

2023 MERIT AWARD

Brock Dueck

UNIVERSITY OF MANITOBA

FACULTY ADVISOR – MARCELLA EATON

LYCEUM

A traveling fellowship in Architecture

CONTEXT

LF-11410

CREATING A CENTRAL CORE

LYCEUM

Old Town Mall - Baltimore MD

The new Central Core takes a site that has been disconnected from the rest of the city and reintegrates it as an essential piece of the community. Providing space for people to move freely and safely as well as providing ample resources limits the need to travel elsewhere. This means that the residents in the neighborhood can create their own future close to home. Much like a building, this space is the Central Core for the Old Town community.

University 

 Schools

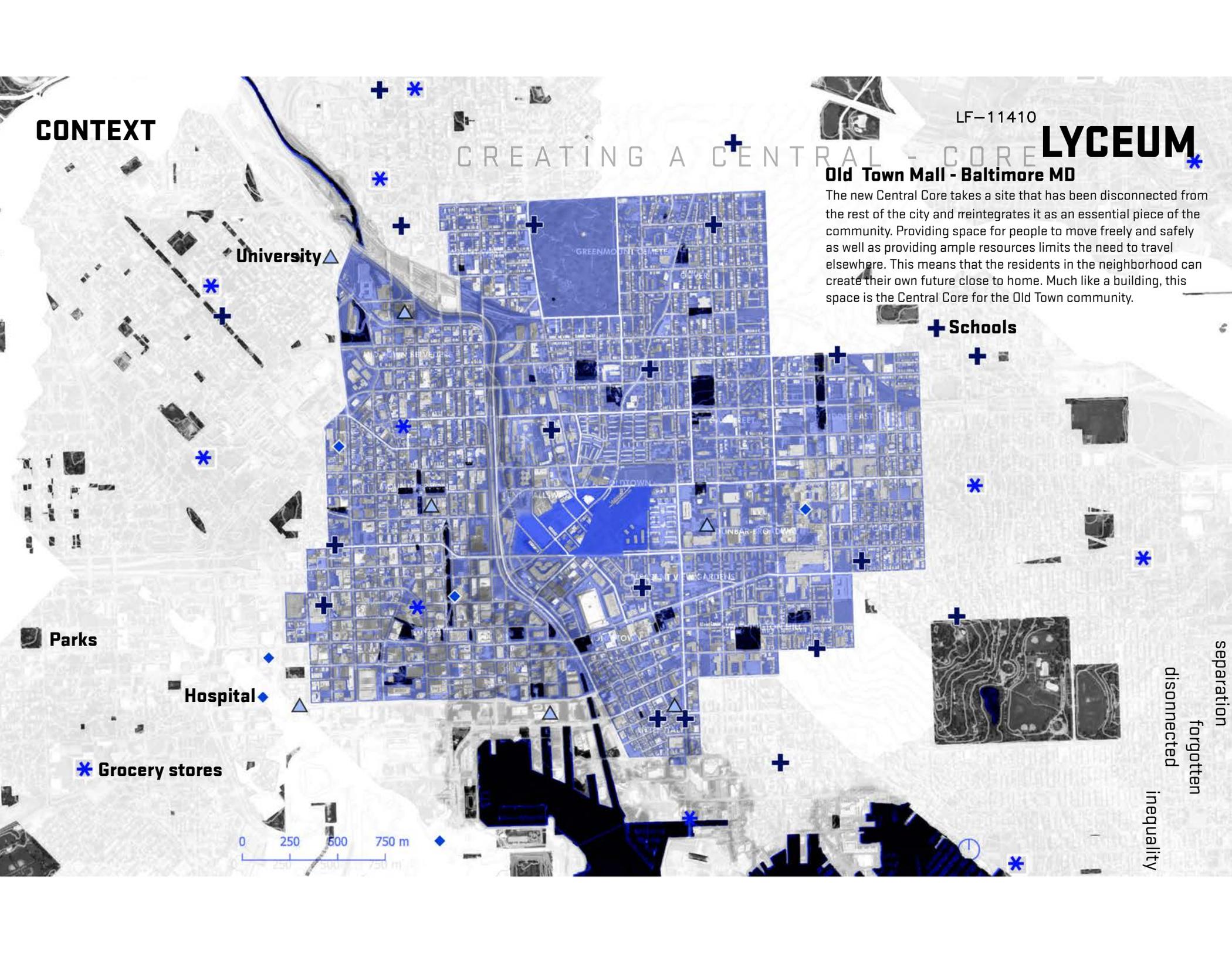
 Parks

Hospital 

 Grocery stores



separation
forgotten
disconnected
inequality



SITE ANALYSIS

Neighborhood Profile

- 77% African American
- 74% of people do not have a vehicle
- Transit is primarily used by people of colour
- 32, 000 students rely on public transit everyday
- Median home sale price is \$58, 000
- Median household income is \$15, 724 annually
- Unemployment is at 7%
- 34% do not complete high school
- Baltimore's median is \$79, 500
- Baltimore's average for not completing high school is 28%

