

# PURA VERDE

2023

DAVID RODRIGUEZ-BURGESS

PURA VERDE

PURA VIDA MAE!



## **DEDICATED TO MY PARENTS**

### **MOM,**

I want to thank you for pushing me to always succeed and lift me up when I get tired. You have always driven me to push through the hard moments and as my academic career comes to an end, I will be rooting for yours at your finish line this time next year! You are strong, inspirational and your determination to pursue new goals keeps my head high. I am so proud of you for always turning lemons into lemonade no matter what situation you are in. I can never repay you for sacrificing literally everything at such an early age to get me into the best situation possible, but I can certainly always try in everything I do.

We have come a long way. I love you to the moon and back ❤️

### **DAD,**

Thank you for coming into our lives and giving my mom and I the love we deserve and taking on the role as a true father I needed. You were one of the good strangers that later changed my mom and I's life forever and for the better. Growing up, you helped me overcome tough situations and eased my mind with your advice and lectures. You continue to give me the tools to be the best man possible for myself and the people I interact with. You always remind me to make decisions that will make me happy not only in my career choices but life in general. I live by your words everyday and the future to come. Thank you for guiding me to do what I love.

**ACKNOWLEDGMENTS:**

**COMMITTEE + CHAIR,**

I would like to thank my committee and chair for your time and resources into giving me the best direction possible for my project. I truly enjoyed meeting every one of you; Alejandro Borges, Dr. Baltazar, Dan Leverett, and Marcel Erminy, for filling my mind with new ideas and ways of thinking about my project conceptually and graphically. I believe I learned a lot within this year alone that has provided me with the best path forward to a successful career in Architecture.

I will never stop learning.

**CHAIR:**  
ALEJANDRO BORGES  
*ASSISTANT PROFESSOR*

**MEMBER:**  
JUAN CARLOS BALTAZAR  
*P.H.D.  
ASSOCIATE PROFESSOR*

**MEMBER:**  
DAN LEVERETT  
*PROFESSOR OF THE PRACTICE*

**STUDIO PROFESSOR:**  
MARCEL ERMINY  
*ASSOCIATE PROFESSOR OF PRACTICE*



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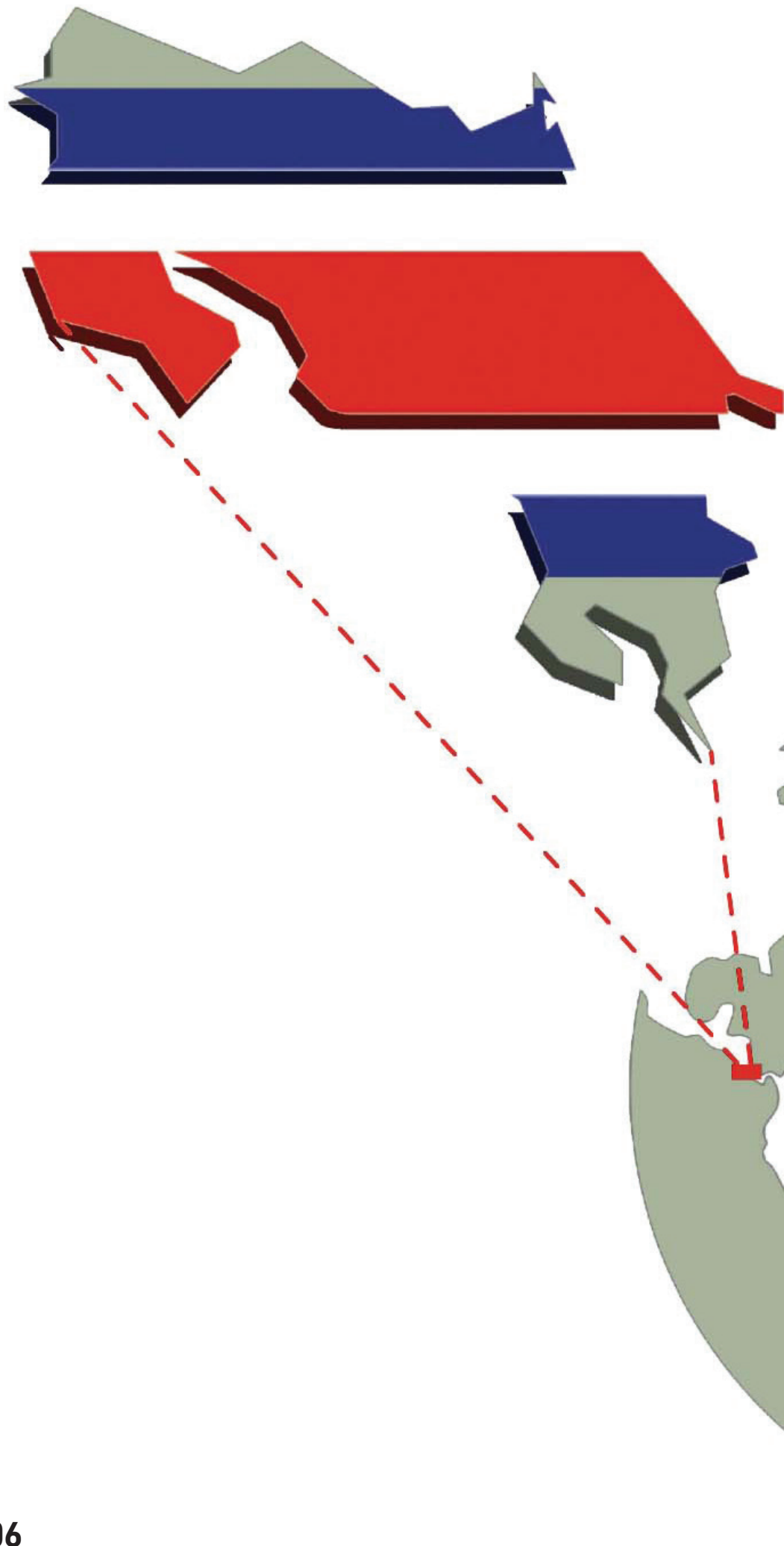
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**01**

**RESEARCH**



HOW CAN DESIGN BLEND THE CITIZENS OF COSTA RICA AND TOURISTS TO ONE CENTRAL LOCATION WHILE INTEGRATING ECONOMIC AND SOCIAL GROWTH FOR SAN JOSE?

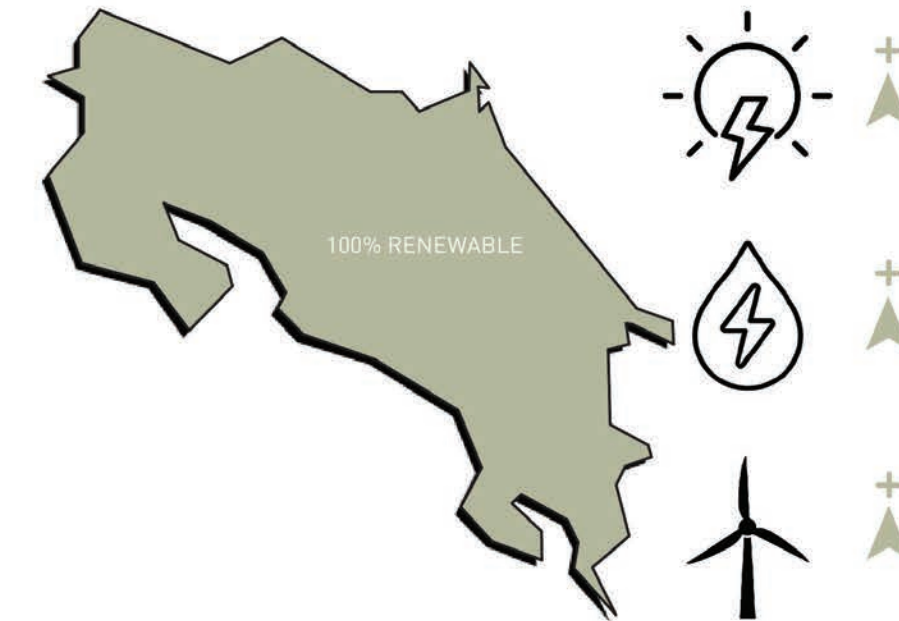
PURA VERDE IS A REGENERATED TRANSPORTATION HUB + MARKET THAT CREATES A COMMUNITY OF LOCALS AND TOURISTS IN ONE CENTRAL LOCATION. THIS MIX-USE DEVELOPMENT ENCOMPASSES COSTA RICA'S VIBRANT CULTURE OF PEOPLE AND FOOD WHILE ACHIEVING AN INFRASTRUCTURE NEED, A CENTRAL BUS TERMINAL.

PURA VERDE WILL NOT ONLY FULFILL CITY NEEDS FOR MORE CITY TRANSPORT BUT IT WILL PROVIDE MUCH NEEDED IDENTITY BY INCORPORATING COSTA RICA'S ROOTS INTO THE PROJECT. WHILE SERVING AS THE IDENTITY, THE PROJECT IS A FUNCTIONAL, HIGH TRAFFIC SUPER BLOCK TO BENEFIT THE COUNTRY'S LOCAL FOOD VENDORS. THE PROJECT GIVES BACK TO THE FARMERS THAT BUILT COSTA RICA'S ECONOMY WITH ITS OWN SUSTAINABLE MICRO ECONOMY WITHIN THE MIX-USE BUS TERMINAL.

2014

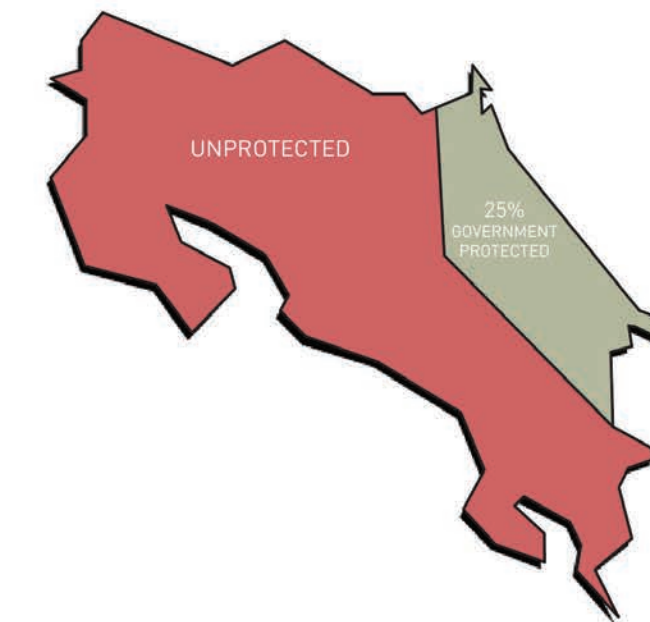
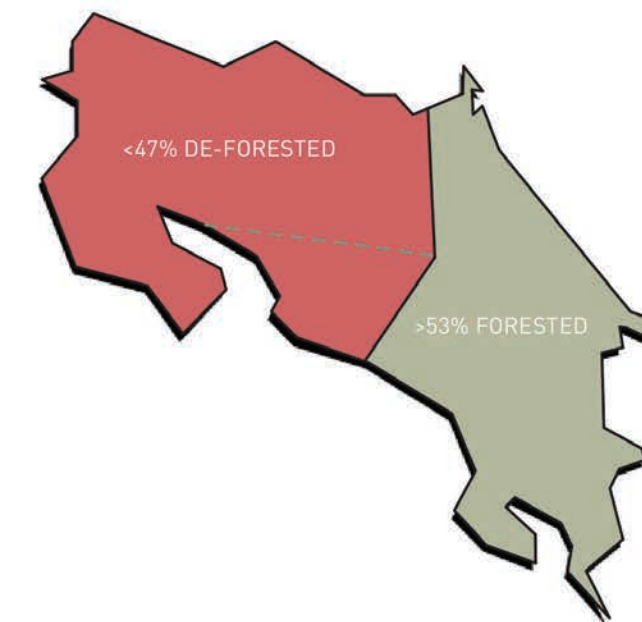


2020



**GOAL: NET ZERO CARBON EMISSIONS 2050**

The National Decarbonization Plan launched in February 2019, aimed at reforming transportation, energy/waste consumption, and land use to achieve net zero emissions by 2050.

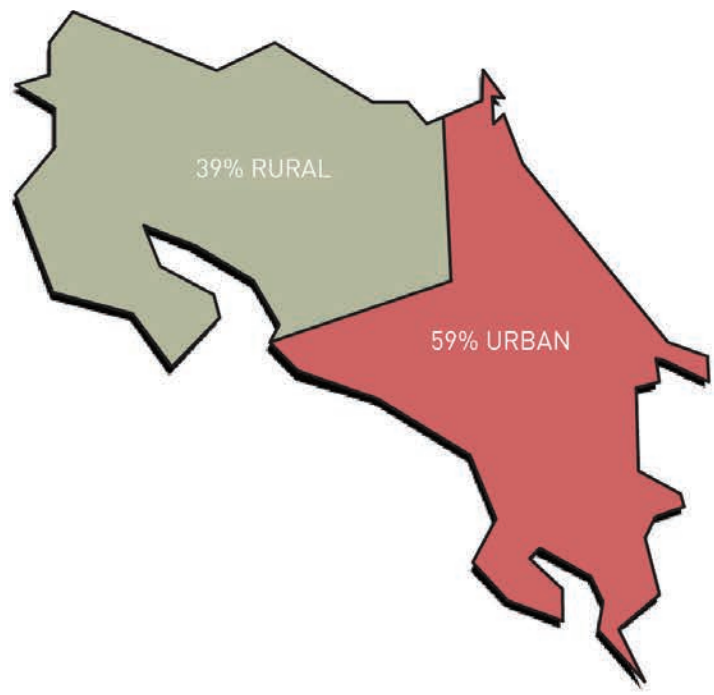


**CHALLENGE: TRANSPORTATION MAKES UP 40-50% OF GREENHOUSE EMISSIONS**

**PROGRESS:** Costa Rica's Government reported that 25 different government institutions had acquired 322 electric vehicles. They also implemented 43 of the target 69 fast-power centers needed to charge the electric vehicles, reaching a 62.3% success rate on this goal to be completed by 2022.

"I imagine a city where mobility is based on clean energy; a city that bets on technology but prioritizes people's well-being, freedom and right to privacy; a city where you breathe clean air; a city that manages waste sustainably and a city where you are in contact with nature to find peace of mind."

