

**Thessaloniki  
ConfEX Park**

## 1.0 Site Plan

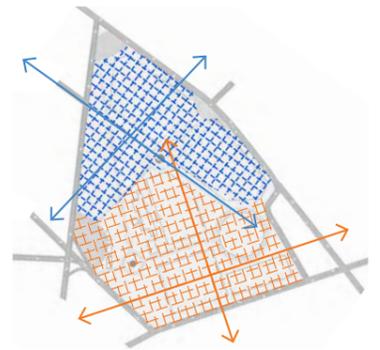
### A Metamorphic Grid

This project is about variety, change and metamorphosis...

...it's about stitching the city together through this site, creating a vibrant district and achieving this through a living grid structure. The grid layout forms and organizing masterplan for the entire area that enables flexibility and change to take place within.

A grid provides structure and order but also allows for variety and change within. We have described this as a living grid, as it should allow city life to thrive and develop. Residents and visitors can occupy, personalise and enjoy a mosaic of different spaces and places. The ConfEx park becomes not just an Exhibition area but a public hub for the city.

We have created a grid and sub-grid that provides a framework to respond to the needs of your brief whilst locating the different building types on the site. This organizing masterplan creates an efficient, flexible and adaptable structure where different uses can be modified and interchanged over time. In essence it allows for a metamorphosis of the site to reach its highest potential: a metamorphic grid.



**Metamorphic Masterplan...**  
...Woven into the City

**Creating a Living Grid...**  
...A Mosaic of Possibilities

**Elegant floating roof planes**  
...Sailing over the site

## 2.0 Architectural Concept

### Understanding the Urban Grain

The basis of our proposal is rooted in:

- A sound understanding of the urban development and historic layering of the site, its context and the wider city of Thessaloniki.
- The present-day urban grain of the surrounding area and the importance placed on both the axis between the sea and mountains, and the extension of the church axis as part of the site's masterplan.

Located at the fringes of Hebard's Beaux Art plan, the redevelopment and scale of the Expo site brings the opportunity to introduce a new urban grid. One which

will provide an underlying template for organising the new buildings and landscape, whilst reconciling the connecting the East and West Sectors of the City.

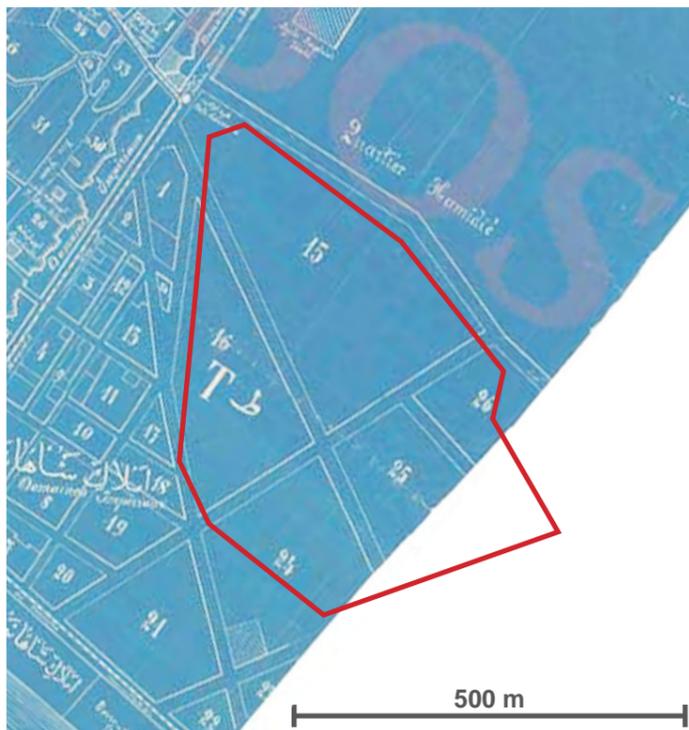
This new grid is defined by the Axis of Hagia Sofia Church – AAMTH, which runs parallel to the coastline; and the Museum Axis which runs perpendicular to the coastline and connects the sea to the mountains.

The decision to 'turn' the grid was made to allow for the efficient spatial planning of the Exhibition Halls on the Plots defined by the Masterplan (I<sub>1</sub>, I<sub>2</sub>, 2 & 4).



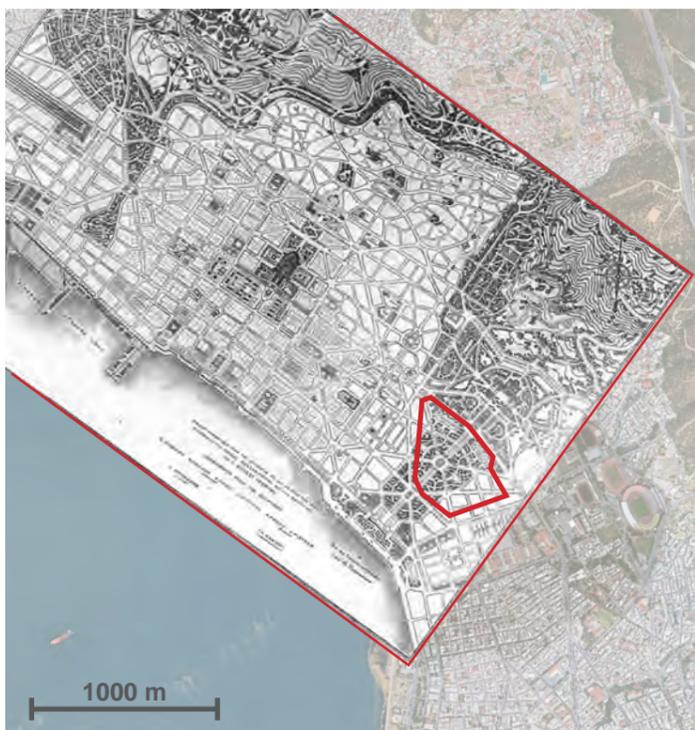
#### The City & Site Today

- Modern European grain surrounds the Ano Poli historic old town. A characterful blend of old and new.



#### Pre 1917 City Plan

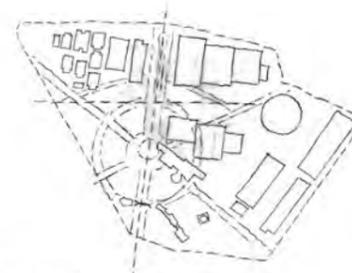
- The Medieval / Ottoman city layout before the Fire of 1917 and the subsequent Hebrard Masterplan



#### Masterplan by Ernest Hebrard (French), Circa 1917

It is the basis of today's city layout, although was never fully completed.

- Beaux-Arts inspired layout
- 'European Metropolis'
- Demolished medieval / Ottoman street layout
- Formal boulevards, symmetry
- Central axis carefully composed around important ancient Byzantine churches & mosques.



## 2.0 Architectural Concept

### Learning from Thessaloniki's Varied Landscape

The landscaping approach addresses three different aspects of the site:

1. At a macro scale it is about linking the east and west urban grain of the city through a green landscaped zone that also connects the mountains to the sea.
2. It provides a flexible interchangeable series of outdoor green spaces that can be designed to respond to the different needs of the city and your brief.
3. It should enhance well-being and promote ecology and sustainability through native landscaping and the use of green facades and low carbon materials.

The site has a great opportunity to 'complete' this green corridor and frame the vistas to and from the sea with landscaped, tree-lined routes. We want to enhance

the public realm and create a variety of different outdoor rooms with a palette of native landscape species and of tree-lined streets, plants and shrubs that create different colours, textures and aromas - a celebration of the culture and vibrancy of Thessaloniki. Fragrant gardens of lavender, thyme and sage are complemented by lines of olive and pine trees.

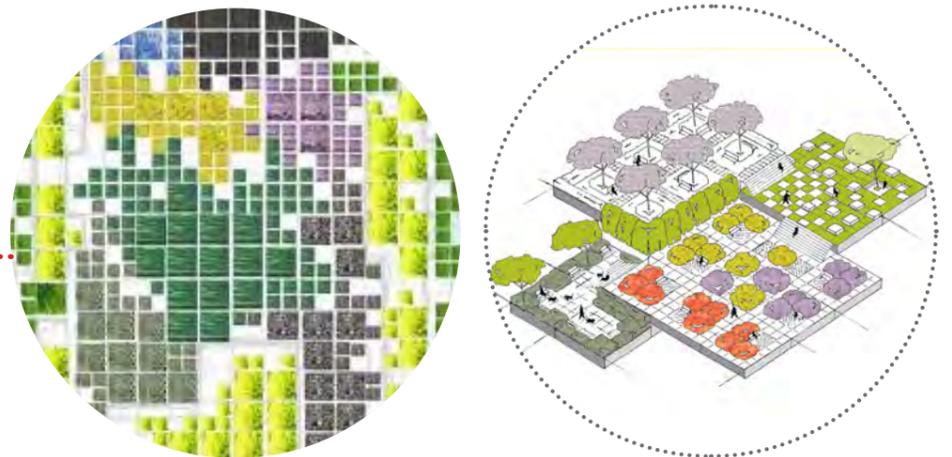
The imposed grid blurs the boundaries between landscape and building, indoor and outdoor. It creates a framework for the Expo site to be broken down and fragmented into a mosaic of different types of spaces and places and is highly adaptable and reactive to future requirements. Gardens on the ground, gardens on the roof – a series of landscaped terraces and green roofs form a network across the site.



### A Mosaic of Parks

#### Thessaloniki: A Mosaic of Cultures and Religions:

In the historical centre we can identify 6 Religions that left their mark in the city with their places of worship and their neighbourhoods: Islam, Orthodox Christian, Evangelical, Catholic, Jewish, Armenian. Since its foundation numerous of cultures, nations and religions have lived and thrived in the "bride of Thermaikos".



All the parks of the city are reflected in the new ConfEx park

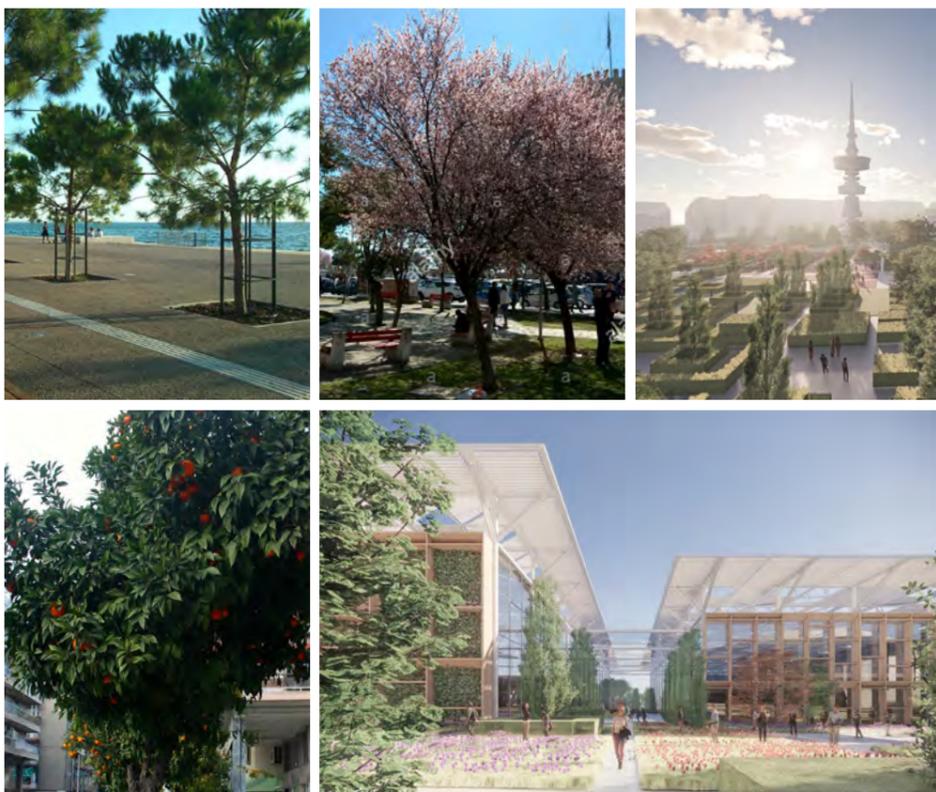
#### Thessaloniki is a Kaleidoscope of experiences

The city provides a rich mix of experiences for the visitor combining unique culinary tastes collected from all different civilizations, historical monuments spanning 2300 years. The new ConfEx park will be a mosaic of the city's surrounding landscaped area, reflecting its layers of history.