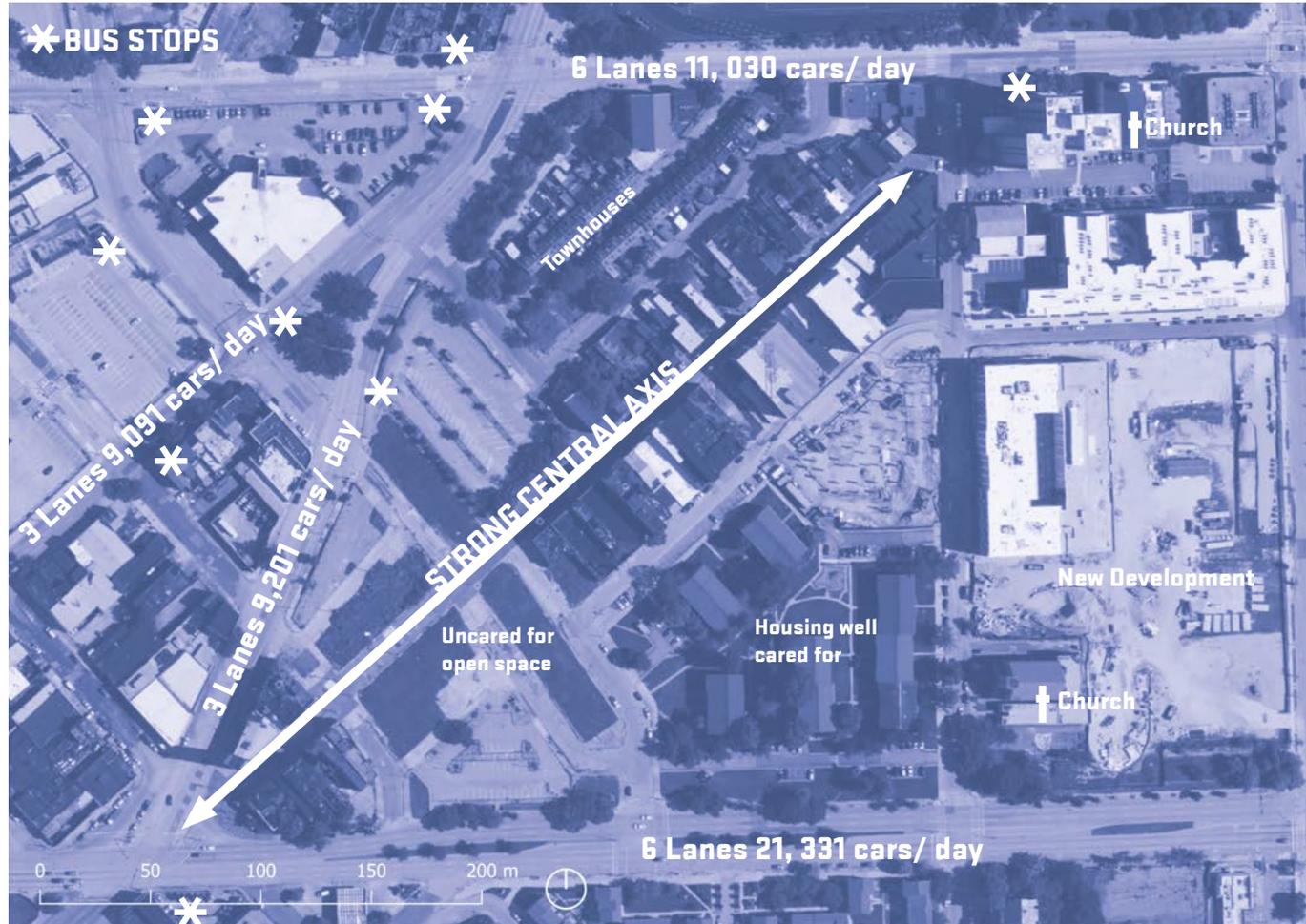
WHY DO PEDESTRIAN MALLS FAIL? FOOT TRAFFIC - PROXIMITY TO ATTRACTIONS - SPRAWL OF THE CITY - LENGTH OF THE MALL

Ecological profile

- Baltimore has a goal to increase the canopy from 20% to 40% by 2037
- \$41 Million has been allocated to the American Rescue Plan to focus ecological development of previously red-lined areas
- 85% of people live within a 10 minute walk of green space, but what is the quality of that space?
- There has been an increase in days reaching max extreme temperatures

Housing

- 26, 500 homes projected to be needed over the next 5 years
- 74% multi-family rent
- 4% multi-family for sale
- 12% single-family attached
- 10 % single family for sale



ZONING

CREATING A CENTRAL - CORE



R-9 Commercial Clusters

Pedestrian-oriented corridors of commercial uses that serve the immediate neighborhood and allow for clustering of entertainment uses. Ensures compatibility between neighboring residential and commercial uses.

I-1 Light Industrial Zoning

Light manufacturing, fabricating, processing, wholesale distributing and warehousing uses.

OS Open Space Zoning

Intended to protect and promote public and private open space, provide public reflective, cultural, educational and recreational opportunities, enhance the urban environment and protect natural resources.

EC-2 Educational Campus Zoning

A campus district for colleges and universities that allows for certain non-educational uses and dormitories for students.

C-3 Intensive Commercial Use

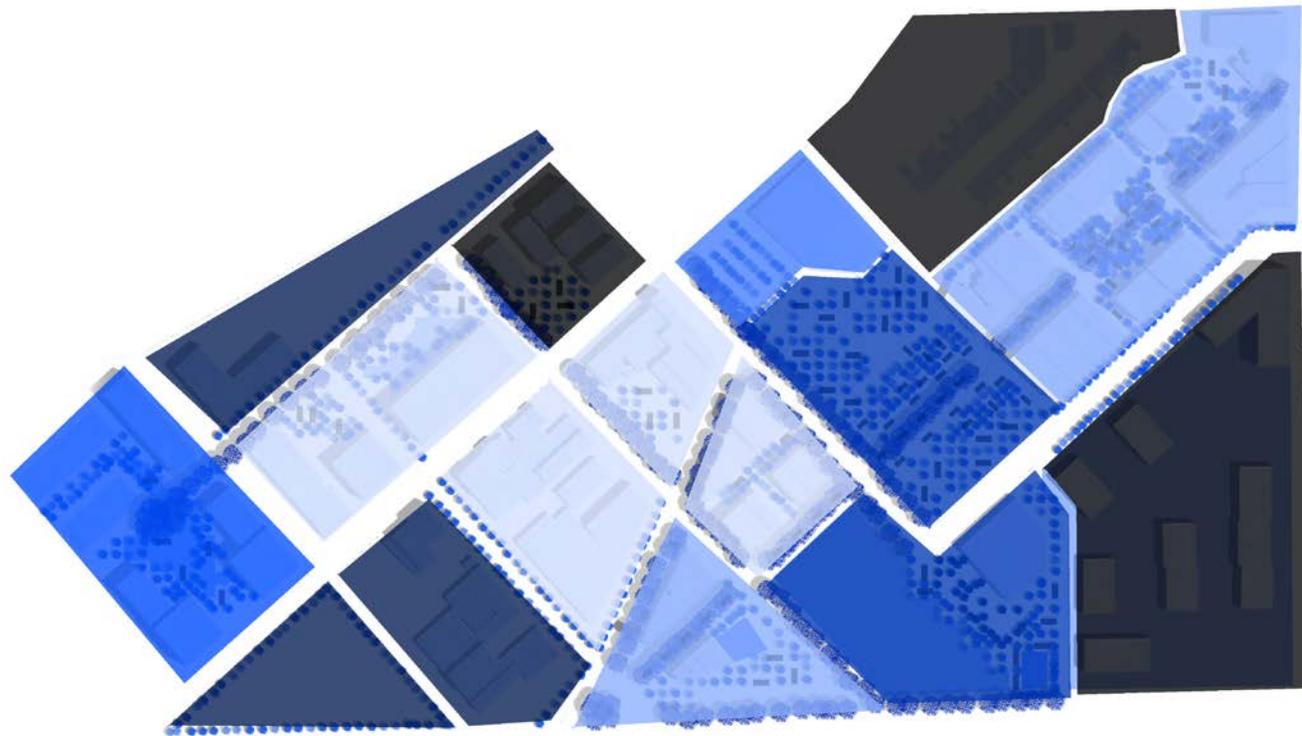
Including key commercial nodes that require additional controls regarding site development, particularly for shopping centers and larger retail establishments.

