



# LOSA

**Proposal for a logistic hub  
for the health care market in Piedmont,  
Liguria and the Aosta valley**

January 2022



**With the  
contribution of:**



CAMERA DI COMMERCIO  
INDUSTRIA ARTIGIANATO E AGRICOLTURA  
DI TORINO

# CASE STUDY: THE LOSA LOGISTIC HUB

## FOR THE HEALTH CARE MARKET IN PIEDMONT, LIGURIA AND THE AOSTA VALLEY






### Logistics in Piedmont

In terms of accessibility, the Italian National Institute of Statistics (Istat) ranks Piedmont at 49.9, slightly better than the averages for the North West (50.3) and Italy (51.8).

However, the picture is very uneven : **accessibility is best in the South-Eastern district with the best accessibility indices being in Novara and Alessandria**, both because their positions as crossroads and because of access to a good motorway network. Turin follows the other two cities.

**Existing logistic facilities**, as well as growth and development scenarios linked to the completion of European corridors **indicate three clusters**:

-  **The Alessandria District**: a natural backport for Liguria, given the number of highly specialised centres for specific goods in Tortona, Rivalta Scrivia and Arquata Scrivia;
-  **The Novara District** thanks to its C.I.M. - *Centro Interportuale Merci di Novara*, the highly specialized Novara Goods Interport at the crossroads of two European Corridors and close to the Malpensa airport hub, with ongoing development plans.
-  **The Turin District** with SITO, close to the regional capital city and to the Turin-Lyon railway, that could also witness the development of city logistics activities.

**A Logistics Platform servicing the Life Science Production System and Health Care can find a home in the Region Piedmont,** considering the demand for drugs & devices that had been growing even before the outbreak of the pandemic. Specifically, the Province of Turin with its airport and a potential to develop its cargo activities, a crossroad between Piedmont's manufacturing plants, the main health care providers are connected to Liguria and the Aosta Valley as well as to Malpensa, the main cargo airport of the Northern Italy.

## Background

### [01] POPULATION

- Catchment area of **6 million people**, **1.5 million being over the age of 65**.
- Ageing population and a **growing demand for health services / care**
- **59 million prescriptions** filled in 2019



### [02] HEALTH SERVICES

- Over **120** public and accredited **health facilities** throughout the community which means **20,028** standard hospital **beds**
- Concentration of the largest hospitals in the Turin and Genoa metropolitan areas



### [03] EMERGENCIES

- **Covid-19 Pandemic** and the risk of new health emergencies (WHO, 2019, 2021)



### [04] INDUSTRY

- Growing industry with **specialized clusters** in drug production and device manufacturing in the Ivrea District (Bioindustry Park), Saluggia, Novara and Genoa



### [05] ACCESSIBILITY & LOGISTICS

- **Road and motorway networks**
- **Railways** (Mediterranean and the Rhine-Alps Corridor)
- **Ports** (Genoa, Savona Vado)
- **Airports** (Turin Caselle, Milan Malpensa)
- **Available Logistic Facilities:** Turin area (the Orbassano Site), the Alessandria Pole, Novara (CIM interport)



# LOSA (Hub LOfistico della SALute)



## ESG (Environmental, Social and Governance)



## LOSA in PILLS

Where do we start

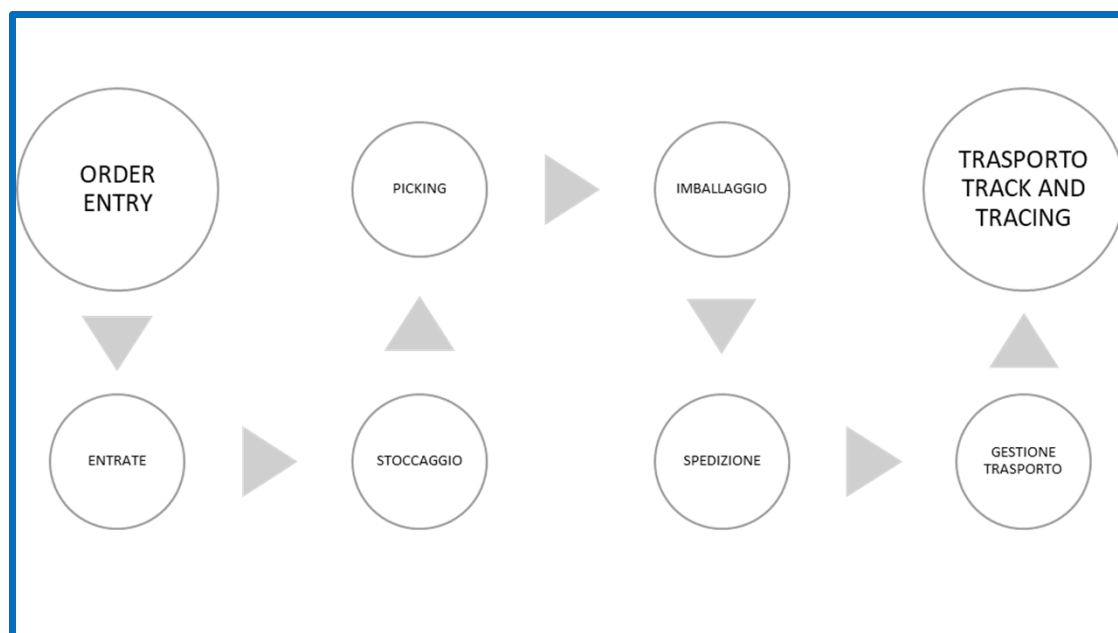
- [01] SIZE (BUILT SURFACE)**  
→ 18,000 to 24,000 square metres
- [02] WAREHOUSING CAPACITY:**  
→ 20,000/30,000 pallets according to selected size  
→ + 1/3 additional capacity
- [03] COST ESTIMATES**  
→ from 700 to 1000 €/square metre
- [04] TIME LINE**  
→ **1. Feasibility Study: 9 months** including the identification of a financial partner, a construction partner and one for the logistics management of the platform  
→ **2. Executive Project Design : 6 months**  
→ **3. Completion: 12/18 months**



# LOSA (Hub LOfistico della SALute)



## Distribution Flow



## Integrated Logistics Services

- **Warehousing:** controlled, room or refrigerated temperature for drugs and active ingredients (API system) and **transport**. Different goods and commodities can be stored at the appropriate **temperature** and monitored using radiofrequency technology :
  - 2-8°
  - - 20°
  - 15°-25°
- **Packaging** of drug production: all packaging will be according to standard GMP (Good Manufacture Practice)
- **Warehousing and transport** of biological samples
- **Urgent 24/7 shipping of** life saving products
- Specialised **Home Care** Channel
- **Warehousing, shipping and withdrawal of prostheses and devices, instruments and disposables** on demand directly from operating theatres (return logistics)
- **Direct deliveries** to the pharmacy channel
- **Labelling:** all labelling according to standard GDP (Good Distribution Practice)

