Thesis Dossier
ARB301 Project Thesis
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The Berlage Center for
Advanced Studies in Architecture
and Urban Design

Crafted with Care

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Crafted with Care imagines a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate under a premium brand to reflect on the preservation of craft production, sited within a heritage monument in the rural area of Switzerland, that accentuates the escapism from the westernized over-processed chocolate and its associated contemporary factories by following the bean-to-bar trade model to develop an architectural aesthetic relevant to the nascent industry of craft.

With a decline in discretionary spending, the demand for craft production will surge, sustained by the new wave of conscious consumers willing to invest in artisanal luxuries that reflect superior quality, traceability, and uniqueness in the knowledge of food processing; offsetting these products against the standardized intent of homogeneity and repeatability.

The Netherlands is internationally recognized as one of the world's largest food exporters due to its excellent connectivity throughout Europe and is home to world-class research institutions. It is—in effect—feeding the world. Driven by the anticipation for a renewable future, the country's journey towards optimization, sustainability, and health requires a paradigm shift in the food industry.

As the COVID-19 pandemic has reshaped the retail market in unprecedented ways, consumers shifted around lifestyle and value. This demanded new spatial configurations of the supermarket, transitioning between a pre-COVID-19 and a post-COVID-19 society. Resting within its etymology—where "super" alludes to supremacy concerning size, quality, and quantity, while "market" refers to trading in goods of value—the supermarket, selling food and household goods, first originated in the 19th century with the novel concept of a self-serve store. As a platform of recurring successful innovations, their profits increased during the COVID-19 pandemic, underscoring that supermarkets are now an essential service - representing a new civic presence.

The collective project on the spatial implications of the food industry in the Netherlands and beyond seeks to redesign the supermarket—currently occupying the most densely used square meters in a city—to implement developments within the meticulously designed sales floor via craft, reshoring, protectionism, automation, and extinction—for an immersive consumer experience—and the concealed back of house through the notions of tastemaking, scarcity, sensorialism, inclusivity, and trade—associated with the product's supply chain—ensuring a frictionless future for shoppers.

These ten contributions explore the architectural and urban design possibilities within the future of the food industry across sites within the Blue Banana—the European Megalopolis—transporting products and radiating back to the Albert Heijn shelves in Delft. They collectively form a project for the design of a future supermarket on the current site of the Albert Heijn XL on Martinus Nijhofflaan in Delft. These contributions provide modifications in the supply chain, product distribution, and store planning, in relation to the products, their associated building types, and their extensive territories. The collective design of this Albert Heijn XL will raise issues of scenography, product flow, human interaction, digital technology, and consumer experience, in an attempt to address the future of the food industry.

At a time when the world is pulling through the COVID-19 pandemic, faced anew with the impending environmental crisis, the collective project raises questions about the ever-changing relation of architecture and the food industry in the Netherlands and beyond.

Figure 1
The Croix-Rousse neighborhood in Lyon, France—also nicknamed the "hill that works"—emerged as the center of the textile industry in the 19th century with its buildings specifically designed for the silk looms, with very high ceilings and large windows. (no copyright)

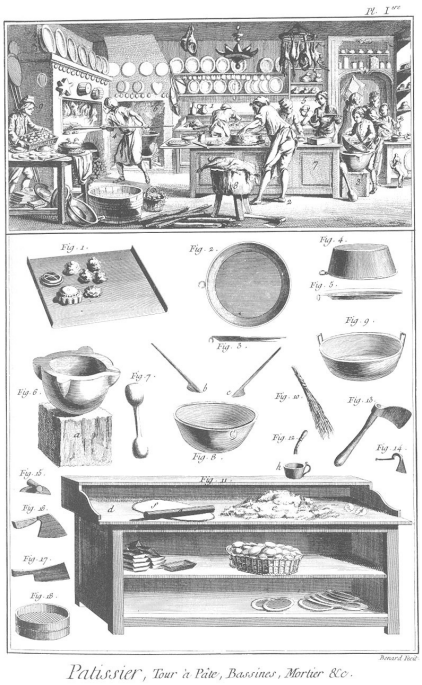

Figure 2
"Patissier," Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, vol. 8, Paris, 1765
Plate of the Pastrymaker and his tools

Figure 3
Philip Webb and William Morris, "Red house," Bexleyheath, England, 1859 (© Ethan Doyle White)
A significant country home of the Arts and Crafts Movement expressing the vernacular through traditional English building methods

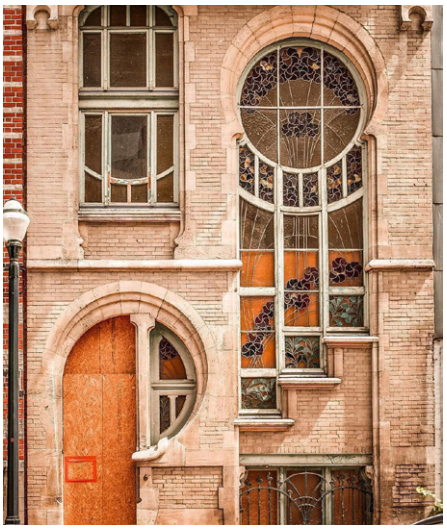

Figure 4
Ernest Delune, "Glassmaker's House," Brussels, Belgium, 1904 (© Reddit)
The monumental Art Nouveau facade with a door and a large stained glass window designed in collaboration with a Viennese craftsman

Figure 5
Carlo Scarpa, "Olivetti Showroom," Venice, Italy, 1958 (© Flickr)
Detail of the staircase and the mosaic floor designed in close collaboration with artisans to reflect Veneto craftsmanship with hand-finished quality in materials and textures

Figure 6
Hunnarshala Foundation, "Hunnarshala Campus," Bhuj, India, 2008 (©Andreas Deffner)
Photograph of the Foundation's campus built by several master artisans and architects exploring sustainability through the use of earth, stone and wood

Figure 7
DUS Architects, "Mobile Europe Building," Amsterdam, The Netherlands, 2015 (©Ossip van Duivenbode)

Figure 8
Plan drawing of a 17th century English Chocolate House at St. James' Street in London.

Figure 9
Vintage poster from the 19th century of Ciocco-lato Moriondo e Gariglio highlighting the craft of chocolate production

Any activity involving a special skill is a manifestation of craft. The word has a broad definition across many disciplines, associated with everything from the production of objects and artifacts to shaping buildings and cities. The mason, the carpenter, the plasterer, the blacksmith, the weaver, the glassmaker, and other skilled men and women—each artisan a master of their respective material—have remained an integral part of buildings, thus becoming an indispensable part of architecture and design. Artisans craft objects by hand, giving every finished product distinctive and unique features. Craft production and craft in architecture intersect in the building type of a workshop for the small- to mid-scale production of artisanal products defining both the quality and the action of craft.

According to McKinsey reports, COVID-19 has changed consumer behavior with a decline in discretionary spending, giving rise to conscious consumers preferring to invest in quality and transparency.1 Artisanal sales of craft products made in small batches therefore soared as they reflect a skilled craft, care, and are often from local sources signifying superior quality. As a counterpoint to mass-produced goods, the future of this mid-scale production of affordable luxuries—reflecting superior quality and uniqueness—will further modify consumption patterns of artisanal products for the new wave of conscious craft consumers emerging in a post-pandemic society. Thus, iterations of the building type facilitating craft production remain a recurring notion for the convergence of craft in architecture.

The rhythm and intensity of craft work has shaped the architecture of workspaces alongside local styles of construction, from mid-sixteenth century timber-framed workshops in Suffolk, UK to eighteenth-century houses incorporating large ground floor workspaces with street frontages in Frome, UK. Where urban artisans operated in attics or garden workshops, distinctive houses with large windows provided ample light for looms built in Lyon, France (see fig. 1), while the finer dye houses had specially designed ponds and purpose-built row houses that originated with the putting-out system .2

From domestic factories to industrial households, workshops—traditionally designed in close relation to the work type—have now evolved into monotonous mass-produced designs losing a sense of identity. Craft in place-making tends to deepen the purpose of constructed environments through contextual connections, creating a sense of identity and culture. It thus develops a relationship between the micro—the small-scale manufacturing process—and its position in the macro—the architectural construction—in turn translating the uniqueness of the manufactured product into the design of the workspace. According to US architect Will Winkelman, it is “the integration of this added layer of ‘craft’—of touch, texture, art, and detail—that adds so much to how a building lives and can be experienced.”3

Craft in architecture adds a creative meaning to the purpose of a building and is deeply rooted in the basic forms of architecture itself. In The Four Elements of Architecture, Gottfried Semper attempts to redefine the primitive hut through assemblies of architecture where each element can be traced back to the traditional crafts—the hearth originating from metallurgy and ceramics, the roof from the craftwork of carpentry, enclosure through weaving, and mound-making through earthworks.4

Craft in architecture became a vital medium in the Middle Ages (see fig. 2) with the emergence of trade and craft guilds where the relationship between craftspeople and builders dominated much of human history, eventually encountering a downfall with the more pragmatic approaches that surfaced with the industrial era. Gaining major revival in the nineteenth and twentieth centuries, the Arts and Crafts Movement and Art Nouveau—originating as a reaction against factory production—shaped modern craft. With the advent of modernism, the Arts and Crafts Movement emphasized structural authenticity with exposed beams and extended rafters, simple open floor plans, and primitive vernacular forms to revive the relationship of art and design with craftspeople. This was especially the case for local handmade materials that contextualized a building within its environment and broader setting (see fig. 3). Art Nouveau—also known as the modern style—abandoned academic art and historicism to find new ways to champion crafts in the modern age. It brought art and design into everyday life, inspired by natural forms through the use of terracotta, colorful glazed tiles and mosaic patterns, along with modern materials like iron, glass, ceramics, and later concrete, creating unusual and asymmetrical forms (see fig. 4).5 Craft has proved to be ever-changing and expanding, thus modifying the scope of human creativity.

The dialogue between craft and architecture has produced different configurations from twentieth-century modernism to the current digital era, altering the original nature of craft from the traditional use of artisans’ skills to designers creating new expressions in traditional media. Through close collaborations with craftspeople, Carlo Scarpa’s Olivetti showroom in Venice is a prodigy of a contemporary design reflecting the Byzantine craft. The architect and his artisans experimented and engineered new techniques through unorthodox combinations of materials and methods, resulting in square sections of hand-cut colored glass forming mosaic patterns on the ground floor (see fig. 5). Precise brass details support the cascading marble staircase while wooden lattices screen the oval and square windows, and jewel-like wooden and metal armatures display typewriters.6 This close-knit collaboration also forms the basis of the Hunnarshala Foundation—an Indian NGO founded by Neelkanth Chaya—that interacts between modern building science and traditional knowledge through an association between architects and craftspeople. The Hunnarshala campus (see fig. 6) forms a paradigm for sustainability with earth technologies and roofing techniques extracted from Indian vernacular architecture, including rammed earth, waste wood, rice husks, and stone.7

The production of designs progressed from individual “crafting” into mass-produced “manufacturing” and eventually mathematical “computing.” Craft and machines, previously thought to be mutually exclusive, have rekindled their relationship in the digital era with robotic fabrication and 3D printing creating meticulously configured and digitally crafted artifacts from modulated facades to experimental installations (see fig. 7). However, craft in architecture encompasses multiple actors as craftspeople—from the designer/

Figure 10
Entrance of the historical Neuhaus chocolate shop founded in 1857 at Galeries St-Hubert in Brussels, Belgium (no copyright)

Figure 13
Aerial view of Huimin County in east China Shandong Province with 20 Taobao Villages with at least 50 households each, operating their own shops and significantly increasing the development of "rural e-commerce" in China. (© VCG Photo)

Figure 11
Percier and Fontaine, "Debauve & Gallais," Paris, 1819. (© My French Country Home)
The interior of the Debauve & Gallais chocolaterie in Paris with elegant cut-out windows and semi-circle countertops made from gilded glass, now classified as a historical monument

Figure 12
Mathieu Lehanneur, " Maison Cailler Flagship Store," Broc, Switzerland, 2012 (© Vincent Duault)
Chocolate flagship store designed in the shape of a half-ellipsoid shell with a metaphorical "bite" at its entrance and local wooden Swiss tiles

architect to the maker/construction worker—with collaborative participation and transference of knowledge, now challenged by the digital era. With digital craft, the designer's tools are subjected to technological advancements guided by software, whereas the maker becomes a slave of mathematical formulas, thus making the human touch obsolete. The value of craft lies within the implicit connection between the maker and the originality of their creation.8 As human connections in craft decelerate in accordance with mass culture, the search for authentic hand-made products accelerates with a potential for humanism to reassert itself, demanding a new iteration for the fusion between old and new, between traditional and contemporary, to give relevance to craft in today's architectural typologies.

A building type where architecture and craft production traditionally converge is the chocolaterie , an industry that evolved with the economic, social, and technological transitions of chocolate production. Now, there are craft chocolate-makers committed to the tenets of quality, traceability, and variation set against commercial standardization. Early civilizations produced liquid chocolate from cocoa beans using tools like a matete—a crude pestle and mortar— a grinder, and a conche in the rural areas of cocoa plantations before transporting them to urban communities for trade. By the end of the seventeenth century, English chocolate houses had become an early typology for purpose-built chocolateries, often designed in the highly decorative Baroque style with concealed kitchens and theatrical interiors for bourgeois gatherings. These spaces symbolized the importance of chocolate in the social sphere (see fig. 8) and, as a result, they became an integral part of urbanized cities.

With the dawn of industrialization and innovations in chocolate processing, mass-produced chocolate bars brought in large-scale industrial chocolate factories and laboratories (see fig. 9), in turn expanding the chocolate market into a global network. However, small-scale artisanal chocolate-makers with a shop in the front and a kitchen at the back remained recurrent with the increasing knowledge of the art of chocolate learned through specialist chocolate schools teaching the historic and modern techniques of chocolate production. Traditional family-owned chocolate shops were designed in Art Nouveau, Art Deco, Classical, or Renaissance styles (see figs. 10 and 11), while contemporary boutiques were designed for luxury chocolatiers with a glass and steel post-modern, deconstructivist style (see fig. 12). Today, chocolateries for small-batch, "bean-to-bar" craft chocolate-makers—embedded within a craft workshop culture—challenge the norm of Westernized, over-processed chocolate and its associated industrial typologies, developing an architectural aesthetic relevant to the nascent industry of craft.

The perpetual nature of making and the shift towards mass production alters the definition of craft and further accentuates its demand in the modern age, especially in a post-pandemic society. With conscious consumers gaining more knowledge about production and provenance, consumption patterns favouring one-off artisanal products will surge. The responsibility of architectural representation is to legibly and uniquely connect the design intention to its function—even more critical now in a time of increased automation when quality, originality, and human touch seem more remote than ever.

The objective of craft in architecture is to adapt to the handmade instead of capitalist machinery and technology, additionally contributing to a country's rich heritage by supporting local artisans (see fig. 13).9 The projection of craft in architecture on both buildings and the urban fabric seeks to develop a unique identity and character in response to its context, aiming to make the components of architecture like space, volume, and form more tactile through precision crafts—in material, texture, and detail. It is, therefore, the presence of a meaningful craft context that creates coherence between the production and the space, in turn giving relevance to the type of work through its architectural design, elevating it to the status of craft.

Endnotes:

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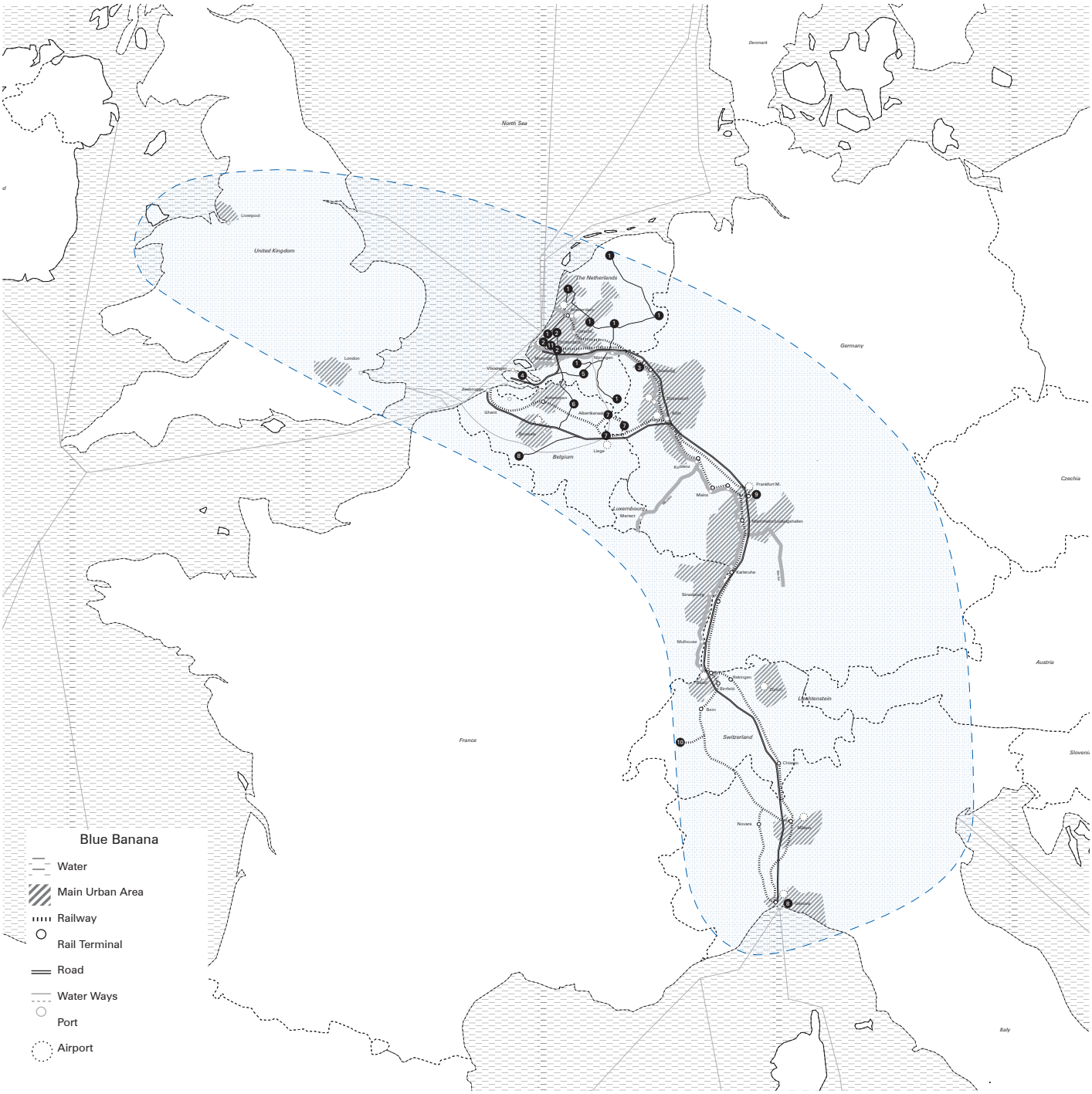
2. Sajal Kohli, Björn Timelin, Victor Fabius, and Sofia Moulvad Veranen. "How COVID-19 Is Changing Consumer Behaviour-Now and Forever," McKinsey & Company (June 2020).
3. Paul S. Barnwell, Marilyn Palmer and Malcolm Airs, The vernacular workshop: from craft to industry, 1400-1900 (Walmgate: Council for British Archaeology, 2004), 2-16.
4. Rebecca Falzano, "Craft in Architecture," Maine Home + Design, AIA DESIGN THEORY (August 2012).
5. Gottfried Semper, The Four Elements of Architecture and Other Writings. Trans. Harry F. Mallgrave and Wolfgang Herrmann (Cambridge, 1989).
6. Jhori, "Arts and Crafts", A DICTIONARY OF MODERN ARCHITECTURE (University of Chicago, November 2015).
7. Jackie Craven, "Art Nouveau: A Turn of the Century Style against the Machine," ThoughtCo (November, 2019).
8. Mariah Nielson, "Carlo Scarpa: THE OLIVETTI SHOWROOM," Maharam.
9. Soumya Mushriff, Ashmili Jadhav, Bhagyashri Sisode and Dr. Krupesh. A. Chauhan, "Hunnarshala: Learning from the Past to Build Future," GRD Journals (February, 2019).
10. Amy Frearson, "Peter Zumthor: Venice Biennale Heralds Return of HANDMADE ARCHITECTURE," Dezeen (May 26, 2016).
11. Guy Horton, "The Indicator: Craft in the Digital Age," ArchDaily (February 18, 2013).
12. Sirdeep Singh, The Ever-Changing Role of Craft in Architecture (University of Sheffield, June 2016).

The Blue Banana—a term coined in 1989 by a group of French geographers—is a name used to describe a European corridor of almost continuous urbanization. Home to 110 million people, the corridor contains metropolitan areas, industrial sites, and major economic centers, stretching all the way from Manchester to Milan, connecting the Irish Sea to the Mediterranean.

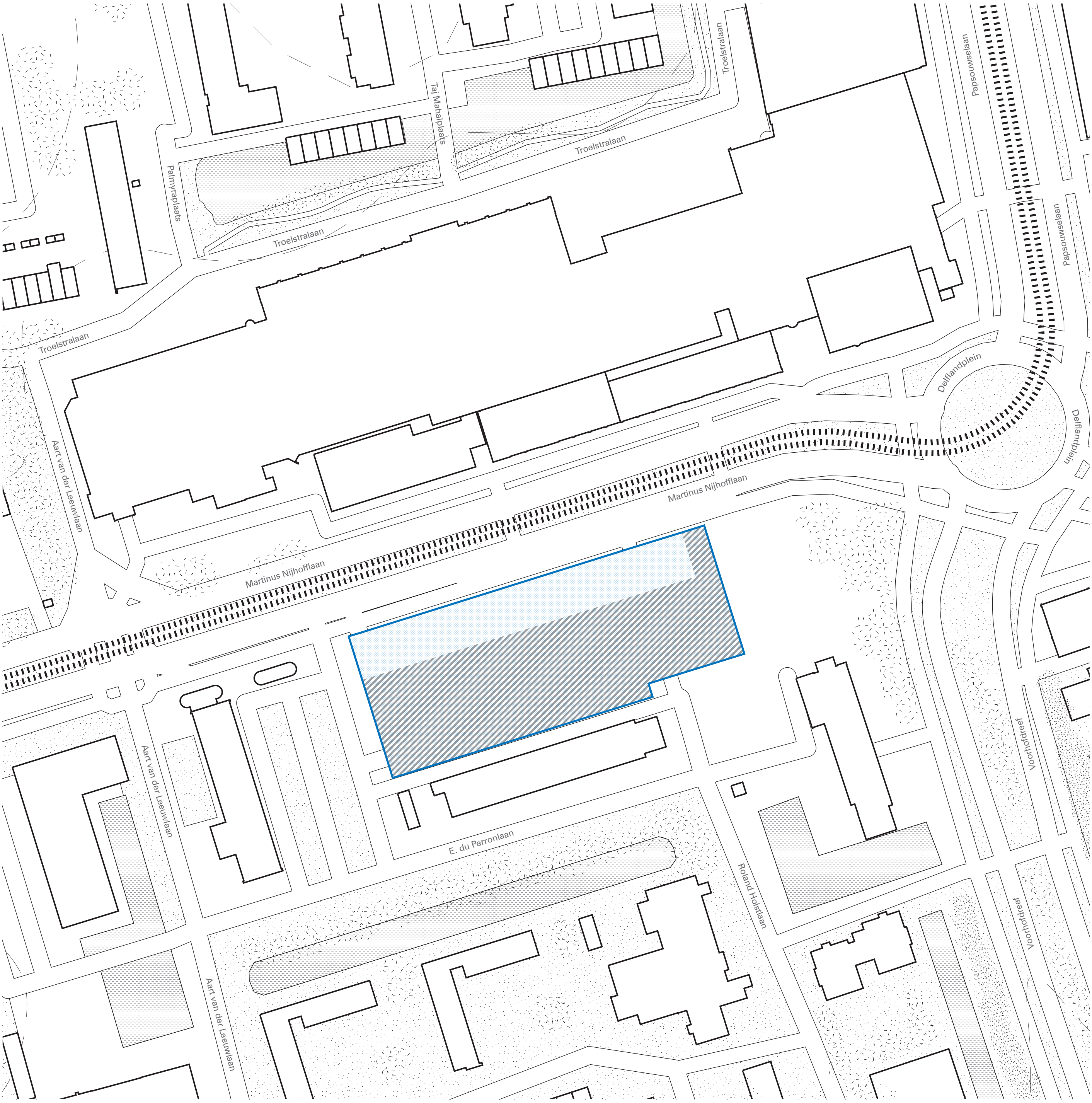
Ten contributions speculate upon the spatial implications of the food industry across the Blue Banana—the European Megalopolis—responding to the specificity of the sites, while, at the same time, providing modifications throughout the supply chain in relation to their respective products that radiate back to the supermarket shelves in Delft.



1 Lab Oratory
2 Whole Milk
3 Pink is Not a Color
4 The Tastemaking Estate
5 Aardket
6 Sensatorium
7 Domus Leo
8 Food Utility Network
9 Fresh Forword
10 Crafted with Care
11 Albert

Albert Heijn XL

The collective project for the design of a future supermarket is located on the current site of the Albert Heijn XL on Martinus Nijhofflaan in Delft. Amidst a densifying residential area, with a variety of stores on the ground floor and social housing above, multicultural demography, proximity to the parking garage, and excellent connectivity to road infrastructure and public transport, the location of the Albert Heijn XL provides the opportunity to reciprocate with its adjacent and peripheral territory.


Troelstralaan
Taj Mahalplaats
Papsouwselaan
Palmyraplaats
Troelstralaan
Troelstralaan
Troelstralaan
Papsouwselaan
Delflandplein
Delflandplein
Aart van der Leeuwlaan
Martinus Nijhofflaan
Martinus Nijhofflaan
Aart van der Leeuwlaan
E. du Perronlaan
Roland Holstlaan
Voorhofdreef
Voorhofdreef
Aart van der Leeuwlaan

0 10 50 m

The collective research—focused on the food industry in the Netherlands and beyond—commenced with the typological analysis of a supermarket. Analysing a local Albert Heijn, it examined the relation between products, their associated building types, and territories, from raw materials to supermarket shelves.

While a supermarket operates within a highly efficient tailored space, how do design decisions vary between intervening in an existing canal house and a purpose-built suburban supermarket?

Transitioning from the mimicry of local markets to promotions on digital screens, what role does scenography play in the design of a supermarket's storefront?

How does the prediction of supply and demand through data-driven decision-making and automation affect the organization, product distribution, and design within supermarkets and the ever-changing future of retail?

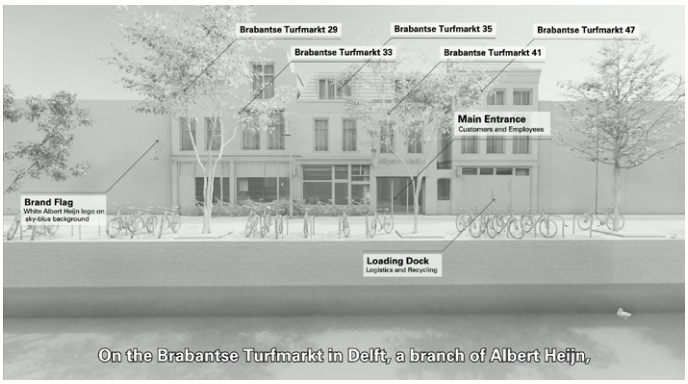
How does the incorporation of a supermarket reciprocate with its adjacent and peripheral demography, real estate, and territory and in turn affect land appreciation?

How does the design of the layout of the concealed back of house relate to the meticulously designed sales floor?

With a constant flow of products, what spatial consequences are posed by the standardized packaging sizes, product distribution, and store planning on the supply chain of a supermarket?

With ever-increasing reliance on e-commerce and perpetually improving digital experiences, what will the future hold for supermarkets in the Netherlands?

The annotated analysis of Albert Heijn reveals the dichotomy within the functioning of a supermarket, between the meticulously designed sales floor for an immersive consumer experience and the concealed back of house associated with the product's supply chain.



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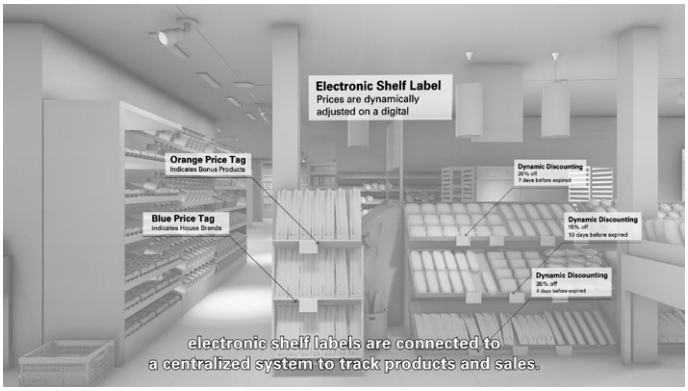

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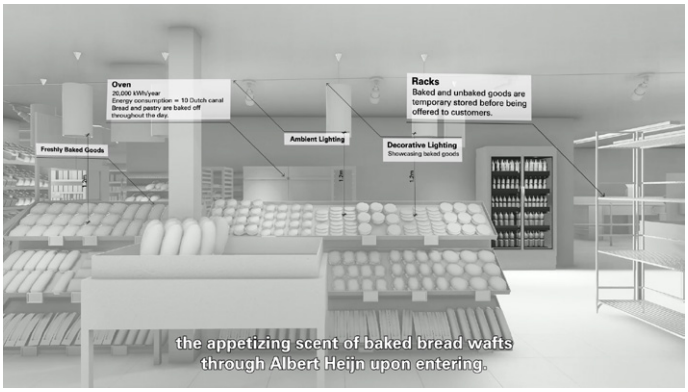

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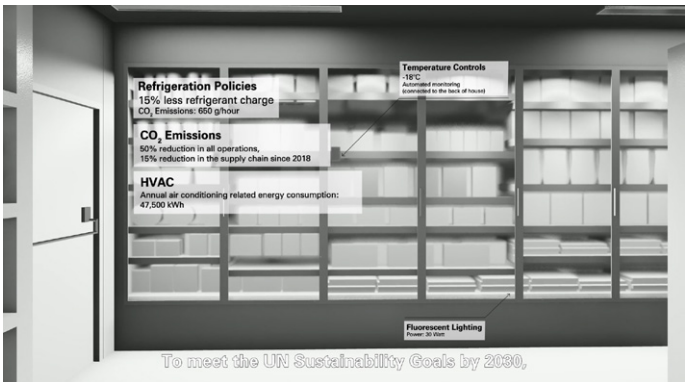
Scenes from annotated analysis of
Albert Heijn



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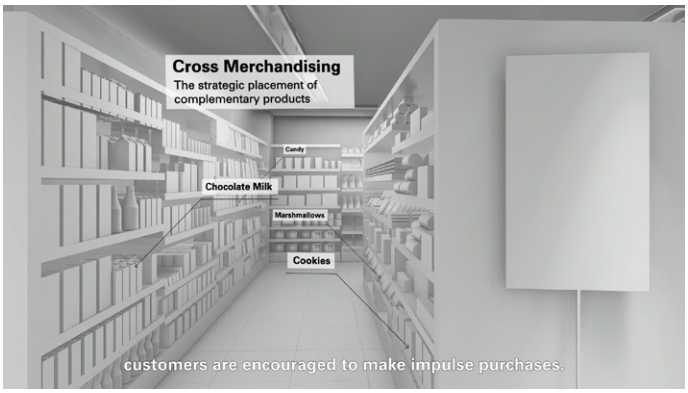

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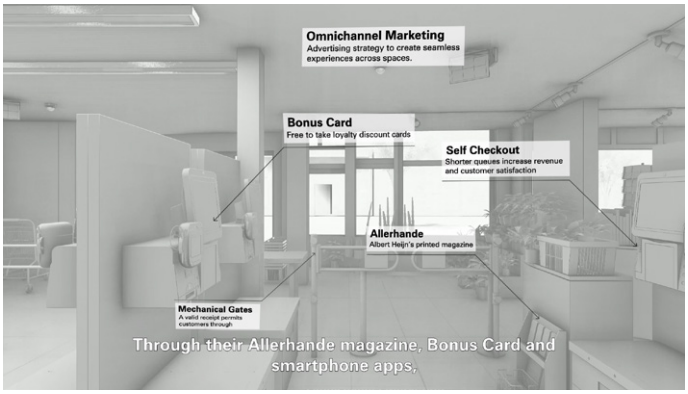
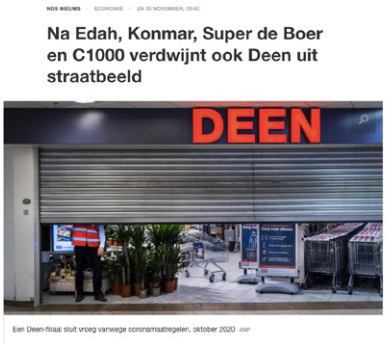


11

1 Facade
2 Fresh Produce
3 Fresh Produce
4 Bakery
5 Bakery
6 Condiments and Spreads
7 Refrigerated Section
8 Back of House
9 Confections
10 Loading Dock
11 Point of Sale

The Supermarket Reconstructed.

On craft- The gondola—or end cap—aisle offers an escape from the design of standardized aisles with a display-within-a-display for craft chocolates.



NOS NIEUWS · ECONOMIE · ZA 20 NOVEMBER, 09:42

Na Edah, Konmar, Super de Boer en C1000 verdwijnt ook Deen uit straatbeeld

Een Deen-filiaal sluit vroeg vanwege coronamaatregelen, oktober 2020 ANP

deVolkskrant

NEWS

Packaging-free webshop Pieter Pot raises 9 million

The packaging-free online supermarket Pieter Pot has raised 9 million euros in investments. With this, the Rotterdam-based company wants to expand to other countries in Western Europe in the coming years.

Editorial December 7, 2021 , 05:00

NOS Nieuws Sport Uitzendingen

NOS NIEUWS · ECONOMIE · VR 24 SEPTEMBER, 09:20 · AANGEPAST VR 24 SEPTEMBER, 14:27

Natuurbeschermers zeggen sloten AH-filialen Amsterdam te hebben dichtgelijmd

DE GROENE AMSTERDAMMER

Working conditions in distribution centers

'It feels like living in captivity'

The situation on the shop floor in the distribution centers of large supermarkets is still very bad. But now migrant workers can no longer take it, they are revolting. "I really hope this can change something."

Sylvana van den Braak and Simone Peek
25 August 2021 – appeared in no. 34

NOS NEWS · ECONOMY · MON JANUARY 3, 6:49 PM

Flash delivery the future? At least Jumbo doesn't want to miss the boat

A Gorillas Flash Deliveryman AFP

Menu nrc

Listen to 10:53

Working in a distribution center: 'I feel like a monkey doing the same trick over and over'

Working in distribution centers The distribution centers in the Netherlands are largely dependent for their staff on employment agencies, which provide flexible and cheap workers from Eastern European countries. What is it like for them to work in halls like this? "I don't know how much longer I can last."

Martin Kuiper & Mark Middle · January 7, 2022 · Reading time 6 minutes

Het Parool

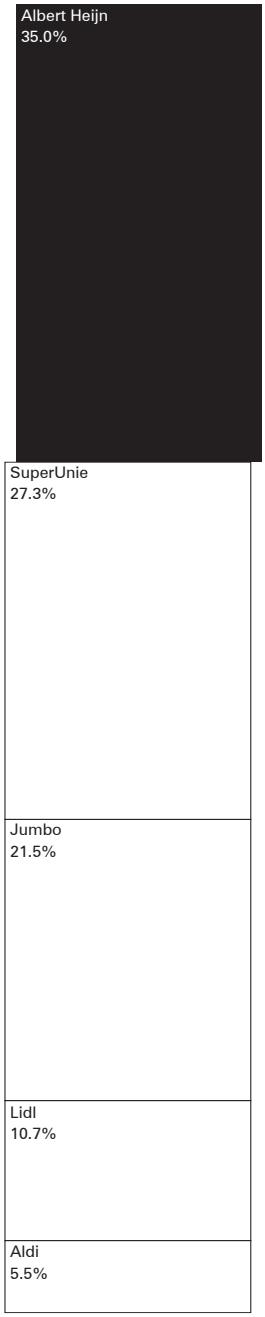
Voorpagina | Amsterdam | Nederland | Wereld | Kunst & Media

Albert Heijn ziet af van bouw in de Lutkemeerpolder

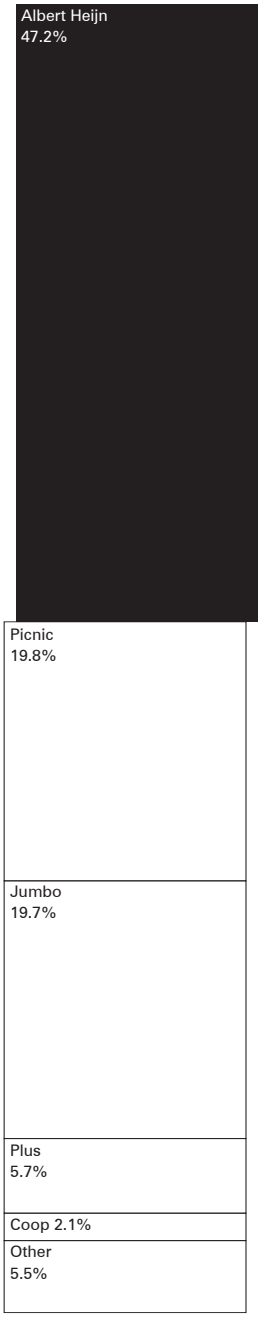
Albert Heijn ziet af van de bouw van een distributiecentrum in de Lutkemeerpolder. Tegen de plannen wordt al maanden fel geprotesteerd door activisten, waarbij zelfs verschillende AH-supermarkten in Amsterdam werden dichtgelijmd.

Bart van Zoelen 28 november 2021, 13:50

Recent headlines describe the supermarket and its distribution network in the Netherlands as a highly competitive sector, with questionable working conditions, while unregulated competitors are set out to disrupt the market.

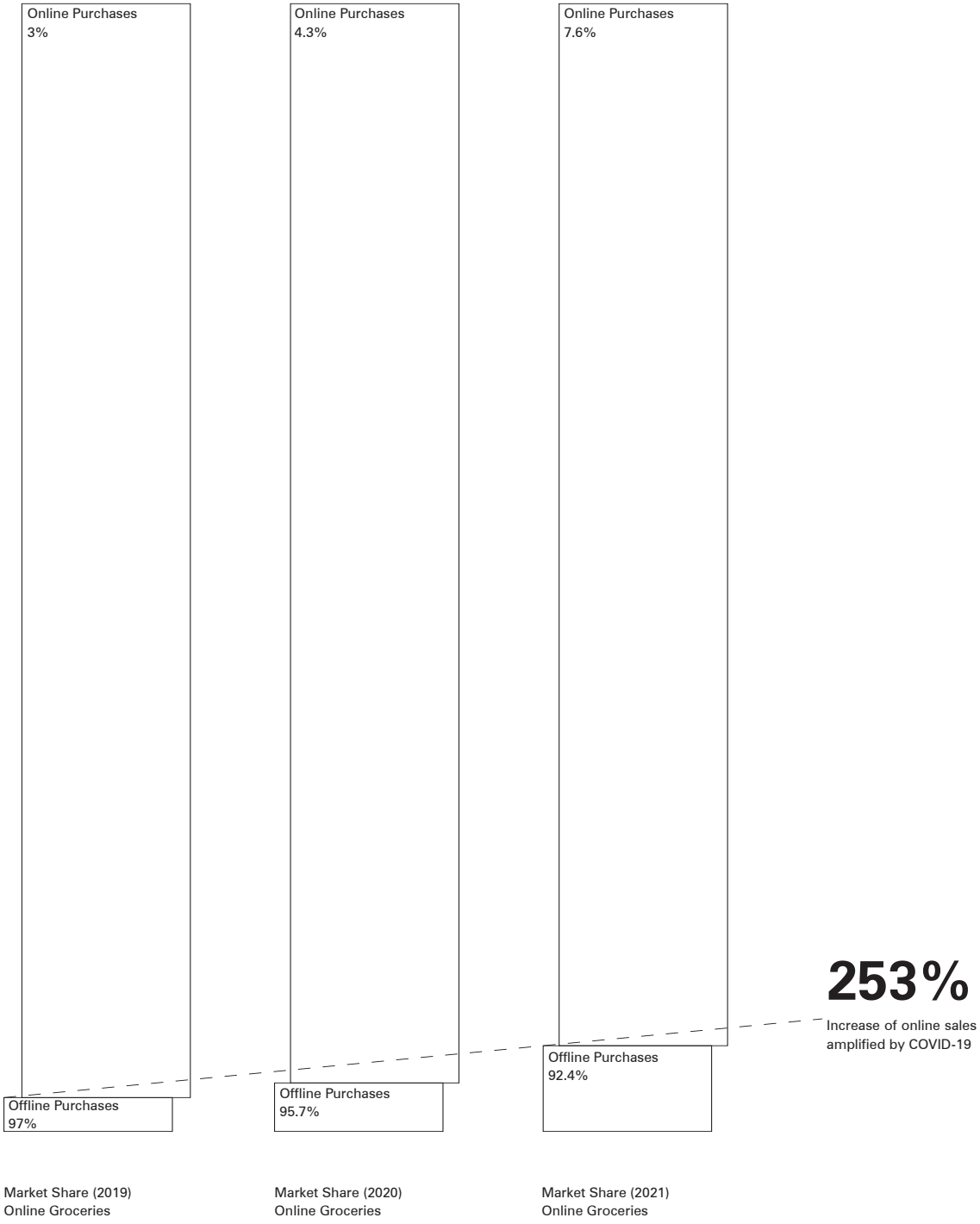


Market Share (2020)
Supermarkets



Market Share (2020)
Online Groceries

The “supermarket war” in the Netherlands, has led to a consolidation of companies and a seemingly oligopolized landscape of grocers, in which Albert Heijn has the greatest market share in both physical and digital stores.



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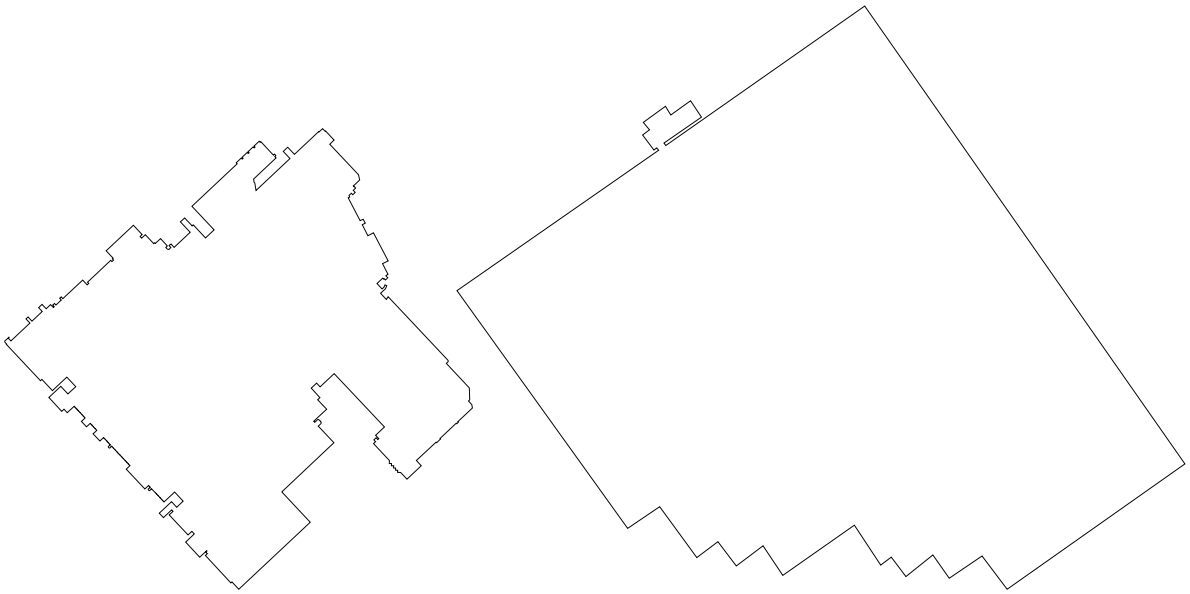
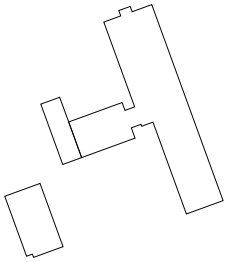
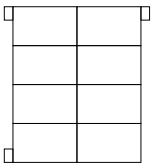


Royal Flora Holland
Aalsmeer
433,000 m²

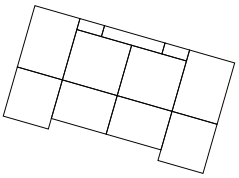
Royal Pride Holland BV
Wieringermeer
1,010,000 m²



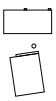
Ahold-Delhaize DC
Delfgauw
62,750 m²



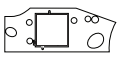
Coolblue DC
Tilburg
90,000 m²



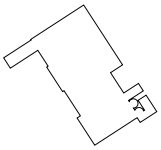
Zalando
Bleijswijk
140,000 m²



Amazon
Heerlen
9,000 m²

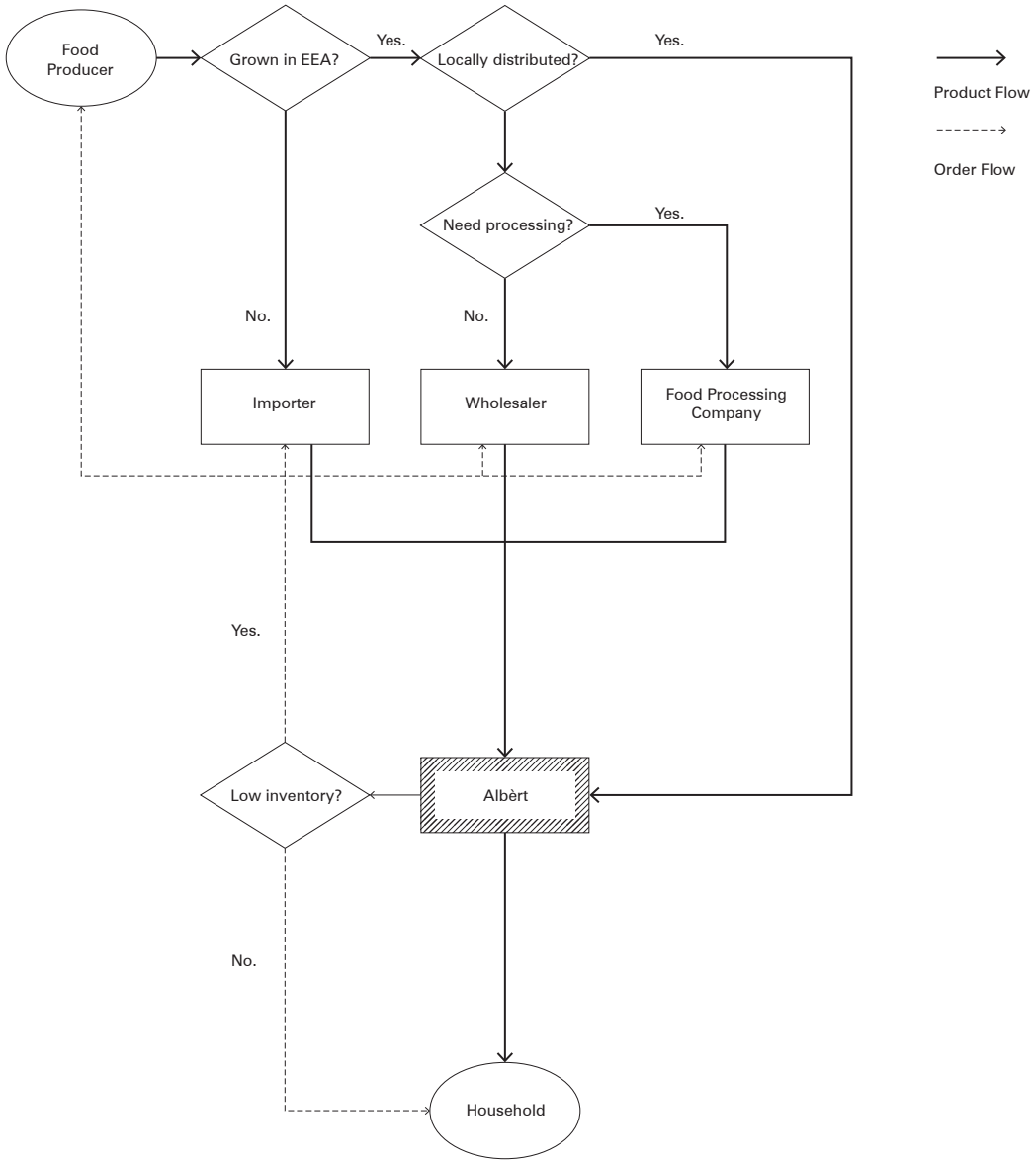


Albèrt
Delft
18,600 m²



IKEA
Delft
40,000 m²

The concealed back of house extends to the peripheries of the Dutch urban areas, taking upon a variety of spatial dimensions, accommodating different quantities of workers, and serving a range of regions.



Producers and suppliers respond to complex market dynamics through just-in-time production, relying on automation, logistics, and infrastructure within the Blue Banana, allowing supermarkets to optimize their stocking to shopper's demand.

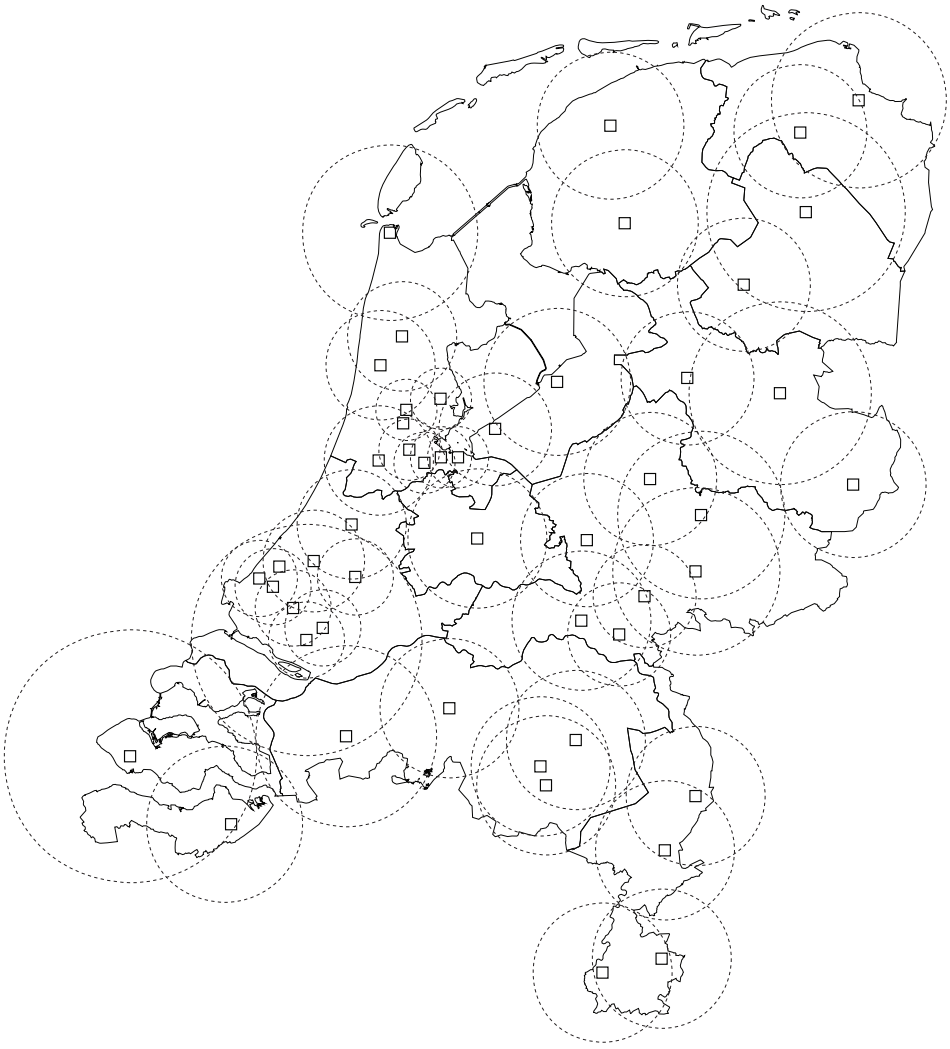
Employees keep track of just-in-time arrivals of products, while their prices are informed by market conditions and proximity.

