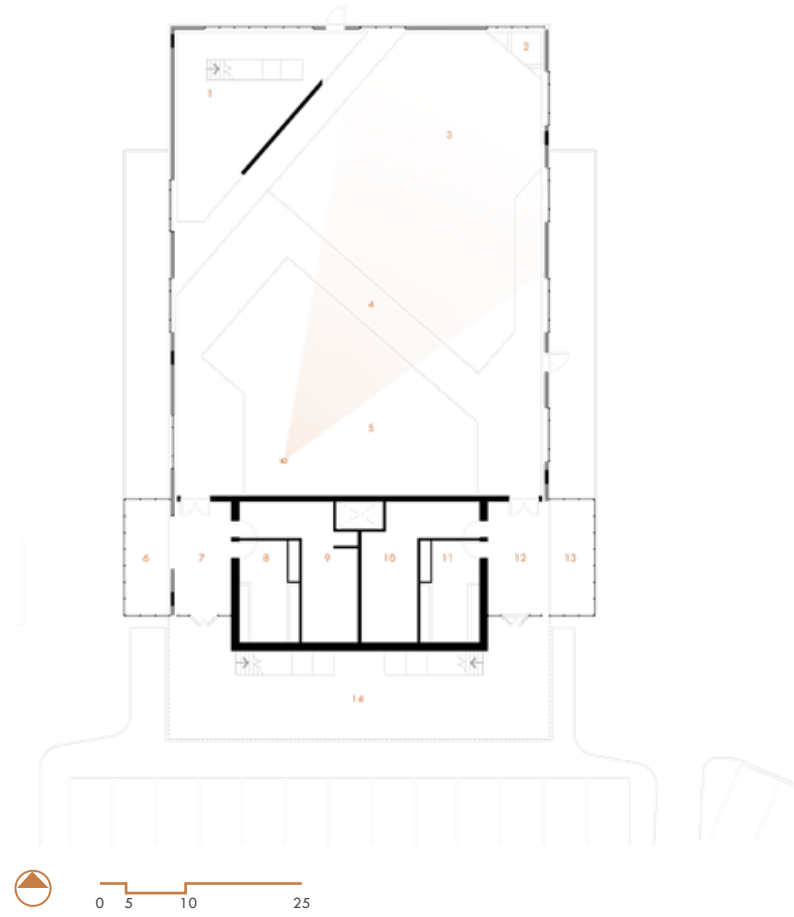
First floor plan - Existing building. Elements to be demolished are in red.



Interior of existing building

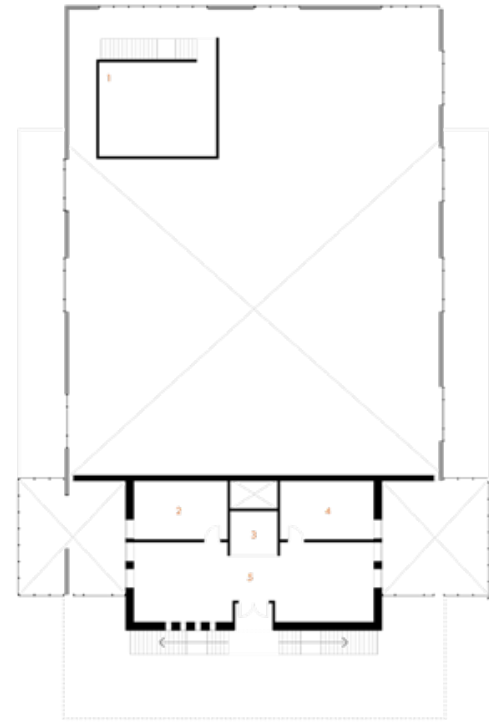


East elevation - existing building. Elements to be demolished are in red.



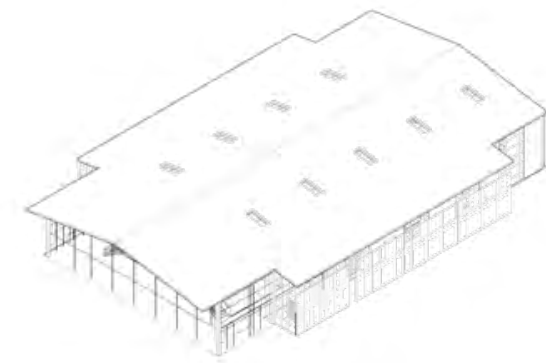
First floor plan - poche

1. Office/ Reception
2. **Mihrab**
3. Men's Prayer Area
4. Wheelchair Accessible Prayer Area
5. Women's Prayer Area
6. Women's Shoe Storage Space
7. Women's Entry Foyer
8. Women's Ablution Area
9. Women's WCs
10. Men's WCs
11. Men's Ablution Area
12. Men's Entry Foyer
13. Men's Shoes Storage Space
14. Main Entrance Space

