GREEN PORTAL OF EMPIRE VILLAGE 2050

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INTRODUCTION
Studio & Assignment

RESEARCH
New York City: Mobility
Empire Village: Challenges

DESIGN BRIEF
Site context: The most conflict
Design Strategy

DESIGN IMPLEMENTATION
XL: Urban Position
L: Building
M: Structure
S: Facade
XS: Details

CIRCULATORY SYSTEM
Ventilation / Light / Water / Material

CONCLUSION
Green portal of Empire Village 2050
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INTRODUCTION

New York is one of the most prosperous cities in the world, yet it has one of the world’s most dysfunctional transportation systems.”

EMPIRE VILLAGE GROUP
EMPIRE VILLAGE: DICHOTOMY

INTRODUCTION

CP studio & Empire Village
CITY CONTEXT/CONGESTION
- Transport gridlock
- Space limit
- The Mobility future of New York

RESEARCH QUESTION
- Underground infrastructure
- The connection between upper and underground

SITE CONTEXT/PORTAL
- Empire Village & Group Vision
- Personal site: Traffic Chaos
- Personal site context: Public Life

DESIGN BRIEF
- Green portal: Infrastructureal Complex
- Design strategy: Void

BUILDING IMPLEMENTATION
- Functionality: Vertically Integration
- Climate system: Lighting / Ventilation

BUILDING DETAIL
- Structure system: Void and Duominuo
- Facade system: Double Skin
GREEN PORTAL OF EMPIRE VILLAGE 2050

Mixed using Transportation Complex for future:
A Public shared from underground to upperground
that serves as the portal to the EV and provides future capacity for the new traffic volume and public life with green
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RESEARCH

New York City Mobility

Empire Village Challenges
MOBILITY OF MANHATTAN TODAY

CONGESTION

LESS PUBLIC TRANSPORT SPACE

TRAFFIC SAFETY

NEW TRANSPORTATION MODE
CONGESTION STYLE

Congestion: Explosive growth with different layers of horizontal movement
Congestion is caused by transit happens on one layer and one site. And the capacity is limited. The use of loop to divert different levels vertically.
LIMITED TRANSIT CAPACITY

Limited transportation capacity: underground expanding
Among the existing underground spaces, especially the semi-underground and underground spaces derived by infrastructure have the most development possibilities and convenience.

New York is currently underdeveloped underground, mostly used by transportation infrastructure and not well utilized.
THE POTENTIAL OF UNDERGROUND SPACE

Vertical diffuence+ full use of underground transportation infrastructure
What kind of space destined for development does *infra-structure* provide by the *underground areas* of New York?

&

How can public activities and culture in the *underground infrastructural space* be related to the *upper ground*?
1. What are the forms and organization of space derived along with the underground transport?
2. What’s the cultural intention and typical public perception for the underground space in NY?
3. What is the difference between upper ground space and underground space?
4. How can upper ground and underground be effectively connected as a whole?
UNDERGROUND CITY HYPOTHESIS 1950S

Elements of underground space development
Light, accessibility, big enough
RESEARCH

New York City Mobility

Empire Village Challenges
MOBILITY OF EMPIRE VILLAGE
NEGATIVE TRANSPORTATION
LESS PUBLIC GREEN SPACE
TRAFFIC SAFETY
NEW TRANSPORTATION MODE
TRANSIT ACCESSIBILITY
NEGATIVE & NO TRANSPORT NODE
NEW CHALLENGE 2050

NEW SUBWAY LINE IN 2ND AVENUE 2050
NEW OPPORTUNITY
2nd Avenue Subway line 2050

QUEEN-MIDTOWN TUNNEL
The Entrance of EV for vehicles

RESEARCH
Empire Village Challenges
THE MOST CONFLICT 2050
THE 2ND AVENUE SUBWAY STATION AREA & TUNNEL ENTRANCE
THE MOST CONFLICT 2050

TRAFFIC ACCESSIBILITY AND DENSITY

Current traffic density  Future traffic density
The traffic flow brought by the upcoming Second Avenue subway will be seriously conflicted with vehicle flow brought by Queen tunnel. How to solve this future collision caused by different transportation systems?
the capacity of underground space — the possibility of the development of the underground space of Second Avenue in the residential area.
In the future with new subway line, the opportunity and challenge of Empire Village will coexist!
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DESIGN BRIEF

