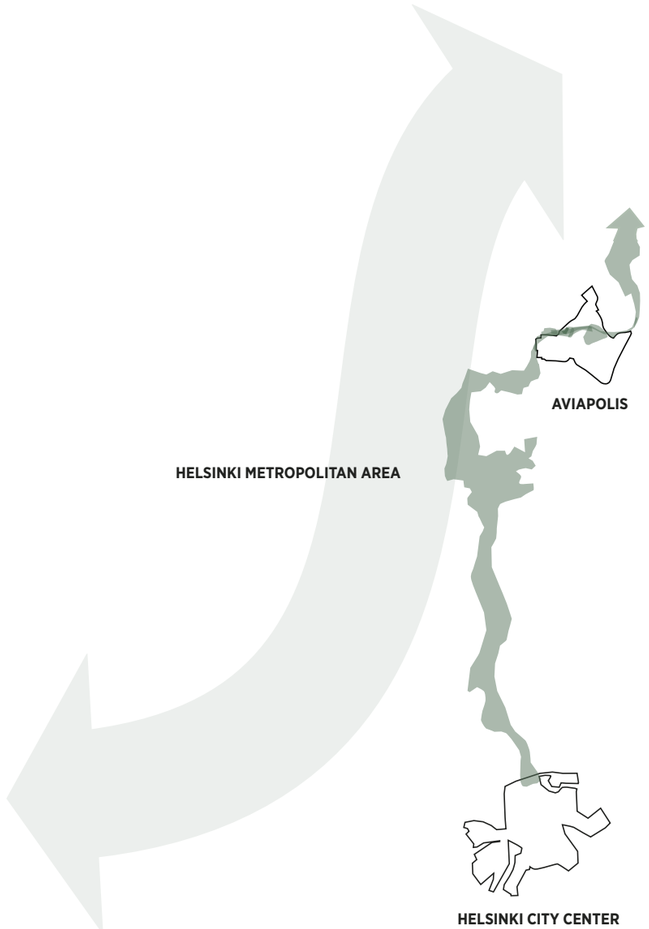
AVIAPOLIS CORE

A WALK - FRIENDLY AIRPORT CITY IN NATURE

ORIENTATION





CONTENT

. SWOT ANALYSIS 4-5

. VISION 7-11

. MASTERPLAN 12-25

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. LANDOWNERSHIP PLAN 42

. STRATEGIC FIGURES OF MASSING 43

AVIAPOLIS CORE TODAY - SWOT ANALYSIS

WEAKNESSES AND THREATS



NOISE POLLUTION AND PHYSICAL BARRIERS





COMMON VISION

Too many different urban development strategies in the area threats a common vision and a holistic perspective.

FAST CHANGES

Fast increased numbers of passengers can result in failure in coordination between Finavia and the planning of Aviapolis

DIFFERENT INTERESTS, DIFFERENT STAKEHOLDERS

Communication channels between Finavia, Finnair, the City of Vantaa and private developers need to be improved and relate to a common vision. Short-term thinking has to be replaced, not only by long-term thinking, but also within long-range planning strategies that relates to ONE vision.

AIRPORT-CITY ”NOT WALK FRIENDLY, ZONING AND SECLUDED”

The lack of accesibility to the nearby nature and to the city creates a bigger mental distance than the real physical distance.

STRENGHTS AND OPPORTUNITIES

“ENHANCE THE CLASHES BETWEEN NATURE, CONNECTIVITY, COMMUNITY AND CULTURE”

CLOSE TO THE AIPORT



CLOSE TO NATURE



USERS



TOURISM



GROWING LAND VALUES



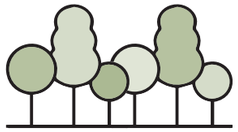


PASSENGERS WORKING PEOPLE RESIDENTS STUDENTS ARTISTS





1. VISION



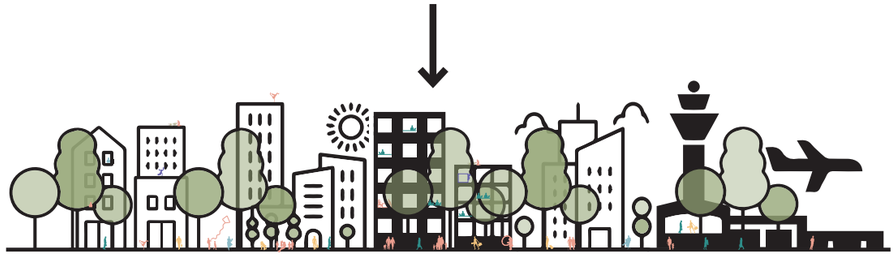
NATURE



CITY



AIRPORT



AVIAPOLIS CORE

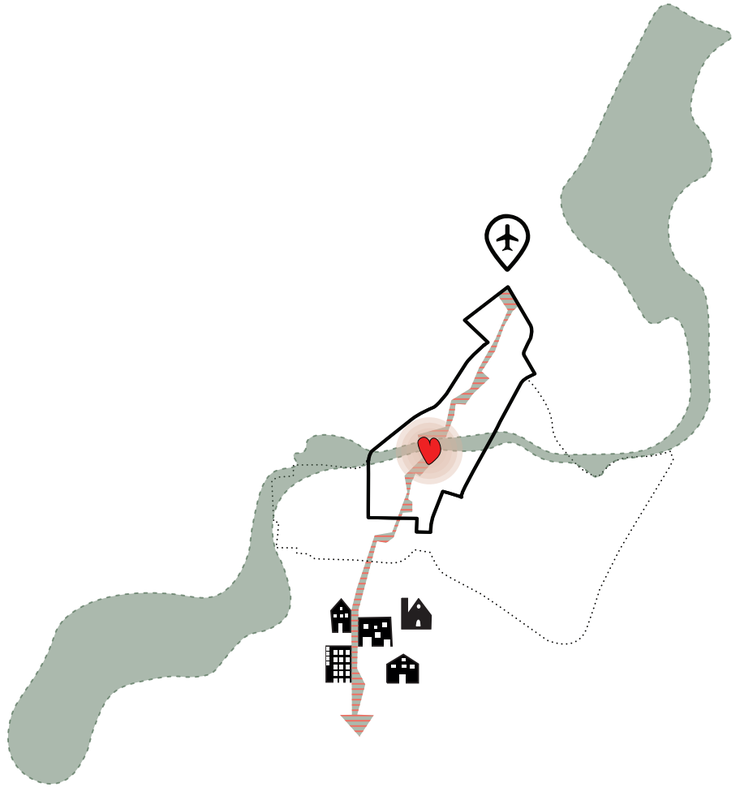
=

” A WALK-FRIENDLY AIRPORT-CITY IN NATURE ”

INVITE NATURE !



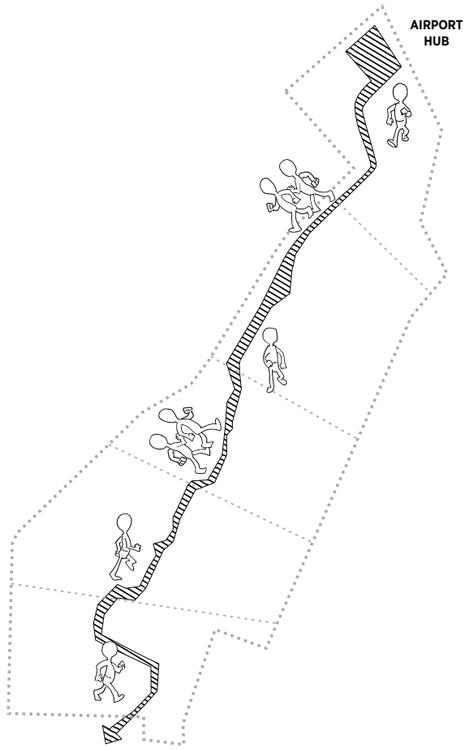
EXISTING CONTEXT



THE STRIP

The strip connects the existing community in the South of the Core area with the airport in the North. The connection itself becomes the heart of the Core area. The strip is activated by program and users and by using it as a tool to invite nature into the urban context.

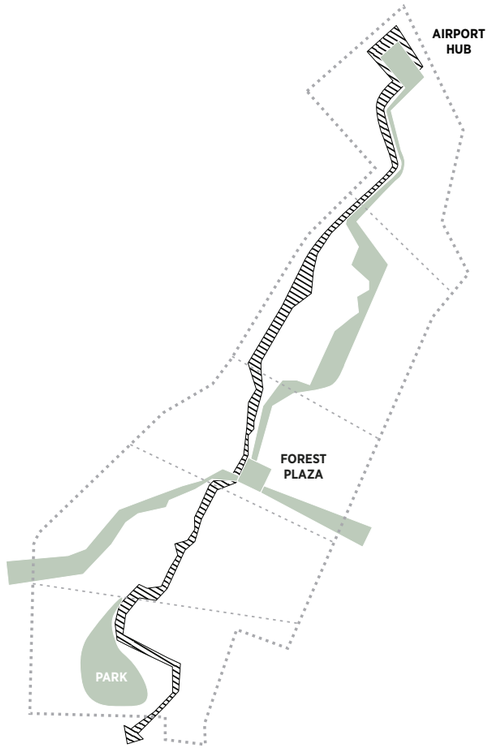
URBAN STRATEGIES



1. PEDESTRIANS ONLY

Create a 100% walk friendly connection that unites urban functions & nature with all the city functions needed.

