



CATHERINE KATTIKAT PETER

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ACKNOWLEDGEMENTS

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01.INTRODUCTION

Homelessness is a complex issue that is often rooted in poverty, extreme economic inequality, and social dislocation. A historical understanding of homelessness and its various causes, popular attitudes, government policies, and architectural responses is essential in addressing the issue. Throughout Western history, homelessness was thought of as a social malady extending from extreme poverty. The concomitant view of homeless persons as extrinsic others who ran a "disorderly course of life" is reflected in the myriad epithets by which they have been referred. Today, the word homelessness covers an array of problems associated with poverty and need. Each major wave of homelessness is associated with a period during which geographic regions and countries undergo significant economic and social changes. Structural and individual factors play a role in this, with institutional laws, customs, and rules of behavior that define a society, which may be rooted in religion, government policies, economics, popular attitudes towards welfare, and access to education

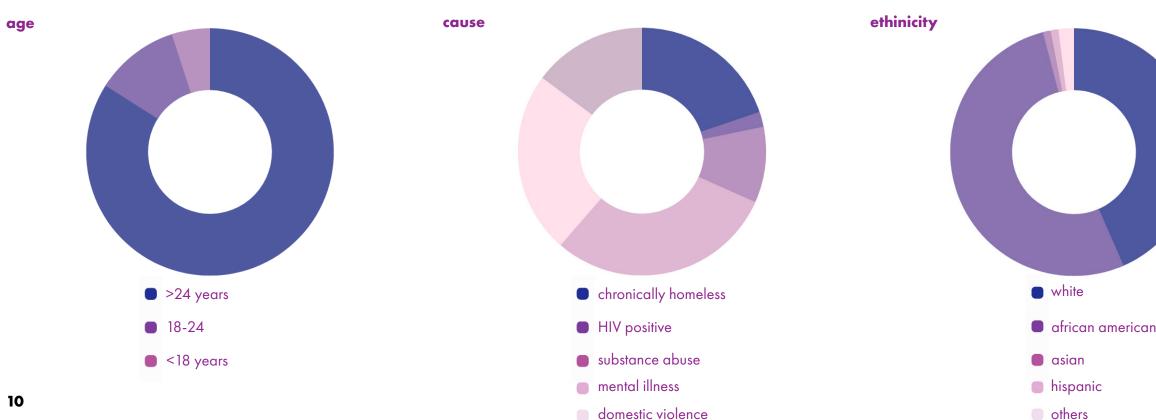


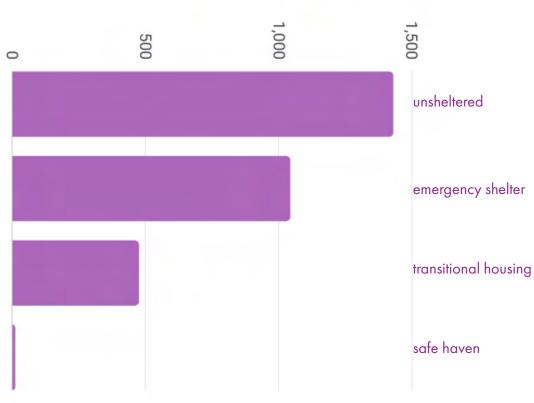
and healthcare services. The state of one's mental health, the extent to which one's habits of personal responsibility, industriousness, or virtuousness affect moral standing and the direct economic or social consequences of behaviors perceived as vices also play a role in this. Attitudes and policies towards the poor and homeless prompt architectural responses tied to these organizations and their institutional goals, management styles, and rules. Architectural spaces were manifestations of ideology that reflected existing social structures, and built environments reflect economic values, public perceptions, moral priorities, and welfare-related social science. Therefore, architectural responses to homelessness – from historical workhouses, almshouses, and casual wards to contemporary shelters and transitional housing - reflect the economic values, public perceptions (both informed and uninformed), moral priorities, and welfare-related social science that, in combination, motivate a community to take action. In conclusion, a comprehensive understanding of the history of homelessness and its associated attitudes, policies, and architectural responses is crucial in addressing the current homelessness crisis that many societies face today.

houston unhoused population

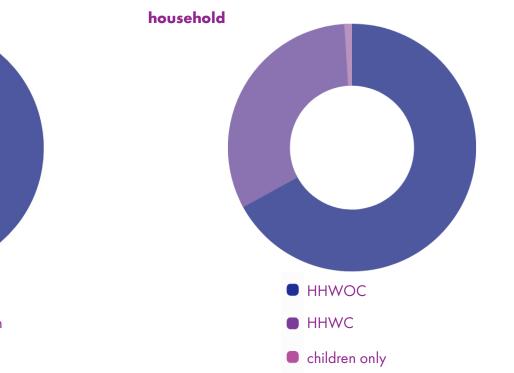


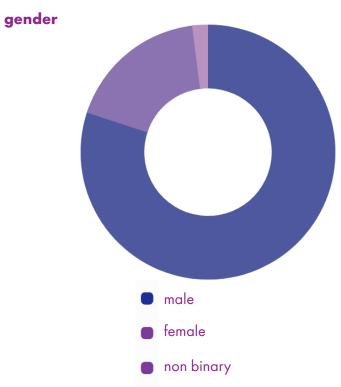
Homelessness in downtown Houston is a visible issue, with many individuals sleeping on sidewalks, in parks, and under bridges. The city has implemented a variety of strategies to address the issue, including increased outreach efforts, expansion of shelter and housing options, and increased police presence in the area. However, some advocates argue that these efforts are not enough, and that more needs to be done to address the root causes of homelessness, such as affordable housing, mental health treatment, and addiction support. Data collected show a total of 3,223 sheltered and unsheltered individuals experiencing homelessness (per HUD's definition) in the Harris County, Persons experiencing homelessness; can be found in one of four settings – places not meant for human habitation (i.e., unsheltered), emergency shelters, transitional housing, or safe havens. Persons experiencing homeless are classified into three household types: persons in households without children (HHWOC), persons in households with children under age 18 years (HHWC), and children-only households(under the age of 18 years).





Number of unhoused





day center

Day centers, also known as day shelters or drop-in shelters, provide vital services to unhoused or vulnerable populations, including protection from the elements, access to basic facilities, and meals in a non-judgmental setting. While day centers are generally only open during business hours and do not offer overnight accommodations, they are important in providing for material needs, opportunities to socialize, welfare support, and rehabilitation.

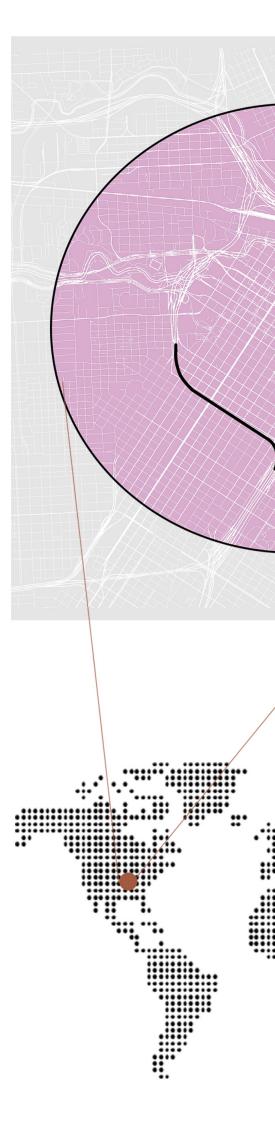
Clients of day centers are often individuals who cannot get assistance elsewhere, such as the chronically homeless, those suffering from substance abuse or mental disabilities, or undocumented immigrants. These programs offer a "physical lifeline" and act as a stable "home base" for many, helping them cope with trauma while gaining independence. Studies have shown, however, that male guests are more likely to use day centers than women, elderly people, or youths, and only marginal percentages of persons from the LGBTQ community use them. To ensure that day centers are accessible to all populations, it is important to consider factors that may inhibit certain groups from using them. Safety, comfort, availability

