

Over time, supporting electricity production infrastructure technology changed, and these supportive plants and other elements became obsolete. It gives way for newer builtforms and technologies. One example is GNDTP in Bathinda

CHANDIGARH NEWS
Mumbai firm to dismantle thermal plant at Bathinda but iconic towers will stay

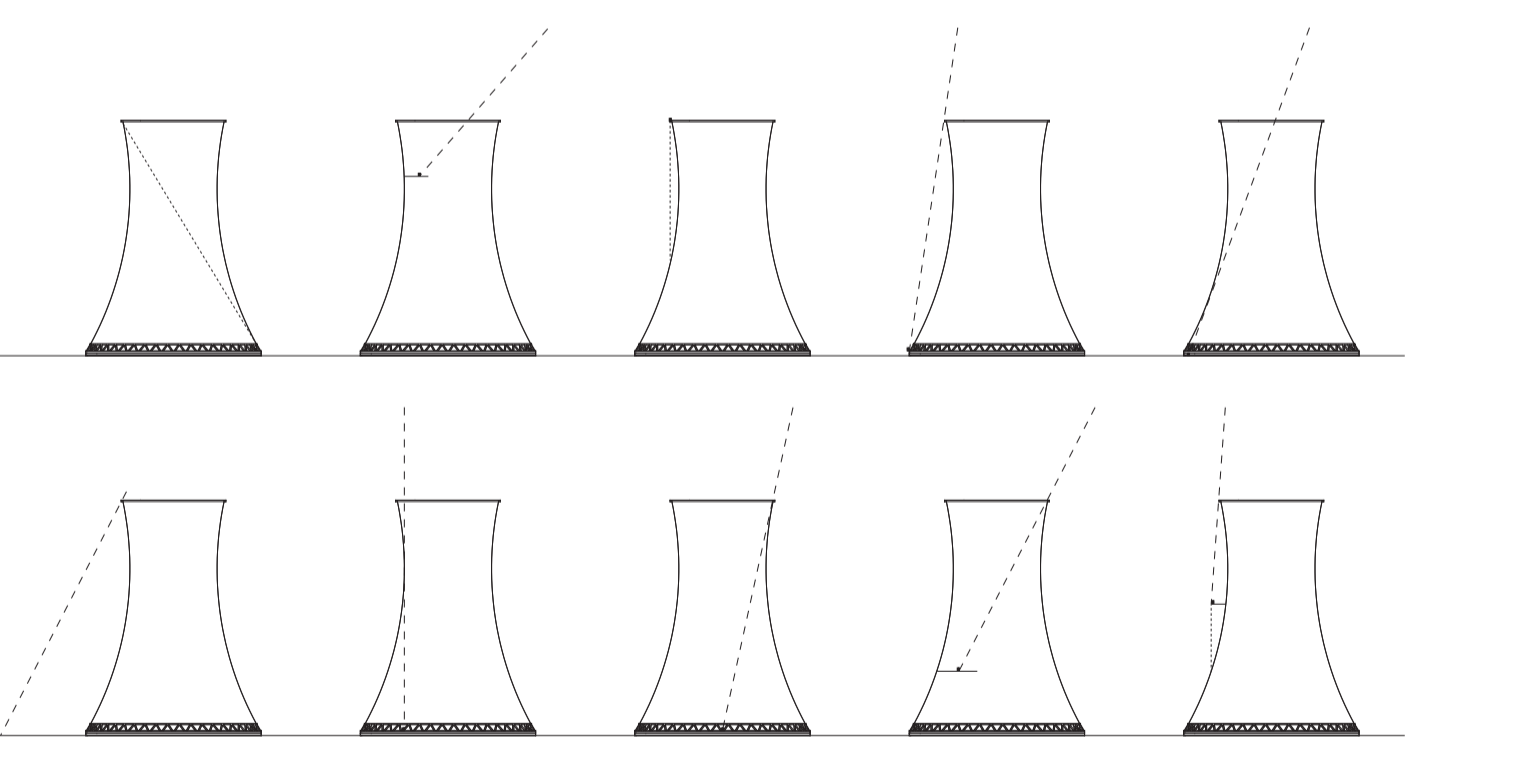
Firm made a final bid of Rs 164.6 crore to Punjab State Power Corporation Limited at e-auction, making way for mega industrial park over 1,350 acres. Four cooling towers of thermal plant, that have become city's landmark, will remain standing

By Vishal Joshi | Hindustan Times, Bathinda
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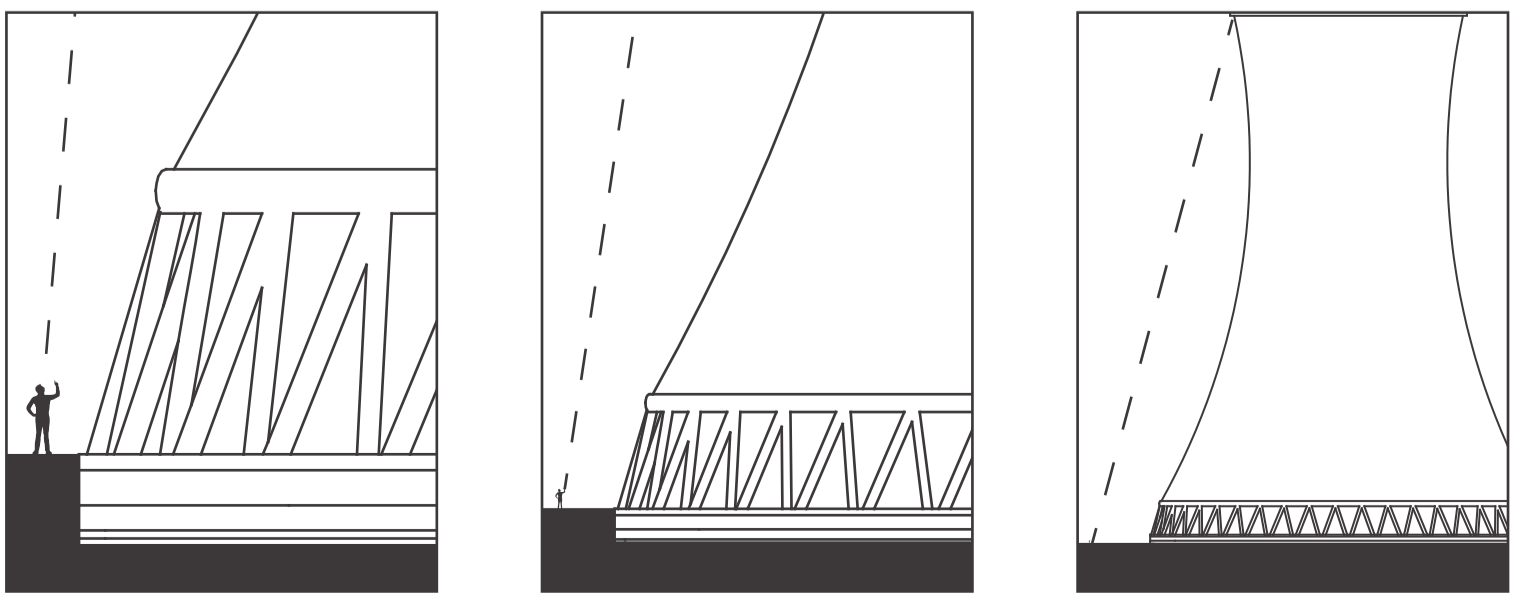


The four mega cooling towers of the Guru Nanak Dev Thermal Plant, which are often confused with smoke-emitting chimneys, will not be brought down. Only civil structures, including chimneys and machinery used in power generation besides cables and pipes, will be disposed of. (Sanjeev Kumar/HT file photo)

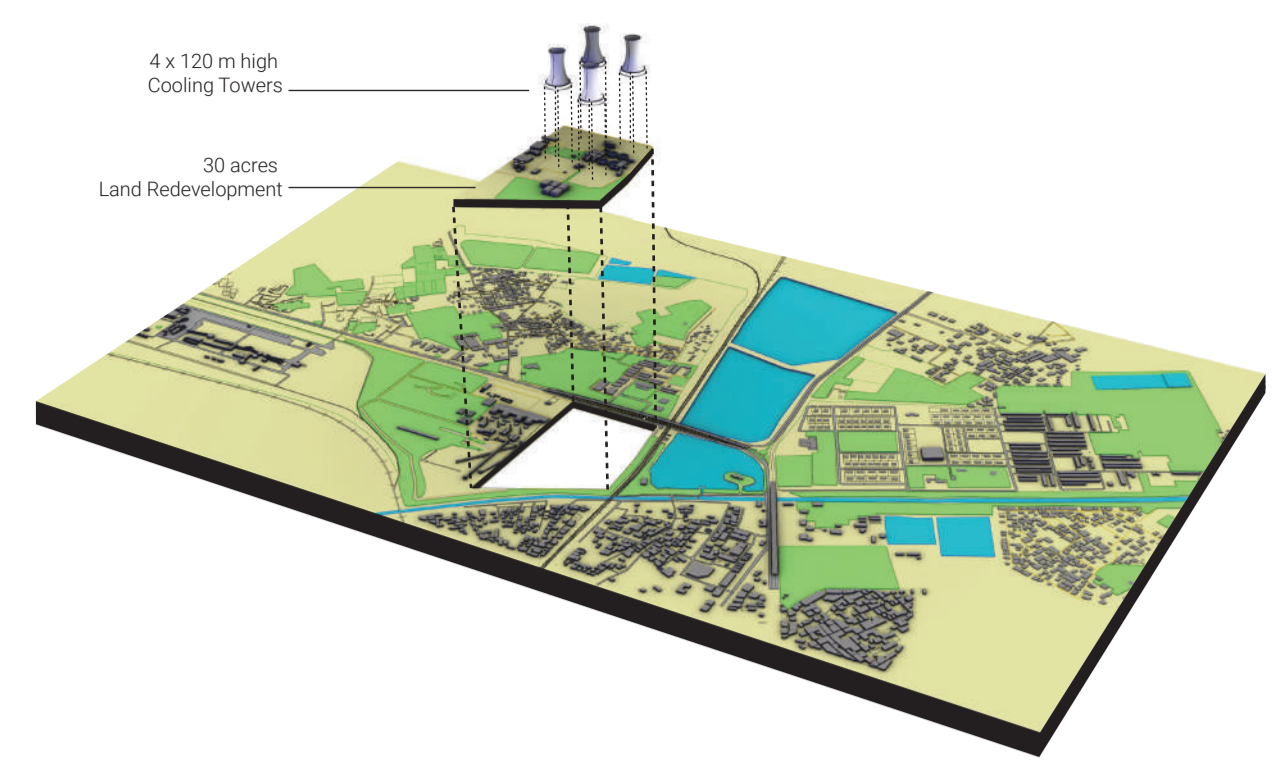
Punjab Govt. regarded towers as Urban monuments and landmarks of city. They have a deep connection for the people and development of the interies in the south punjab. Also it has emotional connection with Shri Guru Nanak Dev Ji.