C2 Small to Medium-Scale Commercial Use

Typically located along urban corridors. Designed to accommodate pedestrians and, in some instances, the automobile. Mixed-use development is appropriate within this district.

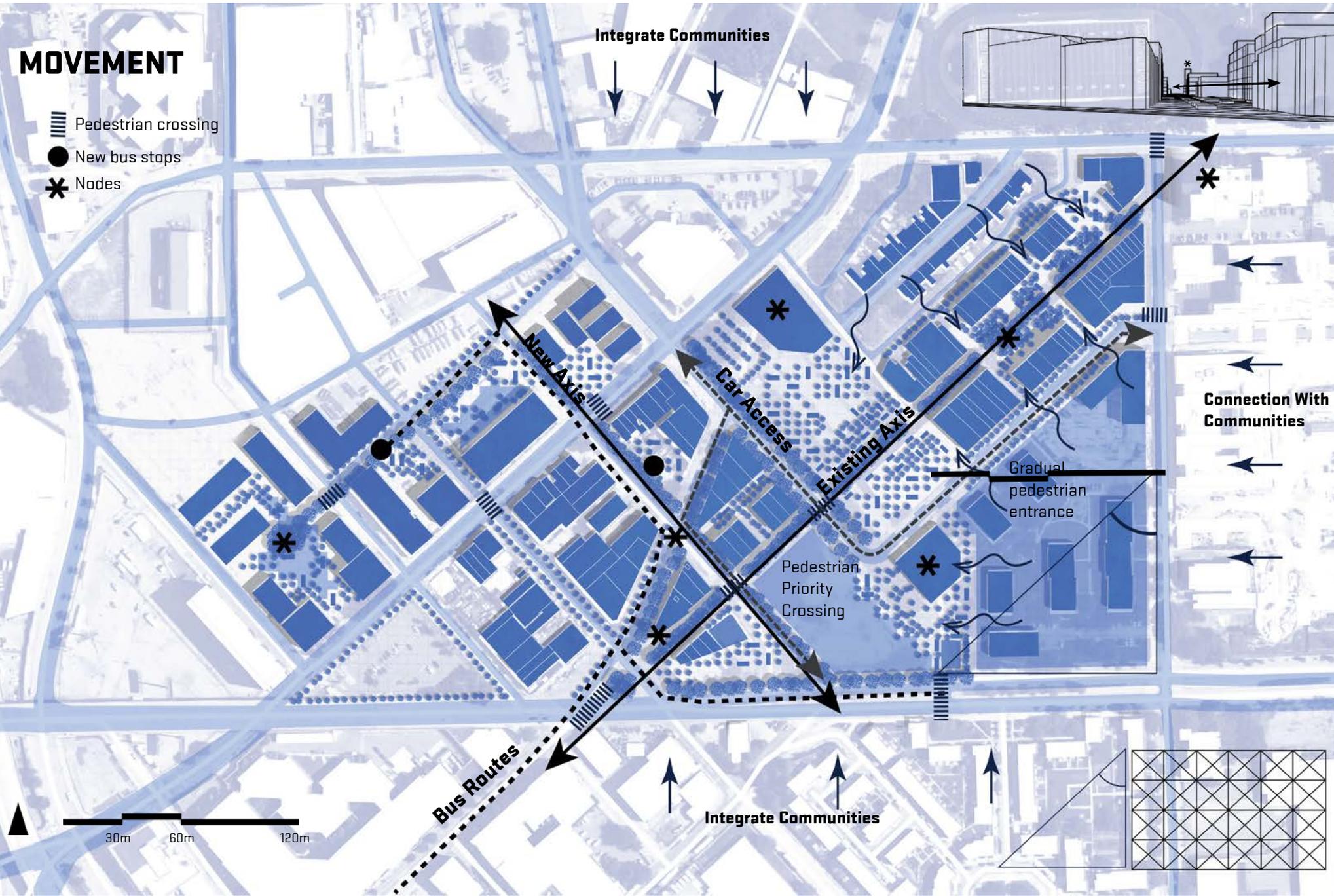
C-1-E Multi-Family Zoning District.

Higher density, mid-rise, housing types, including single-family homes, both detached and semi-detached, row-house developments, and multi-family developments. Significant open space. Limited non-residential uses.