Site Context
The most conflict

Concept
Green portal

Strategy
Void
THE MOST CONFLICT

2ND AVENUE SUBWAY LINE 2050
As the biggest traffic crisis in Empire village in 2050, what are the typical characteristics and problems of the most conflict site?
ONE TYPICAL CHARACTER

THE GATE TO ENTER EMPIRE VILLAGE BY VEHICLE
DESIGN BRIEF

SITE CONTEXT: THE MOST CONFLICT

1. TRAFFIC
   Fow/ parking chaos

2. PUBLIC LIFE
   Less space and unfriendly

3. ENVIRONMENT
   Sun Light and Green
SITE CONTEXT: THE MOST CONFLICT

TRAFFIC CHAOS
1. TRAFFIC
Tunnel Flow/ parking chaos
TRAFFIC CHAOS
PEDESTRIANS WITH CARS ON THE STREET
SITE CONTEXT: THE MOST CONFLICT

LESS PUBLIC LIFE
2. PUBLIC LIFE
Less open public space
LESS PUBLIC SPACE FOR CHILDREN

Surrounded by three primary schools, only a small playground
Climate Container
light / wind / green value
landscape for good view
ENVIRONMENT

less shadow/more sunlight/nice ventilation
CONCLUSION

1. TRAFFIC: VERTICAL INTEGRATING
Dealing with the future congestion and providing future capacity with the separating of flow in different levels and vertical integrating of parking.

2. PUBLIC LIFE: MORE OPEN GREEN
Returning the public space occupied by tunnel to the citizen and make it becomes a new safe green shared hybrid centre under the demand of the neighbourhood.

3. ENVIRONMENT
sufficiently using the positive sunlight, ventilated environment and bring them into underground, proper solar protection.
DESIGN BRIEF

Site Context
The most conflict

Concept
Green portal

Strategy
Void
As the only portal to directly enter the Empire Village from the underground by vehicle, the transport complex aims to alleviate regional congestion and provides future capacity for the traffic volume brought by 2nd Ave Subway, by integrating the local horizontal traffic system to the efficient vertical loop and creating enough public space with green from underground to upper ground.
DESIGN AMBITION

GREEN PORTAL: A GATE TO ENTER EMPIRE VILLAGE

Mixed using Complex for future:
A Public shared from underground to upperground

that serves as the portal to the EV and provides future capacity for the new traffic volume and public life with green

the PORTAL of Empire village

the LOOP from upper to underground
DESIGN BRIEF

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Concept
Green portal

Strategy
Void
1. Integrating the local horizontal traffic system to the efficient vertical loop (C) with the parking lot.
2. Provides future capacity for the traffic volume brought by 2nd Ave Subway by a vertical loop for Pedestrian (A) and a transfer loop for changing the transport modes between car, bus, bike and pedestrian (B).
3. Integrating the main needed public function in several blocks (like gallery, theatre, retail, supermarket and playground...)
SITE AREA

Site Area: 16962m²

C1-9 FAR: R10/C2/F10
R8-FAR: R6.02/C0/F6.5
MASSING
SHAPING THE BUILDING

Loop of stream of transferring (subway, vehicle, pedestrian, bike) more open

Loop of vehicle from tunnel (passing by or parking)

Loop of stream of transferring (subway and pedestrian)
SHAPING THE BUILDING

Loop of stream of transferring (subway, vehicle, pedestrian, bike)
more open

Loop of vehicle from tunnel (passing by or parking)

2nd Avenue
exit of tunnel
exit ramp of tunnel (Overhead a semiunderground green park)
SHAPING THE BUILDING

Loop of stream of transferring (subway, vehicle, pedestrian, bike) more open
Loop of vehicle from tunnel (passing by or parking)

Avoid building congestion in the air

2nd Avenue
exit of tunnel
exit ramp of tunnel (Overhead a semiunderground green park)
FORM OF VOID

VOID CONCEPT
SECTION SKETCH
FORM OF VOID

WHAT IS THE MOST SUITABLE FORM?