2022

In an effort to break open the centralized and concealed distribution network of the supermarket, the role of the distribution centers is shifted to large-scale supermarkets such as Albert Heijn XL—now Albèrt—with a floor area of at least two thousand square meters, ready to serve a larger region through e-commerce.

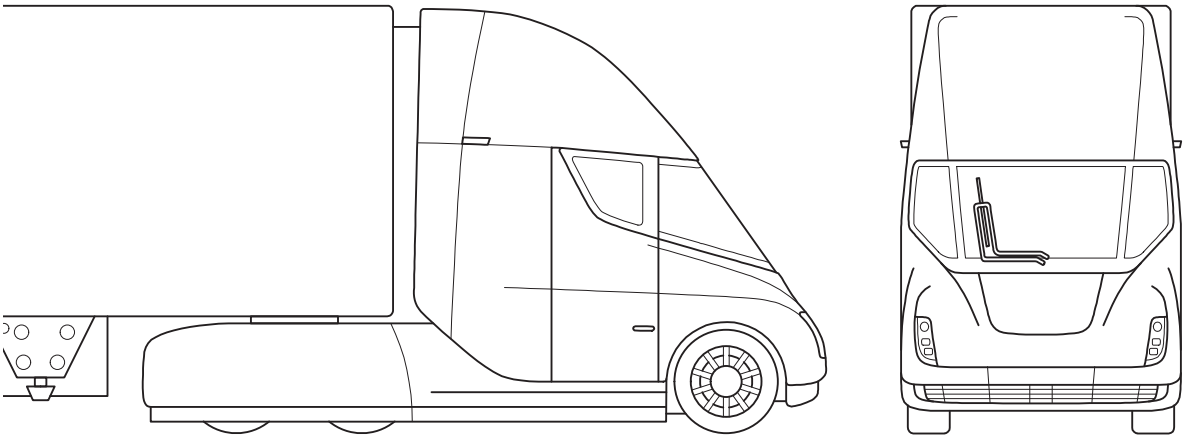
2030

Albèrt

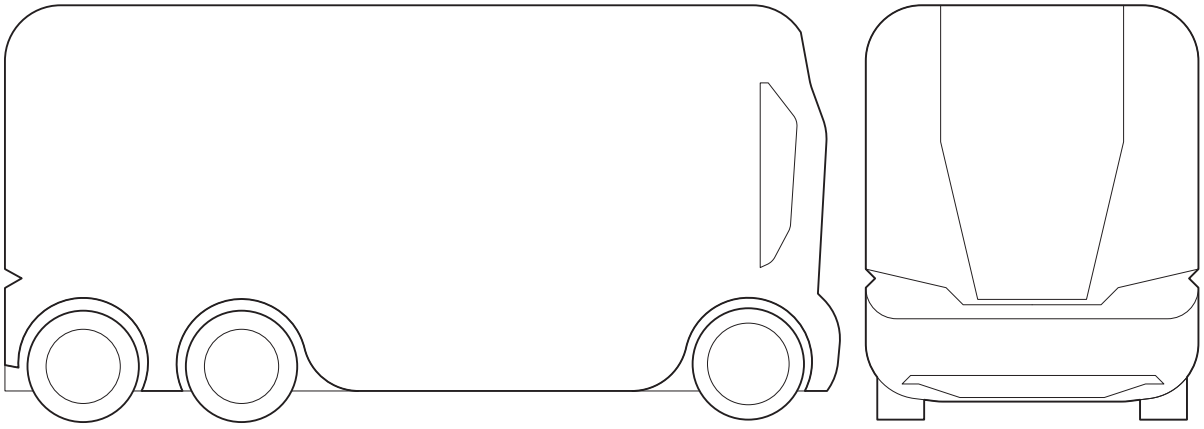


The number of supermarkets and their siting are regulated through municipal planning, leading to an even distribution over Delft's urban expansion areas. Delft's historic center, however, exhibits a high density of supermarkets and speed delivery hubs, responding to valuable shoppers in their proximity. This informs the future distribution of Albèrt and smaller-footprint Albèrtjes.

The essential products in these multiple Albèrtje stores within each city are fed by the distribution centers integrated within each Albèrt, while also having products directly sourced from local suppliers within the city, with the choice of having fine quality products and essential goods at the same place.



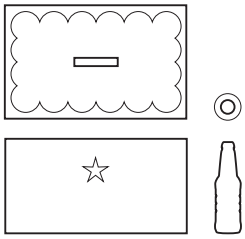
Freight-truck



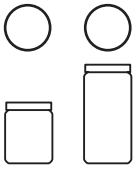
Albèrt truck

By distributing the supply chain from centralized warehouses to large supermarkets in the vicinity, electric semi-trucks with shorter roundtrips take care of transport between producers, supermarkets, and homes.

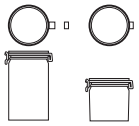
PET Bottle 1.5 l



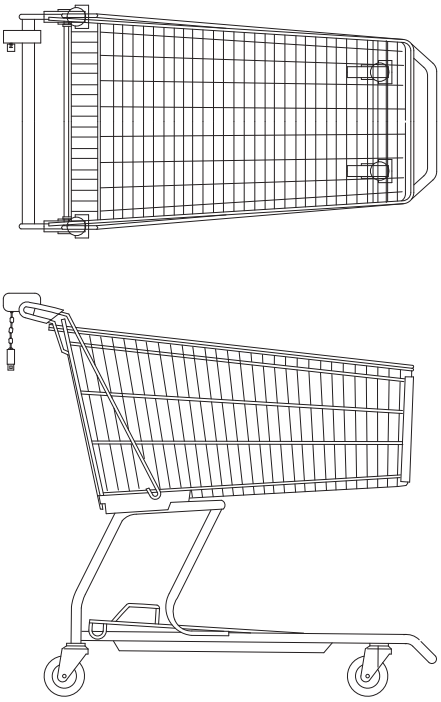
Crate and Glass Bottle, 33 cl



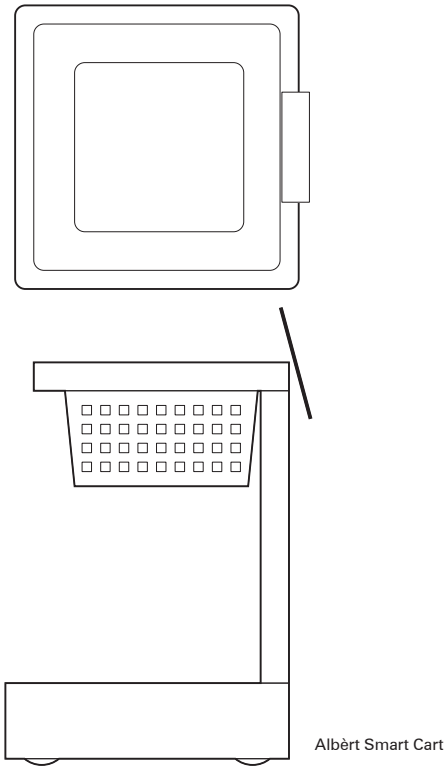
Albèrt Smart Cart



Pieter Pot Reusable Glass Jars, various volumes

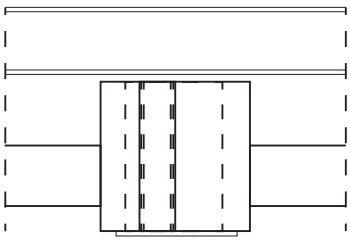


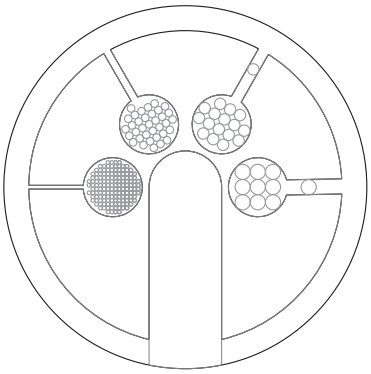
Supermarket shopping cart and shopping basket

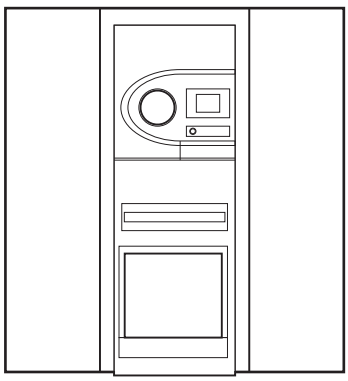


Albèrt Smart Cart

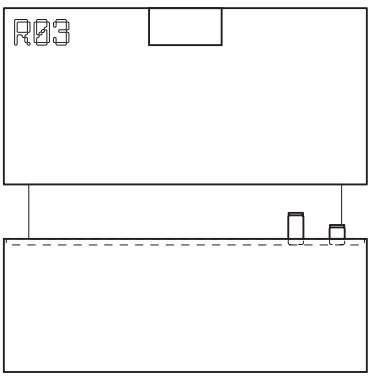
To eliminate single-use packaging and optimize logistic processes, a unified container-deposit system is introduced, limiting the variety of product dimensions in Albèrt. Displays on the smart cart and supermarket hosts guide shoppers in finding their products.





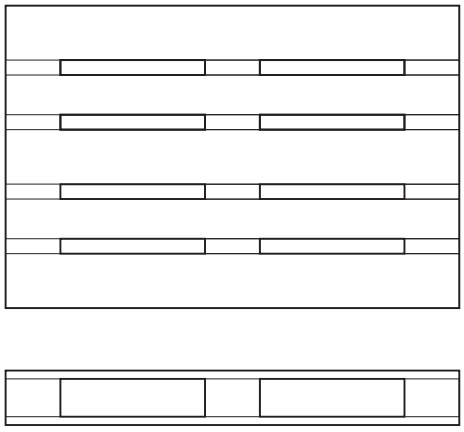


Container-deposit machine

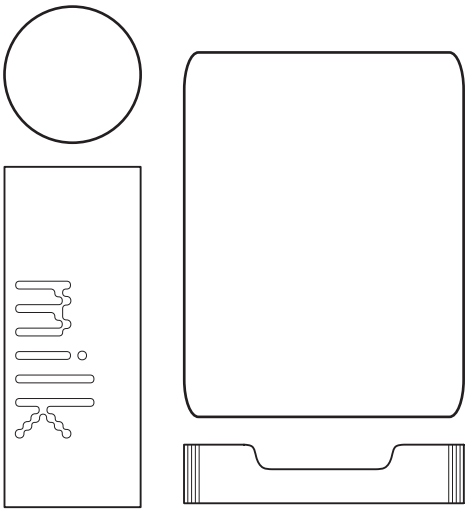


Albèrt Container Return Point

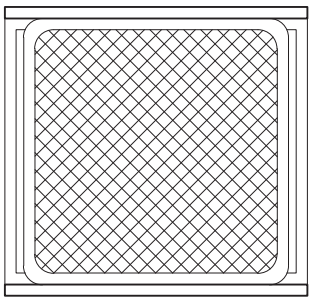
Albèrt's container deposit system utilizes the shopper's existing familiarity with return points for used bottles and crates.

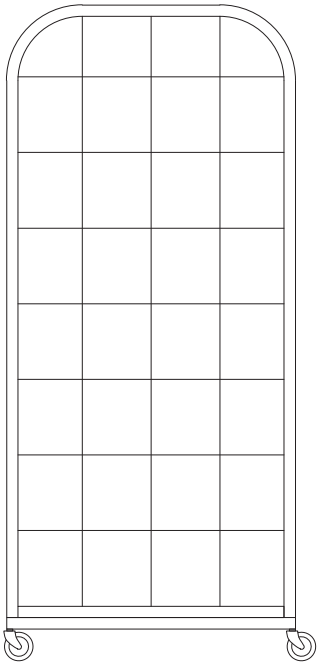


EPAL-Pallet

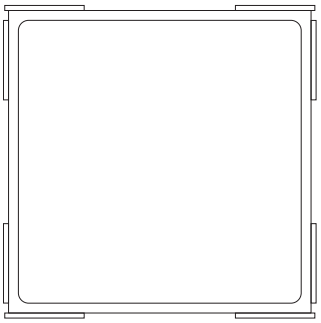


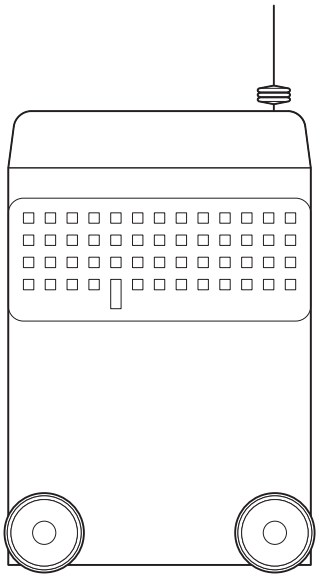
Albèrt Bulk Containers and Crates





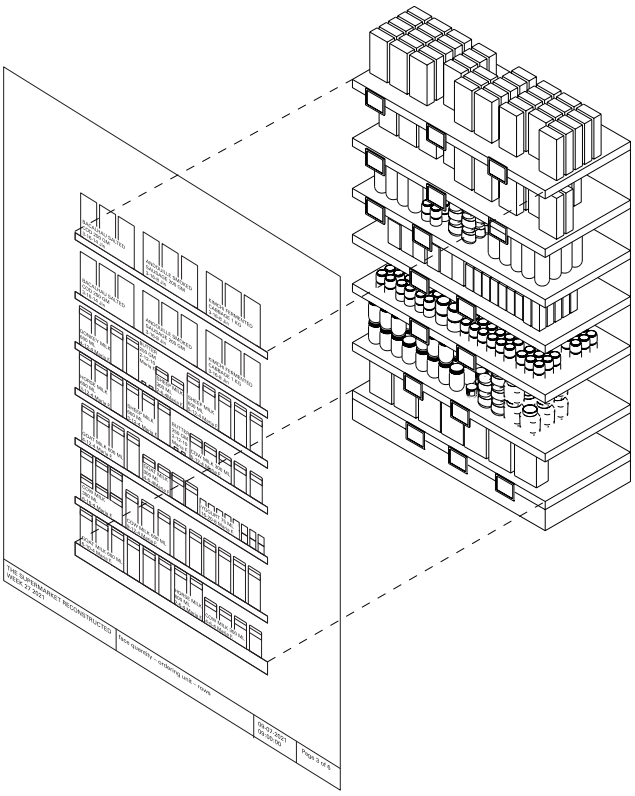
Stocking Cart

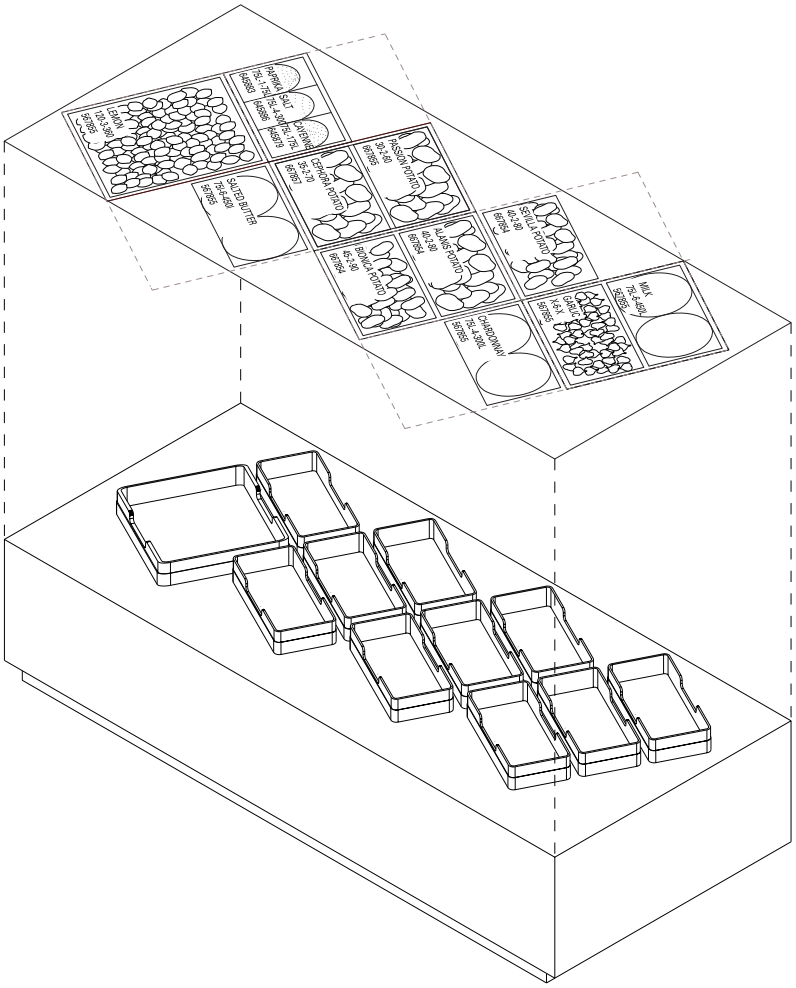




Ocado Robot

Albèrt's automatized warehouse, making use of Ocado robots, considers legacy dimensions based on the EPALpallet, by adhering to an 80 x 80 cm grid.



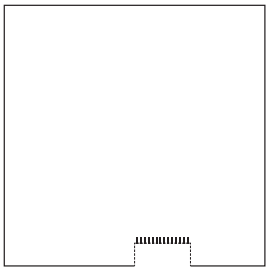


Planograms are an elevational system to optimize the relation between shoppers and the grocer's shelves, in order to maximize sales and minimize wasted space. By introducing a flexible automatized stocking system, the planogram is transformed into a planar organization, in which the retail experience can be dynamically adjusted to market conditions and seasonality.

1970
Thermal printed price label with European Article Number and unit price
120 x 100 mm

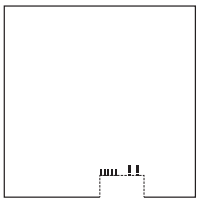
Self-service store with checkout counters
~170 m^2

1936
Self adhesive price label
21 x 12 mm



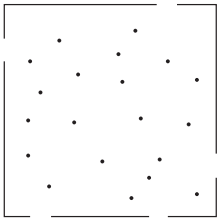
Hypermarket with checkout counters
~6000 m^2

2020
Electronic Shelf labeling system with dynamic display
70 x 36 mm



Modern Supermarket with omi-channel checkouts
~3000 m^2

2030
NFC tag embedded in the crate
Ø3 mm



2030
Albèrt with smart carts
Ø3 mm

The introduction of the fixed price—attached to a product through a sticker—has allowed the grocer to develop into self-service stores, informing the architectural type of the supermarket. Technological developments such as thermal printing, e-ink, NFC tags, and computer vision reintroduce dynamic pricing while offering novel spatial solutions for the supermarket, such as the elimination of the physical check-out point.

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4. Diana Holland, "From Land to Mouth: Interview with Brewster Kneen", *Share International*, accessed August 15, 2021, https://www.share-international.org/archives/economics/ec_dhfromland.htm

An interview discussing a book critiquing the corporate food industry with a call for local farming practices.

5. "Disruption & Uncertainty: The State of Grocery Retail 2021", *McKinsey & Company* (March, 2021).

An interview with the CEO of Ahold Delhaize about the financial positioning of supermarkets after COVID-19.

6. Executive Summary: Global Status of Commercialized Biotech/ GM Crops 2011, *International Service for the Acquisition of Agri-biotech Applications*, 2011

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7. Frank Viviano, "This Tiny Country Feeds The World", *National Geographic*. (September, 2017).

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8. Franziska Bollerey, *Setting the Stage for Modernity: Cafés, Hotels, Restaurants, Places of Pleasure and Leisure* (Jovis Verlag GmbH, 2019).

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11. Lia Ryerson, "Bigger Hauls, Fewer Choices: How the Pandemic Has Changed Our Grocery Shopping Habits Forever," *The Washington Post*, September 1, 2020.

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COVID-19.

12. Marcus Case and Ember Smith, "Automation From Farm to Table: Technology's Impact on the Food Industry," *Brookings*, November 23, 2020.

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13. Marten Kuijpers and Ludo Groen, "Automated Landscapes and the Human Dream of Relentlessness," *Strelka Mag*, March 3, 2020.

An article about large automated production spaces in the Netherlands and their effects on people and land.

14. Melissa Repko, "Grocery Shoppers Trade Up From Dried Beans and Rice to Premium Foods as Covide Cases Rise," *CNBC*, November 12, 2020.

American market trends toward higher quality groceries after COVID-19.

15. Michelle Dunne and Angela Wright, *Local and Artisan Food: A Case For Supermarket Space?* (11th Annual Tourism and Hospitality Research in Ireland Conference (THRIC), 2015).

A literary and market study on the possibility of the placement of local and artisan foods in Irish supermarkets.

16. Nicola Twilley, "The Coldscape: From the Tank Farm to the Sushi Coffin." *Cabinet*, published 2012, https://www.cabinetmagazine.org/issues/47/twilley.php

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17. "Off the Table," ed. Anne Riley Moffat, *Bloomberg Businessweek*, August 23, 2021.

Four human-interest stories about the impacts of rising food costs after COVID-19.

18. Peter Del Tredici, "The Flora of the Future", in *Projective Ecologies*, ed. Chris Reed and Nina-Marie Lister (New York: Actar D, Harvard Graduate School of Design, 2014).

An article claiming the significance of biodiversity in urban areas.

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20. Sylvana van den Braak and Simone Peek, "'It Feels Like Living in Captivity,'" *De Groene Amsterdammer*, #34 (August 25, 2021). Translated by Google Translate from 'Het voelt als leven in gevangenschap'.

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A Business and Consumer Studies thesis from Wageningen University on the communication versus actual sustainability at Dutch supermarkets.

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An article on the connection between GM crops and pest control and the opposing views and policies surrounding the use of GM crops in South Africa.

Supermarket is a collective project on the spatial implications of the food industry in the Netherlands and beyond, redesigning this now considered essential architecture to entail a paradigm shift in its journey towards optimization, sustainability, and health consciousness. It imagines a future supermarket that integrates retail experiences with distribution, supply chains, and product display to ensure a frictionless future for conscious consumers; while, at the same time, creating a new civic presence for the city and its residents.

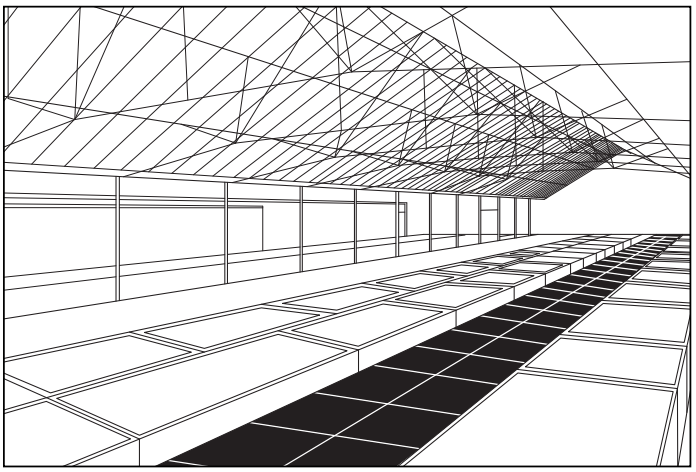
The envisioned supply chain for the future supermarket commences with the Blue Banana, enhancing the position of the Netherlands— one of the world's largest food exporters and home to world-class research institutions—in this urbanized trade corridor. From Genoa to Delft, and from the supermarket's back of house to the sales floor, Supermarket addresses multifaceted aspects of the food industry— scarcity, trade, inclusivity, sensorialism, tastemaking, craft, reshoring, protectionism, automation, and extinction—through ten architectural and urban design contributions.

Ten products, along with their associated building types and territories demonstrate how a modified food distribution network converges at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft. Albèrt seeks to display products and their supply chain by integrating the once stand-alone and distant distribution center with an automated Ocado grid system, asserting itself as the generator of a just-in-time production system—thereby disrupting the seriality of infinite supermarket aisles. With all Albèrt supermarkets operating as distribution centers for multiscalar Ahold Delhaize branches—such as Albert Heijn and Albertje—the supply chain, and its resultant territories, are condensed and reconfigured.

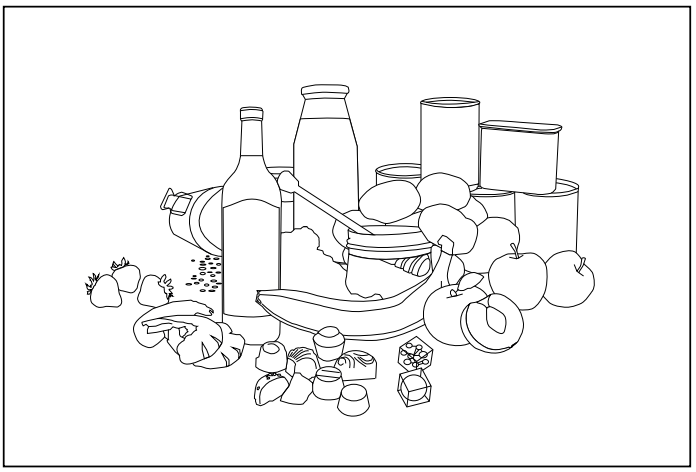
Albèrt offers an omni-channel consumer experience in both physical and digital forms. It reflects on the traditional supermarket's backstory, effectuating sustainability goals throughout a reimagined supply chain. The supermarket assures optimization in unison with the country's circular economy by implementing reusable packaging for all Albèrt products, extending shelf-life from data-driven decision making, offering digitized scanners informing conscious consumers of product particularities, and by providing dynamic pricing for food security.

Along with a flexible open-plan allowing various iterations of product displays to maximize profits and render a unique shopping experience, Albèrt 's business models are diversified, generating revenues from branded products staged in shop-in-shops and electric car-sharing facilities to encourage consumer traffic.

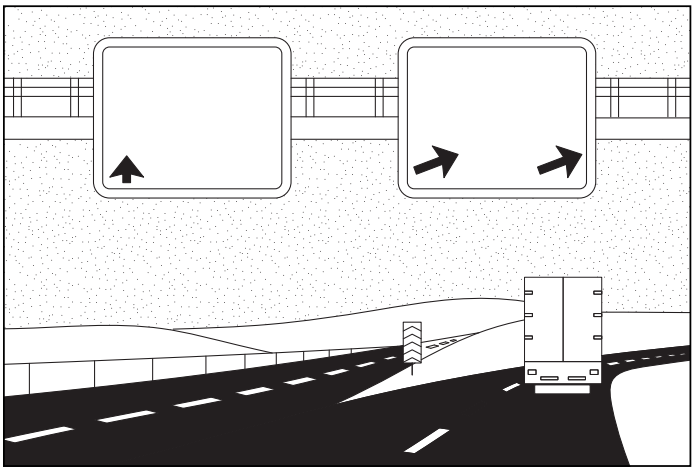
The supermarket—previously conceived as a destination—incorporates a pathway to meet the constant movement of divergent consumers with the conjunction of fast-paced pick-up zones—promoting cycling, delivery, and e-commerce—and slow-paced demonstration zones offering novel tasting experiences along with the green public spaces on the periphery. Albèrt demonstrates an innovative retail experience beyond the technology of the new integrated distribution center, extending its perimeter toward the Delft city center to establish a new civic presence.



The Netherlands is internationally recognized as one of the world's largest food exporters due to its excellent connectivity throughout Europe. Home to world-class research institutions, it is—in effect—feeding the world. However, food production and consumption are responsible for around 25% of the total emission of greenhouse gases and for 60% of the terrestrial loss of variation in plant and animal species. When it comes to the food industry, the country's journey towards optimization, sustainability, and health requires a paradigm shift.



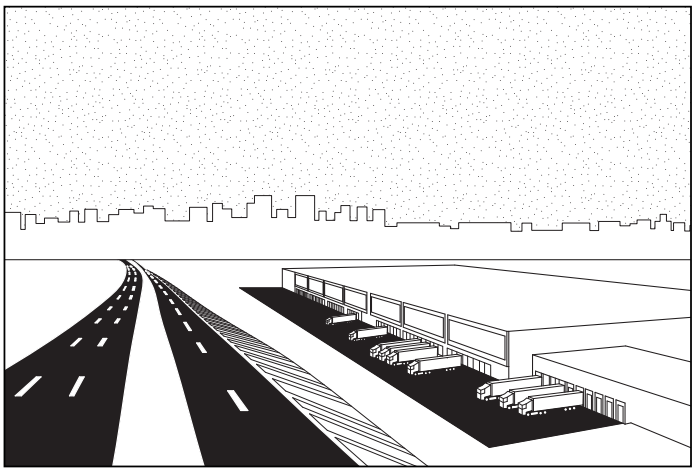
Ten architectural and urban design contributions sited within the Blue Banana—a European corridor of almost continuous urbanization—originating from supermarket products, <<<redesign the future supermarket of 2030.



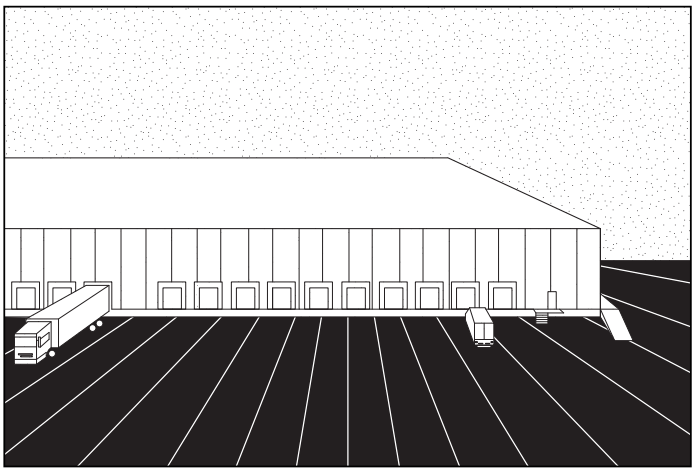
A continuous supply of products and materials, to and from the current supermarket, is made possible through a vast network of roads, rails, and waterways, connecting it to various infrastructural nodes and European trade routes within the Blue Banana.

Supermarkets occupy the most densely used square meters in a city. Resting within its etymology—where «super» alludes to supremacy concerning size, quality, and quantity, while «market» refers to trading in goods of value—the supermarket, selling food and household goods, first originated in the 19th century with the novel concept of a self-serve store.

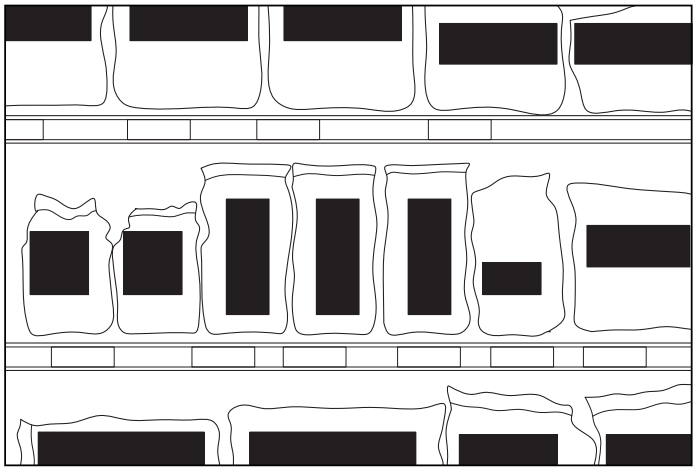
Presented in a set of spatial narratives, the collective project addresses multifaceted aspects of the food industry and its distribution network commencing with the Blue Banana's urbanized trade corridor to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.



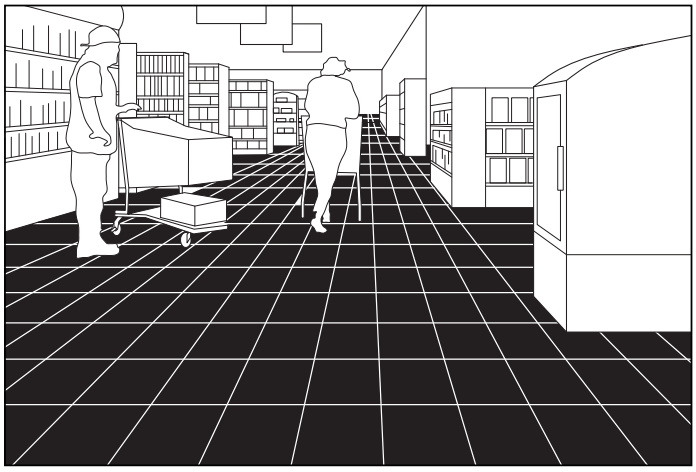
These ten contributions provide modifications to the supply chain, product distribution, and store planning, in relation to the products, their associated building types, and their extensive territories through a vast network of transportation nodes.



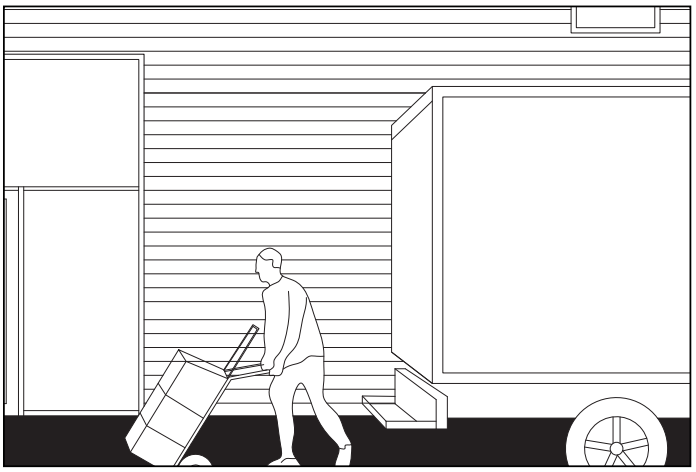
For this purpose, distribution centers currently serve as the epicenter, exploring the resultant spatial characteristics, and linking these ten contributions with the future supermarket.



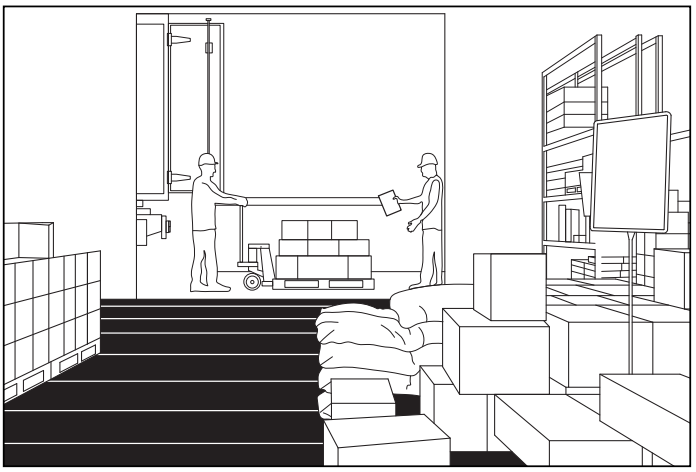
Fixed prices that originated in order to accelerate grocery sales had a huge impact on consumer experience. From standardization of price tags to uniformity of products, and from barcodes to electronic shelf labeling, the improved logistics, shorter employee training periods, a monitored supply system, and efficient shelf organization.



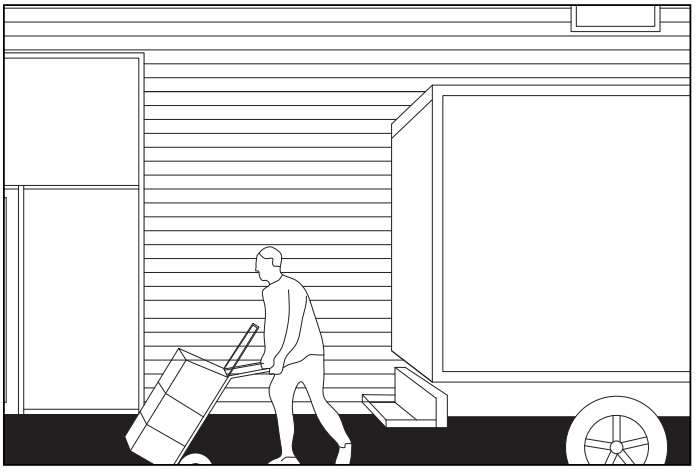
As the COVID-19 pandemic has reshaped the retail market in unprecedented ways, consumers shift around lifestyle and value. Its profits increased up to 40% and physical stores overflowed with people seeking to maintain a sense of normalcy, underscoring it as an essential service, one that represents a new civic presence. This demands new spatial configurations of a supermarket transitioning between a pre-COVID-19 and a post-COVID-19 society.



Home delivery and e-commerce businesses grew up to 5 times faster than before the pandemic, giving rise to an online distribution center that offers the convenience of a digital supermarket.



The supermarket analysis reveals its functional logic through the concealed back of house that is associated with the product's supply chain. Regarded as the employee's domain, the back of house is concerned with product flow, supply, and demand through data-driven decision-making, standardized packaging sizes, and product distribution via tastemaking, scarcity, sensorialism, inclusivity, trade, and biodiversity.



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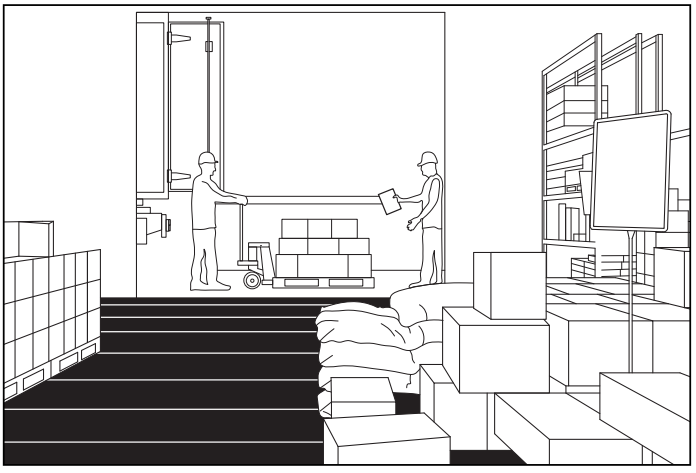

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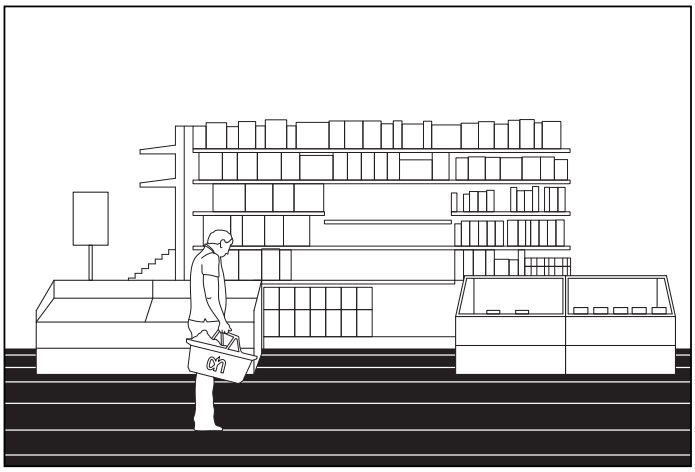
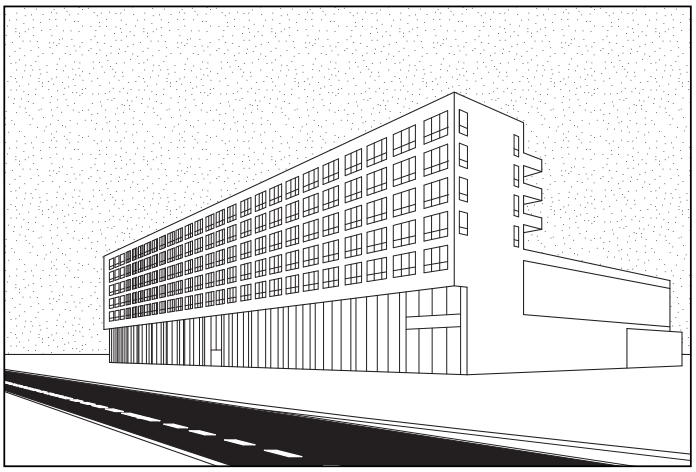
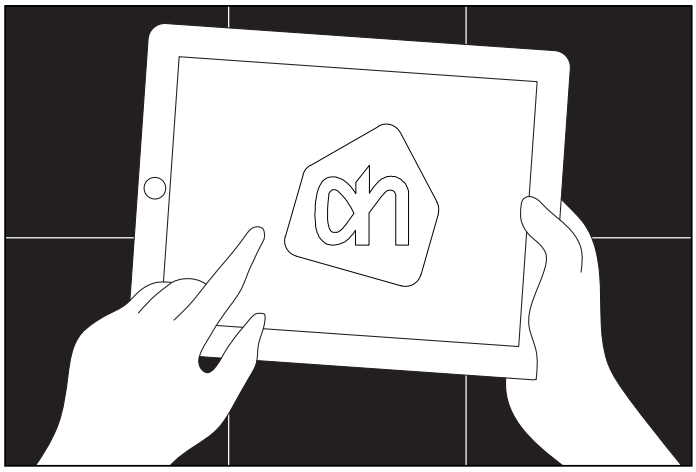
Presented in a set of spatial narratives, the collective project addresses multifaceted aspects of the food industry and its distribution network commencing with the Blue Banana's urbanized trade corridor to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.



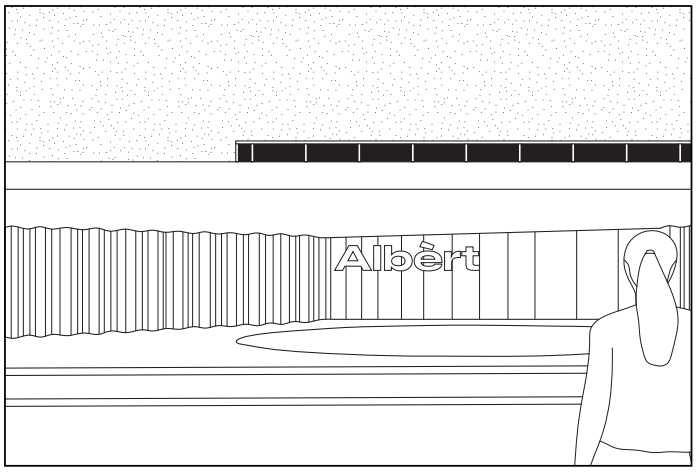
Secondly, the meticulously designed sales floor provides an immersive consumer experience. The sales floor raises issues of scenography, human interaction, digital technology, and the organization of supermarkets within the ever-changing future of retail through the notions of craft, reshoring, protectionism, automation, and extinction.



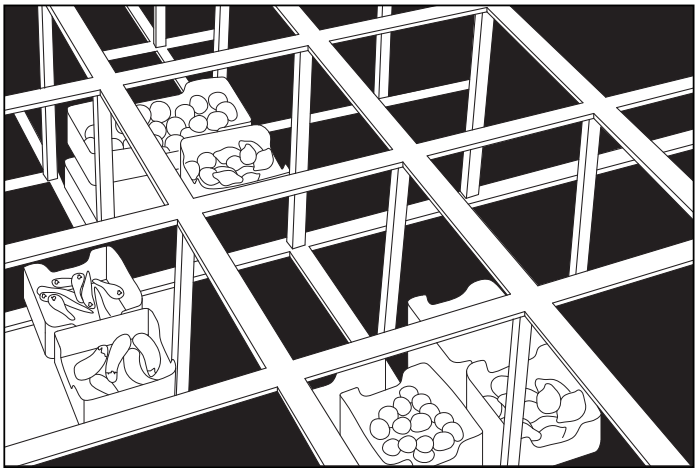
The collective project on the spatial implications of the food industry in the Netherlands and beyond redesigns a future supermarket on the current site of the Albert Heijn XL on Martinus Nijhofflaan in Delft, implementing developments on the sales floor and the back of house ensuring a frictionless future for shoppers.



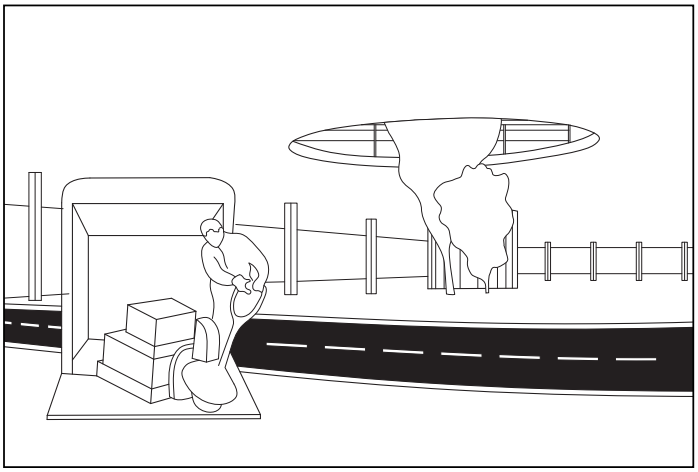
Situated in a densifying expansion area of Delft, a forecasted demography of (international) students, families, and elderly will make use of this supermarket and its e-commerce services.



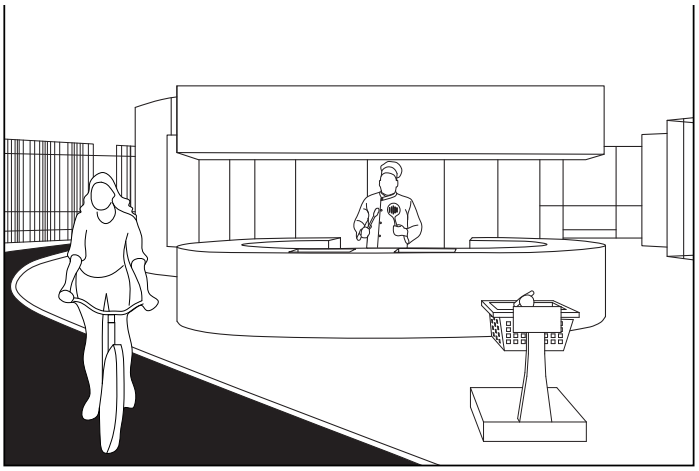
Responding to technical, environmental, and societal demands from the Blue Banana's urbanized corridor to the new Albért, and from the supermarket's back of house to the sales floor, new spatial propositions redefine the future supermarket of 2030.



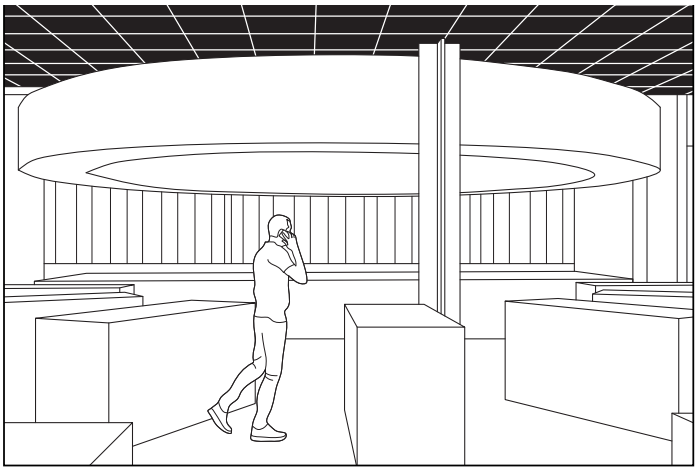
The reimagined supermarket—Albèrt—seeks to display both the product and its supply chain, in turn, the sales floor and the back of house, by integrating the distribution center with an automated Ocado grid system, asserting itself as the generator of a just-in-time production system.



With all Albèrt supermarkets functioning as distribution centers for multi-scale Ahold Delhaize branches—such as Albert Heijn and Albèrtje—the supply chain, and its resultant territories are condensed and redefined. Product distribution within each network thus densifies within smaller radii, becoming open to more local suppliers frequenting small-batch deliveries, while also providing proximity to consumers in the city.

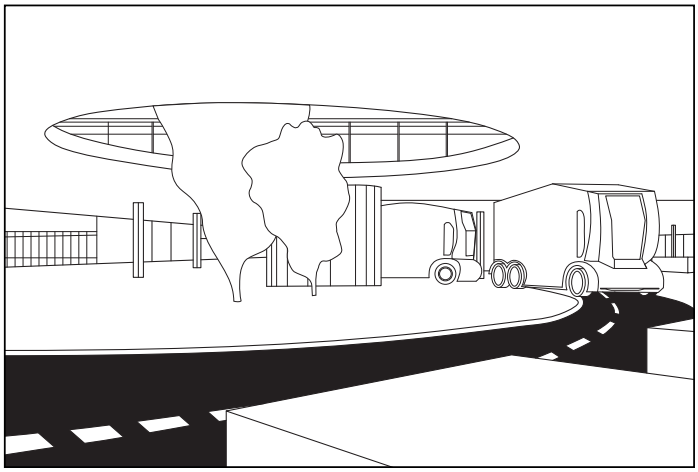


The storefront of the supermarket moves beyond blocked-off rows of checkout lanes and security gates to designated slow-paced zones with product demonstrations, workshops, and exclusive shops that entice consumers into the supermarket.

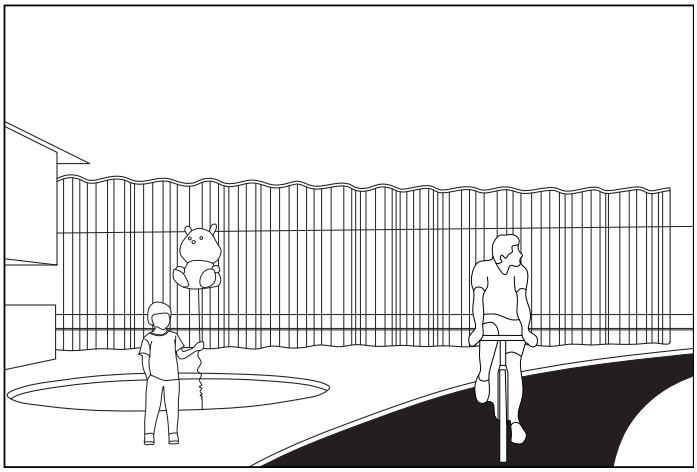


The automated Ocado system in the distribution center above allows for the diversion of labor in the supermarket towards hospitality and social interaction through various host stands—strategically placed to encounter pedestrian flows—offering a tailored shopping experience.

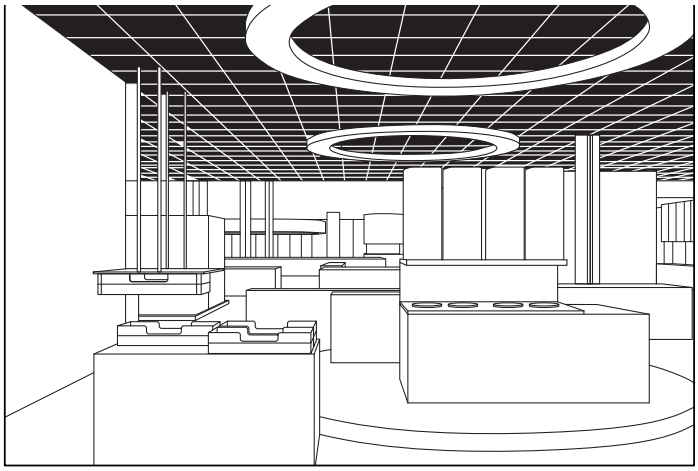
Presented in a set of spatial narratives, the collective project addresses multifaceted aspects of the food industry and its distribution network commencing with the Blue Banana's urbanized trade corridor to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.



