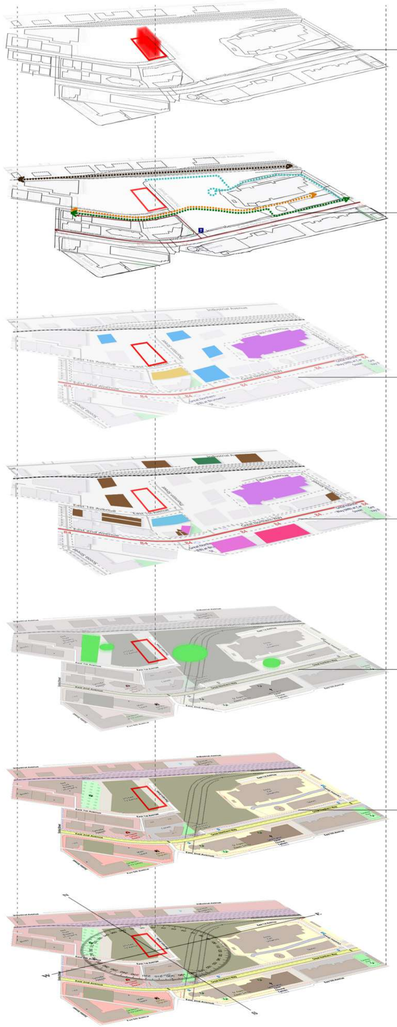
The-Invisible-Hub

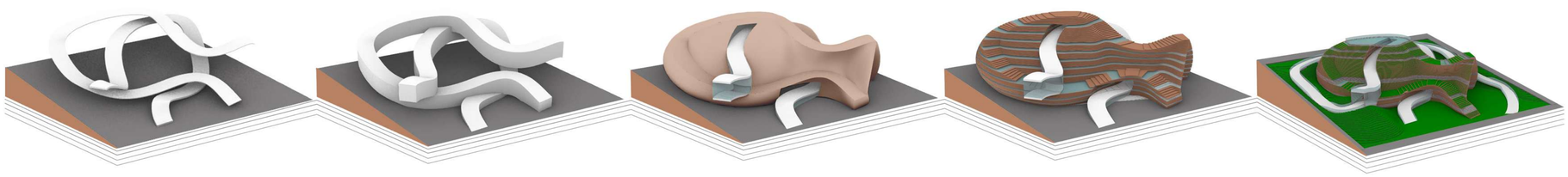
in the design of The Invisible Hub with the given location ,the demands of the competition and the biophilic approach, due to the alignment of biomimicry and biophilic architecture, the design of this building and its landscape are inspired by the famous Vancouver salmon and Stanley Park which has a free shape form. This project has three floors and is located on the site in such a way that interacts with the surrounding neighbors to be in harmony with its use as a Community Center, a place for all social groups of any nationality, gender, and race; in fact, it acts like a social bridge while simultaneously fulfilling the demands of the competition.

The main idea of this project:

all people in the community should be able to use this space to promote mental and physical health and recover lost energy from the monotony of everyday life (this is one of the properties of biophilic architecture).

In addition, it should function in a way that anyone with any physical problem and any restrictions can enjoy using all the defined spaces on different floors.





The design process began with two fish-shaped ramps that were intertwined, and then according to the spatial needs of the project, one of the fish, with its orientation towards the surrounding neighborhoods, with a curved form with freedom (one of the principles of biophilic architecture).

This means that in the design we must use the lines that exist in nature) and also dynamic, which is reminiscent of the free shape of Stanley Park, has become the main building of this design and the second ramp has become a two-story ramp which remains to create a sense of exploration and newness for the clients (one of the principles of biophilic design) in addition to the fact that in this two-story ramp, all people, including the disabled, have free access to the different floors.

In the next stage of the design process, the fish-shaped volume with a uniform curved form is transformed into a stepped form to satisfy the audience in addition to the principle of wonder.

According to prospect-refuge hypothesis, this acts in a way that inside the building is like a refugee and the possibility of climbing the stairs of the building and having a view of surrounding is like having prospect; exploring all parts of this building creates a sense of joy from having dominance over the building (the principle of prospect in biophilic architecture).

In designing this project, neighbors, slope, height limit, etc. of the context have been considered.