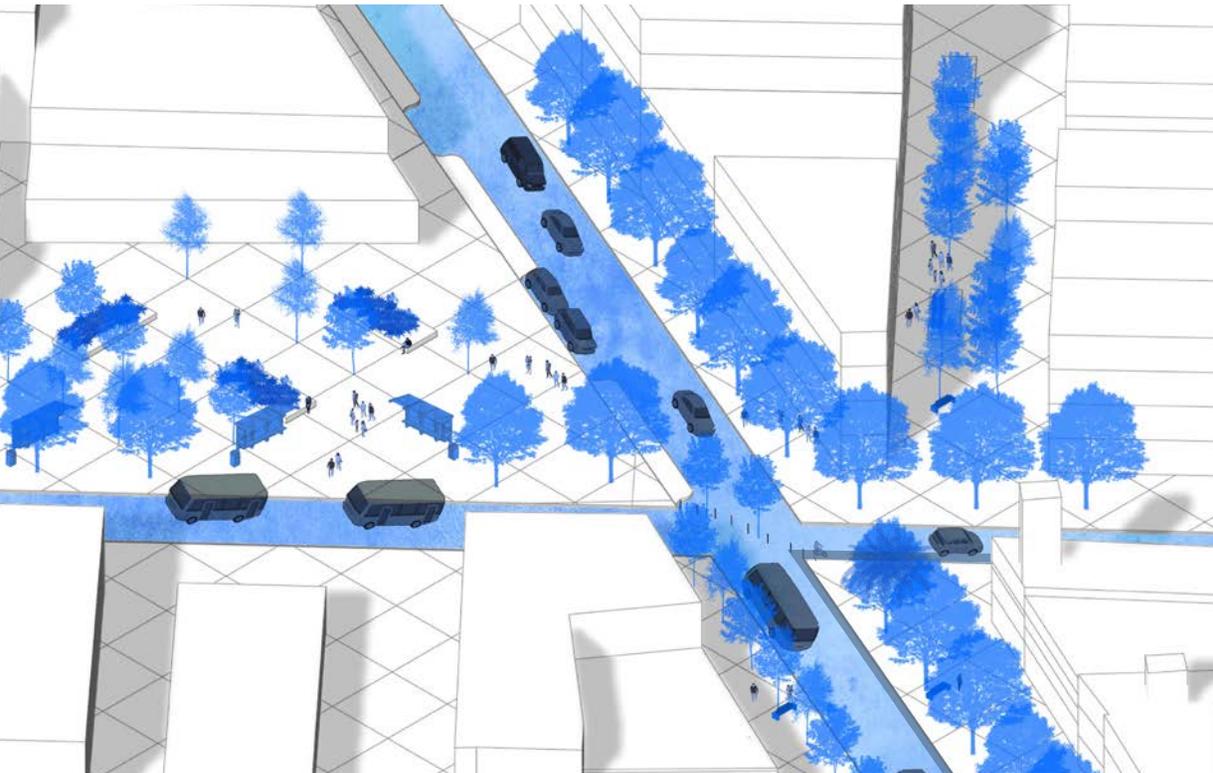
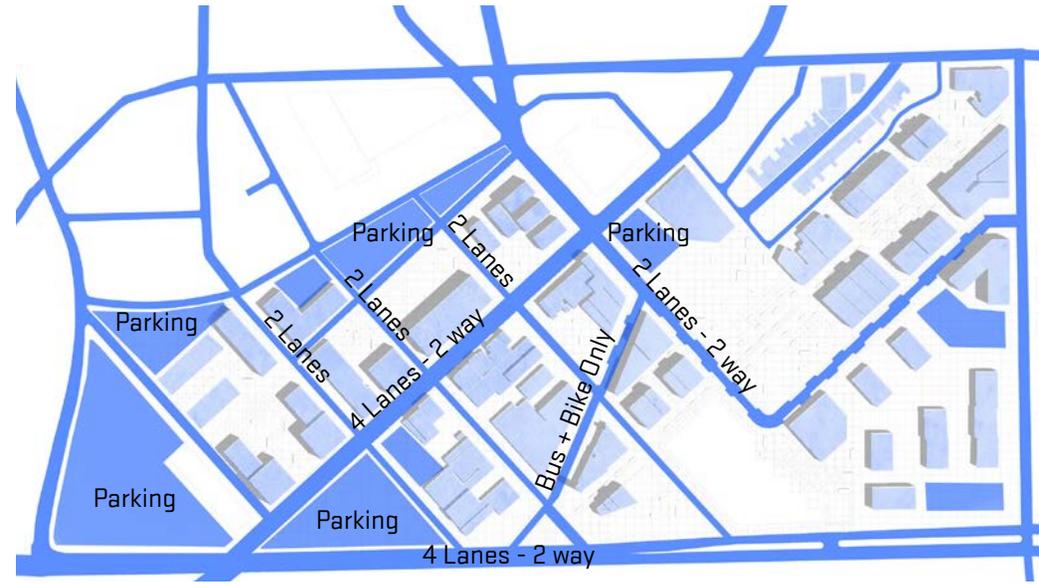
MOVEMENT

- ▬▬▬ Pedestrian crossing
- New bus stops
- * Nodes



TRANSPORT

This site has become little more than a throughway for outside communities attempting to access amenities on the other side. It has also cut off communities from one another as cars are prioritised over the pedestrian experience. Through the analysis, it was discovered that many of the roads could manage with a reduction in lanes. The primary alteration to the site is the transition of Gay St./ Ensor St. into a bus-only lane. As a result, Hillen St. handles the remaining traffic by maintaining the four lanes but switching to a two-way street. Most other roads are reduced by 1-2 lanes, as they are still more than sufficient to handle the daily usage on them. The pedestrian-only space remains, with traffic cutting through on narrow lanes raised to pedestrian level. This is done to reduce the use of roads as only a throughway.



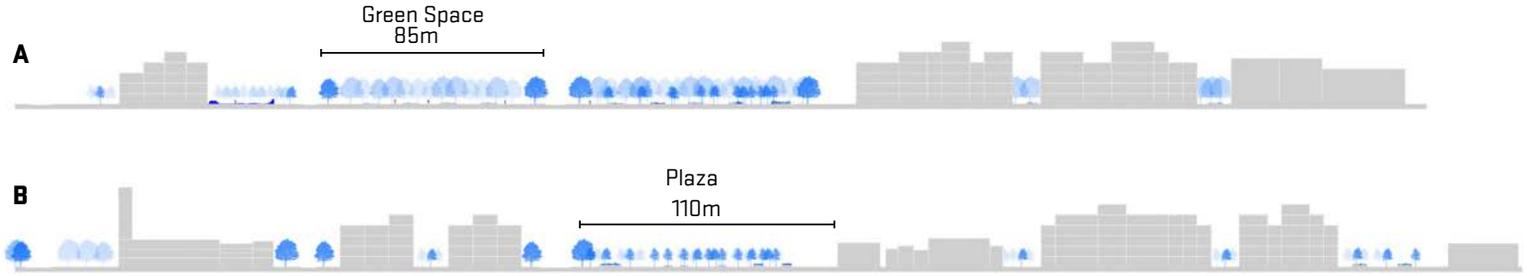
With the merging of both bus and car traffic on the site, Old Town can become a central node for the surrounding communities who need to commute to work, school, or evening activities. It becomes a safe place to wait for the bus as well as for students due to the many people living in the area and the constant foot traffic from the pedestrian mall as well as the trade school.

