

WASTE TO WORTH TALAADTHAI

**Food Waste Transformation Project: Creating New Value for Talaadthai Market, Pathum Thani**

"Have you ever wondered where all the market waste really goes?  
Not just the ones you see... but the ones no one talks about."

# ตลาดไท

02-055-1555

เปิด 24 ชม.







- ☒ ZERO WASTE
- ☒ RECYCLING
- ☒ UPCYCLING



Organic waste mixed with plastic produces a waste basket



Citrus fruit scraps

EM fermentation liquid

Citrus fruit scraps are made into EM fermentation liquid used in office bathrooms, marketplaces, and drainages.



PLASTIC BAGS  
43 bags

REUSABLE BAG  
1 bag

Used plastic PE bags are converted into yarn, produced into reusable bags.



PLASTIC BOTTLES  
14 bottles

APRONS  
1 apron

Used plastic PET bottles are converted into yarn, produced into aprons.



Plastic Waste

(except labels, PVC, melamine, and plastic with aluminum)

Road

Most types of used plastic are crushed and mixed with asphalt to pave the S1 parking area (next to Phahonyothin Road) as a future activity space.



# SITE ANALYSIS





**BRUISED FRUIT**

**10 %**

**VEGETABLE SCRAPS  
AND FRUIT PEELS**

**30 %**

**VEGETABLE SCRAPS,  
VEGETABLE PEELS**

