# ZEYREK A STUDY IN CONSERVATION

by

Nuran Zeren Gülersoy Azime Tezer Kemer Reyhan Genli Yiğiter Kerem Koramaz Zeynep Günay

#### INTRODUCTION

Zeyrek is one of the few settlements in Istanbul where the original settlement pattern has been preserved. The monumental buildings and civil architecture of Zeyrek, all bearing importance from historical, aesthetic and architectural perspectives, are such that this area has been included in the List of World Heritage Sites.

The earliest conservation and planning studies in Zeyrek go back to the 1960s. The Faculty of Architecture at ITU carried out the first documentation study in 1968; and based on that work, in 1975 Zeyrek was designated as a "conservation area."

In the activities for the 1975 European Architectural Heritage Year activities held in Amsterdam, Holland, Turkey participated in an exhibition that covered the various conservation projects for Istanbul's historic areas including Zeyrek. As a result of the contacts developed in this connection, in 1978 the Istanbul Municipality made an official request to UNESCO-UDNP for the support of conservation of Istanbul's cultural heritage. Gaining UNESCO's support with a resolution of the General Conference, the campaign was launched in 1982. As a result of these studies and operations, Istanbul (including Zeyrek) was inscribed to the World Heritage List in 1983 and UNESCO began to allot expertise and financial support for project and restoration activities (Ahunbay, 1998).

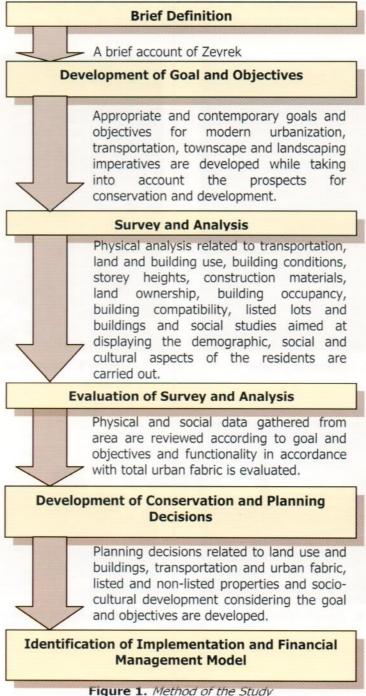
#### **AIM OF THE STUDY\***

The aim of the study is to formulate general planning determinants and to propose the conservation strategies that maintain the appropriate and contemporary development of the social and physical/environmental fabric of Zeyrek, while preserving its historical, archaeological, natural, architectural and functional values.

\*The study was prepared by staff members of the Urban and Regional Planning Department of the Faculty of Architecture at ITU; Prof. Dr. Nuran Zeren Gülersoy, Dr. Azime Tezer Kemer, Dr. Reyhan Yiğiter and the Chairperson of the Restoration Division of the Faculty of Architecture at ITU, Prof. Dr. Zeynep Ahunbay, as advisor. The first work commenced in January 1998 and was finalized in May 1999, supported by the Zeyrek Society. The study was revised in 2003 by Prof. Dr. Nuran Zeren Gülersoy, Dr. Azime Tezer Kemer, Dr. Reyhan Yiğiter, Kerem Koramaz and Zeynep Günay with the support of the UNESCO World Heritage Center.

#### METHOD OF THE STUDY

The Zeyrek Conservation Study contains a brief definition of the area and its history and the goal and objectives of the conservation and development activity. It also includes physical analyses as related to transportation, land and building use, listed buildings, building conditions, story heights, construction materials, land ownership, building occupancy and building compatibility with the physical structure of the area. In addition, the study comprises social studies aimed at displaying the demographic, social and cultural aspects of the residents of the listed and non-listed buildings in the area. The study was evaluated in dimensions of fieldwork and conservation and planning decisions related to land use and buildings, transportation and urban fabric, listed and non-listed properties and socio-cultural development considering the goal and objectives.



#### LOCATION AND HISTORY OF ZEYREK

Zeyrek, with its timber houses and winding streets, is a typical quarter of old Istanbul. It is situated on the slopes of the fourth hill in the Historic Peninsula in Istanbul. The district starts at the shores of the Golden Horn-Haliç, and extends up the slopes along Atatürk Boulevard. Retaining walls reaching up to 15 meters are to be found at some spots along Atatürk Boulevard, as well as dikes and terraces dating from the Byzantine period. These structures present an interesting view in the direction of Galata, the Golden Horn and the Historic Peninsula (Figure 2, Figure 3).

At its heart is the Molla Zeyrek Mosque, which was originally part of the Byzantine monastery of Christ Pantokrator founded by Empress Irene in the 12th century. After the conquest of Constantinople in 1453, the church was transformed first into an Islamic religious school and then into the Molla Zeyrek Mosque.



