Design project

CASPIAN LAND

NASTARAN TALEB EINOLLAHI
Master Degree Project in Urban Studies
Second Cycle 15.0hp AG218X
Design Project by: Nastaran Einollahi
Date: June 2018
Project’s supervisor: Dr. Jerker Söderlind

CASPIAN LAND is

A multicultural design project
with
A mixture of Swedish and Persian urban design characteristics
WHERE
LOCATION & DELIMITATION
• The Caspian Land project is located between Norsborg and Tumba, and along Aspen Lake in Botkyrka municipality with a total proposed area of 1.47 km².
• Caspian Land project is proposed to be located at two areas: Northern part and Southern part of the Aspen Lake.
• The southern part of the project is divided into two different phases; Phase A and B. This study focus on the phase A of the southern part of the Caspian Land project with around area of 700,000 m².

OVERVIEW PLANS
OVERVIEW PLANS
PROPOSED PROJECT

OVERVIEW AREA
<table>
<thead>
<tr>
<th>SWOT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STRENGTHS</strong></td>
<td><strong>WEAKNESS</strong></td>
</tr>
<tr>
<td>Having very low <em>cost, price</em>, <em>cheap</em> and <em>beautiful</em> land.</td>
<td><strong>Long distance</strong> to the city center.</td>
</tr>
<tr>
<td>Having a <em>water sightseeing</em>.</td>
<td>Shortage of <em>urban pathway</em>.</td>
</tr>
<tr>
<td>Vicinity of European highway (E 20).</td>
<td>The absence of productive <em>shopping areas</em>.</td>
</tr>
<tr>
<td>Possessing <em>intact greenery</em>.</td>
<td>Lack of effective <em>public spaces</em>.</td>
</tr>
<tr>
<td>Clean area.</td>
<td>NOT <em>well-structured urban area</em>.</td>
</tr>
<tr>
<td>Having a <em>well-functioning park</em> and old <em>church</em> as a landmark.</td>
<td></td>
</tr>
<tr>
<td>Having the farmlands near the site to create <em>green views</em> for residents.</td>
<td></td>
</tr>
<tr>
<td><strong>OPPORTUNITY</strong></td>
<td><strong>THREAT</strong></td>
</tr>
<tr>
<td>Access to <em>nature of the Aspen lake</em>.</td>
<td>Having some <em>factories</em> and companies near the site.</td>
</tr>
<tr>
<td>Having a <em>great area</em> for housing, school, healthcare, service, and shopping center.</td>
<td><em>Water pollution</em> of Aspen lake.</td>
</tr>
<tr>
<td>Having the opportunity to establish a <em>high-quality walking path along the water</em>.</td>
<td></td>
</tr>
<tr>
<td>Having the <em>farmlands</em> creates an opportunity to have <em>urban gardening</em> on the site.</td>
<td></td>
</tr>
<tr>
<td>Accessibility: <em>easy access to 4 subway stations</em> of (Norsborg, Hallunda, Alby metro stations, and Tumba pendeltåg station).</td>
<td></td>
</tr>
<tr>
<td>Bring economy to clean Aspen lake ‘water.</td>
<td></td>
</tr>
</tbody>
</table>
WHAT are the PROBLEMS?

The area/neighbored is suffering from:

P1: Lack of well-structured urban area.

P2: Shortage of traffic & street network.

P3: The gap between people’s dream of owning their own villa, and what is being built in reality, as well as shortage of mixture of housing typologies.

EXISTING SITUATION

Some of the existing conditions and plans of the project are as follows: OVERVIEW AREA, DISTANCE TO SUBWAYs, TRAFIC & STREET NETWORKs for both cars & bus, and EXISTING VIEW, EXISTING PLAN.
TRAFFIC & STREET NETWORK

[Map showing traffic and street network with various labels such as Aspen, Skravsta, Hagelby, and others, with a scale of 0 - 300M indicated.]
According to a survey conducted by the consultant company Cint in 2014, interviewing 1000 people aged between 18-26 through Sweden:

- 35% would prefer to live in a villa.
- 27% would prefer to live in a condominium housing.
- 23% would prefer to live in a first hand rental apartment.
- 6% would prefer to live in student housing.
- 9% would prefer other options.

The most important drivers of such preference were low cost, ownership and good communication.

What is purpose of the project?

Merging some Swedish & Persian productive models for designing.

Combing
- Trädgårdsstad in Bromma (garden city) as a Swedish model.
- Tabriz Bazaar in a cold climate city in Iran as a Persian model for a multifunctional complex.