**60 %**

VEGETABLE SCRAPS,  
VEGETABLE PEELS



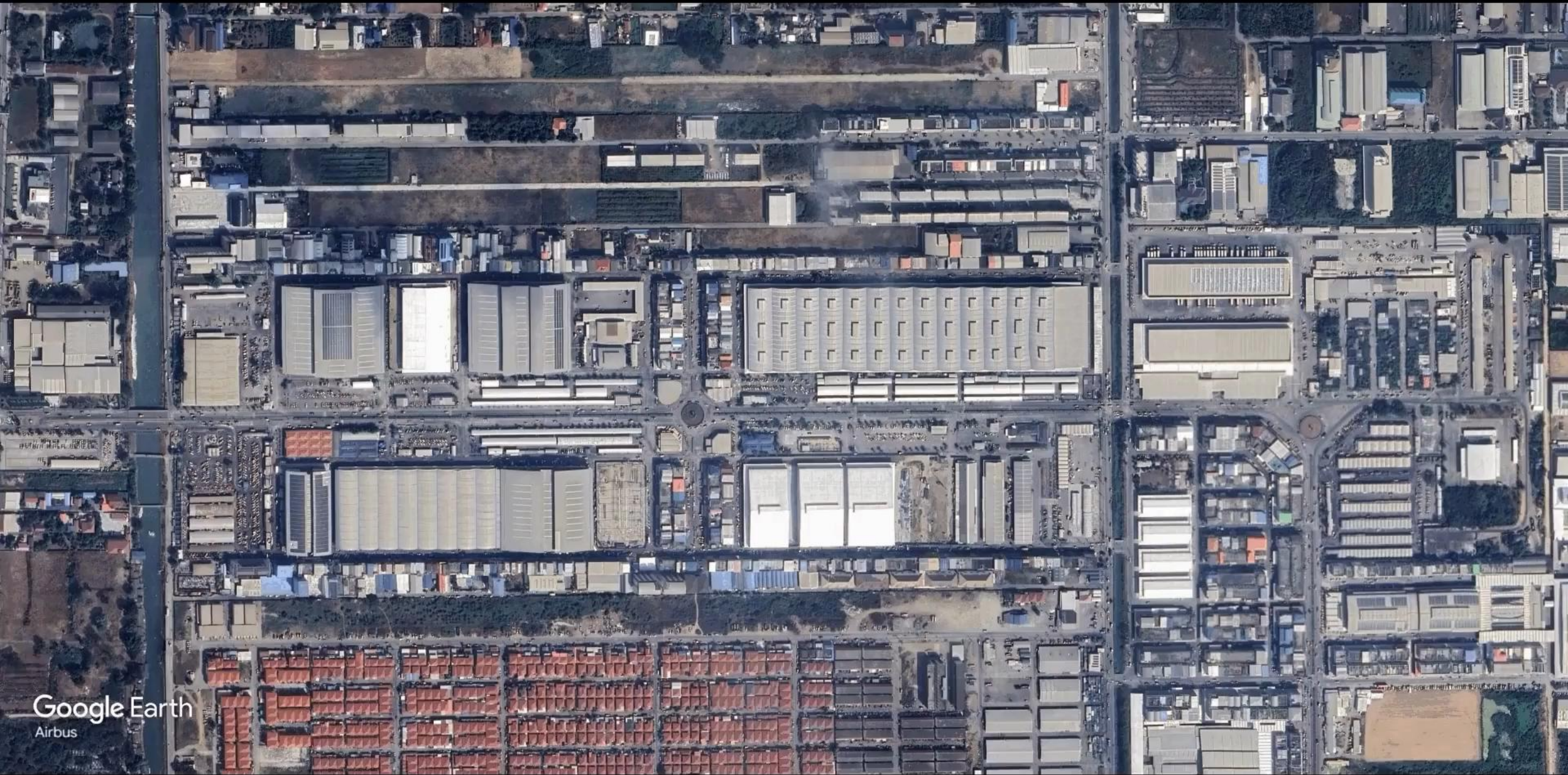
VEGETABLE SCRAPS AND  
FRUIT PEELS



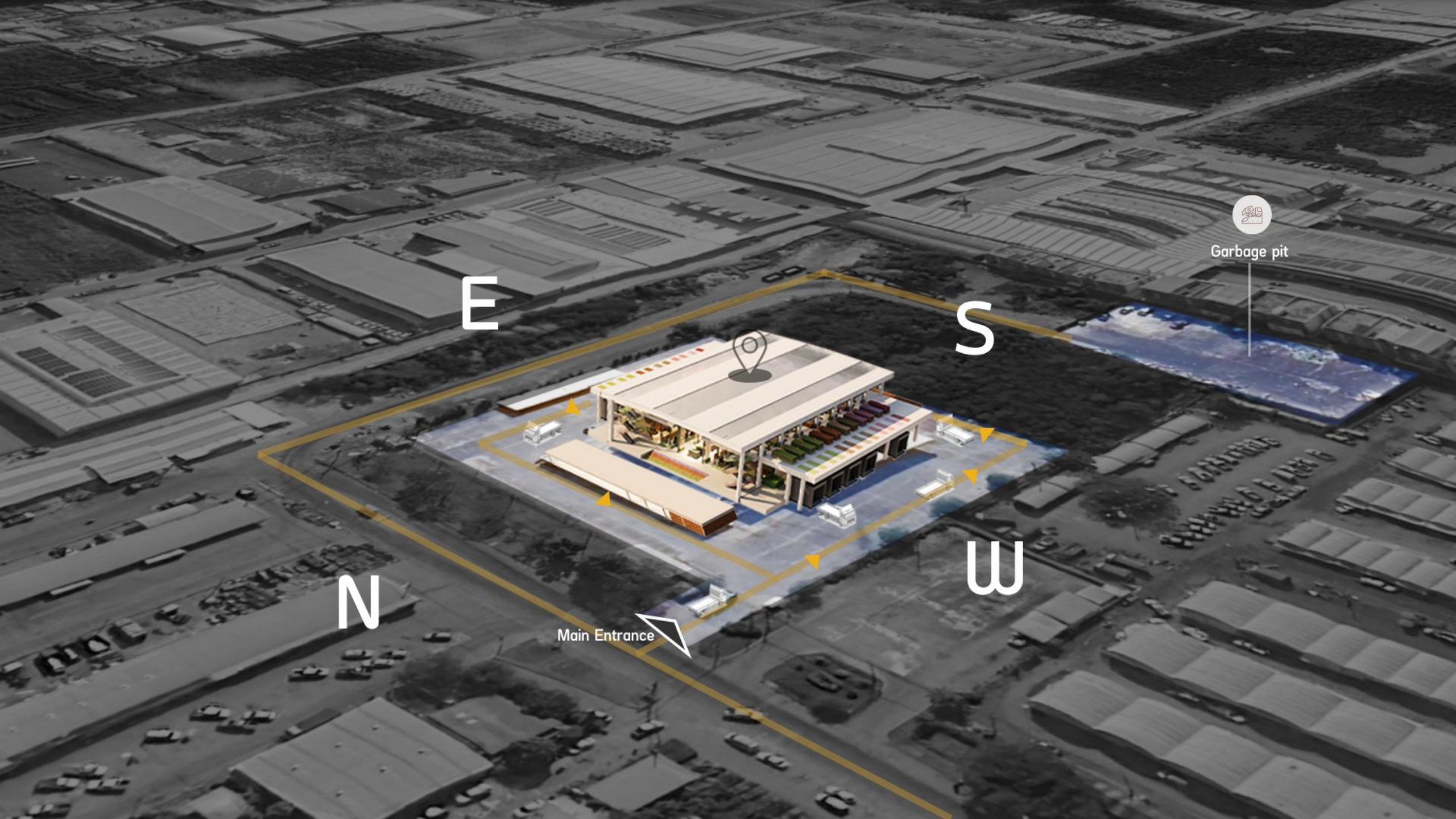
BRUISED FRUIT











E

S

N

W



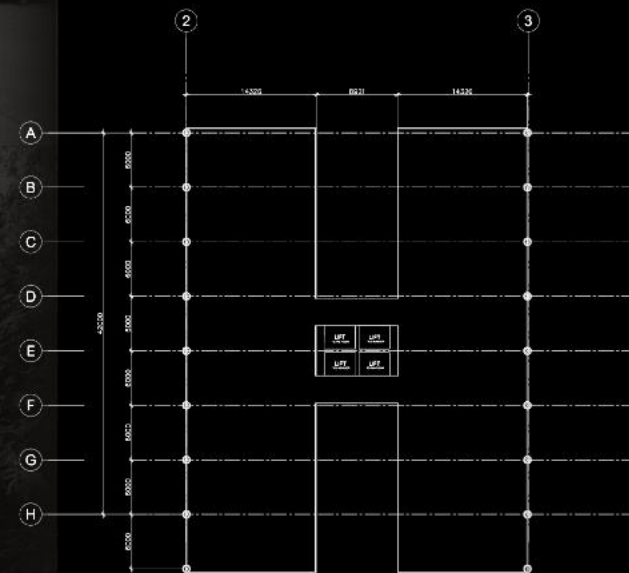
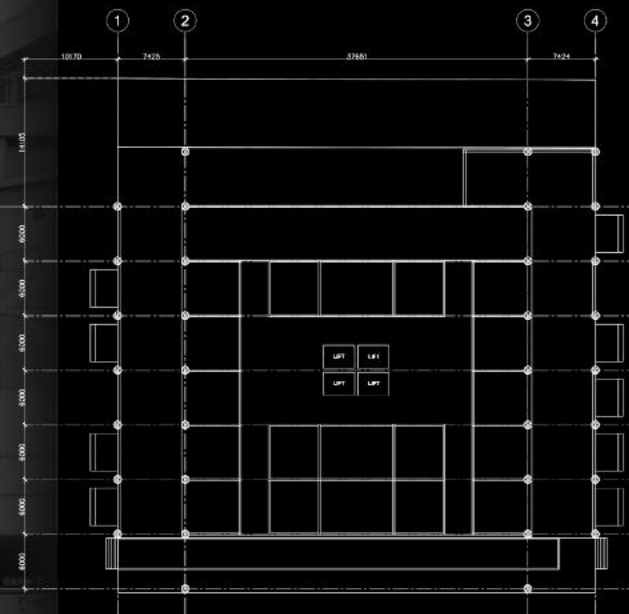
Garbage pit



Main Entrance







# WHY BRICKS?



## ADD VALUE

Adding value in addition to compost  
and animal feed



30 BATH / 2.4 KG



2.4 BATH / 2.4 KG

INCREASED VALUE BY  
~12.5 TIMES



## CAN BE REVIVED TO OPEN A STORE IN THE MARKETPLACE.

Reusing rubbish in  
TALAADTHAI might  
result in actual  
development projects  
and a cycle within the  
market.



## SAME AS FIBER

Assistant Professor Boonserm  
Premthada, Bangkok Project Studio

The use of elephant dung in  
brick production  
demonstrates the feasibility of  
utilizing vegetable scraps and  
fruit peels as well, since they  
share a similar fibrous  
composition.



FIBER



# PROCESS



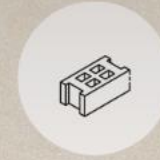
Separate waste from the market



Mashed



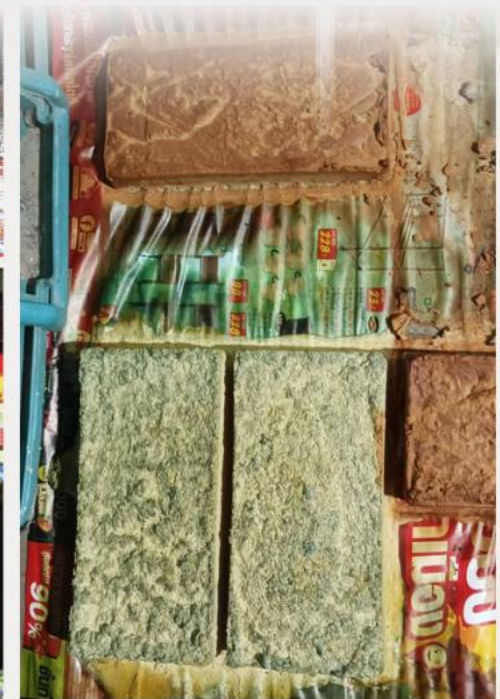
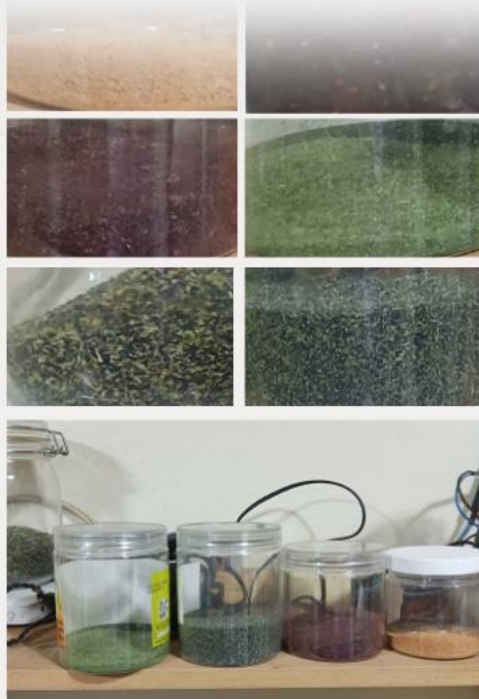
Mix waste with ingredients  
to make bricks.



