

Querétaro

Urban Green Corridor

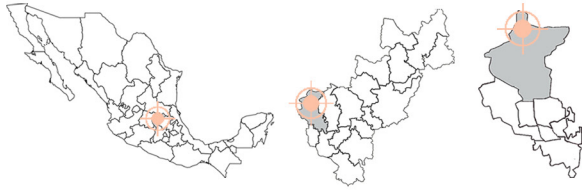
Street Design

Urban heat island effect

2023.10



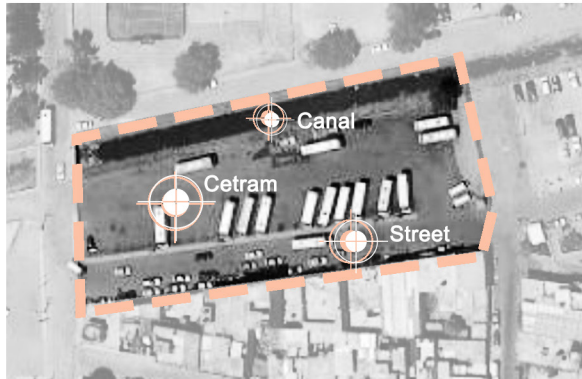
SITE ANALYSIS



Project Location



Project Overview



The transport network in the Santa Rosa Jáuregui area is connected to the center of Querétaro and includes roads and public transport systems, making it a relatively accessible area. In recent years, the Santa Rosa Jáuregui region has experienced growth in urbanization and community development. This includes the expansion of residential, commercial and infrastructure areas.

HISTORICAL CONTEXT

AD200

The area was settled around AD 200 by Mesoamerican groups moving north.

1531

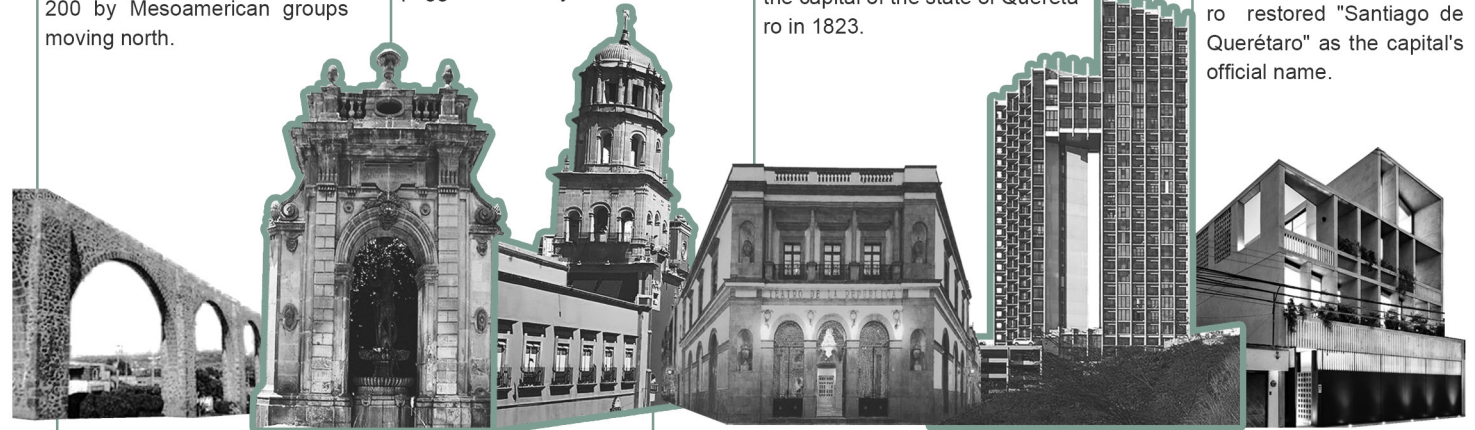
The foundation of the Spanish city of Santiago de Querétaro is pegged to 25 July 1531

1832

Santiago de Querétaro became the capital of the state of Querétaro in 1823.

1996

On 10 September 1996, the Legislature of Querétaro restored "Santiago de Querétaro" as the capital's official name.



1440

This area was under control of the Otomi dominion of Xilotepeque in the 1440s, which in turn was subject to the Aztec Empire of Mexihco-Tenochtitlan.

1606

The settlement was declared a town in 1606 and by 1655, only Spaniards were living in the city proper.

1916

On 2 February 1916, the city was named the provisional capital of the country by President Venustiano Carranza

CROWD ANALYSIS



Customer

I wish the parking locations were more organized.

Resident

More greenery and accessibility on the streets.

Trader

I could have more space to put down my stock of goods.