# LOSA «The PILL» - Design Suggestions

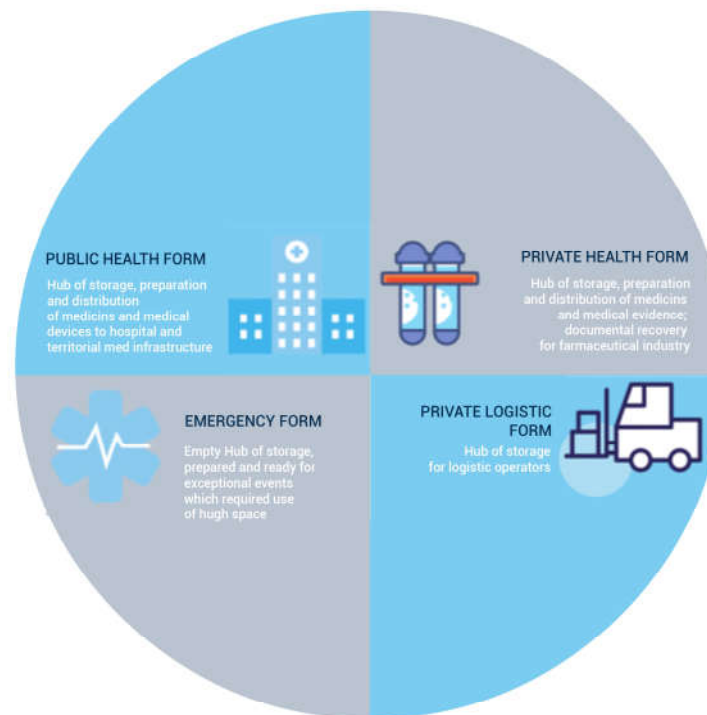


# O THE PILL

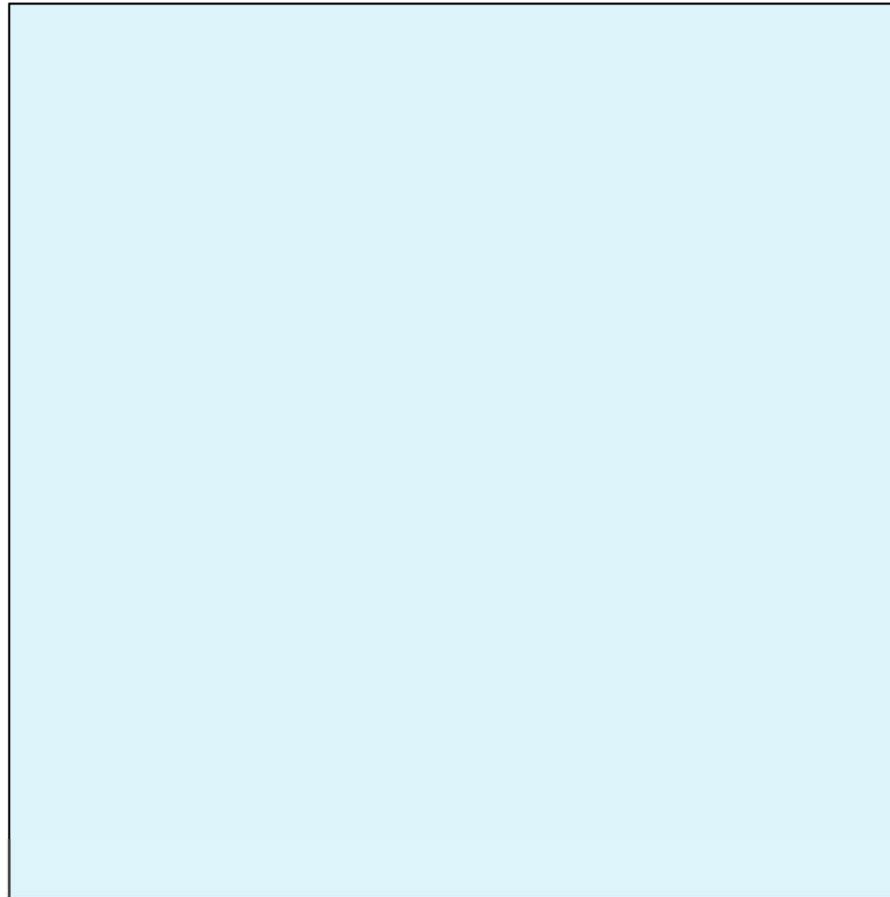
# LOSA «The PILL» - Design Suggestions



DESIGN SUGGESTION



# LOSA «The PILL» - Design Suggestions



## Plot Size

■ Area = 60 000 m<sup>2</sup>

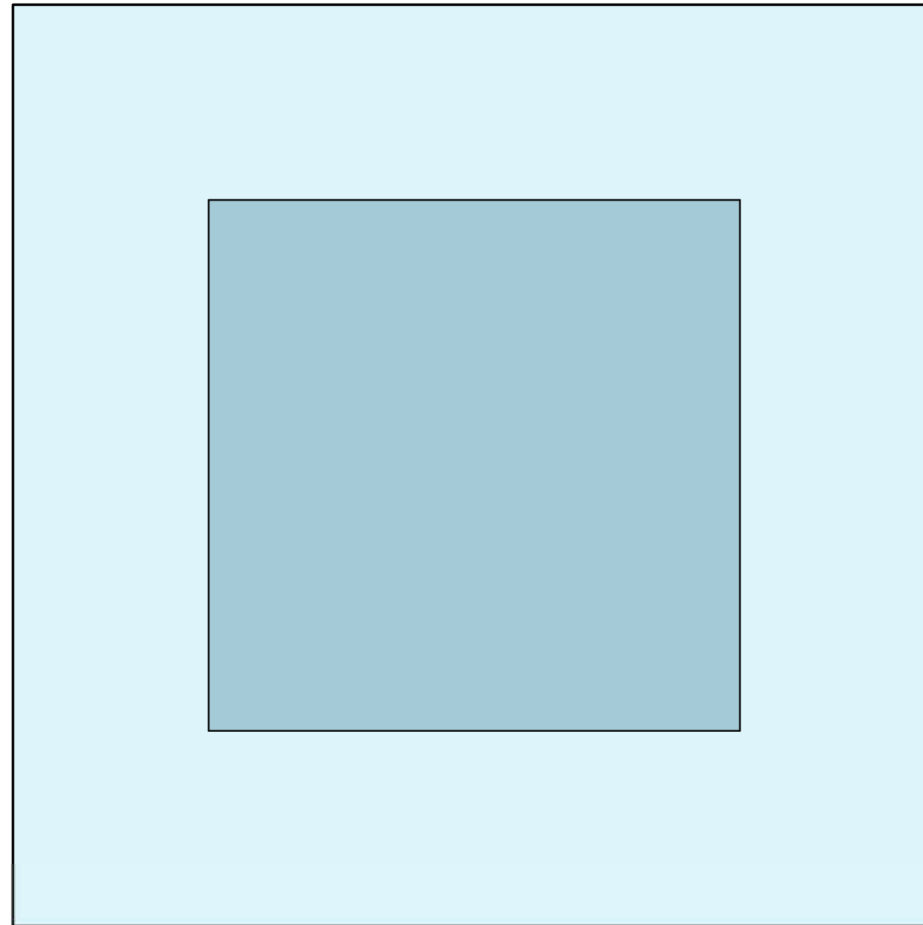
— Side = 245 m

GEOMETRY OF THE PLOT

○ LO.SA - THE PILL



