



AREA MODEL, SEEN FROM NORTH

Concept for the Northern Osaka station-area.

An urban space in 3 dimensions.

The flying city where each building and garden is placed on columns hovering over the rice and garden fields below – the former railway tracks.

The 3 dimensional experience of the new city will create views through the voids and thus create a series of sculptural buildings containing a variety of functions.

The proposal consist of following layers of ideas:

Nature

a) Nature play an important part in the proposal and it is symbolizes by the earth surface and the sign is that we use the area to rice fields and garden elements. In combination with the ground and rice fields there can be placed golf driving ranges, tennis course etc.

The nature element is furthermore used as a motif attached to the elevated building. Here the roof garden is thought more as highly detailed garden design inspired by the famous Japanese garden tradition.

History

b) Traces from the different uses of the site tell a story and this history of the site is used as element in the composition. The borderline of the site is naturally a very strong element in the composition and especially the large railway track towards the south is a major element.

On the surface of the site is a series of railway track creating a fan composition which the proposal uses a guideline for the structure of rice fields and garden elements.

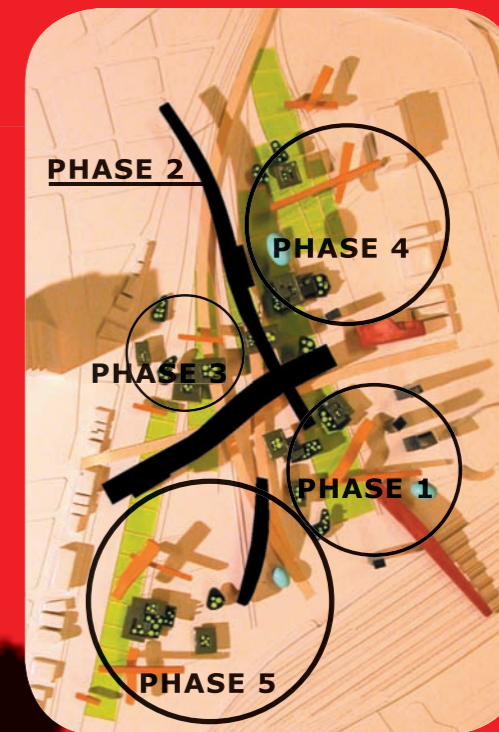
Axis

c) Like two spines a mega-structure is stretching over the site and connecting the main transportation system with the two axis. The spine in the structure is the transportation axis that is intersecting the site and hereby connects with the surrounding infrastructure.

The motif is both used with the roads and pathway traffic, and also the shopping tunnel systems are connected with the new area.

Building

d) The organization of the building structure is made in a form of clusters where both housing and office spaces is integrated in the same structure of clusters. The concept of making these clusters is that the idea is the intersecting flying-building element and whether these are office or housing and the numbers is less important.



SKETCH

3D に見るアーバンスペース



CROSS SECTION



SKETCH



MODEL SEEN FROM SOUTH

International Concept Competition Committee of Northern Osaka Station Area



3D で見るアーバンスペース



SKETCH

“An urban space in 3 dimensions”

3D に見るアーバンスペース



Concept for the Northern Osaka station-area.

An urban space in 3 dimensions.

The flying city where each building and garden is placed on columns hovering over the rice and garden fields below – the former railway tracks.

The 3 dimensional experience of the new city will create views through the voids and thus create a series of sculptural buildings containing a variety of functions.

The proposal consist of following layers of ideas:

Nature

a) Nature play an important part in the proposal and it is symbolizes by the earth surface and the sign is that we use the area to rice fields and garden elements. In combination with the ground and rice fields there can be placed golf driving ranges, tennis course etc.

The nature element is furthermore used as a motif attached to the elevated building. Here the roof garden is thought more as highly detailed garden design inspired by the famous Japanese garden tradition.

History

b) Traces from the different uses of the site tell a story and this history of the site is used as element in the composition. The borderline of the site is naturally a very strong element in the composition and especially the large railway track towards the south is a major element.

On the surface of the site is a series of railway track creating a fan composition which the proposal uses a guideline for the structure of rice fields and garden elements.

Axis

c) Like two spines a mega-structure is stretching over the site and connecting the main transportation system with the two axis. The spine in the structure is the transportation axis that is intersecting the site and hereby connects with the surrounding infrastructure.

The motif is both used with the roads and pathway traffic, and also the shopping tunnel systems are connected with the new area.

Building

d) The organization of the building structure is made in a form of clusters where both housing and office spaces is integrated in the same structure of clusters. The concept of making these clusters is that the idea is the intersecting flying-building element and whether these are office or housing and the numbers is less important.