Bus Driver

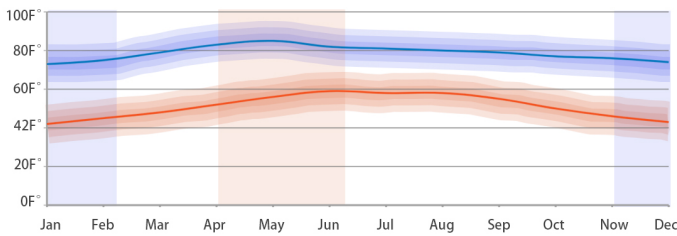
I wish the parking locations were more organized.

Taxi Driver

A centralized place to receive passengers.

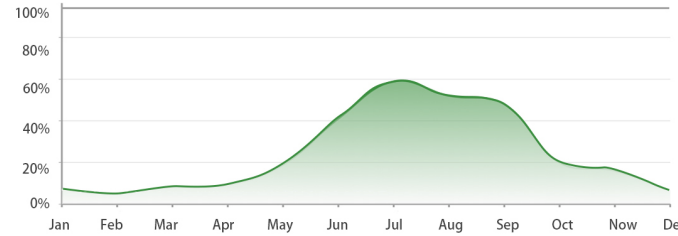
QUERETARO CLIMATE AND FLORA

Average High and Low Temperature



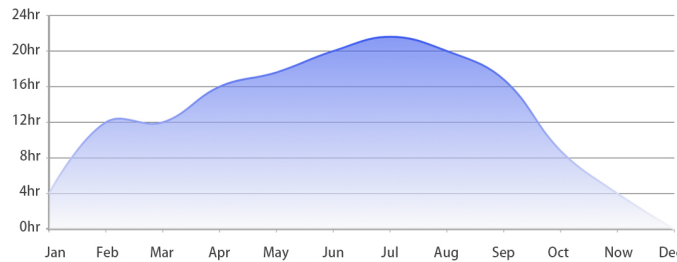
Changes in Querétaro temperatures affect native plants in many ways, both positively and negatively. The adaptive capacity of plants and the health of ecosystems will determine their ability to respond and adapt to Querétaro temperatures.

Humidity level



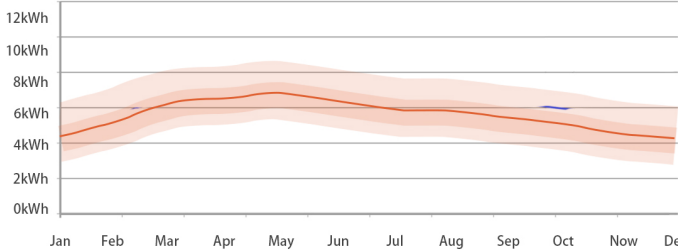
The humidity of Querétaro's climate has a significant impact on the growth and development of local plants. Suitable humidity conditions help plants to reproduce and grow healthily, while too high or too low humidity may adversely affect plants.

Sunshine duration



Summer will have more hours of sunshine, while winter will have fewer hours of sunshine. The adaptive capacity of the plants and the health of the ecosystem will determine their ability to respond and adapt to Querétaro daylight hours.

Average Daily Incident Shortwave Solar



The right amount of solar energy promotes photosynthesis and plant growth, but too much solar energy may adversely affect plants. Appropriate light and shade practices are essential to maintain plant health and growth.

QUERETARO LOCALITIES PLANTS



FEROCACTUS GLAUSCENS



LEPIDIUM VIRGINICUM



LEPIDIUM VIRGINICUM



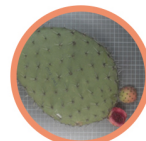
PENSTEMON ROSEUS



CARICA PAPAYA



CARICA PAPAYA



OPUNTIA MATUDAE



APOCYNACEAE



LAGENARIA SICERARIA



CAPSICUM ANNUM

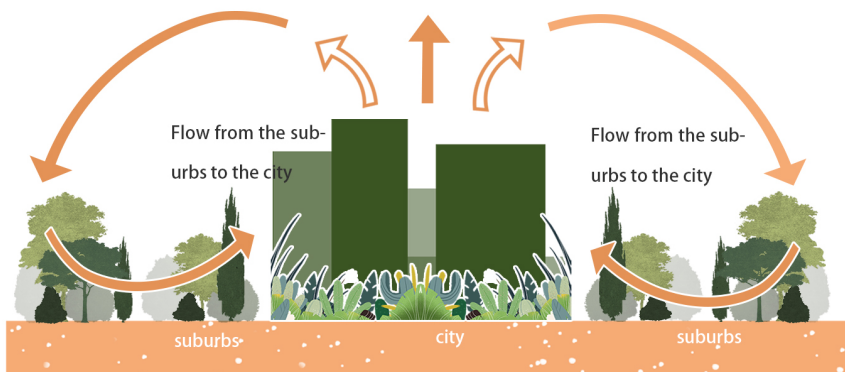


AGAVE ANGUSTIFOLIA



LITCHI CHINENSIS

URBAN HEAT ISLAND EFFECT



Cause of the heat island effect



Ventilation at the bus station

Urban areas often lack large areas of vegetation, such as trees and grass, which provide shade and evapotranspiration, helping to cool temperatures. In urban areas, vegetation is replaced by buildings and hard surfaces, leading to increased temperatures