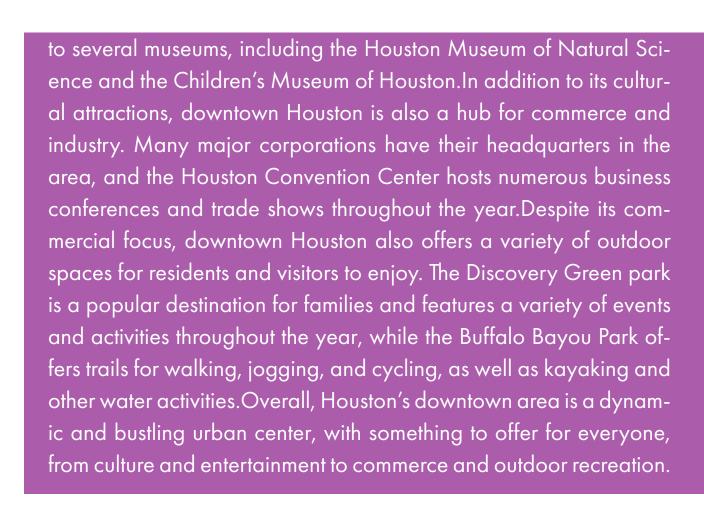


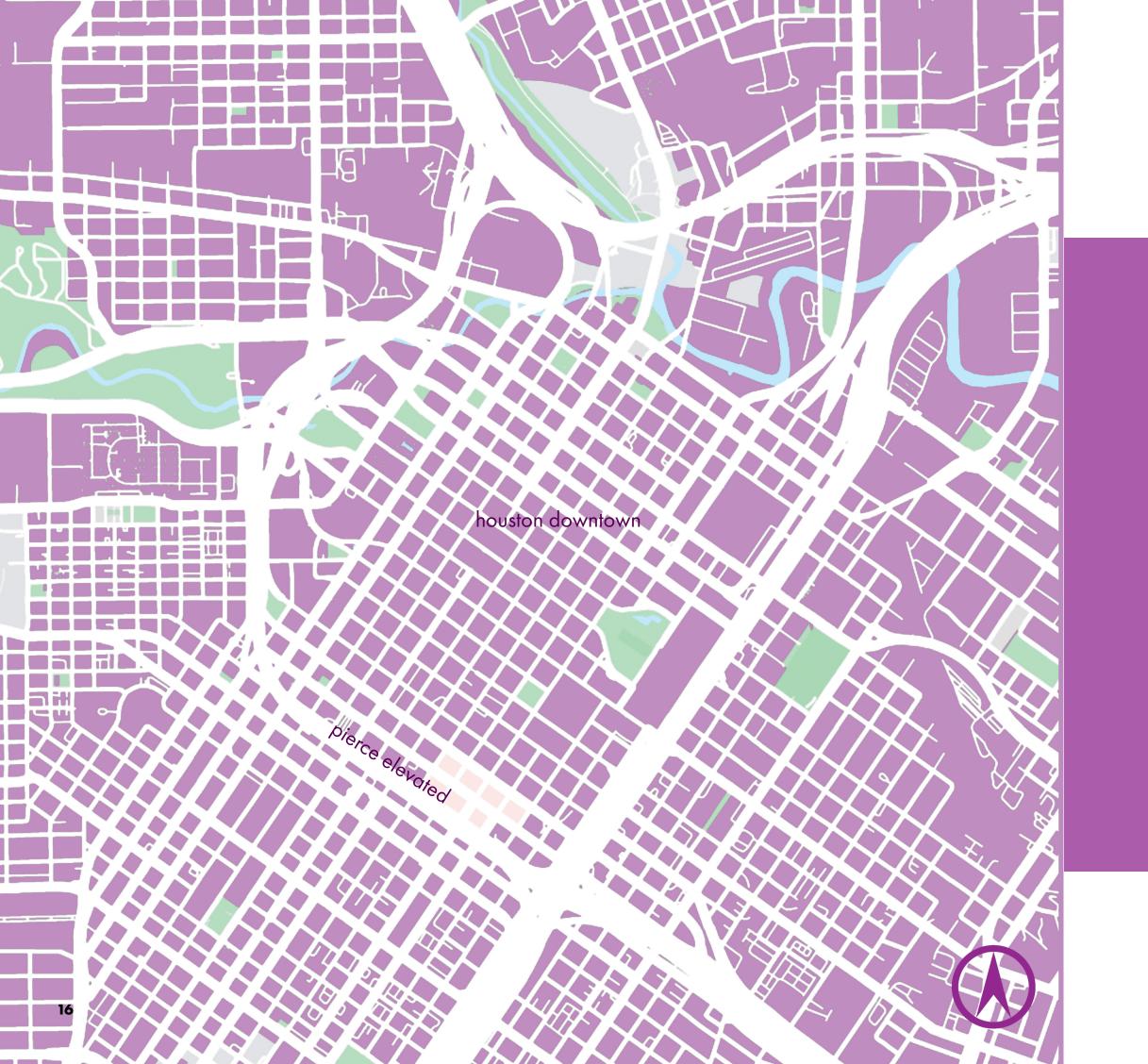
of fun and engaging recreational opportunities, availability of confidential support services, and convenience of location and operation hours are all critical factors to consider when planning and designing day centers. Safety and security, dignity, and health and well-being are also important considerations. There are three models of day centers based on their sponsoring organizations and missions: a "spiritual or missionary" approach, a social services approach, and a community work approach. Each approach aims to provide sanctuary and support to those in need, and to challenge clients to alter their behaviors, habits, and choices that may lead to improvements in their lives.Overall, low barriers to entrance and a focus on physical and emotional safety are key in creating a positive therapeutic environment at day centers. Tailoring day center services to particular demographics within the larger population of people experiencing homelessness can also help reach as many clients as possible. Day centers play an essential role in supporting vulnerable populations and helping them regain independence and stability.

02.SITE: pierce elevated

Houston's downtown area is the central business district of the city, and it is home to a wide range of commercial, cultural, and entertainment attractions. The area is known for its impressive skyline, which features numerous skyscrapers and iconic buildings, such as the JP Morgan Chase Tower and the Wells Fargo Plaza.One of the most notable features of downtown Houston is its extensive system of underground tunnels, which connect many of the area's buildings and provide sheltered pedestrian access to restaurants, shops, and other amenities. The tunnels also offer relief from the hot and humid Houston weather, making them a popular destination for locals and visitors alike.The downtown area is also home to a number of major cultural institutions, including the Houston Theater District, which boasts numerous performance venues, such as the Wortham Theater Center and the Hobby Center for the Performing Arts. The area is also home







pierce elevated

The Pierce Elevated Highway in Houston, Texas, is a distinctive feature of the city's downtown skyline. Built in the 1960s, it was designed to alleviate traffic congestion in the heart of the city, providing a direct route for commuters and travelers through downtown Houston. The highway runs for about 1.5 miles and is elevated above street level, providing drivers with a bird's eye view of the surrounding area. While the Pierce Elevated was initially praised for its practicality and modern design, in recent years it has become a source of controversy. Some argue that it has outlived its usefulness, and that it impedes the growth and development of downtown Houston. The highway has been criticized for being an eyesore, as well as for its impact on air quality and noise pollution in the surrounding neighborhoods.Despite these concerns, the Pierce Elevated remains an important part of Houston's transportation infrastructure. It connects major highways and facilitates the movement of people and goods throughout the city, playing a key role in the region's economy. Additionally, efforts have been made in recent years to explore alternative uses for the highway, such as transforming it into a park or removing it altogether. However, any decision regarding the future of the Pierce Elevated will have to balance the benefits of improved traffic flow with the potential negative impacts on the surrounding community and environment.

existing proposal

The Pierce Elevated Highway in Houston, Texas, has been the subject of a recent proposal to remove it altogether. The proposal is based on the idea that the highway has outlived its usefulness and that its removal would provide numerous benefits to the city. One of the primary arguments in favor of removing the Pierce Elevated is that it is an eyesore that detracts from the beauty of the city. Removing the highway would allow for the development of green spaces and public parks, as well as the construction of new buildings and infrastructure that would better serve the needs of the community. Another argument in favor of removal is that the highway has negative environmental impacts, including air pollution and noise pollution. Removing the highway would improve air quality and reduce noise levels, making the surrounding neighborhoods more livable and attractive to residents and businesses alike. The removal of the Pierce Elevated would also provide an opportunity to reimagine transportation in Houston. Rather than relying on cars and highways, the city could invest in public transportation infrastructure, such as light rail and bus rapid transit, that would provide faster, more efficient, and more sustainable modes of transportation. While the removal of the Pierce Elevated would certainly be a major undertaking, it is seen by many as a necessary step in the continued growth and development of Houston. By creating new opportunities for green space, development, and transportation, the removal of the highway would help to make Houston a more livable, attractive, and sustainable city for generations to come.