- President Alvarado



5 MILLION



1.5 MILLION  
SAN JOSE



TOTAL POPULATION

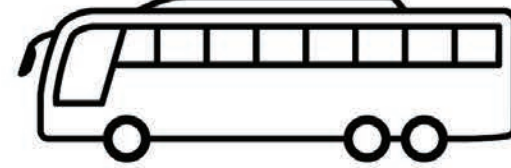
48%



Percentage of riders in San Jose riding public transit for more than 2 hours per day



47 MIN



Average commute by public transit per day

BUS TRANSPORT

1.7 MILLION



80% eco-tourists



\$1.7B/YEAR



20 National Parks  
26 Protected Zones  
9 Forest Reserves  
8 Biological Reserves

TOURISM



Active Volcanos



Best beaches



6% of world's Bio-diversity

AGRICULTURE

14%

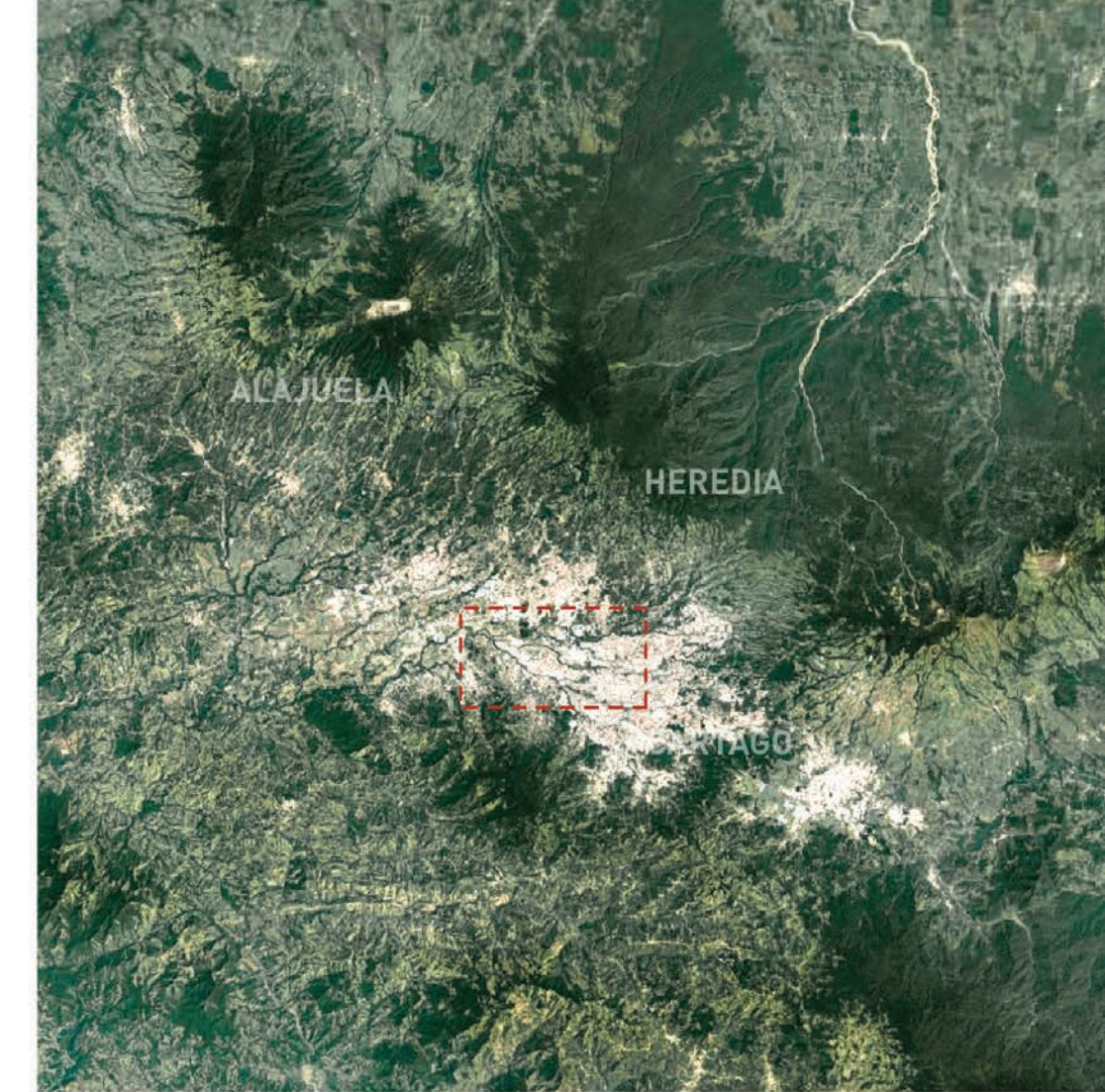


Population of farmers

34% Agricultural



Percentage of the overall economy



EXISTING SITE PLAN

The buildings surrounding the Pura Verde (TRACOPA) site is made up of restaurants, service stations, educational, and government facilities with 2 historic parks at each end of the superblock area serving as endpoints of the focus area. In addition, a fully functional historic train station is located at the far left of the focus area where its train tracks split down the middle of the superblock area along the alley road where the linear market takes place on the weekends (Saturday Market). The tracks run throughout the city stopping only within the city limits on San Jose.



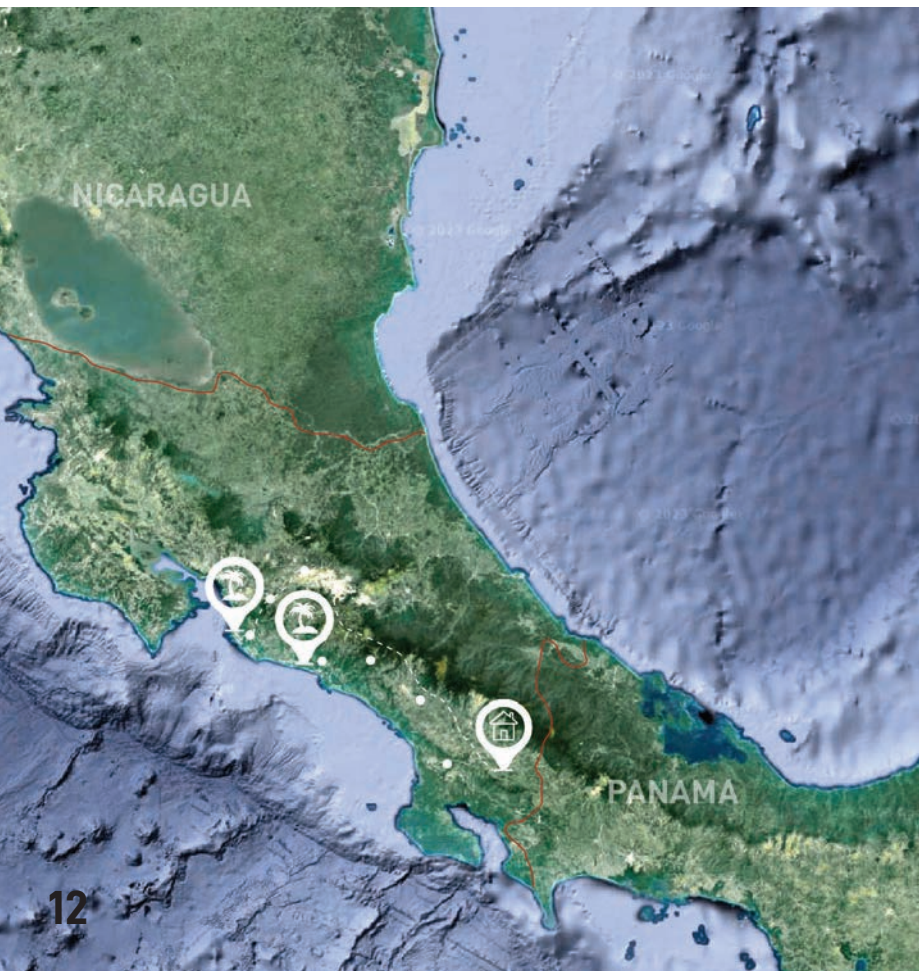
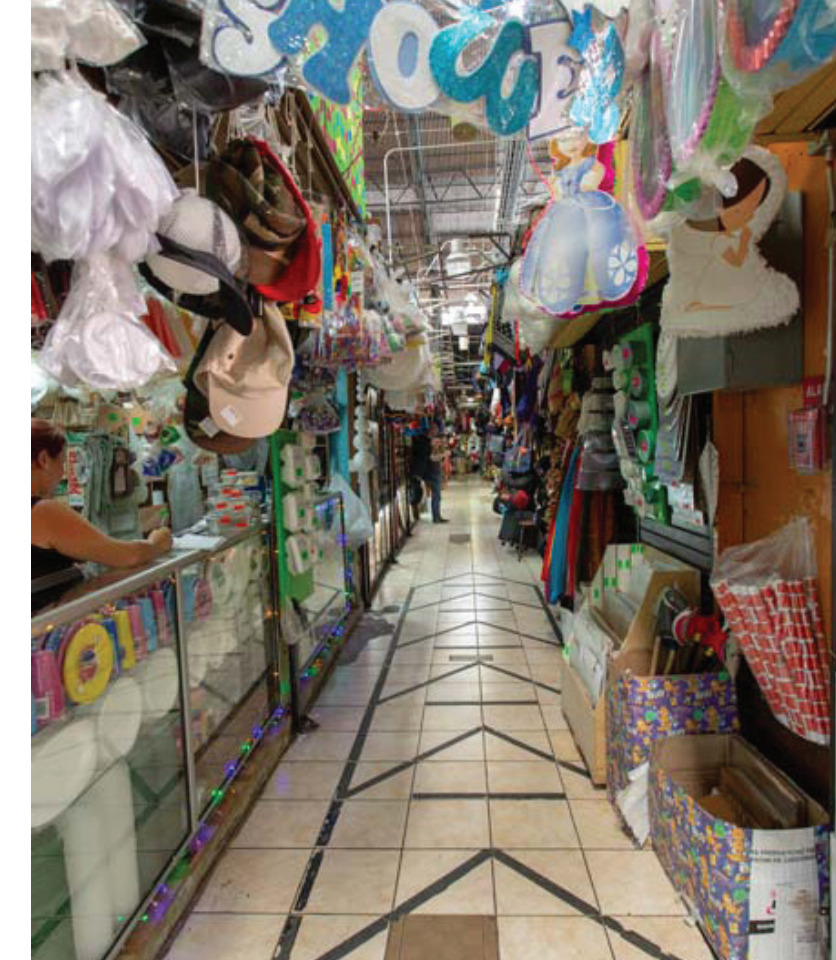
**TRACOPA BUS SCHEDULE & ROUTE**

TRACOPA WEBSITE			MOOVIT	
DEPART	DESTINATION	TYPE	DEPART	DESTINATION
5:30:00	PASO CANOAS	REGULAR	7:00 AM	MANUEL ANTONIO
6:00:00	MANUEL ANTONIO	DIRECTO	10:00 AM	MANUEL ANTONIO
6:00:00	COPA BUENA	REGULAR	11:30 AM	MANUEL ANTONIO
6:30:00	GOLFITO	REGULAR	2:15 PM	MANUEL ANTONIO
6:41:00	PASO CANOAS	REGULAR	3:30 PM	MANUEL ANTONIO
7:00:00	GOLFITO	REGULAR	5:45 PM	MANUEL ANTONIO
7:00:00	QUEPOS	REGULAR	8:30 PM	MANUEL ANTONIO
7:30:00	DAVID	DIRECTO	11:00 AM	CUIDAD CORTES
7:31:00	PASO CANOAS	REGULAR	7:30 AM	GOLFITO
7:40:00	PASO CANOAS	REGULAR	4:30 PM	GOLFITO
8:15:00	COPA BUENA	REGULAR	6:00 AM	PASO CANOAS
8:30:00	SIERPE	REGULAR	6:30 AM	PASO CANOAS
9:00:00	MANUEL ANTONIO	DIRECTO	7:00 AM	PASO CANOAS
9:30:00	PASO CANOAS	REGULAR	8:30 AM	PASO CANOAS
10:00:00	COTO 47	REGULAR	8:40 AM	PASO CANOAS
10:00:00	PASO CANOAS	REGULAR	11:15 AM	PASO CANOAS
10:15:00	MANUEL ANTONIO	DIRECTO	12:00 PM	PASO CANOAS
10:30:00	LAUREL	REGULAR	12:50 PM	PASO CANOAS
11:00:00	PASO CANOAS	REGULAR	2:00 PM	PASO CANOAS
11:15:00	PASO CANOAS	REGULAR	2:05 PM	PASO CANOAS
11:45:00	PASO CANOAS	REGULAR	3:00 PM	PASO CANOAS
12:00:00	MANUEL ANTONIO	DIRECTO	4:30 PM	PASO CANOAS
12:01:00	COPA BUENA	REGULAR	5:30 PM	PASO CANOAS
12:15:00	COPA BUENA	REGULAR	7:30 PM	PASO CANOAS
1:00:00 PM*	PASO CANOAS	REGULAR	7:40 PM	PASO CANOAS
1:05:00 PM*	PASO CANOAS	REGULAR	7:40 PM	PASO CANOAS
1:15:00 PM*	PASO CANOAS	REGULAR	11:00 PM	PASO CANOAS
1:15:00 PM*	MANUEL ANTONIO	DIRECTO	11:20 PM	PASO CANOAS
2:00:00 PM*	PASO CANOAS	REGULAR	1:00 PM	QUEPOS
2:05:00 PM*	PASO CANOAS	REGULAR	9:30 AM	SIERPE
2:30:00 PM*	CIUDAD CORTES	REGULAR	11:00 AM	COTO 47
2:30:00 PM*	MANUEL ANTONIO	DIRECTO		
3:30:00 PM*	GOLFITO	REGULAR		
3:30:00 PM*	PASO CANOAS	REGULAR		
3:30:00 PM*	COPA BUENA	REGULAR		
4:00:00 PM*	MANUEL ANTONIO	REGULAR		
4:30:00 PM*	PASO CANOAS	REGULAR		
4:45:00 PM*	MANUEL ANTONIO	DIRECTO		
5:00:00 PM*	QUEPOS	REGULAR		
6:30:00 PM*	PASO CANOAS	REGULAR		
6:40:00 PM*	PASO CANOAS	REGULAR		