1. SPHERE
2. CIRCULAR TUBE
3. POLYGONAL TUBE
4. ROTATED CUBE
FORM OF VOID

OPEN TO THE PARK
DESIGN BRIEF
STRATEGY: BLOCK AND VOID

CIRCULAR TUBE

POLYGONAL TUBE

SPHERE

ROTATED AND CUTTED CUBE
DESIGN BRIEF

STRATEGY: BLOCK AND VOID

CIRCULAR TUBE

STRUCTURAL STABILITY
SOUTHWEST LIGHTING

for people: moderate shading

for people and vegetation with upper part open:
Welcome Lots of light

for parking: shading
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DESIGN IMPLEMENTATION

XL Urban Position
L Building
M Structure
S Facade
XS Details
URBAN POSITION

FOR CITY: urban landscape : bonsai

FOR BUILDING: native ventilation and light with three huge void / make the underground and upper ground organized as a whole
SITE PLAN 1:1000
SITE AERIAL VIEW

2nd Avenue (with Subway line 2050)
URBAN ELEVATION

3rd Avenue

2nd Avenue (with Subway line 2050)

1st Avenue
NORTH-EAST VIEW

2nd Avenue (with Subway line 2050)
SOUTH-WEST VIEW

2nd Avenue (with Subway line 2050)
SOUTH-WAST VIEW

2nd Avenue (with Subway line 2050)
NOUTH-WAST VIEW

2nd Avenue (with Subway line 2050)
DESIGN IMPLEMENTATION
URBAN VIEW
VIEW TO MANHATTAN MIDTOWN
SUN LIGHT
GREEN
BEARING CORES

SOLOR PROTECTION
TRAFFIC FLOWS
TRAFFIC FLOWS
TRAFFIC FLOWS
TRAFFIC FLOWS

SUBWAY-PEDESTRIAN

TRANSFER SUBWAY-BICYCLE/CAR

CAR PARKING
TRAFFIC FLOWS

- **Subway-Pedestrian**
- **Transfer Subway-Bicycle/Car**
- **Car Parking**
- **Tunnel - Cars**
TRAFFIC TRANSITION

USERS: PEOPLE + VEHICLE

PUBLIC LIFE ------ VEHICLE STORAGE & OPERATION

PEOPLE: OPEN ---- MOST OPEN ---- CLOSED

VEHICLE: LIMITED ---- TRANSFER ---- OREN
URBAN SECTION

DESIGN IMPLEMENTATION

L: BUILDING / SECTION
SECTION 1: 300
VOID CHARACTERS

PUBLIC LIFE ------ VEHICLE STORAGE & OPERATION

SUBWAY VOID

DICHOTOMY VOID

PARKING VOID

PEOPLE: OPEN ---- MOST OPEN ---- CLOSED

VEHICLE: LIMITED -- TRANSFER ---- OREN
SECTION 1: 300
SECTION 1: 300
PROGRAM INSPIRATION

Artificial nature, green

New yorker style: chaos parking

Commercial (supermarket, retail)

New yorker style, subway culture

Residential demand: playground, green, gym, library
PROGRAM RATIO

PUBLIC LIFE: open exhibition/library

VEHICLE STORAGE: car parking / bicycle parking

PUBLIC LIFE: theatre

PUBLIC LIFE: retail/ supermarket/Fitness center

TRANSPORT INFRASTRUCTURAL COMPLEX
DESIGN IMPLEMENTATION
BUILDING / FUNCTIONALITY

4F
ROOF PARK

3F
OPEN EXHIBITION
LIBRARY
CAR PARKING

2F
OPEN EXHIBITION
LIBRARY

1F
ENTRANCE HALL
LIBRARY
CAR PARKING

0F
ENTRANCE HALL
RETAIL
BICYCLE PARKING
FORSTER GARDEN

-1F
RETAIL
BICYCLE PARKING
TUNNEL PARK

-2F
RETAIL
BICYCLE PARKING
CAR PARKING
FITNESS CENTER

-3F
SUBWAY STATION
RETAIL
THEATRE
SUPPERMARKET
CAR PARKING
CAR PARKING
DESIGN IMPLEMENTATION
L: BUILDING / FUNCTIONALITY

-3F PLAN 1:300
PROGRAM ZONING

DESIGN IMPLEMENTATION
L: BUILDING / FUNCTIONALITY

THEATRE
2ND AVE SUBWAY STATION
RETAIL
FOYER
GALLERY / OPEN EXHIBITION
SUPERMARKET
PARKING LOT
GYM
BICYCLE PARKING
ZOOM IN...SUBWAY STATION