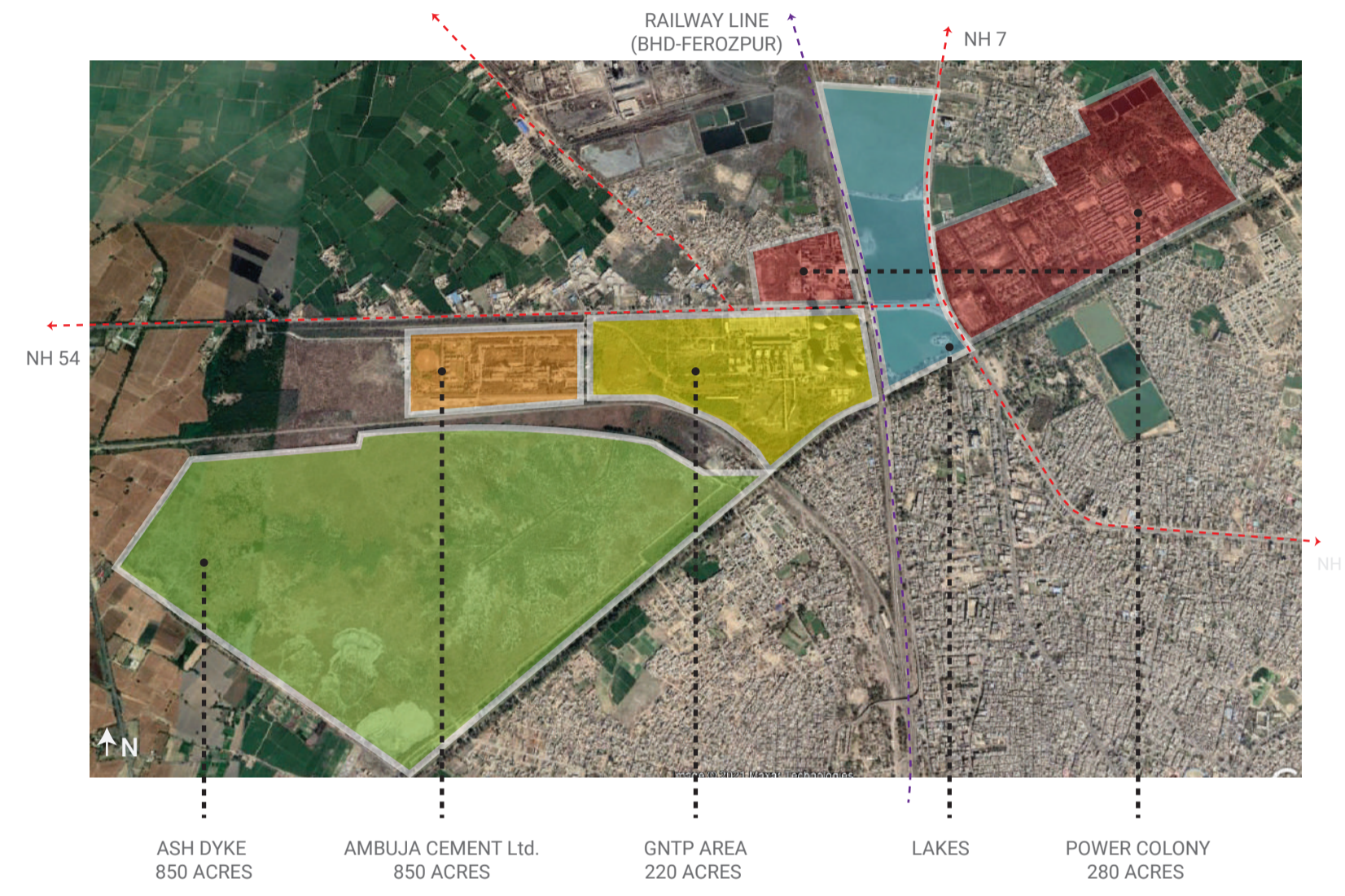
EXPERIENTIAL SPACE REALTION DIAGRAMS



UNDERSTANDING HUMAN SCALE WRT COOLING TOWER



Out of 800 acre thermal campus 30 acre main thermal zone is selected for intevention. wiyh 4 120 meter high cooling towers.



December 2020, the zone had resovers greeny and builtforms all around.



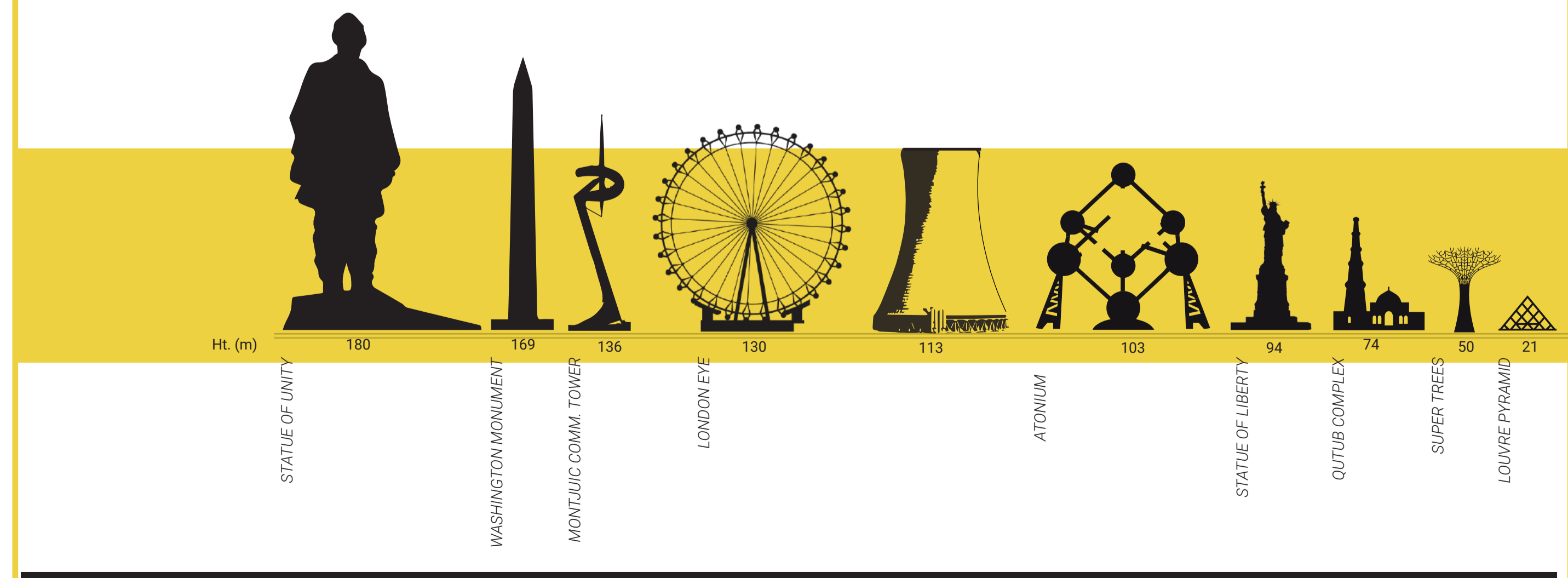
By march 2021,central zone had been demolished but the out greeny and utility roads have been retained.

IMAGIBILITY OF COOLING TOWERS
 ADEQUATE RESPECT FOR THE CITY SKYLINE

By studing all public spots of city it was understood that towers are part of the city but they have lost the respect within the communities. We need to activate the facades to regain this respect for the skylibe.



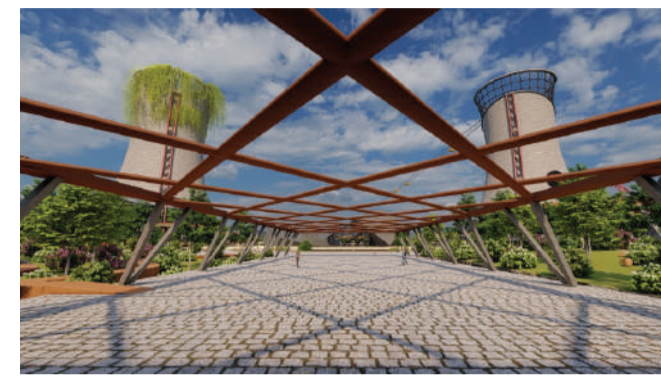
BATHINDA CITY SECTION
 TOWERS SEEN FROM -8.9 Kms



In order to be clear about the scale a small comaparive exercise was done. Cooling towers are comapred to famous lamdmrks/Urban monuments across the world. In terms of hieght abd volume. These towers can give profound effect in our city if conceived well.

Guru Nanak Dev Thermal Plant was shut down for ever. All of the sudden this story became talk of the town. State of Punjab witnessed large protests from opposition parties as well as the working labour. Main reasons were fear of unemployment, price hike in electric bills, demolition of sacred builtforms and most importantly it was closed down within few months of renovation worth INR 700 crores. City feels that tax payer money has been wasted due to wrong decision making. As an architect and part of the tax payer community I feel the land and the resources wasted should be given back to the city in some way or the other.

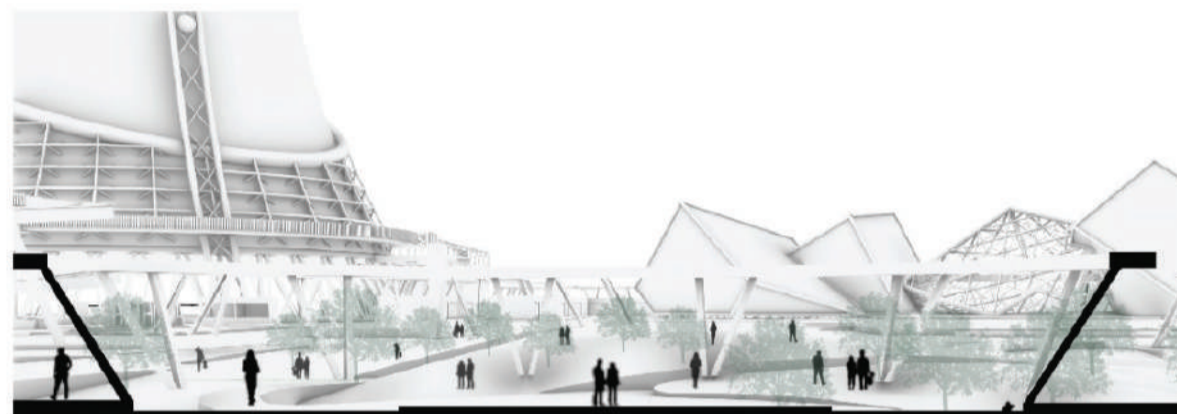
NATURAL GREENS



Existing dense vegetation cover to be reconditioned to an **urban forest**. It would consist of viewing decks and insect and bird gardens.