# LOSA «The PILL» - Suggestioni progettuali



## Size of the Building

■ Area = 20 000 m<sup>2</sup>

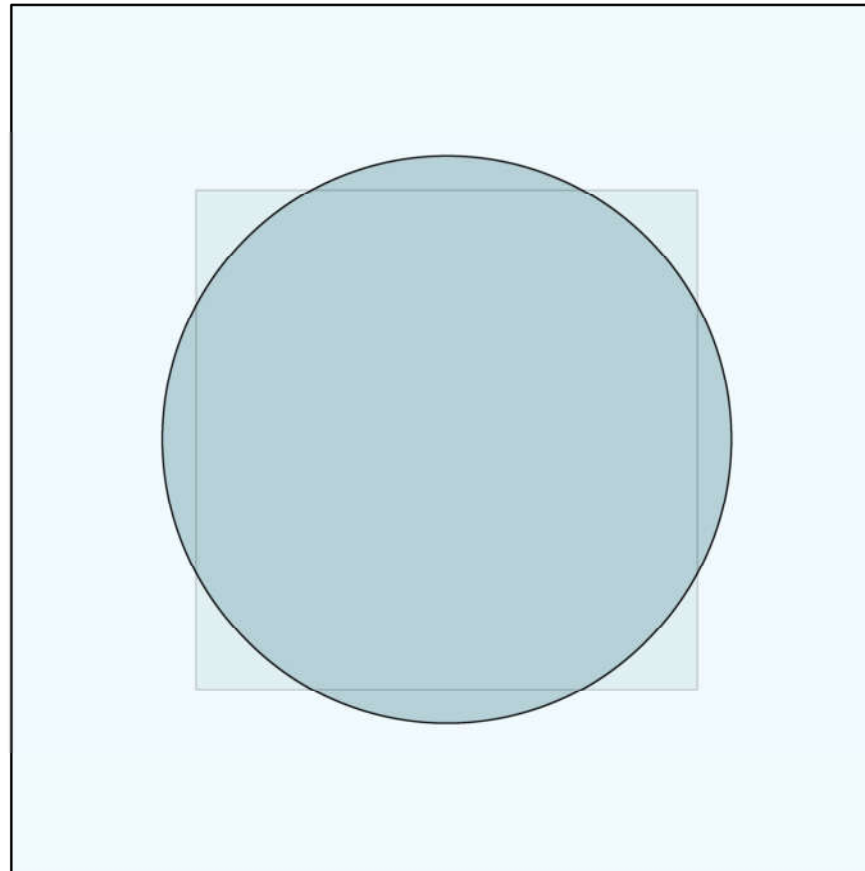
Side = 141 m

## Plot Size

■ Area = 60 000 m<sup>2</sup>

Side = 245 m

# LOSA «The PILL» - Design Suggestions



## Size of Building

■ Area = 20 000 m<sup>2</sup>

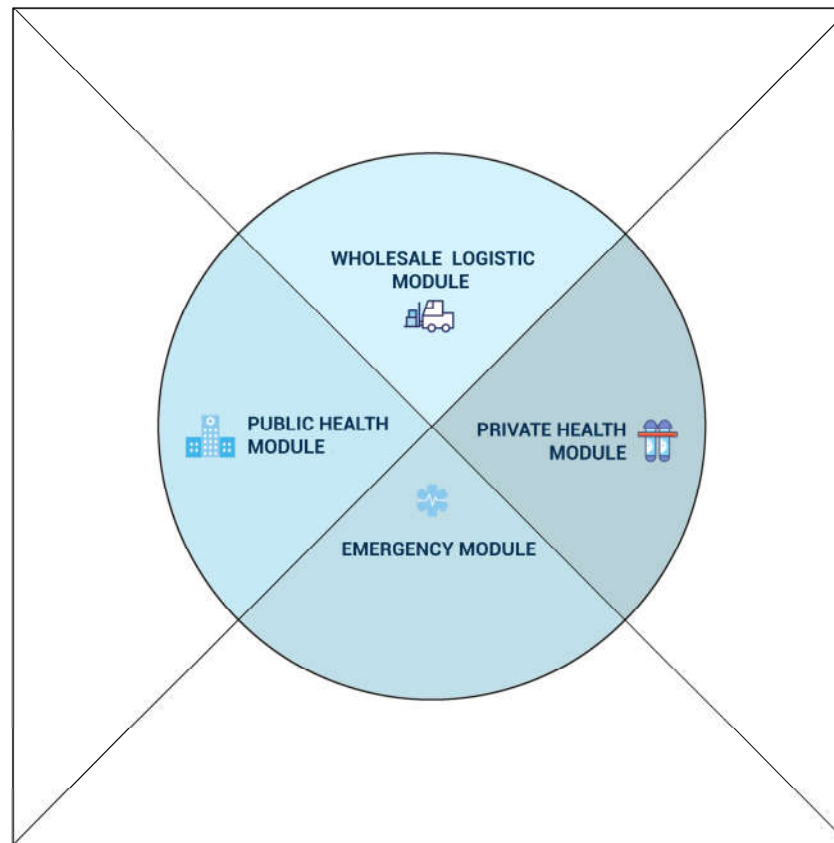
Radius = 80 m