The bike lane connects downtown with the site by following south down Gay street connecting with the Fallsway Bike Path. Once back in the new Old Town Mall cyclists can easily navigate safely away from cars before continuing along the existing path on East Monument Street.

BUILDING USE

- 32, 099m² of Commercial added
- 17, 850m² of Educational added
- 527 Dwelling Units added

- Daycare
- Coffee shop
- Barbershop
- Grocery
- Deli
- Recovery center
- Pharmacy
- Bakery
- Pizza Shop
- Bookstore
- Ice cream shop
- Pet store
- Entertainment venue
- Pool hall
- Thrift Store
- Laundromat
- Gym
- Record store
- Gallery space



Trade School

- A sample of some programs would be: carpentry, plumbing, hairdressing, electrician, welding, business, drafting, cosmetology, haircutting, child and youthcare, mechanics

Light Industry

- This location provides opportunities for jobs, and for training when in the trade school.

Commercial

- Integrating commercial space here brings more foot traffic and activity.

Grocery Store

- Providing a place for the community to buy groceries is a much-needed addition to the area. It is accessible by transit, vehicle, and foot.

Mixed use

- Having mixed-use buildings means there is more activity and opportunity for businesses to succeed. Having residential spaces above commercial also means there are more eyes on the street, and people have more ownership over the public spaces.

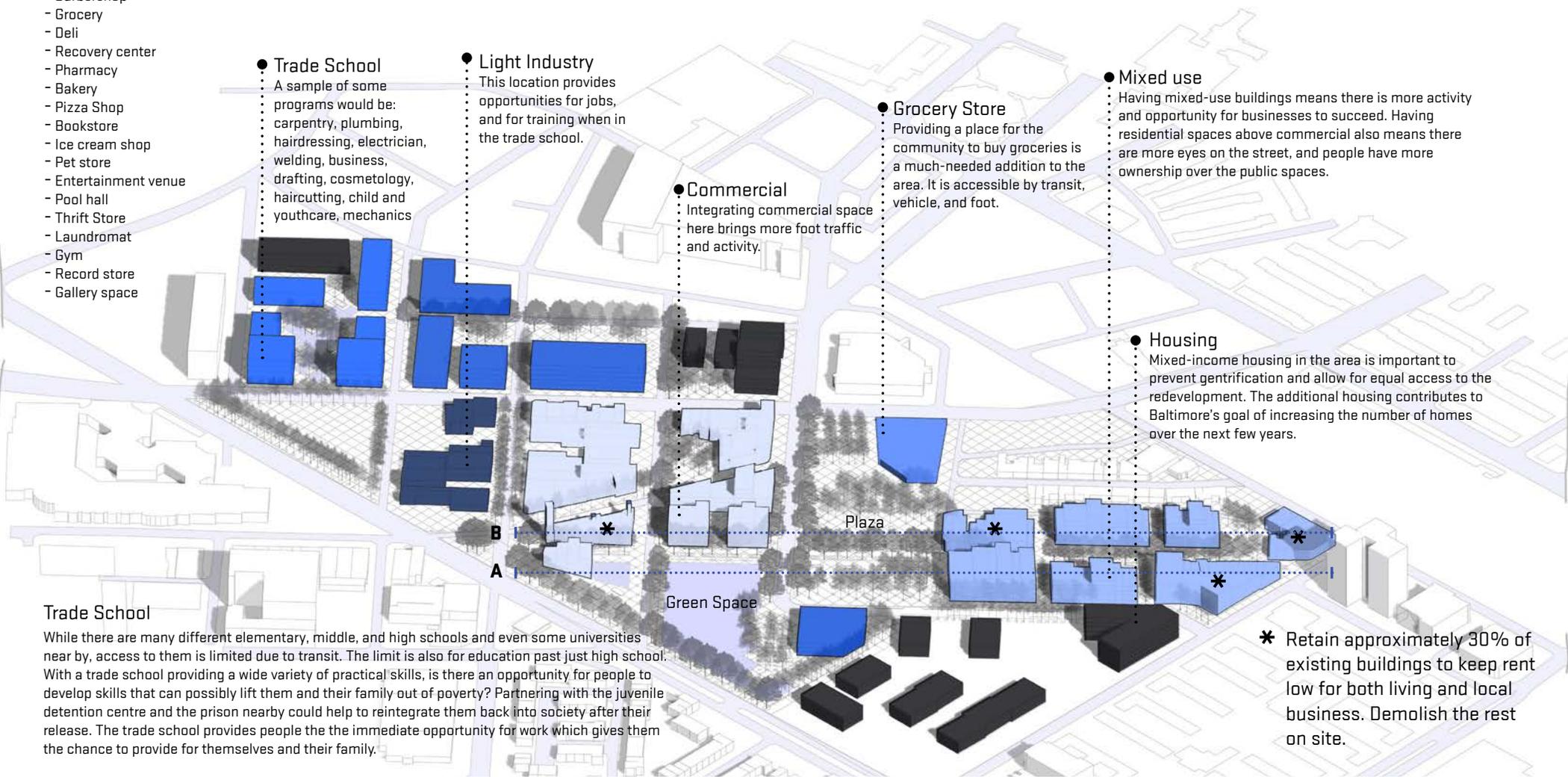
Housing

- Mixed-income housing in the area is important to prevent gentrification and allow for equal access to the redevelopment. The additional housing contributes to Baltimore's goal of increasing the number of homes over the next few years.