DESIGN IMPLEMENTATION
L: BUILDING / FUNCTIONALITY
PROGRAM ZONING
PROGRAM ZONING
ZOOM IN..OPEN EXHIBITION & PARKING

DESIGN IMPLEMENTATION
L: BUILDING / FUNCTIONALITY
EXHIBITION HALL

LIFT

EXHIBITION HALL
ROOF PLAN 1:300
DESIGN IMPLEMENTATION

L: BUILDING / FUNCTIONALITY

ROOF PARK
parking directly during people go out of the tunnel, to prevent the previous chaotic parking on the ground street after coming out of the underground tunnel.

original expansion of tunnel ramp:
height 8m --- 5% (Urban overpass) ---
distance : 150m

--- 9.5% (NEW, IN BUILDING WITH SPIRAL)----- 150m : 85 m
CAR-PARKING

OF
ENTRANCE HALL
RETAIL
BICYCLE PARKING
FORYER GARDEN

-1F
RETAIL
BICYCLE PARKING
TUNNEL PARK

-2F
RETAIL
BICYCLE PARKING
CAR PARKING
FITNESS CENTER

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW
4F
ROOF PARK

3F
OPEN EXHIBITION
LIBRARY
CAR PARKING

2F
OPEN EXHIBITION
LIBRARY

1F
ENTRANCE HALL
LIBRARY
CAR PARKING

0F
ENTRANCE HALL
RETAIL
BICYCLE PARKING
FORYER GARDEN

-1F
RETAIL
BICYCLE PARKING
TUNNEL PARK

-2F
RETAIL
BICYCLE PARKING
CAR PARKING
FITNESS CENTER

-3F
SUBWAY STATION
RETAIL
THEATRE
SUPPERMARKET
CAR PARKING
CAR PARKING
DICHOTOMY VOID

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW

ESCALATOR
DICHOTOMY VOID

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW

LANDSCAPE STAIRS
ESCALATOR
LIFT (FIRE STAIRCASE)
PARKING VOID

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW

ESCALATOR
PARKING VOID

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW

LANDSCAPE STAIRS

ESCALATOR
PARKING VOID

LANDSCAPE STAIRS

ESCALATOR

LIFT (FIRE STAIRCASE)

DESIGN IMPLEMENTATION
L: BUILDING / TRAFFIC FLOW
DESIGN IMPLEMENTATION
FLOOR HEIGHT

red area (public life and art): 6m
blue area (commerce / office): 4.5m
yellow area (Storage/parking): 3m
COLUMN GRID

COLUMN:
red area: 12 m x 9m
blue area: 7.5m x 9m
grey area: 8.1m x 9m
yellow area: 8.1m x 6m
transit core : 12m x 9m
DESIGN IMPLEMENTATION
STRUCTURE SYSTEM: OVERALL FRAME
OVERALL STRUCTURE SYSTEM

ROOF STRUCTURE
3m x 3m I-BEAM

FACADE SYSTEM
Perforated aluminum vertical louvers
Glass

LOAD-BEARING FRAME
VOID FRAME
steel tube with mesh (r-420mm)

BEAM-COLUMN FRAME
upper ground: I-beam
underground: I-beam /Shear wall

STRUCTURAL CORE:
CONCRETE
STRUCTURAL CONCRETE
MAIN STRUCTURE

BEAM-COLUMN FRAME
upper ground: I-beam
underground: I-beam /Shear wall
VOID FRAME
steel tube with mesh (r-420mm)

SECOND BEAM
FACADE SYSTEM
Perforated aluminum vertical louvers
ROOF STRUCTURE

3m x 3m GRID
900MMX 300MM I-BEAM
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: OVERALL FRAME

MAIN STRUCTURE

VOID FRAME
steel tube with mesh (r-420mm)

BEAM-COLUMN FRAME
upper ground: I-beam
underground: I-beam /Shear wall

STRUCTURAL CORE
CONCRETE
VOID FRAM

VOID = Light column/ structure/ circular tube
STRUCTURE LECTOTYPE

1. ring beam + “tree” steel tube

2. ring beam + “tree” steel tube

3. arc steel plate + “rhombus mesh” steel tube/ not whole circle
HOW TO DO?