## Size of the Plot

■ Area = 60 000 m<sup>2</sup>

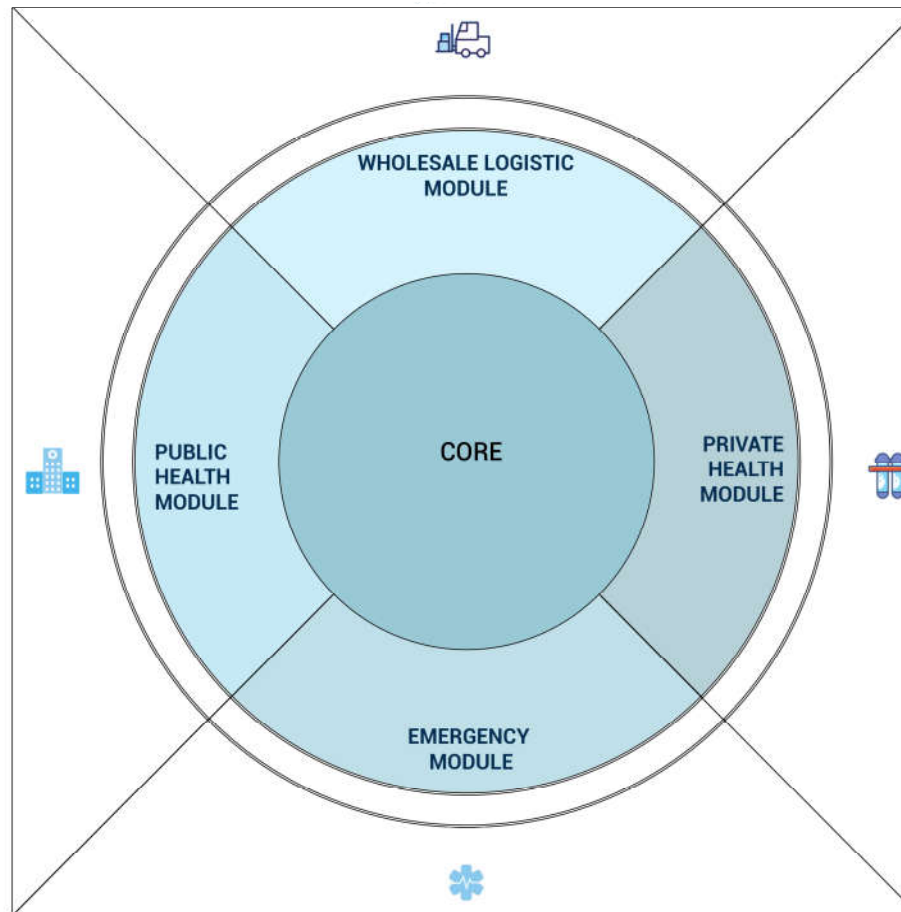
Side = 245 m

# LOSA «The PILL» - Design Suggestions

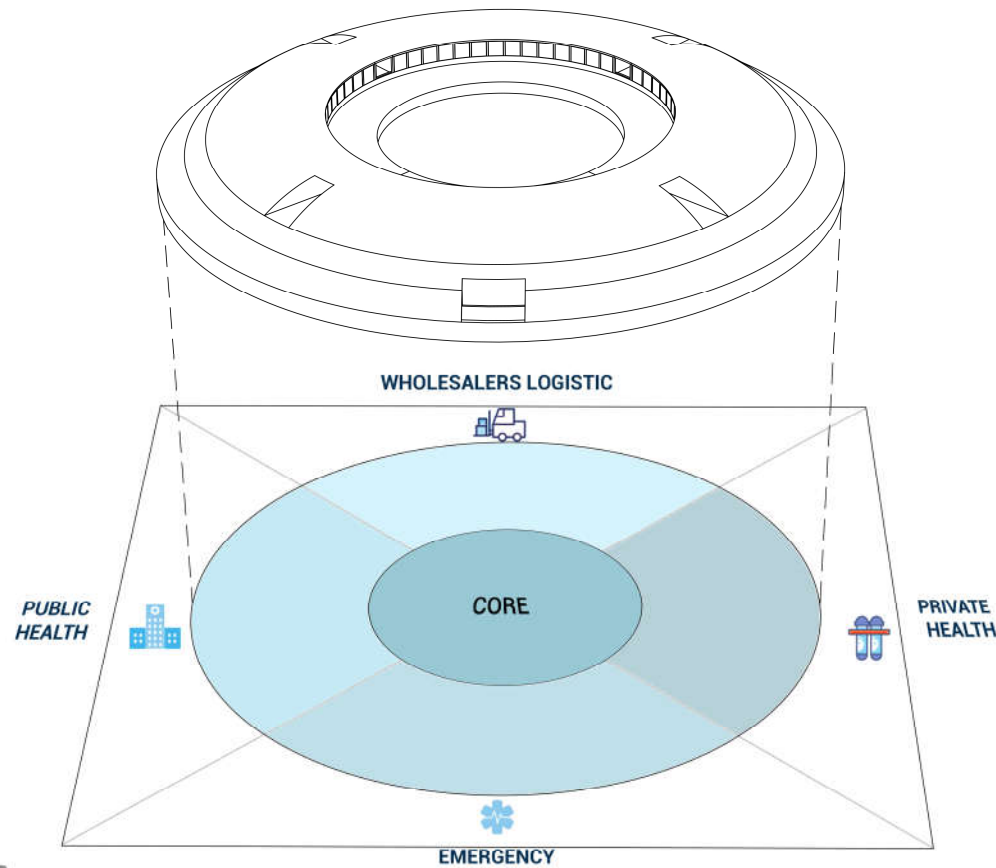


The circle can be easily segmented and modulated thanks to its geometric properties, that is central symmetry

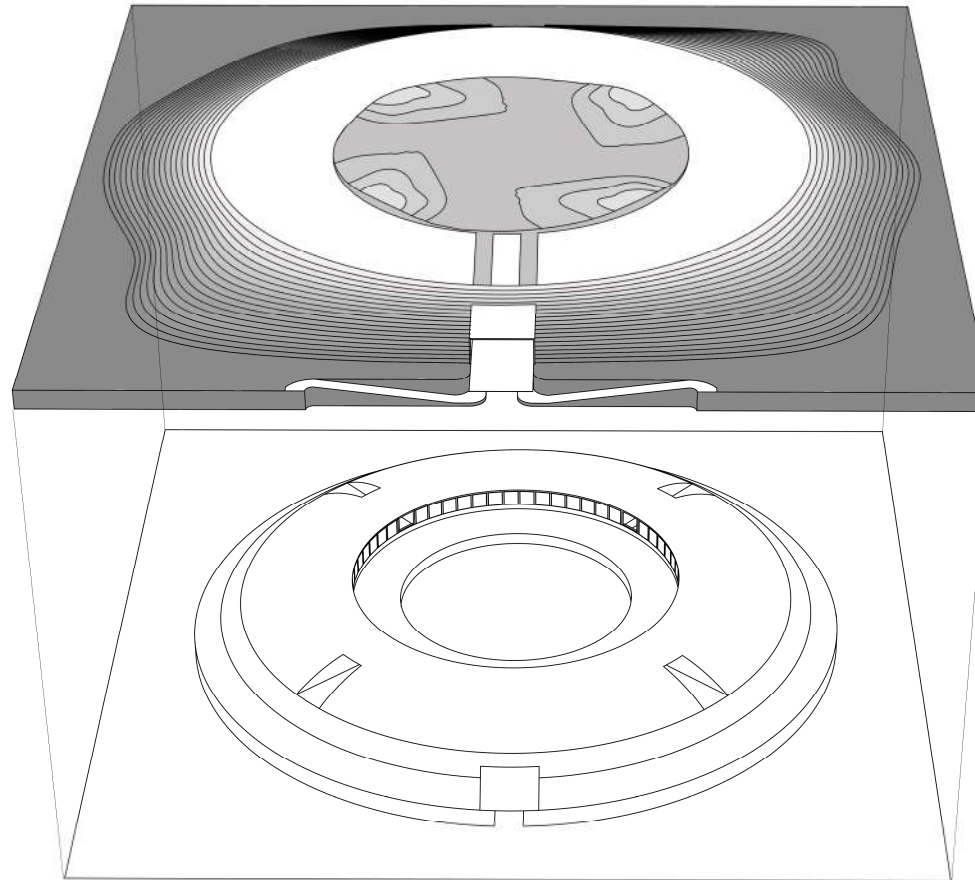
### 3.3 LOSA «The PILL» - Design Suggestions