Figure 2. Location of Zeyrek



**Figure 3.** Aerial View of Zeyrek and Environs



Figure 4. Zeyrek Mosque



Figure 5. Zeyrek Mosque and Zeyrekhane





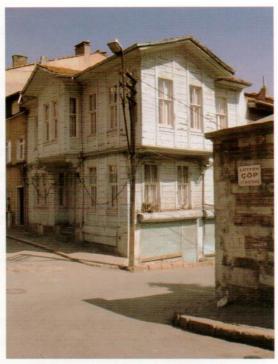


Figure 7. Civil Architecture in Zeyrek

The ethnic diversity of the region persisted after the conquest of Constantinople and up until the 16th century. Over time, the Greek population of the region moved to Galata, and the other minorities dispersed. During the years spanning the conquest up to the present, Zeyrek has been a region of dense Muslim settlement. The majority of the timber houses in Zeyrek were constructed between 1800 and 1840 in an adjoined pattern (Ahunbay, 1998).

In the Republican era, the 1950s ushered in a period of intense internal migration into Istanbul. The social structure of the area changed drastically and transformations in the outlook of the area have been occurring since then. The ensuing development paid no attention to conservation and the old timber houses of Zeyrek began to be replaced with 4-5 story concrete buildings.

The borders of the planning area are taken as the urban and archaeological site borders of Zeyrek specified in accordance to the general decisions of the "Superior Council for Immovable Antiquities and Monuments" in 1974, and the "Superior Board for the Protection of Cultural and Natural Assets" in 1987 (Figure 3).

In the activities for the 1975 European Architectural Heritage Year held in Amsterdam, Holland, Turkey participated in an exhibition that covered the various conservation projects for Istanbul's historic areas including Zeyrek. As a result of the contacts developed in this connection, in 1978 the Istanbul Municipality made an official request to the UNESCO-UDNP for the support of conservation of Istanbul's cultural heritage (Ahunbay, 1998).

#### **GOAL AND OBJECTIVES OF THE STUDY**

The goal of the "Zeyrek Conservation Development Plan" is to formulate general planning determinants that maintain the appropriate and contemporary development of the environmental fabric of the Zeyrek Urban and Archeological Site, while

preserving its historical, archeological, natural, architectural, and functional values; and to improve detailed development plans beyond these decisions.

Towards the specified goal the following measures are adopted:

- · Appraising the monumental buildings and their immediate surroundings,
- Revitalizing the values particular to the region while maintaining authenticity,
- Working to ensure the permanence of historic, civil, and monumental structures in the region, and to meet the modern needs of its inhabitants.

In the Zeyrek Conservation Development Plan, planning objectives are achieved by depending on the predicted planning goals and the potential of the conservation area.

These objectives can be grouped under the following headings:

**Functional Qualifications:** Ensuring the functional integration of the Zeyrek Conservation Area with other neighboring residential, working and recreational areas, along with the Historic Peninsula and the City Center of Istanbul have to be achieved.

**Optimal Communications:** Setting up efficient pedestrian routes and vehicle transportation systems and service facilities consistent with the existing and proposed activities in the Zeyrek Conservation Area are crucial functions for replacing better communications in the planning area.

**Social and Cultural Integration:** Transforming one of the most important settlements of the Historic Peninsula with respect to the process of the historic development of Istanbul into a charming cultural and touristic center by appraising its cultural, archeological and natural values, its potential for architectural heritage and traditional urban fabric is essential to forming a sustainable urban environment.

A Positive Environment for the Architectural and Urban Quality: Promoting an appearance that puts emphasis on the influential role in the urban fabric of natural, archeological, historic, monumental and civil architectural values will improve the architectural quality of the Zeyrek Neighborhood by preserving, repairing, upgrading historically and architecturally important or economically valuable structures and areas, and demolishing unfit structures, replacing them with ones that are in harmony with the character and scale of the site and consistent with contemporary architecture.

**Conditions of Health and Comfort for a Positive Environment:** Providing the optimal living conditions in Zeyrek Neighborhood through climate control, lighting and ensuring the cleanliness of the environment by restructuring garbage collection, sewage and water system.

**Optimum (minimum if necessary) Cost and Economic Support:** Considering and utilizing the resources of the country, organizations charged with implementation, and those of the local people to ensure optimum cost/quality ratios at every stage of planning have to be taken into account for applicability of the plan and supporting viable and profit-generating activities that will improve the economic life of Zeyrek is essential.

**Flexibility and Applicability:** Finding flexible solutions to provide opportunities for change and further development of Zeyrek Neighborhood in time and space.