Brick forming



Sun-dried







  
Vegetable and fruit waste



  
Bricks from vegetable and fruit waste

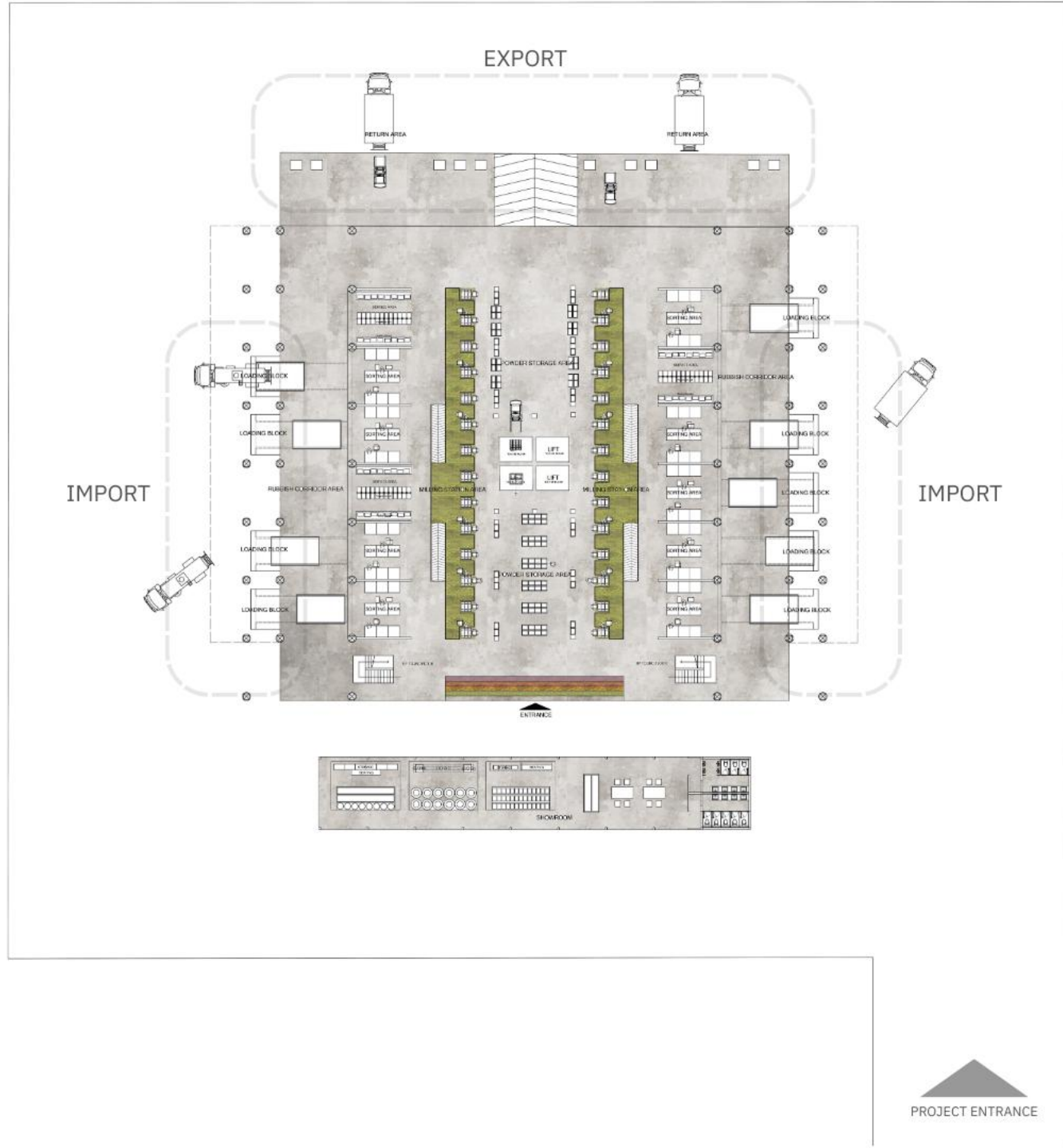






WASTE TO WORTH TALAADTHAI





1ST FLOOR LAYOUT



**DOCK AREA FOR LOADING GOODS**



**VEGETABLE AND FRUIT  
COLOR SORTING AREA**



**VEGETABLE AND FRUIT  
GRINDING AREA**



**VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA**



**BRICK MAKING AREA**



**BRICK DRYING AREA**



**BRICK EXPORT AREA**



**SHOWROOM**

BRICK-MAKING AREA



BRICK DRYING AREA



VEGETABLE AND FRUIT  
COLOR SORTING AREA



VEGETABLE AND FRUIT  
GRINDING AREA



VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA

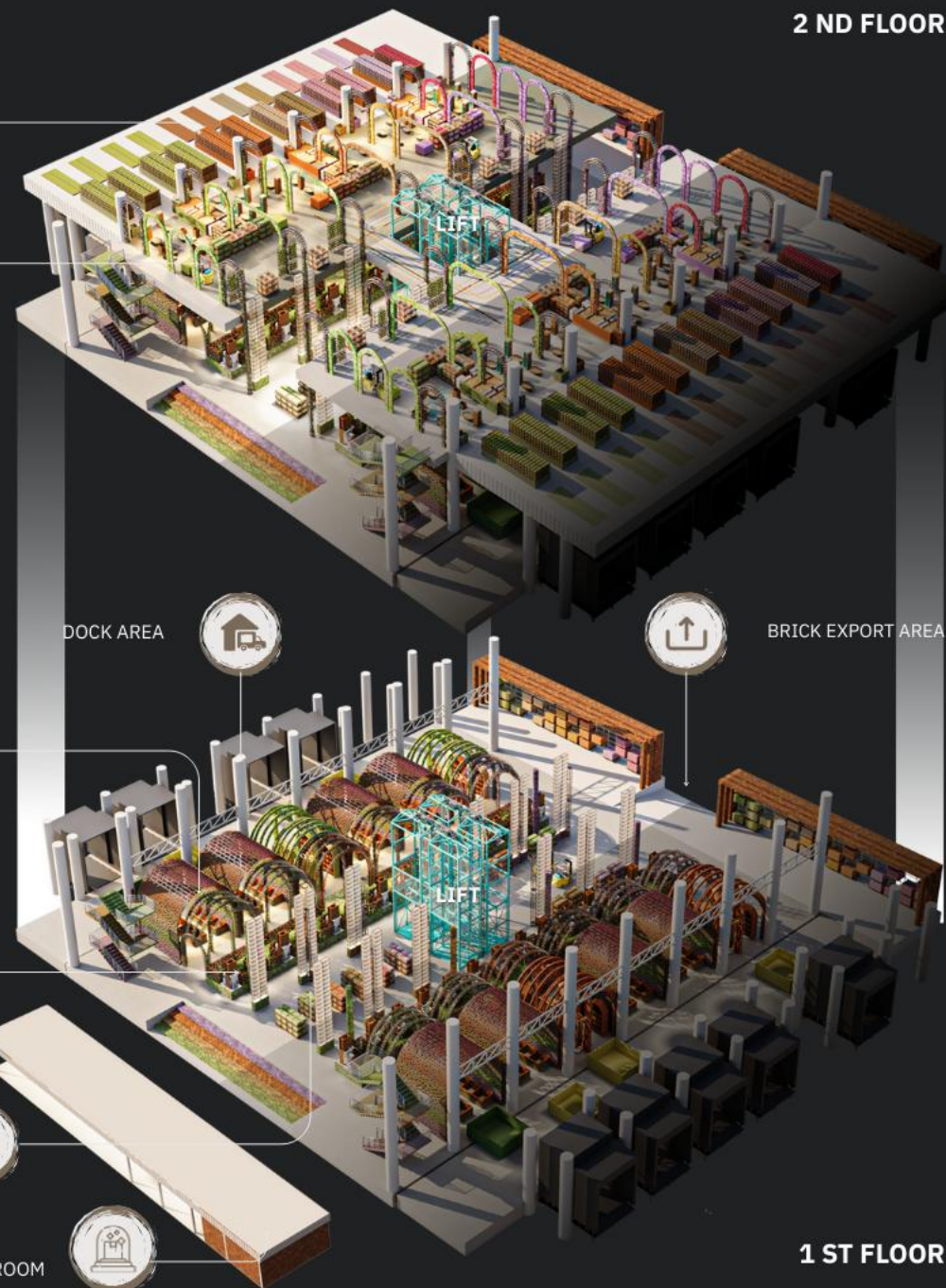


SHOWROOM

DOCK AREA



BRICK EXPORT AREA



**2 ND FLOOR**

**1 ST FLOOR**





# DOCK AREA



VEGETABLE SCRAP BIN

FRUIT PEEL BIN

BRICK DRYING AREA

BRICK MAKING AREA

VEGETABLE AND FRUIT  
COLOR SORTING AREA

VEGETABLE AND FRUIT  
GRINDING AREA

VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA

SHOWROOM

LIFT

DOCK AREA

LIFT

2 ND FLOOR  
BRICK EXPORT AREA

1 ST FLOOR







DOCK AREA



## VEGETABLE AND FRUIT COLOR SORTING AREA



SORT BY CATEGORY AND COLOR.

