



**RENOVATION AND RECLAMATION OF OLD BUILDINGS IN  
İSTANBUL: THE CASE OF BORUSAN MUSIC HOUSE IN BEYOĞLU**

**İREM GÖLAY İZMİTLİ YILDIRIM**

**APRIL 2016**

**RENOVATION AND RECLAMATION OF OLD BUILDINGS IN  
İSTANBUL: THE CASE OF BORUSAN MUSIC HOUSE IN BEYOĞLU**

**A THESIS SUBMITTED TO  
THE GRADUATE SCHOOL OF NATURAL AND APPLIED  
SCIENCES OF  
ÇANKAYA UNIVERSITY**

**BY  
İREM GÖLAY İZMİTLİ YILDIRIM**


**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF  
MASTER OF SCIENCE  
IN  
THE DEPARTMENT OF  
INTERIOR ARCHITECTURE**

**APRIL 2016**


**Title of the Thesis: Renovation and Reclamation of Old Buildings in İstanbul:  
The Case of Borusan Music House in Beyoğlu.**

**Submitted by İrem Gölay İZMİTLİ YILDIRIM**


Approval of the Graduate School of Natural and Applied Sciences, Çankaya University.

  
\_\_\_\_\_  
**Prof. Dr. Halil Tanyer EYYUBOĞLU**  
**Director**

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

  
\_\_\_\_\_  
**Assist. Prof. Dr. İpek MEMİKOĞLU**  
**Head of Department**

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

  
\_\_\_\_\_  
**Assist. Prof. Dr. Cengiz ÖZMEN**  
**Supervisor**

**Examination Date: 15.04.2016**

**Examining Committee Members**

Prof. Dr. Ayşe Zeynep ONUR (Çankaya Univ.)

Prof. Dr. Ali İhsan ÜNAY (Gazi Univ.)

Assist. Prof. Dr. İpek MEMİKOĞLU (Çankaya Univ.)


Assist. Prof. Dr. Ceren KATIPOĞLU  
ÖZMEN (Çankaya Univ.)

  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_

## STATEMENT OF NON-PLAGIARISM PAGE

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name : İrem Gölay  
İZMİTLİ YILDIRIM

Signature : 

Date : 15.04.2016



## ABSTRACT

### RENOVATION AND RECLAMATION OF OLD BUILDINGS IN İSTANBUL: THE CASE OF BORUSAN MUSIC HOUSE IN BEYOĞLU

İZMİTLİ YILDIRIM, İrem Gölay

M.Sc., Department of Interior Architecture

Supervisor: Assist. Prof. Dr. Cengiz ÖZMEN

April 2016, 226 pages

The main objective of this thesis is to investigate the re-functioning of 18<sup>th</sup> and 19<sup>th</sup> century's buildings, within this perspective, Borusan Music House on İstiklal Avenue, which was commissioned by Borusan Holding and re-functioned by Gökhan Avcioğlu in the year 2007. This thesis also contains a research of laws, principles and regulations of the city as well as a review of similar re-functioning works in İstanbul.

Borusan Music House and the other examples show us that they made works which increased cities' cultural levels by combining corporations and architectural offices. This new perspective requires, instead of renovation by making the new building look similar to the old building, preservation of all functional elements of the old building and to give an exact opposite character to the new additions. So instead of concealing the differences between the old and the new, this approach requires them to be honestly exposed. There are numerous examples of such modernization by use of latest technology in old buildings in İstanbul.

**Keywords:** Restoration, Renovation, Rebuild, Borusan Music House, Beyoğlu.

## ÖZ

### İSTANBUL'DA ESKİ YAPILARI YENİDEN KAZANMA ÖRNEĞİ: BORUSAN MÜZİK EVİ

İZMİTLİ YILDIRIM, İrem Gölay

Yüksek Lisans, İç Mimarlık Anabilim Dalı

Tez Yöneticisi: Yrd. Doç. Dr. Cengiz ÖZMEN

Nisan 2016, 226 sayfa

Bu tez çalışmasında, kültür ve sanatın başkenti İstanbul'da 18. ve 19.yy'dan günümüze gelen taşınmaz eserlerin, yeniden işlevlendirilmesi sonucunda ortaya çıkan mekânsal değişim üzerinde durulmaktadır. Seçilen araştırma alanı, 2007 yılında Borusan Holding tarafından kurumsallaştırılan ve Gökhan Avcioğlu önderliğinde yeniden işlevlendirilen, İstiklal Caddesi üzerindeki Borusan Müzik Evi'dir. Bu araştırma alanına zemin hazırlamak için, bulunduğu kentin tarihindeki kırılma noktaları, kanunlar, ilkeler, yönetmelikler araştırılmakta ve örnek yapılarla analizleri yapılmaktadır.

Borusan Müzik Evi ve diğer örnekler kurumsal şirketler ile mimari ofislerinin bir araya gelmesiyle kentlerin kültür seviyelerini arttıran işler ortaya konulabildiğini göstermektedir. Bu tezin savunduğu durum, yapıların eski hallerine benzetilerek yenilenmesinden yana bir tutum yerine, eski yapının işe yarayan her bir parçasının tutulması, yeni yapılan eklemelerin ise eski yapıya zıt karakterde olması gerektiğidir. Bu sayede, eski ile eklenti arasındaki yüzyıl farkının gizlenmesi yerine, dürüst bir şekilde ortaya konulması sağlanmaktadır. İstanbul'daki eski yapıların eldeki teknolojik imkânlar kullanılarak nasıl modernleştirildiği gözlemlenmektedir.

**Anahtar Kelimeler:** Restorasyon, Renovasyon, Yenileme, Borusan Müzik Evi, Beyoğlu.

## ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Assist. Prof. Dr. Cengiz ÖZMEN for his supervision, special guidance, suggestions, and encouragement through the development of this thesis.

I wish to extend my most sincere regards and respect to all faculty members of Çankaya University, Department of Interior Architecture during 2004-2008 period. They are the ones who always supported me in learning the details of interior architecture with patience and highest empathy.

I also thank two inspirational people: Ender Murat and Gökhan Avcıođlu who have shared all their archives on the subject and provided great guidance even though they did not know me before.

Finally, I thank my competitor, my motivator and my husband, Interior Architect Evren Yıldırım for all his support from my undergraduate studies until today and to my mother, M.D. Tülay Tombak, for all those snacks she provided during the long nights of undergraduate studies and to my son, Pars for being the beacon of hope and happiness; I'll always direct my career to his happiness and successful development.

## TABLE OF CONTENTS

STATEMENT OF NON-PLAGIARISM .....	iii
ABSTRACT.....	iv
ÖZ .....	v
ACKNOWLEDGEMENTS .....	vi
TABLE OF CONTENTS.....	vii
LIST OF FIGURES .....	x
LIST OF TABLES .....	xviii
LIST OF ABBREVIATIONS.....	xix

### CHAPTERS:

1. INTRODUCTION.....	3
1.1. Problem Statement.....	3
1.2. Aim and Objectives .....	4
1.3. Methodology and Structure of the Thesis .....	5
2. BASIC CONCEPTS AND DEFINITIONS .....	8
2.1. Concepts of Old Building.....	8
2.1.1. Causes underlying the aging of buildings.....	8
2.1.2. Assigning new function to old buildings.....	9
2.1.3. Re-evaluation methods in architecture .....	11
2.2. Concept of Conservation in Architecture .....	12
2.2.1. Idea of conservation.....	12
2.2.2. History of conservation in Turkey.....	13
2.2.3. Purpose of conservation.....	16
2.2.4. Types of conservation.....	18
2.2.3.1. Restoration.....	18
2.2.3.2. Renovation.....	20
2.2.3.3. Reclamation.....	22

2.2.3.4.	Other conservation concepts.....	23
2.2.5.	Assessment of Borusan Music House project in terms of concepts of conservation .....	25
2.3.	Conservation Laws and Regulations in Turkey.....	26
2.3.1.	Conservation in urban scale: Protect areas .....	26
2.3.2.	The Turkish laws and regulations in force .....	30
2.3.3.	Legal framework for the renovation of Borusan Music House .....	36
3.	SOME OF THE CONSERVATION PROJECTS FROM İSTANBUL....	41
3.1.	Esmâ Sultan Mansion (ESM) (Tırnakçı Mansion).....	41
3.2.	Changa Restaurant (Sıraselviler No: 47).....	54
3.3.	Salt Beyoğlu (Siniossoğlu Apartment).....	61
3.4.	Salt Galata (Ottoman Bank) .....	75
4.	DOCUMENTATION OF BORUSAN MUSIC HOUSE BEFORE AND AFTER RENOVATION .....	86
4.1.	Location of Borusan Music House .....	86
4.2.	History of Borusan Music House .....	88
4.3.	Description of the Old Building .....	90
4.3.1.	Spatial layout .....	92
4.3.2.	Elevation characteristics .....	94
4.3.3.	Spatial alterations .....	99
4.3.4.	Structural characteristics.....	99
4.3.5.	Construction material and lighting .....	104
4.4.	Description of the New Building.....	107
4.4.1.	Spatial layout .....	107
4.4.2.	Elevation characteristics .....	113
4.4.3.	Spatial alterations .....	116
4.4.4.	Structural characteristics.....	118
4.4.5.	Construction material and lighting .....	121

5.	EVALUATION .....	127
5.1.	Evaluation of the Renovation and Reclamation Process of Borusan Music House.....	127
5.1.1.	The involvement of the architectural firm .....	128
5.1.2.	Chronology of the renovation works .....	130
5.2.	Evaluation the New Building .....	136
5.2.1.	The evaluation of the new facade with respect to the surrounding neighborhood of the building .....	136
5.2.2.	The evaluation of the new spatial configuration with respect to the old building .....	139
5.2.3.	The evaluation of the new structural system with respect to the new function of the building.....	143
5.2.4.	The evaluation of the new space in terms of construction materials.....	146
5.2.5.	The evaluation of the new space in terms of construction lighting.....	147
6.	CONCLUSION .....	150
	REFERENCES.....	R1
	APPENDICES .....	A1
	CURRICULUM VITAE .....	A37

## LIST OF FIGURES

### FIGURES

Figure 2.1	Petition of Borusan Music House (BMH) dated 1984 .....	37
Figure 2.2	Deed of the BMH .....	38
Figure 2.3	Technical report of BMH .....	39
Figure 2.4	Petition submitted to the Cultural and Natural Heritage Protection Council's directorate .....	40
Figure 3.1	Roofed Esma Sultan Mansion (ESM) before construction of Bosporus Bridge .....	41
Figure 3.2	Location of ESM .....	41
Figure 3.3	Esma Sultan Mansion before fire .....	43
Figure 3.4	Esma Sultan Mansion after fire .....	43
Figure 3.5	ESM 's views from side and front facade before fire .....	43
Figure 3.6	1 <sup>st</sup> and 2 <sup>nd</sup> floor plans of ESM before fire .....	44
Figure 3.7	Suggestion for reuse of ESM.....	45
Figure 3.8	Ground floor plan of the new structure .....	46
Figure 3.9	First floor plan of the new structure .....	46
Figure 3.10	Cross section of the new structure.....	46
Figure 3.11	Main entrance (photocell sliding glass door) .....	48
Figure 3.12	Steel structural oval staircase .....	48
Figure 3.13	Ground floor rear window door and suspended ceiling .....	48
Figure 3.14	First floor general material, elevator on the left part.....	48
Figure 3.15	Stairs down to restroom from the ground floor .....	49
Figure 3.16	Esma Sultan Mansion restroom.....	49
Figure 3.17	Esma Sultan Mansion kitchen scene .....	49
Figure 3.18	Combination of old brick facade and new steel structure .....	52
Figure 3.19	Belt reinforcement.....	52

## FIGURES

Figure 3.20	Retrofit reinforced concrete brace or wrapping.....	52
Figure 3.21	Vertical and horizontal application of reinforced concrete wrapping method on brick-masonry building .....	53
Figure 3.22	Old exterior facade drawing of Changa Restaurant .....	54
Figure 3.23	New exterior facade drawing of Changa Restaurant.....	54
Figure 3.24	Changa Restaurant's former ground floor plan.....	55
Figure 3.25	Changa Restaurant's old first floor plan .....	55
Figure 3.26	Changa Restaurant old second floor plan.....	55
Figure 3.27	New bar floor of Changa Restaurant .....	56
Figure 3.28	New first floor facing new ground floor of Changa Restaurant....	56
Figure 3.29	New third floor of Changa Restaurant.....	56
Figure 3.30	New loft-1 of Changa Restaurant .....	57
Figure 3.31	New loft-2 of Changa Restaurant .....	57
Figure 3.32	The new cross section of Changa Restaurant .....	59
Figure 3.33	Changa Restaurant's new front facade .....	61
Figure 3.34	Changa Restaurant's new rear facade.....	61
Figure 3.35	Changa Restaurant interior view .....	61
Figure 3.36	Changa Restaurant bar scene voltaic tile ceiling, floor epoxy .....	61
Figure 3.37	Changa Restaurant interior gallery space .....	61
Figure 3.38	Salt Beyoğlu's old side facade .....	63
Figure 3.39	Salt Beyoğlu's new plan.....	66
Figure 3.40	Salt Beyoğlu new section .....	67
Figure 3.41	Salt Beyoğlu new elevation .....	67
Figure 3.42	The changes made on Salt Beyoğlu's facade.....	68
Figure 3.43	İstiklal Street, ground floor.....	69
Figure 3.44	Restoration of the old stairs.....	69
Figure 3.45	Location of glass elevators from the exhibition area.....	69
Figure 3.46	Integration of old and new ceiling.....	69



## FIGURES

Figure 3.47	Library and restaurant scenes and logo lettering.....	69
Figure 3.48	Construction work on the forum area.....	69
Figure 3.49	Lighting elements used in Salt Beyoğlu.....	74
Figure 3.50	Courtyard old new.....	76
Figure 3.51	Salt Galata plans.....	77
Figure 3.52	Salt Galata and additional building cross section.....	78
Figure 3.53	Ottoman Bank entry wall.....	79
Figure 3.54	Glass display at the entrance scene of Salt Galata.....	79
Figure 3.55	Elevator used in the Ottoman Bank.....	79
Figure 3.56	Large space created by the removed elevator.....	79
Figure 3.57	The gallery space started to block sunlight.....	81
Figure 3.58	Salt Galata new main gallery space.....	81
Figure 3.59	Salt Galata's mirror panels (heliostats).....	81
Figure 3.60	Bookstore of Salt Galata.....	81
Figure 3.61	Drawing of auditorium.....	83
Figure 3.62	Salt Galata's office designed by Superpool.....	85
Figure 4.1	İstanbul's position on the world.....	86
Figure 4.2	The location of BMH.....	87
Figure 4.3	Borusan Music House environment.....	88
Figure 4.4	Site plan of parcel belonging to 1964.....	90
Figure 4.5	System details.....	91
Figure 4.6	Photos of the old first floor.....	92
Figure 4.7	Photos of the old fifth floor.....	92
Figure 4.8	Two front entrance of ground floor.....	93
Figure 4.9	Side entrance of ground floor.....	93
Figure 4.10	Stone arches of 1 <sup>st</sup> floor.....	95
Figure 4.11	French balcony of 2 <sup>nd</sup> floor.....	95
Figure 4.12	Grape ornaments, simplified wooden window frames.....	96

## FIGURES

Figure 4.13	Ground floor facade facing Orhan Adli Apaydın Street door .....	97
Figure 4.14	Ground floor facade facing OS window.....	97
Figure 4.15	One of the mutule .....	97
Figure 4.16	Narrow windows of facade facing OS.....	98
Figure 4.17	Windows of facade facing OS.....	98
Figure 4.18	Photo of old loft from facade facing OS .....	98
Figure 4.19	Floor arch.....	100
Figure 4.20	Ceilings of ground floor are floor arch and walls are masonry brick.....	100
Figure 4.21	5 <sup>th</sup> floor arch and steel joist .....	101
Figure 4.22	Floor arch on 3 <sup>rd</sup> floor.....	101
Figure 4.23	Floor arch on ground floor .....	101
Figure 4.24	Joist.....	102
Figure 4.25	Steel joist line on second floor .....	102
Figure 4.26	Stud section in loft and plan drawings .....	103
Figure 4.27	Hipped roofs .....	103
Figure 4.28	Old stairs are marbled.....	105
Figure 4.29	Photo taken from loft, natural lighting well .....	105
Figure 4.30	Hanging light in the ceiling, wooden floor on ground .....	106
Figure 4.31	Natural light is taken from skylight.....	106
Figure 4.32	Floor is glazed tile .....	106
Figure 4.33	Masonry bricks can be seen on walls .....	106
Figure 4.34	Floor is obfuscatory installed ceramic.....	106
Figure 4.35	Marseille roofing tile has been used in roof.....	107
Figure 4.36	Marseille roofing tile has been used in roof.....	107
Figure 4.37	Fire exit door at ground floor .....	108
Figure 4.38	Fire escape and service corridor on ground floor.....	108
Figure 4.39	Borusan Music House's restroom .....	108

## FIGURES

Figure 4.40	Temporary exhibition unit.....	109
Figure 4.41	Stairs from ground floor to first floor.....	109
Figure 4.42	Galley opening linking second and third floor to each other .....	110
Figure 4.43	Piano elevator system between 1 <sup>st</sup> and 2 <sup>nd</sup> floor.....	111
Figure 4.44	Ground of 3 <sup>rd</sup> floor.....	112
Figure 4.45	One of rehearsal room on 4 <sup>th</sup> floor .....	112
Figure 4.46	Corridor on the 4 <sup>th</sup> floor.....	112
Figure 4.47	Stairs from terrace to roof.....	113
Figure 4.48	Observation terrace.....	113
Figure 4.49	New facade and facade facing OS.....	114
Figure 4.50	Main entrance doors .....	114
Figure 4.51	Opening windows are located in terraces.....	115
Figure 4.52	Four openable joineries for terrace, construction photo.....	115
Figure 4.53	Photo of completed form of 4 openable joineries for terrace.....	115
Figure 4.54	Sliding joinery detail on loft.....	115
Figure 4.55	Seating orders with different alternatives.....	116
Figure 4.56	Seating plan with tables for 40 people .....	117
Figure 4.57	Borusan Music House eating plan for 182 people.....	117
Figure 4.58	Structural system model of BMH.....	118
Figure 4.59	Diagonal steel structure is seen on the left side, I steel columns are seen on right side, gas concrete blocks are seen on right front, steel right profiles used in horizontal are seen at the top.....	119
Figure 4.60	Steel sheet-concrete composite flooring.....	120
Figure 4.61	Ground floor, facade facing OS single piece double glazing.....	122
Figure 4.62	Ground floor, first floor and terrace flooring material .....	122
Figure 4.63	Interior wall material details of ground floor .....	122
Figure 4.64	Floor material of first floor is concrete looking epoxy.....	123
Figure 4.65	Blind lateral facade.....	123

## FIGURES

Figure 4.66	Ceiling and lighting on first floor .....	123
Figure 4.67	Fifth floor entrance is provided by card system .....	124
Figure 4.68	Terrace skylight .....	124
Figure 4.69	Restroom ceiling lighting .....	125
Figure 4.70	Fire escape .....	125
Figure 4.71	Elevator door at terrace floor .....	125
Figure 4.72	Separator glass panel detail taking place in the space .....	126
Figure 4.73	Separator glass panel detail taking place in the space .....	126
Figure 5.1	Photographs of the construction phase as taken by GAD .....	130
Figure 5.2	Steel supports are used to keep the frontal facade standing .....	131
Figure 5.3	Diagonal structure is being erected as the steel beams are placed between the layers .....	131
Figure 5.4	Elevator shaft .....	132
Figure 5.5	Construction works at fourth level .....	132
Figure 5.6	Scaffolding in gallery space .....	133
Figure 5.7	Air conditioners were mounted on ceiling .....	133
Figure 5.8	Construction of structure reached as high as the terrace level .....	133
Figure 5.9	Original side door was restored in situ .....	134
Figure 5.10	Original front facade was restored .....	134
Figure 5.11	Electricity and installation pipes were installed in the shafts .....	134
Figure 5.12	Outer windows of the building were installed .....	135
Figure 5.13	Elevator structure was installed while construction of 2 <sup>nd</sup> and 3 <sup>rd</sup> floor gallery void was still ongoing .....	135
Figure 5.14	Form function comparison between old front facade and new front facade .....	136
Figure 5.15	Form function comparison between old side facade and new side facade .....	137

## FIGURES

Figure 5.16	Form function comparison between old side entrance gate new side exit door function comparison .....	137
Figure 5.17	Form function comparison of old ground floor's side facade and new ground floor's side facade .....	138
Figure 5.18	First floor obsolete wallpapers .....	139
Figure 5.19	The first floor front facade elevator relation .....	139
Figure 5.20	The first floor old ceiling decoration.....	140
Figure 5.21	Current state of the photograph in figure 5.20 .....	140
Figure 5.22	İstiklal Avenue view from the first floor window .....	141
Figure 5.23	İstiklal Avenue view from the first floor window .....	141
Figure 5.24	Old fifth floor corridor and balcony .....	142
Figure 5.25	Old fifth floor .....	142
Figure 5.26	The fifth floor and balcony door .....	142
Figure 5.27	Old structural system, concrete column .....	144
Figure 5.28	New structural system, diagonal steel columns.....	144
Figure 5.29	Roof floor old structural system, tile roof .....	145
Figure 5.30	Roof floor new structural system .....	145
Figure 5.31	Old concrete stairs .....	145
Figure 5.32	New steel stairs.....	145
Figure 5.33	The new lighting system which is located from inside to the outer facade and which has red, blue, purple and yellow colors lighting respectively .....	148
Figure 5.34	Figure assembly works of the art works on diagonal structure .....	149

## LIST OF TABLES

### TABLES

Table 2.1	Comparison of Re-Using Methods.....	12
Table 3.1	ESM's field, width, length, height measurements .....	50
Table 3.2	ESM organization number of persons .....	50



## LIST OF ABBREVIATIONS

BMH	Borusan Music House-Borusan Music Evi
ESM	Esmâ Sultan Mansion-Esmâ Sultan Yalısı
OS	Orhan Adli Apaydın Street- Orhan Adli Apaydın Sokak
GAD	Gökhan Avcıođlu Architecture/Global Architectural Development
LPCNP	Law on Protection of Cultural and Natural Property- Kùltür ve Tabiat Varlıklarını Koruma Kanunu
SCIAM	Supreme Council of Immovable Antiquities and Monuments- Gayrimenkul Eski Eserler ve Anıtlar Yüksek Kurulu
SRRP	Survey, Restitution, Restoration Projects- Tek Yapı Ölçeğinde Rölöve, Restitüsyon ve Restorasyon Projeleri Teknik Şartnamesi
RGMRICP	Resolution on Grouping, Maintenance and Repair of the Immovable Cultural Property; Resolution numbered 660-660 sayılı ilke kararı; Taşınmaz Kùltür Varlıklarının Gruplandırılması, Bakım ve Onarımları
RIRICNPP	Regulation on the Identification and Registration of Immovable Cultural and Natural Property to be Protected- Korunması Gerekli Taşınmaz Kùltür ve Tabiat Varlıklarının Tespit ve Tescili Hakkında Yönetmelik
BUCSPIPR	Beyođlu Urban Conservation Site Protective Implementation Plan Report- Beyođlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu
CACOPR	Operation of the Conservation, Application Control Offices, Project Offices and Training Units- Koruma, Uygulama ve

Denetim Büroları, Proje Büroları ile Eğitim Birimleri  
Kuruluş, İzin, Çalışma Usul ve Esaslarına Dair Yönetmelik

CACO

Conservation, Application Control Offices- Koruma,  
Uygulama ve Denetim Büroları (KUDEB)





# CHAPTER 1

## INTRODUCTION

### 1.1 Problem Statement

Buildings change and develop based on both socio-cultural, economic, technological factors and according to the needs of community and environmental factors. Buildings are created by architects, grown up by inhabitants and its death is decided by employers or politicians. As long as they exist, the structures reflect religious views, perspectives on life, cultural knowledge, ability of technology use and socio-economic classes of the people who create, develop and left them.

Newly created structures break the integrity of cities by being located without due consideration to the location of historical buildings. Creation of new buildings without any consideration to the existing historical structures of the area breaches the harmony in the urban pattern. This problem may be ignored in urban areas where mostly unattached buildings are found, but in attached arrangement of urban centers, harmony between the adjacent buildings becomes a rather significant issue, even if they are owned by different persons. Reasons of negative change in historical structures are humans and environmental factors. So, it is deemed necessary to protect structures from these two factors. Mistakes of people in using the structures or people leaving the structures without owners makes the historical buildings unprotected against natural disasters such as earthquake, flood and fire and this shows us how fast the negative changes can affect the buildings.

At the stage of protection of structure deformations, the architects must protect the structures at design stage directly by considering the realities today (in their design decisions). Otherwise, one of the problems of the country is now lack of valuable structures which cannot be brought back as result of our sickness of destroying and re-building, because the same quality cannot be obtained even if the valuable old structures are copied [1].

Today, the cities are affected negatively as the characterless new structures which are built with the new technology do not consider the valuable old structures, decrease their memories and do not consider what was lived in them. Protection of the city's history is only possible by determination of structures and fields and archeological sites that must be protected. Among the issues to be thought, there are shapes, functions and design language of new attachments to be made in the structures under protection. Attachments to be made in the historical structures must be considered by thinking of the compliance of structure with the attachment (location and age of the structure to be subject to application, year of application, identities of the old users, new planned function of use of the structure) by examining historical features of the structure.

Finally, at the core of the present study, the problem addressed is simple: when the old buildings are renovated with their old functions, they are doomed to remain only in the history. Yet, we have a choice: refunctioning. Refunctioned buildings are allowed to keep their genetic origins while developing a new yet robust and lasting character. Restored buildings are ought to bear the personality which must make do with its genetic origin.

## **1.2 Aim and Objectives**

The historical structures are important elements of countries where they are located. Countries and the citizens of countries are expected to protect values of the structures in such important issues. This protection can be fairly valuable as far as they can be followed up by conscious individuals from the beginning to the end.

Protection and examination of histories of aforementioned structures and having information on how to transfer them to the next generations are fairly important. Future functions of these structures, whose history will not be intervened, are dependent on political views of the employer in the related date and then the architecture. Therefore the techniques, methods and rules to transfer these structures to the next generations who will protect them are the subjects of this thesis.

The present study aims to show that the renovation is not merely duplication of the old but is an approach through the use of modern construction materials, techniques and knowledge towards a better and more appropriate solutions not only for the users but also for the building itself. The respect towards the old building can only be shown by the efforts to bring them to the future. However if the modern means and facilities cannot be adapted to the old buildings, the economic life of such buildings will be shortened by the difficulties encountered the users regarding the functionality of the old building which will only result in a rather rapid abandoning. Buildings that can rapidly satisfy the needs and demands of the mankind have increased functionality which in return increases the utility. A functional building has a higher chance to be brought to the future. For this reason, in order to keep the buildings alive, modern additions must gain recognition which is the main objective of the present study.

### **1.3 Methodology and Structure of the Thesis**

The argument of this thesis is construed in following steps:

The case study of the thesis is Borusan Music House (BMH) which is located on İstiklal Avenue in İstanbul. On-site examination progress of this structure, which leaded the thesis, started after separately visiting the floors after taking necessary permissions. Designs of the floors used for different functions have made appropriate with the functions of building. External facade, which is as important as the interior, was examined on site in this stage of field research. It was finalized in this stage of research, that the structure, located on corner land, has a front and a side facade. At this stage of research, difference between two facades can be seen with naked eye. This difference is that the front facade is the facade transferred from history and the side facade was re-built by considering its former shape.

After making preliminary research and preparing a report on the structure, the architecture office making the renovation was visited and plans of the final shape of structure were taken. In addition to the plans, files of construction images prepared monthly were also obtained from this office.

One of the most important stages of research was to visit Beyoğlu Municipality for obtaining information on former shape of the structure. From here, relays drawn by high architect Halil Onur before renovation were obtained.

In the next stage, Cultural and Natural Heritage Protection Board has reached to images on former shape of the building. After collection of all documents on the structure, assessment criteria results were shaped. It was seen that the structure is a historical building rather than an old building, due to construction year of it. It was understood that the former structural system and former functions of the structure were completely lost. It was determined that the front facade is the same with its shape before renovation.

Method followed in the thesis is as follows:

- Explanation of old concept and re-evaluation of this old structure.
- Discussion of new function adaptation to the obsolete structure.
- Examination of reassessing methods in architecture.
- Explanation of varieties of protection methods within protection concept and historical progress.
- Emphasis of the importance of supporting protection methods with laws and regulations.
- Examination of samples of four structure examples subjected to renovation in İstanbul.
- Statement of old shape of the structure which was refunctioned (Borusan Music House).
- Explaining new form of BMH.
- Reassessment stages of BMH and discussing the design over this example.

The first part; introduction to the subject; purpose of thesis, identification of problem and subject sequence. The second part; old concept and how this situation can be valuable. Protection concept and laws and regulations in this concept. The third part; Esmâ Sultan Mansion (ESM) renovated in accordance with Philip Robert and GAD project, Changa Restaurant renovated by Gokhan Avcioglu, Salt Beyoğlu and Salt Beyoğlu Galata structures renovated by Han Tümerterkin and adaptation of these

buildings to today. The fourth part; geographical, historical and architectural features of the historical structure in İstiklal Avenue in İstanbul (BMH). The fifth part; examination of renovation stages of BMH through the eyes of interior architect. The sixth part is the conclusion part.

The main reason for choosing BMH for this thesis was the very fact that it was designed and implemented by one of the leading architects of Turkey, Gökhan Avcıoğlu and his team. BMH project is a pioneer example of modernization and re-functioning of an old building. The main characteristic that differentiates this building from other renovation projects is the material and the load bearing system used for the project. As it is self-explanatory, the newer materials and techniques provide longer functional life for a building. Additionally, another characteristic that made this building worth examining is the opportunity provided by the building to employ multiple techniques for renovations. History was respected and preserved wherever and whenever it was possible during the renovation works. Also, for such parts that could not be possibly saved, technology was fused with tradition in a sensible manner to adopt the building to modern era.

Two of the other four examples included in the thesis, also feature the same properties. This means that Esmâ Sultan Mansion and Changa Restaurant were also renovated by Gökhan Avcıoğlu and his team. Such sections that could be saved were preserved and presented to modern age while unusable sections were renovated through modernization works. Remaining examples included in the present thesis are Salt Beyoğlu and Salt Galata. All these buildings were included in this thesis due to their similarities with BMH project. The latter two were also designed and implemented by Han Tümertekin, who is also another prominent member of Turkey's architects. My personal desire to have a closer look into the actions and decisions by great architects of Turkey in renovating old buildings was admittedly one of the main reasons behind choosing these buildings for the thesis. Salt Beyoğlu and Salt Galata are examples where the outer shell was preserved and renovated without any change while inner sections were completely redesigned in consideration with new functioning and public characteristics of the buildings.

## CHAPTER 2

### BASIC CONCEPTS AND DEFINITIONS

#### 2.1 Concepts of Old Building

##### 2.1.1 Causes underlying the aging of buildings

The term old refers to either things that have lived for a long time or things that belong to the past (Url-1). According to TDK dictionary, the term also refers to things that are worn out or damaged due to use in long periods of time. The term old may also suggest things that should be protected or renewed if it has a particular value.

Inability to stand is an indication of the fact that the building is old. An old building endangers not only those who live within but also those around it. There are only two options that apply to such old buildings: demolition or conservation. If the old building is considered as a future value, then the building shall be preserved which means it shall be reclaimed.

Before reclamation, the causes underlying aging which lead to the need of reclamation must be mentioned. The causes of aging are explained through the types of aging. According to Polat, aging is caused by four causes: physical, functional, economic and visual [2].

**Physical aging (structural aging):** The most important factors that cause physical wear off are time itself, human and nature. The following examples apply to this type of aging: Wear and tear of the materials used; destruction by human in cases of wars and plunder and; damage by nature in cases of earthquake, floods or fires. Structural wear and tear develops slowly but constantly and does not have any distinctive stage unless caused by a destructive external factor like earthquake, fire or war.

**Functional Aging:** This is the state where the object lost its purpose of use and no new function is given to it. If no new function is attached to it, then the building is

abandoned to destruction. Functions gradually change over the time pursuant to the developments in processes or in the technology. Economic and visual aging are direct results of physical and functional aging.

**Economic Aging:** According to Polat, aging is reflected in lower sale or rental value compared to those of the buildings in vicinity due to physical aging of the building in question [2]. On the other hand, Avcı describes the economic aging as follows: “Rapid population growth and increased economic activity affect the urban development and land use which in return gradually changes the physical structure of historical cities” [3]. Therefore, historical city centers cannot resist the pressure exerted by the various sectors such as commerce, service and other thus forcing historical items and architectural monuments [3].

**Visual Aging:** It is the loss of unique identity of the space due to unconscious additions [2]. According to Avcı, this type of aging is actually an environmental aging and when the environment is worn, damaged or completely destroyed, the building loses its value [3].

For old buildings, reclamation as well as its mode directly depends to the type of aging seen on the building in question. In other words, the decision of reclamation is formed by the aging type of the building.

### **2.1.2 Assigning new function to old buildings**

Hasol defines function as “conformity to its use or natural operation; the task completed to achieve an end” [4]. A lot of buildings undergo various changes in terms of function during their lifetime. The function of a building may be subjected to questioning due to religious, political, economic or temporal reasons. The churches that were converted to mosques, the Mansions that become museums, the communication towers that are now touristic attractions or the old taverns that now serve as restaurants are the examples in which such a change manifests.

Due to ever changing lifestyles and desires many historical buildings have lost their original functions and they have been converted for serving a different function.

Since the original function of such historical buildings like *hammams* (Turkish bath), caravanserais, *tekkes* (Islamic Monastery) or monasteries can survive only under specific circumstances; it becomes an obligation to use such buildings for a different purpose than their original functions. Such buildings like residences or hotels, whose original function still exist, on the other hand, cannot achieve the comfort level of their modern counterparts thus losing their functions as they remain below the standards and when no updating is applied, they are abandoned to destruction [3]. Fortunately, the functional performance of buildings can be significantly enhanced with an architectural re-arrangement. The performance of such buildings in their newly assigned function can only achieve a certain level of efficiency simply because each building gives best functional performance only for its original purpose [3].

Because the mentalities of individuals are in a continuous state of change which often changes faster than that of the buildings, functional modifications applied to old buildings are also subject to a constant process of re-evaluation. In case of historically significant old buildings, it is important to document various stages of the buildings life to preserve the historical heritage and collective memory of the society. Such documentation is possible through building surveys. The documents that contain only drawings but not any written assessment are called architectural surveys. An architectural survey project does not only document the actual status of a building but also determines its problems as well as its potential and new uses and also consider main approaches and intervention methods for repairs as well as description of interventions needed for its new use [5]. As a matter of fact, an architectural survey study is one of the best ways to preserve the old building.

Architectural surveys provide opportunities for preserving the archival documents the old buildings. With the help of these archival documents, the buildings can be brought into the future without any fear of destroying the past. After the survey, the old buildings become open to modern interpretations.



### 2.1.3 Re-evaluation methods in architecture

Article 3 of the Law on Protection of Cultural and Natural Property (LPCNP) defines the evaluation as: shall mean the exhibition, organization, use and scientific promotion of cultural and natural property [6].

Evaluation method may be chosen according to the type of aging. In this respect, the classification of re-evaluation can be formed as follows:

1. Reuse after repairing only the structural wear-tear;
2. Reuse after repairing the shell of the building and making changes in the interior space without any interventions to the load-bearing system;
3. Reuse after repairing the outer shell of the building and re-constructing the interior spaces in whole;
4. Reuse after preserving of the load-bearing system of the building and re-constructing the outer and interior walls;
5. Reuse after demolishing the whole body of the building and constructing a new building in line with the interior spaces, functions, facade and mass of the previous one [7].

Examination of these classifications by Dinçer in terms of harmony with the surrounding buildings, cost, duration and energy produces the following results (Table 1). Since there are no significant alterations in the sites of the buildings subjected to re-evaluation and since only minor changes occur in terms of building volumes, such operations provide a high level of harmony with surroundings, irrespective of the method. The parts to be repaired in a building subjected to evaluation are determined in consideration with the usability of the old parts. For this reason the cost of repair directly relates to the old mass that will remain intact after the conversion to the new function. Contrary to this, separation of the parts of building that will be repaired provides the parts to be constructed. In Table 1, it is indicated, the repair is high while there is no construction cost. However, when the repair is low, the cost of construction is increased. Another result deducted from the table shows that the construction works of the repair-weighted re-evaluations takes

less time. As the construction works increase the time to complete increases as well. Due to rapid development of technology since from the date when Table 1 was first created, the energy-saving column will be ignored in this study.

Table 1: Comparison of Re-Using Methods (Özel, 2006; Sarıcı, 1990; Dinçer 1971)

	Harmony	Cost		Time	Energy Saving
		Repair	Construction		
1	High	High	N / A	Very Short	High
2	Moderate	Moderate	Moderate	Short	Medium
3	High	Low	Much	Long	Low
4	High	N / A	Moderate	Long	Low
5	High	N / A	Much	Until new construction	N / A

## 2.2 Concept of Conservation in Architecture

### 2.2.1 Idea of conservation

Human desire to keep the cultural values created by the previous generations alive and to transfer the same to the future generations evolved since from prehistoric ages to the present form. Various documents and findings show that mankind was concerned with preserving the monuments since the beginning of first organized human settlements. At first, the buildings were preserved due to religious reasons. Then, the need for conservation became necessary due to economic and then cultural reasons. The act of conservation even became a profession as the awareness, thus the need increased. Keeping the historical environmental values alive and to transfer it to the future generations has become an important duty not only for the professionals but also for the entire society.

Conservation is usually handled in three scales. These are: individual buildings, groups of buildings and an urban region. This classification has developed over time. Conservation was first envisaged for an individual building or a group of buildings. Later, it was understood that the future of a single monument or conservation site

cannot be separated from the environmental framework. Thus the idea of conservation reached to a scale where urban areas, even cities as whole are included [3].

In the light of above explanations, the definition of conservation emerges: the conservation is the protection of the works with high architectural values in an area of the city from any external threat so as to carry it for use of future generations. As it is understood from this definition, the building to be preserved needs to bear a certain architectural value. The dictionary definition of architecture is: the art of designing spaces to facilitate the life of mankind and to ensure sustainment of their actions like accommodation, entertainment, recreation or working and the concerning science (Url-2). According to Hasol, the conservation is taking necessary measures for conservation, repair and maintenance needed by buildings with historical or artistic value, natural assets or urban pieces for survival [4].

Mankind tends to protect and conserve the things valuable to them. Yet the value of a thing is only realized at the borders of a loss. It should be always kept in mind that the works that constitute today's environment are the objects of art of the future. A correct evaluation method must be selected in full pursuance with the concept of conservation for any approach that considers conservation as a method to evaluate the existing building stock would underline the economic aspect of the concept of conservation [7].

### **2.2.2 History of conservation in Turkey**

Conservation of buildings from past has gained importance only after the establishment of the Republic. Yet, demolition of historical works cannot be effectively prevented at any point in time. Economic based speculative pressures, intentional or unintentional omissions, fires, development movements or even court decisions hindered conservation at desired levels [3].

Throughout the history, as the social and economic structure changes, architecture and urban formations change because they are but concrete reflections of the socio-

economic structure. Conservation of works with cultural and aesthetic value causes different interpretations within this process of change.

After 1950s, efforts to protect old works destroyed by rapid urbanization increased and on the date of 02.07.1951, Supreme Council of Immovable Antiquities and Monuments (SCIAM) was established to solve any settlement and antiquity problems that may occur during development activities and to conserve antiquities and monuments. Despite vast powers entrusted to the Supreme Council, lack of an enforcement organization which could enforce and supervise the Supreme Council's decision and difficulty of working with old and inappropriate antiquity legislation prevented development of an effective policy. Despite all these, the Supreme Council had played the most important role in the history of conservation in Turkey as it was the only authority to stand against irresponsible development efforts [3].

SCIAM uninterruptedly continued its works until foundation of Supreme Council of Immovable Cultural and Natural Property by the Law numbered 2863 on Protection of Immovable Cultural and Natural Property (LPCNP) [8]. The law numbered 2863 is still in force in Turkey. It was first adopted on the date of 21 July 1983. The second chapter of the law defines the immovable cultural and natural property to be protected as follows:

- a) Natural property to be protected and the immovable property built until the end of the 19<sup>th</sup> century,
- b) The immovable property created after the mentioned date that the Ministry of Culture and Tourism deems necessary to be protected considering its importance and characteristics,
- c) Immovable cultural property situated in the conservation site,
- d) Buildings that were stages of great historic events during the National War of Independence and the Foundation of the Republic of Turkey that are not subject to time and registration rules due to their importance for national history, areas to be identified as such and houses used by Mustafa Kemal ATATÜRK [9].

Despite the arguable nature of these provisions, they give a general idea about the buildings that needs to be protected. Yet, Article 6 continues with a “however”: “However, the immovable property not decided to be protected by the Conservation Councils on the basis of their architectural, historical, aesthetic, archaeological and other important characteristics shall not be regarded as immovable cultural property to be protected”. With this sentence, it is clear as day that the concerns of Cengiz Bektaş (i.e. the future of the buildings constructed after 19<sup>th</sup> century are at discretion of the governments according to their understanding of culture) actually apply to the buildings constructed before 19<sup>th</sup> century as well.

Starting from 1990s, projects to bring new functions to unused buildings have gained pace in İstanbul. Thanks to such factors, İstanbul was denominated as the European Capital of Culture in 2010. The idea incorporating old buildings into modern life extends from İstanbul to other cities in Turkey that host damaged buildings with historical value. Resurrection of damaged buildings in anyway, would also serve to resurrect the history of that city.

İstanbul hosted various civilizations like Romans, Byzantium, Latin and Ottoman Empires as their capital. Therefore the city houses a splendid history. On the other hand, all these different civilizations left different cultural heritages and lifestyles as their heritages in the city. All these different lifestyles, created three different values for the next generation, these are; **Cultural values**; documentary, historical, archeological, aesthetical, architectural, townscape and landscape. **Emotional values**; curiosity, admiration, pride; And finally, **functional values**; functional, economical, social and political [10]. Transfer of these values from one generation to the next resulted in the awareness to modernize the historical buildings. Due to their cultural values, the shells of the historical buildings are conserved while new functions are introduced into interior spaces due to their functional values. This approach ensures the continuity of the use of such buildings by the residents.

The idea of conserving the buildings first occurred for religious reasons. In time, the artistic preservation concerns are included to these reasons [10]. The motives for conservation have changed through the time due to the changes in the needs of people. Today, the factors like security and competition are also included in such

motives which caused further changes in the understanding of repairing. It is a known fact that possible fractures in the Marmara fault line will have enormous direct impacts on İstanbul. Therefore, it is not enough to construct only the new buildings in line with the precautions against such disasters. Each and every building constructed in the past which are integrated into the urban fabric of the city whether or not accepted as cultural asset shall be prepared against the earthquakes or fires.

In the further step, after the safety factor, the phenomenon of competence is what triggers the new ideas in one of the largest commercial centers of the world, namely, İstanbul. At first, on the contrary of the general assumption, it is not the artists who supported the conservation of the historical buildings but is the entrepreneurs. The artists contribute their interpretations to the buildings in further steps thanks to the budgets raised by the entrepreneurs. Thanks to such renovations realized by the material supports from the entrepreneurs and by the artistic contributions of the artists the value of these old streets and rental fees in such streets increase. After such renovations, people from upper classes are also attracted to such streets which facilitate the commercial life in there.

### **2.2.3 Purpose of conservation**

The awareness to protect the history increases day by day. Accordingly, the number of techniques of renovation and restoration increases. In cases where the historical buildings are in such a bad shape beyond help, new techniques may make it possible to save the building. In the sensitive approaches of Cengiz Bektaş concerning renovations, the modern interpretation of the history is underlined. In his book on the subject, the President of the Turkish Historical Researches Board is called upon with following statements: Nearly all of the masonry and wooden architectural works are damaged in all around Turkey. They are in need of renovation and restoration. They are ruined and being demolished. Also future generations are invited to follow a more sensible approach [11].