#### The power of Thessaloniki is the constant Metamorphosis it undergoes:

This allows the diverse and the new to flourish and evolve. The proposed solution follows this principle creating a vessel for the change to be received, to be established, to grow. The masterplan embraces time as a 4th dimension in the design and addresses the future of the city in the same manner that the Metropolis has taught. **We have provided a flexible and adaptable system for both the architecture and landscape to change over time; it is not a fixed design.**

#### Creating a palette of local planting, vegetation and trees for the scheme:



A variety of local tree species with low water demand to suit the arid climate are used to line pedestrian streets and provide shade: olive, blossom, and pine trees.



A mosaic of shrubs and fragrant herbs: lavender, sage and thyme. The grid also provides flexible spaces for hard landscaping, water features playgrounds and kiosks.

## 2.0 Architectural Concept

### Initial Ideas

Creating a Mosaic of interchangeable and adaptable spaces.

- Activating space with the Living Grid
- Blueprint for highly efficient special planning
- A flexible and future-adaptable module
- Allowing for Change

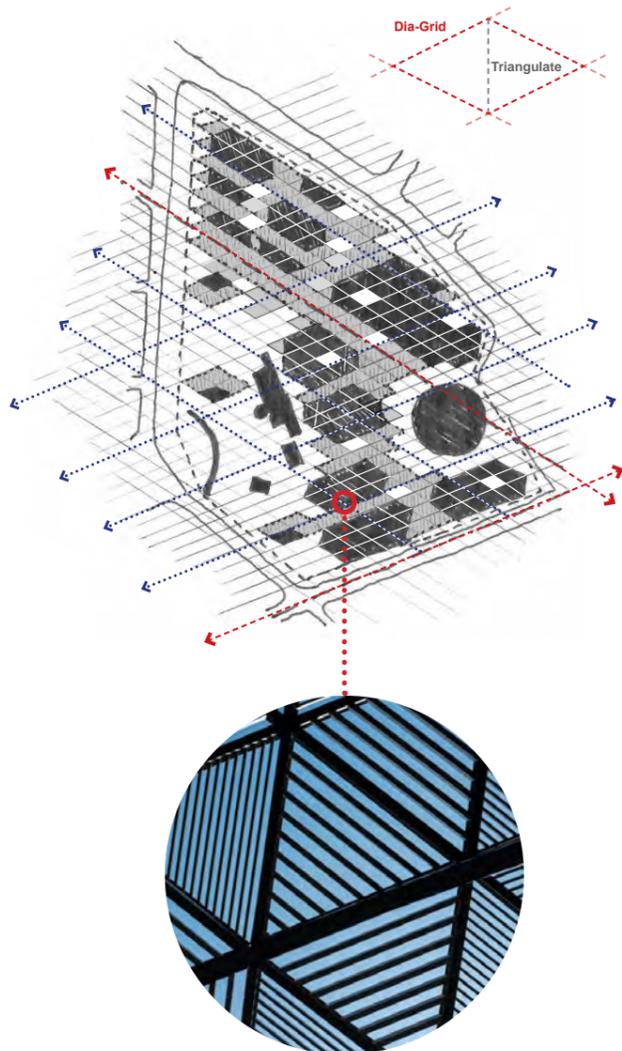
The masterplans axial routes were used to develop a series of planning grid studies (below) which could be applied to the site. These sought to provide an underlying organising principle for the new buildings and landscaped areas. Efficient buildings, functional event, spaces and micro-parks are incorporated to activate the grid.

The concept of the Mosaic extends beyond the planning of the site's buildings, and is representative of the diversity of cultures and variety of different spaces found throughout Thessaloniki. It will build on and enhance the historic layering of the city.

From a practical perspective, following an underlying grid makes for highly-efficient spaces, servicing and structure. Allowing for large open-spans, logistical planning which support the site's core functions as a world-class exhibition venue.

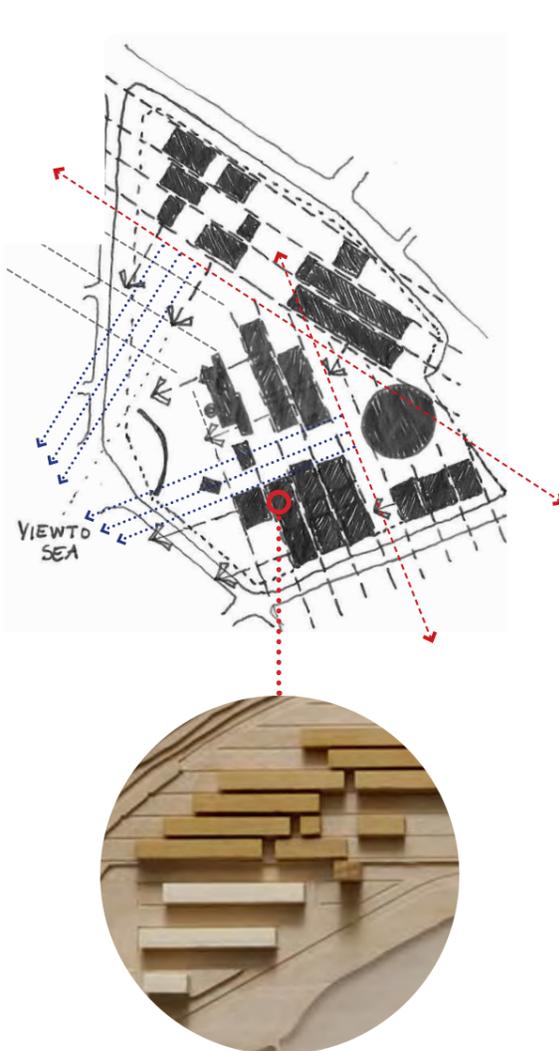
A concept of a 'dual grid' of two converging axis was developed forward, aligning best to the natural forms of the site and maximising the potential for adaptation and change in the future.

#### Singular Rhombus Grid



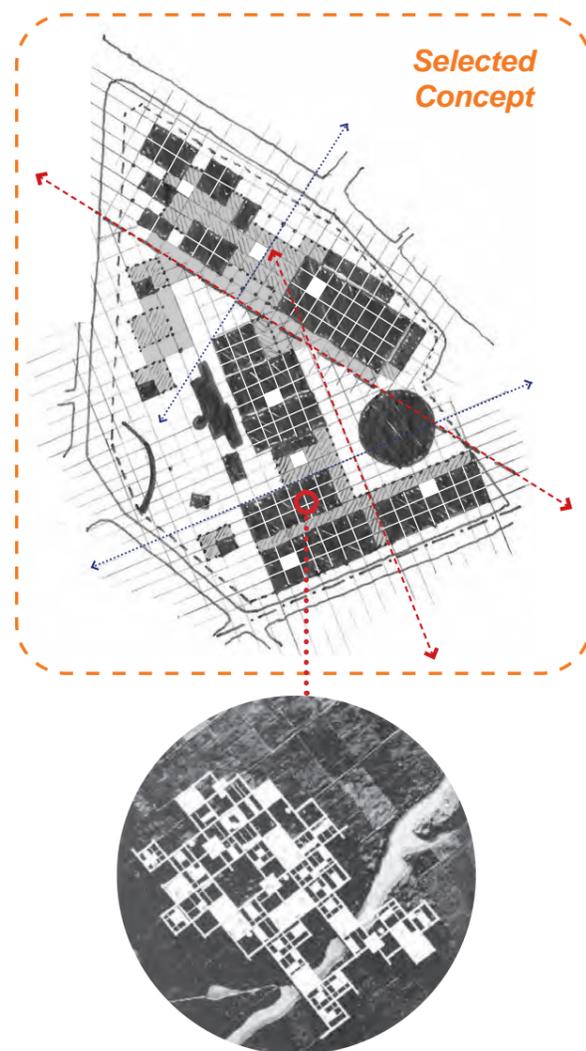
- Overlaid grid with solid infill and openings across the site
- Dia-grid set out by the Church Axis and the White Tower Axis

#### Terraced Strips Facing the Sea



- Building massing is terraced along the slope of the site
- Linear blocks are orientated to the sea views

#### Dual Grids Aligned to Major Axis



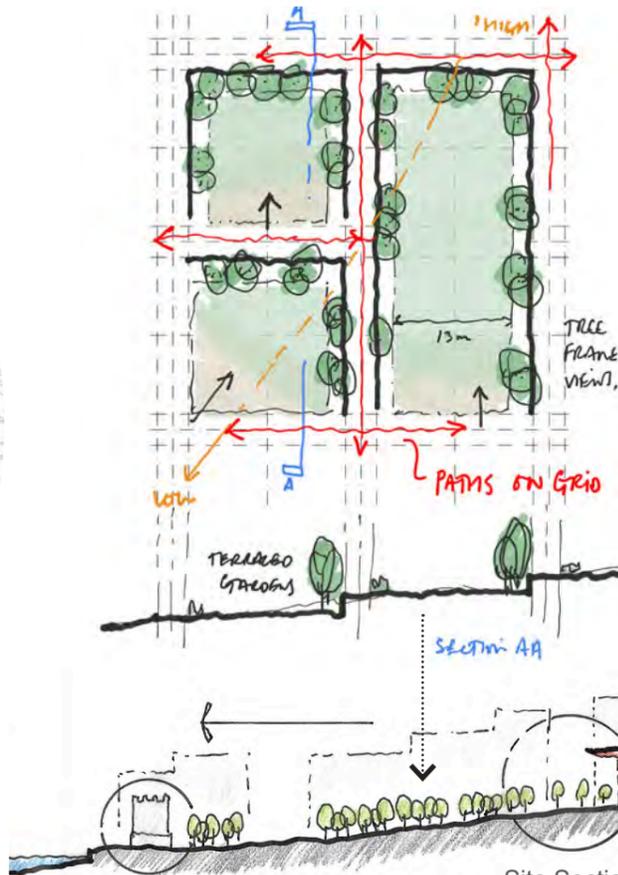
- Two converging grids align to the major axis surrounding the site.
- Easily adaptable and flexible for change in the future

#### Axial routes and an adaptive grid

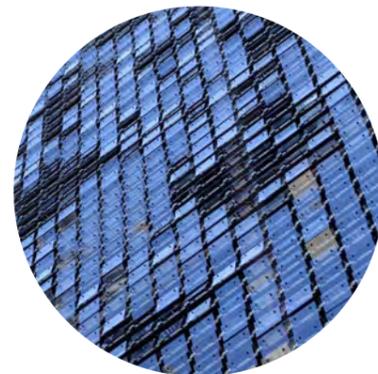


Grid defined by the major axial routes in the surrounding urban grain

#### Terraced landscaping grid



#### Shimmering roof grid



Site Section

## 2.0 Architectural Concept

### Design Development

#### Modular Architecture: a kit of parts

This grid also informs the character of the buildings from the beautiful and elegant overlapping roof planes of the exhibition spaces to the modular self shaded wooden facades inset with vertical planting. These together create a prefabricated kit of parts across the site allowing for rapid construction, high quality and lower costs.

The modular exhibition halls have moveable partitions under a light weight roof structure. The roof could host a variety of elements, including planted areas, apertures for natural daylight, opening for passive ventilation and angled PV cells.

#### Gardens: a mosaic of plant types and spaces

The gardens are about creating variety and vibrancy. Within our grid there are a series of outdoor rooms with a variety of different experiences. Some are intimate planted spaces, others more open with views to the sea. There are dry spaces and lush spaces, olive groves and lavender gardens, places for people to sit and enjoy the park or for children to play. Some areas are quiet and for reflection, others more busy for events.

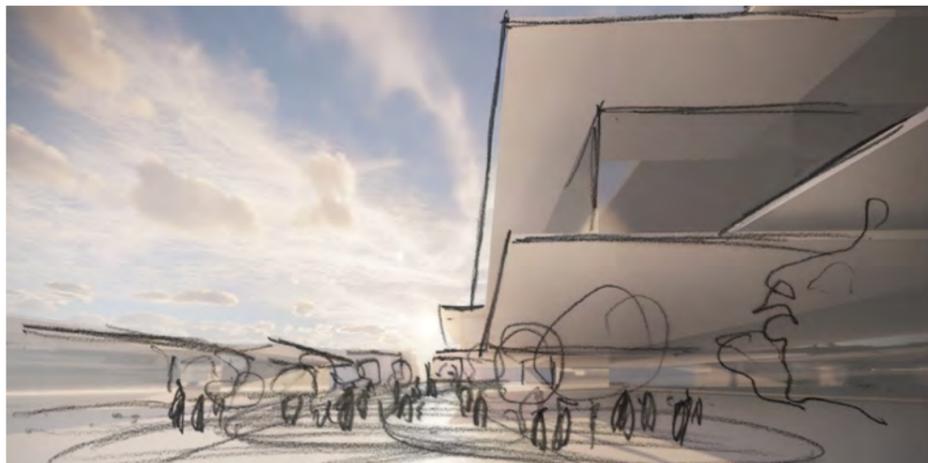
The streets area tree lined to help to create outdoor exhibition spaces, emphasizing the entrance experience. Seating is human scaled, such as those in the commercial business district with awnings and indoor/outdoor facades and green roof terraces.