SUBWAY AND PARKING VOID: 1+2. ring beam +"rhombus mesh" steel tube
DICHOTOMY VOID: 3. plus arc steel plate for upper part

1+2.

Height: 45m
diameter: 15~23m
Circle number: 18 steel tubes
(20 ° per tube) (Φ ~ 420mm)
Bearing structure with walking ramp

3

load-bearing structure
steel tube
(Φ 325mm/20mm)
Not a whole circle,
the egdes are fixed by
CURVED STEEL PLATE (450MM)
DESIGN IMPLEMENTATION
STRUCTURE SYSTEM: VOID FRAME

Basic form

Torsional deformation

Secondary deformation and reinforcement
OVERALL STRUCTURE FRAME

Rhombus steel mesh frame + Domino steel Frame+concrete core
rhombus steel mesh frame + Domino steel frame + concrete core
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH + DOMINO

PUBLIC VOID

ring beam + "rhombus mesh"

LOAD-BEARING STRUCTURE:

I-BEAM (600 X 300mm)
VOID MESH: STEEL TUBE(Φ 420mm)

STRUCTURAL CORE:
CONCRETE
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH+DOMINO

RED PART: the connected beam between normal structure and tube structure
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH+DOMINO
RED PART:
second beam to connecting void structure and normal structure

BLUE PART:
Additional column

STRUCTURE SYSTEM: VOID MESH+DOMINO
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH + DOMINO

DICHTOMY VOID

ring beam + "rhombus mesh" steel tube + arc steel plate

LOAD-BEARING STRUCTURE:

I-BEAM (600 X 300mm)
VOID MESH: STEEL TUBE (Φ 400mm)
RING BEAM: 400mm

STRUCTURAL CORE:
CONCRETE
RED PART: the connected beam between normal structure and tube structure
YELLOW PART:
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH+DOMINO
special: upper/ outside/arc steel plate
under: half concrete wall
(along with the mesh of steel tube)
/ half mesh
DESIGN IMPLEMENTATION
STRUCTURE SYSTEM: VOID MESH+DOMINO

PARKING VOID
ring beam + "rhombus mesh" steel tube

LOAD-BEARING STRUCTURE:
- I-BEAM (600 X 300mm)
- VOID MESH: STEEL TUBE(Φ 420mm)
- RING BEAM: 400mm

STRUCTURAL CORE:
CONCRETE
RED PART: the connected beam between normal structure and tube structure
DESIGN IMPLEMENTATION

STRUCTURE SYSTEM: VOID MESH + DOMINO
DESIGN IMPLEMENTATION

XL Uban Position
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FACADE SYSTEM

ROOF STRUCTURE
3m x 3m I-BEAM

FACADE SYSTEM
Perforated aluminum vertical louvers
Glass

LOAD-BEARING FRAME
VOID FRAME
steel tube with mesh (r=420mm)
BEAM-COLUMN FRAME
upper ground: I-beam
underground: I-beam /Shear wall

STRUCTURAL CORE:
CONCRETE
CLIMATE BOUNDARY

TWO SKINS:

OUTSIDE FACADE: perforated aluminum vertical louvers -- solar protection
INSIDE FACADE: glass-climate boundary
Partition of inside and outside

Outside: Park, Playground
semi-outside: Parking lot/ transfer area/ open Market /outside exhibition
Inside: Theatre / Service / Retail / library /Gallery
1: 300 ELEVATION
DESIGN IMPLEMENTATION
S: FACADE SYSTEM
DESIGN IMPLEMENTATION

XL Urban Position
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XS Details
TWO SKINS:

OUTSIDE
Perforated aluminum vertical louvers
Solor protection

INSIDE
Glass (can open)
Climate boundary

1:20 FACADE
1:5 EAVE DETAIL
- concrete with sloping floor
- leveling layer
- protective layer
- PVC waterproofing
- ROOFMATE SL
- geotextile filter layer
- soil base
- slab surface
- thermal insulation material
- geotextile
- grits - drainage layer
- lining
- Roofmate
- wooden washer
- overlap

1:10 Curtain wall foundation

DESIGN IMPLEMENTATION
XS: DETAILS

ROOF DETAIL
FOUNDATION

1:10 DETAIL
Aluminum vertical louvers
Electronic control solar protection
Changed follow sunlight