GETTING READY TO BEGIN  
THE GRINDING PROCESS

BRICK MAKING AREA

BRICK DRYING AREA

VEGETABLE AND FRUIT  
COLOR SORTING AREA

VEGETABLE AND FRUIT  
GRINDING AREA

VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA

SHOWROOM

LIFT

DOCK AREA

LIFT

2 ND FLOOR  
BRICK EXPORT AREA

1 ST FLOOR







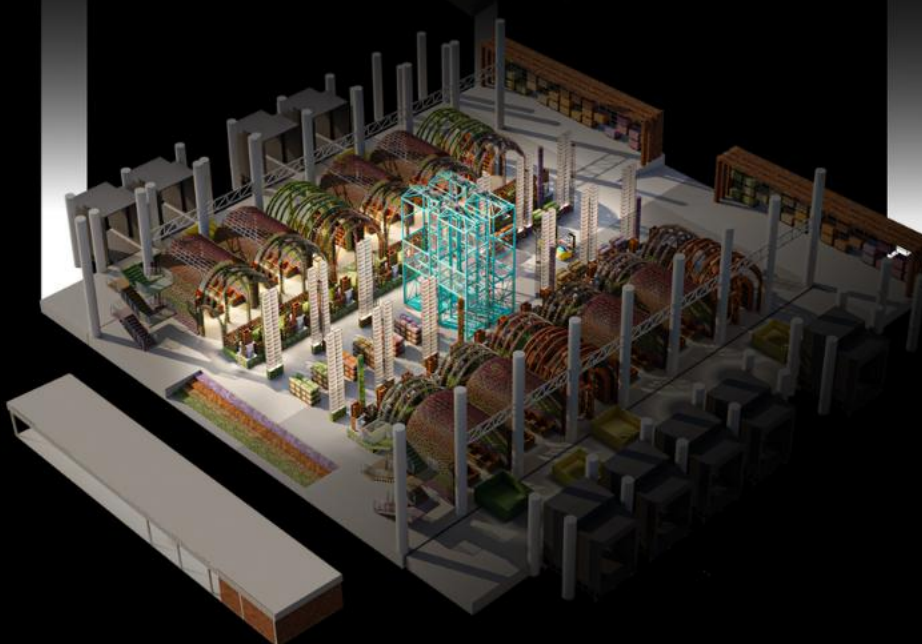
VEGETABLE AND FRUIT COLOR SORTING AREA





## VEGETABLE AND FRUIT GRINDING AREA

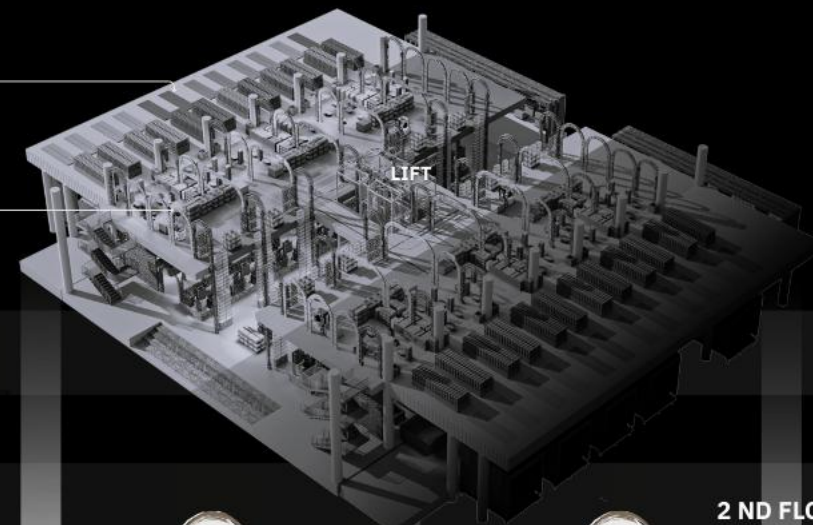
## VEGETABLE AND FRUIT COLOR POWDER STORAGE AREA



BRICK DRYING AREA



BRICK MAKING AREA



2 ND FLOOR  
BRICK EXPORT AREA

DOCK AREA



VEGETABLE AND FRUIT  
COLOR SORTING AREA