Trade School

While there are many different elementary, middle, and high schools and even some universities near by, access to them is limited due to transit. The limit is also for education past just high school. With a trade school providing a wide variety of practical skills, is there an opportunity for people to develop skills that can possibly lift them and their family out of poverty? Partnering with the juvenile detention centre and the prison nearby could help to reintegrate them back into society after their release. The trade school provides people the immediate opportunity for work which gives them the chance to provide for themselves and their family.

* Retain approximately 30% of existing buildings to keep rent low for both living and local business. Demolish the rest on site.



FLORA + FAUNA

All along the main axis of the site, London plane trees are planted. This is done to provide maximal shade as well as guide people from one side of the site to another. One of these paths is between the Old Town Mall and the addition of the trade school, which are a five minute walk from one another. Within the grid of trees that can be seen throughout the site, Green Ash and Manitoba Maple are used. Through variation and the intentional exclusion of planting in specific areas, the trees create a sense of mystery through constant points of proximity and refuge. From the outside, the planting began sparsely before becoming denser to gradually entice people to enter further into the site.

In the planters found on the outer edge as well as all along the main axis with the London plane trees, a monoculture of Christmas ferns is planted. This is done in order to not obstruct the view people have. They also merely lay their leaves down in the winter, which means the green colour is maintained throughout the winter.

While the bird songs, brightly coloured flowers, and shaded spaces are beneficial to the overall experience for people, the flora and fauna benefit even more from this deep within the city limits.

- Carolina Chickadee**
Parus carolinensis
 Stay year round.
 Eats primarily insects but during winter eats more fruit.
- Eastern Bluebird**
Sialia sialis
 Stay year round and begin nesting in February.
 Eats wild berries, and insects.
- Baltimore Oriole**
Icterus gabula
 Migrates to Baltimore in April before leaving in July for Florida.
 Eats insects and wild berries.

Manitoba Maple
Acer negundo
 Moist/ Wet
 Flowers Apr - May



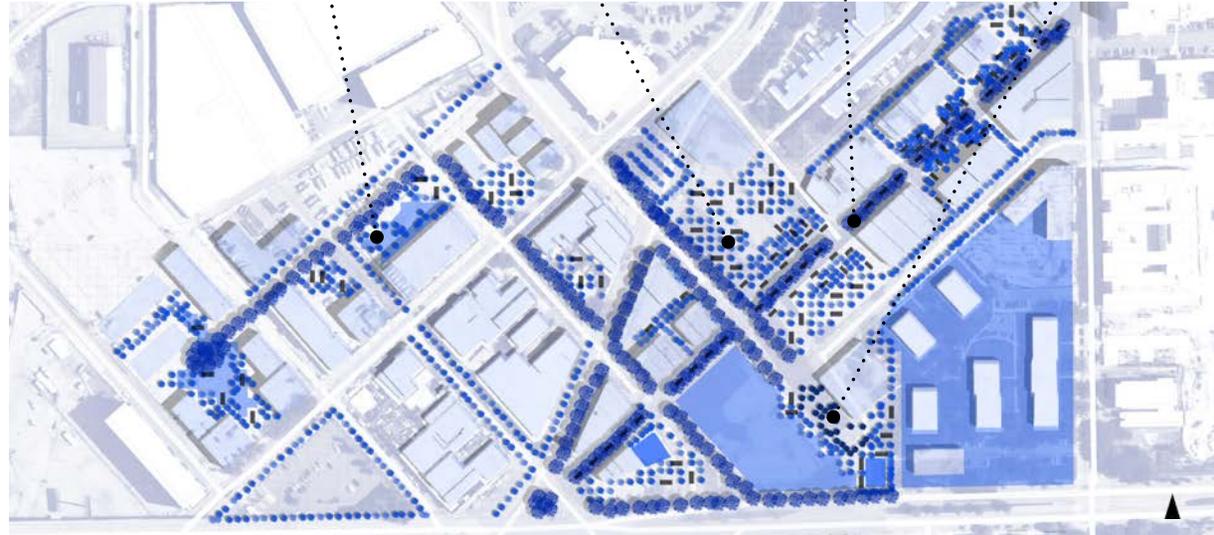
Green Ash
Fraxinus pennsylvanica
 Dry/ Moist/ Wet
 Flowers July - August



London Plane
Platanus x acerfolia
 Dry/ Moist
 Flowers Apr - Jun



River Birch
Betula nigra
 Moist/ Wet
 Flowers Apr - May

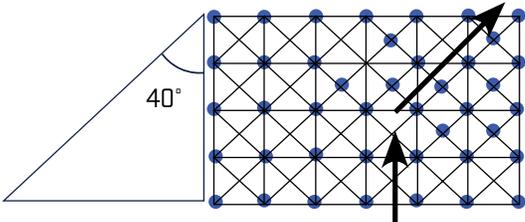
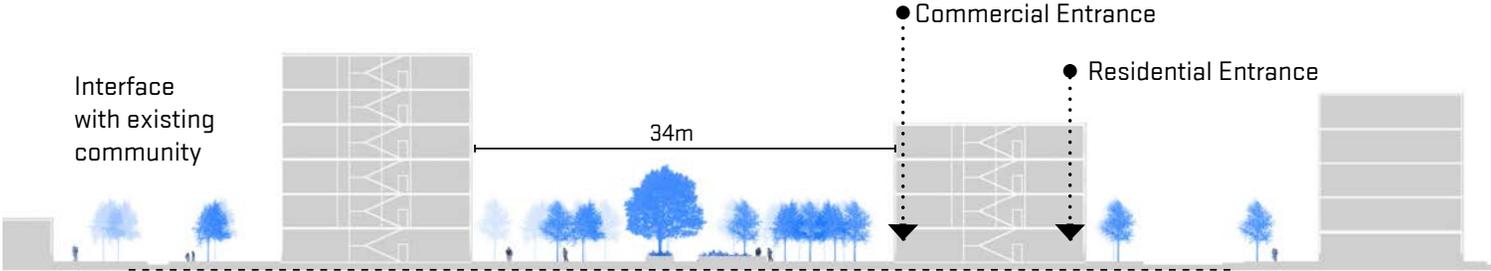