Building structure
Curtain wall with glazing (Partially openable)
Electronically controlled pneumatic arm
Horizontal fin supports
Perforated aluminum vertical louvers (450mm)

1:10 ALUMINUM LUVER DETAIL
INSIDE DETAIL 1:10

1:10 ROOF DETAIL

Roof element:
- 3.5mm anodized aluminum sheeting
- 70 mm mineral wool
- 3 mm galvanized steel sheeting

Wooden pavement (100 mm maple wood)
- 200 mm concrete floor
- 600x300 mm I-beam
- Interceded ceiling

Bolted joint

1:10 JOINT DETAIL

Load-bearing structure
- I-beam (600 x 300 mm)
- Void mesh: steel tube (Ø 40-25 mm)
- Ring beam: 300 mm

Welding joint

25 mm steel plate
- Ø 40/25 mm steel tube
- 20 mm steel plate
- 40/40/50 mm steel plate

1:10 ROOF DETAIL

INSIDE - VOID STRUCTURE
BOLTED JOINT
Movable, fitting for all angles
stability? load-bearing capacity?

WELDING
stability, prefabricated, Sustainable?
Curtain wall with glazing (Partially openable)

Perforated aluminum vertical louvers

Openable glass roof  I-beam frame

Steel truss  Concrete rotating cylinder

Mesh steel tube (420/25mm)  Wooden pavement

Plaster board ceiling  White lime cement wall

Terrazzo floors
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CIRCULATORY SYSTEM
Ventilation / Light / Water / Material

CONCLUSION
Green portal of Empire Village 2050
CIRCUITARY SYSTEM

Light
Ventilation
Water
Material
CLIMATE ENVIRONMENT
Passive Design
Natural systems of lighting and ventilation

SOUTHWEST LIGHTING
for people: moderate shading
for people and vegetation with upper part open: Welcome Lots of light
for parking: shading
SUMMER
SOLAR PROTECTION+COLLECTION

CIRCULATORY SYSTEM
SUN LIGHT

SOUTH LIGHT
DESIGN IMPLEMENTATION
CLIMATE SYSTEM: SOLARLIGHT

WINTER
SOLAR PROTECTION

SOUTH LIGHT
VENTILATED CONTAINER
CIRCULATORY SYSTEM
VENTILATION

SUMMER
NATURAL VENTILATION

Natural Ventilation Control Unit

openable roof
outdoor Air

Air Conditioned
Fresh air (OFF)

Heat Exchanger
(OF)
WINTER
MACHINE VENTILATION /HALF

- Air Conditional fresh air
- exhaust air
- Supply fresh air
- Air Conditioned Fresh air
- Heat Recovery Unit
- Cooling tower
- Heat Exchanger

CIRCULATORY SYSTEM
VENTILATION
RAIN AND VEGETATION

RAINWATER COLLECTING SYSTEM

ROOF GREEN

ACOUSTIC SYSTEM
CIRCULATORY SYSTEM

MATERIAL

- Curtain wall with glazing (Partially openable)
- Perforated aluminum vertical louvers
- Openable glass roof
- I-beam frame
- Steel truss
- Concrete rotating cylinder
- Terrazzo floors
- Mesh steel tube (420/25mm)
- Wooden pavement
- Plaster board ceiling
- White lime cement wall
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IMPLEMENTATION

Taking off from climate condition and vertical traffic integration, the whole project is organized by void spaces in series.

The design strategy is the mixture and balance of three void space in a mass solid. From the climate condition of the site, which is surrounded by northeast high-rising building and southwest green park, the whole building is in a good solar condition of an urban basin with southwest sunlight without shadow all year, which has the possibility to become a city landscape and public life in the lower layer. Three huge void space and green roof park will continue the nice nature condition in the interior and exterior. Not only having structure and climate meaning, but these three voids also have different characters.
AMBITION

1. to create a green portal to enter Empire Village and the key strategies are the loop from upper to the underground.
2. a mixed using transportation infrastructural complex for future and become a public hybrid building shared from underground to upper ground
3. redefine the form of transportation infrastructure and the use-value of derived space, and balance the dichotomy of the commercial significance and public social activities.

GREEN PORTAL OF EMPIRE VILLAGE 2050

Mixed using Complex for future: A Public shared from underground to upperground
GREEN PORTAL OF EMPIRE VILLAGE 2050