**TRACOPA EXISTING CONDITIONS**  
Pura Verde location



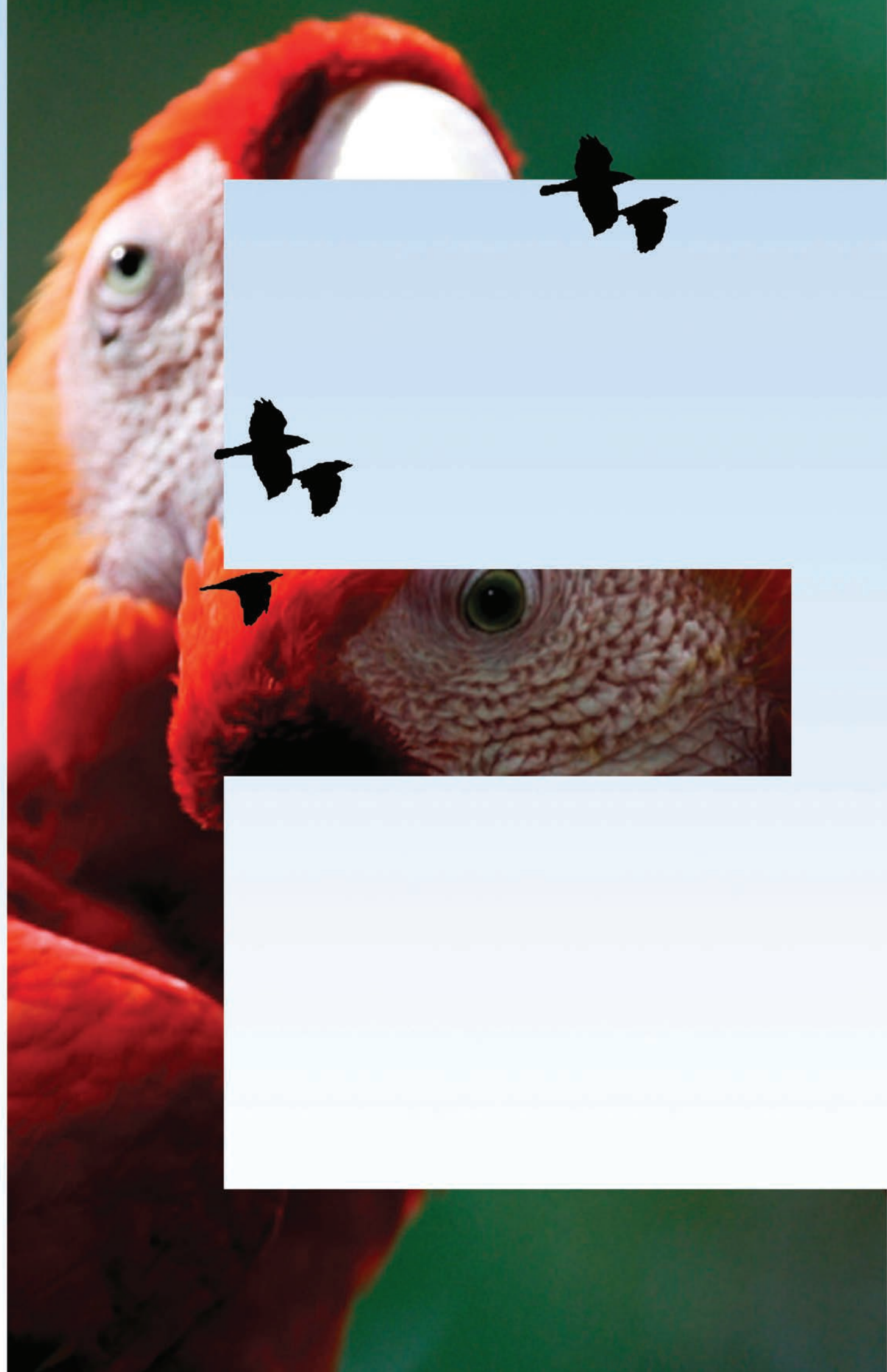
**EXISTING SAN JOSE CENTRAL MARKET**  
1 mile from site