Process

All together the four layer gives nature, history, structure by the axis and dynamic impact with the building clusters.

Creating a new urban space with a visionary approach is a task in which it is possible to use many methods and tools. We have chosen to illustrate our design process through sketch, concept model and simple illustration. As we understand this unique competition the minute planning of each area and its function is nearly the easiest part because and large piece of land is very precious in Japan so in many ways it is preferable to keep the bird eye view on the concept..

Design process has been divided in the following phase 1 stage →sketches and development of ideas→the vision and dream→ chosen elements →presentation and concept model.

Concept

The identity of the existing city, the culture, the planning principle and the design all creates elements the vision and the concept has to taken the starting point in these headlines.

Furthermore the concept has to be so organic in its approach so it can withstand the demand fore changes throughout the development process and underline the different demands of changing in the functional needs.

Japan is a modernistic adventure where infrastructure, industry, office- and housing areas are mingled with golf training spaces.

The impression is a tense dynamic experience of human energy and the culmination of the industrial society.



The image from Osaka already illustrates a city that is defines of many layers of complexity, not only in the sense of different transportation systems but also in the meaning of many historic layers.

The proposal uses these multiple layers as a starting point for the design and combines this vision with the variety of new functions.

Society

The complexity of modern life could either be reflected in a very nearly sacred space, a space for tranquillity as a contrast to the speed of the outside world.

Or another way is to use the speed and dynamic of the modern life as a tool in the concept planning, but also add values and spaces that has origin in values as nature, family.

It seems as if the industrialized world is standing on the threshold to redefining notions as growth, expanding, poverty, resources and in this redefining process among other things we have to discuss our physical environment and this concept competition seem to be a unique possibility to do so.

By following a line of more visionary relationships to inner values and the exterior outer life, the urban frame in which we live, has to combine a complex dynamic approach alongside the moral values of resources, human rights and the perceptive elements expressed in garden areas, leisure's and family life.

The approach of creating a new urban environment will become a part in the overall discussion both in Japan and rest of the world.



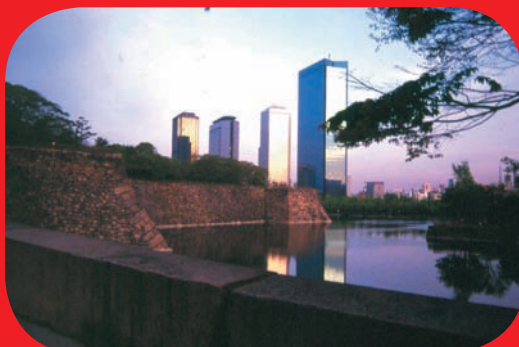
The concept is to create a new urban structure where the planning principle is made in a three-dimensional grid system and the vision is through this to make a visual impact between the different function and building thus hereby creating the identity of the Osaka northern station area.

By creating a highly complex urban structure that is planned in three dimensions, where the contact and view from one structure to the other is very open, and both the earth surface and the hanging gardens hovering over the site, will become a new icon of another way of integrating different parts of activities into the same structure.

We are at present used to segregate most of our activities in pre-designated areas without any interaction between the spaces.

It is not possible to make a vision of a future urbanism in Japan without discussing the undergoing changes of the Japanese society.

The Japanese society and culture has through the last decades addressed major changes and the process is going very rapidly now.



The castle in Osaka illustrates the layers of long historic tradition of Japan stretching from the many centuries ago up to the frontrunner of creating an image of the modern industrialized society.

The historic culture and the many very beautiful traditions such as tea ceremonies, Zen gardens, temples, sense of quality and aesthetic and the high moral are present in the experience of the Japanese people.

On the other hand is the will to growth, new challenge an open door to ex. American cultural impact, with music, fast food leisure and dress codes.

The crossroad for Japan lies in keeping the tradition and culture and transforming this into a modern life and values. Here the cooperate Japan with the major company influence and the many lives, the political system, the school system and the changes of patterns in sex roles e.g. is active poles in this process. A new urban area is not the answer but by calling for an international answer on this specific site in gives the possibility to make a vision of how a new urbanism and identity could be designed.



This sketch illustrates the idea of creating different views through the void of spaces and thus giving both the visitor that just travels through but also the uses a unique urban space.

References

This point of view expresses not an arrogant approach but a sincere attempt to be a part of the future discussion of bringing an urban vision to one of the world most beautiful countries. Some values that could be presented instead of a very separated reality between the home, work, leisure and social life the new urban area, are in our proposal combined in a sculptural 3 D structure.