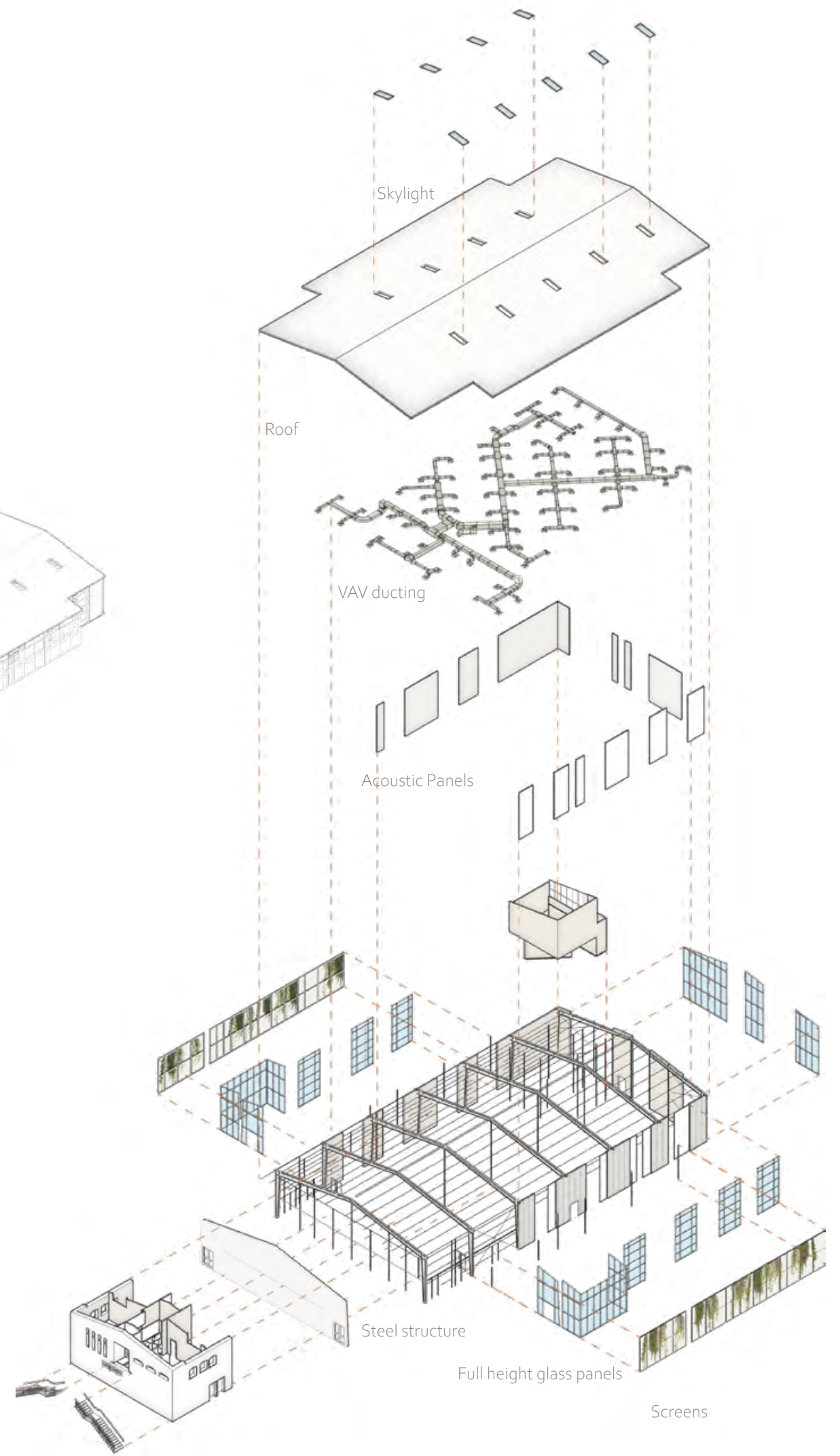


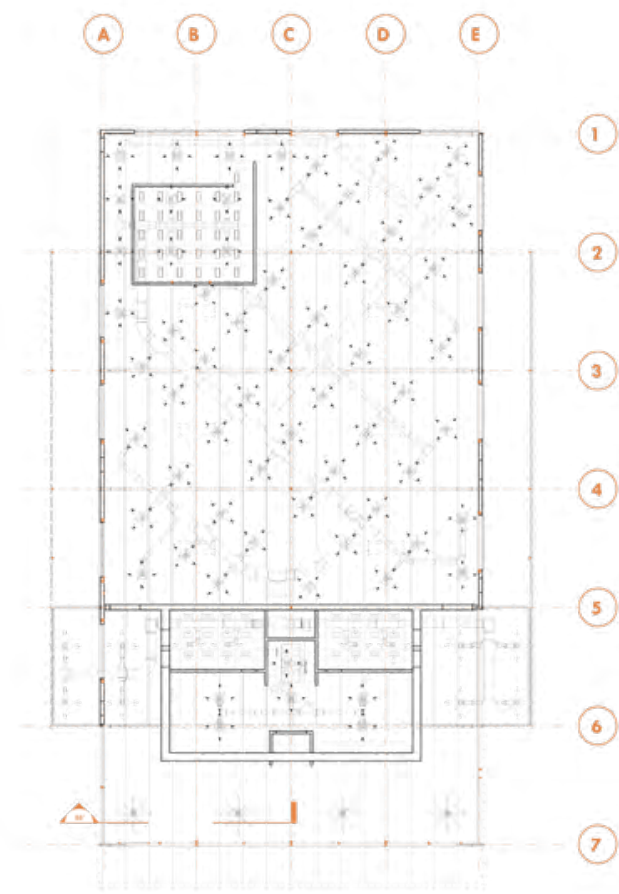
Second floor plan - poche

1. Office
2. Student's Lounge (Male)