**EXISTING LINEAR OUTDOOR MARKET**  
Adjacent to site

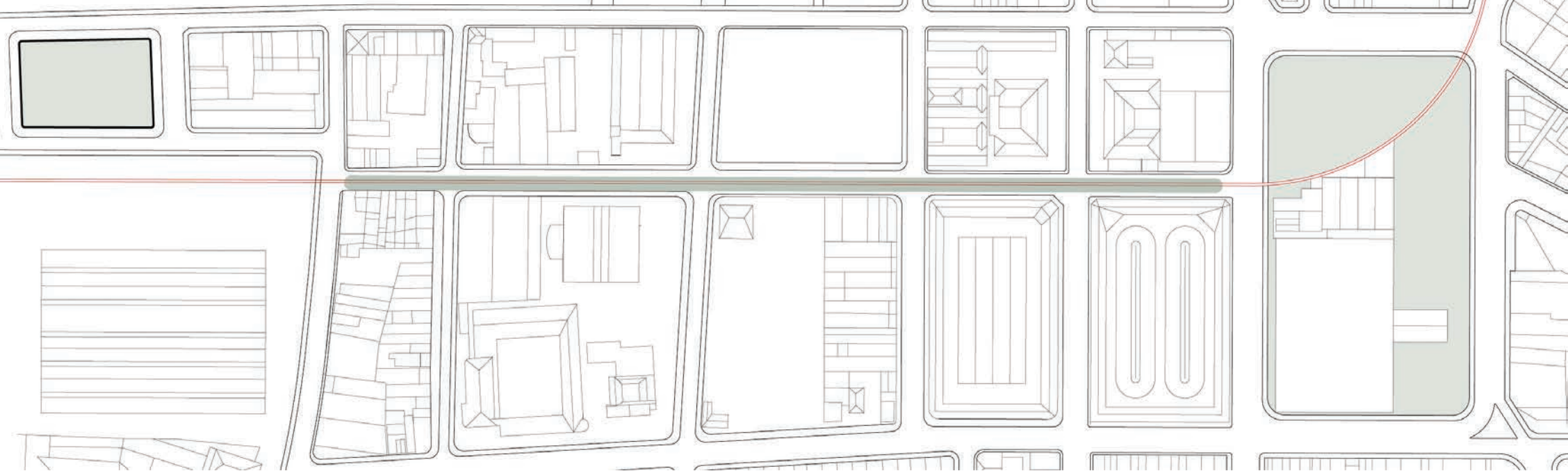




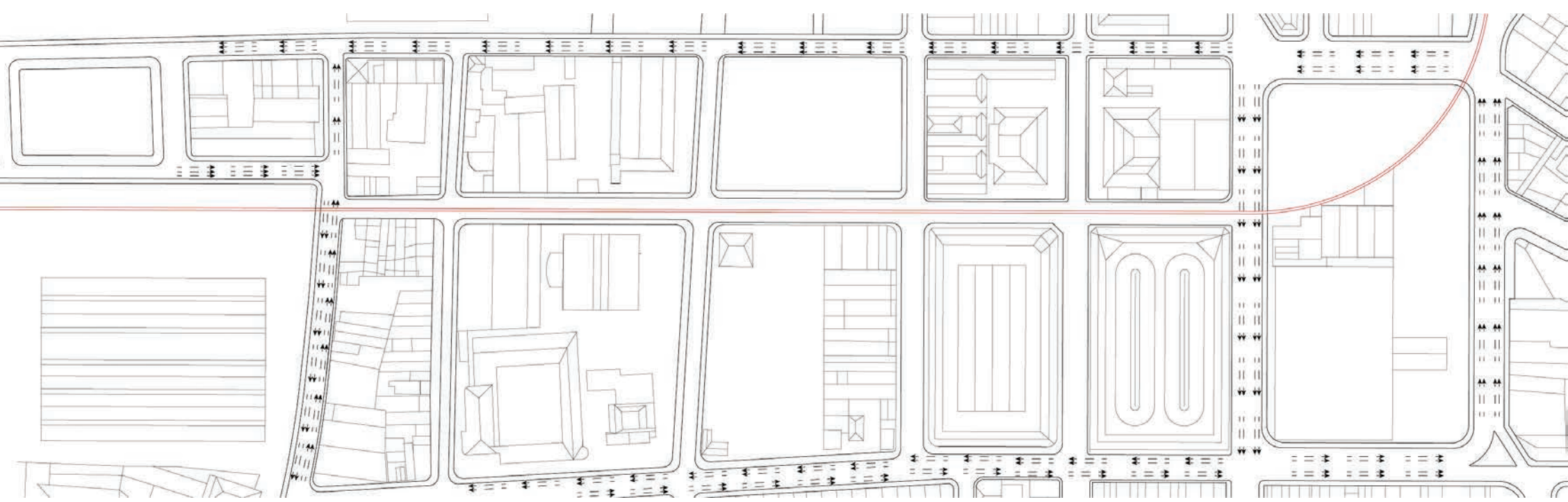


02

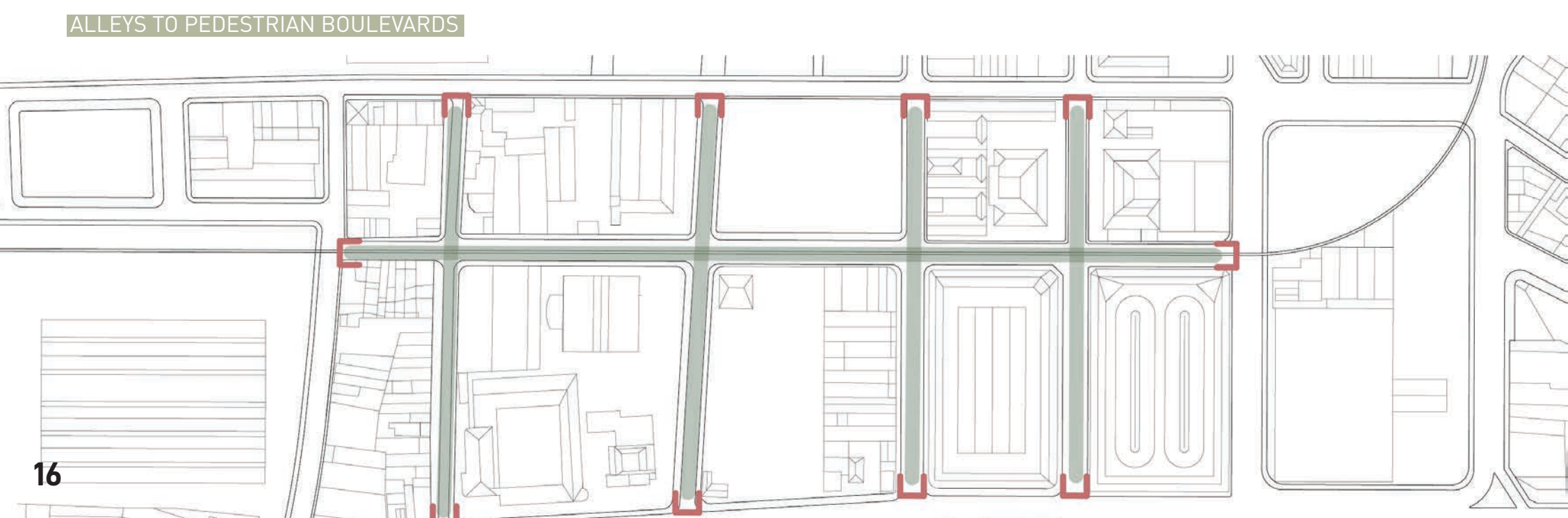
PRE-DESIGN



WEST/EAST PARK CONNECTION THROUGH LINEAR MARKET



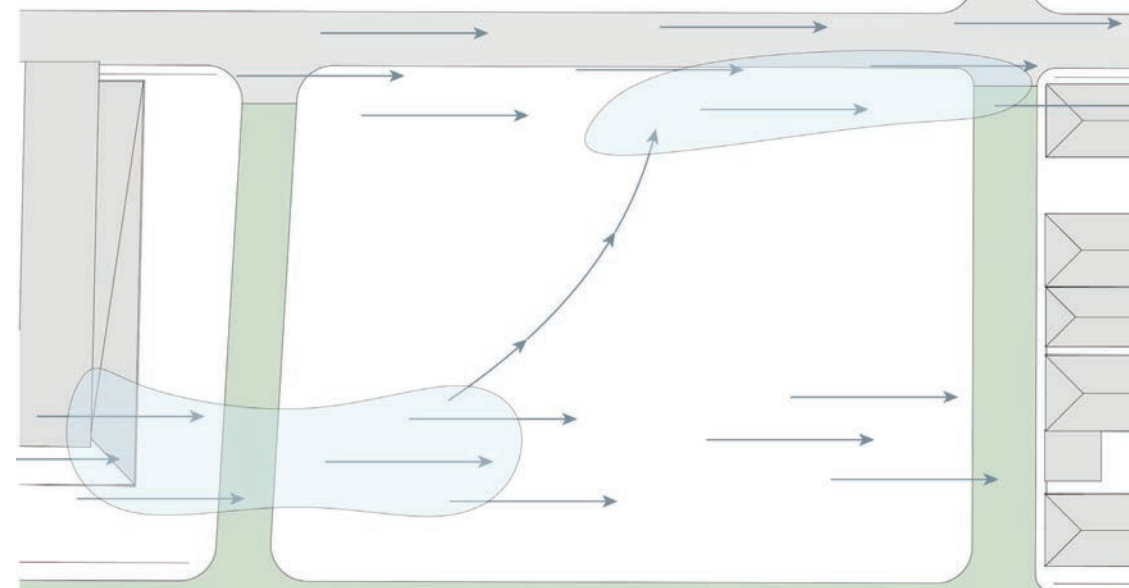
TRAFFIC PATTERNS



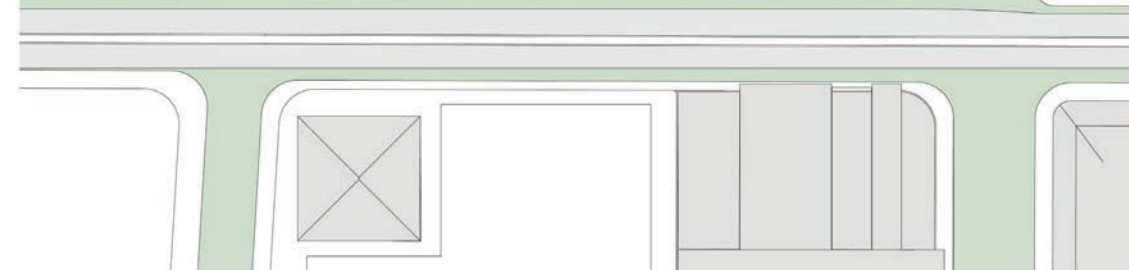
ALLEYS TO PEDESTRIAN BOULEVARDS



VENTILATION



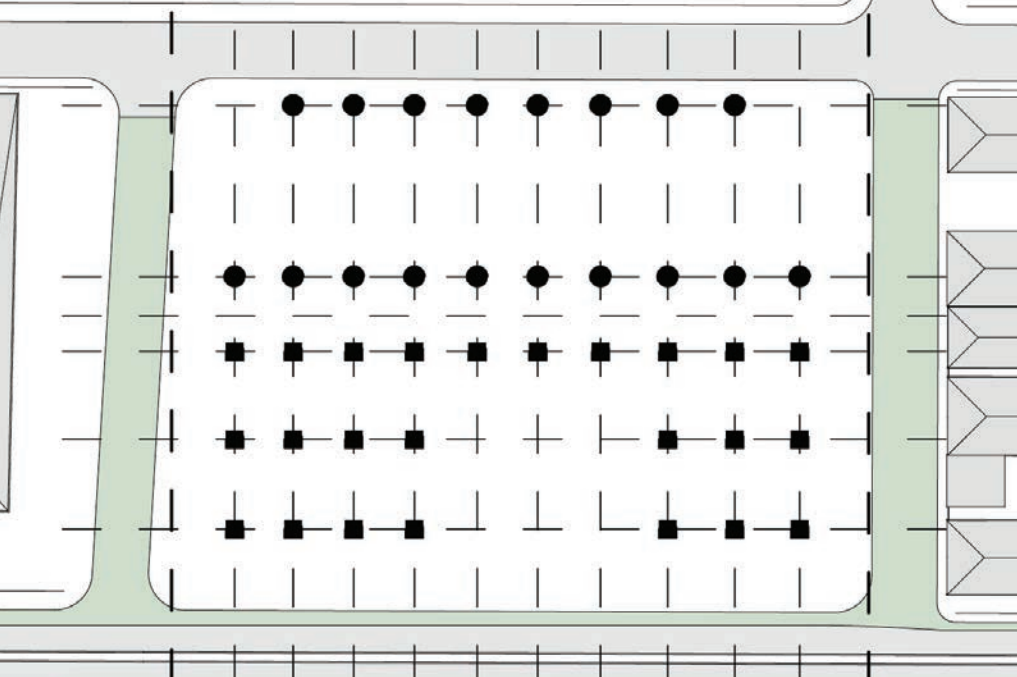
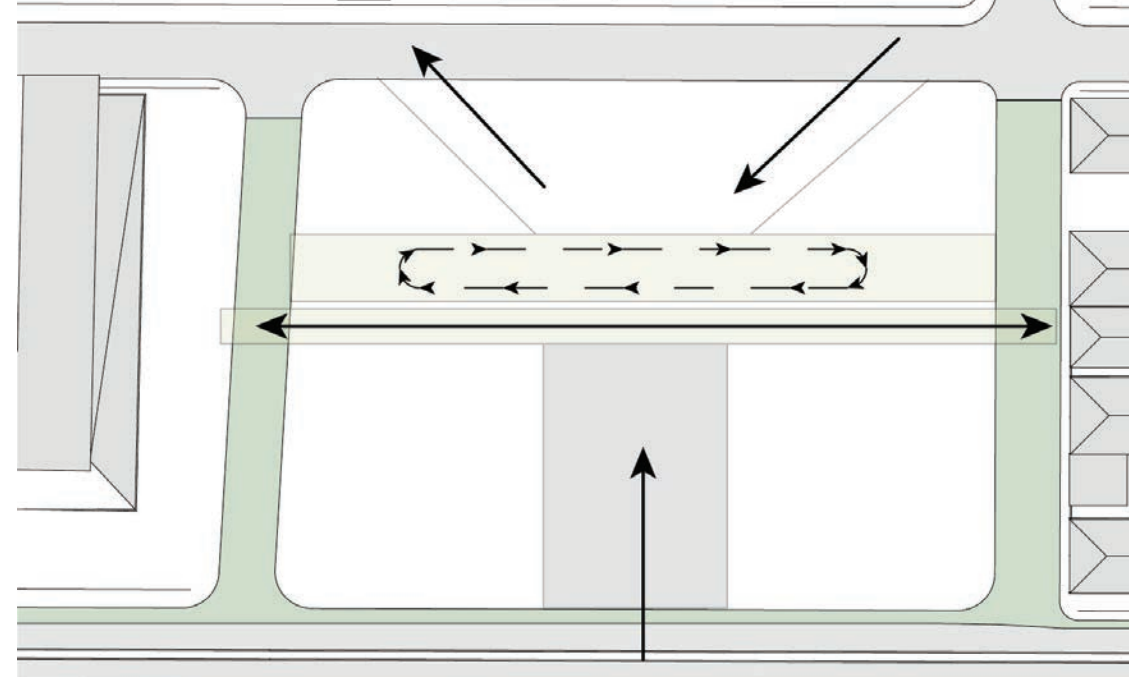
SOLAR STUDY



AXIS & ENTRANCE



WOOD/CONCRETE GRID

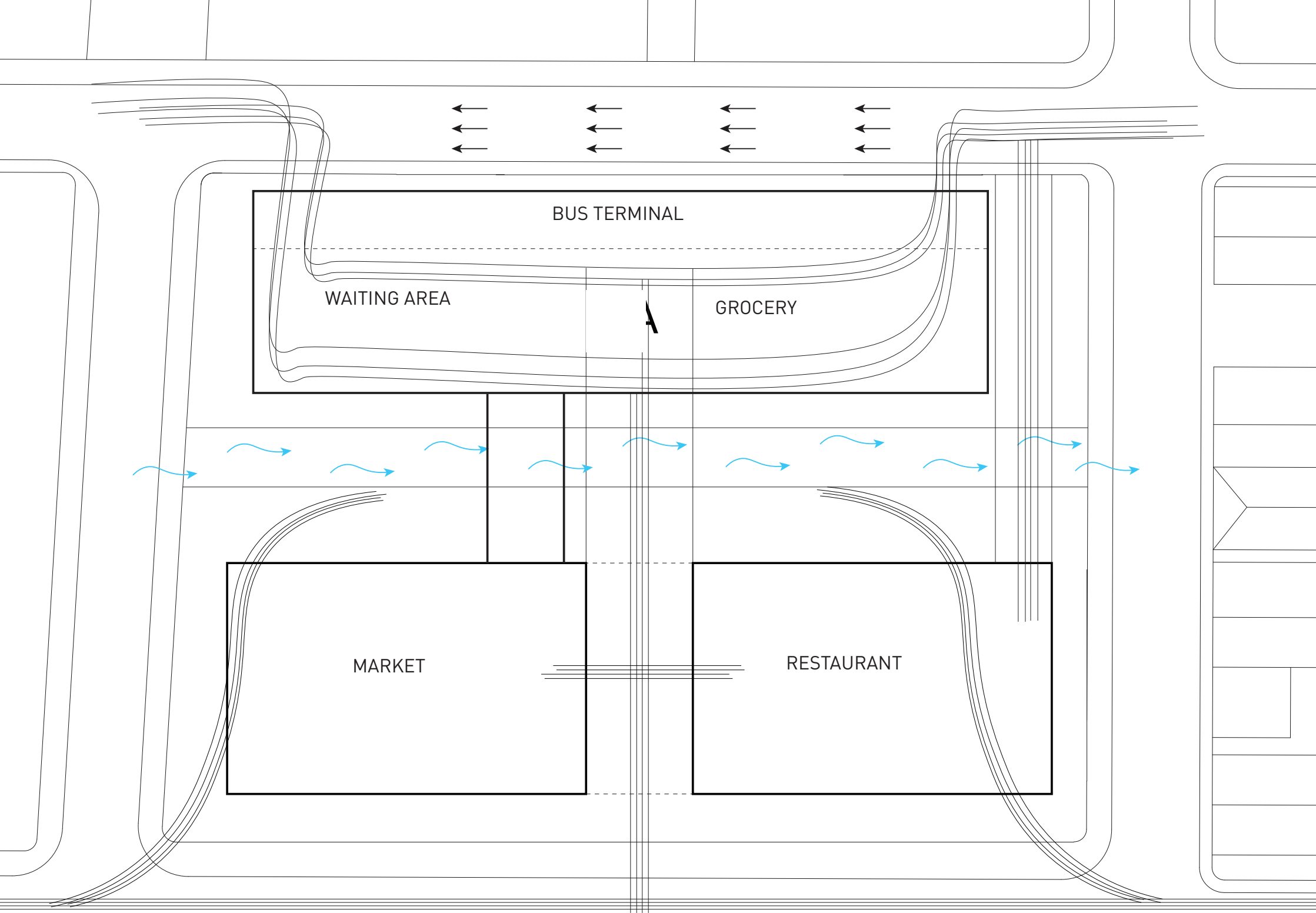


WOOD/CONCRETE GRID

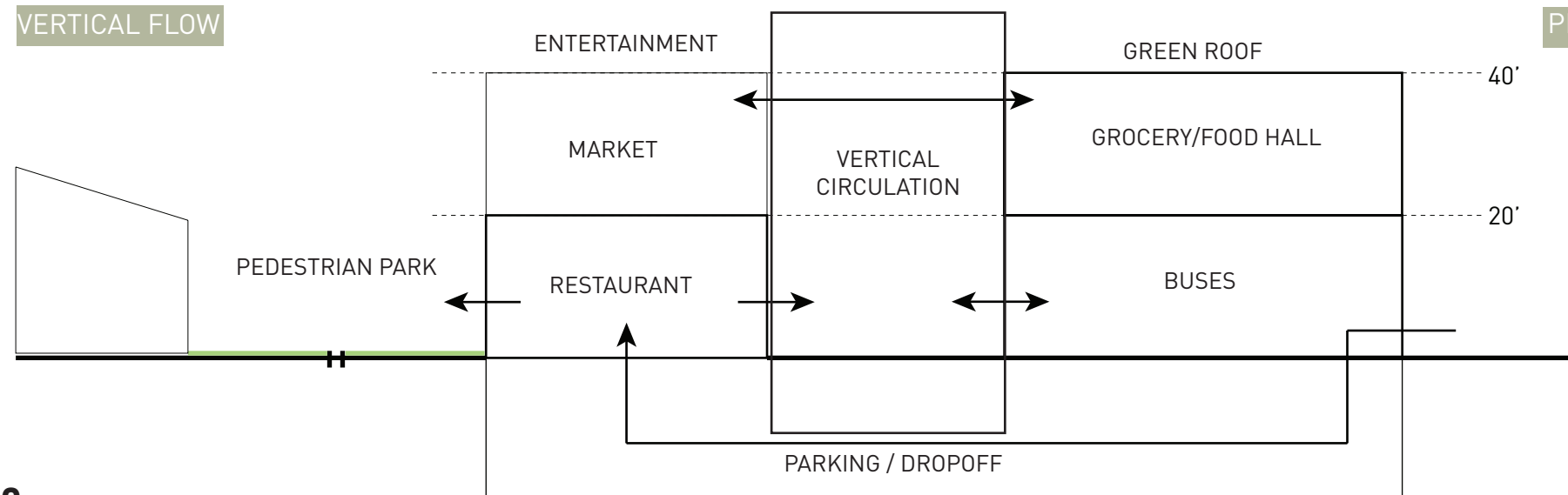
PROPOSED SITE PLAN

Pura Verde addresses all site conditions, not just the initial area of development. The outdoor linear market is brought into Pura Verde and replaced with a green boulevard dedicated to commuters and visitors. The superblocks around Pura Verde contain large surface areas that are undeveloped which poses the opportunity to allocate spacing for new, smaller lanes in exchange for green alley-ways that connect to the main boulevard. The city lacks walkability within and around the city and has been a growing need as it is developing.