According to the results of a seminar held in Turkey on this subject, the main problems are; lack of suitably quality conservation and restoration applications, delegation of restoration projects without appropriate research and without setting

appropriate standards, inconveniences in delegation of restoration projects, in creating funds for such projects and also in implementation of these projects. The main objective is to execute the restoration projects in full pursuance with international criteria and practices to strengthen the cultural assets as well as to keep them alive [12]. The best approach to achieve this goal would be through ensuring use of the most appropriate technology as well as specific and correct material in all applications. In order to realize this principle, training programs must be developed for the foremen and journeymen to be employed in the applications.

Another important problem is the lack of financial funds and ineffective use of existing resources to suitably protect the cultural assets. The objective, on this regard, is to create funds during implementation processes of management plans [12].

In the opening speech of the same seminar, determination of protection action plans and their application processes; determination of problems; determination of vision and objectives; classification of strategies by priority; determination of action plans, i.e. the application and the authority to execute this application; budget and legislation were chosen as agenda items [12]. Historical buildings shall survive as long as these protection action plans are realized by correct people. As Bektaş put it; the objective of protection is not to freeze but to keep alive [11].

An understanding of conservation which prevents building from being used with a new function also prevents people from experiencing all the qualities that building offers to the society. Idea of protection is indicative of the responsibility which has many aspects such as social, cultural and economic aspects. A society can only transfer its culture to future generation if it protects the environment in which it lives along with the values created by the society. Each protected fabric will stand as a proof of the appropriation of land by individuals. Naturally, it is not possible to protect each and every building. It is also not possible to save each square meter of an old building. Nonetheless, the objective of idea of conservation is to evaluate what remains as best as it gets with the prevailing conditions.

## 2.2.4 Types of conservation

### 2.2.4.1 Restoration

Restoration is the total body of repair works to protect the original building with a view to transfer the original building to the future generations. According to Cengiz Bektaş, restoration is the repair in accordance with the original state. It is argued that with the introduction of the concept of restoration, the way to transform the buildings is now open for it is restoration which brings modern living [11]. Celal Esad Arseven defines the restoration as the artistic repair. Lastly, the most recent definition by Özel acknowledges the restoration as a physical renewal method which is applied by taking the values of a representative utopia as guidelines [7].

Restoration defines the collective body of: determination of the problems as well as potential and new usage facilities of the building after documentation of its existing conditions, determination of basic principles, approaches and intervention methods for repair and description of the interventions needed for its new uses by means of reports, measured and scaled drawings [13].

According to the Resolution numbered 660, the restoration has the exact same meaning of significant repairs [5]. The idea of restoration of old buildings is an old one. The recommendations by Sinan the Architect written in a letter to the Chief Judge of İstanbul and Regent of Hagia Sophia accounting the then exiting status of the mosque and for its protection is a good example from the history [11].

Additionally the 1789 French Revolution, which in fact triggered the progress of restoration, was, after all, a great loss for buildings. The desire to re-elevate the buildings by examination of European Medieval Architecture occurred after 1830s which triggered emergence of types of restoration. These were divided under four categories in the thesis study titled Study on Restoration Works and Restoration Enterprises in Turkey by Erim.

Stylistic Re-composition Movement (reaching stylistic consensus): M. Eugene Emmanuel Violet Le Duc, a French Architect from 19<sup>th</sup> Century (1834 – 1879)



executed many works that can be acknowledged as the very beginning of the history of restoration. The movement supported restoration of the former appearance of the building by using the original techniques. Yet this method caused elimination of the traces of the past in the name of granting the building with its former appearance [14]. According to Viollet Le Duc: to restore a building is not protecting, repairing or re-constructing a building but to make it a complete building in a given time in a form that it never had [15].

Romantic Movement (anti-restoration movement - SPAB Society): The movement advocates that restoration is to betray the building and that the building must be preserved untouched. The movement was led by British John Ruskin (1819-1900) but within a short period of time it lost momentum since its principle would only mean leaving the buildings to their fate [14].

Historical Restoration Movement: This means restoring the building solely based on the documents. Italian Luca Beltrami (1854 – 1933) has created foundations of today's understanding of restoration as he started this movement. This was also the birth of an archivist-type restorer who studies the history and keeps the documents at hand.

Modern Restoration Movement: The principles announced by Italian Camillo Boito (1836-1914) in 1883 are accepted as the pioneer modern restoration rules. These are:

- Monuments document the history of whole mankind. For this reason, they should be treated with respect. Any changes on them may result in deceptive results and judgments.
- Intervention to architectural monuments may be a necessity; however consolidation is better than repair and repair is better than to restore.
- When it becomes a necessity to make annexes to the monument due to structural defects or safety reasons, such annexes must be based on concrete data; visual integrity of the building must be

respected and such works must be realized with the same materials and characteristics. The restoration also must be indicated by means of a historical indicator.

- After first design, the amendments on the building at different periods of time must be acknowledged as an integral part of the monument and kept unless they have negative impacts on other elements like closing or damaging.
- The procedures and processes conducted during restoration must be carefully documented by means of reports, drawings and photographs [15].

Modern restoration concept aims to protect all kinds of cultural heritage items which can be transferred from past to present and to future or which can be given a longer life alive and also to protect any element which can serve as a source of variety to balance the odds against the possibility of monotone world in the future. Especially Article 3 and 4 of the above list formed the foundations of the concept of renovation. Even though the concept of renovation seems to be the opposite of the idea of restoration, in fact, the renovation is the most advanced form of restoration.

#### ***2.2.4.2 Renovation***

According to Hasol renovation is to renew [4]. Also in the Resolution numbered 660, renovation has the same meaning with to renew [5]. The Dictionary of Turkish Language Institute, the term renovation is accepted as improvement.

Bektaş states that as the culture is being protected, the ways create the modern counterpart must be kept open. The main subject of protection is in fact the act of creation [11]. From an architectural point of view, between the past and present and between the present and future can extend to the modern age only through these

creations. To replicate exactly the same building which was born by the conditions, life style, construction methods and principles of previous centuries would only indicate a century-old backwardness and would mean that the previous century was not understood by the performer [11].

An approach in contrast to the historic building shall not be deemed as an insult or disrespect to the traditional buildings. It can be very well named as resurrection of historical buildings that have been in such a bad condition beyond usability. The identity and historical appearance of the building must be preserved as the historic building is renovated. The objective is to transfer the historic fabric to the future generations through materials, technology and architectural understanding of the day. In the early 90s, some projects prepared by the METU students anticipated the placement of new buildings amongst historical ones. The outcomes of the discussions following the design process are as follows:

- New designs, buildings must reflect today, i.e. the modern
- The modern technology and new lifestyles shall channelize the architecture and the buildings to be constructed in present day must not replicate the past but must become the precursor of the future.
- Old buildings are forged by use of the construction materials and techniques of their respective ages. It is wrong to continue to create the “old” with the new material and techniques.
- As an artist, the Architects and Interior Architect shall not constrain the creative power that they holds and must present modern creations. For this reason no direction rules shall be imposed to the design of the architect or the interior architect.
- Keeping their own identity, the new designs to be implemented within the old fabric would provide a meaningful harmony with the old provided that they shall reflect the modern architecture. The harmony with the

historical environment shall not be degraded to a decorative level as the similarity of appearance [16].

Yet, along with these innovative thoughts there is some opposition. For instance Leon Krier, who sides with the idea of designing the modern buildings in style of 18<sup>th</sup> – 19<sup>th</sup> C, defines such buildings as an industrial nonsense behind beautiful facades. However should the idea to modernize the history were actually disrespect, then the philosophical reference made during renovation of Louvre Museum, which brought past to the future, would become null and void.

#### ***2.2.4.3 Reclamation***

The concept of reclamation, on the other hand, refers to the total body of the positive modifications realized by humans on the nature so as to make it useful (Url-2).

Tütengil defines reclamation as a proceeding within the decision making process which is applied to select the most appropriate among various paths [7]. Each society forms its own reclamation methods. This derives from the fact that the value occurs as a result of the particular cultural heritage of that society. The correct reclamation, on the other hand, depends on the approach and view of individuals that will carry out the reclamation of the past, present and future of the object subjected to reclamation.

For this reason, the person who will reclaim needs to fully comprehend the spatio-temporal existence of the item subjected to reclamation. More comprehension will lead to a longer life for the phenomenon that will be the result of the reclamation.

#### ***2.2.4.4 Other conservation concepts***

The methods to prolong the life of buildings and their descriptions are given below:

**Rehabilitation:** The term literally means to restore to good condition, operation, or capacity. Rehabilitation of a building aims to prolong its useful life and to restore it to operability. The most important feature of rehabilitation that separates it from restoration is to preserve the urban area along with the population and to prioritize public benefit for the works executed [7].

**Regeneration:** To clean the ramshackle buildings to enable them for further development.

**Remodeling:** To renovate a building by usage, to renovate to enable different uses.

**Revalorization:** To re-evaluate a building [7].

**Conversion:** To restore a building for the same use or to enable a new use [7].

**Re-adaptation:** When used for buildings, this term signifies adaptation, conversion, re-use or to adapt the building to the current conditions.

**Recycling:** To enable re-use of out-of-order buildings for modern purposes [7].

**Rebuilding:** To re-construct a part or whole of a building which was damaged beyond use [7].

**Reconstruction:** Construction of a building that was lost or demolished according to its original status. This method is based on archeological, archive or literature data. Re-construction of a completely lost or demolished monument or protected building based on the documents is an application which is accepted only under special conditions. A replica can only copy the form of the historical masses or spaces. It cannot replace a monument. In other words, it does not present any historical value. In order to realize the reconstruction, appropriate amount of photographs, surveys and similar graphical documents presenting data suitable for construction are needed. It would be beneficial to carefully separate and preserve any and all original parts belonging to the building(s) that had been demolished, like doors, windows, ceiling ornaments, skirting, etc and to use them in the new building to strengthen the relationship between the old and new buildings [17].

**Replication:** Construction of a replica of an existing building on another location. Construction of replicas does not present any historical value. Yet they may be important to keep a building technique, a tradition alive [17].

**Consolidation:** By definition, this term refers to combination of the objects with similar structures. In architecture, consolidation means the constant maintenance of buildings to keep them in new conditions. Application of pesticides, replacement of damaged wooden parts or establishment of new foundations fall in the scope of this type of protection.

**Reconstitution:** Re-construction of a building according to its original status. It is the method of construction where the buildings with only fragments remaining due to such reasons like war or the parts excavated from archeological sites are brought

together and reconstructed. Additionally, in certain cases, the buildings are dismantled and re-combined on a different location.

**Adaptive Use:** Any intervention that results in change of function of a building through adaption of the building to the existing conditions. By large, this is the most economic solution to protect old buildings and it usually varies in interior spaces in a radical way.

Independent from these definitions, Resolution 660 of the Superior Council of Culture and Natural Property Protection, under the Ministry of Culture, states that any intervention to the buildings to be protected shall be determined according to the specific conditions of each building. However, in addition to this, the methods of intervention are divided into three classes: maintenance, repair and re-building.

- Maintenance: Works which solely aim at ensuring the continued maintenance of a building and do not require any modification to its design, materials, structure and architectural elements (such as roof treatment, groove repair and painting – white washing works)
- Repair: Works aiming at ensuring the continued life of a building which do not require any modification on the design, material, structure or architectural elements of the building. Repair is divided into two sub-categories namely simple repair and restoration.
  - Simple Repair: Replacement by the same material of any architectural elements which are wooden, metal, baked clay, stone, etc of the buildings and which become deficient as a result of deterioration, in compliance with their original conditions and renewal of any deteriorated interior or exterior plasters and coating in compliance with their original conditions by achieving compatibility in terms of color and material.
  - Significant Repairs (Restoration): Restitution and / or restoration projects for the building based on surveys and any other interventions thereof for which the contents of the relevant documentation and scales are determined by the preservation council. Consolidation, Liberation, Re-integration, Renovation, Reconstruction and Moving processes are accepted as restoration. Furthermore, each of these processes is a type of protection.

- Reconstruction: Construction of the building based on the information at hand on the parcel on which the building had been previously located with the previous facade characteristics and at same mass and template by using an authentic plan, material and construction technique [5].

### **2.2.5 Assessment of Borusan Music House Project in terms of concepts of conservation**

Borusan Music House has a rectangular like plan with one facade on İstiklal Avenue and other on Orhan Adli Apaydın Street (OS). Both facades were renovated in compliance with the previous form of the building. However, the facade on the street was not as conserved as the facade to the avenue.

Front facade was well conserved and reached today, i.e. restored. The sides of the building, however, were demolished and re-constructed in compliance with its original form. Thus they were reconstructed. Overall review of the building shows that remodeling and recycling were the conservation methods applied for renovating the building.

Borusan Music House is a building that underwent a functional change. The building had been used as a residence in the past. However, today, the building was renovated to host new uses as is accordance with the definition of remodeling. The remodeling works were designed in consideration with the buildings new use: a concert hall and a hall for temporary and permanent exhibits.

Before becoming the BMH, the building was abandoned and ignored. Later, following the fast-paced development of İstiklal Avenue, the building was remodeled to enable modern uses; thus the works on the building also falls into the category of recycling.

Because of the fact that the resolutions, regulations and laws used the term of renovation in place of remodelling and recycling and that the works on the building

also suits the concept of renovation, in the following parts of the study the term renovation will be used to refer the works executed on the building.

## **2.3 Conservation Laws and Regulations in Turkey**

### **2.3.1 Conservation in urban scale: Protected areas**

The idea of culture is constituted by the whole body of the instruments that reflect the extend of human reign over the natural and social environment in transferring all of the values created throughout the history to the next generations [18]. Cultural identity is the criteria that indicate the civilization in the past of the society. Societies' philosophy and behavior patterns, understanding of life, art, economy, administrative and political structure, etc are the reflections of the cultural identity. Cities are the spatial reflections of the cultural identity of a society. The cities, as reflection of the cultural identity in environment and the matter throughout centuries are the place of education where generations are trained and gained their identities [18]. There are only a handful of cities in the world that actually bear a cultural significance. Importance of the Turkish Culture is derivative of the variety of the values to be conserved.

The values to be conserved are split into two categories: movable and immovable cultural assets. Movable cultural and natural assets are defined in the Chapter 3, Article 23 of the Law on Protection of Cultural and Natural Property. The immovable cultural property is described in the second Chapter of the same law. The law defines immovable cultural property as the assets (formerly monuments) with historical and cultural value as well as the protected areas.

The conservation sites, according to the Law, are the cities and remains of cities that are product of various prehistoric to present civilizations that reflect the social, economic and architectural. Characteristics of the respective period, areas that have been stages of social life or important historical events with a concentration of cultural property and areas the natural characteristics of which have been documented to require protection [6].



The regional conservation board is responsible for preparing the projects for conservation of an area and submitting the same to the relevant authorities for approval. An application at any scale can be stopped within an area declared to be a conservation zone by the regional conservation board. For this reason, any development in a conservation area is subjected to the approval of board.

Another issue about the conservation sites is the fact that these sites are further divided into sub categories. Today, the conservation sites are classified by Ahunbay as:

- Natural,
- Historical,
- Archeological,
- Urban,
- Rural
- Complex (Ahunbay, 2011).

The urban conservation sites are defined in the Regulation on the Identification and Registration of Immovable Cultural and Natural Property to be Protected (RIRICNPP): The areas where cultural and natural environmental elements (buildings, gardens, florae, settlement textures, walls) having architectural, local, historical, aesthetic and artistic specificity co-exist constituting a higher value than they would if they were separately located [19].

Ahunbay, on the other hand, defines the urban conservation areas as the streets, neighborhoods and areas that maintained the consistent harmony of old cities, the architectural integrity and their frameworks. Ahunbay refers to the residence-intensive settlement areas of Tokat, Gaziantep and Mardin provinces as examples of urban conservation areas [15].

İstanbul is the largest metropolis in Turkey. The city also hosts the Beyoğlu District where BMH, the subject of hereby study are located. Beyoğlu District was announced as an urban conservation site pursuant to the decision of Protection of Cultural and Natural Properties Board dated 7.7.1993 and numbered 4720. Beyoğlu Urban Conservation Site Protective Implementation Plan Report (BUCSPIPR) aims

to eliminate the existing problems and to identify the qualities of the continuity between the past and present in Historical Peninsula and İstanbul in consideration with its unique identity in terms of history, culture, science, art and tourism in a way that preserves and highlights the variety and that cares the historical, cultural and architectural values at a regional scale [18].

Some of the objectives of the Beyoğlu Urban Conservation Site Protective Implementation Plan are as follows:

- To remove all functions that do not comply with the identity of the Urban Conservation Site in Beyoğlu District and to provide functions in harmony with its own identity (production and storage activities will be removed from the conservation site. In the areas from these functions, residence, commercial areas and accommodation functions will be established in buildings with principal function of residence by restorations and consolidations with maximum use of existing building inventory [18].
- Saving the historical urban fabric as well as the pressure of metropolitan sub-region development dynamics contrary to the regional identity and removal of such activities damaging to these areas like production and storage and arrangement of textures in the converted spaces.
- Protection of the historical, cultural and architectural values of Beyoğlu District and addition of lost monuments and significant architectural examples that have been identified with the historical and cultural identity of the region to its historical fabric.
- To convert the buildings which have negative impacts on visual integrity of region?
- Provision of appropriate appurtenance standards for night population and to increase the quality as well as the effectiveness of these appurtenances.
- Relieving the existing residence texture from expansion pressure by tourism – service – commerce (T.S.C.) function and arrangement, improvement and supporting for the spaces that were converted to residence [18].

As it is understood from these principles, the method to be implemented to reach the objects is as follows:

- First of all a conservation decision is needed.
- Such a conservation decision can be obtained depending on the significance of the building or a group of buildings in terms of their historical documentary qualities, antiquity characteristics and aesthetical value [20].
- When a building or a settlement bears one or more of these characteristics, it can obtain an identification decision which is the very first step towards conservation [15].

Identification shows that the immovable cultural and natural property to be protected is acknowledged by a conservation board decision [19]. For the building or the group of buildings to be identified, firstly the assessment criteria are applied. Some of the assessment criteria are as follows:

- That they be among the natural property to be protected and the immovable property constructed by the end of the 19<sup>th</sup> century,
- That it be deemed necessary to conserve the property with respect to its importance and properties although it was constructed after the end of the 19<sup>th</sup> century,
- That the immovable property be located in the conservation site,
- For detached or single buildings: that the immovable property be special with respect to its structure, decoration, structural status, material, construction technology and format within the scope of the range of artistic, architectural, historical, aesthetic, local, archeological values,
- For urban conservation sites; that the detached building having the property of cultural property to be protected demonstrate intensity, architectural, historical integrity.

The documents to be drafted to have the building or the group of buildings bearing these criteria identified are as follows:

- Identification application,
- Appropriate number of photographs to introduce:

For detached or single buildings; photographs of the interior and exterior spaces of the building as well as its environment,

For archeological, urban and natural conservation sites: panoramic photographs that enable comprehension of the area as a whole.

- Slides,
- Drawings showing the location and border of the immovable,

Upon examination of the documents, the buildings acknowledged by the Ministry of Culture and Tourism, are identified and registered by the Protection of Cultural and Natural Properties Board.

### **2.3.2 The Turkish laws and regulations in force**

The main foundations of the laws in force today were created by the principles that were resulted from the meetings, conferences and seminars wherein the leading actors of the profession met. These principles change to conform the actual conditions and are adapted to the laws.

The principles declared by Camillo Boito in 1883 (these principles were referred in Section 2.2.3.1. Restoration) were developed by Gustavo Giovannoni (1873-1947) whose opinions were reviewed and then became the Carta del Restauro (1932) (Terms of Reference for Restoration) a legal tool in Italy [15].

The Venice Charter was prepared on 1964 not only for regarding the monuments as an artwork but also to protect them as an historical document in restoration and conservation practice. Until the Venice Charter, all the principles considered that it was only the monuments that needed protection. However, Article 1 of this Charter states that not only big works of art need the protection but also the simpler artworks that obtained a cultural significance should be protected.

Article 12 of the Venice Charter states that: Replacements of missing parts must integrate harmoniously with the whole, but at the same time must be distinguishable from the original so that restoration does not falsify the artistic or historic evidence [15].

The concept of monument was expanded by Venice Charter, yet it was UNESCO who brought the concept into a new terminology on 1976. The term cultural property was invented to cover all tangible assets relevant to culture and traditions [15]. The Law on Protection of Cultural and Natural Property numbered 2863 which was enacted on 1983 (LPCNP) defines the cultural property as any and all movable and immovable property on the surface, underground or underwater which are found as being related to the sciences, cultures, religions and fine arts in the pre-historical and historical periods or were part of social life in the pre-historical or historical periods and are presently of original significance in terms of sciences and cultures [6].

An article added to the LPCNP on 2004 reads as follows: Metropolitan Municipalities, governorships and such municipalities authorized by the Ministry shall establish conservation, implementation and supervision departments to execute procedures and transactions concerning cultural property in which such professionals like art historians, architects, urban planning experts, engineers and archeologists shall be assigned. Furthermore, training units shall be established by provincial special administrations to train project offices and certified building foremen that will prepare and implement survey, restitution, restoration projects for conservation of cultural property. These offices are responsible for supervision of the applications including protective implementation plans approved by regional conservation boards, project and material changes and construction audits [6].

This article revealed the gap in the existing laws on this subject. This article was further detailed by the Regulation on Principles and Procedures of Establishment, Permits and Operation of the Conservation, Application Control Offices, Project Offices and Training Units (CACOPR) which was issued on 2005. This regulation defines the Conservation, Application Control Offices (CACO); the conservation, application and control offices to be established within the body of the municipalities authorized by the provincial special administrations, metropolitan municipalities and the Ministry. The first municipality that established and commissioned a CACO (2006) in Turkey was Beyoğlu Municipality [21].

The responsibilities of CACO are defined in the article 7 of CACOPR.

In summary the responsibilities of CACOs are:

- Issuing preliminary permits before any applications on the immovable cultural property,
- Restoration conformity document,
- Issuing use suitability document after the application,
- In cases where the application on the building exceeds the definition set forth in the regulation or the areas and conditions to stop the application.

Article 8 of the same regulation specifies the operation of the CACO:

- The person or the organization that will conduct the implementation on the registered building shall apply to the CACO with photographs of the current status of the building and a document describing the works to be done on the building.
- A permit shall be issued upon examination of the application by at least two experts from CACO.
- After the application, the experts audit the building in situ and issue a renovation conformity document.
- If the experts determine any breach of the restoration project as approved by the regional conservation boards CACO shall notify this to the Directorate of Regional Conservation Boards for Cultural and Natural Properties.
- CACO shall stop the works on the building until further notice from the Directorate [22].

Furthermore, the most extensive principle that covers the restoration, renovation and maintenance concepts within the legal framework is the Resolution on Grouping, Maintenance and Repair of the Immovable Cultural Property (RGMRICP) numbered 660, which was issued on 1999. This resolution highlights the fact that the biggest problem in conservation of immovable cultural properties is the inability to determine the nature of intervention. The resolution reports that since each building has its unique problems, general classifications that cover all buildings and intervention types result in wrong applications [5].As a solution to the problem,

various definitions are given in the resolution that will serve as a basis for the decisions of boards.

First definition concerns the groups of buildings. According to the resolution numbered 660 the buildings are divided into two sub groups: first the buildings with their own historical or aesthetical value and the second the elements of urban conservation sites, streets or silhouettes that constitute the historical identity of the city.

- I. Buildings: Buildings with such historical, symbolic, memorial and aesthetic qualities that needs to be protected within the cultural data which creates the material history of the society.
- II. Group of Buildings: The buildings that represent the local lifestyle with quality of cultural property that contribute the urban and environmental identity. According to Ahunbay, the buildings that will be adapted to a new use through internal modifications like factory, warehouse buildings as well as residences, apartments and taverns from 19<sup>th</sup> century that will be re-arranged upon modern requirements fall into this category [15].

Another explanation relates to the principles of restoration which was defined in the Section 2.2.3, Conservation Types. The principles of restoration, according to RGMRI CP resolution are as follows:

- The spatial, formal and structural characteristics of the building that constitute a part of socio-cultural and historical identity as well as its specific location within its surrounding environment shall be preserved. The intervention method and the qualities shall determined by the conservation board according to the physical status of the building;
- It is essential to conserve the buildings without demolition. Demolishment of a building that is claimed to present a danger of demolition by the owners or the municipality can only be decided by the conservation board. The immovable cultural property to be protected which presents a demolition danger shall be evacuated by the municipalities or government offices. After necessary physical and safety measures are taken by the

governor's office or by the municipality, the issue shall be submitted to the decision by the conservation board.

- Such annexes of the buildings that present historical, social or cultural value shall be protected.
- The qualities of annexes to be constructed for the buildings that are subjected to changes in use must be in harmony with the cultural property to be protected. The architect who designed shall prepare concept projects and submit the same to the approval of the conservation board when necessary,
- The plaster scrapping, partial dismantling and drilling of the restitution study that will serve as basis for the restoration project shall be based on the desktop studies and comparison researches; should it is impossible to realize this work before start of the repair, the restoration project must be amended and submitted to the approval of the conservation board in the light of any data that arise after approval of the repair project.
- Simple and significant repairs of the registered immovable cultural property owned or under the administration by the public organizations and agencies as specified in the Article 10 of the Law numbered 2863 as amended by the Law numbered 3386 shall be conducted by the relevant public agency / organization in accordance with the decision of the conservation board and the reports, photographs, etc documents concerning results of the application shall be submitted to the conservation board. The repairs and restorations deemed inappropriate by the board shall be renewed.
- Before start of the repair works on immovable cultural property to be protected and repair works on the excavation sites by the Ministry of Culture, a conservation board decision shall be obtained for the survey and restoration projects to be prepared [5].

The resolution numbered 660 is divided into subtitles of; building groups, intervention methods, restoration principles, control of applications, transactions regarding destroyed registered buildings and principles for preparing survey, restitution, restoration projects (SRRP). In addition to documenting the existing condition of the building, the Survey, Restitution, Restoration Projects also enables exploration of potential and new uses, determination of main restoration approach and the intervention methods as well as provides description of the interventions



needed for the new functions of the building. On this account, a common terminology for the definitions and a common pattern for project preparation principles were defined. The patterns were prepared for the drawings and are as follows:

- 1 / 500 - 1 / 200 scaled site plan (which indicates all items like buildings, annexes, wells, trees, garden walls, pavements, etc on the parcel as well as the buildings at adjacent parcels.)
- 1 / 200 scaled silhouette of the building subjected to the survey drawing that indicates at least two buildings on its left and on its right at the street or avenue on which the facade of the building is located
- Floor Plans, 1 / 50
- Flooring Plans, 1 / 50
- Ceiling Plans, 1 / 50
- Roof Plans, 1 / 50
- All visible facades, 1 / 50
- At least two sections that will vertically cross each other 1 / 50 (number of cross sections may be increased when it is deemed necessary by the Conservation board.)
- Appropriate system details to introduce the structural system and the materials: Facade, plan and section details 1/20
- Details on typical structural elements like windows, doors, ceiling skirts, hearts, closets, niches, fringe, bearing system, ornamental elements, etc, (as needed for the building): 1/10, 1/5 or 1/1
- Photo album

Furthermore, a report and a photo album shall be prepared to explain the project. In this report, the main approach on the restoration and new use shall be explained. The photo album shall contain photographs of the interior and exterior spaces. When the photographs of interior spaces are filed, the picture shall be indicated on the floor plan as arrows. For a good description, at least 3 photographs shall be taken for each floor. For exterior spaces, each sides and facades must be visible on photographs.

This resolution shall be subjected to authorities and obligations of the Superior Council of Protection of Cultural Property as it is specified in the Article 51 of the Law on Protection of Cultural and Natural Property (“...to set forth the principles that apply to protection and restoration of the immovable cultural and natural property to be protected).

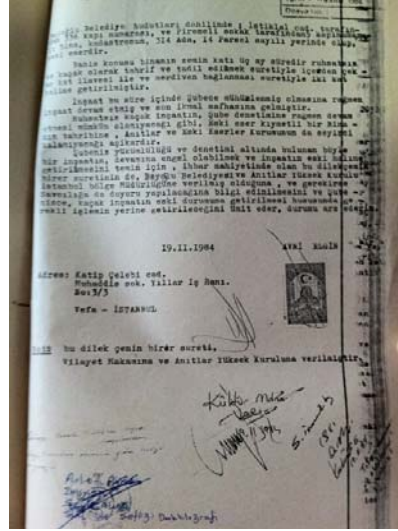
### **2.3.3 Legal framework for the renovation of Borusan Music House**

Some legal stages applied on thesis-subject Borusan Music House in the history are as follows:

Petition given to the Monuments High Council by Avni Elgin was written on 19.11.1984 and nowadays it is kept in the archive of High Council in BMH's file. In the petition, anxiety of an ordinary citizen about the lost history in his/her city is mentioned as follows:

*“It is an antique located on 314th square 14th parcel in the land survey. Ground floor of the aforementioned building was made two floors by adding half storey and connecting with stairs from inside by altering and modifying for three months without license. Although the construction was red tagged within this duration, construction continued and the last supply stage was started. It is not possible to continue unlicensed construction in spite of the branch audit as well as Monuments and Antiques Institution shall not sit back and watch alteration of a valuable building. I hope that your branch shall take necessary steps on restoration of the unlicensed construction which is mentioned in the petition also submitted to Municipality of Beyoğlu and Monuments High Council's İstanbul Regional Directorate for ensuring that continuation of the construction shall be stopped and the building shall be brought its former shape, and I kindly mention that the situation shall be notified to the Prosecutor's Office if necessary; kindly submitted for your information” (Elgin, November 1984) (Translated by author).*

Thanks to this petition, detailed information on the former shape of building can be obtained (see Figure 2.1).

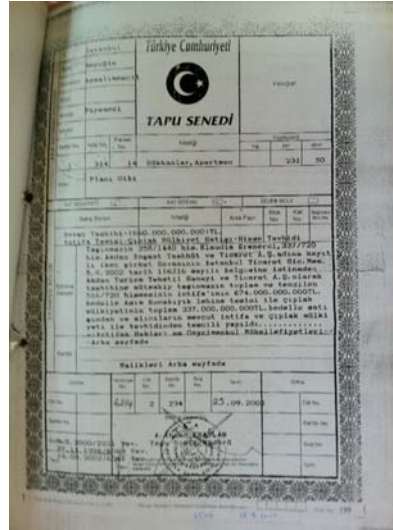


**Figure 2.1** Petition of BMH dated 1984

Obtaining reason mentioned in the title deed dated 25.09.2002 of BMH approved by A. Ayhan Eraslan the Director of Title Registration Office is explained as follows:

*“When 358/1440 shares of the property belonged to Klaudin Erenerol and 337/720 shares belonged to Akdan İnşaat Taahhüt ve Ticaret A.Ş., the structure's registration was made on Asım Kocabıyık with an amount of 674.000.000.000 TRY for totally 516/720 shares after correction of the company's title as Akdan Turizm Tekstil Sanayi ve Ticaret A.Ş. according to the document No. 116216 dated 5.8.2002 İstanbul Trade Registry” (September 2002) (Translated by author).*

So, the property registered under names of Klaudin Erenerol and Akdan İnşaat A.Ş. has become the property of Asım Kocabıyık (see Figure 2.2).



**Figure 2.2** Deed of the BMH

The technical report prepared on 20.08.2003 for BMH structure by Construction Engineer Sinan Koloğlu is as follows:

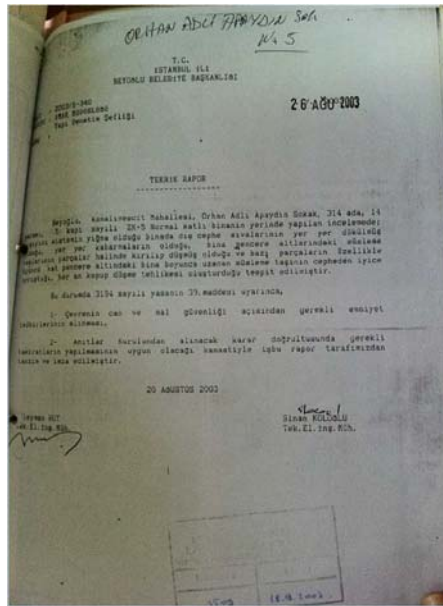
*“In the examination made on-site for the building with Ground Floor + 5 normal floors: It was determined that the outer facade's plasters partially fell off, there are partially swells, decoration stones under windows are broken and felt off and some pieces are divided from the decoration stone along the building in the structure which have stacked structural system and these pieces have the hazard to break off and fall down at any moment.*

*In this situation, as per Article 39th of Law No. 3194,*

*1- Performance of necessary safety measures in terms of life and property safety,*

*2- Performance of necessary repair works in accordance with the decision to be taken by the Monuments Council were deemed appropriate and this report was issued and signed in this regard” (report, August 2003)(see Figure 2.3)*

*(Translated by author).*



**Figure 2.3** Technical Report of BMH

39<sup>th</sup> Article of Law No. 3194 mentioned in the fifth part of technical report is as follows:

Structures dangerous to the degree of collapse

For structures or parts of them that are determined by the municipality or governorate to be so dangerous as to collapse, a notice is served to the owner thereof by either of them demanding remedy within ten days from determination. If the owner of the structure is not found, the notice is served to those dwelling in the structure. If they are neither to be found, the notice is posted on the dangerous structure to act as service of notice, and the matter is taken under a memorandum jointly with the Mukhtar, who is the elected head of the neighborhood.

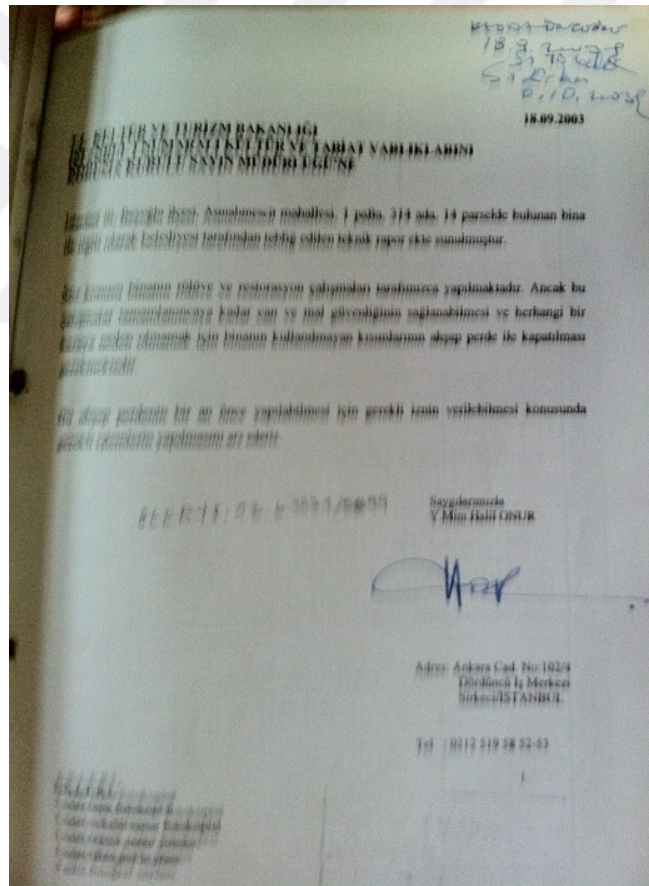
Unless the danger is eliminated by the structure owner, either by repair or by tearing down, within the period prescribed by the notice, these works are performed by the municipality or governorate, and expenses to that effect are collected from the owner with a surplus of 20%.

If the state of poverty of the relevant person is documented, expenses are met from the budget of the municipality or governorate. If the dangerous conditions require evacuation of the structure and vicinity, it is evacuated by municipal security forces without the need of a court judgment (Url-3).

Petition submitted to the Ministry of Culture and Tourism's Cultural and Natural Heritage Protection Council's Directorate on 18.09.2003 by Master Architect Halil Onur is as follows:

Survey and restoration works of the aforementioned building are carried out by us. However, unused parts of the building must be closed with wooden curtains for ensuring health and property safety and not causing any accidents until these works are completed.

We kindly request performance of necessary transactions for giving the necessary permission in order to make this wooden curtain as soon as possible [23] (Figure 2.4).



**Figure 2.4** Petition submitted to the Cultural and Natural Heritage Protection Council's directorate

## CHAPTER 3

### SOME OF THE CONSERVATION PROJECTS FROM İSTANBUL

#### 3.1 Esma Sultan Mansion (ESM) (Tırnakçı Mansion)

##### **Location:**

Location of the structure in Ortakoy town of İstanbul is border to the Bosphorus and is on the edge of Bosphorus Bridge (Figure 3.1 and Figure 3.2). It is in Muallim Naci Avenue, Yalicikmazi Street. Architect of this mansion is Sarkis Balyan [24]. Unlike other buildings around, it has a fairly large garden. Garden walls are stone masonry and they separate the structure from the environment. There are cistern, Turkish baths and ruins of barn on the garden of this structure. This part was also maintained like the building and the garden has taken within the borders of walls.



**Figure 3.1** Roofed ESM before construction of Bosphorus Bridge



**Figure 3.2** Location of ESM

##### **History:**

According to historical information taken from the current operator of the mansion; 32. Esma Sultan, daughter of Ottoman Sultan Abdulaziz, was born in Dolmabahce Mansion in 1873. In 1876, when Esma Sultan was three, she was taken to Yıldız Mansion Harem of Abdulhamit for education after her father was dethroned. Esma Sultan, who was educated as a loved lady sultan, married with Circassian Mehmet

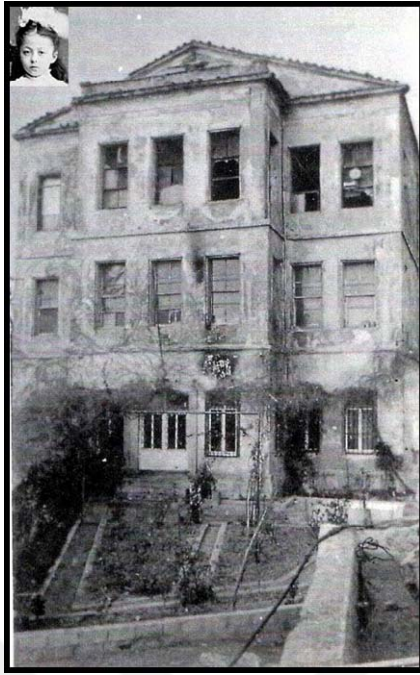


Pasa when she became 16. Mehmed Pasha was one of the important statesmen of the related time and 19<sup>th</sup> century Ottoman mansion next to Ortakoy Mosque was given to Esma Sultan as wedding present. Not surprisingly, the Mansion has taken its name from Esma Sultan who lived there (see Figure 3.3). Upon death of Esma Sultan, II. Abdulhamit gave the mansion to his daughter Cemile Sultan in 1899. Then it was given to her daughter Fatma Hanim Sultan after her death. Esma Sultan Mansion, which was taken out of the Ottoman Mansion family's property around 1915, was used as Greek school from 1918 to 1922, after which it has been used as tobacco warehouse. In 1950s, the mansion was sold a couple of times and it was used as carpentry workshop, furniture warehouse and coal warehouse. The building burned down in a fire in 1975. At the beginning of 90s, The Marmara has bought ESM and a new cultural identity has been given to the building by preserving its original plan (Url-4).

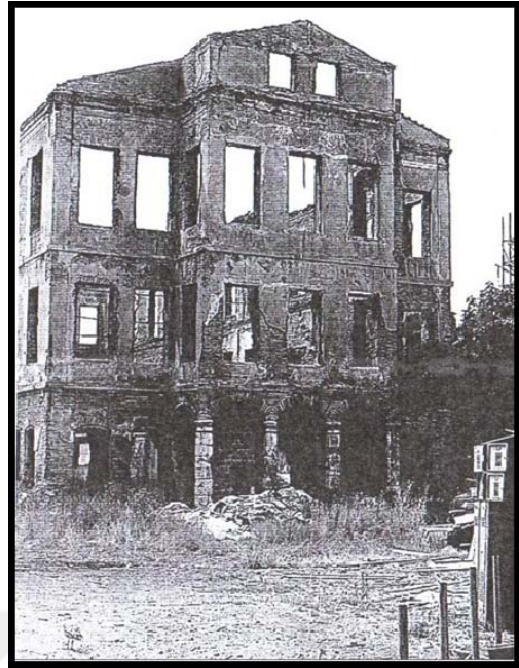
According to another source in Altinoluk's book, it is thought that the mansion was made built by I. Abdulhamid for his daughter. This mansion has been unusable approximately 100 years after its construction (see Figure 3.4) [25]. The structure, which has been derelict in time, is known to have been used for temporary functions such as warehouse by unknown persons.

We find the following truth when these sources are examined: The Mansion was built in 1793 and it took its name from the Sultan who was presented this mansion in 1889. Esma Sultan lived in this building for 10 years. After this, it was used for various purposes and it has been unusable as result of disasters such as earthquake and fire.





**Figure 3.3** Esma Sultan Mansion  
before fire



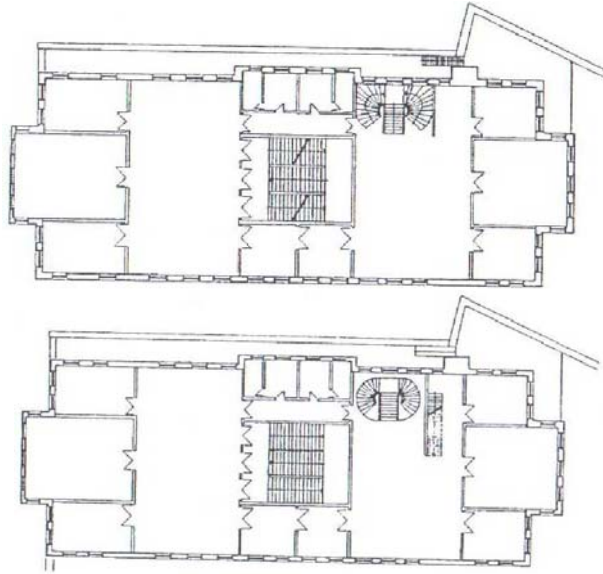
**Figure 3.4** Esma Sultan Mansion  
after fire

### **Description of the Old Building:**

Old Drawings of ESM:



**Figure 3.5** Esma Sultan Mansion's views from side and front facade before fire



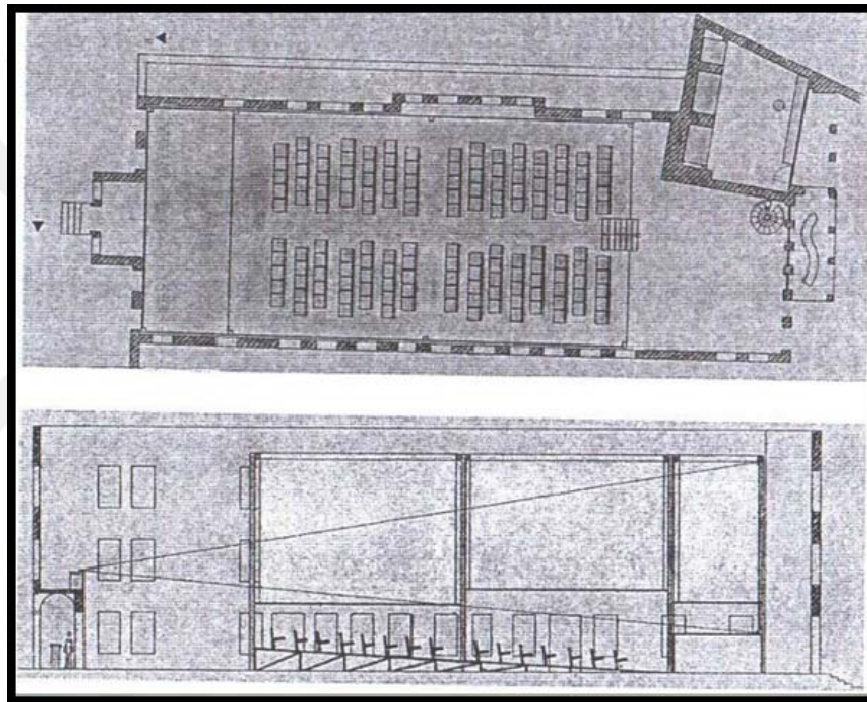
**Figure 3.6** 1<sup>st</sup> and 2<sup>nd</sup> floor plans of ESM before fire

According to the information obtained from plans before fire, the structure is consistent of six horizontal axis, three vertical floors and a terrace floor. The structure's wall thickness is seemed to be 80 cm. There are two entrances from side facade and one entrance from front facade to the building (see Figure 3.5). Passages between floors are made with large stairs at the middle of place. In addition to these stairs, there are circular shaped stairs. In drawings, a narrow staircase going up to the terrace floor is seemed (Figure 3.6). In first and second floor drawings, there are totally 12 rooms as three on the front facade, three on the back facade (Figure 3.6). On the same line with staircase, there are rooms which are probably solved by wet places. It is thought that the rest of these places were used as yards. There are big yards in second and third floors too and it is thought that they were used as today's halls. Traces of the walls separating these rooms can still be seen in the inner parts of the structure. The most significant structure element which has been lost is the roof.