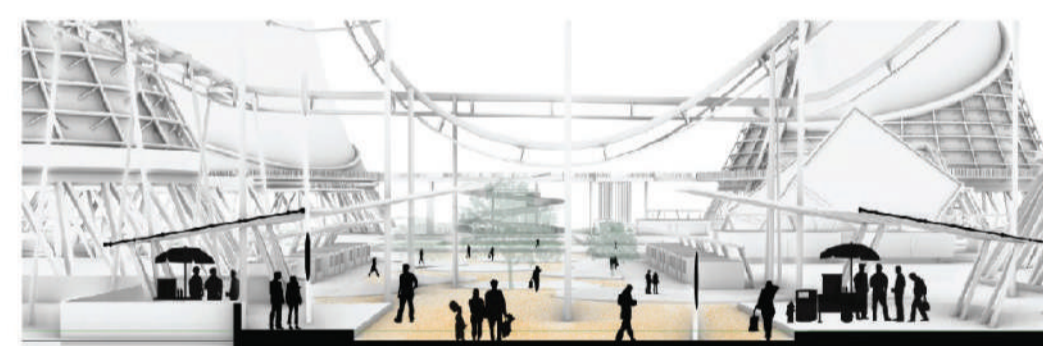
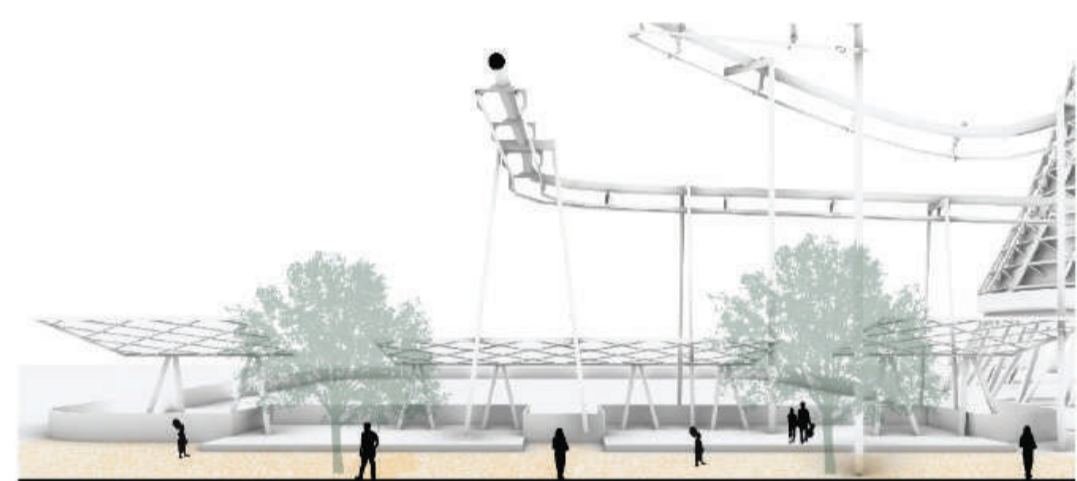
Near to the tower1, greenery was more random and scattered but with good quality trees. This zone is made as a public park.

At Entry Vegetation is linear and symmetrical. These trees are used to create powerful vistas during entry in the site.

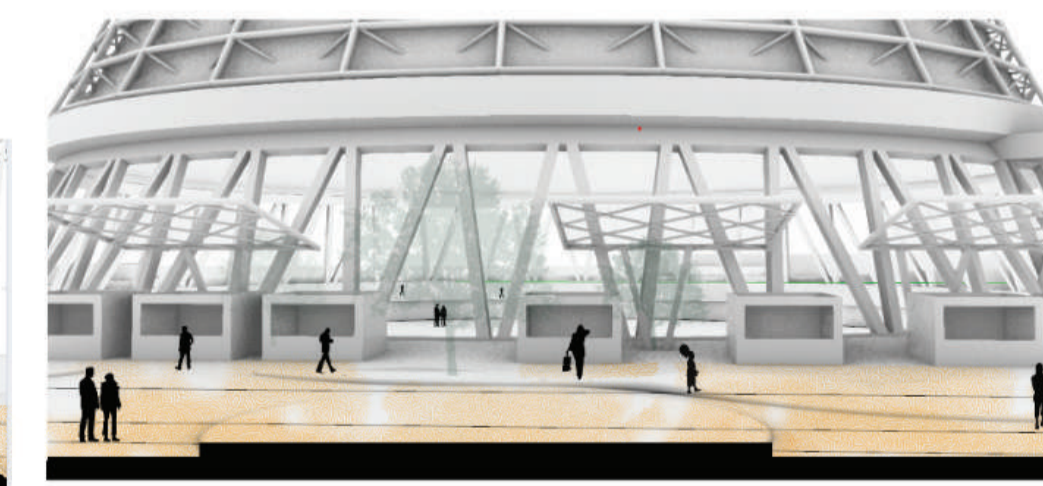
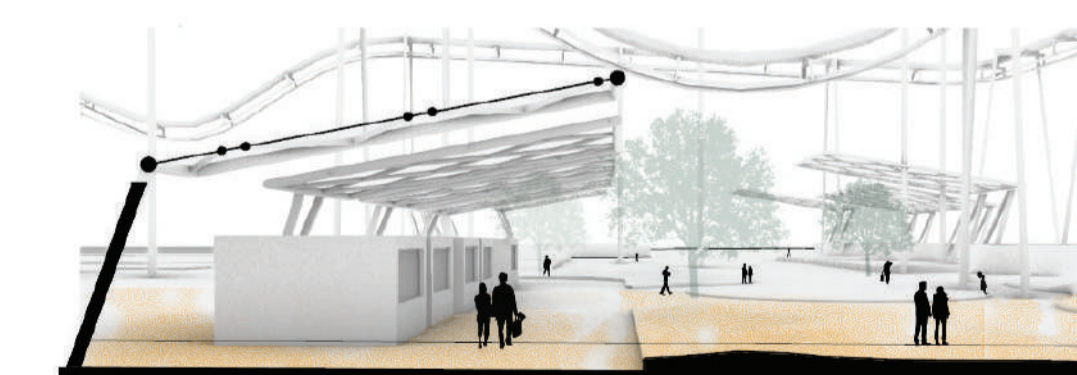


Pathways are created to connect different zones of greenery in the site. At the nodes a ring is created similar to the lower part of the cooling tower. Moreover landform is changed by adding artificial mounds creating drama in the movement in the pathways.

SECONDARY ENTRY - BOOTHS AND MANDIS



First zone gives way for weekly markets and mandis for the locals. it consists of slabs and parasols for such market development.

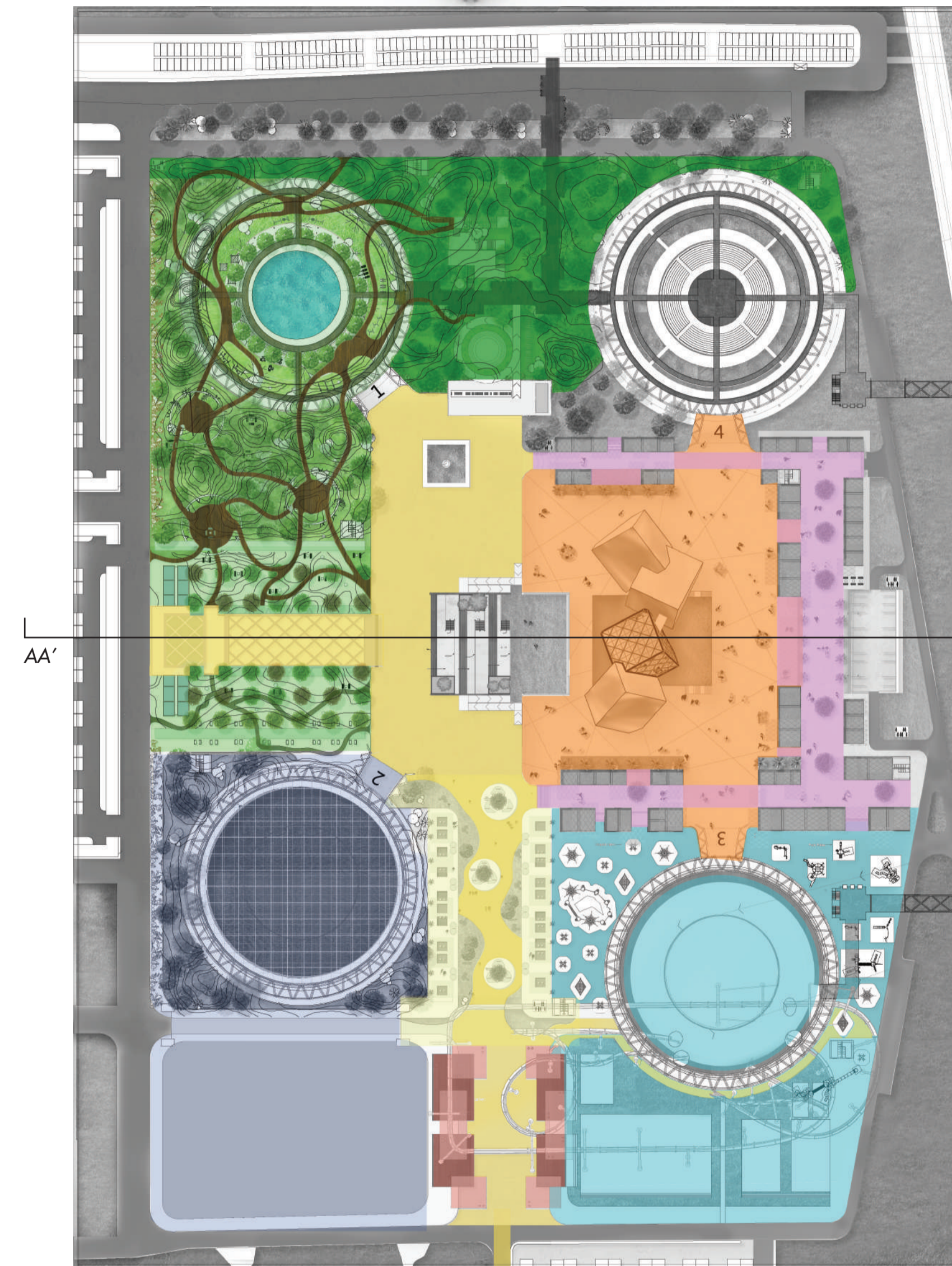
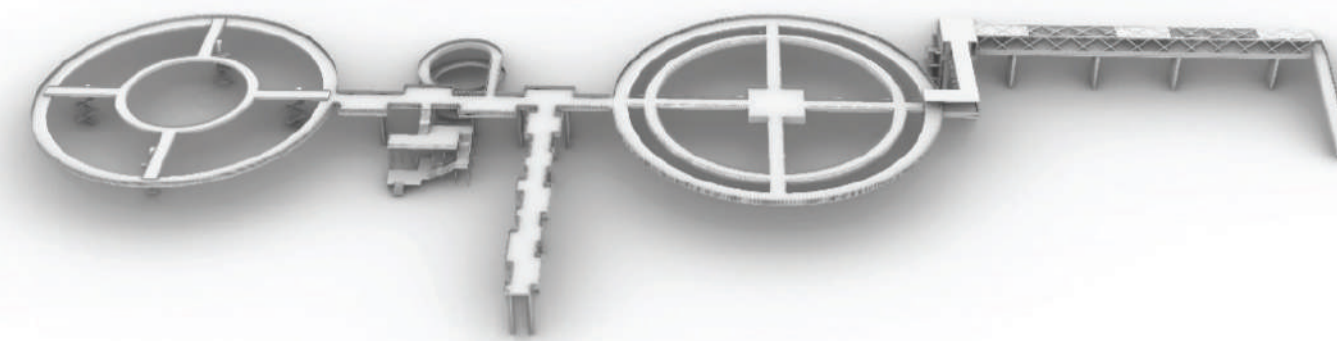


Next market becomes a booth market. This zone has curved landscape to keep it activated and dramatic. Roller coaster in sky brings life to the zone.