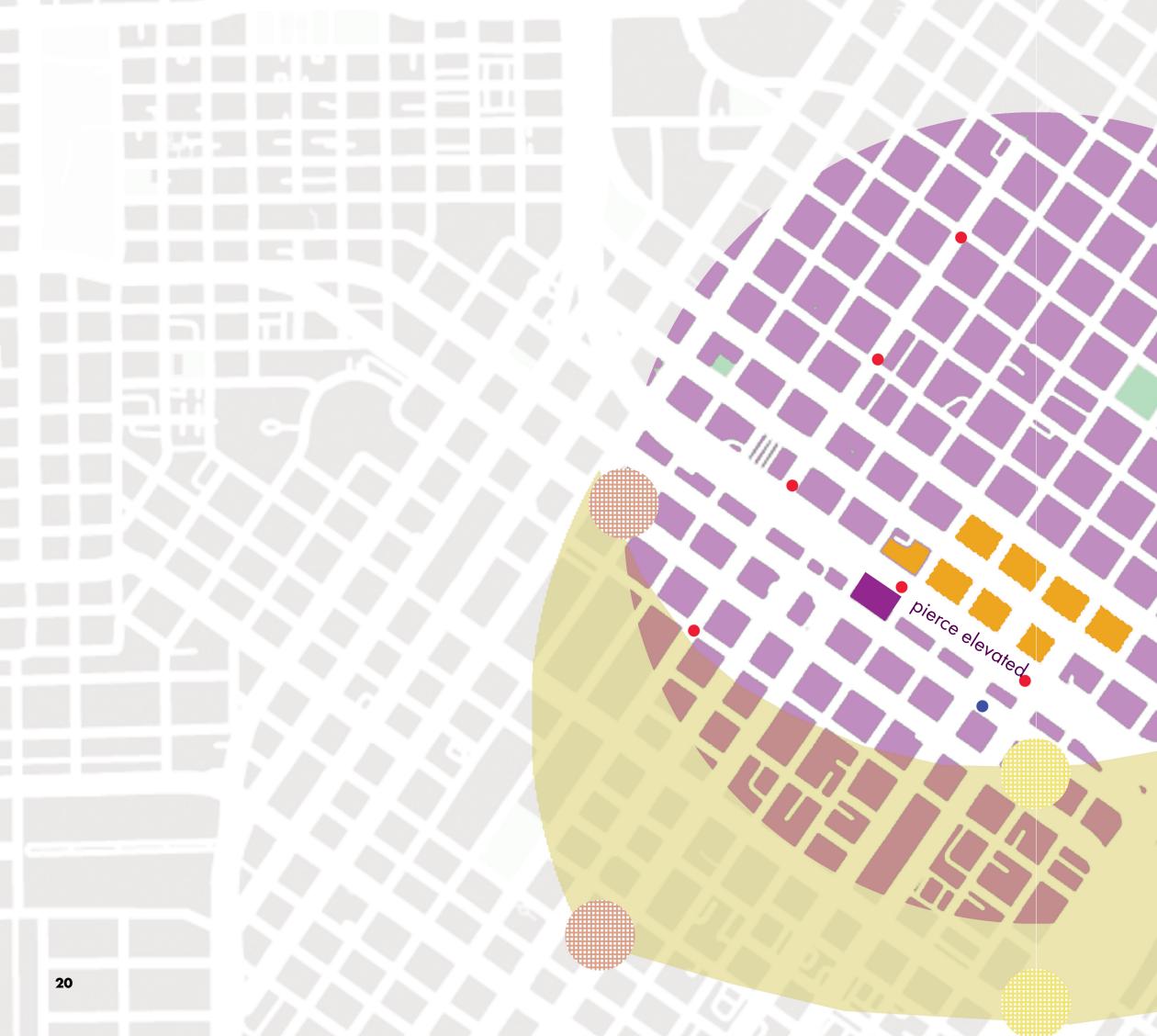
proposal to remove

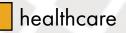
In addition to the proposal for removing the Pierce Elevated Highway in Houston, there have also been discussions about the possibility of creating a skypark in its place. A skypark is a type of public park that is built on top of a highway, providing a green space for residents and visitors while still allowing for the movement of vehicles below. The idea of a skypark in downtown Houston has generated a lot of excitement, as it would provide a unique and innovative solution to the problem of urban highway infrastructure. The park could include features such as walking paths, bike lanes, playgrounds, gardens, and outdoor seating areas, providing a much-needed respite from the concrete and asphalt of the city below. In addition to its aesthetic and recreational benefits, a skypark would also have environmental benefits. By absorbing carbon dioxide and other pollutants from the air, the park would help to improve air quality in the surrounding neighborhoods. It could also help to mitigate the urban heat island effect, which is a phenomenon in which cities experience higher temperatures than surrounding rural areas due to the absorption and retention of heat by buildings and pavement.Of course, the creation of a skypark would require significant planning and investment, and it would likely take years to complete. However, many see it as a worthwhile endeavor, one that would transform the city's downtown area and make it a more livable and attractive place for residents and visitors alike.

skech by marcus martinez aia

to use as a skypark

PIERCE



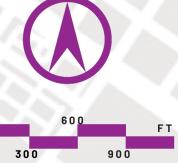


site



public transportation

support services



impact on unhoused population

The Pierce Elevated Skypark Proposal offers numerous benefits to the urban environment and community, but it may significantly impact the homeless population. Careful consideration and planning are required to address potential effects on this vulnerable group:

1. **Displacement:** The project may displace homeless individuals using the area as a makeshift shelter. The city should collaborate with local homeless service providers to identify alternative shelter options and support services for affected individuals.

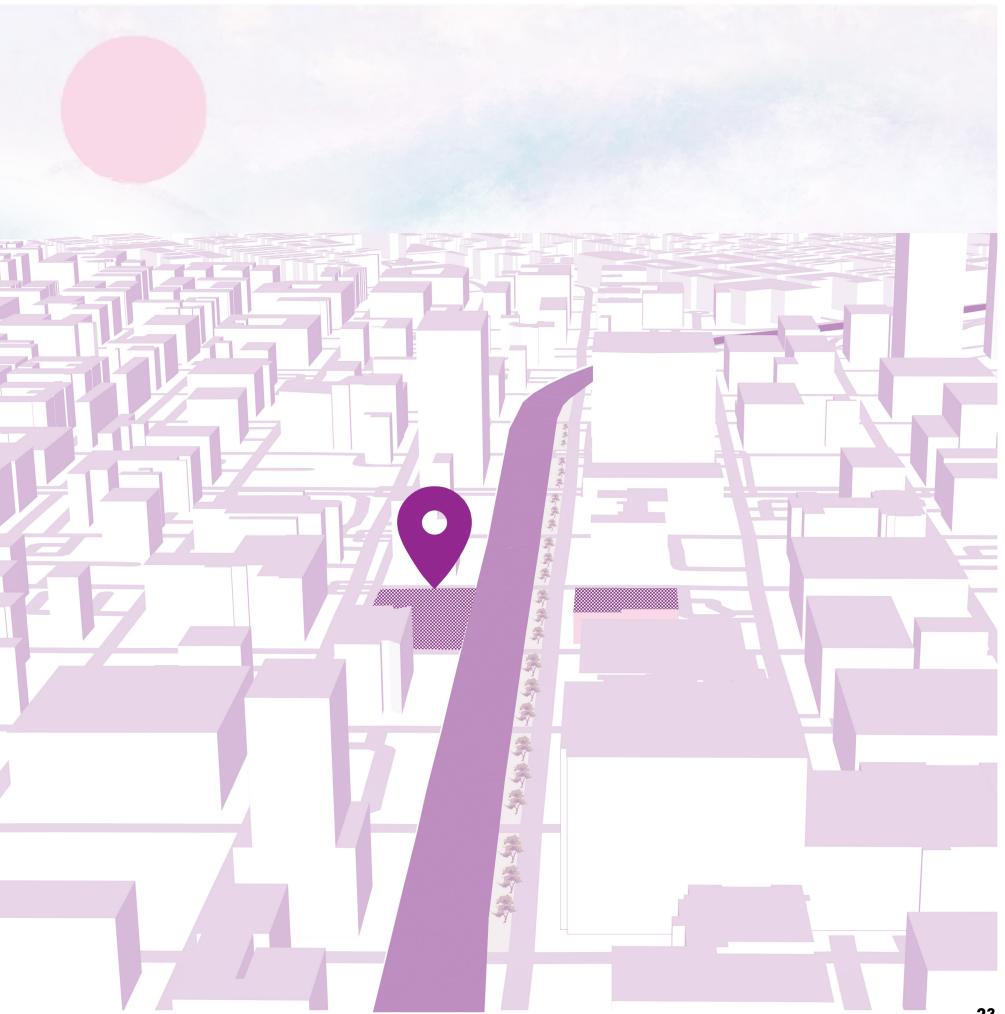
2.**Employment opportunities:** The redevelopment may create jobs in construction, landscaping, and maintenance. The city could develop targeted job training and placement programs for homeless individuals, equipping them with skills and resources to benefit from these opportunities.

3.**Inclusive public space:** The Skypark should be designed as an inclusive space, welcoming all community members. Amenities such as public restrooms, drinking fountains, and shaded seating areas can improve accessibility and comfort for everyone.

4. **Social integration**: A vibrant public space can foster a sense of community and social integration for homeless individuals, encouraging interaction and reducing stigmas associated with homelessness.

5.**Support services:** The city could allocate funds or space for support services tailored to the homeless population, including mental health services, substance abuse counseling, and job training programs.

In summary, the Pierce Elevated Skypark Proposal may have negative consequences for the homeless population, but these can be mitigated through thoughtful planning and incorporating inclusive design principles and support services. This approach will ensure the project benefits all community members, including the most vulnerable residents.





O3.NARRATIVE

The day shelter is tucked away in a community known for its night shelters and social assistance facilities, this day refuge offers a haven for the transient individuals who frequently visit the area. The shelter will act as a central hub, offering visitors daytime refuge and nourishment, access to care for their physical, emotional, and health needs, and a range of resources to support their personal lives. Located in the hospital district, which is densely packed with night shelters and services for the transient and homeless populations, it was crucial to comprehend the potential for connecting to urban centers and the local population's activity patterns to optimally utilize the building site and create symbolic ties to the city.In the architectural design, the potential for connecting to urban centers and local activity patterns played



a critical role in determining the best use of the building site and establishing symbolic links to the city. The structure subtly leans towards the downtown area by adopting the grid of highway that mirrors the downtown street grids. The architectural design aims to be both a community anchor and a beacon of outreach. While the building's form gestures towards the distant city, it connects to the immediate community through a reinterpretation of the warehouse archetype. The use of transparent materials and visible structure reflects the values of openness and honesty. The community plaza, outdoor seating, and rooftop community garden all contribute to fostering a sense of ownership and pride within the community.

project goals

PEOPLE

Since the demographics of the unhoused people shows a higher demand for people above 25, this day center is for single unhoused men and woman in Houston downtown area who are above the age of 25.

ACTIVITIES

Because of the Psychological-sociological nature of the community that need to be rescued and trained, the solution should provide the user with a clear sense of orientation within a limited time frame (8am-5pm).

RELATIONSHIPS

Since the goal for a safe and stress releasing environment is required, the design must include provisions for adequate supervision and control with a connection to nature.

SITE

Because of the location of the site under the highway, the design solution must provide for the interfacing of activities in the day center and the immediate community by creating a connection to hospital and to green open space

ENVIORNMENT

The design must respond with enhancement of the environment by reusing the highway and also by using passive climate control methods that will help to achieve a sensitive site development.

QUALITY

Since the design involves going above and below the highway , the grid layout plan should solve requirements for elevator access and for cross and vertical circulation both above and below the highway.

facility.

FUNCTION

INITIAL BUDGET

Because of the numerous functions to be provided within a low-to-medium cost as the project will be funded mostly by non profit organizations, the day center should strive for economy and multiuse space.

OPERATING COSTS

Recognizing the limitation of the budget, use cost control techniques such as passive designing, solar panels, water conservation methods, low maintenance furniture's etc. to reduce the operating cost.

LIFE CYCLE COSTS

The plan should maintain the elements and the integrity of the structural system of the highway by proper placement of the programs for the day center, so that they can be reused after useful life of the

PAST

Since the location was chose because of the proximity to the hospital and also to the support organization (COH), the design should to connect to these amenities without blocking away the space below highway.

PRESENT

Since the methods of addressing homelessness may change the facility must be able to adaptable to these changes, hence multiuse spaces should be considered as a priority.

