Argument - Why do we need such a large building.

THE WALL
Argument - Why do we need such a large building.

South Chicago is facing a lot of problem today. The problem listed here has been going on for decades. It derived from a general economical and political background on a much larger scale. Some of it is old habit. The situation is driven by some myth inertia and could be very difficult be changed.

Thus this new land, this new project needs a strong statement of itself, and a clear cut from the old obit.

In this condition, size is everything.
Argument - Why do we need such a large building.

In order to activate South Chicago, we introduce a new industry cluster here, a Bio-chemical Research and Life Science cluster. In the larger picture, this move will be able to ease the unemployment issue of South Chicago.

Also, inside this system there is a mutual-improving mechanism on building up personnel in nursing and healthcare profession. This could be one of the most effective path towards the promoting of South Chicago.

But, everything result in education.

To cut from the past, to look towards the new future, education is the path.

A new industry cluster

Ambition

Through Education
Argument - Why do we need such a large building.

There is a tension between the new developing area and the neighborhood. We are bringing the city a new breath, but it doesn't mean the locals should be excluded from this future.

In the masterplan, we are aiming at connecting the new area and the neighborhood. When it comes to this new striking landmark, position and approach are very important.
Urban Attributes - two faces

Site Plan

1:200  West Facade - The Wall
Argument - Why do we need such a large building.
Urban Attributes - two faces

basic facade

when in short of large rooms

during events in special sections

function in small groups

larger rooms
smaller rooms
pavilions
semi climatic
controlled

fully installed
Composition - different feature belts

Long Section 2-2  the wall  Long Section 5-5  the platform  Long Section 6-6  the elastic
Composition - different feature belts

Long Section 2-2  the wall

Long Section 5-5  the platform

Long Section 6-6  the elastic
Composition - different feature levels

urban figure

below 48m

above 48m
Composition - different feature levels

10-10 Section

24-24 Section

South Facade

North Facade
Composition - different feature levels

Ground Floor Level +0.00

Plan on +56.00
Composition - different feature levels

Ground Floor Level +0.00

Plan on +56.00
Composition - the routing

Company House  Exhibition House  Conference House  Institution House  Chapel

routing with entrance & special programs

education platform  activity platform  healthcare experiencing platform  commercial platform  library platform

routing with different platforms

Long Section in the Void
Composition - the routing

routing with entrance & special programs

routing with different platforms

education platform
activity platform
healthcare experiencing platform
commercial platform
library platform

Long Section in the Void
Composition - the routing

Cross Section 25-25 / Entrance Hall

Ground Floor Plan / Entrance Hall

Plan on +8.00
Composition - the routing

Cross Section 25-25 / Entrance Hall

Ground Floor Plan / Entrance Hall

Plan on +8.00
Structure System

Structure Detail of the "EYE"

Column Meet Warren Truss

Column Meet Spacial Truss
Climate Design and Installations

Mechanical Ventilation Detail

- Exhausted air
- Pre-heated/cool air
- Evacuation & heat recovery

Generation & Transport System

- Aquifer 20 °C
- Heat Pump A 40 - 50 °C
- Heat Pump B 40 - 50 °C
- Aquifer 8 °C

Supply System - Heat Radiators
Climate Design and Installations

Natural Ventilation

Wind Tunnels

Wind Rose of Chicago

exhausted air
Natural Wind
Mechanical control

Day time
Summer/Winter

Night time
Summer

shut down
Facade Detail

Section H

1. steel column
2. warren truss
3. gypsum ceiling board
4. column joint
5. drain pipe
6. floor drain
7. tempered glass
8. polymer insulation filling
9. polyester board
10. wire netting
11. preshaped steel panel
12. steel beam
13. secondary plywood deck
14. aluminum panel track
15. aluminum glazing frame
16. rectangular steel beam 240X240
17. I beam steel 195X165
18. I beam steel 125X150
19. steel veneer
20. round steel d 100
21. insulation foam
22. water proof layer
23. surface layer
24. plastic ceiling panel
25. preshaped steel panel
26. cast concrete on site
27. self-leveling insulation
28. damping layer
29. floor surface layer
30. rectangular steel beam 240X150
31. diagonal bracing beam 60X60