F	
Qualification	To emphasize the functional role in relation to the integration with other neighboring residential, labor, recreational areas, the Historic Peninsula and the city center of Istanbul.
D Ames and the	To utilize new functions while changing the character of existing unsuitable socio-economic functions to provide continuity in economic progress while preserving the historic urban pattern.
ri santane tiba	To create new distribution networks for existing services while integrating them with new achievements.
bre production	To provide functionally sufficient and efficient places for both inhabitants and visitors, while improving living standards.
Optimal Communications	To arrange the pedestrian routes and vehicle transportation network sufficiently for the needs of the existing and proposed activities.
THE REAL PROPERTY.	To connect sites of various activities having importance with a hierarchy of pedestrian ways, parking lots and bus stops.
	To provide parking lots for residents and for long or short period visitors.
Social an Cultura Integratio  A Positive Environment for Architectura and Urba Quality  Conditions of Health an Comfort for Positive Environment Support Suppo	To raise public awareness on conservation of cultural heritage by providing an education milieu.
integration	To enhance the understanding of conservation study to provide development in social structure.
A Positive Environment fo Architectura and Urbai Qualit	To emphasize the conservation, planning and implementation process with full participation of inhabitants.
A Positive Environment fo Architectura	To promote an environmental network that puts emphasis on the influential role in the urban fabric of natural, historic, monumental and civil architectural values.
and Urban Quality	To improve the architectural quality by preserving, repairing, upgrading, demolishing unfitting structures and harmonizing them with the character and scale of the site consistent with contemporary architecture.
	To generate new housing opportunities to constitute new social structure in the sense of conservation.
	To prevent historic urban pattern and infrastructure to be ruined and to eliminate insufficiencies.
Conditions of Health and	To provide optimal conditions through climate control both indoors and outdoors.
Comfort for a Positive	To provide optimum lighting conditions indoors and outdoors using natural and artificial light.
Environment	To ensure the cleanliness of the environment by restructuring garbage collection, and by placing garbage bins and containers at suitable locations.
Optimum Cost and Economic Support	To utilize the resources of the country, organizations charged with implementation, volunteers and the local people to ensure optimum cost/quality ratios at every stage of planning.
	To assist in finding financial resources in the process of implementation.
	To provide economic inputs to manage continuity of living in an urban heritage area.
	To create new distribution networks for services by supporting interventions and raising the density of activities that provide new job opportunities.
Flexibility and Applicability	To find flexible solutions to provide opportunities for change and further development in time and space.

Figure 8. Planning Objectives

#### PHYSICAL AND SOCIAL SURVEY RESULTS

# Content of the Surveys

The Zeyrek Conservation Development Plan involves Area Analysis that include a transportation survey, a survey of individual buildings and spaces (such as use of land and buildings in ground and upper floors) and listed buildings and other listed properties' living conditions; the story heights; building materials; land ownership; occupancy of buildings; and harmony with the architectural character of the area. In addition, questionnaires are used to gather data about listed and other structures for the purpose of establishing the characteristics of the social structure in the region.

The social structure analysis in the planning area has covered the demographic and socio-economic aspects of the inhabitants of the planning area, as well as their interactions with their environment and their expectations, their approach to urban conservation and the historical environment. Information is gathered from households in both listed and non-listed buildings.

# PHYSICAL SURVEY RESULTS

**Use of Land and Buildings:** The central position of the Zeyrek Planning Area, its busy transportation links, and the deteriorated state of its historic structures work hand-in-hand to change the environmental and functional features of the region. At the beginning of the Republican era, structures in the region were generally used for housing, a few monumental structures notwithstanding. Nowadays, structures are being used for increasingly diverse purposes. This diversification emanates from the economic hardship imposing pressure on the urban structure. This economic pressure is also to be blamed for the increase in the ratio of constructed areas in the region with respect to previous levels (Figure 9).

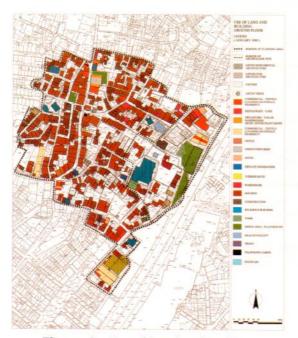


Figure 9. Use of Land and Buildings

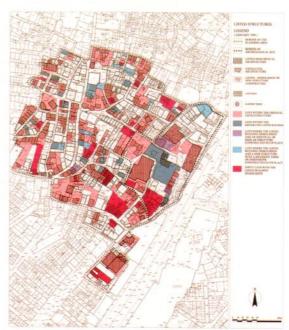


Figure 10. Listed Structure

According to the Use of Land and Building Survey Study, structures in the planning area are generally housing units (ground floor 69%, upper floor 88% in listed buildings). There are 14 (3%) religious facilities (mosque, tombs, graveyard). In the way of health services there is the dispensary of the polyclinic. Usage of ground floor: 57 (10.1%) as commercial units; 5 (0.9%) for services (Service Foundation, Society for Lost People, National Youth Foundation, a hotel and a public bath); and 3 (0.5%) buildings are under construction. In the planning area there is one substation, one listed mosque fountain, 12 (2.1%) miscellaneous and 59 (8.8%) empty lots. Of the buildings, 12 (2.1%) are not being used.