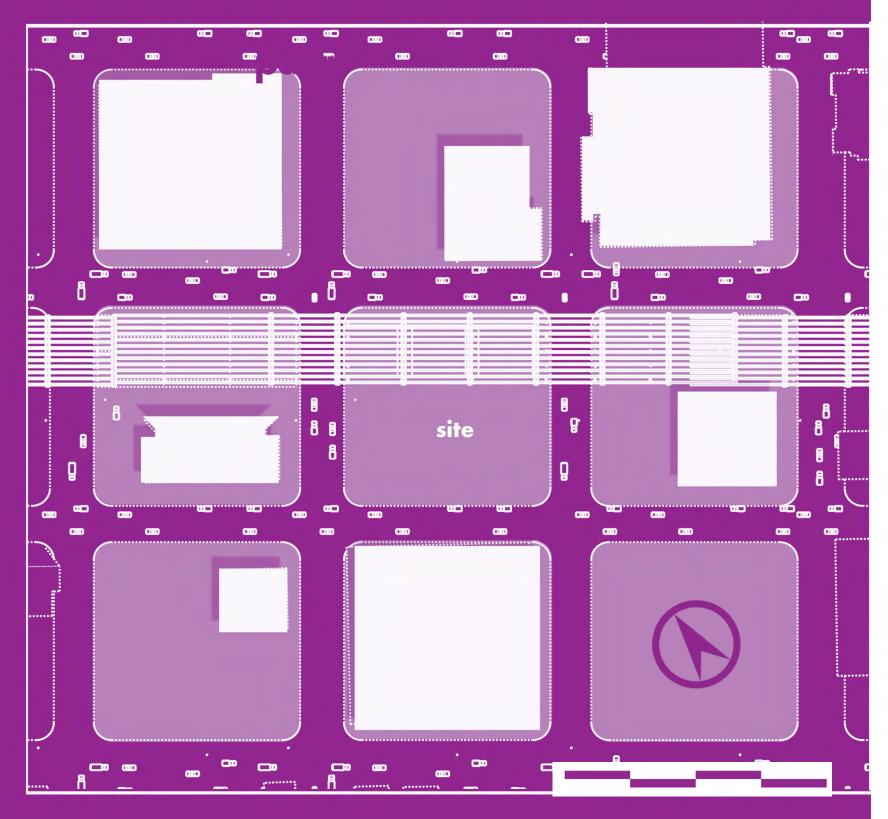
FUTURE

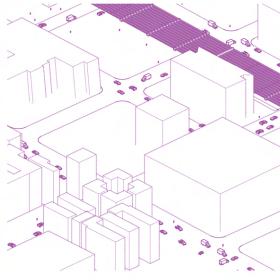
The city's demand to shelter the unhoused will increase in future. Therefore the facility must be designed so that it can be expanded economically and efficiently to the East side where the Coalition of homeless is located.

ECONOMY

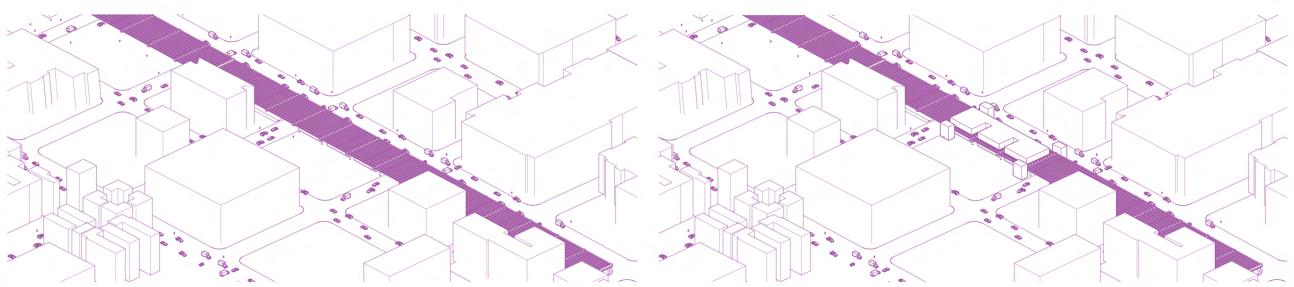
TIME

29

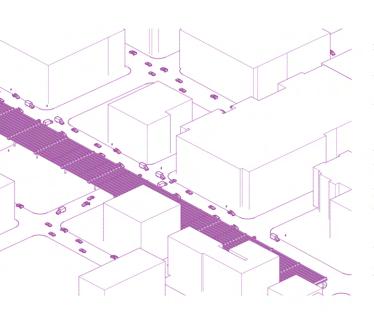


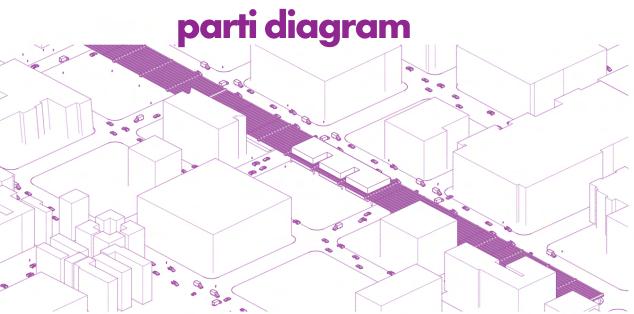


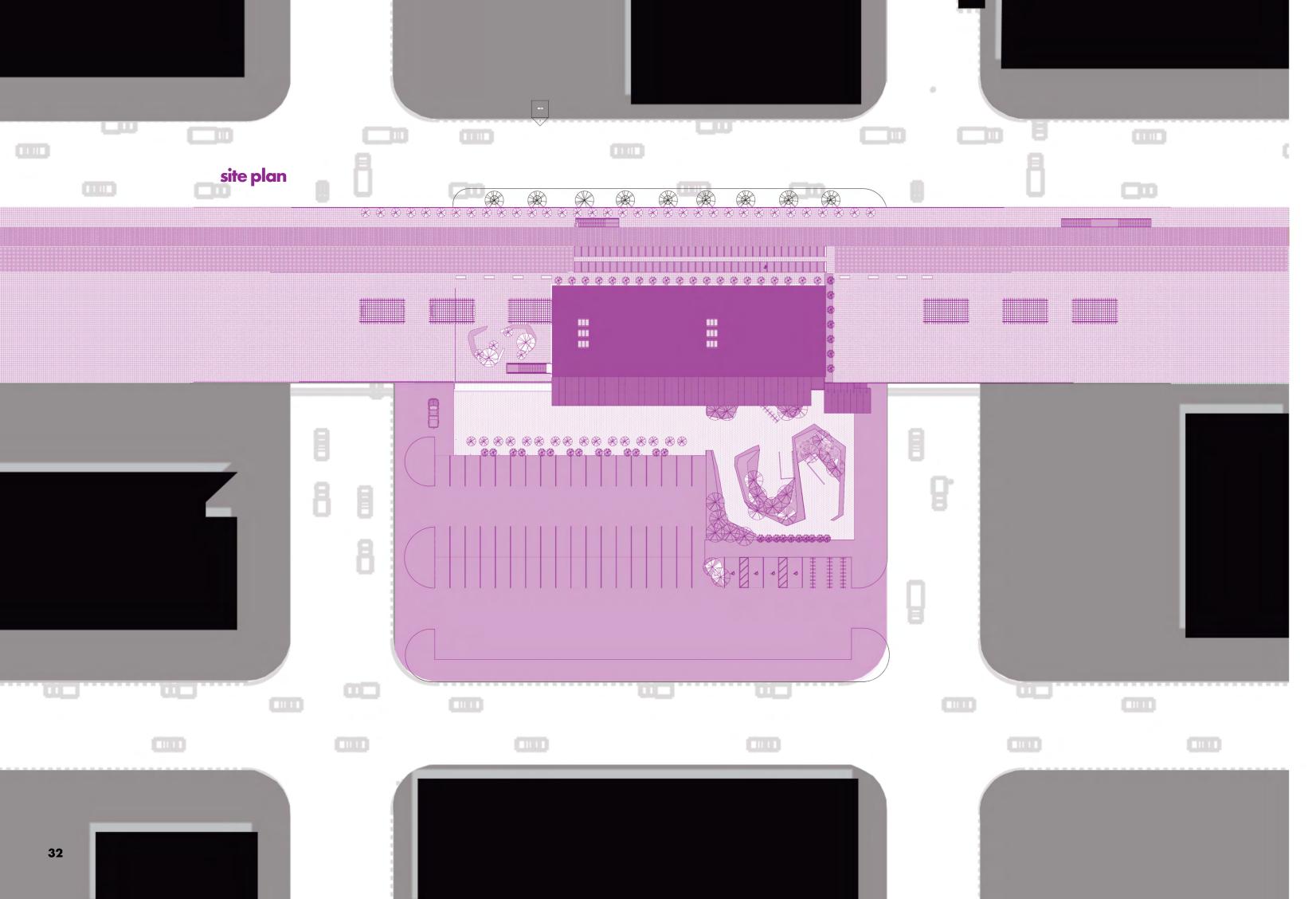
the grid of highway-12 I beams spaced 6 feet apart supported on 4 feet T beams that rests on 5 coulms which are spaced 90,20 feet in x,y directions respectively perforations to facilitate transparancy and to bring in light. The massing on above the highway established a connection and equal oppurtunity to enjoy the same amenities as public



the massing under the highway opens up under the T beams which has a lower clear heard space, this openings will have transparent materials which will establish a visual connection across the street park.