Six Principles of
BIOPHILIC DESIGN

ENVIRONMENTAL FEATURES
- Using water elemnts
- Using natural light for each space
- Using vernacular plants
- Intraction between light and shadows in spaces
- Make a new space for Biodiversity

NATURAL SHAPES AND FORMS
- Using amorphous forms in interior design
- Using cylindrical columns to remind stableness of trees
- Using light's reflecting features

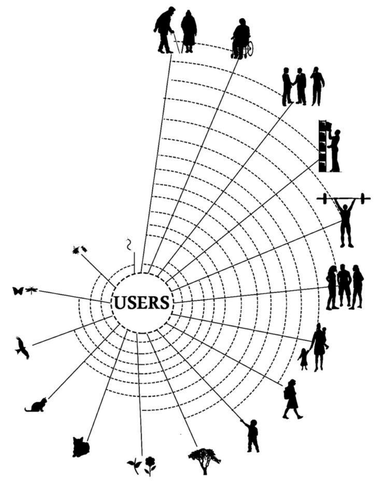
NATURAL PATTERNS AND PROCESSES
- Using natural forms
- Using free geometry inspired by nature in both interior and exterior design.

LIGHT AND SPACE
- Using natural light for each space.
- Intraction between light and shadows.
- Using colored glasses in ceiling to reflect colors in interior space.

PLACE-BASED RELATIONSHIPS
- Using vernacular and recyclable materials
- Business plan based on site analysis
- Considering the geographical, historical, ecological, and cultural characteristics of the site.

ENVOLVED HUMAN-NATURE RELATIONSHIPS
- Considering human needs, especially the need of being in touch with nature and feeling it by our five senses.

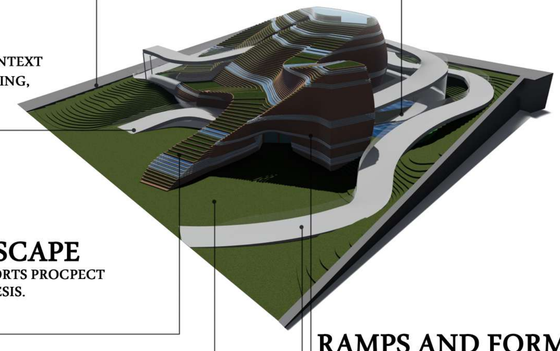
- Considering human five senses in different spaces to improve humans' mental health; for instance, using scents of flowers and grass, water as a visual and auditory element, sunlight ,and the interaction between light and shadows in both exterior and interior spaces.
- Making biodiversity spaces by improving microclimate which further will help both humans and all living species.
- Reconstructing the relarionship between nature and humans which has been restricted due to the modernism.
- Coexistence of all living species in order to respect nature and not to interfere in it.
- Absorbing and using solar power, which is a renewable source of energy, by the panels in the roof garden.
- Using greenery and a few trees to induce The Savannah, where the primary humans existed. (According to Savannah Hypothesis).



GREENSPACE
USING GRASS AND FLOWERS TO HAVE PLEASANT SCENTS WHICH ARE GOOD FOR HUMANS .

LAKE
USING WATER AS ONE OF THE BIOPHILIC ELEMENTS, ALSO TO HAVE A BASIS FOR FUTURE BIODIVERSITY.

CONTEXT
CONSIDERING THE CONTEXT OF THE SITE IN DESIGNING, BASED ON SITE'S TYPOLOGY.