#### **Spatial Alterations:**

According to Altınoluk, the structure was rented as floors before the fire. Years after the fire, a company from the Middle East started to work on the structure. This was a hotel project. In this project, there were 120-bed capacity, swimming pool and helicopter area [25].

In addition to ESM's history and unexecuted projects, a student project will be referred to. This project is the suggestion of reuse for ESM, by Deniz Dogan under management of Ülkü Altınoluk. As function, summer theatre was thought (Figure 3.7). When deciding on this function, social status of Ortakoy was considered and this environment's needs were thought. As a result, a large place to allow execution of cinema and music events was located on the ground floor. In dream project, upper floors were thought as music listening rooms, sales units, and cafeteria and management units [25].

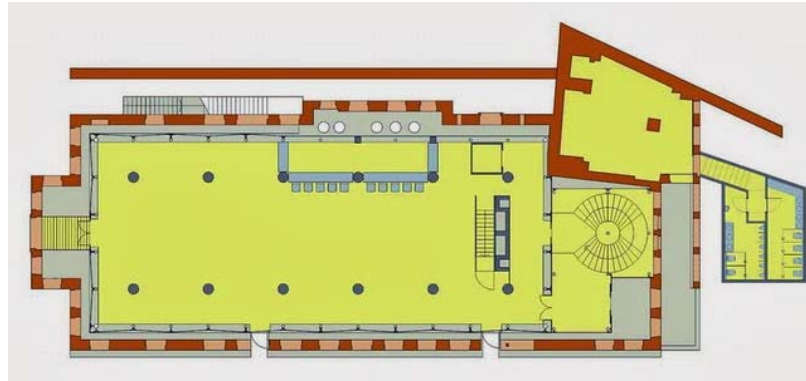


**Figure 3.7** Suggestion for reuse of ESM

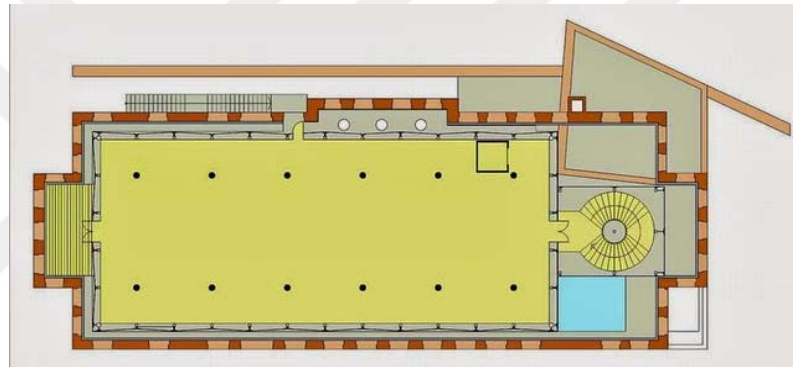
#### **Old Structure, Material and Lighting:**

As the building had a masonry load bearing system, inner and outer walls carried the building. Windows which are located frequently on each facade of the building take sunlight into the building. Material and artificial lightening information of the former structure could not be accessed.

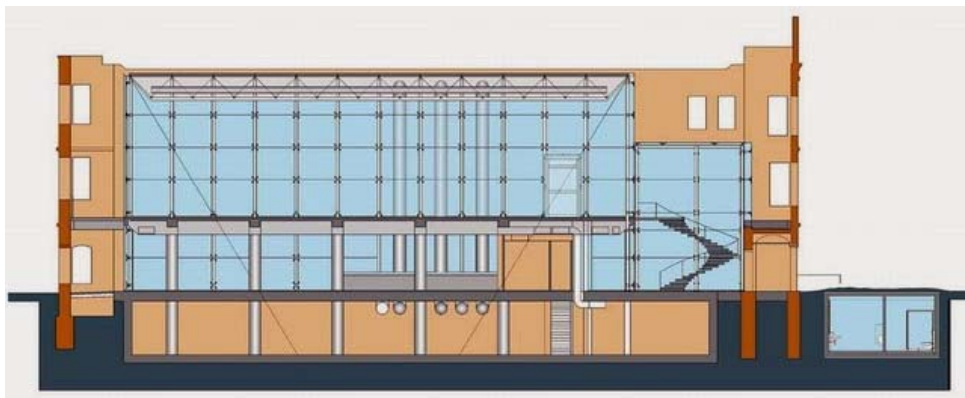
**Description of the New Building:**



**Figure 3.8** Ground floor plan of the new structure



**Figure 3.9** First floor plan of the new structure



**Figure 3.10** Cross section of the new structure



Current state of ESM consists of 3 floors as ground floor, basement and first floor (see Figure 3.10). In the basement, there are kitchen, restrooms and cellar. The ground floor forms preliminary acceptance part of the activity made on the first floor (see Figure 3.8). The first floor is sometimes used as an exhibition area for dining activities (see Figure 3.9).

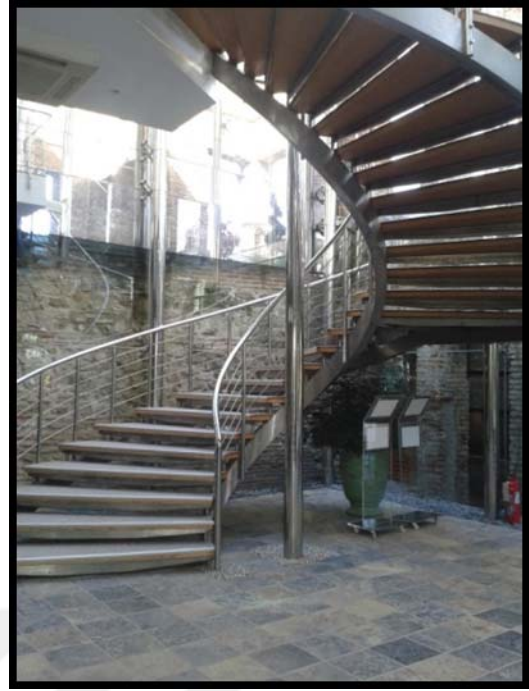
Entrances and exits are made through the sliding glass on the ground floor (see Figure 3.11). Connection between two floors can be made through the steel structure large oval stairs or the glass covered elevator with steel structure (see Figure 3.12 and Figure 3.14). Double winged glass door on back side of ground floor allows entrance to the garden on Bosphorus side (see Figure 3.13). There are two single winged glass doors for entrance to the garden on side facade of the ground floor. Stairs going down from the cellar part on the ground floor are used for access restrooms (see Figure 3.15). There are four stalls in the female restroom and two stalls in male restroom (see Figure 3.16). Another stairs going down from inner part of ground floor allows access to the kitchen area (see Figure 3.17). Only element seem as fixed furniture on the ground floor is the bar between columns. The ground floor forms preliminary acceptance part of the activity made on the first floor.

### **Materials and light:**

If we start materials and light of new form of the structure from the ground floor, we can say that it has a fairly basic scheme. Ceiling is gypsum suspended ceiling. Artificial lighting was resolved in this suspended ceiling (see Figure 3.13). The floor is carpeted; however it is appropriate for laying different materials for different events. The walls are composed of joining of the glasses forming inner cover. Joint of glasses with each other are provided with the stainless glass holder spiders. Columns are painted with white plaster and they were left fairly basic.



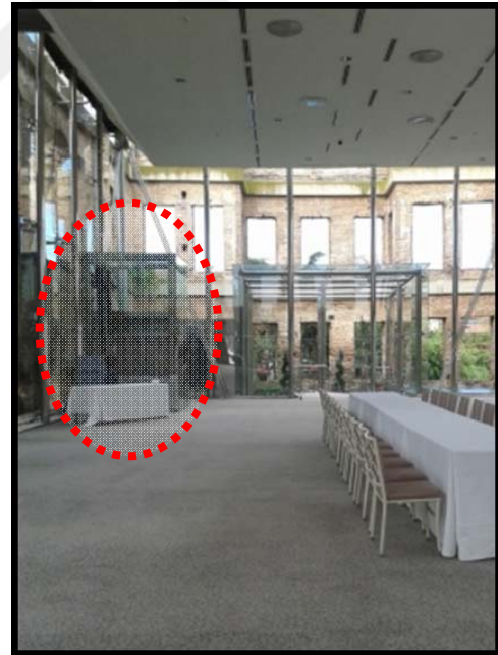
**Figure 3.11** Main entrance (photorecell sliding glass door)



**Figure 3.12** Steel structural oval staircase



**Figure 3.13** Ground floor rear window door and suspended ceiling



**Figure 3.14** First floor general material, elevator on the left part

Ceiling of the first floor is suspended ceiling including the ventilation system. In this way, a flat image has been obtained on the ceiling. As it is a place with relatively higher ceiling than the other places, embedded lighting fixtures used on ceiling have

higher watts. Ground floor was covered with decorative gravels from edges and the middle parts of it are carpeted. This carpet can be in different colors according to the event's concept. Wall material is glass which forms the shell of structure (see Figure 3.14).



**Figure 3.15** Stairs leading to the restrooms



**Figure 3.16** Esma Sultan Mansion restroom



**Figure 3.17** Esma Sultan Mansion kitchen scene

The walls of the stairs going down to the basement are lightened with embedded lights on the same line with steps left as gross concrete (Figure 3.15). The walls of the restrooms are also left as concrete and washbasin and door materials were selected as stainless steel (Figure 3.16). Restroom lights were made by sequencing old model light bulbs on the same line with mirrors. Again, in kitchen which is on the same line with ground floor, there are industrial type oven, counter and cabinets (Figure 3.17). Lightening is provided with white fluorescent.

Area of the garden within stack walls is 2226 m<sup>2</sup>, the ground floor is 388 m<sup>2</sup> and the first floor is 338 m<sup>2</sup>. The garden is shapeless, as can be seen in the satellite view. Ground floor width of the structure is 12.5 m, length is 27 m and height is 3.8 m. Ground floor width of the structure is 12.5 m, length is 31 m and height is 6.8 m (Table 3.1). All measurements except height is the same with former shape of the structure. No intervention was made on the structure borders during renewal works, however, height was changed.

**Table 3.1** ESM's field, width, length, height measurements are given in the table below

	Area (m <sup>2</sup> )	Width (m)	Length (m)	Height (m)
Exterior	2226			
Interior ground floor	338	12.5	27	3.8
Interior upper floor	388	12.5	31	6.8

### **Spatial Alterations:**

Esma Sultan Mansion started to be used for various events after renewal by Marmara Hotel Business. Number of persons for these organizations such as wedding, reception and meeting is given in the table below.

In ESM, sitting layout is determined according to the type of activity to be made. If presentation or promotion is on the forefront in the organization, then theatre layout may be suggested in terms of concentration on the stage. This layout is applied in the inner parts, because the ambient must be dark for concentration on the screen. Although the measures of ground floor and first floor are the same, number of persons in sitting layout makes great difference due to the columns on ground floor. Thus, number of persons in ground floor theatre layout is 250 and in first floor, this number is 400 (Table 3.2).

**Table 3.2** ESM organization number of persons

Layout Name	Theatre	Cocktail	Round
Exterior	-	3000	1000
Interior ground floor	250	300	180
Interior upper floor	400	600	336



Cocktail organizations which are shorter than dining meetings have more people as the organizations are made on foot. In organizations, 3000 persons can be hosted in the garden, 300 on the ground floor and 600 on the first floor.

Round table layout is preferred in weddings and special promotions. Organization is with dining in round table layout. That's why it's the sitting layout which takes the most area. In organizations, 1000 persons can be hosted in the garden, 180 on the ground floor and 336 on the first floor (see Table 3.2).

### **Structural, Material and Light:**

Interior and exterior place separation in two floors of ESM is provided with special glass material. Structure standing the glasses is made of stainless steel. Distance between steel structural systems is determined by static elements. The shape is dependent on the designer. Design decision appropriate to this structure was given as cylindrical pipe. Points where cylindrical pipes join to each other were made in a sharp way, rather than turning points. Element holding the separator glasses are provided with spiders connected to the cylinder pipes. Four-armed type stainless steel spiders are preferred. Its reason is that they can hold every corner of glass with rectangular shape. It can hold with its strong vacuuming feature.

Space between glass-steel system and stack structure was made decorative with the gravels on the ground (see Figure 3.18). Ventilation systems are also resolved in this space. Another application resolved in this part of structure is assembly of strengthening elements to the gravel ground. Profiles carrying the stacked side are put in these spaces with systematical intervals (see Figure 3.18). In addition, there is a very important system for safety of place on this part. This system is the hydraulic pistons located between interior and exterior covers (see Figure 3.18). This hydraulics absorbs the mobile-horizontal load to be created by earthquake on the structure and it protects the structure against damages such as sliding and cracking. This hydraulic system is located around the structure from ground floor to the ceiling level.



**Figure 3.18** Combination of old brick facade and new steel structure



**Figure 3.19** Belt reinforcement

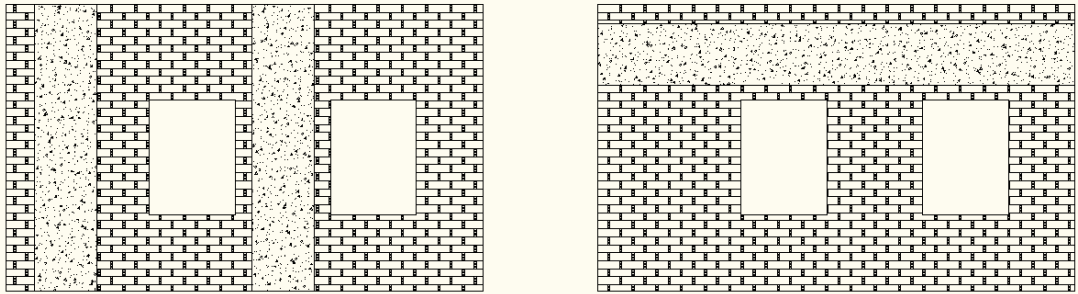


**Figure 3.20** Retrofit reinforced concrete brace or wrapping

Stack cover is reinforced from inside and outside during renewing works. Reinforcement works are made with curved profiles and screws on belts (Figure 3.19). Screws which seem to be places randomly are normally located on points which are deemed appropriate by experts.

Another important reinforcement application is the reinforced concrete belt reinforcements along the length in approximately 50 cm of height (Figure 3.20). This method is also called wrapping method. It is a commonly used method in structure reinforcement. It is possible to use vertically and horizontally (see Figure 3.21). It was used horizontally in ESM's reinforcement. Application of reinforced concrete was told as follows in Cogurcu's master thesis: Firstly, it must be purified from the mortar to be poured on the area to be subject to the process. In this way, concrete to

be sprayed in the further stages of process will be integrated with the walls of structure better. Then braided steel will be located on the cleaned area. High pressure cement-sand mortar will be sprayed onto this reinforcement. Finally, this process will be continued until 5 cm of concrete belt is created on the wall [26].



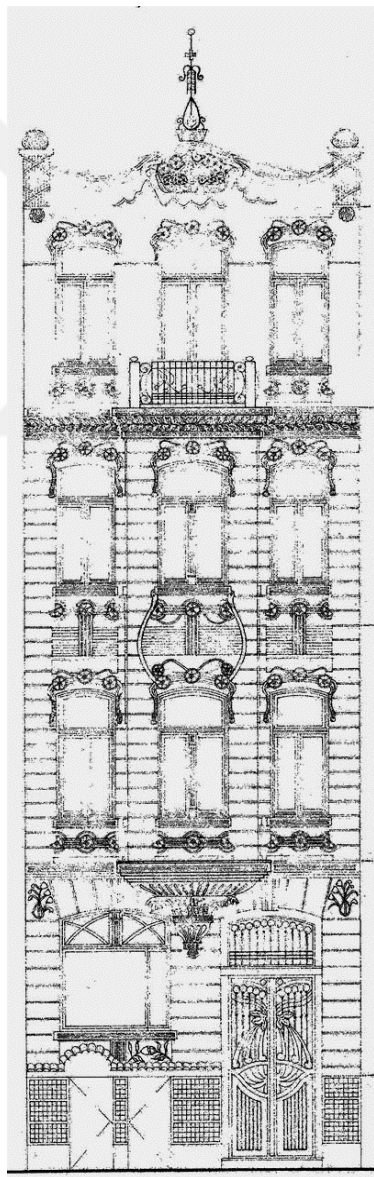
**Figure 3.21** Vertical and horizontal application of reinforced concrete wrapping method on brick-masonry building

This process was applied in ESM in two stages in such manner that it covers the structure tightly. Tile alignment was determined as the axis on which this process was to be applied in the former state of structure. Secondly, this process was applied on the upper line of outer cover. As the masonry facade is exposed to too much wind, wrapping protects the facade from cracking.

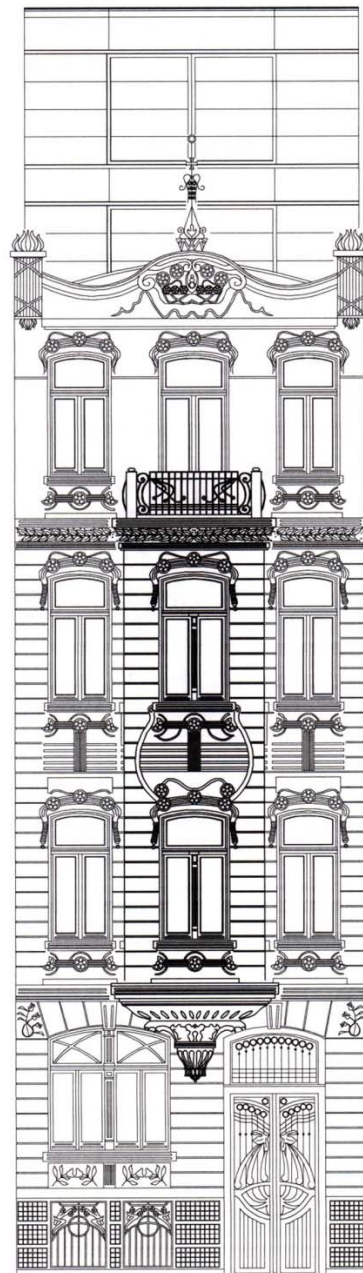
One of the most significant parts in this structure with new structural system is that the columns on ground floor do not continue on the first floor. The reason of this is that there is no roof to be carried. In the former state of structure, the roof had not been in a status to be repaired today. That's why modern solutions were sought when taking design decision. This solution was space beam system. Load of the space beam was given to the steel structure on edges of the building. In this way, wide and clean space was created for use.

### 3.2 Changa Restaurant (Siraselviler No: 47)

Restoration of the building was made in 1903 in Taksim Siraselviler Caddesi No: 47, was made by adding modern elements and parts (see Figure 3.33). As can be understood from the front facade, it is consistent of three floors (Figure 3.22). As can be seen from the front facade drawing of new front facade, two more floors were made on steel construction on three floors (Figure 2.23)

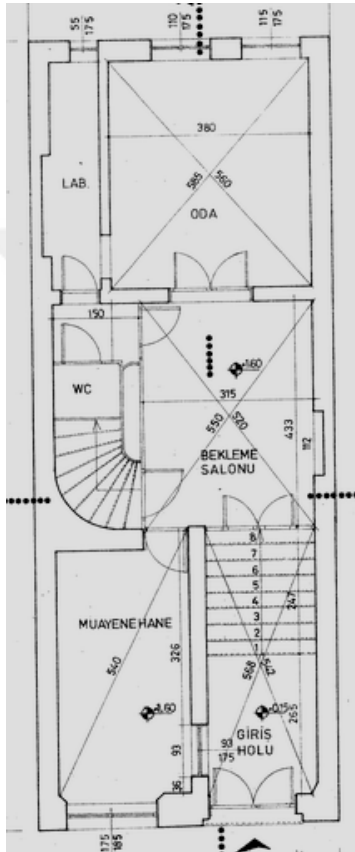


**Figure 3.22** Old exterior facade drawing of Changa Restaurant



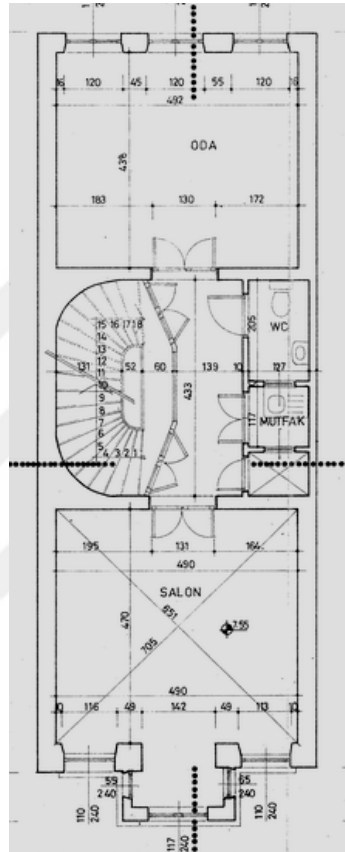
**Figure 3.23** New exterior facade drawing of Changa Restaurant

Firstly, if we examine the structure upon older plans: it is seen that we can access to the waiting hall after climbing 8 steps from the main entrance, then examination room when directed to the front facade and then the laboratory part from room place (Figure 3.24). In addition, it is possible to access to restroom part, laboratory and stair to the upper floors from waiting hall.



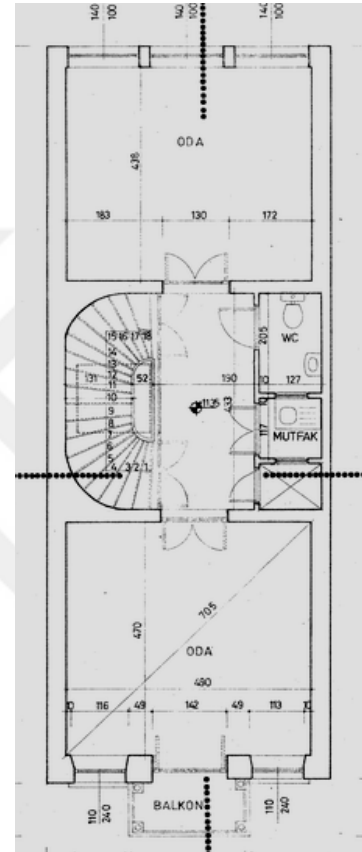
**Figure 3.24** Changa

Restaurant's former ground floor plan



**Figure 3.25** Changa

Restaurant's old first floor plan



**Figure 3.26** Changa

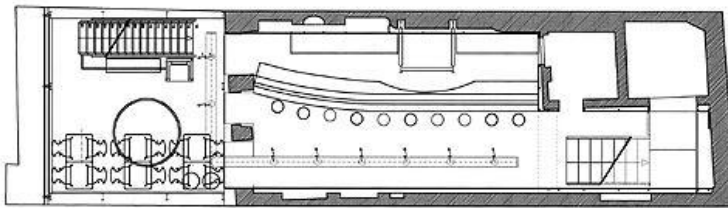
Restaurant old second floor plan

Passage is made through glass doors to the second floor which can only be accessed with stairs coming from ground floor and passing from the first floor (Figure 3.25). This place, which can be named as hallway, directs you to the main hall from the right to the front facade, to the room from the left to the back facade. Alignment of the middle window is seemed as bay window on the hall. The rear room has three

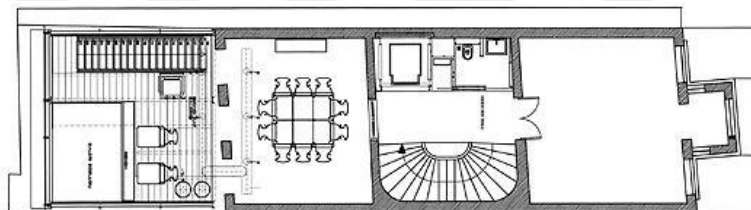


windows facing back facade. Kitchen, restroom and warehouse parts are accessed from hallway.

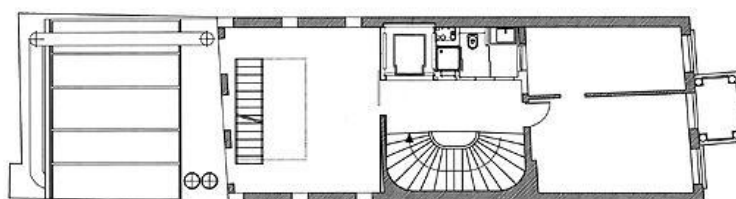
Third floor, which is accessed from the stairs from second floor, is similar with the second floor (see Figure 3.26) with the exception that there is no showcase at the doorway section of the third floor. Also, the bay window section on the second floor becomes a balcony on this floor.



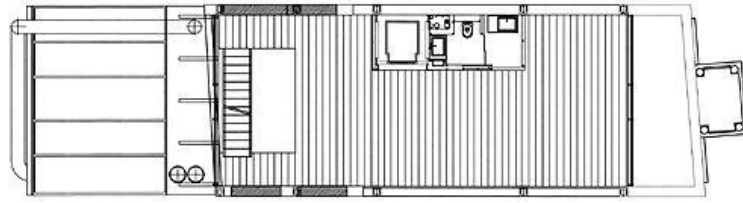
**Figure 3.27** New bar floor of Changa Restaurant



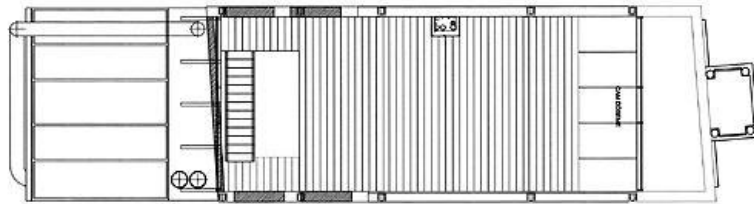
**Figure 3.28** New first floors facing new ground floor of Changa Restaurant



**Figure 3.29** New third floor of Changa Restaurant



**Figure 3.30** New loft-1 of Changa Restaurant



**Figure 3.31** New loft-2 of Changa Restaurant

When the plans of new building constructed and opened in 1999 by GAD by renovation is examined:

There are bars and tables on the bar floor which is accessed by stepping down 8 steps from the main entrance (see Figure 3.27). According to the information obtained from images, the ground is coated with concrete-looking gloss epoxy. The ceiling was obtained by painting the tiles on original plan of structure (see Figure 3.36). Drywall was only used for increasing design trace of bar on the same line with bar. Niches used behind the bar has determined the wall materials and they have been deemed appropriate for locating bottles and glasses to be used in the bar. Besides, large bulge on back side of the bar is used as screen. When the plans of upper floors are examined, it is thought that this place was used as the technical size of elevator. On this floor, ventilation pipes were left empty to be used as design elements.

Kitchen scene, which is accessed by going down from this floor, is made of 4 cm-thick laminated glass which can lift up to 4 tons. Those who look at the film covered glass from the kitchen see a matte glass while those look at it from the bar see their food being cooked (Url-5).

In master's thesis of Aslihan Sahin Tural from İstanbul Technical University, with subject of New Trends in Use and Design of F&B Places in İstanbul - Beyoğlu, this subject is mentioned as follows:

Different seat groups in different floors of Changa are fairly important for complying with various social relation levels and thus the psychological comfort. For example, eating a romantic dinner on ground floor, where movement and environmental noise is too much, will make people disturbed. Ground floor will again be very disturbing for a crowded friends group which wants to concentrate on only each other. Ground floor, in which the music level is higher than it is on the other floors, may disturb these users. In another situation, a user who comes to the place alone will be disturbed of being in the same environment with friend groups or couples preferring upper floors. In this context, ground floor containing the bar will be a relaxing environment for a user who comes to the place alone.

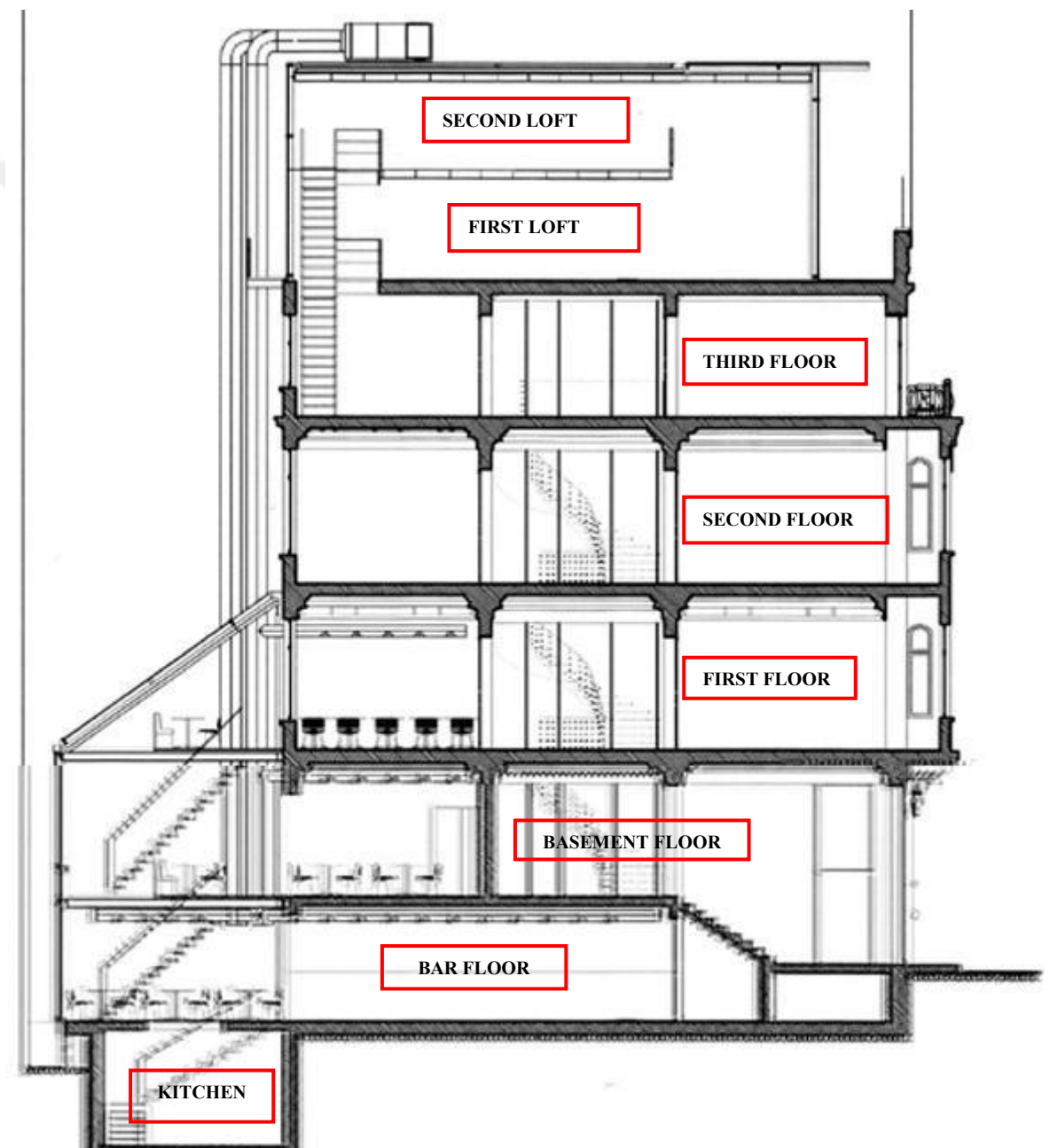
In Changa Restaurant-Bar, each seating group and each floor must have different levels of privacy. There is an important relation between seating groups in different layouts which are determined according to privacy requests of users. With its crowd, possibly of watching the customers coming and going and the bar, the ground floor is a livelier place and those who come here alone or small groups which would like to check the environment may prefer this place. The first floor is a calmer and less crowded place which is appropriate for special interviews and romantic dinners etc. [27].

According to the information obtained from cross section, the ground floor which is accessed by climbing 8 steps from the main entrance can also be accessed with the stairs closer to the bar floor's rear facade. The ground is covered with wood. Table and chairs seating layout continues here and the same of stairs going up to this floor from bar floor allows access to the first floor (see Figure 3.37).

First floor has an outer facade like greenhouse. Front facade is a place with bay window (see Figure 3.32). The ground is covered with wood and the walls look like gross concrete. Upper floor can be accessed with elevator or the original stairs of building on the middle axis. Again this elevator and staircase allows access to the third floor from second floor (see Figure 3.32).



Special dining hall with original hand paintings and wall decorations, which is appropriate for special invitations on the upper floor of restaurant, can host 30 persons. The fact that decorations on walls and ceilings of these special rooms add aesthetic value to the place. As the music broadcast is made from ground floor, upper floors are not very noisy. In the special dining hall, different music broadcasts can be made according to requests of users [27].



**Figure 3.32** The new cross section of Changa Restaurant

GAD Architecture, which designed the structure, summarized Changa Restaurant project in its site as follows:

Current structure: On both sides of the staircase in the middle, there are three floors, a ground floor and a basement floor consisting of rooms facing each other.

Function: Basement, ground and first three floors were designed as restaurant. A different working area was constructed with floors which have been settled on each other like a container.

Design Guidelines: The structure which shows the fashion trend of the term in which it was built continues to show the decoration of nineteenth century on its ceiling. No original pieces such as entrance door, window, ceiling or ground pavement which consist the building has not been changed or modified.

Circulation, natural light, additional functions to be necessary in the new building was supported with a light steel structure to carry masonry system. Old and new pieces were reflected together and clearly when connecting the buildings and parts to each other (Url-6).

Finally, art works used in CR, which are the combination of old and new, classic and modern, will be referred to. In arts works used in the building, there are signatures of famous Turkish artists such as Canan Tolon, Ahmet Elhan and Ferhan Kiziltepe. There is signature of Charles Eames on chairs and tables. One of the chairs, Lounge Chair Wood (LCW), was designed in 1945 and produced in 1946-57. Dimensions: 68x56x62cm seating height 39cm. Another chair, Dining Side Shell Wood (DSW), was designed in 1951. Dimensions Depth: 54 Height: 81 Width: 47cm Seat Height: 44 cm. Paul Henningsen-signed lighting element and PH Artichoke lamp are the design elements which have been used in this structure. In 1958, suspended lightening which is designed with stainless steel was used in the special room of the structure.



**Figure 3.33** Changa Restaurant's new front facade



**Figure 3.34** Changa Restaurant's new rear facade



**Figure 3.35** Changa Restaurant interior view



**Figure 3.36** Changa Restaurant bar scene  
voltaic tile ceiling, floor epoxy



**Figure 3.37** Changa Restaurant interior gallery space

### 3.3 Salt Beyoğlu (Siniossoğlu Apartment)

It is located on the parcel where İstiklal Avenue and Saka Salim Cikmazi intersect. First name of this masonry building, which is thought to have been built by Greeks in 1870-1880s, was Siniossoğlu Apartment [28].

Historical information on shell closed and board located during construction of building are as follows:

In goad Map dated 1905; it is written Sinisoglu Apartment on the building. Sinisoglu family is a famous Greek family and some people in

the family are known to have worked in Ottoman Mansion's as managers at the end of 19<sup>th</sup> century and beginning of 20<sup>th</sup> century. The structure, whose original function was apartment, shop and office rooms, was built in Sultan Abdulaziz' period and its construction date is thought to be 1876.

There is no information on the architect of this structure and it is thought that it was built by an important architect as it is on one of the most important avenues of İstanbul. Approximately 30 cm-wide cast columns and Corinthian looking cast column heads, which are important in terms of technology, show us that the structure was impacted by the architectural trends of industrial revolution [29].

Two-block steel beamed, floor arch full masonry structure. The structure, which is understood to have been used as commercial center on street level and as residence on the upper floors, has been used as office, art gallery and party directorate functions as of the periods when Beyoğlu started to be a business center. The building was reinforced with steel and reinforced concrete systems and it gained its new place in compliance with the new use by taking support of technology (Url-7).

Forum area, which is qualified as continuation of the street with its area of 190 m<sup>2</sup>, is the entrance area in which guest services and information functions are executed. On ground floors, there is a cafe of 150 m<sup>2</sup> which opens to a small square on the back side and which can be accessed both from inside and outside and there is a store of 100 square meters covering the visual culture broadcasts in relation with the cafe. Digital cinema place on lower floor was added to this public place in such manner that it would host multipurpose events. In the building there is a digital cinema of 160 square meters and an exhibition area of 1130 square meters. There are also an area of 1095 square meters which covers archive storages, offices and background service units (Url-7).



**Figure 3.38** Salt Beyoğlu's old side facade

Salt Beyoğlu is consistent of exhibition and event areas which are public and free. Most of the ground floor of the structure (the architecture office refers to this floor as the first basement floor) has an entrance part which is named as forum that is entered with one step due to small level difference with the street. Re-use of the place targeted to create an inviting fiction which would attract people passing by. In this respect, vitrines on the facade of this floor are left open in the day. Persons getting inside in with trust of entering with a small step find themselves in the column set which looks like double colonnade. This double-row column has an installation designed by architect Jan H. Van Lierde for the ceiling. This work, which is consistent of rectangular glass plates sequenced next to each other in double row turning reversely in 360 degrees with help of a motor makes the place seem like a post modern application of 19<sup>th</sup> century's passages (Url-8).

Orkun Aziz Aksoy referred to Salt Beyoğlu in his article titled 'Uncovering Publicity; Salt Beyoğlu as an Example of Modern Public Place' as follows:

On the entrance floor of this building, there is Corinth headed thin columns which are sequenced with intervals of 3.1 meters and the exhibition areas, cafe and

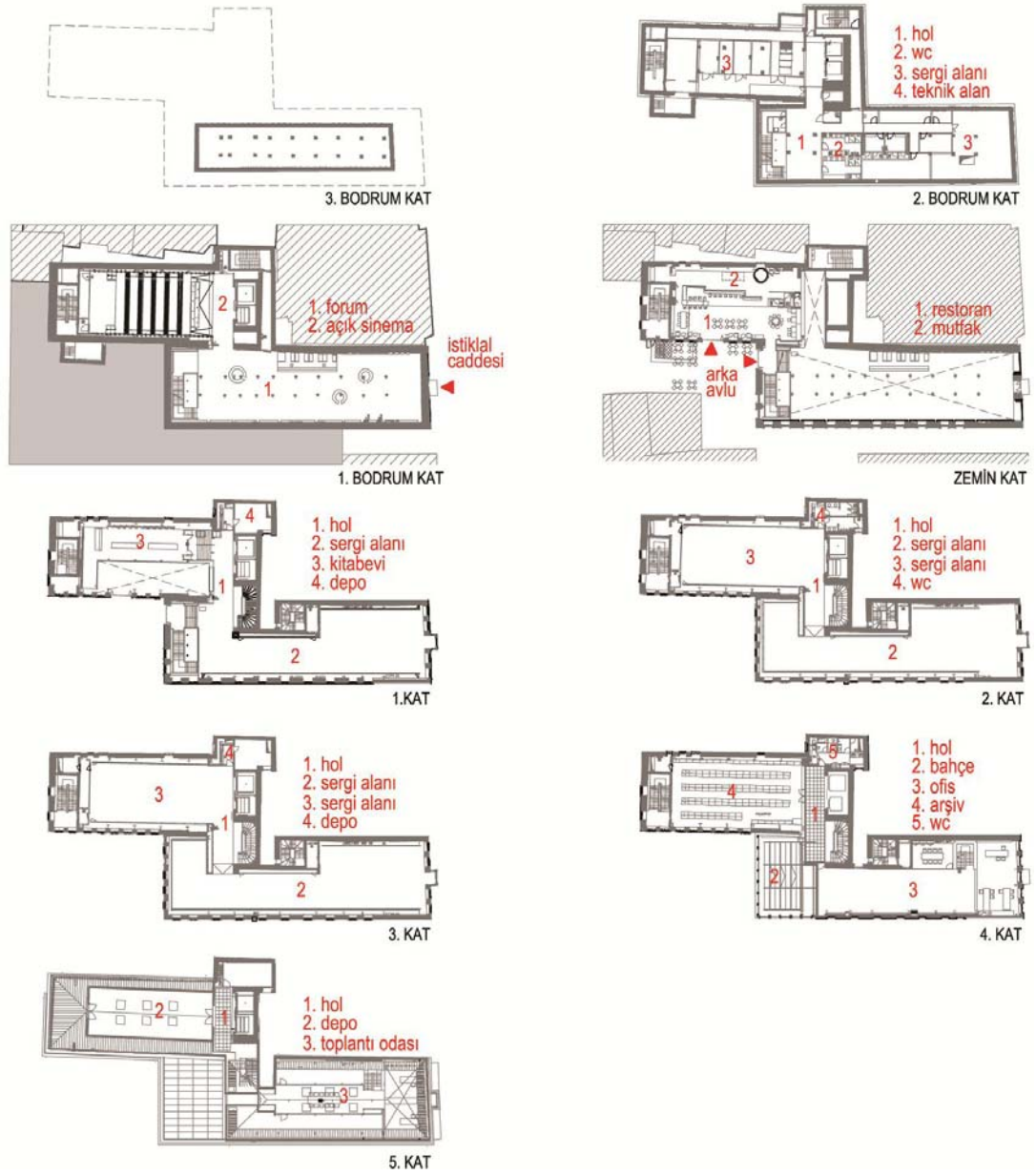
bookseller are accessed upon the place with beamed ceiling (see Figure 3.43). These columns look like colonnade due to the fact that interior walls on the ground floor wracked in time; however the columns on ground floor were protected during restoration (see Figure 3.38). It is thought that the name 'Forum' of this place is due to the fact that Salt targeted to make this institution a discussion platform and the institution is a public place. Double row colonnade can be seen as an element giving reference to public places such as store and passage which strengthens the feel of publicity. Forum part which covers most of the ground floor is a multi purpose area as well as an exhibition, meeting and seminar area. The place is also an information area and daily program information of events in Salt Beyoğlu and Salt Galata are announced on the boards on the wall (see Figure 3.43). When we walk on the floor in the direction of double row columns, we see reservation counter at the end after seeing "Open Cinema" on the right. This place is free and public. In addition to films shown during the day, events, interviews, speeches and performances are made in this place. "Forum" part has a flexible and variable space arrangement. Figural and functional flexibility brought by fixed planning and lack of function is an important feature in terms of publicity. There were times when it was only used as exhibition and information area but it was also used as both exhibition and discussion area. In a period of a couple of months when this examination has started, covering April 2013, there were no exhibition in Forum part and people used to come and sit to spend their free times here by the columns. This furniture allowed people sit as much as they want and communicate when they want. During visits made in the place, it was observed that people from all groups of the society come to this place and some people sit and spend time here before going up to the exhibition floors. At this point, a seat element in the place has been integrated with the function of place and the sitting banks in parks which are public areas. The place has turned into a closed city park. The difference between a real parks and the place was that there were light games and organic smell of iron instead of trees and sky and there was another forest atmosphere consisting of columns reflecting green. On June, 2013, an installation covering almost whole of the entrance area was made and all seat groups were removed. In this case, this place has lost most of its publicity and it left its former livelihood and movement. Then the place became home for another exhibition as one of the main places of 13<sup>th</sup> İstanbul Biennial between September 14 – October 20, 2013. In this exhibition, installation named "Sunday or Death" of Argentinian Artist

Diego Bianchi covered most of Forum. The place has been taken into another transformation both physically and functionally after the end of biennial. The floor was covered with a soft rubber material, mainly with the seating puffs which were lightweight and modular cube units. When these elements are united with different shapes, they complied with the flexibility condition which was an importance condition for publicity. Previously, speeches were made in "Open Cinema", then forums and discussions were made in Forum in January 2014. Moreover, these discussions were about public area and public art. As participation is fairly high, cubes were insufficient for sitting needs and the participants started to sit on the floor due to soft structure of the ground. As we can see here, the place's use control is partially in hands of the people in place. According to Richard Sennett, the more the individuals integrate with place, the more the publicity of that place increase. The building's form which is opened to different functions and is physically flexible is very important for publicity of the place (Url-8).