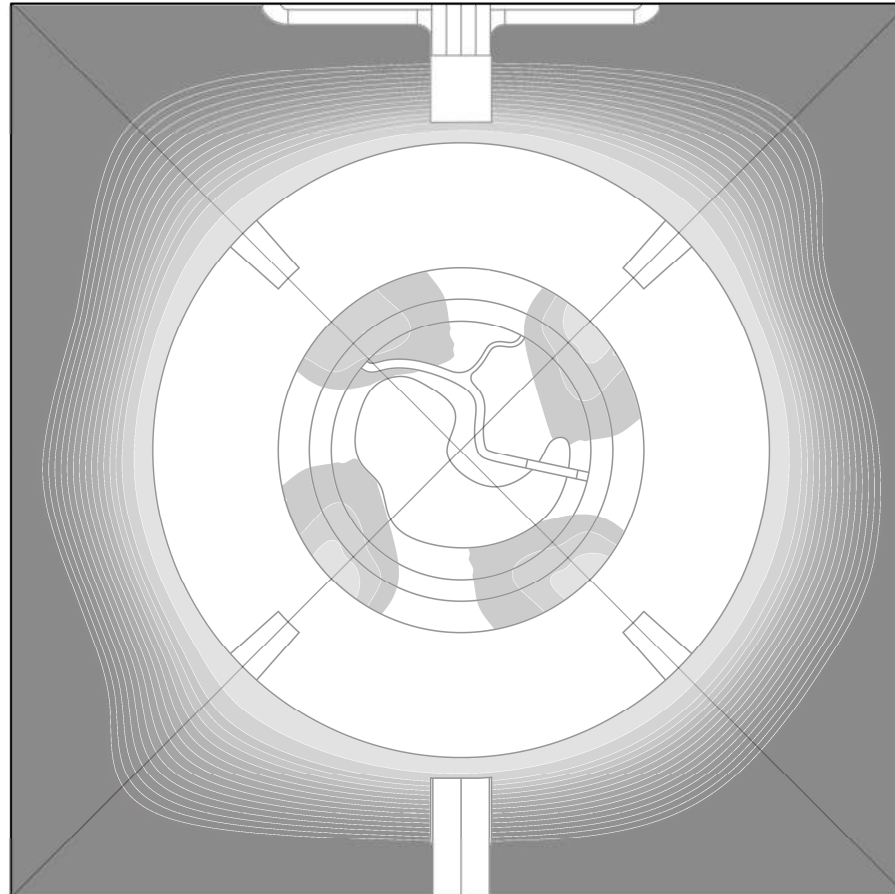
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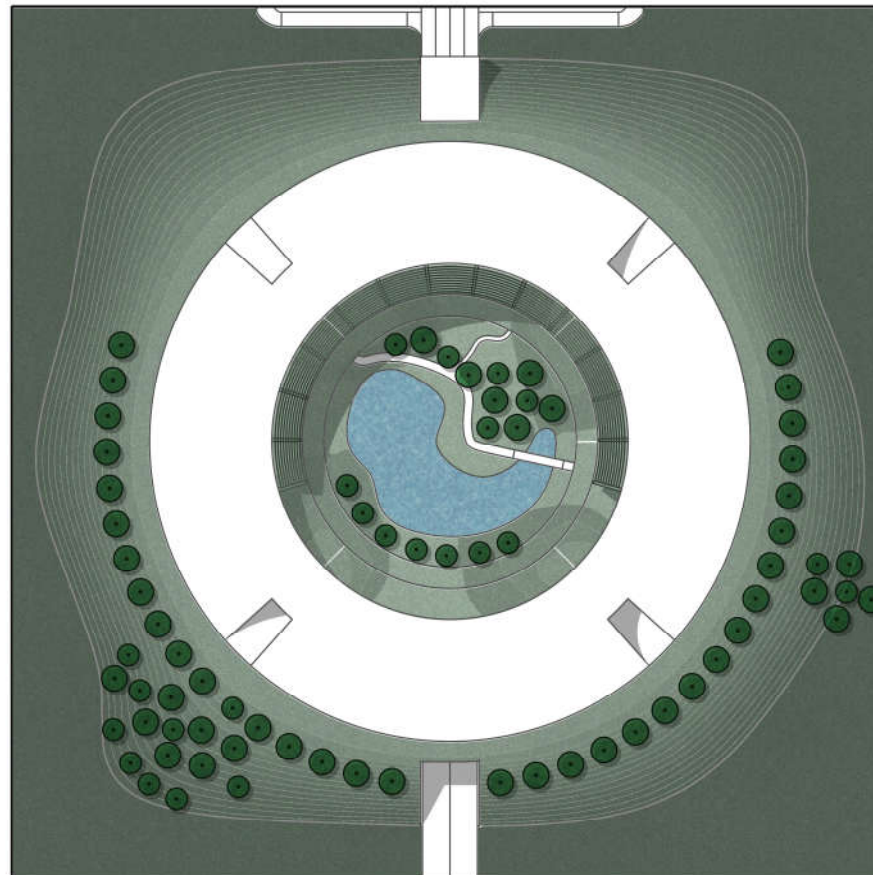
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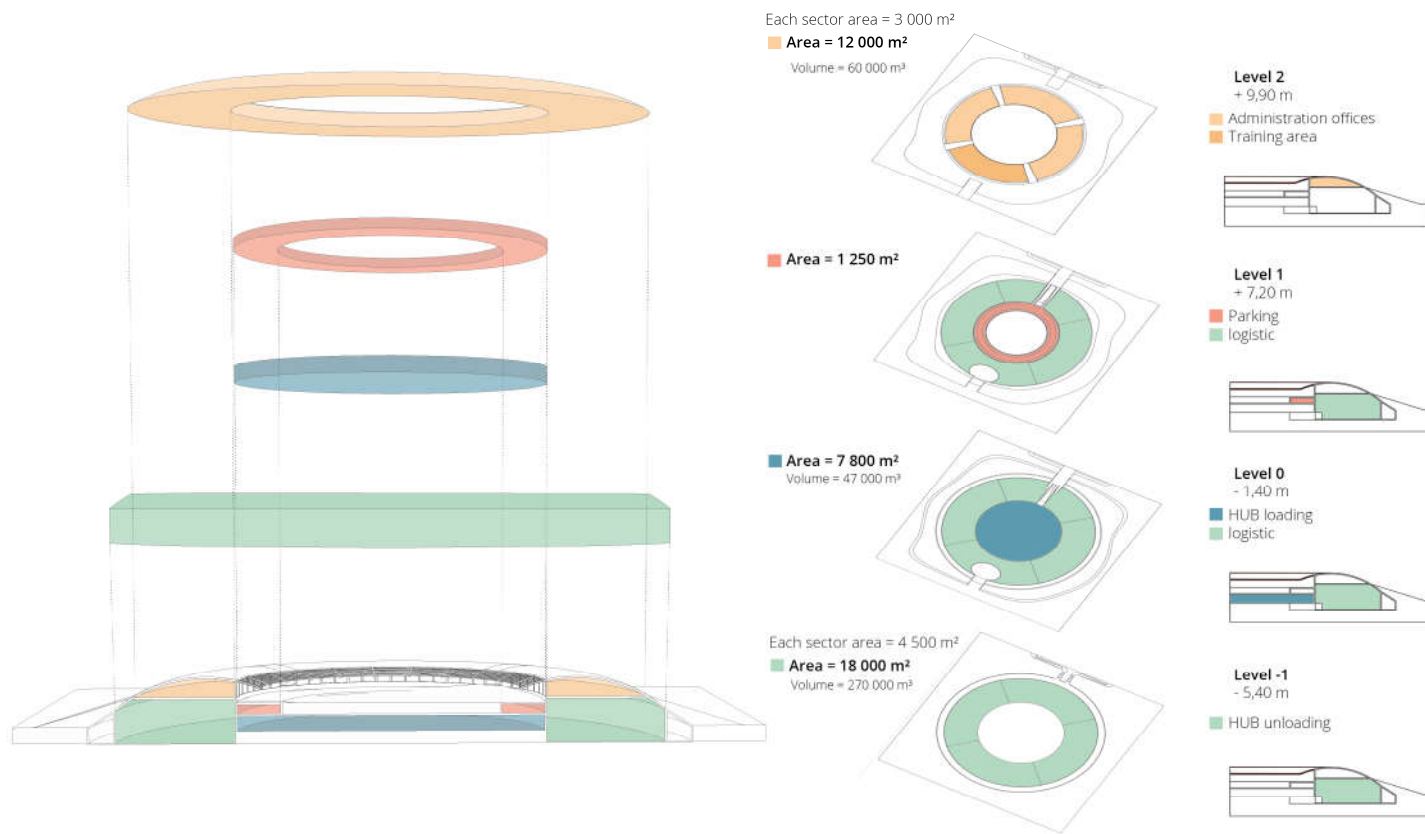