Urban drainage systems usually result in large amounts of rainwater being rapidly discharged into sewers without being absorbed by the soil, reducing the effect of evaporative cooling. This can also lead to urban areas being more susceptible to the heat island effect in rainy weather conditions.

DESIGN STRATGYE

01

Heat-island effect

Rainwater collection and self circulation system

By paving permeable surfaces and planting hydrophilic plants, the surface water permeability and runoff are increased, and rainwater collection devices are added. After passing through filters, the rainwater is collected into a collection tank, and the heat island effect is alleviated through a streetlight spraying system.

02

Single landscape

Ecological corridor, increasing biodiversity

Reforming the river irrigation system, adding a comprehensive rainwater collection system and ecological trails, visitors can immerse themselves in forest oxygen bars, have close contact with nature, and enrich the forest to conserve water sources and regulate the climate.

03

Loss of function

Improve urban supporting facilities

On the first floor, a bus parking lot, maintenance room, driver's lounge, and public restroom will be arranged. On the second floor, a garden market, fitness and leisure, children's playground, and communication space will be arranged to improve urban infrastructure construction and contribute to the construction of a beautiful design city.

04

Traffic disorder

Pedestrian system separated from vehicle system

Realize the separation of pedestrians and vehicles, avoid conflicts between pedestrian flow lines and passenger flow lines, improve the safety of passenger stations, and improve urban infrastructure design and construction.

05

Lack of public space

Restructuring of public spaces

By erecting a roof, the flow of people is led to the second floor, increasing public space for people, providing a good environment and trading space for Sunday markets, increasing people's connection with society, avoiding economic and psychological problems caused by urban-rural development differences, and promoting social harmony and stability.

06

Lack of connection

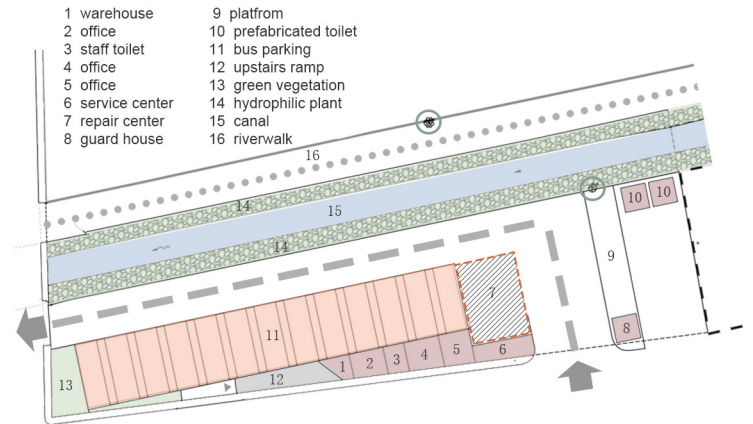
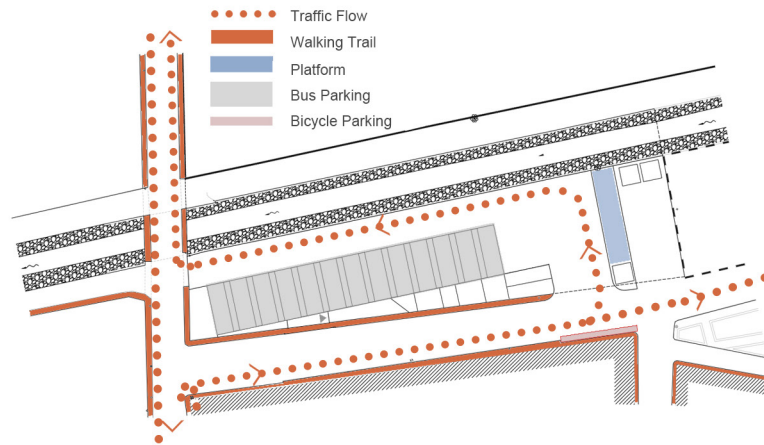
Increase spatial interactivity

From densely wooded ecological waterways to prosperous and bustling market markets, to thriving street shops north, and finally to cultural landmarks and church buildings, the design capital of Cretaro has diverse urban forms. By improving the spatial structure of bus stations, close connections between the north and south are achieved.