The metaphor of the monastery that has all part of life integrated in the same structure from meditation over teaching to growing herbs, creates an icon of the intensions of this proposal.

The architectural impression of the monastery is a series of buildings in a very close formal alignment, whereas in this proposal the metaphor is only used in relationship with the variety of functions proposed on the site together with the design principle that each function has to intersect with other functions.



The focus of the proposal is the vision of creating a concept that gives the urban space a storytelling element where the different layers are visible.

Osaka City

Osaka as a city becomes an icon of energy. When arriving in the stunning Kasai airport one move into the city which in classical sense is not defined with an urban centre, but much more is experienced through movement and cluster structures of activities.

The movement becomes an important part of the experience of Osaka, with its tunnel systems with shops and elevated pathways that - together with the infrastructure - creates a series of movements from one activity to another.

Another thing is the visual mix between vertical high-rises and small scale 2 and 3 story buildings combined with smaller alleys and intersections of highways, that gives Osaka the ambience of a multi-layer structure which illustrates the dynamics of the Japanese society.

The new concept has to establish its own formal language, but still use the inspiration of Osaka as a starting point. Especially the pathways are an inspiration that is interpreted in the proposal.

The sculptural design of the main spine - that together with the main infrastructure of roads and public access - draws the overall composition of the Northern station area.

The intersection between the existing infrastructures is reflected in the joining of elements so that the new elements will meet the existing structures in the main crossing sections.

A series of transportation elements will become important parts in the experience of the area road: tunnels, trains, parking, pedestrian paths and bicycle paths.



In Japan the earth is precious and that lays a large concentration of activities in the flat land, whereas hills and mountains define the main part of Japan. Rice fields are a historic reference and in the EDO period. This was a major activity in the Osaka district.

The proposal integrates the possibility of having rice fields under the flying city both as sign back to history but also as a recreational element.

In contrast to the very easy readable infrastructures such as pathways, there are other values which the traveller experience in Osaka and Japan in general. The garden design, temples and presence of historic culture, gives Japan a magic scent that also should be a part of the design process of the new concept.

Soft values such as dreams, views, air and light should be an integrated part of the design process and here each element in the new urban composition should fortify this effort.

Illumination

Light as an immaterial substance is at night one of the most significant experiences of Japan.

The illumination should both lit up the main structure, and the cooperated logos on the office buildings should be marked. But one illumination-element that could give the area a new character would be the underside of the flying buildings. Here should be placed different types of illumination as well as coloured light, so that the hole elevated composition of building volumes are illuminated.

If it was planned from the beginning the whole elevated city could be illuminated by a series of light-artist from around the world.

Materiality

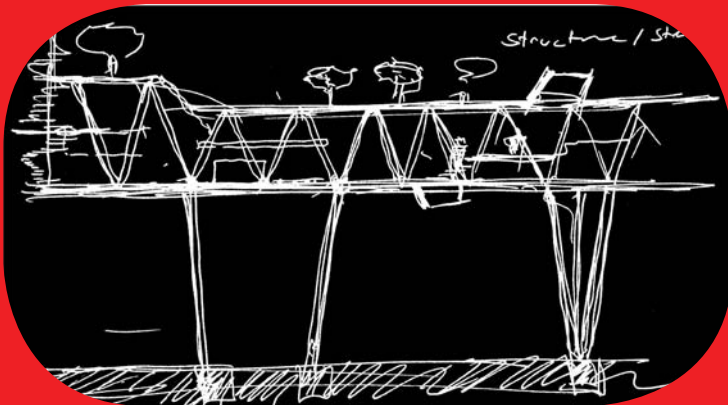
The flying buildings should be covered in quite smooth materials such as steel plates and wood panels. This cladding should also be on the underside of the building due to the visible surface there.

The roof garden is made of hardwood panel floor, and the garden elements are placed in stone- and grass beds. The railings and fittings are in steel. The main spine is covered with colour-plates that could be chosen later in the project. All elevator systems and pathways are proposed in glass either translucent or with integrated sun-blinders to create a transparent exterior in contrast to the more closed building volumes.



Sketch of the spaces that are created between each element of the structure. The main motif will become the void and the views between the different structures.

Technical aspects of the projects is in this concept study not in the main focus, but still there are some issues that would be natural to deal with such as: Construction and earthquake, environment and resources.