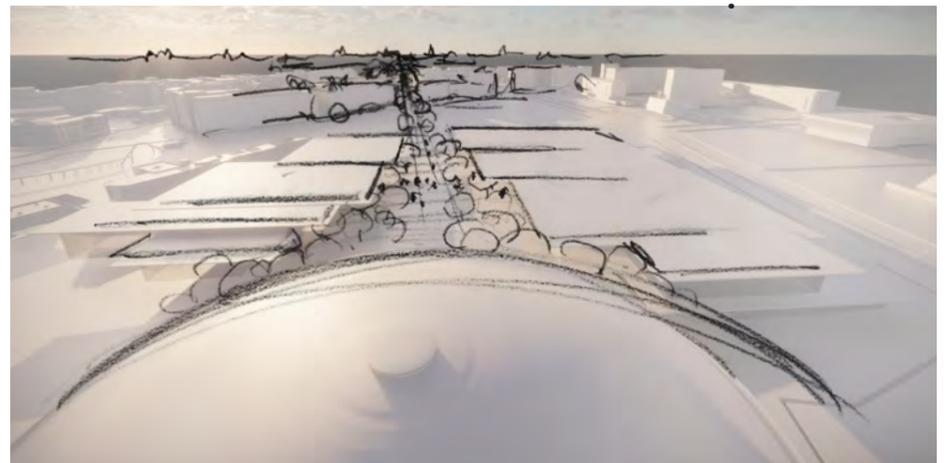
Axial view to the AAMTH building, framed by the exhibition buildings.



Elegant Roofs Planes... Shading the Buildings and Streets



Projecting horizontal roof planes provide a sheltered micro-climate.



Shaded axial routes link into the surrounding urban grain of the city.



The streets have tree lined routes helping to create outdoor exhibition spaces emphasizing the entrance experience as well as human scaled seating areas such as those in the commercial business district with awnings and indoor/outdoor facades and green roof terraces.

Roof Gardens for VIP Congress Events with views across to the city and sea

### 3.0 Technical & Structure

#### Modular Roof Grid

##### Roofscape: elegant sailing roof planes frame the axial routes

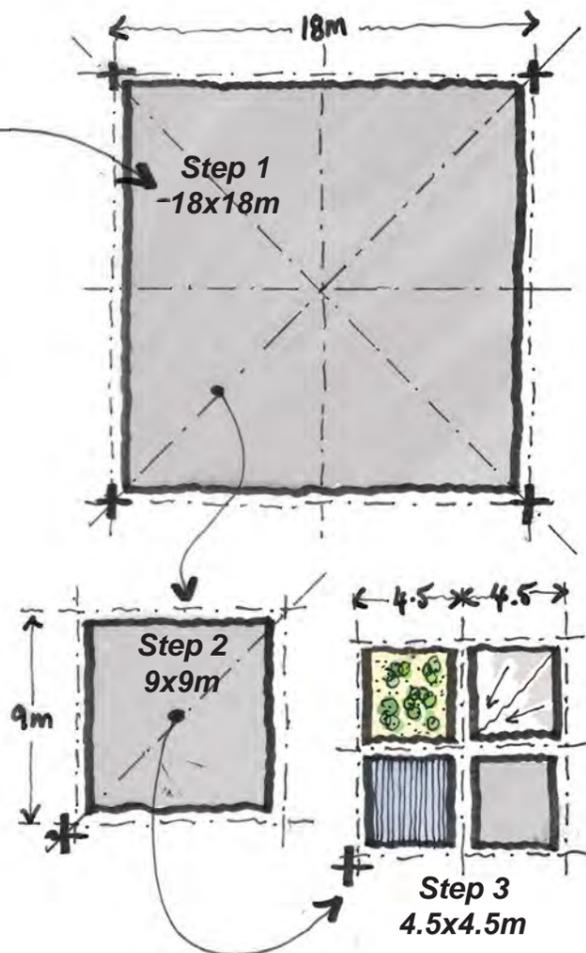
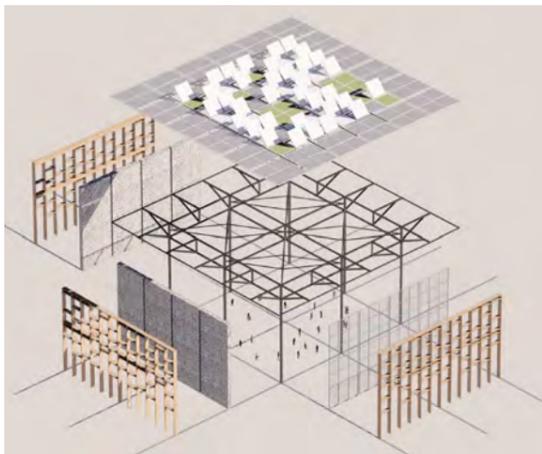
The roofscape creates a series of horizontal planes out of characterful lightweight elements. The roof areas comprise modular interchangeable elements that allow for natural light into the exhibition spaces, angled PV cells to generate energy and planted zones to encourage local wildlife habitats and diversity.

This also creates a series of striking roof planes that reflect the sunlight and sky throughout the day animating Heli Expo and giving it a strong presence, sense of place and recognisable profile on Thessaloniki's skyline.

##### An Adaptable Mosaic Grid

An underlying sub grid creates a module the allows for a variety of different spaces and functions – a mosaic of possibilities:

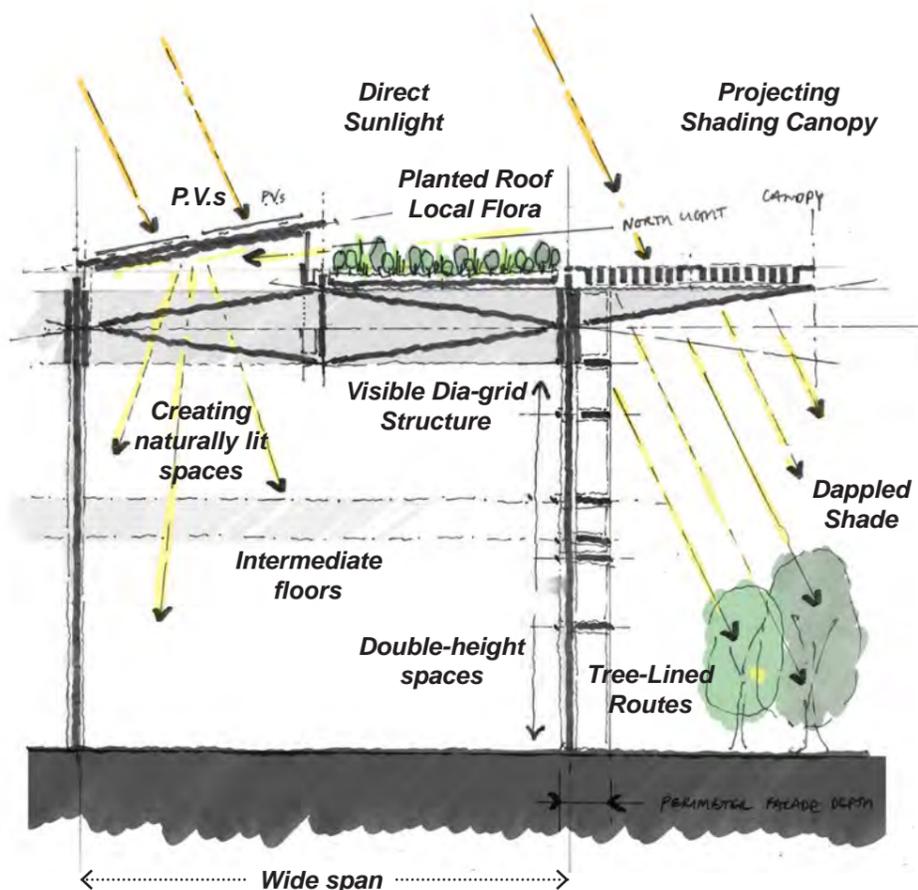
- From highly efficient functional and adaptable exhibition buildings
- To vibrant human scaled tree lined streets and commercial spaces
- Along with a variety of different landscape spaces and outdoor experiences



##### Grid Module Design Principle

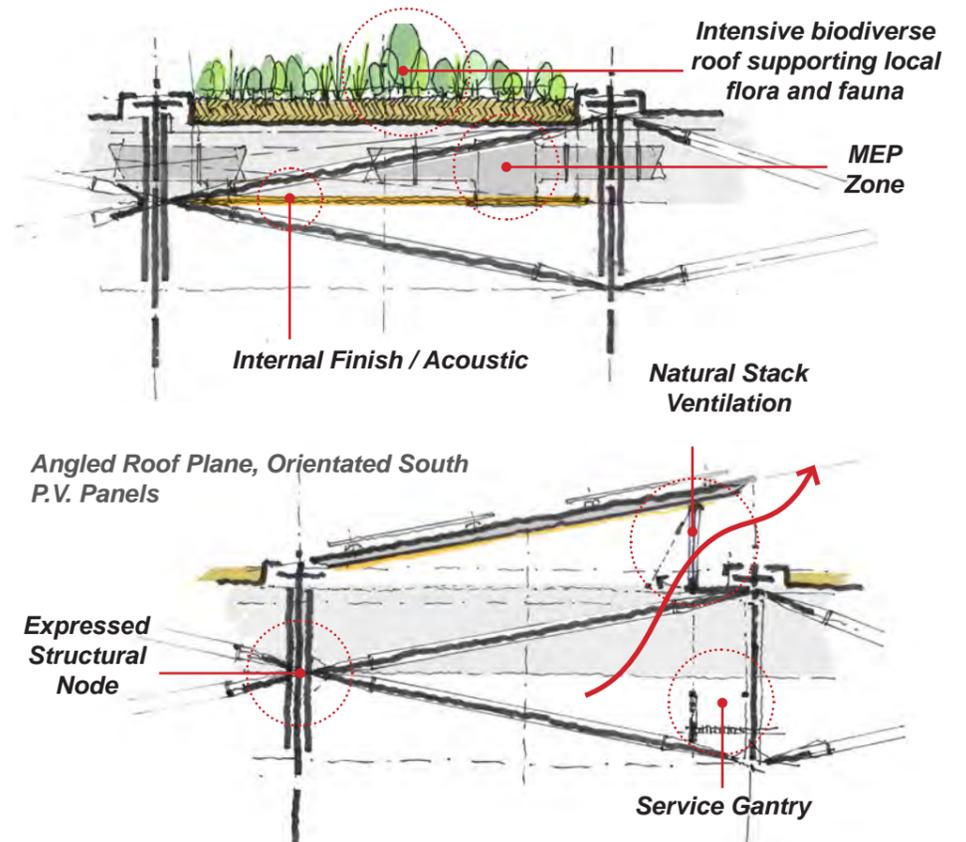
1. The underlying Living Grid model is based on a structurally efficient 18x18m grid. Where required, this can achieve a 54m clear-span to flexible exhibition spaces.
2. This grid is quartered to form a roof module repeated across the site, connecting together to form large-span, structure-free spaces.
3. The grid module is further broken down. This subsequent sub-division creates the mosaic framework.

##### Canopy Section Concept



##### Infill Modules - Roof Activation

###### Infill Type: Roof Light



## 4.0 Sustainability

### Mission Statement

The Thessaloniki ConfEx Park project is a monumental opportunity from a holistic sustainability perspective. Commissioning an infrastructure project of this scale amid the Climate and Biodiversity emergencies requires any proposals to respond responsibly to the challenges, and opportunities, of creating thriving spaces in accordance with the UN Sustainable Development Goals and within our planetary boundaries. Its large-scale presence within the city bestows it the responsibility of integrating to, and enriching the existing communities and characters, whilst its diverse human-oriented functions require subtlety and nuanced details. We propose to successfully mediate between these scales through deploying a rationalised regular grid across the site which will define the spatial language of the Thessaloniki ConfEx Park and help articulate the key axis at a more human scale.

We believe that a good building lasts longest, and part of the qualification for 'good' is its ability to become relevant to the needs of the moment through supporting adaptation. Whilst the anticipated uses of these significant urban interventions are understood, these are only their initial uses. Constructing buildings is a costly process; for finances, time, materials, and carbon emissions and we have therefore designed our proposal with adaptability in mind, so that the flexible, long-spanning building systems built on day 1 will stand the tests of time whilst best prepared for catering for the rich opportunity of future uses.

The diagram below encapsulates the key strategic moves in our approach to integrating sustainability in the design.



Water efficient fixtures and fittings preserve scarce resources.