According to area survey results, residential use is dominant in the area. Religious buildings like mosques, tombs and graves are the secondary prevalent function. The Molla Zeyrek Mosque constitutes the center of the zone having first priority in the implementation stage. The Küçük Ibadethane Mosque is the second most important monumental building in the area. Çinili Bath is another important monumental building having potential for the area. But its physical conditions and environs have been deteriorated and neglected. Cisterns and archeological sites existing in the planning area are other potential to be taken into account.

The two platforms and a good scenic viewpoint in the archeological site increase the attractiveness of the Zeyrek Conservation area. However, the connection between the two platforms is problematic and makes daily use difficult in the existing situation. Under the pressures of other functions spreading throughout the area, the dominant residential function is being transformed into commercial, office and hotel functions.

The Manifaturacılar Bazaar (shop district selling fabrics) is another impact of this transformation. Commercial activities intensify on Haydar Street, passing through the planning area from north to south. In some other small streets, some ground floors have been set aside for commercial activities. Empty shops can be seen in some places.

**Listed Structures**: The Molla Zeyrek Mosque is one of the most important listed structures in the region and the most symbolic of it. Because the region was an important religious center both in Byzantine and Ottoman times, there are many churches that have been turned into mosques, as well as many tombs and graveyards.

Around the Pantokrator Monastery (whose boundaries are not exactly known at present), many cisterns were constructed, the most important of which, the Pantokrator Cistern, still survives. Rising 15 meters above ground level on Atatürk Boulevard, the architectural features of this cistern are different from those of other cisterns (S. Eyice, 1994).

Survey analyses show that 191 (86%) of the listed buildings are defined as civil architecture and 31 (14%) of them as monumental architecture. According to the survey analysis in the planning area, 51% of the existing 449 lots are listed lots ( Figure 10). There exist 229 listed lots; the percentage of listed lots that original historic buildings exist on is 67%.

**Condition of Buildings:** The physical usability of structures is evaluated for building condition. Of the 464 buildings inspected, 5 (1%) are found to be in very good condition; 95 (18.7%) in good condition; 172 (33.9%) average; 165 (32.5%) in bad condition; 31 (6.1%) in very bad condition and 39 (7.7%) in ruins.

A large percentage of the timber structures, which are characteristic of the conservation area, have damaged or collapsed windows, bay windows or balconies.

The deterioration in these types of structures is caused by lack of insulation and maintenance in floors above the ground or close to the roof.

In renovated historical buildings, window apertures in facades were widened or changed. With many of the ground floors used as shops and warehouses, the structures have lost their original features. The majority of the concrete structures that were constructed more recently, and that form an affront to the traditional style of the region, are in good condition (Figure 11).

**Story Heights:** In this analysis, a large percentage of the buildings are observed to have 2-3 stories. The number of one-story buildings is 81 (17%); two-story buildings 122 (26%); three-story buildings 142 (31%); four-story buildings 62 (13%); five-story buildings 52 (11%); and six-story buildings 10 (2%).

Economic pressures forced a change in the region in this respect, and now a quarter of the structures have four or more stories. Listed buildings are generally 2-3 stories high. In addition, there is a group of four-story buildings in the region that still survive in their original form (Figure 12).

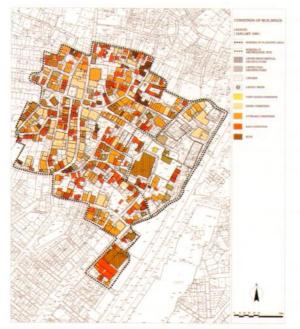


Figure 11. Condition of Buildings



Figure 12. Story Heights

**Construction Materials:** The analysis of building construction materials indicates that most of the structures in the conservation area are masonry or timber structures. Of the 469 buildings surveyed in the planning area, 188 (40%) are masonry; 131 (28%) are timber; 137 (29%) are concrete; and 13 (3%) are concrete buildings with timber covered facades. There are also authentic masonry buildings in the region. Stone structures that are worthy of preservation make up a quarter of the listed buildings in the area. But the number of buildings which preserve their original characteristics is lower (Figure 13).

**Ownership:** The number of new land lots formed by joining two lots or dividing one lot into two have been specified by comparing the lot numbers on the evaluation sheets with those on the most recent numerical maps. Of the 449 lots included in the survey, 222 (49.4%) are found to be owned by private partners; 194 (43.2%) by

private individuals; 10 (2.2%) by the Municipality; 10 (2.2%) by private foundations and 9 (2%) by the Foundations Directorate.

In the planning area, there are only two lots that belong to the province. Private individuals own 47.6% of the listed lots and 38.6% of the non-listed lots. The ratio of private partners is 42.4% in listed lots and is higher at 56.8% in non-listed lots because of condominiums (Figure 14).

**Occupancy of Buildings:** According to the occupancy of buildings survey, 81% are in use, 5% are partly in use and 13% are empty. The percentage of unoccupied listed buildings is 23%.