3. Kitchen/ Pantry
4. Student's Lounge (Female)
5. Common Study Space



Completed building

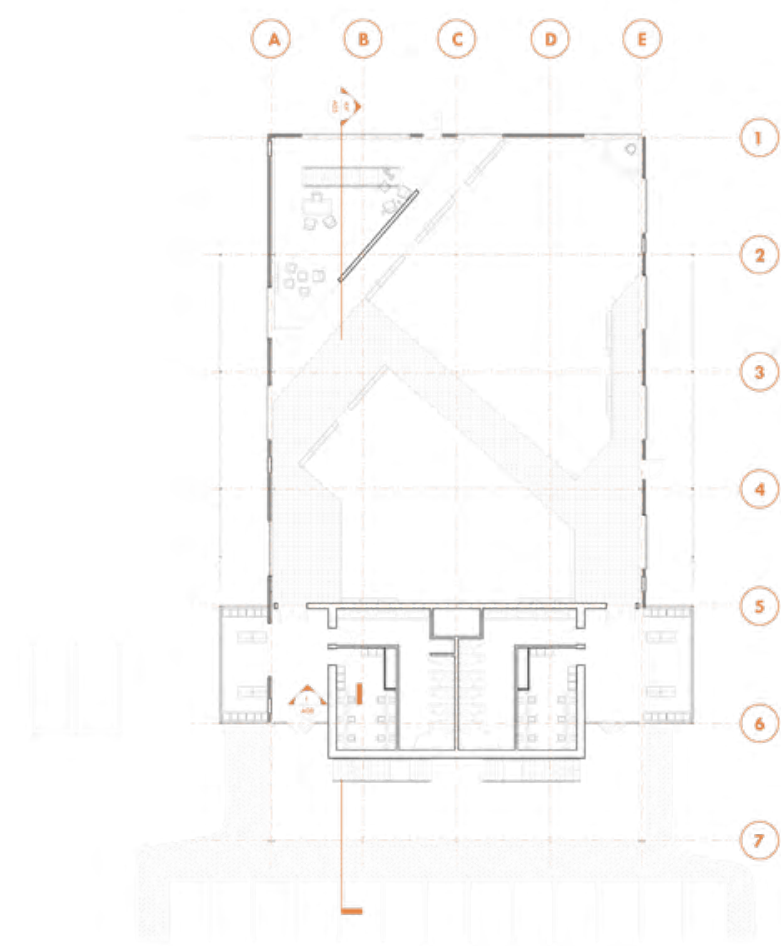




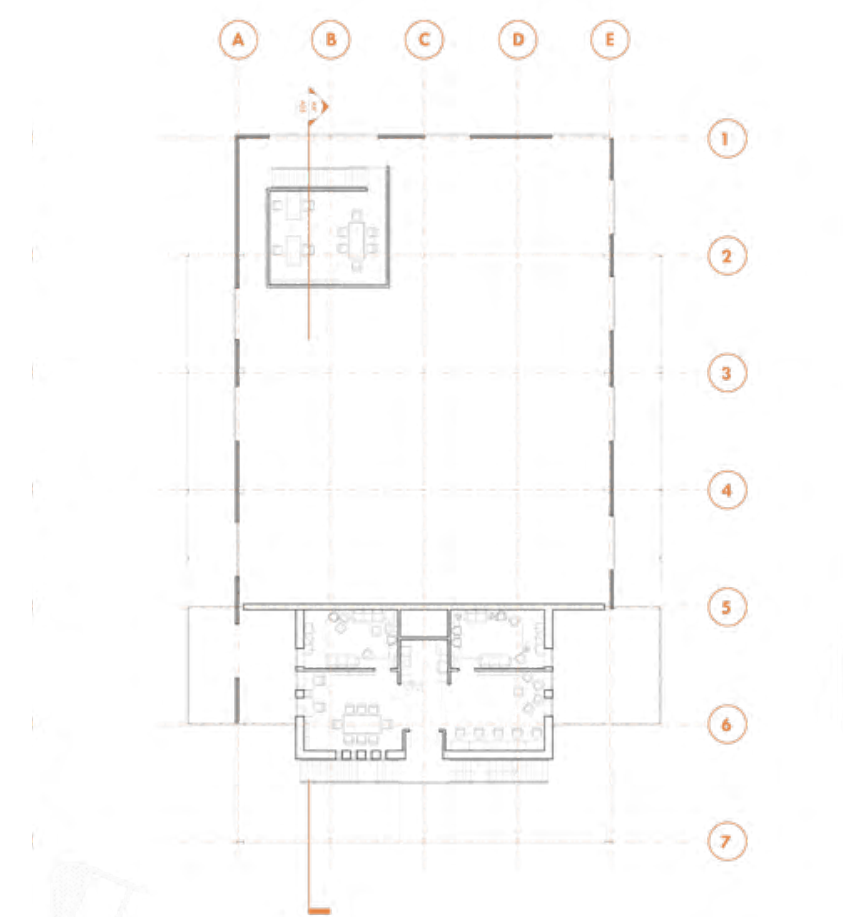
