

***Project Report***

House is a private area and is a specification border for humans. Such borders which enable us the distinction between inside and outside express possession for individual. When the concept is called “HOUSES FOR CHANGE” it makes sense this private area borders should be changeable, so this generates concept of flexible spaces. Such concept can be defined by flexible spaces suitable for different interpretations.

In this project, it is aimed to provide a new point of view to the perception of public and private spaces by narrowing, expanding, or removing borders of internal and external spaces of the house. In this way, creating alternating spatial borders were designed. With these flexible borders, the questions such as; “Border with whom?” and “What kind of a border?” arouse. This directly relates and indicates neighboring relations. Hence, the borders were built with idea of determining such relations.

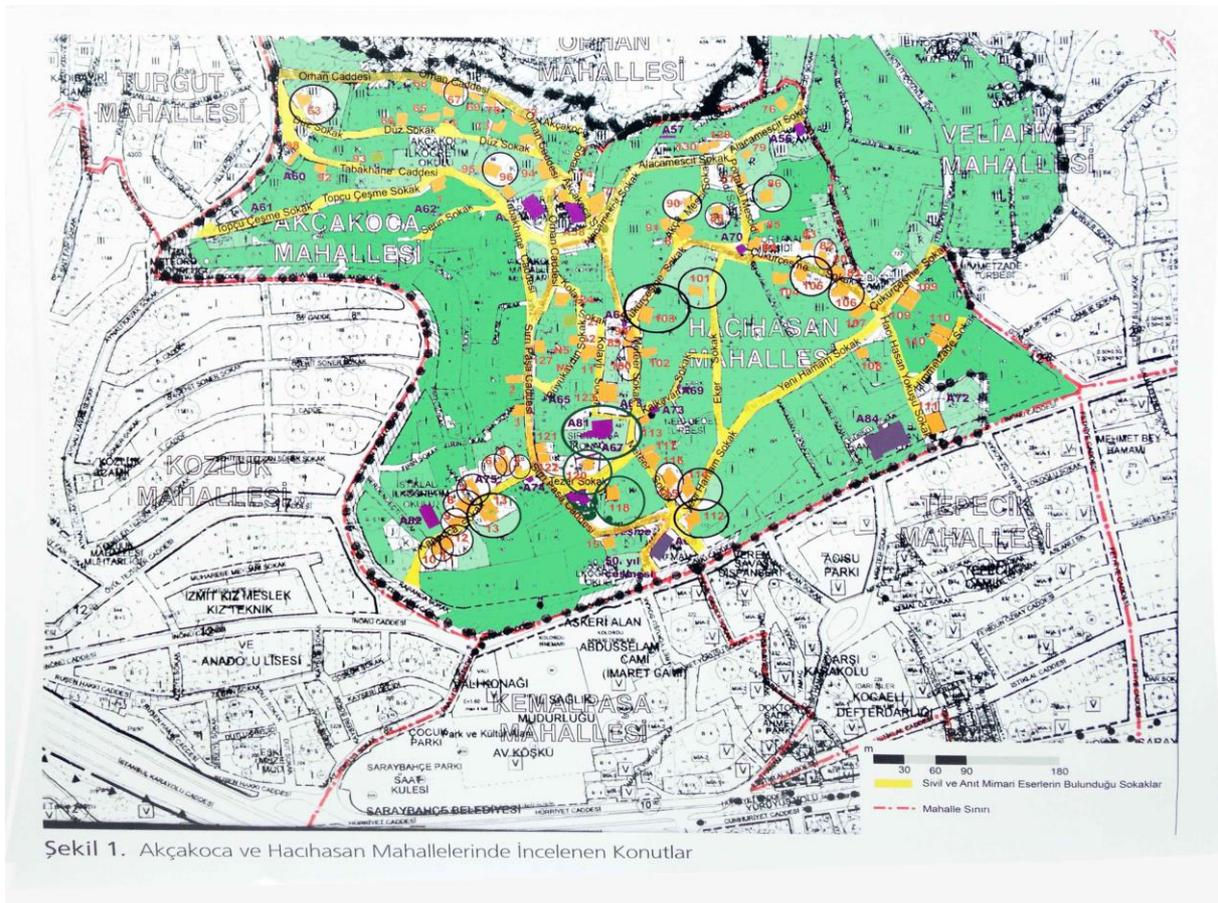


Figure 1 İzmit Protected site area

## Project Area and feasibility

In The Izmit protected site area, there is new settlement regime which ignores the well-developed and matured housing structure for centuries. (Figure.1). This new building regime becomes a treat for the existing pattern and these other building that exist and live together with the historical houses in harmony for many years. The dense and high-rise structure of these new buildings apply a “pressure” over the existing buildings and the existing cultural identity and if not prevented would easily achieve this in very little time The chosen project area is located in the Izmit protected site area, the land in between Çukurçeşme and Alacamescit streets where such a “pressure” is well applied and felt. (Figure 2)



Figure 2 Chosen project area

People in region have a major transportation problem related with the high slope of the area. Considering this problem, we think that the best connection with Main Street could be built around the chosen project area. With this connection

point, an internal system of interconnections can be achieved. Along with that, the existing natural inclination provides us with a view to watch.