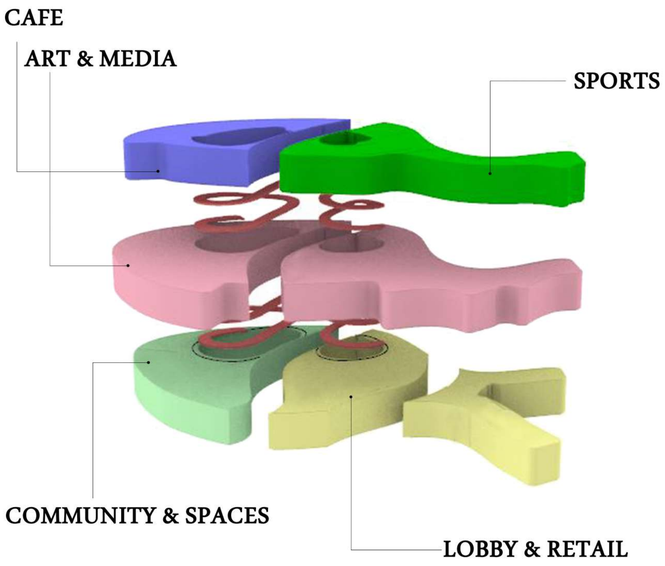


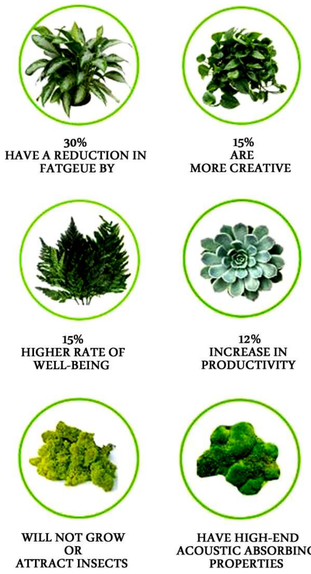
FREE LANDSCAPE
THE FORM ALSO SUPPORTS PROCPECT AND REFUGE HYPOTHESIS.

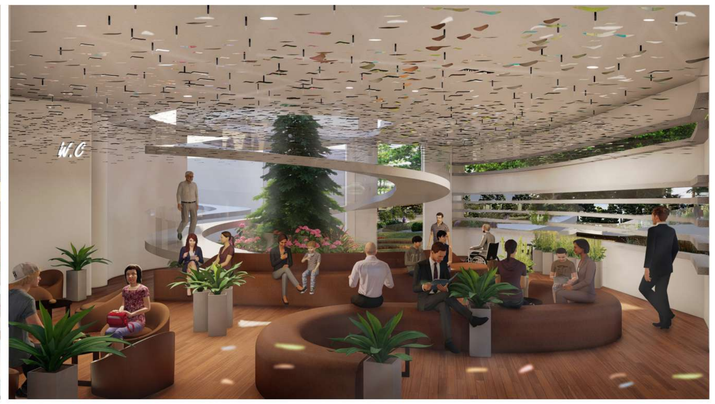
RAMPS AND FORM
FORM AND RAMPS CAME FROM NATURAL SHAPES; INSPIRED FROM VANCOUVER'S FAMOUS FISH AND SEA WAVES.

SITE POTENTIAL
USING SITE POTENTIALS TO HAVE GATHERING SPACES BOTH INSIDE AND OUTSIDE .

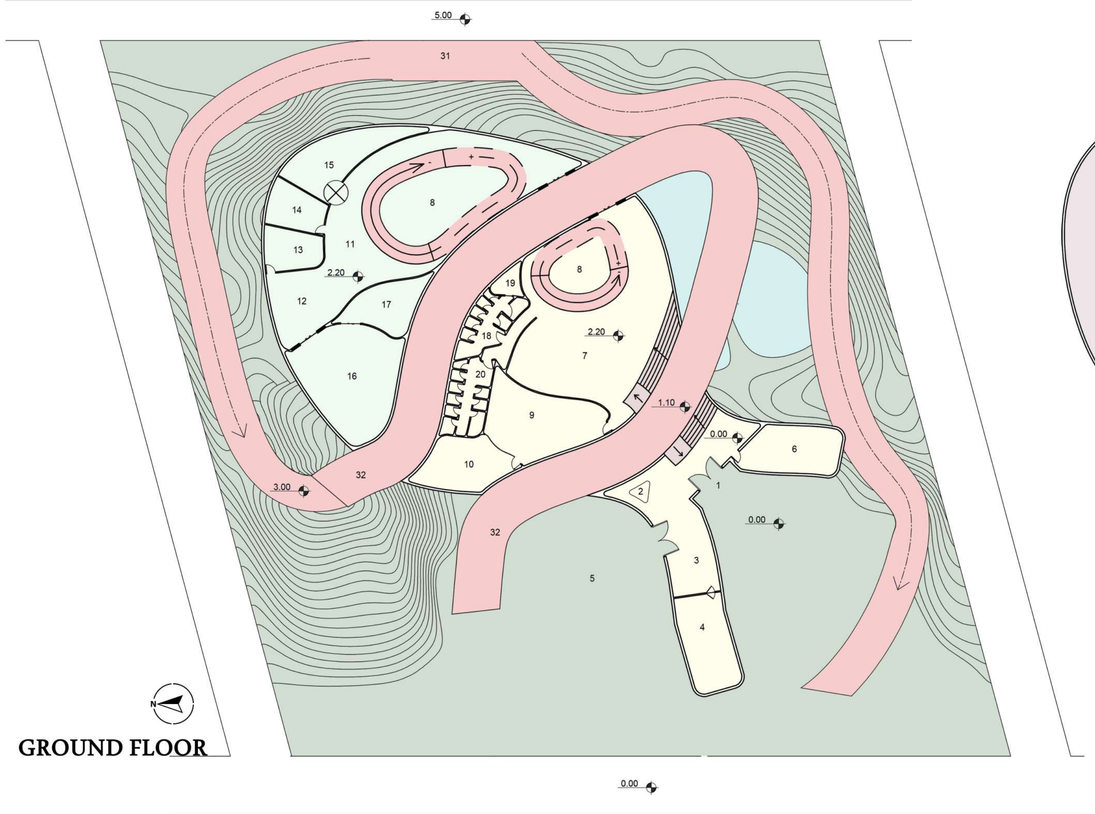
MATERIALS
USING RECYCLABLE MATERIALS WHICH ARE NATURE FREINDLY AND SUSTAINABLE.