04.PROJECT

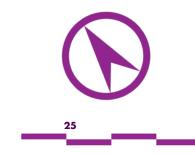
become a space that respects and foster people

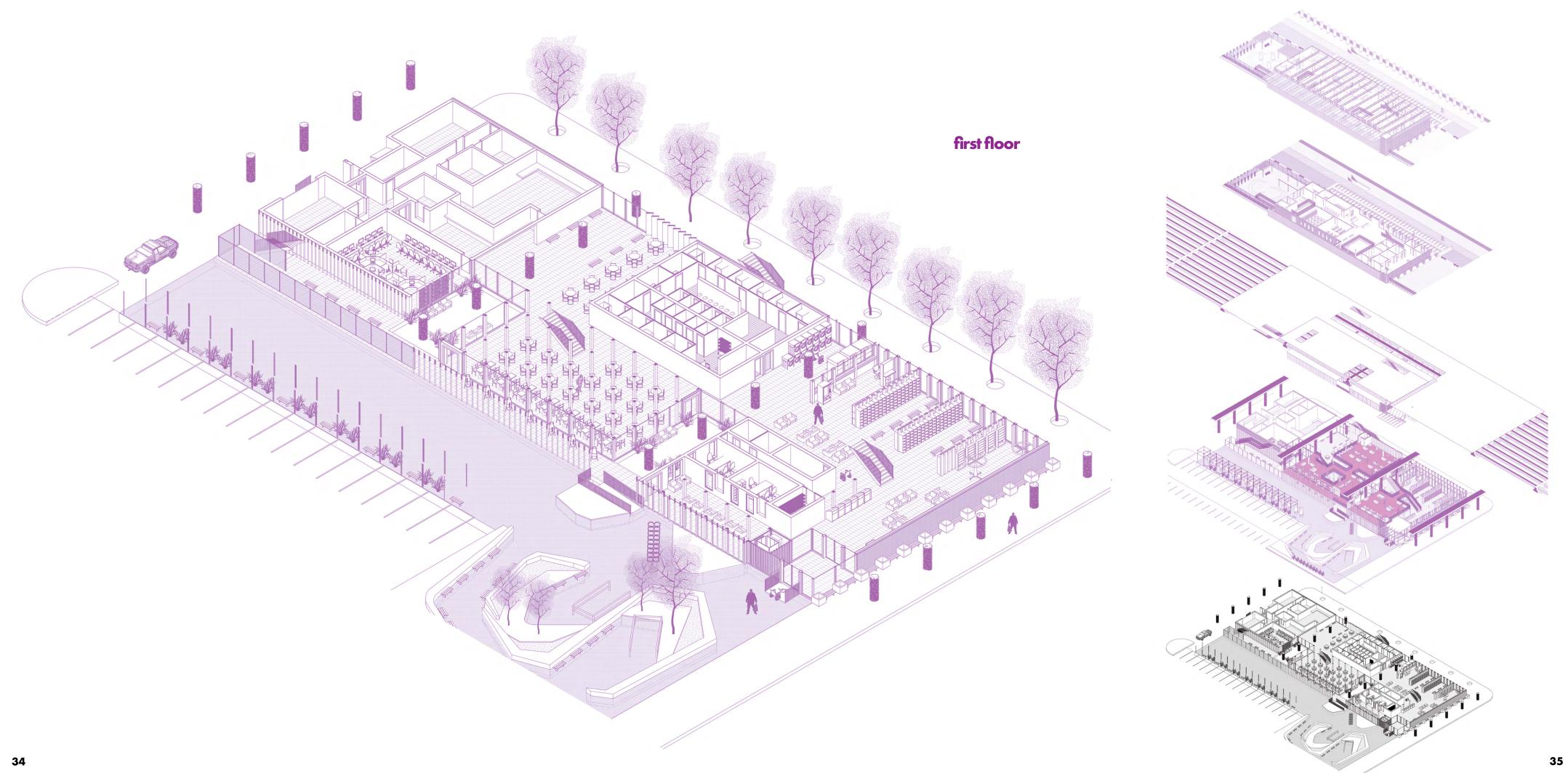
be a catalyst for positive change within the community

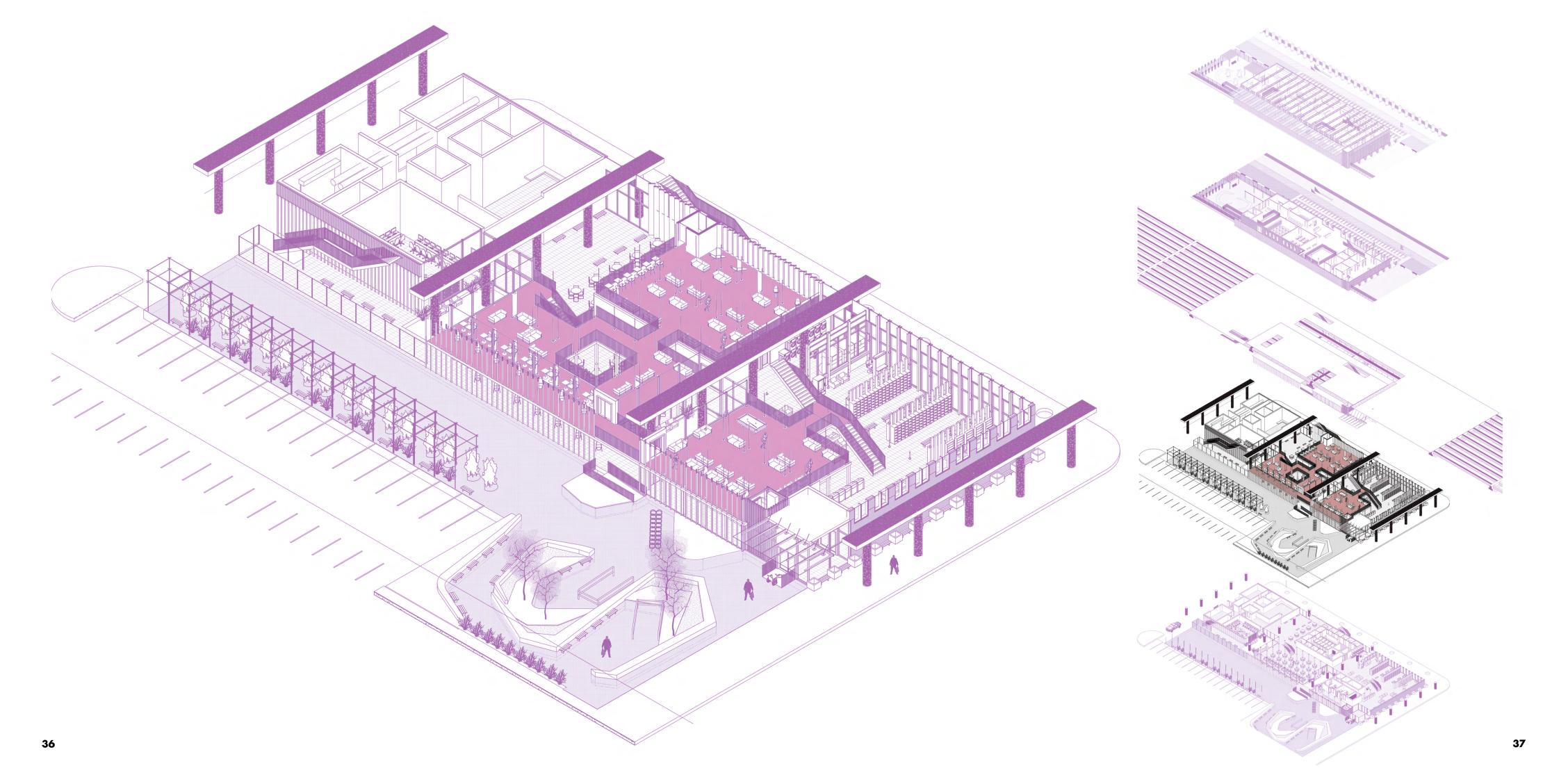
be transparent but at the same time respect privacy

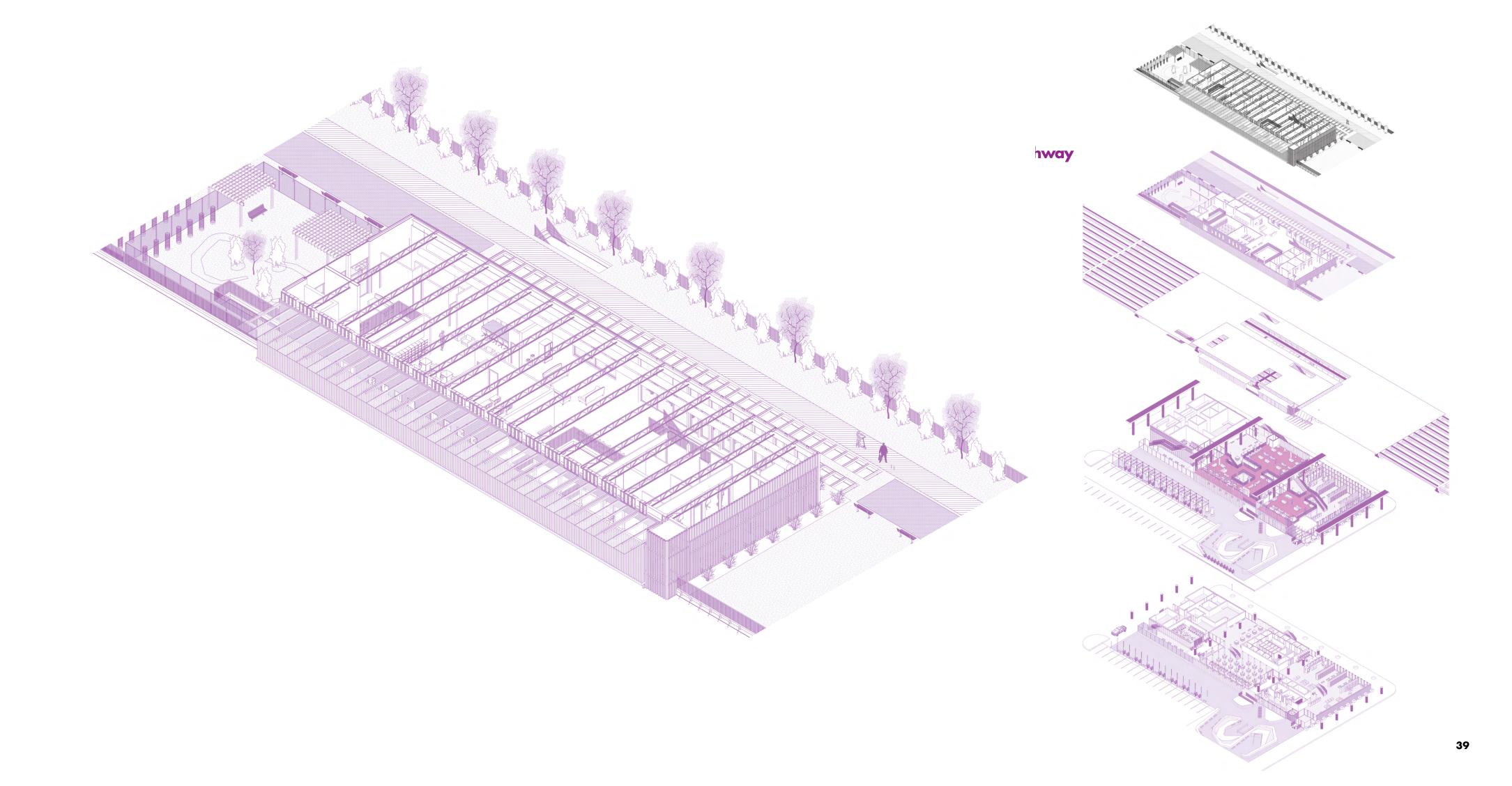
be a space that provides familiar setting