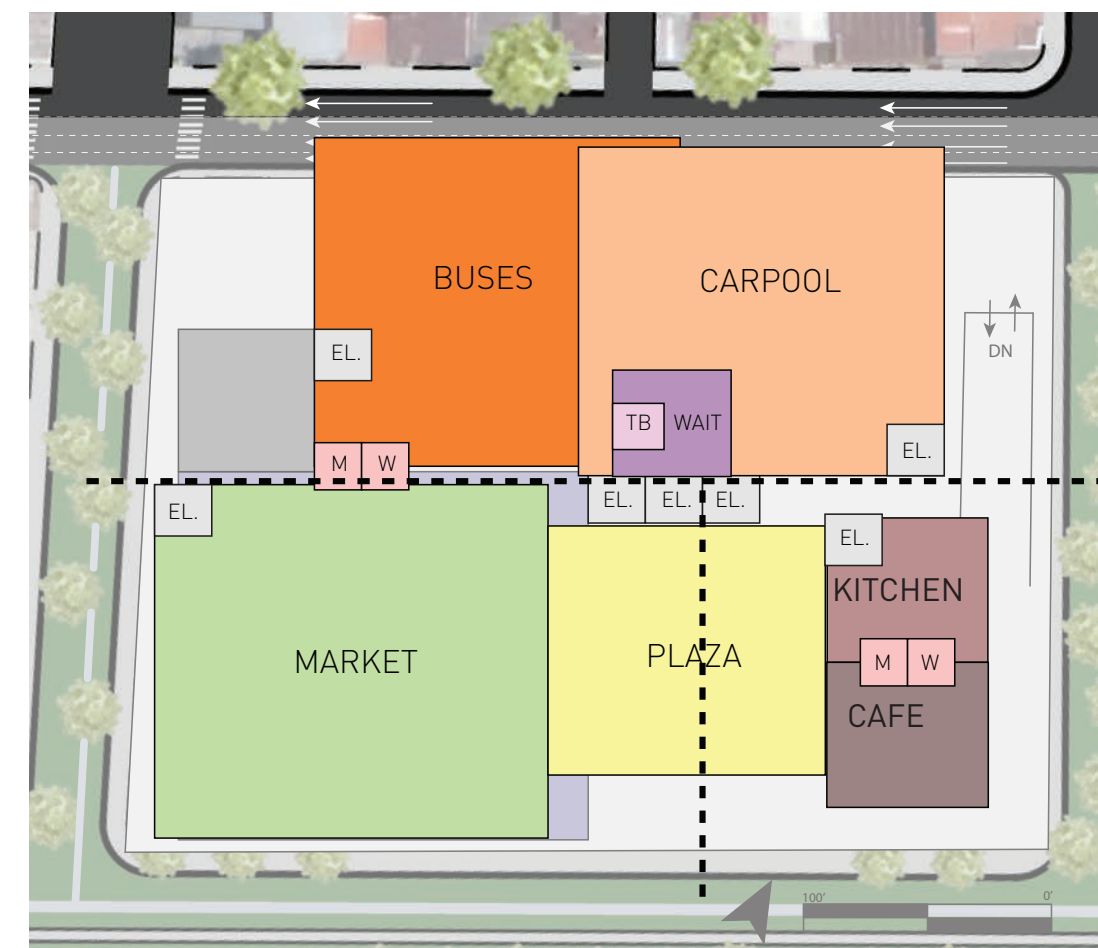


VERTICAL FLOW

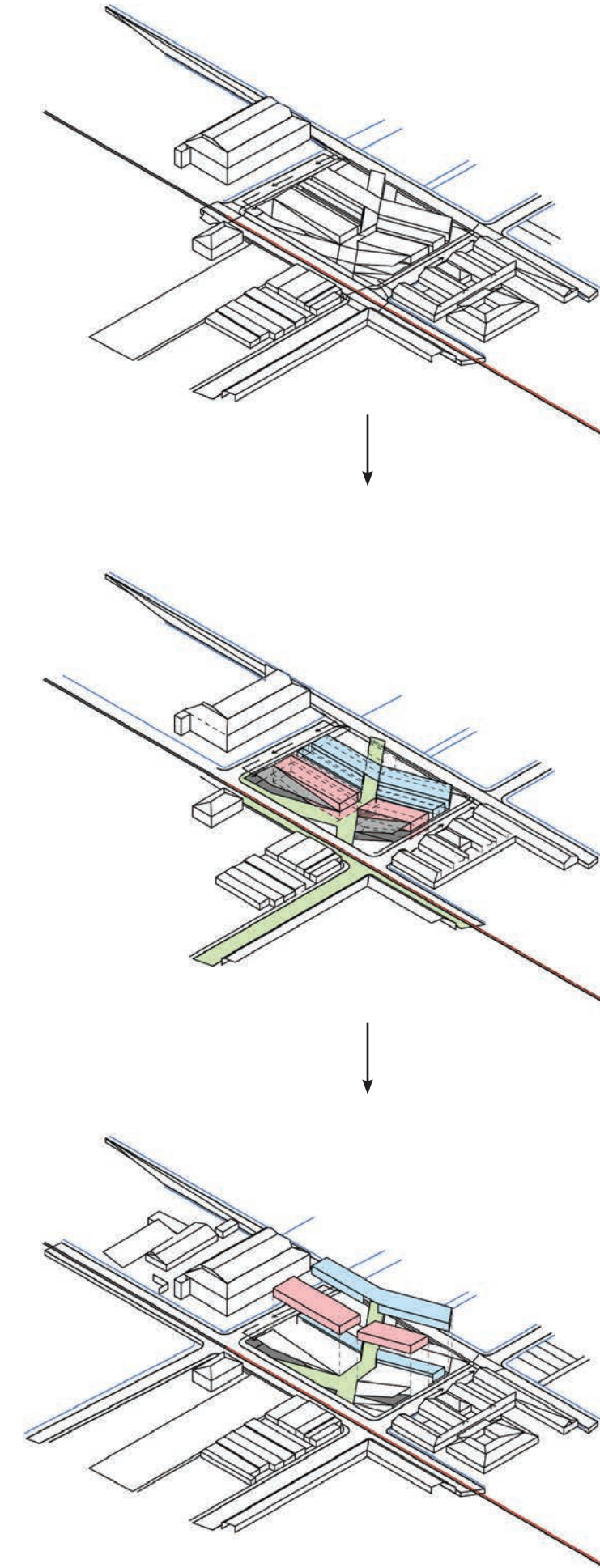


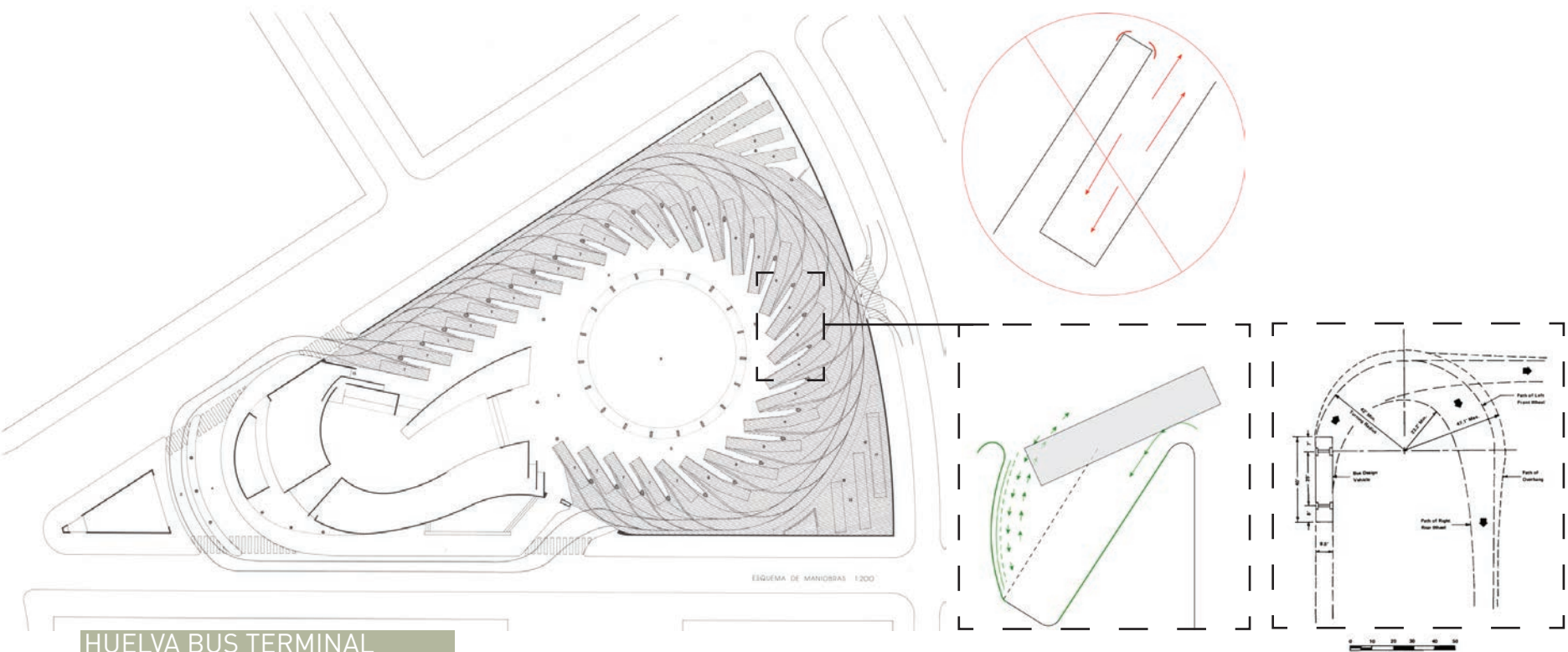
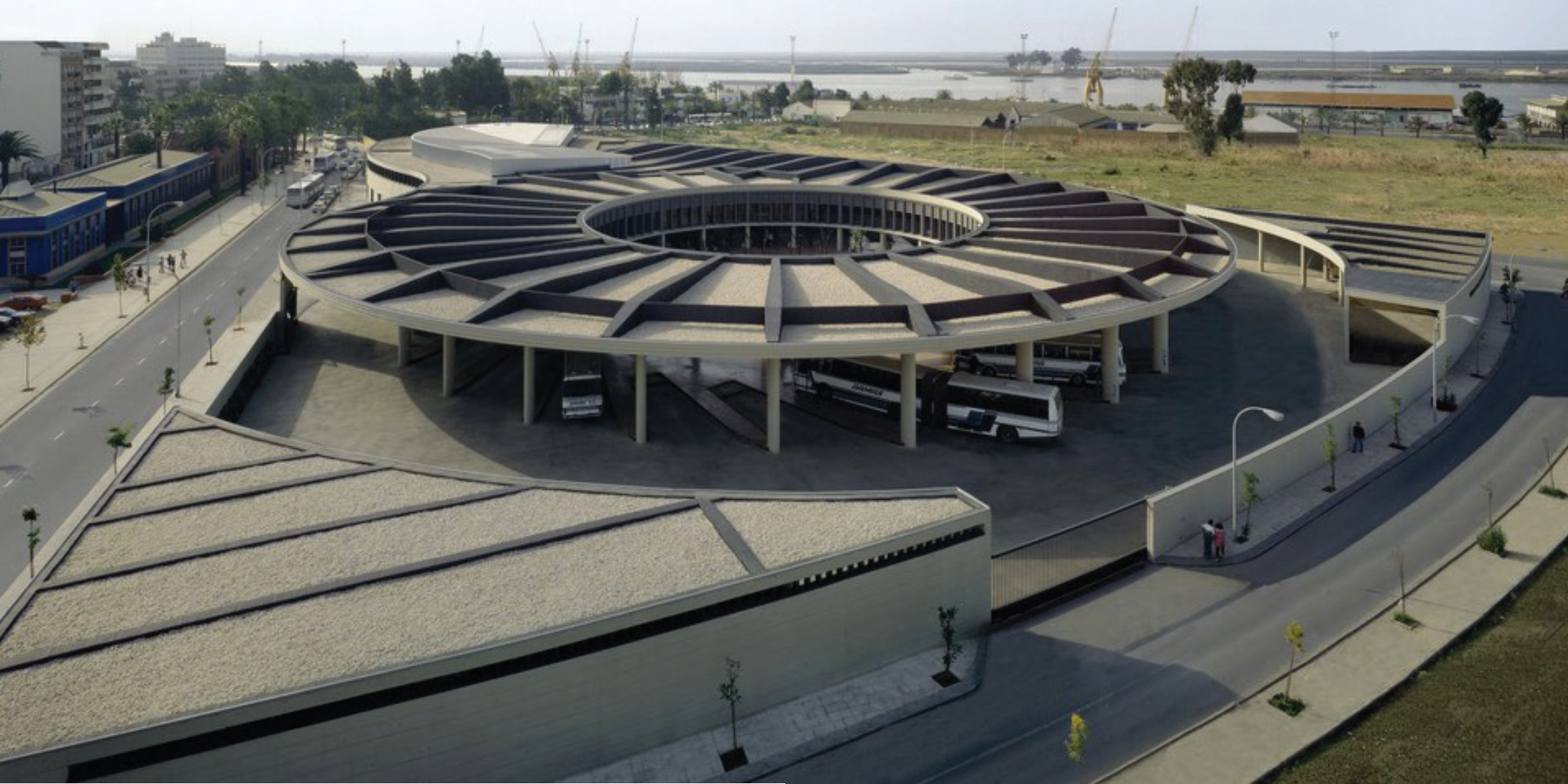
PLAN VIEW OF FLOW

2D GAMING



3D GAMING





HUELVA BUS TERMINAL

Huelva Bus Terminal does not utilize a conventional parking spot for the buses but rather a more ergonomic geometry to hug the buses in place as they swing around the turn-about. This geometric approach serves the station well as it further promotes easy flow around the triangular site.



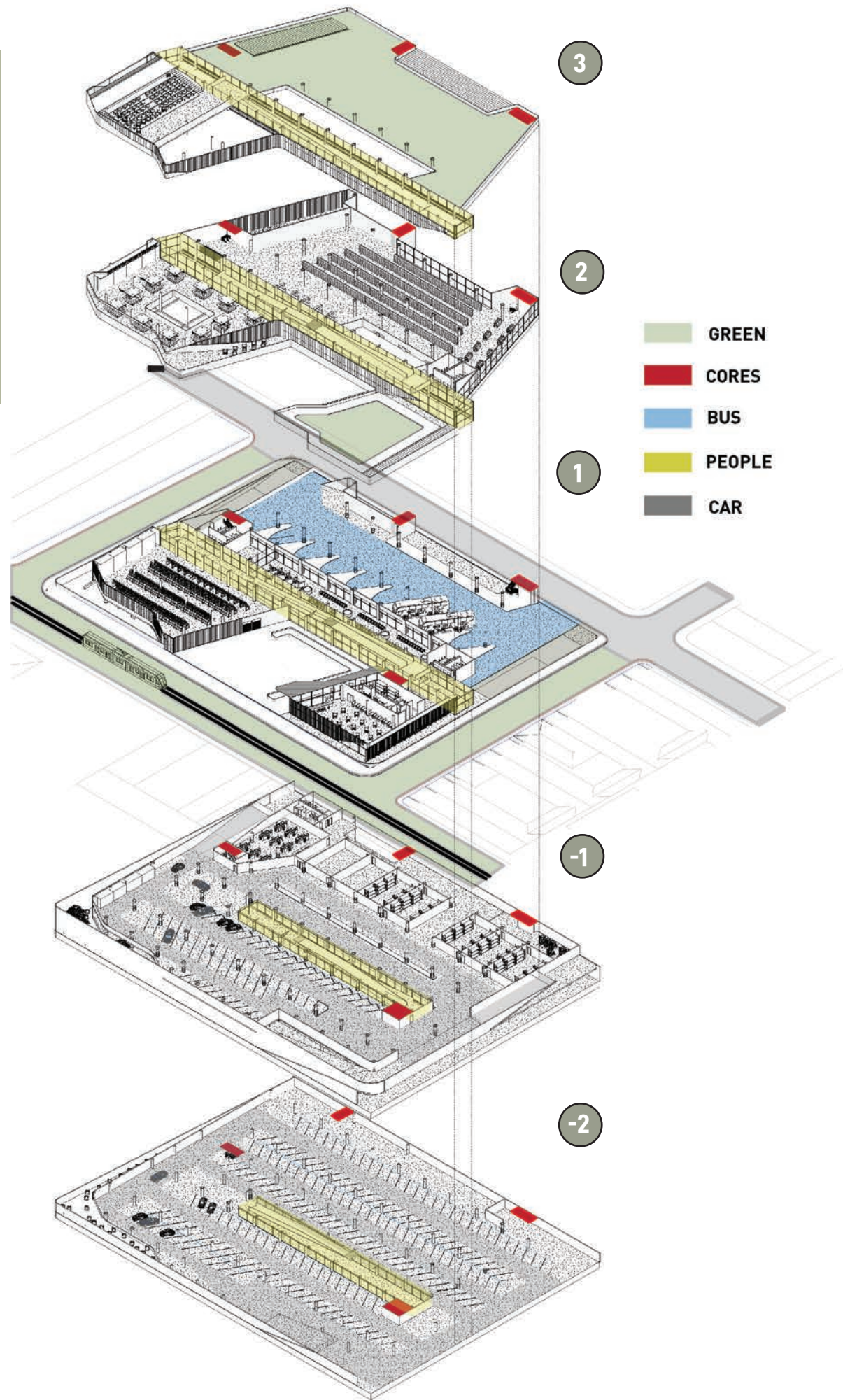
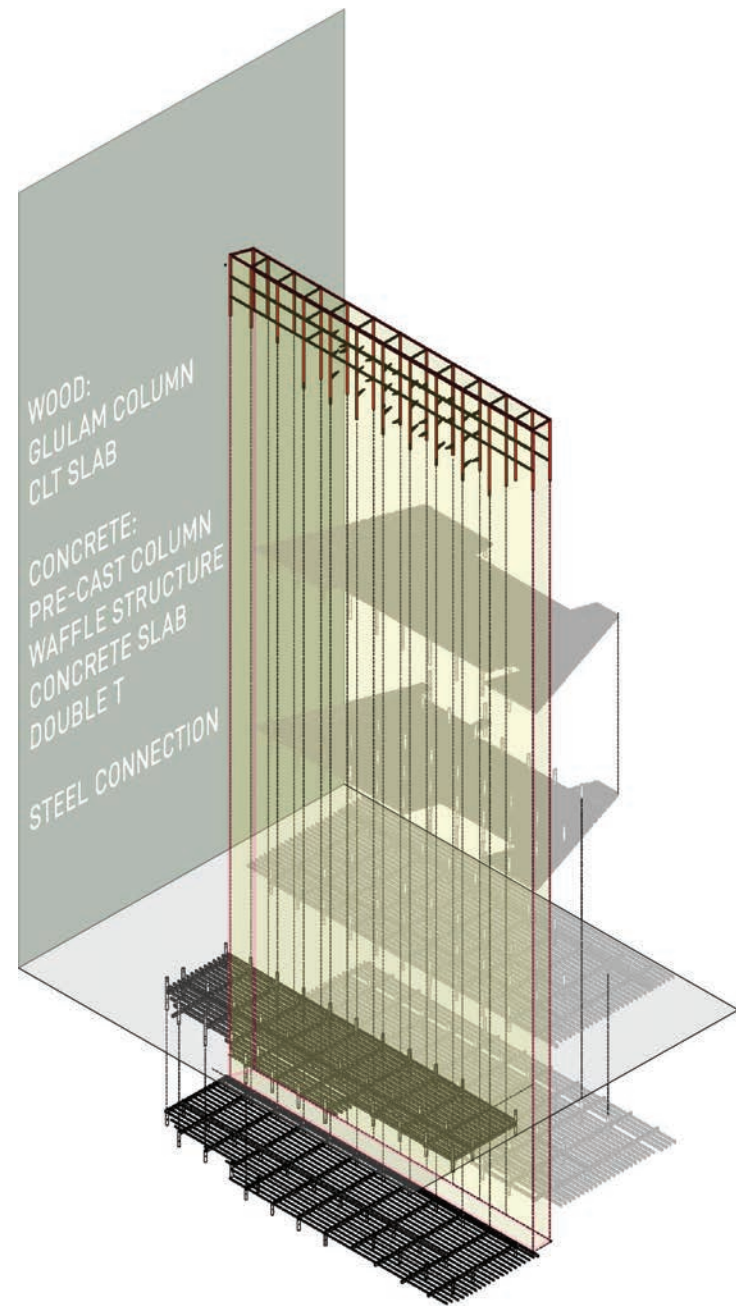
MUSEUM OF CONTEMPORARY ART BARCELONA

Richard Meier's design for the south facing facade focused on letting filtered daylight pour into the main atrium while serving views into the plaza space outside. The ramps not only serve as vertical circulation but also provides shading for the large space adjacent.