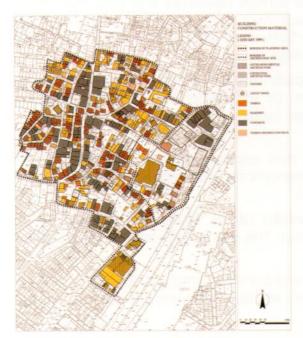


Figure 13. Construction Materials

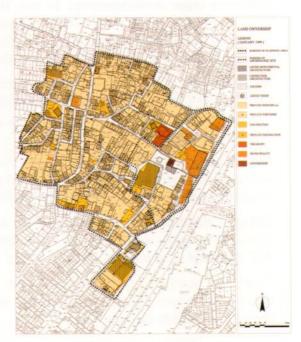


Figure 14. Ownership

#### **SOCIAL SURVEY ANALYSIS**

One hundred questionnaires were prepared with 50 applied to each of listed and nonlisted buildings. Family size, age, place of birth, education, occupation, income and vehicle ownership are evaluated in the demographic structure survey. Ownership of the property, period of residence, location of previous residence, desire to move different house, desired location to move, types of residence preferred, house satisfaction, desire for house improvement and intervention preference if the sufficient founds available are questioned in the building-user relationship survey. As a measure of social communication levels, respondents are asked if they have other relatives living in Zeyrek. Also, interactive and cordial relationships with neighbors, common places for neighborhood gatherings, desire to participate neighborhood beautification efforts with neighbors and with an organization are other subjects evaluated in this respect. Understanding the meaning of conservation area, user perception of urban conservation, awareness about conservation development plans, user opinion regarding the conservation of listed property and user perception regarding the replacement of the listed house with a modern and multi-story building are inquired to evaluate the users' opinions about urban conservation.

**Demographic Structure:** In Zeyrek. most of the families are extended families of more than 5 people. This stems from the increasing immigration rates from economically undeveloped settlements of the Southeast and East Anatolia regions.

Zeyrek has not much commercial potential and is, therefore, more of a housing district. The major population of residents in the planning area is housewives and self-employees.

The number of fathers with no income is high in Zeyrek. A higher percentage of fathers earn between US\$ 62-124 per month in Zeyrek, concentrating on marginal sector.

**Building-User Relationship:** In the 100 surveys conducted it is seen that almost equal numbers of renters and homeowners were living on the property. Of those surveyed, 49% were homeowners, while 50% were renters. One family was being provided housing free of charge by the municipality.

An evaluation of listed and non-listed property shows that renters tend slightly more than owners to reside in listed dwellings. Of the residents of the listed property surveyed, 42% are homeowners, 56% are renters and 2% are occupying a listed dwelling free of charge.

Almost half of the residents have lived in their residence for a period of less than 5 years. The continuous immigration from economically undeveloped regions of Turkey creates a dynamic mobile population profile.

**Social Communication Interaction Levels:** Of the inhabitants surveyed in the study 52% have relatives in the same district. This is a general issue in historic areas that are used as primary migration nodes.

There are nearly no common places for neighborhood gatherings in Zeyrek, nor are there green areas. Newly opened cafes, such as Zeyrekhane, are inefficient for serving the local residents (Figure 15).

# User's Opinions about Urban Conservation

Only a small portion of residents, especially tenants, has a true understanding of Zeyrek as a conservation area. However, the residents' thoughts are in the direction of the preservation of listed buildings for beautification of the district. The willingness to participate in community beautification efforts with their neighbors is 64%, giving evidence for an active public for future conservation efforts. Changes in the social structure and the lack of interest in conservation studies create more deterioration within the general framework of the Zeyrek district. As well as restoration of listed buildings, the precautions to enhance environmental quality are vital. Effective conservation and integrated conservation approaches are necessary to enhance the environs and to create better income opportunities for the people living in the area by re-functioning regulations along with residential use. These regulations are essential for creating alive historical environments.

The social structure of the area changed completely after the 1950s. This change was reflected in the spatial structure, too. Prior users were moved outwards and immigrants from Eastern and Southeastern Anatolia settled in the area. Migrant families are mainly in the low-income level. The lack of interest in conservation and lack of ownership where they live has accelerated the deterioration of the timber buildings. Multi-story reinforced concrete buildings were built after the demolition of traditional ones, resulting in a lack of harmony with the traditional urban texture.



Figure 15. Social Life in Zeyrek

## **EVALUATION OF THE SURVEY AND PLANNING DECISIONS**

Previously prepared plans and research are used in the research and evaluation stages of the preparation of the Zeyrek Conservation Development Plan; other required additional research has been completed and the existing ones updated (Figure 16, Figure 17). During this stage efforts are especially directed to ensuring that the decisions taken towards conservation of the Zeyrek urban and archeological conservation areas according with and providing continuity for previously approved plans.