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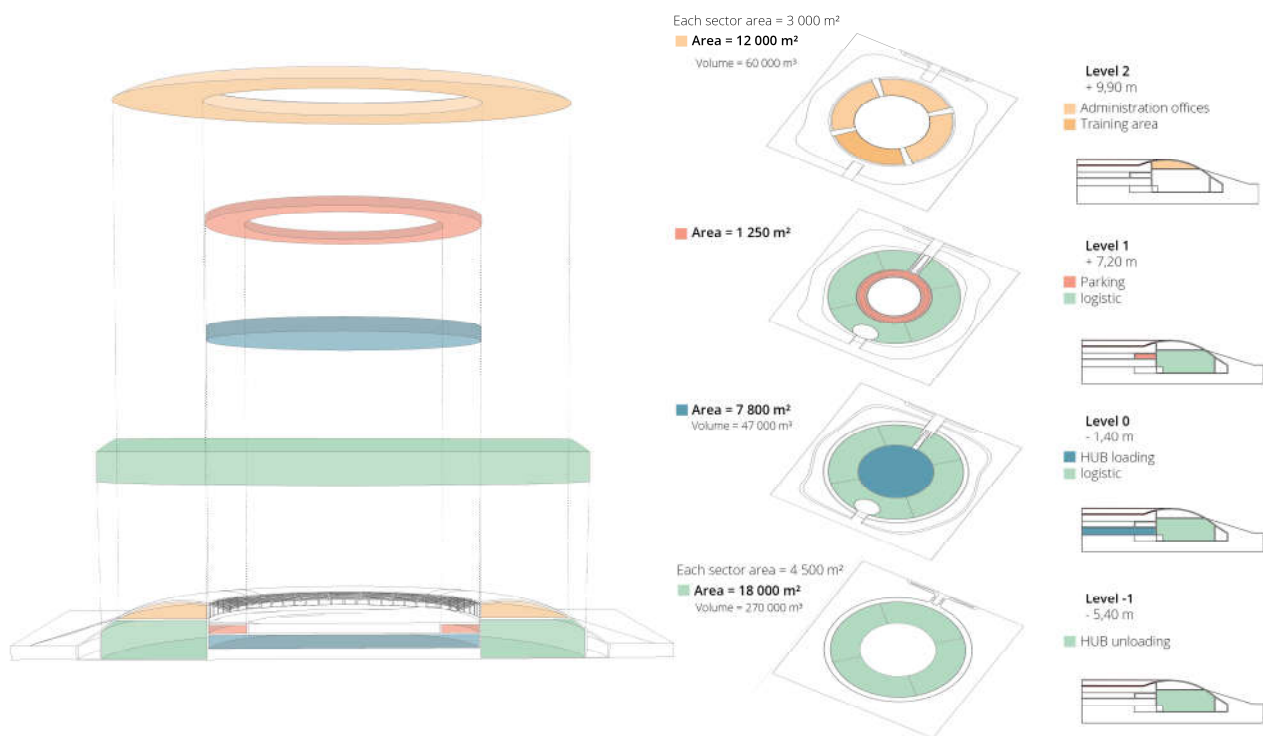