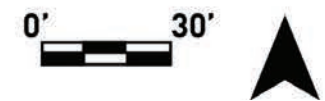
EXPLODED AXON ANALYSIS

Pura Verde uses 3 different structural systems: Waffle structure, Double T Pre-Cast, and CLT/ Glulam concrete composite slab. Concrete enforces permanence and resilience within the site for the Bus Terminal imposing long term goals of putting infrastructure development first for the city. Wood composite structure stemming from the concrete reinforces the spine of the project as it is able to have mobility during seismic activity. Not only do these elements have structural integrity but it raises more awareness towards more sustainable design that uses local labor and resources.



FIRST FLOOR PLAN

- 1 - FREIGHT DROP
  - 2 - BUS PARKING
  - 3 - WAITING ROOM
  - 4 - BATHROOM
  - 5 - RESTAURANT
  - 6 - KITCHEN
  - 7 - PLAZA
  - 8 - MARKET
- CORE RAMP**

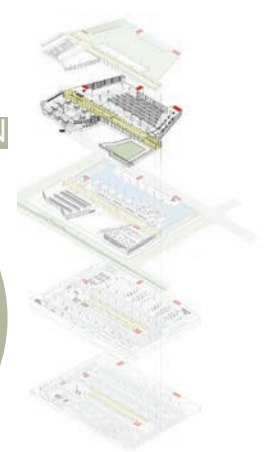




0' 20'

SECOND FLOOR PLAN

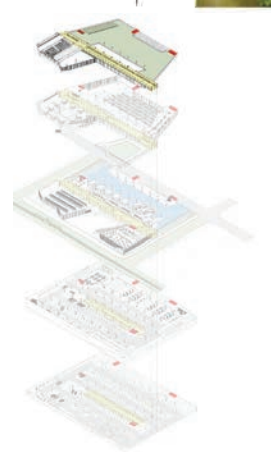
- 3 - FOOD HALL
- 4 - GROCERY
- 5 - BATHROOM
- 6 - GREEN ROOF
- 7 - MECHANICAL
- CORE RAMP**



0' 20'

THIRD FLOOR PLAN

- 1 - THEATER
- 2 - GREEN ROOF
- CORE RAMP**







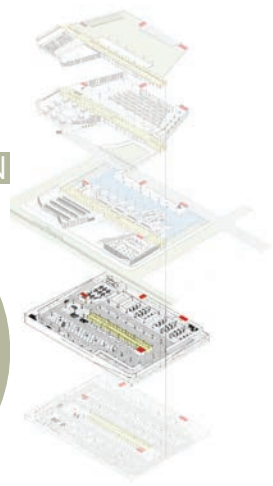
0' 20'



0' 20'

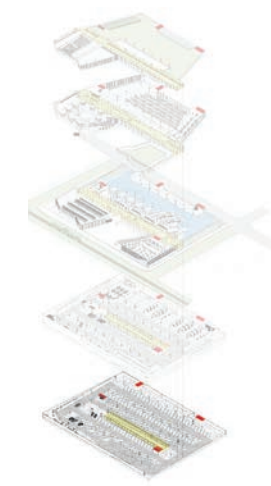
BASE FLOOR PLAN

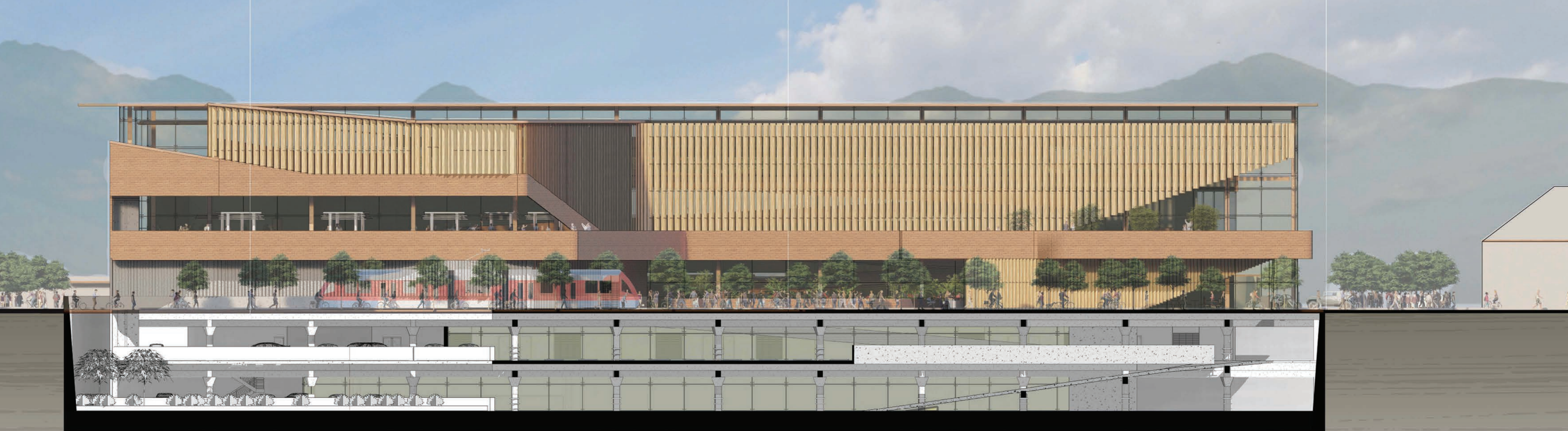
- 1 - STORAGE
- 2 - TRASH
- 3 - OFFICES
- 4 - BATHROOM
- 5 - FREIGHT
- 6 - VENDOR PARKING
- 7 - DROP-OFF
- CORE RAMP**