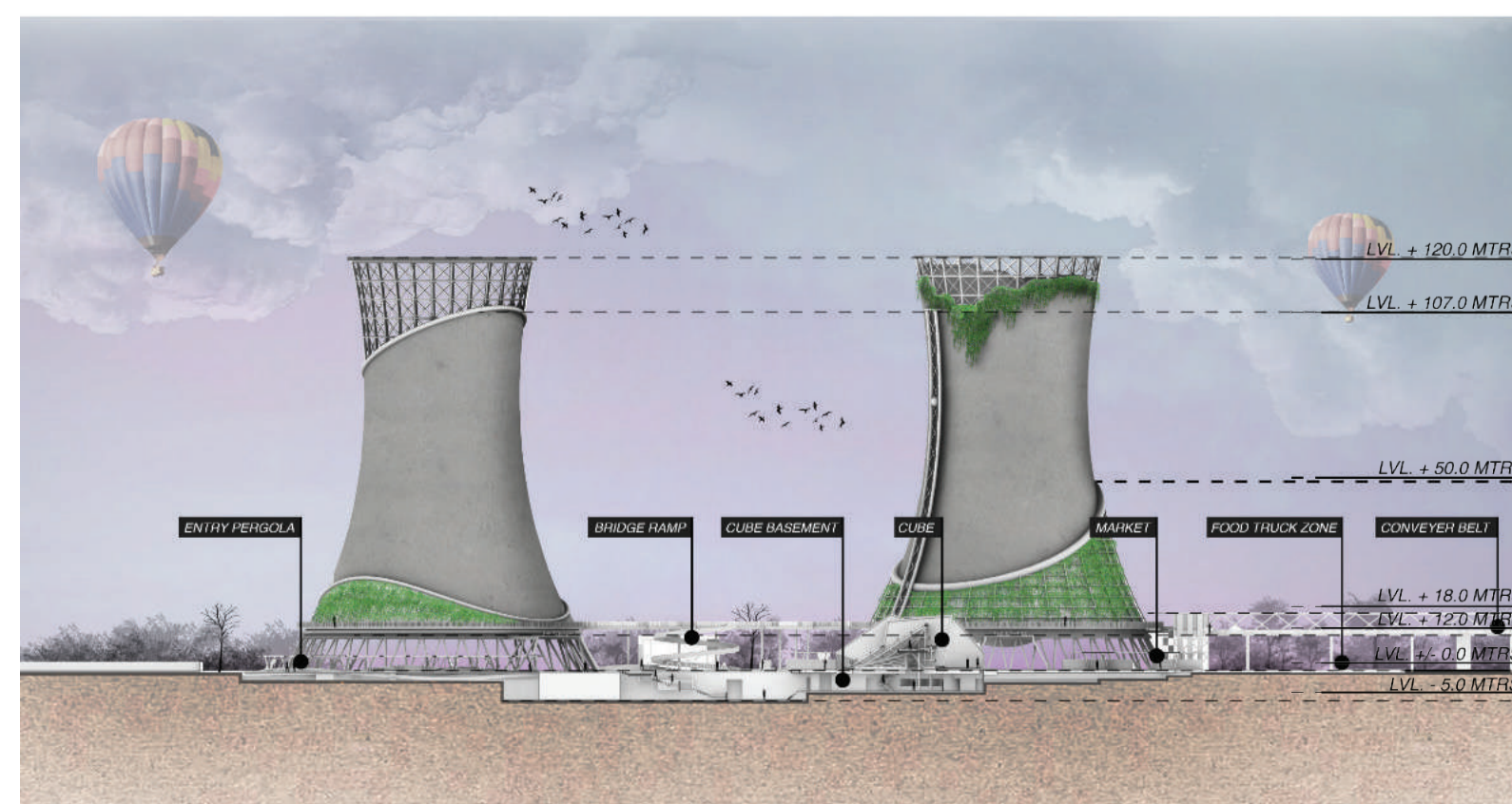


At 12 meters height various components gets connected. Inner and outer Balconies of towers, decks, conveyer belts, flyover bridge. Ramps lifts stairs are added for easy vertical movement.

OVER HEAD CONNECTIONS



9 ADAPTIVE REUSED ZONES



SECTION AA'

SPORTS AND ADVENTURE



ROLLER COASTER



BUNGEE JUMPING



ZERO GRAVITY



WALL CLIMBING



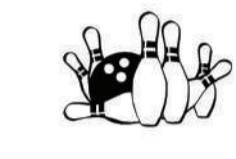
SWIMMING COURTS



SKATING RINGS



GYMS



BOWLING ALLEY

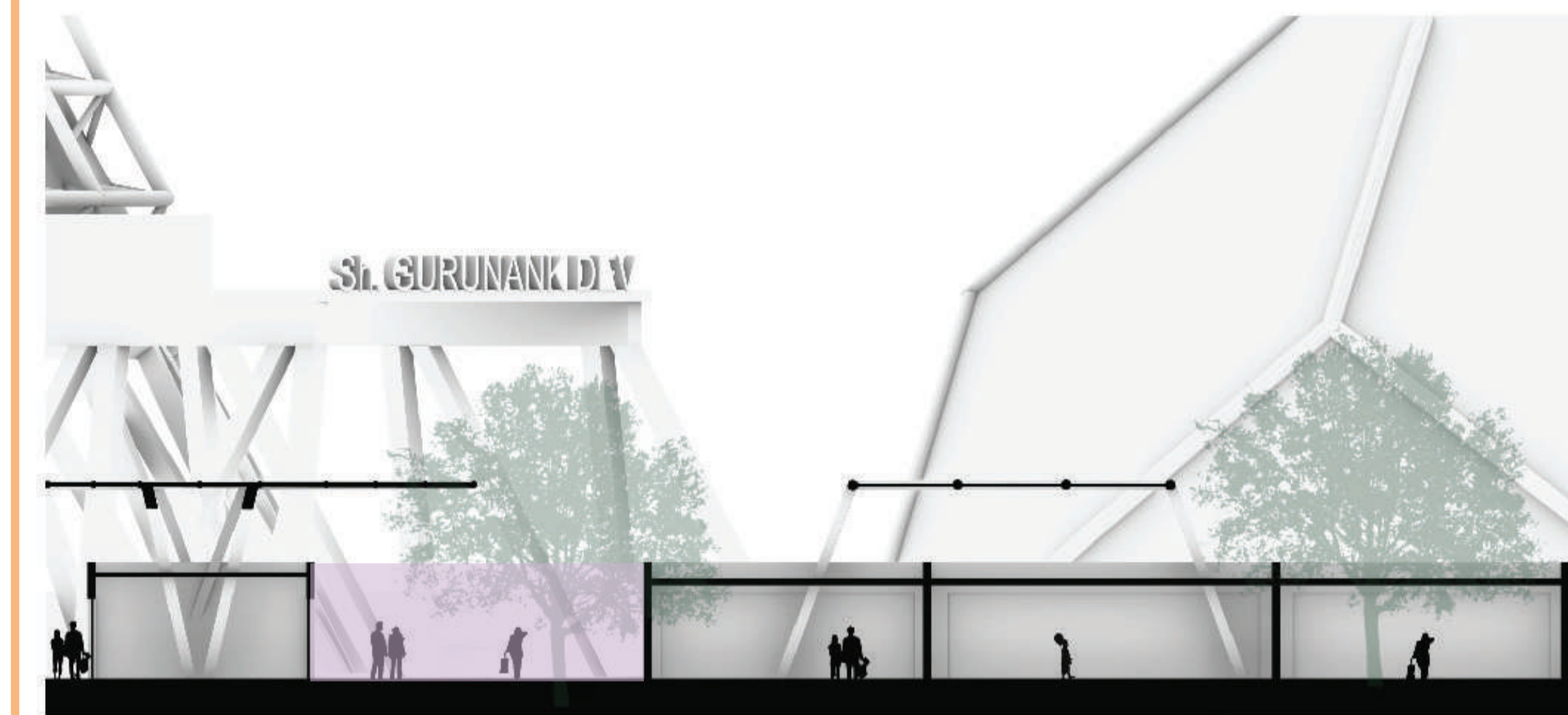
This zone consists of multiple activities which keeps the zone most activated in the site also attracting the locals.

ENERGY PRODUCTION



Reusing the infrastructure to produce energy for the campus making it self sustainable. The name for the tower is kept the former name of the thermal plant reminding the memories of the space.

CENTRAL PLAZA | MARKET STREETS



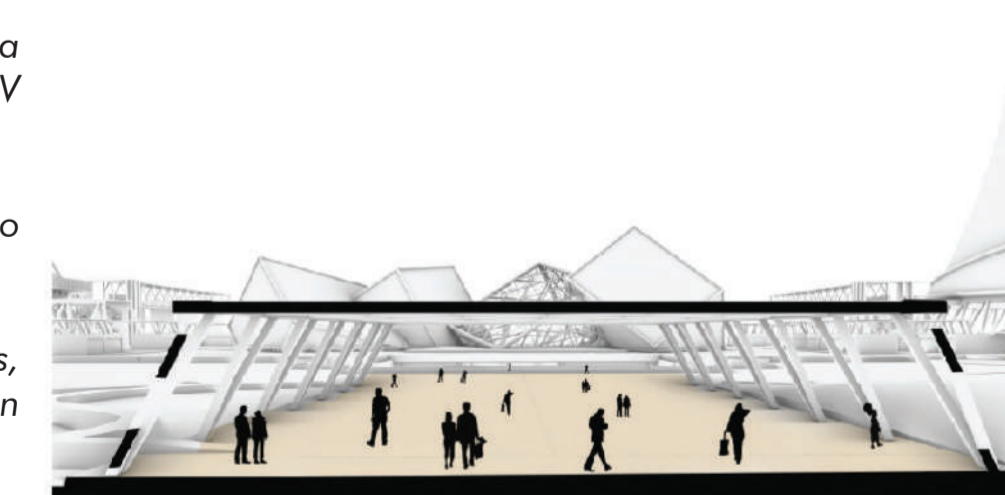
Central plaza and street intercross each other at various points. there is a grade of increase of scale from shops to parasols the cubes entry to the tower and then the tower itself. but sudden movements in the campus changes scale drastically. bringing life in the space.