ROAD SPACE

SPACE ①

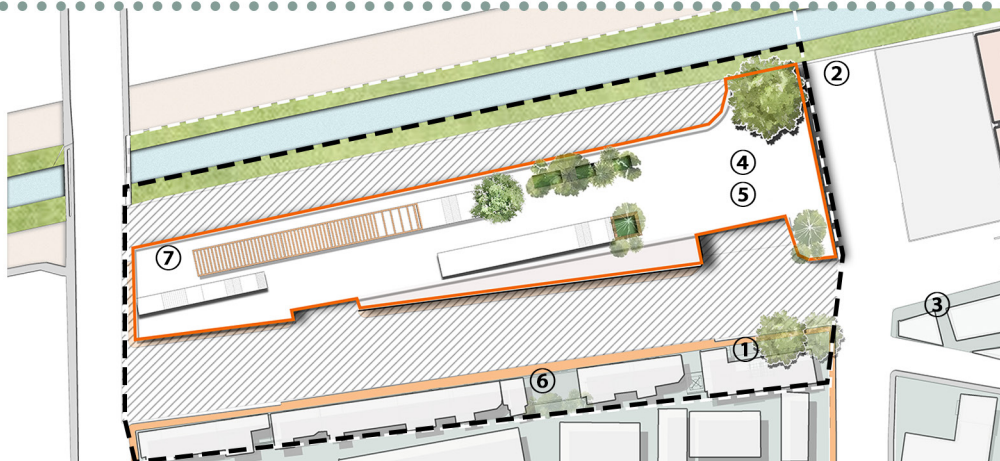
- Flower basket module
- Stormwater pipe
- Bicycle parking