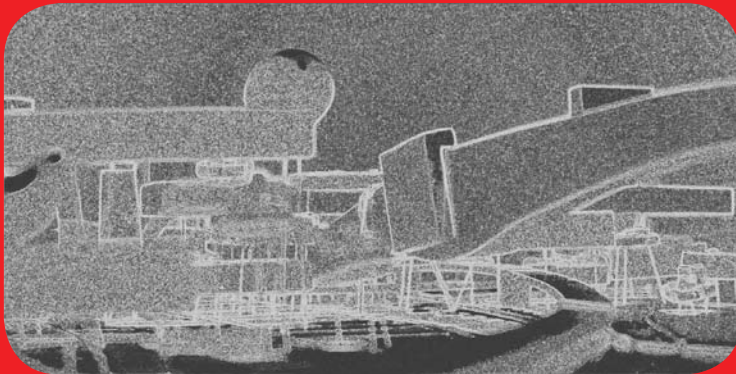


The construction is made in steel and especially the condition of earthquake has to be incorporated in the design. However the main visual expression of the buildings are volumes covered with steel plates and supports of column structure of steel and concrete. All façade and fitting must support this impression thus contrasted in the roof gardens and nature elements.

The design of the main structures has on one hand to take the starting point in the need of making the buildings strong enough to withstand earthquake, and on the other hand to hold a feasible construction-economy.

It is proposed to investigate into the use of alloy and minimalistic construction in the car industry and flight industry, where notions such as low weight and strong tube-constructions is common.

Hereby it would be possible to make these building structures elegant without losing the strong construction.

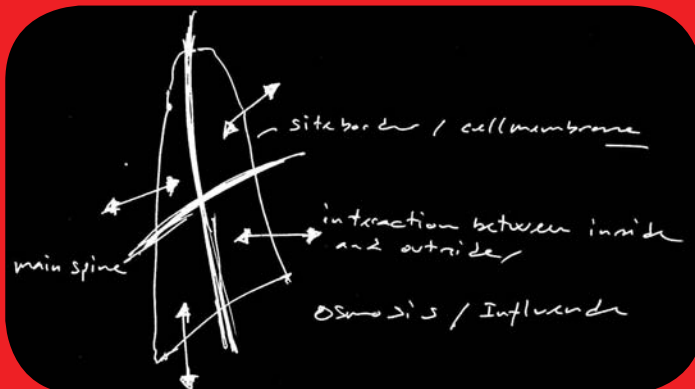


The perspective illustrates the visual complexity of the new structure, where both the main spine but also the columns, flying housing and gardens will create a stylised forest of elements.

The process of creating a new urban environment demands a visionary approach, but also a process of choosing the ideas, functions, design element and architectural statement that creates a process in which it is possible to change, add new ideas and elements in a ongoing process.

So the proposal to the area is a mechanism and a mythology that creates the identity of the new urban space, but still creates a juxtaposition of ideas and dreams.

Osmosis as a metaphor



The principle diagram illustrates the main elements of the concept with the axis penetrating the site and the more organic approach on the borders where both functions and design are influenced by each other.

The principle is inspired by the notion from biology – osmosis - that in the short version is the spreading of liquid through a solid part of substance.

The osmotic pressure is a transportation system in the cells. The energy from different pressure makes the molecules spread on each side of the semi-permeable cell-walls.

The proposal is using this metaphor as a tool to incorporate all the different layers of the Osaka Northern station area, and the interaction between the existing structure and city, and so the new concept has to be a dynamic tool.

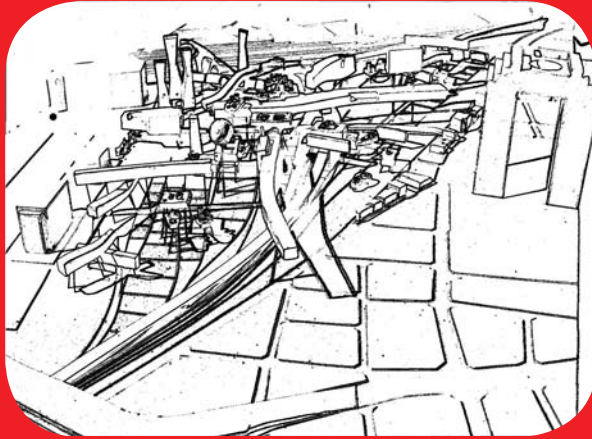


Illustration of the new urban structure as a group of movements and voids between the hovering building structures. Seen in bird perspective it is a complexity composition but moving through the structure the view will multiply.

The site is a symbol of the cell. The surrounding urban structure penetrates the borderlines of the site with infrastructure, roads, tunnels and the new urban structure on the site, stretches out and gives way through to the existing city. The borders of the site are to compare with the cell membrane. Planning has to discuss whether it will be the penetration of the existing elements of the city, or of elements in the new stretching out and making a connection with the known structures.