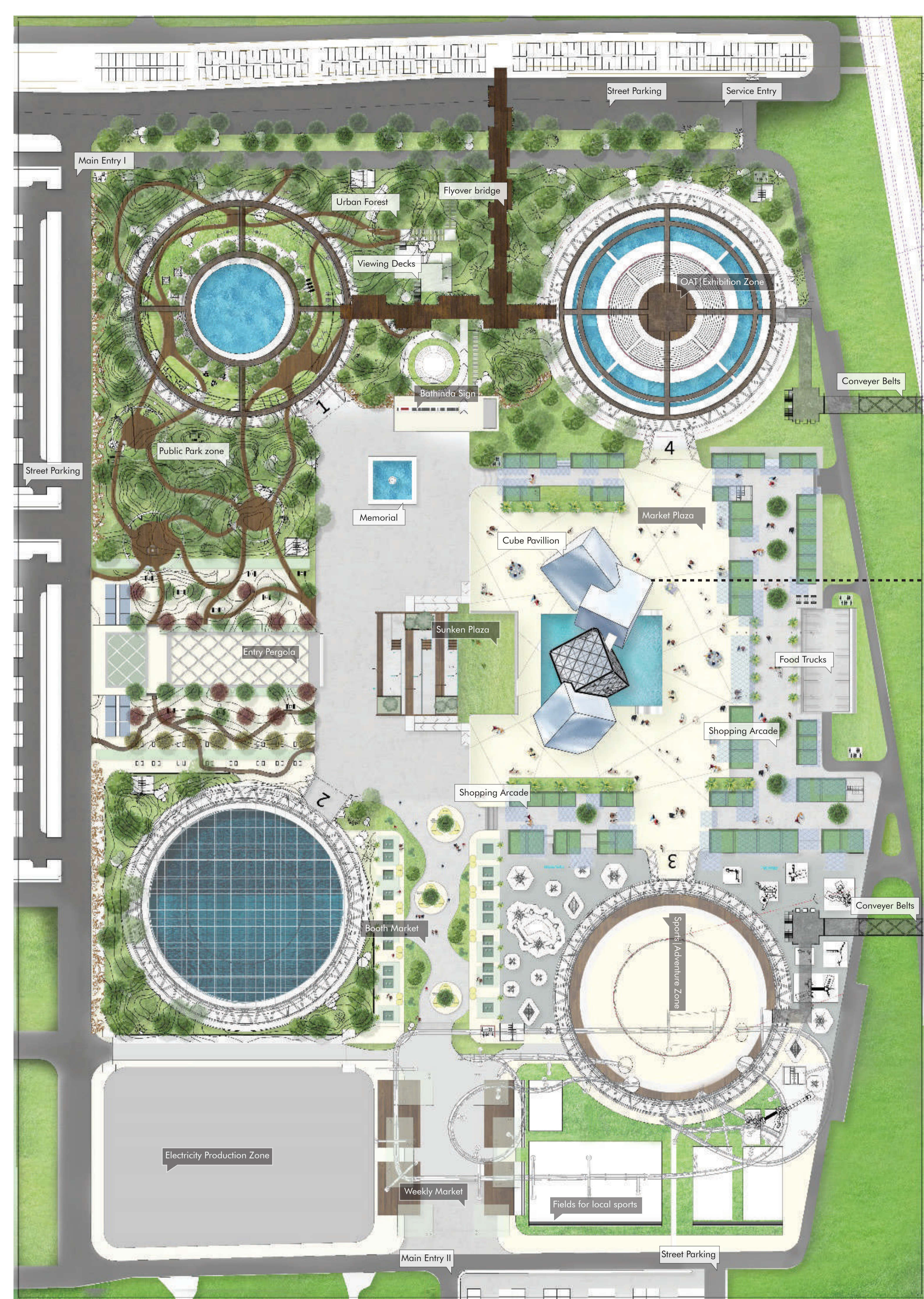
THERMAL SPINE

This zone connects all the spots to the campus. Entry is a diagrid pergola contry to the hyperbolics in the sky. It has V shaped columns similar to the tower basins.

This zone has emphebral setup to keep it activated but also permanent instalations like i love bathinda , memorials.

This zone resonantes with the city environment. Protests, pride, rallies, marches, celebrations could easily happen in this zone.