be flexible and open but include the grid structure

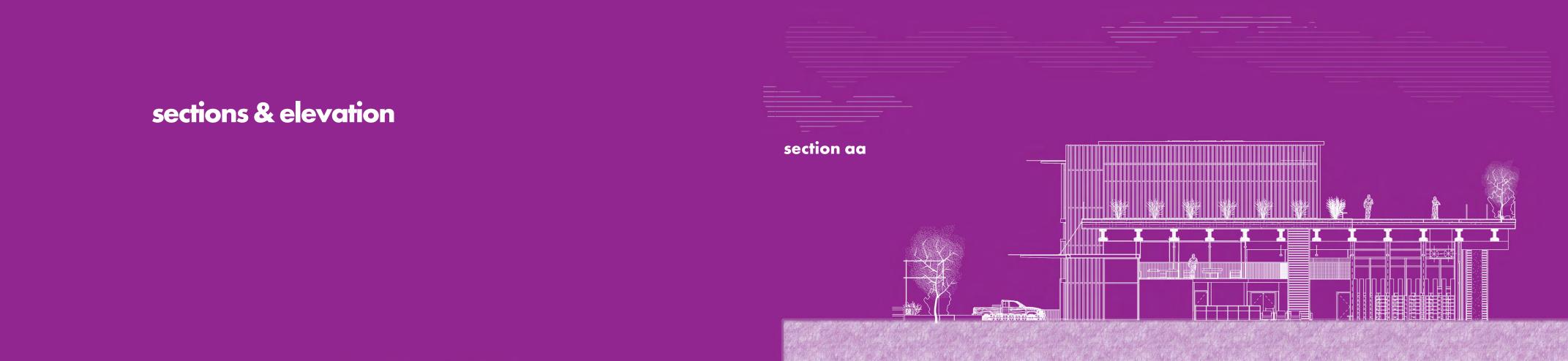


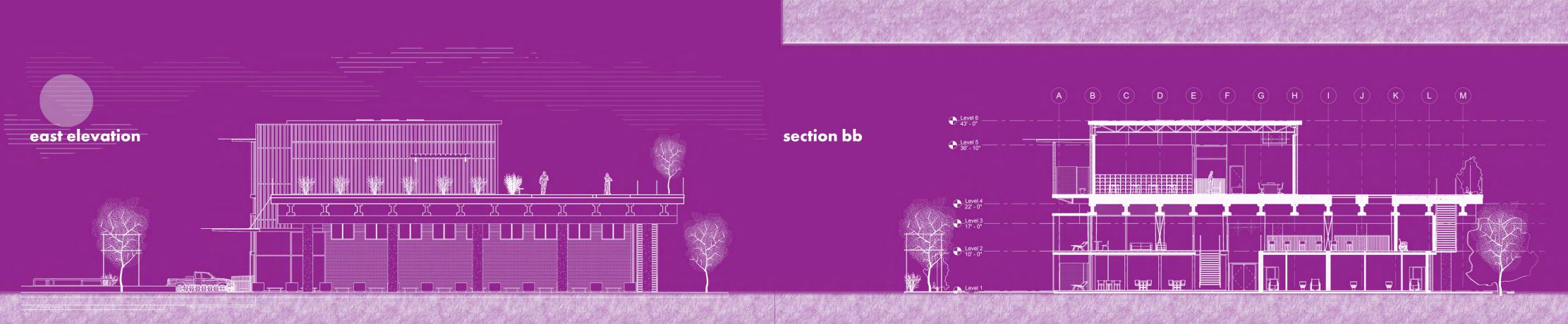


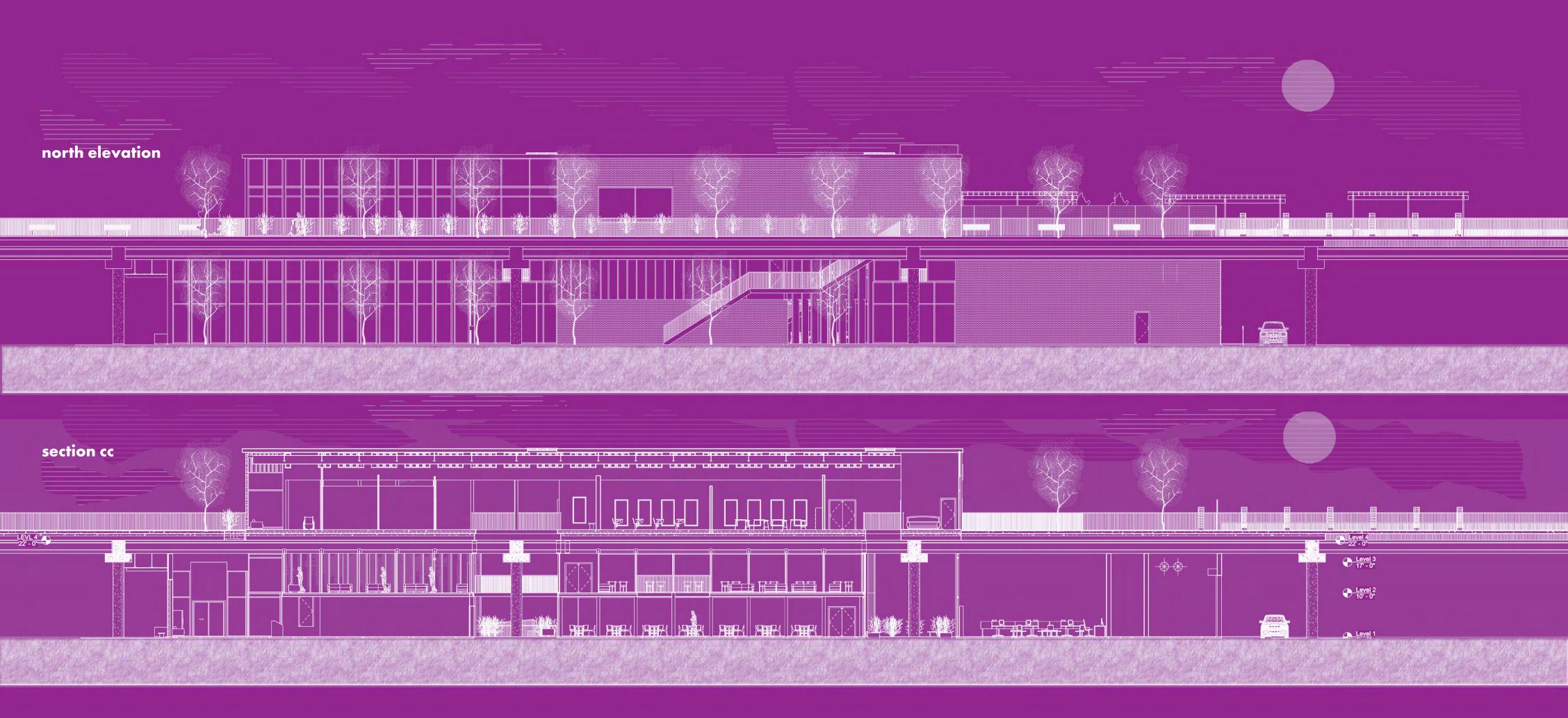








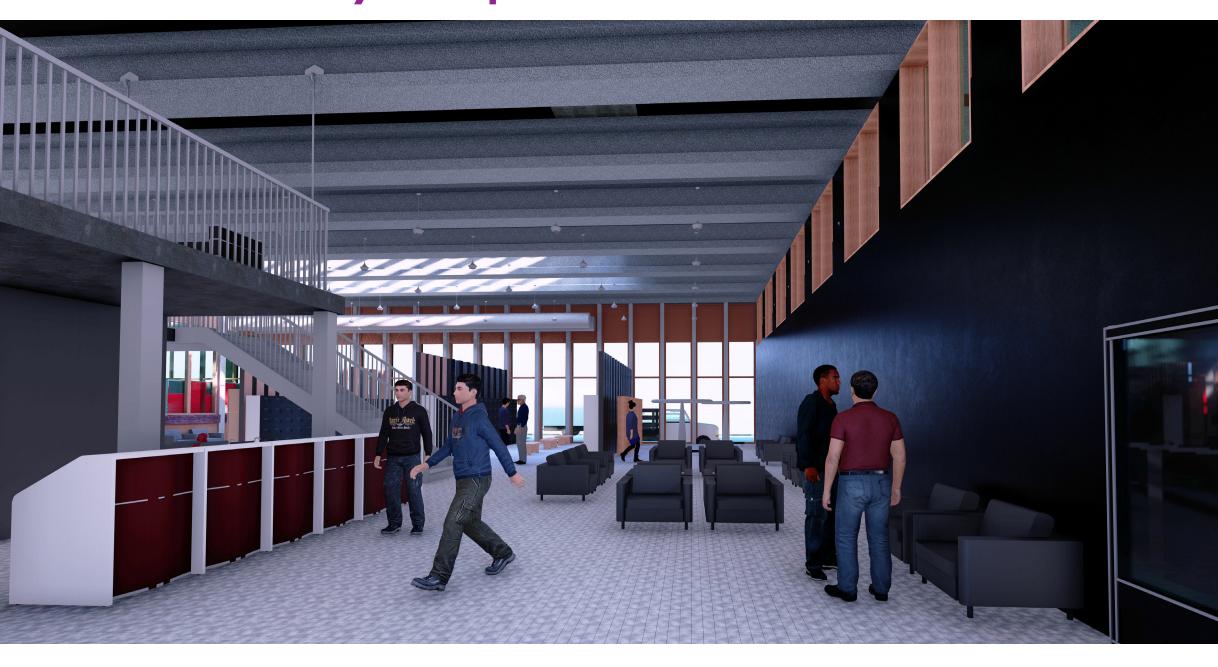




05.RENDERS

The community square, improved street-facing exteriors, open-air eating spaces, and rooftop terrace all contribute to fostering a sense of belonging and pride within the community. The site has been organized to maximize its potential, positioning the community square toward the primary pedestrian route. Encircled by the main entrance to the building and its porches, and adorned with a gentle cover of trees and native flora, the square provides a welcoming space for community gatherings and an inviting entrance to the center. Large areas of clear, high-performance glass, wooden-toned metal panels, and natural brick elements pay homage to the neighborhood's industrial warehouse origins while maintaining a contemporary and innovative aesthetic.

lobby & reception



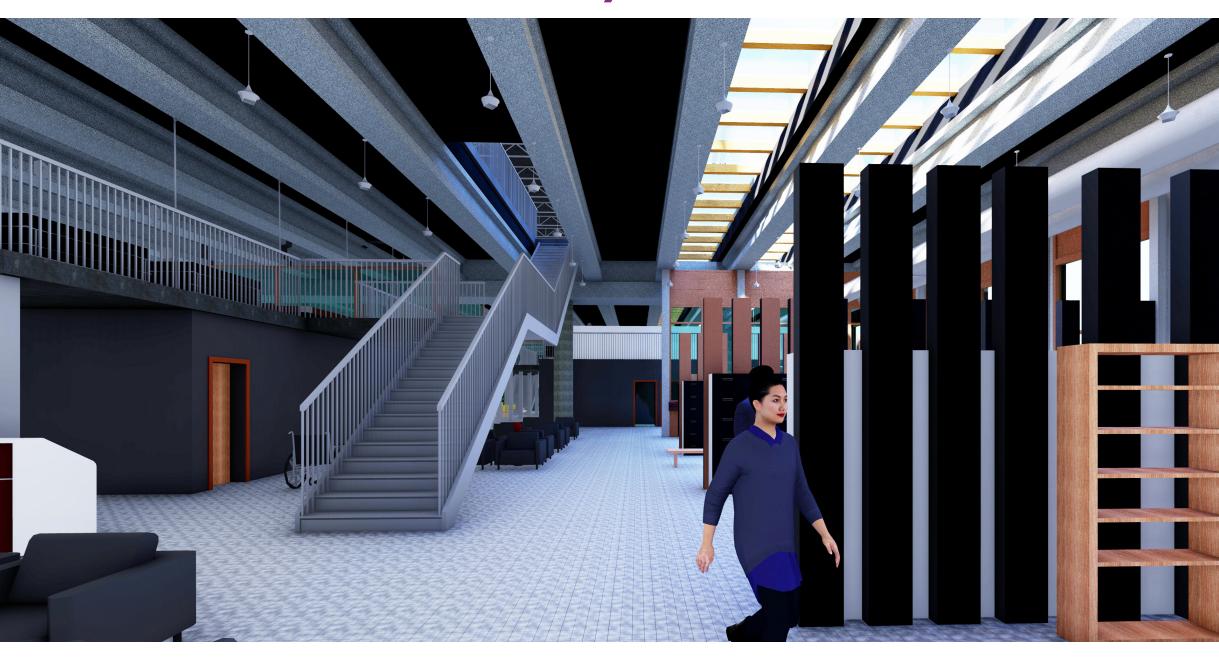
ProgramThe reimagined warehouse archytype draws inspiration from a sophisticated industrial style of deontown Houston. The use of authentic materials, such as polished concrete floors, visible structural elements, sleek dark gray metallic accents, and warm wooden hues, provides a solid foundation and evokes a feeling of enduring stability. Emphasizing transparency and connectivity, the extensive application of interior and exterior glass allows natural light to fill the space, removing any visual obstructions. The wall facing the main road located under the highway is left opaque.

Reception and intake area: A welcoming space where staff can greet, register, and assess the needs of visitors. This area will include a reception desk, seating, and storage for forms and informational materials.