- Goldenrod**
Solidago canadensis
 Dry/ Moist
 Flowers Jul - Aug
- Butterfly weed**
Asclepias tuberosa
 Dry/ Moist
 Flowers May - Jul
- Raydon's Favorite**
Symphoricarpon oblongifolium
 Dry/ Moist
 Flowers Aug - Oct
- Christmas Fern**
Polystichum acrostichoides
 Moist
 Flowers Jun - Oct
- Veronica**
Veronicastrum virginicum
 Moist/ Wet
 Flowers May - Sep
- Bottlebrush Grass**
Elymus hystrix
 Moist
 Flowers Jun - Aug

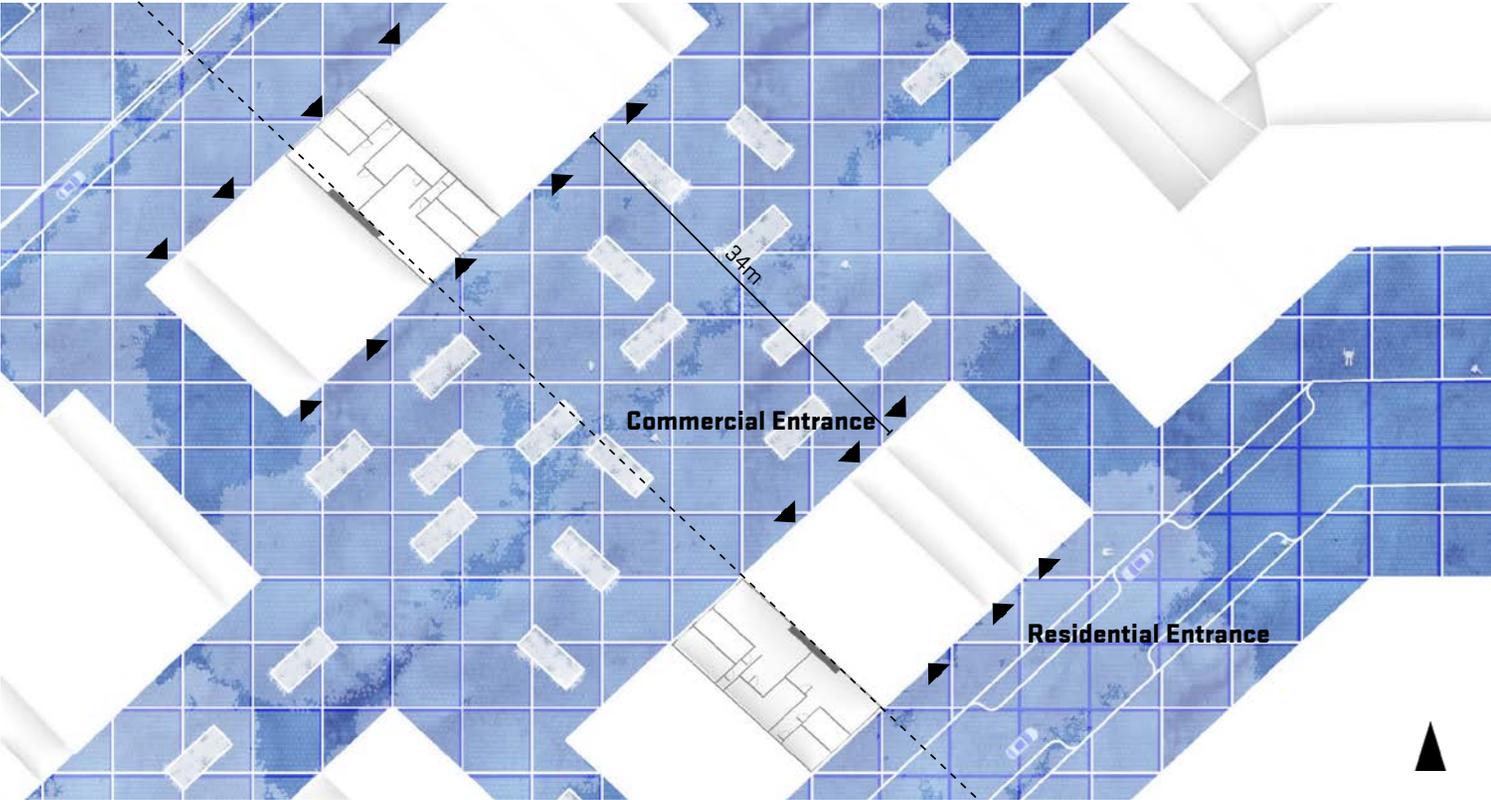
As Baltimore is located in an estuary, there are many birds to be seen even within the city, if they have suitable habitats. By creating a dense tree canopy and implementing native plant species, more birds will be attracted to the area. With a dense canopy, the effects of an urban heat island will be reduced, making the day-to-day experience much more tolerable for residents. The trees used are often used for nesting by many birds. Furthermore, the native plants used in planters attract insects that help pollinate the naturally occurring species. With insects being a primary food source for many birds, they will help to maintain the biodiversity in the community. And the trade school can provide programs for people to maintain this new vegetated layer of the site.