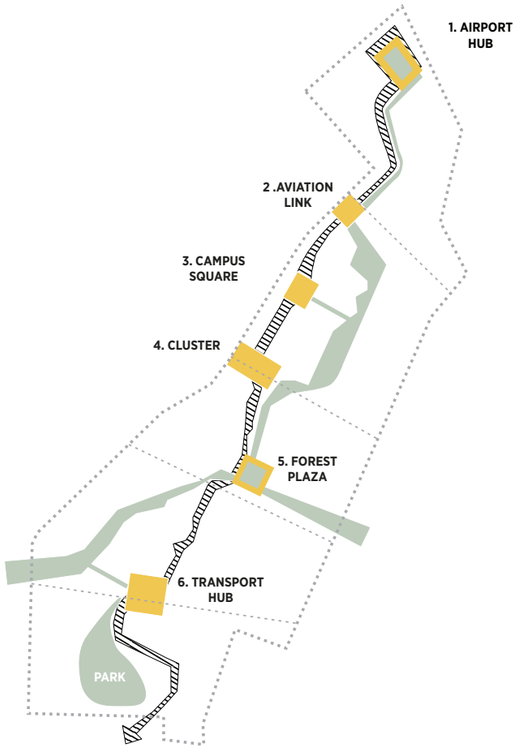
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2. NATURE

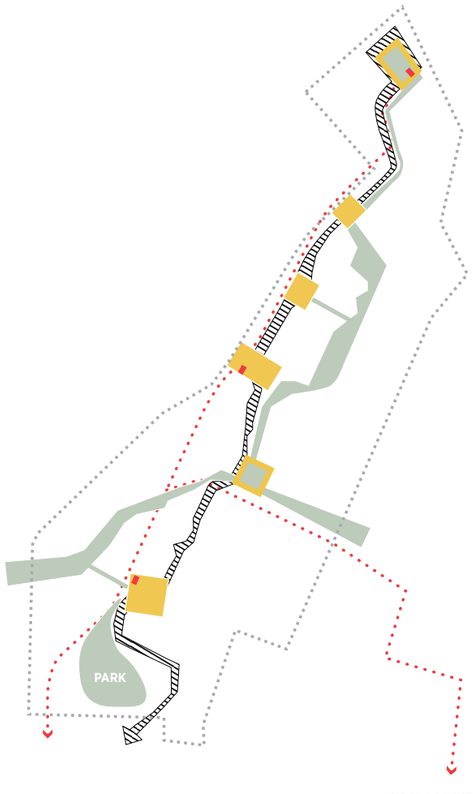
The unreachable nature of the surroundings! The strategy is to connect with nature and bring nature all the way to the airport. Give to the ”Welcome to Finland” a new meaning. Finland will be visable already at arrival.

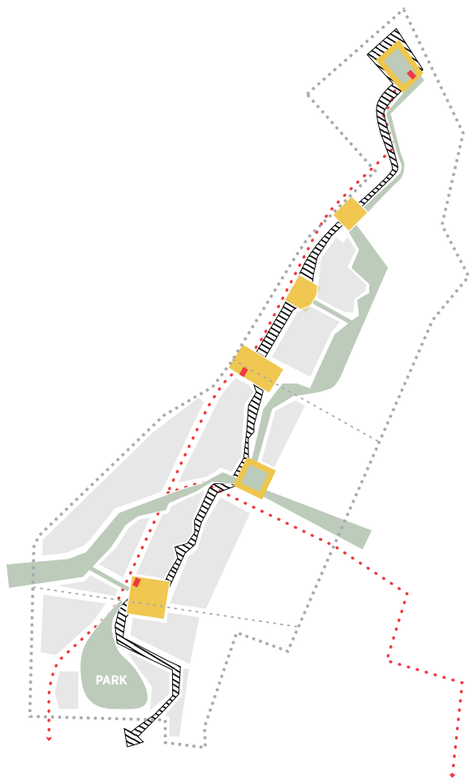
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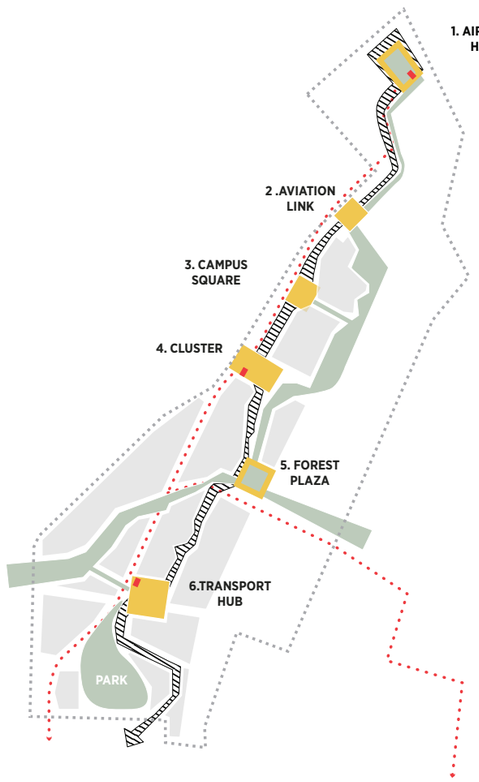


3. A SERIES OF URBAN NODES

The urban nodes are just as crucial for the identity of the strip as they are for its surrounding program. By locating the nodes along the strip they will nurish strip-identity. By planning and docking the surrounding buildings accordingly around them, they will become local necessities. This is one of the most important aspects of turning the strip into a destination itself.







4. TRANSPORT

The transport solutions facilitate human activities at all times of the day and night, good conditions are ensured for pedestrains and cyclists. The public transport is enhanced and the car access is limited and at the same time streamlined for people living and working in the Core area.

+

5. PLOTS

The placement of building plots are the corresponding result of intricate urban strategies and of course of existing buildings. This strategic order gives them the foundation they need to flourish. They are the in-betweens of strategy but the mass of the masterplan.

=

AVIAPOLIS CORE (LIVELY URBAN SPACE 24/7)

The Aviapolis Core Area will be lively and vibrant 24/7 all year round, a place that is active and safe all around the clock. Seasonal and diurnal variations are a natural part of planning

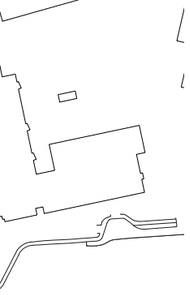
2. MASTERPLAN

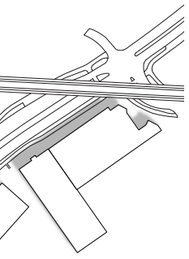


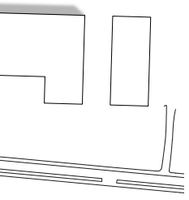
LIFE & USERS DEFINE **SPACE** FRAMED BY **BUILDINGS**

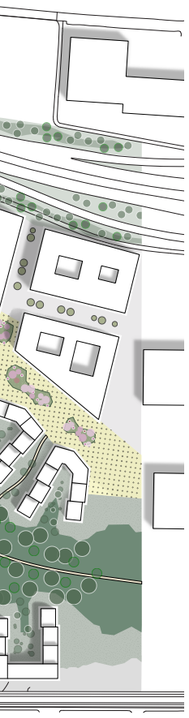
MASTERPLAN 1.5000











In order to realize and fulfill a vision and a concept when creating a masterplan, the most important factor is to organise it´s contents with a hierarchy of priority factors. These can be read as certain necessary layers, components, typologies of phenomenas or even ingredients of a whole. Although masterplans rarely are 100% materialized they can differ vigorously in consequence. **With this strategy + masterplan we pave the way for the realization of an airport-city that sets new standards for quality of life in an active, dense and mixed urban development**
“An aiport city that challenges the future as a role model”

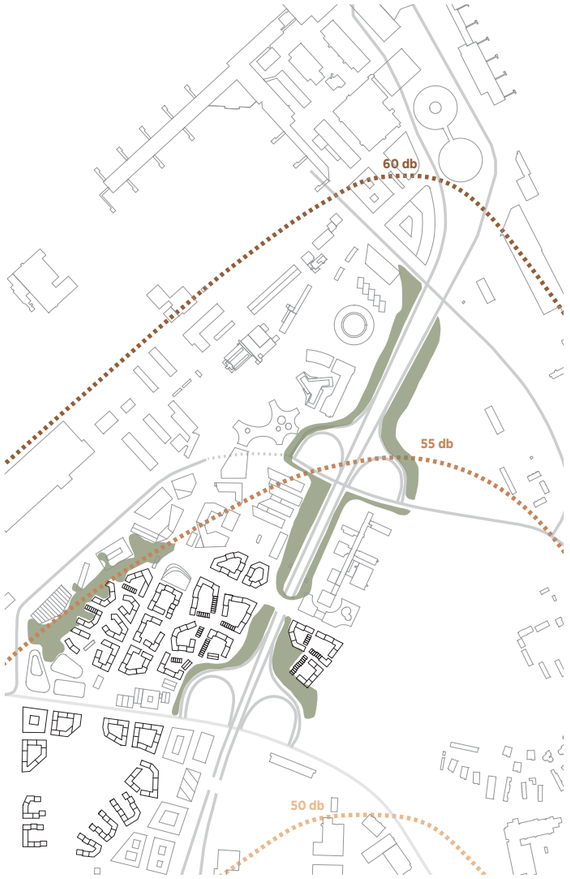
In general, the aim for uniqueness vary, in Aviapolis it´s an absolute must !
Aviapolis has to tranform into a place adding uniqueness to people visiting, working or living there.
Every attemt to compensate problematic conditions (e.g large airport) without turning conditions to valuable assets, will fail.
Let´s create new multiple synergies in the aiport city and establish a new destination.
Aviapolis will become famous for it´s city life created by a mix of residential properties, commercial facilities, retail premises, night life, public and cultural facilities, all interacting in an aiport environment. Together, these elements will make Aviapolis appear as a new role model in the constitution of future airport cities.