Pre-fabricated approach to construction minimised on site waste.



Roof-mounted solar PV generates renewable energy for the buildings and electric vehicles.



Louvred canopies shade the buildings and provide pleasant micro-climates for people.



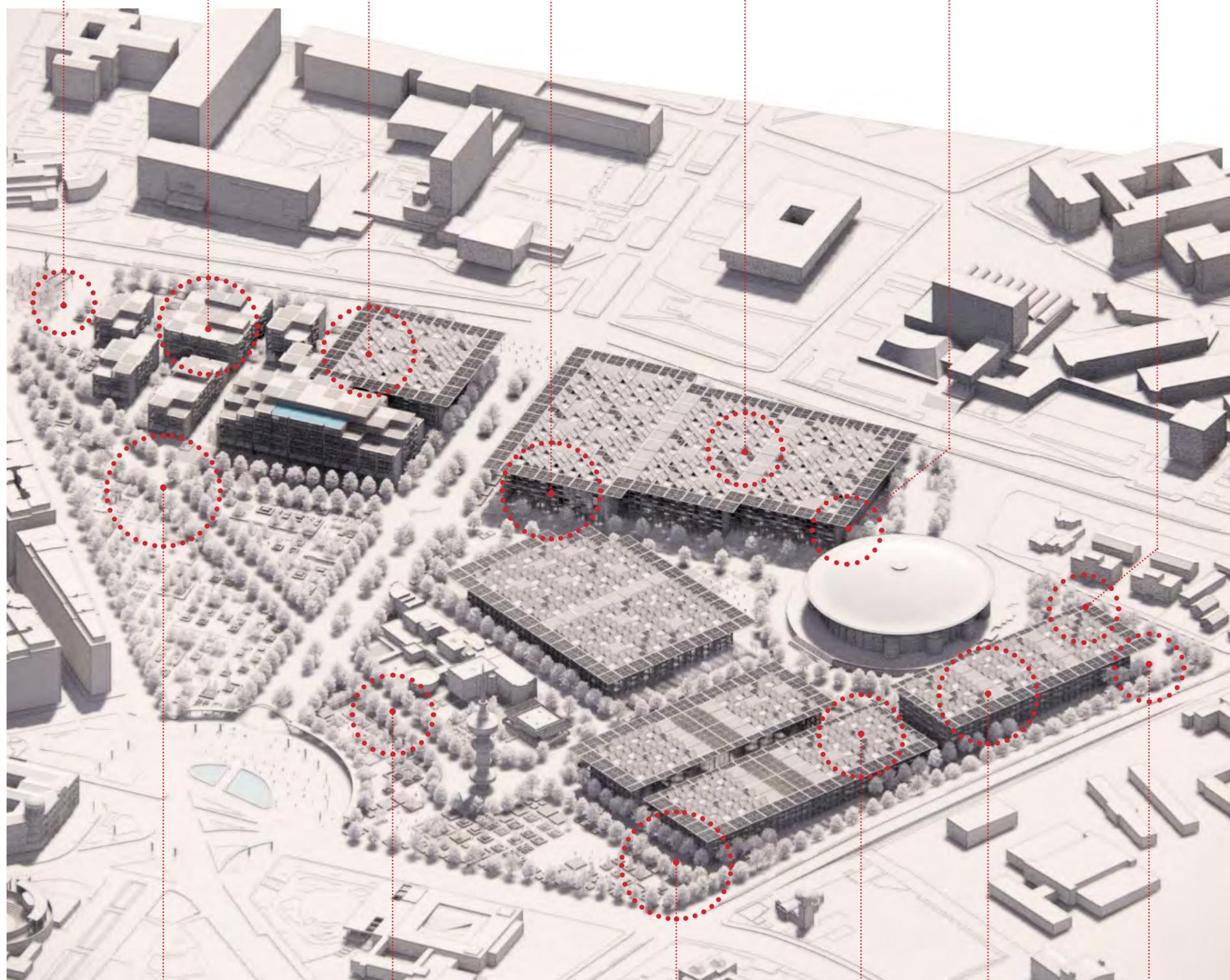
Natural light brought in by roof lights orientated to minimise solar gains whilst reducing energy demand and improving well being.



Radiant passive cooling from gabion walls enhance energy efficiency and improve thermal comfort.



Thermally efficient fabric and compact building form reduces energy and material use.



Car-free tree-lined avenues promote active transport including electric bicycles across the site, reducing emissions and improving local air quality.

Green corridors and spaces created using climate-appropriate planting and xeriscaping to minimise irrigation demands whilst supporting improved biodiversity.

Shading and evapotranspiration from planting helps create pleasant micro-climates and improves local air quality.

Ability to enhance fresh air supply to benefit comfort and well-being.

Highly efficient building systems.

Circular economy principals will re-use demolished building material on-site at its highest material worth.



## 4.0 Sustainability

### Landscaping Features

Sustainability is underpinned by system boundaries that define its sphere of influence, be it positively or negatively. We see the system boundaries of the Thessaloniki ConfEx Park extending far beyond the extensive site boundary of the master plan. The established three pillars of sustainability; economic, social, and environmental are still relevant and important lenses through which to evaluate sustainability.

We have begun mapping how our proposal will knit into, and support the existing peripheral economies of cafes, hotels, and businesses. Environmentally, our proposal joins the dots between a pattern of existing green streets and parks – creating green infrastructure that will benefit people and the local fauna and flora. The creation of the Thessaloniki ConfEx Park offers a unique social value opportunity to crystallise the green recovery to the global pandemic that global communities have been calling through. Local skills can be developed through a construction skills academy, investing in people, employment and a just transition to a green economy excelling in modern methods of prefabrication and the circular economy.

But the science has also clearly told us that efforts to date for sustainability have unfortunately been insufficient, and that the damage caused needs to be reversed through regenerative efforts. This is obviously core to the concept of the Thessaloniki ConfEx Park, in regenerating the tired and dated offerings on site.

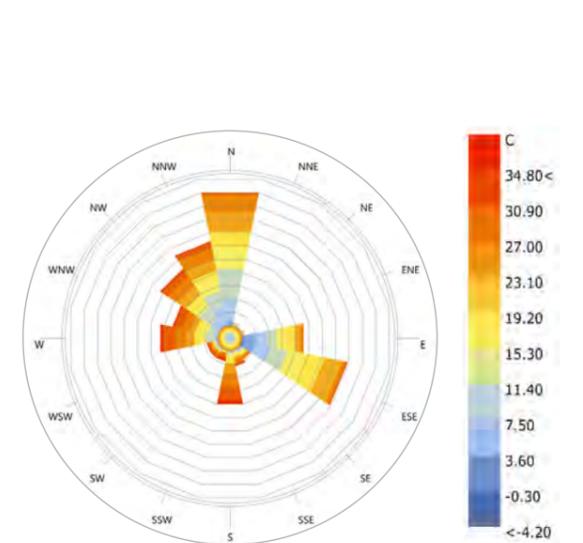
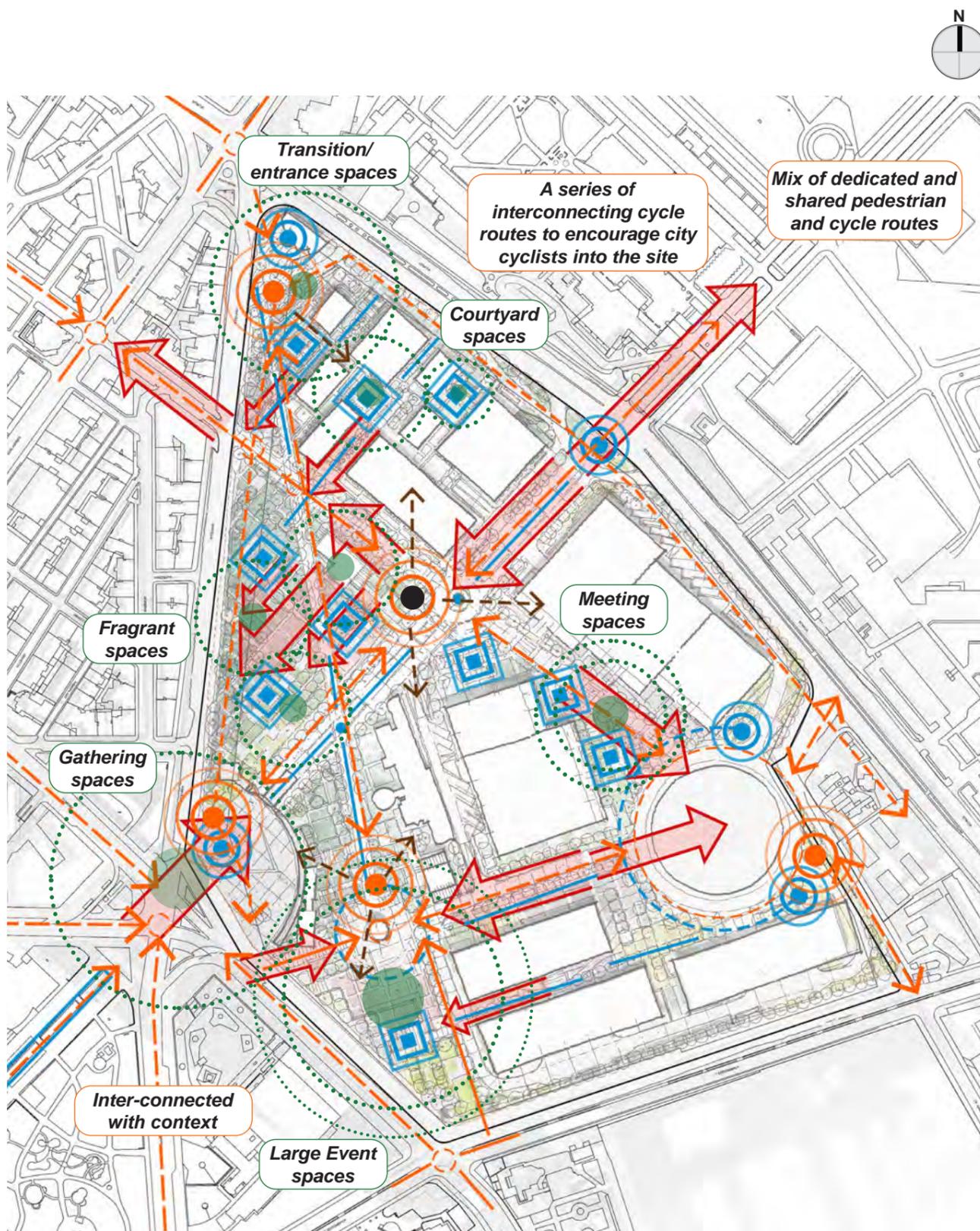
Biodiversity too needs regenerating, and our proposals look to enjoy the symbiotic

benefits for both people and the local fauna and flora through biodiverse and resilient public realms.

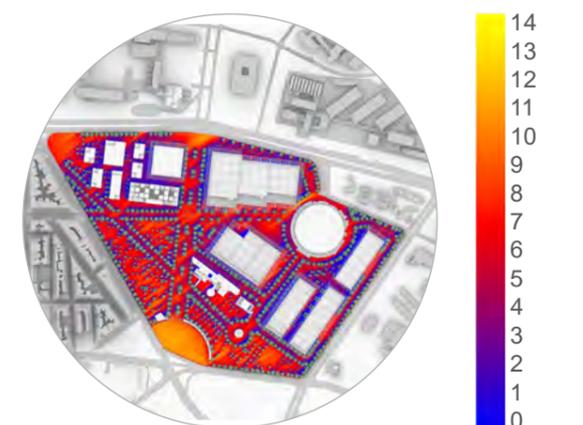
We are committed to 'Net Zero' which encapsulates both in-use operational energy emission and the embodied carbon emissions from construction. We are experienced in quantifying both complex challenges and driving them down throughout a project's stages through collaborative strategies across the design team disciplines.

Bioclimatic design is central to optimising human comfort and in-use operational emissions through passive design solutions including thermal mass and night-time cooling. Our proposals are based on specific analysis of the site's conditions and opportunities and have informed both macro and micro design considerations from building massing and arrangements to the angle of the roof-lights. Thessaloniki's solar radiation exposure and the carbon intensity of the grid electricity make PVs very suitable, and our proposals feature a mega PV array which will power both the buildings and a fleet of electric bicycles to encourage active transport across the site and beyond.