MATERIAL + DETAILS

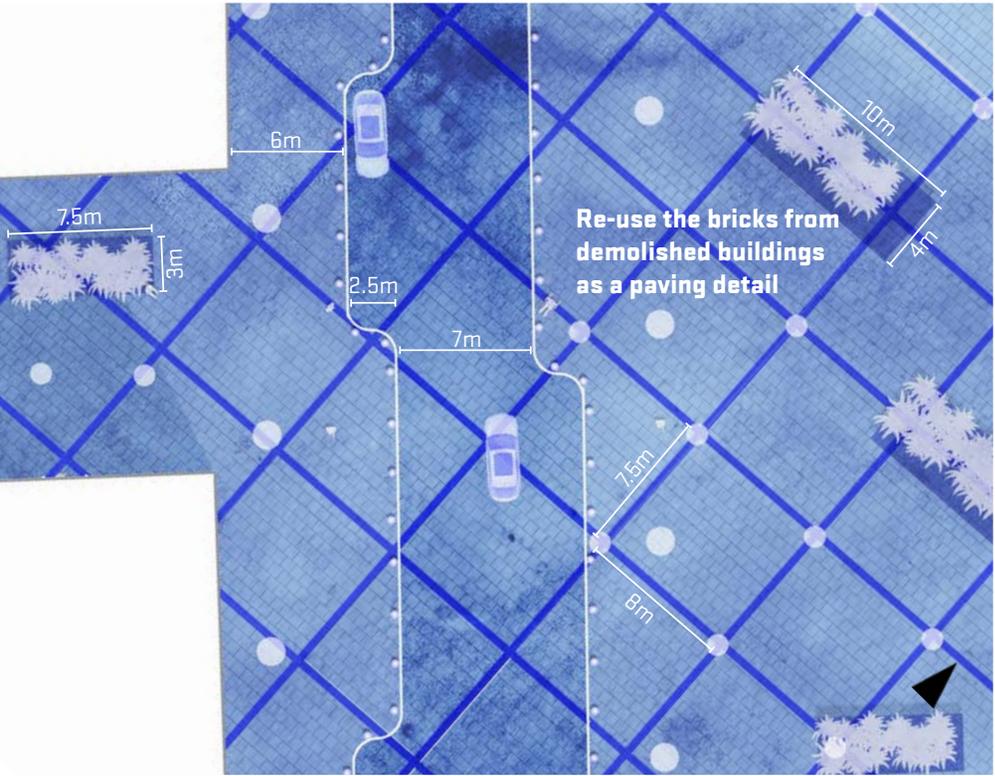
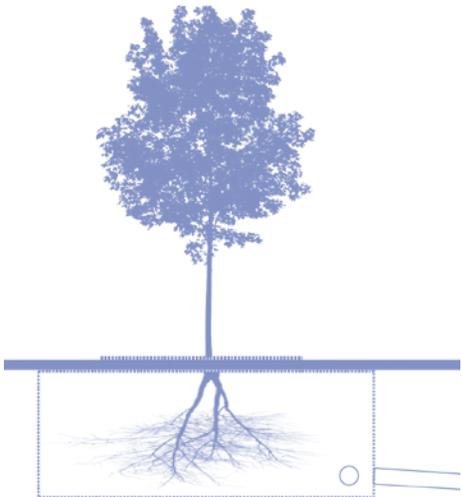
Using the existing materials found on site, along with the bricks from the demolished buildings, a grid is created for the trees. The inner part of the grid is made of stone. This contrasts other areas of Baltimore creating a unique identity and helping reduce heat gain in summer as well as increase brightness. Furthermore, it creates a new sense of identity for the community here. This same pattern spreads onto the street as well as extends outward to the trade school and other surroundings.



The grid is developed to be in alignment with the collision of the surrounding city grid and the sites grid. This is done so that as you enter into the site the gradual transition between spaces is barely noticed. The trees become more dense and the alignment switches to be coordinated with the diagonal orientation of Old Town Mall.

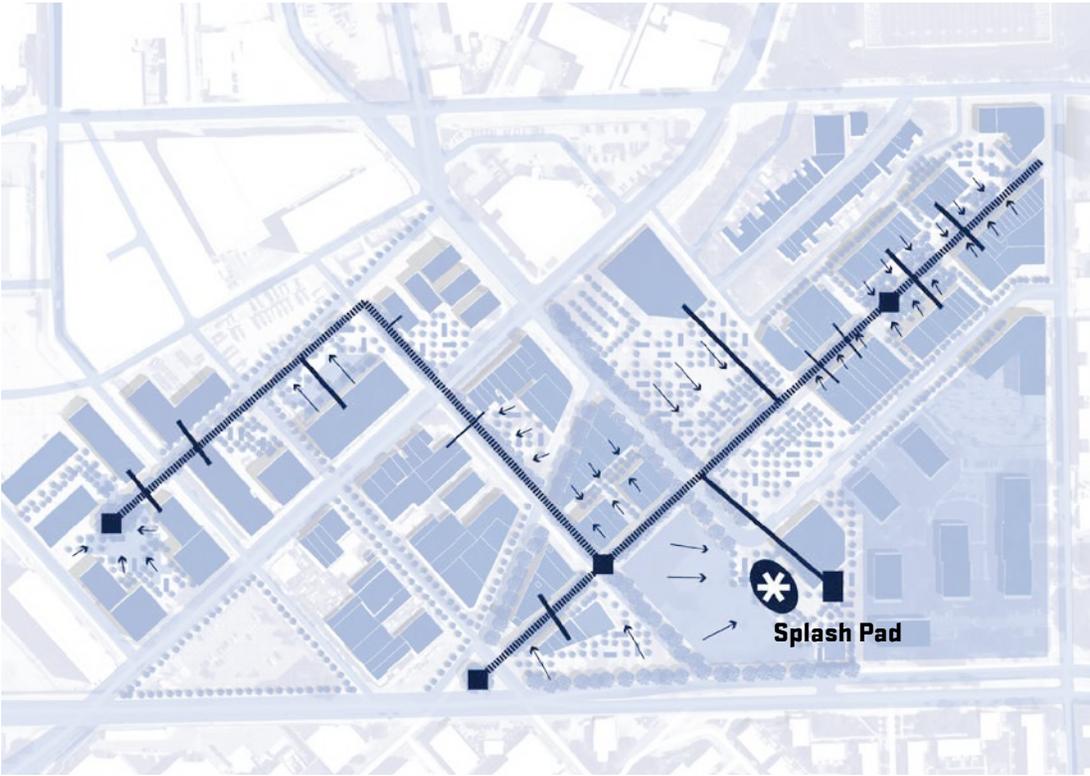


MATERIAL + DETAILS



Drainage

The drainage in the site is all dealt with locally by storing rain water in the planter throughout the site. Any water that cannot be managed is stores in underground water tanks which is then used for the splash pads on warmer days. This will turn a normally dreary rainy day into anticipation for the opportunity to play in the water!



Splash Pad