Aviapolis will gain international attention and attract visitors from all over the world. Simultaneously it has to become a place that residents of the surrounding neighbourhoods use at all hours of the day. Aviapolis attractiveness lies in it´s future diversity, connectivity, vibrant life and close relation to nature.

Aviapolis will become an attractive city that offers a wide range of workplaces, educational institutions, cutural events and venues, as well as recreational facilities that will attract new citizens to the city.

The aiport city of Aviapolis will offer a wide spectrum of opportunities and facilities such as diverse, authentic urban environment, attractive housing, cultural offerings, creative networks and a technological platform. Aviapolis will continue to develop as an international aiport with a strong urban identity.

PLAN CONTENTS



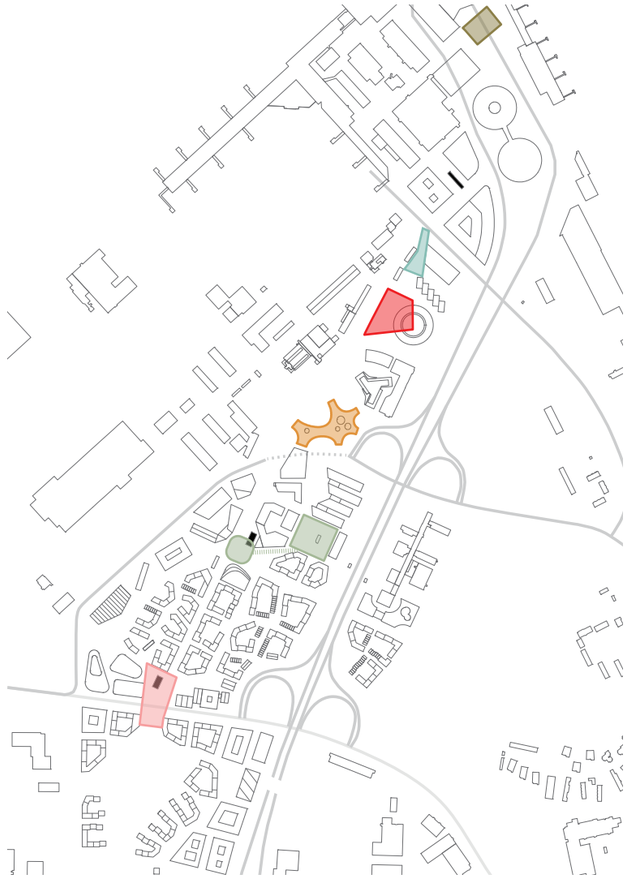
ACOUSTIC ENVIRONMENT

- Nature as an acoustic buffer
- 60db (mixed use)
- 55db (residential)
- 50db (residential)



GREEN AND BLUE STRUCTURE

- Wild green nature as a recreation
- Green nature as acoustic buffer
- Urban green
- The landscape working as a natural drainage in the lowest points. Dry in normal conditions.



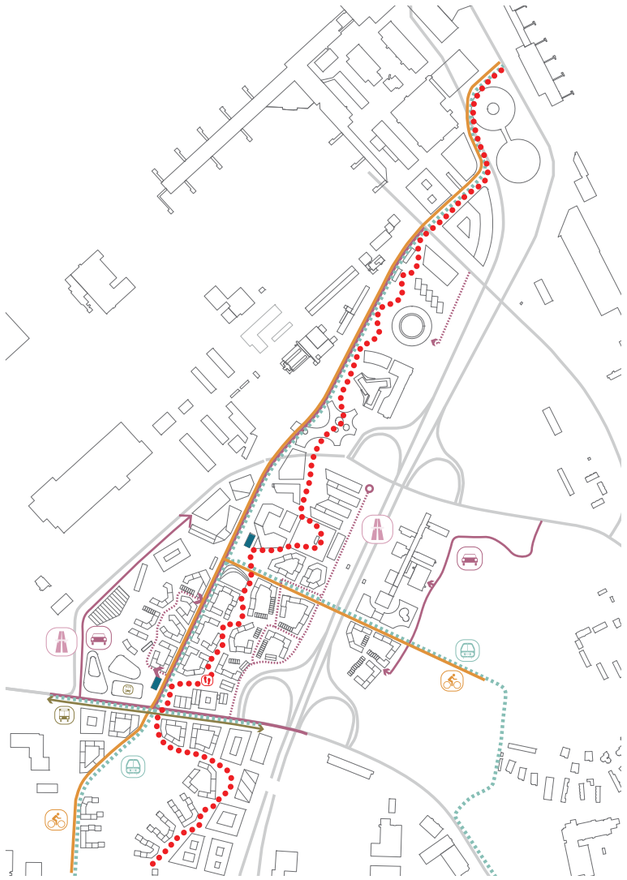
NODES - PROGRAM

- Airport Hub
- Aviation Link
- Campus Square
- Cluster
- Forest Plaza
- Transport Hub



PROGRAM GROUND FLOOR

- Commercial
- Mixed use
- Public spaces
- Education



TRANSPORT - TRAFFIC

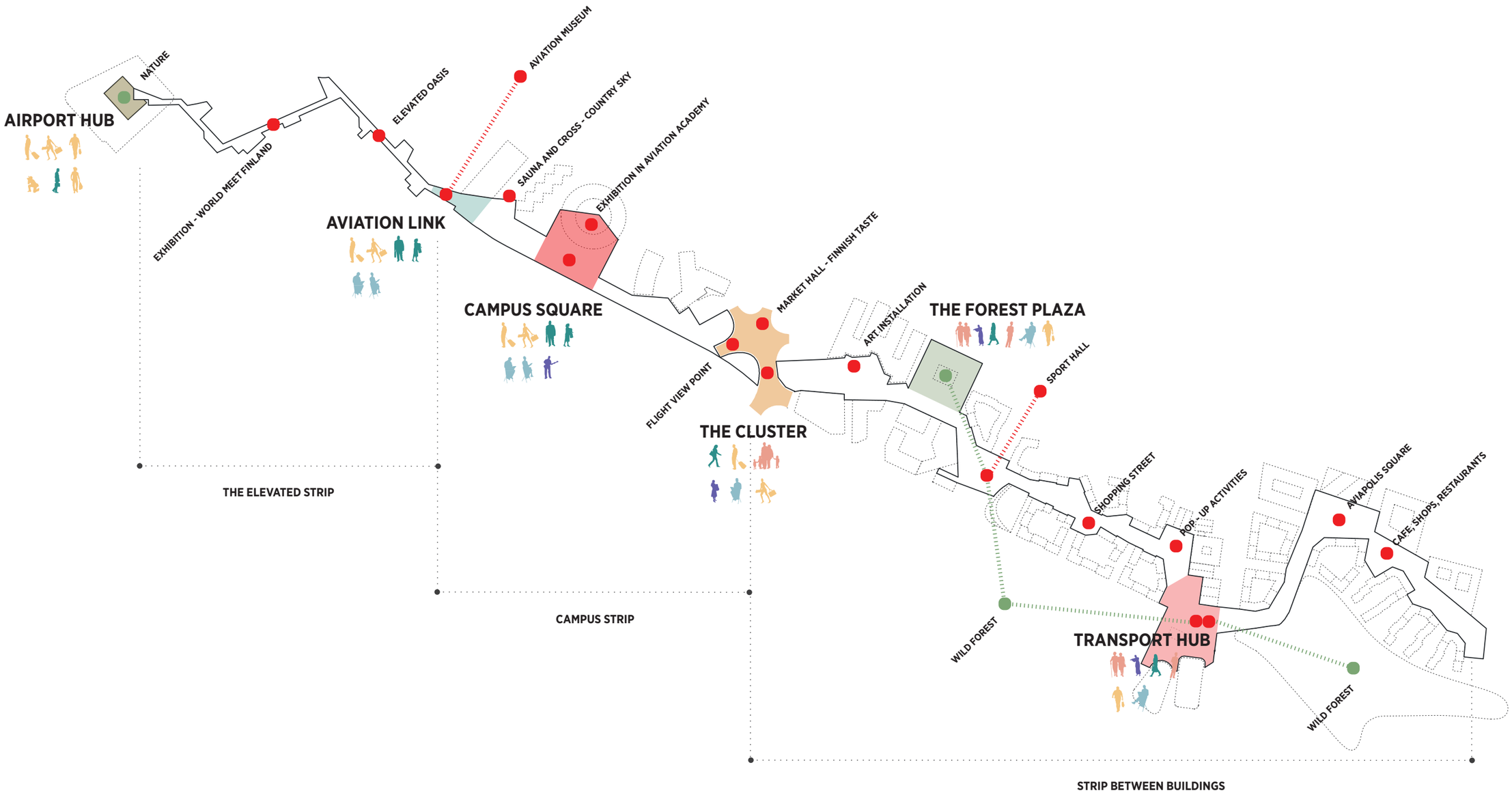
- Strip
- Pedestrian street with car access
- Tram
- Car street
- Bike
- Bus