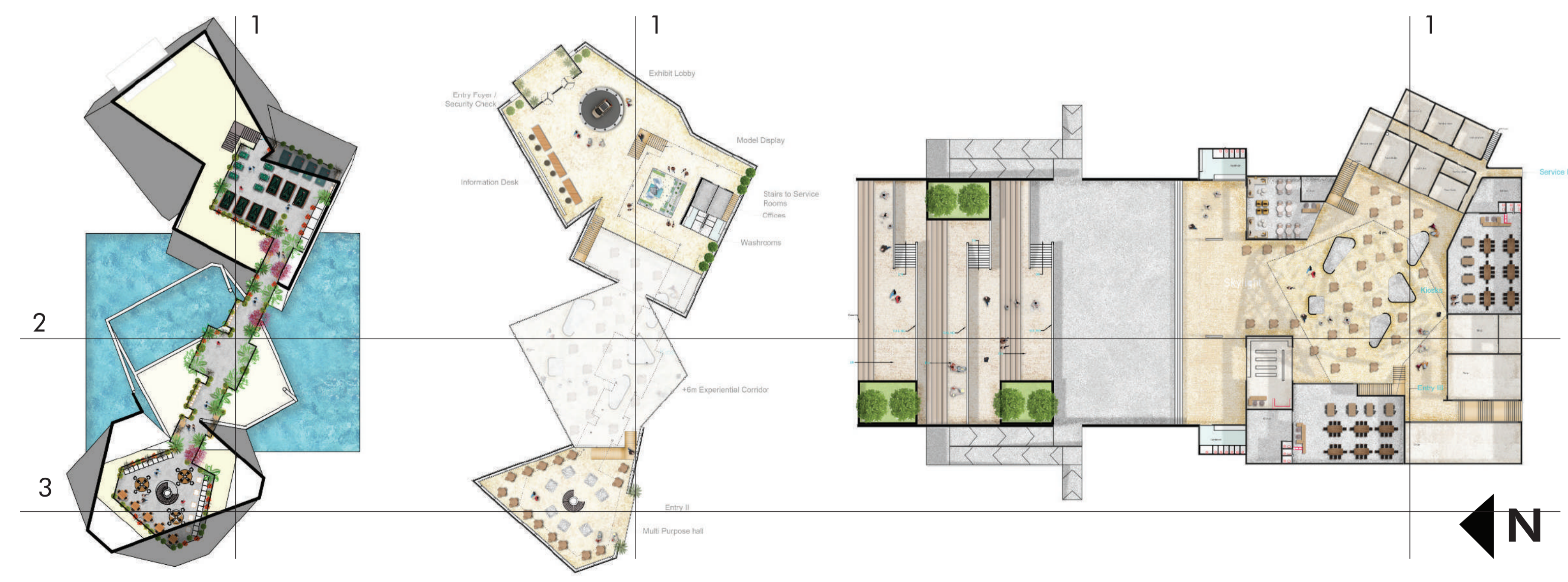
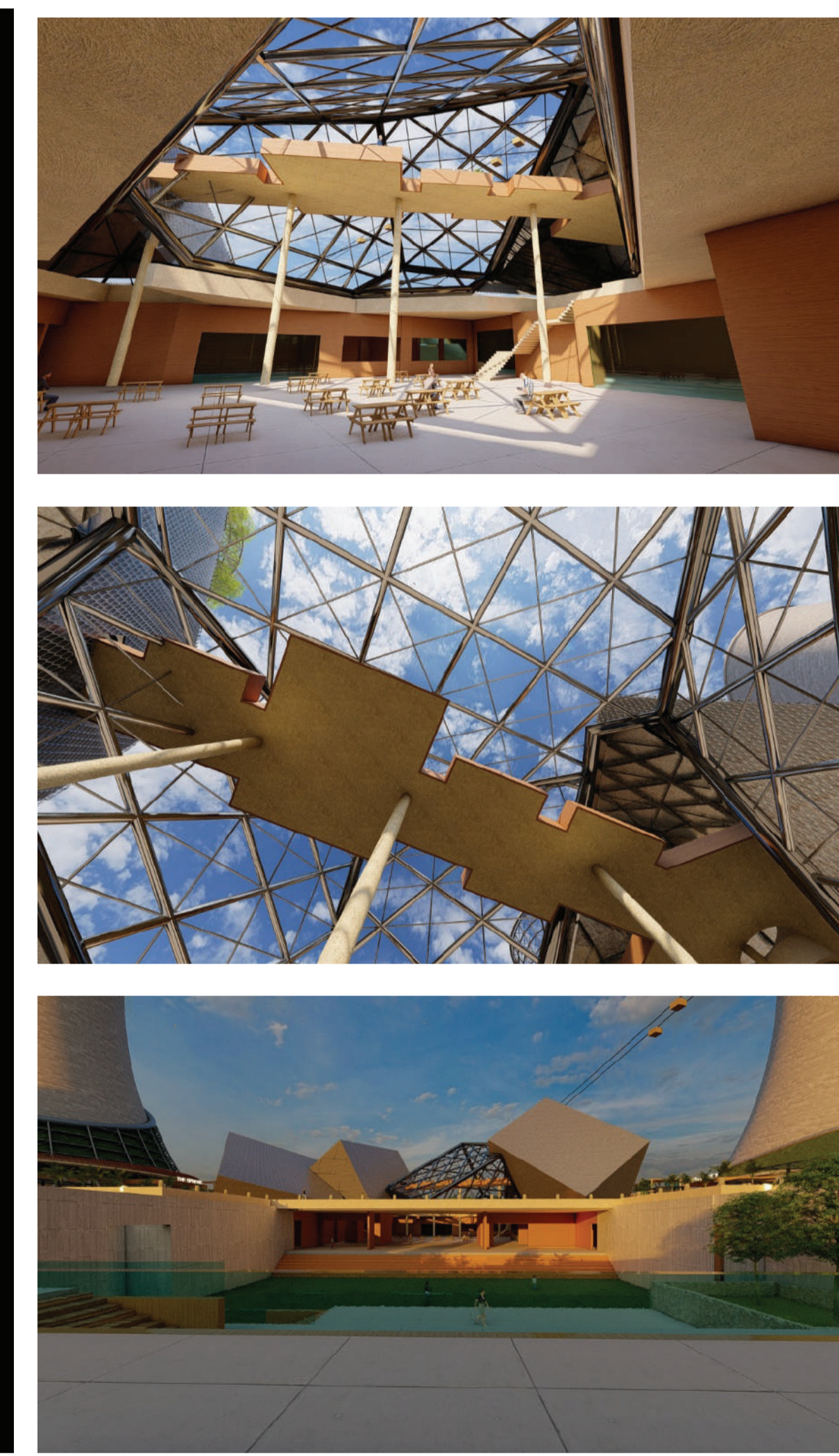
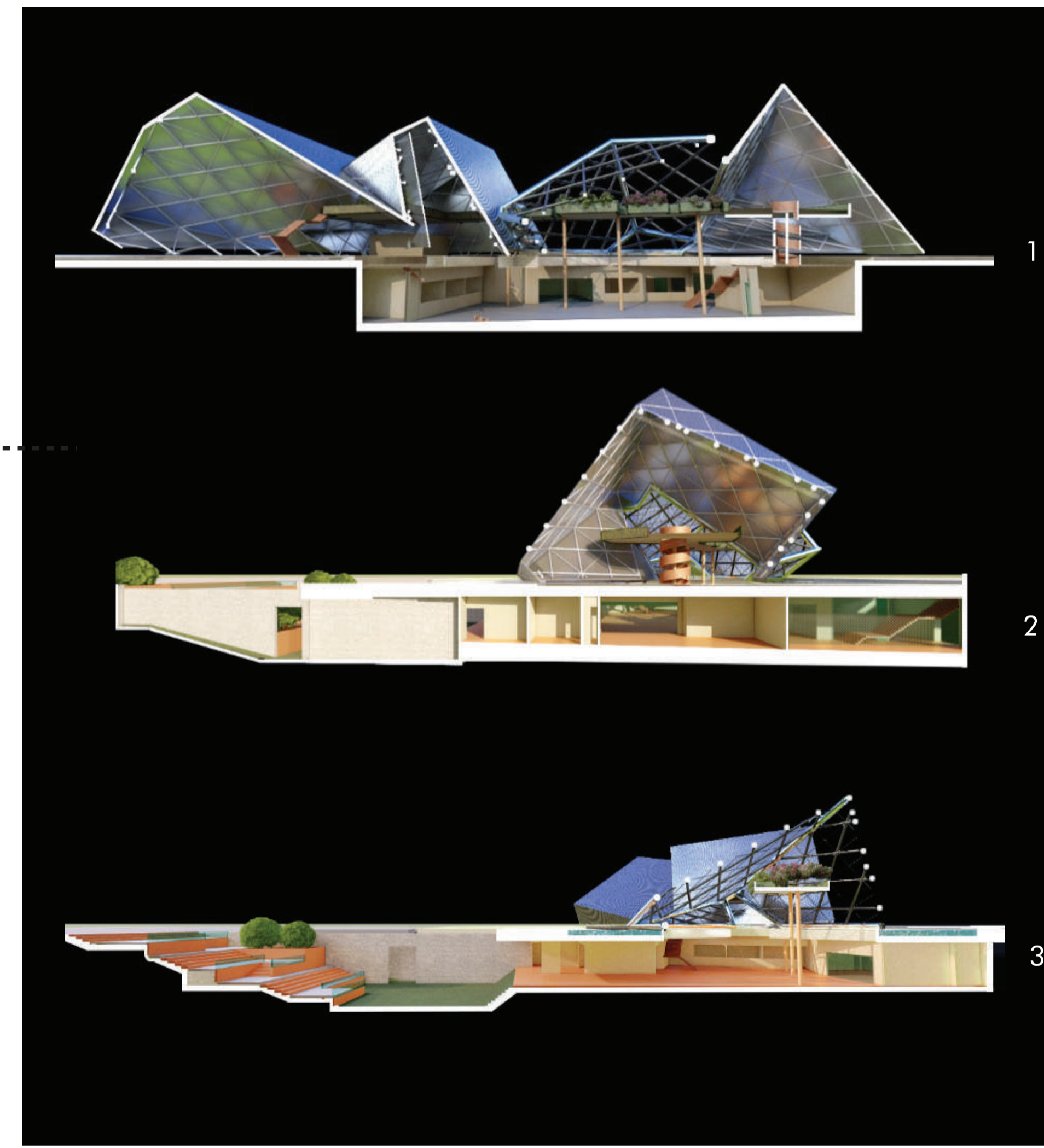
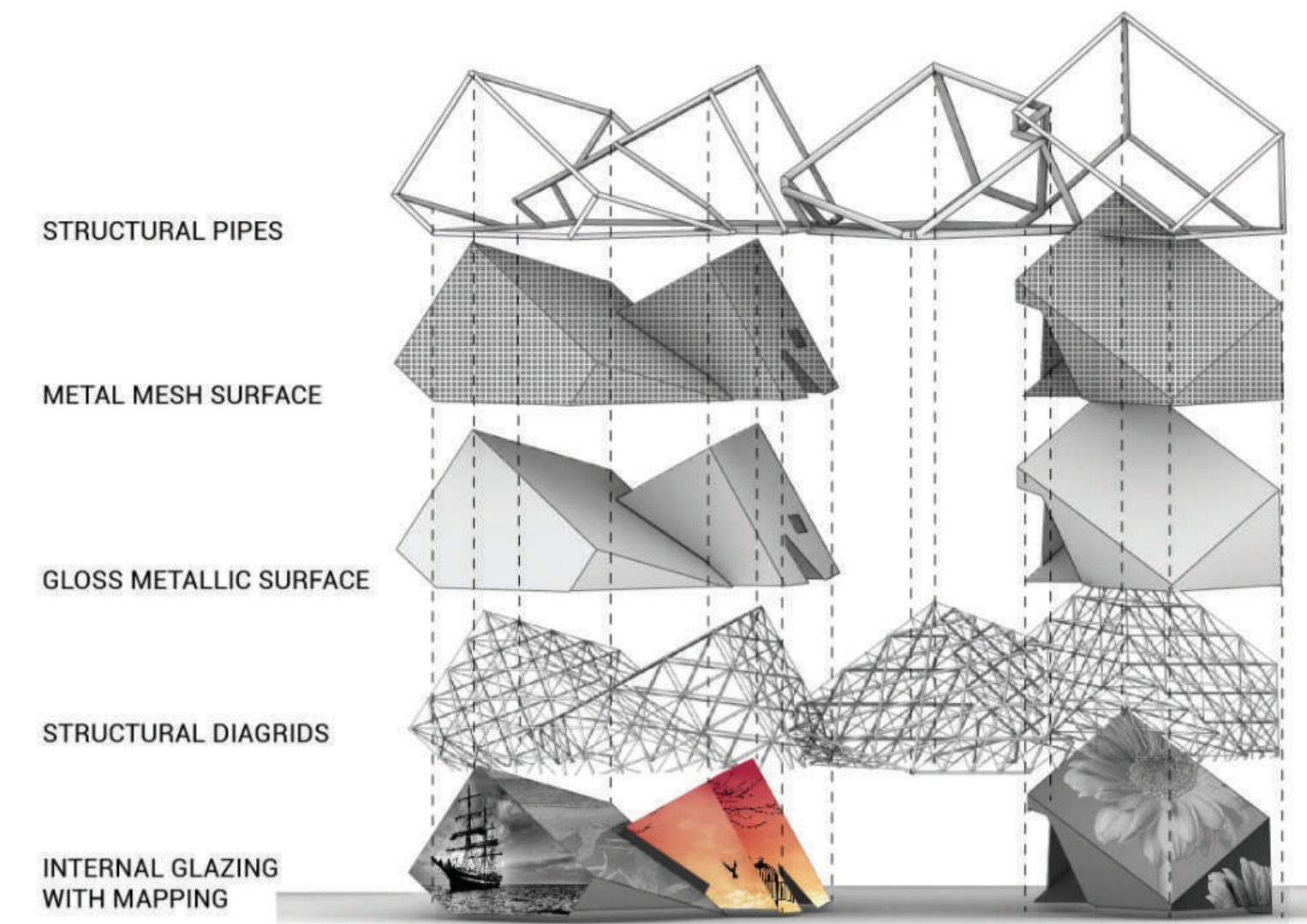


FALLING CUBE PAVILLION

The central part of a strong symmetrical site becomes of prime importance. The very idea of something was destroyed and now its the time to regrow and re-emerge shall start in this zone. Therefore a 4 cubes were arranged organically sunk into the ground with reflective surface showing strong broken reflections of hyperbolics in the linear angular planer surface of the cubes.

The old purpose used to be water resoviers in the ground thus giving basement becomes resonable. ground consists of reception , help desks and multipurpose halls. A mezanine is added for clubbing activities with viewing decks. basement is a foodcourt zone opening by a sunked stepped court and lit by a diagrid trasnparent cube over head.

Structure is a cube diagrid with mesh and metal panels.