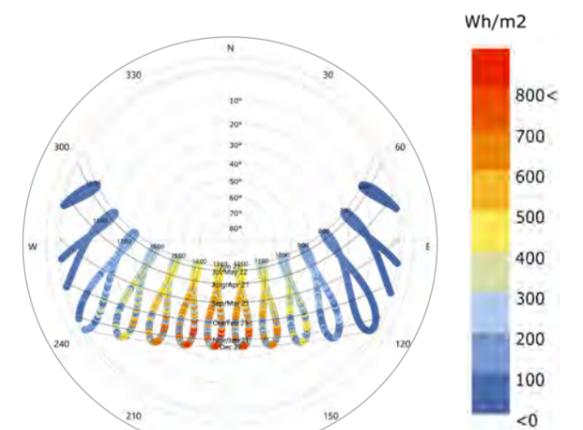
We are also acutely aware that offsetting of carbon emissions must only be seen as a last resort once these emissions have been driven down as low as possible and we have delivered projects to the most onerous and progressive industry standards.



Thessaloniki Wind Rose



Sunlight Hours March 21st

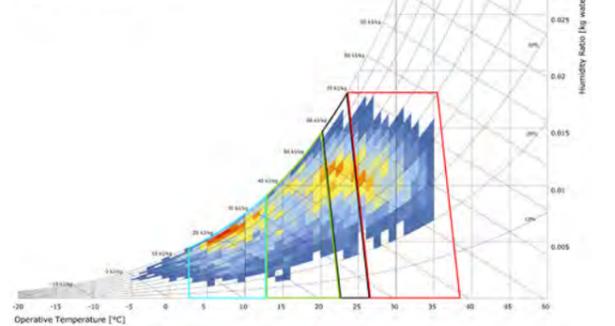


South Facing Radiation

Key:

-  Cycle Hubs to support city-wide circuits and activate spaces
-  Type A water feature
-  Landscaped gathering spaces  
A series of framed views defined by the Living Grid, the Masterplan axis and landscape
-  Central cycle Hub Store and charging
-  Type B water feature
-  Axial Vistas  
Mix of dedicated and shared pedestrian and cycle routes
-  Cycle and Pedestrian Routes  
Mix of dedicated and shared pedestrian and cycle routes
-  Type C water feature

Psychrometric Chart



## 5.0 Materiality & Economy

### Modularised Systems and Reduced Energy Demands

We have designed the project as a flexible and adaptable 'kit of parts' that follows a modularised grid type system. This system can be prefabricated off-site and interchanged allowing for rapid construction, high quality and lower costs.

We have deliberately kept the servicing and design of the buildings to be functional, orthogonal and efficient to allow for change and ease of operation.

Materials used would either be from sustainable sources close to the Heli-expo site with an emphasis on sustainable materials such as CLT timber as well as creating highly insulated walls from the rubble of demolished buildings on the existing site. The palette of materials would be inexpensive, long lasting and durable, with stone, metal, timber and shaded glass elements.

Glazing could be controlled and where used would be shaded behind warm timber brise soleil structures that can be inhabited by smaller kiosks and pavilions to allow for activation of streets even when no events take place. Above certain solid wall areas could be planted with greenery and vines.

The roof planes could comprise a mixture of very lightweight minimal use of steel along with recycled aluminium roof panels, PV cells and sedum 'green roof' areas that encourage bio-diversity and local wildlife habitats.

We also propose the extensive use of native plants and trees throughout the project which helps to soften the overall appearance of the project as well as creating healthy human scaled streets with dappled shade and fragrant gardens that change over the seasons.

### How can we Re-Purpose the Existing Buildings on Site to Reduce Embodied Carbon?

Step 1: Understanding the Existing Buildings on Site



Step 2: Re-Use / Re-Purpose Our Proposal



From our initial analysis:

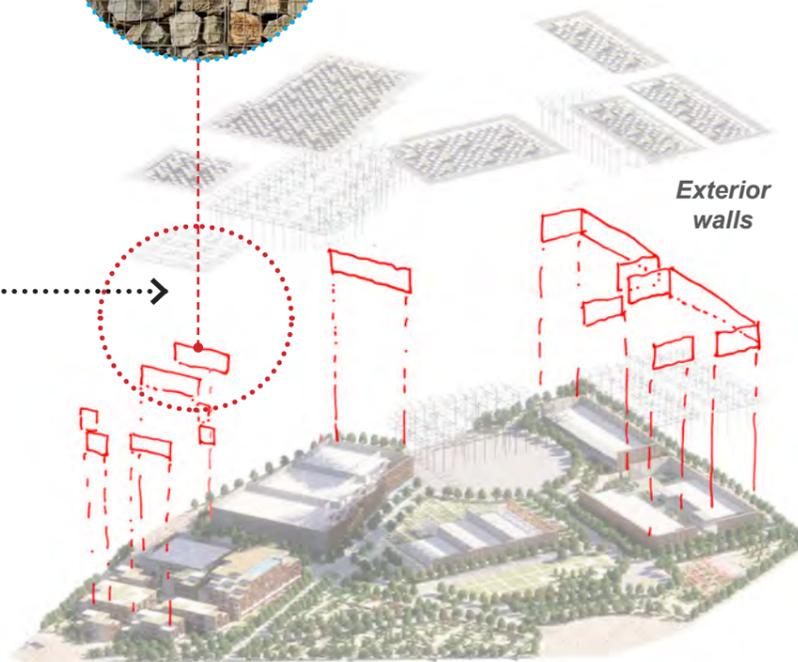
- The site comprises of a collection of buildings at various stages in their lifecycles and suitability.
- In-efficient in terms of spatial use & environmental control
- To retain many would interrupt the masterplans' proposed axes

Re-Purpose the fabric of the existing buildings into a series of Gabion Walls

- Reduces material sent to landfill
- Creates Thermal Mass to passively regulate interior spaces Improves human comfort levels, reduces operational energy bills and helps estate achieve net zero ambitions
- Can be used as retaining walls to address site's sloping topography



Gabion Wall Components



Exterior walls

Gabions form Strong Linear Elements Reinforce the New Living Grid

Creates a connection between Buildings & Landscape



Internal CLT Timber Structure for Exhibition Halls

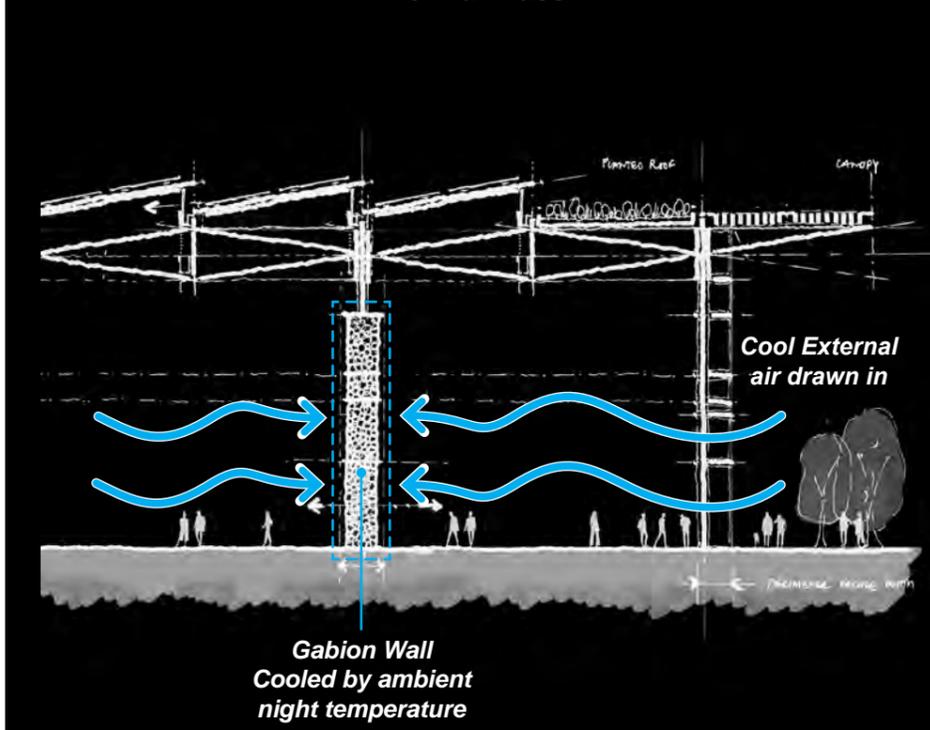


Filtered light through gabion walls

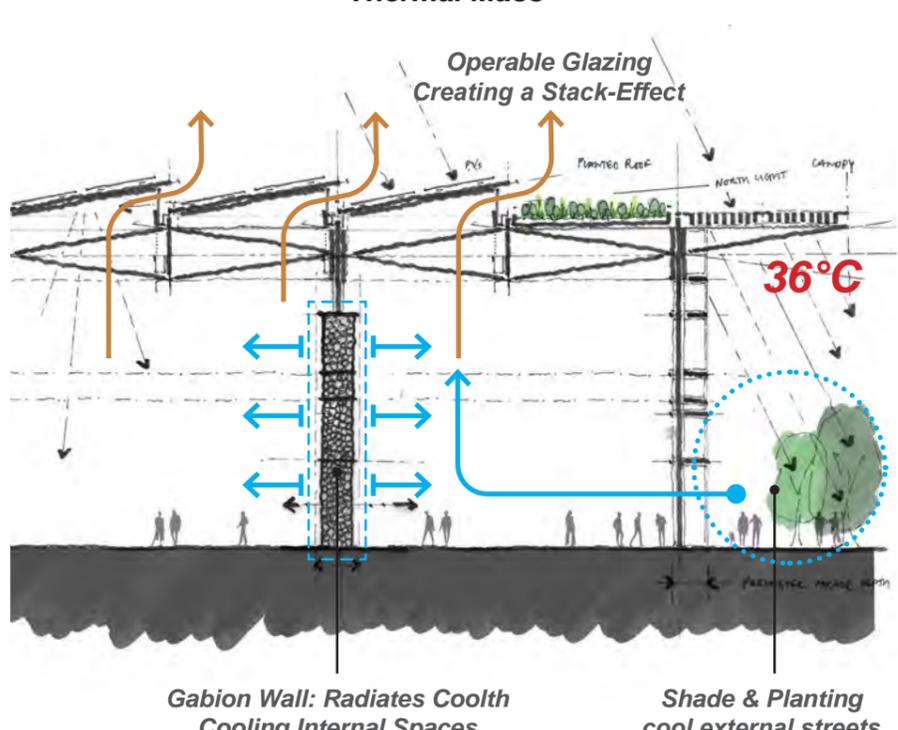


The thermal mass of the gabion walls reduces cooling demands:

Exhibition Hall (NIGHT)  
Thermal Mass



Exhibition Hall (DAY)  
Thermal Mass



## 6.0 Space Program Tables

## Areas Comparison

**International Architectural Design Competition for the Thessaloniki ConfEx Park**  
Data Sheet for the evaluation of the Economy of the Project