PARKING DISTRIBUTION

- Car parking
- Parking and mixed use program
- Bike parking

THE STRIP: STRATEGY OF LAYERS



The strip is both a destination and a connection, a pedestrian narrative collage of places to stay, sit, walk, connect and experience.
Along the strip different programs creates different characteristics, inviting all kind of users. **A future pedestrian traffic will flow along the strip, and over time this flow will reshape it´s surroundings just as much as it adapts to it´s birth as a phenomena in a masterplan.**

The strip is a place for attractive, dynamic, sustainable and innovative urban life. An active vibrant urban district in which the spirit of the surroundings provides new urban experiences. Its very specific atmosphere is created by the clashes of many different experiences and activities. The strip needs many different activities to become lively and vibrant. These functions and the space they inhabit should inspire necessary everyday activities as well as recreation. **The goal is to create a vibrant, safe and secure urban life.**

The spatial qualities of the strip are crucial for the strip's own identity, particularly the sequences and facilities for people that will intensify the activity and security preceived in these new urban spaces.

The strip's public spaces should vary in size, function, expression and character. Both urban spaces and buildings should be new destinations and attractions in the area and should contribute to the overall quality of the site.

USERS

1.PASSENGERS

Invite the stopover and layover passengers that already exist to Aviapolis Core area. Nowadays there is a significantly increased numbers of passengers.



2. WORKING PEOPLE

The surroundings of the airport are dominated by not walk friendly infrastructure. The people working in the area are urged to stay in their offices, lacking a lot of daily services. Provide them with these services and synergies with other type of users.



3. RESIDENTS

Create a community that has good qualities and at the same time has a great connectivity.



4. ARTISTS AND STUDENTS

Increase Aviapoli's intellectual profile and cultural capita





NODES

“WELCOME TO FINLAND”

1.AIRPORT HUB

First impression lasts!
This is the entrance to Aviapolis, let´s make it a memorable entrance to Finland.

All major airports are surrounded by large quantities of infrastructural complexity, and almost all of them fails to look for other potentials than to solve its infrastructural needs. Aviapolis cannot afford the same approach. It´s in fact 100 % essential for the Core Area and its programmatic construction to be linked with an airport hub which has a completely different approach.

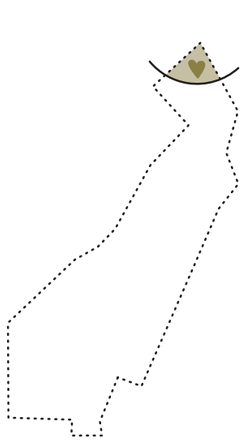
In the future the terminals will not be as spread out as they are today, this is an important step in the right direction. However, we also need to unite the infrastructural needs with the human scale and the nature. Here the strip begins and ends. The strip will elevate above groundlevel to create a pedestrian green oasis floating above strings of infrastructure. The strip lands in the hub, bringing urban green with a welcoming and farewell friendly approach to visitors and travelers .



NEW TERMINAL



FINNISH NATURE INSIDE







HUB



NATURE OUTSIDE

“VIRTUAL DENSITY”



CONNECTION AVIATION MUSEUM



CONNECTION NATURE



PAVILLION POP-UP



CONNECTION AIRPORT

2. AVIATION LINK

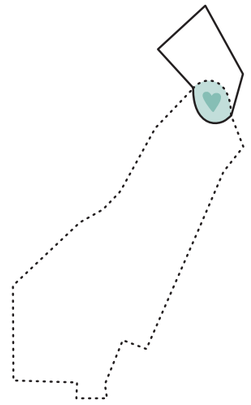
The aviation link welcomes the passengers to groundlevel, the strip lands!

This is the beginning of the overall characteristics of the strip. Wide space and an edges filled by air-port buildings. Human scale becomes crucial.

This environment needs it´s non-permanens with changes due to its necessities. Temporary functions creates temporary experiences to be transformed or dissapear completely, then only to be replaced by new ones. This constant change is not a coincidence or lack of planning, but a fundamental concept. We call it virtual density!

The aviation link is located on the edge of the aiport-city, intersected by the major aiport road.



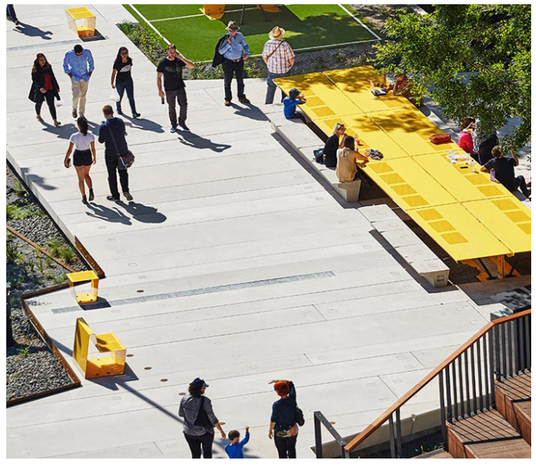


“VIRTUAL DENSITY AND CLASHES”

3. CAMPUS SQUARE

Aviapolis’ intellectual profile and cultural capital is enhanced and in the same time is also rich in building culture. The campus square and the buildings surrounding reflects a sense of quality and clear desire to create something fantastic rather than something simple, rational and evident. In the development and conversion of the site, the narrative of the aiport-city must be continued and integrated in a new model for the future of these cities. The spirit of the place is reinforced with the aviation academy, which has a crucial roll here, as a catalized of the students, workers and passengers to come to visit it.

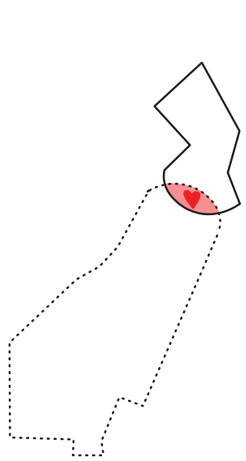
This students will be mixed by people working in the airport area. Although Aviapolis will be a totally new environment to the old aiport-city model, the necesary buildings and infrastructure for the aiport will be present, with its Finavia headquarters. Because this new city will be an aiport-city, there is a responsability on keeping its relation to it, enhancing all the positive things that comes with it.

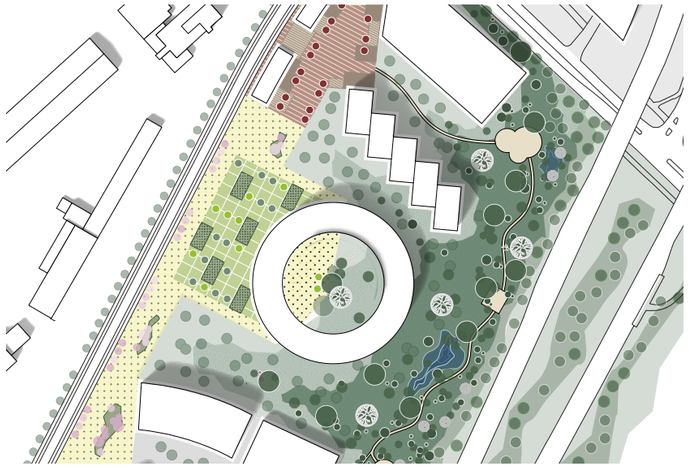


ACTIVITIES



SPACE FOR CREATIVITY







AVIATION ACADEMY + INTERNATIONAL SCHOOL



STREET FOOD

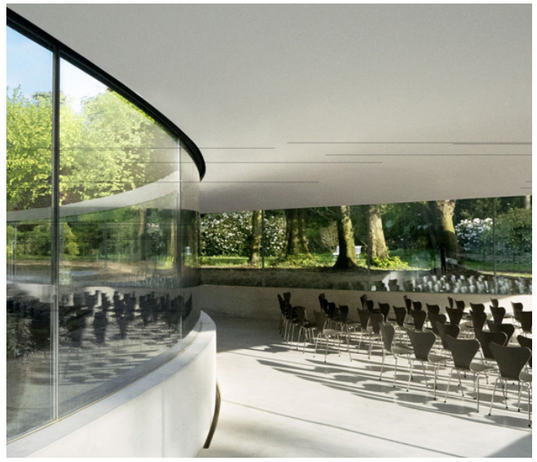
“ALL USERS MEETING PLACE”



AIRPLANES VIEW POINT



FOOD MARKET HALL



MEETING SPACES - RELATION NATURE



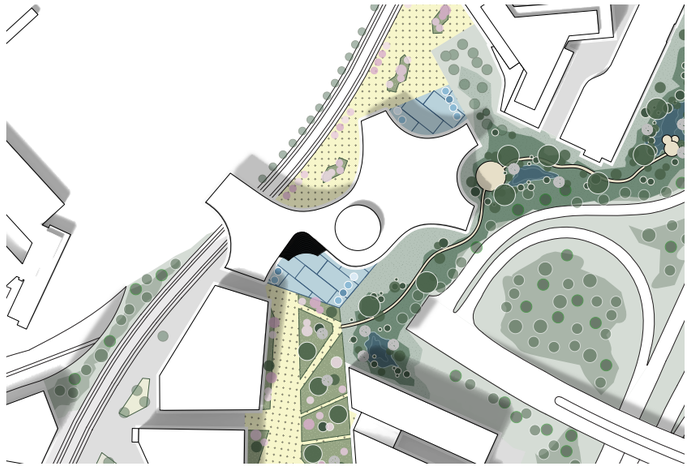
TRAM STOP

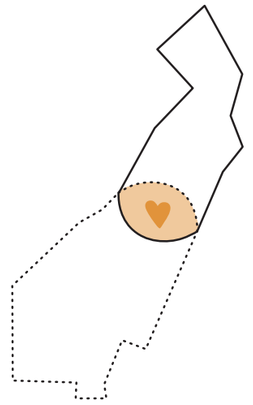
4. THE CLUSTER

This is where all type of users meet to have a pleasant time: turists, residents, people working in the area, entrepeneurs, students, and artists. A mosaic of people from different backgrounds and ages.