Second floor RCP - Mechanical systems



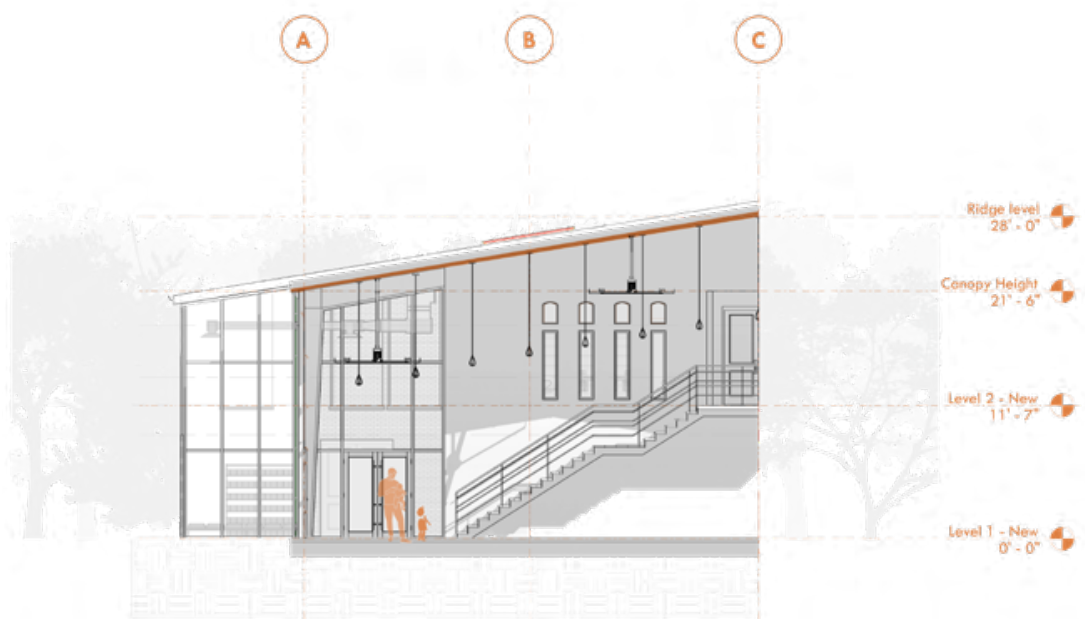
Second floor RCP - Lighting layout for prayer space