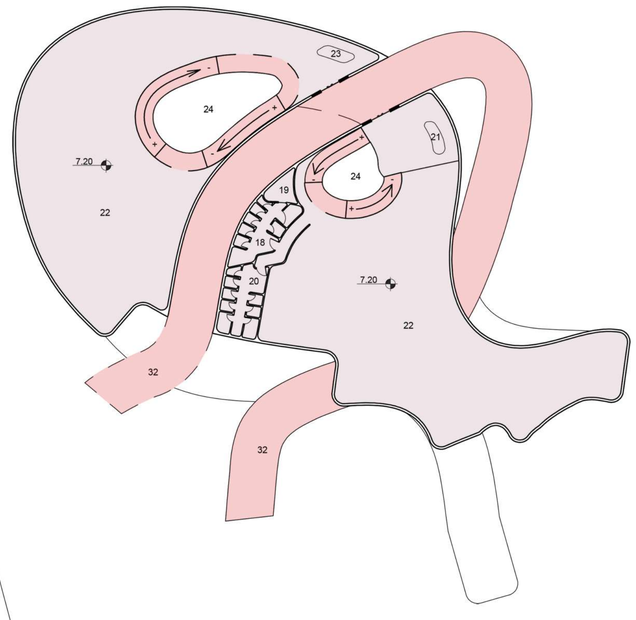




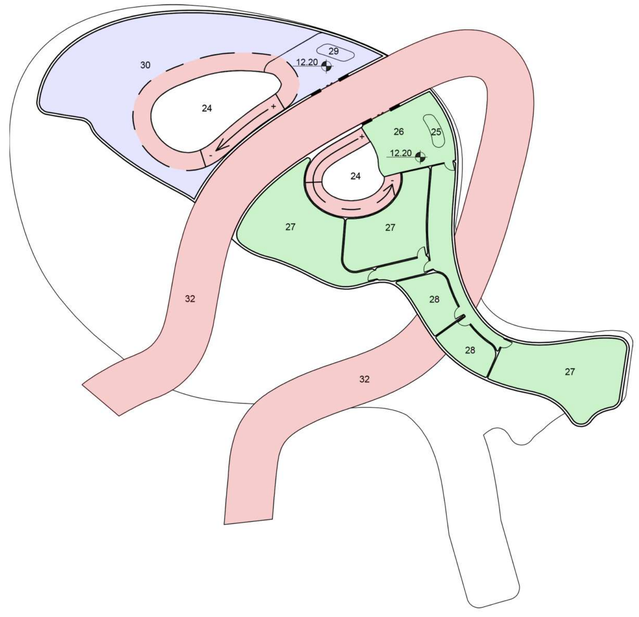
In designing the interiors of this complex, in addition to place natural elements and provide the possibility of visual communication between people and nature, attention has been paid to the fact that people need to understand the biophilia of the place in different ways. With the involvement of all five senses, individuals start to feel connected with nature once again. For example, in the design of the second floor's cafe, in addition, to engage the senses of sight, smell, and hearing, an attempt has been made to involve people's sense of touch through the direct contact of their feet with purified water; or using the visual illusion of water made by digital platforms. In another hand, in the design of the lobby and its skylight, we have tried to remind the diverse nature of Vancouver, which has different properties like vegetation, sea, pond and etc., by using dense vegetation. Also, colored glasses have been used to beautify the spaces by their reflection in various colors by their reflection in various colors.