An office floor which was not present in the first years was added to the structure and it preserved its floor persistence until today. With this addition, the structure is formed of ground floor, 3 floors, roof floor and three basements (see Figure.3.40) [28]. It is consistent of two blocks continuing by breaking backwards rather than its narrow view from the front facade (see Figure 3.41). The blocks were named as A and B. The building has three entrances. The first one is the main entrance from İstiklal Avenue, the second one is Bistro Entrance accessed by following Saka Salim Cikmazi and the third one is the unused entrance made of the second platform of forum stairs intersecting with the yard's level [28].

Changes made by people according to their needs in time can be mentioned as closing some windows, adding balcony to the back side, changing interior place covering and different colors and coatings. Entrance and exit points and staircases are among the systems which were not changed.



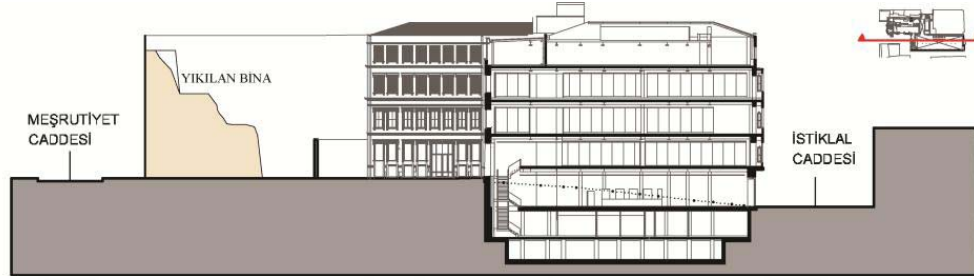


**Figure 3.39** Salt Beyoğlu's new plan [28]

The floor which is entered from İstiklal Avenue, named as the 1<sup>st</sup> basement floor by the architectural office, has forum and open cinema in it. The place entered from the back side is named as the ground floor and access to restaurant is possible with both yard and forum stairs. There are exhibition area, bookstore and warehouse on the first floor, exhibition area, restrooms on the second floor, exhibition area and warehouse on the third floor, office units and garden on the fourth floor and meeting room and office on the roof (Figure 3.39). As the ceiling of cafe scene, which is the most used part of the structure, is high, there is gallery space on the floor where the



library is and there is a visual connection to the cafe from library (see Figure 4.47). On the second basement floor under İstiklal Avenue entrance, there are restrooms and technical sizes. Salt Beyoğlu is neighboring tea house, cafe in Saka Salim Cizmazi and Yakup Bey Apartment used as warehouse on the side facing back yard [28].



**Figure 3.40** Salt Beyoğlu new section [28]



**Figure 3.41** Salt Beyoğlu new elevation [28]

Color adjustments were made with care on the facade and it was restored with a special system for being permanent for years [28]. Changes made on the facade between the years 2007 and 2011 were determined by Elife Bilgen Dinc and they were mentioned as follows:



Bay window has been added to the third floor. Ground floor entrance icicle has been removed and facade has been renewed.



Windows gaps on the first basement floor have been filled.



The fourth-floor balcony has been canceled. Vitrines have been added to the garden on fourth floor.



Fire escape windows have been opened. Entire of the rear wing facade has been uncovered after demolition of adjacent buildings.

**Figure 3.42** The changes made on Salt Beyoğlu's facade [28]



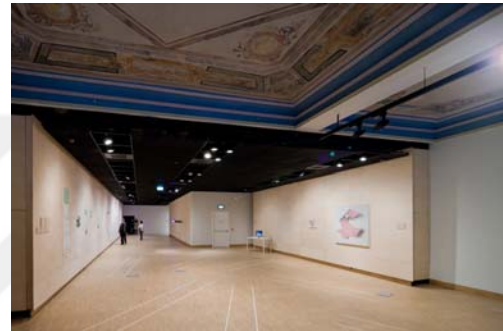
**Figure 3.43** İstiklal Street, ground floor



**Figure 3.44** Restoration of the old stairs



**Figure 3.45** Location of glass elevators from the exhibition area



**Figure 3.46** Integration of old and new ceiling



**Figure 3.47** Library and restaurant scenes and logo lettering



**Figure 3.48** Construction work on the Forum area

The structure's black steel beams can be seen at the moment when you look at the structure. Details of the structure are given in the web site of Turkish Structural Steel Association in article named Beyoğlu's Sinisoglu Apartment has turned into Salt Beyoğlu with Steel:

Upon the architectural restoration projects prepared for reinforcement and modification of structure by Garanti Bank, Erdem Muhendislik Musavirlik Insaat Hizmetleri made construction calculations and a technical report was prepared by Prof. Dr. Ahmet Saygun from İTÜ.

According to the technical report, the building is a masonry structure originally consisting of 5 floors and 2 Blocks. A Block which has facade to İstiklal Avenue has a rectangular area of approximately 36,90 m x11.45 m. Walls of exterior facade in 50-70 cm of thickness and walls of interior section in 30-40 cm of thickness forms horizontal structural system of building. It is determined that all interior part walls on ground floor of A block were removed and changed with 2 rows of columns with intervals of 3.1 m in time or at the beginning, which means that the building's stack structural system was broken and this situation damaged earthquake safety of the building.

When making reinforcement and restoration of the building, it was foreseen that some exterior walls and some interior walls of the building would be protected and some interior walls would be removed. A horizontal steel frame system was created by carrying beam tile system on block floors. In general, this frame system which was located with intervals of approximately 3.10-3.60 m was fixed to the profile columns attached to the walls on section beams with single gap of 9.40 m. With this frame system, short direction of the building which was insufficient was reinforced.

When the number of floors and affecting loads were considered, it was seen that the current stone wall basement system in the building was insufficient and partial basement was turned into complete basement and floor levels were increased during restoration. For this, 70 cm thick raft basement plaque was poured by going 4.6 m down from the ground level to cover the structure with reinforced concrete curtain for obtaining and fixing to the basement floor an upper structure with beam base in order to obtain a basement floor which is 3.90 m high (Url-9).

Current columns on A Block's ground floor were preserved and 40/40 cross section reinforced concrete columns were built on the bottom of these columns on basement floor. Ground floor on level of -4.04 is the Forum area in A Block and bottom tile of

the Conference Hall in B Block was shed in grades from -4.04 levels to -4.89 levels. B Block's entrance was made to be on the level of + 0.12 m and access to the 1st floors bottom level was provided with the stairs from B Block to A Block. Partial mezzanine was made on level of + 3.16 in B Block (Url-9).

Exterior walls' thickness was not changed and the interior sides were reinforced with ready shotcrete which changes between 10 cm and 25 cm according to the sections. Accordingly, horizontal structural system was filled with full reinforced concrete masonry composite walls on the facades facing the blind street.

Column cross sections of the horizontal frames in blocks are strengthened with shotcrete concrete within and the building was made resistant against earthquake with the frames on walls.

Necessary vertical shafts for all kinds of installation were built on 25 cm spaces within the exterior facade curtains between column axes. 30 cm of linear spaces left in the beam bodies of steel frame allowed horizontal passage of ventilation, electricity and sanitary system.

In the reinforcement construction, firstly the basement floor, curtain walls and their basements were constructed with a working layout similar to well system. The outer wall of the steel columns and reinforced shotcrete construction starting from downstairs after up to the top floor, steel beams placed internal walls starting from upstairs removing downstairs done right. In the final stage, basement spread foundation and reinforced concrete ceiling tiles were completed. In accordance with the architectural function, a steel structural system to carry current tile safely was planned as the inner walls with function of carrying both horizontal and vertical loads in the structure were removed and it was sure that the building was going to have problems on carrying the necessary loads. Steel beams located between the steel columns along the height of building were used as basis for steel beams. The same steel column-beam system was applied as the laying system in the other block of building was created again but the composite laying system was fixed to these main frames.

A column of the steel frame system which was thought to carry horizontal loads of the building was fixed with reinforced concrete curtains as jointed with the reinforced columns. On the upper floors, beam column connections were made with high resistance rigid and the steel columns were connected to the curtain by being left within the curtain or by creating a triangular head in floors opened from the wall according to the wall thickness (Url-9).

Celal Erden Muhendislik Hizmetleri, which gave engineering services for Salt Beyoğlu, mentioned the processes applied for this building as follows:

“The application started by making well type excavation for basement and curtains. In the basement, curtains and anchoring works to hold the building safe was made with reinforcing concrete application on structural exterior walls of the upper floors of building. Old structure's walls which are fixed on greywacke in form of solid rock were fixed on 30 cm deep basement on İstiklal Avenue's side (Figure 3.48). Two basement places were created for serving new purpose of use of the building. Methods may appear complicated, but they are actually consistent of productions that have to follow each other” (Url-10).

Material information on the structure was told as follows in the article named Expression of Hybrid Spatialisation: Salt Beyoğlu and Salt Galata of Elife Bilgen Dinc from İstanbul Technical University.

Tümertekin, who mentioned that the fact that exhibition areas are covered with industrial tiles, expresses that they would like to create an exhibition area which has a warm atmosphere and they would like to break the perception of classical exhibition (see Figure 3.45). In addition, it is stated they preferred an element which would be wondered by the visitors in addition to calm and visible exhibition stands and ceilings with black metal perforations. In this way, some pen works have been behind the metal perforated ceiling, but the perforated ceiling gives reference to its history behind the perforations [28].

The part on which pen work decorations can be perceived clearly on the ceiling is the part on 5 meters of depth from the windows' axes on French balconies in A Block (see Figure 3.46). Other than the pen works clearly perceived in the exhibition area,

there are three different pen works which can be seen only when examined carefully between electrical and mechanical equipment on the metal ceiling spaces [28].

Wood tile coating ends at the beginning of stairs of floor and the original marble coating on steps create their own borders between each floor. When experiencing the steps, time - place contradictions are experienced in hidden yellow led and railings added later (see Figure 3.44). On one side, iron rod and wood handle railings belonging to its own period and on the other side, marble baseboard with latest period lightening technique. While on move, two square windows on the large wall are seemed [28].

Salt Beyoğlu is a large structure and too many light varieties were used in it. One of the world-famous brands preferred by the architecture office mentioned this structure's lightening system as follows:

The SALT is a non-profit institution dedicated to research in the fields of Turkish culture promoted through videography, and the development of innovative programs to new ways of thinking. Among other activities, it also includes the management of the Centre for Research and Archives of the Ottoman Bank, the central bank of the Ottoman Empire.

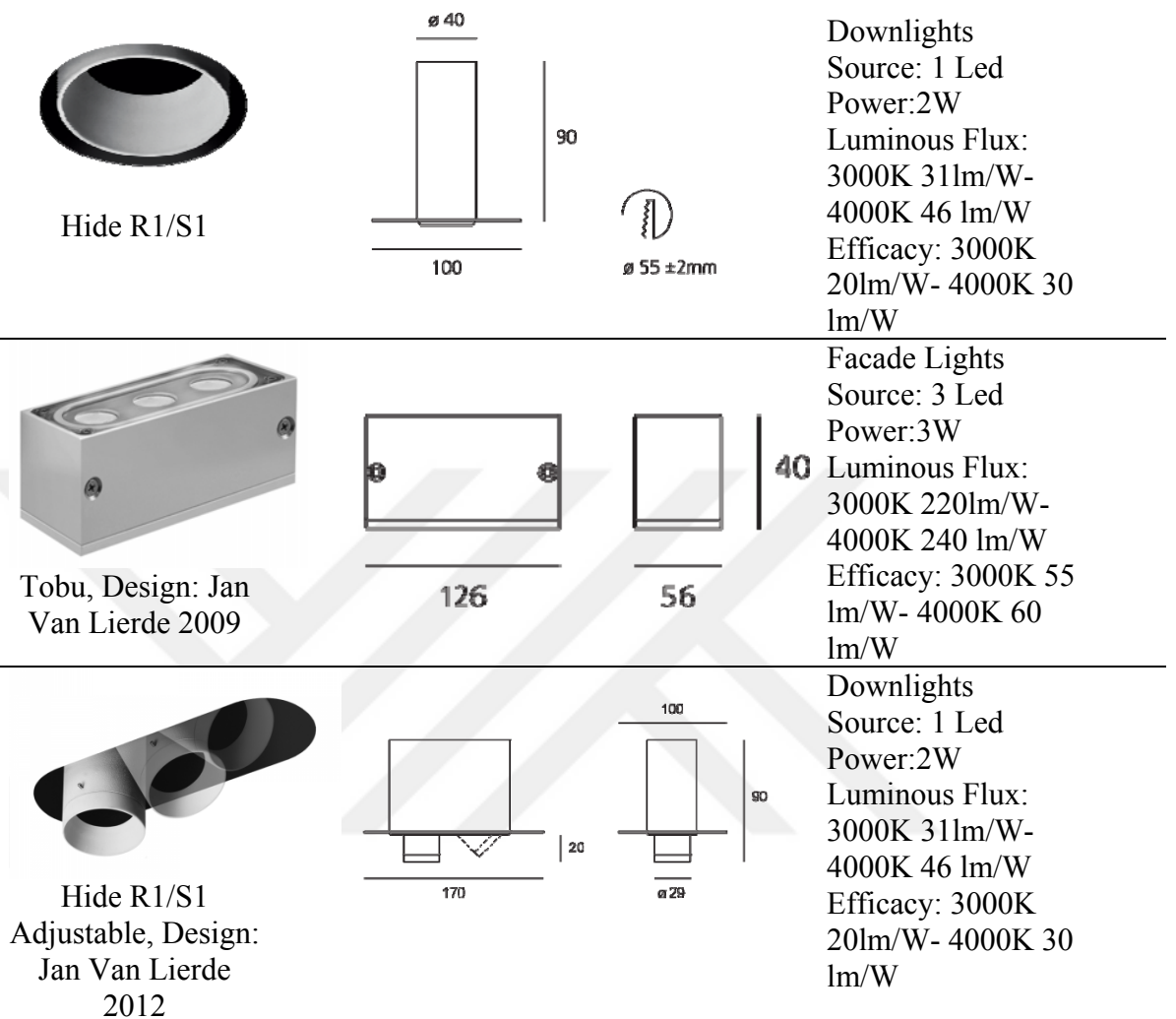
The center of SALT Beyoğlu was renovated starting from 2011, on the basis of an old apartment complex to return to the city of İstanbul a center of attraction.

In addition to the architectural features, the project also saw the study of proper lighting through the work of the architect Jan Van Lierde, who worked on the light in the interior and exterior spaces (see Figure 3.49). The design of the exterior, realized with projectors Tobu wall of small dimensions, effectively enhances the essential details of the facade, and through the use of specific optical effect gets strong intensity.

Inside, LED products of the series Hide are used in various areas, including for example the multi-purpose hall inside the building, that allow the creation of an even completely hidden luminaire, turning the light emitted in the only real protagonist of the scene. In particular, the product Hide is adapted to the various types of existing building ceiling, drywall or structure type Armstrong, through specific mounting accessories (Url-11).



Light references given in continuation of this article: Hide and Tobu. Designers and product information are as follows.



**Figure 3.49** Lighting elements used in Salt Beyoğlu (Url-12)



### 3.4 Salt Galata (Ottoman Bank)

Salt Galata (2011) in Bankalar Street is today's description of Ottoman Bank (1892) in Voyvoda Street (see Figure 3.50). Garanti Bank has the following article in its web site for the architecture of culture institution which makes programs in many fields from architecture to design and city life, from daily life to social history and economy history.

Salt Galata aims to be an importance stop in terms of architectural experience as well as the programs to be made. Salt Galata's building which carries the signature of French architect Alexandre Vallaury is a unique example in İstanbul due to its different architectural style on front and back facades of the building. Historical building which was designed as general directorate building for Ottoman Bank at the end of 19th century became the Achieve and Research Center of Ottoman Bank as of 2000 and it has been Ottoman Bank museum since 2002.

Redesign works on two historical buildings of Salt was made by the team led by architect Han Tümertekin with Aga Han award. Spatial fiction was recreated for reflecting unique characteristic of the structure and for meeting multi layer needs of Salt. Interior of Salt Galata was made by different design and architecture offices. The building's store was made by Omer Unal, offices by Superpool, auditorium by Zoom, workshops by Arif Ozden and Tanju Ozelgin, library by Sanal Mimarlik, cafe and restaurant by Mimarlar Tasarim and Zehra Ucar, reception counter and visitor restrooms by Autoban. The building's marking and forwarding design was made by Koray Ozgen (Url-13).

Ottoman Bank's building designed by Alexandre Vallury in the 19<sup>th</sup> century has 4 floors on ground floor. Last floor of the building designed by Vallaury in the 20th century was added a floor with re progressing and an adjacent additional building was constructed on the side facing Halic.



**Figure 3.50** Courtyard old new

Today, Salt Galata is consistent of main building and additional building made in the sub periods. Salt Galata, consisting of main building and additional building, has 4 floors on ground floor and 2 basement floors and the additional building has 1 floor on ground floor and 3 basement floors. There are entrance hall, Salt research, inner garden, restaurant, bookstore, restrooms and cloakroom on the ground floor. There is mezzanine in the section where Salt Research is located. There are open exhibition areas on 1<sup>st</sup> floor which has workshops and staircase hall, offices on the second floor, archive and offices on the third floor, halls used in special events on the 4th floor. In the basement floors, there are exhibition area and museum in the 1<sup>st</sup> basement floor, auditorium and warehouses in the 2nd basement floor and technical area in the 3rd basement floor [28] (see Figure 3.51).

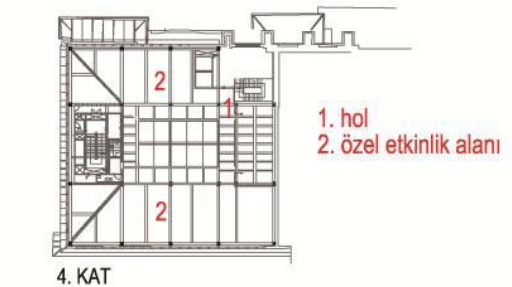
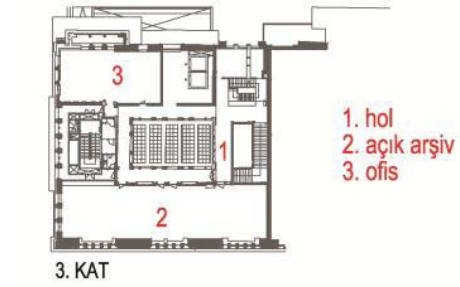
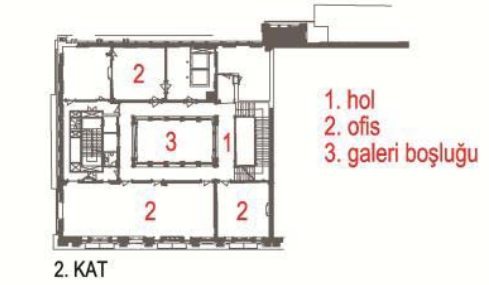
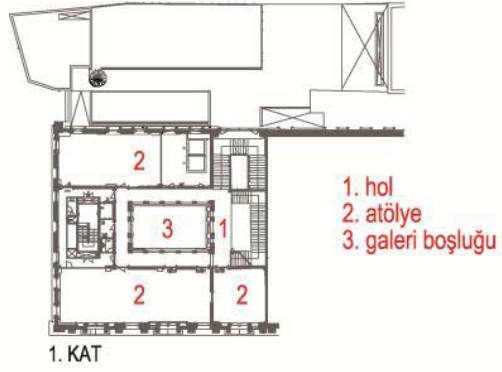
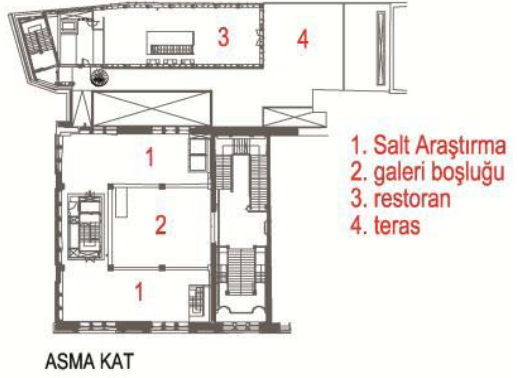
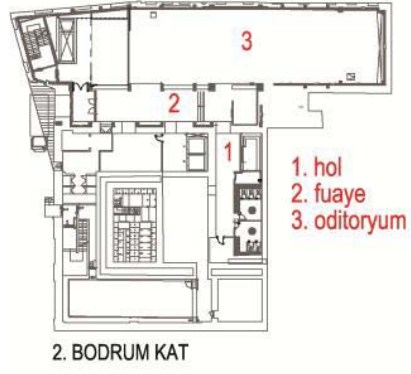
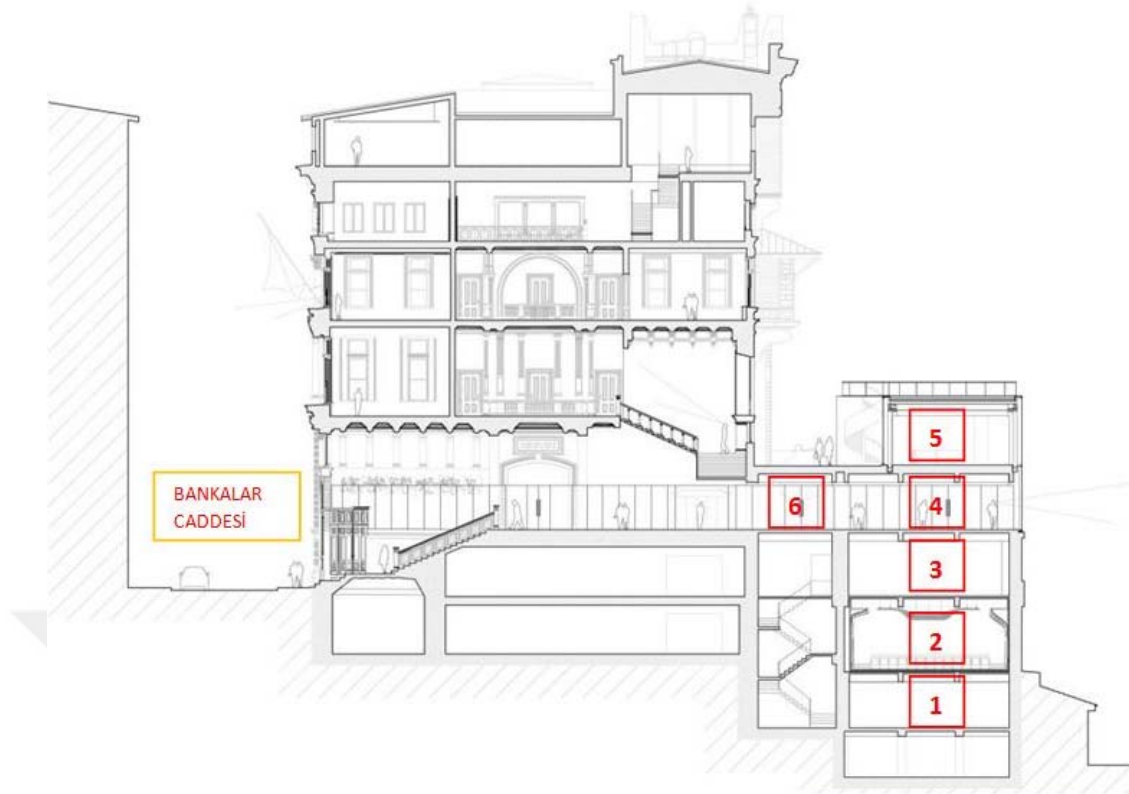


Figure 3.51 Salt Galata plans [28]



**Figure 3.52** Salt Galata and additional building cross section [28]

- 1st technical area / 3rd basement
- 2nd Conference Hall / 2nd basement
- 3rd term exhibition / 1st basement
- 4th inner courtyard restaurant / ground floor
- 5th restaurant and bar facing Halic and inner yard / 1st floor
- 6th inner yard / ground floor

Tümertekin mentioned that the building which was intervened many times in the history is weakened and the building must be rebuilt by preserving the facade with the additional building's inner heights for creating the areas needed by the new building for new functions. Bottom basement floor of the additional building was recreated and the basement depth needed by the structural system was provided, thus the Auditorium which is needed by the cultural structure of building was located here [28].

In the additional building, there are bookstore and restaurant facing inner yard on the ground floor, term exhibition on the 1st basement floor, conference hall on the 2nd

basement floor and the back windows were closed and window traces of the former building were reflected [28] (see Figure 3.52).



**Figure 3.53** Ottoman Bank entry wall [28]



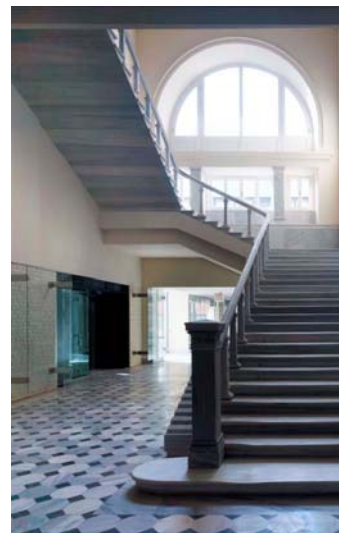
**Figure 3.54** Glass display at the entrance scene of Salt Galata

One of the significant innovative design decisions is that the archeological wall decorations on the entrance were reflected with glass display.

All layers of sub term in ground floor, mezzanine and gallery hall were removed and painting was made on the original tissue of building [28].



**Figure 3.55** Elevator used in the Ottoman Bank [28]



**Figure 3.56** Large space created by the removed elevator

The section which is used as elevator hall today was used as room in the 19<sup>th</sup> century. There was an elevator on the staircase space between ground floor and first floor opposite the entrance (see Figure 3.55). Removal of this elevator used in the old structure was one of the most significant design decisions. As result of removal of elevator, staircase was reflected more, as one of the valuable elements of historical place. In addition, sunlight entering from large window starting at the staircase was made available for the users until the main entrance (see Figure 3.56).

Gallery space, starting from the ground floor in main building, was closed as result of the changes made until today (see Figure 3.57). Its relation with sky was cut. Firstly, original sunlight was taken back in the building by removing the additions blocking sunlight. Then the layers on decorations within frame were removed and original wooden layers were reached and painting was made on these layers (see Figure 3.58). Finally, energy saving was made by using Heliostat panels for compliance with future (see Figure 3.59). With the help of this mirror and glass panels, maximum sunlight was transferred to the middle of building in the most economical way.

Due to the size and diversity of the structure, new spaces will be examined by considering in parts. In this review, firstly the bookstore on the ground floor of new building will be considered. A flexible system was made by considering sales and display conditions by using metal and wood (see Figure 3.60). Every element consisting a part of the system within the store has created an integrated design by allowing different uses of store (Url-14).





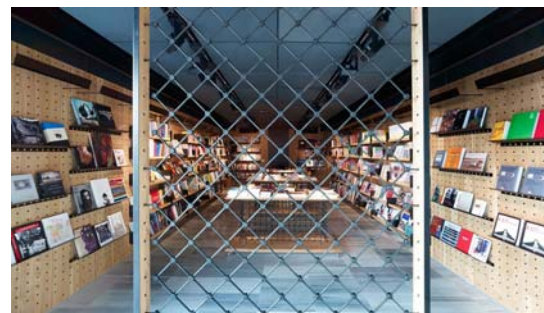
**Figure 3.57** The gallery space started to block sunlight



**Figure 3.58** Salt Galata new main gallery space



**Figure 3.59** Salt Galata's mirror panels (heliostats)



**Figure 3.60** Bookstore of Salt Galata

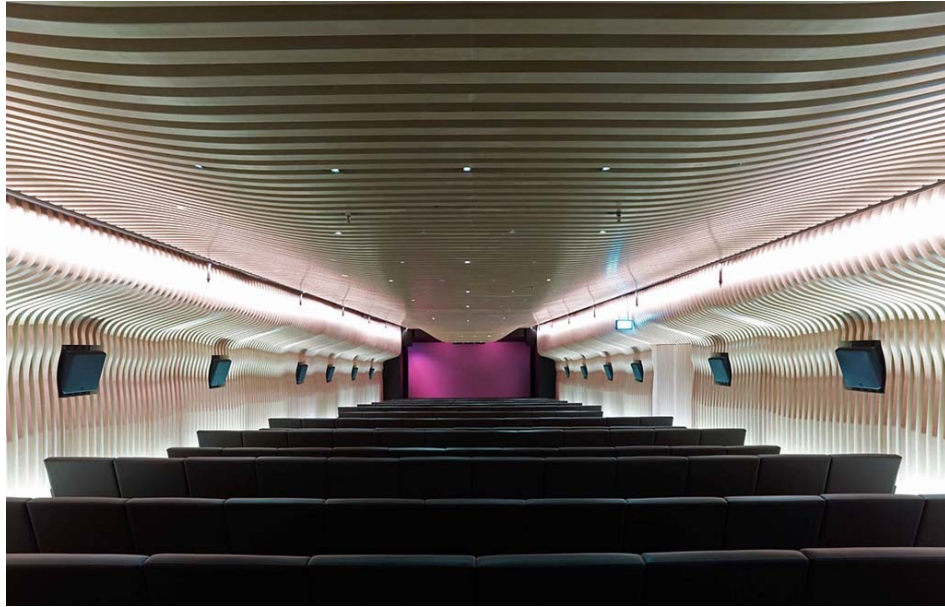
Information obtained from the interview of Omer Unal made by CCI Magazine is as follows:

A small change I made on the load bearing structure of the original sketches created a derivation of unlimited and highly variable opportunities. This new structure has turned out to be a sturdy load bearing element which is visually elegant product with multi-functional application that also borne the cultural DNA just as I wanted it to be. After creating this structure, other objects completing the place have, dare I say spontaneously, emerged from main matrix of the main structure. (This structure was used only on the entrance door and tables in Salt Galata building; however its use in Beyoğlu building is more intensive). I named this structure as “Link” and it allows creation of different furnitures or spaces. In all my new projects, I am experimenting with new applications of this product. You can consider link as a game set such as Lego in which the user can create many different and sophisticated structures (Url-15).

Link (the product created by Omer Unal) which can be made in different shapes with different connection styles, has taken a form in which books are displayed and all shelves can be repositioned according to their heights. Integrity of natural wood that can be applied on the ceiling and basement with black and grey tones gives a balanced, modern and warm view to the place (Url-15).

Auditorium, which is located on the 2nd basement floor of additional building, was designed by Zoom TPU for classical presentation and sharing events as well as long term sessions, discussions, seminars and conferences. Auditorium with a capacity of 129 people can also be used for performances. Wood was used commonly in place arrangement and leather was used in seating units. Irregular wall surfaces were created with wood records drawing different curves in short intervals with in order to ensure necessary space for acoustics (see Figure 3.61). Technical requirements such as mechanical, electrical and lighting were created behind the wood surface. Place, which has been integrated with the ceiling having same materials and approaches, gives the view of an eardrum and an organic view such as a cave (Url-14).





**Figure 3.61** Drawing of auditorium

Two floors on ground of additional structure creating the facade facing Thursday Bazaar of Salt Galata were functioned as cafe and restaurant. Cafe area on the ground floor, which was shaped with understanding of open kitchen, was built with reinforced construction and the restaurant area was built as steel construction. Differentiation in selection of materials was preferred for purpose of parsing the attachments made in different periods. Attitude clearly reflected by the structure in the whole architectural base of the additional building was designed by Mimarlar Tasarim and Zehra Ucar (Url-14).

Salt Galata's first-floor workshops host meetings organized in collaboration with Salt or with different scopes; in addition, it meets the demands of use by outer premises. Workshops, designed by Arif Ozden and Tanju Ozelgin are consistent of a large place and two fixed meeting places. Places which are available for many people working at the same time allow easy access to Salt research which is on the ground floor. Solid natural hardwood was used on the ground of workshops and all elements added to wall, ceiling and place were ended with a gray color. Places, which carry the traces of history with their general sense of color and lighting understanding, were designed in such manner that they reflect history and memory of the building. Workshops' function were considered together with actual needs, flexibility and

redesigning possibilities without giving reference to trend on any term or period in design of mobile furniture (Url-14). In seat fabric details, laying fabrics created by Sanal Mimarlik for İstanbul's roof landscape were used. Sanalarc mentions Salt Galata project in its web site as follows:

The interior design for SALT research set in the atrium of the historic Ottoman Bank building was envisioned as a public tool and a vehicle to research, exchange, engage, and create content, but also as a distinct place-based steward of contemporary cultures. Digitally sampling the cities and the building is unique in our process of architectural design. Sampling the city through multi-modal digital platforms to create and compose narratives; then spatially re-collaged relations to create the 'sense' of place. Our design narratives are most clearly articulated in the 3 distinct objects: A) site + sound, B) light + aperture, and C) the atrium's 19<sup>th</sup> century ornament + view. The design approach pursued both millenniums of the 19<sup>th</sup> C historic building uniqueness and the new 21<sup>st</sup> C library in a choreographed composition. Our firm's sound sampling software, Adobe Illustrator's scripting platform, and Rhino's parametric surface mapping underpinned the concept to realization (Url-16).

Offices are located on the facade facing Bankalar Street on the second floor. Starting from the organization's "innovative programs on experimental drops and researches", design named "Parliament" reminding a large meeting hall with empty space in the middle was applied. Elliptical tables, which allow synchronous little meetings with individual works, allowed clustering around. "Parliament" which allowed presentation and discussions reflected Salt's collective thinking, discussion and creation understandings. Tables in offices designed by SUPERPOOL can be used from both sides in such manner that they provide flexibility in the place. Lighting and electrical equipment were located within the tables with 8 cm of thickness. Durable and simple white Formica was preferred for the surface. Inner sides of drawers were coated with oak (see Figure 3.62).



**Figure 3.62** Salt Galata's office designed by Superpool

Reception, exhibition areas, Auditorium's halls and wet areas on the third floor of Salt Galata, where user circulation is intensive, were designed by Autoban. Autoban preferred to reflect marble's production progress on architectural surfaces, arising from intensive use of marble in historical structures. When drilling, breaking and cutting progresses, perforated tissue and ribbed texture were used in creation of this design with horizontal and vertical marble surfaces by protecting and transferring to the user these traces, which allowed reference to stone labor. Reception area has been made appropriate for meeting intensive traffic of people by evaluating the space under stairs (Url-14).

## CHAPTER 4

### DOCUMENTATION OF BORUSAN MUSIC HOUSE BEFORE AND AFTER THE RENOVATION

#### 4.1 Location of Borusan Music House

Istanbul is established where Asian and European Continents were split by a narrow strait and is built on two continents thus forming the the only city in the world that the sea passes through. İstanbul is located on a peninsula, surrounded by Marmara Sea, Bosphorus Straits and Golden Horn [30].

İstanbul is located in the coordinates of 28° 01' and 29° 55' East longitudes and 41° 33' and 40° 28' North latitudes (Figure 4.1). While joining Black Sea and Marmara Sea, İstanbul Straits divides Asian and European Continent as well as İstanbul City. The province is bordered by high summits of Kocaeli Mountain Ranges in the East, by Marmara Sea in the South and waterline of Ergene Basin in the West [30]. Beyoğlu administrative zone, which was especially important for İstanbul during the second half of 19<sup>th</sup> century, is spread over an area of 8.76 square kilometer. Beyoğlu district is neighbor of Eyüp, Kağıthane, Şişli and Beşiktaş in north, Fatih and Eminönü in south. Its neighbor in Anatolian side of Bosphorus is Üsküdar. Main districts of Beyoğlu are Taksim, Cihangir, Fındıklı, Kabataş, Tophane, Galata, Tünel, Galatasaray, Tarlabası, Talimhane, Yenışehir, Hasköy, Kasımpaşa, and Sötlüce. The district consists of 46 neighborhoods [31].



**Figure 4.1** İstanbul's position on the world

Beyoğlu is in an easily accessible point and surrounded by developed and highly populated areas. The district is located in a central location ranging from historical peninsula to Taksim through bridges, from here to districts as Harbiye, Nişantaşı, Kurtuluş, Şişli and on the other hand to Bosphorus or Tophane through Ayaspaşa, Gümüşsuyu, and Dolmabahçe. Beyoğlu District Urban Protected Area has an important role in İstanbul's status as a synthesis of cultures and a true value for civilization. With Galata, Karaköy, Tarlabası, Taksim, Cihangir and İstiklal Street areas the Urban Protected Area is in the position of a region in which different cultures take part.

Borusan Music House is located in Asmalı Mescit Neighborhood of Beyoğlu District. It is in the intersection point of İstiklal Street and OS (old Piremeci Street) (Figure 4.2).



**Figure 4.2** The location of BMH

Location of Music House at the border of protected area has many advantages and reasons. One of these advantages is the fact that the people come to realize the true value of the building late but in time to carry out necessary interventions.

One of the other reasons is the responsibility attached to the building BMH. Textures of buildings located in İstiklal Street are not allowed to breach the harmony of the facades facing the street. While not damaging this integrity, the building is obliged to



meet the requirements of the surrounding environment at the same time (Figure 4.3). People tend to look after and care for the things they are accustomed to therefore the more buildings are in the form local residents accustomed to the more people will look after more those buildings. Caring for even one single building will lead to a mass instinct of preservation.



**Figure 4.3** Borusan Music House environment

## 4.2 History of Borusan Music House

Nur Akın distributes settlement in the region into four categories:

- A period until 1830, in which there were a lot of timber applications and at the same time which included the first structures of the region.
- Between 1830-1860, Pera period, during which the configuration was very regular and beautified with renovations after great fire.
- Between 1860 and 1880, a period in which masonry buildings had covered entire region after Pera Fire in 1870.

- Between 1880-1920, a period in which most multi-storey and majestic buildings replaced previous buildings and a part of which consisted the historical examples of today's Pera [32].

It is reckoned that foundation of BMH had been laid during the structuring process of Beyoğlu after Pera Fire. We guess due to rapid development of this street, however buildings had been built quickly, and it is not easy to reach the written information about these buildings. Construction year of BMH is estimated to be 1875. The name of the original architect has been lost in the history, very much contrary to the building itself. The only information about the architect of the building is that he/she was French (Url-17).

Borusan Holding was established in 1972 and Borusan Culture and Art Center was established in 1997 (Url-17). Borusan Music House began its activities in January 2010 and met with the public and since it was opened, it hosted many exhibitions such as ArtCenter/İstanbul2010, Kozmi Latte 2010, Madde Işık 2010, Durumun Sorgulanması 2011, Romantik Asiler 2012, and Söylenmemiş Yazılmamış 2013. Since that date, BMH also served as the venue of many concerts by numerous people such as Jef Giansily, Divan Consort, Sanena, Fazıl Say, Occult Ensemble, Islak Köpek, Alev Lenz, Şirin Soysal, Hazerfen Ensemble, and Ağır Yürüyen, Ferit Odman, İmer Demirer, Ploctones, Çağdaş Kontrbas, Grame-Yi-Pang Yang, Lotta Melin-Guro Moe, Melis Danişment and Elif Çağlar-Kerem Görsev concerts (Url-18).

Borusan Music House is an ideal combination of historical values with technology and was so adapted to Beyoğlu. During restoration works, the historical fabric of the building was preserved while a multi-purpose, flexible structure, as required for a modern space of music and art, was formed through interior design applications (Url-18). Mr. Yağız Zaimoğlu, the Director of the Music House, underlines that the program of the House will be dominated by music, obviously. Yet BMH will not lack other forms of art and artistic performances. Mr. Zaimoğlu further claims that the objectives of BMH are clearly summarized by an artistic piece, Listen to Your Eyes, by Maurizio Nannucci of Florence, which is exhibited in ground floor of BMH. In this work, the artist had written the title in yellow neon lights. According to him, the objective here is to express the relationship between music and visual arts.

In BMH, it will be possible to listen music through eyes and to observe the pieces played in form of music [33].

The ruin of a building, which was the status of BMH before restoration, was an attraction for the homeless who sheltered in nights. After the restoration, however, it has become the venue wherein the artists are invited to chose and decide on the practice they desire and where the audience passes some pleasant time by witnessing the artworks.

### 4.3 Description of the Old Building

Former situation of BMH has been reached by patterns required for SRRP preparation principles mentioned under the title of laws and regulations applicable in Turkey with the number of 2.3.2. Application of SRRP preparation principles for BMH was as follows:



**Figure 4.4** Site plan of parcel belonging to 1964

1 / 500 - 1 / 200 layout plan (Figure 4.4)

Floor Plans, 1 / 50: Appendix 1-2-3-4-5-6-7-8-9

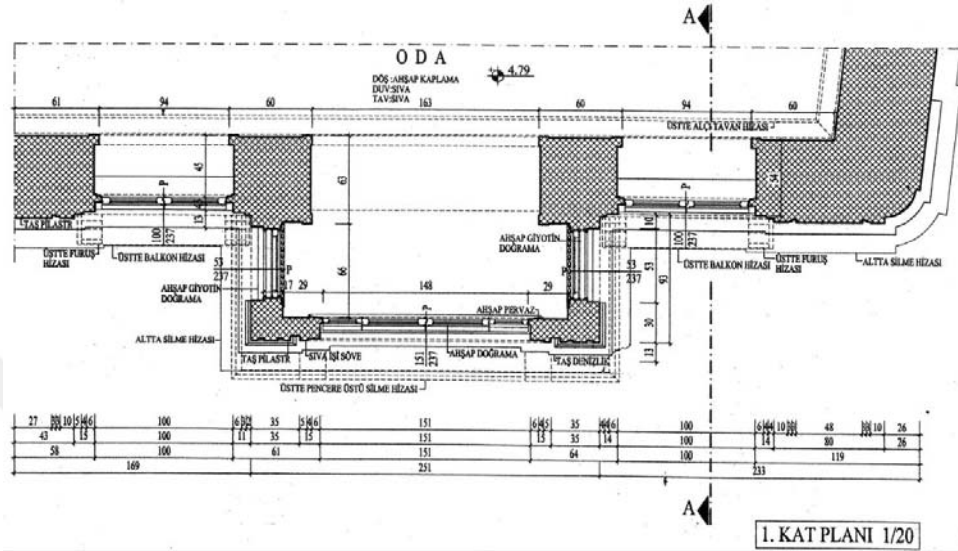
Roof Plan, 1 / 50: Appendix 10

All seen fronts, 1 / 50: Appendix 14-15



At least two cross-section to be passed to each other perpendicular 1 / 50: Appendix 11-12-13

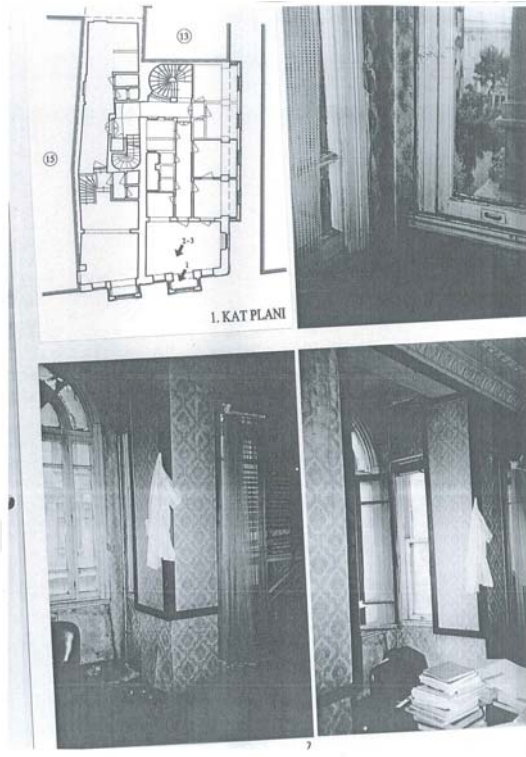
Enough system details aiming to introduce structural system and material: Frontal, plan and cross section 1/20: Appendix 16



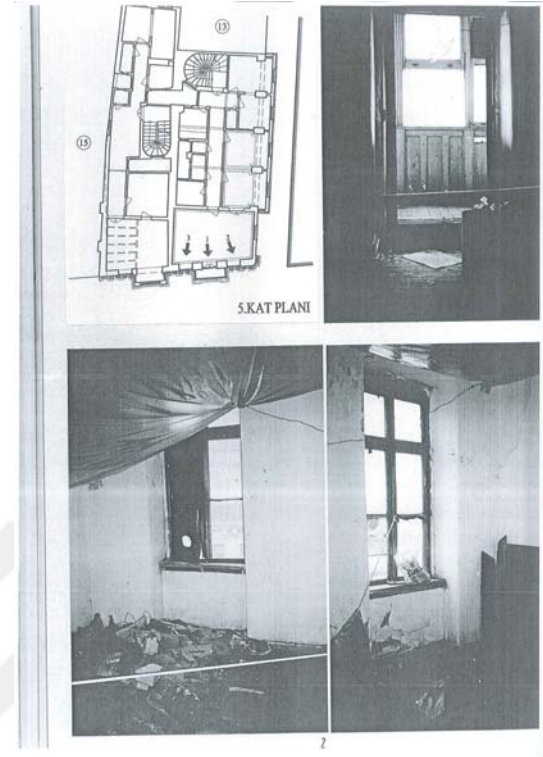
**Figure 4.5** System details

Details related to typical elements of structure as windows, doors, ceiling socle, stove, cabinets, niches, eaves, conveyor system, decorative elements: 1/10, 1/5 and 1/1: Appendix 18-19-20-21-22

Photo album:



**Figure 4.6** Photos of the old first floor



**Figure 4.7** Photos of the old fifth floor

### 4.3.1 Spatial layout

Former form of the structure consisted of nine floor with basement, ground floor, 1st floor, 2nd floor, 3rd floor, 4th floor, 5th floor and loft. It will be called as Typical Floor Plan. Information obtained from surveying drawn by Master Architect Halil Onur, continues as follows:

**Basement:** It has not been entered due to sewage detention. Due to fact that there wasn't any point of this floor opening to facade and stairs descending to that floor were closed, plan of this floor could only be drawn from the line of floors above it as estimated (Appendix 1).