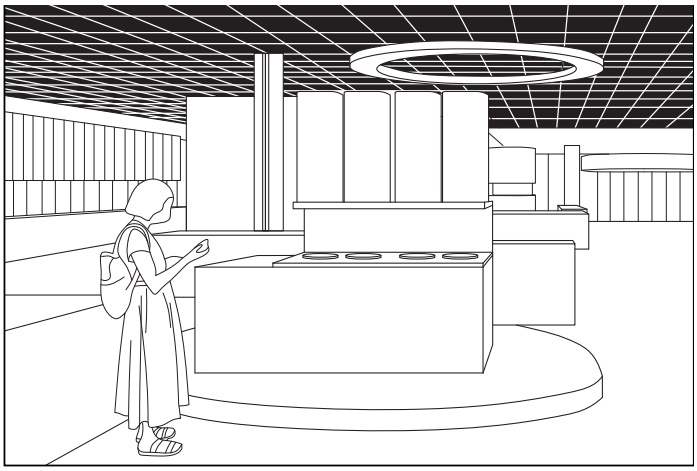
The relationship between the supermarket and the city changes with a modified transitional system that showcases the dynamic loading dock and its functioning on the sales floor, diverts private vehicular flow, e-trucks, and car-sharing services towards the Albèrt parking on the site, and promotes cyclists by providing access on the sales floor through the incorporation of a pathway for fast-paced pick-up zones with an increase in delivery and e-commerce.



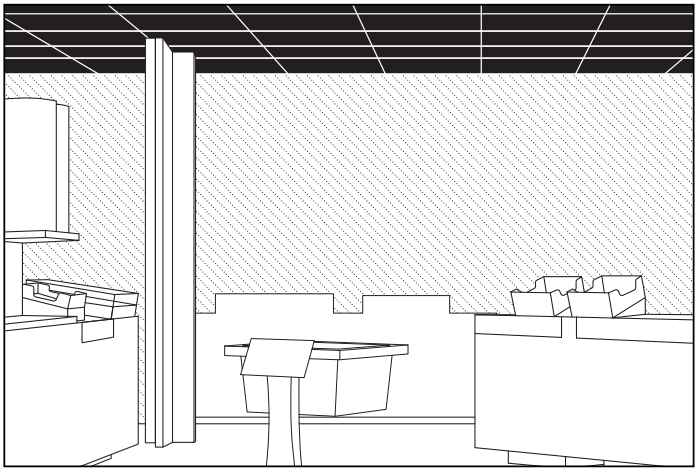
The supermarket provides several entrances—strategically located near high traffic zones—to move away from a one-directional circulation path to a multi-directional circulation pattern within the organic layout of the facade that is designed in response to the surrounding context.



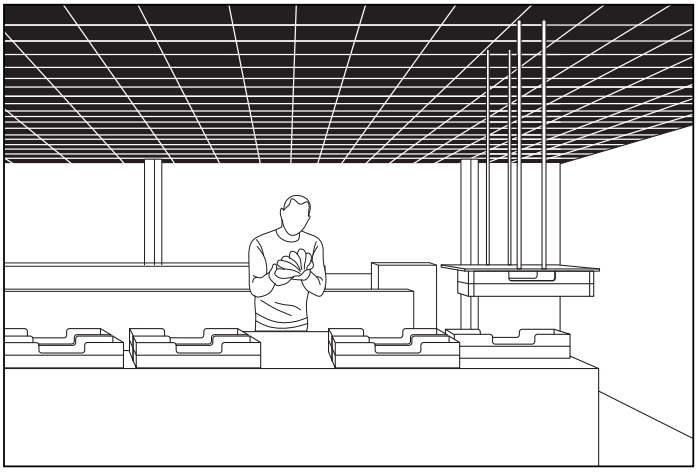
The supermarket is reorganized according to the central high yield automated distribution center within a static grid ceiling that offers dynamic robotic movements, allowing various iterations of product displays in reaction to seasonality and specialties, to render an open floor plan shopping experience.



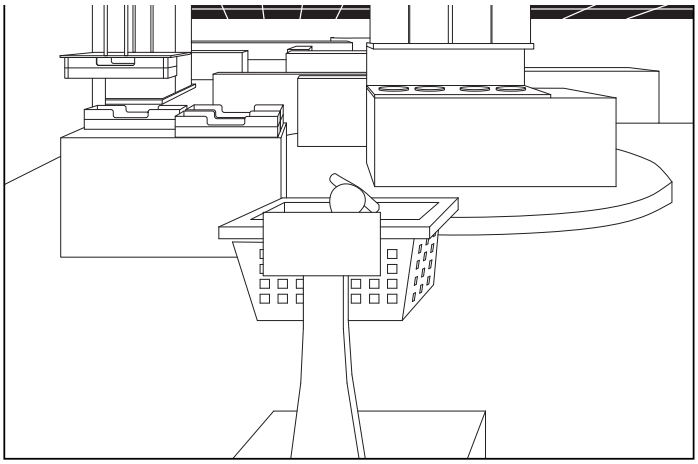
Stores will continue to use planograms, working on existing principles of increasing sales. From bulk shelves to fresh produce crates, shelving systems within the open plan generate new episodic formats of planograms, while accommodating changes in circulation with the incorporation of electronic signage to guide the consumers.



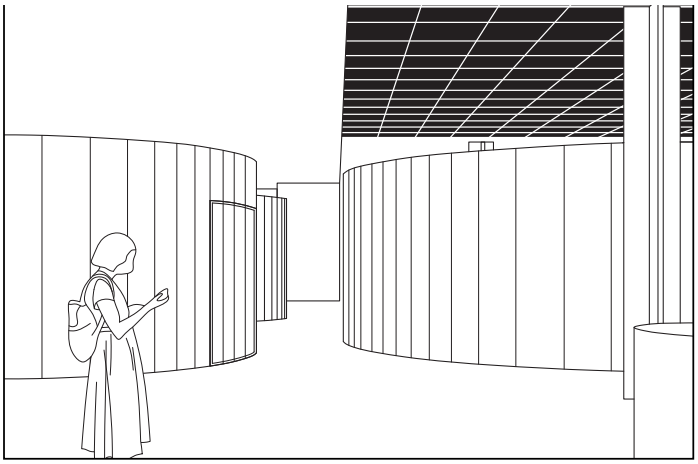
Responding to the supermarket's visibility of the supply chain, vertical experiential walk-in refrigerators represent the ripening rooms and recreate the conditions of refrigerated trucks to extend the distribution center to the sales floor with a convenient product flow, allowing consumers to momentarily enter the varied environments of the food supply chain.



All new shelves, carts, packaging, and delivery methods work within the 800mm x 800mm grid to ensure full standardization within the supply chain system starting from the cargo pallet itself.



Once an item is delivered, the screen on the smart cart displays other useful items, or the next item on the shopping list while still incorporating key supermarket sales concepts and experiences like cross-merchandising and impulse buys.



Business models and real-estate strategies—introduced through independent areas defined for peripheral store-in-stores—promote collaborations with exclusive brands and local entrepreneurs by bringing in highly curated experiences, catering to the experimental and diverse tastes of Delft residents.

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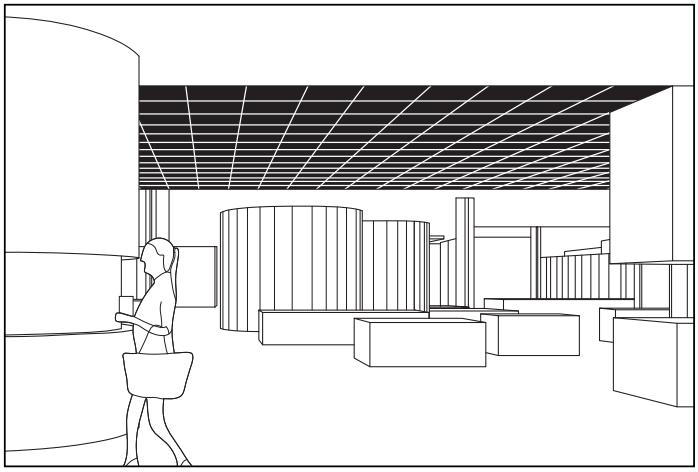
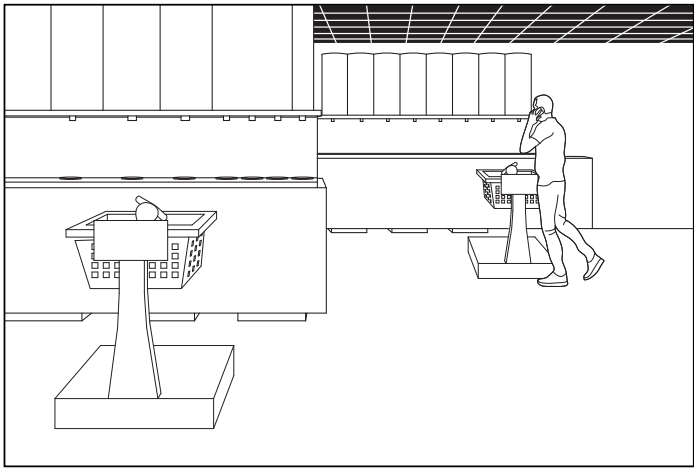
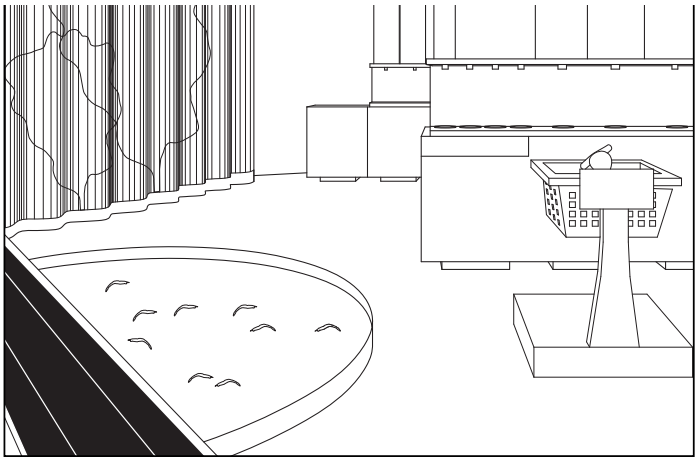


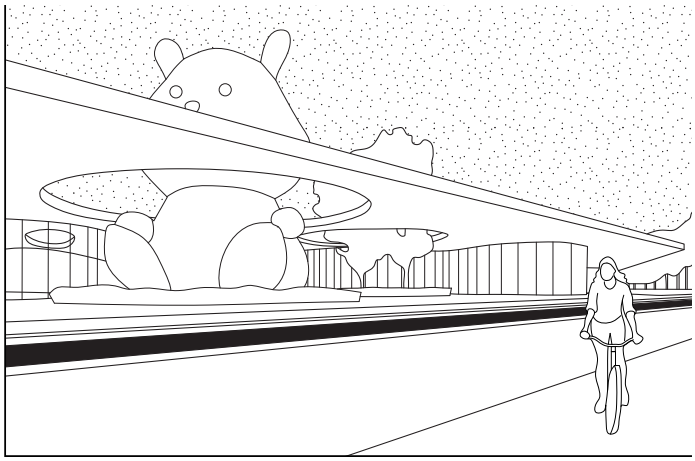
The future supermarket addresses sustainability goals through a reimagined supply chain with reusable packaging for all Albèrt products that are collected, cleaned, and redistributed on site in various return points, cleaning stations, and end-cap gondolas respectively, that remain scattered throughout the sales floor.



Smart carts with digitized scanners react to the particularities of the product on the shelf with information on the provenance of products for conscious consumers. Electronic displays are connected to expiration dates, supply, and demand through dynamic pricing monitored by data-driven decision-making.



As an essential service, the supermarket's design incorporates several public green zones amidst the sales floor to entice the consumers to spend more time inside, while at the same time providing a healthier working environment, through biodiverse farming solutions, integrated agriculture strategies, and a green roofscape.



Albèrt offers a new retail experience open to Delft by putting both the product and its supply chain on display. A flexible open plan within and beyond the high yield automated distribution center—now a part of the supermarket—extends its perimeter towards the city and its residents, establishing a new civic presence.

The introduction of fast-paced zones in the supermarket spreads along the bike lane, featuring a demonstration kitchen and pick-up points.

Live shrimps and small-batch milk deliveries demonstrate freshness and reusable packaging within a just-in-time production system.

Permaculture as a new farming method inside the supermarket boosts biodiversity and rewards the cultivation of GMOs

View of the automated Ocado grid system and the distribution center on the ceiling from the concierge desk on the sales floor.

The smart cart eliminates the boundaries of the supermarket's sales floor while dynamic pricing and digitalized labels inform the consumers about the product's supply chain and provenance.

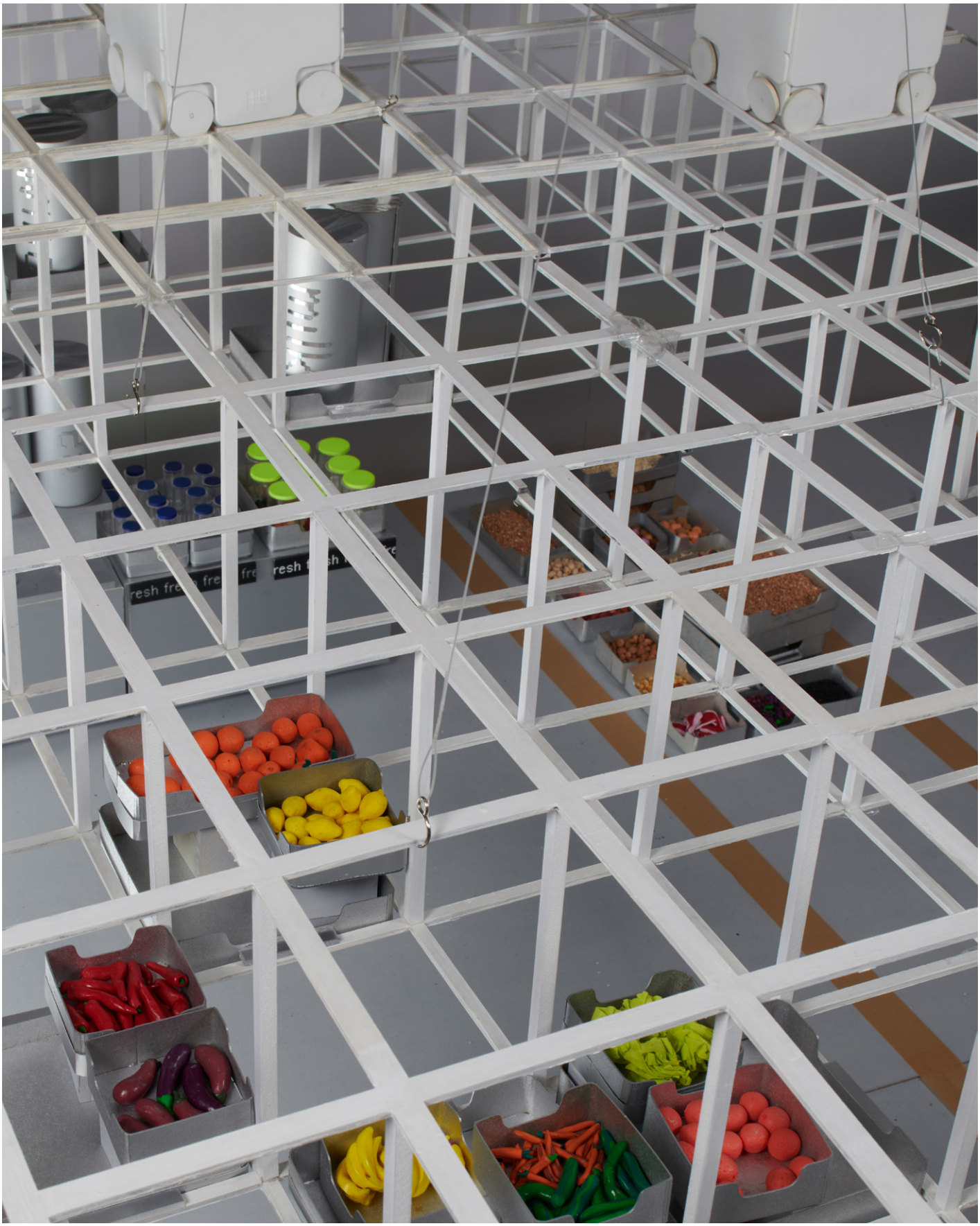
Dynamic robotic movement above the open sales floor allows for various iterations of product displays, according to seasonality, discounts, and specialties.

Free food is no longer shameful, facing the luxury products of the Hermès store-in-a-store.

The walk-in refrigerator extends the distribution center to the sales floor, offering a momentary experience in the varied environments of the food supply chain.

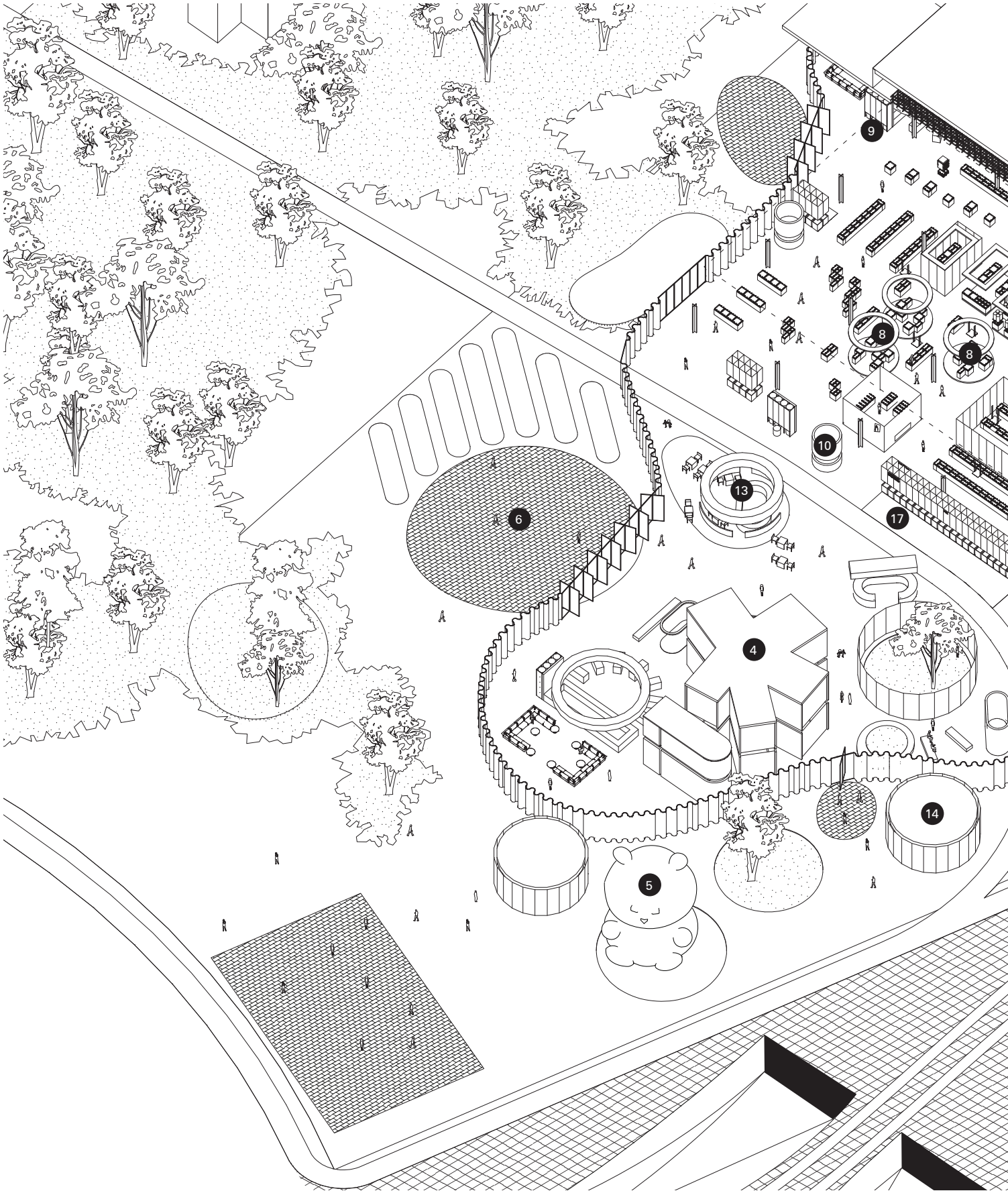
A wine bar next to an automat restaurant are part of the slow-paced zones of the supermarket, introducing a novel tasting experience next to a public green terrace.

Beyond the internal core, Albèrt offers an innovative retail experience, opening up the supermarket's perimeter towards the city.



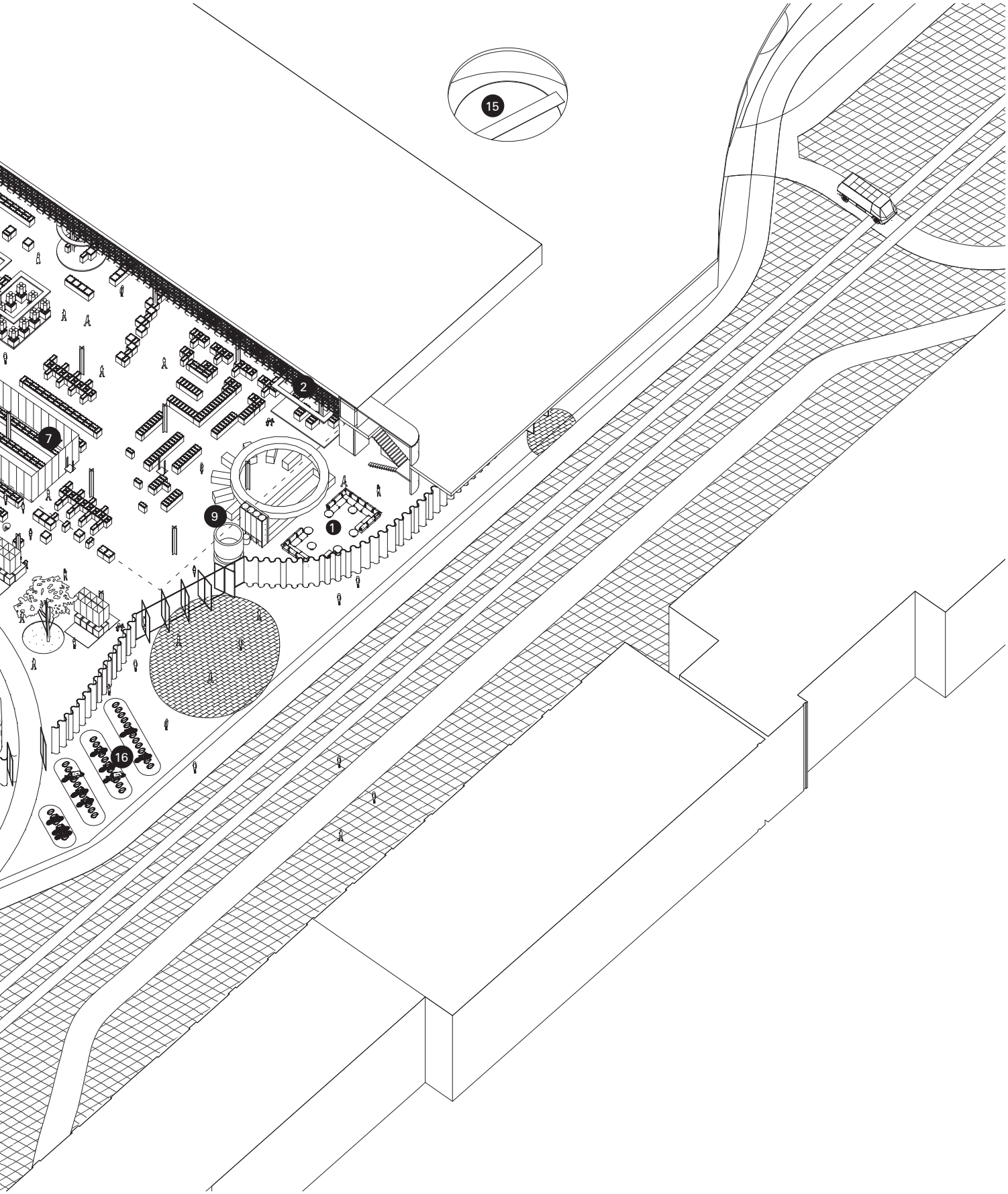
View of the loading dock on the sales floor from the automated distribution center on the ceiling.

A green roofscape amidst the residential neighborhood, provides a healthy working and living environment.

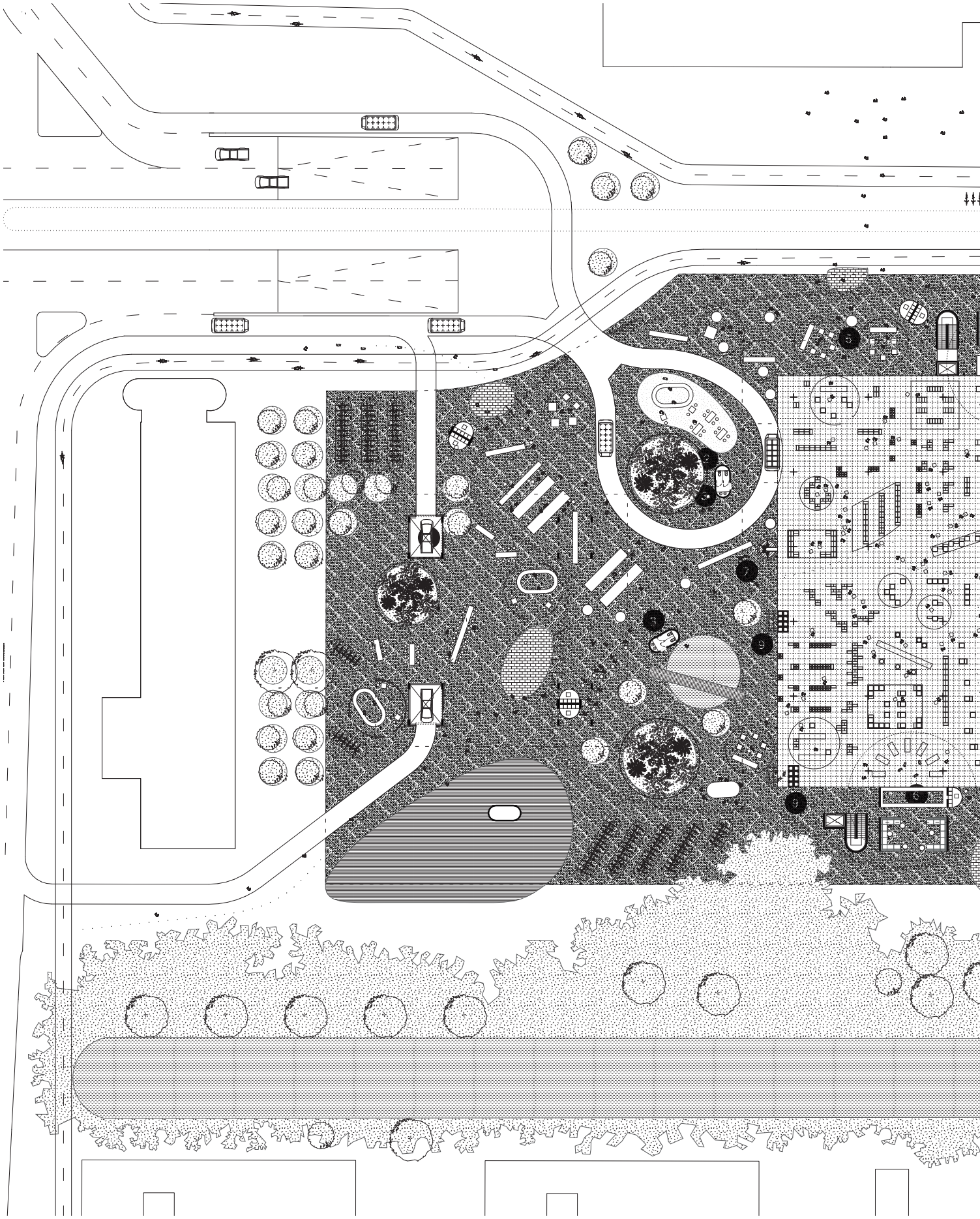


A cut-out axonometric exposing the blurred boundaries between the supermarket, the landscape, and the city of Delft.

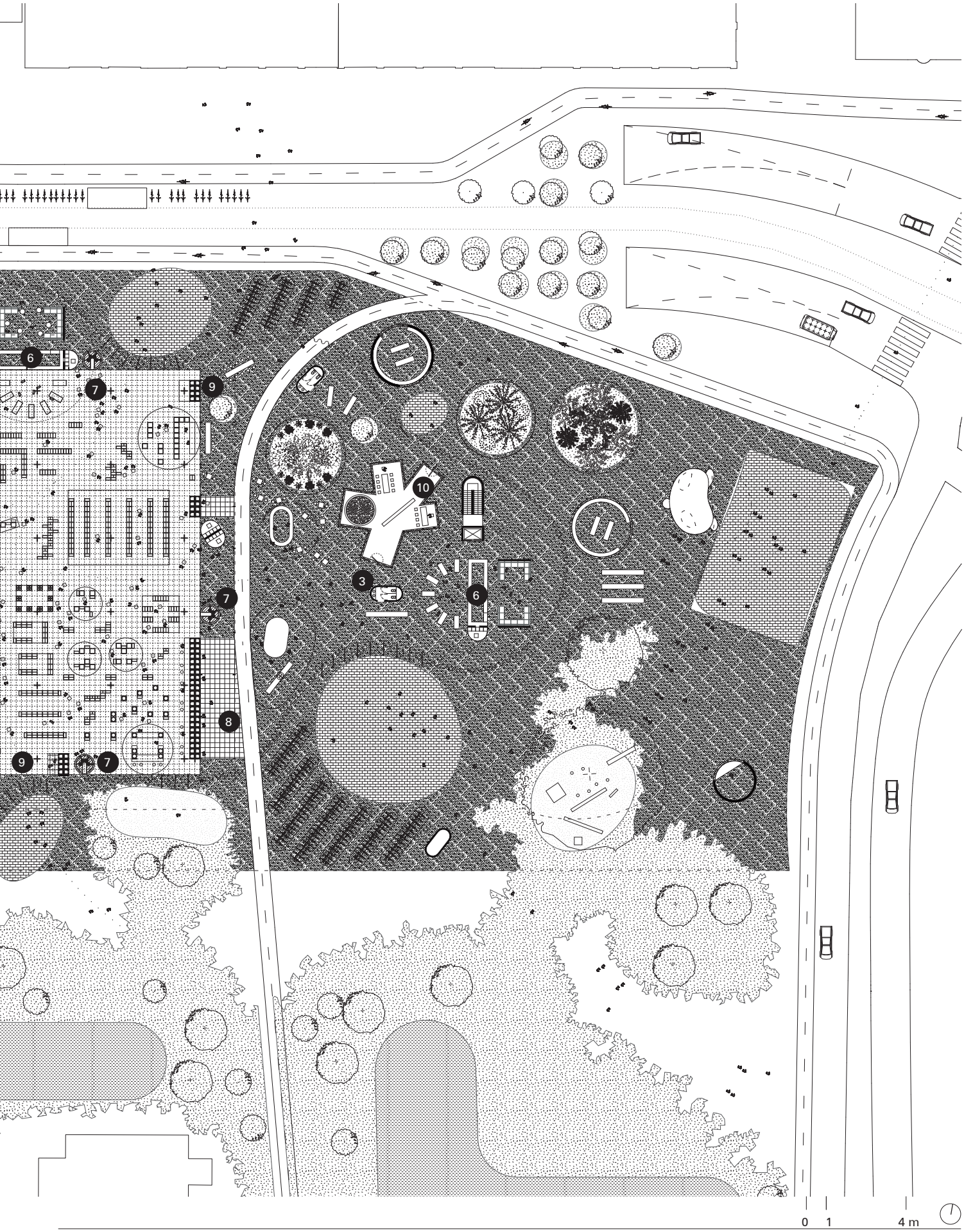
1 Concierge
2 Automated Ocado grid
3 Vertical circulation core
4 Kindergarten
5 Sculpture of Albèrt's mascot
6 Entrance
7 Refrigerated area
8 Specialty displays



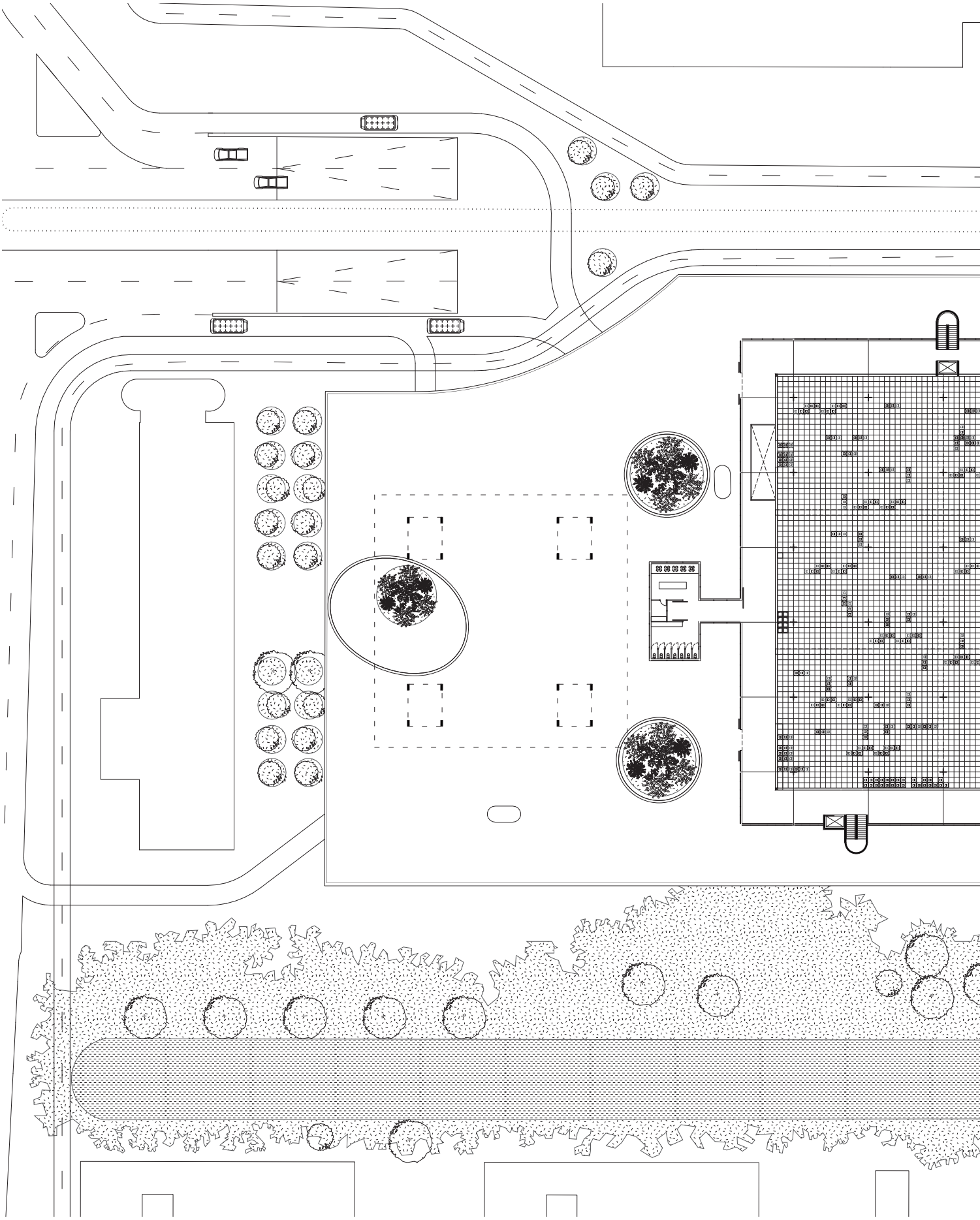
9 Smart cart station
10 Return points
11 Pick up points
12 Cycle track
13 Demonstration kitchen
14 Shop-in-shops
15 Shrimp pond
16 Bycicle parking
17 Automat



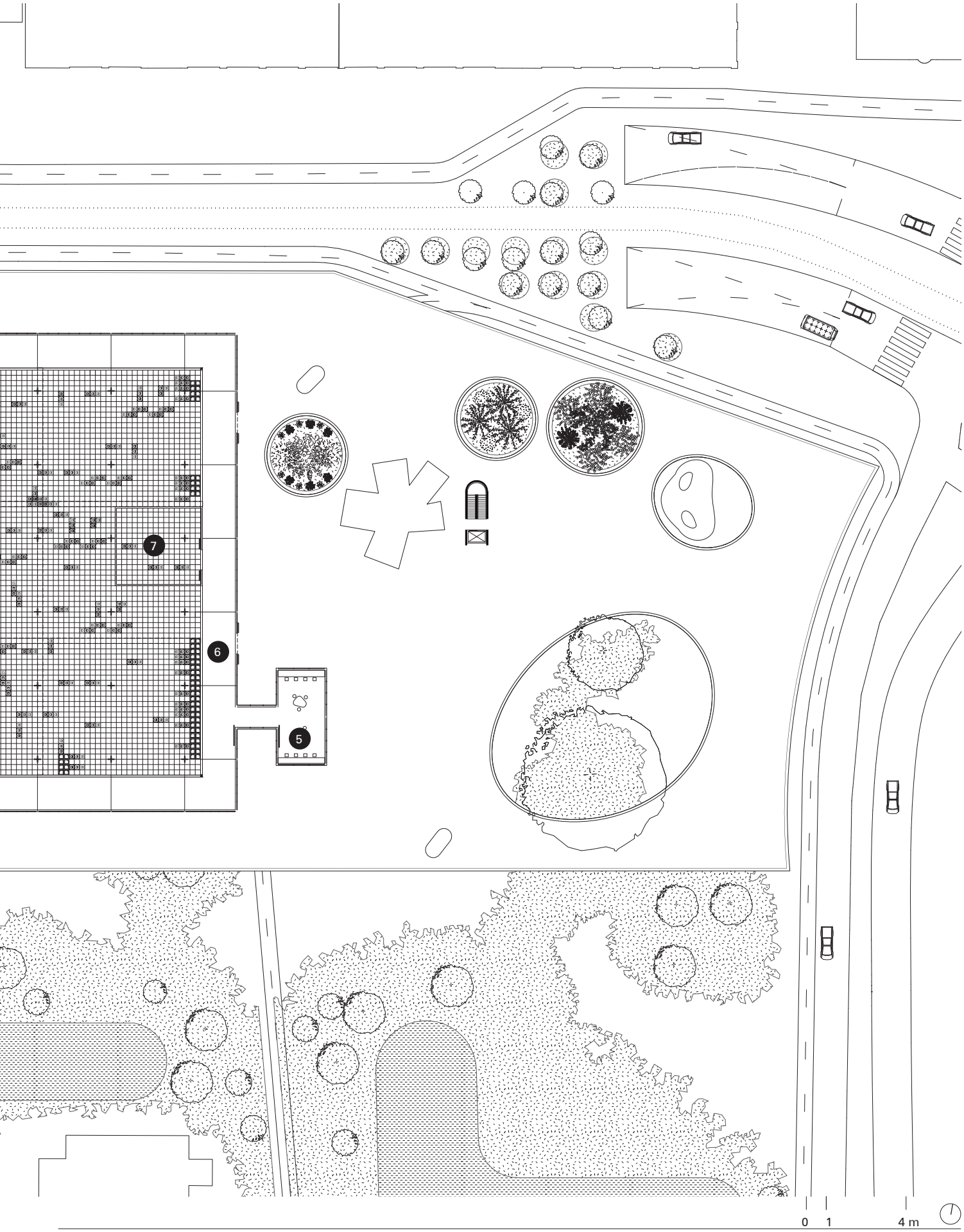
Albèrt offers a new retail experience with a flexible open plan within and beyond the high yield automated distribution center to display both the product and its supply chain. The supermarket is organized in three different zones, consisting of the central high yield core, the interior periphery of the glass facade, and the outdoor facilities covered by the cantilevered roof.



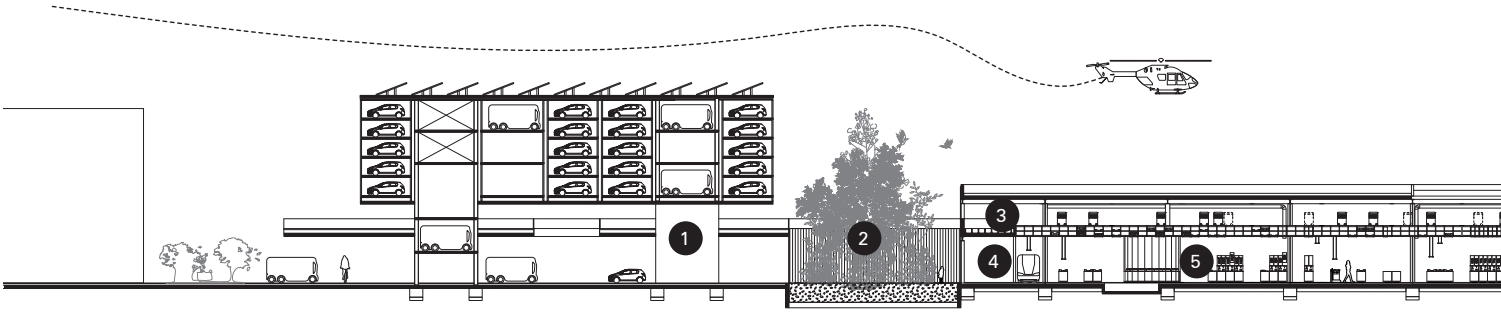
1 Access to Parking
2 Loading dock
3 Estructural cores, toilets, HVAC
4 Shrimp pond
5 Shop-in-shop
6 Concierge
7 Return point
8 Automat
9 Pick up points
10 Kindergarten

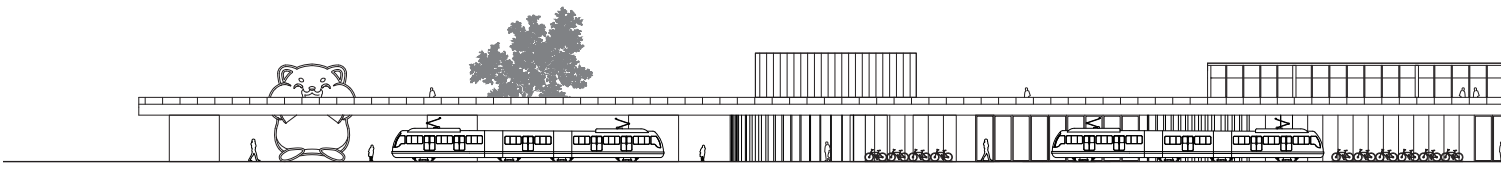


The back of house operates as a distribution center above the sales floor, consisting of the automated Ocado system in the static grid ceiling core that offers dynamic robotic movements.

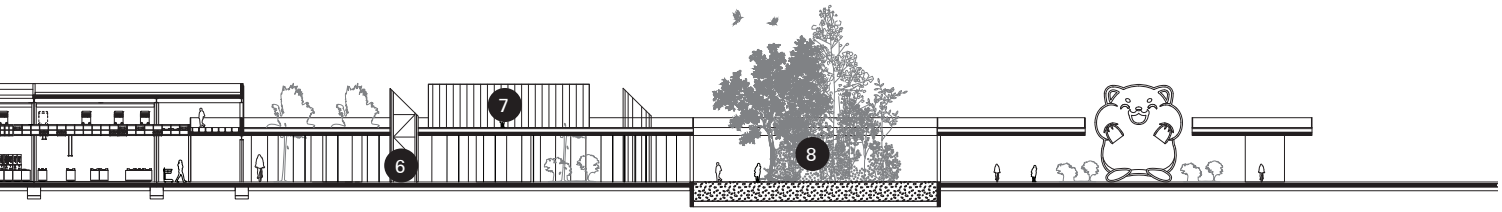


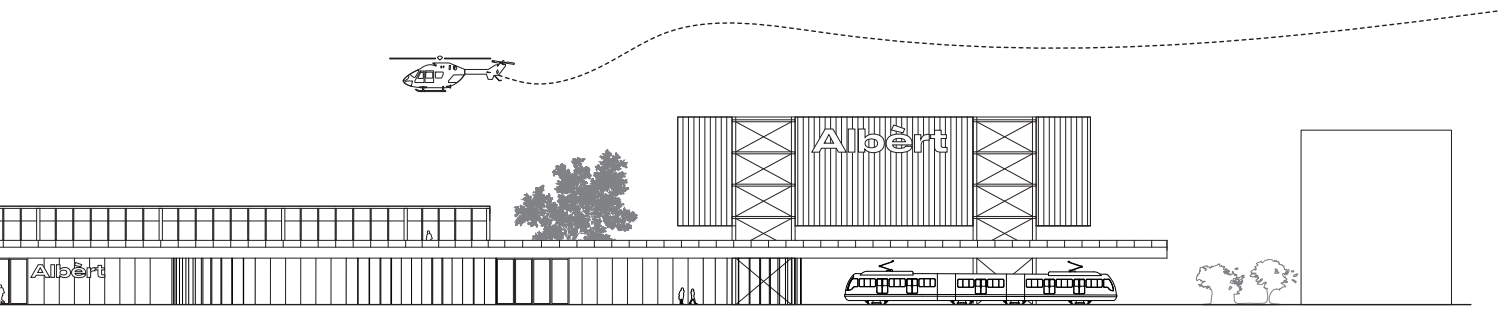
1 Maintenance point
2 Toilets
3 Automated Ocado grid
4 Vertical core
5 Offices
6 Perimeter for humans
7 Refrigerated area





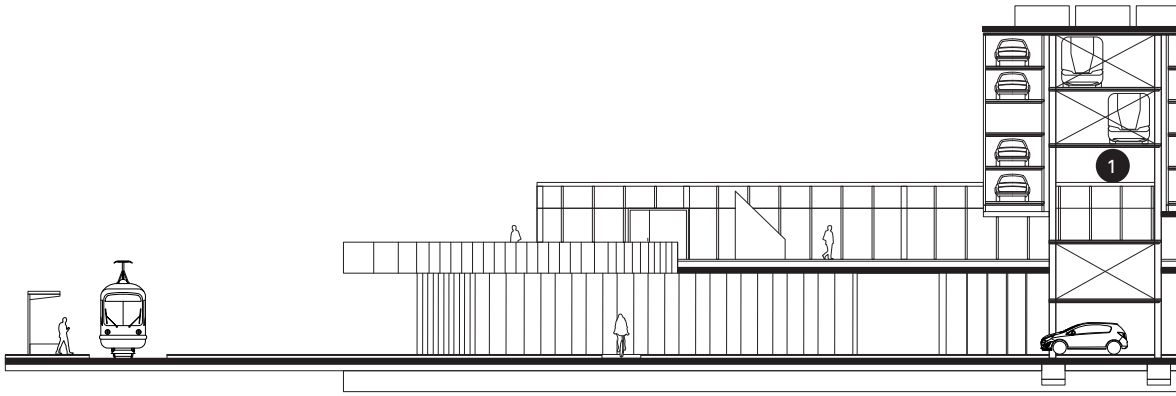
The reimagined relationship between the supermarket's sales floor and back of house is vertical, juxtaposed with the additional Albèrt car-sharing facilities and parking on the site that caters to the supermarket's customers, e-trucks, and the neighborhood's needs.

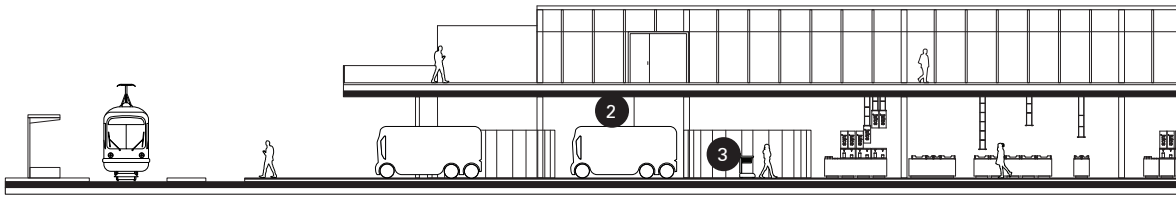




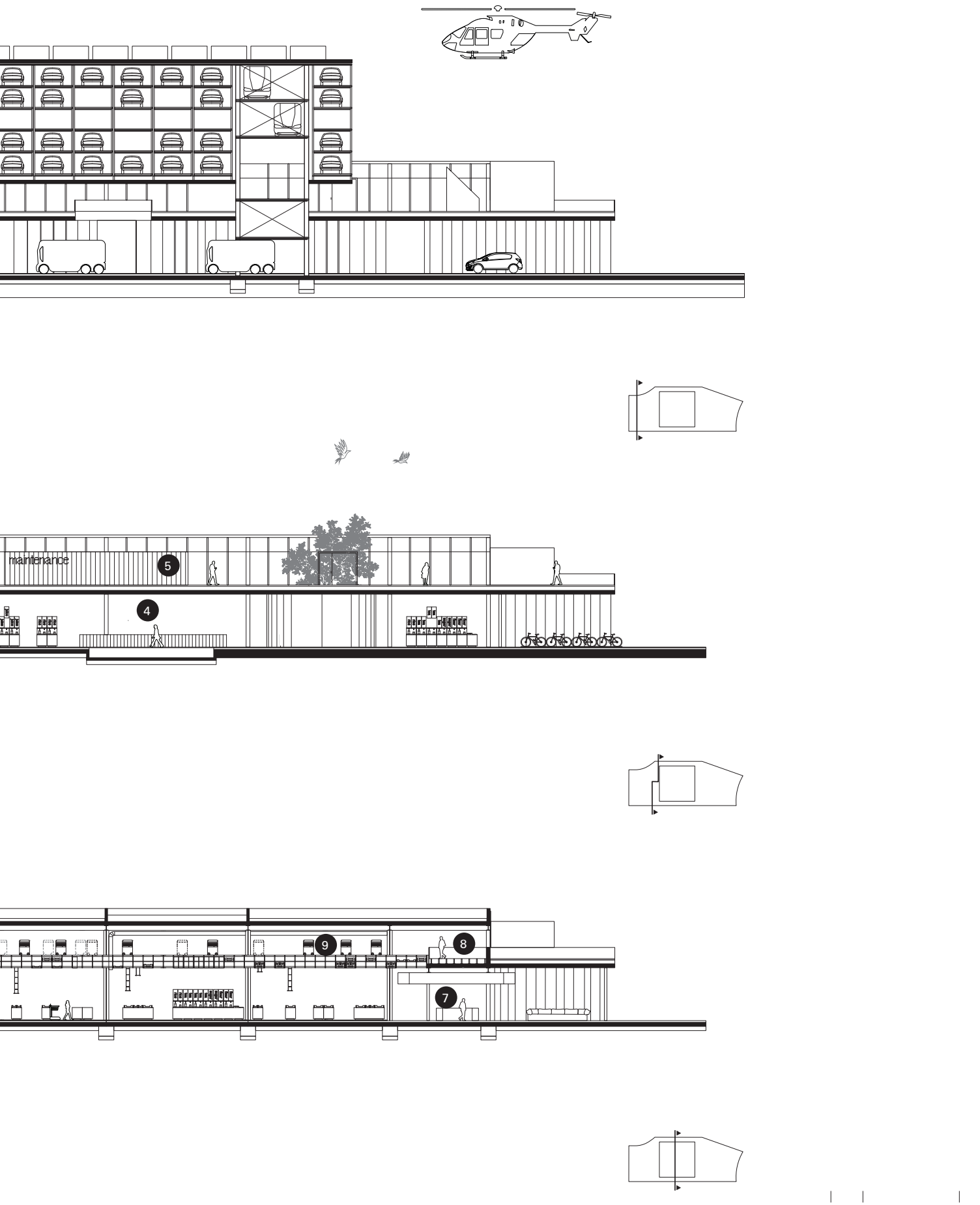
0 1 4 m

1 Maintenance point
2 Toilets
3 Automated Ocado grid
4 Vertical core

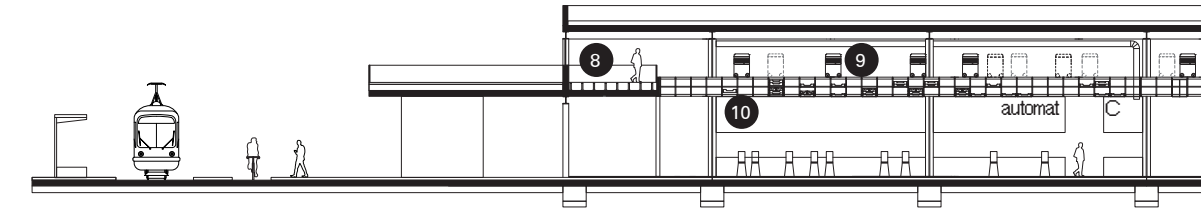


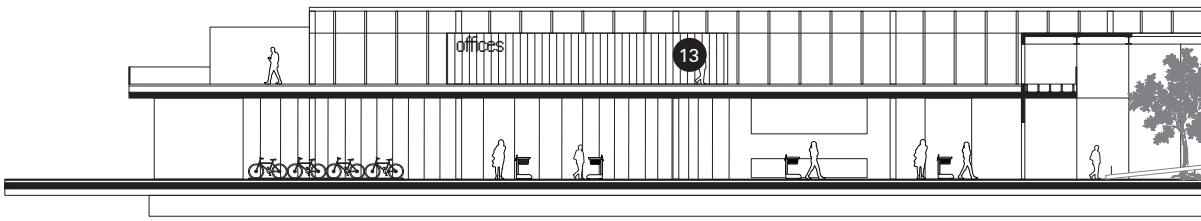


The organization of the building around the central high yield distribution center allows for various iterations of product displays on the sales floor, disrupting the infinite seriality of the supermarket aisles.