Another major problem is that the area is under the risk of earthquake due to its location. Because of that, not only the existing buildings should be strengthened but also the new designed buildings are thought in this manner. Also the rocky stature of the chosen project area was an important selection criterion

### *Analysis:*

- Some of people live crowded, the remainder consist of the elementary family.
- Most of subjects are doing shopping from the supermarket.
- While most needed areas were listed as; green space, school, and health centers which are in our subjects' own settlement are public areas, local library is thrown back in order of priority. In order to change this, the local library, has been chosen as one of the focal point of our system.
- Houses of the subjects are an indispensable for themselves due to position seeing view. Garden, balcony, terrace, outside place are positioned according to view. The borders and buildings to view are treats for home owners.
- Local community prefers to live in single-detached dwellings because the idea of living in an apartment does not sound appealing (noise, neighborhood, earthquakes, and private places)
- Due to all these reasons, for local community habits and continuing the original identity of people of the region, the newly designed system should come up with sensitive thinking. The element of cultural building blocks of structures are reinterpreted and transformed to design in order to tap into the traditional structure in the region.
- Duty relation of structure is trying to give new structure with moving between units. In addition, like relation between side-entrance which is due to user habits and kitchen-garden structure planning methods were considered. Providing flexibility in the interior case with moveable panels was considered to ergonomics of the user's profile. While doing landscaping, we discussed units' relations with each other, semi-public and public areas .Hence, system that spreads from the places that are determined as a focal point is designed. Then, also, the units which the system includes relations with each other are enabled by spreading the roads which is inside of the system.

### *Neighborhood Relations and Settlement Decisions*

- In unit interior, flexible areas were handled with every type of user in mind. Relations between units were provided with flexible panels. Flexible panels in the design which both spaces can be divided into units with and multiple units can be brought together into one space. This design enables forming the border which can be changeable according to user selection and needs of users.
- The place which is capable of responding to the changing needs was proposed. For the relationship between types of users, again, the border which can be flexible was recommended. In some units the borders were formed with walls which can be removed, or optionally altered depending on the needs of people as system allows.
- With changeable door locations, altering neighboring relations were provided with alternative entries to buildings. While some units were brought with together by using their garden some units were put together using the door neighboring relations with the formed new street pattern. Settlement movement began by taking reference from focal points of area.
- With the flexible facades designed are positioned reciprocally for the units, semi-public or private areas were formed optionally at altering spaces.
- The entrances from different elevations were designed in multi-story units so that the units were created freely and within optimal square meters.
- In public space, design decisions are very important in terms of socialization and cohesiveness of local people, and this need was tried to resolve with district library and watching terraces were planned to build to selected project area. These terraces which are surrounded by registered protected buildings were designed keeping their transportation focus in mind.
- Finally, in front of the library an amplifier has been created which sitting on slope and, welcoming place was designed.

### **Materials and Technical Elements**

- Reinforced concrete skeleton system was preferred as the structural system because of the fact that it is easily accessible and reliable in terms of earthquake resistance when applied correctly. Moreover, in reinforced concrete construction techniques, the ease of reaching skilled craftsmen and, to be able to find such material easily is important factors in the selection of this material.
- Another material used in the design is insulated panels because of flexibility of interior space and user ergonomics. When using reinforced concrete in the external borders and wet area borders, partitioned of interior and flexible face were provided with flexible panels. The arrangement of the panel for interior identification was positioned most properly. Movable separation panel systems have been used in many projects around the world for their ease of design, alternating surface preferences and their high level of noise insulation. They are provided with manual, semi-automatic and automatic operation properties. To achieve the goals in economics manual operation was selected.

### **Work Plan**

- The implementation decision of project was taken in being high-rise building area and in the area which is seen as a risk zone. Firstly, the indicated area divided into two parts. The settlement which is sparse region was determined as a first stage. Then, prefabricated houses were shown as an alternative way for proprietor during construction. In this one-year period, half of project was aimed at the end. The same procedure was estimated for the second stage.

### **Conclusion**

The flexible spaces formed with construction techniques that can be applied everywhere where low-income people are living in, and everywhere is at risk correlate with material relations in that area, and that can be repeated. Which is the system constructed spreading from the focal point, formed with neighboring relations between user profiles was provided which also can be altered and optimized were designed and can be repeated.