GENERAL LAYOUT

SPACE ②

- Prefabricated toilet
- Near the canal launching



SPACE ⑦

- Building block module
- Viewing screen

SPACE ③

- Bazaar
- Bin placement
- Bicycle parking

SPACE ④

- Queue waiting area
- Smart flip guide
- Swipe card gate

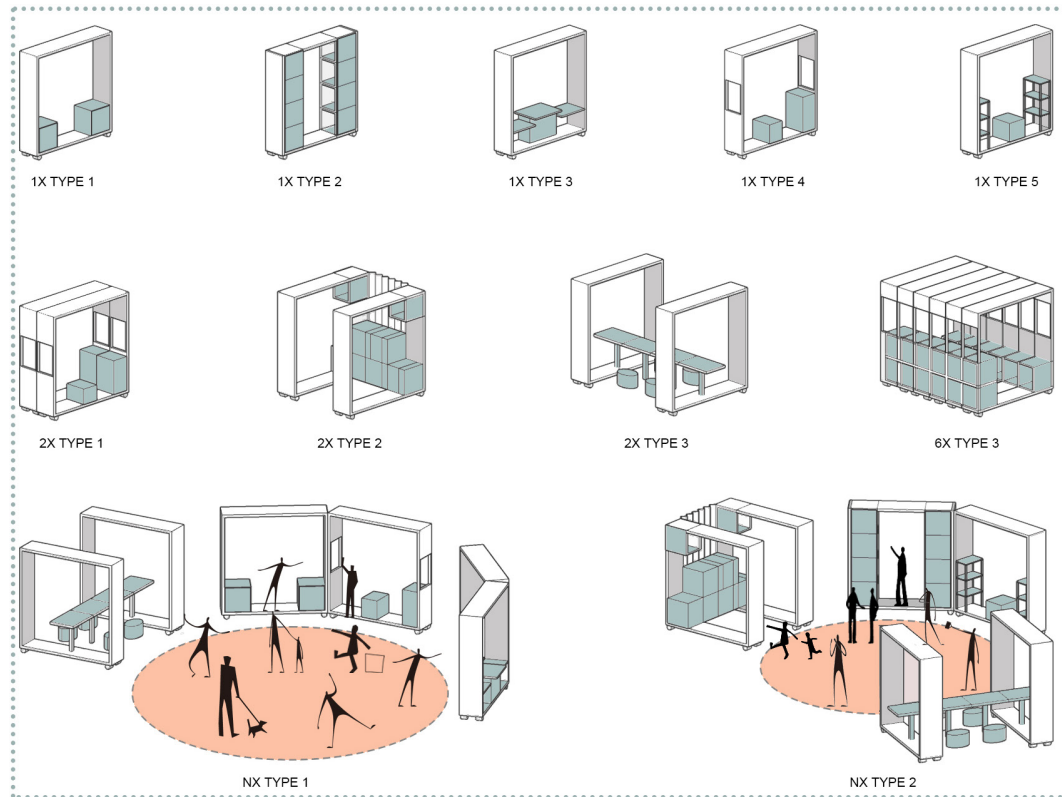
SPACE ⑤