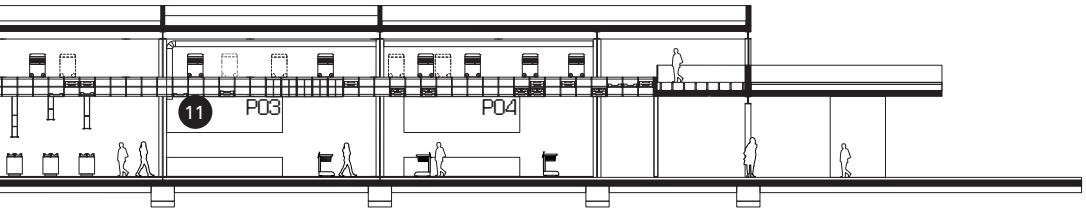


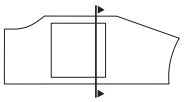
1 Automated parking
2 Loading dock
3 Shop-in-shop
4 Shrimp pond
5 Maintenance point
6 Vertical core
7 Concierge
8 Perimeter for humans
9 Automated Ocado grid

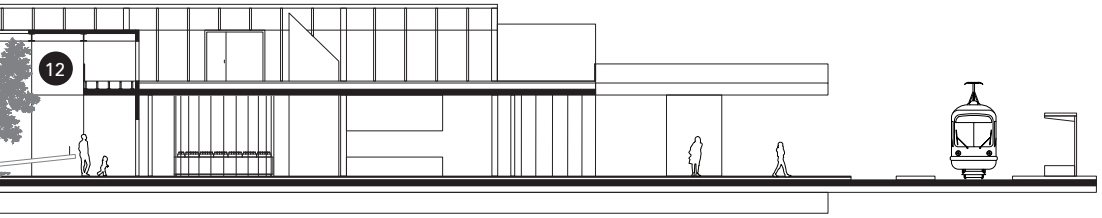


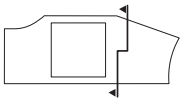


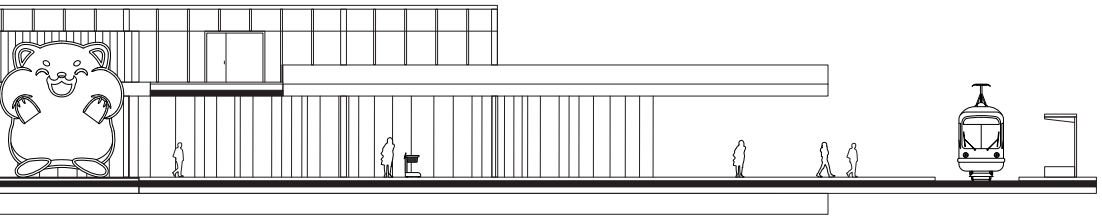
The organization of the building around the central high yield distribution center allows for various iterations of product displays on the sales floor, disrupting the infinite seriality of the supermarket aisles.

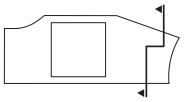






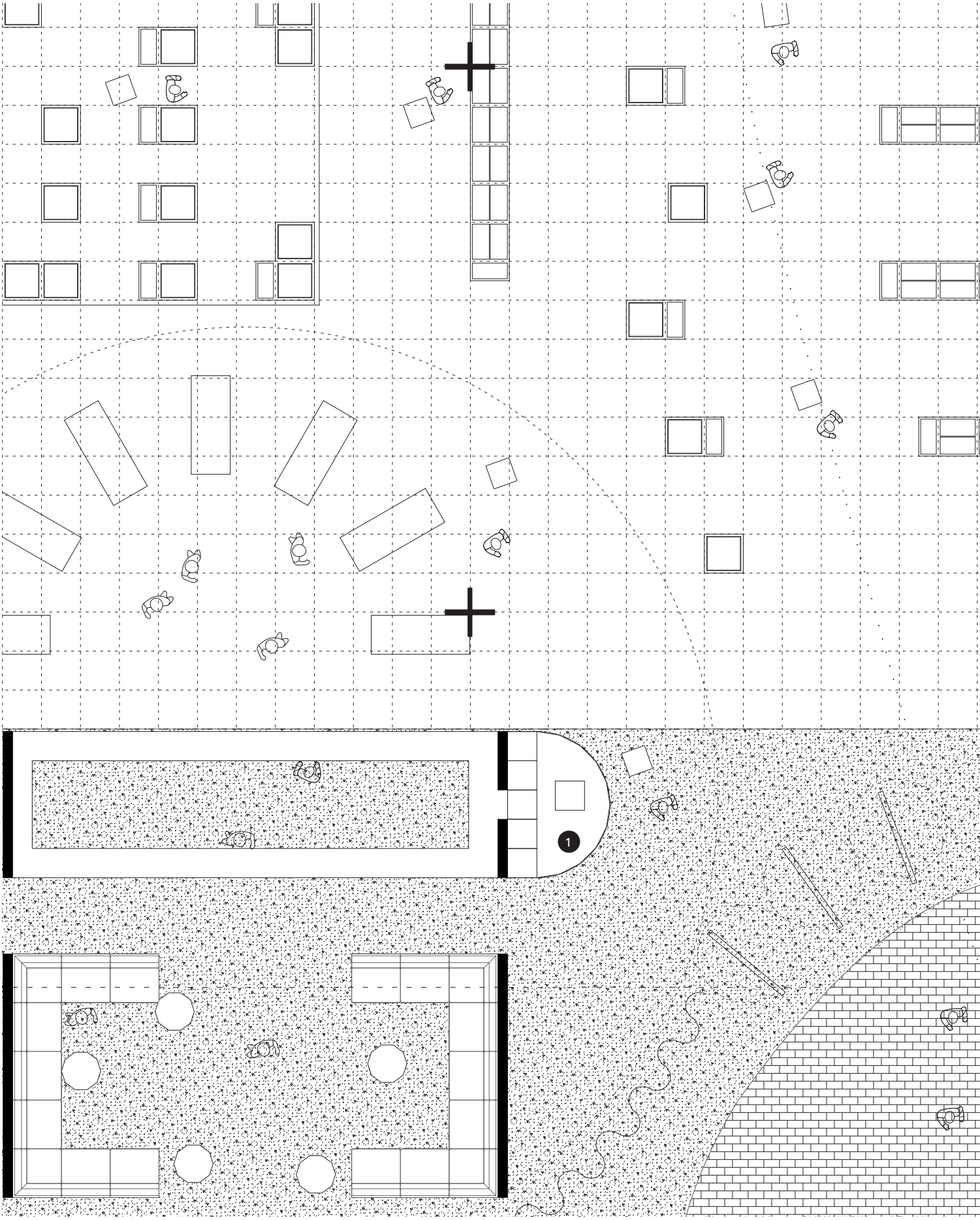




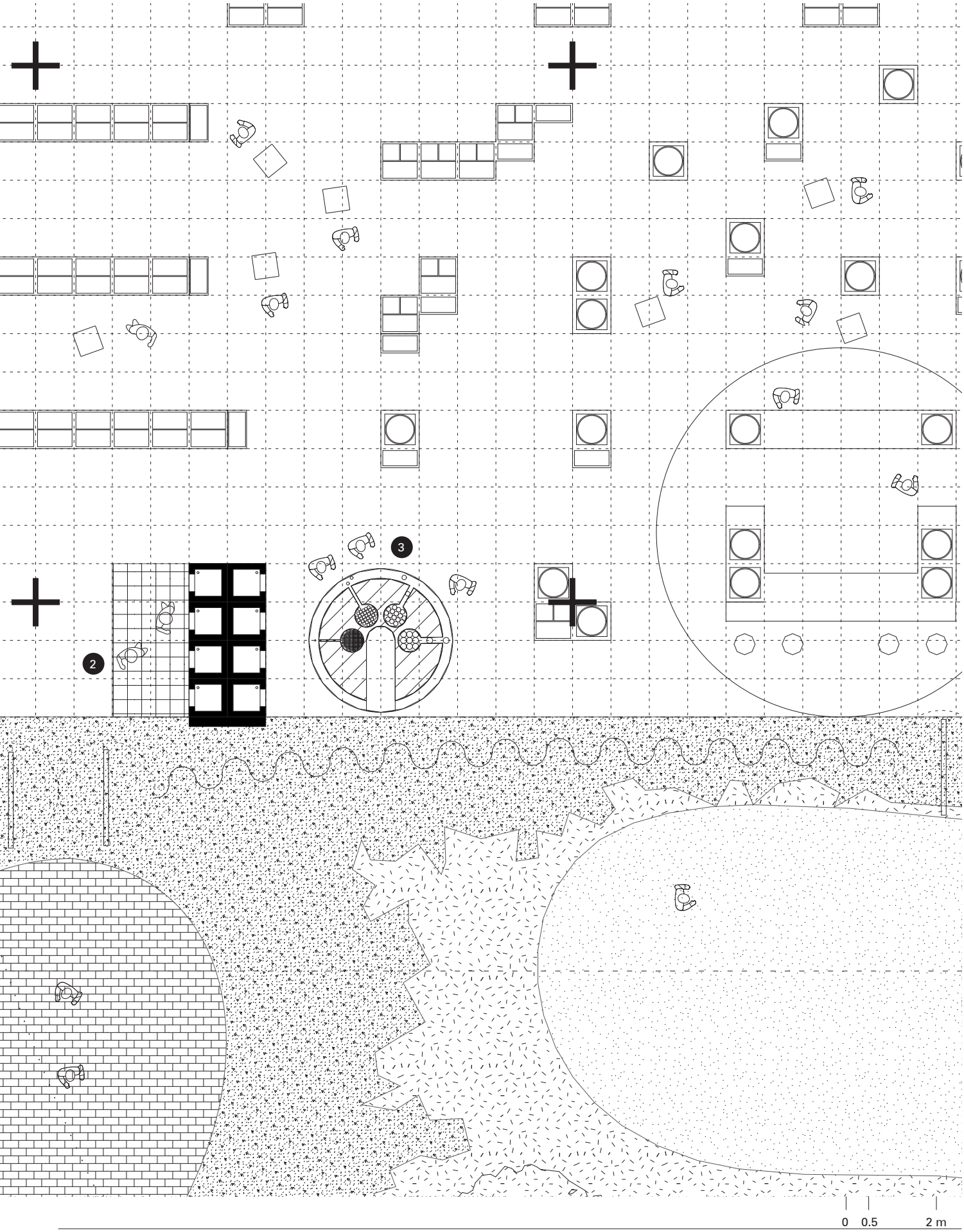


0 2.5 10 m

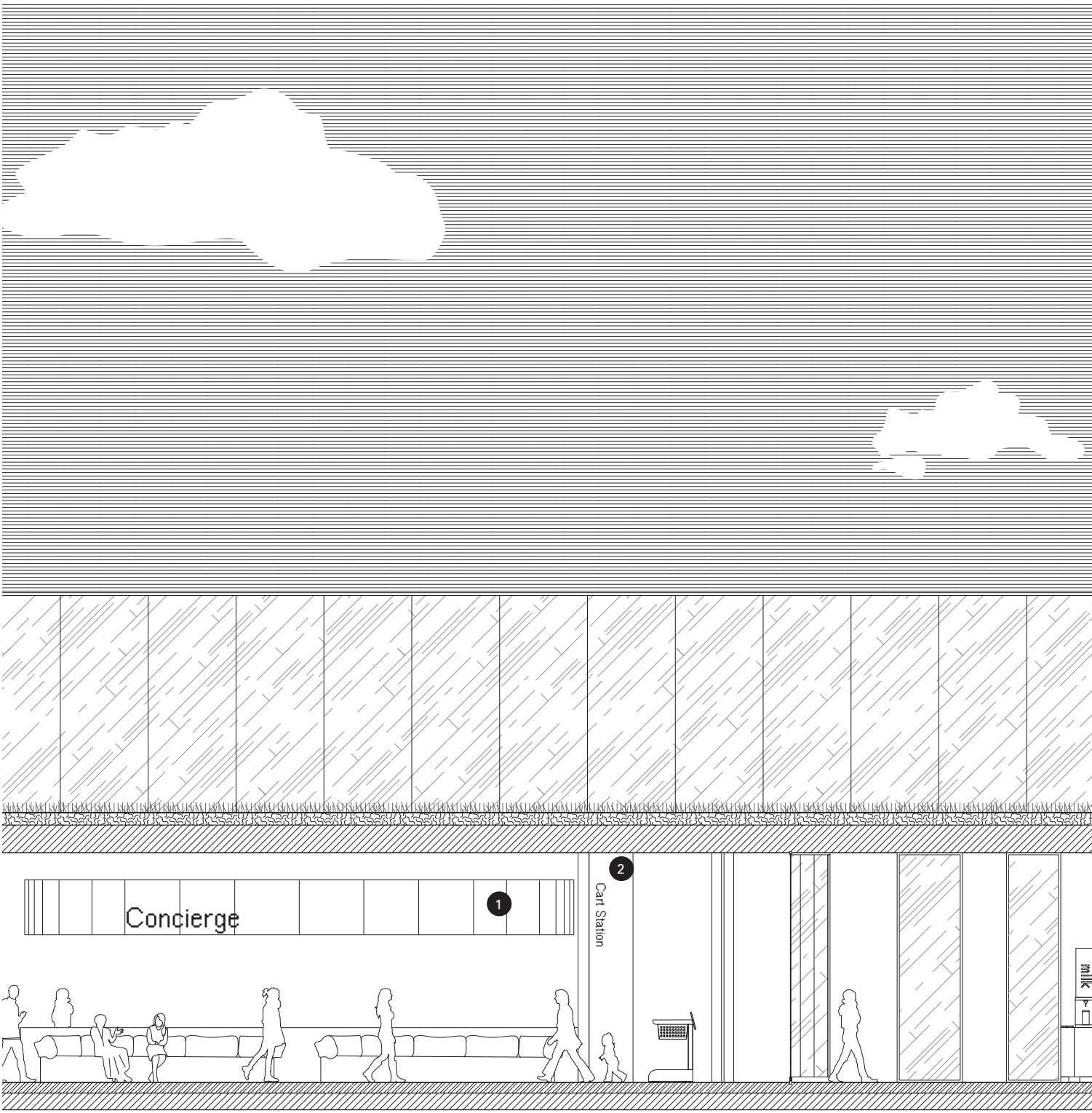
1 Automated parking
2 Loading dock
3 Shop in shop
4 Shrimp pond
5 Maintenance point
6 Vertical core
7 Host
8 Perimeter for humans
9 Automated ceiling
10 Automat
11 Pick up points
12 Kindergarten



The dynamic robotic movements allow for the reconfiguration of the supermarket shelves in reaction to seasonality and specialties, rendering a unique shopping experience.



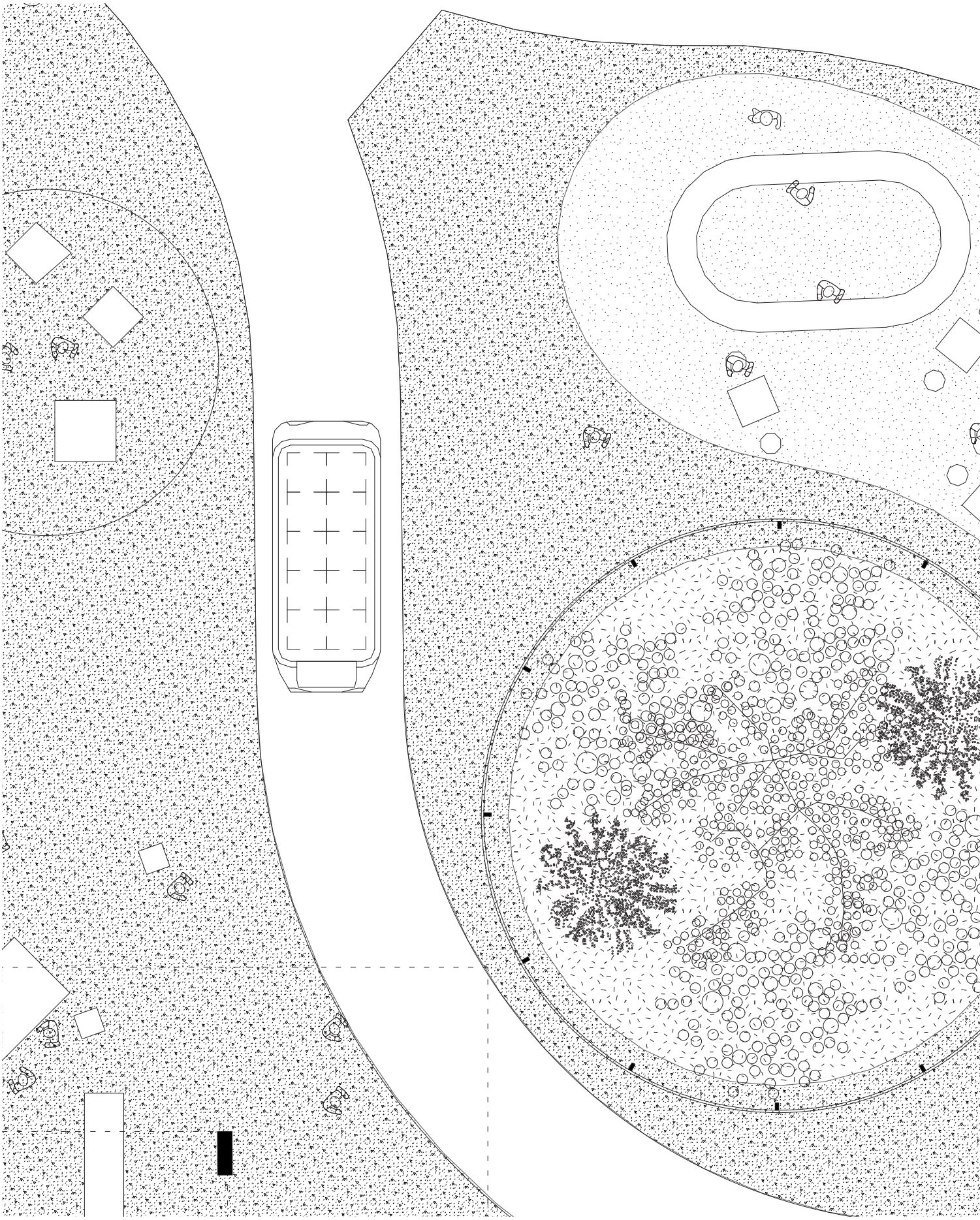
1 Concierge
2 Pick up points
3 Returning point



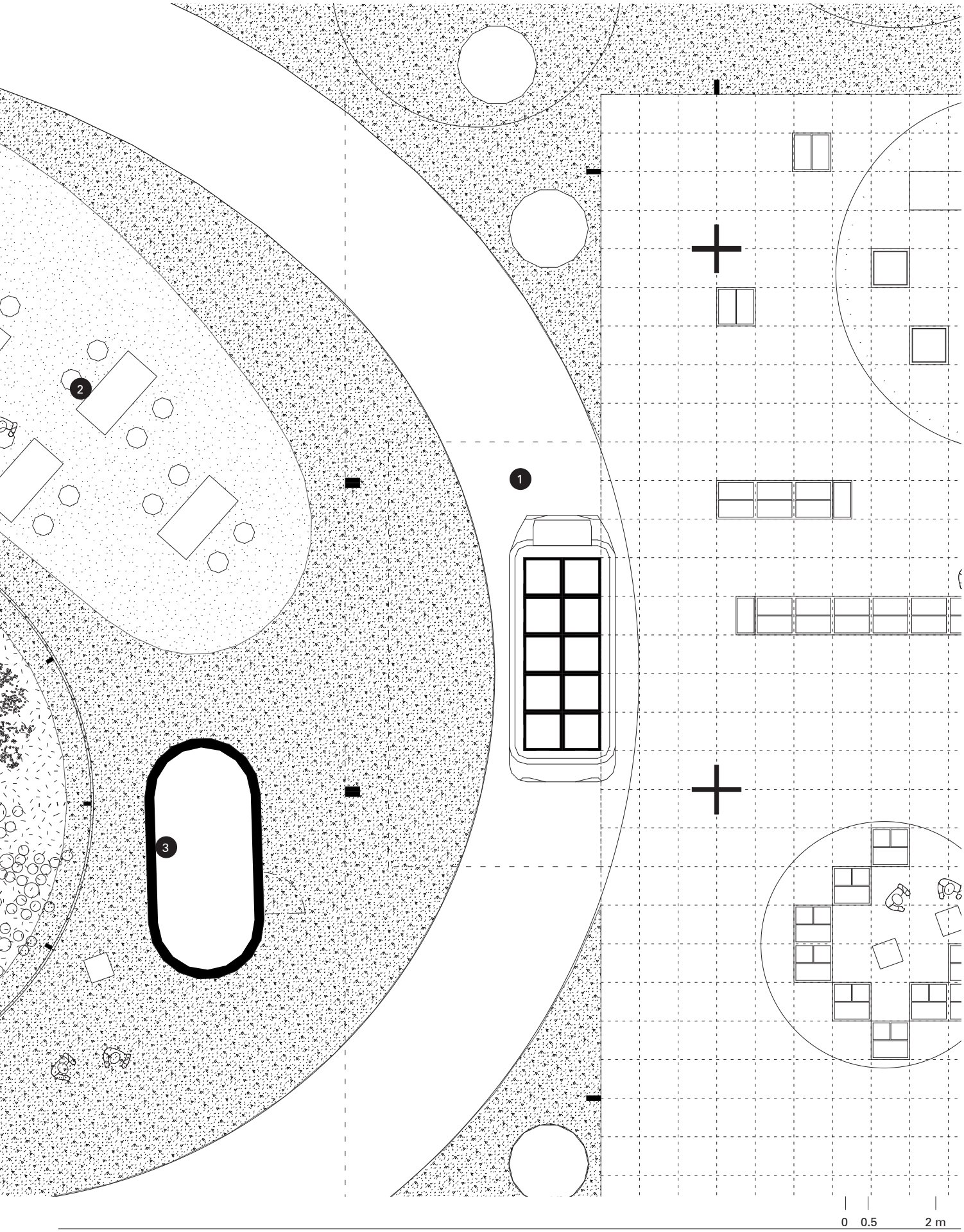
The dynamic robotic movements allow for the reconfiguration of the supermarket shelves in reaction to seasonality and specialties, rendering a unique shopping experience.

0 0.5 2 m

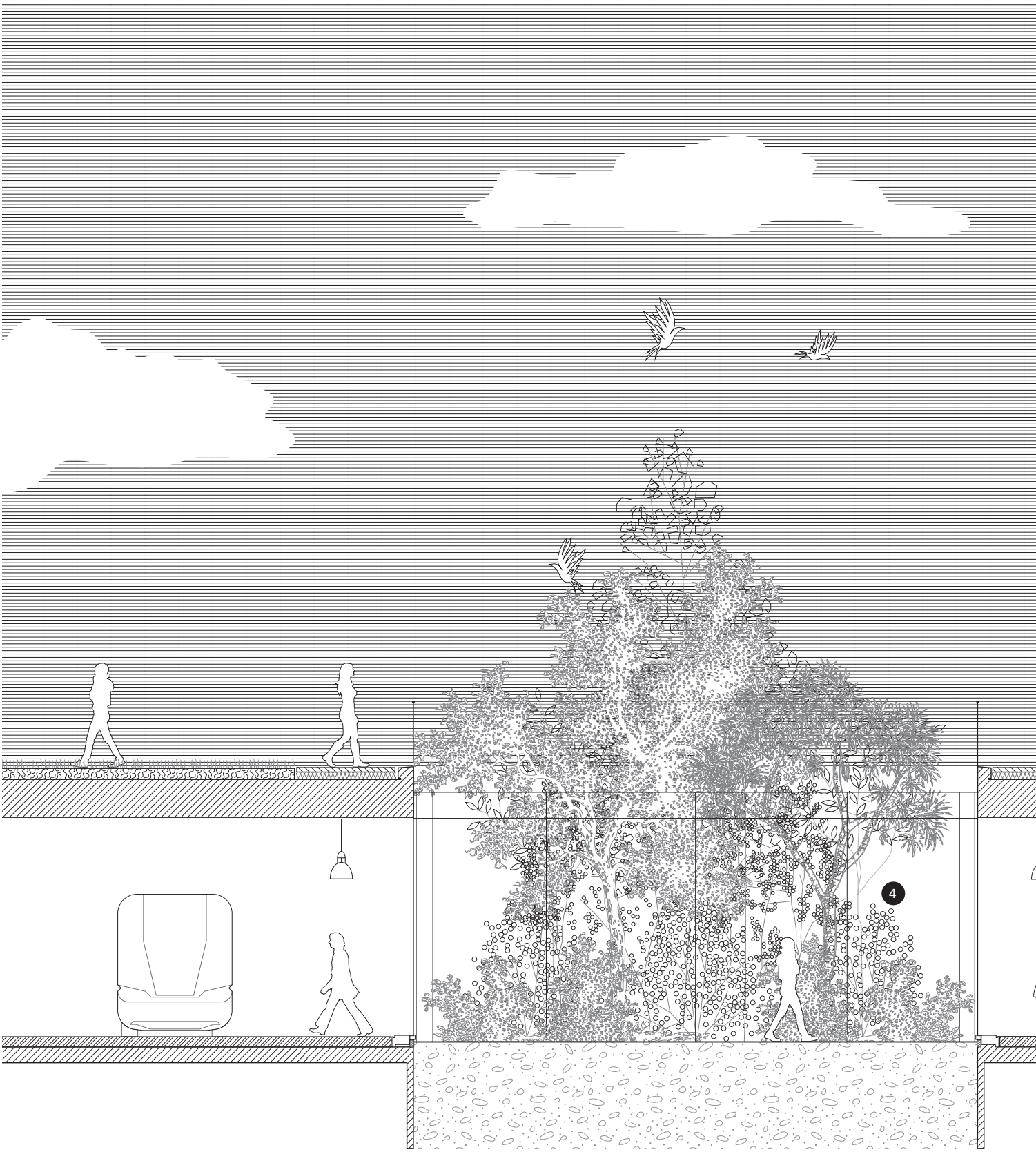
1 Host
2 Cart station



A ritual of loading and unloading is experienced on the sales floor, exposing the supermarket's supply chain to the conscious consumers.



1 Loading dock
2 Bar
3 Structural core and HVAC
4 Permaculture



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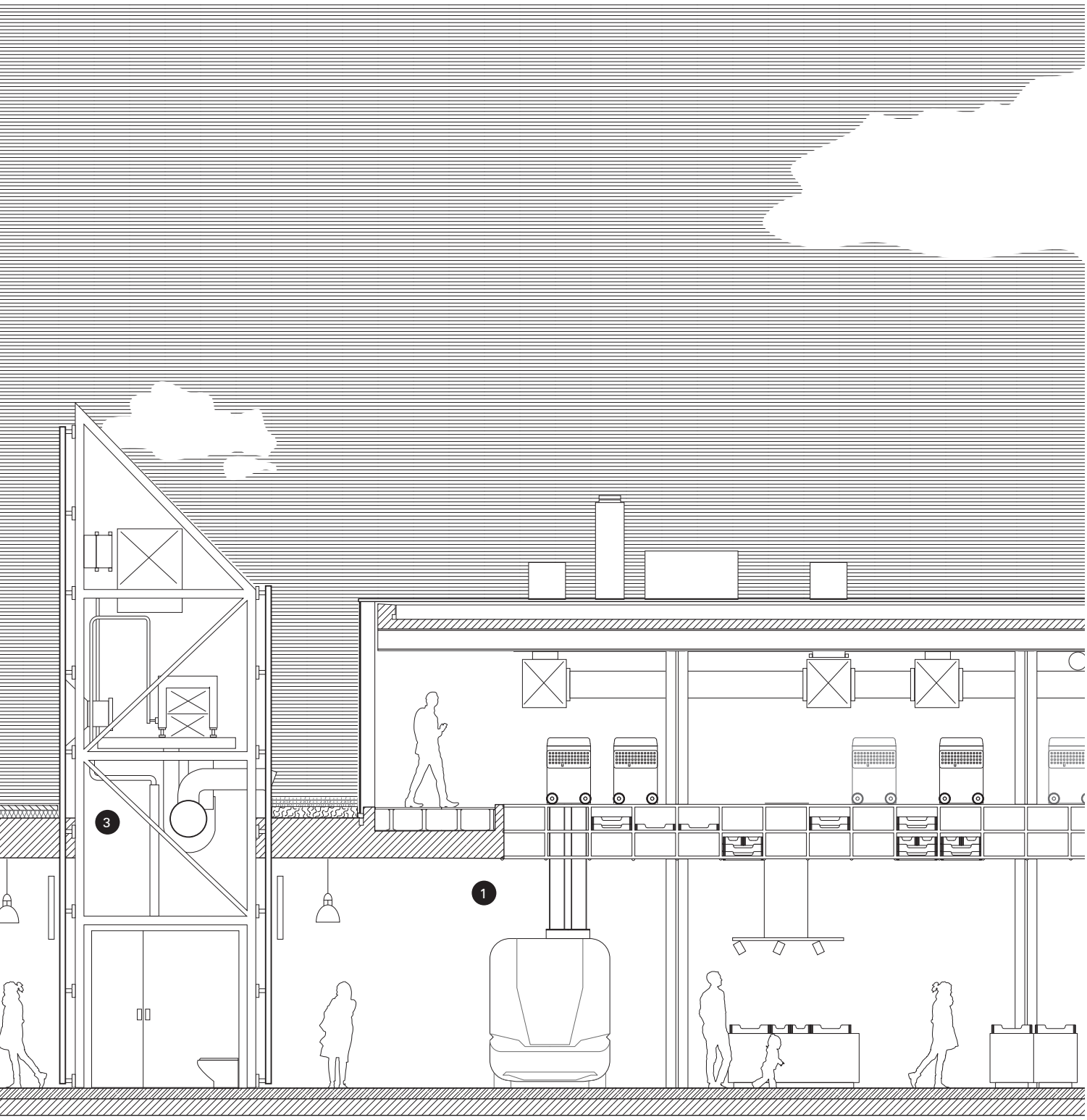

0 0.5 2 m

1 Loading dock
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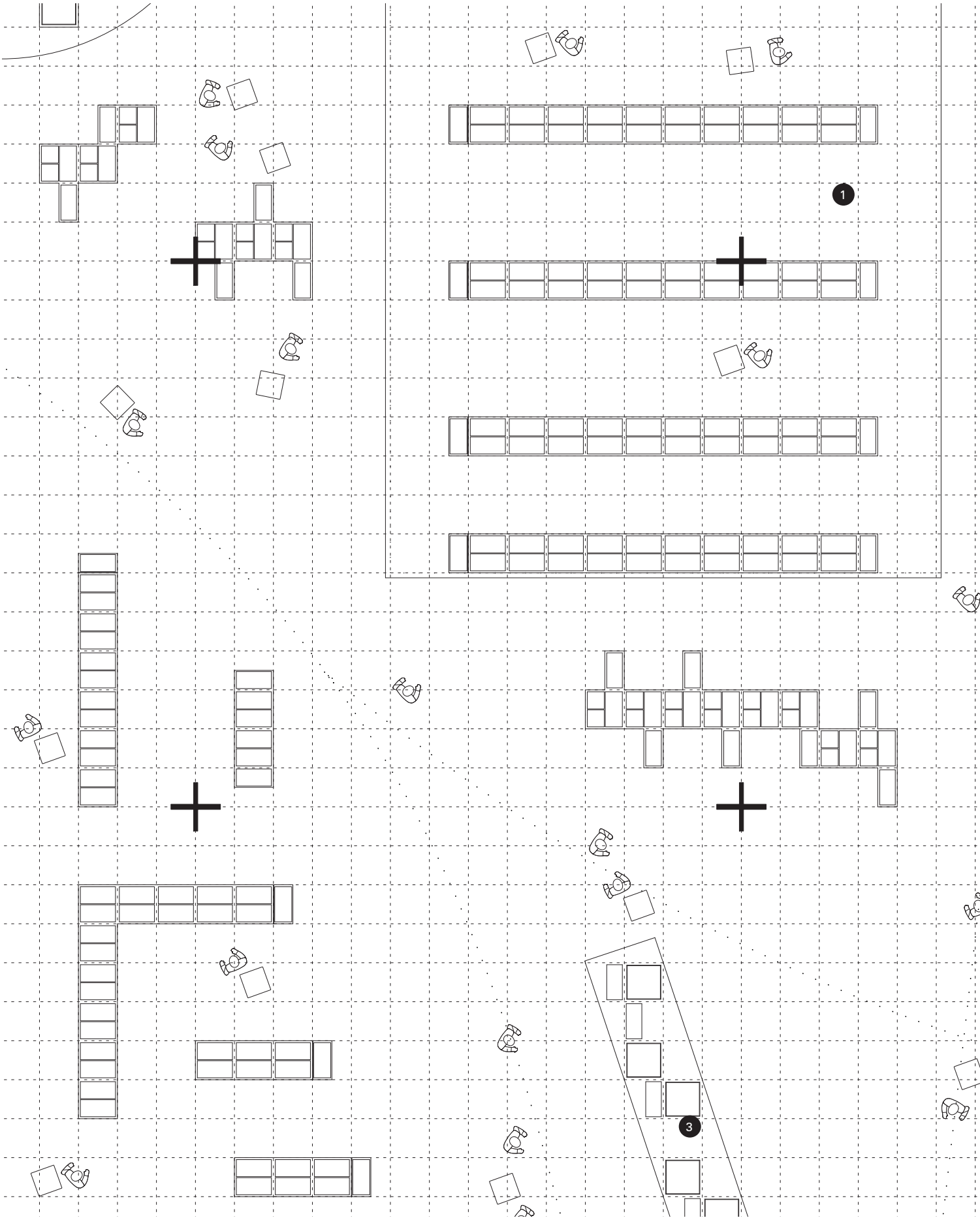

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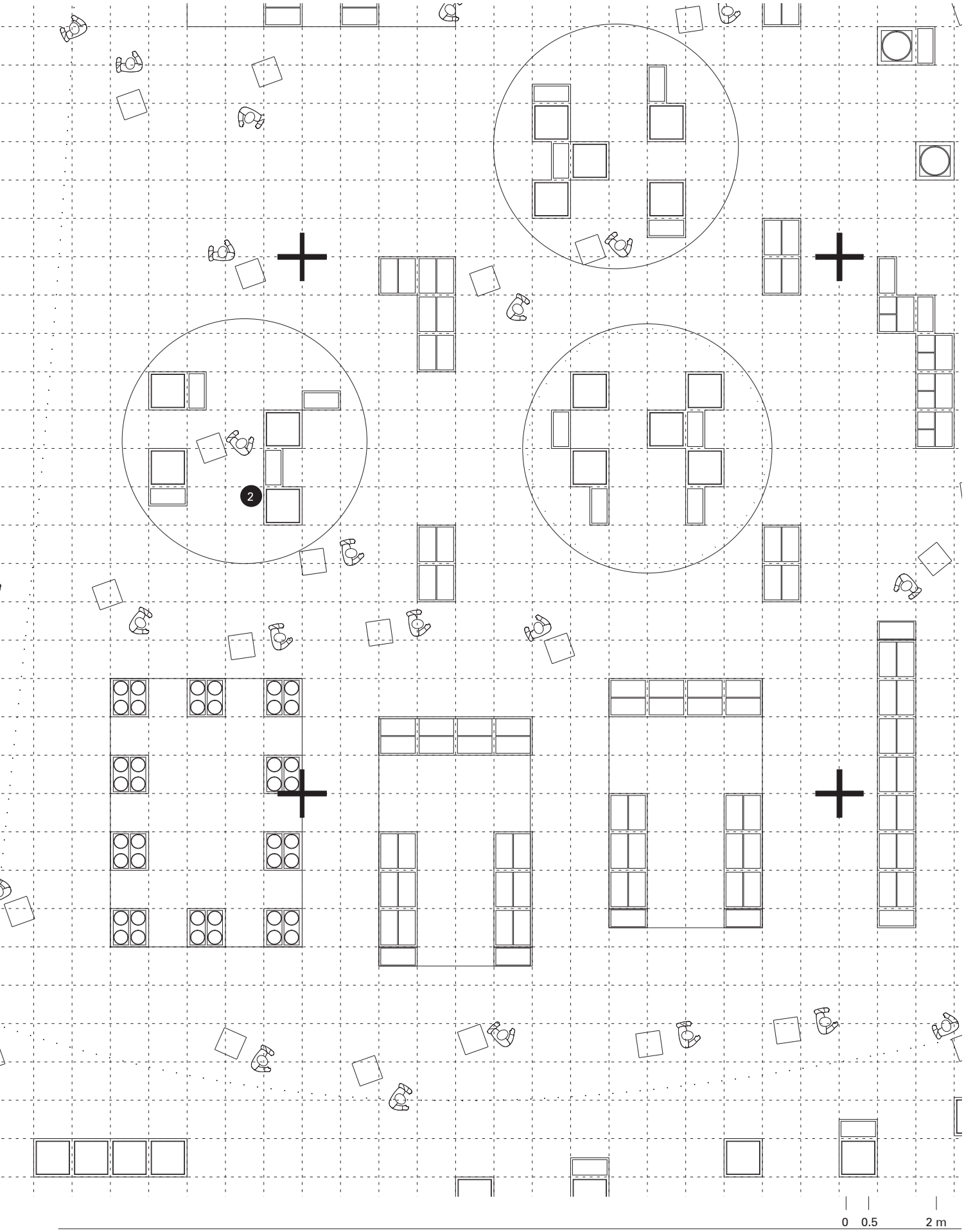
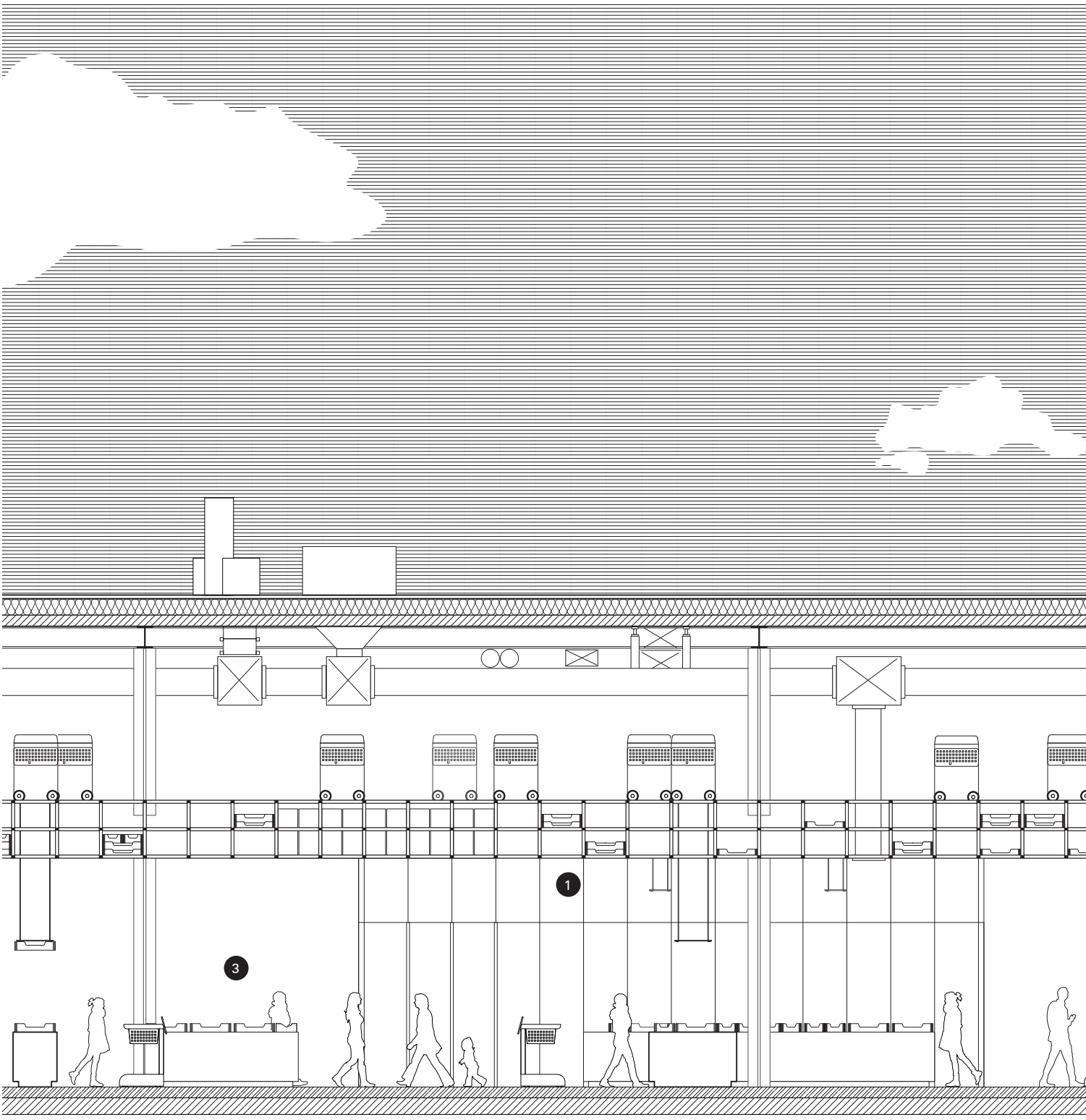


1 Refrigerated room
2 Sesonal products
3 Bonus



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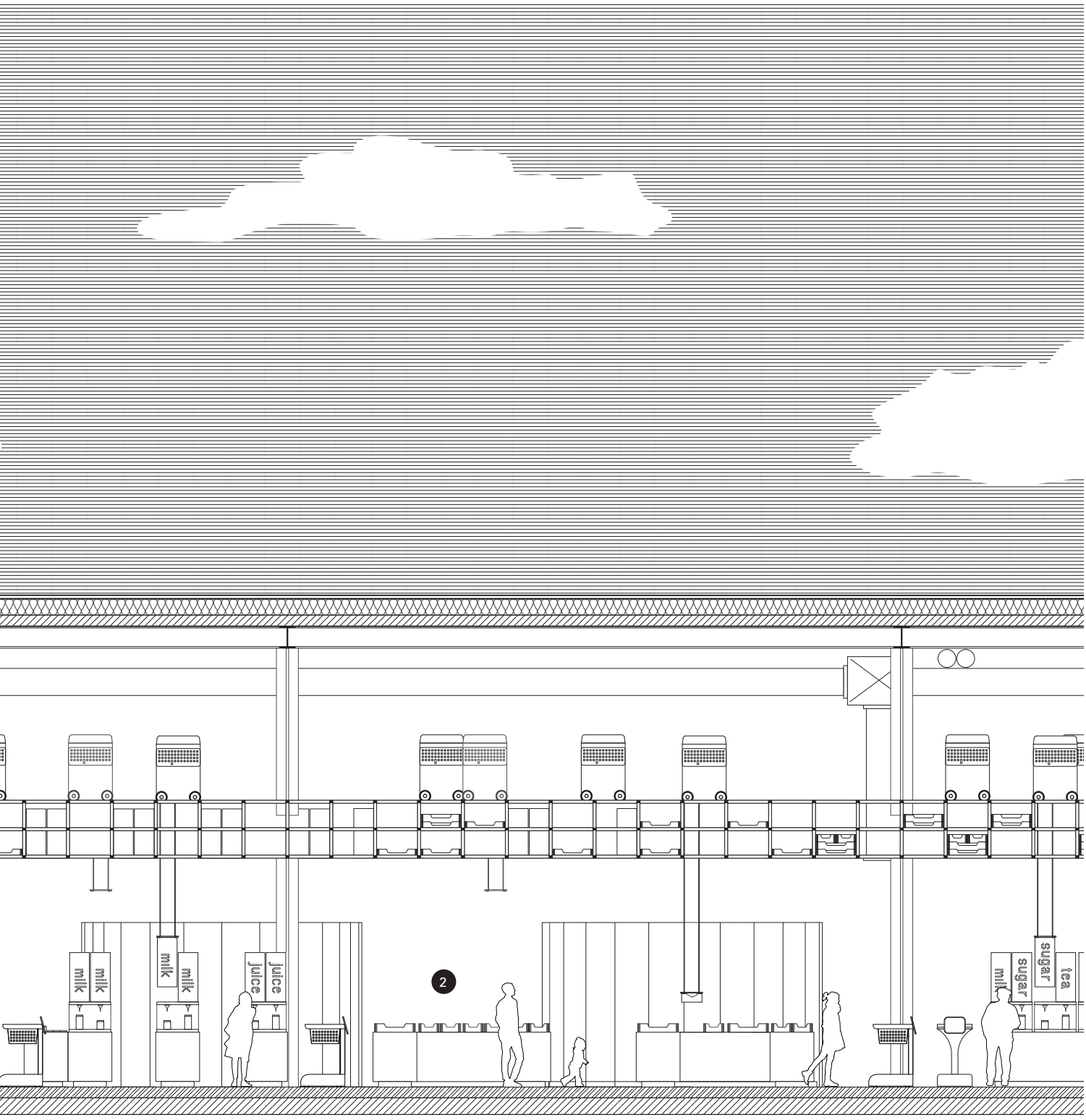
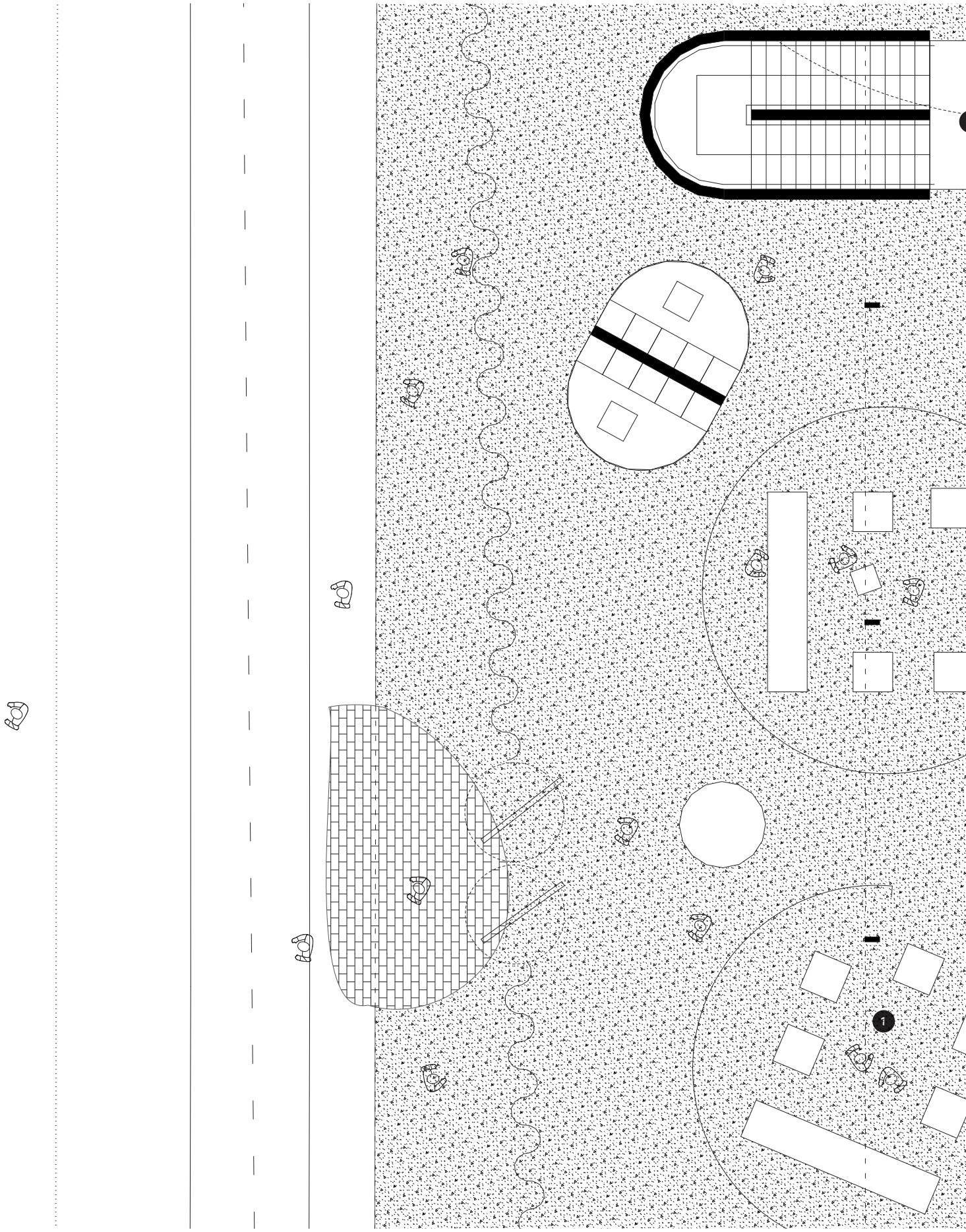
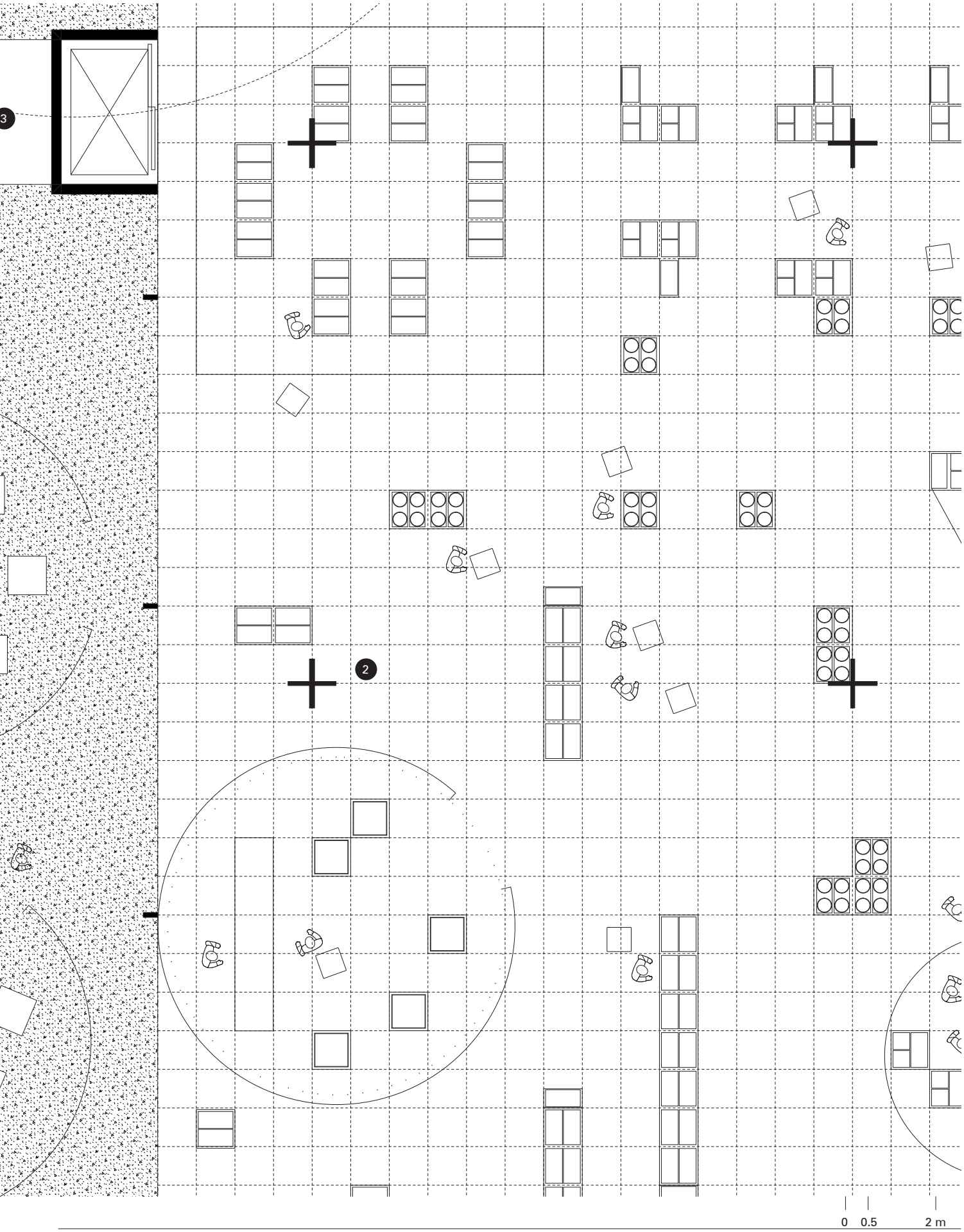


0 0.5 2 m

1 Refrigerated room
2 Sesonal products
3 Bonus

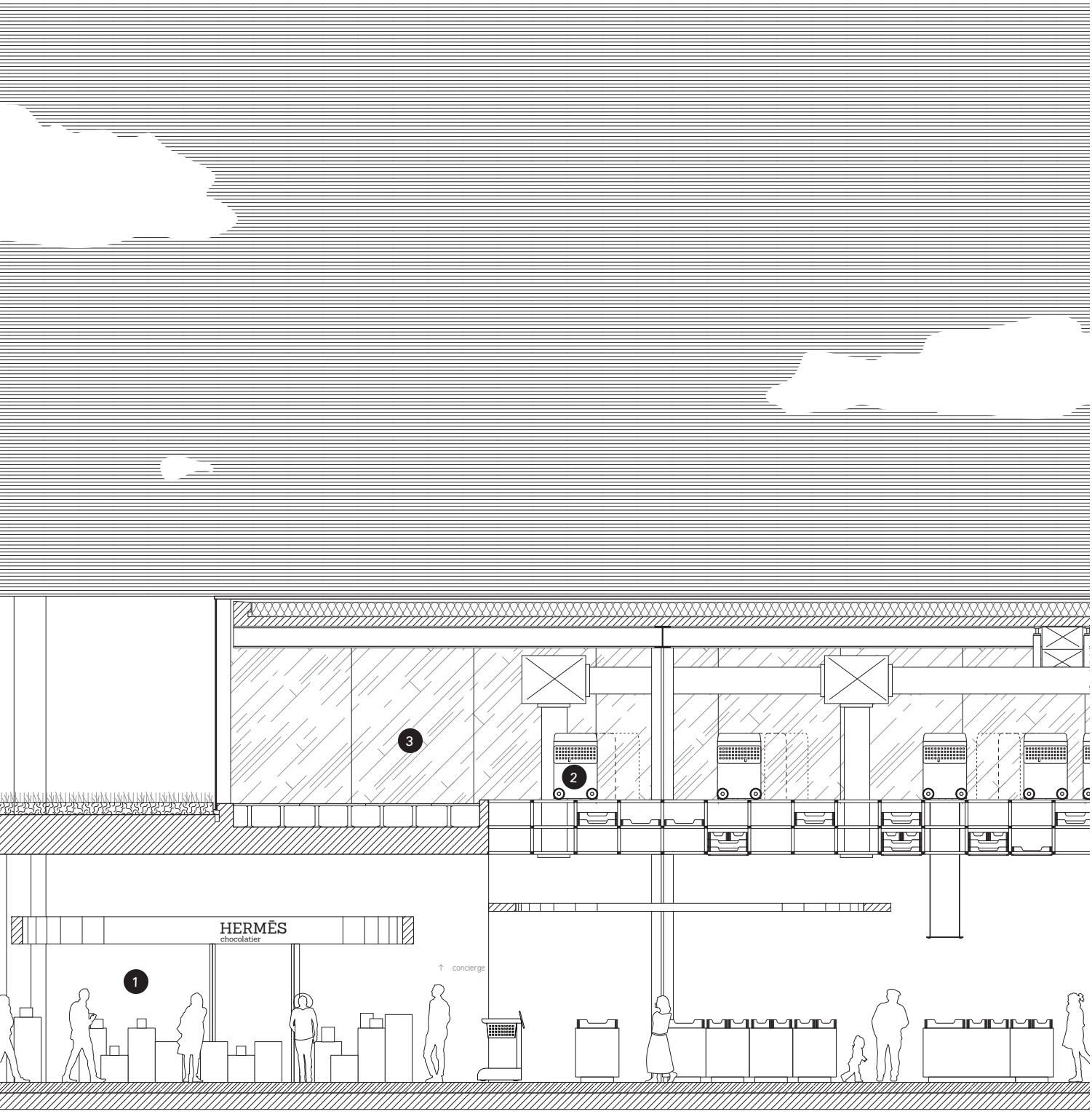


Independent areas are defined for peripheral store-in-stores, promoting collaborations with exclusive brands and local entrepreneurs.