This building stands out from its surroundings, the architectural style of the building differs with a central character in the Core Area. This building articulates all kind of users, all kind of transports and the nature.

This is a very important placement as it is where the strip meets all kind of transports and nature. The tram and the bike-line needs to pass throw this point and that’s why the future heavy non-stop main road is digged down at this point, prioritising the pedestrian and the public transport improving the traffic and the safety.

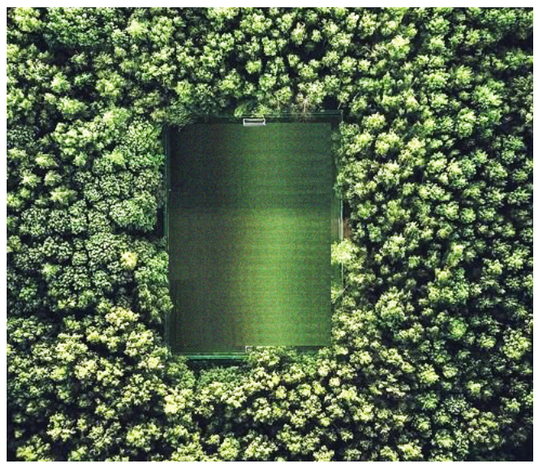




“BRING IN THE OASIS”

5. FOREST PLAZA

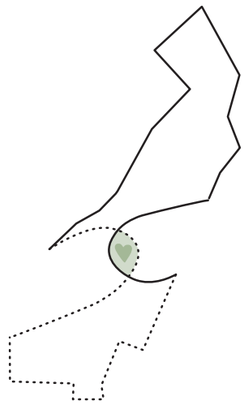
The forest plaza is a composite node creating one of the clearest clashes in the urban environment. In the west part of the node the entrance to the train station is used as a transition point. In the east part, the strip follows along the side and creates a plaza of forest, a calmer peacefull node in dialogue with commercial activities. This is both a local clash in terms of program meeting nature, but it´s also a clear clash to the airport itself.
noise vs. nature,
commercial activities vs. nature
residential vs. nature
The forest plaza not only contains uniqueness in its spatial inversion of a plaza as an open space. It also changes the context of forest in its new relation with commercial activities.
The forest plaza inhabits a strenght in concept and can therefore be refined in various ways.
e. g
* As a dense forest that encloses an oasis
* As a sparser pine wood with a more transparent visibility to its surroundings.

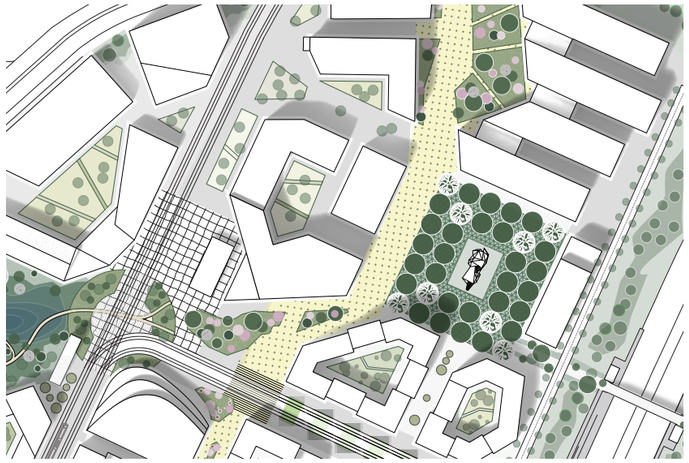




INVERSION OF PLAZA → FOREST PLAZA

It nurses the visitor
The jewel of Aviapolis!







PROGRAM -SAUNA



PROGRAM -INSTALLATION

6. TRANSPORT HUB

This is the node of all the public transport system: train, tram, bus terminal and bike parking. The train connects the Core area and the aiport to Helsinki in 30 minutes while the tram connects the Core area and the airport to differents areas of Vantaa.

The Core Area promotes the pedestrian and bicycle traffic and this principle is specially important in the nodes where different transports and flows meet. The safety of people walking is a priority so the flows and intersections of the different transports are taken into account. The fuctions and flows of the urban spaces define the suitable placements of the urban artefacts. In the case of the Transport hub node, these spaces are used for the natural collection of the water in case of heavy rain, as it is the lowest point of the site and has direct connection to the natural drainage in the West of the Core area.



HUB TRANSPORT CONNECTION



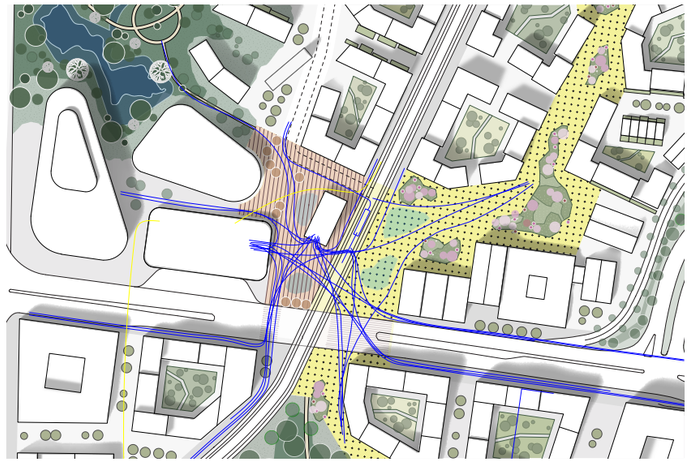
CONNECTION WITH NATURE

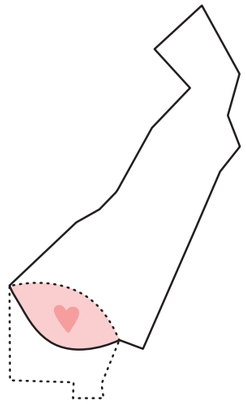


SPACE GIVES MORE FLEXIBILITY



NATURAL DRAINAGE SYSTEM





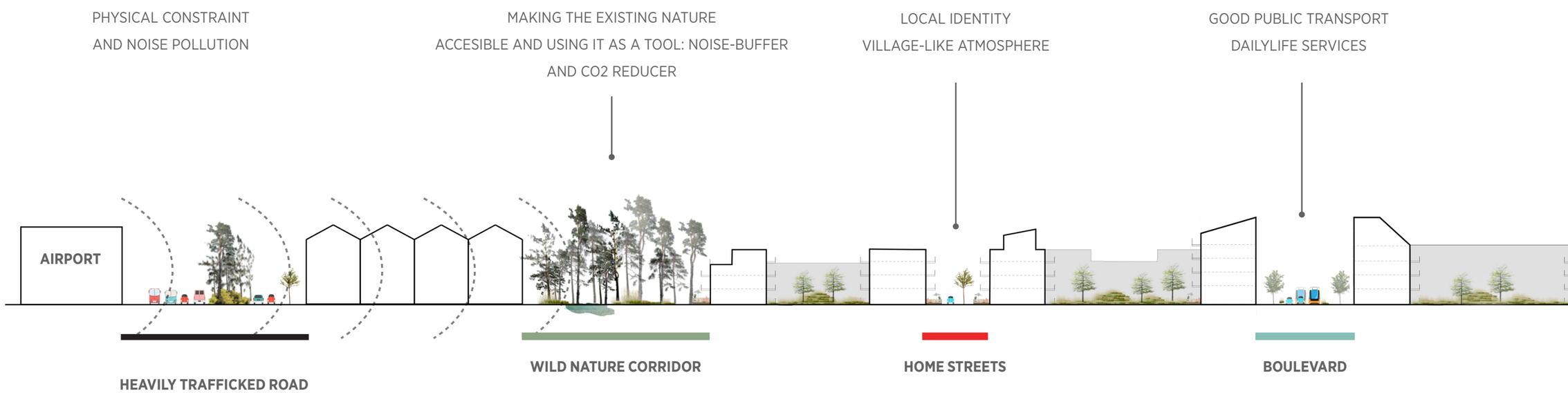

KRACK
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3. STREETS

STREETS - THE LIFE BETWEEN BUILDINGS

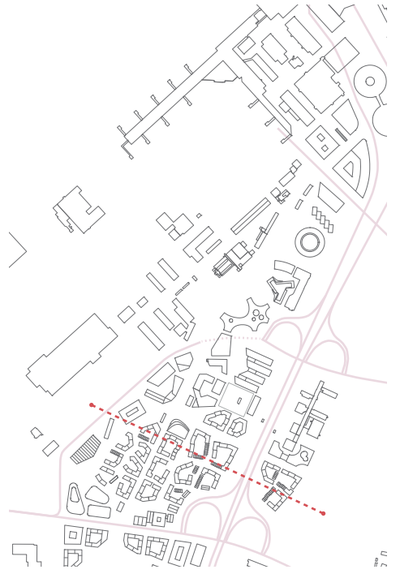
The Core Area needs a different hierarchy and character in the streets, depending on their users, program, transport, nature and the different constraints. The street are divided in four main different characters: the strip, the boulevard, the wild nature corridor and the home streets. In the same time, the strip will have three different characters along its way.