- Seat module
- Green planting
- Free combination

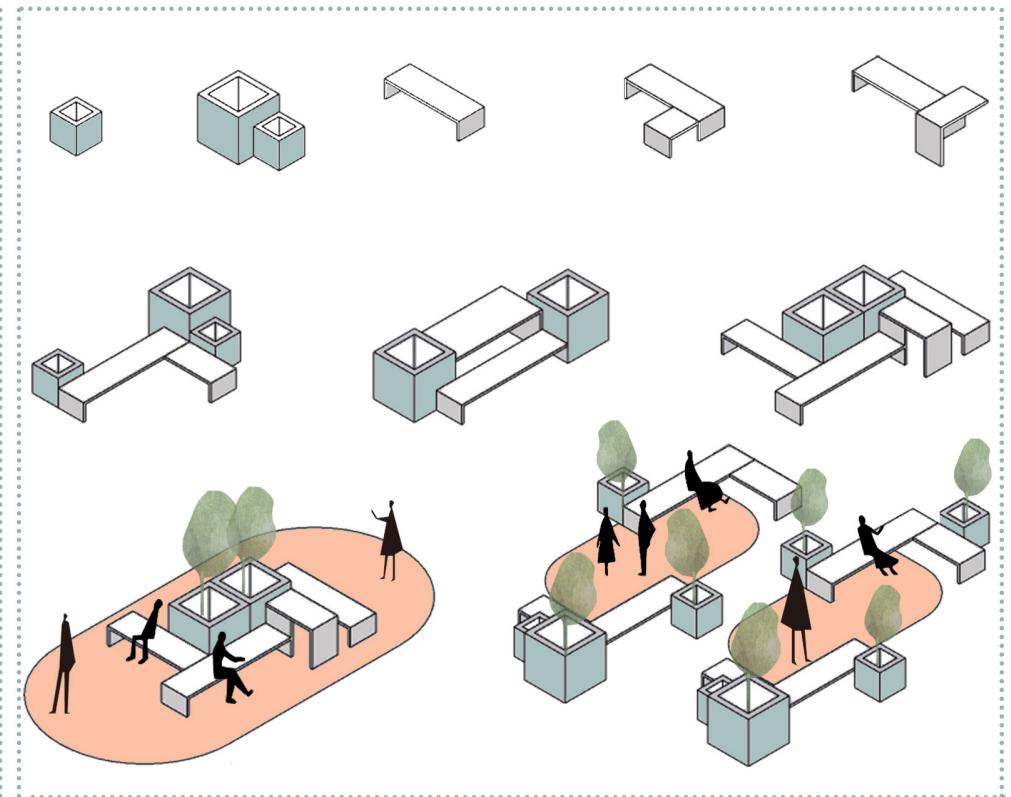
SPACE ⑥

- Business module
- Autonomous communication

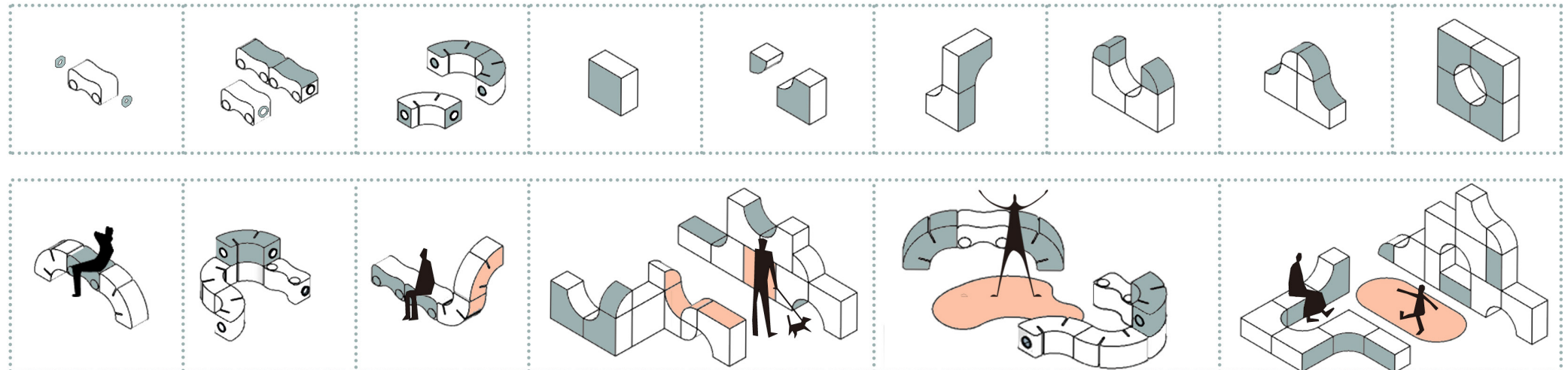
SMALL UNIT DESIGN I — Bazaar

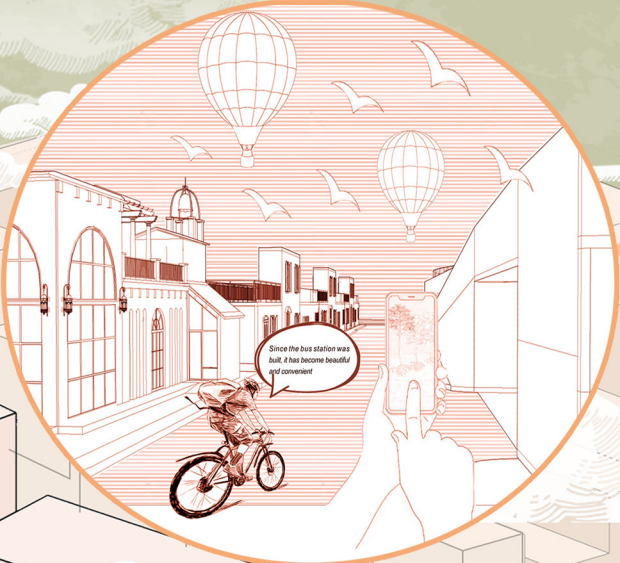
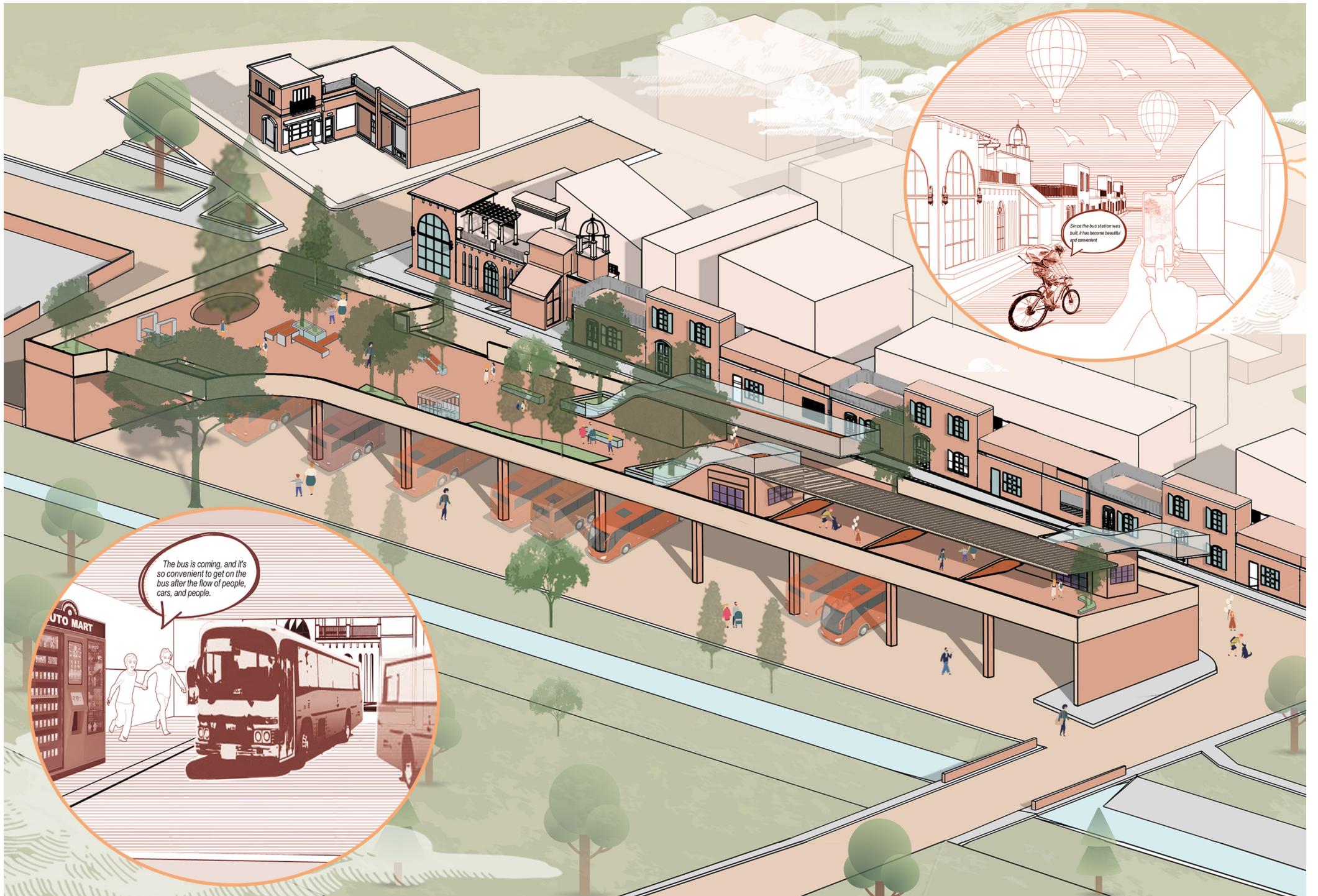