The conclusions drawn from the research are described in both written and graphic form. In addition to the implementation plan detailed on digital maps, a design project and street silhouettes, photographic determination of important points within the planning boundary, and lists by block/lot number evaluating each currently existing structure along with proposals for future construction and use have also been prepared.

At this stage, decisions are also developed in a manner that agrees with the urban and archeological characteristics of the area. This directs the future construction and functions of structures that would replace those that do not require conservation and those that will be built on empty lots.

Determining the cadastral status of the current digital maps by investigating lot by lot, appropriate and unique construction proposals and interventions have been developed that are in accordance with the current situation of the area. The fundamental principle on which the Zeyrek Conservation Area has been based is related to the preservation of the functionality of individually listed buildings, rather than a preservation that freezes these structures in time.

This is an urban conservation plan that preserves and evaluates the functionality in accordance with the total urban fabric while not destroying the essence of the character. The dimensions and ratios of new construction are monitored so that they harmonize with the whole character of the district.



**Figure 16.** General Evaluation of the Survey



**Figure 17.** *Introduction of the Planning Decisions* 

The previous implementation examples determined through traditional planning methods to establish building density (floor area ratio, ground area ratio) are deemed disadvantageous and new building proposals are developed for each lot.

Identified policies regarding the Historic Peninsula in the 1/50,000 scaled Metropolitan Area Sub-Regional Master Plan are the determination of the prestigious historical urban fabric to be planned for housing, urban services and tourism function; the regulations to increase standards and quality of the urban social and technical infrastructure; and the policies to direct new development pressures on the Historic Peninsula through other poles in the west and east ends. In the General Regulations of Construction Conditions of the Historic Peninsula Transition Period, a +40 meter altitude is assumed as a restriction in new construction demands. Warehousing, wholesaling, manufacturing and workshop-dealing land uses have to be abandoned from this area step by step and new demands on this matter have to be prevented. Housing, touristic accommodations, culture, retail and recreational functions and green areas are recommended inside the 1st Degree Archeological Conservation Area and historical and urban conservation area.

In accordance with the 1/50,000 Master Plan and the 1/5000-scaled Conservation Master Plan of Historic Peninsula, Zeyrek is defined as a low-density residential area and an integrated function of housing+culture+tourism. Additionally, Zeyrek is recognized as an area of special urban design planning. Basic principles of this plan are

defined as follows: protecting the Historic Peninsula from dilapidation, determining the borders and properties of functions proposed inside this area, with effective re-functioning of historical, cultural and esthetic inheritance; establishing integrity with its regional socio-economic identity, vacating all functions which are not harmonious with the identity of this area; eliminating buildings which have a negative impact on the visual integrity of the area; creating construction restrictions on density, elevation, etc. in the area; locating all necessary urban facilities and services to the Historic Peninsula; and conserving the Historic Peninsula by reorganizing the existing historical street and settlement patterns in response to contemporary urban needs.



Figure 18. Example of Building Row



**Figure 19.** Commercial Area on Haydar Street

# URBAN CONSERVATION DEVELOPMENT PLAN, PLANNING DECISIONS

Planning decisions related to density and population, transportation, land use, conservation of listed property and new constructions are proposed in the 1/1000-scaled Zeyrek Urban Conservation Development Plan (Figure 20).

The 1/500-scaled Urban Design Project is developed in the close environment of the Molla Zeyrek Mosque. This area forms the heart of the district, with the city blocks on the streets that open onto the Molla Zeyrek Mosque.

# 1/1000-Scaled Urban Conservation Development Plan, Planning Decisions

Planning decisions in harmony with existing traditional urban patterns and integrated with decisions of upper-level plans are the main objectives of the 1/1000-scaled Zeyrek Conservation Development Plan.

**Density and Population:** Gross density of the existing situation is approximately 520 person/ha in the planning area with 11.33 hectares of land and 6,000 people. A maximum of 3 story buildings is recommended on the Proposal Zeyrek Conservation Development Plan as the result of upper-level plan decisions. Gross density is estimated as 363 person/ha in the planning area (total 11.33 hectares) with a total of 4,120 inhabitants (915 households). The total household number is 270, the population is

1,215 people, and gross density is 240 person/ha inside the 1/500 scale Urban Design Project area.

**Transportation:** Main traffic, pedestrian and service regulations on the road pattern are provided to achieve harmony with existing and proposed functions in keeping with the possibilities of the traditional urban fabric and the directions of upper-level plans. Efforts are undertaken in the planning area to ensure that the main vehicular arteries, pedestrian and service roads are in accordance with the scale provided within the traditional urban fabric.

- Most of the streets within the Zeyrek Conservation Area are quite narrow and require that many function only as one-way traffic lanes.
- The other streets in the district have been designated as pedestrian routes and are closed to vehicle traffic. When required and during specified hours of the day these streets will act as service vehicle lanes.
- Vehicle parking lots have been established at required and convenient locations. Due to the unique features of the area, the car park regulations cannot be implemented in the district.