Boutique of used clothes: a designated space for the boutique, organized with racks, shelves, or bins for elegant displaying of clothing items. The boutique should be well-lit and inviting.

Case management and counseling offices: Private offices or semi-private cubicles where staff can meet with visitors to provide case management, mental health counseling, or other support services.

locker,salon,laundry&mailbox



Storage/locker area: A secure space for visitors to store their belongings, either in lockers or on shelves, while they use the day center's services.

Salon: Designate a separate area within the day center for the salon, equipped with necessary tools and equipment such as chairs, mirrors, sinks, and storage for hair products and styling tools.

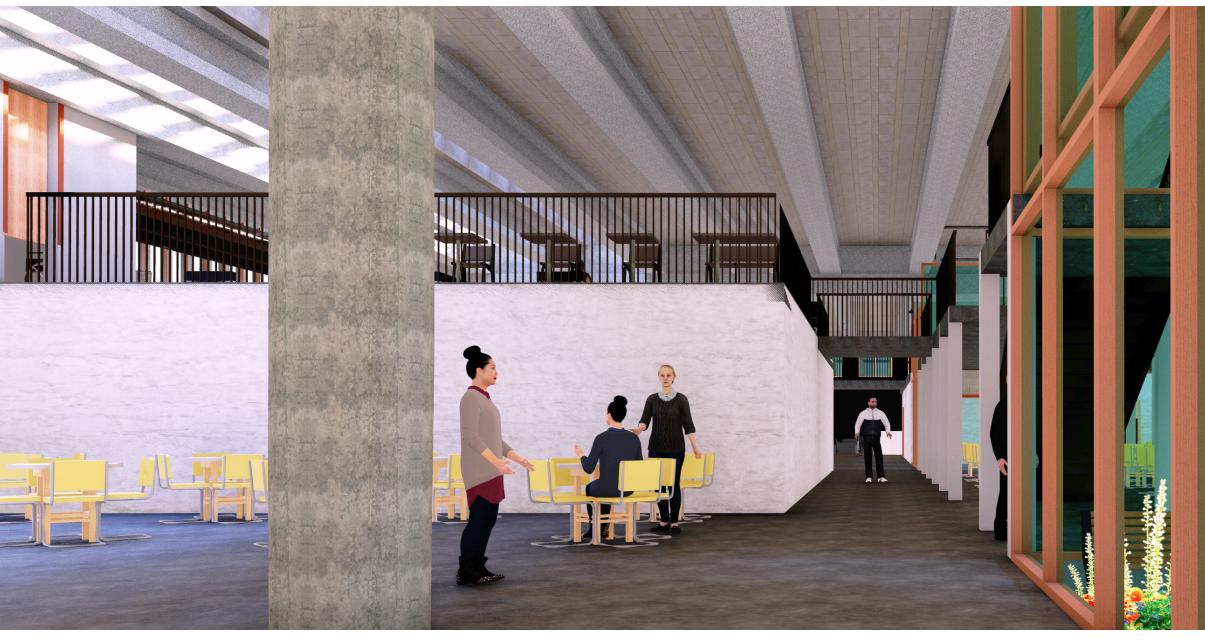
Common area: A comfortable and spacious area with seating, tables, and possibly a television or reading materials, where visitors can relax, socialize, or access resources. The mezzanine floor is designated space for relaxing, these spaces have low lighting but yet provide visibility and transparancy.

Laundry facilities: An area with washers, dryers, and storage for detergent and other laundry supplies, allowing visitors to clean their clothes.

Mailbox Facility: Having a mailing address is often a requirement for accessing social services, job applications, and medical careservices, this will provide the homeless individuals the opportunity to use their address to receive mail.

Restrooms and shower facilities: Clean and well-maintained restrooms, including showers and changing areas, with adequate space and privacy for users

dining, kitchen&mezzanine





Dining area: A designated space for serving meals or snacks, with tables and chairs for visitors to eat comfortably. The meal will be provided in to go boxes, so the users can grab the lunch and sit in spaces most convinient for them. This also cut down the need for an industrial size kitchen.