**Ground Floor:** Two entrances from front and one entrance from facade facing OS have been given to structure. Left entrance of the front is opened to restaurant and right one is opened to warehouse (Appendix 2). Before drawings of Halil Onur, two

different entrance located in front of the ground floor were at the same place but they were used as clothing store instead of restaurant (Figure 4.8). Entrance located at the facade facing OS is opened directly to upstairs (Figure 4.9).



**Figure 4.8** Two front entrance of ground floor



**Figure 4.9** Side entrance of ground floor

Mezzanine: There is only in the part of restaurant. Access is provided to this floor through stairs inside the restaurant. Restaurant has a small gallery space in itself (Appendix 3).

First Floor: Restaurant is at the same line and continues also in this floor. Stairs inside the restaurant also goes to this floor. Restrooms and kitchens of the restaurant are on this floor. Service entrance of the kitchen is provided through stairs taking place in the opposite of door, entrance of which is from facade facing OS. On this floor, we see new stairs providing access to upstairs. On this floor; we also see a new flat. This flat consists of 5 rooms, 1 living room, 1 bathroom, 1 restroom and a kitchen. Due to fact that two rooms of the flat have not been entered yet, it has been drawn by taking the plan of upstairs into consideration (Appendix 4).

Second floor: On this floor, there is a flat same as the first floor. In addition, a new flat has also been located on a restaurant and kitchen line of the first floor. In this flat, there are 2 rooms, 1 living room, 1 bathroom, 1 restroom and kitchen (Appendix 5). The third floor is the replicate of second floor. Using the walls which are separating some places by demolishing led to the differences arising from the personal preferences of that floor. The room, which has been formed with the result of demolishment of the wall between two rooms, has led to a reduction in the number of rooms (Appendix 6). Fourth and fifth floors are the replicate of second and third floors (Appendix 7-8).

Loft plan: On this floor, there is flat and a warehouse. In front of them, there is a lengthwise terrace. The flat consists of 3 rooms, 1 bathroom and a kitchen. Around the warehouse, there are 3 small rooms (Appendix 9).

#### **4.3.2 Elevation characteristics**

The first facade faces İstiklal Street while the lateral facade faces new OS which was formerly called Piremeçi Street.

Examining the facade facing İstiklal Avenue floor by floor:

Ground floor: 78 cm wide stone plasters constitute the columns in front. Stone moldings at the top of stone plasters are connected to columns on the upper floor (Appendix 18). On the ceiling lines of the ground floor, there are stone mutules (Appendix 14).

First floor: Arched windows are located on this floor. Ornaments of the arched windows are made of stone (see Figure 4.10). Ornaments of two of these five arched windows taking place in the facade of this floor were made flashier than the other three. As figure, leaves have been used on the branch. On the smaller arch ornament, figure of leaves have been used with curved motifs (Appendix 19). Windows on this floor are wooden joinery as other windows on the other floors. The feature of the joinery on this floor differentiating from the other joinery is that wooden joinery has been made inclined in accordance with the arched structure. Other ornaments of this

floor are the flower figures inside the rectangular stone frames in the bottom of each window. Flowers in the frames have taken place in surveys as stone ornament.



**Figure 4.10** Stone archs of 1<sup>st</sup> floor



**Figure 4.11** French balcony of 2<sup>nd</sup> floor

Second floor: At this line, there are three decorative patterns, round-based stone ornaments on stone columns. In the three of five windows, there are French balconies. Railings of the balcony are made of iron. Circle and fold patterns have been used as pattern. There are two stone mutules under each railing, one in the left corner and the other in the right corner. In the patterns of woodwork windows, there are square grids (Figure 4.11).

Third floor: There are curled ornaments resembling bunches of grapes on stone columns on this line (see Figure 4.12). On this floor, there are also French balconies same as with the French balconies in the second floor (Appendix 20). Woodworks are simplified on this floor. Flower and leaf patterns have been combined with curves in rectangular stone window frames above the windows. Stone moldings, which have been seen between ground floor and first floor, are also seen between third and fourth floor.



**Figure 4.12** Grape ornaments, simplified wooden window frames

Fourth Floor: Stone columns have a cross-hatch pattern on this line here. Upper corners of windows make diameters. Stone ornaments, which have been applied in parallel with these diameters, are in the form of flower branch. In rectangular frames taking place below and above the windows, there are flower patterns combined with geometric shapes. In addition, there is stone molding on the ceiling line of this floor.

Fifth Floor: Transverse columns continue to rise on this floor. At the upper middle part of 3 of 4 windows, there is rectangular stone ornament in the form of keystone. Two windows of it from the left are wooden guillotine. Line of bay window at downstairs is used as balcony at this floor. It seems that windows are guillotine system in this balcony block. Railings of the balcony have been made with same material and patterns as French balcony on 2<sup>nd</sup> and 3<sup>rd</sup> floor. At the line of this floor corresponding to ceiling line, there are stone mutules.

The upper part of the facade is stone molding, stone wall covered by plaster and ends with a stone wall coping. This part is also the detail constituting the railings of loft.

Examination of the lateral façade facing Orhan Adli Apaydın Street floor by floor:

Ground Floor: There are three big windows and one door. The door has been made of iron and surrounded by a marble jamb (Figure 4.13). At the upper middle part of the marble jamb, there are decorative curved pattern and flower patterns on their upper corners (Put figure-detail). Visual contact of windows with street is blocked by shutters (see Figure 4.14). In the two of three windows, there are plastered jambs.



On upper mid-point of these simple jambs, there are rectangular ornaments which are also taking place at the fifth floor of facade. There are five wooden mutules at the ceiling line (Figure 4.15). Stone molding, which continues lengthwise on it, is seen (Appendix 14).



**Figure 4.13** Ground floor facade facing OS door



**Figure 4.14** Ground floor facade facing OS window



**Figure 4.15** One of the mutule

First, second, third, fourth and fifth floors: There are 6 windows in each of these floors. Five of them see the facade facing OS and a narrow one sees İstiklal Avenue (see Figure 4.16). This narrow place takes place after the first window looking facade facing OS and cannot be seen in summer frontage drawings. All windows have been made of wooden guillotine, their jambs have been covered by plaster, their upper lines have been designed mild curved and there is a small stone ornament in the center of this curve (see Figure 4.17). At the transition line of this qatar, stone molding continues lengthwise.



**Figure 4.16** Narrow windows of facade facing OS



**Figure 4.17** Windows of facade facing OS

Loft: There are three windows. Windows are woodwork and far from ornament. The walls are covered with plaster (Figure 4.18).



**Figure 4.18** Photo of old loft from facade facing OS



### 4.3.3 Spatial alterations

Known and estimated information related to changes made for the original form of the structure are as follows:

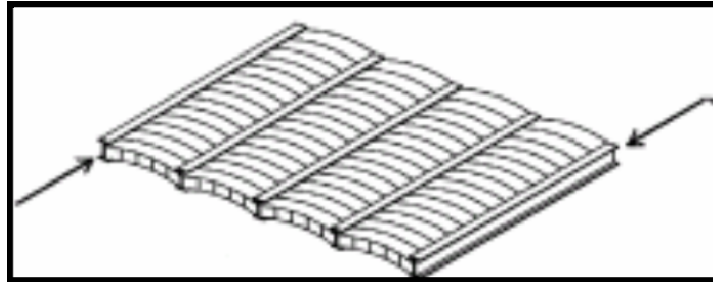
- It can be understood from the petition written by Avni Elgin under the title of 2.3.3. that formerly there wasn't any mezzanine in the restaurant taking place in ground floor. Indeed this information shows that mezzanine plan in the surveys is not belong to original form of the structure [34].
- When surveys of facade and facade facing OS are examined, it can be understood that loft was added later. There is aesthetic perception in the whole structure and it can be seen that this aesthetic perception brings itself on this floor to space perception made by hand.
- Examining floor plans, it can be seen that users had made gaps on walls between spaces according to their needs.

### 4.3.4 Structural characteristics

Floor arch is a type of upholstery which involves construction of brick vaults between steel I profile beams which operates in a single direction (see Figure 4.19). It transfers vertical loads to brick vault arches. Brick vault arches transfers the same to steel girders. And steel girders transfer it to walls on which they were built or columns. Steel profiles can slide under horizontal earthquake loads. Brick arches may be weakened by bending perpendicular to its plane or bending in its direction; there may be dynamic interaction between steel girders and brick and system does not show a diaphragm operation [35].

Connecting I profile girder ends with vertical girders, or establishing I profiles that will create grids between I girders increases the seismic strength of conventional floor arch. Roofs and floorings of historical masonry structures have been made by vault or cupola. These curved surfaces are quiet stabile if impact forces in their braces are adequately met [35].

Basement: Basement walls of the structure, which was built on masonry foundations, are masonry brick walls. This information is understood from the thickness of wall in survey.



**Figure 4.19** Floor arch [35]

Ground Floor: Walls are masonry brick walls. The ceiling is likely to be completely floor arch, but it is not certain due to fact that it couldn't be documented (Figure 4.20). In the former form of the structure, there are documented floor arch drawings. First of it is on the fifth floor, in the space corresponding room below the terrace (see Figure 4.21). Secondly, it is shown in the kitchen on third floor (see Figure 4.22). Final documented floor arch is in the warehouse space of ground floor (see Figure 4.23).



**Figure 4.20** Ceilings of ground floor and walls are masonry brick

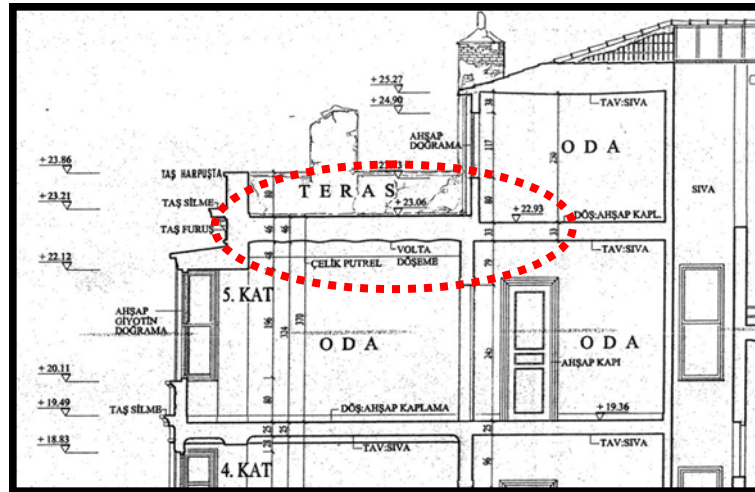


Figure 4.21 5<sup>th</sup> Floor arch and steel joist (taken from survey 1/50 scale A-A Section)

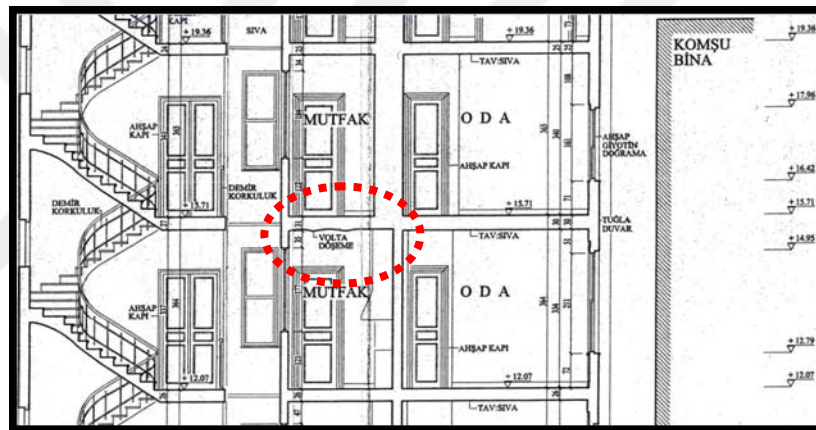


Figure 4.22 Floor arch on 3<sup>rd</sup> floor (taken from survey 1/50 scale A-A Section)

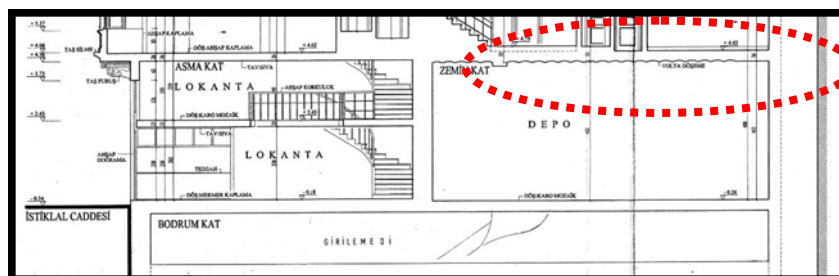


Figure 4.23 Floor arch on ground floor (taken from survey 1/50 scale A-A Section)

Mezzazine: Considering gallery voids in the restaurant and due to fact an unlicensed floor, which was added then, is known; we can determine it is wooden flooring.

First floor: Thick walls are carrier brick walls. Thinner walls separating rooms are brick or wood. These intermediate walls are not carrier walls.



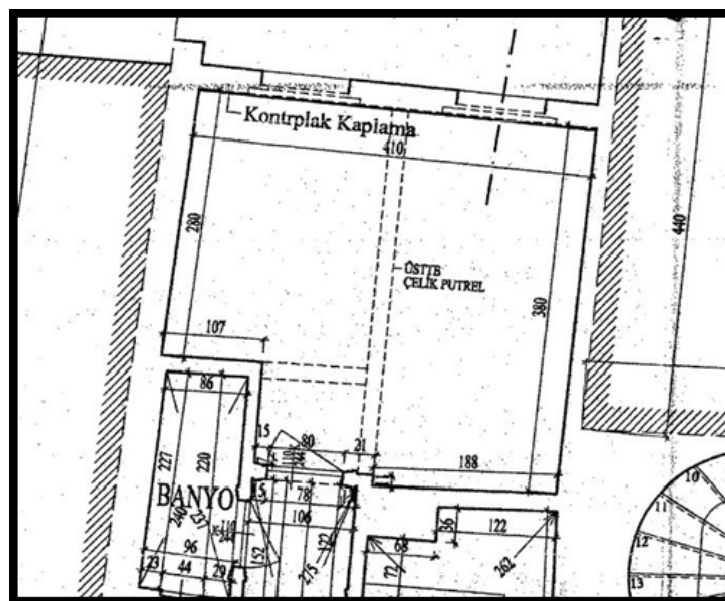
**Figure 4.24** Joists

Joist means iron girder connection (Figure 4.24) (Url-19).

Second floor: It was understud that the girders are made of steel given the steel joist information provided in the survey drawings (Figure 4.25).

Third, fourth and fifth floors: They have the same structural features with second and third floors.

Loft: Structure used for eave is stud (see Figure 4.26). These are unstable temporary attachments, which have been made later, as stud and many walls of this floor.



**Figure 4.25** Steel joist line on second floor

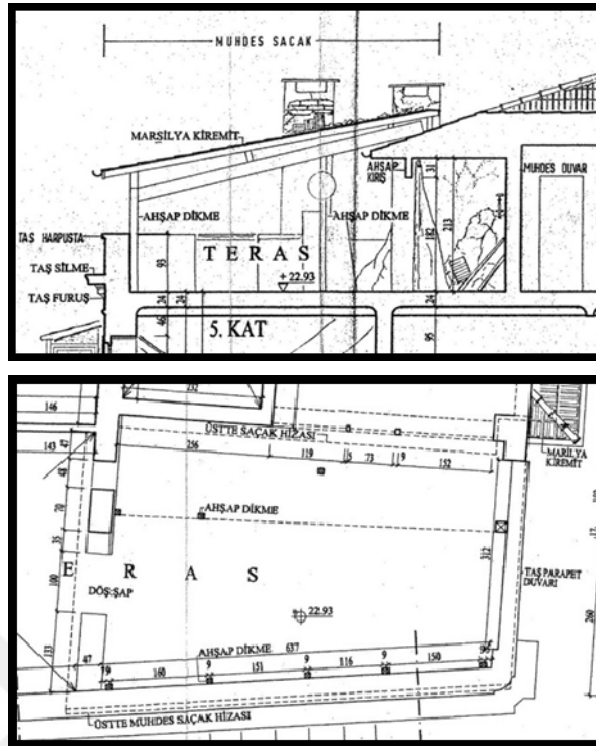


Figure 4.26 Stud section in loft and plan drawings

Hipped roof is in the form of roof having flow in four directions [36]. These are roofs which have inclined surfaces as edges of the building on which it was built (Figure 4.27).

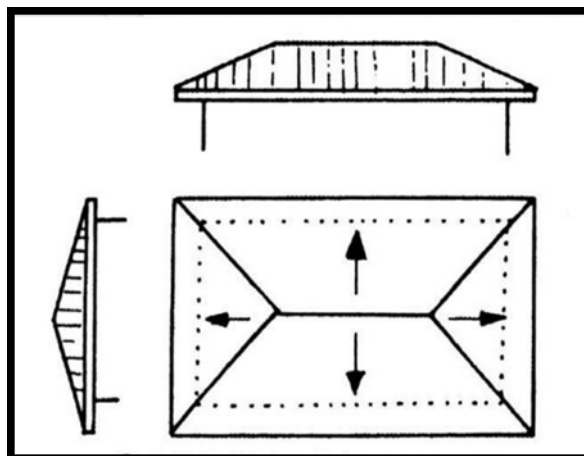


Figure 4.27 Hipped roofs

Roof: Roof information cannot be obtained due to insufficient drawings in sections. However, in structural terms, it can be said there are two alternatives:

- It can be wooden or arch as in the lower floors. There is a hipped roof on it (Appendix-10).
- There is no flooring on loft, there is suspended roof. Wooden clapboard has been floored below the truss of suspended roof and it has been perfused.

#### **4.3.5 Construction material and lighting**

According to the information obtained from written notes of surveys and photos of the former form of the structure, indoor materials are as follows:

Ground floor of the restaurant and flooring of the mezzazine in the structure are marble. Floor mats of restaurant, restroom and kitchen on the first floor of the same restaurant are ceramic. On ground floor and mezzazine, walls are timber cover. Walls of restaurant on first floor are gypsum panels and walls of restroom and kitchen are ceramics. Materials of the stairs in the restaurant have not been specified, but due to fact that railings of stairs are mentioned as wooden, the stairs are presumed to be wooden (Figure 4.22).

Flooring of warehouse located at ground floor consists of tile, their walls are plaster and their ceilings are timber. Stairs, beginning on the ground floor and providing main vertical circulation of the structure, are marble covered on stone (Figure 4.28).





**Figure 4.28** Old stairs are marbled



**Figure 4.29** Photo taken from loft, natural lighting well

In general, floor mats of rooms and living rooms of houses taking place on first floor and typical floors are wooden, their walls and ceilings are plastering (Figure 4.6). In addition, floorings of kitchen and bathrooms of these flats are specified as ceramic, their walls and ceilings are specified as plaster.

Lightings in the structure are divided into two as natural and artificial. One of the natural lightings is daylight entering into apartment from skylight. The other is lighting entering from bright field and providing light to remaining rooms and kitchen in the interior parts of flats (Figure 4.29). Lights of luminous are provided by daylight taken from the gaps of roof.

Artificial lights emerge at two visuals. In one visual, we see hanging light used in the corridor (see Figure 4.30). On the other, we see the light bulb used in well (Figure 4.31). Ceramic types used in the structure can be seen in the following images in details. Glazed tile is seen in Figure 4.32, sequentially ordered white ceramic is seen in Figure 4.33 and obfuscatory installed brick color square-shaped ceramics are seen in Figure 4.34. Material used in the roof is Marseille roofing tile (see Figure 4.35). It is floored with ranking system as can be seen in Figure 4.36.



**Figure 4.30** Hanging light in the ceiling, wooden floor on ground



**Figure 4.31** Natural light is taken from skylight



**Figure 4.32** Floor is glazed tile



**Figure 4.33** Masonry bricks can be seen on walls

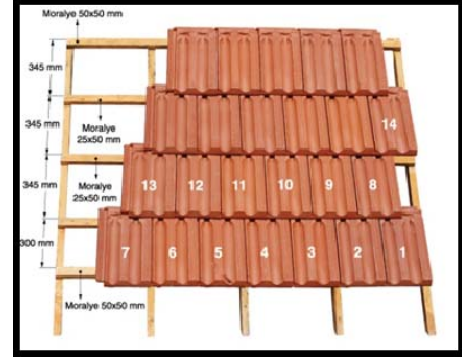


**Figure 4.34** Floor is obfuscatory installed ceramic





**Figure 4.35** Marseille roofing tile has been used in roof. The roof is in the form of hipped roof



**Figure 4.36** Marseille roofing tile has been used in roof

## 4.4 Description of the New Building

### 4.4.1 Spatial layout

Examining the building consisting of 8 floor as basement, ground floor, 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> floor, floor by floor:

**Basement:** It has been reserved for the use of employees and executive staffs. Access to this floor is provided by a fire escape taking place in service area and steel framed glass elevator which also provides access to other floors. In the floor, in which there are restrooms for man and woman, working areas of employees have been separated by a divider panel. Information for this floor was obtained from electricity company [37] (Appendix 23). During in-site inspections, only this floor hasn't been allowed to be entered.

**Ground Floor:** This is the floor where the main entrance is located. Main entrance is directly opened to place where the permanent exhibition taking place. On the left of main entrance, there are information desk and security. Names of artwork and their designers who are the part of this building are as follows: Sonsuzluğa Doğru [Ad Infinitum] – BrigitteKowanz, Gözlerini Dinle [Listen toYourEyes] – MaurizioNannucci, Kestirme Yollar [Shortcuts] – IvanNavarro, Örümcek Işıklar [ELO-Spiderlights] – ChristianPartosveİsimsiz [Untitled] – LeoVillareal.

On the ground floor, apart from this mentioned section, entrance and exit is provided from OS to building. This door is connected to service corridor of the building. It is also used as fire exit door (Figure 4.37). However, this is the detail which hasn't been mentioned in the ground floor drawings of the building (Appendix 24). It is not seen in the drawing, but according to information obtained from in-site inspection, on the left side of door, a corridor has been created by a fixed wall made of plasterboard (Figure 4.38). At the end of this corridor there are a restroom for man and a restroom for woman (Figure 4.39). At the end of the corridor, on the right side, there is fire escape.



**Figure 4.37** Fire exit door at ground floor



**Figure 4.38** Fire escape and service corridor on ground floor

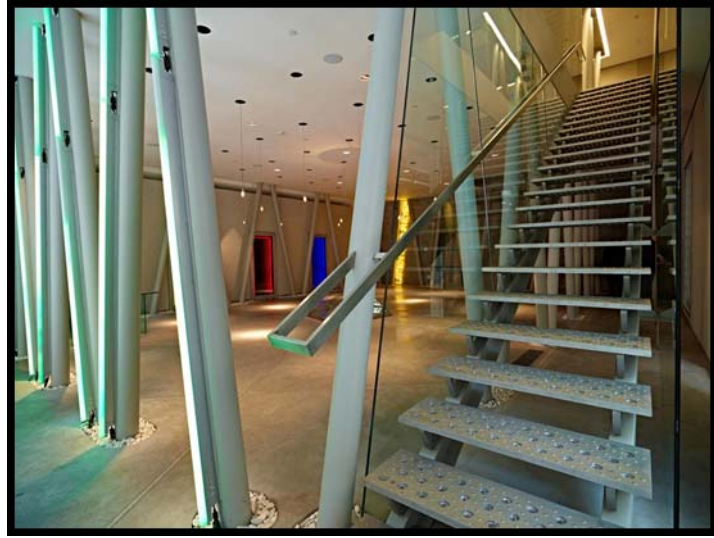


**Figure 4.39** Borusan Music House's restroom

First Floor: It is used as a multi-purpose hall. According to functions of temporary exhibitions, plasterboard moving divider panels take place as parts of this floor (Figure 4.40). Elevator, fire escape and restrooms continue same on ground floor (Appendix 25). Except basement and terrace floor, it is made by stairs having glass divider panel with steel footstep and structure (Figure 4.41). Steel stair coming from ground floor to this floor undergoes an axis change between first and second floor. Axis taking part on the second floor continues till fifth floor.



**Figure 4.40** Temporary exhibition unit



**Figure 4.41** Stairs from ground floor to first floor

Second Floor: This floor, which is used as multi-purpose hall during exhibitions, is used as a space in which audiences and scene can be located during concerts (Appendix 26). The most significant feature separating second floor from others is the gallery void created with third floor (Figure 4.42).

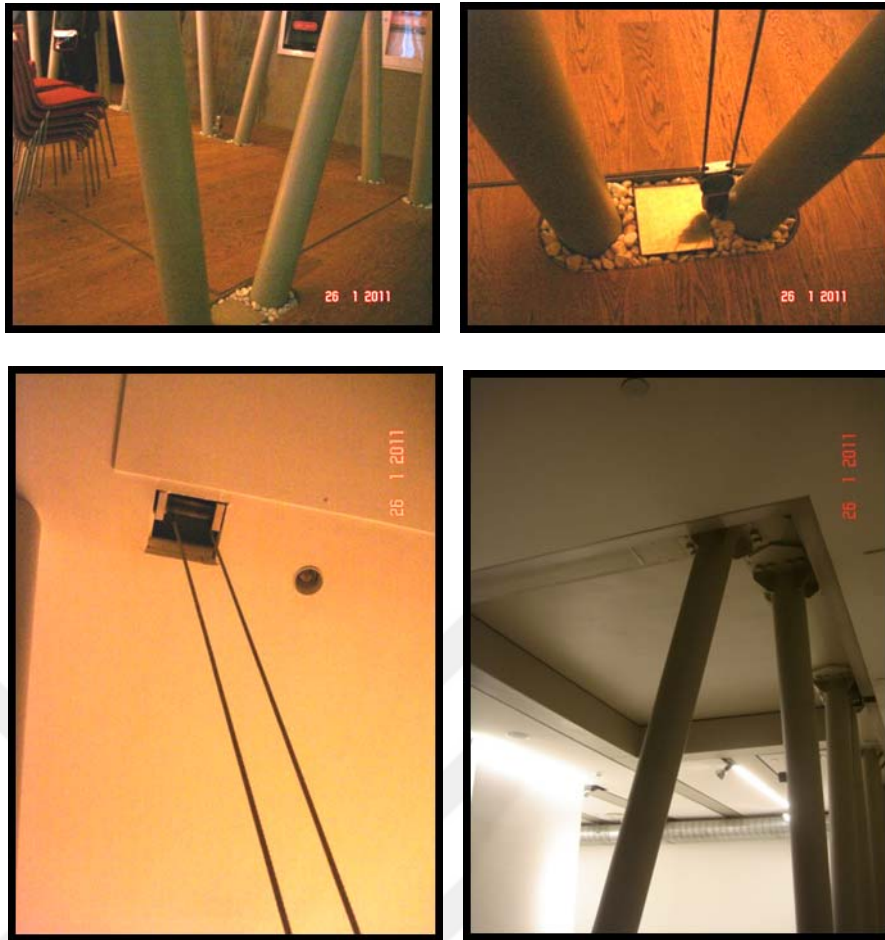
Between floors, a different design providing link between floors attracts the attention. First of these is the piano elevator (Figure 4.43). It completes its function as a result of a rectangular piece is sat on the ground of first floor by separating from the ground of second floor. It is realized with wrapping movement of mobile steel rope. Other different design of this connection between these two floors is a thin, long, rectangular glass surface located in parallel with stairwell which also takes place both in the ceiling of 2<sup>nd</sup> floor and ground of 3<sup>rd</sup> floor (Figure 4.44). From this point, it becomes possible to capture clues about the structure of building for people who see the building for the first-time.



**Figure 4.42** Galley opening gap linking second and third floor to each other

Third Floor: 2<sup>nd</sup> and 3<sup>rd</sup> floors of Borusan Art Gallery are used as a concert hall during concerts and exhibition hall during exhibition event. Between second and third floors, there is gap 860cm to 640cm (Appendix 27). In this gap, there is a rail system designed for illuminating the scene. This system has been fixed on the ceiling of 3<sup>rd</sup> floor with steel ropes. Design of this lighting system has been located not to prevent the viewpoints of people watching from third floor the concert performed on the second floor. Design of the railing surrounding this gallery void has also been designed not to prevent view. For this reason, glass has been used as material and only fixation of glass to ground has been applied as detail (Figure 4.42).





**Figure 4.43** Piano elevator system between 1<sup>st</sup> and 2<sup>nd</sup> floor

Fourth Floor: It has a different language from other floors with its rehearsal rooms and deadeningly walls (Figure 4.45). At first, on this floor, space is divided into sections (Appendix 28). This division is made within the borders of steel structure. So, within the new space in former space; a new space has been created again. A corridor, in parallel with axis of stair, specified the wall lines of rooms (Figure 4.46). Under favor of indoors in steel columns, any rhythm disorder cannot be met when viewed from outside the building. Steel columns, which are the structural system of the structure, determine the entry points of rooms. In addition, as on other floors, on this floor, locations of doors, from where entrance is provided to service area, are determined by the location of structural system.



**Figure 4.44** Ground of 3<sup>rd</sup> floor



**Figure 4.45** One of rehearsal room on 4<sup>th</sup> floor



**Figure 4.46** Corridor on the 4<sup>th</sup> floor

Fifth floor and terrace (6<sup>th</sup> floor): 5<sup>th</sup> and terrace floors are left empty for seminars, dances, performances and rehearsals (Appendix 29-30). Historical facade of the building ends on 5<sup>th</sup> floor. One of the other futures of Borusan Art Galley differencing it from its similar is its terrace; importance has been given to design of it. Terrace consists of glass, recessed inside external wall as cannot be seen by people walking on the street.

Roof: The roof of the building was designed as an open space which is accessed by the stairs located in terrace (Figure 4.47). It is called as viewing terrace (Figure 4.48). Rear part is used as technical space (Appendix 31). In this space, compression ventilator of fire escape, outdoor units of air conditioners and fresh air devices (clivet heat pump) for each floor are placed.



**Figure 4.47** Stairs from terrace to roof



**Figure 4.48** Viewing terrace

#### **4.4.2 Elevation characteristics**

Facades of the building have been renewed faithfully to exterior features described in section 4.1.3.2. However, adaptation styles of both two frontages to present were different. Facade has been restored and moved to the present day. Facade facing OS was demolished and rebuilt in an appropriate manner (Figure 4.49).

The main entrance on the ground floor has been provided by a glass, floor to ceiling, double-wing door from İstiklal Street (Figure 4.50). Windows and cases integrating facades have been renewed according to today's technology. Most of facade windows have been produced as blind frame. In the process of assembly, blind frames have been installed one by one; then, pattern has been given on to the glass with wooden bars in order to resemble it to its former form. This pattern has given window an appearance as it is opening. Implementation of wooden bars has been made from the outside of glass.



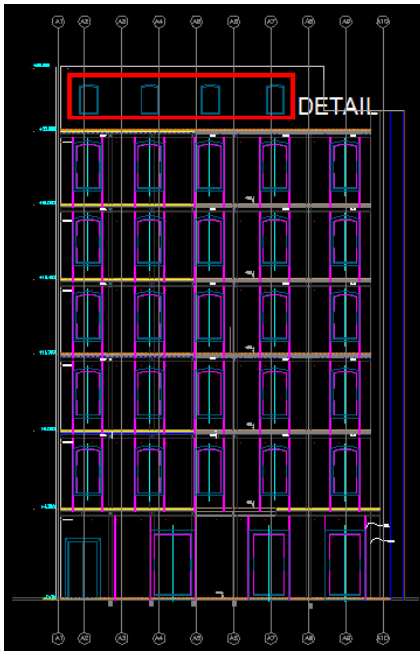
**Figure 4.49** New facade and facade facing OS



**Figure 4.50** Main entrance doors

Although blind frames are predominate, in new building there are also opening windows. Opening windows are located in terraces and heads where facade extends (Figure 4.49 and Figure 4.51). A photo from the constution process of windows located in terrace is seen in Figure 4.52. These windows are opened to a semi-outdoor place (see Figure 53). There are two openable door joineries on facade. First of it, is the double wing door on the front side. This door has a feature distinguishing it from others. This door has remained from the former form of the building. This old and unusable door has been used in new building with repair (Figure 4.37). Second opening door is located on the 5th floor of facade and opened through the balcony of the building. This door has been rebuilt as other joineries on facade.





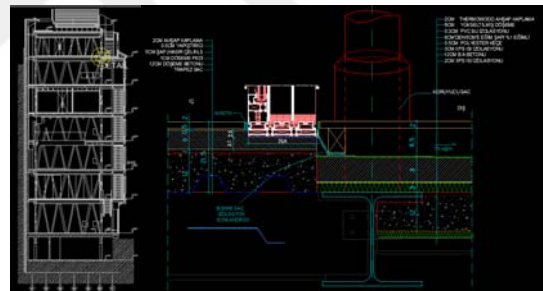
**Figure 4.51** Opening windows are located in terraces



**Figure 4.53** Photo of completed form of 4 openable joineries for terrace



**Figure 4.52** Four openable joineries for terrace construction photo



**Figure 4.54** Sliding joinery detail on loft

Another joinery detail on the loft is used as facade on terrace. So, access to terrace can be provided by a door opened from this front. This door was designed as sliding door so more usage area has been created in terrace (Figure 4.54).

### 4.4.3 Spatial alterations

Since from the restoration project, no significant modifications/amendments have been carried out in BMH. Changes in the new version of the building are formed in accordance with the needs of carried out events. Number of person required for the event determines the form of seating order. Seating order with cushion is preferred for the events performed for young people, seating order with chair is preferred for the events performed for protocol and seating order with tables is preferred for the events performed for less number of participants (Figure 4.55). Seating plan with tables for 40 people in 2011 was increased to capacity with 17 tables, in which 4 people will sit, for 68 people in 2014. In 2015, a new settlement plan has been arranged for 182 people with more significant border (Figure 4.57). If the event is exhibition instead of concert, elements to be displayed instead of seating units are settled.



Seating order with chairs

Seating order with cushion

Seating order with table

**Figure 4.55** Seating orders with different alternatives

It shows the flexible structure of space. Space keeps up with the daily life today. Whatever type of event occurs, it is able to meet people with object-note or case with same time and place.

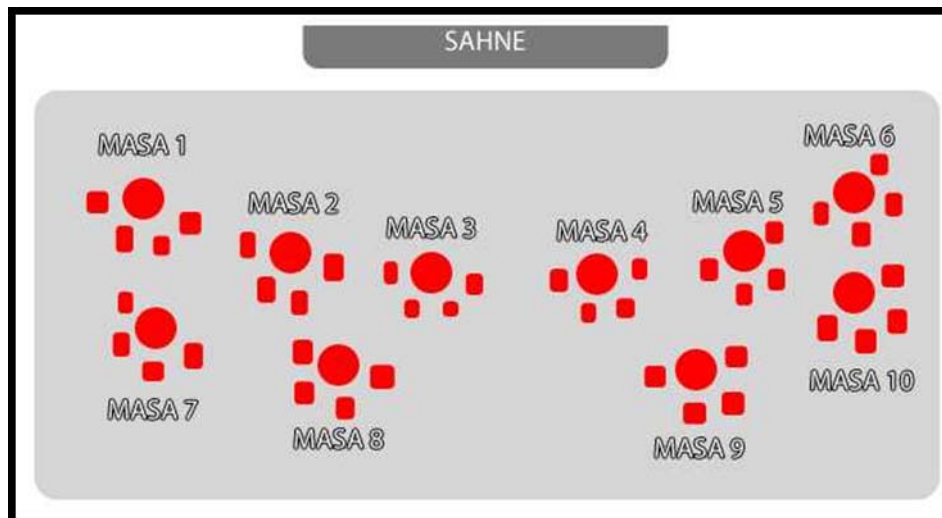


Figure 4.56 Seating plan with tables for 40 people



Figure 4.57 Borusan Music House eating plan for 182 people

#### 4.4.4 Structural characteristics

Addressing new structure of the building as fronts, building structure in vertical and building structure in horizontal;

Fronts: Facade is not carrier and facade facing OS is made of aerated autoclaved concrete blocks. To the line of fronts to next building, ferroconcrete curtain walls have been made vertically and girders connecting them have been made horizontally belonging to BMH. Installation gap on the front seen on the left part of A-A section continues from first floor to terrace (Appendix 32).

Vertical Building Structure: Diagonal steel structure is the system which carries out the main load of building (Figure 4.58). This system, which is the vertical carrier due to its shape, also resist against lateral loads. From ground floor to loft, this system continues. Structural system on the borders of building is I steel columns (Figure 4.59).



**Figure 4.58** Structural system model of BMH



**Figure 4.59** Diagonal steel structure is seen on the left side, I steel columns are seen on right side, gas concrete blocks are seen on right front, steel right profiles used in horizontal are seen at the top

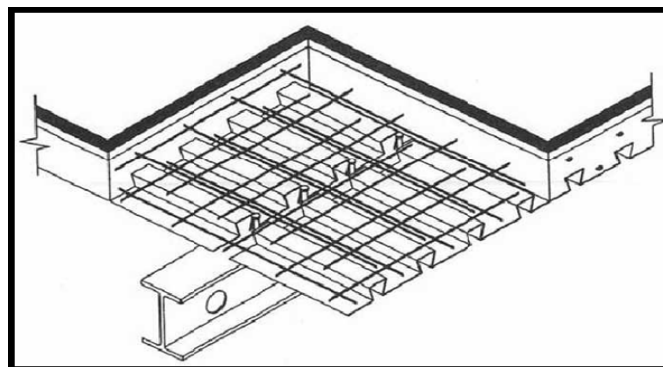
Horizontal Building Structure: In 1969s, first examples of modern composite floorings have appeared with the production by forming indentations and dentations on surfaces of steel sheet [38]. When companies recognized the usefulness and economy of this material, usage of this material has spread increasingly. Trials of this technique, use of which has increased, have emerged different from each other. With the thoughts as these trials may cause negative consequences; it was decided to base it on a standard. In 1967, American Steel and Iron Institute created the basis of these standards [38].



Elements of composite floor applied are:

- Rolled iron girder
- Flanged sliding connection
- Profiled Steel Sheet
- Concrete

During construction, it should be completely settled and combined with steel girders in order to have qualification that can carry wet concrete to be poured onto steel sheet. For the correct replacement of dry concrete, pouring type is important. For correct replacement, at first concrete should be poured on structural bearing elements, then process should be completed by advancing towards the center of sheet gap [38]. In this way, concrete is uniformly distributed throughout sheet gap. Uneven distribution of casting will cause the problem of concrete ponding. Another problem is the possibility of corrosion of the steel sheet. In order to prevent corrosion, it is necessary to take measures before concreting. All kinds of impurities on the steel sheet should be cleaned. This cleaning not only prevents corrosion but also have qualification as preliminary during the seaming process of sheet and steel girder. Moisture can cause seaming defects as well as corrosion. Therefore, during seaming process, steel sheet should be dried by compressed air to eliminate the moisture on steel sheet [38].



**Figure 4.60** Steel sheet-concrete composite flooring

Composite floorings, which are constituted with profiled steel girder, sliding connection, steel sheet and concrete composition, have many structural and economic advantages compared with traditional floorings: Girder gap can reach up 9-12 meters and girder range can reach up 2.5-3 meters [38]. Before concrete pouring, steel sheet creates a safety platform accelerating construction time for other processes. It acts as permanent mold for concrete. Less height of steel sheet provides concrete economy up to 40 liters/m<sup>2</sup> depending on type of sheet. This reduction in own height of flooring provides a significant reduction about 1.0kN/m<sup>2</sup> in dead load carried by building and foundation [38] (Figure 4.60).

#### **4.4.5 Construction material and lighting**

Examining entire of new version of the structure, it can be seen that the same materials were included as far as possible. The walls have been construed with the same material on each floor, ground has been construed with same material on each floor, and stairs have been construed with same material on each floor. This decision moves the building away from chaos and protects the perception as each floors belong to same integrate.

Examining the material and lighting of new version building floor by floor:

On the facade of ground floor, there is a tempered glass made by using the entire distance between columns and girders of the building. This glass is shatterless and has noise insulation features. This glass on the entrance has ability to get daylight in maximum level. In addition, with the decision of this glass material, it is in the qualification inviting people walking on İstiklal Street to the event in the space whether they don't enter. Single big windows on facade facing OS accompanies to the transparency on the facade of first floor. Infrangibility and soundproofing features of these double layered windows become the priority of preference (Figure 4.61). While three big front windows carry daylight into the building during the day, at night they bring artificial lights of the building with people walking on the street.

On the ground floor, floor covering of area, in which there is a permanent exhibition, is industrial floor covering concrete looking epoxy (Figure 4.62). Moreover; decorative pebble stone has been placed on spaces between column and wall.

The ceiling is gypsum board suspended ceiling. This ceiling is different from other because in fact suspended ceiling of ground floor is one of enduring works of art. In the artificial lighting of ground floor, there is work of art called as ELO (Örümcek Işıklar-SpiderLights) covering 100m2 area made by Christian Partos in 2009. There are flush mounted downlight luminaires making contribution to lighting of this work of art.