Each street is defined in program, size and relation to the typologies and transport system they are attached to. Aiming to find a local identity within the home streets and having an almost village-like atmosphere, a clear walkable and lively conexion in the strip full of contrasts, a leisure relation to the finish nature in the wild nature corridor, and a well defined transport system (tram and bike) in the boulevard. The identity of all these streets and how they differ from each other is a key feature in the whole masterplan.



These streets with different character illustrate how the city and the public and private spaces should be organised to provide the needs and requirements of student life, everyday activities, working life, recreational activities, indoor and outdoor life, cultural life, etc.

On another hand, in the Core Area there are some big constraints: the aiport, the heavy-traffic road and the main road that connects to the airport. How these constraints have been treated are an important part of the masterplan. The greenery has been used both as a noise buffer and a CO2 reducer, and also with a recreation purpose, creating activity in the same time.



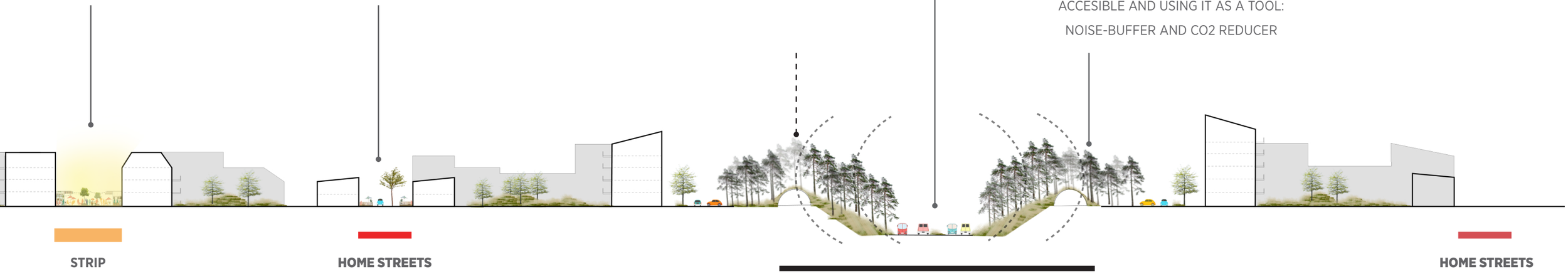
PHYSICAL CONSTRAINT
AND NOISE POLLUTION

LIVELY AND WALKABLE
WITHOUT INTERRUPTIONS

LOCAL IDENTITY
VILLAGE-LIKE ATMOSPHERE

OUTDOOR LIFE AND
ACTIVITIES

MAKING THE EXISTING NATURE
ACCESIBLE AND USING IT AS A TOOL:
NOISE-BUFFER AND CO2 REDUCER



STRIP

HOME STREETS

HOME STREETS

MASTERPLAN 1:2000

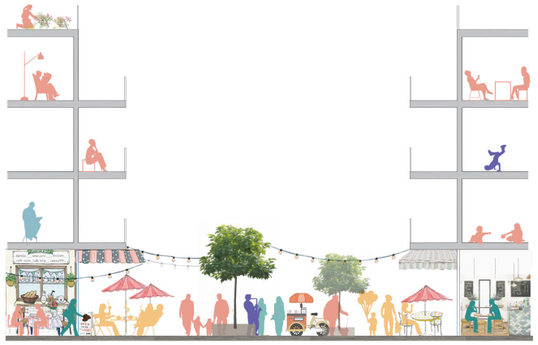
STUDENTS RESIDENCE

AVIATION ACADEMY + INTERNATIONAL SCHOOL

CAMPUS SQUARE

THE CLUSTER

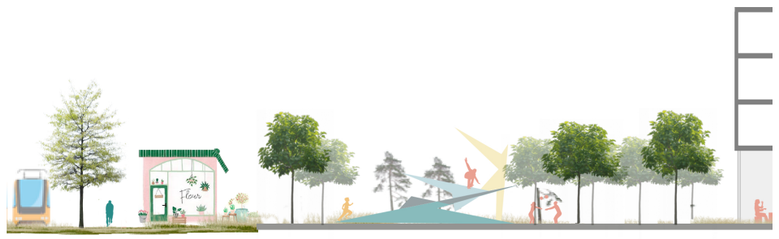
THE FOREST PLAZA



1. STRIP BETWEEN BUILDINGS

This is the liveliest street in the Core Area. A continuous facade with a sensible and variable scale will create a cohesive and human scaled pedestrian street. Active ground floors with shops, cafés or restaurants, services for people living, working or visiting with direct relation to the street.





2 .CAMPUS STREET

In this part of the strip is where the aiport environment shows its real face. Being a wide street and having an edge completely filled by aiport buildings working with the human scale becomes crucial. This environment changes following its necesities showing that an aiport-city is never a complete and finished entity, but a place with constant development.





3. ELEVATED STRIP

Elevated above its surroundings, the strip here is a unique place, in terms of the ability to create this landscape surrounded by an hostile aiport-city environment. It is separated from this environment by height and it works as an own entity by itself.



MASTERPLAN 1.2000

HOME STREET

STRIP

4

STRIP

HOME STREET

TRANSPORT HUB

WILD NATURE



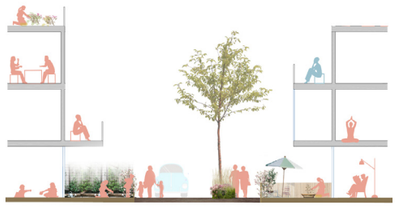
4. WILD NATURE

The Core Area of Aviapolis wants to preserve, regenerate and expand the city's green structure. The activities offered in the green areas must be adapted to the needs and requirements of the day and age, taking into consideration values created by the natural environment. The opportunities for experience must be increased. These areas should be opened up to all kind of users. Walks, jogging, picnics, etc.



5. THE BOULEVARD

Almost a straight line from south to north will allow residents car, bikers and tram users to be connected fast and efficiency. Along the boulevard trees will be placed as well as green division between traffic and bike/pedestrian.
It will become a shopping street with a wide variety of supermarkets, pharmacy, post-office, specialist shops, etc. providing the basic services for people living and working in the Core Area. This services will be placed along the ground floor of the whole avenue, activating it.



6. HOME STREETS

It is a unique housing area, a small village in the middle of the city, with neighbour streets used for play, ball games and street parties. The ground floors are characterized by residential use with front gardens creating soft edges to the shared space streets.
This neighbourhoods stands out culturally and socially because of their strong community feeling in the area.