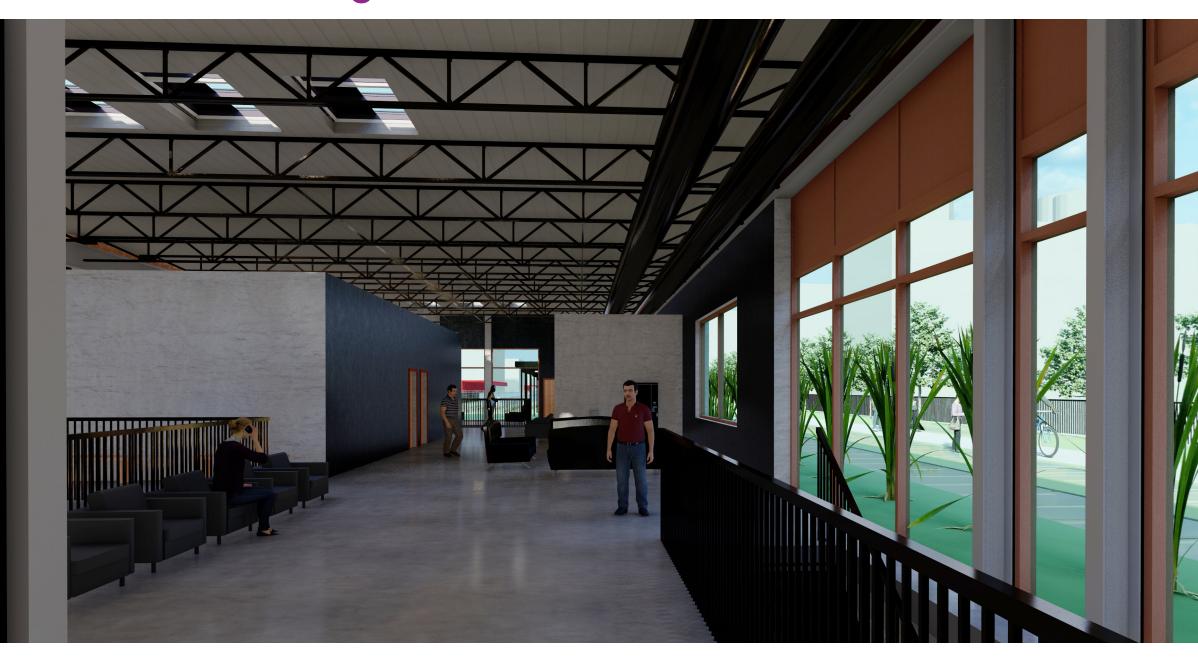
Computer and resource area: A designated space with computers and internet access for job searching, resume building, and accessing online resources, as well as information on local services and resources. This is a lounge provided in the groundfloor in addition to the training center on the second floor.

Outdoor area: A secure outdoor space with seating and greenery, where visitors can relax and enjoy fresh air. This space is provided in the grid structure where the I beam meets the T section beams, this narrow neck also helps with visibility and transparacy.

Kitchen area: Since the kitchen is not required to facilitate industrial cooking the kitchen should have equipemts to store and severve meals.

Multipurpose room: In this case the mezzanne floor has flexible space for group gatherings and recreational activities such as pool table and board games.

training center

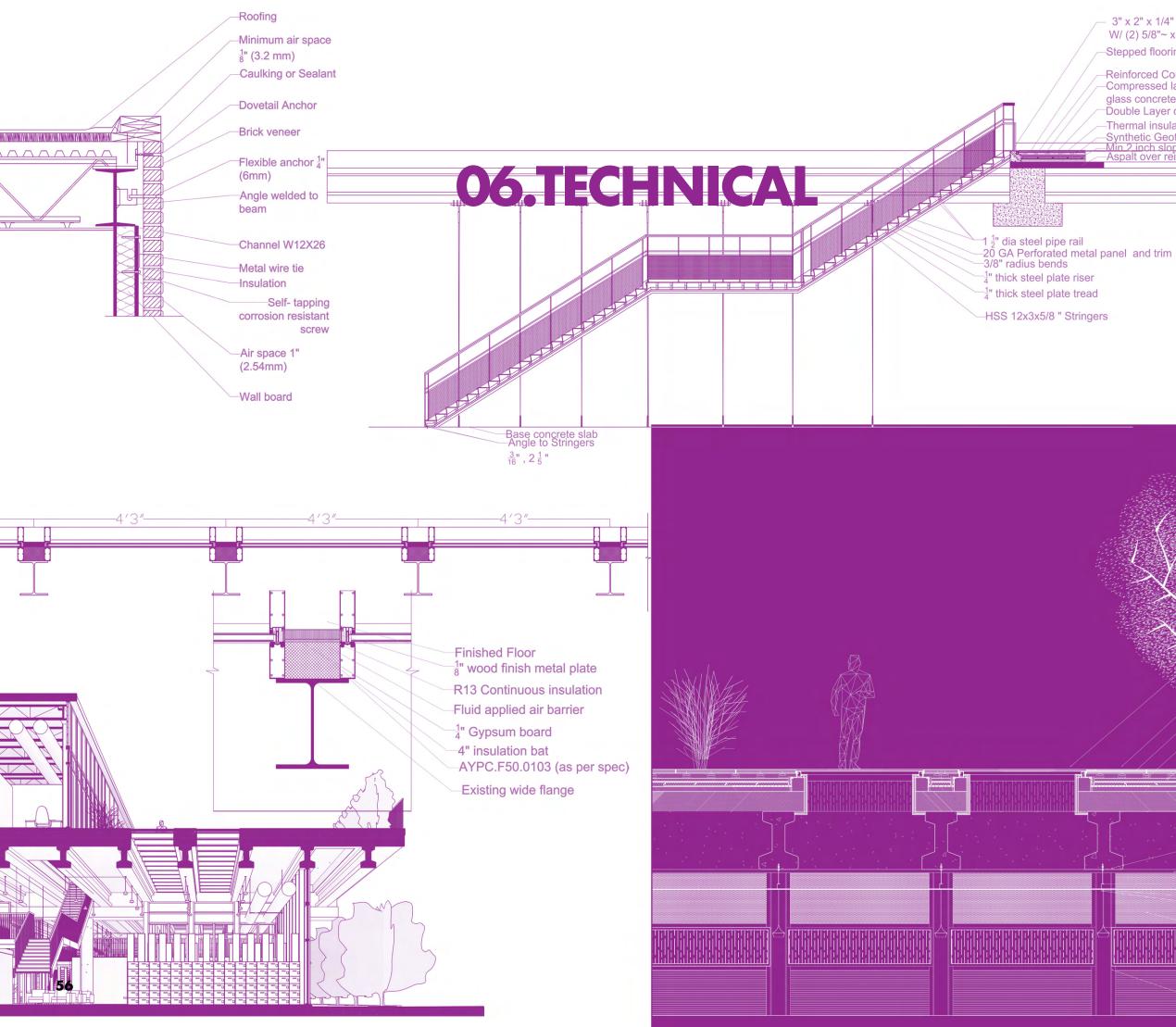


Training center: Anarea within the day center for the training center, equipped with tables, chairs, and necessary technology such as computers, projectors, and whiteboards. This space should be flexible and adaptable for various training activities, workshops, and classes.

Career guidance office: Create a separate space or private office within the training center for career guidance services, where staff or volunteers can meet with visitors individually to provide personalized career advice, resume building support, and job search assistance.

IT training area: Area for information technology training, equipped with computers, internet access, and relevant software for teaching digital literacy and other IT skills. This area can also be used for teaching basic computer skills, such as typing, email, and using office applications.

Workshop/classroom space: A flexible space within the training center for hosting workshops, classes, or seminars on various topics, such as job readiness, financial literacy, and other life skills. This space should have movable furniture and equipment to accommodate different group sizes and configurations.

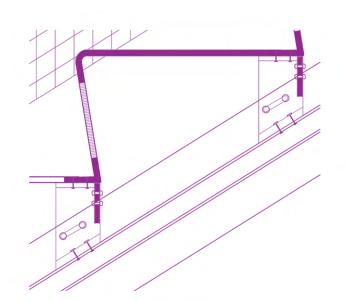


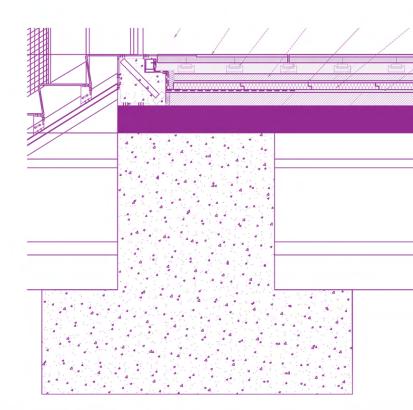
3" x 2" x 1/4" Cont. between stringers W/ (2) 5/8"~ x 1 1/2" A325 T.C. Bolts -Stepped flooring stone on Mortar

Reinforced Concrete Masonry Units

-Compressed layer of reinforced fibre glass concrete -Ďouble Layer of Synthetic Geotextile 1 $\frac{1}{2}$ in

-Thermal insulation with Extruded Polystyrene sheets Synthetic Geotextile separtor layer Min 2 inch slope every 8 feet Aspalt over reinforced concrete slabs







1 ¼ in Three Ply Structural Frit glass on Aluminium tubes

Stepped flooring stone on Mortar Reinforced Concrete Masonry Units

Compressed layer of reinforced fibre glass concrete

Double Layer of Synthetic Geotextile $1\frac{1}{2}$ in Thermal insulation with Extruded Polystyrene sheets

Synthetic Geotextile separtor layer

Min 2 inch slope every 8 feet

Existing Structure- Aspalt over reinforced concrete slabs

Cable tray support for Ducts

Precast Concrete I Beam- 35 MPa

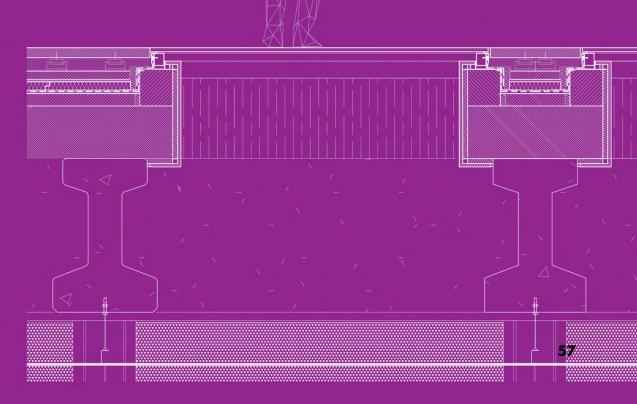
Fiber Wood Therm dry and Cement bonded particle board on X-lam, will wrap the T beam and join the wall across Suspended Wires

6'Light gauge steel 4'O.C.

- $\frac{1}{4}$ inch Hat channel
- Drop Pendant Light

R2 4mm Glazing

Fiber Wood Therm dry and Cement bonded particle board on X-lam Commercial 1" IG unit with teo lites of $\frac{1}{4}$ inch glass and $\frac{1}{2}$ inch air barrier W10X 49 Steel Column



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