No	Description	SECTORS I & II		SECTOR III		SECTOR IV		SECTOR V		TOTAL	
		Plot Area (I) = 39.397,11 m <sup>2</sup> Proposed by Competitor (SECTOR I)	Plot Area (II) = 16.339,68 m <sup>2</sup> Proposed by Competitor (SECTOR II)	Plot Area = 20.034,00 m <sup>2</sup> Proposed by Competitor	Programme Requirements (SECTOR I & II)	Plot Area = 13.971,22 m <sup>2</sup> Proposed by Competitor	Programme Requirements	Plot Area = 58.900,71 m <sup>2</sup> Proposed by Competitor	Programme Requirements	Plot Area = 161.769,04 m <sup>2</sup> Proposed by Competitor	Programme Requirements
<b>A. General Metrics</b>											
A1	Above Ground GFA (m <sup>2</sup> )	34850	8750	26575	max 48.500	15640	max 16.500	245	max 250	86060	max 92.000 excl. preserved bldgs
A2	Below Ground Parking use GFA (m <sup>2</sup> )	11990	NA	24300	-	14900	-	NA	-	51190	-
A3	Below Ground other Aux uses GFA (m <sup>2</sup> )	9720	2835	3400	-	1950	-	NA	-	17.905	-
A4	Net Floor Area NFA (m <sup>2</sup> )	34250	8380	24075	-	15270	-	205	-	82180	-
A5	Building Coverage ratio (%) & Area (m <sup>2</sup> )	46% / 18150	52% / 8750	54% / 10850	max 60% - 12.020,40	70% / 9800	-	0.005% / 275	-	30% / 47825	max 45% - 64.000 excl. AAMTH - pres.bldgs
A6	Gross Volume above Ground (m <sup>3</sup> )	326700	105000	172600	-	176400	-	1375	-	687575	-
A7	Foundations Footprint (m <sup>2</sup> )	4000	1750	4060	-	1340	-	280	-	-	-
A8	Façade (m <sup>2</sup> )	15200	4750	17300	-	13300	-	360	-	-	-
A9	Exterior Openings (m <sup>2</sup> )	3000	1000	7720	-	1560	-	110	-	-	-
A10	Accessible Roof surface (m <sup>2</sup> )	0	0	3810	-	0	-	0	-	-	-
A11	Inaccessible Roof surface (m <sup>2</sup> )	23070	10850	7845	-	14200	-	275	-	-	-
A12	Green Roof surface (m <sup>2</sup> )	6500	3400	4350	-	4260	-	200	-	-	-
A13	Balconies / Open Covered Areas (m <sup>2</sup> )	NA	NA	1200	-	1460	-	0	-	-	-
<b>B. Programme Area</b>											
B1	Exhibition Center Area (m <sup>2</sup> )	33850	8250	-	47.000	-	-	-	-	-	-
B2	Administration Offices Area (m <sup>2</sup> )	1000	500	-	1.500	-	-	-	-	-	-
B3	Hotel (m <sup>2</sup> )	-	-	7450	-	-	-	-	-	-	-
B4	Commercial Complex / Retail-Recreation (m <sup>2</sup> )	-	-	9100	-	-	-	-	-	-	-
B5	Commercial Complex / Offices (m <sup>2</sup> )	-	-	6395	-	-	-	-	-	-	-
B6	Multi-purpose Hall (m <sup>2</sup> )	-	-	3630	-	-	-	-	-	-	-
B7	Conference Center Area (m <sup>2</sup> )	-	-	-	-	9160	10.500	-	-	-	-
B8	Luxury Exhibition Hall Area (m <sup>2</sup> )	-	-	-	-	6480	6.000	-	-	-	-
B9	Cafeteria (m <sup>2</sup> )	-	-	-	-	-	-	-	250	-	-
B10	Underground Parking Area (m <sup>2</sup> )	11990	0	-	12.500	14900	15.000	-	-	-	-
B11	Underground Storage Area (m <sup>2</sup> )	9720	2835	-	12.000	1950	2.000	-	-	-	-
<b>C. Open Areas</b>											
C1	Provide Area of Roadways (m <sup>2</sup> )	-	-	-	-	-	-	-	-	16080	-
C2	Provide Area of Pedestrian Pathways (m <sup>2</sup> )	-	-	-	-	-	-	-	-	7510	-
C3	Provide Area of other Hardscape (m <sup>2</sup> )	-	-	-	-	-	-	-	-	5000	-
C4	Provide Area of green Landscape without underground buildings (m <sup>2</sup> )	-	-	-	-	-	-	-	-	29030	-
C5	Provide Area of green Landscape over underground buildings (m <sup>2</sup> )	-	-	-	-	-	-	-	-	0	-
C6	Provide Area of other Landscape (m <sup>2</sup> )	-	-	-	-	-	-	-	-	NA	-
C7	Provide Area of Water Features (m <sup>2</sup> )	-	-	-	-	-	-	-	-	200	-
C8	Provide Area of other structures (m <sup>2</sup> )	-	-	-	-	-	-	-	-	800	-

1

**Note on Areas:**  
**Area Calculations are a high-level estimate based on this initial Concept Design. The Grid System concept proposed for organising the site has been developed to easily adapt to final area requirements, as the project develops.**

# Thessaloniki ConfEx Park

1



## Metamorphic Grid An organising masterplan

Our proposal provides you with a flexible and adaptable masterplan that enables you as a client to make changes inside - interchanging buildings and public spaces as the project develops and the design evolves.



### Woven into its Context:

We have achieved this with an organising grid structure that links into the major axial routes of the city as well as aligning itself with two subgrids that sensitively respond to the geometry of the site and its existing buildings.

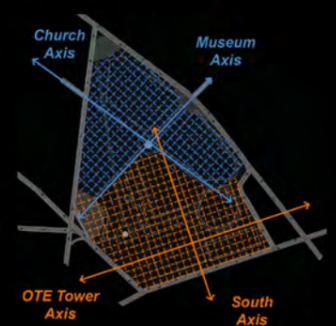


Site Plan & Surrounding Area (1:1500)

## A Living Grid Creating a mosaic of Possibilities

A grid provides order but should also allow city life to thrive and develop. We have described this as a 'living grid'.

Visitors can occupy, personalise and enjoy a mosaic of different spaces. The Confexpark becomes not just an Exhibition area but a public hub for the city.



### Flexible and Adaptable:

We have created an efficient, flexible and adaptable structure that provides a framework to respond to the needs of your brief but that can be interchanged over time. In essence it's allowing for a metamorphosis of the site to reach its highest potential, which is why we have called the project a metamorphic grid.

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# Gardens and Roofscape...



## Gardens – a mosaic of plant types and spaces

The gardens are about creating variety and vibrancy. We have provided a grid that allows the landscape to be broken down and fragmented into a mosaic of different types of spaces and 'rooms' - a patch work of gardens, with hard surfaces and soft surfaces. Some are intimate planted spaces, others more open with sea views.

There are dry spaces and lush spaces, olive groves and lavender gardens, places for people to sit and enjoy the park or for children to play. Some areas are quiet, for reflection, others more busy for events.

It is also about community engagement and allowing city residents to shape the character and appearance and activities of spaces.

The streets have tree lined routes helping to create outdoor exhibition spaces emphasizing the entrance experience as well as human scaled seating areas such as those in the commercial business district with awnings and indoor/outdoor facades and green roof terraces.

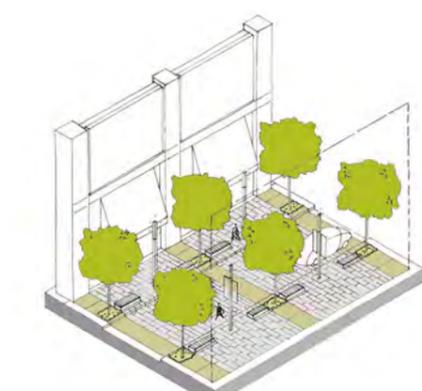
The reason for a fragmented garden is to allow for change and a variety of functions.

## Creating Vibrant External Spaces



## Biodiversity, planting indigenous flora to encourage local fauna

The streets have tree lined routes helping to create outdoor exhibition spaces emphasizing the entrance experience as well as human scaled seating areas such as those in the commercial business district with awnings and indoor/outdoor facades and green roof terraces.



Activated, naturally shaded streets



A variety of human-scaled spaces to enjoy



Height and Enclosure - Event Areas



Blurring the boundary between inside and outside  
Intimate, Sheltered Spaces

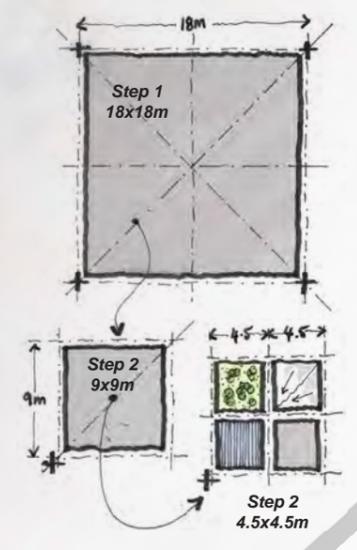


**Roofscape – elegant horizontal planes**

The roofscape creates a series of horizontal planes out of characterful lightweight elements.

The roof areas comprise modular interchangeable elements that allow for natural light into the exhibition spaces, angled PV cells to generate energy and planted zones to encourage local wildlife habitats and diversity.

This also creates a series of striking roof planes that reflect the sunlight and sky throughout the day animating Heli Expo and giving it a strong presence and sense of place.



Grid Module Design Principle

1. The underlying Living Grid model is based on a structurally efficient 18x18m grid. This module is repeated across the site, connecting together to form large-span, structure-free spaces.

2. The grid module is further broken down. This subsequent sub-division creates mosaic framework of different spaces and places.



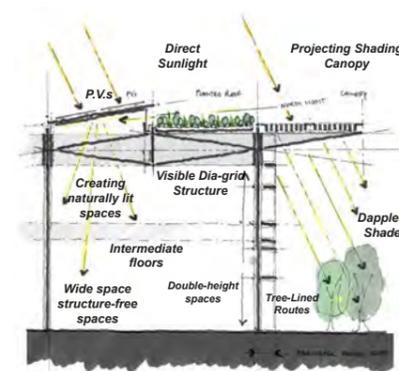
Roof Plan (1:500)



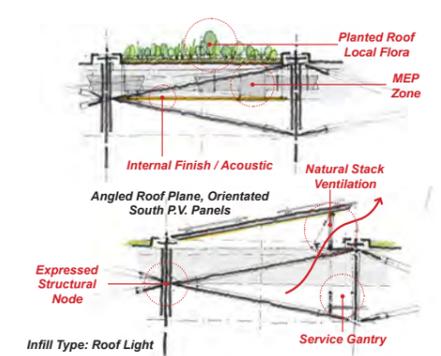
A shimmering roof plane



Dappled natural light animated the interior spaces



Canopy Section Concept



Infill Modules - Roof Activation

# The Layered Grid

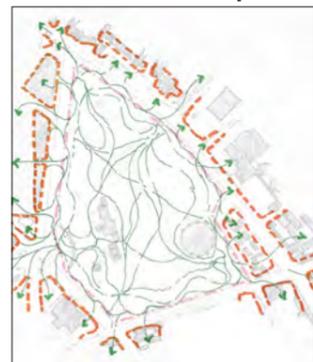
This exploded axonometric illustrates how an organising grid allows for flexible and cost effective modular buildings that meet your budget requirements.



An Efficient Structural Grid



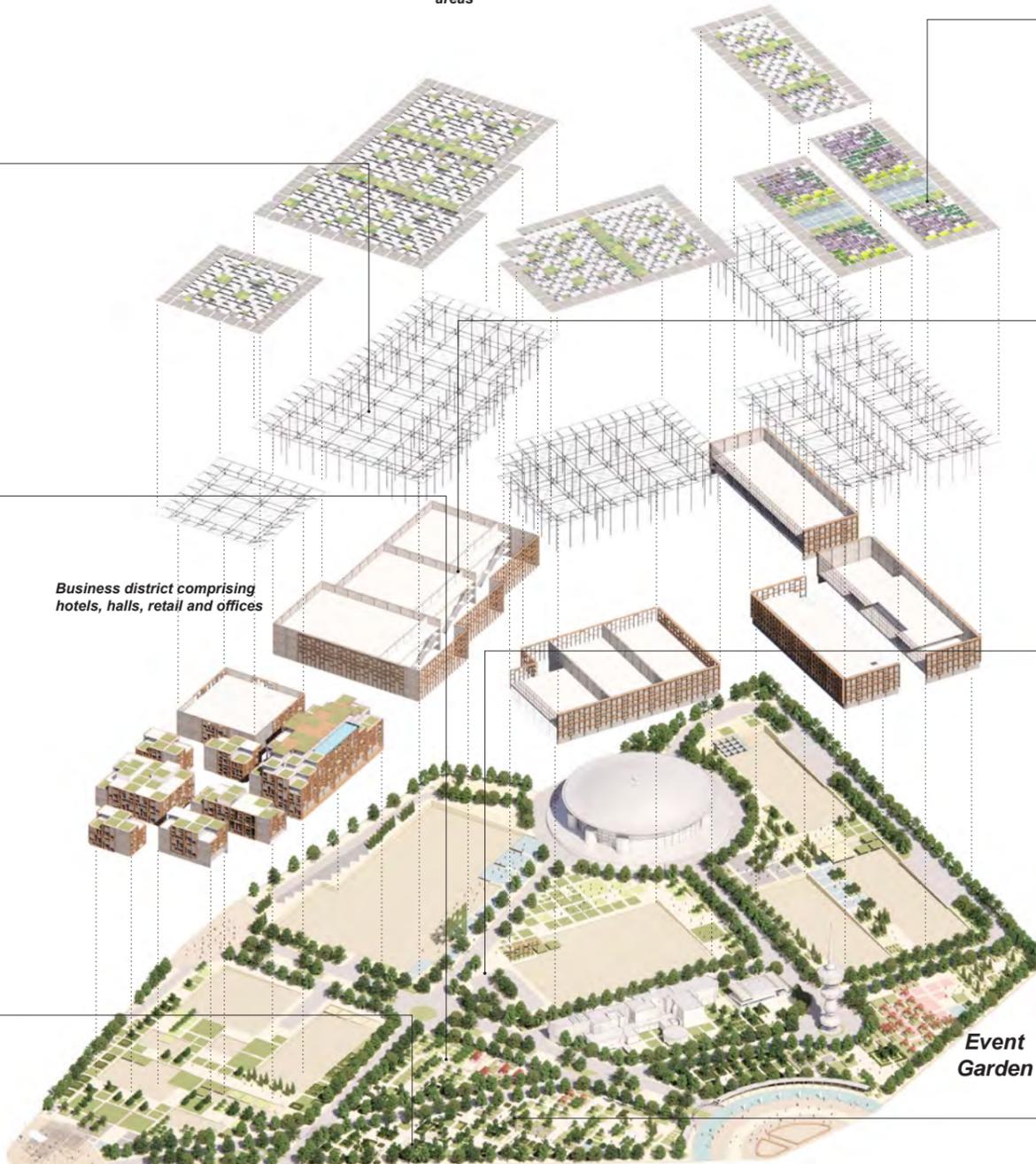
Interlinked Landscape



A Permeable Landscape

The edges of the site could be permeable to allow meandering routes through the landscape of the confex park.