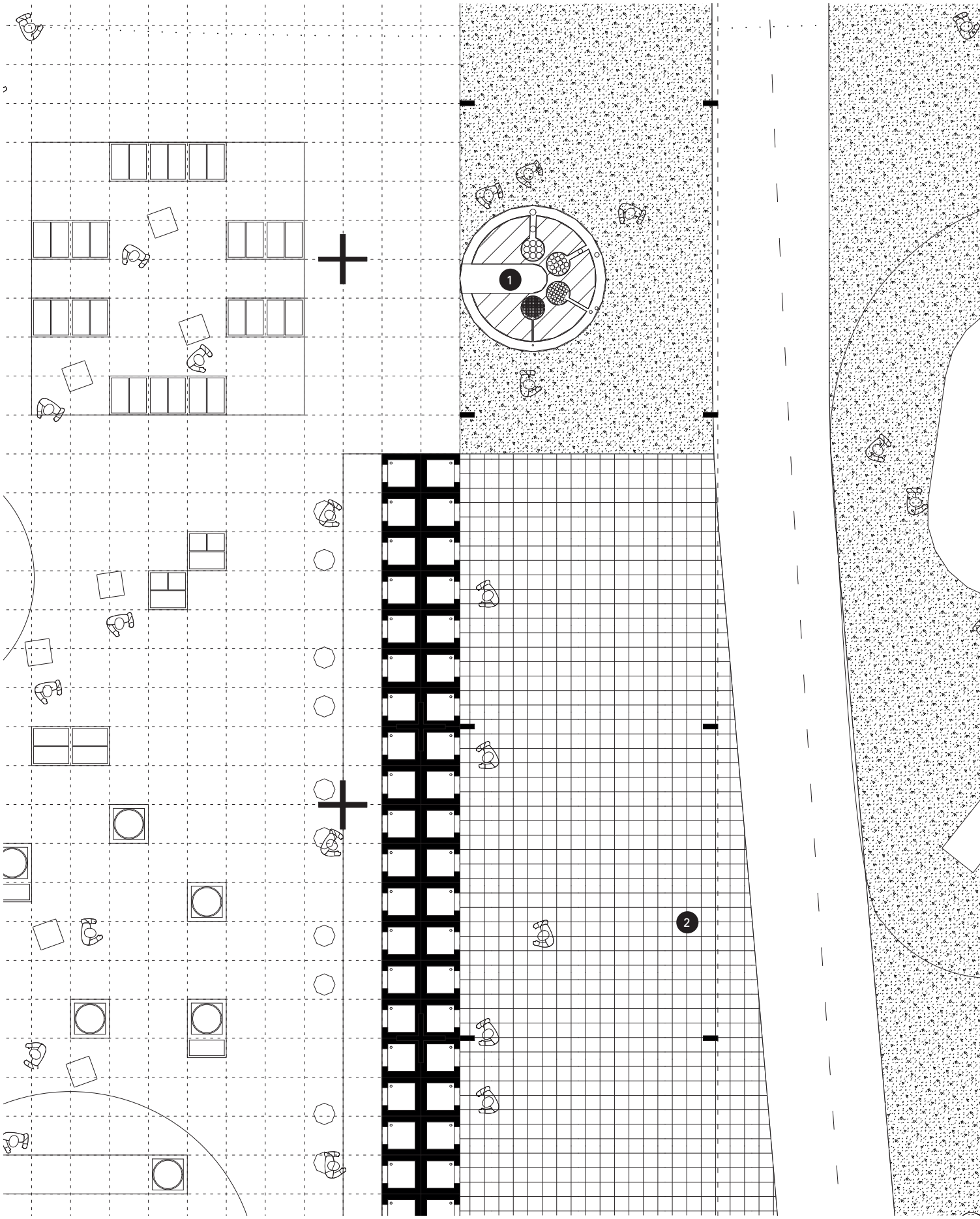
1 Shop-in-shop
2 Sales floor
3 Vertical core
4 Loading dock

Independent areas are defined for peripheral store-in-stores, promoting collaborations with exclusive brands and local entrepreneurs.

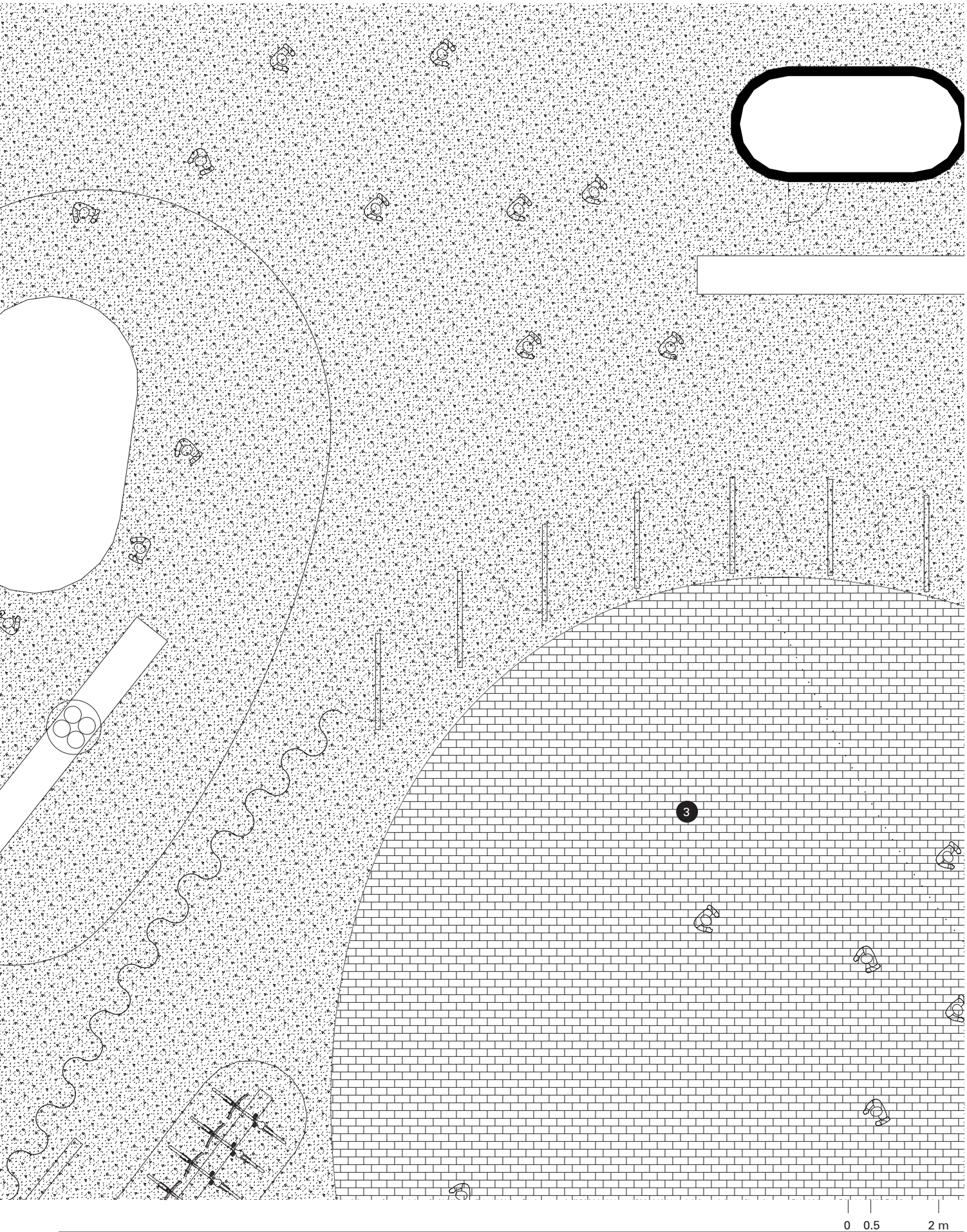


0 0.5 2 m

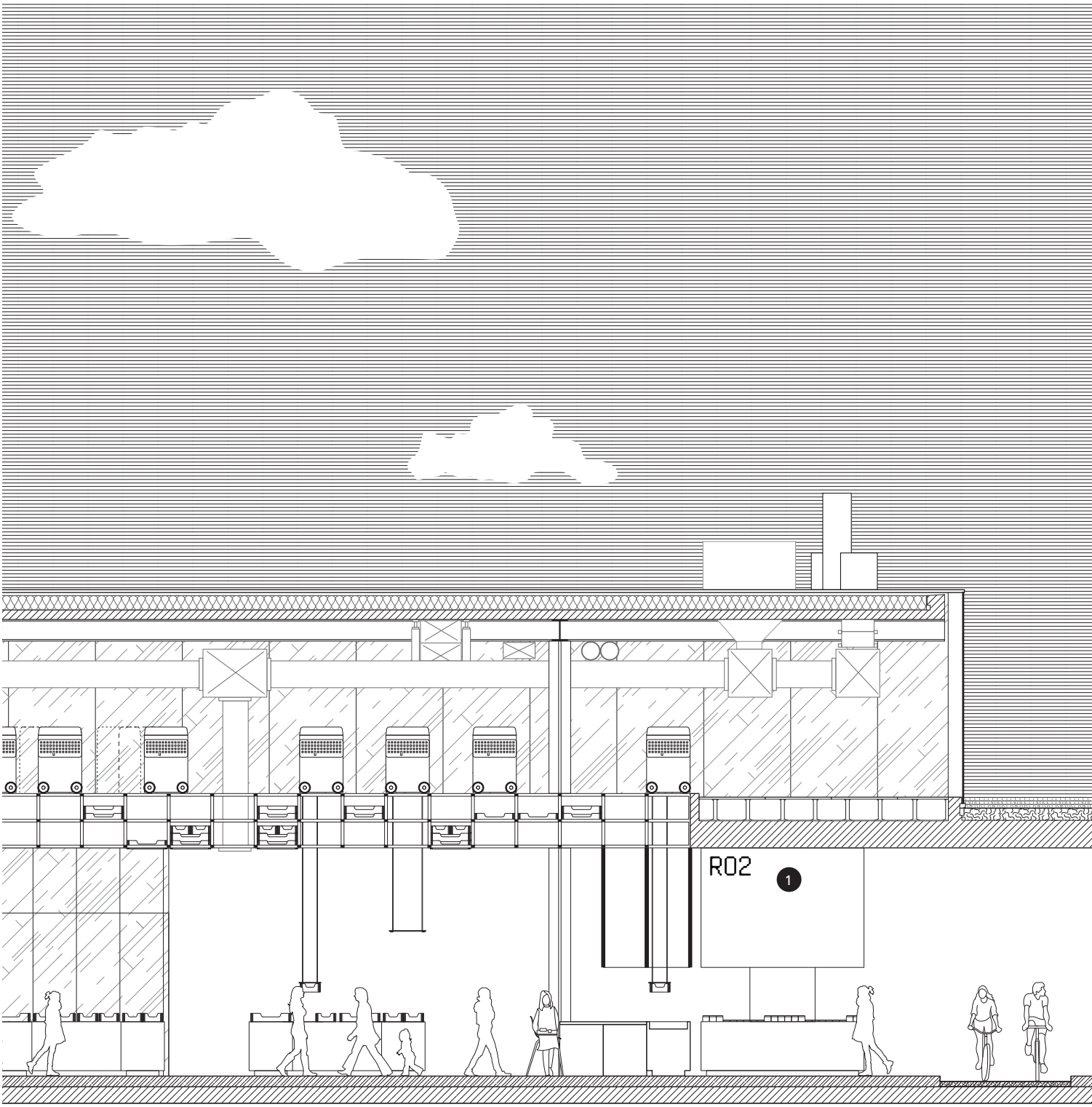
1 Shop-in-shop
2 Sales floor
3 Vertical core
4 Loading dock



Designated slow-paced zones with product demonstrations, workshops, and exclusive shops are developed around the periphery of the supermarket sales floor, in juxtaposition with fast-paced pick-up zones along the bike pathway to promote cyclists, delivery, and e-commerce.



1 Returning point
2 Automat
3 Entrance



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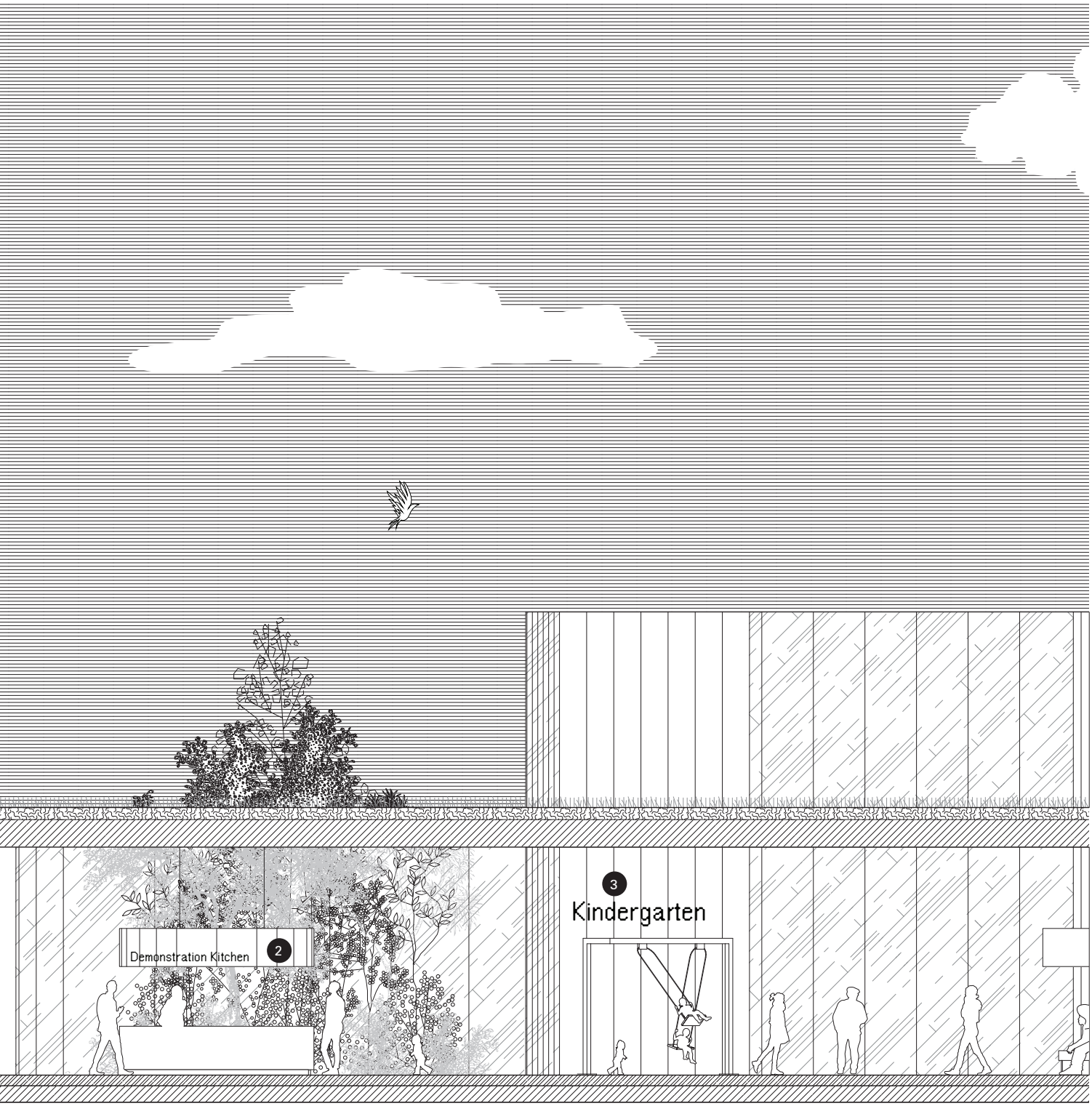
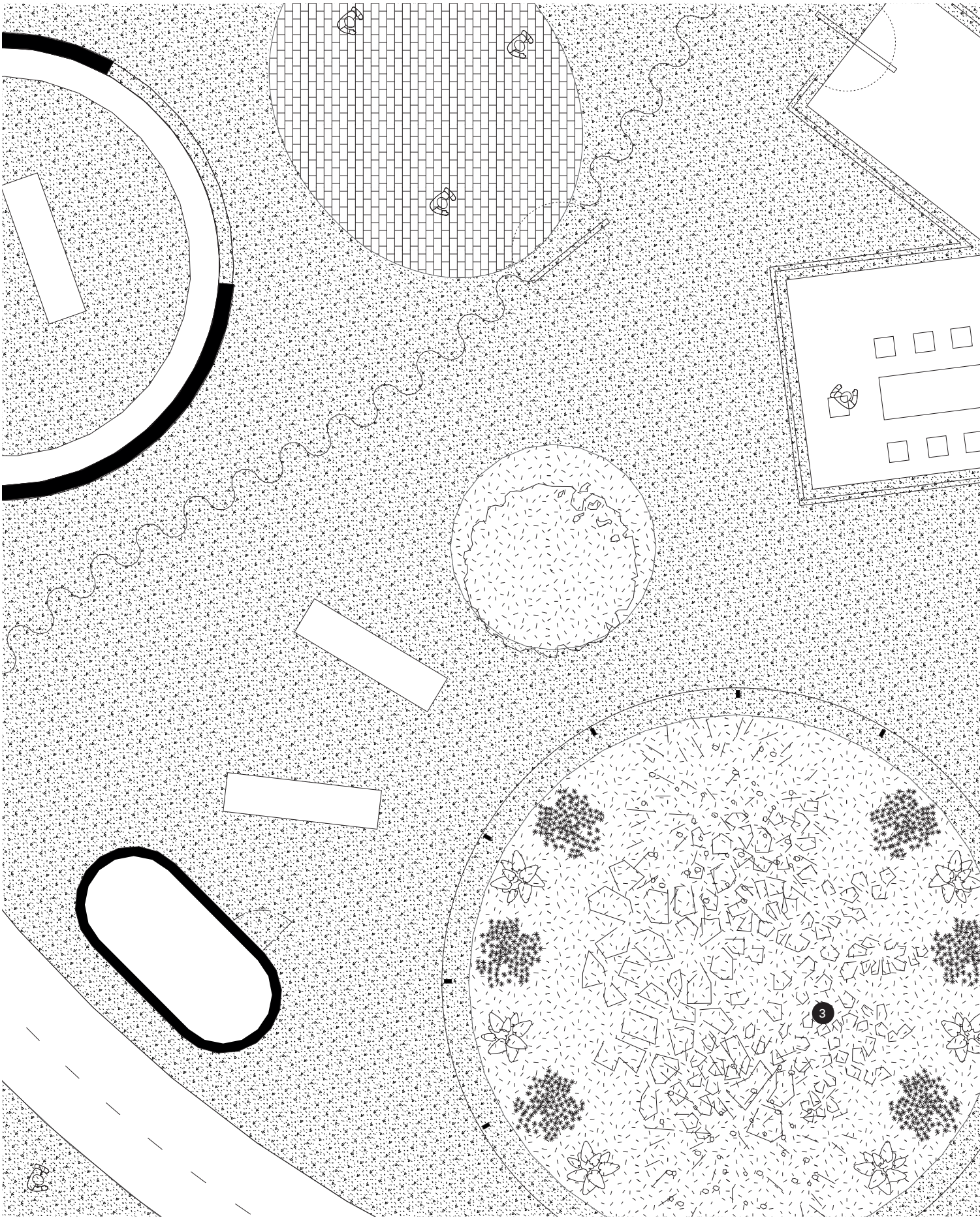
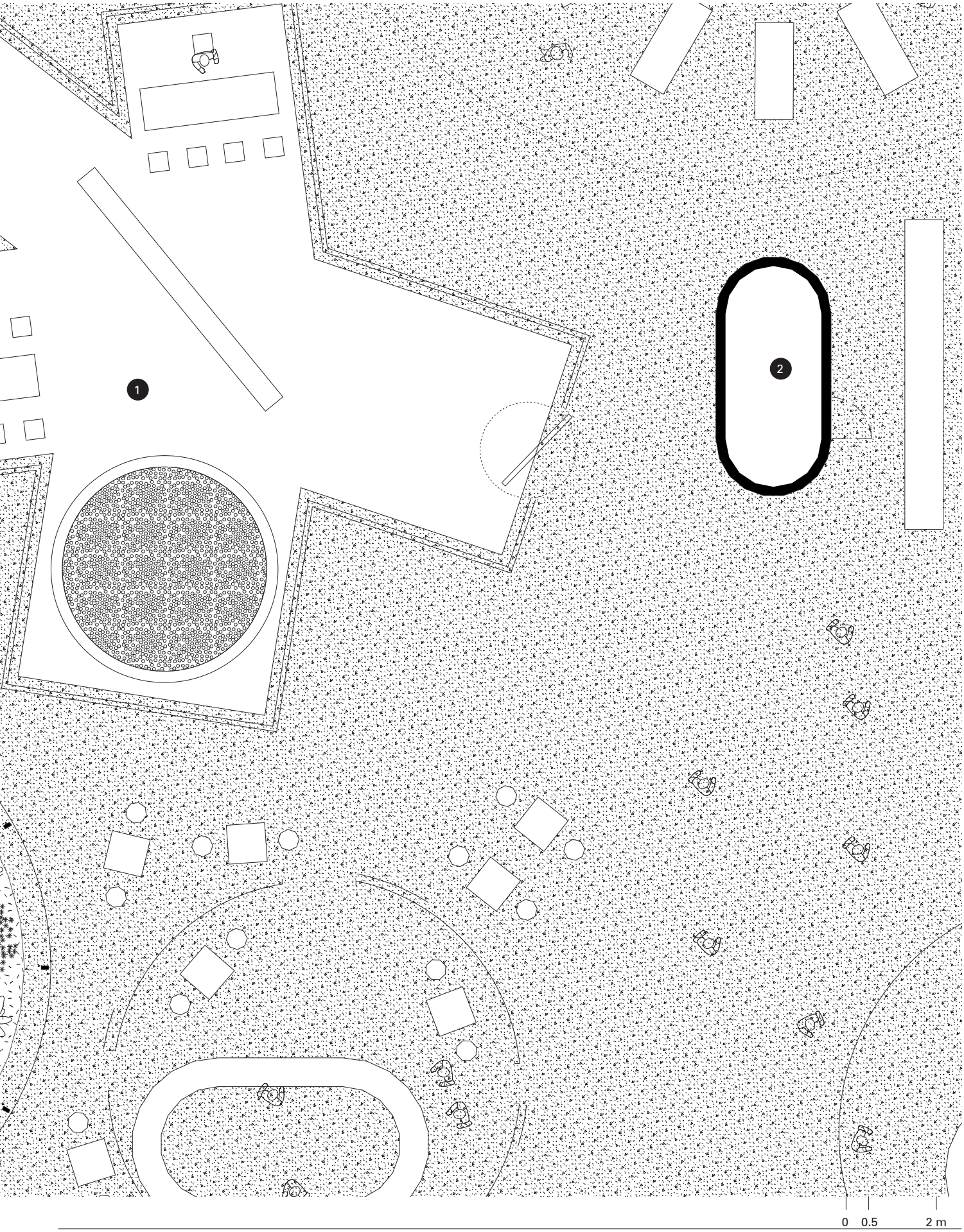


0 0.5 2 m

1 Returning point
2 Automat
3 Entrance

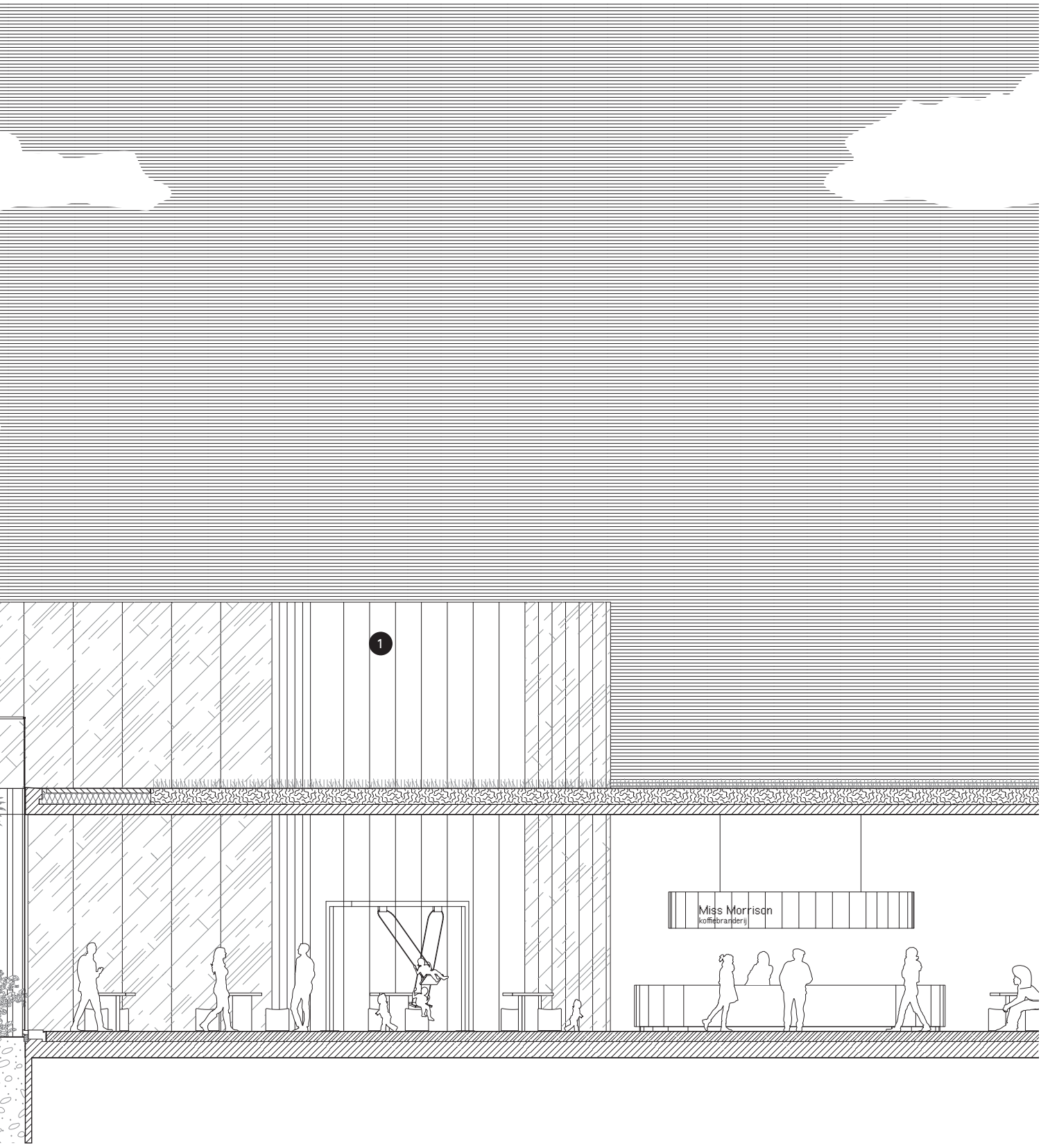


Public green zones are incorporated amidst the sales floor to entice the consumers to spend more time inside, while also providing a green roofscape for the neighborhood.



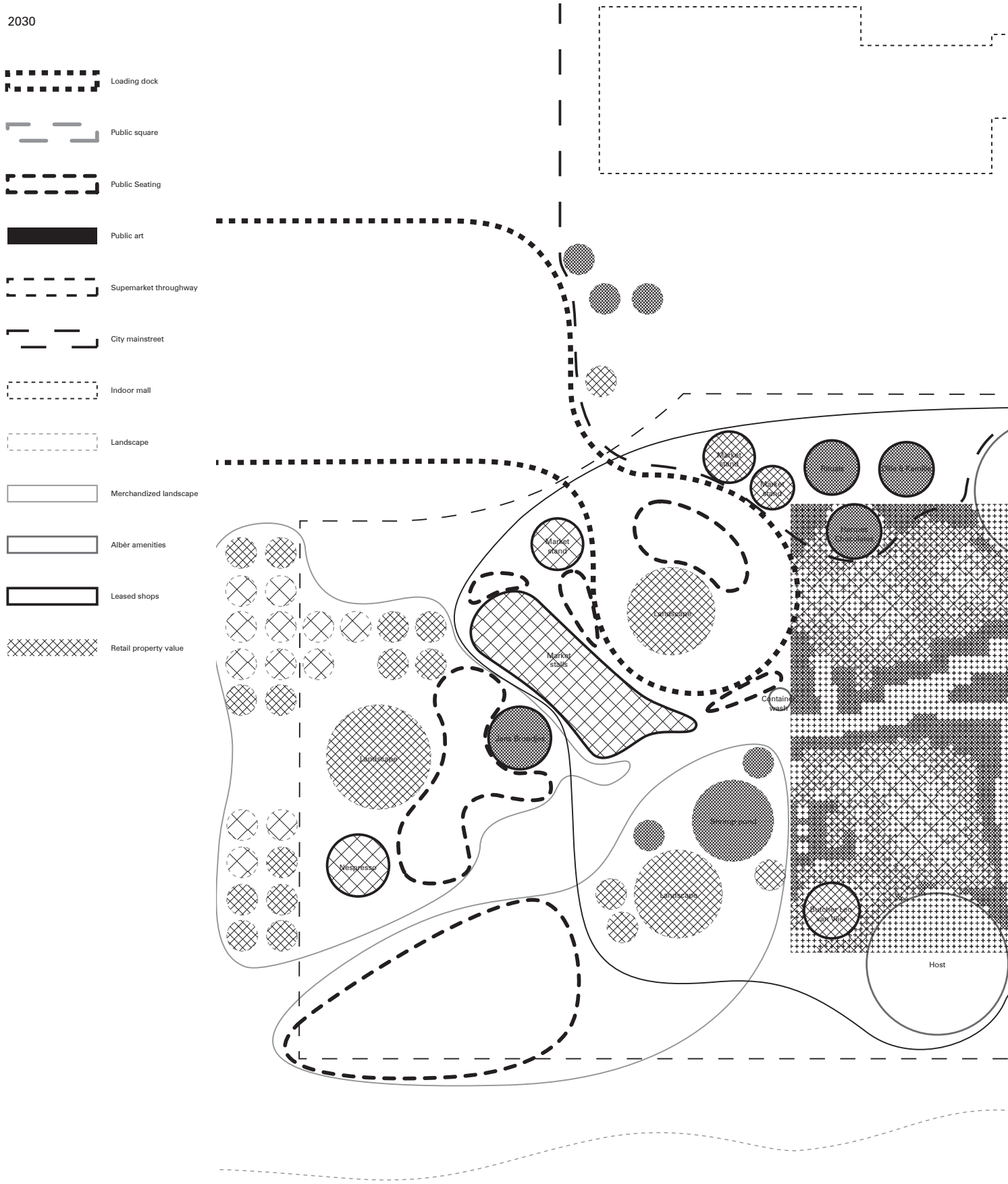
1 Kindergarten
2 Structural core, toiltes, HVAC
3 Public green areas

Public green zones are incorporated amidst the sales floor to entice the consumers to spend more time inside, while also providing a green roofscape for the neighborhood.

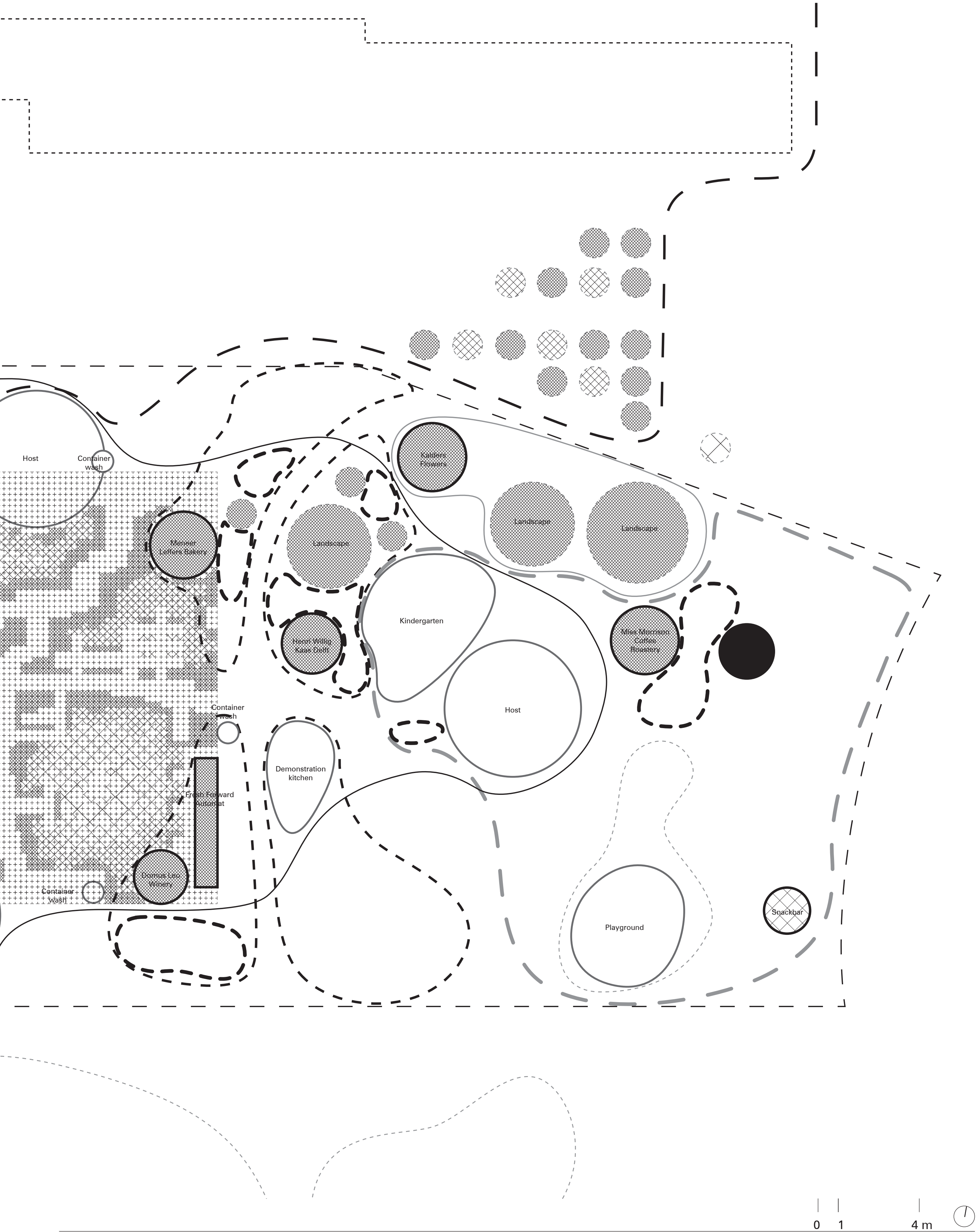


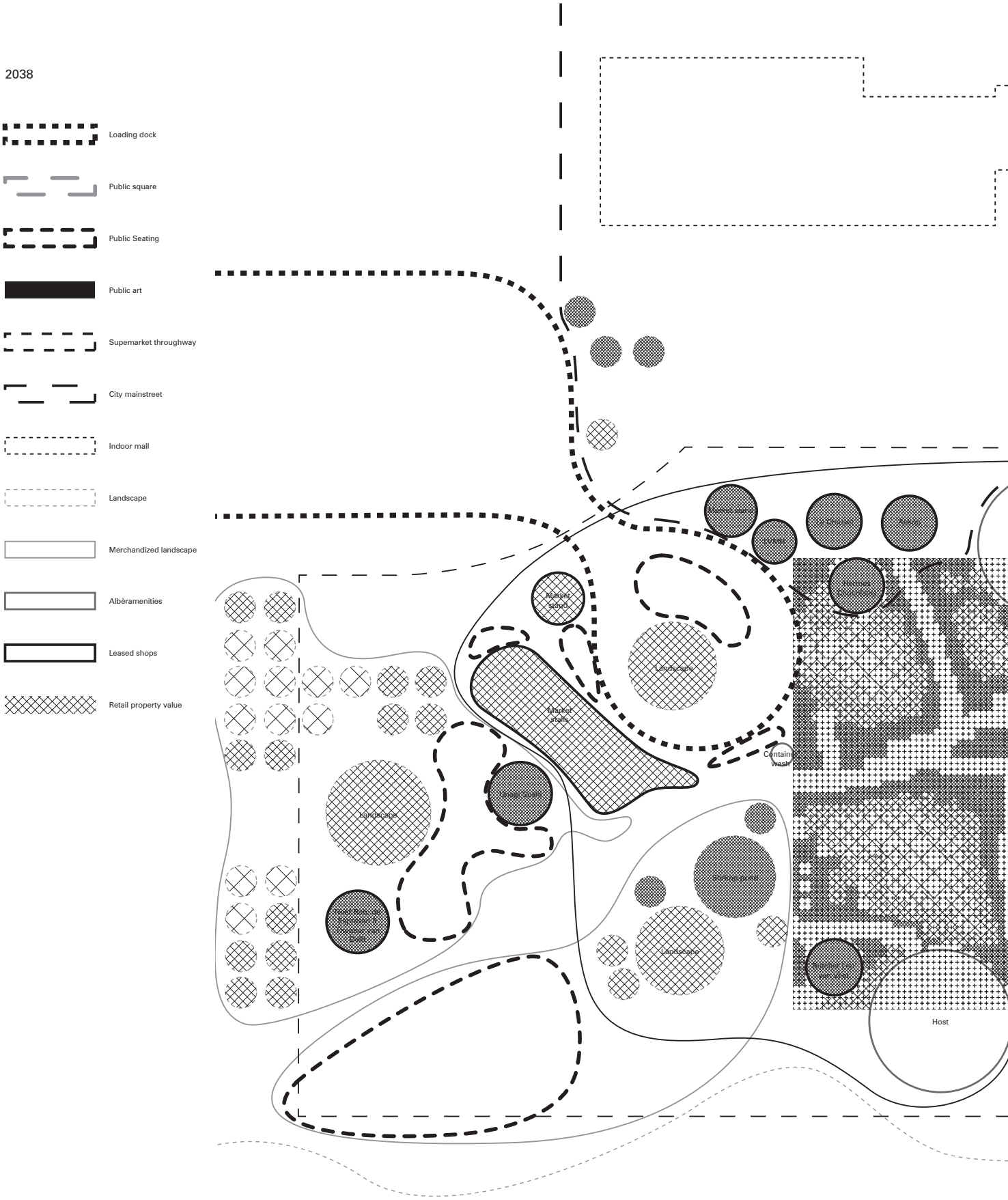
0 0.5 2 m

1 Kindergarten
2 Structural core, toiltes, HVAC
3 Public green areas



From bulks to fresh produce crates, standardized shelving systems within the open plan generate new episodic formats of planograms. No longer vertical and detached from each other, the new planograms dictate the dynamic floor plan.


Host
Container wash
Meneer Leffers Bakery
Landscape
Katders Flowers
Landscape
Landscape
Kindergarten
Henri Willig Kaas Delft
Miss Morrison Coffee Roastery
Host
Container wash
Demonstration kitchen
Fresh Forward Automat
Domus Leo Winery
Container wash
Playground
Snackbar
0
1
4 m



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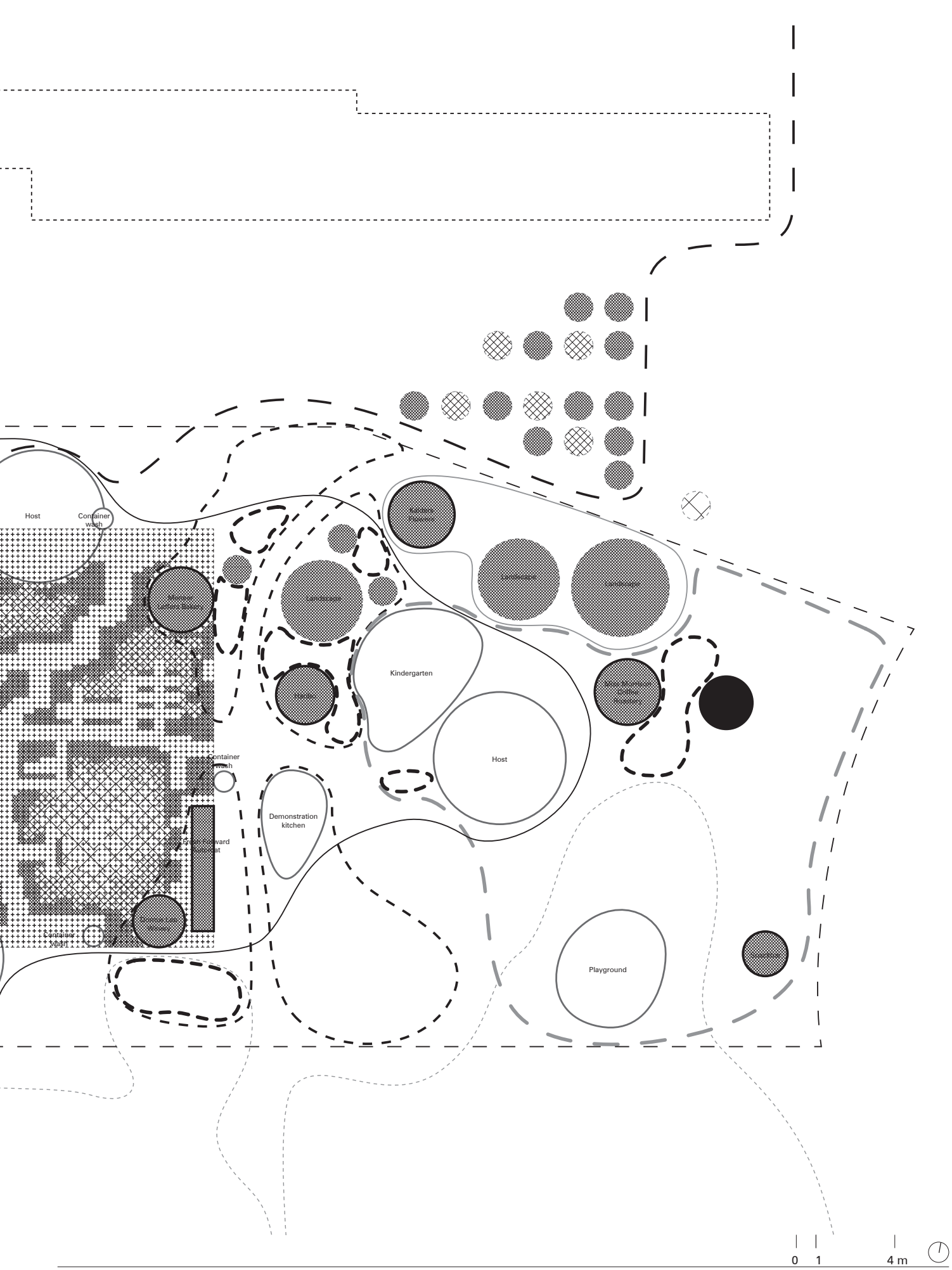
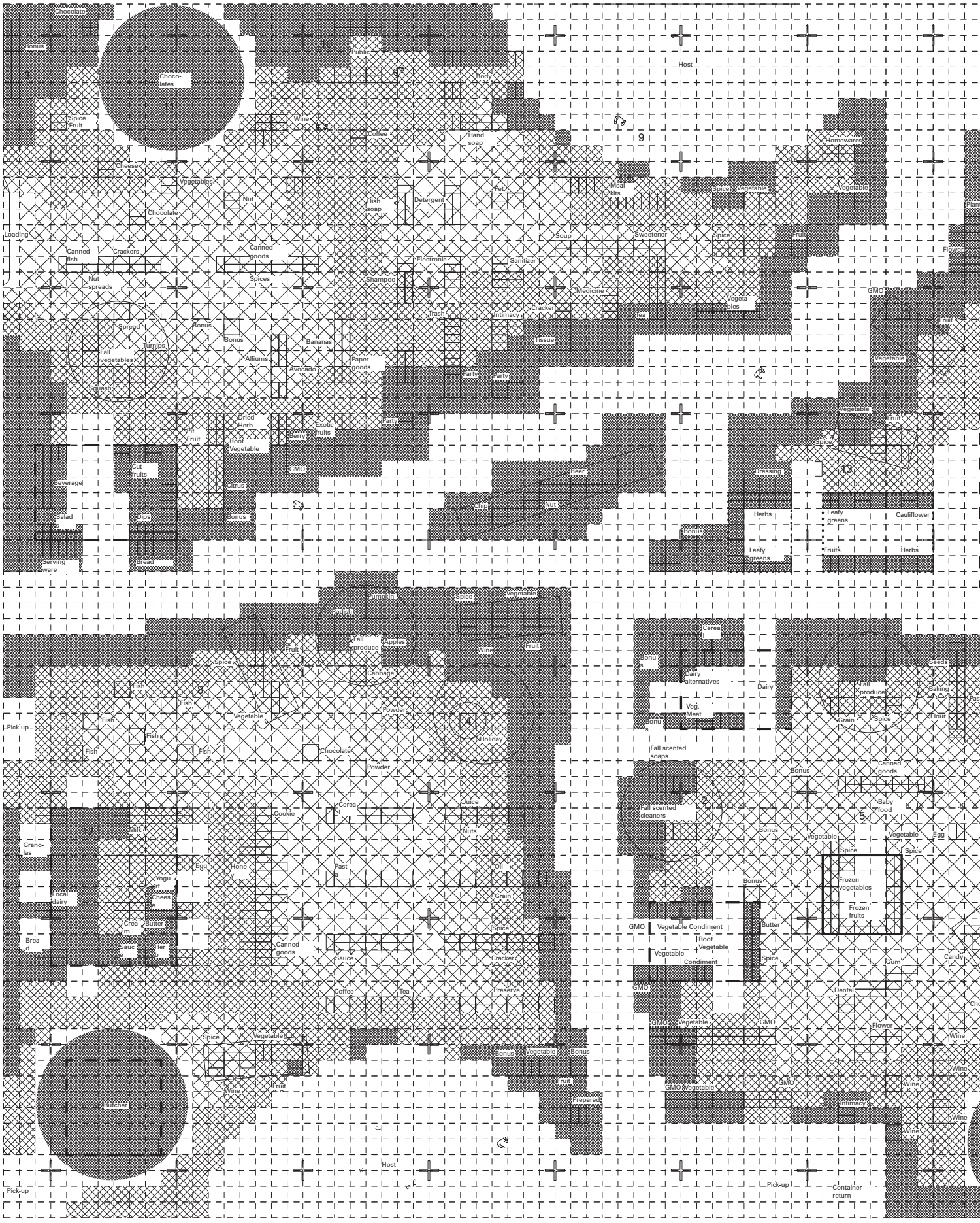
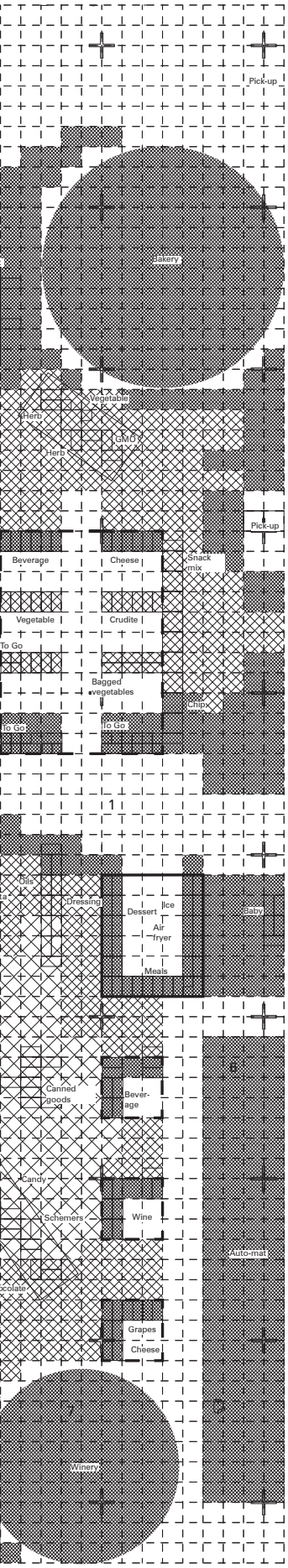

Host
Container wash
Kindergarten
Host
Demonstration kitchen
Container wash
Container wash
Playground
0
1
4 m



The supermarket sales floor as a real estate platform reveals business strategies in order to generate profit. Albèrt's business approach offers a wide range of products through a binary financial model that incorporates all Albèrt products within the efficient automated grid system, while real estate strategies—such as store-within-a-store—for branded products remain exclusively and independently staged.