First floor plan - Furniture layout



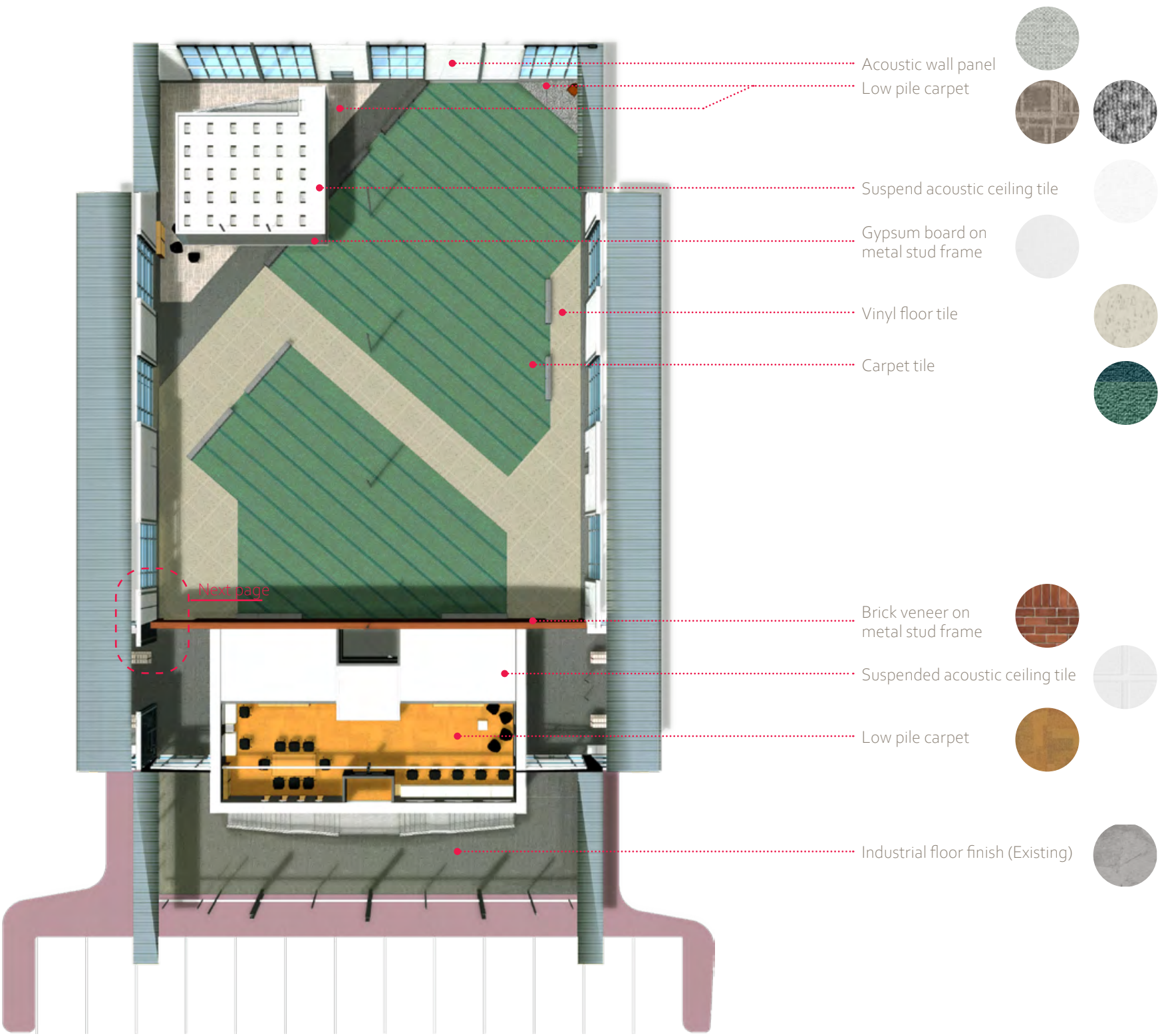
Second floor plan - Furniture layout



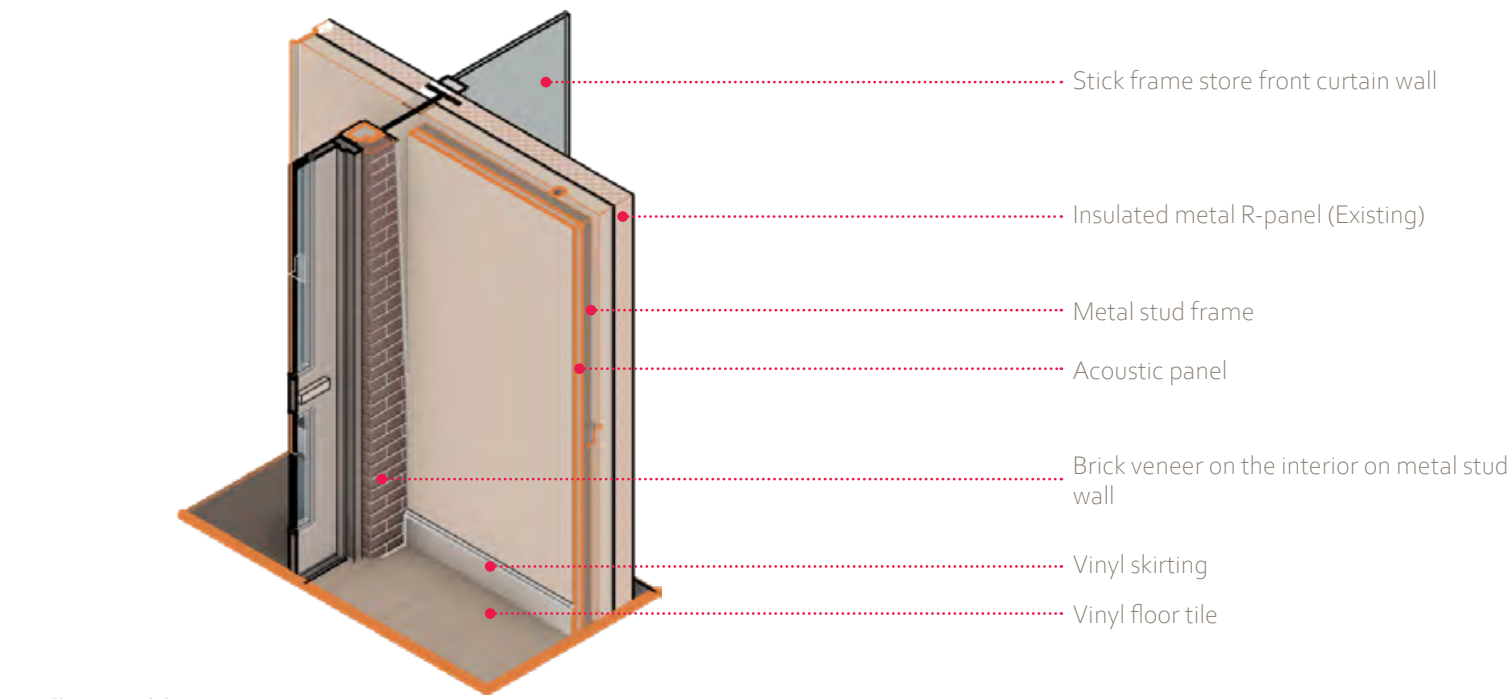
Section BB' - Through building entrance



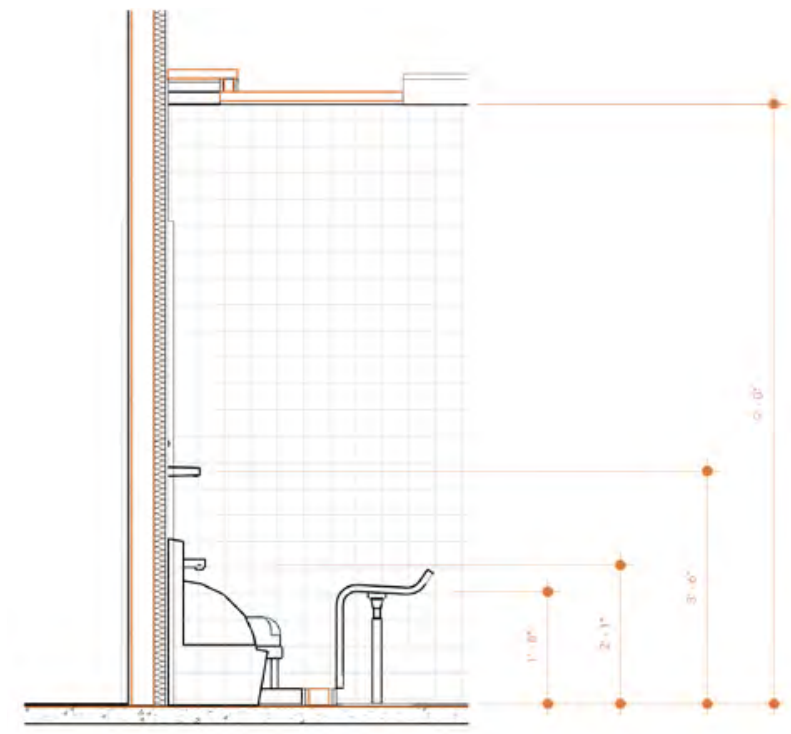
East elevation - New construction



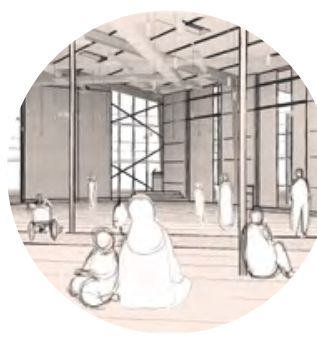
Materials



Wall assembly



Section through ablution area



Space usage



Office



Prayer space





Ancillary spaces



Entry



End

This last section will summarize the project, and end with diagrams on the program of practices as contrasted to the program of spaces and functions. The rest of the section is dedicated to references, and notes.