**Figure 4.61** Ground floor, facade facing OS single piece double glazing



**Figure 4.62** Ground floor, first floor and terrace flooring material



**Figure 4.63** Interior wall material details of ground floor

Another light source making contribution to artificial lighting of ground floor is a work of art called as Gözlerini Dinle (Listen to Your Eyes) made by Maurizio Nannucci in 2008. Dimension of this neon lighting is 364x26cm. Another work of art, which was not made with the purpose of lighting but is giving artificial lighting to space, is Kestirme Yollar (Shortcuts) designed by Ivan Navarro in 2005. Dimension of this work of art is 218.5x406x11.5cm and uses neon as light source. Last work of art on the ground floor, which was not designed with the purpose of lighting but can be mentioned as artificial lighting source in the dark due to neon lamp in it, is Sonsuzluğa Doğru (Ad Infinitum) of Brigitte Kowanz designed in 2007. Work of art consists of neon and mirror. Dimension of it is 112x185x150cm.



On the walls of new ground floor, there are acoustic gypsum panels with dispersed holes and in some sections there are exposed concrete looking implementation in harmony with ground implementation (Figure 4.63).

Concrete looking epoxy has been used as ground material on first floor. On the ground, decorative pebblestone has been placed on bottoms of column and spaces between column and wall (Figure 4.62). On interior wall of facade, there is brick looking natural covering which was renewed faithfully to former form (Figure 4.64). Lateral front walls with windows are acoustic gypsum panels with dispersed holes. Windowless wall, adjacent to neighboring building has been covered with exposed concrete looking implementation (Figure 4.65). Ceiling is a white colored suspended ceiling. Artificial lighting of first floor is provided by a white fluorescent inserted into this suspended ceiling (Figure 4.66).



**Figure 4.64** Floor material of first floor is concrete looking epoxy



**Figure 4.65** Blind lateral facade



**Figure 4.66** Ceiling and lighting on first floor

Floor mats of second, third and fourth floors are water resist solid wood parquets. Same materials have been used on walls as first floor. These floors differ from each other in terms of artificial lighting: Due to fact that on the second floor there is a gallery space combined with third floor, differences are seen in electricity installation plan (Appendix 34). 9 pieces of 150W halogen projectors have been located in the form surrounding three edges of gallery space. In the parts remaining from gallery space, there are white colored gypsum panels on the ceiling. There are 14 pieces of

2.26W flush mounted downlight luminaires on gypsum panels ceiling parts of second floor [37].

On the ceiling of third floor, there are 12 pieces of 150W metal Halide dawnlight luminaires. Due to fact that this is the section, where ceiling of the building is the highest, and luminaire has been preferred at this point. On the same floor, in sections where ceiling height is reduced, there are 14 pieces of 2.26W flush mounted downlight luminaires (Appendix 35) [37].



**Figure 4.67** Fifth floor entrance is provided by card system



**Figure 4.68** Terrace skylight

On the fourth floor, by using a space in space fiction, rehearsal rooms have been built on the floor. Walls and ceilings of the rooms are acoustic gypsum panels. Separate artificial lighting installations have been installed for each room. For the corridor, there are artificial lighting elements placed on the ceiling (Appendix 36).

Grounds of fifth floor and terrace are concrete looking epoxy as industrial floor covering (Figure 4.67). Wall materials are same as other floors. Ceiling of the fifth floor shows similarities with first floor. On the ceiling of terrace floor, black suspended ceiling has been used. Unlike from the other floors, there are big windows

on the ceiling of terrace which have been located to see the sky (Figure 4.68). These provide the entrance of daylight to space directly. Artificial lighting of these floors has been provided by downlights.

Investigation floor by floor has been completed. In this case, materials and lighting of restrooms, fire spaces, elevators, glass panels and diagonal columns taking place on each floor will be examined.

According to information taken from plans, there are restrooms on each floor, but it has been determined during the inspection that there aren't any restrooms on 2nd and 3rd floors. The flooring of the restrooms is orange colored epoxy (Figure 4.39). On walls, concrete looking coating on green gypsum panels has been applied. The ceiling is gypsum panels. Lighting has been resolved on this gypsum panels (Figure 4.69).



**Figure 4.69** Restroom ceiling lighting



**Figure 4.70:** Fire escape

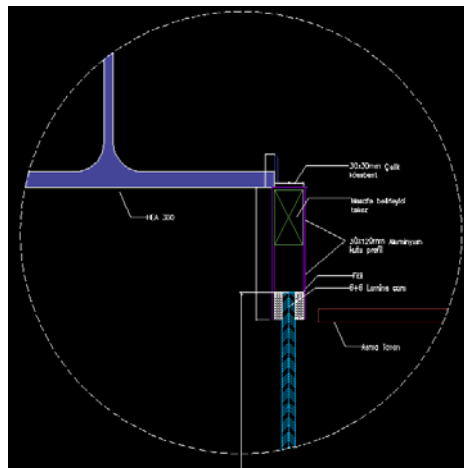


**Figure 4.71** Elevator door at terrace floor

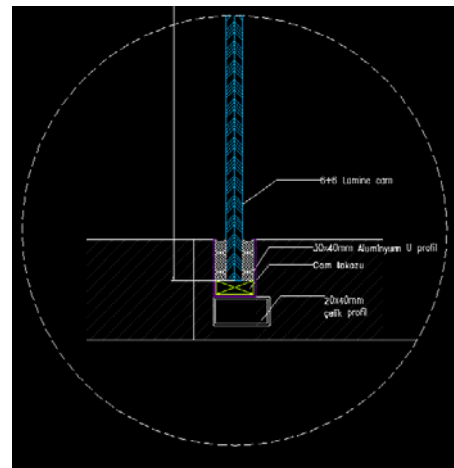
Fire escape continues uninterruptedly from -1<sup>st</sup> floor to terrace at the same axle. There is exposed concrete implementation on its walls. Steps of stairs have been covered with concrete colored stone. There is a metal handle on the wall side. Instead of metal railing, stainless steel ropes have been used through floors (Figure 4.70). Elevator continues uninterruptedly from -1<sup>st</sup> floor to terrace at the same axle. Square elevator is made of glass material. Railing inside it and parts of electrical components are stainless steel. Due to fact that area, to where elevator ending at

terrace goes, is an open space; glass raincoat has been added to elevator exit door (Figure 4.71).

Glass panels taking place next to interior stairs divide space without interrupting the image. These panels act mainly as parapet for stairs. So, individual moving between floors by using stairs can see all floors one passed. Through glass panels, both safeties are provided and daylight can enter into space without any decrease. Glass panels continue from ground to ceiling. Detail drawing of panel on ceiling is shown in Figure 4.72 and detail drawing on ground is shown in Figure 4.73. Upper part of glass panel is combined with suspended ceiling and lower part of it is combined with wooden flooring. 30x120mm aluminum box profile has been used on ceiling and 30x40mm aluminum U profile has been used on ground. Glass used in panel has been formed by combination of 6mm 2 laminate glass. Unlike other floors, card sliding door system is added to these glass panels on 4<sup>th</sup> and 5<sup>th</sup> floors. Due to fact that 4<sup>th</sup> and 5<sup>th</sup> floors are spaces designed for the use of employees except guests, these doors were needed. Card door systems are for preventing the entrance of both undesirable individuals and undesirable sounds of other floors (Figure 4.68).



**Figure 4.72.** Separator glass panel detail taking place in the space



**Figure 4.73.** Separator glass panel detail

## CHAPTER 5

### EVALUATION

#### **5.1 Evaluation of the Renovation and Reclamation Process of Borusan Music House**

Old and new versions of BMH were examined to evaluate the applications on the building throughout the process. First evaluation was aimed at protection of the valuable elements of the old building while the second was aimed at measuring the contributions made by the alternatives which filled the available space created by demolishing the parts of the old building that could not be used.

The front facade and side door are the heritages of the old building which were taken over in new era. Renewal through restoration of the front facade is essentially a sculpturework to be brought to future which needs preservation. Similarly, a valuable item of the city's history, i.e. the side door of the building was restored and presented to the future.

Rest of the old building were completely demolished and renewed with state of art technology which caused many modifications in the building. This part of works was not focused on preserving the original form. The main reason for this was the fact that the function of the building was to be changed completely. Such small partitions of the old building would become completely useless for the new function to be given. The most significant reason for demolition was the fact that the load bearing system of the old building was extremely old which posed great threat to not only those who were inside the building but also those countless pedestrians who are present in the avenue and around the building at any given time of the day. Therefore, the new structure required by new functionality assigned to the building was to be designed and applied in due consideration with the potential earthquake stipulated in İstanbul. For this reason, diagonal steel columns were used as an appropriate solution provided by the latest technology.

The material used for reconstruction of the facade facing OS is chosen to prevent heat loss and to ensure due sound insulation. In the light of the awareness to maximize economizing which have gradually increasing impact on any decision since from early 19<sup>th</sup> Century, a building that maximizes energy efficiency was created. Furthermore, an alive building was created out of a dead one. The proportion of the sections taken over from the old building is relatively very small compared the total size of the new building, therefore, no concerns emerge from the view point of modern architecture.

### **5.1.1 The involvement of the architectural firm**

The full title of the Project at hand is: Borusan Center for Music and Arts. The design team of the is led by Gökhan Avcıoğlu and consists Ozan Ertuğ, Barış Uçar, Ayhan Ürgüplü, Arzu Meyvacı, Yeliz Özsoy, Bora Soykut, Gözde Nur Demir, Serkan Cedetaş and Ertuğrul Morçöl (Url-6). The Architectural Firm of the design team is named; GAD Global Architectural Development; The Owner of the Project is Borusan Holding. Project's preliminary works were completed in 2007-2008 while the construction took place in 2008-2009 (Url-20). Project's construction area: The project area is classified as cultural and has a surface area of 230 m<sup>2</sup> with a construction area of 1900 m<sup>2</sup>.

GAD has received the following awards for BMH project:

2012 Highly Commended Public Service Architecture with Borusan Music and Art House for Europe, International Property Awards

2011 Best Alternative Investments for the Borusan Music and Art House, ArkiPARC

2011 International Architecture Award for the Borusan Music and Art House, Chicago Athenaeum and Europe Architecture Centre (Url-6).

The Chief Architect described the project on web site of the Firm with the following words:

The Borusan Music and Art Center in the historic neighborhood of Beyoğlu, İstanbul is a multi-purpose event space for exhibitions and performance. This new space symbolizes the cultural and arts renaissance occurring throughout the city while paying homage to the grand architectural legacy of İstanbul (Url-6).

Gökhan Avcıoğlu's design preserved and restored the delicate historic shell and defined a void independent from columns through a modern system in inner section that contrasts to this historic shell. The system bears the load in an invisible way through diagrid frames made of lightweight steel. This design approach allowed creation of free spaces wherein any kind of activity or performance may take place. The materials used for historical shell and modern inner structure created an exciting tension between the past and present which forms an ideal sphere for artistic occasions.

During restoration of the building the historical fabric of the building was preserved while a multi-purpose, flexible structure is provided interior as required for a modern space of music and art. The BMH is a six-storey building. The entrance to the exhibition hall faces İstiklal Avenue while main entrance is located at OS. Monolithic glass at the facade of the entry level connected to İstiklal Avenue allows passersby to observe the events inside the building. The entrance level, which is designed as the exhibition space, also provides a flexible arrangement wherein many other events can take place. Visitors are accepted through a monumental glass door.

Open performance spaces on the second and third levels can accommodate up to 200 people seated and 500 people standing. Forth level has six different rehearsal halls while fifth level can hold different events. Finally, sixth floor gives the beautiful, breathtaking view of the Bosphorus. The terrace cannot be reached via elevator but those who bear a series of series are rewarded for their extra effort to enjoy the most comforting and beautiful terrace.

The building also features many works of art that are in harmony with the building as if all of them were made simultaneously. The "Nameless" by Leo Villareal, 2008, is one of such artwork that attracts high attention. Also LED tubes illuminating V shaped columns give an extraordinary appearance for the building.



The walls of the building were covered with due consideration to acoustics according to calculations. Some of the walls were covered with drywall while the floorings were made of wooden parquet and some others were covered with concrete to provide perfect and unique acoustic.

The transparent elevator open for outside viewers creates an astonishing harmony with the rest of the building. Also, the steel elements applied to the stairs highlight the light of the building. As a place for music and arts, the building features many installations related to audio. A good example of this is the thick curtains used on glass separators to prevent echo. Borusan Music House is a perfect “home” wherein extensive services are provided for art-lovers” (Url-6).

#### 5.1.2. Chronology of the renovation works



**Figure 5.1** Photographs of the construction phase as taken by GAD  
(GAD, February 2008)

Upon due exhaustion of legal procedures, the building was circled with necessary fences to start the construction works. For fences, large and hard MDF boards were used to avoid any damage to surroundings and to determine the construction area. Every step behind those fences was photographed by GAD Architecture as the architectural firm of the project. The construction stages of the BMH will be viewed over those photographs.

It is seen on the photograph that nothing was left out of the old building except for the front facade in February 2008 (Figure 5.1). Frontal facade was supported by steel elements which kept it standing (Figure 5.2). Since the previous load bearing



elements were completely removed, at this stage, the front facade silently awaits for construction of new load-bearing element.

At the time, the foundations were laid and the concrete for floor was poured and dried. New diagonal steel system is revealed in basement and even at floor level. Also, U box profiles which will be used in creating the surface between the basement and the ground floor are in place, waiting to be used.



**Figure 5.2** Steel supports are used to keep the frontal facade standing (GAD, February 2008)



**Figure 5.3** Diagonal structure is being erected as the steel beams are placed between the layers (GAD, March 2008)

In March 2008, diagonal structure raised another level and steel beams are tied between the floors (Figure 5.3). The floor concrete was poured and the fire escape works are underway.

In June 2008 walls of basement, ground, first and second levels are erected. Steel sheets and concrete are laid between floors from basement until fourth level. A space was spared and encircled for security for piano elevator shaft at the ground level

(Figure 5.4). Two steel profiles were placed to bear the stairs at the gaps of the floorings level to the stair steps. Boat outlets were placed at the determined sections of the fourth floor where offices and rehearsal rooms that specially needed electricity supply from the ground (Figure 5.5). By the end of June, the structure raised as high as the terrace level and the grounds were covered with metal sheet.



**Figure 5.4** Elevator shaft  
(GAD, June 2008)



**Figure 5.5** Construction works at fourth level  
(GAD, June 2008)

During August 2008 perforated acoustic panels were brought to the construction site. The perimeter of the washroom area was determined and the structure of drywall panels was put in place. During mounting of concrete walls gaps for such elements like fire cabinets that required niches were visible. In order to be able to execute necessary works on 3<sup>rd</sup> level ceiling, a scaffold was established in the gallery void between 2<sup>nd</sup> and 3<sup>rd</sup> levels (Figure 5.6). Side walls were made of ytong. Ventilation and air conditioning systems were installed at ceilings (Figure 5.7) and installation pipes were laid. A hole was opened at the ceiling of the fire escape stairs shaft. Construction of diagonal structure was completed up to terrace floor. The ceiling of

the terrace floor was closed while no side walls were applied (Figure 5.8). Concrete part of the parapet of the view terrace was poured.



**Figure 5.6** Scaffolding in gallery space  
(GAD, August, 2008)



**Figure 5.7** Air conditioners were mounted on ceiling  
(GAD, August, 2008)



**Figure 5.8** Construction of structure reached as high as the terrace level  
(GAD, August, 2008)

During September 2008 the original door located on side facade was renewed in construction site (Figure 5.9). Front facade fortification works and restoration were completed (Figure 5.10). Installation of windows frames started on side facades. At the side adjacent to the neighbor building was already installed with electric and water piping at the shafts that were created beforehand (Figure 5.11). Wiring and piping for smoke detector, sprinklers, lightening installations, speakers and ventilation pipes which were to be hidden above the suspended ceiling were completed. Aluminum frames of the Pop-up windows located on side walls of terrace level were installed. Also color testing on diagonal steel columns was completed. Maintenance of such parts of the building that remain inside the frontal facade was conducted and installation of ventilation pipes continued.



**Figure 5.9** Original side door was restored in situ (GAD, September 2008)



**Figure 5.11** Electricity and installation pipes were installed in the shafts (GAD, September 2008)



**Figure 5.10** Original front facade was restored (GAD, September 2008)



During November 2008, glass windows were installed on walls (Figure 5.12). Upon completion of works on outer shell of the building, the MDF-panel-fence was removed (except for the ground level). Frames of the side wall windows were also renewed as per the originals. The elevator structure was completed within the shaft designed for this purpose (Figure 5.13). The floor of the acoustic panel to be covered on Ytong was prepared. The windows were temporarily covered with nylon to avoid any impact of ongoing construction works. Also, the elevator shaft, which ascended up to the terrace level, was covered with a plate to prevent water from getting into.





**Figure 5.12** Outer windows of the building were installed (GAD, November 2008)



**Figure 5.13** Elevator structure was installed while construction of 2<sup>nd</sup> and 3<sup>rd</sup> floor gallery void was still ongoing (GAD, November 2008)

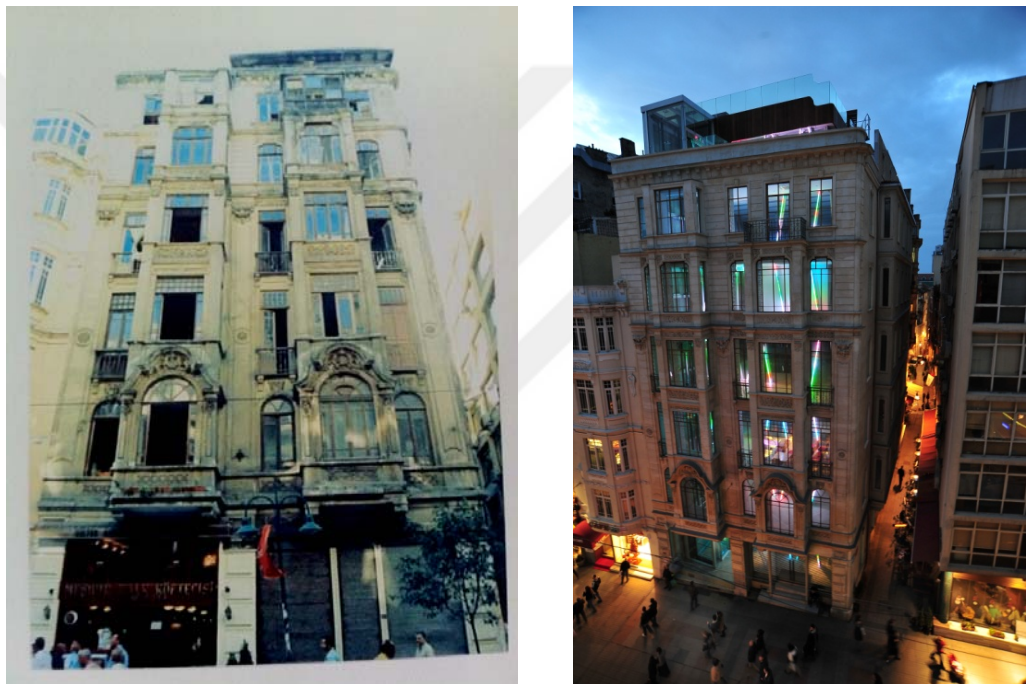
During May 2009, laths as per the original were mounted on the windows of the front facade. Doors and windows of the ground level were installed. MDF panels on the ground level were also removed. Final retouches were made on walls and floors before grand opening. The stairs were installed. Diagonal columns were painted in grey and gravels were placed at the bottom of these columns. At this date, the glass used as the side wall of the staircase was also mounted. Perforated acoustic panels were installed at their predetermined places. The suspended gypsum panels of the ceilings were mounted with gaps for lightening elements. Elevator glasses and doors were installed. Some of ceiling lightening elements was installed. Fire door, fire cabinet and fire alarm buttons were placed. Interior space appearances of the frontal facade were restored. The shafts of electric wires and water pipes were covered with aluminum pipes and glass parapet of the gallery void was installed. Furthermore, the diagonal structure parallel to the front facade was applied with lightening designs. Fire stairs' parapet was installed and step stones were laid.

In June 2009, artworks were placed in ground level. Decorative pebbles were laid and furniture such as chairs were brought to the building. Then boat covers were installed. The stage lighting mechanism of the gallery void was installed and the

floor of the terrace was covered with waterproof material whereupon the technical mechanisms of the building were placed. Also, the part of the elevator which is visible from the terrace took its final form. Finally, the parapets of the terrace were covered with decorative, waterproof material.

## 5.2 Evaluation the new Building

### 5.2.1 The evaluation of the new facade with respect to the surrounding neighborhood of the building



**Figure 5.14** Form function comparison between old front facade and new front facade

Indeed, it is a completely different structure as result of the renovations made with loyalty to the former structure, when looked from outside. One faces the technology and thought structure of the 21<sup>st</sup> century although the number of windows and entrances we see are the same on the facade (Figure 5.14). The people, who used to be anxious while passing by the structure which was about to collapse, are now admirers of the structure.



**Figure 5.15** Form function comparison between old side facade and new side facade

Although the structure which used to have opening windows does not have opening windows now, it is possible to have fresher air in the structure now. Form of the structure was not changed; however, it is now in a soul keeping pace with the street's modern form. Although we can feel porous surface of the side facade only on the photographs, it must not be forgotten that the renewed facade insulated the temperature inside it for the future of world (Figure 5.15).



**Figure 5.16** Form function comparison between old side entrance gate new side exit door function comparisons

The place of restaurant, which was faced when entered from the main door in the 19<sup>th</sup> century, was taken by the art works in the 21<sup>st</sup> century. The stairs which used to appear when entered from the side door to the structure in the 19<sup>th</sup> century left their place to the exit area equipped with the latest technology which can be trusted in emergencies (Figure 5.16).



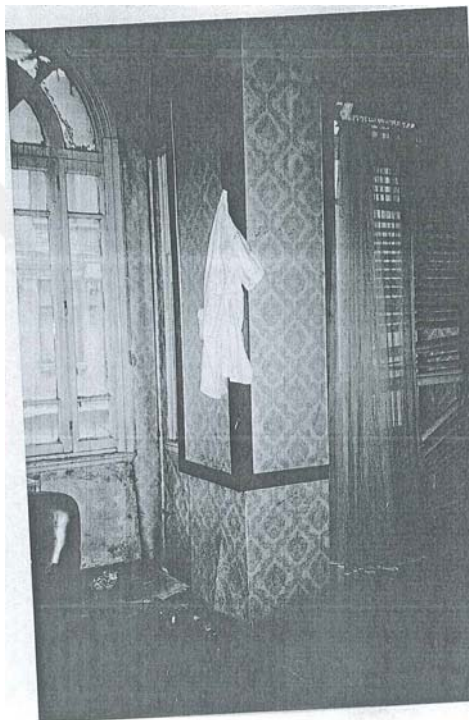
**Figure 5.17** Form function comparison of old ground floor's side facade and new ground floor's side facade

The fact that the windows of side facade which is as valuable as if it has a view of Bosphorus gives us the idea that this area was used as warehouse in the past. Now, this valuable facade must be protected with the same form. It is targeted to meet public and art by removing the walls in İstiklal Avenue, most of which are used as culture center and art house (Figure 5.17).



### 5.2.2 The evaluation of the new spatial configuration with respect to the old building

The biggest change in the interior is undoubtedly the place measures. In the old structure, places used to be small, with walls and doors, however, separators were used as less as possible in the new places. So, design idea making indoors and outdoors closed has not put any borders in the place.



**Figure 5.18** First floor obsolete wallpapers



**Figure 5.19** The first floor front facade elevator relation

According to the information belonging to the structure's form before restoration, taken from the institutions, the first floor was used as a living area until the recent times with its wallpapers and flitting curtains. Thick wooden joinery faces aging, however, it didn't lose anything from its magnificence. Wallpapers have swelled by raising like they know the fashion of 21<sup>st</sup> century (Figure 5.18). In the place, which serves as an exhibition area, we see that the windows lost their opening feature after being restored. New interior wall of the front facade, which reveals with restoration of main structure material under the fancy wallpapers, completes the exhibition

place. Synchronization of the elevator made of glass and steel with the old facade is the most significant frame of change (see Figure 5.19).



**Figure 5.20** The first floor old ceiling decoration



**Figure 5.21.** Current state of the photograph in Figure 5.20

The ceiling detail seen on the photograph taken from the first floor before restoration is thought to be a detail worth for protection if it didn't lose its structure. The books stacked on the table on the photograph shows us the life experience of old state of the structure. Today, in the same place, changing exhibitions are established. It is seen that there is nothing left from the past in ceiling materials. By contrast, it is known that the air-conditioner system embedded in ceiling has taken the place of non-opening windows in the place (Figure 5.21).



**Figure 5.22.** İstiklal Avenue view from the first floor window



**Figure 5.23.** İstiklal Avenue view from the first floor window

New and old photographs taken from bay window of the first floor tells the restoration works made in structure completely. It is seen that İstiklal Avenue, seen from the window on the old photograph, does not have many floors and is full of green (Figure 5.22). Handle of the old window's frame tells us that it was not changed since the year it was made. The curtain, which closes this window, tells us about the privacy inside. In the new structure, we can see high floors but no green on the street. Separators such as curtains or veils are not needed in the new structure as it is used for events (Figure 5.23).





**Figure 5.24** Old fifth floor corridor and balcony



**Figure 5.26** The fifth floor and balcony door



**Figure 5.25** Old fifth floor

According to the information obtained from fifth floor photographs before restoration: The balcony door on the front facade is double-winged woodwork (Figure 5.24). Balcony part is accessed with one step. The sides of balcony were painted to cream color and the balcony was closed with glass work with wooden frame. The corridor in same axis with this balcony is opened to the rooms from right, left and main place. There is one more photograph taken before restoration from the room with balcony. In this figure, it is seen that the walls are painted to white, frames

are wooden and there are wooden ledges on the front side of them (Figure 5.25). The ceiling material is not seen because of the tarp coated by the users. The possible reason of need of tarp is thought to be the water leakage from the ceiling. Indeed, it is seen that tarp was used instead of the broken glass (Figure 5.25).

Old form of the fifth floor used as living area has turned into one of exhibition floors of BMH today. As result of this change, everything but balconies and windows on the front side were changed (Figure 5.26). New balcony door and windows were made on the same line with old wooded frames, but they are in different colors. Balcony door is double winged again. But the balcony is not closed anymore. The floor with many separator walls and doors has left its place to a single area.

### **5.2.3 The evaluation of the new structural system with respect to the new function of the building**

Old masonry retrofit structural system needed to be completely demolished as is such old that it could not be strengthened (Figure 5.27). Structure has been demolished but floor heights and facade borders have continued to be protected. The diagonal steel structure which is the new structural system allows creating large openings. In this way, openings needed for new functions are obtained and the structure is strengthened. Strengthening of the structure is very important for protecting the structure from earthquake. Second benefit of renewal of the structure is in terms of aesthetics. Lightings attached to the structure with electrical outlets made on the bottom of each column are in compliance with the structure's dynamics. The new structure feels the fiction of place in place, rather than separating the place into parts. Steel structure is not an object blocking passage or an object in need of protection. The new structure can be named as a separator panel with passage (Figure 5.28).



**Figure 5.27** Old structural system,  
concrete column



**Figure 5.28** New structural system,  
diagonal steel columns

One of the biggest changes has been the renovation of terrace floor. As result of release of load made on the structure by old roof, BMH had a design with view terrace. On the photograph taken before restoration, it is seen that the old stacked structure is dangerous (Figure 5.29). As result of the fact that floor height of the old structure was not changed, the terrace floor starts at the line where the older front facade ends. Diagonal steel structure is seen in this floor too. With help of the water proof materials used instead of roof in BMH, schematic and publicly available view terrace was obtained (Figure 3.30).

Materials, as well as the places, of structure's stairs were changed and adopted to today. Steel carrier stairs have taken the place of old concrete stairs. Straight glass has taken the place of old wrought iron wooden handle parapet. Walls of stairs and plasters are painted (Figure 5.31). In the new application, walls next to stairs are coated with perforated acoustic panels. Old stairs have created a place within themselves. New stairs have joined the place as design objects (Figure 5.32).



**Figure 5.29** Roof floor old structural system, tile roof



**Figure 5.30** Roof floor new structural system



**Figure 5.31** Old concrete stairs



**Figure 5.32** New steel stairs



#### **5.2.4 The evaluation of the new space in terms of construction materials**

Due to the fact that the structure's function is musical hall, first preference reason in material selection must be acoustic features. The fact that the floor coating is partially epoxy, partially hardwood, configuration of the walls with acoustic panels and preference of gypsum panel on ceilings is because of use of the structure as music events hall.

Considering the whole body of the building it is not possible to claim a variety for materials used. This can be a result of the lack of interior architect for BMH project or may be a decision by the project management to avoid tackling multiple materials. Nonetheless, the success of material choice is reflected in the popular appreciation of the building. In fact, should one or more interior architects were assigned during project preparation phase; the following changes might have been made on material decisions:

The perforated acoustic panels used for flooring are of a type that can be easily damaged by the visitors or by impact of any material being handled. For this reason, at all floors, existing type of perforated panels could be used for heights over 160 cm from the floor while the parts of walls below 160 cm could be covered with another acoustic material with higher durability.

For the flooring concrete-appearance industrial epoxy is used. This material needs polishing and shining at regular intervals. This material has a very long economic life which, however, may outlast its vogue. For this reason it is suggested to change the color during such maintenance activities.

Wood parquets were also used for flooring. These could become worn rather sooner than the epoxy. For this reason it should be maintained at different intervals by different units. This also lead a requirement to choose different cleansing materials for daily or weekly cleaning activities. However, if epoxy was used instead of parquet parts, such problems could have been avoided. Also, regarding the parquets, selection of colors could use some insight. Instead of risk-free colors commonly



found in every restaurant and houses nowadays, bright, marginal colors could be used to highlight the artistic identity of the building.

In recent years, there is an abundance of ceiling materials. Given abundance of variety, one can assert that better and more diligent choices could be done for BMH's ceilings. The ceilings, beside that of the ground floor, were constructed to merely satisfy the functional needs without any consideration to the design.

If glass was used in the metal stairs this would give a more intense sense of interrelation between the floors. In recent years glasses with very high bearing properties were developed. The possibility to use glass in stair structure could have been investigated. It is a known fact that every-day, ordinary architectural companies cannot conduct such investigations due to financial concerns. However, for this project, the owners of the project do not seem to have such concerns. Also, the existing arrangement of the stairwell causes insufficient lightening after sundown. Artificial lightening could have been considered for such parts. For instance the wall-mounted railing could have been a design element which radiates light.

Straight fluorescent lights mounted on columns could have been replaced with spiral or circular forms that encircle the column. This would ensure that the users of the building could enjoy the light-shows as seen from outside.

Lastly, the fixtures, water closets and washbasins used in the restroom sections could be selected from the products of known/famous designers. This would, again, allow the users of the building to experience something different than what they already use in their own houses or in any common restaurant.

### **5.2.5 The evaluation of the new space in terms of construction lighting**

In the structure's outer facade lighting, lights located on the facade in most of buildings similar to BMH architecture were not preferred. Instead, diagonal structure was used for lighting the structure at night. When looked at the structure from outside at night, the first thing we see is an unnamed art work designed in 2008 by Leo Villarreal. This art work is used as facade lighting in the structure. The colors

are used separately or mobile by winging on request (see Figure 5.33). Although it is an art work, it was adopted to the building. So, the artist has contributed to the structure with adjustments during and after assembly (see Figure 5.34).

During the day, sunlight entering from the outer facades are quite sufficient for lighting the structure. It's because there is nothing cutting the light on the front facade. The stairs located in parallel with the side facade's walls does not prevent sunlight due to its structure. Perforated structure of the steps of stairs, lack of risers and preference of parapet due to the structure and preference of glass materials which are completely transparent allows sunlight from the side facade.



**Figure 5.33** The new lighting system which is located from inside to the outer facade and which has red, blue, purple and yellow colors lighting respectively

As the places were separated with walls in the old structure, there were lighting spaces in different points of the structure. Today, the main reason why these lighting spaces are not used in new structures is that the rooms are deemed to be blind rooms. So, even if BMH was designed as a place to be used as living area, it would have been planned in such manner that lighting spaces would not be needed due to its new design.

Lighting plan of the structure, which is use as music hall today, is almost the same in every floor. As height of gallery space is more than the other floors, lighting fixture used was calculated according to the height of this floor. An fixture stronger than the other floors was preferred.



**Figure 5.34** Figure assembly works of the art works on diagonal structure

## CHAPTER 6

### CONCLUSION

This thesis was emerged with the idea of possibility to renew buildings as well as restoration of the historical buildings. After this, perspective of laws, codes and regulations in this situation was revealed. Comparison of the rules in renewing in our country allowed us to meet the world in the same subject by making decision after examination of the rules around the universe. It was shown that it is possible to have qualified buildings in the future, by making qualified interventions. Old buildings survived from past to present include the efforts of carrying to the future as result of changing environmental factors.

If the historical structures are in a place which is crowded, it will not be sufficient to protect only their physical existence. It is necessary to make their physical forms functional by adding functions to the structures according to the characteristics of that town. In this way, the structure will be assessed as a living place instead of standing like a statue. One must also consider the innovations presented to the humans by technology during adoption of historical buildings to today. Being opened to such innovations means expanding the life of structure in the future. In historical buildings, it is necessary to make innovations sometimes with little touches and sometimes with profound changes.

When it is deemed necessary to consider an immovable historical structure, methods determined by architects and employers are selected and applied. Designs of these modern additions, which seem to be reverse with the structure although they are brought by the technology, will be different in each structure.

Selected research place was BMH. The first reason in preference of BMH is that it is a leading point determining Turkey's pulse due to its location. The second reason is that the team designing the structure is the leading mind determining Turkey's architecture and decoration future. Due to the strategical location of structure, it is important that the intervention to make on the structure must be made by

professionals. People making the renovation works must be people who can answer needs and requests of the society. Compliance of selected function with structure and environment is very important in terms of long life of the structure which was renewed.

Members of BMH renovation team are individuals with deep knowledge about the social trends and needs and also with excessive sensitivity for environmental protection. However, the very fact that all of the team members are architects proves that the importance of the interior architecture, as a profession is yet to be understood even by those with high awareness. The main reason for lack of appropriate public respect for interior architecture is the fact that the interior architects in most of the shows on visual media are characterized as marginal, gold digger, shallow and even sassy personalities. Also, practitioners of interior architecture are practically used as slaves in architectural firms in terribly underpaid positions, all while trying to achieve a higher social status for their trade. This is yet another proof that the architects and engineers (owners of such firms) do not have any regard to the interior architecture even though they practically qualify as parents of this profession. The project reviewed in this study is obviously a highly important and valuable project. Had an interior architect been assigned to this project, it would have significant impacts on the course of the project. When a person perambulates from ground to top floor through stairs, the monotony takes its toll and the person's attention diminishes at higher levels. Each of the floors so resembles the others that creates monotony and causes loss of attention. However, should each floor was assigned to a different interior architect; it would be a good opportunity to show the public how interior architects can create astonishing works and to keep the building from monotony. Assignment of an interior architect to project would turn this building into a marvel to be described in lecture halls in architecture and interior architecture departments for many years to come.

Any renovation project requires an in-depth investigation of reasons for disappearing of the building's previous functions. The investigation needs to aim at identifying the new function to be provided for the building. It is a must for this function to be in harmony with the building and with the environmental aspects so as to ensure a long life for renewed building.

As a general result emerging as result of examination of old-new structure schemes, it is seen that plain schemed, uncut large places have taken the places of complex schemed, separated plans used in old structures. Although this situation is seemed to be due to change of the place's function, it is a result of the fact that designers have thrown their blindfolds away. Plans, which got out of known schemes with help of innovative designers, have turned into places with different fictions.

Today, there are many structures which are left alone but having historical value. The society must be informed for protecting these structures which are witnesses of historical and cultural heritage. Protection concept, which used to be evaluated alone in the structures with more historical qualifications, has expanded in such manner that it foresees protection of a historical, social and art structure or structure group having monumental qualifications. Today, even small and basic structures are considered as monuments despite the fact that only the structures with archaeological values used to be protected in the past. This shows the value we place on this subject as society.

Future studies may also benefit from this study. Firstly, the future studies may possibly use the present study as a guide for investigating the additions to the buildings in 22<sup>nd</sup> Century. Such additions would probably be insulated spaces to be created by the people based on their natural instinct for protection against the nature. Needing protection from elements, the mankind will need to isolate their living spaces. We, as the species, will need to protect the buildings (which currently protect us from elements) at a different scale. The historical buildings may preserve their functionality as living spaces yet, it might very well be needed to place them within glass bells. Secondly, the present study may be used to investigate the standing of renovation in a different city of Turkey. Thirdly, it can be used for comparison with other examples located in the same area.

Finally, it is possible to follow-up the change progress of BMH with the photographs taken in different times on the ground floor. There are unlimited choices to be applied on the place which is completely demolished and whose borders are significant. GAD has made the choice which is the most appropriate with location and function of the structure. Today, it can be thought that shortcuts, which is the

first art work seen when entered to the structure, is located in a quite deep niche. Indeed, it is understood that the niche is only 4 cm deep when we look at the space left empty for this art work before assembly. When we look at the art works before they are connected to electricity after assembly, we can see how far they are from magnificence. It is understood that the place is worth visiting, after closing the spaces on the upper line of wall with walls and same materials and after turning the lights of art works on.

There is a conflict between the electrical plan and applied form of the ground floor which is full of permanent art works. According to the information in electrical plan, downlight fixtures were not used in the plan; ground floor's ceiling was mentioned to be PVC stretched ceiling. It is thought that these additional lightings were needed due to change of ceiling materials during application. This situation continues in the plans of first floor. So, the ceiling is seen in the first floor electrical plans, but there is suspended ceiling in the applied form of it.

Another issue not in compliance with the plans in terms of the ground floor is about the side facade door. In the plans, it is seen that the side facade door is directly opening to the ground floor's exhibition area. However, it shall be possible to pass from the corridor to the exhibition area when entered to the place from the side door before passing from the fire door.

According to the information obtained from plans, there is restroom in each floor, however, in the building exploration, it is mentioned that there is no restroom in 2<sup>nd</sup> and 3<sup>rd</sup> floors. As these floors are usually used for concerts and for preventing sound coming to the concert area from restrooms, this situation is seem to be quite logical. Electrical plan in restroom are not in compliance with the applied lightings. In the plan, there is information regarding 1x18 W surface mounted fluorescent fixtures. Washbasin mirror is seemed to be the locating place. Yet, there is homogenous lighting embedded in the ceiling without welding.

There is one elevator in the structure. It provides access to floors -1, 0, 1, 2, 3, 4, 5 and 6 (terrace). When the construction stage of this elevator is examined, it is seen that the elevator's shaft is under the floor -1. In the construction stage of elevator,

safety of the space left for elevator in the structure was considered in every stage. Iron balustrades were located 1 m above the slab line as safety measure. Today, the elevator is located on the left at the end of reception counter when entered from the main entrance. Tight view of elevator, column and bank, in spite of the wide area, does not affect circulation.

People using the elevator can see İstiklal Avenue as well as they can have information about the floors due to the elevator's position and material. In the same way, guests who use the side stairs can watch OS as well as they have the chance to see the floors.

In BMH, there are only two floors separated into parts. One of them is the basement floor and the other one is the fourth floor. There are rehearsal rooms in these parts which were designed with the idea of place in place. In the rehearsal rooms, artificial light is used because they cannot benefit from the sunlight due to lack of windows. In this floor, because of the separators, the light coming from the windows cannot even light the corridor even when the sunlight is sufficient in the other floors.



## REFERENCES

1. **Yılmaz M.Y. (2011).** “Eskişehir’i Ankara’dan Yönetmeye Çalışmak”  
Hürriyet Gazetesi 06.06.2011
2. **Polat S. (2005).** “Mimarlık ve Kentsel Yaşam Kalitesinin Sağlanmasında Dönüşüm Projelerinin Rolü: Bursa Santral Garaj Bölgesi Örneği”, Uludağ Üniversitesi, Turkey.
3. **Avcı N. (2003).** “Anıtsal Yapılara Uygulanabilecek Eklerin Çeşitlerinin Araştırılması ve Örneklerle Açıklanması”, Yıldız Teknik Üniversitesi, İstanbul, Turkey.
4. **Hasol D. (2002).** “Ansiklopedik Mimarlık Sözlüğü”. Yapı Endüstri Merkezi Yayınları, 8.Baskı.
5. **RGMRICP (1999).** “Taşınmaz Kültür Varlıklarının Gruplandırılması, Bakım ve Onarımları”, Türkiye Cumhuriyeti Kültür ve Turizm Bakanlığı, 660 Nolu İlke Kararı, Retrieved December 27, 2011, from <http://teftis.kulturturizm.gov.tr/TR,13918/660-nolu-ilke-karari-tasinmaz-kultur-varliklarinin-grup-.html>
6. **LPCNP (1983).** “Kültür ve Tabiat Varlıklarını Koruma Kanunu”, No:2863, Retrieved December27, 2011, from [www.mevzuat.gov.tr/MevzuatMetin/1.5.2863.doc](http://www.mevzuat.gov.tr/MevzuatMetin/1.5.2863.doc)
7. **Özel B. (2006).** “Eski Yapıların Yeni İşlevle Değerlendirilmesi”, Yıldız Teknik Üniversitesi, İstanbul, Turkey.
8. **Kejanlı D.T., Akın C.T., Yılmaz A. (2007).** “Türkiye’de Koruma Yasalarının Tarihsel Gelişimi Üzerine Bir İnceleme”. Elektronik Sosyal Bilimler Dergisi. Retrieved January 28, 2016, from [http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=3&vtadi=TPRJ%2CTTAR%2CTTIP%2CTMUH%2CTSOS%2CTHUK&c=google&s\\_f=5&detailed=1&keyword=83685](http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=3&vtadi=TPRJ%2CTTAR%2CTTIP%2CTMUH%2CTSOS%2CTHUK&c=google&s_f=5&detailed=1&keyword=83685)
9. **Kültür ve Tabiat Varlıklarını Koruma Kanunu, (1983).** Türkiye Cumhuriyeti Başbakanlık. Retrieved December 27, 2011, from <http://www.mevzuat.gov.tr/>

10. **Zeren, N. (1981).** “Koruma Amaçlı İmar Planı Yapım ve Uygulama Sorunları”, Çevre ve Şehircilik Uygulama Araştırma Merkezi Yayınları, İTÜ, İstanbul.
11. **Bektaş C. (2001).** “Koruma Onarım”, Litaratür Yayınları, İstanbul.
12. **Onur H. (2010).** “Tarihi Yarımada Alan Yönetimi Planı ve Koruma”, Kagit Yapılarda Koruma ve Onarım Semineri 2, İstanbul Büyükşehir Belediyesi İmar ve Şehircilik Daire Başkanlığı Koruma Uygulama ve Denetim Müdürlüğü.
13. **SRRP (2011).** “Tek Yapı Ölçeğinde Rölöve, Restitüsyon ve Restorasyon Projeleri Teknik Şartnamesi”, Türkiye Cumhuriyeti Kültür ve Turizm Bakanlığı. Retrieved December 27, 2011, from <http://www.kulturvarliklari.gov.tr/>
14. **Erim M. (2007).** “Türkiyedeki Restorasyon Çalışmaları ve Restorasyon İşletmelerinin İncelenmesi”, Çağ Üniversitesi, Mersin, Turkey.
15. **Ahunbay Z. (2011).** “Tarihi Çevre Koruma ve Restorasyon”, YEM Yayın, 6.baskı, İstanbul.
16. **Velioğlu A. (1992).** “Tarihi Çevre İçinde Mimari Tasarım ve Süreci Üzerine Bir Araştırma”, Karadeniz Teknik Üniversitesi, Trabzon.
17. **Ahunbay Z. (1996).** “Tarihi Çevre Koruma ve Restorasyon”, YEM Yayın, İstanbul.
18. **BUCSPIPR (2009).** “ Beyoğlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu”, Şehir Planlama Müdürlüğü, İstanbul.
19. **RIRICNPP (1987).** “Korunması Gerekli Taşınmaz Kültür ve Tabiat Varlıklarının Tespit ve Tescili Hakkında Yönetmelik”, Retrieved December 27, 2011, from <http://teftis.kulturturizm.gov.tr/TR,14437/korunmasi-gerekli-tasinmaz-kultur-ve-tabiat-varliklarin-.html>
20. **Kuban D. (2000).** “Tarihi Çevre Korumanın Mimarlık Boyutu”, YEM Yayın, İstanbul.
21. **Demircan A.M. (2014).** “Üst Yapı Yatırımları”, Retrieved January 28, 2016, from <http://www.ahmetmisbahdemircan.org/hizmetlerim/default.aspx?SectionId=89&ContentId=2402>

22. **CACOPR (2005)**. “Koruma, Uygulama ve Denetim Büroları, Proje Büroları ile Eğitim Birimleri Kuruluş, İzin, Çalışma Usul ve Esaslarına Dair Yönetmelik”, Kültür ve Turizm Bakanlığı.
23. **Onur H. (2003)**. “Kültür ve Tabiat Varlıklarını Koruma Kurulu’na yazılan dilekçe”, İstanbul.
24. **Sezer S; Özyalçın A. (2010)**. “Öyküleriyle İstanbul Anıtları-II Saray’ dan Liman’a”, Evrensel Basım Yayın, İstanbul.
25. **Altınoluk U. (1998)**. “Binaların Yeniden Kullanımı”, YEM Yayın, İstanbul.
26. **Çöğür M.T. (2007)**. “Yığma Yapıların Yatay Derz Güçlendirme Yöntemiyle Güçlendirilmesi”, Selçuk Üniversitesi, Konya, Turkey, pp:52.
27. **Şahin Tural A. (2006)**. “İstanbul Beyoğlu’nda Yer Alan Yeme İçme Mekanlarının Tasarımında ve Kullanımında Yeni Eğilimler”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
28. **Dinç E. B. (2012)**. “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
29. **Construction Sign (2011)**. Salt Beyoğlu’nun İnşaat Tabelasındaki Yazı, İstiklal Caddesi, Beyoğlu, İstanbul.
30. **İbb (2016)**. “Geographic Location and Strategic Importance”, İstanbul 2010 European Capital of Culture. Retrieved January 28, 2016, from <http://www.ibb.gov.tr/sites/ks/en-us/0-exploring-the-city/location/Pages/GeographicalandStrategicPosition.aspx>
31. **Tekeli İ. (1994)**. “The Development of the İstanbul Metropolitan Area”, Kent Press, İstanbul.
32. **Akın N. (2002)**. “19.Yüzyılın İkinci Yarısında Galata ve Pera”, Literatür Yayıncılık, İstanbul.
33. **Yalçınkaya F. (2010)**. “Beyoğlu’nun Orta Yeri Müzik Evi”, Sabah Gazetesi, Retrieved January 28, 2016, from [http://www.sabah.com.tr/cumartesi/2010/01/23/istiklalde\\_muzik\\_evi\\_donemi](http://www.sabah.com.tr/cumartesi/2010/01/23/istiklalde_muzik_evi_donemi)
34. **Elgin A. (1984)**. “Anıtlar Yüksek Kuruluna Verilen Dilekçe”, Kurul Dosyası, İstanbul.
35. **Arun, G. (February, 12, 2005)**. Yığma Kagir Yapı Davranışı. METU, Ankara. Retrieved December 27, 2011, from

[http://home.anadolu.edu.tr/~yguney/cemil\\_historical/Historical\\_Buildings/March\\_2007/11.%2520Gorun%2520Arun%5B1%5D.pdf](http://home.anadolu.edu.tr/~yguney/cemil_historical/Historical_Buildings/March_2007/11.%2520Gorun%2520Arun%5B1%5D.pdf)

36. **Özkaya H. (2014)**. “Çatılar”, Retrieved November 03, 2015, from <http://www.harunozkaya.com/wp-content/uploads/2014/01/10-%C3%87at%C4%B1lar.pdf>
37. **Latek (2011)**. “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd. Şti.”, İstanbul.
38. **Yorgun C. (2005)**. “Çelik Saç Beton Kompozit Döşeme Sistemlerinin Uygulamalarına Yönelik Değerlendirmeler”, Türkiye Mühendislik Haberleri, Sayı: 435, 2005/1. Retrieved December 27, 2011, from [http://www.imo.org.tr/resimler/dosya\\_ekler/57964cc505556b9\\_ek.pdf?dergi=160](http://www.imo.org.tr/resimler/dosya_ekler/57964cc505556b9_ek.pdf?dergi=160)

**Url-1**

<[http://www.tdk.gov.tr/index.php?option=com\\_gts&arama=gts&guid=TDK.GTS.56a8987e8553a1.90765714](http://www.tdk.gov.tr/index.php?option=com_gts&arama=gts&guid=TDK.GTS.56a8987e8553a1.90765714)> [Accessed; January, 27, 2016].