Swedish model

Bromma (Trädgårdsstad)

Bromma is a neighborhood that can address what people wished for a desired home in the surveys conducted by Boverket, United Minds and SBAB, i.e:

• Good communications • Beautiful locations • Varied environment • Own ownership • Possibility to influence the design of the home.
**Persian Model**

**Tabriz Bazaar**
Tabriz bazaar is one of Iran’s UNESCO world heritage sites. It is a historical market located in the center of Tabriz, Iran. It is one of the oldest bazaars in the Middle East and the largest covered bazaar in the world. Tabriz has a cold climate with particular planning techniques corresponding with cold climate, thus, the planning of the Tabriz bazaar can be considered as a good candidate model for Stockholm to be used in this project.

- Tabriz bazaar is a traditional example of how indoor public spaces was/is used as an urban area for commercial activities as well as social, cultural, political and religious activities.
- Tabriz Bazar is used a sample model in this project, as a unique hybrid and multifunctional model for shopping center as a public space.
- The proposed Shopping center can be introduced as a man-made landmark next to the Aspen lake as a natural landmark.
- Some activities are considered to happen in the proposed shopping center or Bazar, through the Persian cultural house, such as:
  - Teaching Persian music with some traditional and Persian instruments
  - Teaching the Persian language as Språk Café

![Tabriz Bazaar](image.png)
The Caspian land project attempts to address some problems such as:

**SHORTAGE OF HOUSING IN STOCKHOLM**

Creating a well-structured urban area with **mix land use**: Apartment, row house, semi-detached house, and villa that can address people’s desire to own their home with an economically acceptable price in comparison with **similar properties in the city center**.

**SHORTAGE OF TRAFFIC & STREET NETWORK**

This project would also create a well-functioning street network inside the proposed project.

**ECONOMICAL PRICING**

- Providing housing for residents with the various budget, with focus on **low** and **medium income** residents.
- Establish **cheaper private housing** in comparison with similar housing in the city center.
- Creating a **hybrid and multifunctional urban area** with a **commercial base** (like the proposed shopping center) that can encourage **financial sponsors** to invest in this proposed project.

**SUSTAINABILITY CONCERNS**

- Creating a **walkable urban area** with a **high-quality walking path** that would encourage people to walk or cycle to commute.
- Offering an opportunity to residents for utilizing **urban gardening** to provide a small part of residents' daily vegetable needs.
- Providing an opportunity for people, specially elderly and children, to spend more time in nature.

### PROJECT IN NUMBERS

- **120** Villa
- **35** Semi-Detached House
- **52** Row House
- **230** Apartment
- **2** School
- **1** Hospital
- **2** Elderly House (2 * 34) = **70** Unit
- **1** Covered Parking
- **1** Sport Hall
- **2** Cafe & Restaurant
- **21** Playground
- **126** Offices Unit
- **18** Industrial Store
- **10** Sport Ground
- **3(300 Store) Bazaar**

### NAME OF PROJECT

My proposed project is located in the southern part of the Aspen Lake, while my country Iran is also located in the southern part of the Caspian Sea.

The Caspian Land name for this specific area along the Aspen lake is inspired from the name of the Caspian Sea. Therefore, according to the similarity between Aspen and Caspian names, the name of Caspian land is chosen for this project.
PROPOSED URBAN DESIGN

Some items and my proposed 3d modeling are designed for this area in Caspian Land project such as:

PROPOSED 3D models' VIEW (SOUTH-WEST VIEW and NORTH-EAST VIEW), PROPOSED PLAN, and PROPOSED STREET NETWORK.

PROPOSED VIEW
NORTH-EAST VIEW
In the Caspian Land project, the proposed street network is designed as a basic frame, platform, and skeleton for the entire southern part of the Aspen lake, in both phases of A & B.
The proposed street networks have **five main entrances** to the project’s site.
17 bus stations would be located on the shoreline along the Aspen lake and the boulevard, providing access to the public transport.
These proposed street networks are formed by various types of street, one high-quality walkable shoreline with 18 meters width, and one walkable boulevard with 33 meters width that are proposed to be used in this project. The different types of street that is used in this project are presented.

Figure 1: Illustration of a boulevard. Source: Claire Vlach, Bottomley Design & Planning.
This functional plan presents proposed functions in this project as follows:

HOUSING, PUBLIC & OPERATION BUILDING, PARKING, CAR & BICYCLE, GREEN SPACE & URBAN GARDENING, and GREEN CONNECTION
Various types of housing are offered in Caspian Land Project such as: APARTMENT, SEMI-DETACHED HOUSE, ROW HOUSE, and VILLA HOUSE.
The different type of housings with their related details such as their plans and 3D modeling are also presented.
Different public and operational buildings are presented in this project, such as: SCHOOL, SPORTS FACILITIES, PLAYGROUND, OFFICE, BAZAAR, HOSPITAL, and ELDERLY HOUSE.
Since Tabriz Bazar is quite huge, I couldn’t apply its complete plan to this project, and I decided to select one narrow part of Tabriz Bazar plan to be applied to this project.