Land Use and Building Functions: In the Historic Peninsula, Zeyrek, Fener, Balat and Ayvansaray, having dense historical monuments and civil architecture examples, cultural and touristic functions as well as housing, are appropriated for vacant buildings and manufacturing functions. The aim of this action is to provide a population increase for day and night use of the area, as well as conservation efforts. In this plan, Zeyrek is projected for housing + cultural + touristic areas. Housing, guest houses, pensions, apart hotels, restaurants, cafés, tourism agents, an exhibition hall, a museum, a library, flower shops, nursery schools, touristic gift shops, art gallerys, handcraft studios, rest or retirement houses, etc. are envisaged for the housing + cultural + touristic area to be in harmony with the traditional structure of the historical urban site. Moreover, an archeological park, exhibition and cultural open-air park functions are proposed for the archeological site in the same plan. Open-air parks and overlook points are to be developed in these kinds of areas to exhibit monumental assets and examples of civil architectures after the expropriation process.

**Conservation of Listed Property:** Prior to development of the Zeyrek Conservation Development Plan, those interventions to be utilized in the implementation of a project directed at all of the structures in the district, including the listed elements belonging to our shared cultural heritage, are delineated (Figure 21).

The interventions are gathered together under two main headings: Any interventions made are to be functional in nature and would conform to the structural characteristics of the building. All listed buildings within the planning area are evaluated individually. The primary aim is that all of these interventions be carried out so as to preserve the basic character of the district and to provide this character with continuity.

**New Structures:** In addition to the listed buildings, all other structures within the planning area and all of the other buildings are thoroughly investigated. Each section has been evaluated as a whole, and decisions are derived that have taken into consideration the unique functions and construction types of that section. It is recommended that building heights on lots next to listed buildings not exceed the eave heights of the listed buildings. Early decisions regarding this district had limited buildings to three stories. According to the 1/5000-scaled Historic Peninsula Master Plan, the Planning Notes, the authorizations of amendments and functional changes will not be approved, and roof

floor and penthouse will not be permitted for the buildings having a height level higher than that approved.

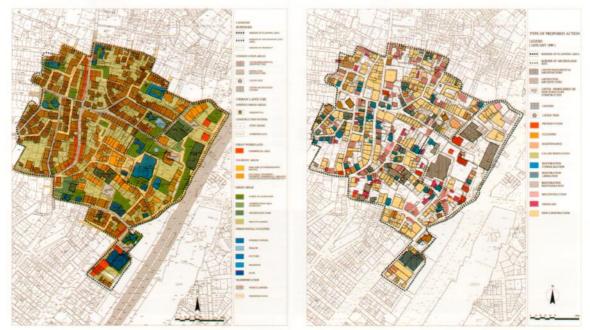


Figure 20. 1/1000 Scale Zeyrek Conservation Development Plan

**Figure 21.** Types of Intervention for the Existing Buildings

# 1/500-Scaled Urban Conservation Development Plan, Planning Decisions

The 1/500-scaled Zeyrek Urban Design Project is developed for the city blocks on the streets that open onto Molla Zeyrek Mosque, an area that is part of the overall 1/1000-scaled design of the Zeyrek Conservation Development Plan. In accordance with the general land and building use, stipulated by the 1/1000-scaled Zeyrek Conservation Development, it is suggested that two platforms (Platforms I and II) be built around the periphery of the Molla Zeyrek Mosque (Figure 22).



Figure 22. Zeyrek Conservation Development Plan, 1/500-Scaled Design Project



**Figure 23.** Existing Situation in Zeyrek 3D Model



**Figure 24.** Proposed Situation in Zeyrek 3D Model



**Figure 25.** Existing View of Fazilet Street



Figure 26. Proposed View of Fazilet Street

This is the area that forms the heart of the district, to provide better viewing opportunities of that area and of the district as a whole.

Platform I is designed to facilitate pedestrian access to the area and includes the area over Atatürk Boulevard. It will be reached by an elevator made of transparent materials that will allow it to conform to the setting.

The area around the ruins is taken as the base periphery. Taking advantage of the difference in elevation, a three-stage seating arrangement has been designed. In this way, the area of this platform with its scattered seating arrangement, and the archaeological park becomes better unified around designated points.



Figure 27. View from Zeyrek Mosque



Figure 28. View from Zeyrekhane







Figure 30. Civil Architecture in Zeyrek

#### CONCLUSION

The Zeyrek Conservation Study is a comprehensive approach for the conservation of cultural assets in Turkey. At the heart of the study is an integrated view towards urban conservation and historic revitalization combining a number of actions that address environmental, social and economic concerns facing world heritage sites. The need to balance physical, social and economic elements and to assure implementation and financial strategy are new attempts for the Historic Peninsula, also for Turkey, for building a common basis within the content of European Union membership. The study also provides a comprehensive documentary of cultural assets including a three-dimensional evaluation. Finally, it brings concrete evidence that Turkey is working hard to be active in the conservation of World Cultural Heritage at a time when it is threatened with being excluded from the List.