6.0

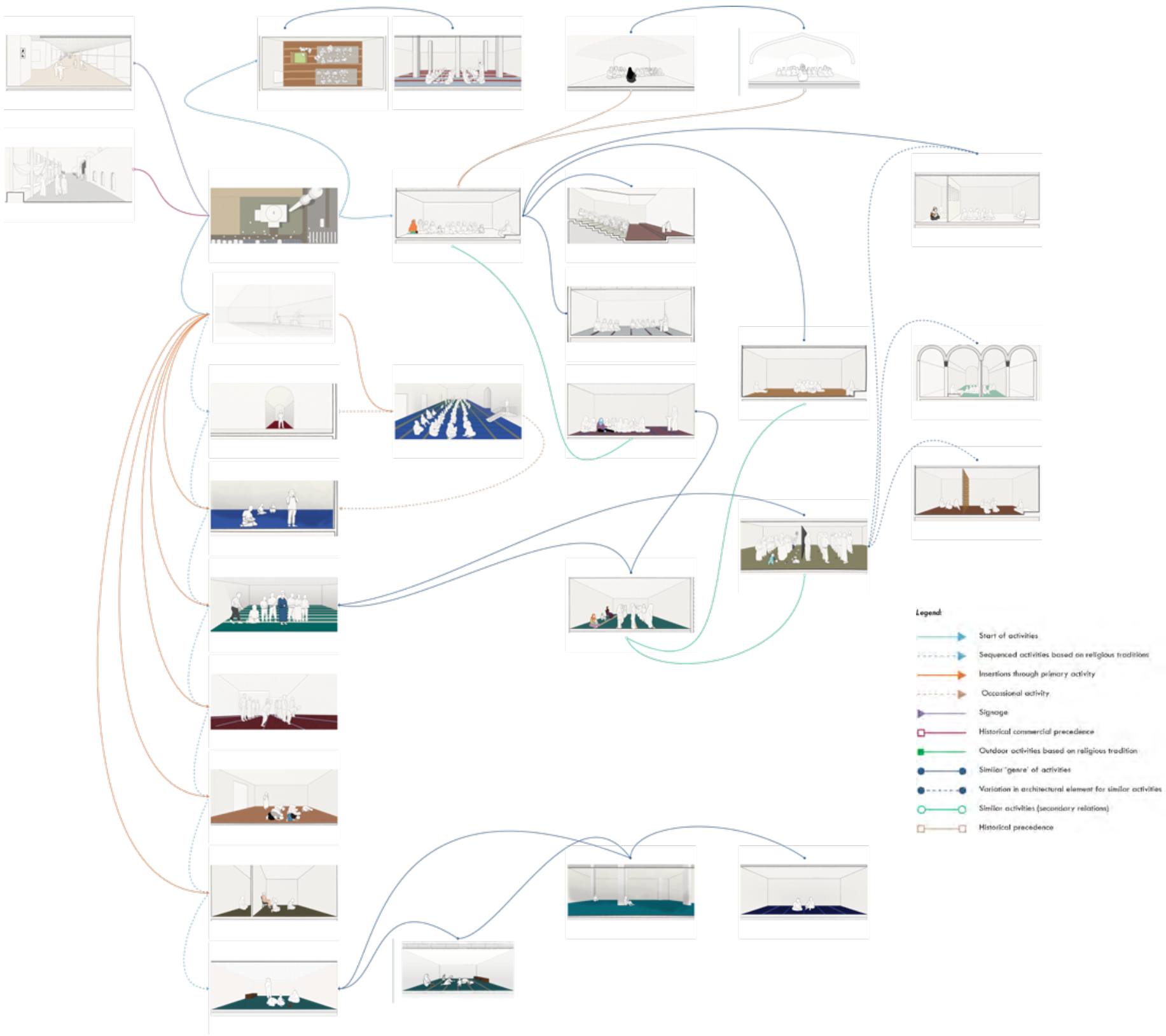
conclusions.

The last section ended with snippets of the Muslim community’s narrative rendered within a frame of generic architectural sections. The hope is that our representation of space will be richer if we are able to add the social dimension of architecture, not just through quantitative dimensions, but through assertions on affective qualities of space.

The end product of this project is the design of a mosque in a warehouse. But this project was also an attempt to study and explore other methods of design approach. As students of architecture we are often mesmerized by the works of particular architects, sometimes we are taken in by a building to such an extent that we strive to emulate the design ‘handprints’ of the architects. The architecture of the master and the apprentice are visible through and through in the masterpieces around us. But then, not all built objects impress or affect us beyond the visual. Most of the structures we are surrounded by, the infrastructure that is continually shaping our understandings and utilizations of space, are not always the works of ‘great’ architects. Beyond the city centers, the structure and construction of buildings, and thus their designs, are constantly stuck in a loop of generic reproduction of technical details, material selections and cost analyses. But these structures are more than just three dimensional enclosures over existing

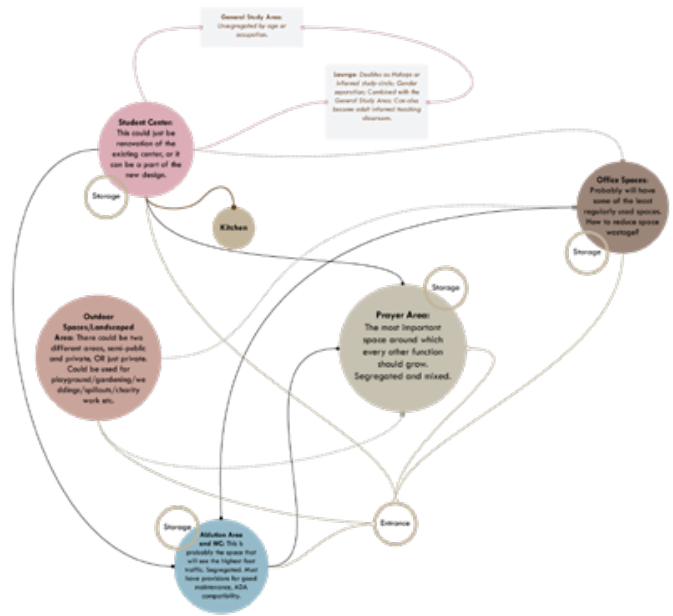
landscapes. The reach of architecture is far and deep, and the factors that implicitly affect our understanding of space, our approach to design and construction, are often taken for granted. These underlying frameworks of identity, practice, exchanges, relationships and representations, unbeknownst to us, directly influence our reading of architecture and buildings. If we start looking under the layers of accepted methods and practices, maybe, out of sheer curiosity, we might also gain a better insight into the many-faceted discipline we call architecture.