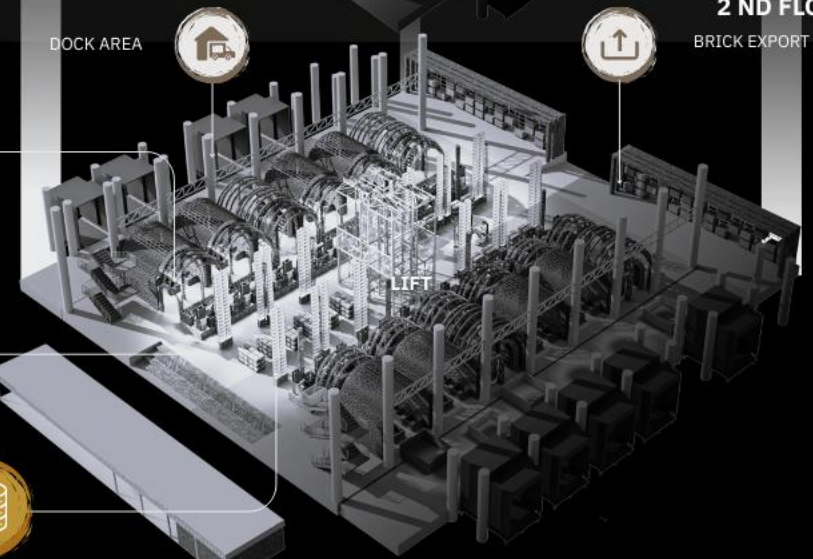
VEGETABLE AND FRUIT  
GRINDING AREA



VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA



SHOWROOM



1 ST FLOOR

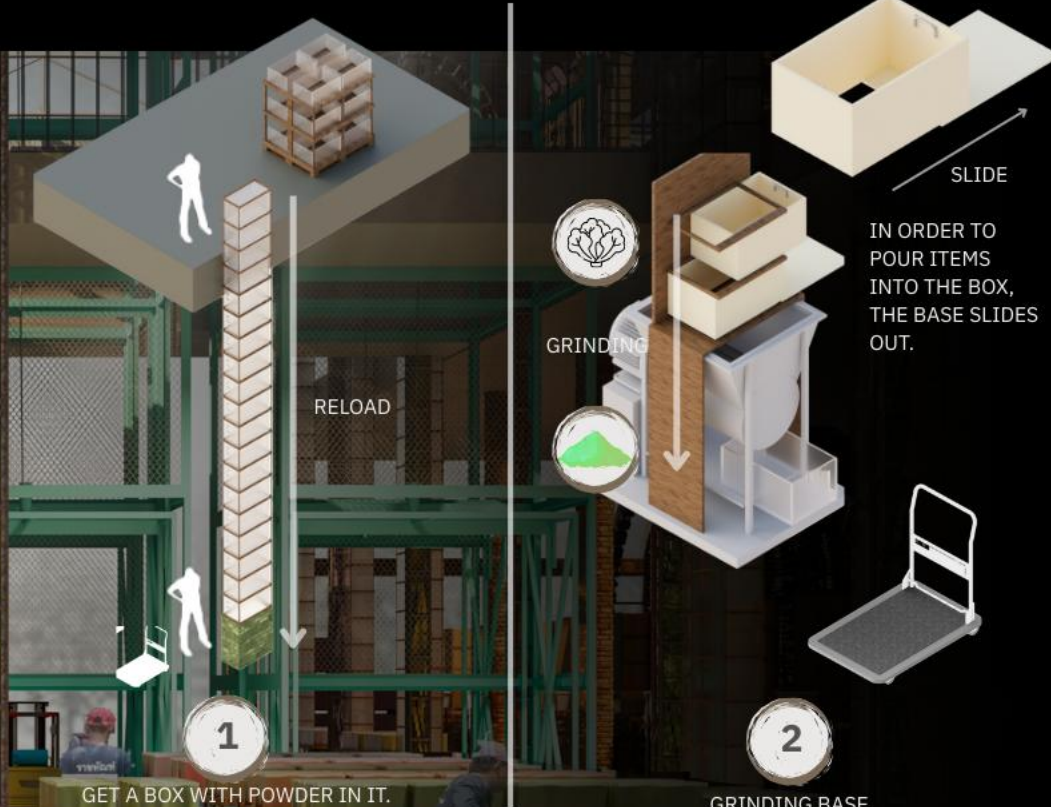






VEGETABLE AND FRUITGRINDING AREA & VEGETABLE AND FRUIT COLOR POWDER STORAGE AREA

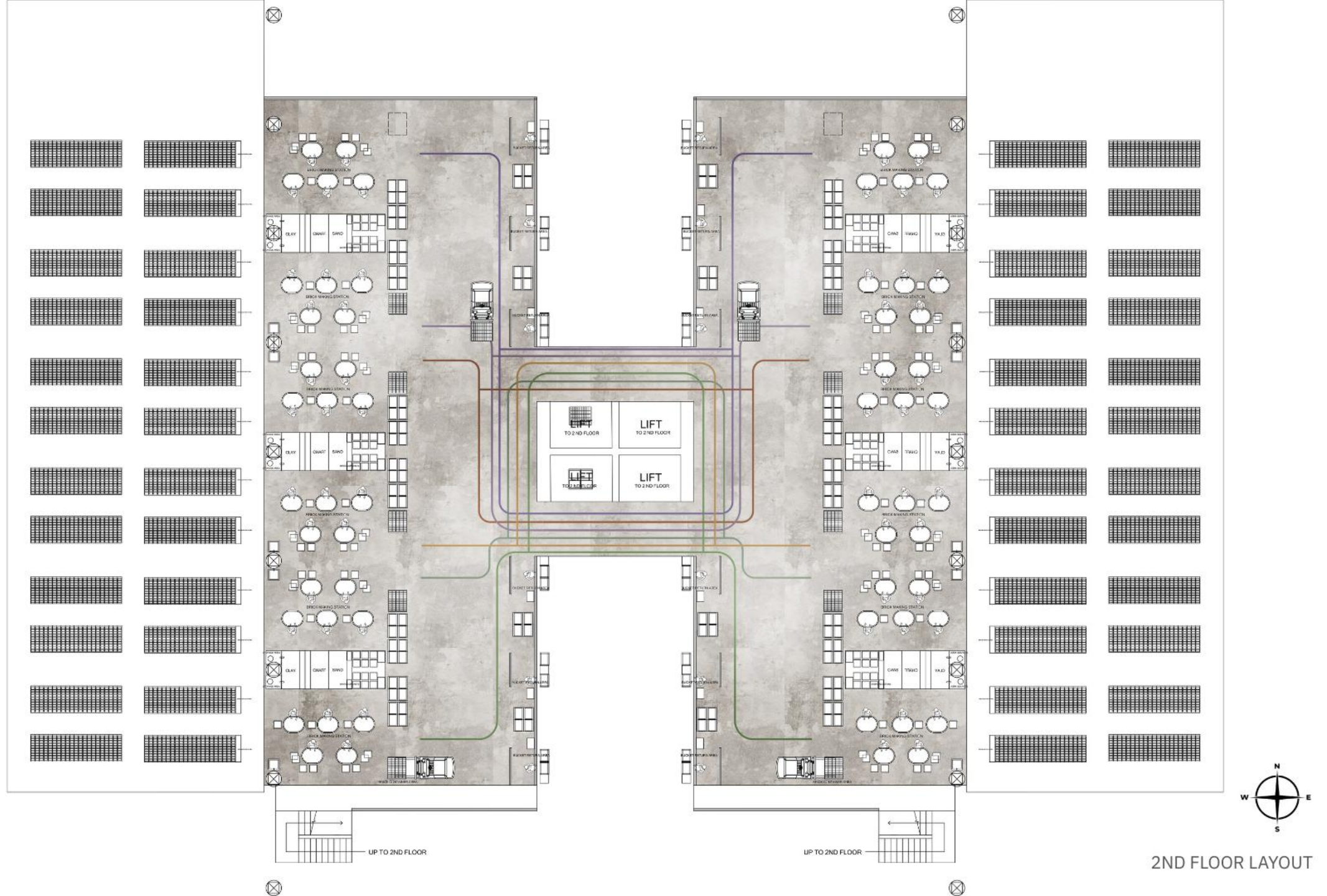




3 PALLETS THAT CAN BE MOVED BY HAND LIFT MAKE UP THE POWDER BOX LAYER WITH THE BASE.

VEGETABLE AND FRUITGRINDING AREA & VEGETABLE AND FRUIT COLOR POWDER STORAGE AREA





2ND FLOOR LAYOUT







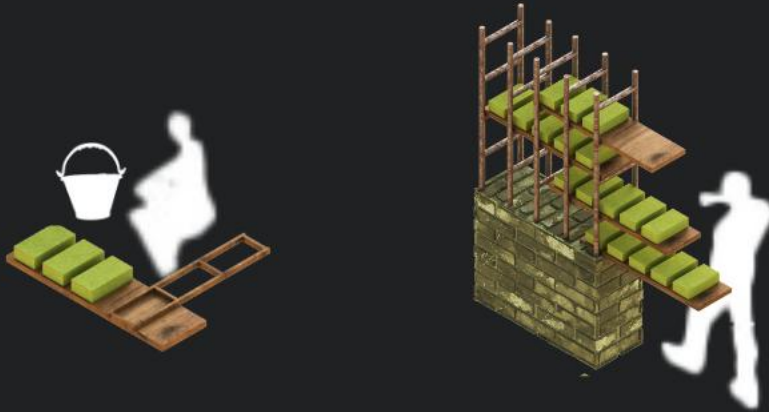






BRICK MAKING AREA





1

BRICK MOLDING

2

DRY ON A SHELF THAT IS MOVABLE.