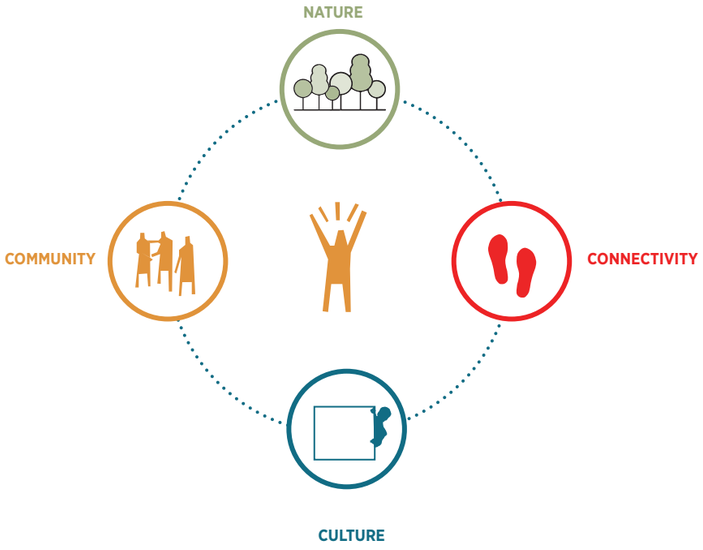




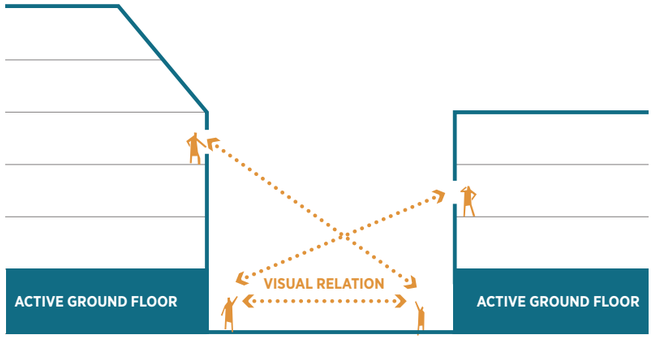


4. BLOCKS

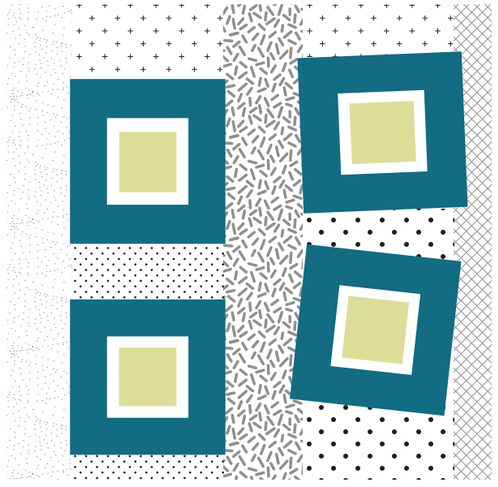
AVIAPOLIS CORE BLOCKS



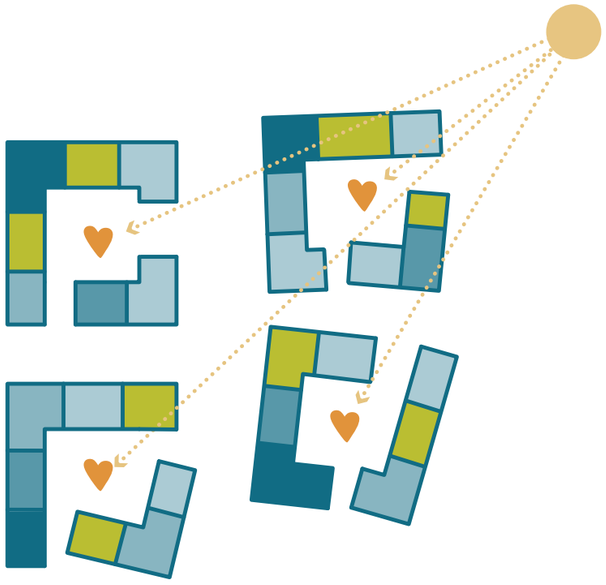
1. LIVING WITH NATURE, COMMUNITY, CONNECTIVITY AND CULTURE



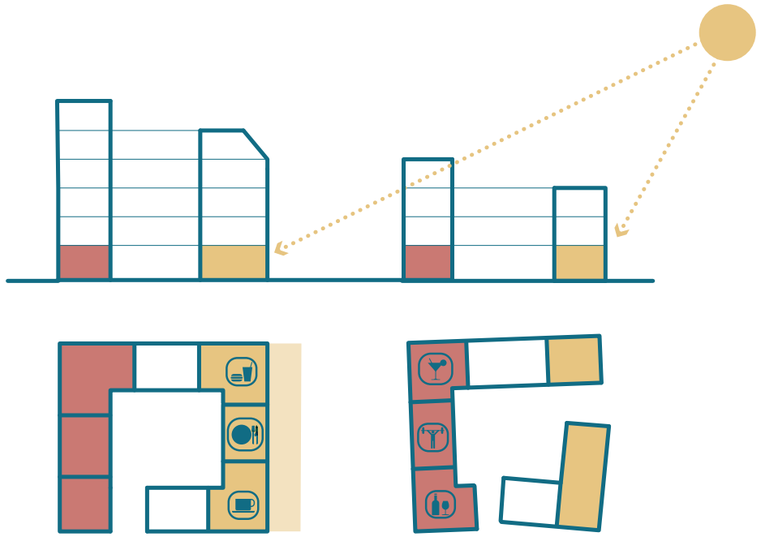
2. HUMAN SCALE



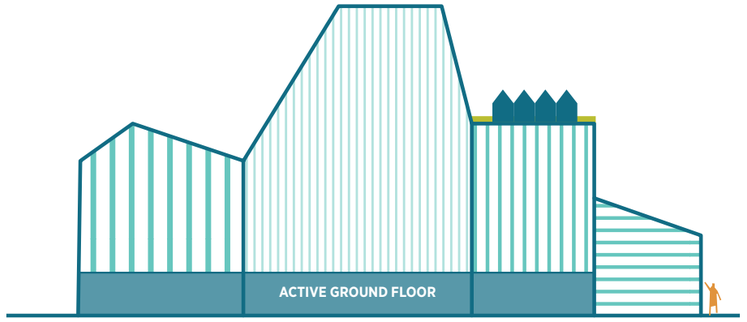
3. DIFFERENT STREET CHARACTERS



4. RELATION HEIGHTS AND COMMON SPACES



5. GROUND FLOOR STRATEGIES



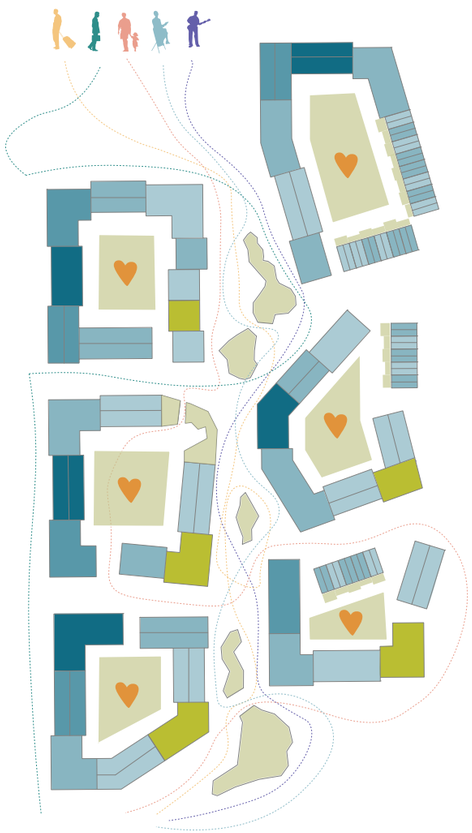
6. DIFFERENT TYPOLIGIES WITH DIFFERENT FUNCTIONS BRINGS DIFFERENT KIND OF USERS.MATERIAL QUALITY AND VERSATILITY.

TYPOLOGIES

TOWARDS THE STRIP (HOUSING)

A sequence of facades framing the street with a sensible and variable scale will create a cohesive and human scale pedestrian street. The diversity of typologies, size, rythm creates a rich, sensorial experience as well as reinforce the feeling of confort. The ground floor will be activated by commercial purposes, enhancing the activity along the strip. The apartment typologies will be varied as there will be different kind of residents in the strip: people living in the area for some days a week because of work, students, artists, young couples, etc. Rich in type of residents, with more flexible and temporary character.







STROLLING, EATING, SHOPPING

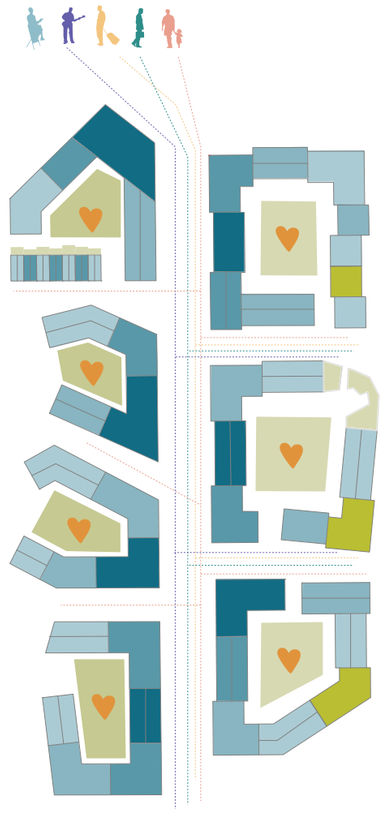


HAPPENINGS

TOWARDS THE BOULEVARD (HOUSING)

Classic perimeter blocks with well-defined facades, will provide a great streetscape towards the boulevard. The courtyard will allow residents enjoy private green with recreation purposes enhancing the feeling of community. The perimeter of the blocks should be adapt in respond to better sun conditions and better views for the residents.