Keywords: Urban conservation, Zeyrek, Historical Peninsula, historical revitalization.

### **BIBLIOGRAPHY**

**Ahunbay, Z.,** (ed.), (1998), Pilot Projeler İstanbul, UNESCO Türkiye Milli Komitesi, (Pilot Research Projects, Istanbul, Turkish National Commission for UNESCO), Ankara.

**Alsaç, Ü.,** (1992), Fatih Koruma Amaçlı İmar Planı-Tarihsel Gelişim (Fatih Urban Conservation Development Plan-Historical Development), (unpublished research report in Turkish), Istanbul.

**Council Of Europe**, (1975), European Program of Pilot Project, Strasbourg, Council of Europe, Committee on Monuments and Sites.

**Eyice, S.,** (1994), Zeyrek Kilise Camii, (Zeyrek Church Mosque) (in Turkish), in *Istanbul Encyclopedia*, vol. 7, pp. 555-557, Istanbul.

- **Eyice, S.,** (1994); Pantokrator Sarnıçlari (Pantokrator Cisterns) (in Turkish), in *İstanbul Encyclopedia*, vol. 6, pp. 218-219, Istanbul.
- **Greater Istanbul Municipality,** (1995), 1/50 000 Ölcekli İstanbul Metropoliten Alan Alt Bölge Nazım İmar Planı Raporu, Planlama ve İmar Daire Baskanlığı Sehir Planlama Müdürlüğü (Planning and Development Department, Urban Planning Directorate, 1/50000 Scale Metropolitan Area of Istanbul, Sub-Regional Master Plan) (in Turkish), İstanbul.
- **Gülersoy-Zeren N., Tezer, A., Yigiter R.,** (1999), *Zeyrek Conservation Development Plan*, vol. 1, "Photographic Album of the Zeyrek Conservation Area" (unpublished report), ITU Research and Development Foundation; Project No: 98/568, Istanbul.
- **Gülersoy-Zeren, N., Tezer, A., Yigiter R.,** (1999), *Zeyrek Conservation Development Plan*, vol. 2, "Assessment of the Buildings in Zeyrek Conservation Area" (unpublished report), ITU Research and Development Foundation; Project No: 98/568, Istanbul.
- **Gülersoy-Zeren, N., Tezer, A., Yigiter, R.,** (1999), *Zeyrek Conservation Development Plan* vol. 3, "Land Survey and Planning Proposals of the Zeyrek Conservation Development Plan" (unpublished report), ITU Research and Development Foundation; Project No: 98/568, Istanbul.
- **Gülersoy-Zeren, N.; Tezer, A., Yigiter, R.,** (1999), *Zeyrek Conservation Development Plan*, vol. 4, "Final Report of the Zeyrek Conservation Development Plan" (unpublished report), ITU Research and Development Foundation; Project No: 98/568, Istanbul.
- **Gülersoy-Zeren, N., Tezer, A., Yigiter, R.,** (2001), *Zeyrek, A Study in Conservation*, ITU Faculty of Architecture, Istanbul.
- Gülersoy-Zeren, N., Tezer, A., Yigiter, R., Koramaz, K., Gunay, Z. (2003), Istanbul Project: Istanbul Historic Peninsula Conservation Study; Zeyrek, Suleymaniye and Yenikapi Historic Districts, vol. 2: Zeyrek Case, UNESCO World Heritage Center, ITU Faculty of Architecture, Contract No. 700.624.0.1, Urban and Environmental Planning and Research Center, Istanbul.
- **Istanbul Technical University,** (1999), Tarihi Yarimada Doğal ve Kültürel Varlıkları Koruma Envanteri Fişleri, Mimarlik Fakultesi, Mimarlik Bolumu, Restorasyon Anabilim Dali (Faculty of Architecture, Department of Architecture, Restoration Division, Conservation Inventory Records of the Historical Peninsula Natural and Cultural Entities) (unpublished SPO State Planning Organization Project) (in Turkish), Istanbul.
- **Karaman, A., Onal, S.,** (1994), Zeyrek (in Turkish), in *Istanbul Encyclopedia*, vol. 7, pp. 553-555, Istanbul.
- **Muller, W. W.,** (1977), *Bildlexikonzur Topographie Istanbuls*, Bizantion-Konstantinapolis Isti bis zum Beginn des Jahrhundeerts Deutsches Archaologisches Institut, Istanbul.
- **Muller, W. W., Cramer, J.,** (1982), *Istanbul Zeyrek Studien zur Erhaltung Eines Traditionellen Wohngebietes*, Deutsches Orient-Institut, im Verbund der Stiftung Deutsches Institut, Hamburg.
- Muller, W. W., Schille, R., (1988), 19. Yüzyılda İstanbul Hayatı (İstanbul Life in the 19th Century), Apa Press, İstanbul.