## BRICK DRYING AREA

BRICK DRYING  
AREA



BRICK MAKING  
AREA



VEGETABLE AND FRUIT  
COLOR SORTING AREA



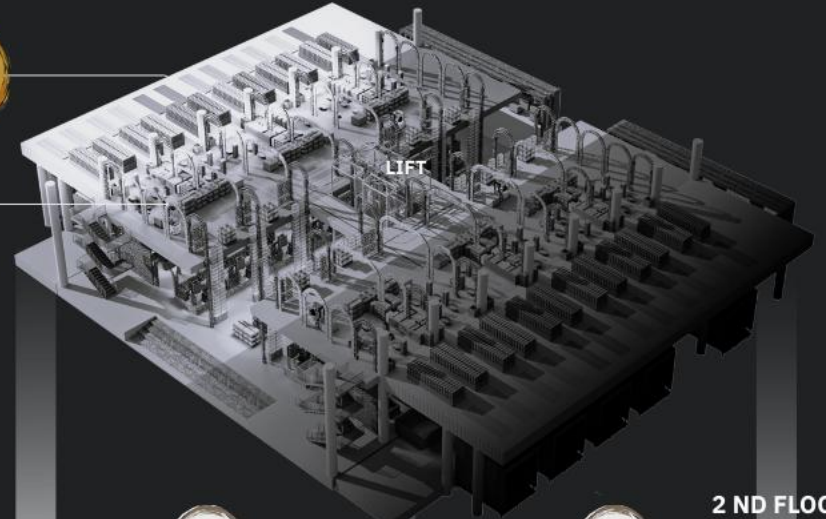
VEGETABLE AND FRUIT  
COLOR GRINDING AREA



VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA



SHOWROOM



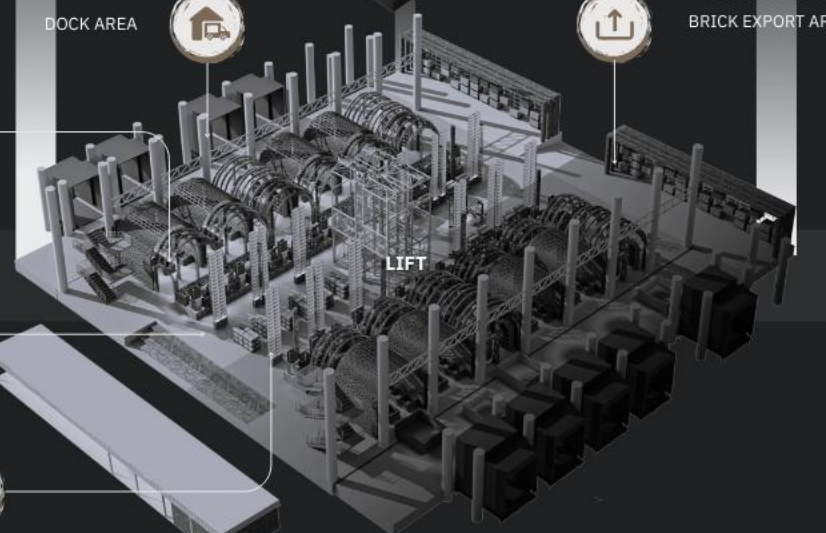
LIFT

DOCK AREA



2 ND FLOOR

BRICK EXPORT AREA



LIFT

1 ST FLOOR

1 3 7 10 13 15 17 20 23 25 27

8640

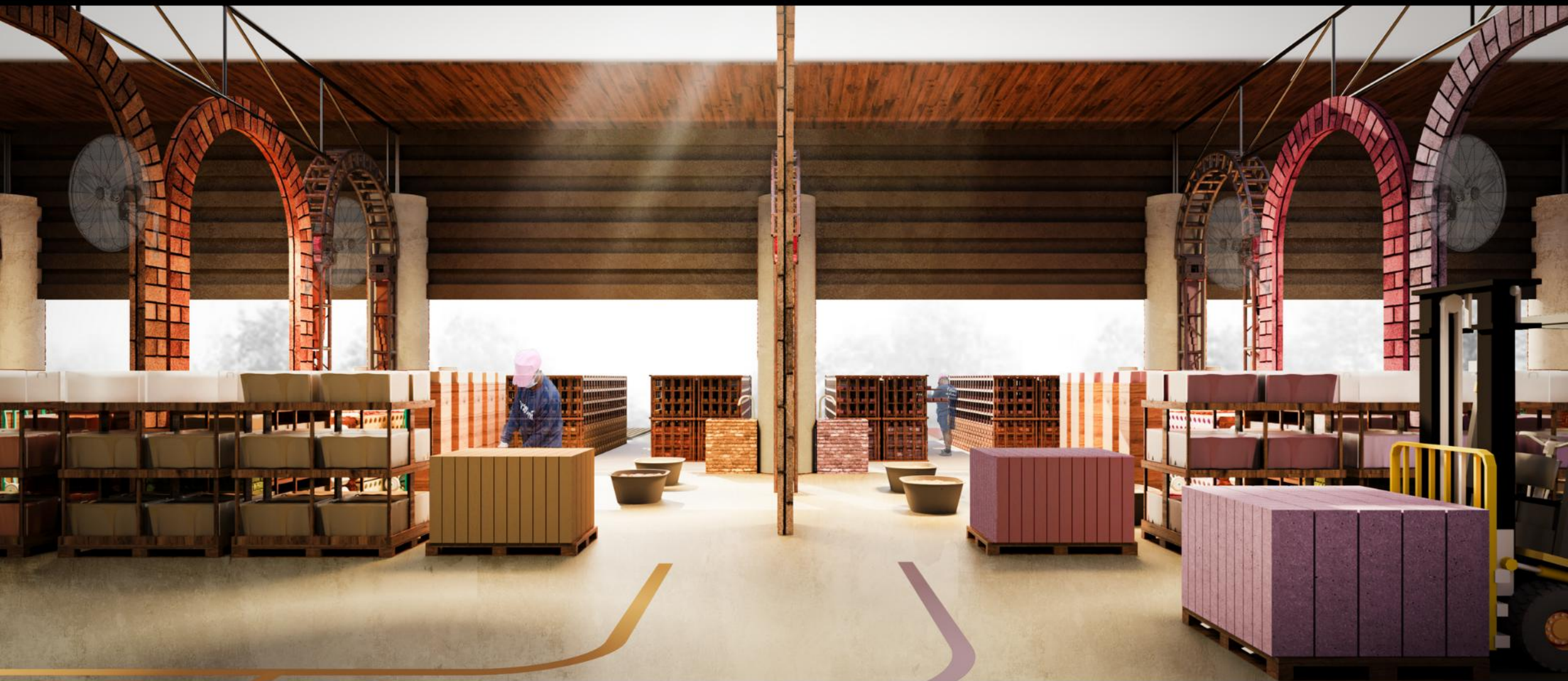
TIME TABLE





BRICK DRYING AREA





BRICK LAYING AREA













# BRICK EXPORT AREA



BRICK DRYING AREA



BRICK MAKING AREA



VEGETABLE AND FRUIT  
COLOR SORTING AREA



VEGETABLE AND FRUIT  
GRINDING AREA



VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA



SHOWROOM

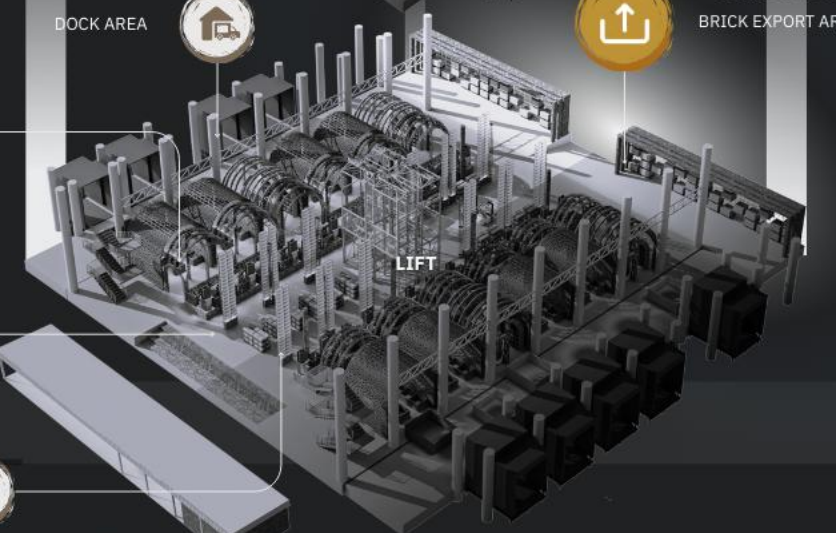


LIFT

DOCK AREA



2 ND FLOOR  
BRICK EXPORT AREA



LIFT

1 ST FLOOR

BEGINNING OF  
THE MONTH

MID OF THE  
MONTH

END OF THE  
MONTH

TIME TABLE

30 = 60480





BRICK EXPORT AREA





# SHOWROOM



BRICK DRYING AREA



BRICK MAKING AREA



VEGETABLE AND FRUIT  
COLOR SORTING AREA



VEGETABLE AND FRUIT  
GRINDING AREA



VEGETABLE AND FRUIT  
COLOR POWDER STORAGE AREA



SHOWROOM



LIFT

DOCK AREA



LIFT

2 ND FLOOR  
BRICK EXPORT AREA



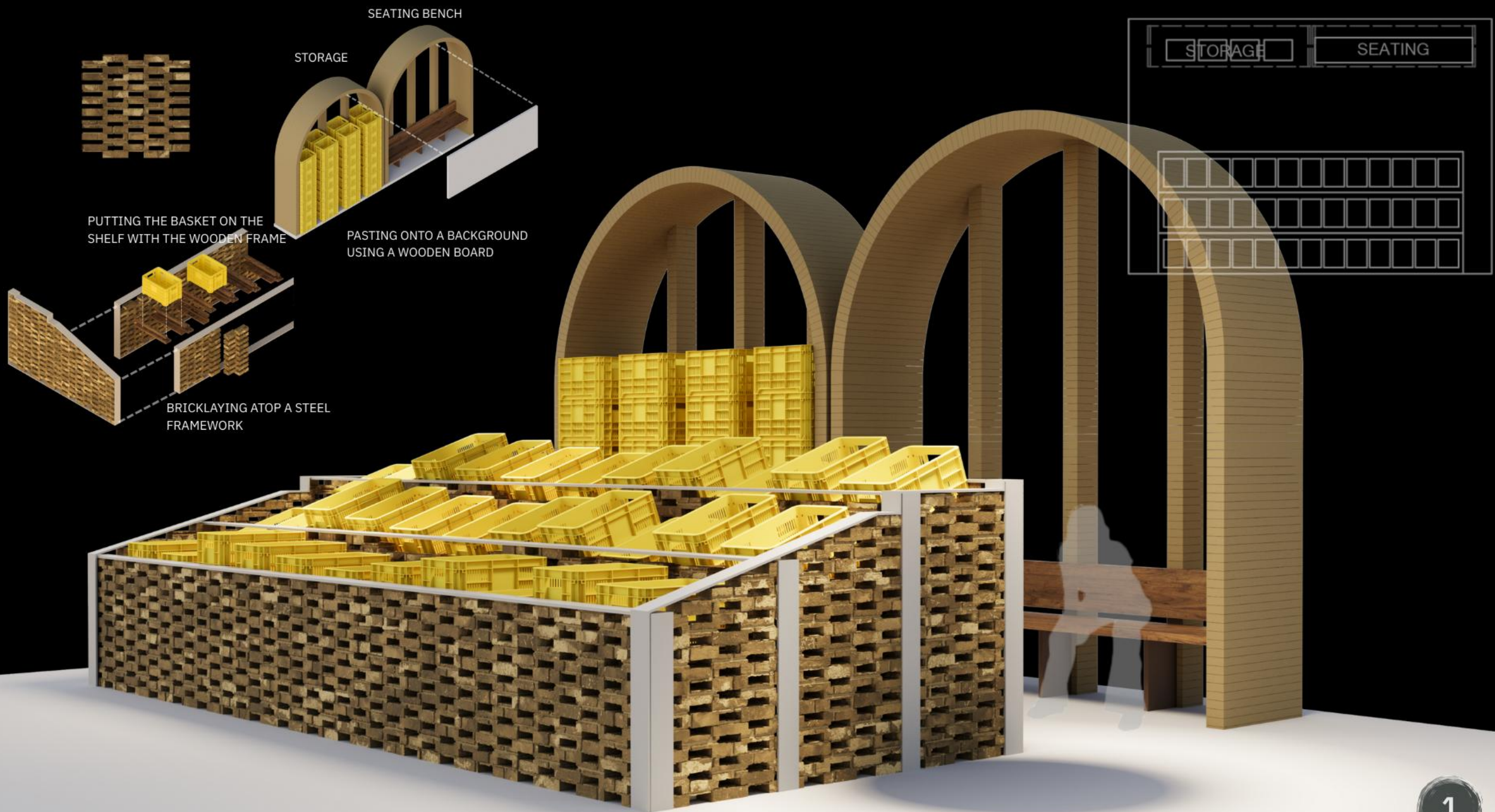
1 ST FLOOR



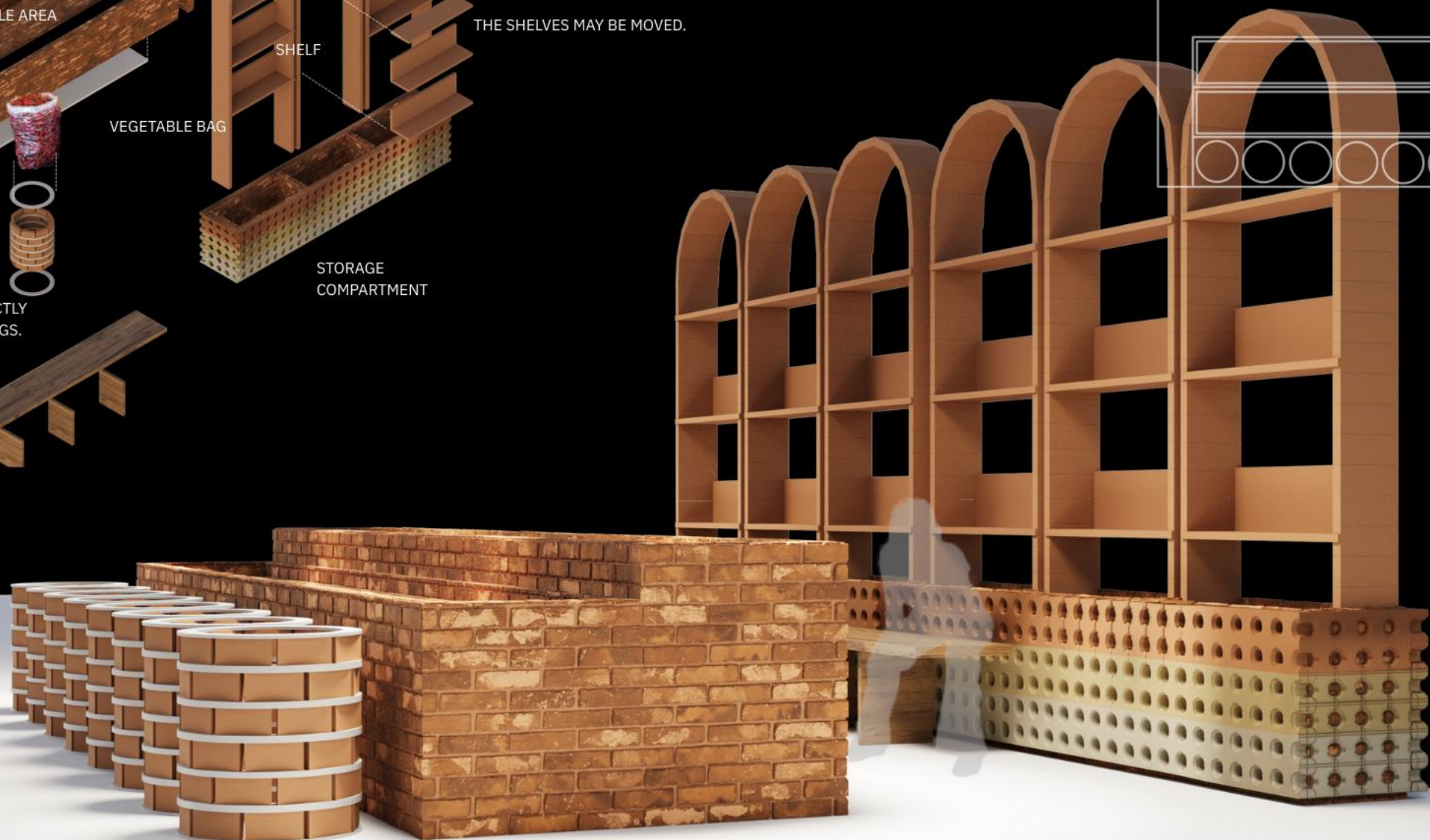
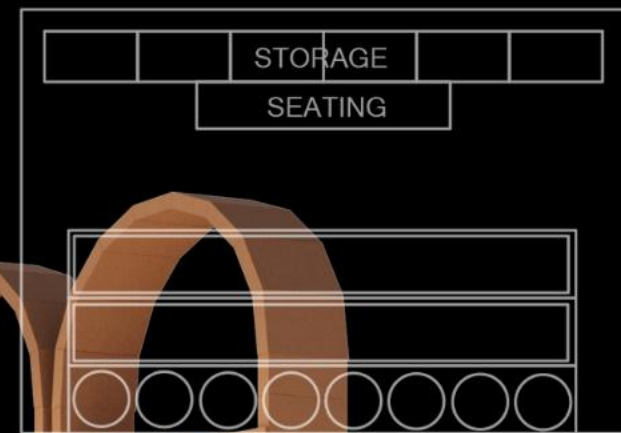
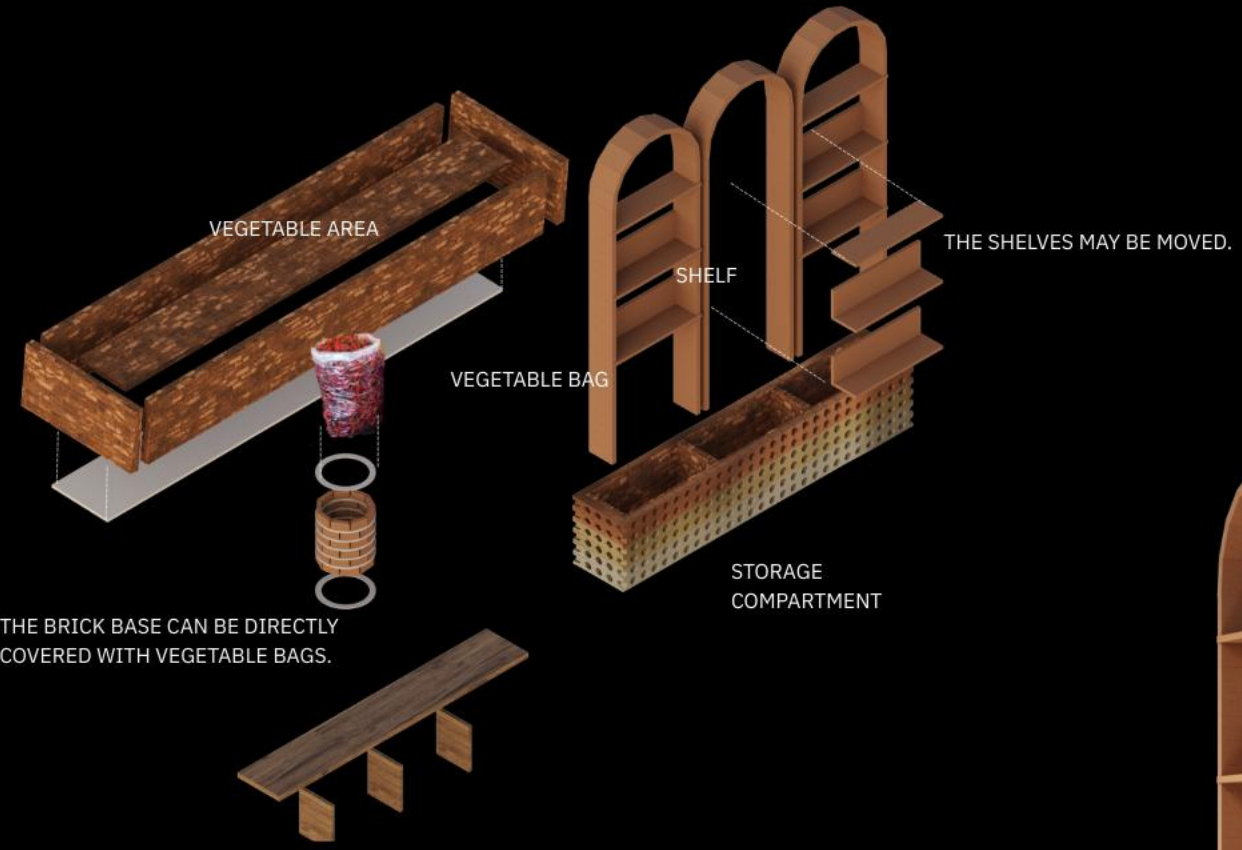