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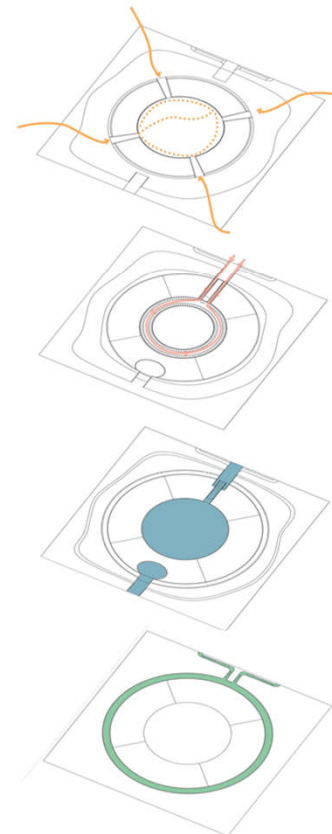
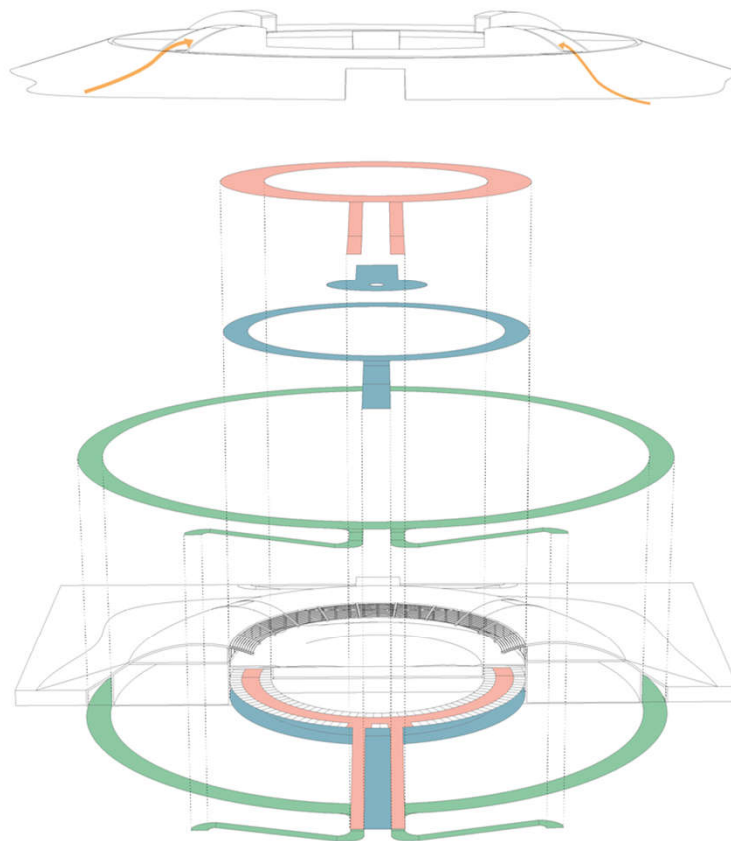
# LOSA «The PILL» - Design Suggestions