Exhibition halls with moveable partitions light weight roof structure modular roof elements with angled PV cells and planted areas



Business district comprising hotels, halls, retail and offices

Event Garden

Recreational Garden

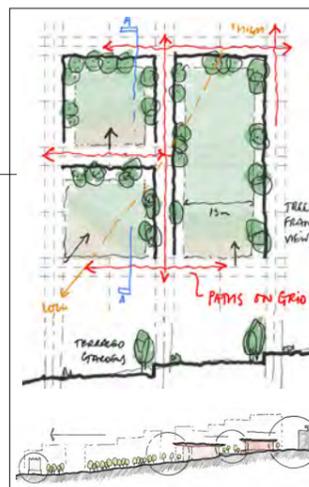
4



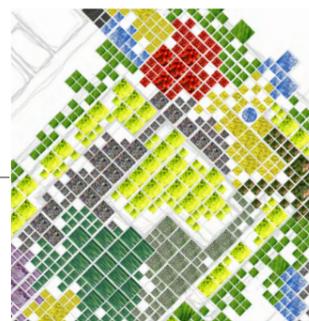
Sustainable Green Roof  
Some areas of the roof could be planted with different coloured shrubs improving biodiversity



Flexible Hall Design



Terracing Gardens



The Fragmented Garden  
Fragmented Gardens with a patchwork of different trees and plants



Creating Different Experiences

Tree-Lined Avenues

Contoured Approach

Extending the Living Grid into the Landscape

A mix of seclusion & open spaces

A Mosaic of Different Routes

View of the Parkland and Living Grid Landscape

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# View of Exhibition area looking towards the Arena

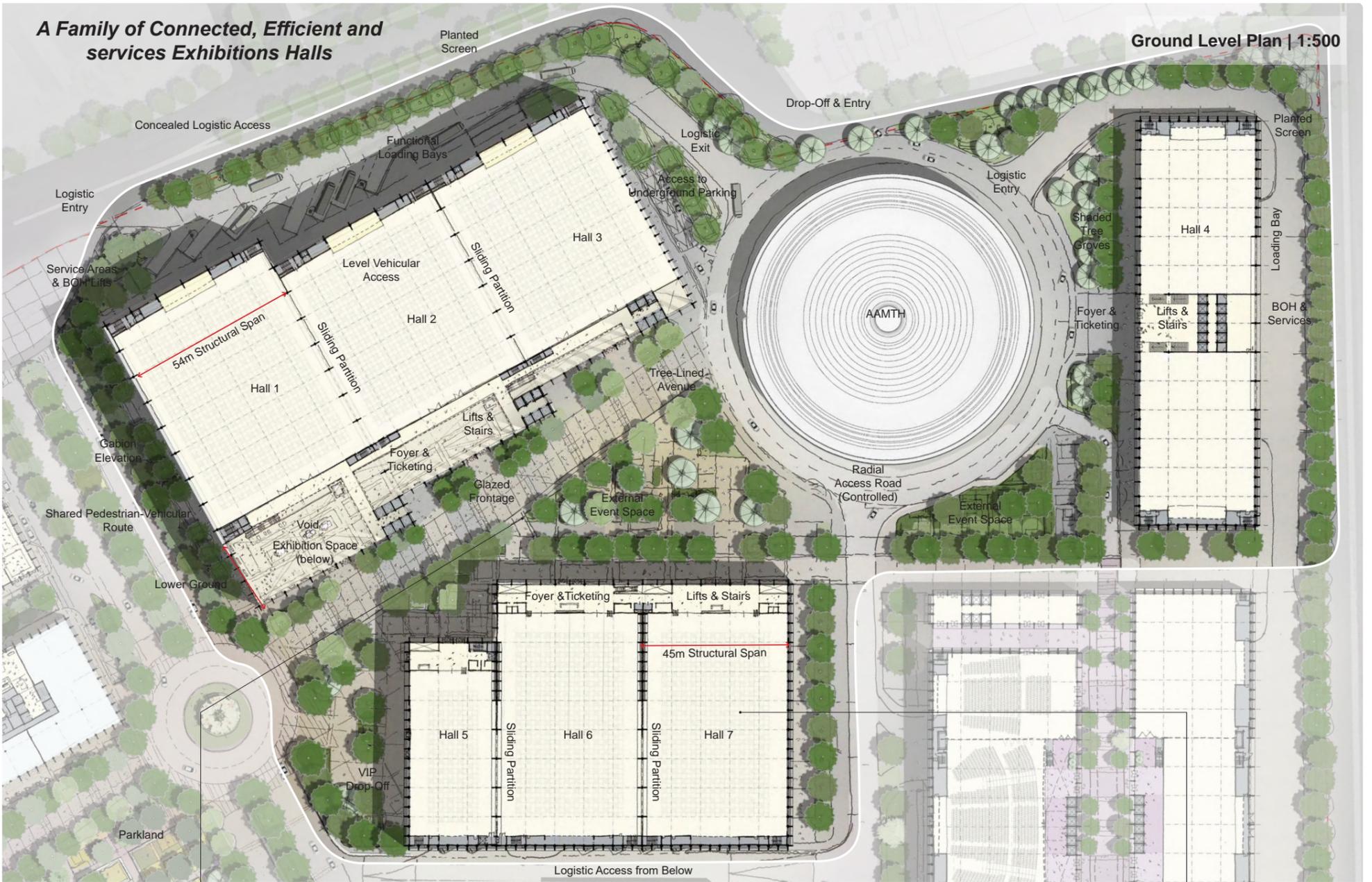
5



A Clear Sense of Arrival to the Exhibition Centre

A family of efficient, flexible and modular Exhibition halls

## A Family of Connected, Efficient and services Exhibitions Halls



Ground Level Plan | 1:500



Overhanging eaves create pleasant shaded routes



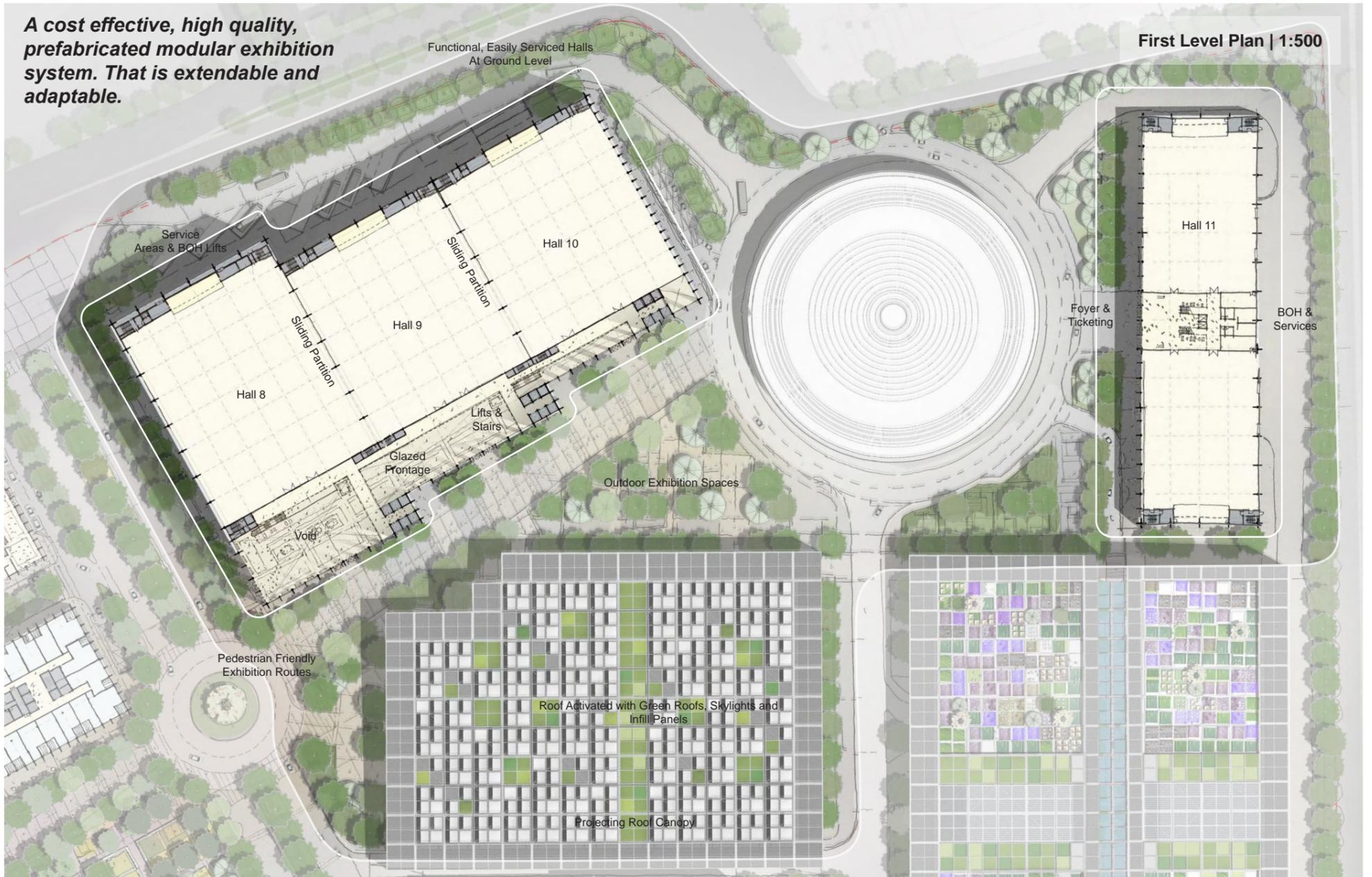
Site Cross-Section



Exhibition halls visually connect to the landscaping

# Exhibition Hall Foyer and Event Space

6



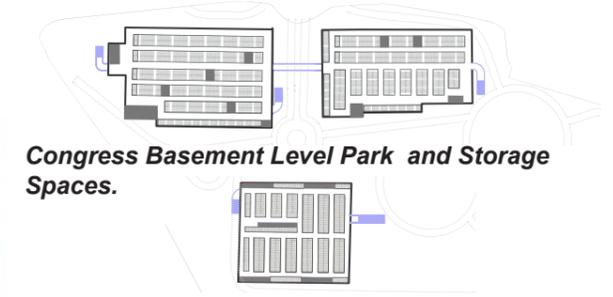
**Integrating Logistic Access to create highly serviceable spaces**