SHOWROOM

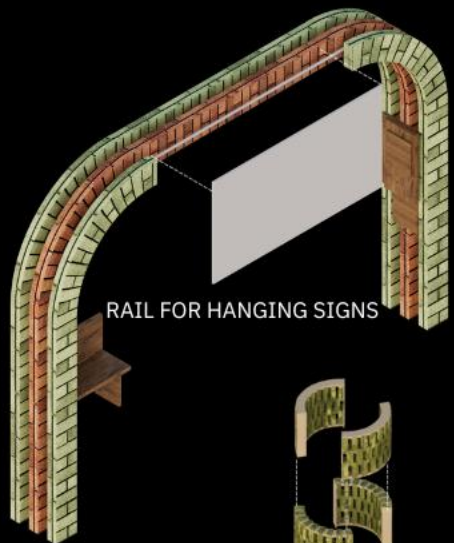












RAIL FOR HANGING SIGNS

TO INCREASE  
STORAGE SPACE,  
THE BENCH CAN  
BE FOLDED UP.



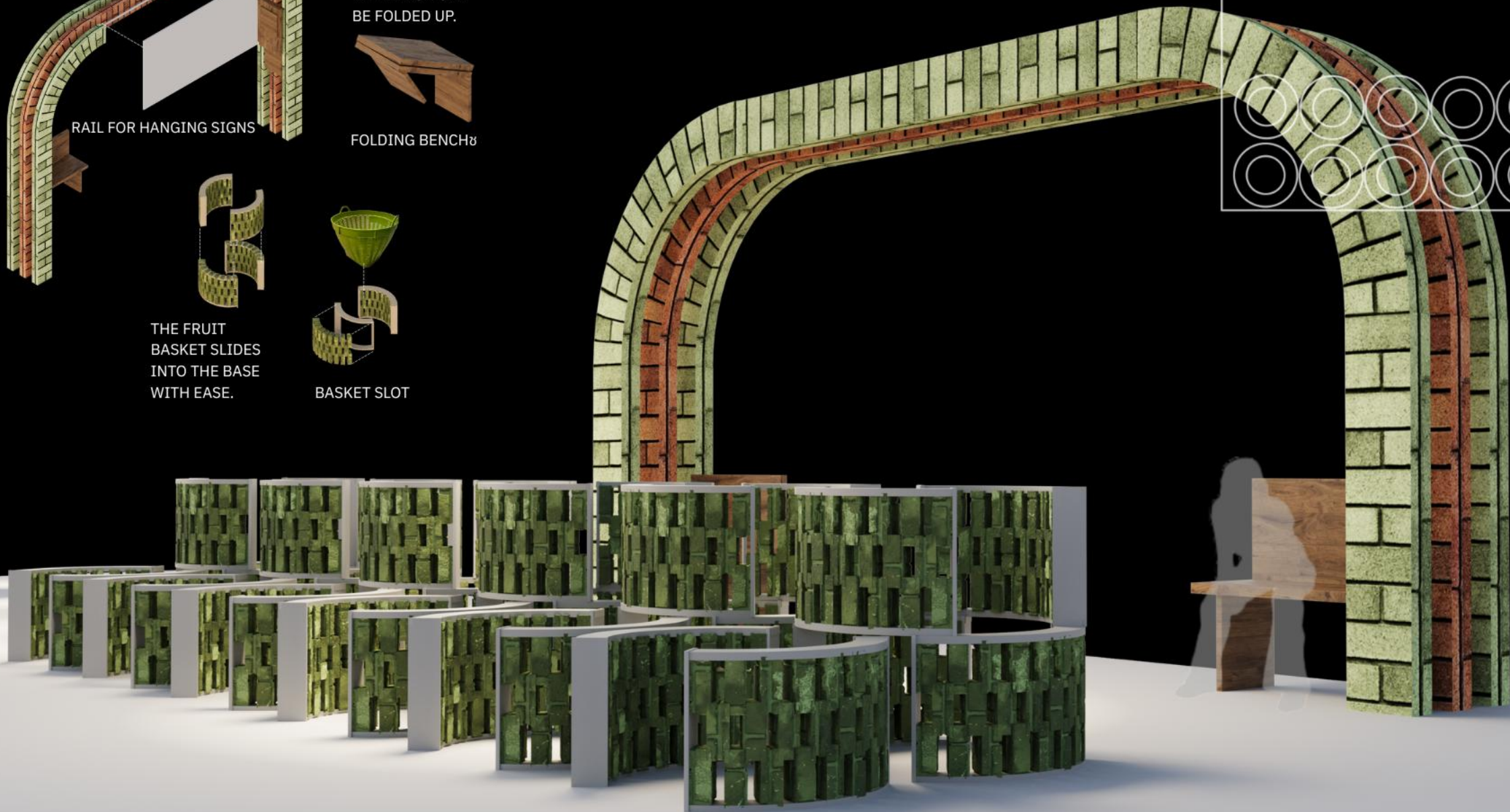
FOLDING BENCH



THE FRUIT  
BASKET SLIDES  
INTO THE BASE  
WITH EASE.



BASKET SLOT











“

I hope this project can serve as a small local beginning that inspires a broader movement in transforming how we manage food waste in the future.

- Thank you -

”