SMALL UNIT DESIGN II — Urban Furniture



SMALL UNIT DESIGN III — Urban Furniture





VISIONS FOR THE STREET

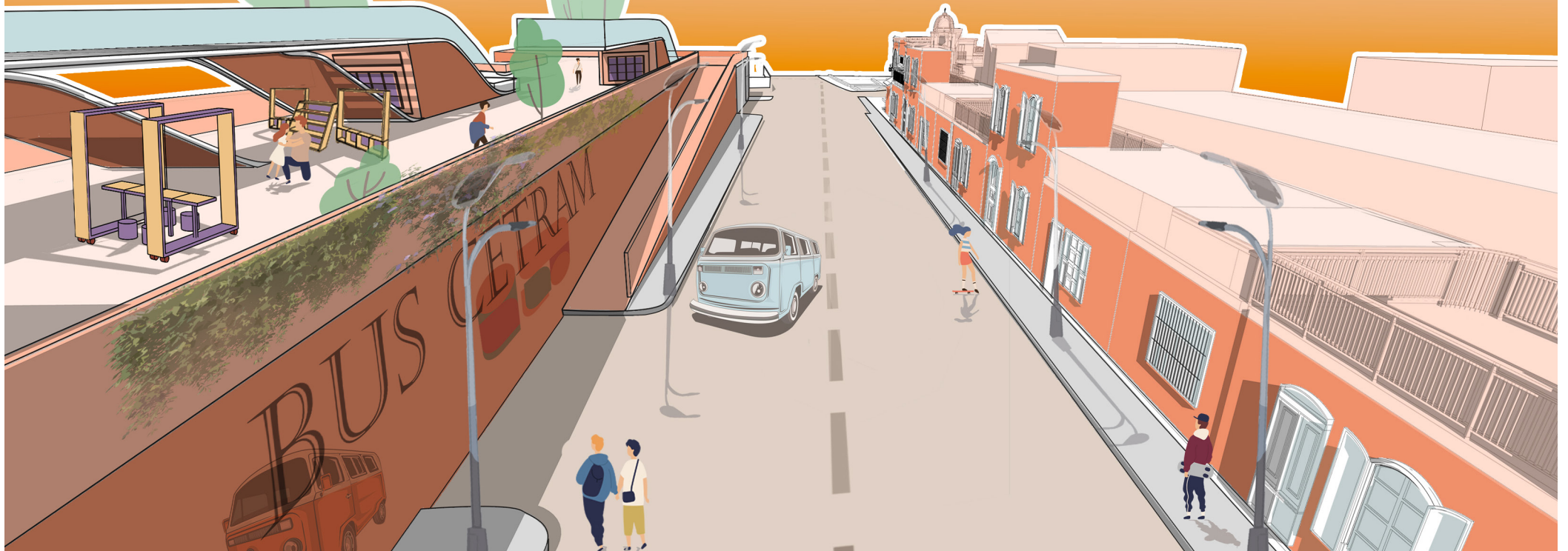
The new space is reserved for scattered merchants to sell their goods in a more suitable location, keeping the original mobility of the street unchanged and at the same time more orderly, and revitalizing the neighborhood business.

It's nice to be able to rest and relax with a view while strolling through the fairgrounds!