**A dramatic series of floating roof planes characterises the exhibition halls**



**Basement Level Park and Storage Spaces.**



**Congress Basement Level Park and Storage Spaces.**

# The Congress Centre and VIP Exhibition Halls

7

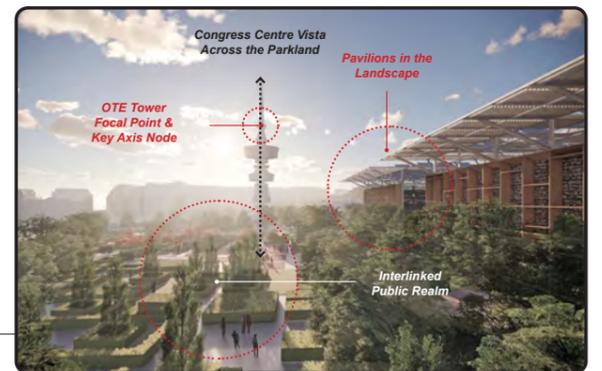
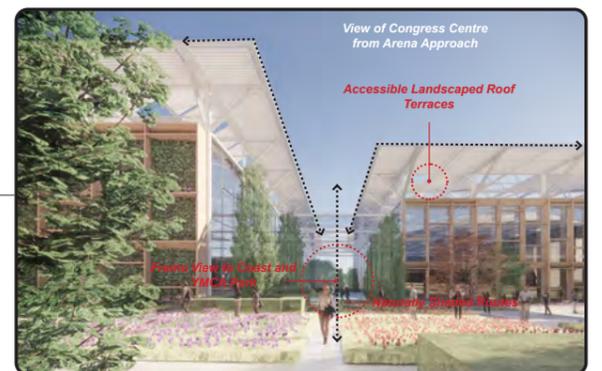
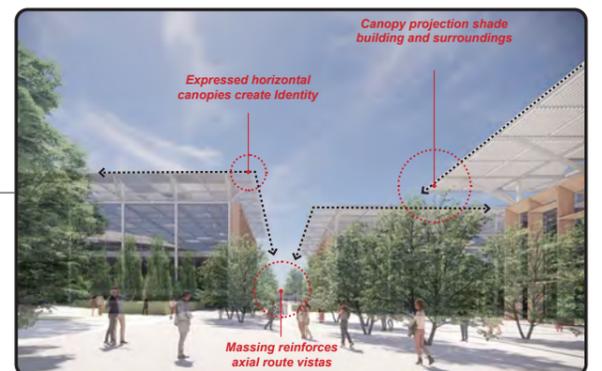
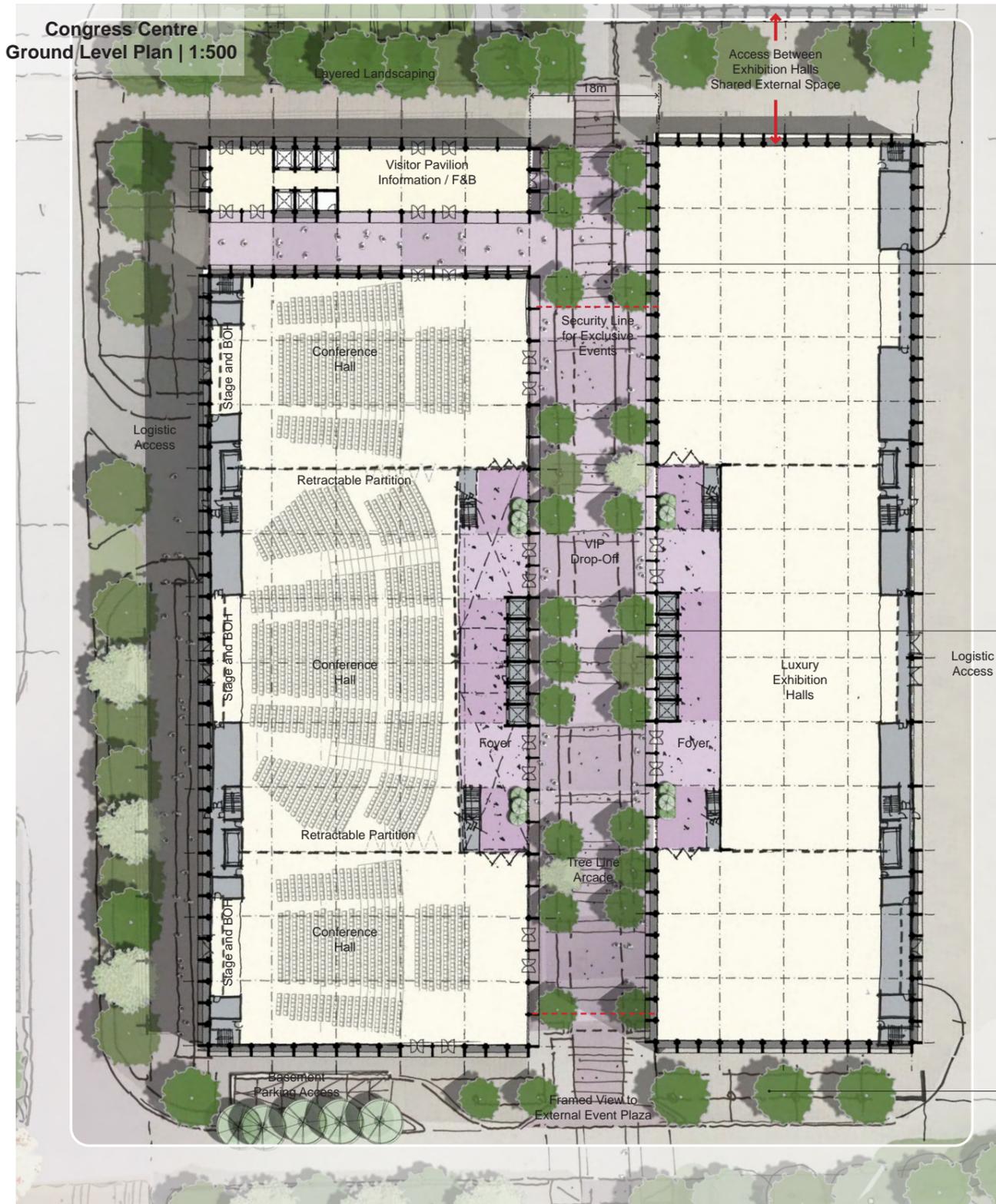
A memorable family of structures with expressed horizontal canopies

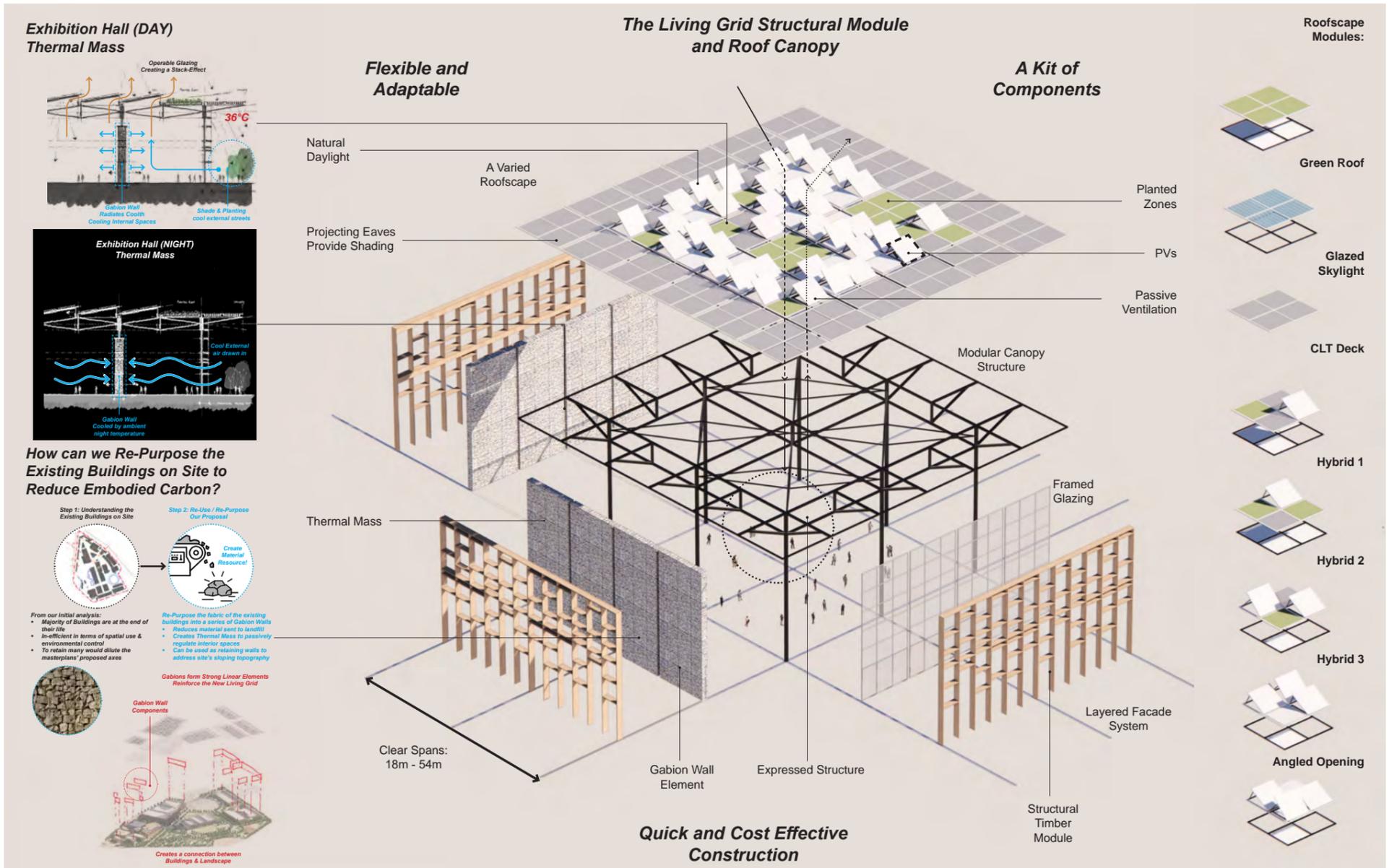
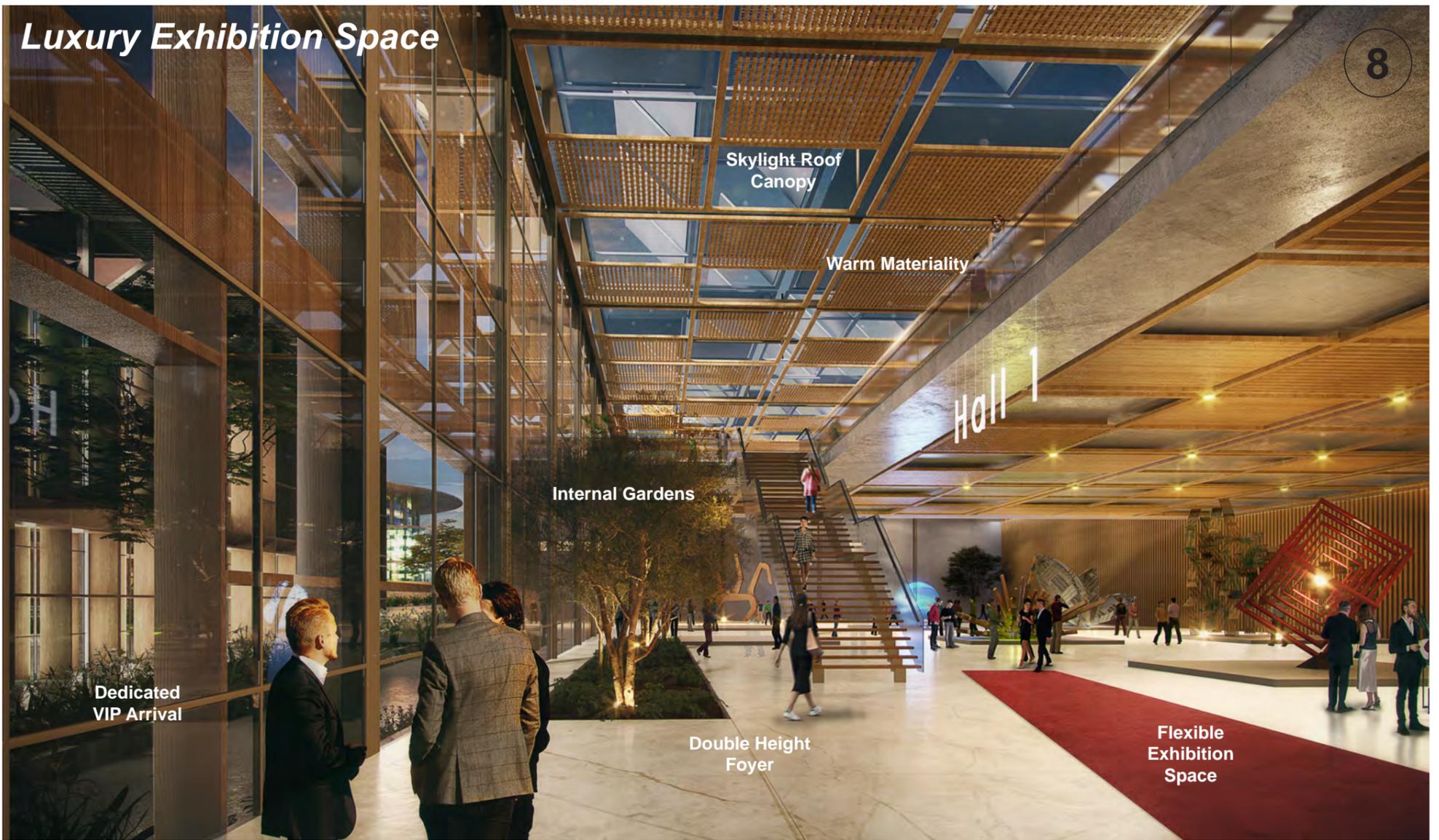
Nestled into the sites Parkland



Buildings Merged with the Landscape

Overlapping Layered Roof Planes





# The Business Centre and Gateway to the City

9



**A vibrant, active district and threshold between Heli-Expo and the city**



**Activated Roofscape**



**Business Centre Courtyard**



**Deep Shading Facade**



The Business Centre... upper level Plan



Modular Design, Efficient Layout...



Offices With Activated Rooftop Terraces



Tree Lined Street



Hotel