A 3D volume model of a hospital and commercial building are offered in this project.
plans of a retirement-house (Elderly house) and two school buildings are also offered in this project.
one indoor sports hall with its swimming pool along with its plan and 3D volume model is designed in this project,

and also one covered parking which is placed next to the proposed shopping center is offered in the Caspian Land project.
Some parking lots for both cars and bicycles are designed for residents in this project.
The greenery that includes 2 parks, street trees, and some proposed spots for urban gardening of residents (for growing the vegetables that they desire) is proposed in the Caspian Land project.
Figure 2: Illustration of urban gardening. Source: Jerker Söderlind, 2014
In the green connection’s plan is shown how green places are interconnected with each other.
Since the 3D model of the project is quite wide, I decided to show a close-up view per each part.
ZONE M & A:
2 commercial buildings, a hospital, and 18 industrial product stores are presented, which are next to the existing factory on the site, so I decided to design this area as an industrial and official area.

Zone A&B:
These are apartment blocks, and one park alongside the Aspen lake to be used as an outdoor public space for residents.
Zone C&F:
This is a school with three playgrounds and a park next to it. It also offers three bicycle parking for students and people who are using the park. Two retirement houses (Elderly houses) and aged-care facilities are located next to the lake with lake view, and one parking area for both cars & bicycles. Along the boulevard are located 5 apartments with their parking areas for both cars & bicycles.
Zone D&E:
Three commercial buildings with their parking areas for both cars & bicycles are placed along the boulevard and the Bazaar.
And this is the bazaar; a commercial, cultural, and indoor public space or in another word a multifunctional building. It also offers a covered parking area for the Bazaar visitors.
Three outdoor sports ground are located next to the Bazaar with their wooden urban furniture and one bicycle parking.
Four villa and seven semi-detached houses are located along the boulevard.

CLOSE-UP IN EACH ZONE
Zone G&H:

Here is also one residential area with its parking lot for both cars and bicycles. Moreover, many villas, row-houses, semi-detached houses, three different types of apartments and their parking lots for both cars and bicycles and playgrounds, as well as one school and its 4 playgrounds, 4 sports facilities and 2 bicycle parking for students are designed to be located in this part. There are designed one park and one indoor sports hall with its swimming pool, 3 sports grounds and two bicycle parking along the boulevard. Five different spots for urban gardening corresponding to existing farmlands, as well as one restaurant and one café for those who use the gardens, are designed in this zone.
Zone K:
In this part, another type of residential area with the different type of villas are proposed along the shoreline street with the water view and two playgrounds and parking lots for cars and bicycles.
QUESTIONS & ANSWERES

Some questions about this project are raised and answered in this part.

Questions:

1. How is current ownership of the site?
2. Why are Persian characteristics chosen to be applied to the project?
3. Why Tabriz Bazar is chosen as a model for shopping center & Public space in this project?
4. How can this project establish 570 housing with affordable pricing?

Answers:

1. The ownership of the site mostly belongs to Botkyrka municipality.
2. On the one hand, this project tries to establish a multicultural urban area, on the other hand:
   • Iranians are around 1.7% of Sweden’s population, while they don’t have any specific community and gathering space.
3. Tabriz Bazaar is one of the oldest bazaars in the Middle East and the largest covered bazaar in the world. Moreover, it is a unique hybrid and multifunctional model as an indoor public space with commercial function can be well suited to Sweden’s cold climate situation. Therefore, it can be a practical model to apply to this project from climate perspective, while from attraction perspective, it can also encourage businesses to invest in this area via this project.
4. As you may know, land price per square meter in this area is much cheaper than city center, therefore this project can be carried out, through attracting investors to invest in this area and this project.
**Next Step**

- The remaining parts of the project (Northern part of the Aspen lake, as well as phase B of Southern part of the Aspen lake), can be subject for further studies as next phases of this project.
References:


Hanachi, P. and Yadollahi, S., 2011. Tabriz historical bazaar in the context of change.

Söderlind, 2014, Figure 2, Illustration of urban gardening, Promenadståd i Söderort Stadsliv AB, Source: Jerker Söderlind

Online References:

Laš used, 23 April 2018


https://en.wikipedia.org/wiki/Caspian_Sea


http://www.b00n.loxblog.com/post/2

http://tabriz.ireb.ir/~%D8%A8%D8%A7%D8%B2%D8%A7%D8%B1-%D8%B3%96%D8%A8%DB%8C-%D8%AA%D8%A8%D8%B1%D-B%8C%D8%B2-%D8%A8%D8%B2%D8%B1%DA%AF%D8%AA%D8%B1%DB%8C%D9%86-%D8%A8%7%D8%B2%7%D8%A7%87%78%97%8D


http://www.sustainablematerials.org.uk/resource/

Figure 1: Illustration of a boulevard. Source: Claire Vlach, Bottomley Design & Planning, A framework for walkable urban thoroughfare Design, chapter 4, [1Augš 2018, Date Accessed]., https://www.ite.org/css/online/DWUT04.html