Retail property value

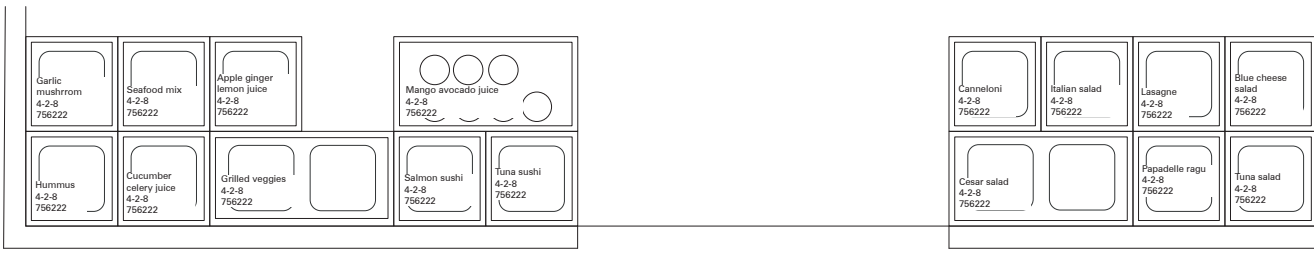
Walk-in refrigeration

Misted refrigeration

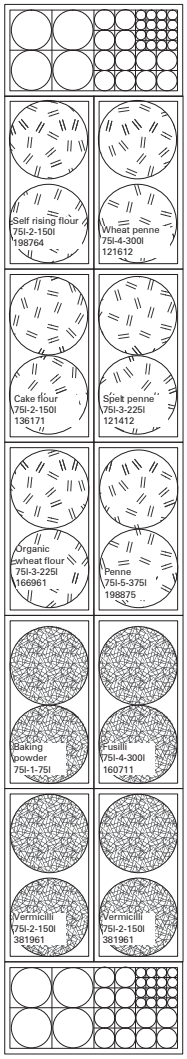
Freezer

PRODUCT NAME (XXXX)
UNITS IN CONTAINER - CONTAINERS IN STORE - UNITS IN STORE (#-#-#)
PRODUCT CODE (######)

0 1 4 m



Path

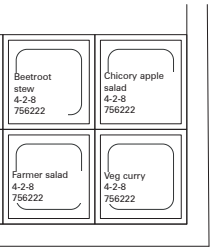


1

Holiday

Path

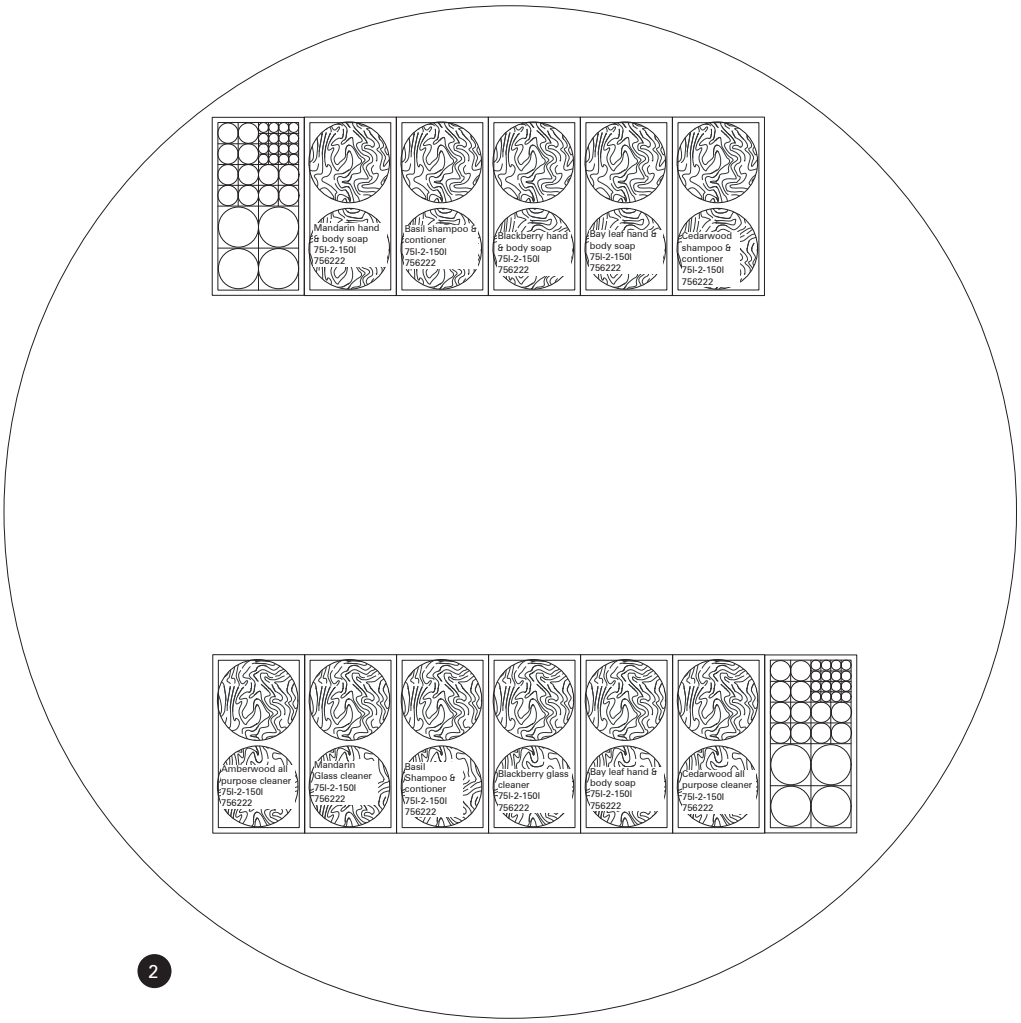
From bulks to fresh produce crates, standardized shelving systems within the open plan generate new episodic formats of planograms. No longer vertical and detached from each other, the new planograms dictate the dynamic floor plan.



Pick-up

Seating

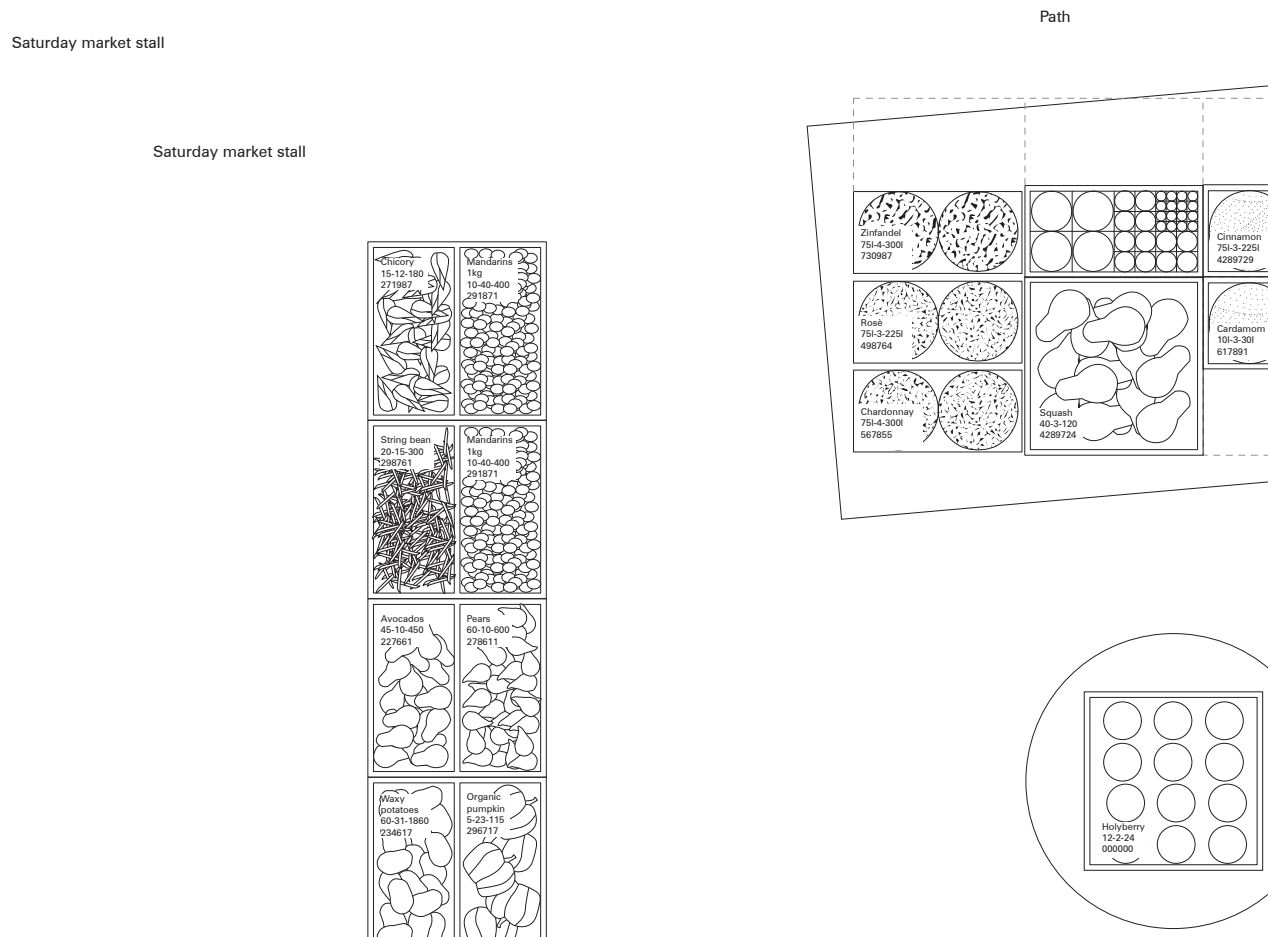
Bike path



2

0 200 1000 mm

1 Bike path convenience
2 Fall scented cleaners



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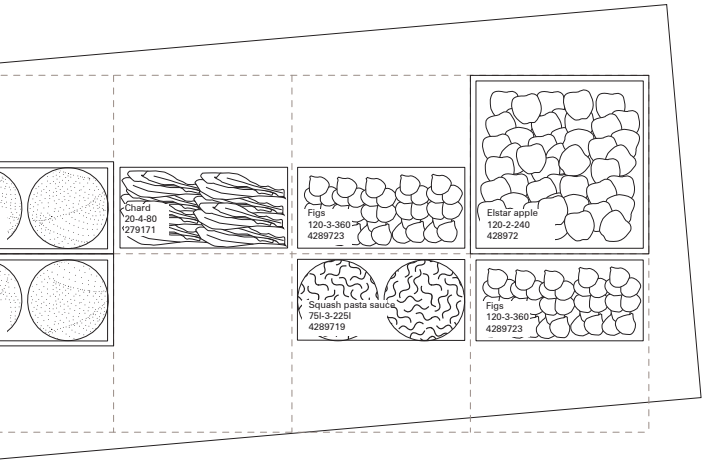
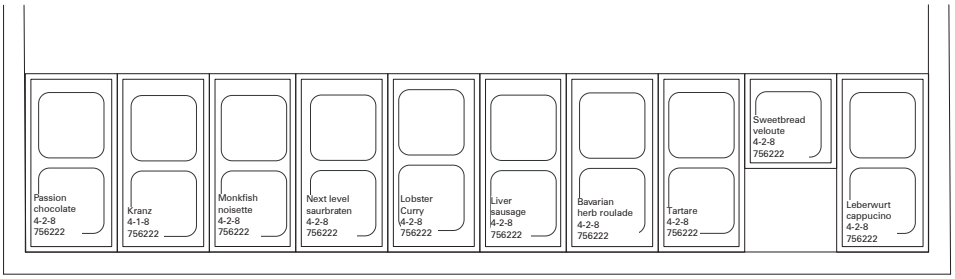
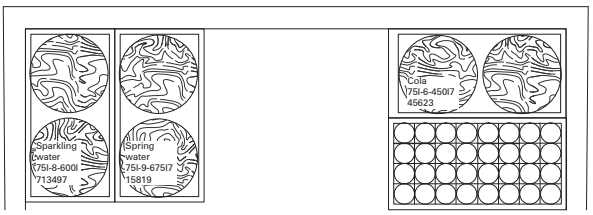


Path



Fresh forward automat

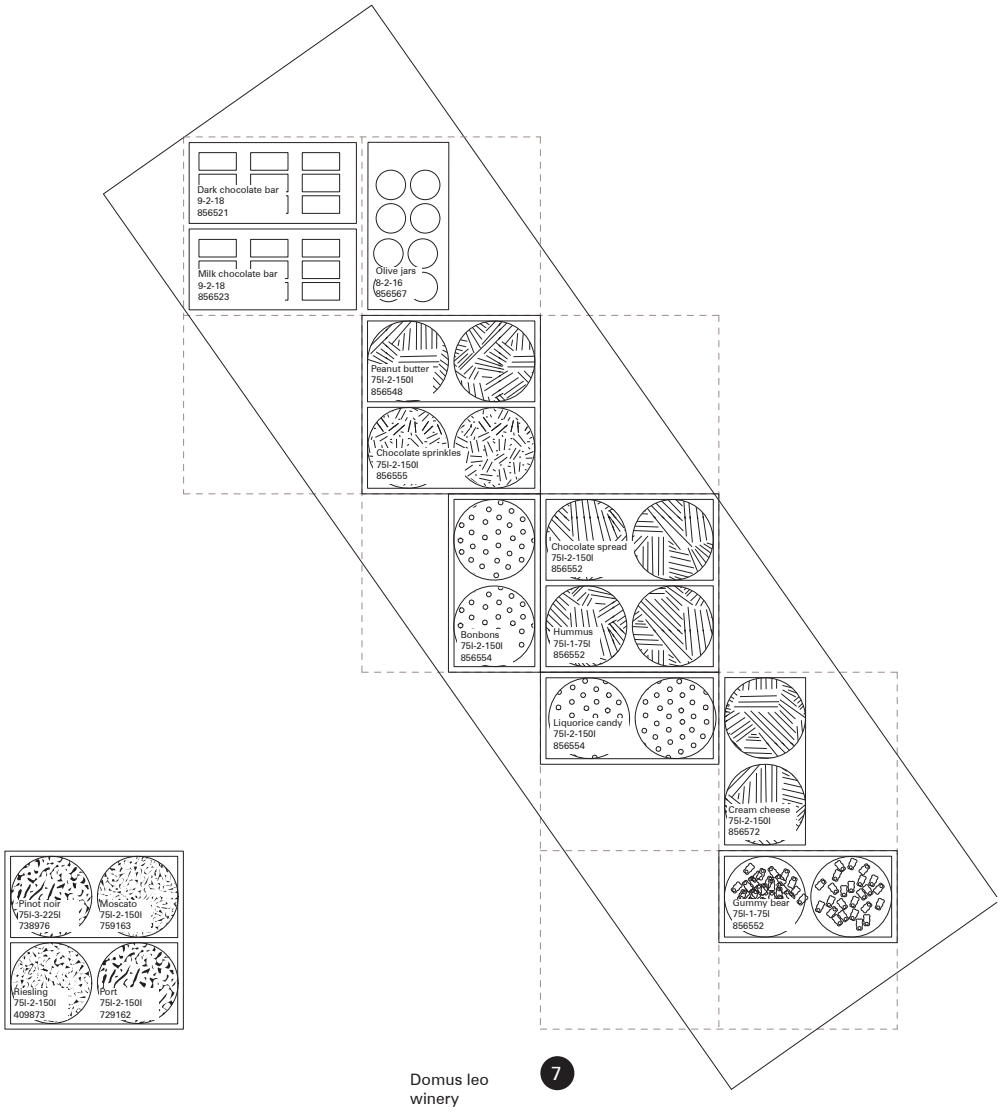


Seating

6

0 200 1000 mm

3 Saturday market aisles
4 Holyberry merchandising
5 Baby products and pantry
6 Automat merchandising



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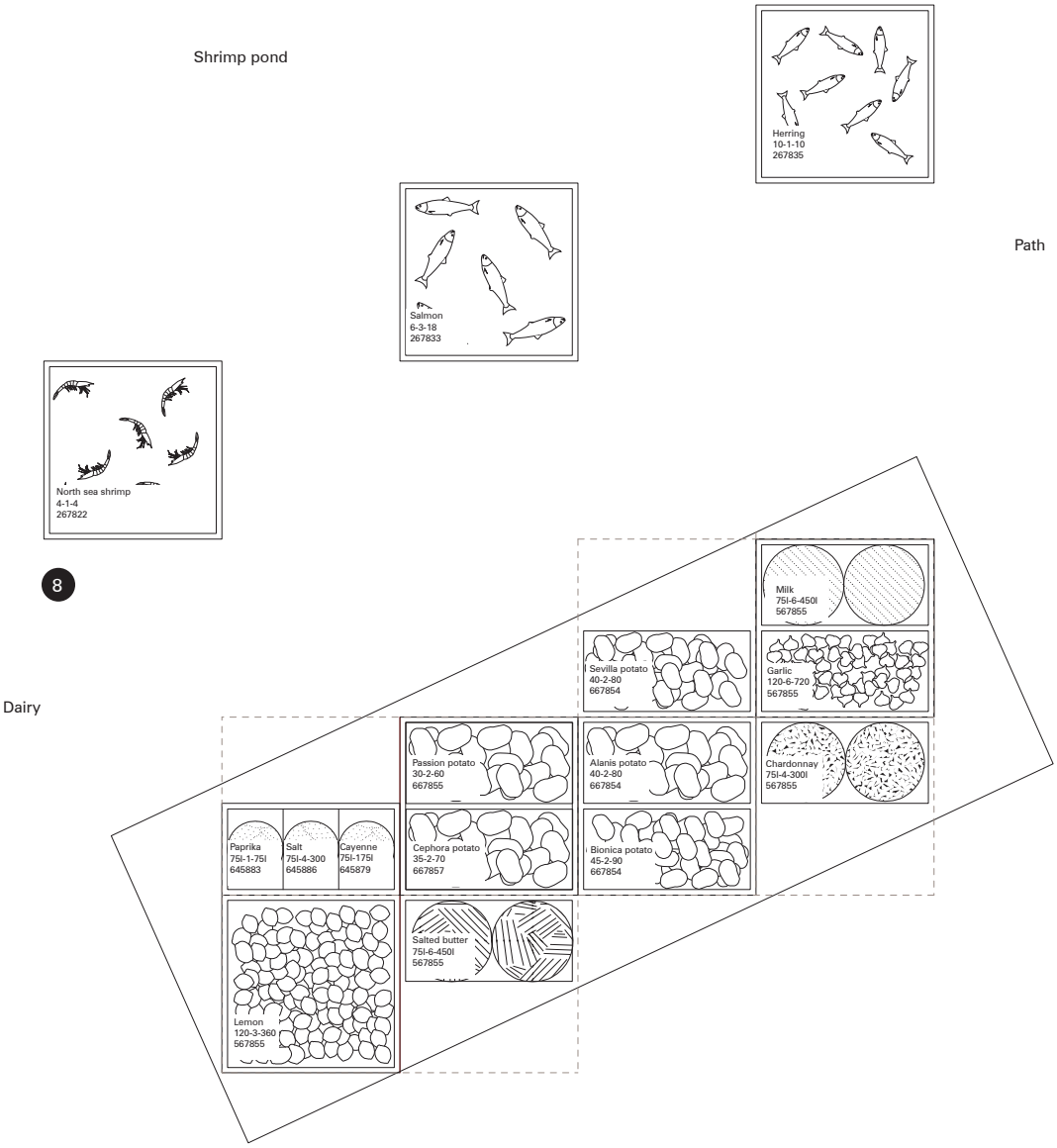
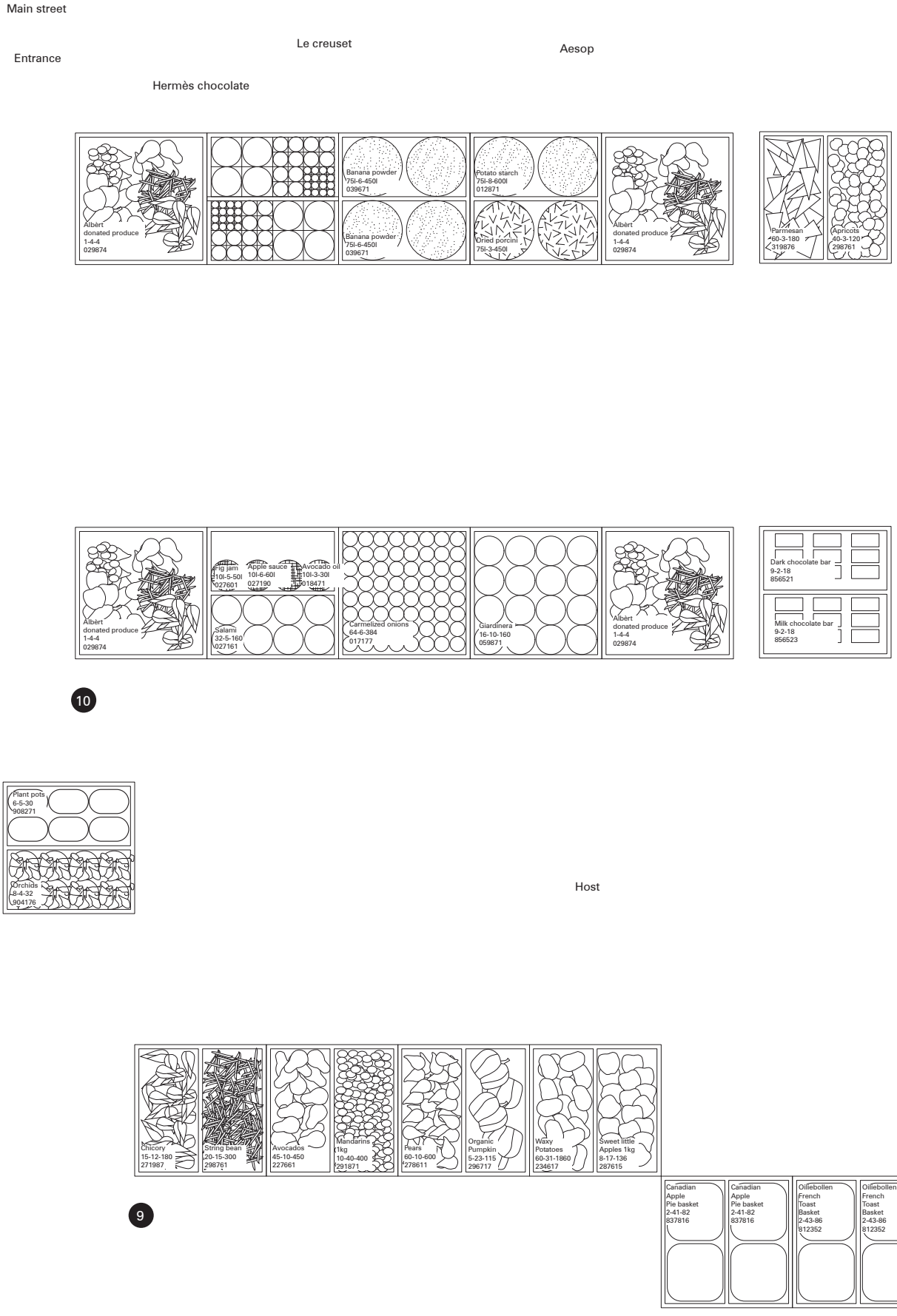


0 200 1000 mm

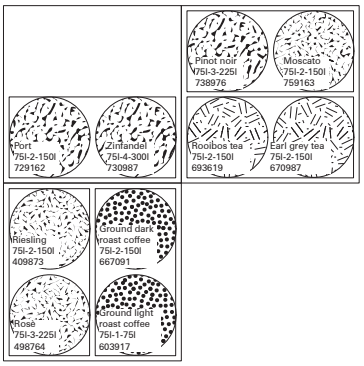
7 Wine merchandising
8 Fishmonger merchandising

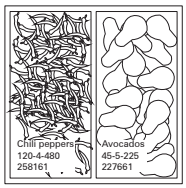


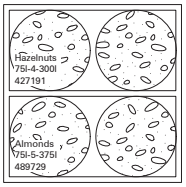
From bulks to fresh produce crates, standardized shelving systems within the open plan generate new episodic formats of planograms. No longer vertical and detached from each other, the new planograms dictate the dynamic floor plan.

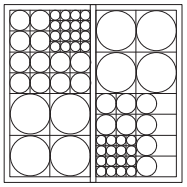
Main street

Hermès chocolate

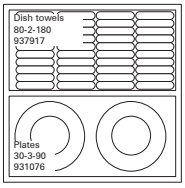


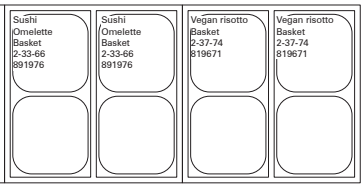






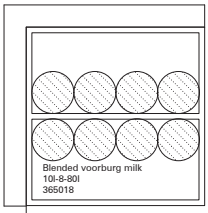
11

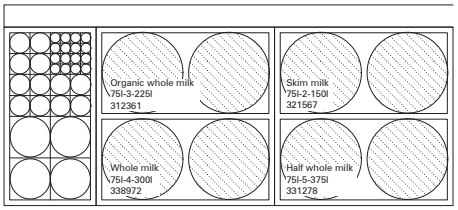




0 200 1000 mm

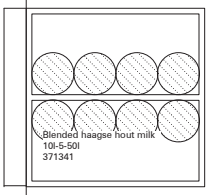
9 Albèrt lifestyling
10 Public products
11 Chocolate merchandising

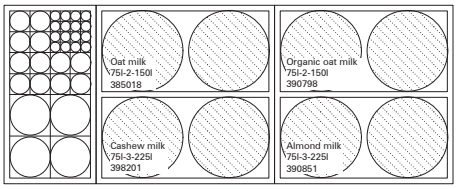




Shrimp pond

Landscape





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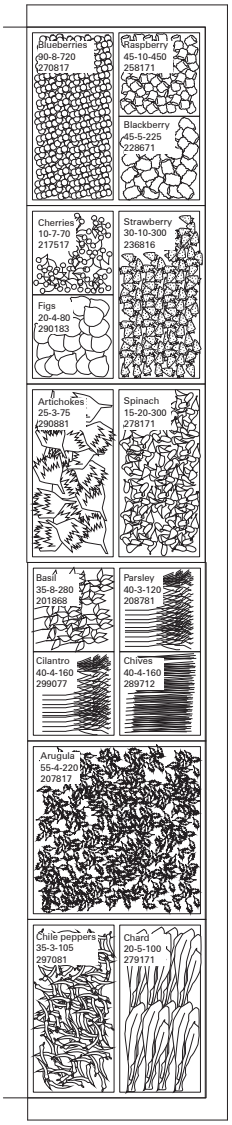
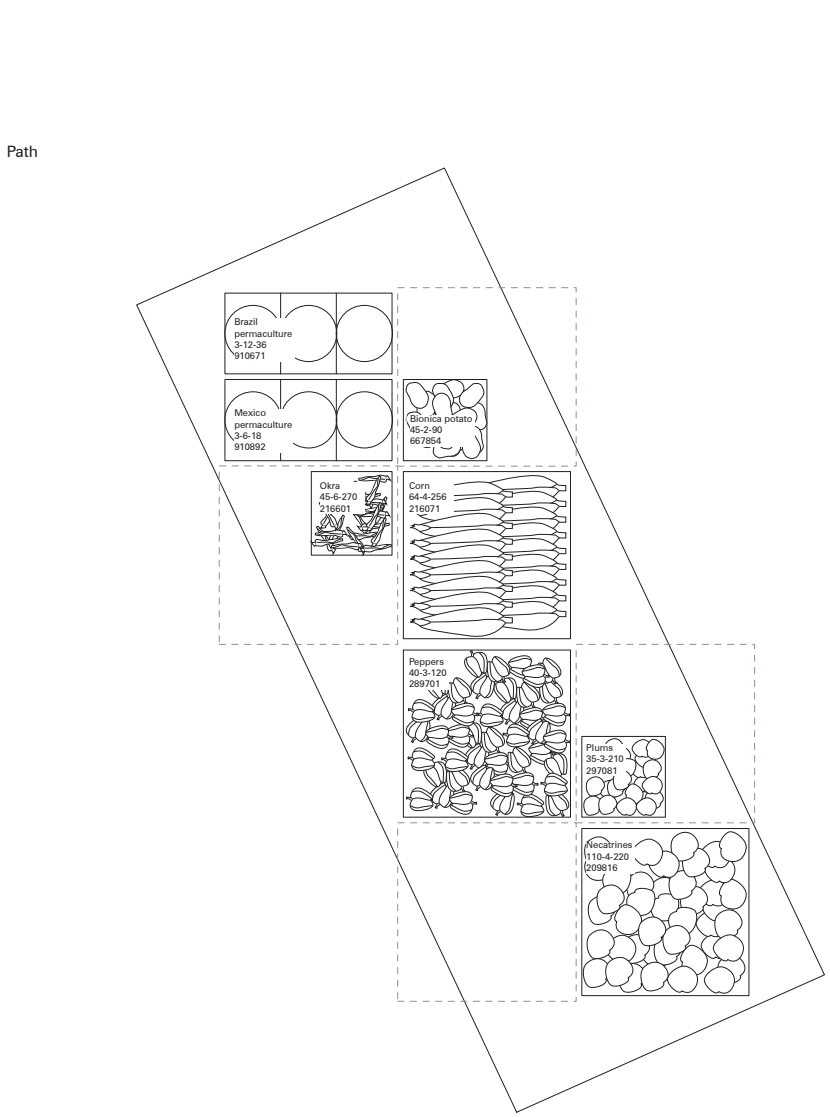


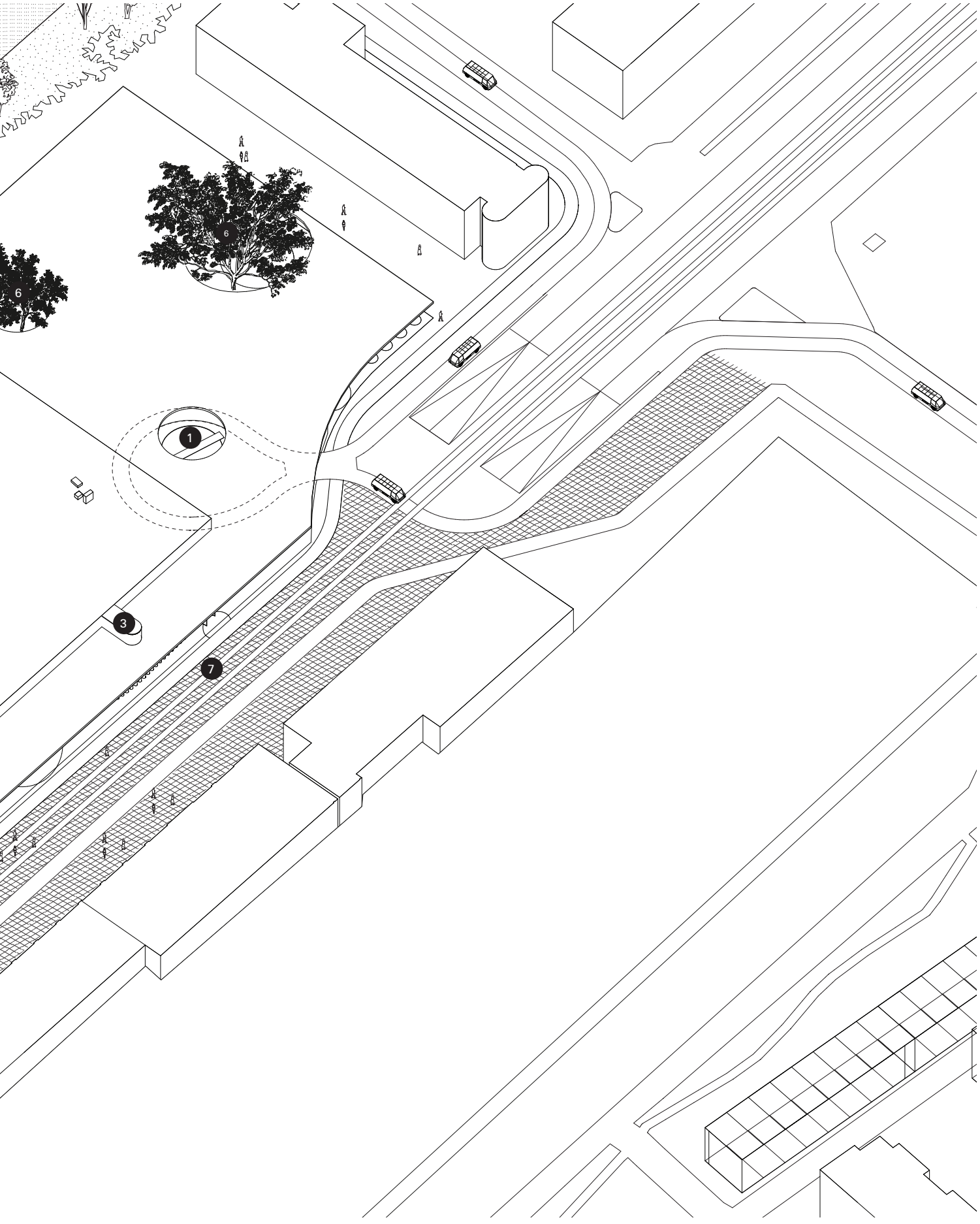
13

From bulks to fresh produce crates, standardized shelving systems within the open plan generate new episodic formats of planograms. No longer vertical and detached from each other, the new planograms dictate the dynamic floor plan.



12 Dairy walk-in
13 Fresh produce display

Amidst a transportation node and a public square, featuring a green roofscape, Albèrt extends its perimeter towards the city and its residents, establishing a new civic presence.



1 Loading
2 Automated ceiling
3 Vertical core
4 Kindergarten
5 Sculpture of Albèrt's mascot
6 Garden
7 Tram

Stills from the walk-through video on the reimagined supermarket of the future, Albèrt.


Albèrt

Stills from the walk-through video on the reimagined supermarket of the future, Albèrt.


Demonstration Kitchen

Stills from the walk-through video on the reimagined supermarket of the future, Albèrt.


Koffiebrander
R03
P01

Stills from the walk-through video on the reimagined supermarket of the future, Albèrt.

Stills from the walk-through video on the reimagined supermarket of the future, Albèrt.

1 From The Hague to Genoa, the supply chain of the future supermarket will span across the Blue Banana trade corridor, addressing multifaceted aspects of the food industry in the Netherlands and beyond, through the notions of scarcity, trade, inclusivity, sensorialism, tastemaking, craft, reshoring, protectionism, automation, and extinction.

2 The reimagined supermarket—Albèrt—displays both the product and its supply chain for the conscious consumers by integrating the distribution center with an automated Ocado grid system above the supermarket, rendering a completely open sales floor.

3 In an attempt to reduce waste and address sustainability goals, Albèrt operates within a just-in-time production system of non-disposable packaging and dynamic pricing, maintaining small batches of products in the integrated Distribution Center.

4 No longer an enclosed and controlled retail space, the supermarket uses various strategies—such as store-in-a-store rentals for exclusive brands and specialty displays for seasonal products—to create a flexible sales floor in order to maximize profit, operating as a real estate platform.

5 Novel tasting experiences and green public spaces—along with the dynamic robotic movement that diverts human labor towards hospitality and social interaction—blur the boundaries between the supermarket and the city, introducing a new civic presence.

1

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4

5

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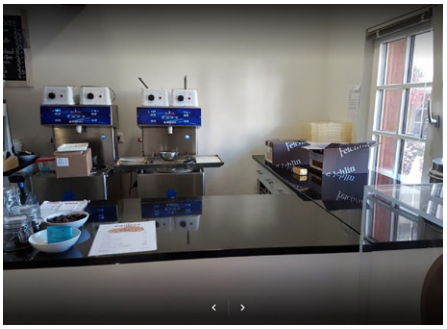

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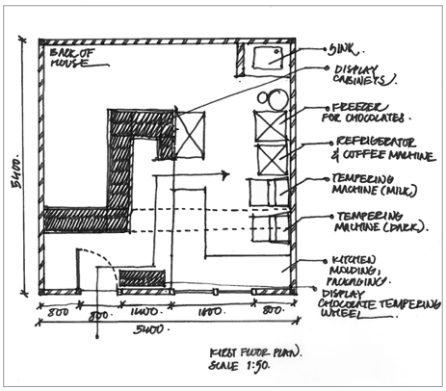

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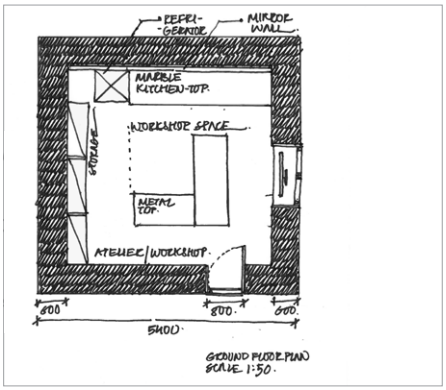


9

1-4 Gruyères
5-9 Chocolaterie de Gruyères

The site plan represents the car-free fortified village of Gruyères and its contextual infrastructure that offers excellent connectivity to the major European trade routes while also providing proximity to regional products required for chocolate production.

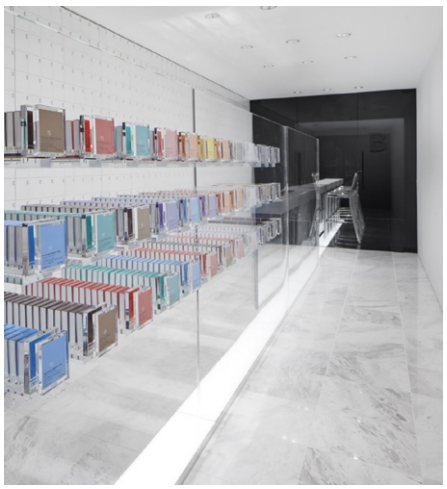
À la Mère de Famille in Paris

Debauve & Gallais in Paris

Maison Cailler Chocolate Boutique in Switzerland

Debauve & Gallais in Paris

Neuhaus (Galerie de la Reine) in Brussels



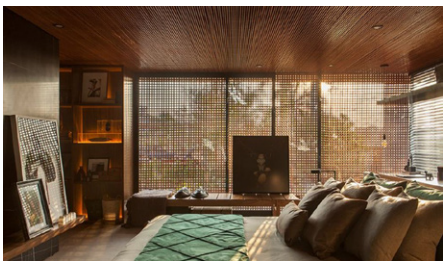
Tokyo Chocolate Shop by Nendo

Shane Confectionery in Philadelphia

Le Comptoir de Mathilde in Paris.

Boutique Patrick Roger in Paris.

Material Study:
Specially-engineered glass bricks form a partially see-through facade for the Hermes store, creating a new storefront while utilizing the brick language of the traditional Amsterdam canal houses.

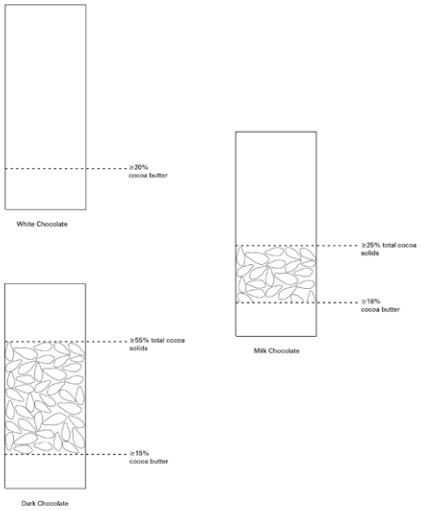


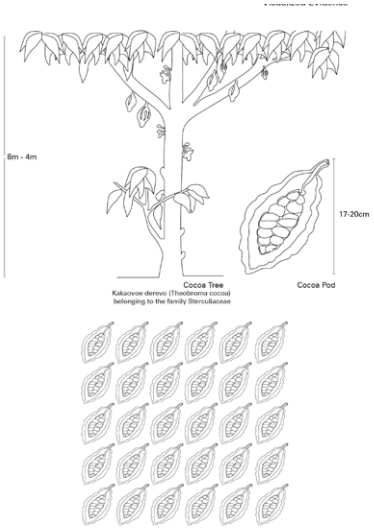
Material Study:
Wooden Screens by mf+arquitetos creating a semi-transparent facade.

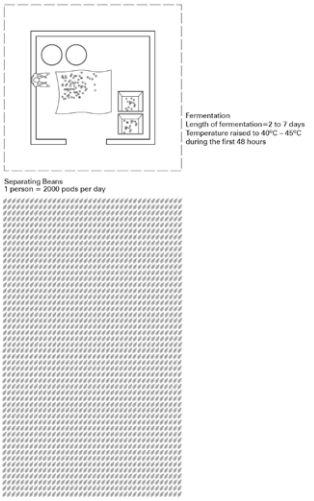
The craft of meticulously designed Japanese hand-painted screens- byobu-making.

The Amir Shakib Arslan Mosque
Use of wooden mobile screens to create display areas for five different origins of cocoa, alluding to the provenance of the beans through the exoticism of the craft and the wood used.

Typology Study:
Traditional wood-carving craft details in
the Swiss chalet houses.

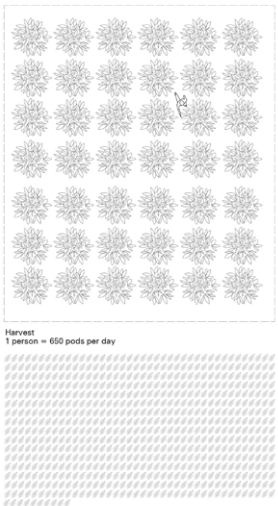


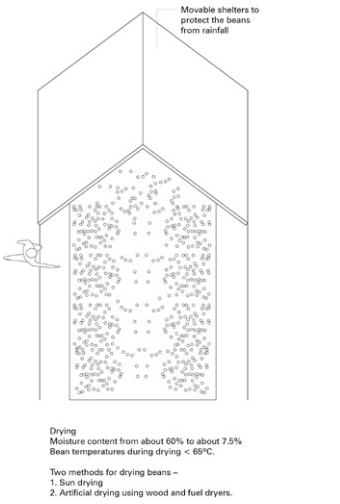


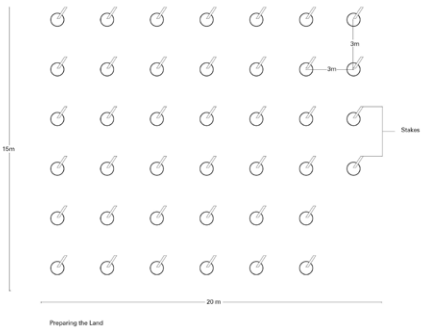


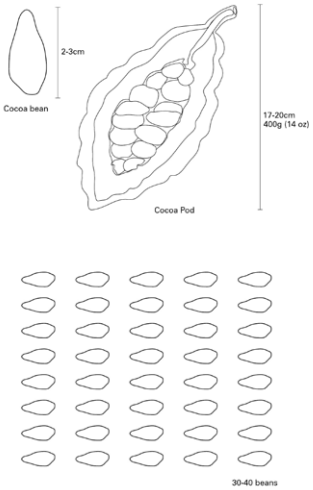
Annual mean temperature (°C)	Optimum Tolerance	22-25 20-27
Minimum-Maximum temperature (°C)	Optimum Tolerance	21-32 10-38
Annual precipitation (mm)	Optimum Tolerance	1200-3000 900-7600
Number of dry months	Optimum Tolerance	0 1-3

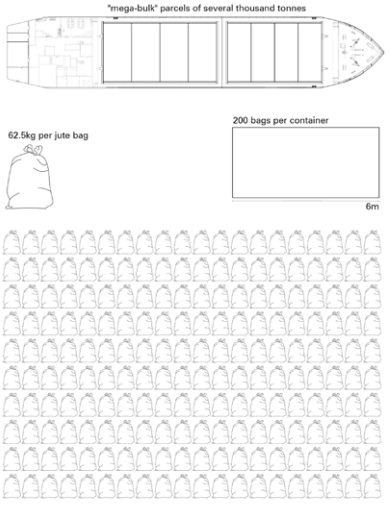
January February March	Main Harvest
April	
May June July	Smaller Harvest 10-14 days
August September	
October November December	Main Harvest



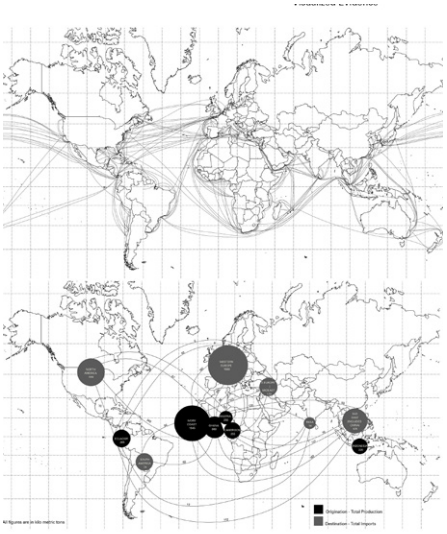




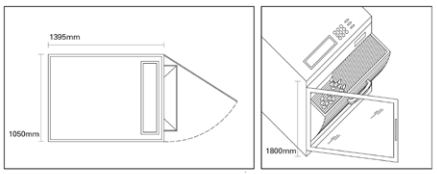




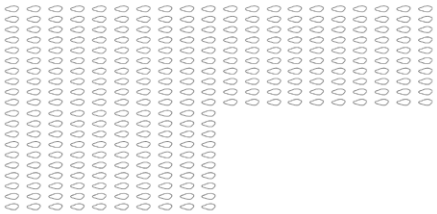
Visualized Evidence on the quantities required for a small-batch bean-to-bar chocolaterie.



Program	Quantity	Requirements	Max. Occupancy	Area
Hand-Sorting	30-45kg of beans	Storage, Sorting trays with chicken wire, Sorting Tables	2	12 sqm
Roasting	3 kg beans for 7-8mins	Roasting Machine (1395x1050x1800 mm), Tables for Roast Tests	2	7.5 sqm
Cracking & Winnowing	5kg beans (one batch) 50 kg/hr	Separate Room, Cracking and Winnowing Machine (950x750x1550 mm), Cooling Table	2	7.5 sqm
Grinding, Refining & Conching *Tempering* *Molding*	35 kg over a period of 72hrs 30 kg	3 Conching Machines for dark, milk and white, Heat Guns, Grindometer for micron count, Storage for other ingredients Gastronorm Trays, 3 Tempering machines for dark, milk and white, Marble slab for manual tempering, cocoa butter extraction machine, tables for molding, Trolley, Molds, Vibrating plate	4	32 sqm
Cooling	700 l capacity	3 refrigerators for white, milk and dark chocobites, table	2	7.5 sqm
Packaging	6 kg to 12 kg daily	Tables for hand-wrapping	4	20 sqm
Shop & Cafe	Weekly batch of chocolates (except special orders)	Kitchen, Retail space, Seating Areas, Toilets, Display area	15	70sqm
Storage	**1 sack of cocoa beans 50-70 kg**	**Storage space for beans, raw materials (double cream, Feilbrig milk, Morello cherries from Chesnaye-Noriat and Swiss kirsch, hazelnuts, almonds), packaging, extra equipment etc.**	**4**	**25 sqm**
Back of House	-	2 Changing Rooms, 2 Toilets, Eating Area, Coffee Machines, Office	8	30 sqm

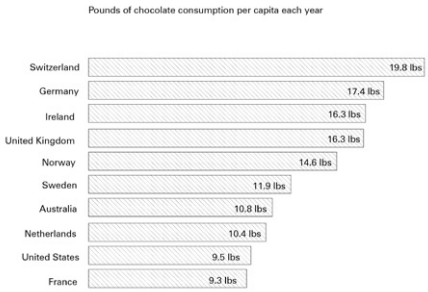


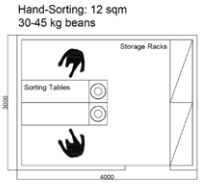
Roasting
3 kg cocoa beans = 300 cocoa beans

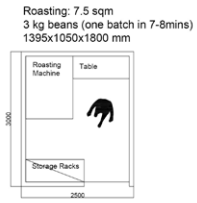


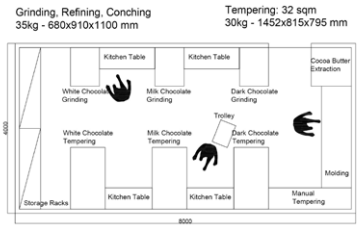
Quantitative requirements for the first two steps-

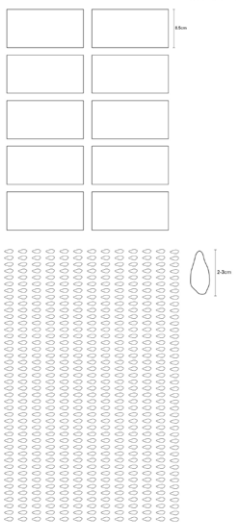
Source: Produced by the Author.

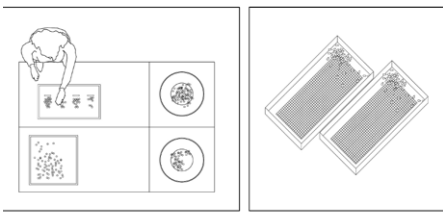




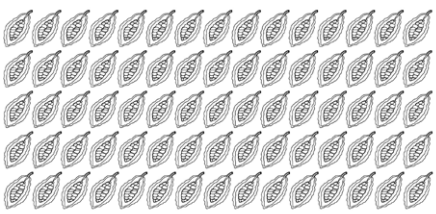


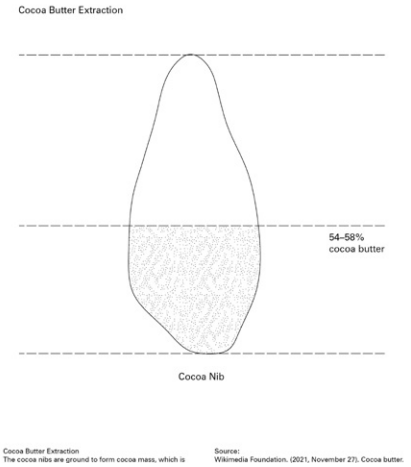






Hand-Sorting
30 kg cocoa beans = 3000 cocoa beans = 75 cocoa pods

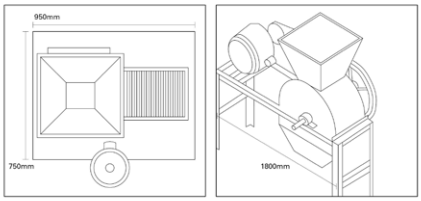




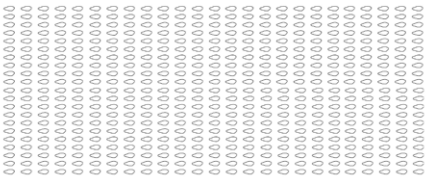
Cocoa Butter Extraction
The cocoa nibs are ground to form cocoa mass, which is

Source:
Wikimedia Foundation. (2021, November 27). Cocoa butter.