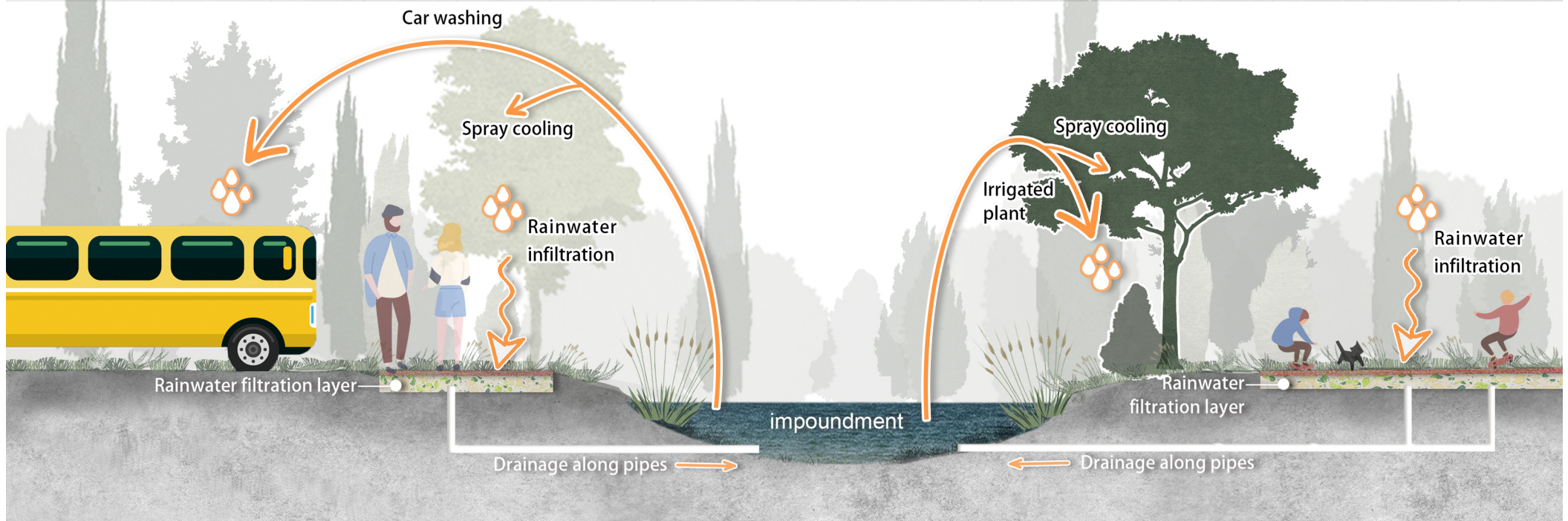
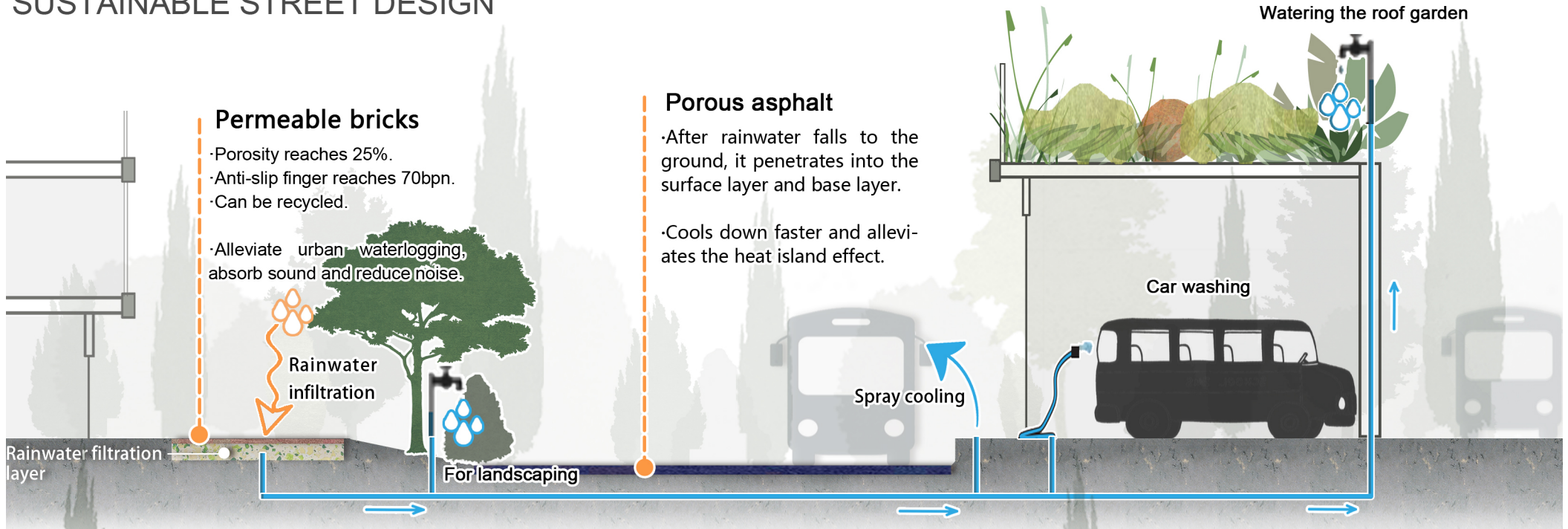


The new space enriches the difference in heights on the street, and on the basis of the optimization of the ditch on the north side of the block, the second floor integrates a space for residents to view and relax.

I have a more stable space to sell my goods to customers!



SUSTAINABLE STREET DESIGN



Bazaar

Bazaar

Bazaar

BAZAAR

OPEN TIME: SUNDAY
LOCATION: BUS STATION 2F



PIRUL



BUS
CET
RAM

BUS TIMETABLE
6:00AM-8:00P