Functions

Square meters and functions are divided in five phases and the proposed square meter is thought as a framework to underline the main motif.

One could say that this is the minimum square meter that is needed to support the vision and without there in the proposal is stated more one could add about 30% more build mass which just would underline the idea further.

To the calculation is added 20% in circulation and technical spaces and concerning the infrastructure with roads, tunnel systems and parking areas following calculator is made

The main road system has access from existing road system and the new road would give access the underground parking, to the shopping area a there would establish approximately 2000 parking lots. The 500 would be in the landscape situated at the access road and the 1500 would be placed in underground construction area. The size of the underground parking area would be 67.500 m².

Tunnel system connecting the existing tunnels with new ones in the area will be made with shopping space and at each junction where a elevator to the elevated building intersect the should be situated a larger shopping square. The area designed to this underground function is designated to approximately 20.000 m².

The functions are divided in following categories.

1. Housing (green buildings on the model). The proposed housing scheme combines flats for family, with single apartment and spaces fore students. Hereby it would be possible to create both 2 and 3 story high apartments all connecting with the roof garden.
2. Office area (yellow on the model). The office area is situated so it will become integrated in the housing area and the concept is both to create smaller units that can be used as greenhouses fore expanding new businesses but the single building can also be used to profile a cooperate identity.
3. Mixed functions spine (red on the model). The two main axis is a combination between transport and function and the proposed functions would a shopping space in connection with the main transportation, combined with office space, small hotel for businessmen and cultural activity placed in connection with the blue spheres.
4. Cultural activities (blue spheres on the model). These are placed in contact with the red spine and the proposed cultural activities could expand from an exhibition of manga cartoons to a music and cinema spaces.

1. phase

- a. Housing 14.000 m²
- b. Office space 7.300 m²
- c. Mixed functions 12.000 m²
- d. Cultural functions 2.200 m²

Total 35.500 m²

2. phase

- a. Mixed functions 98.000 m²
- b. Cultural functions 1.200 m²

Total 99.200 m²

3. phase

- a. Housing 22.500 m²
- b. Office space 2.600 m²

Total 25.100 m²

4. phase

- a. Housing 3.300 m²
- b. Office space 9.200 m²
- c. Cultural functions 3.000 m²

Total 15.500 m²

5. phase

- a. Housing 11.800 m²
- b. Office space 13.700 m²

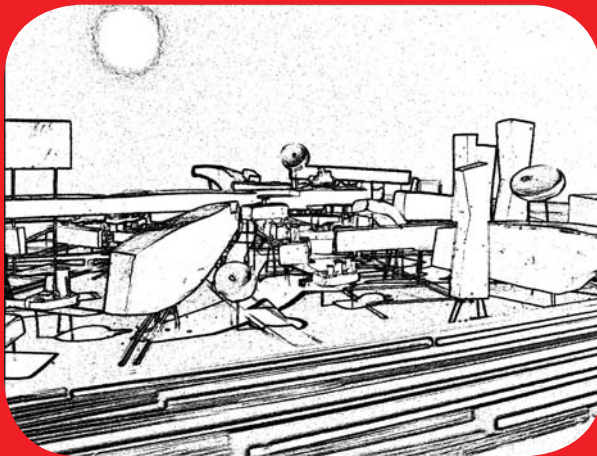
Total 25.500 m²

Total square meters for all phases:

- 1. Housing 51.600 m²
- 2. Office space 32.800 m²
- 3. Mixed functions 110.000 m²
- 4. Cultural functions 6.400 m²

Total 200.800 m²

- Infrastructure/transportation
- Recreational elements
- Housing
- Hotels
- Office area
- Shopping area
- Cultural element



A sketch of Osaka Northern station area seen pass the existing railways. The perspective illustrates the complexity spatial through the 3D planning principle, where both horizontal and vertical elements are combined into the main composition.

All elements are woven together into a new structure in 3 dimensions, stretching towards the sky. The area is arranged in a 3 D grid in order to arrange design and planning. Through this grid a framework for the future development of the area is made.

Summary

The final comments is that the proposal creates a framework in which it will be both necessary - but also an integrated part of the evolution of the area - to make changes and alteration through the planning process. The main structure and ideas of the project is so visionary significant, that it will withstand the programmatic changes.

The urbanism is created of the choice of elements and functions and the process is defined as a concept and design development in which one of the headlines has been to create a sculptural environment in 3 D, with the notion of osmosis as inspiration for the planning.

Using the nature, traces of history and giving a main spine, as defined in the axis with contrast in the housing clusters,