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

1-ENTRY	2-INFORMATION	3-CAFE	4-CAFE'S KITCHEN	5-OUTDOOR CAFE	6-SECURITY	7-LOBBY & WORKING SEATS	8-GREEN SPACES
9-JUNIOR SPACE	10-KIDS SPACE	11-COMMUNITY HALL	12-WORKING WITH LAPTOP	13-BOOKSTORE	14-ELECTRICAL STORE	15-GROCERIES SHOP	16-LIBRARY LOUNGE
17-BOOK STORAGE	18-WOMEN W.C	19-WOMEN LOCKER	20-MEN W.C	21-TICKETS	22-GALLERY	23-SECURITY	24-VOID
25-SPORTS' INFORMATION	26-SPORTS' AIRLOCK	27-GYM	28-LOCKERS	29-CAFE'S CASHIER	30-CAFE	31-COMPLEX MAIN ENTERANCE	32-TWO STORY RAMP

In designing the plan of this complex, we tried to use lines with soft and free natural forms, exactly similar to the features of lines in nature, which allows us to make wonders and surprises, a place with unpredictable features. This makes their experience enjoyable with a great feeling of using architecture as a healing method and live a unique experience apart from the dry and soulless buildings. The building has been built on three floors, precisely divided into three zones. Spaces have been divided from bottom to top by this order: the social zone, art zone, sports, and cafe.

The-Invisible-Hub

in the design of The Invisible Hub with the given location, the demands of the competition, and the biophilic approach, due to the alignment of biomimicry and biophilic architecture, the design of this building and its landscape are inspired by the famous Vancouver salmon and Stanley Park which has a free shape form. This project has three floors and is located on the site in such a way that interacts with the surrounding neighbors to be in harmony with its use as a Community Center, a place for all social groups of any nationality, gender and race, in fact, it acts as a social bridge while simultaneously fulfilling the demands of the competition.
The main idea of this project: all people in the community should be able to use this space to promote mental and physical health and recover lost energy from the monotony of everyday life (this is one of the properties of biophilic architecture).
In addition, it should function in a way that anyone with any physical problem and any restrictions can enjoy using all the defined spaces on different floors.

The design process began with two fish-shaped ramps that were intertwined, and then according to the spatial needs of the project, one of the fish, with its orientation towards the surrounding neighborhoods, with a curved form with freedom (one of the principles of biophilic architecture).
This means that in the design we must use the lines that exist in nature) and also dynamic, which is reminiscent of the free shape of Stanley Park, has become the main building of this design and the second ramp has become a two-story ramp which remains to create a sense of exploration and newness for the clients (one of the principles of biophilic design) in addition to the fact that in this two-story ramp, all people, including the disabled, have free access to the different floors.
In the next stage of the design process, the fish-shaped volume with a uniform curved form is transformed into a stepped form to satisfy the audience in addition to the principle of wonder.
According to prospect-refuge theory, this acts in a way that inside the building is like a refugee and the possibility of climbing the stairs of the building and having a view of surrounding is like having prospect; exploring all parts of this building creates a sense of joy from dominating the building (the principle of prospect in biophilic architecture).
In designing this project, neighbors, slope, height limit, etc. of the context have been considered.

- Considering human five senses in different spaces to improve humans' mental health; for instance, using scents of flowers and grass, water as a visual and auditory element, sunlight, and the interaction between light and shadows in both exterior and interior spaces.
- Making biodiversity spaces by improving microclimate which further will help both humans and all living species.
- Reconstructing the relationship between nature and humans which has been restricted due to modernism.
- Coexistence of all living species to respect nature and not interfere with it.
- Absorbing and using solar power, which is a renewable source of energy, by the panels in the roof garden.
- Using greenery and a few trees to induce The Savannah, where the primary humans existed. (According to Savannah Hypothesis).

In designing the interiors of this complex, in addition to place natural elements and provide the possibility of visual communication between people and nature, attention has been paid to the fact that people need to understand the biophilia of the place in different ways. With the involvement of all five senses, individuals start to feel connected with nature once again.
For example, in the design of the second floor's cafe, in addition, to engage the senses of sight, smell, and hearing, an attempt has been made to involve people's sense of touch through the direct contact of their feet with purified water; or using the visual illusion of water made by digital platforms. In another hand, in the design of the lobby and its skylight, we have tried to remind the diverse nature of Vancouver, which has different properties like vegetation, sea, pond, etc., by using dense vegetation. Also, colored glasses have been used to beautify the spaces by their reflection in various colors.

In designing the plan of this complex, we tried to use lines with soft and free natural forms, exactly similar to the features of lines in nature, which allows us to make wonders and surprises, a place with unpredictable features. This makes their experience enjoyable with a great feeling of using architecture as a healing method and to live a unique experience apart from the dry and soulless buildings. The building has been built on three floors, precisely divided into three zones. Spaces have been divided from bottom to top by this order: the social zone, art zone, sports, and cafe.