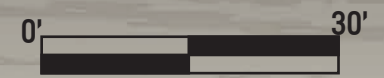
BASE FLOOR PLAN

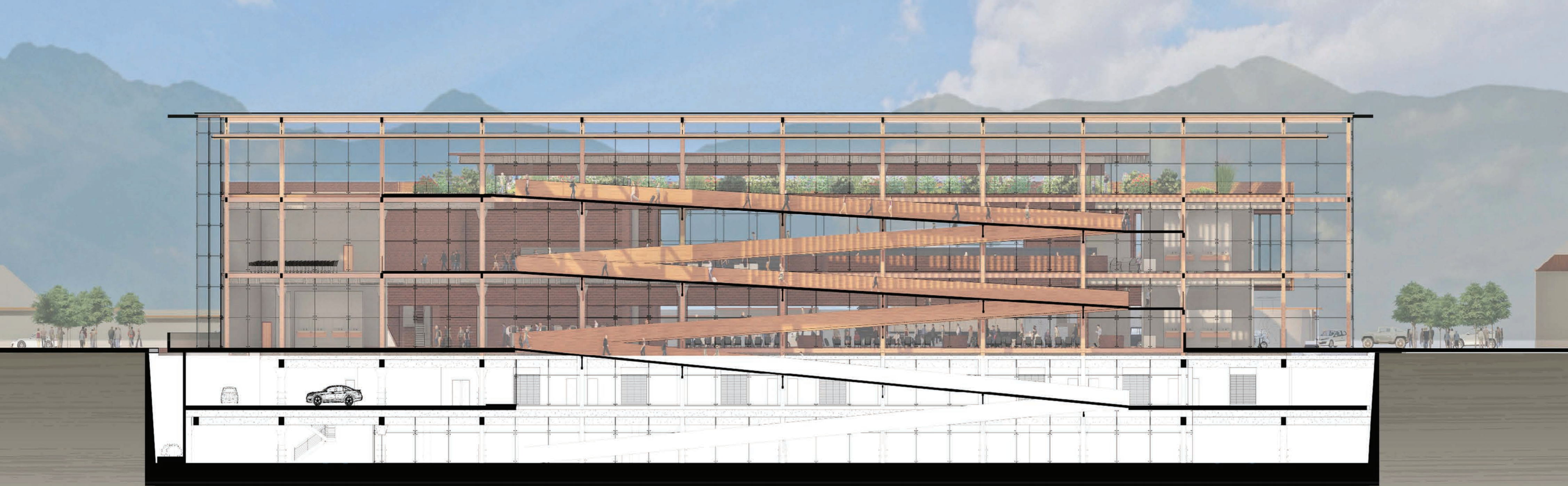
- 8 - GENERAL PARKING
- CORE RAMP**



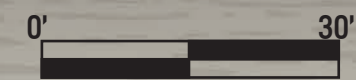


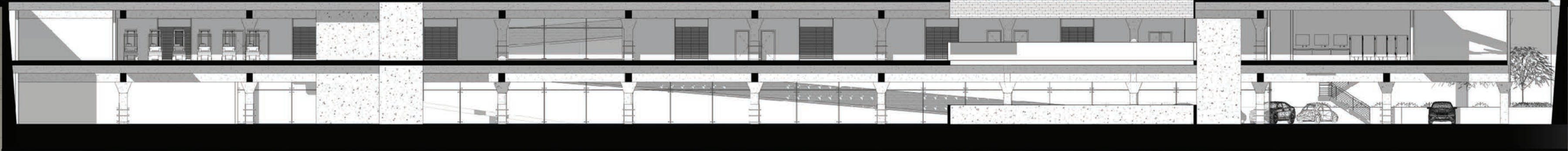
SOUTH ELEVATION



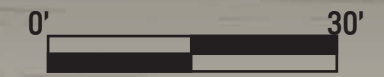


SOUTH SECTION



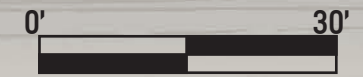


NORTH ELEVATION



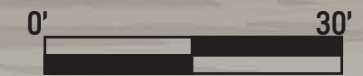


WEST ELEVATION





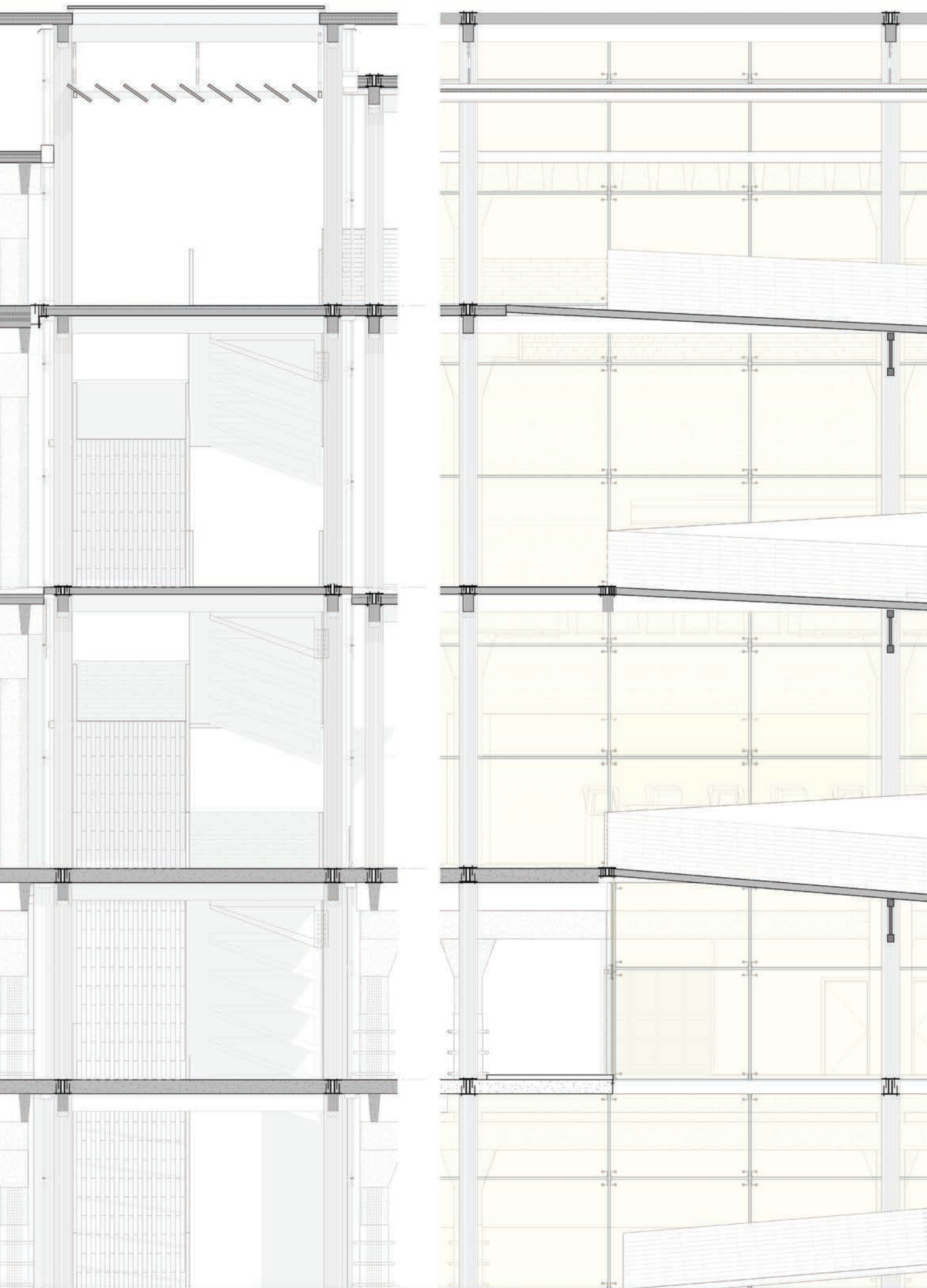
EAST SECTION





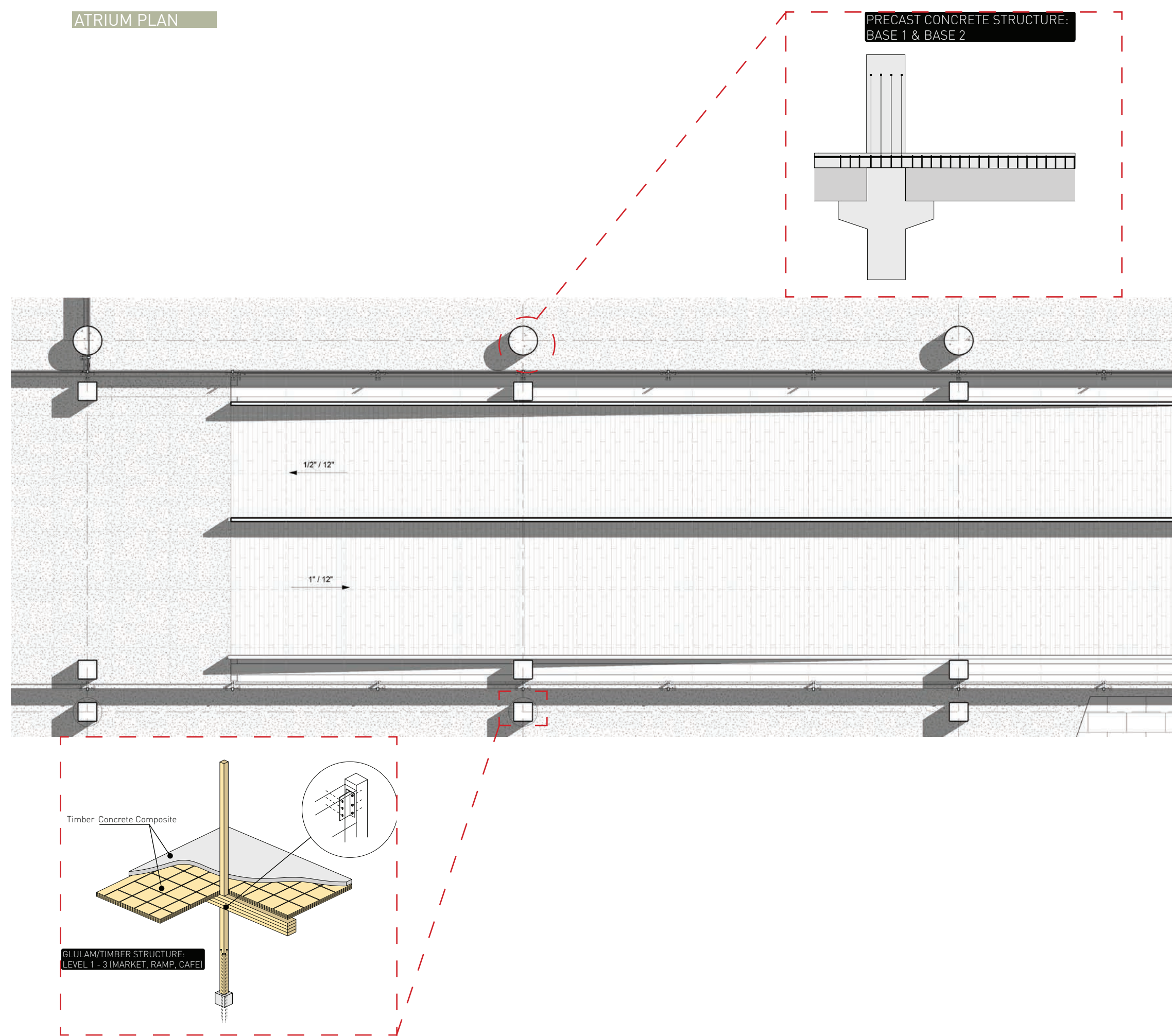
# 04

DETAILS



ATRIUM SECTIONS

ATRIUM PLAN

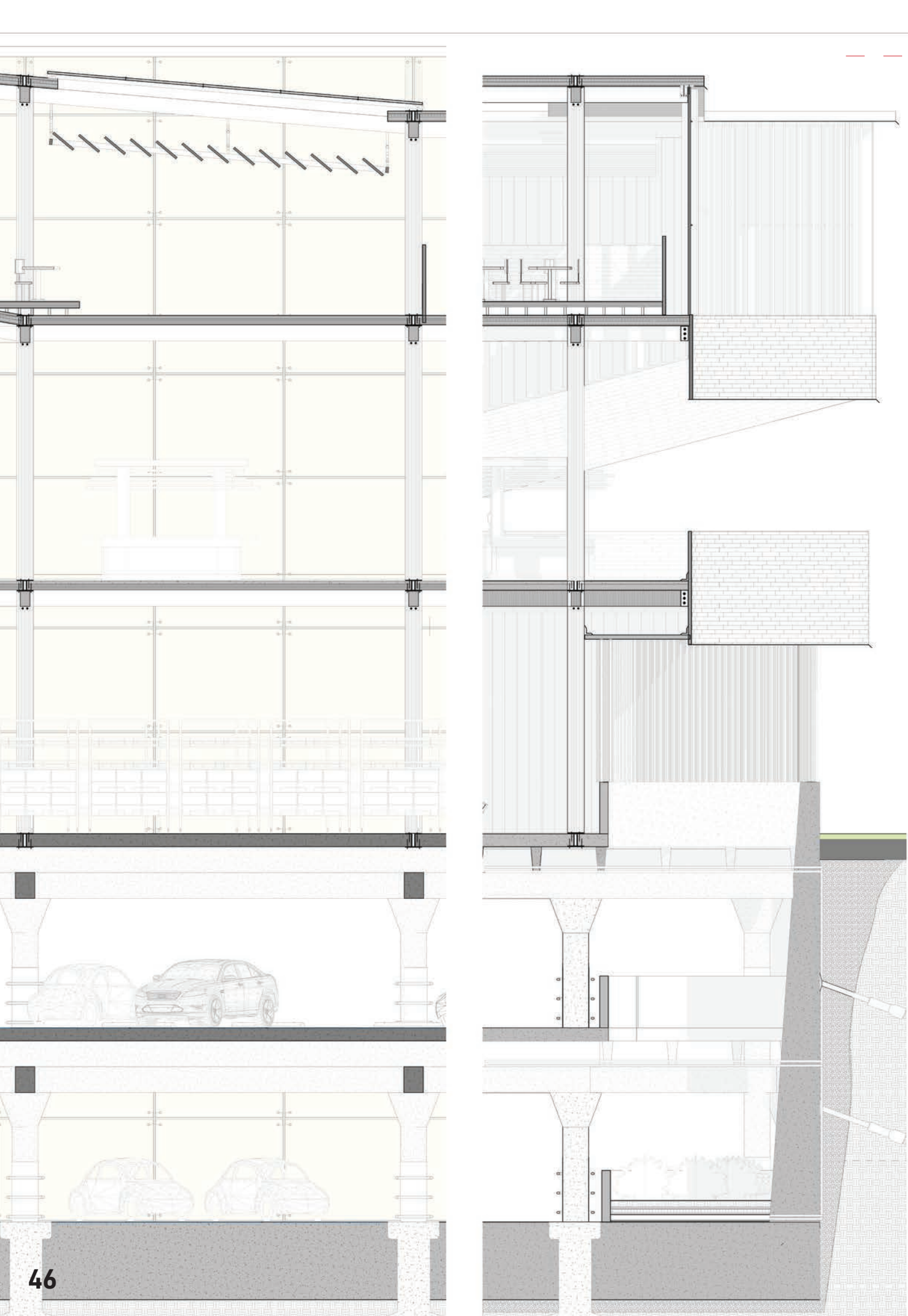


PRECAST CONCRETE STRUCTURE:  
BASE 1 & BASE 2

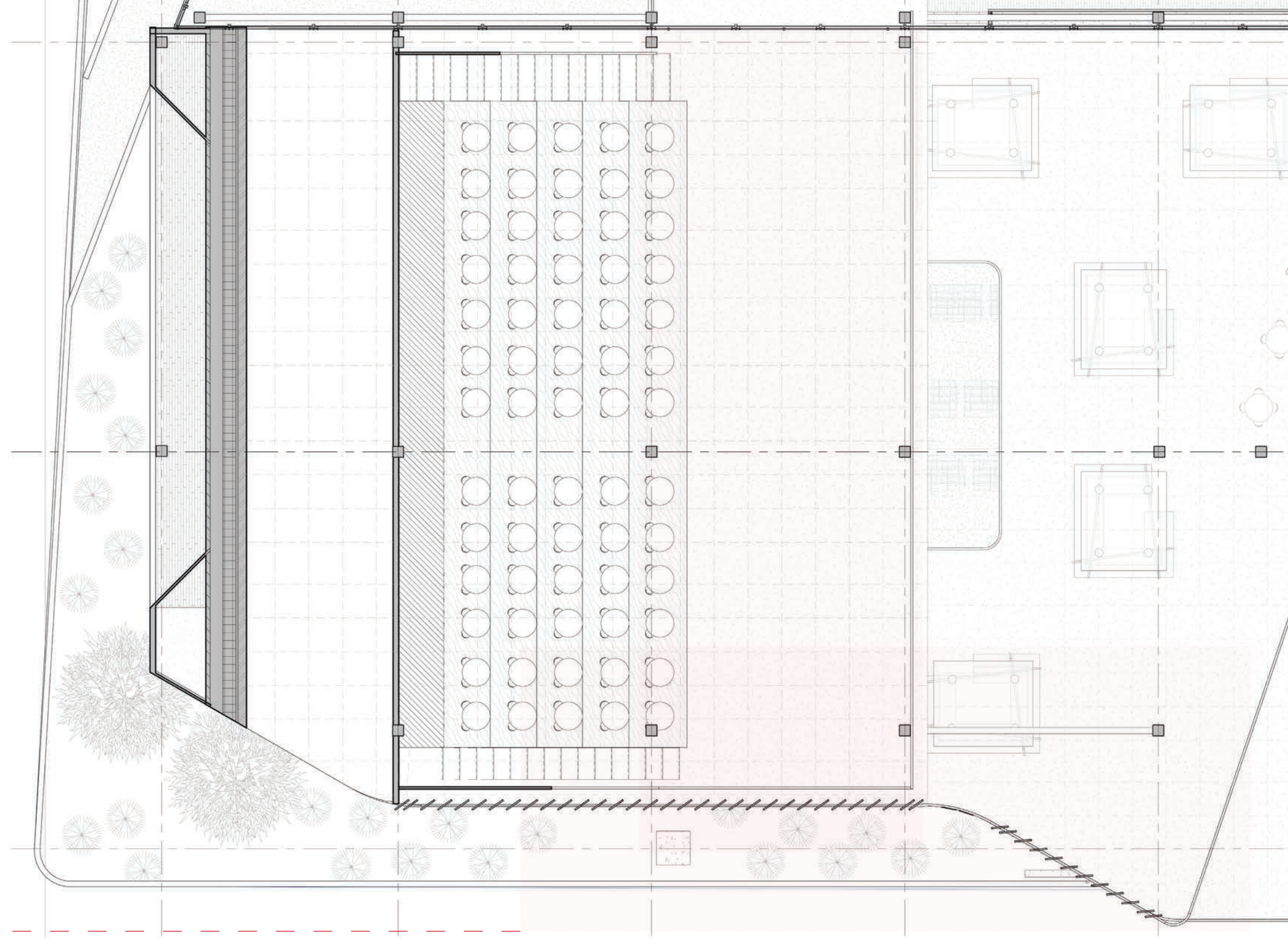
Timber-Concrete Composite

GLULAM/TIMBER STRUCTURE:  
LEVEL 1 - 3 (MARKET, RAMP, CAFE)

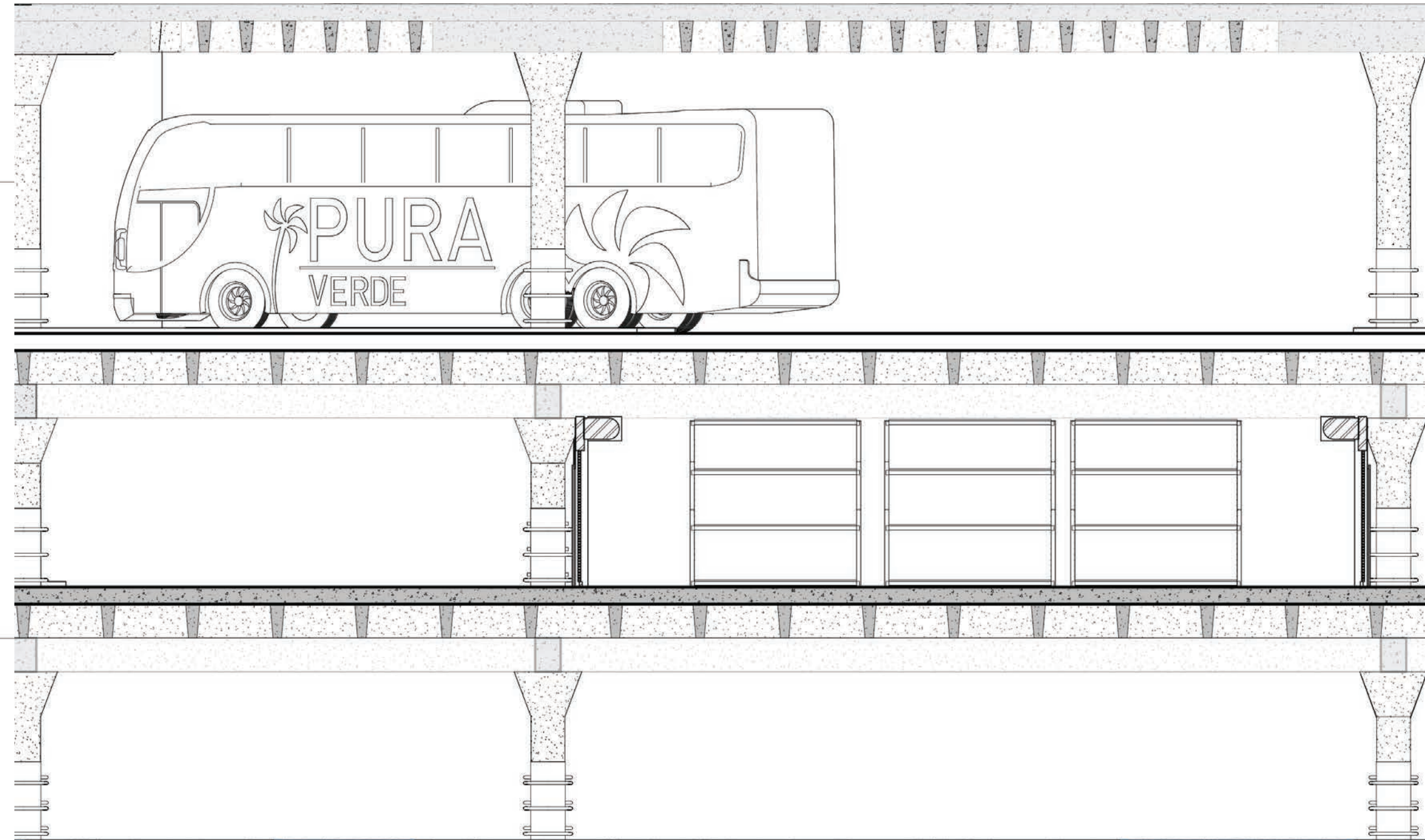
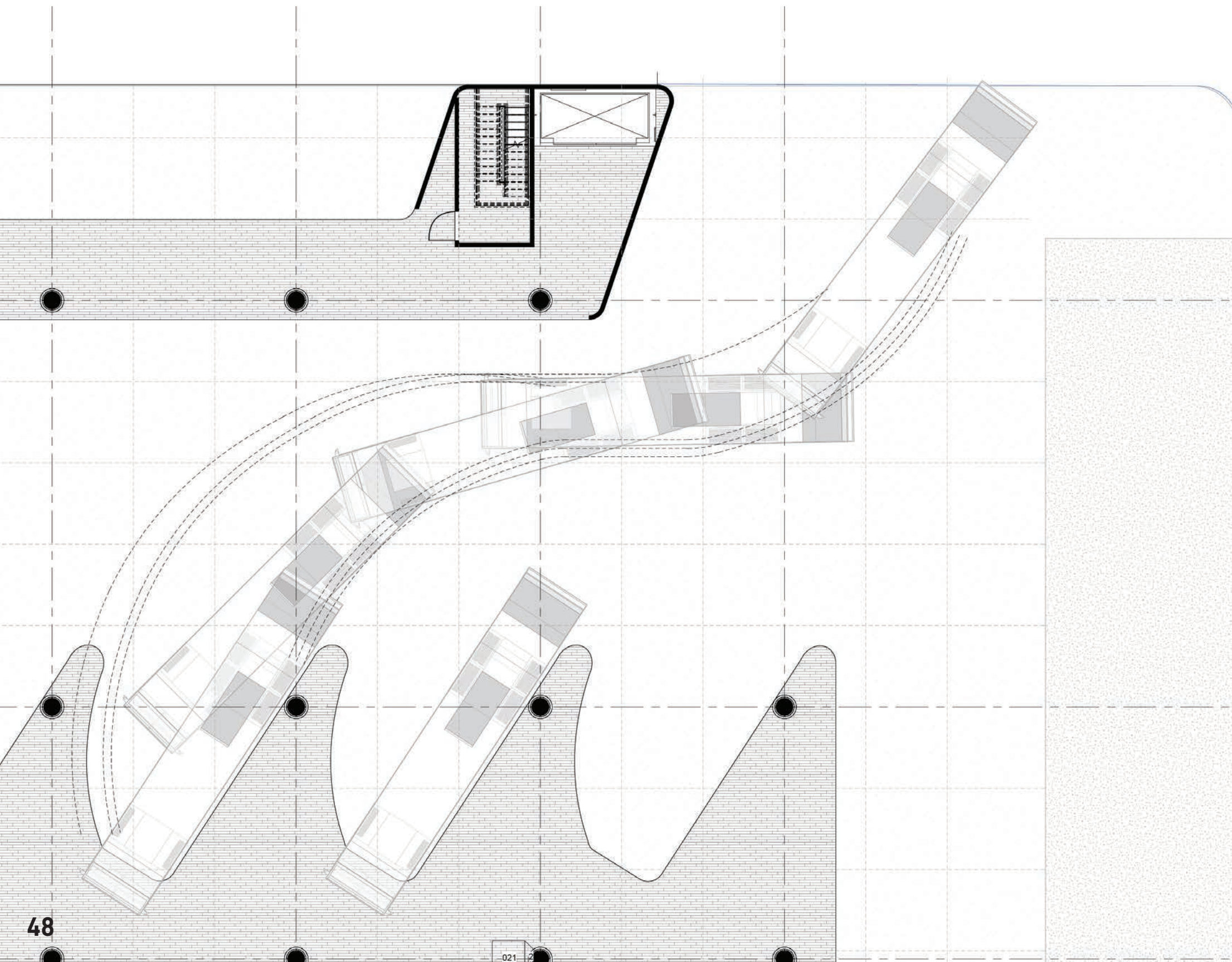