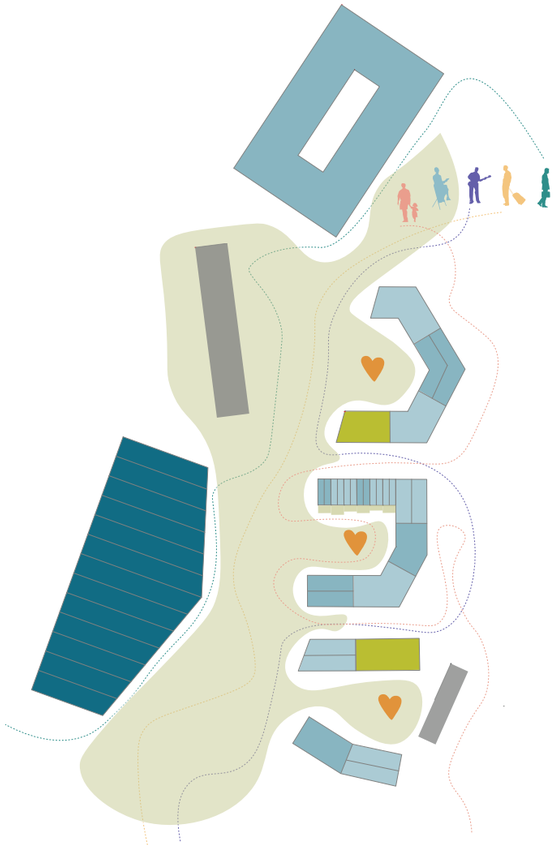


TYPOLOGIES

TOWARDS THE WILD NATURE(HOUSING AND OFFICES)

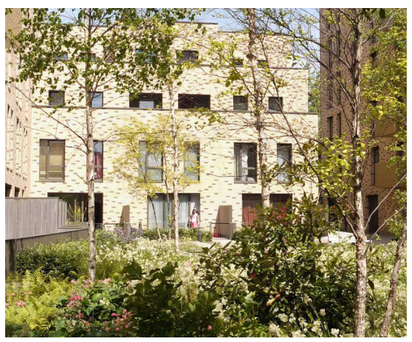
The housing blocks open and break in height towards the wild nature corridor, having a dialogue with it in the human scale. This wild corridor enters in the courtyards, creating another typology of housing block. This closeness of the residential blocks towards the nature and the office building without dead angles gives a confort and safety feeling in the park, which is activated 24/7 in their facades by people working during the day and people living during the night.







OFFICE

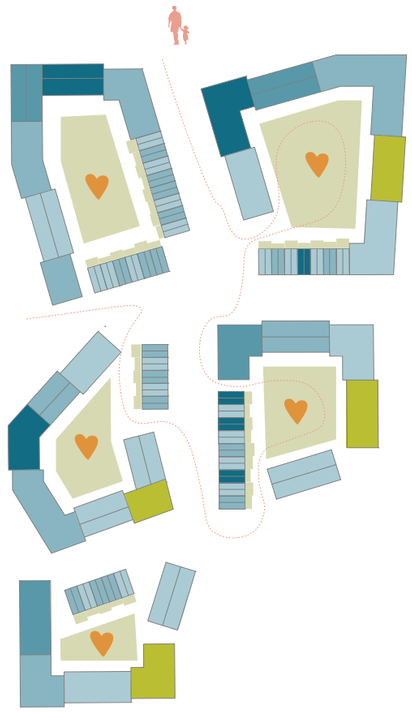


HOUSING

TOWARDS THE HOME STREETS (HOUSING)

The housing blocks open and break in height towards the home streets. Small-scale buildings will add neighbourhood atmosphere and variation to the area. They will be dispossed breaking the facade in order to get better views and sunlight conditions. Private front gardens and green edges will act as a buffer between eventual traffic, public spaces and residences. These edges will transform regular residential ground floors into attractive hosing with qualities of vila-living but with a community living.





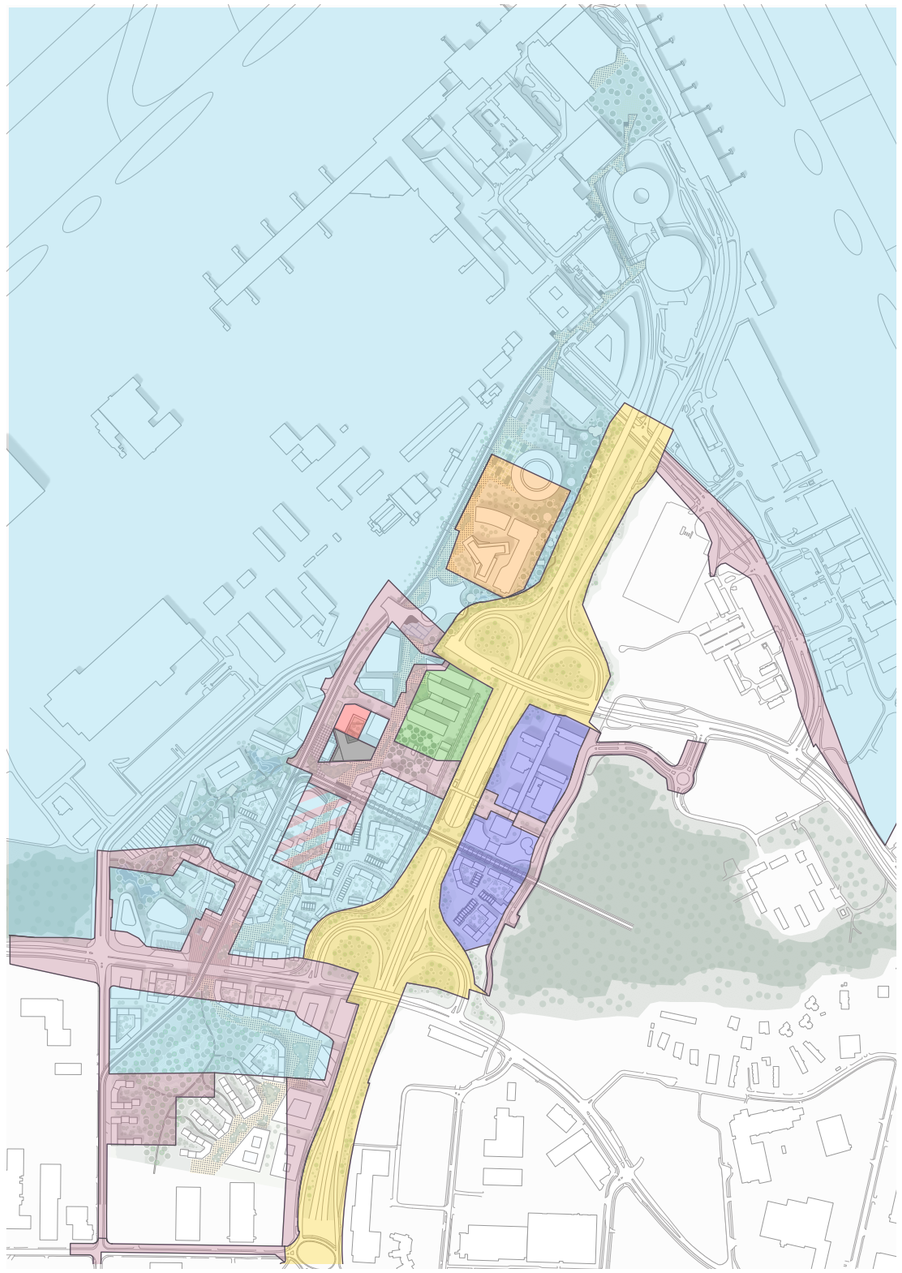


SOFT EDGES



SHARED SPACE

LANDOWNERSHIP PLAN



The way that this masterplan has been realized has been aiming the best qualities for the Core Area. The landowners should not work independentely but they should work together with a common vision and the holistic perspective

The communication channels between Finavia, Finnair, the City of Vantaa and private developers need to be improved and relate to a common vision. Short-term thinking has to be replaced, not only by long-term thinking, but also within long-range planning strategies that relates to ONE vision.

FINAVIA or LAK

ANTILOOPPI

TECHNOPOLIS

SKANSKA

KEVA

NCC

CITY OF VANTAA

ELY

THE AVIAPOLIS CORE INNER AREA



HOUSING (3-6 floors): 252 000 m²

OFFICES (6 floors): 232 000 m²

SCHOOL AVIATION (5 floors): 25 000 m²

HOTEL (6 floors): 7 200m2

PUBLIC BUILDINGS (1-5 floors): 42 000 m²

1 - Virtual density pavilions
2 - Market hall
3 - Co-working building
4 - Sauna
5 - Library
6 - Bus terminal
7 - International Primary school

MIXED USE (4-6 floors): 80 000 m²

COMMERCIAL (2 floors): 5 400 m²

PARKING (6 floors): 30 000 m²

THE AVIAPOLIS CORE INNER AREA

RESIDENCE STUDENTS (4 floors): 7 400 m²

HOUSING (3-6 floors): 25 000 m²

PUBLIC BUILDING (1 floor): 6 000 m²

8 - Sports hall

MIXED USE (5 floors): 18 000 m²

STRATEGIC FIGURES OF MASSING

The areas required by the client for the Aviapolis Core inner area:

-1000-2000 residents: 50m2 x 2000 = **100 000m2**

-10 000 jobs: 20m2 x 10 000 = **200 000m2**

-Services:

-International School (Gymnasium and upper classes of comprehensive school) = 10 000m2

-Flight Academy, that exist already in Aviapolis = 10 000m2

And later on, a entity focused on education and training related to aviation and mobility will be developed (Aviation Academy).

The client wants the international school and Aviation Academy “under the same roof”, built in phases = **20 000- 30 000m2**

The way that this masterplan has been realized has been aiming the best qualities for the Core Area without having the previous numbers in mind. The result of the numbers we have gotten are higher than the ones required by the client, but they are the ones that can give the quality needed in terms of density, street sizes, human scale and program needed.

AVIAPOLIS CORE

A WALK- FRIENDLY AIRPORT CITY IN NATURE