LEVELS - FUNCTIONS

LO.SA - THE PILL

# LOSA «The PILL» - Design Suggestions



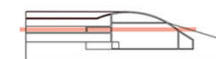
**Level 2**  
+ 9,90 m

Pedestrian access  
and green court  
paths



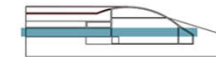
**Level 1**  
+ 7,20 m

Inner Ring (2) :  
vehicle access and  
parking facilities



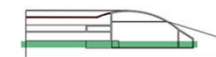
**Level 0**  
- 1,40 m

Inner ring (1)  
Loading platform  
and access route

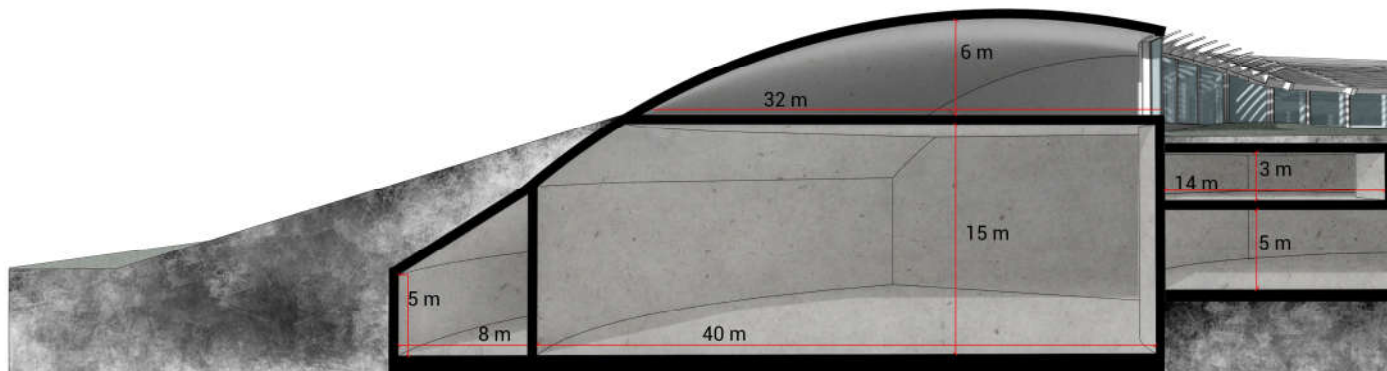


**Level -1**  
- 5,40 m

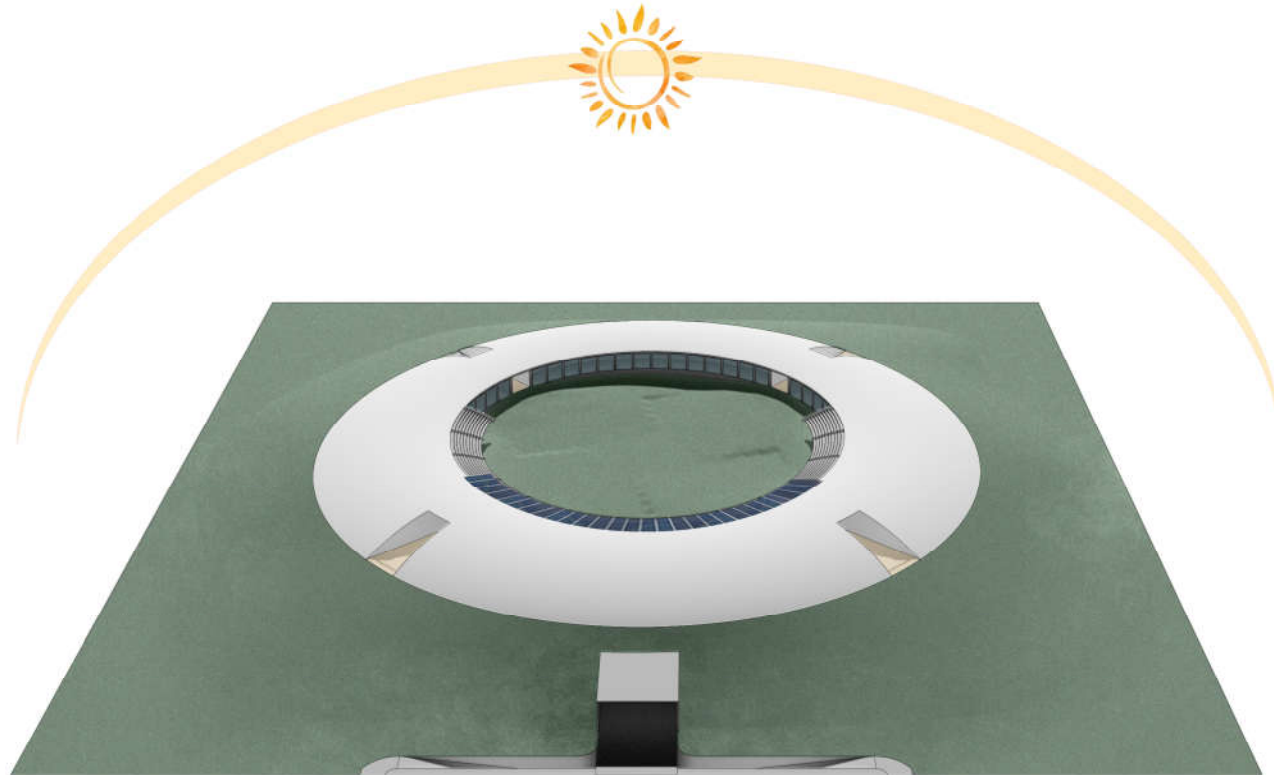
Outer Ring  
unloading area



# LOSA «The PILL» - Design Suggestions



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CLEAN ENERGY : SOLAR PANEL  
GEO-THERMAL PROBES

ENERGY EFFICIENCY : CIRCULAR PERIMETER - SMALLER DISPERSION SURFACE  
SHADOW THANKS TO BRISE-SOLEIL  
STABLE INDOOR TEMPERATURE  
40 000 m2 of green asurface, 1200 trees - 52 500 kg / year of CO2  
HIDDEN ROADS, FILERING TO EXHAUST FUMES



SUSTAINABILITY - STRATEGIES

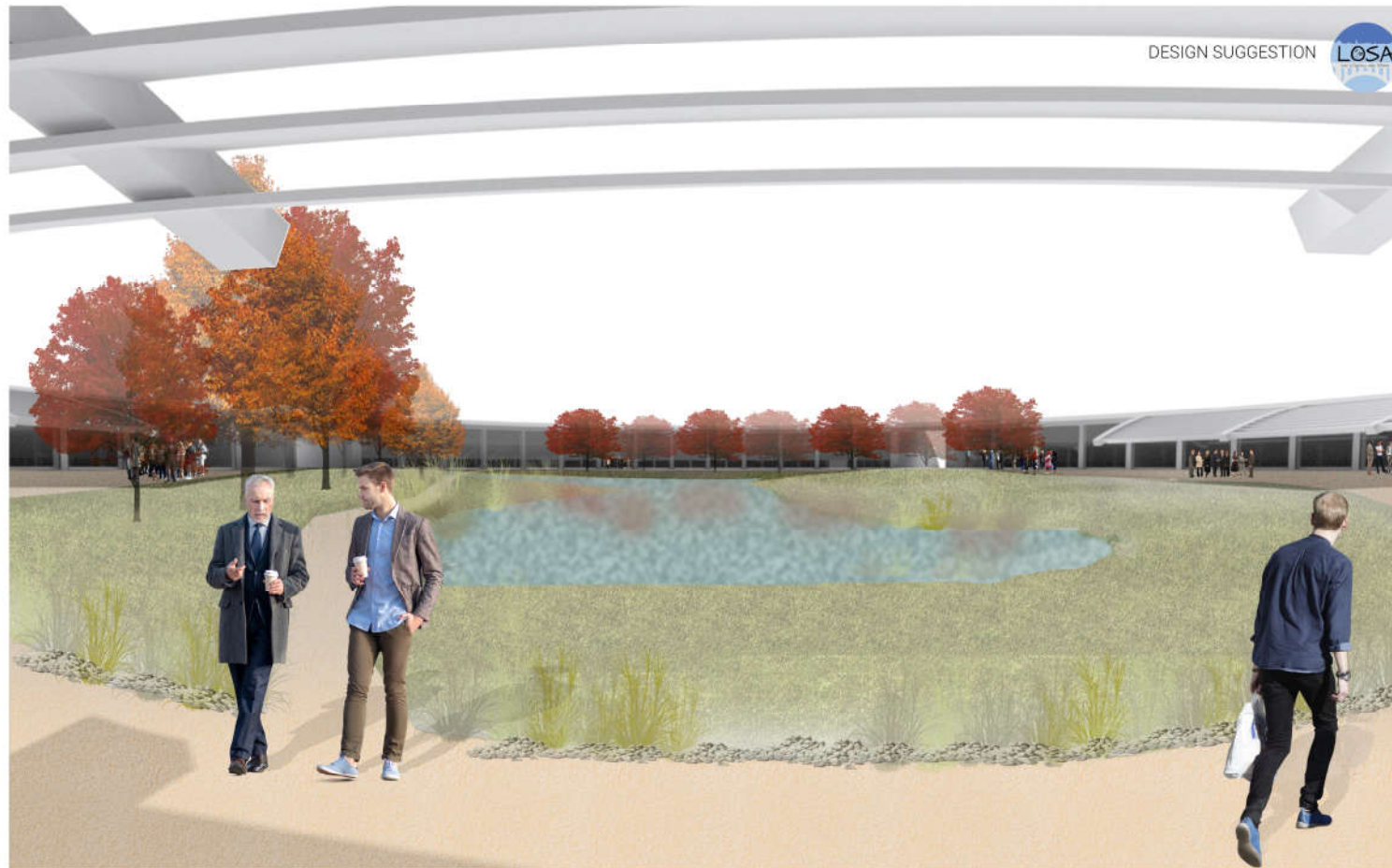
LO.SA - THE PILL

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DESIGN SUGGESTION



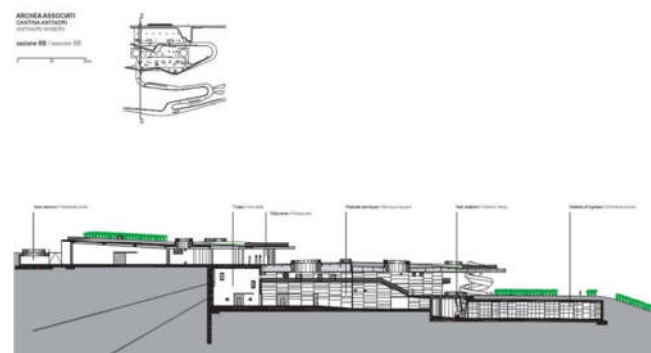
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Project by



With the contribution of the Turin Chamber of Commerce, Agriculture and Crafts



CAMERA DI COMMERCIO  
INDUSTRIA ARTIGIANATO E AGRICOLTURA  
DI TORINO

In cooperation with



CONFINDUSTRIA  
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