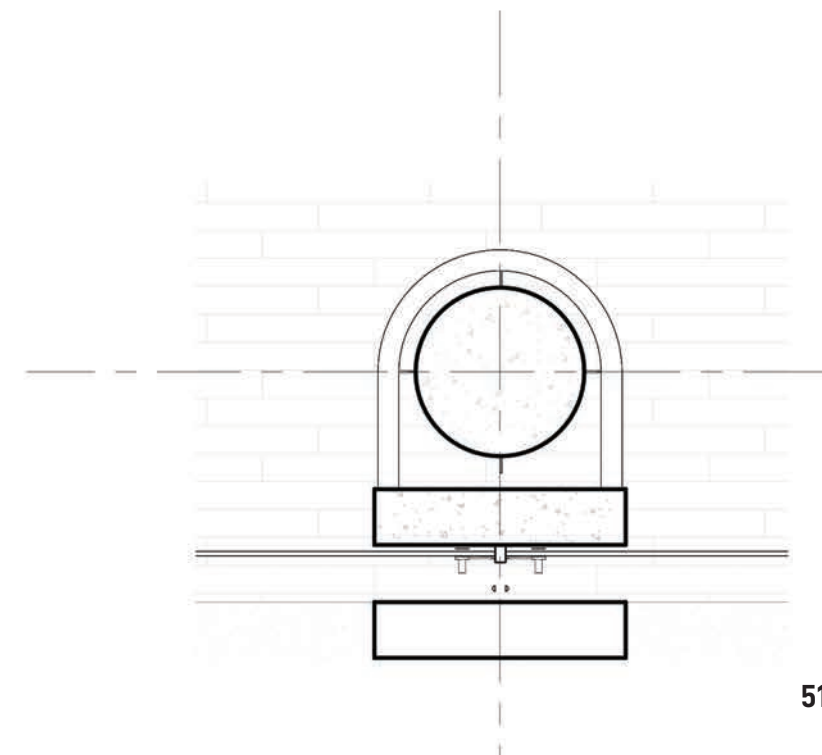
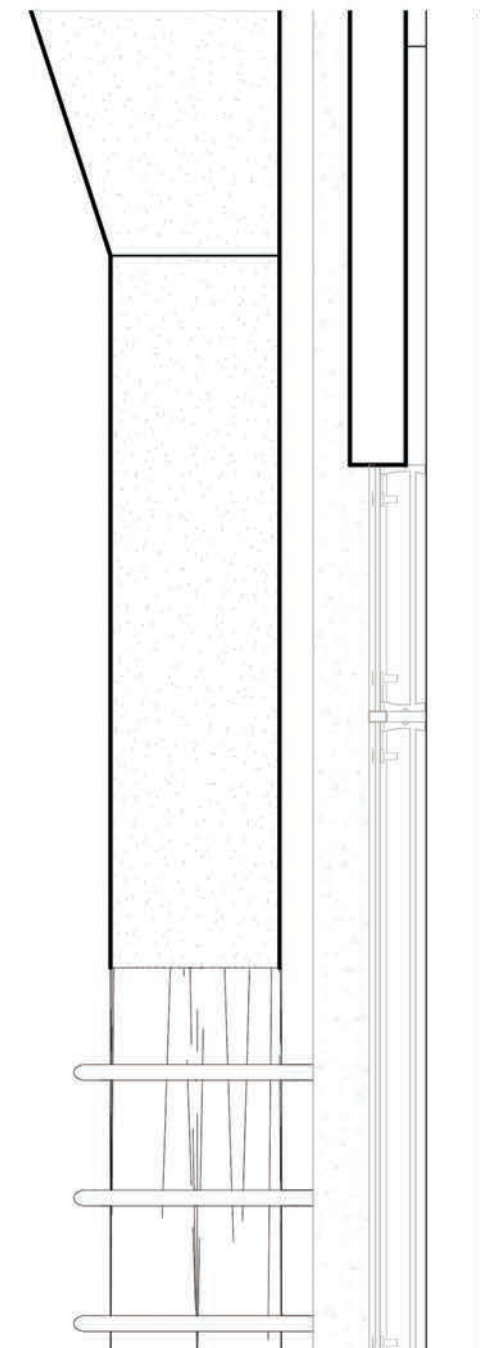
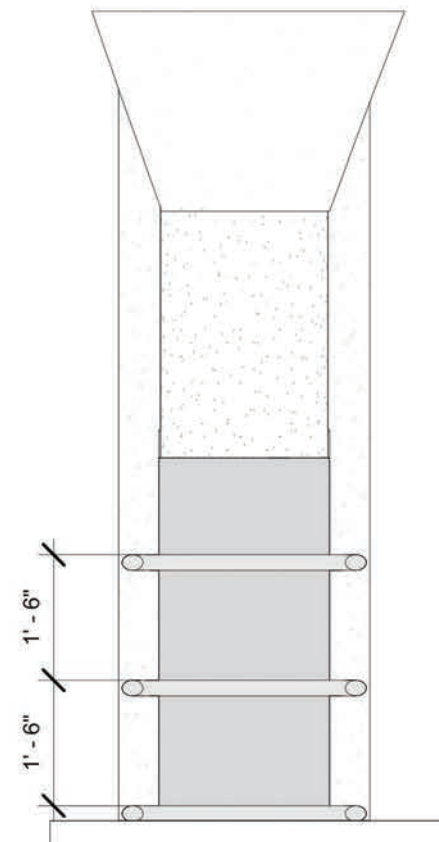
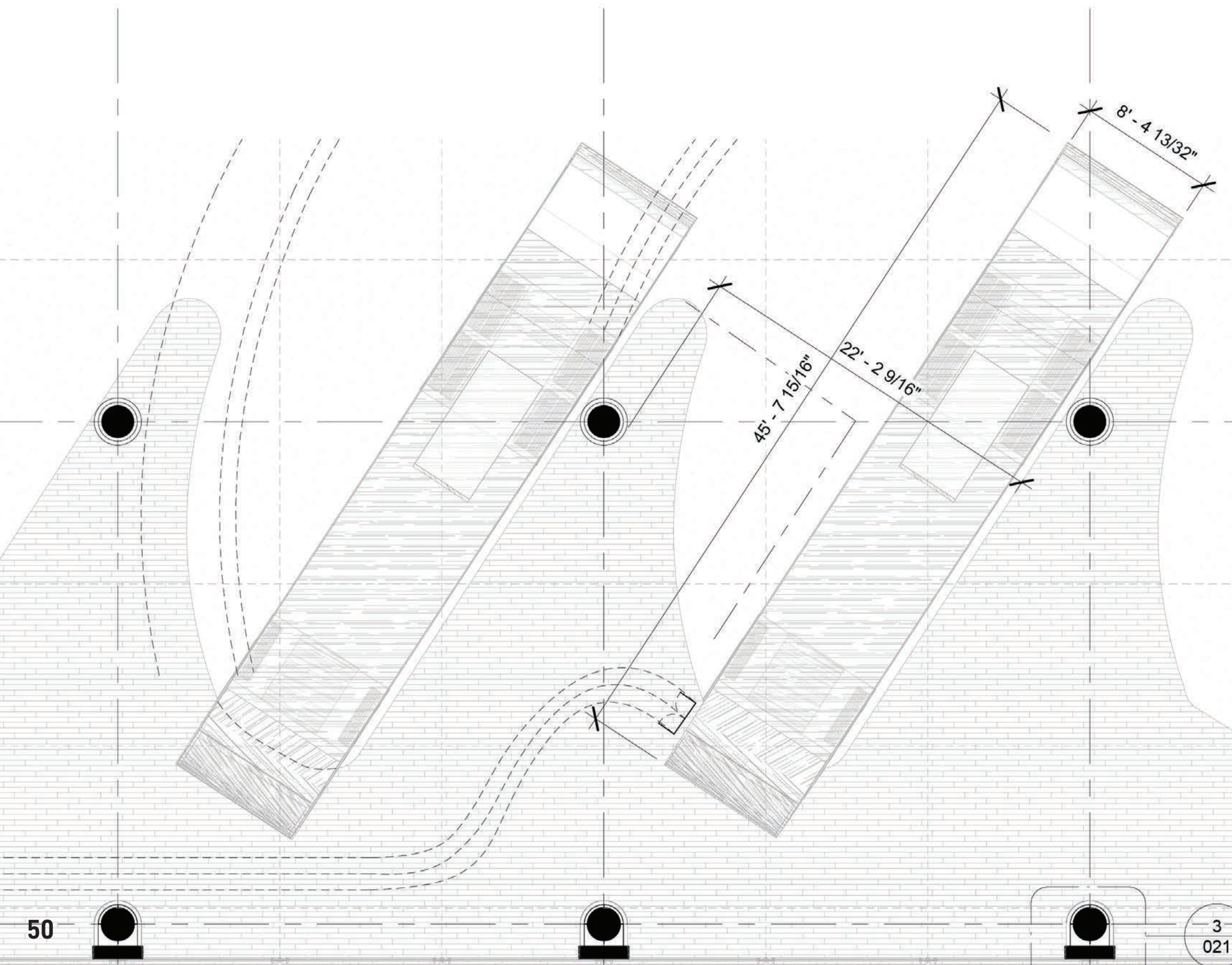


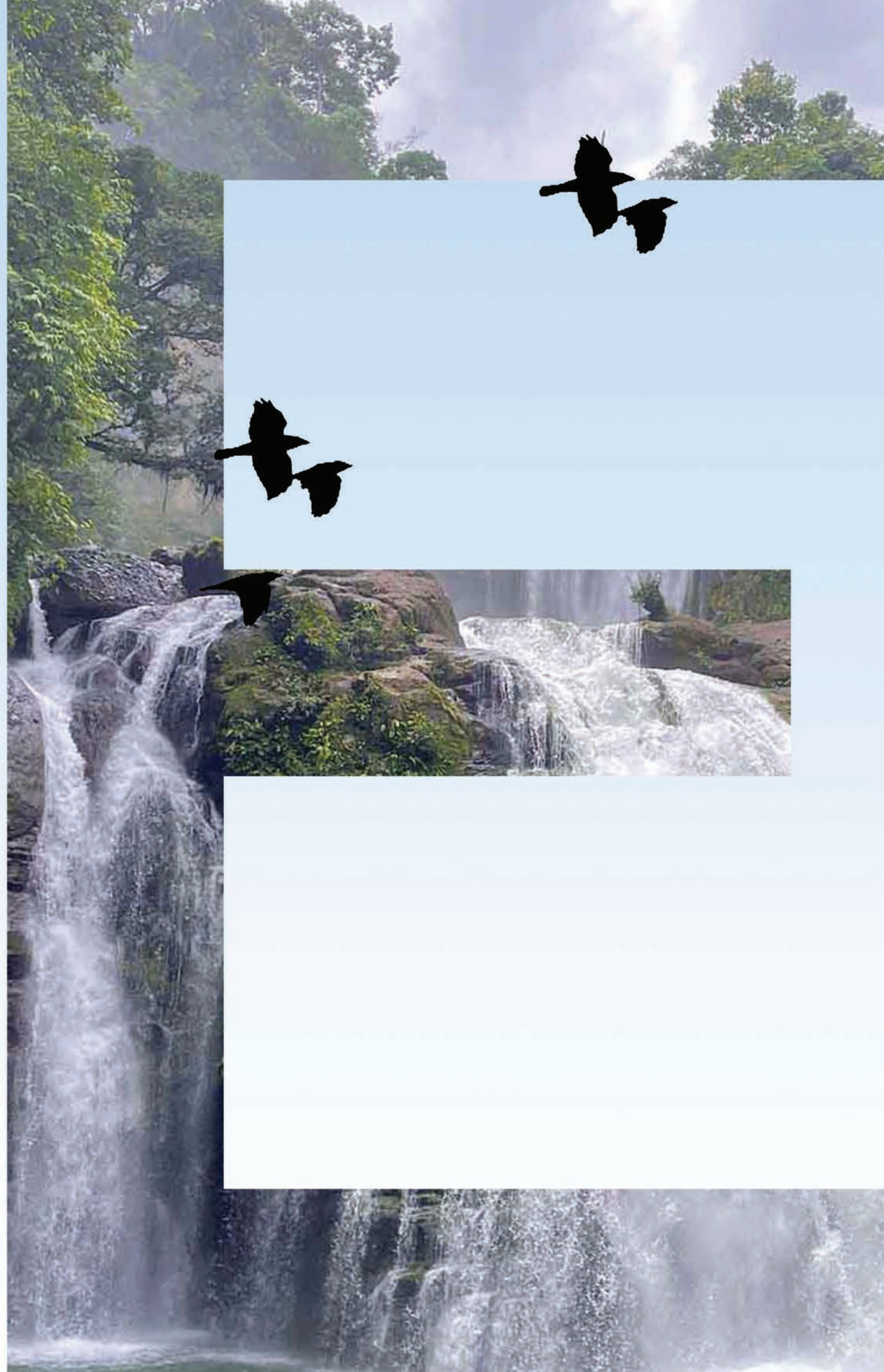
MARKET/FOODHALL SECTIONS



MARKET/FOODHALL PLAN







05

VISUALS







## REFERENCES

### IMAGES

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