**Url-2**

<<http://tdkterim.gov.tr/bts/>> [Accessed; December, 27, 2011]

**Url-3**

<<http://www.mevzuat.gov.tr/Kanunlar.aspx> [Accessed; December 2013]

**Url-4**

<http://www.themarmarahotels.com/anasayfa.aspx> [Accessed; 2011)

**Url-5**

<<http://www.hurriyet.com.tr/dekorasyonu-en-guzel-10-restoran-203960>  
[Accessed; December, 10, 2015]

**Url-6**

<<https://www.gadarchitecture.com/en/> [Accessed; 2015]

**Url-7**

<<http://www.halukderya.com/> [Accessed; 2015]

**Url-8**

<<http://tasarimdergisi.com/kamusalligi-yeniden-ortaya-cikarmak-cagdas-bir-kamusal-mekan-ornegi-olarak-salt-beyoglu/> [Accessed; 2015]

**Url-9**

<[http://www.tucsa.org/tr/celik\\_yapilar\\_yazi.aspx?yazi=226](http://www.tucsa.org/tr/celik_yapilar_yazi.aspx?yazi=226)  
[Accessed; 2015]

**Url-10**

<<http://www.celalerdem.com/#!/salt-beyolu/c8sp> [Accessed; 2015]

**Url-11**

<[http://www.artemide.com/luce\\_servizi/download/cataloghi/docs/cataloghi/2013\\_nordlight/flipping\\_book/files/assets/basic-html/index.html#305](http://www.artemide.com/luce_servizi/download/cataloghi/docs/cataloghi/2013_nordlight/flipping_book/files/assets/basic-html/index.html#305) [Accessed; 2016]

**Url- 12**

<[http://www.artemide.com/luce\\_servizi/download/cataloghi/docs/cataloghi/2013\\_nordlight/flipping\\_book/files/assets/basic-html/page174.html](http://www.artemide.com/luce_servizi/download/cataloghi/docs/cataloghi/2013_nordlight/flipping_book/files/assets/basic-html/page174.html) [Accessed; 2016]

**Url- 13**

<[http://www.garanti.com.tr/tr/garanti\\_hakkinda/surdurulebilirlik/kurumsal\\_sorumluluk/kultur\\_sanata\\_destek/salt/salt\\_galata.page](http://www.garanti.com.tr/tr/garanti_hakkinda/surdurulebilirlik/kurumsal_sorumluluk/kultur_sanata_destek/salt/salt_galata.page) [Accessed; 2016]

**Url-14**

<<http://v2.arkiv.com.tr/p11136-salt-galata.html> [Accessed; 2016]

**Url-15**

<<https://designmixer.com.tr/2012/02/22/salt-galata-ve-robinson-cruose-389-tasarim-hikayesi/> [Accessed; 2016]

**Url-16**

<<http://sanalarc.prosite.com/58484/484480/selected-works/salt-research-salt-aratma> [Accessed; 2016]

**Url-17**

<<http://www.borusan.com.tr/tr/hakkimizda/kilometre-taslari> [Accessed; 2016]

**Url-18**

<[http://www.borusansanat.com/tr/borusan-muzik-evi\\_4/tarihce\\_29/](http://www.borusansanat.com/tr/borusan-muzik-evi_4/tarihce_29/)  
[Accessed; 2016]

**Url-19**

<[http://www.tdk.gov.tr/index.php?option=com\\_gts&arama=gts&guid=TDK.GTS.56acc8361a4a12.10170861](http://www.tdk.gov.tr/index.php?option=com_gts&arama=gts&guid=TDK.GTS.56acc8361a4a12.10170861) , [Accessed; January, 27, 2016]

## Url-20

<<http://v2.arkiv.com.tr/p9445-borusan-muzik-ve-sanat-evi.html>

[Accessed; January, 27, 2016]

**Figure 2.1** Taken by author [January, 5, 2012]

**Figure 2.2** Taken by author [January, 5, 2012]

**Figure 2.3** Taken by author [January, 5, 2012]

**Figure 2.4** Taken by author [January, 5, 2012]

**Figure 3.1** < <http://eski.istanbulium.net/post/115559481640/ortak%C3%B6y-kartpostal>

[Accessed; January, 5, 2016]

**Figure 3.2** google earth (10.12.2011; 23:30)

**Figure 3.3** <<http://www.milliyet.com.tr/fotogaleri/53313-yasam-hic-bilmediginiz-istanbul/51>) [Accessed; November, 26, 2015]

**Figure 3.4** Altınoluk U. (1998). “Binaların Yeniden Kullanımı”, YEM Yayın, İstanbul.

**Figure 3.5** Altınoluk U. (1998). “Binaların Yeniden Kullanımı”, YEM Yayın, İstanbul.

**Figure 3.6** Altınoluk U. (1998). “Binaların Yeniden Kullanımı”, YEM Yayın, İstanbul.

**Figure 3.7** Altınoluk U. (1998). “Binaların Yeniden Kullanımı”, YEM Yayın, İstanbul.

**Figure 3.8** Taken from GAD Architecture [March, 10, 2011]

**Figure 3.9** Taken from GAD Architecture [March, 10, 2011]

**Figure 3.10** Taken from GAD Architecture [March, 10, 2011]

**Figure 3.11** Taken by author [March, 10, 2011]

**Figure 3.12** Taken by author [March, 10, 2011]

**Figure 3.13** Taken by author [March, 10, 2011]

**Figure 3.14** Taken by author [March, 10, 2011]

**Figure 3.15** Taken by author [March, 10, 2011]

**Figure 3.16** Taken by author [March, 10, 2011]

**Figure 3.18** Taken by author [March, 10, 2011]

**Figure 3.19** Taken by author [March, 10, 2011]

- Figure 3.20** Taken by author [March, 10, 2011]
- Figure 3.21** Çoğürçü M.T., (2007). “Yığma Yapıların Yatay Derz Güçlendirme Yöntemiyle Güçlendirilmesi”, Selçuk Üniversitesi, Konya, Turkey.
- Figure 3.22** Şehir Planlama Müdürlüğü (2009). Beyoğlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu, sf:3-172
- Figure 3.23** < <https://www.gadarchitecture.com/tr/changa-restaurant> [Accessed; November, 26, 2015]
- Figure 3.24** Şehir Planlama Müdürlüğü (2009). Beyoğlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu, sf:3-172.
- Figure 3.25** Şehir Planlama Müdürlüğü (2009). Beyoğlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu, sf:3-172.
- Figure 3.26** Şehir Planlama Müdürlüğü (2009). Beyoğlu Kentsel Sit Alanı Koruma Amaçlı Uygulama İmar Planı Raporu, sf:3-172.
- Figure 3.27** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.28** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.29** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.30** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.31** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.32** < <http://v2.arkiv.com.tr/p619-changa.html> [Accessed; November, 26, 2015]
- Figure 3.33** < <https://www.gadarchitecture.com/tr/changa-restaurant> [Accessed; November, 26, 2015]
- Figure 3.34** < <https://www.gadarchitecture.com/tr/changa-restaurant> [Accessed; November, 26, 2015]
- Figure 3.35** < <https://www.gadarchitecture.com/tr/changa-restaurant> [Accessed; November, 26, 2015]
- Figure 3.36** < <https://www.gadarchitecture.com/tr/changa-restaurant> [Accessed; November, 26, 2015]

**Figure 3.37** < <https://www.gadarchitecture.com/tr/changa-restaurant>

[Accessed; November, 26, 2015]

**Figure 3.38** < <http://www.gezinim.com/banuyobas/salt-beyoglu/>

[Accessed; November, 26, 2015]

**Figure 3.39** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.

**Figure 3.40** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.

**Figure 3.41** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.

**Figure 3.42** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.

**Figure 3.43** < <http://www.arkiv.com.tr/proje/salt-beyoglu/2633>

[Accessed; November, 28, 2015]

**Figure 3.44** < <http://www.halukderya.com/> [Accessed; November, 28, 2015]

**Figure 3.45** < <http://www.halukderya.com/> [Accessed; November, 28, 2015]

**Figure 3.46** < <http://www.arkiv.com.tr/proje/salt-beyoglu/2633>

[Accessed; November, 28, 2015]

**Figure 3.47** < <http://www.gurmerehberi.com/yemek-kulturu/gurmelerden/sanat-eseri-gibi-bistro/> [Accessed; November, 28, 2015]

**Figure 3.48** < <http://www.celalerdem.com/#!/salt-beyolu/c8sp>

[Accessed; November, 28, 2015]

**Figure 3.49** < [http://www.artemide.com/luce\\_servizi/download/cataloghi/docs/cataloghi/2013\\_nordlight/flipping\\_book/files/assets/basic-html/page174.html](http://www.artemide.com/luce_servizi/download/cataloghi/docs/cataloghi/2013_nordlight/flipping_book/files/assets/basic-html/page174.html) [Accessed; 2016]

**Figure 3.50** < <https://www.gogobot.com/istanbul/things-to-do/salt-galata>

[Accessed; November, 28, 2015]



- Figure 3.51** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
- Figure 3.52** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
- Figure 3.53** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
- Figure 3.54** <<http://www.halukderya.com/> [Accessed; December, 8, 2015]
- Figure 3.55** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
- Figure 3.56** <[http://galeri2.arkitera.com/main.php?g2\\_view=core.DownloadItem&g2\\_itemId=77288&g2\\_serialNumber=2](http://galeri2.arkitera.com/main.php?g2_view=core.DownloadItem&g2_itemId=77288&g2_serialNumber=2) [Accessed; December, 8, 2015]
- Figure 3.57** Dinç E. B., (2012). “Melez Mekansallaşmanın Dışavurumu: Salt Beyoğlu ve Salt Galata”. Mimarlık Ana Bilim Dalı, Yüksek Lisans Tezi, İTÜ.
- Figure 3.58** <<http://www.bantmag.com/magazine/issue/post/24/85> [Accessed; December, 18, 2015]
- Figure 3.59** <[http://www.mimarizm.com/haberler/salt-galata-hem-kentin-hem-bolgenin-arastirma-ussu-olacak\\_117095](http://www.mimarizm.com/haberler/salt-galata-hem-kentin-hem-bolgenin-arastirma-ussu-olacak_117095) [Accessed; December, 18, 2015]
- Figure 3.60** <<http://www.halukderya.com/> [Accessed; December, 20, 2015]
- Figure 3.61** <<http://www.halukderya.com/> [Accessed; December, 20, 2015]
- Figure 3.62** < <http://www.superpool.org/index.php/work/salt-offices> [Accessed; December, 20, 2015]
- Figure 4.1** Taken from Google earth [Accessed; December, 10, 2011]
- Figure 4.2** Taken from Google earth [Accessed; December, 18, 2013]
- Figure 4.3** Taken from Google earth [Accessed; December, 10, 2011]
- Figure 4.4** Taken from Preservation Board of Beyoğlu Municipality [January, 5, 2012]
- Figure 4.5** Taken from Beyoğlu Municipality [January, 5, 2012]

- Figure 4.6** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü”(<http://www.kulturvarliklari.gov.tr/TR,43058/istanbul-2-numarali-kultur-varliklarini-koruma-bolge-ku-.html> ) [January, 5, 2012]
- Figure 4.7** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.8** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.9** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.10** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.11** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.12** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.13** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.14** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.15** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.16** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.17** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.18** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.19** Arun, G. (February, 12, 2005). Yığma Kagir Yapı Davranışı. METU, Ankara.
- Figure 4.20** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.21** Taken from Beyoğlu Municipality [January, 5, 2012]

- Figure 4.22** Taken from Beyoğlu Municipality [January, 5, 2012]
- Figure 4.23** Taken from Beyoğlu Municipality [January, 5, 2012]
- Figure 4.24** < <http://www.beykozmetal.com/Default.asp?id=74>  
[Accessed; May, 26, 2015]
- Figure 4.25** Taken from Beyoğlu Municipality [January, 5, 2012]
- Figure 4.26** Taken from Beyoğlu Municipality [January, 5, 2012]
- Figure 4.27** < <http://www.harunozkaya.com/wp-content/uploads/2014/01/10-%C3%87at%C4%B1lar.pdf>> (November, 3, 2015)
- Figure 4.28** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.29** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.30** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.31** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.32** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.33** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.34** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.35** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]
- Figure 4.36** <<http://www.harunozkaya.com/wp-content/uploads/2014/01/10-%C3%87at%C4%B1lar.pdf>> [Accessed; December, 03, 2015]
- Figure 4.37** Taken by author [January, 3, 2012]
- Figure 4.38** Taken by author [January, 3, 2012]
- Figure 4.39** Taken by author [January, 3, 2012]
- Figure 4.40** Taken by author [January, 26, 2011]
- Figure 4.41** < <https://www.gadarchitecture.com/tr/borusan-muzik-ve-sanat-merkezi>  
[January, 26, 2016]

**Figure 4.42** < <https://www.gadarchitecture.com/tr/borusan-muzik-ve-sanat-merkezi>

[January, 26, 2016]

**Figure 4.43** Taken by author [January, 26, 2011]

**Figure 4.43** Taken by author [January, 26, 2011]

**Figure 4.43** Taken by author [January, 26, 2011]

**Figure 4.43** Taken by author [January, 26, 2011]

**Figure 4.44** Taken by author [January, 26, 2011]

**Figure 4.45** Taken by author [January, 26, 2011]

**Figure 4.46** Taken by author [January, 26, 2011]

**Figure 4.47** Taken from GAD Office [January, 26, 2011]

**Figure 4.48** Taken from GAD Office [January, 26, 2011]

**Figure 4.49** Taken from GAD Office [January, 26, 2011]

**Figure 4.50** <<http://isea2011.sabanciuniv.edu/> (November, 3, 2015)

**Figure 4.51** Latek, (2011). “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd. Şti.” İstanbul.

**Figure 4.52** Taken from GAD Office [January, 26, 2011]

**Figure 4.53** Taken by author [January, 26, 2011]

**Figure 4.54** Latek, (2011). “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd. Şti.” İstanbul.

**Figure 4.55** <[http://www.earchitect.co.uk/images/jpgs/istanbul/borusan\\_music\\_art\\_house\\_w010911\\_2.jpg](http://www.earchitect.co.uk/images/jpgs/istanbul/borusan_music_art_house_w010911_2.jpg)

<<http://www.borusanmuzikevi.com/tr/Galeri/AlevLenzPiyano.aspx?PageNumber=2>

<<http://www.borusanmuzikevi.com/tr/Galeri/MelisDanishment.aspx>

**Figure 4.56** <<http://web03.biletix.com/etkinlik/MKBDD/İSTANBUL/tr>

(21.12.2011)

**Figure 4.57** <<http://www.biletix.com/etkinlik> (05.11.2015)

**Figure 4.58** <<http://v2.arkiv.com.tr/p9445-borusan-muzik-ve-sanat-evi.html>

(08.02.2014)

**Figure 4.59** Taken from GAD Office [January, 26, 2011]

**Figure 4.60** <<http://dicata.ing.unibs.it/gelfi/didattica/appunticorso/appunti.htm>

**Figure 4.61** Taken by author [January, 26, 2011]

**Figure 4.62** Taken by author [January, 26, 2011]

**Figure 4.63** Taken by author [January, 26, 2011]  
**Figure 4.64** Taken by author [January, 26, 2011]  
**Figure 4.65** Taken by author [January, 26, 2011]  
**Figure 4.66** Taken by author [January, 26, 2011]  
**Figure 4.67** Taken by author [January, 26, 2011]  
**Figure 4.68** Taken by author [January, 26, 2011]  
**Figure 4.69** Taken by author [January, 26, 2011]  
**Figure 4.70** Taken by author [January, 26, 2011]  
**Figure 4.71** Taken by author [January, 26, 2011]  
**Figure 4.72** Latek, (2011). “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd. Şti.” İstanbul.  
**Figure 4.73** Latek, (2011). “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd. Şti.” İstanbul.  
**Figure 5.1** Taken from GAD Office (taken by GAD February 2008) [January, 26, 2011]  
**Figure 5.2** Taken from GAD Office (taken by GAD February 2008) [January, 26, 2011]  
**Figure 5.3** Taken from GAD Office (taken by GAD March 2008) [January, 26, 2011]  
**Figure 5.4** Taken from GAD Office (taken by GAD June 2008) [January, 26, 2011]  
**Figure 5.5** Taken from GAD Office (taken by GAD June 2008) [January, 26, 2011]  
**Figure 5.6** Taken from GAD Office (taken by GAD August 2008) [January, 26, 2011]  
**Figure 5.7** Taken from GAD Office (taken by GAD August 2008) [January, 26, 2011]  
**Figure 5.8** Taken from GAD Office (taken by GAD August 2008) [January, 26, 2011]  
**Figure 5.9** Taken from GAD Office (taken by GAD September 2008) [January, 26, 2011]  
**Figure 5.10** Taken from GAD Office (taken by GAD September 2008) [January, 26, 2011]  
**Figure 5.11** Taken from GAD Office (taken by GAD September 2008) [January, 26, 2011]

**Figure 5.12** Taken from GAD Office (taken by GAD November 2008) [January, 26, 2011]

**Figure 5.13** Taken from GAD Office (taken by GAD November 2008) [January, 26, 2011]

**Figure 5.14** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

<Taken from GAD Office [January, 26, 2011]

**Figure 5.15** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

<Taken from GAD Office [January, 26, 2011]

**Figure 5.16** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

<Taken from GAD Office [January, 26, 2011]

**Figure 5.17** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

< Taken by author [January, 26, 2011]

**Figure 5.18** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.19** Taken by author [January, 26, 2011]

**Figure 5.20** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.21** Taken by author [January, 26, 2011]

**Figure 5.22** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.23** Taken by author [January, 26, 2011]

**Figure 5.24** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.25** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.26** Taken by author [January, 26, 2011]

**Figure 5.27** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.28** < <https://www.gadarchitecture.com/tr/borusan-muzik-ve-sanat-merkezi>  
[January, 12, 2015]

**Figure 5.29** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge  
Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.30** < <https://www.gadarchitecture.com/tr/borusan-muzik-ve-sanat-merkezi>  
[January, 12, 2015]

**Figure 5.31** Taken from “İstanbul 2 Numaralı Kültür Varlıklarını Koruma Bölge  
Kurulu Müdürlüğü” [January, 5, 2012]

**Figure 5.32** < <https://www.gadarchitecture.com/tr/borusan-muzik-ve-sanat-merkezi>  
[January, 12, 2015]

**Figure 5.33** Latek, (2011). “Latek İnşaat Elektrik Proje Tahhüt San. Ve Tic. Ltd.  
Şti.” İstanbul.

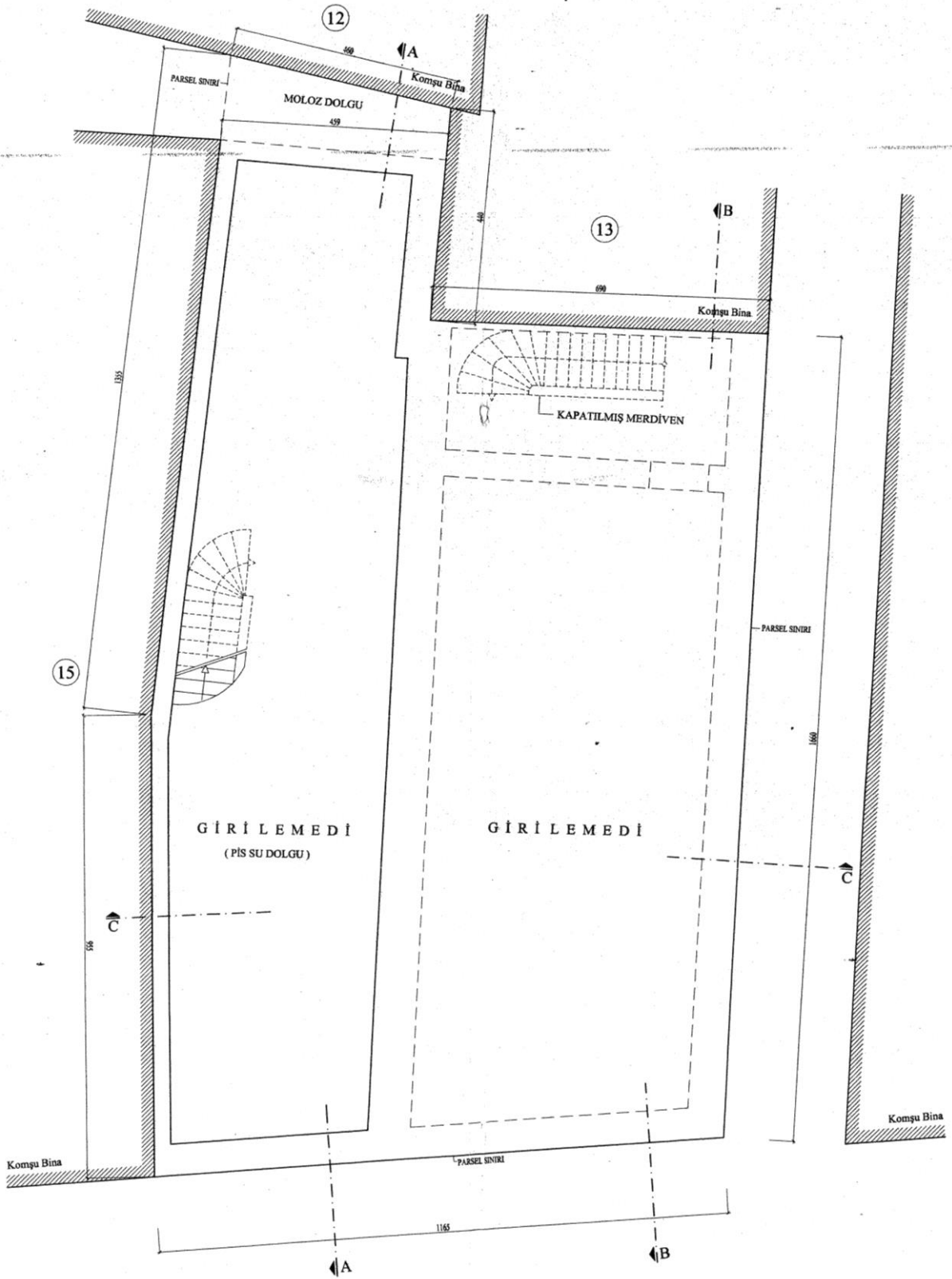
**Figure 5.34** <<http://www.nothingintosomething.com/blog/matter-light-2> ,13.11.2015