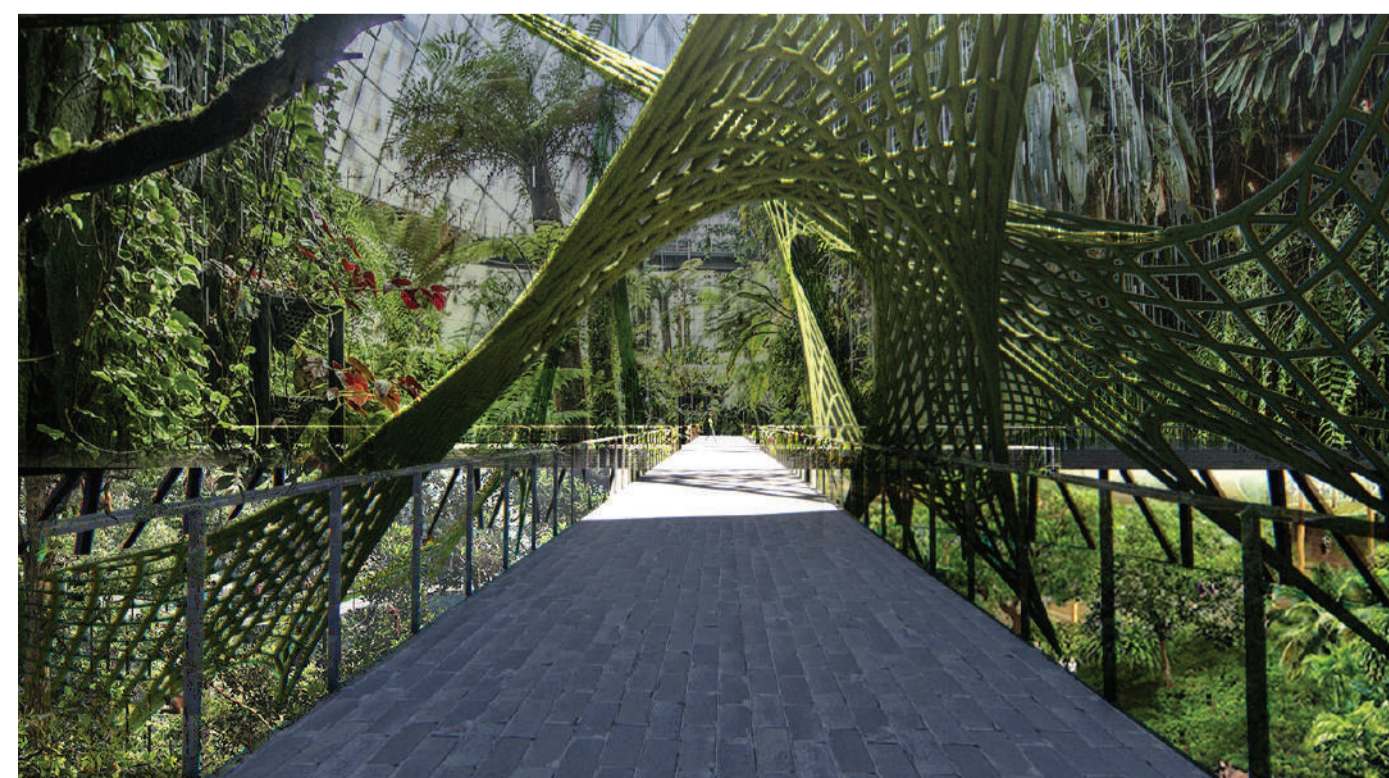
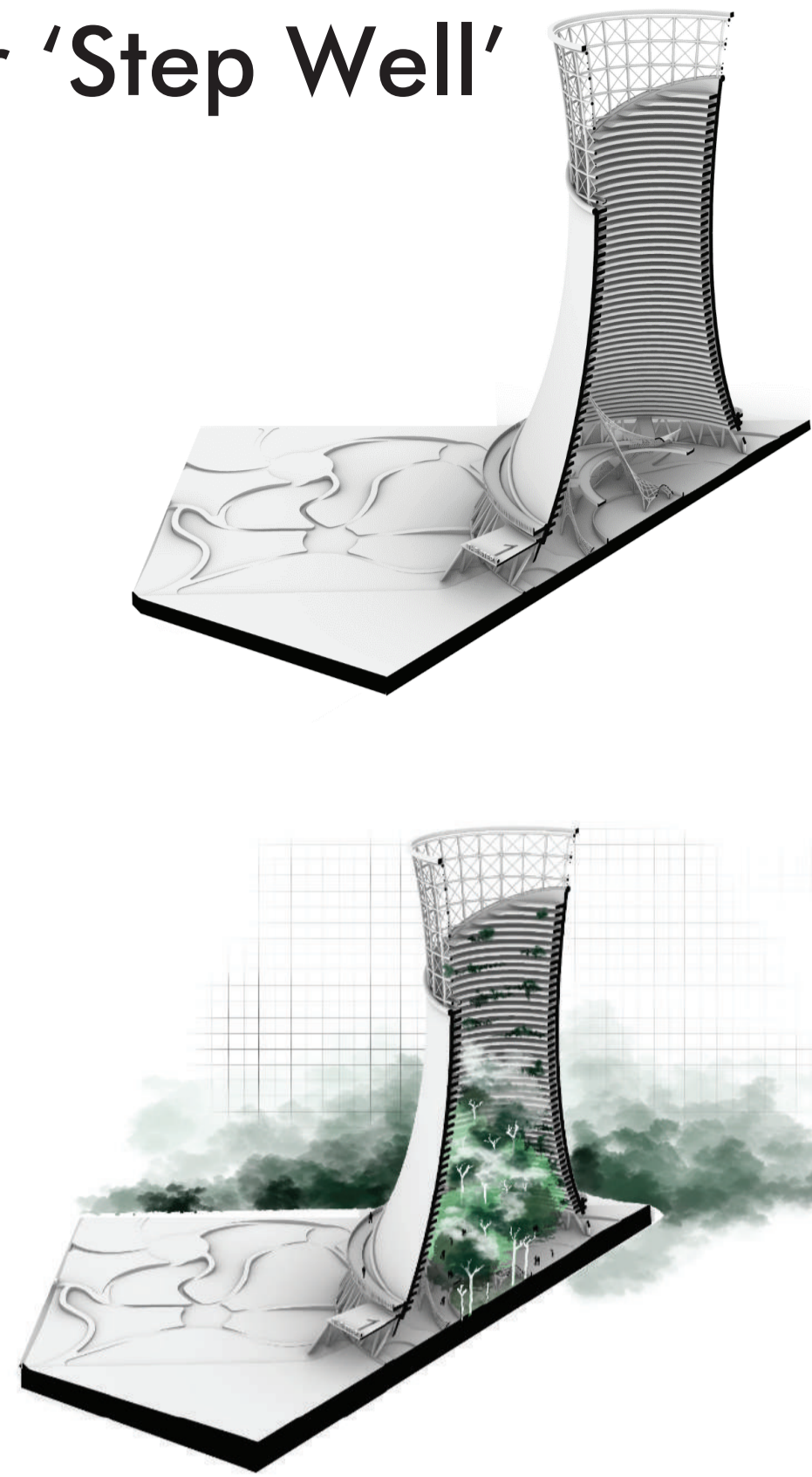
1. Tower 'Step Well'

TOWER 1 IS CELEBRATED AS AN INVERTED STEPWELL WITH VERTICAL GREENRY ON THE INNER LINING OF THE SHELL.

SERIES OF RINGS ARE MADE TO CREATE DRAMA IN THE INTERIORS. THE CENTRAL VOLUME REMAINS EMPTY BUT THE TEXTURE AND FORM OF THE SHELL CHANGES GIVING THE IDEA OF PRESENCE OF ABSENCE IN THE SPACE.

IN THE BASIN ZONE PARK IS CARRIED FORWARD INSIDE. DURING HOT CLIMATE THE ENVIRONMENT OF THE PARK STILL REMAINS COOL AND USABLE. MESH IS PROVIDED TO HELP CLIMBERS GROW VERTICALLY.

SHELL IS CHOPPED 45 DEGREE TO THE SOUTH TO BRING QUALITY SUNLIGHT.



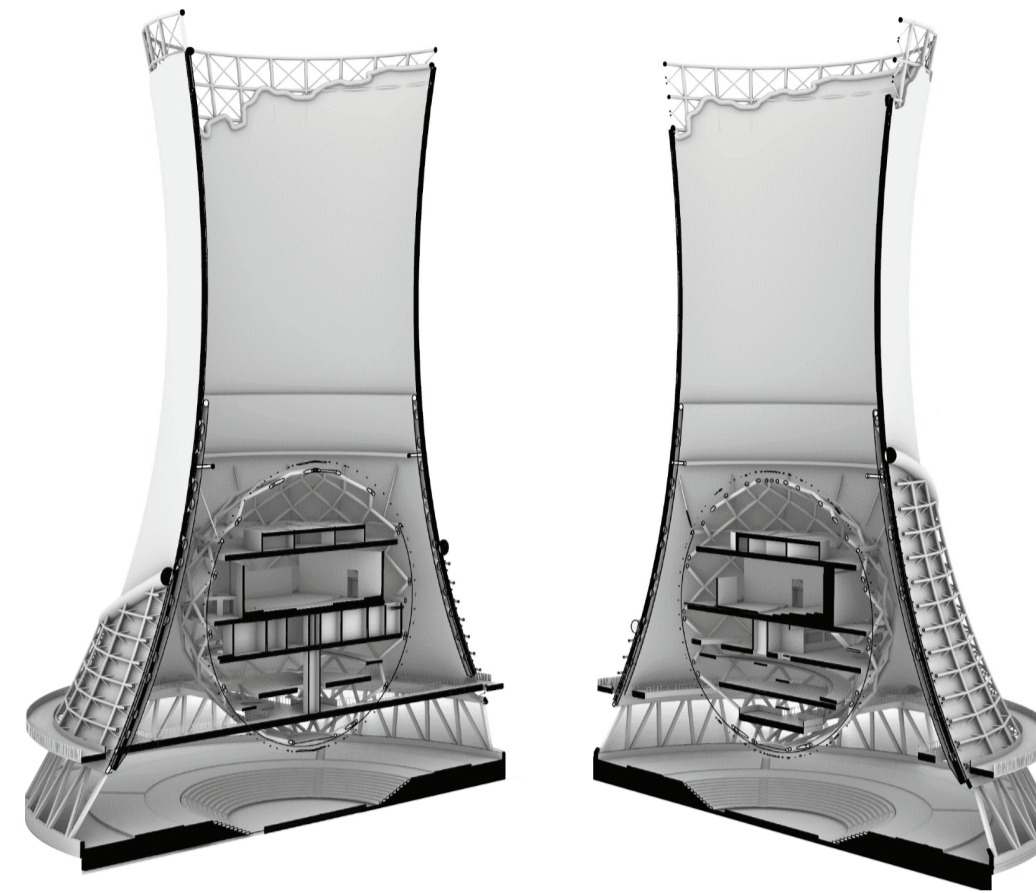
2. Tower 'The Sphere'

SECOND TOWER HAS A SPHERICAL STRUCTURE HANGING FROM THE NECK OF THE TOWER WITHOUT INTERFERING THE STRUCTURE AND INNER FACADES OF THE SHELL. IT OCCUPIES THE EMPINESS OF THE SHELL.

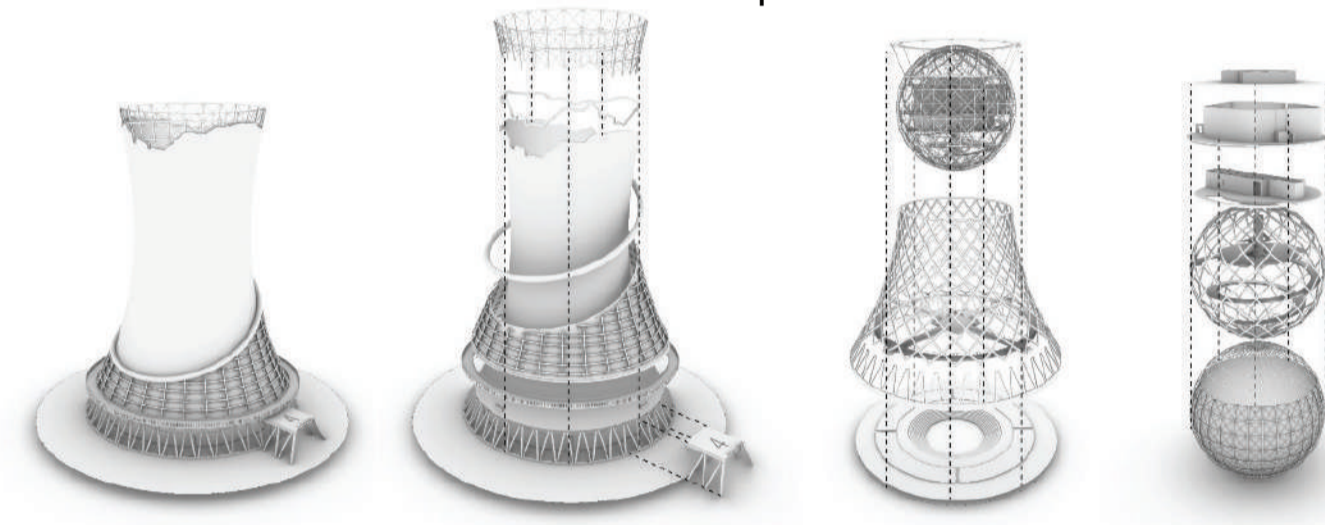
THIS TOWER IS FINE AND PERFORMING ARTS ZONE.