This project was one such trip through a seemingly endless loop of connections. This project was small, and the book is smaller, with a handful of pages mostly filled with writing. If you have asked yourself, “Where is the design in this book?” as you flipped through it, know that I have asked this question myself. To not begin from a site analysis, with squiggly arrows and a sun-path, to not play with massing and form, to not draw lines of imagined axes through real landscapes - to not use the taught and tested methods in studio - was unnerving. And yet, the discoveries I made during this project could not have been summarized through my feeble attempts at design. The relationships of space with people and vice versa have not been articulated well here, and my shortcomings only hinder the rich understandings that could have possibly emerged from this project. There are tons to still discover and learn, but in this studio, and especially through this project, I have come to the realization that there’s actually very little I know of architecture—I know of the tools and I have been taught how to wield them, but that which creates the need for such tools still eludes my understanding.

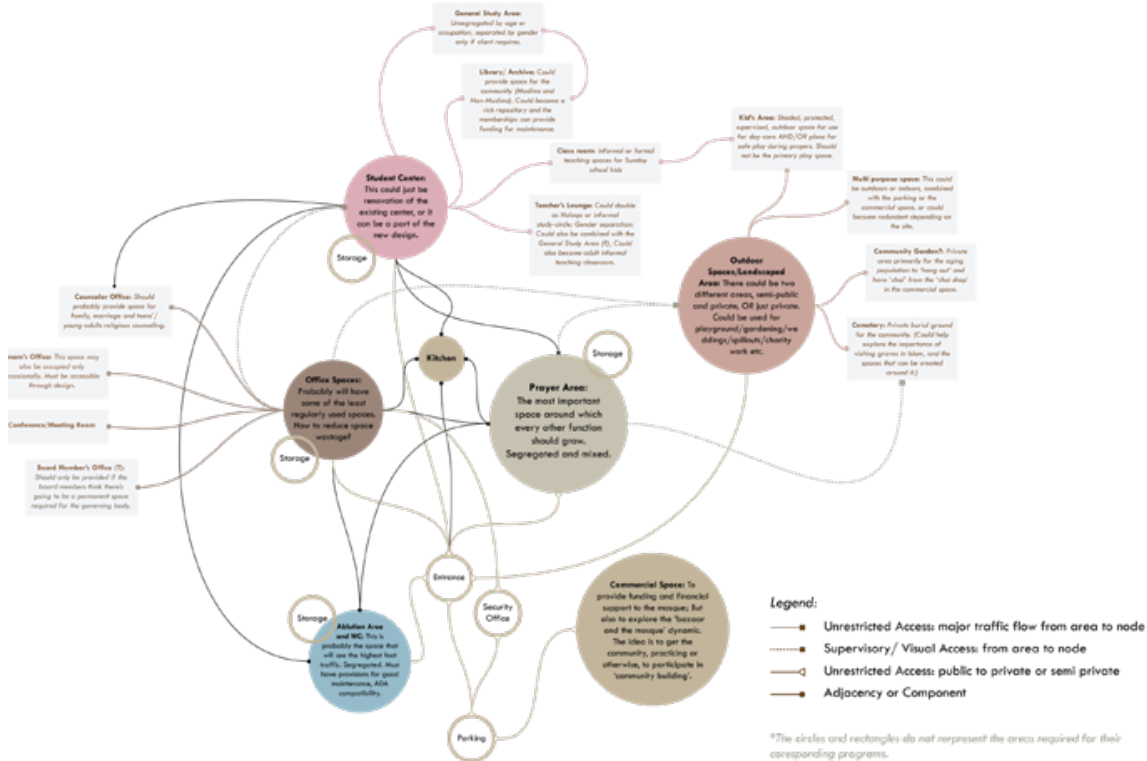


Program of practices

Program of functions from proposed design



Program of functions from existing standards



endnotes.

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2. *Evening Star*. 1952. “Image 137,” March 2, 1952. Chronicling America: Historic American Newspapers. <https://chroniclingamerica.loc.gov/lccn/sn83045462/1952-03-02/ed-1/seq-137/>

3. The other building typology is the mausoleum.

4. *Evening Star*. 1953. “Image 151,” March 22, 1953. Chronicling America: Historic American Newspapers. <https://chroniclingamerica.loc.gov/lccn/sn83045462/1953-03-22/ed-1/seq-151/>

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When all you see is darkness, know that there will
always be people to walk with you, until you can see the
light at the end of the tunnel again.