Visualized Evidence on the quantities required for a small-batch bean-to-bar chocolaterie.

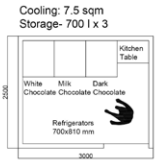


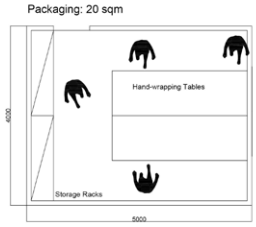
Cracking and Winnowing
5 kg cocoa beans = 500 cocoa beans

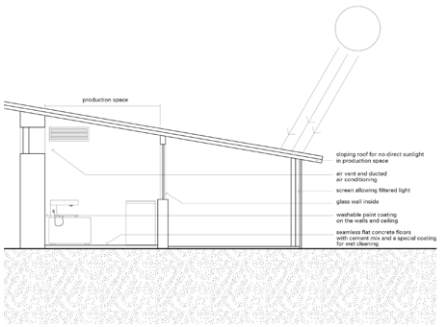


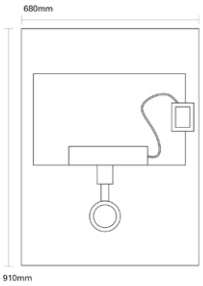
Quantitative requirements for cracking and winnowing: Removing outer shell

Source: Produced by the Author.





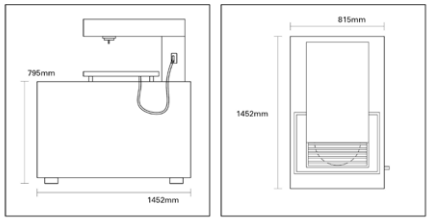




Grinding, Refining and Conching
35 kg cocoa beans = 88 cocoa pods

Number of workers: 9

Number of visitors at a time: 25

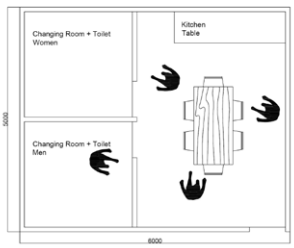


Tempering
30 kg cocoa beans = 3000 cocoa beans = 75 cocoa pods

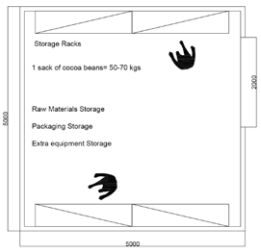
Quantitative requirements for tempering into liquid

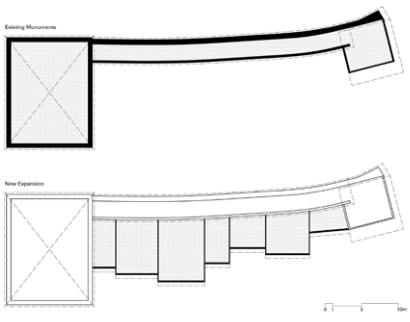
Source: Produced by the Author.

Back of House: 30 sqm



Storage Warehouse: 25 sqm

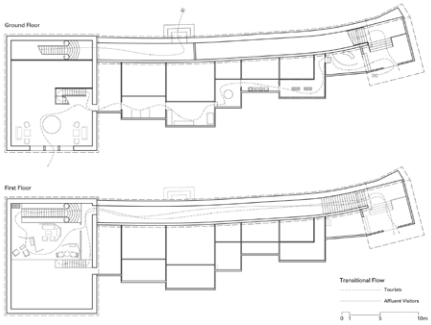




Building Analysis: Existing fortification of Gruyeres and new intervention.

Source: Produced by the Author.

Visualized Evidence on the quantities required for a small-batch bean-to-bar chocolaterie.



Visualized Evidence on the quantities required for a small-batch bean-to-bar chocolaterie.

Nishi Shah (NS): Hello. I'm an architect from the Technical University of Delft, currently pursuing the Berlage post-master in Architecture and Urban Design. For my final semester's thesis project, I am designing a small-scale bean-to-bar artisanal chocolaterie producing craft chocolates in a rural village of Switzerland. The fundamental idea is to create a design that preserves the craft of chocolate-making and educates the visitors on the same. For this purpose, I'm interviewing different chocolate shops in and around Delft to understand the spatial requirements of a chocolaterie.

Joyce van der Burgh (JvdB): This was also our plan when we started the business that we wanted the shop to be designed in such a way that everybody could see how we make everything and that there are no secrets, it's a transparent production chain.

NS: Where do you get your cocoa beans from?

JvdB: We don't start with the beans, we have the help of the fabric. Because it's a lot of work when you start from the beans themselves. So we use the chocolate pallets. So this is what we use to make the chocolate bars. We have two machines here. One is for the milk and the other one is for the dark chocolate. We put these chocolate pallets inside for them to melt. It is always at 45 degrees so that it remains in liquid state. When we start to make chocolates and pour them into moulds, we bring the temperature down to 30 degrees as it is the right temperature to make chocolate. We start to fill the moulds at 30 degrees because the machine starts vibrating. These are the chocolate tempering machines. We actually always use it for milk and dark chocolate but we don't have it for white chocolate because white chocolate has no cacao, it's just butter and sugar. So it is not real chocolate. We make a few small batches sometimes but we majorly always have milk or dark chocolate. We have the dark chocolate for 54% cacao and the milk for 34%.

NS: And where do you get your chocolate pallets from?

JvdB: It is from Callebaut, in Belgium. Sometimes we also get it from Valrhona, it's another very famous chocolate brand. We used 54% for dark but we also have 72% for darker. The tempering machine remains on the whole day on and then when we start, we make 150 bars in one batch. So after tempering and molding we have to cool the chocolates. Behind this room we have the cooling area where we have separate refrigerators, one for milk and one for dark chocolate.

NS: Is it important to have separate refrigerators for milk and dark chocolates?

JvdB: Yes, it is. Because many customers have milk allergies so separating the two is necessary.

NS: And when you say one batch of 150 bars, how many days does that take to produce?

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NS: And when you say one batch of 150 bars, how many days does that take to produce?

JvdB: Oh we make it within one hour, or one hour and a half. It is very fast! So we fill the moulds here, then we take it to the back where there is someone putting in all the ingredients—like oranges, nuts, cranberries etcetera—by hand inside and then it goes into the fridge. The fridge has 11 degrees temperature. That's the best temperature to get the chocolate ready.

NS: And how many bars do you produce daily?

JvdB: Well, that changes a lot. Because sometimes we have a lot of orders for companies. For example, two days in the last week were really hot so we had to remain closed because of the extreme warm temperatures. Chocolate is a very difficult product to work with. When it's too warm it's not possible to make it. If we get it out from the fridge during these warm temperatures, there is a gray layer on top of it. So yeah, it's a bit difficult to say how many because the quantities change all the time, whether it's weekends or if it is Monday. Sometimes we have very busy times like during Christmas and everything, which is the busiest time of the year. We don't have a daily standard of making—like 500 everyday or something—because it constantly changes.

NS: How many bars do you have on display here?

JvdB: Let's see. There are 45 bars each in a display and we have 16 displays so approximately 720 bars. And then we have all the separate stuff also like bonbons and truffles. But our core business is the bar. That's where we started with a kitchen at home, 10 years ago. My husband used to work in a bank and I used to work as a flight attendant. But we wanted to do something for ourselves but didn't know what to do. A friend of ours—who's a designer—suggested we should start something with chocolate because it's always good and everybody likes it. But then in another way with different wrapping and make it ourselves. And then we start thinking, okay, how can you make it different from other chocolate shops? Because they're mostly always the same actually. There is always a bar with chocolate and somebody who's there to sell it to you but you never see how they make it. So that became very important for us. We started in the small shop next door here. And we were there for a year and a half, ten years ago. We started in the kitchen in the very beginning actually. We started to make chocolates to try everything, with different flavors and then having family and friends taste and give feedback on it. And then we started with a web shop, and it was actually successful from the beginning. So we had to make chocolate in our kitchen. And then we had three fridges, chocolate tools, and everything. And then we get our first order. And it was from KLM. So we started there.

NS: Wow! So do you still have a tie-up with KLM?

JvdB: No, not anymore because they started with the in-flight sales magazine and they changed it every time. So we were there for four or five years. So, yeah, we produced a lot of bars for them and well, it wasn't eventually possible to do it in the house anymore. So we started next door here but in a year and a half it became too small again. Then we come here and it's big enough to produce everything. Now we have about 250 resellers. And they order bars here.

NS: And is this the only place where you make chocolates?

JvdB: Yeah, the only place.

NS: And are these 250 resellers in Europe, or only in the Netherlands?

JvdB: Just in the Netherlands, yes. We have a lot of special orders from companies, sometimes from Japan, United States and we also have a lot of people who come here regularly and some tourists. Although, now with Covid it was a problem there but for now they're coming again. We see people from Germany or the United States, who buy their chocolates from us
And take it back to give it to their friends or family in the United States and Germany and then they come back to buy our chocolates. So that's nice. It's expanded a lot.

NS: Do you ever temper your chocolate by hand?

JvdB: To get the air out and everything, you mean? So no, that's what the machine does. Although when we started in the kitchen, we had to do it by ourselves. But now, it's become much easier!

NS: Are the bonbons and truffles made in the kitchen inside?

JvdB: Yeah. We make it when we have time because the bars are a bigger business here always. So, it's extra. We do it when we have time to make it but the people are also discovering this now. So they also want this. Yeah. So it's getting very busy with that too!

NS: For the kitchen inside, what do you need in terms of space? Are there any particular machines inside or are all tasks done by hand?

JvdB: Yeah you don't need much space. We have these machines in the front space here and in the back there is a small kitchen. But it doesn't need to be very big because we do everything, like wrapping, here on the table in the front. And sometimes here in between the machines, we also make chocolate so that the customers can see what we do. And behind is the cooling area, but that's all you need. It doesn't need to be really big so it depends on how many machines you have and the space you need respectively. So, well this is okay for our shop here. But that's always a problem because when you start a shop, you always want to collaborate and grow bigger and bigger. But sometimes it's not possible. You have to make a choice. And we think quality is most important to everything. So then you cannot choose for it to go bigger. And so more more more, but that's not always good. There's also a lot of times we have to say no because we cannot. It's too much.

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NS: And I'm curious to know who has designed your packaging and what is the idea behind it. Because it is the first thing that attracted me to this place when I saw them online.

JvdB: Everybody really likes the wrapping. So I designed it myself with our friend—who's a designer—and helped us here. I think it's also very original. There's nobody who has the papers, and it is not from a big factory or anything. It's really our own design.

NS: How many people are working here?

JvdB: Yeah, well it's a family business so just us. But yeah, during Christmas, when it's more busy, we have more people, around 10. So it changes too. During covid, our parents couldn't help with the work here because it was a bit too dangerous for them. Now it's my husband and I together, my oldest daughter, my middle one, and some friends. It's always different. When you work with your family, you understand each other and you know exactly what to do and what the other thing is and it always works very well. We try to keep it not that big but sometimes necessary to have people from the outside, which is also nice. But the best team is to work with the family. So usually around four to five people during these weeks. And then we have around ten people during Christmas time.

NS: Do you have a schedule for the production break-down during each day of the week?

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NS: Do you have a schedule for the production break-down during each day of the week?

JvdB: No, because everything happens every day. Sometimes we work seven days a week when we're really busy. Now we are actually closed on Sunday. But till a year ago, we were always open on Sundays as well.

NS: How many visitors do you have

daily?

JvdB: No I don't, I don't know. I just know if it's a busy day but sometimes when it is very hot outside it's fairly quiet. But I don't know exactly.
NS: And when would be the least busiest time of the year?

JvdB: The beginning of January. December is the busiest because of Christmas. And for us, now when summer ends, it also starts getting busy. We have people ordering for Christmas now already.

NS: When you got the space designed, what were the spatial requirements in terms of design that you had?

JvdB: Well, I don't like shops like a showroom. They go to a factory and ask for ten tables. But here everything is a choice and it's from everywhere. From France, Belgium, and also from home. And it's good in combination with the building.

NS: A future question now. Do you think you have plans of expanding more?

JvdB: It's always difficult. Because we are a family business, so it's small and good. And I don't know if more is always better. And big is always better. I don't know. We like it, we do it with passion and that's the most important thing. Although I would like another product. Maybe like coffee or something with a cafe space.

NS: Do you have any tie-ups with supermarkets?

JvdB: No. Jumbo had asked us but no, we want to stay exclusive.

NS: Yeah, I think that sums up the questions. I was just wondering if I could have a look behind at the kitchen and the cooling areas?

JvdB: Actually, it's because of the hygienic reasons that we cannot allow you inside. Sorry.

NS: I can understand. Thank you for your time. Your inputs have been extremely insightful for me to understand the spatial requirements of a small-scale chocolaterie. I'll keep you updated with my progress! Thank you very much.

* The exclusive Van der Burgh Chocolaad was founded in July 2011 by Joyce and Richard van der Burgh as a result of an extensive search in the Netherlands for hand processed chocolate bars. As a small family business, based in the old city center of Delft, Van der Burgh Chocolaad carefully crafts luxury chocolate in small batches by hand and heart and also specializes in high-end and high quality delicacie gifts.

Link: https://www.vanderburghchocolaad.nl/en_GB/c-1249783/about-us/

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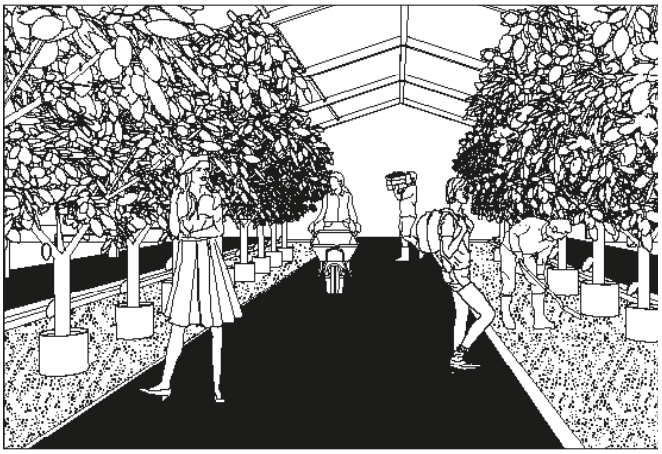
Description

Crafted with Care imagines a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate, sited within a space of 1000 square meters on a sloped terrain in the medieval town of Gruyères in Switzerland, located at the top of an 82 meter-high hill overlooking the Saane valley. The rural town of Gruyères specializing in milk production and cattle breeding remains a popular tourist destination for the traditional precision craftsmanship of the infamous cheese and chocolate production. The existing family-owned chocolaterie, Chocolaterie de Gruyères, producing artisanal craft chocolate is integrated with the existing fortification at the entrance of Gruyères with proximity to regional products—such as double cream, Friborg milk, Morello cherries, Swiss kirsch, and Swiss cane beets—for their dark or milk “bean to bar” chocolate products. However, the new engagement of the chocolaterie with Hermès, a family-owned French house recognized for its luxury crafted goods, to preserve the craft of chocolate-making from its forthcoming extinction requires a new development of Chocolaterie de Gruyères to express the luxury and craft of chocolate-making and is thus sited in an exclusive heritage monument of the fort tower, offering a parallel exclusivity that compliments the product identity. The chocolaterie—committed to the tenets of traceability—is redesigned to additionally function as a gallery, educating the visitors on the transparency of chocolate processing and the value of craft production through the implicit connection with the maker. Through the disintegration of chocolate production into its layers of programmatic elements, the chocolaterie tends to highlight the precision at each level of chocolate-making, while providing different transitional routes for the varying consumer flux. The integration of the new intervention with the existing fortifications creates visual and transitional vistas overlooking the chocolate production, thus connecting the preservation of the building with the preservation of the craft of the inherently luxurious chocolates.
The site in the car-free village has proximity to parking areas, is located at a distance of 800 meters from the railway station, and at a distance of 90 meters from the bus stop with excellent connectivity for the transport of these chocolates into the major Swiss trade routes in Europe. A resultant modified supply chain will allow Swiss local

Chocolate bars have a distinct provenance originating from the territories of cocoa trees that grow in tropical areas. Current shelves, stocked with excess chocolates, seem to be real chocolates but are deceptively composed of cocoa substitutes like soy and hazelnut to gain more profits for the chocolate companies. With cacao going extinct by 2050 due to fungal disease and climate change, real chocolate will be scarce and luxurious in the future.

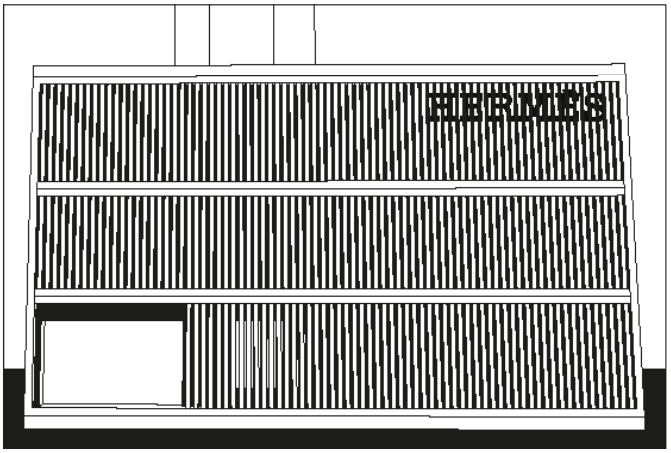


Willing to expand into the sector of Craft Chocolates, Hermès envisions the need for luxury chocolates to compete with other substitutes that are more profitable, thus moving towards transparency, sustainability, and corporate responsibility for socially conscious consumers. Future cocoa plantations use the resources of Hermès for research and scientific developments becoming a popular tourist attraction.

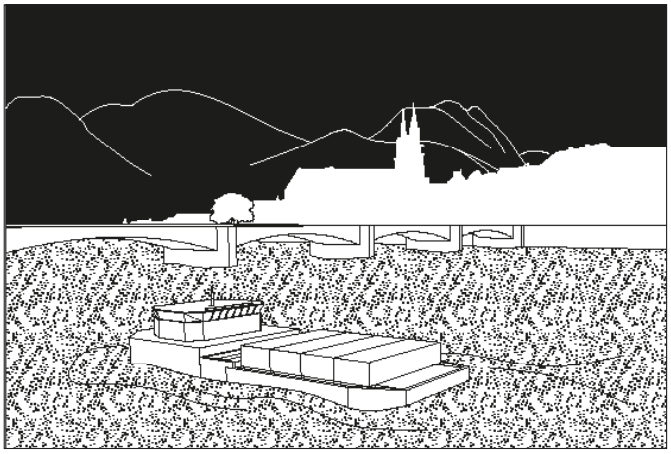
The medieval town of Gruyères in the canton of Fribourg is located at the top of an 82 meter-high hill overlooking the Saane valley and the Lake of Gruyère. Occupying a small land area, Gruyères has always been a rural town with specialized agriculture in milk production and cattle breeding as the primary sector, providing major raw materials for the infamous Gruyère cheese, and Swiss chocolate production,

This car-free French-speaking hilltop village of Gruyères offers beautiful views of the Alps and is centered around the main road of the village. With cobbled walkways and quarried-stone fort walls, the historic village identifies itself through its distinct architectural fabric.

Presented in a set of spatial narratives, the contribution of a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate demonstrates the modified supply chain commencing with the medieval town of Gruyères in Switzerland to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.

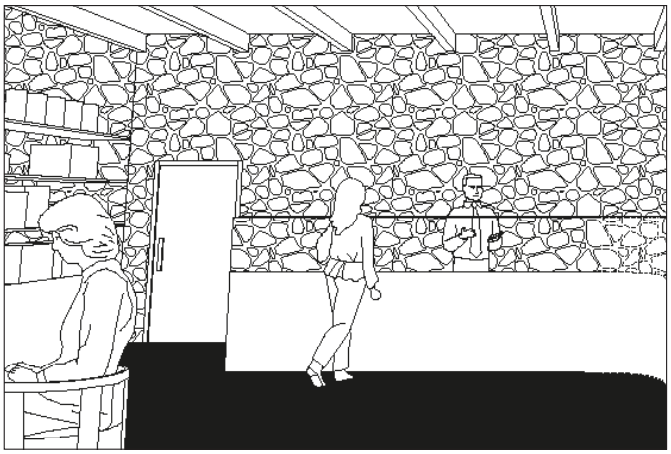


Now home to local chocolateries in Switzerland, Belgium, and Paris to preserve the craft of chocolate-making, Hermès provides the resources needed to market its products through carefully selected channels. Creating a communal culture of luxury craft chocolate globally modifies the supply chain by allowing local experts to introduce a new distribution network of real chocolate.

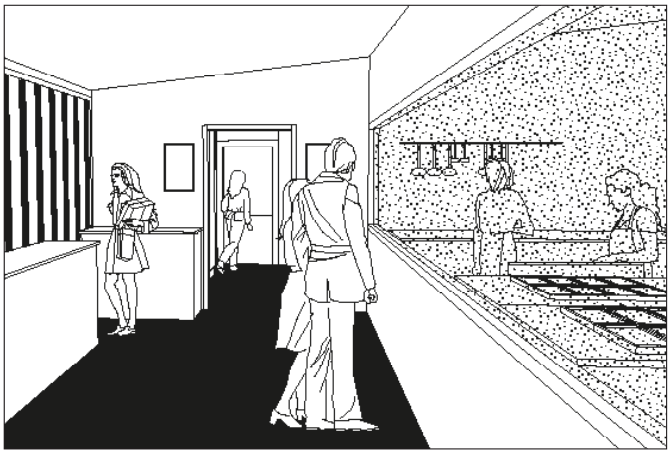


With consumers seeking higher quality chocolate, the market prospects in Europe still provide good opportunities for exporters in producing countries. Switzerland—the largest chocolate exporter and the current highest chocolate consumer—remains the main exporter with an added advantage of the free-trade agreement with the European Union. The cocoa beans cross the territories Amsterdam to Switzerland through the Rhine river.

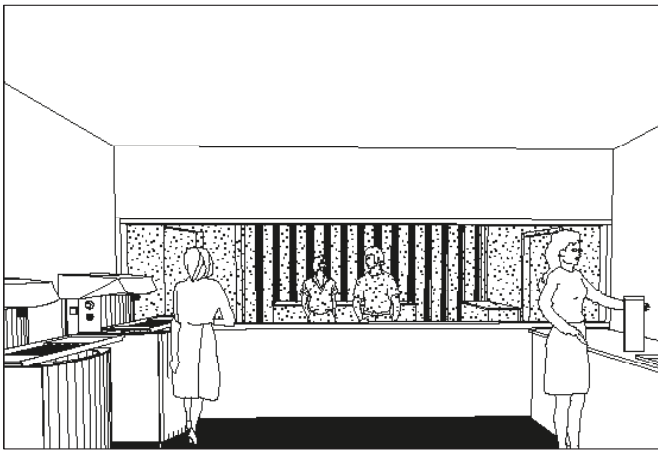
The existing chocolaterie is located next to the original shop of Chocolaterie de Gruyères, as an extension on the fort wall of the village—a Heritage site of national significance—sited on a sloped terrain with proximity to regional products such as double cream, Friborg milk, Morello cherries from Cheseaux-Noréaz, and Swiss kirsch.



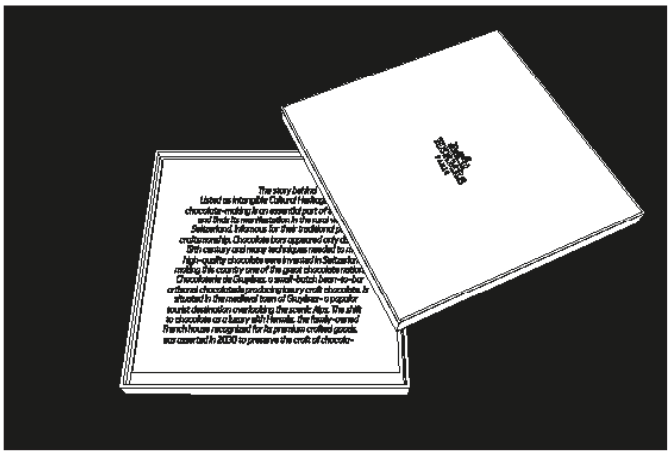
A small family business in Switzerland, the chocolaterie specializes in the art of making small-batch craft «bean to bar» chocolate products and is now housed by Hermès, a family-owned French house recognized for its luxury crafted goods. A bar of bean-to-bar craft chocolate refers to the complete traceability of the chocolate's provenance through cocoa farmers and control on each step of



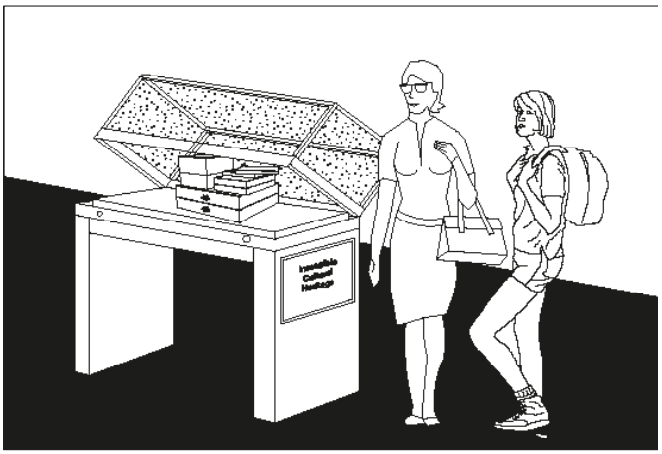
The engagement with Hermès requires a new development of Chocolaterie de Gruyères to express the luxury and craft of chocolate-making under the new branding. The chocolaterie—committed to the tenets of traceability—is designed to additionally function as a gallery, educating the visitors on the transparency of chocolate processing and the value of craft production through the implicit connection with the maker.



Through the disintegration of chocolate production into its layers of programmatic elements, the chocolaterie tends to highlight the precision at each level of chocolate-making.



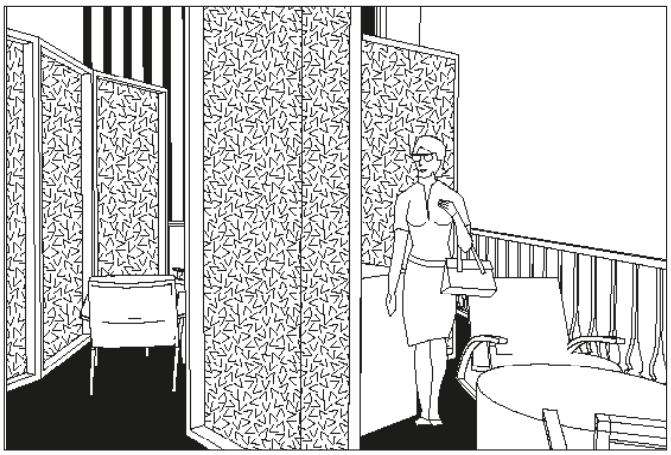
The three chocolates are made from the three different provenances of the origins of cocoa beans- Ecuador (2 regions), Venezuela, and Brazil. Additionally the box with an engraved facade of a typical Swiss Chalet house reflects the context of the place of production.



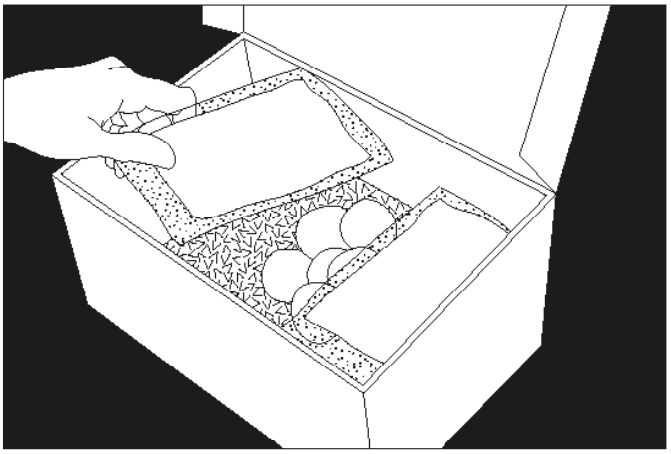
The shift to chocolate as a luxury is a necessity to save the craft of chocolate-making, thus becoming a part of the UNESCO list of “Intangible Cultural Heritage”.

Presented in a set of spatial narratives, the contribution of a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate demonstrates the modified supply chain commencing with the medieval town of Gruyères in Switzerland to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.

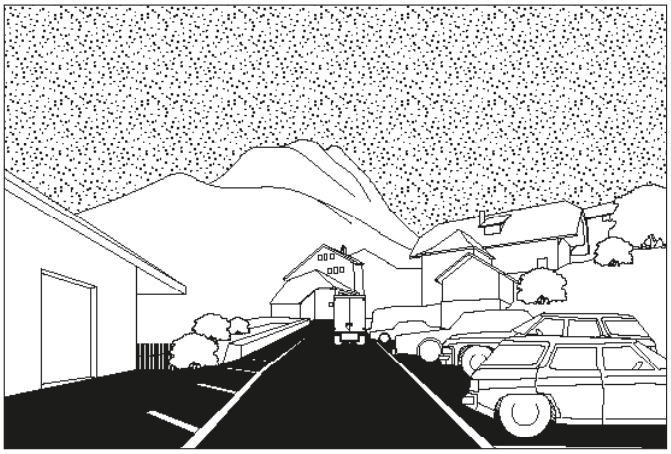
The design of the chocolaterie, embedded within the monumental fort wall, also provides a designated space on the ground floor for conducting workshops on chocolate-making, becoming highly popular amongst tourists.



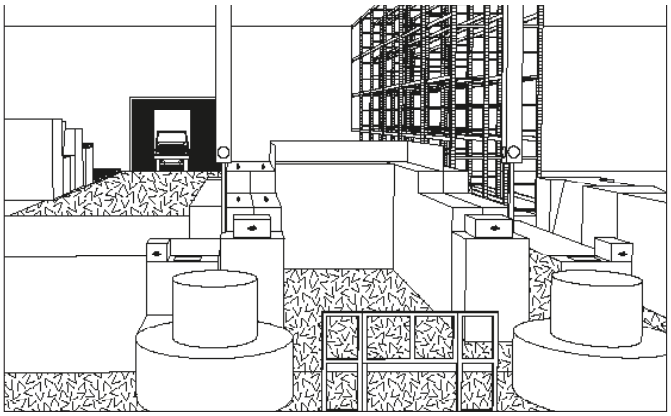
The retail area, located at the terminus of the chocolaterie, emphasizes the luxury of the brand through an exclusive sparing display of chocolates with crafted mobile partitions reflecting on the provenance of cocoa beans.



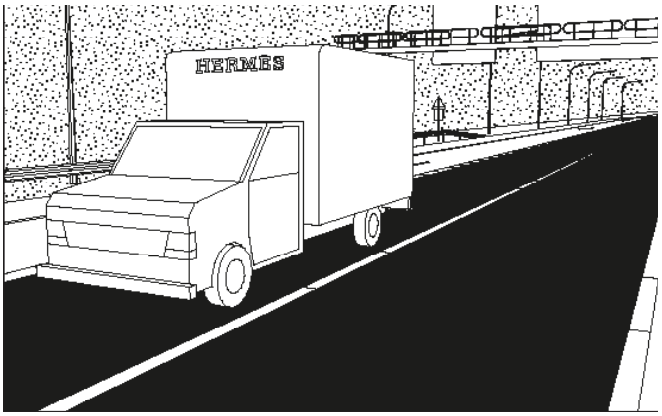
The collaboration of Hermès with specialty material provider develops packaging that utilizes molecular recycling technologies from mixed waste plastic, providing a sustainable alternative. Boxes with Earth-friendly insulation liners, refrigerant gel packs, and spacers to prevent cold packs from freezing the chocolate provide a complete solution to ship chocolates efficiently, maintaining cold temperatures for longer durations.



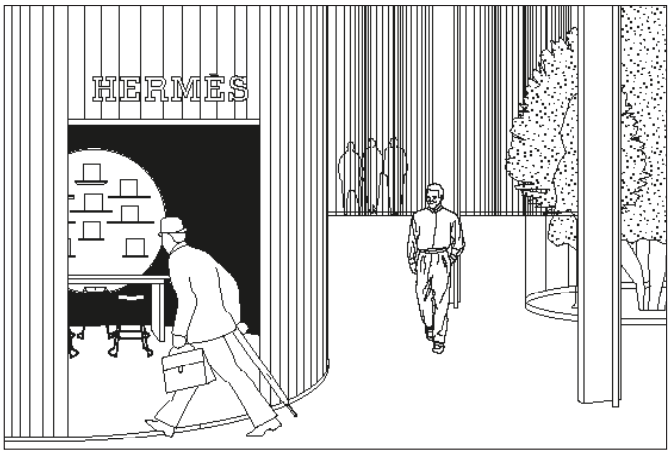
Located at the entrance of the village, the chocolaterie remains in close proximity to parking zones which allows the trucks to load the goods conveniently. The site in the village is located at a distance of 800 meters from the Gruyères, Gare railway station, and at a distance of 90 meters from the Gruyères, Ville bus stop with excellent connectivity for the transport of these chocolates into the major Swiss trade routes in Europe.



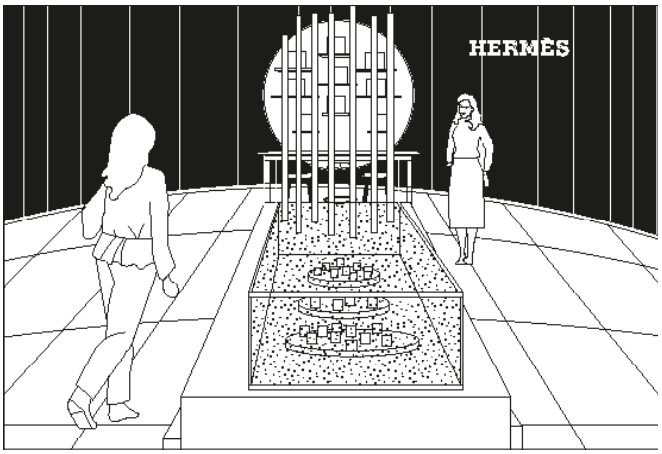
The Hermès Supply Chain makes sure that the products created by their Houses are available when and where they are needed, managed through the Headquarters in Paris. This spans planning, purchasing, production, sales administration, customer service, logistics, managing returns, etc, ensuring all the products made by their Houses receive the needful resources, from procurement of raw materials to the sale of products in stores.



100% deliveries by electric trucks is an initiative by Hermès to protect the environment, making deliveries as environmentally-friendly as possible to lower the brand's global environmental footprint.

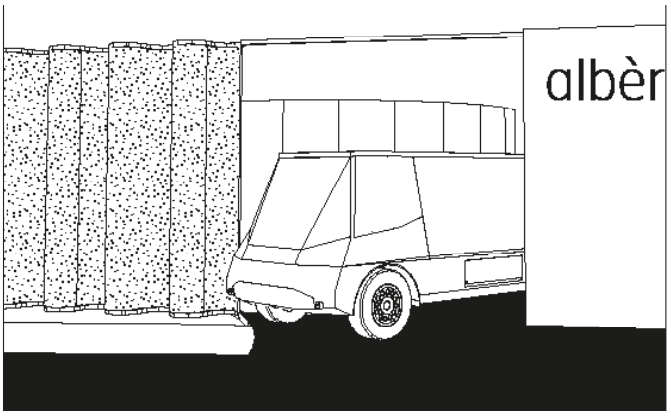


The concept of shop-in-a-shop with Albèrt's sister shops and local companies provides varied experiences through the design of a supermarket generating a new civic presence while also boosting the appeal of brands, creating a more comfortable shopping experience, and introducing new and exclusive products.

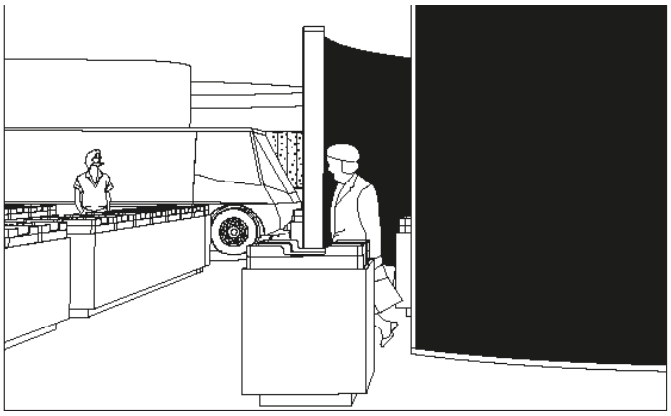


The brand's interior with brass infills in flooring, marble counter tops, brass lights, and luxurious seating areas creates an exclusive context making the consumer willing to pay for the high-quality they provide.

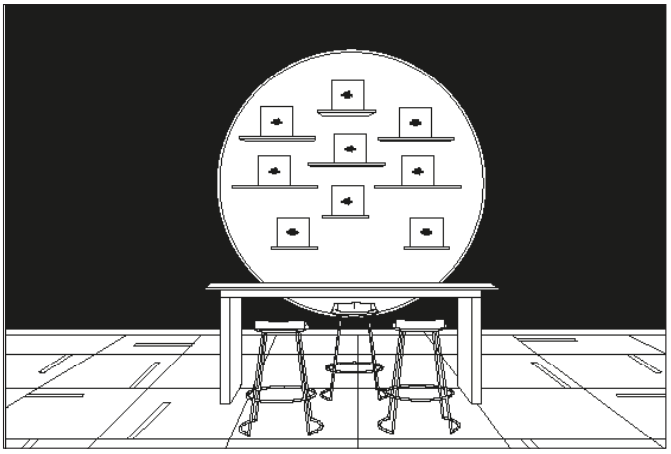
Presented in a set of spatial narratives, the contribution of a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate demonstrates the modified supply chain commencing with the medieval town of Gruyères in Switzerland to reconfigure at the future supermarket—Albèrt—on Martinus Nijhofflaan in Delft.



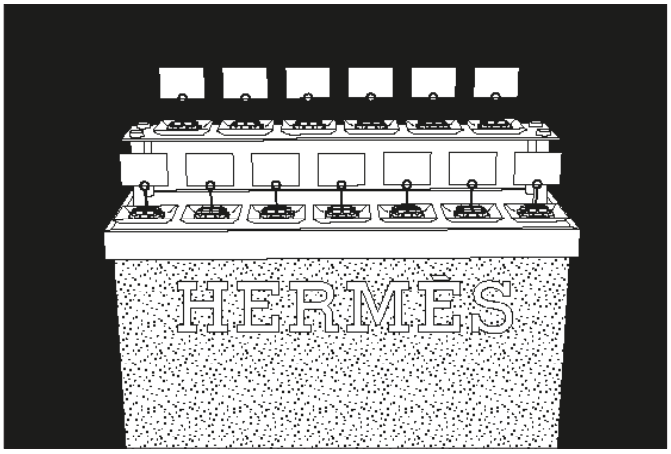
Taking advantage of the resources of Hermès, these Swiss delicacies cross their territories across the Blue Banana reaching the integrated distribution center of Albèrt in Martinus Nijhofflaan—the epicenter—to be distributed to the chocolate display area on the sales floor of the supermarket.



The limited selection of Hermès luxurious, crafted, and real chocolates reach Albèrt catering to a target demography with its artisanal opulence, challenging the notion of “experiential retail” within the supermarket with a peripheral shop-in-a-shop model to modify the sales floor and entice passers-by.



A sparing display of 100 chocolate boxes worth 250 euros each accentuates the brand’s exclusivity with people reacting towards impressive experiences by wanting to spend extended periods of time in these spaces.



A small corner for chocolate tasting combined with red wine allows the consumers willing to invest in the luxury of craft to get a taste of the different milk and dark chocolates produced in the village of Switzerland, now being experienced in different parts of the world.

United Nations Educational, Scientific and Cultural Organization

Intangible Cultural Heritage

Representative List

Original: French

INTERNATIONAL CONVENTION FOR THE SAFEGUARDING OF INTANGIBLE CULTURAL HERITAGE

INTERGOVERNMENTAL COMMITTEE FOR THE SAFEGUARDING OF THE INTANGIBLE CULTURAL HERITAGE

Tenth session
Gruyères, Switzerland
December 2030

Nomination File No. 01221 for inscription in 2030 on the Representative List of the Intangible Cultural heritage of Humanity

A. State(s) Party(ies)

For multi-national nominations, States Parties should be listed in the order on which they have mutually agreed.

Switzerland

B. Name of the element

B.1. Name of the element in English or French

Indicate the official name of the element that will appear in published material.

Not to exceed 200 characters

Swiss Craft of Chocolate-making

B.2. Name of the element in the language and script of the community concerned, if applicable

Indicate the official name of the element in the vernacular language corresponding to the official name in English or French (point B.1).

Not to exceed 200 characters

Artisanat suisse de la Chocolaterie

B.3. Other name(s) of the element, if any

In addition to the official name(s) of the element (point B.1) mention alternate name(s), if any, by which the element is known.

Application form to attain the UNESCO Intangible Cultural Heritage listing for the Swiss Craft of Chocolate-making under the sector of "Traditional craftsmanship"—filled out by Hermès—to save the craft from its forthcoming extinction.

C. Name of the communities, groups or, if applicable, individuals concerned

Identify clearly one or several communities, groups or, if applicable, individuals concerned with the nominated element.

Not to exceed 150 words

Chocolate-making is an essential part of the Swiss crafts, which finds its manifestation in the rural milk-producing villages of Switzerland, and its community includes all Swiss chocolatiers. While cacao beans and other ingredients such as sugar can originate from outside Switzerland, the actual production of the chocolate must take place in Switzerland.

The famous chocolate bars appeared only during the 19th century; and many of the techniques needed to make high quality chocolate were invented and developed in Switzerland, making this country one of the great chocolate nations. Thus, the invention by François-Louis Cailler of conching, which made it possible to create the first melting chocolates, or even that of milk chocolate by Daniel Peter, will permanently link the image of Switzerland with premium chocolate. However, with the scarcity of cacao trees due to fungal disease and climate change, Hermès, a family-owned French house, specializing in luxury crafted goods, has invested in the research centers and production facilities of the now exclusive chocolate production. Hermès is now home to Chocolaterie de Gruyères, a small family business in Switzerland, specializing in the art of transforming cocoa into artisanal luxury chocolate.

As a part of the Culinary Heritage of Switzerland, the craft of chocolate-making protects the communal culture within local artisans and allows them to export their luxury chocolate in a global market.

D. Geographical location and range of the element

Provide information on the distribution of the element within the territory(ies) of the submitting State(s), indicating if possible the location(s) in which it is centred. Nominations should concentrate on the situation of the element within the territories of the submitting States, while acknowledging the existence of same or similar elements outside their territories, and submitting States should not refer to the viability of such intangible cultural heritage outside their territories or characterize the safeguarding efforts of other States.

Not to exceed 150 words

Chocolate-making is being exclusively practiced by the Swiss chocolatier Richard Uldry in the heart of Gruyère with proximity to regional Swiss products such as double cream, Friborg milk, Morello cherries from Cheseaux-Noréaz, organically grown regional sugar, and Swiss kirsch for their variations of dark or milk "bean to bar" chocolate products.

The chocolaterie only processes chocolates from so-called single origins sustainable cocoa, ranging currently from five origins in the equatorial countries of Ecuador (2 regions), Venezuela, Brazil and Colombia. Each chocolate bar is given a flavour that is typical of the variety and region. The type of cocoa, soil, cultivation, climate, weather and the individual production process of the individual origins influence the chocolate that is made in Chocolaterie de Gruyères.

The craft of chocolate-making from Chocolaterie de Gruyères is exported globally under the Hermès branding for the increasing number of conscious craft consumers willing to invest in luxury artisanal chocolate.

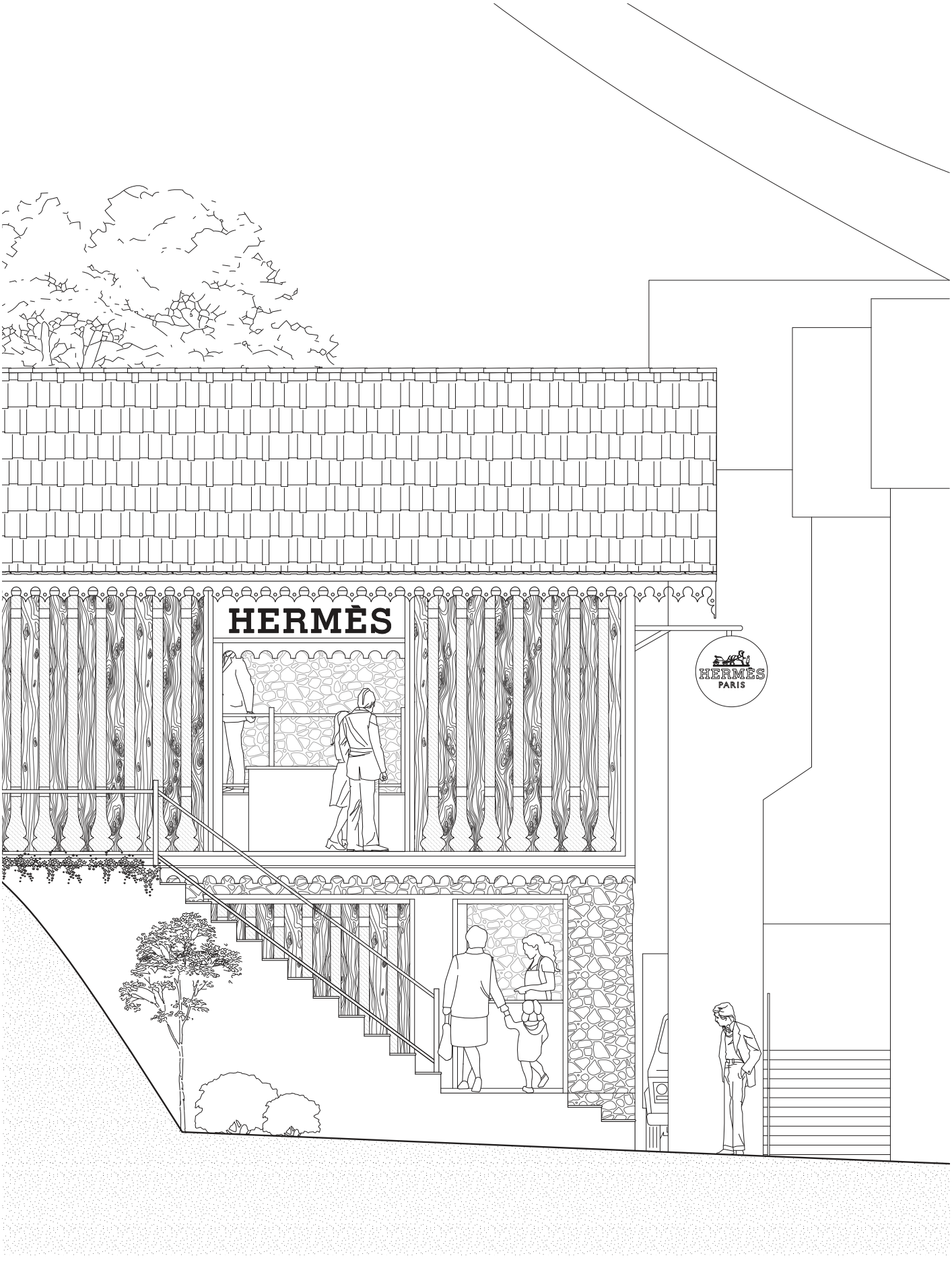
E. Contact person for correspondence

E.1. Designated contact person

Provide the name, address and other contact information of a single person responsible for all correspondence concerning the nomination. For multi-national nominations provide complete contact information for one person designated by the States Parties as the main contact person for all correspondence relating to the nomination.

Title (Ms/Mr, etc.): Mr

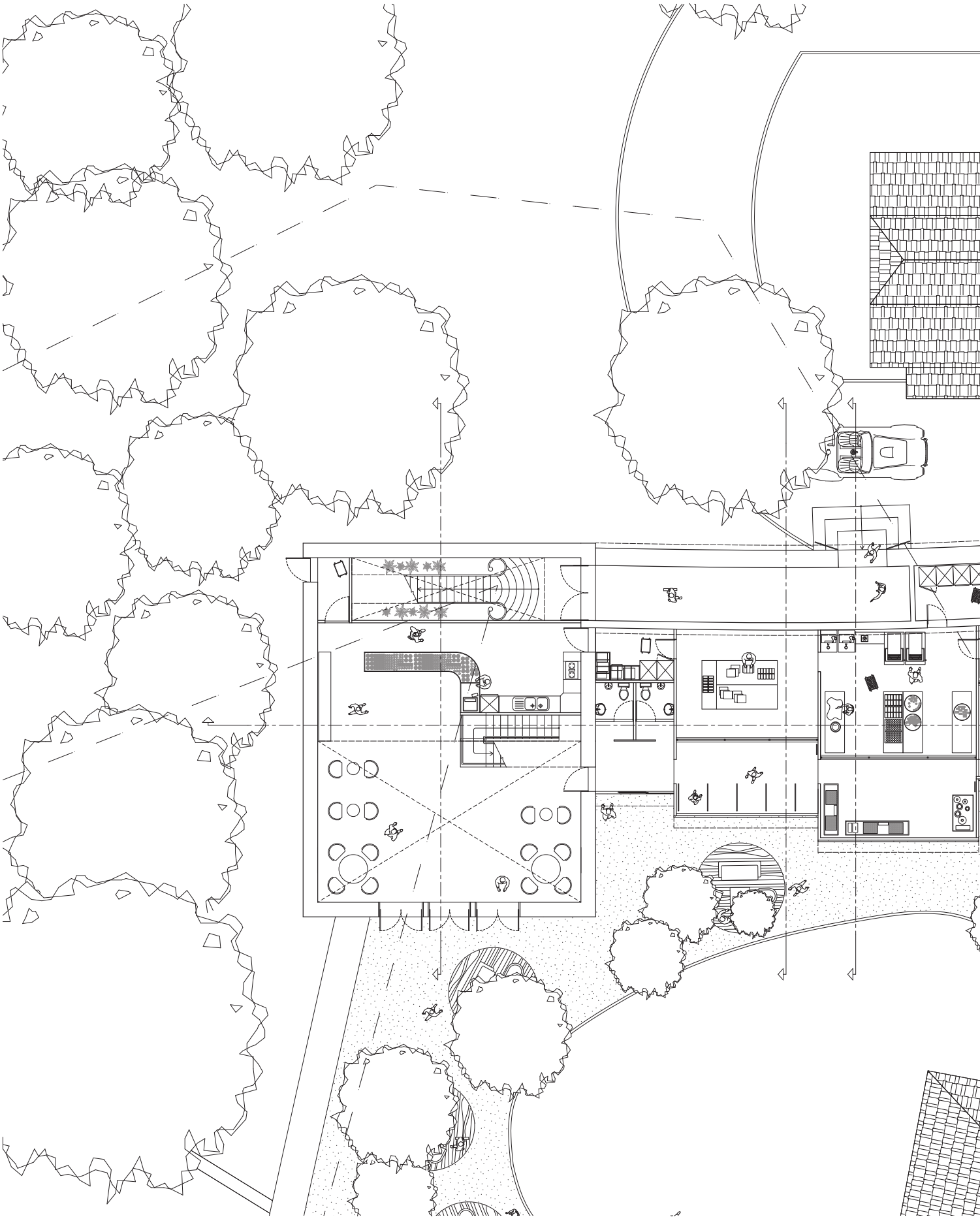
The rural town of Gruyères in Switzerland, specializing in milk production and cattle breeding remains a popular tourist destination for its traditional precision craftsmanship, especially the infamous cheese and chocolate production.