THE SPHERE ITSELF HAS TRUSSED SLABS AND SPHERICAL DIAGRID HANGING FROM THE TENSION CABLES FROM THE TOP WHICH IS THEN CONNECTED TO THE HYPERBOLIC DIAGRID RECREATED IN THE SHELL.

STRUCTURE IS INSPIRED FROM THE TUNED DAMP DUMPSTERS IN HIGH RISES.



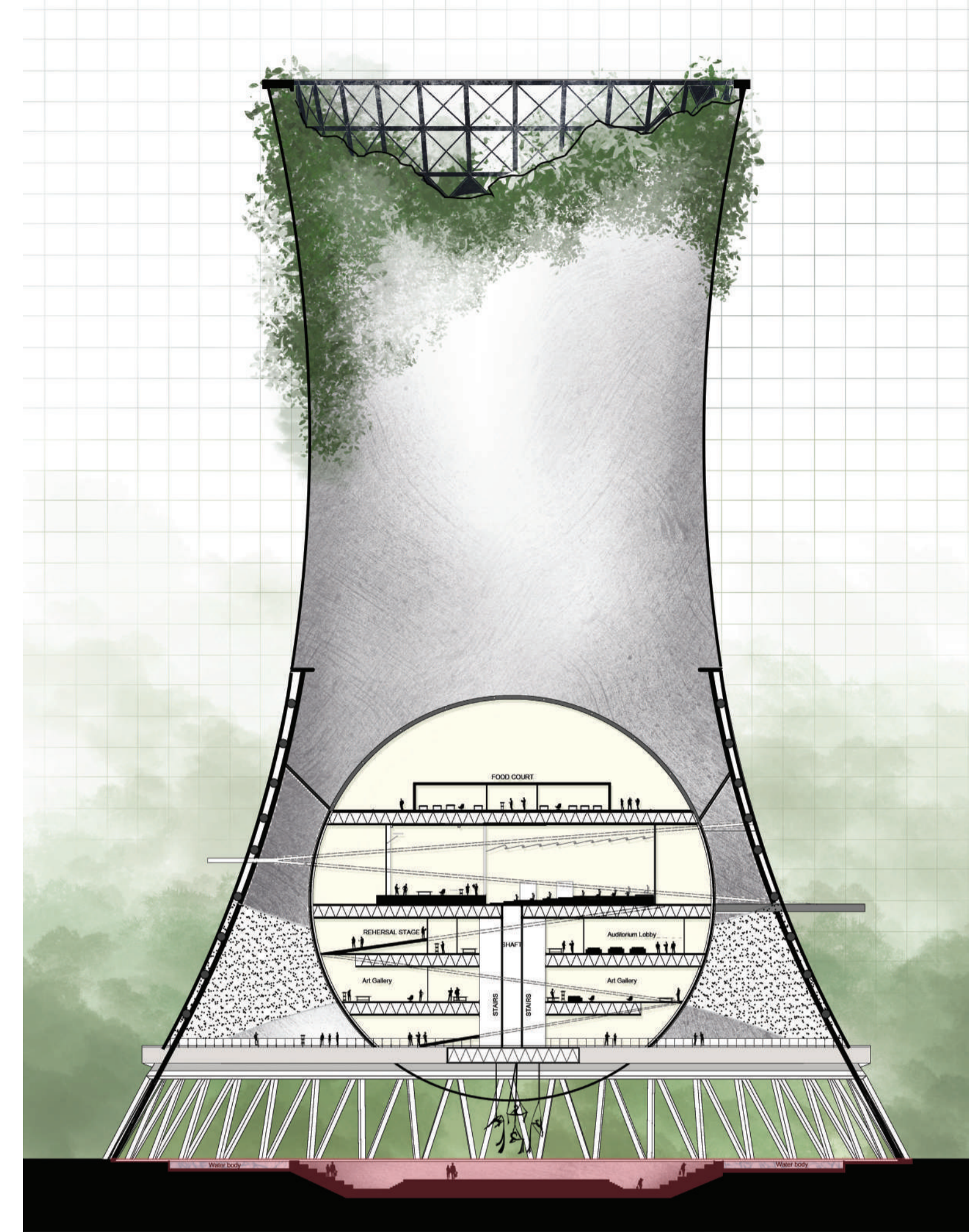
Perspective Section



Components

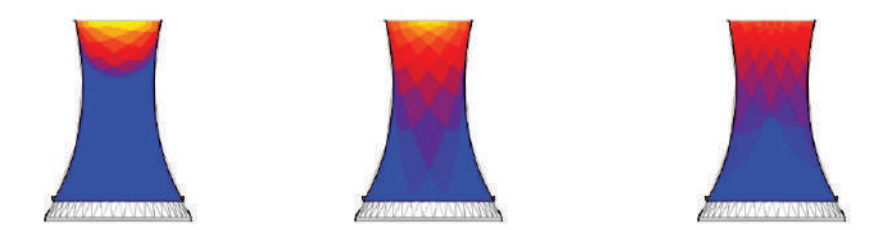


STRUCTURAL SYSTEM REFERENCE

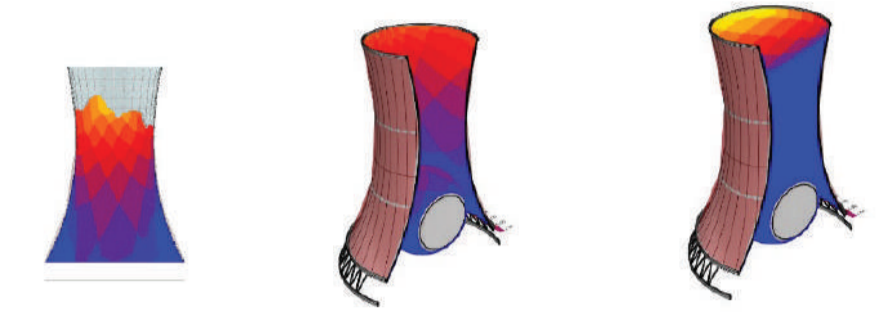


SPHERE CONSISTS OF ART GALLERY EXHIBITION AUDITORIUM AND FOOD COURT. ALL CONNECTED BY CENTRAL CORE AND A GUGGIEHIM LIKE RAMP. THERE IS NO DIRECT ACCESS IN THE SPHERE FROM SHELL. OUTER 1.2 METER TRANSVERSE SYSTEM GIVES ACCESS TO THE SPHERE. THE TOWER IS ORGANICALLY CROPPED WITH OVER FLOWING CREEPERS CONTRARY TO THE HIGH TECH ARCHITECTURE INSIDE A CONCRETE JUNGLE.

Cooling towers ANALYSIS

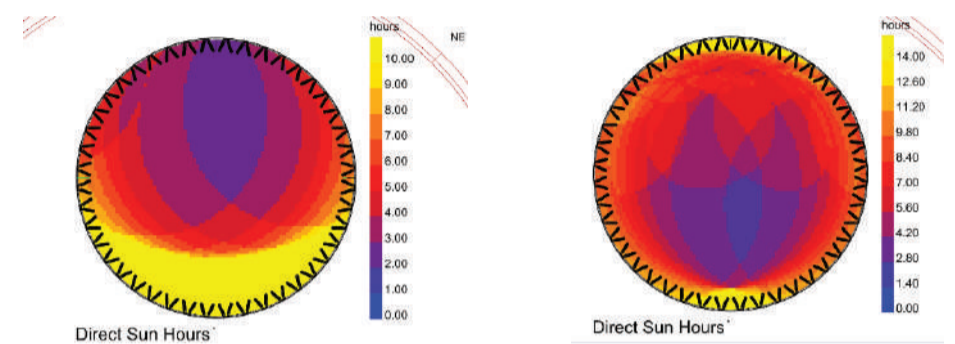


Solar analysis inside Cooling towers



Solar analysis inside trimmed Cooling towers

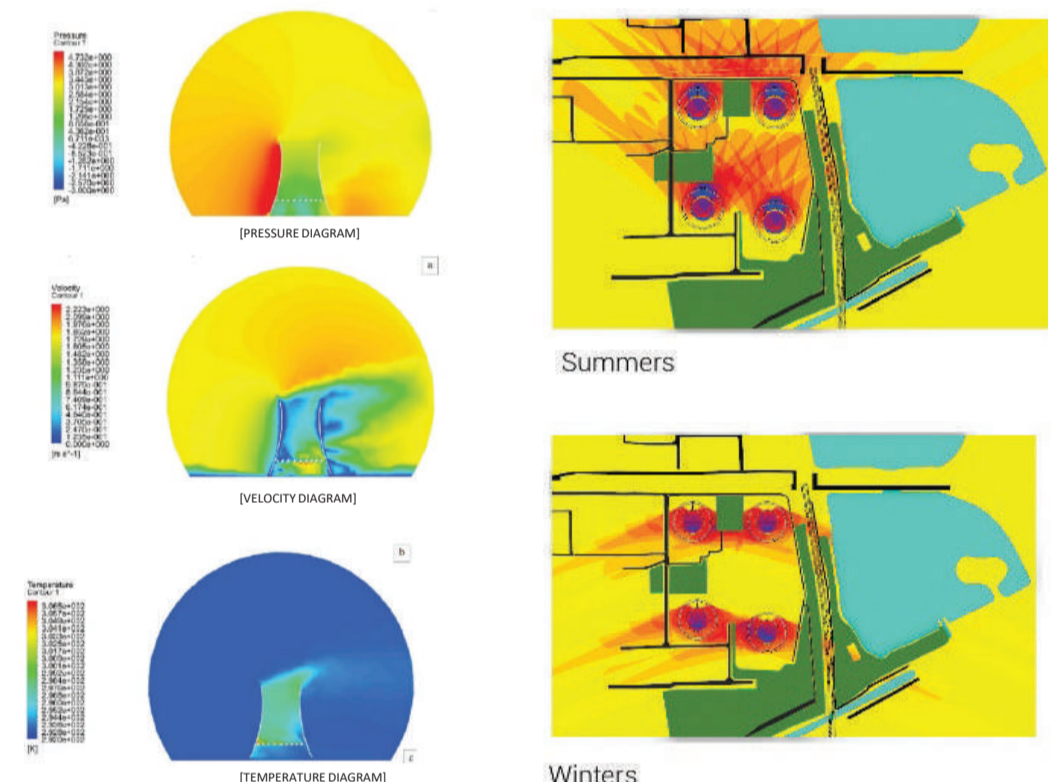
Solar analysis inside Cooling towers with sphere



Direct Sun Hours

Direct Sun Hours

Cooling towers basin SHADOW ANALYSIS



Cooling towers SHADOW ANALYSIS