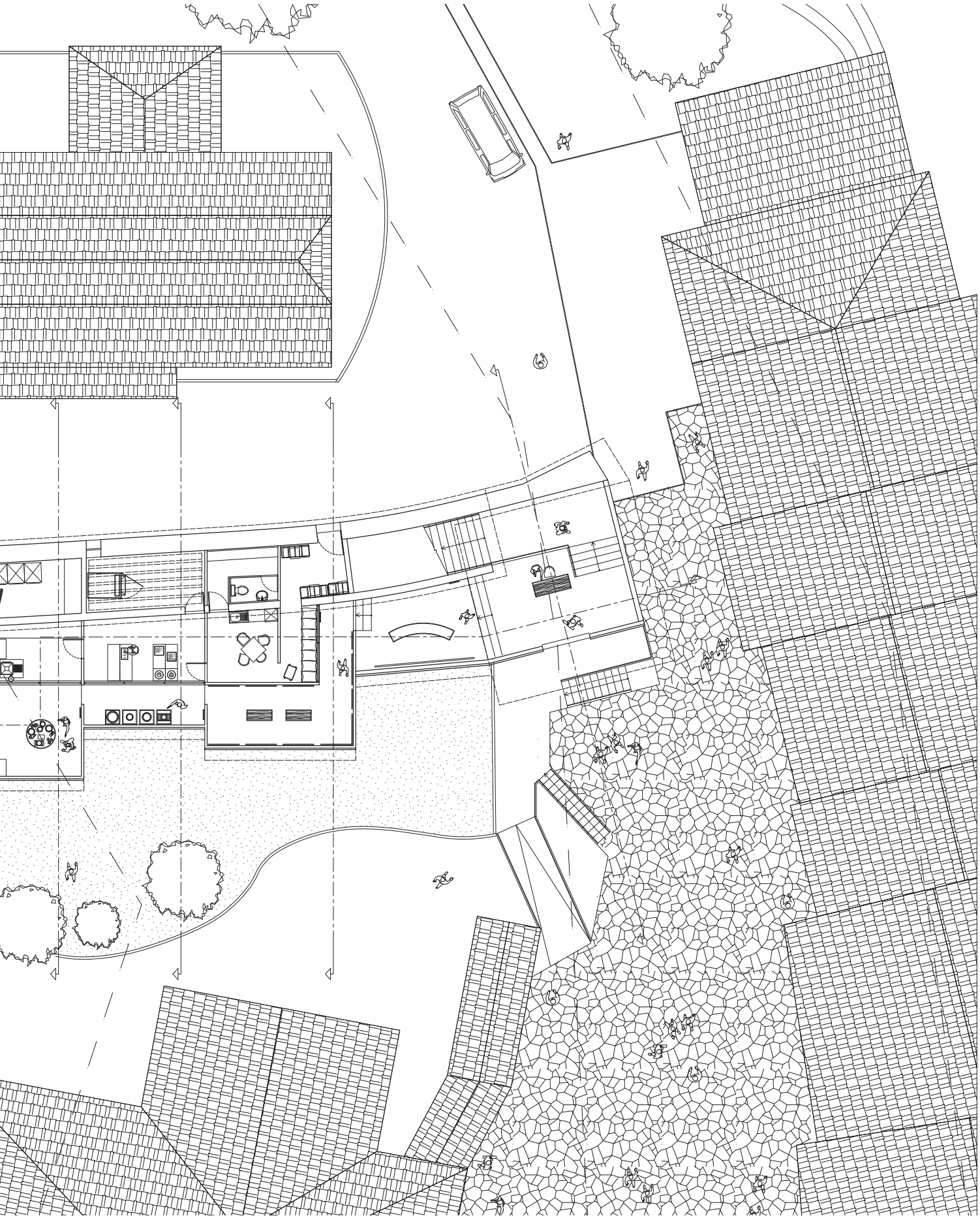
Crafted wooden screens and roof shingles inspired from the Swiss Chalet style replace the original facade to create an enticing and illuminated Hermès storefront.

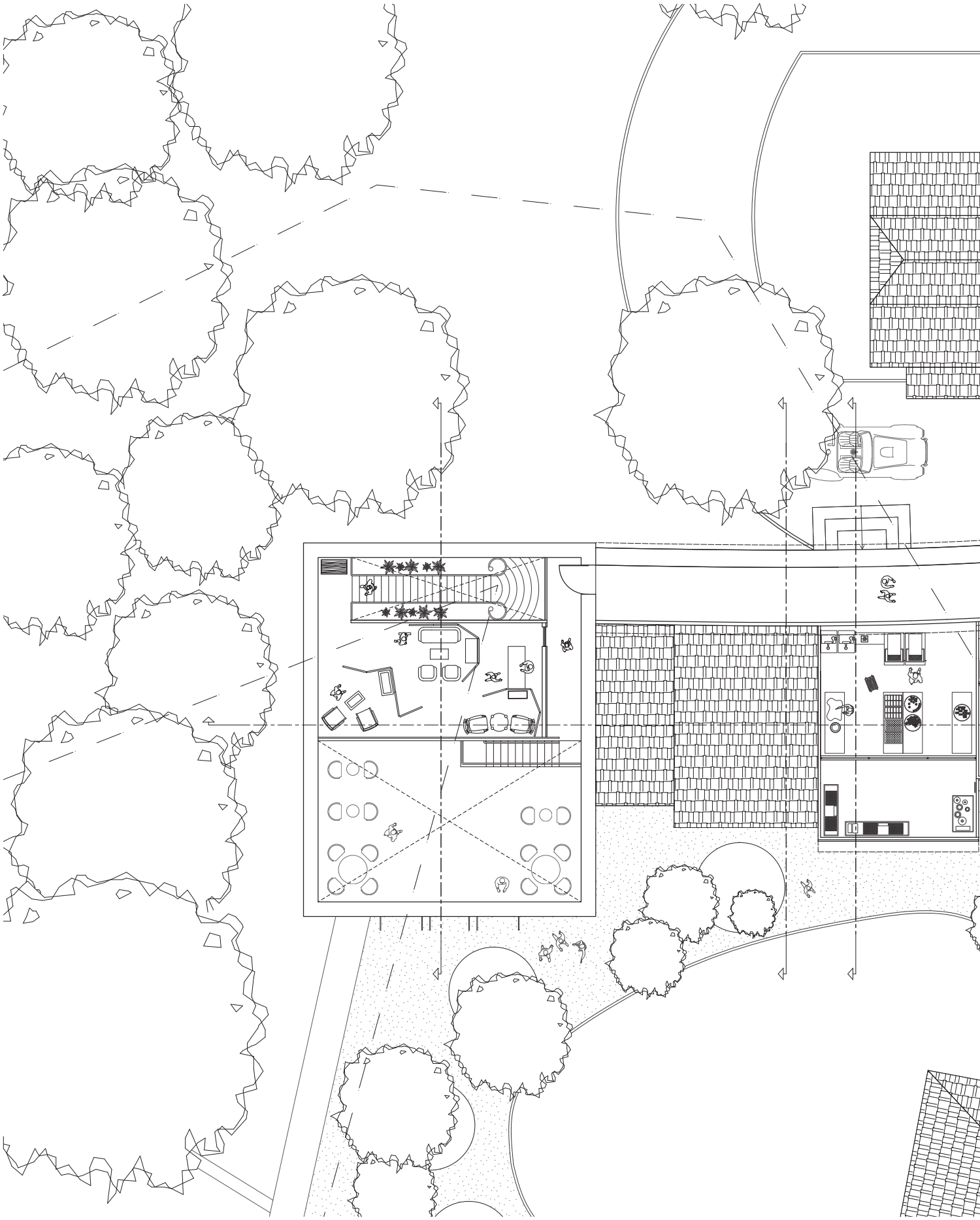
The site plan represents the car-free fortified village of Gruyères and its contextual infrastructure that offers excellent connectivity to the major European trade routes while also providing proximity to regional products required for chocolate

The street section highlights the fortified enclosure of the medieval town of Gruyères in Switzerland, occupying a small land area at the top of an 82 meter-high hill with a fort tower at the entrance and the chateau at its terminus.

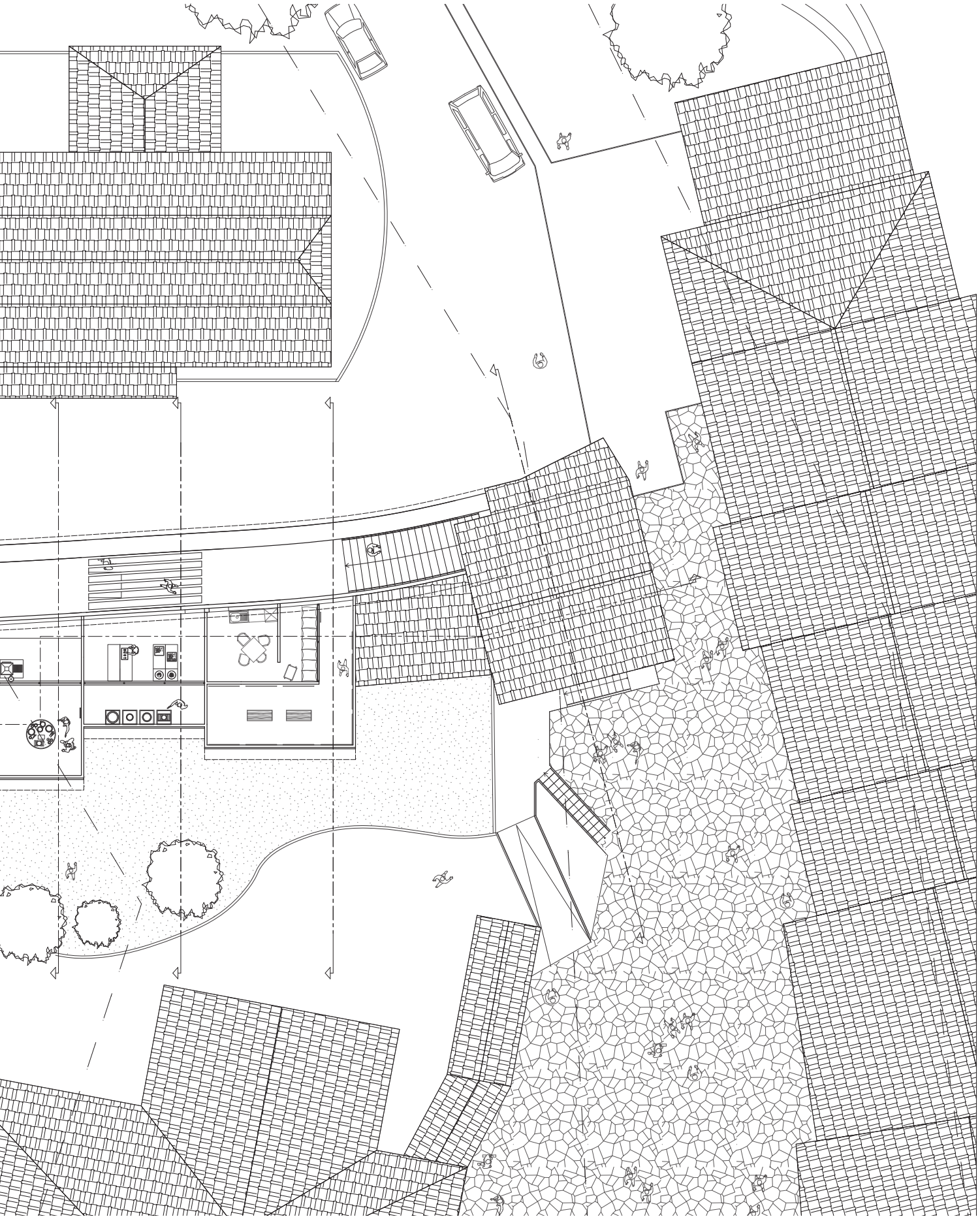


The plan locates the site at the entrance of Gruyères to show the modest expansion of Chocolaterie de Gruyères and its integration with the existing fortification.

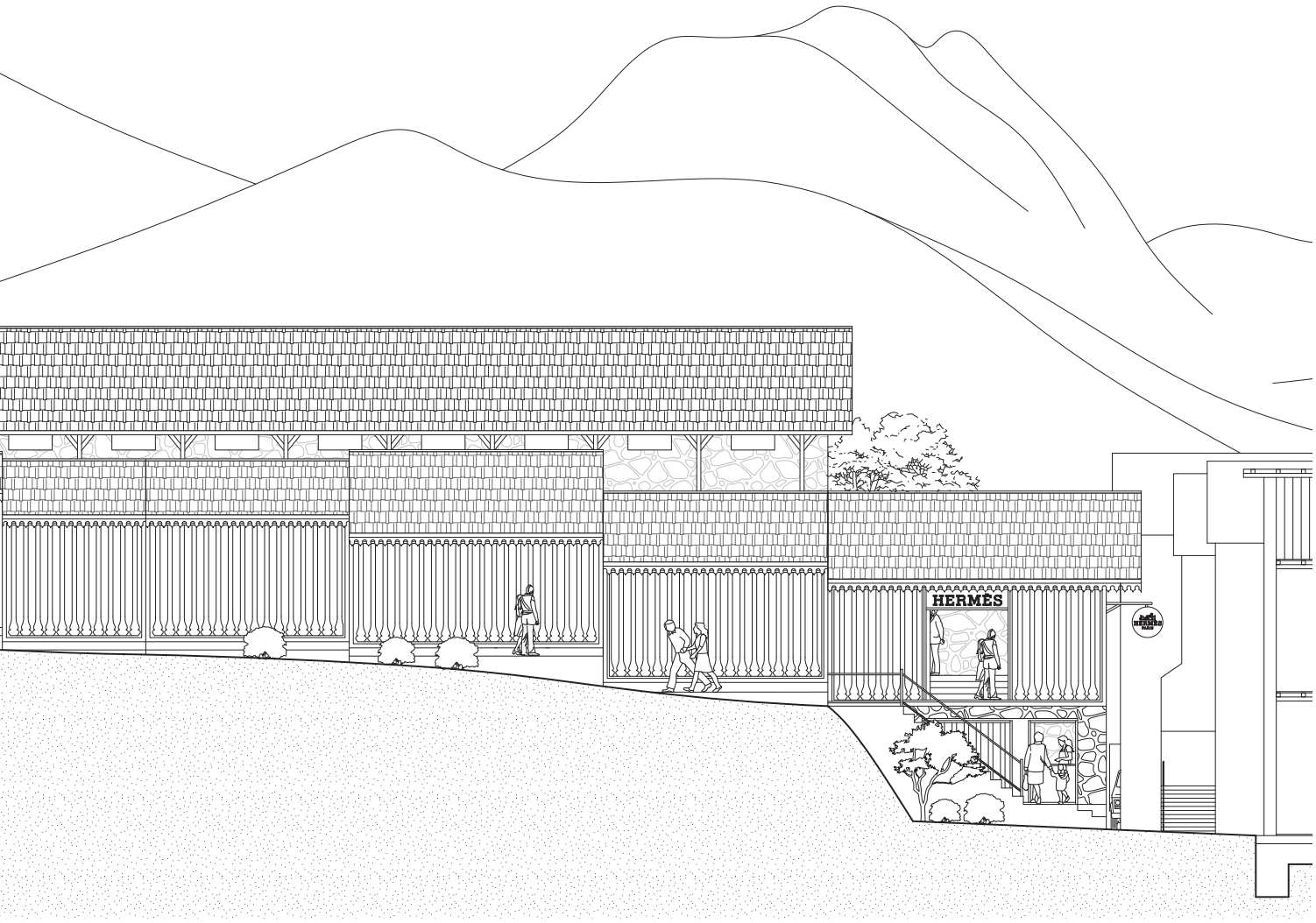




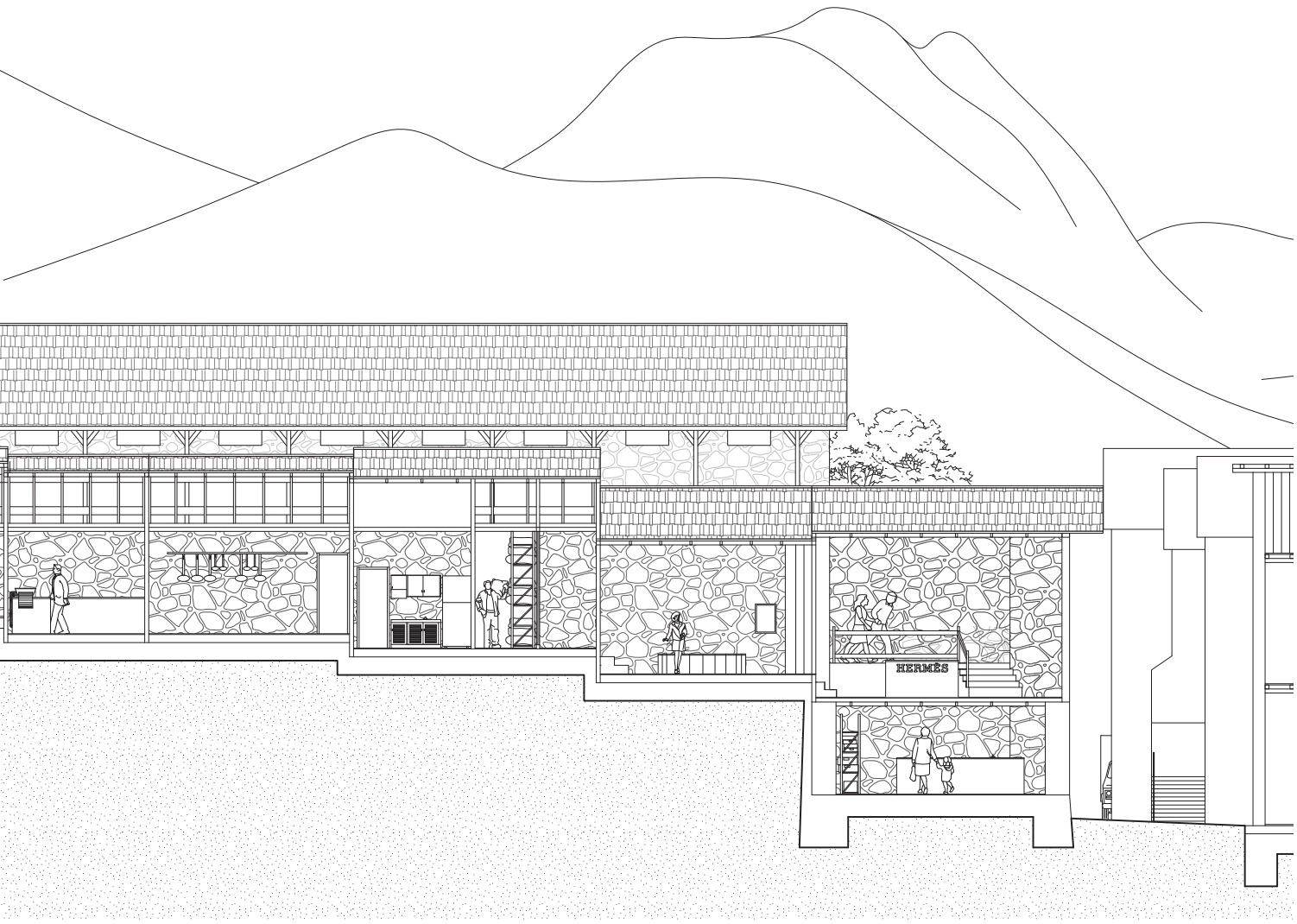
The first floor plan accentuates the transitional flows of varying consumers with the upper level mezzanine exclusively accessible for consumers willing to shop.



The elevation depicts the new facade of the building, inspired by the use of wood in Swiss craft architecture, providing a variation in light, transparency, and visibility, while providing a well-illuminated facade.


HERMÈS

The longitudinal section highlights the transparency of chocolate production within the new intervention, combining traditional forms with novel materials to respect the village's distinct architectural fabric.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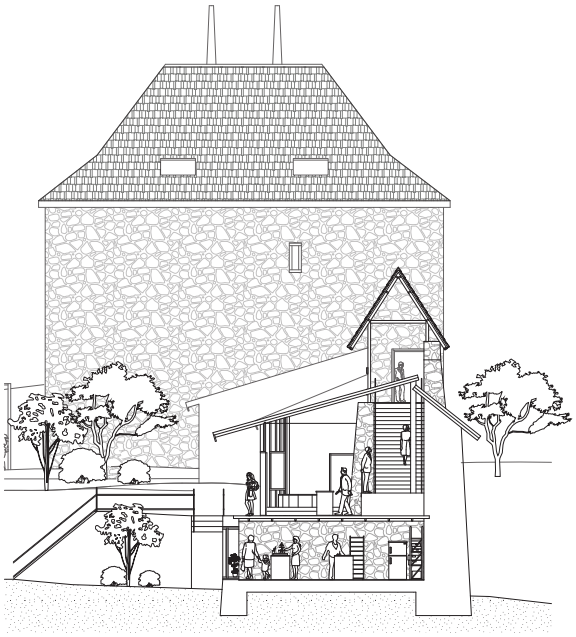
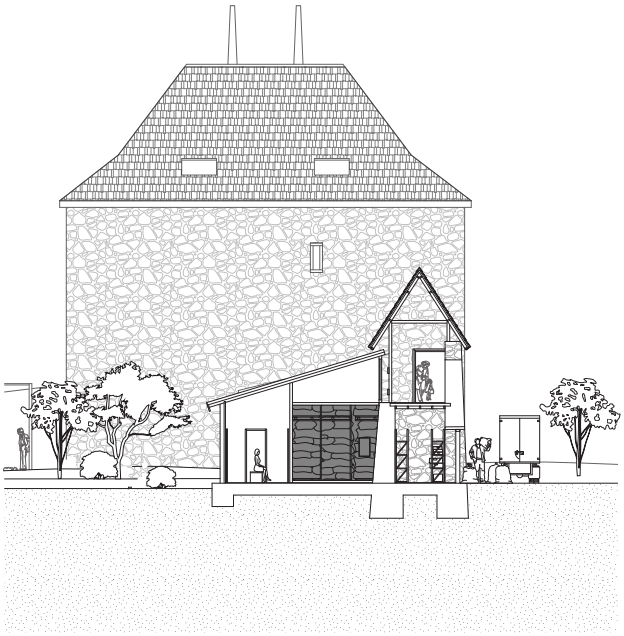
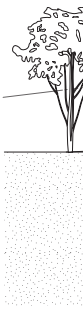
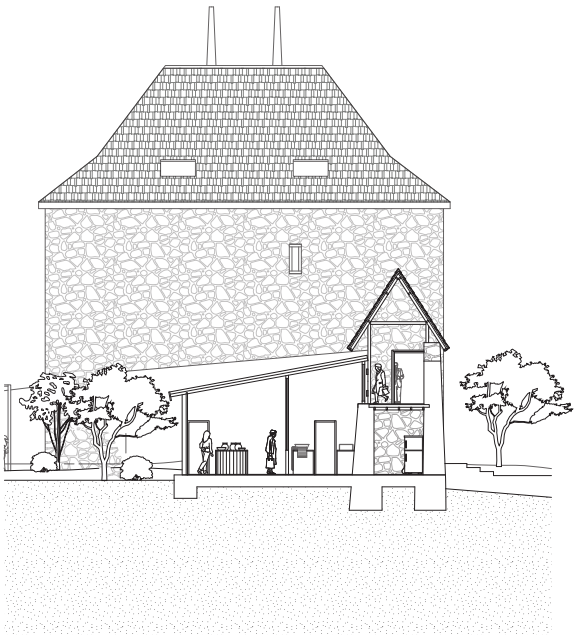
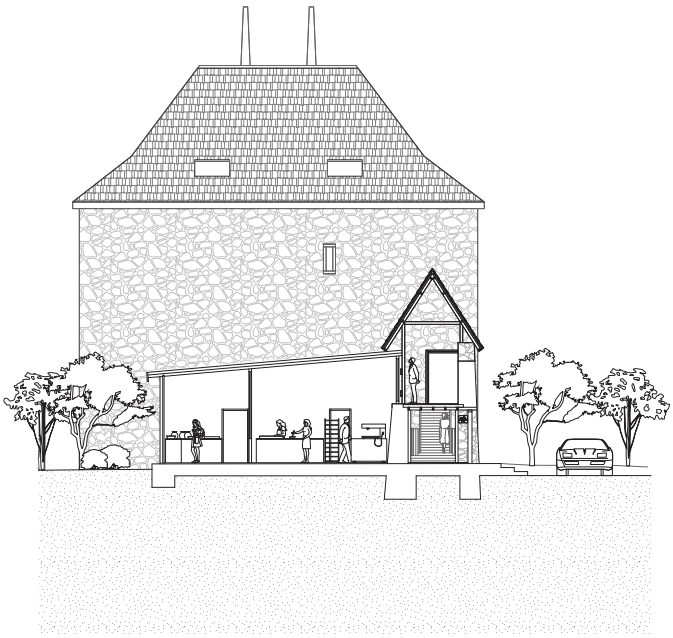


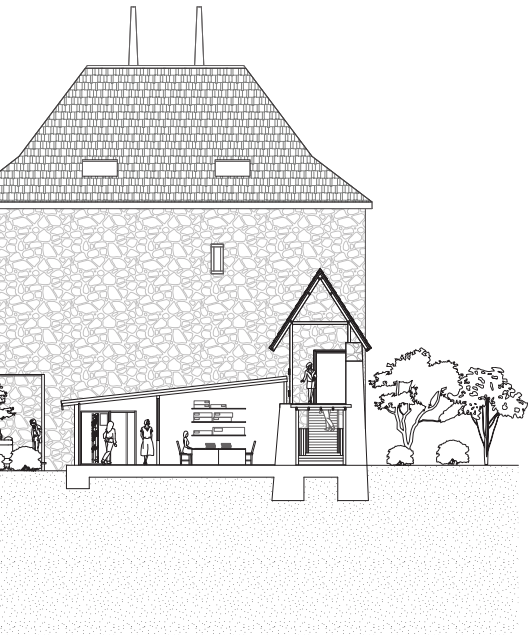


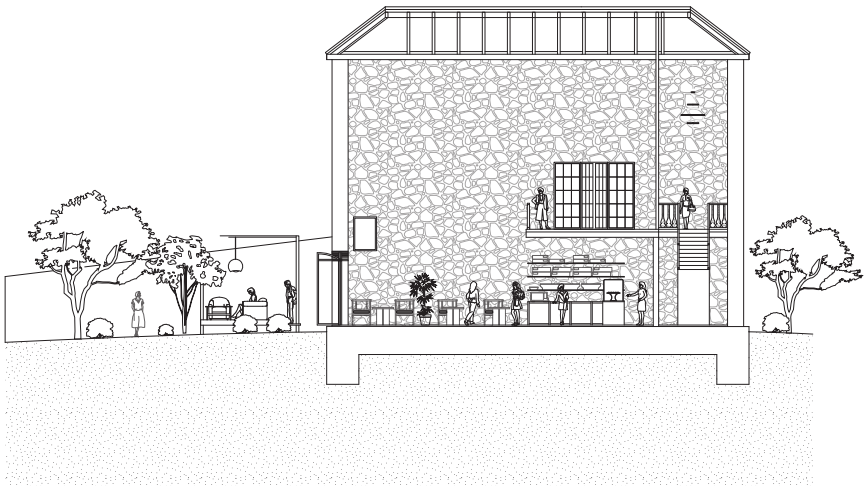


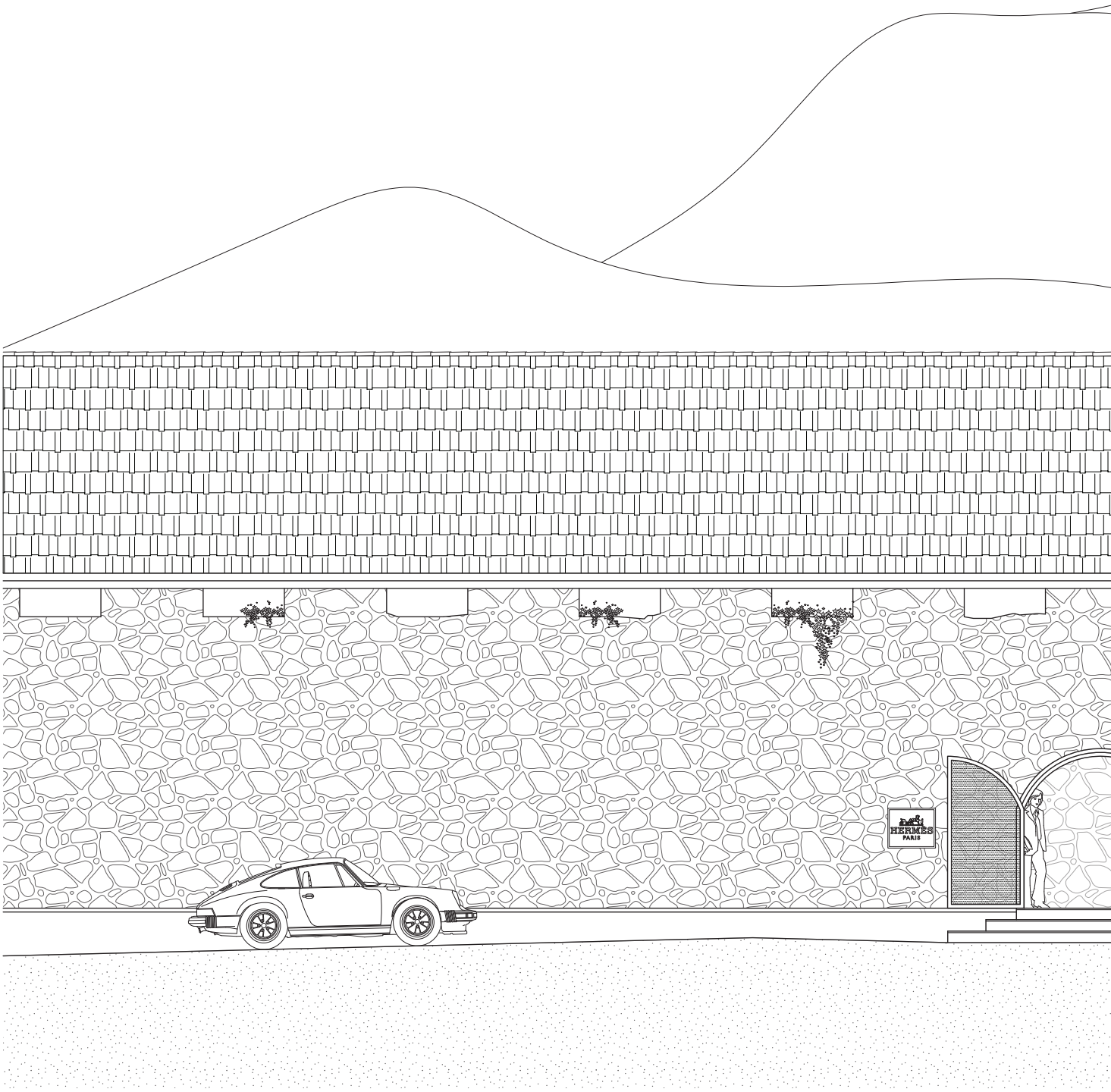




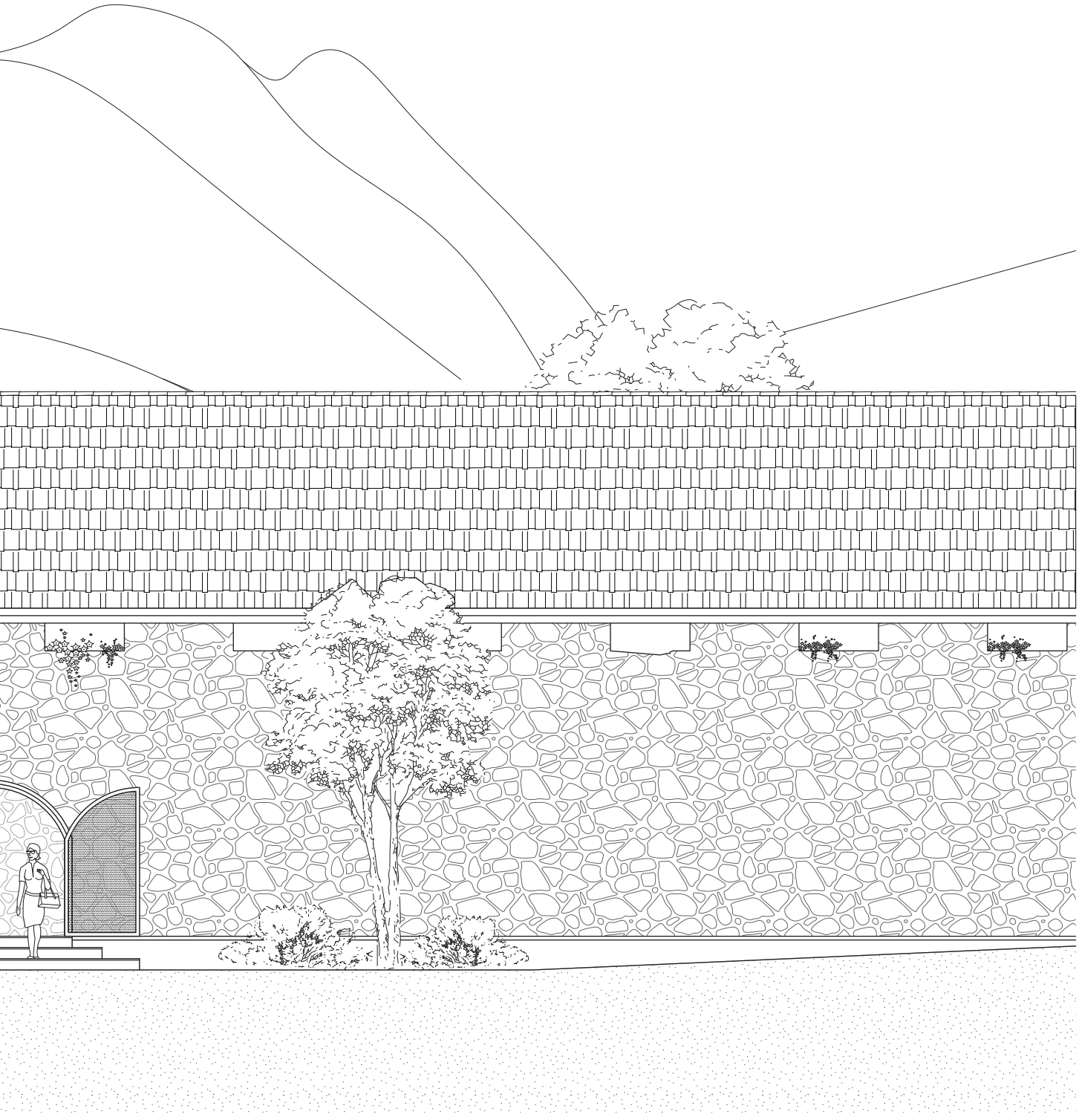
The cross-section shows the integration of the old with the new, creating visual and transitional vistas from the existing corridor, overlooking the chocolate production.

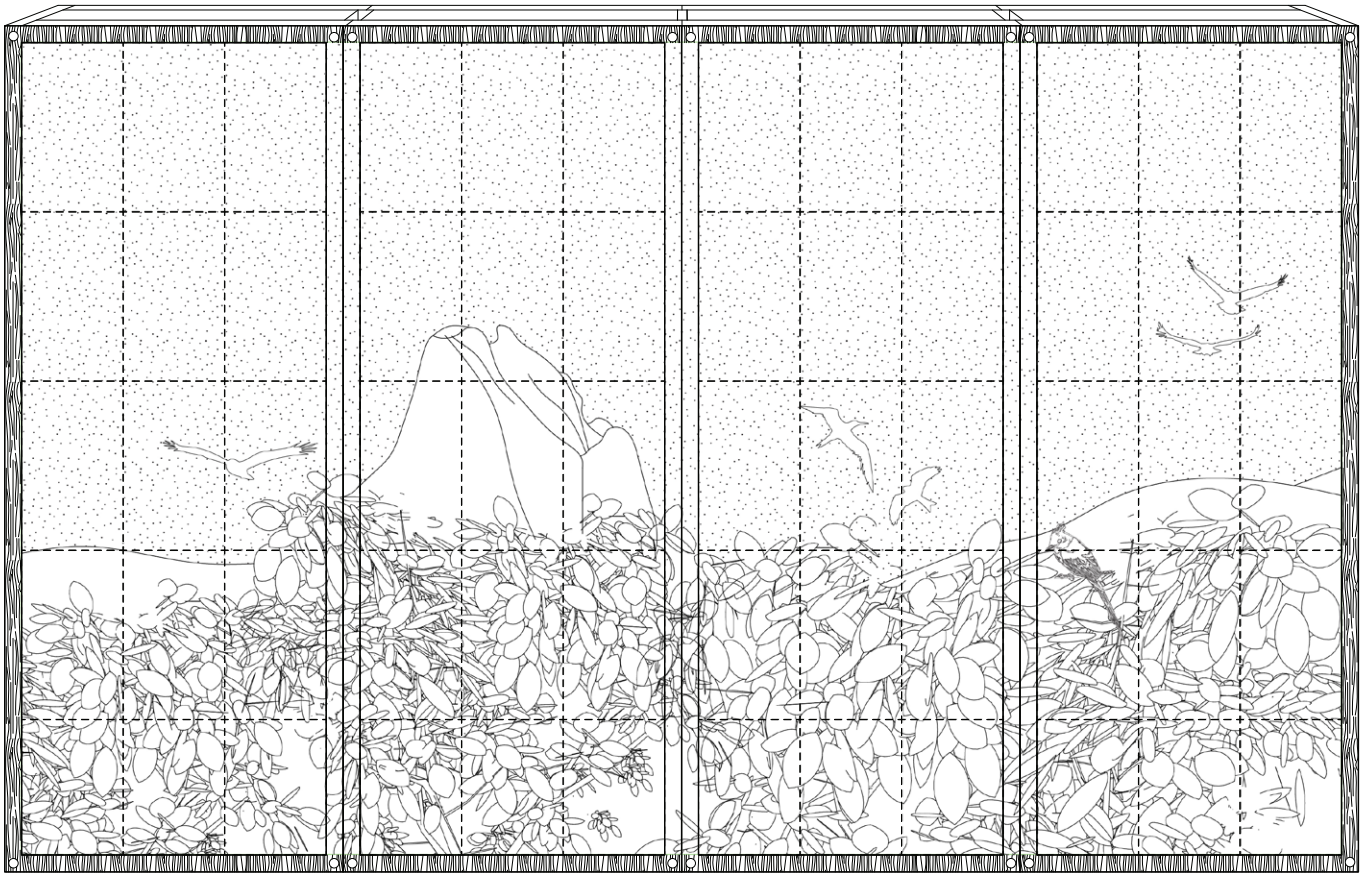






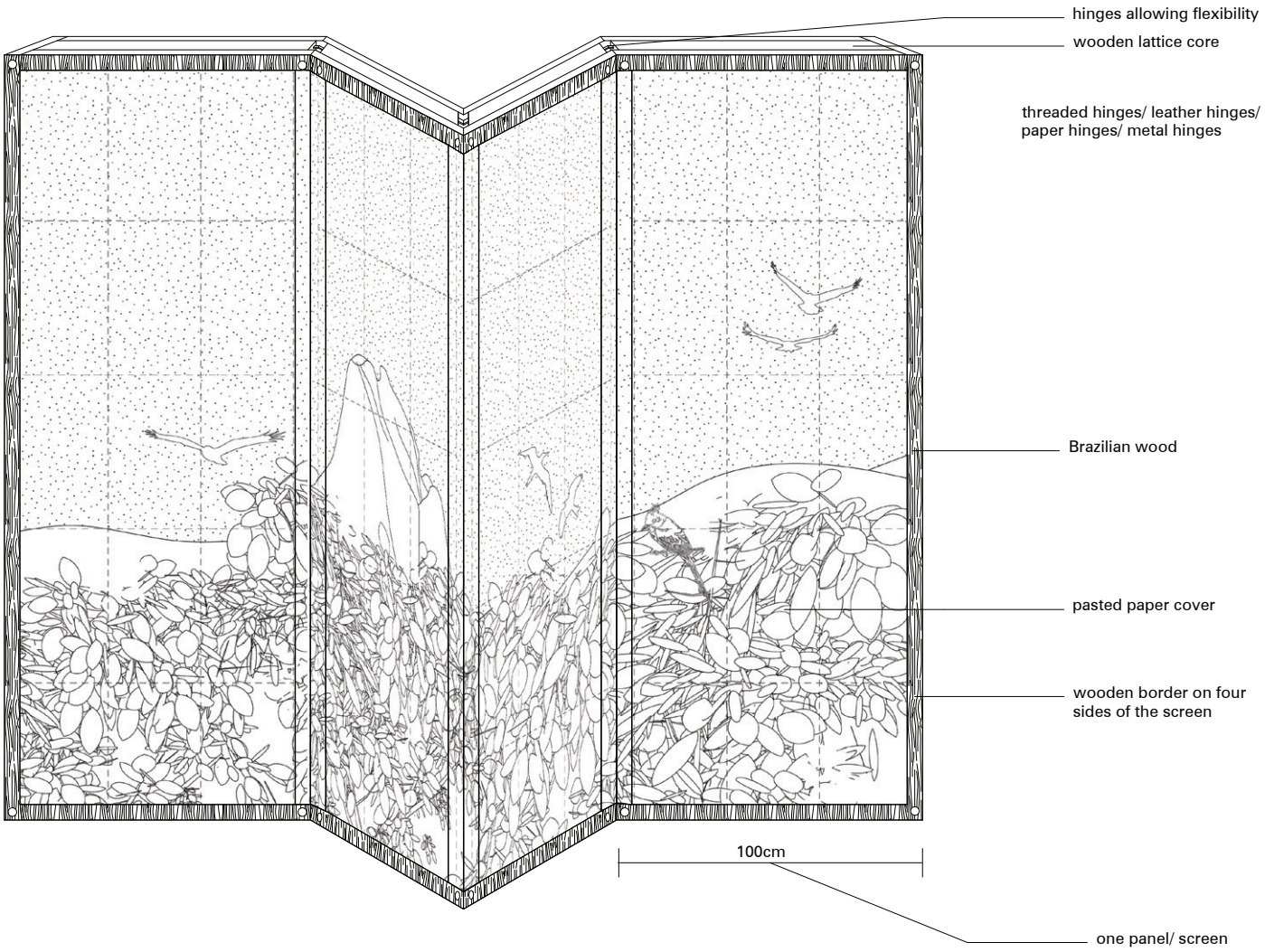
The elevation shows the secondary entrance and the route for affluent consumers willing to invest in artisanal luxuries, separated from the tourist traffic, offering exclusive premises with chocolate tasting experiences.

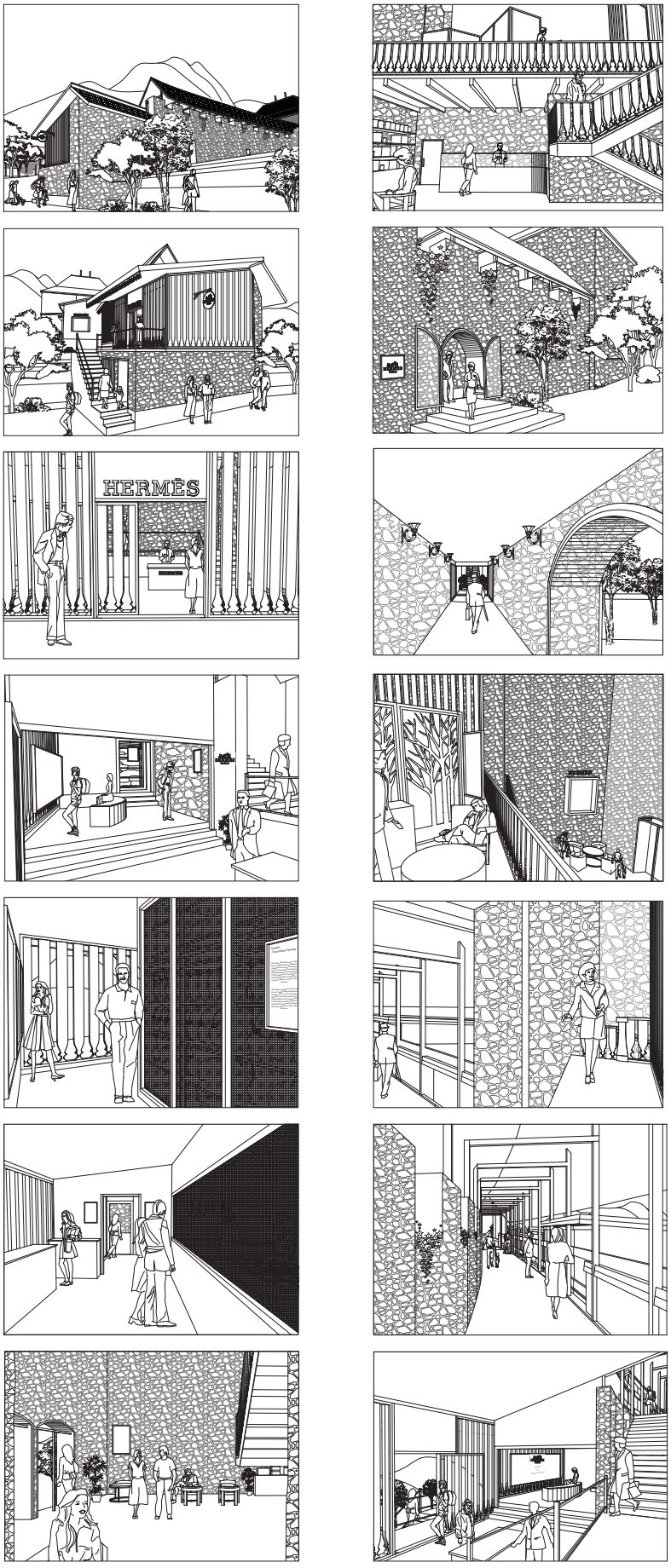




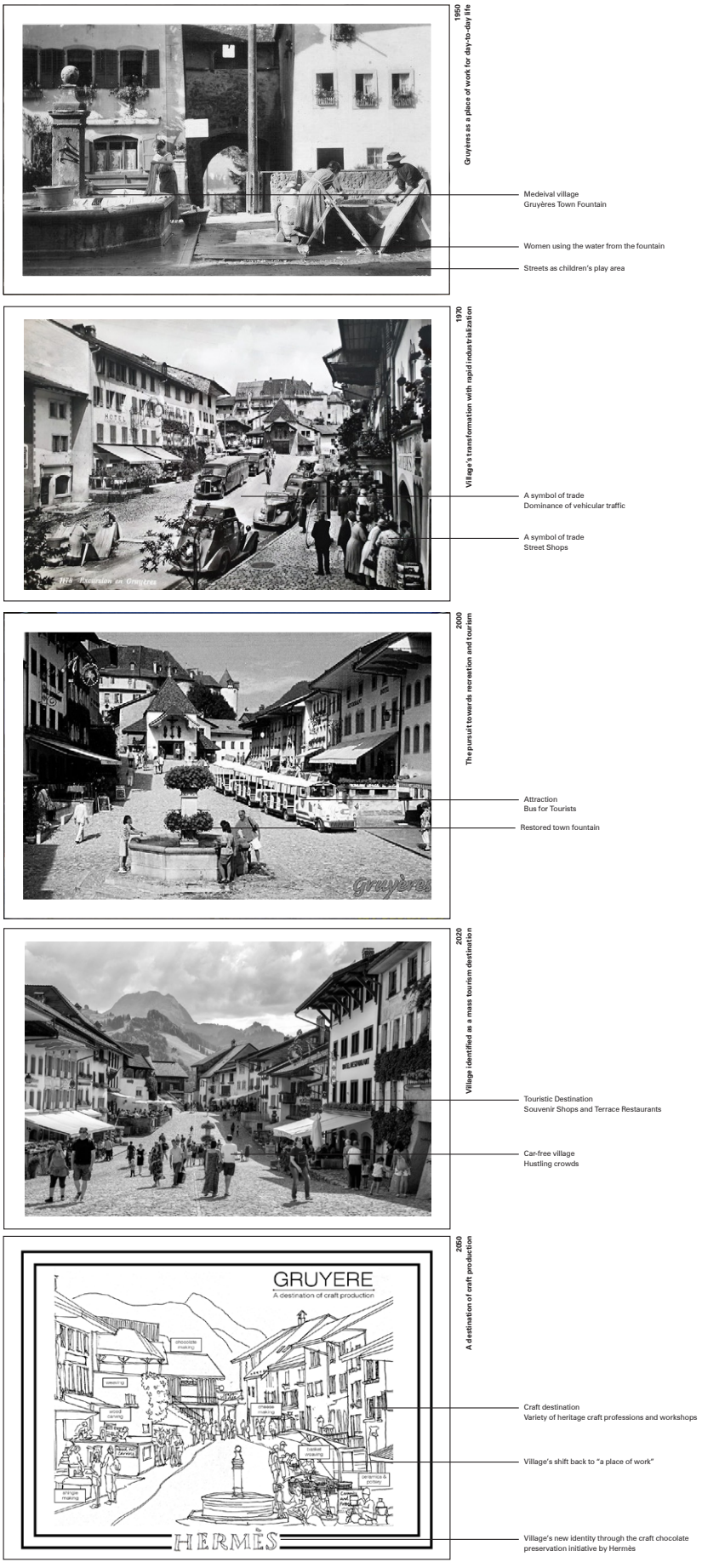
Display Screen for Bahian Cocoa
from Brazil

Wooden mobile screens from the craft of byobu-making create luxurious and independent display areas for three different origins of cocoa, assembled there and alluding to the exoticism of the provenance of beans through the specific imagery and wood used.


hinges allowing flexibility
wooden lattice core
threaded hinges/ leather hinges/
paper hinges/ metal hinges
Brazilian wood
pasted paper cover
wooden border on four
sides of the screen
100cm
one panel/ screen



A series of spatial perspectives narrating the distinct consumer experiences through a curated journey that intersects with the new intervention and the existing heritage site of the chocolaterie.



A collection of postcards from Gruyères that trace its history from a place of work to a place of value, entitling a renewed identity of heritage craft preservation to move beyond mere tourism.

1 The shift to chocolate as a luxury is a necessity to save the craft of chocolate-making with cacao going extinct by 2050 to be unreservedly replaced by now already prevalent deceptive and profitable substitutes, making real chocolate scarce and inherently luxurious in the future.

2 With a decline in discretionary spending, the demand for craft production will surge, sustained by the new wave of conscious consumers willing to invest in artisanal luxuries that reflect superior quality, traceability, and uniqueness in the knowledge of food processing.; offsetting these products against the standardized intent of homogeneity and repeatability.

3 A modified supply chain will allow Swiss local experts to introduce a new distribution network of real chocolate across the Blue Banana, under a premium brand, eventually customizing the consumer experience in Albert in Delft through a branded shop-in-a-shop to reach a target demography with its artisanal opulence.

4 Heritage monuments—limited in numbers—become the natural site for the branded chocolaterie, nurturing its rich history and craft, while providing vintage charm, spacious premises, and a parallel exclusivity that compliments product identity.

5 The contemporary use of the heritage building will move beyond mere culture conservation and tourism to function as a place of production, thus legibly and uniquely connecting the preservation of the building with the preservation of the craft.

This contribution is part of *Supermarket*, a collective project on the spatial implications of the food industry in the Netherlands and beyond, redesigning the now considered essential architecture of a supermarket.

Crafted with Care imagines a small-batch bean-to-bar artisanal chocolaterie producing luxury craft chocolate under a premium brand to reflect on the preservation of craft production, sited within a heritage monument in the rural area of Switzerland.

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and Urban Design

Faculty of Architecture and
the Built Environment

Delft University of Technology

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