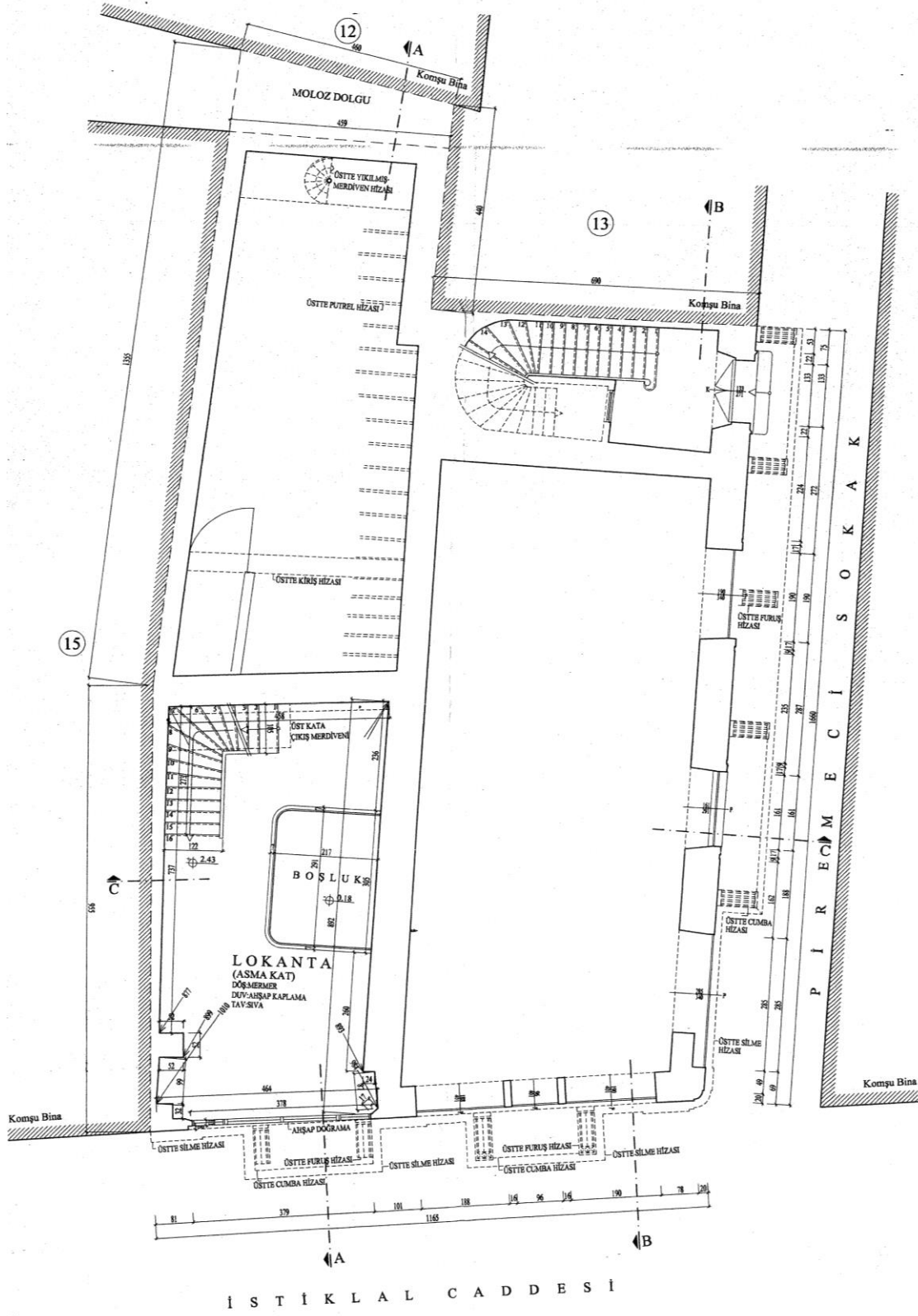
## APPENDICES

### APPENDIX 1. BMH BASEMENT FLOOR PLAN

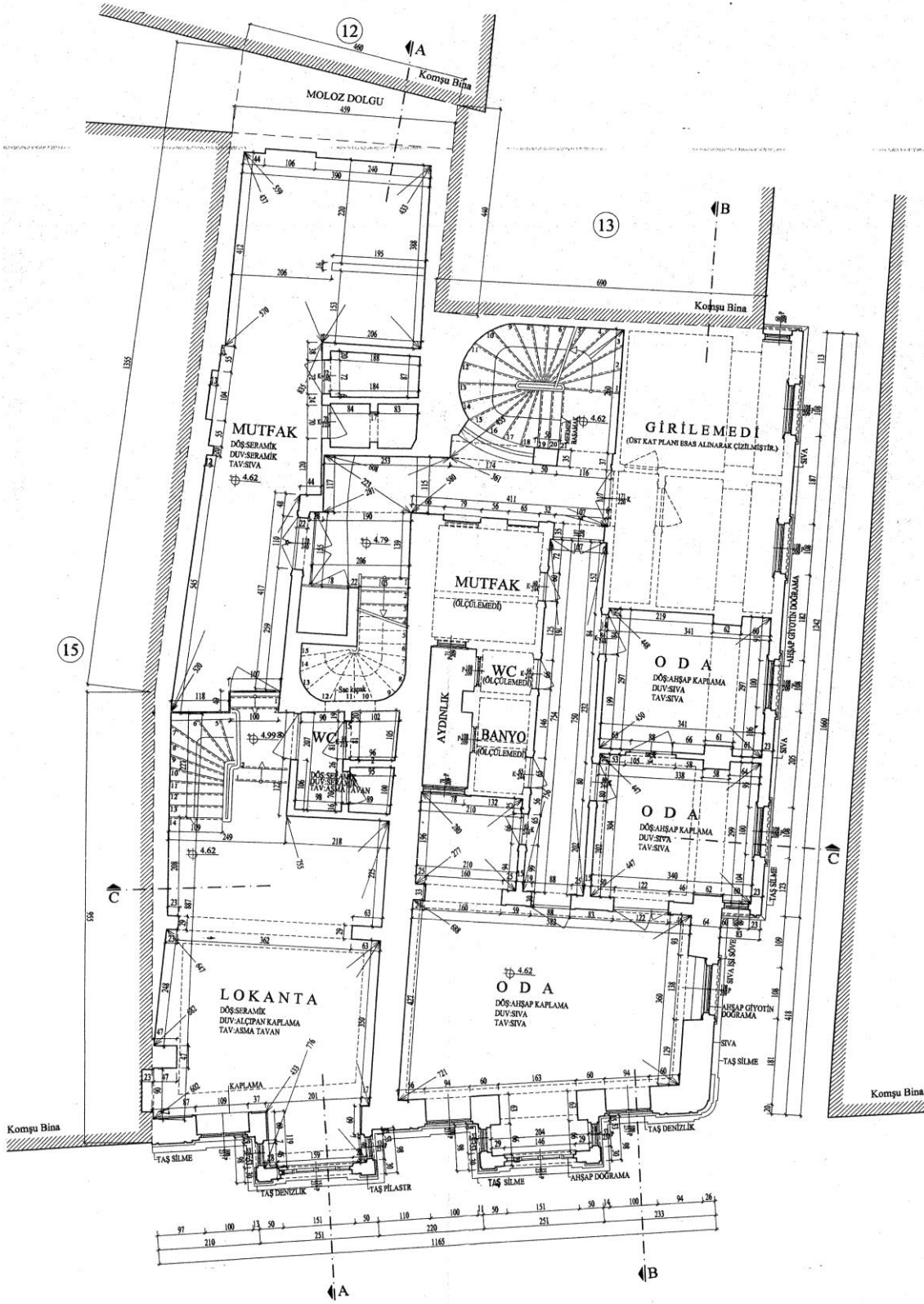




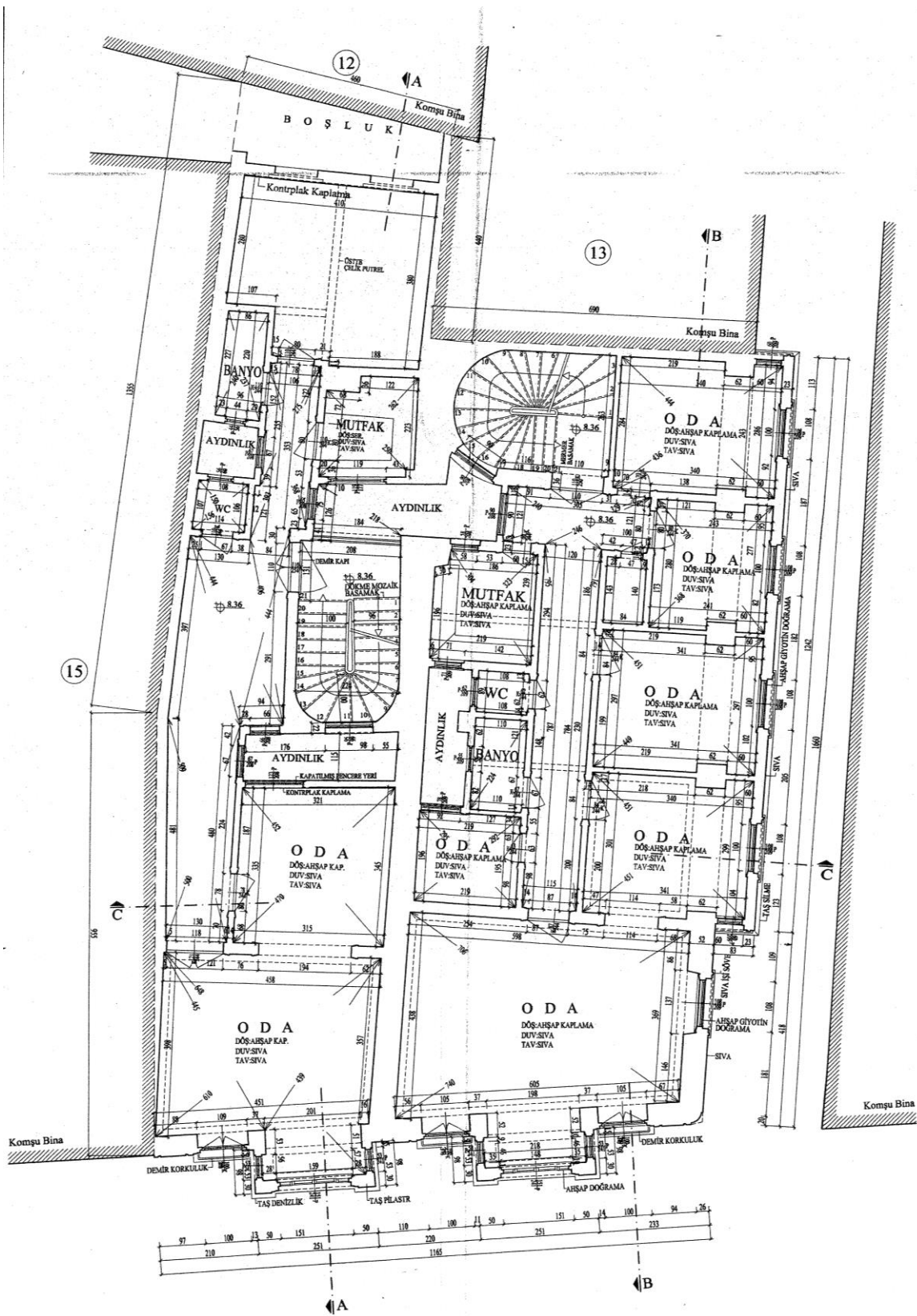
# APPENDIX 3. BMH MEZZANINE FLOOR PLAN



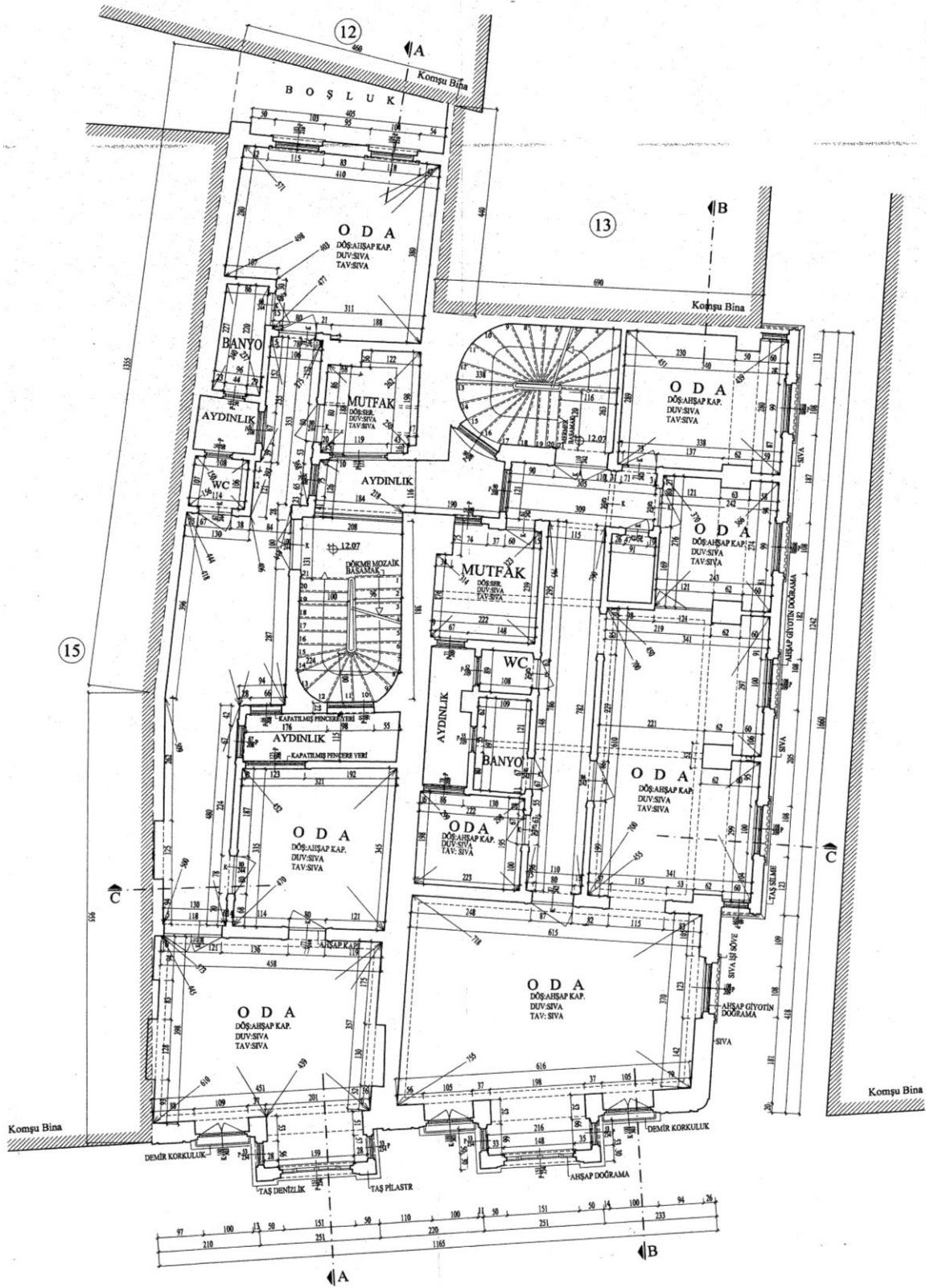
# APPENDIX 4. BMH FIRST FLOOR PLAN



# APPENDIX 5. BMH SECOND FLOOR PLAN

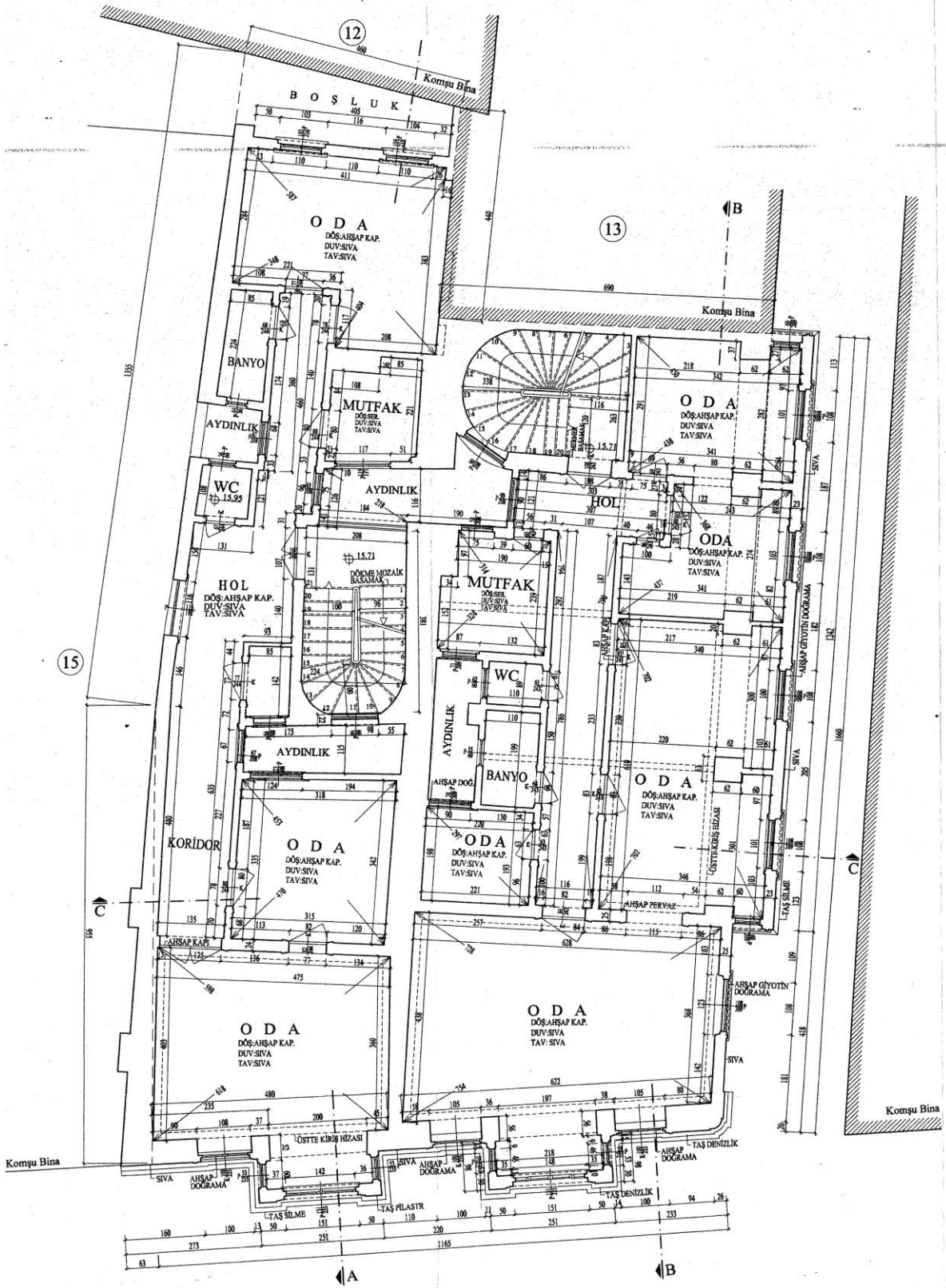


# APPENDIX 6. BMH THIRD FLOOR PLAN



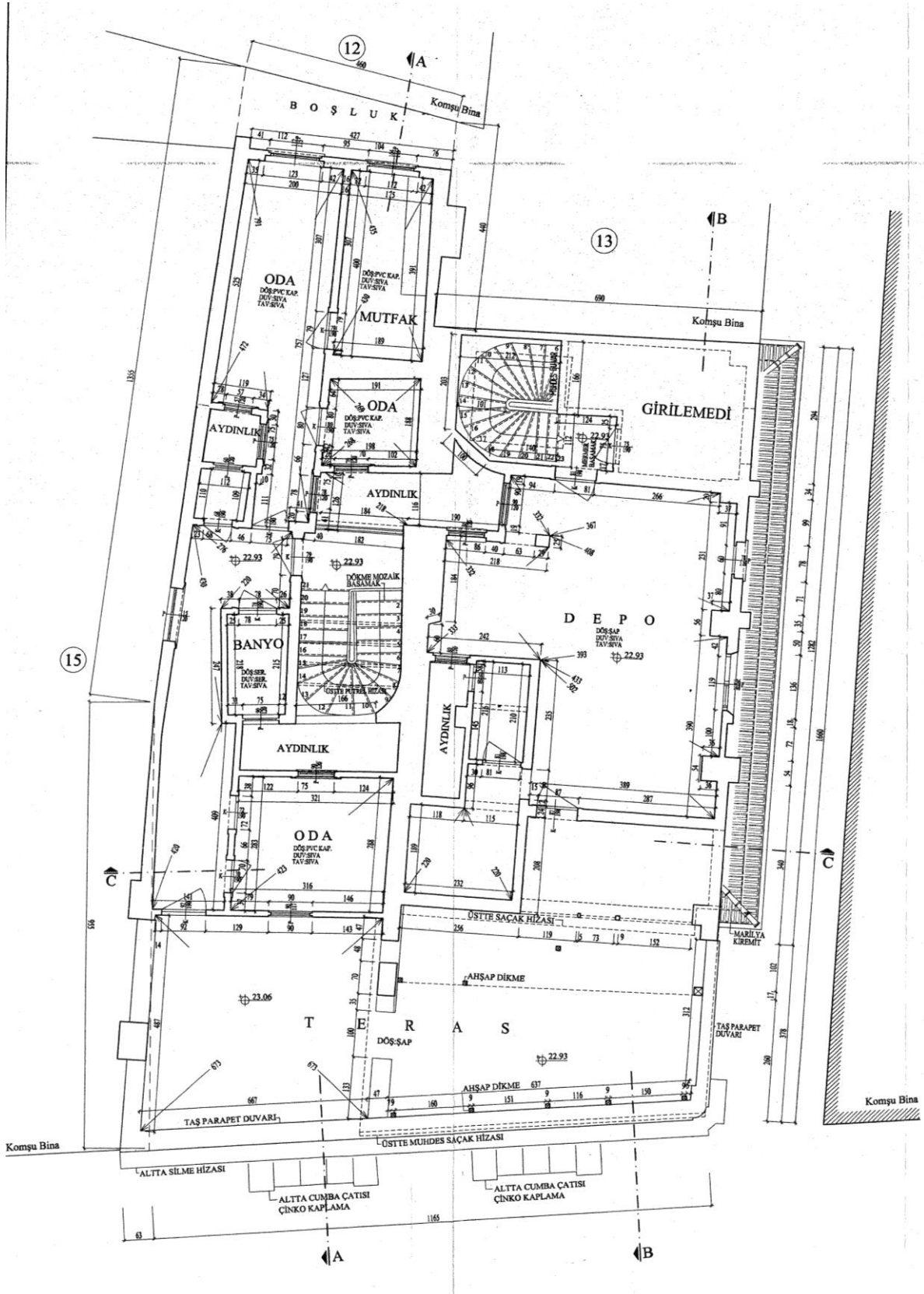


# APPENDIX 7. BMH FOURTH FLOOR PLAN

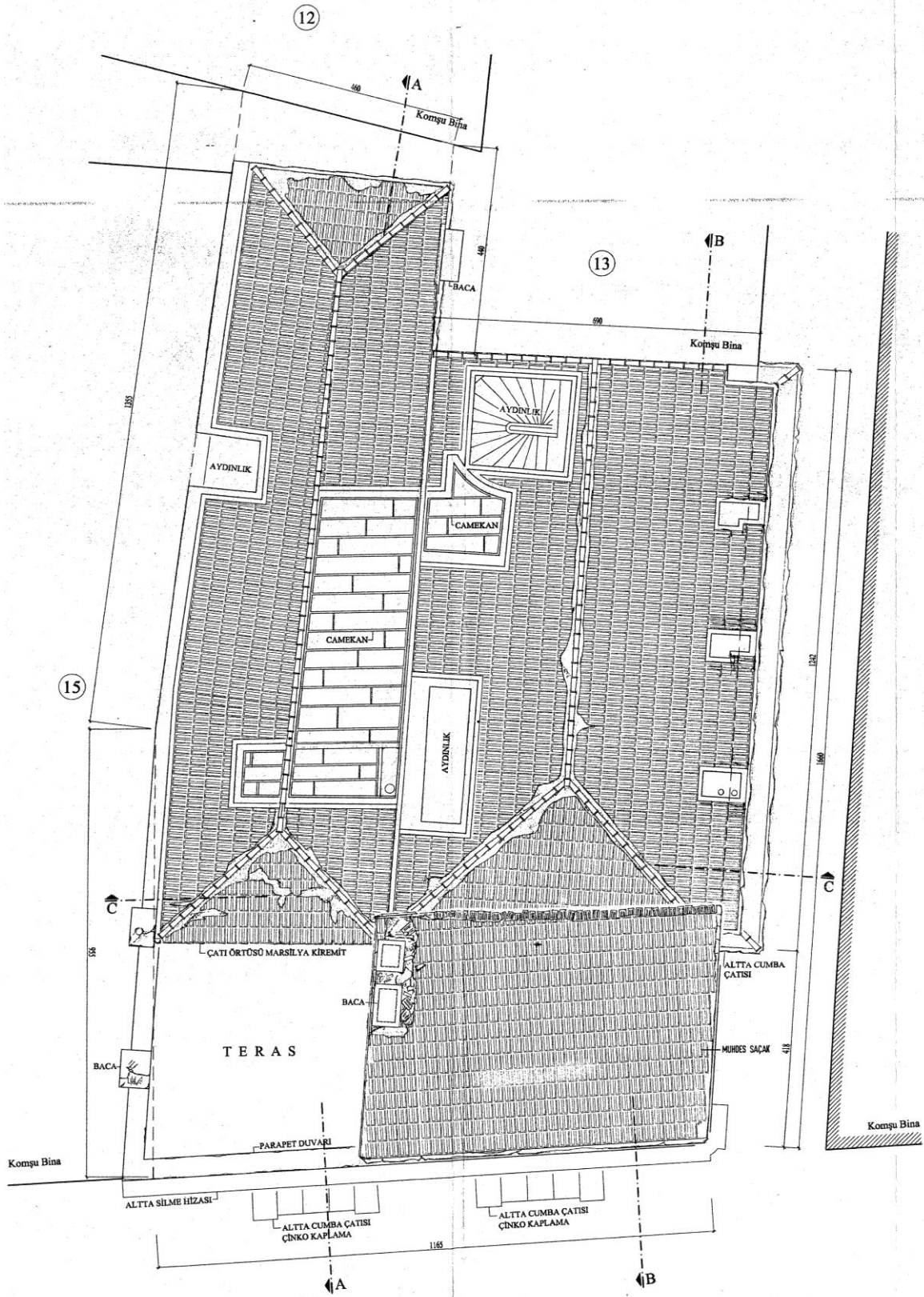




# APPENDIX 9. BMH LOFT PLAN



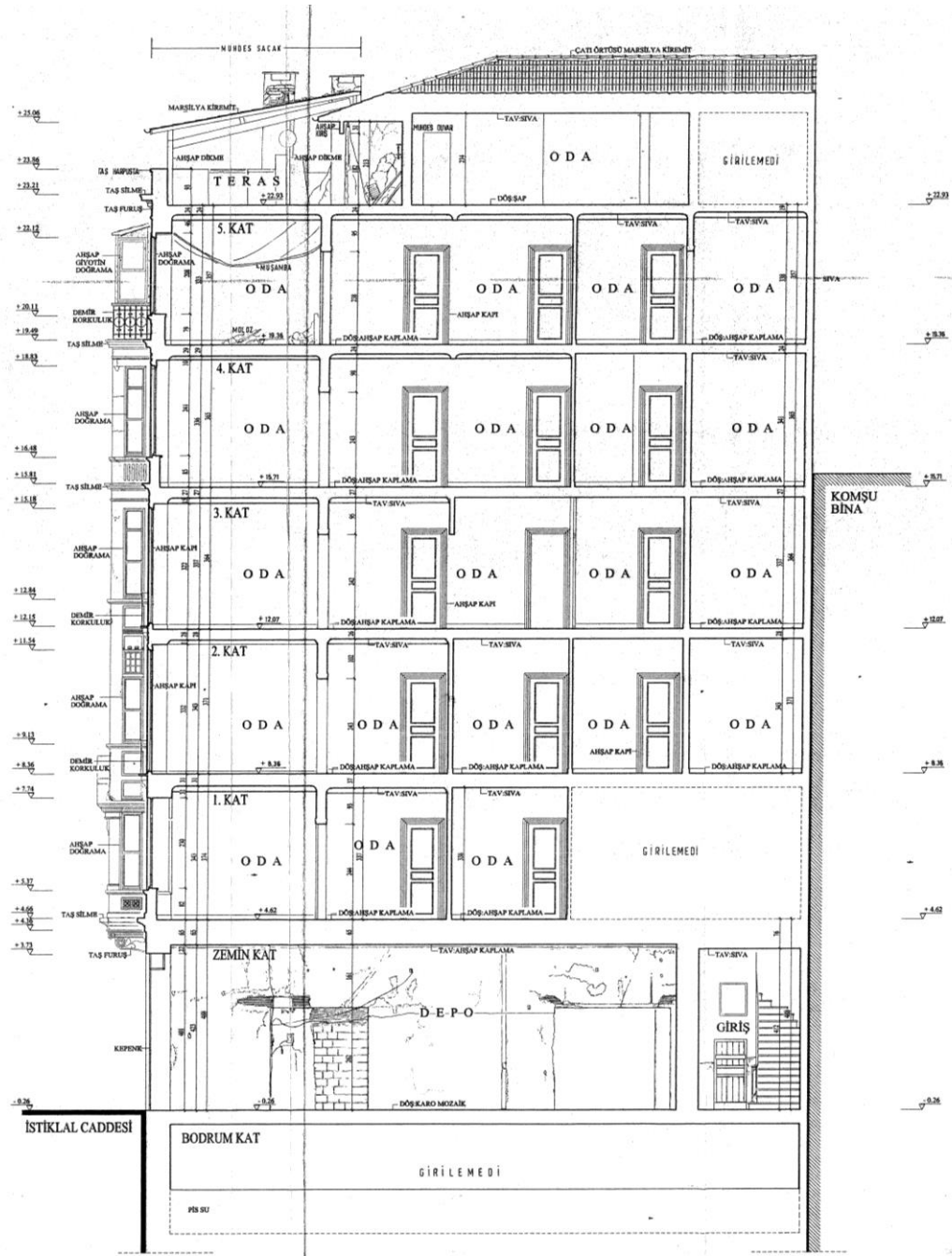
# APPENDIX 10. BMH ROOF PLAN



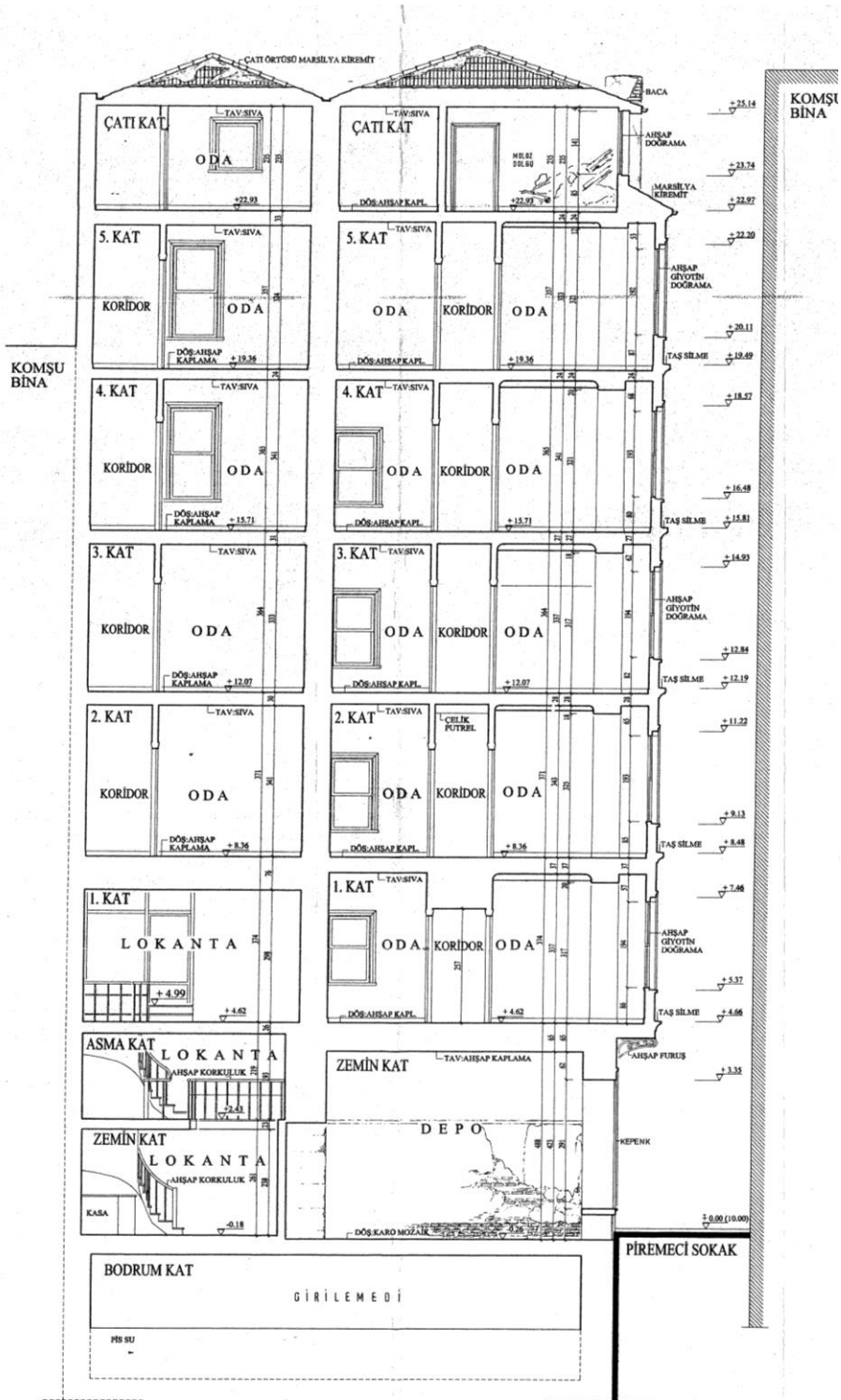




# APPENDIX 12. BMH B-B SECTION

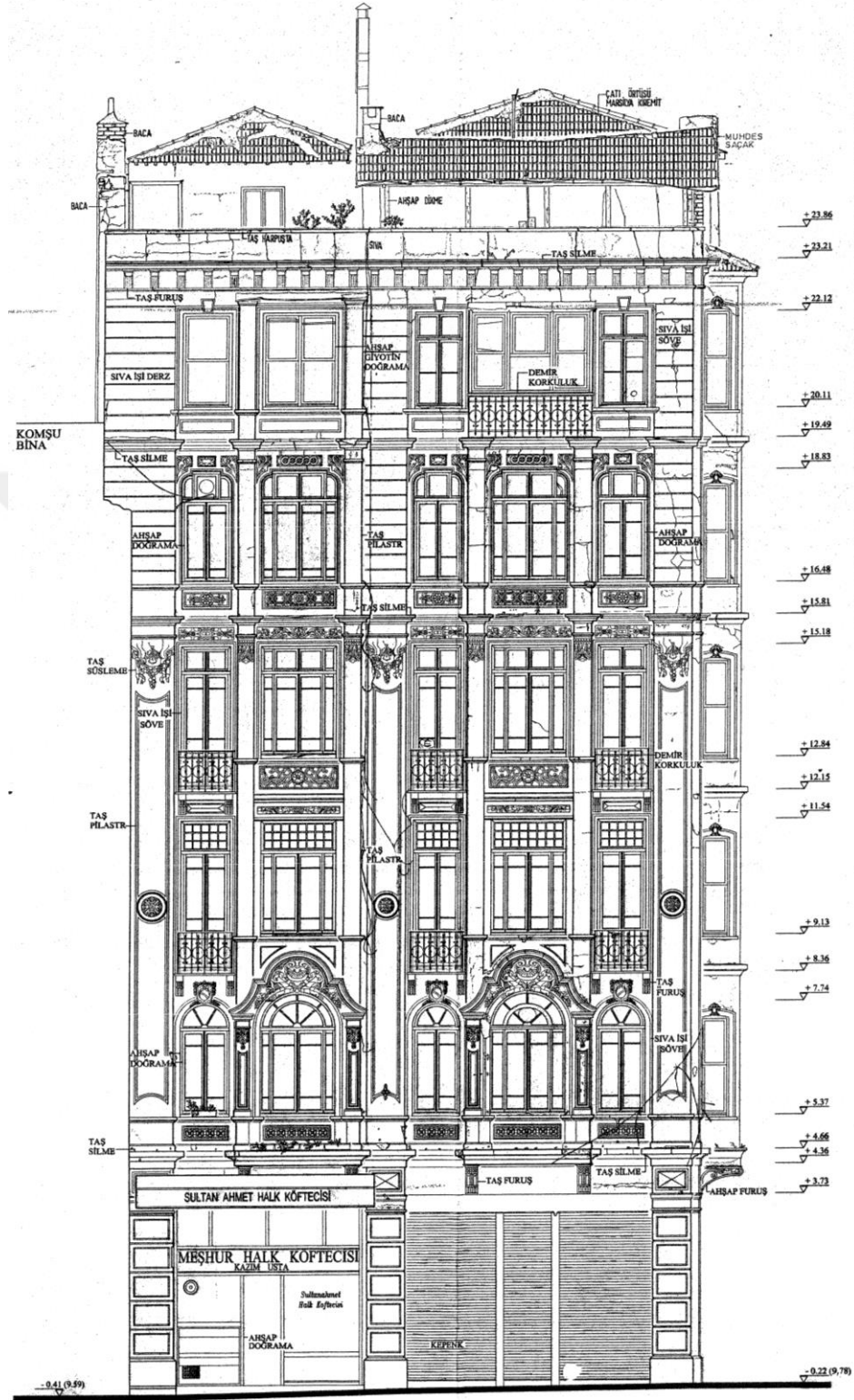


# APPENDIX 13. BMH C-C SECTION



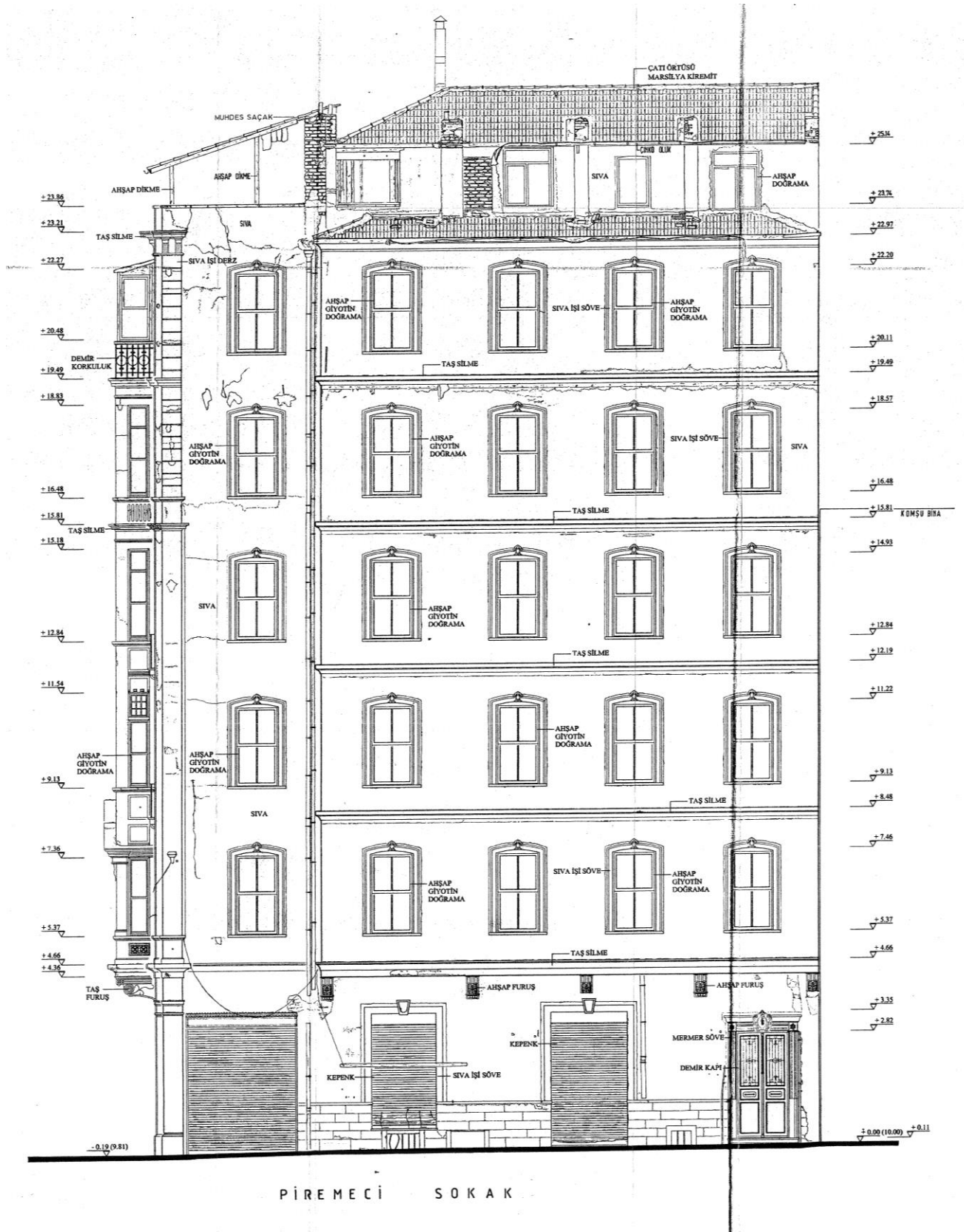


# APPENDIX 14. BMH FRONT VIEW

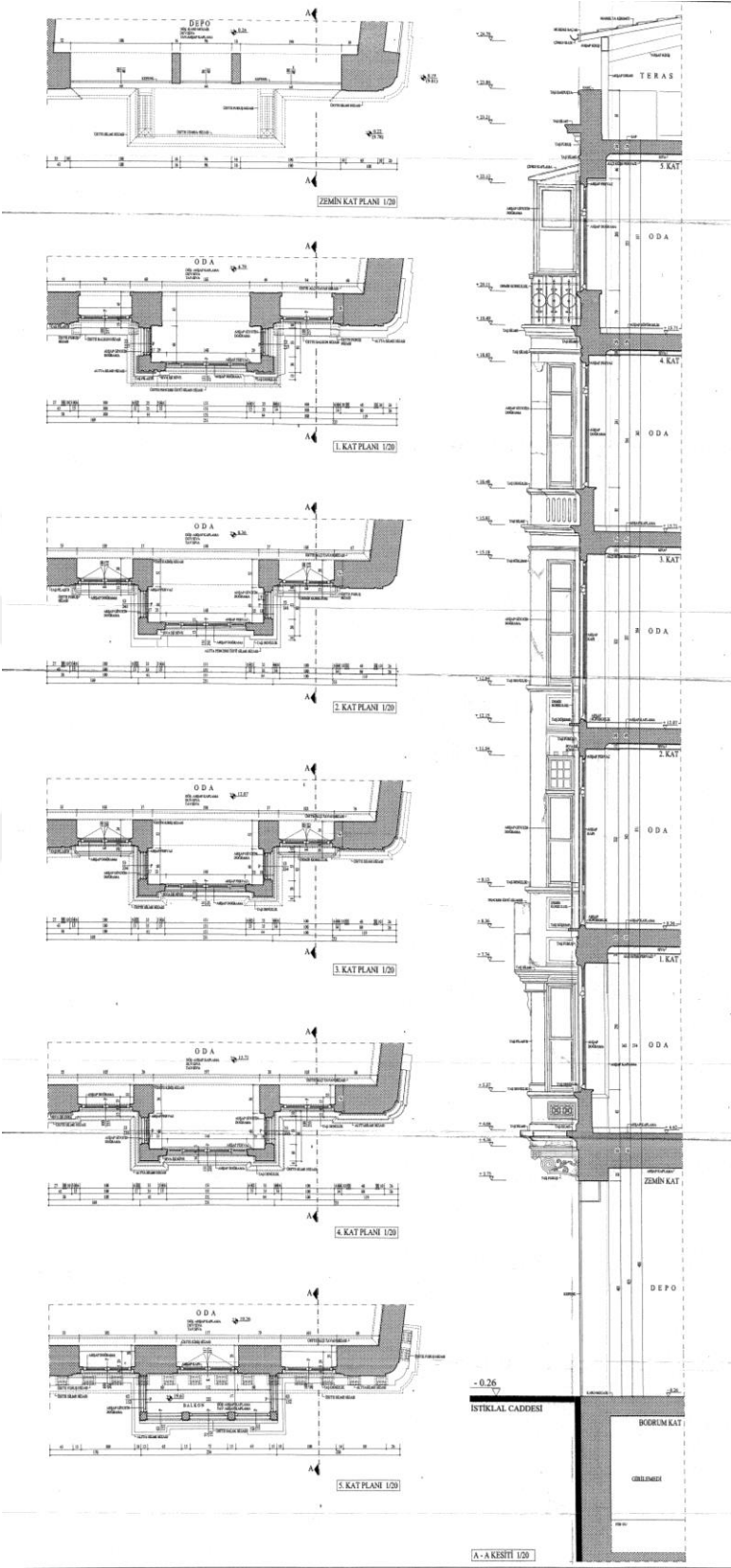


İ S T İ K L A L C A D D E S İ

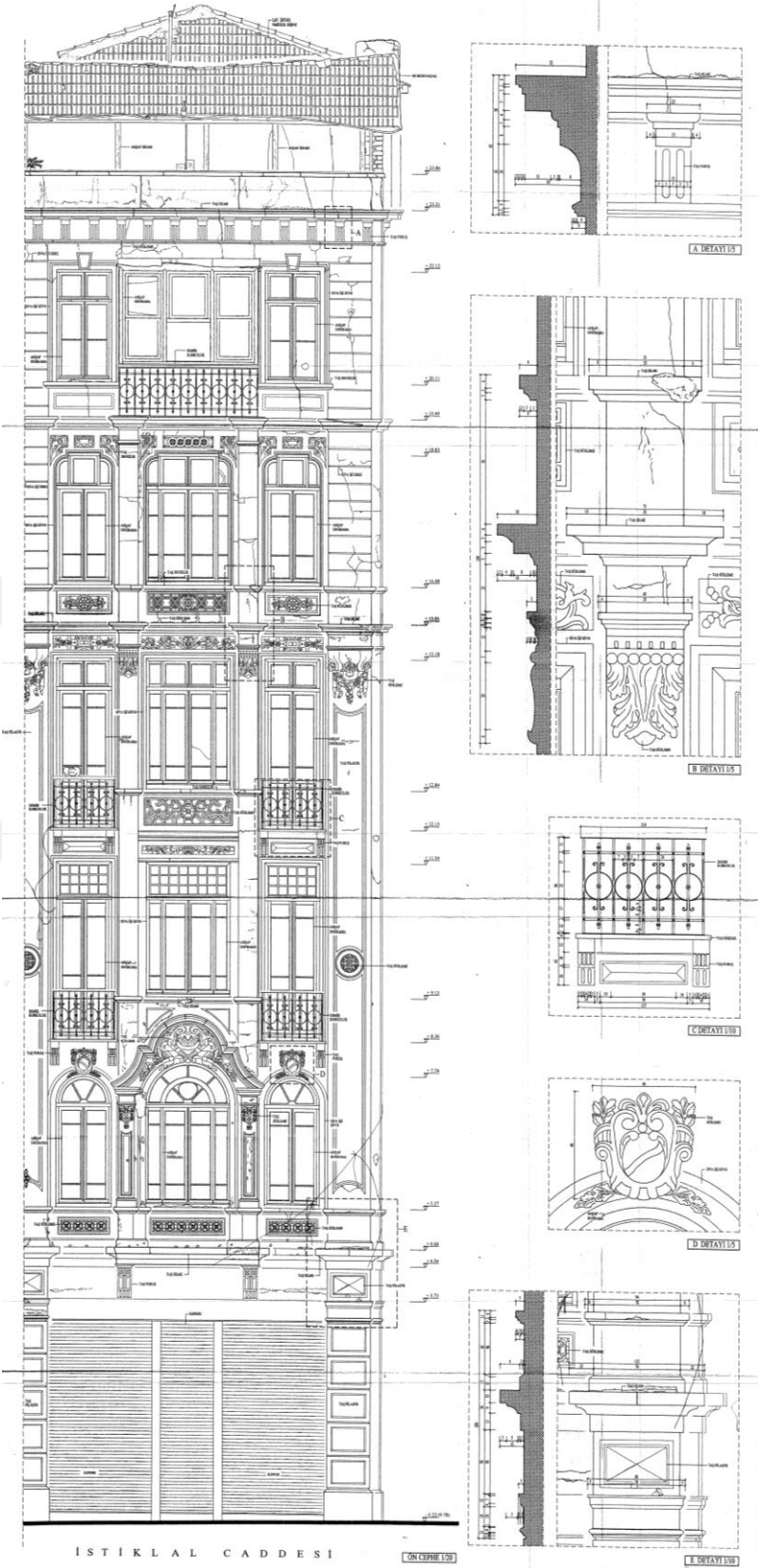
# APPENDIX 15. BMH SIDE VIEW



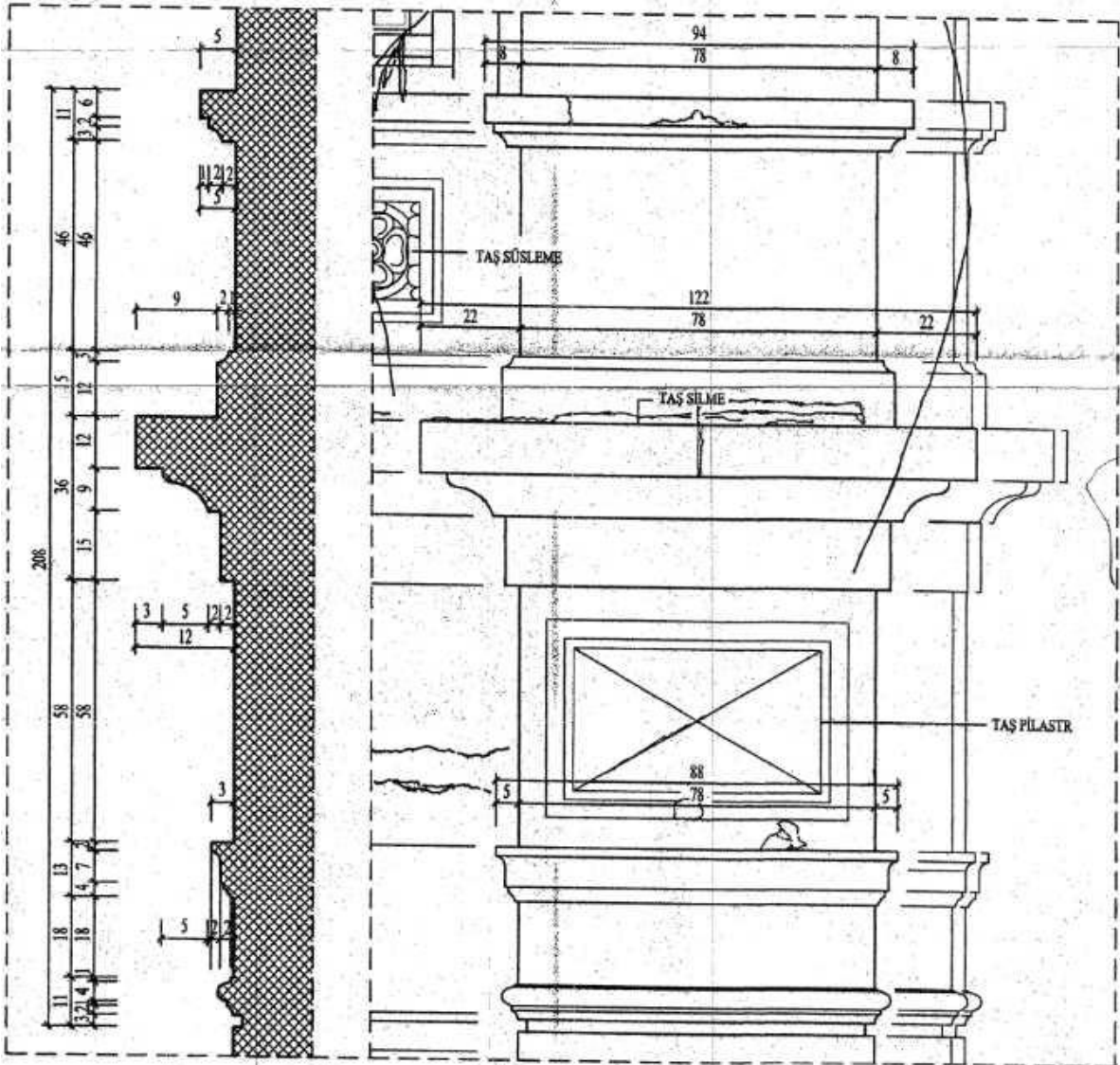
APPENDIX 16. BMH SYSTEM DETAIL DRAWING



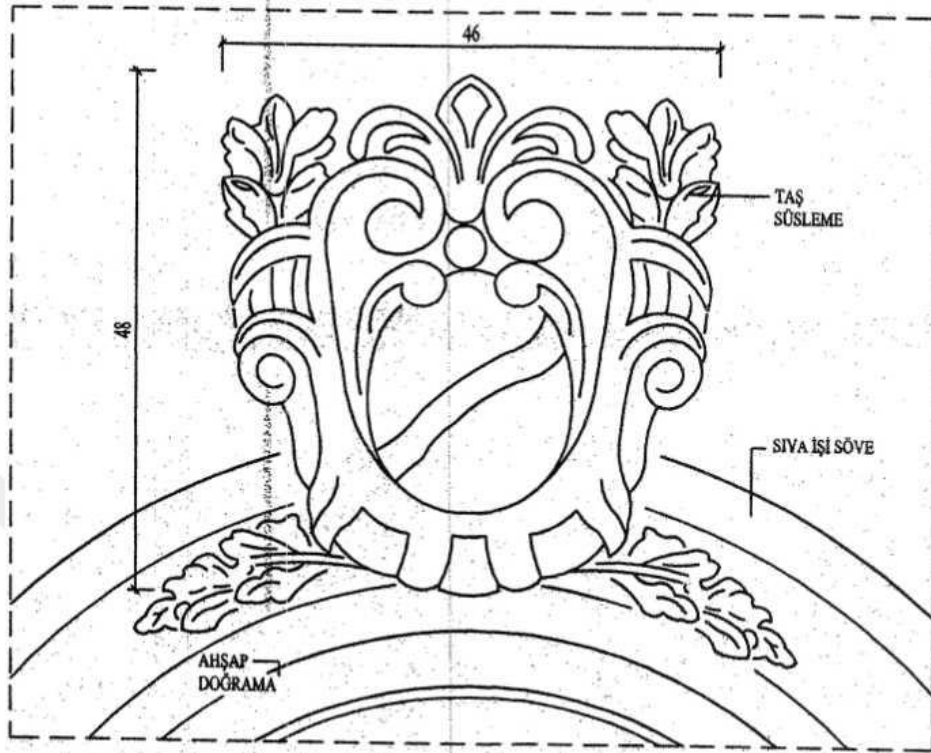
APPENDIX 17. BMH DETAIL DRAWINGS



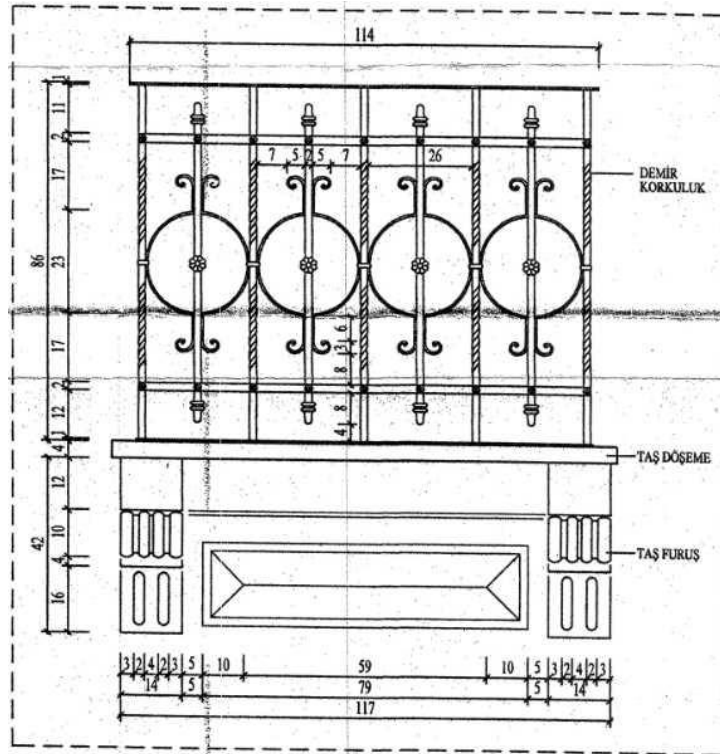
**APPENDIX 18. BMH DETAIL-E DRAWINGS**



APPENDIX 19. BMH DETAIL-D DRAWINGS

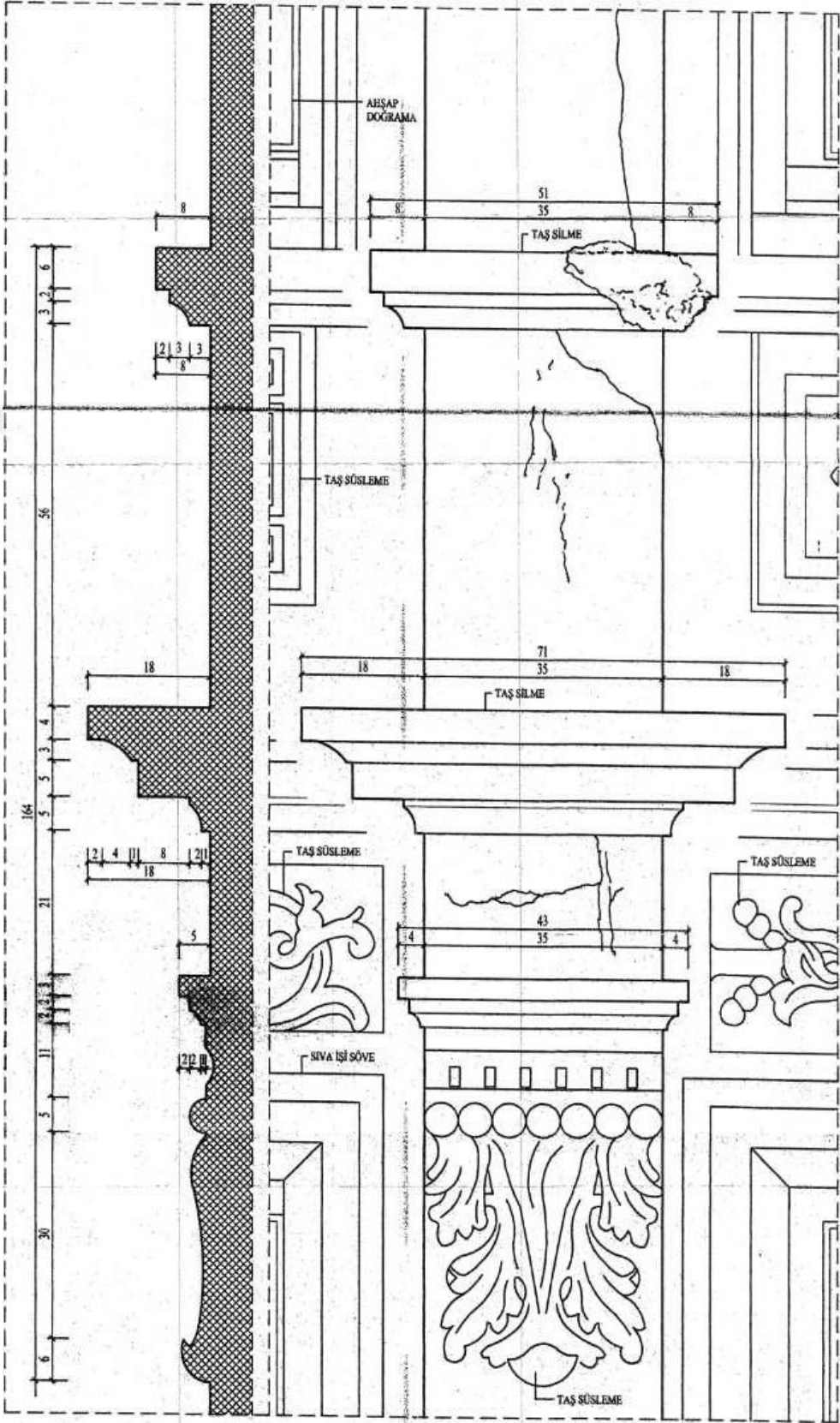


APPENDIX 20. BMH DETAIL-C DRAWINGS



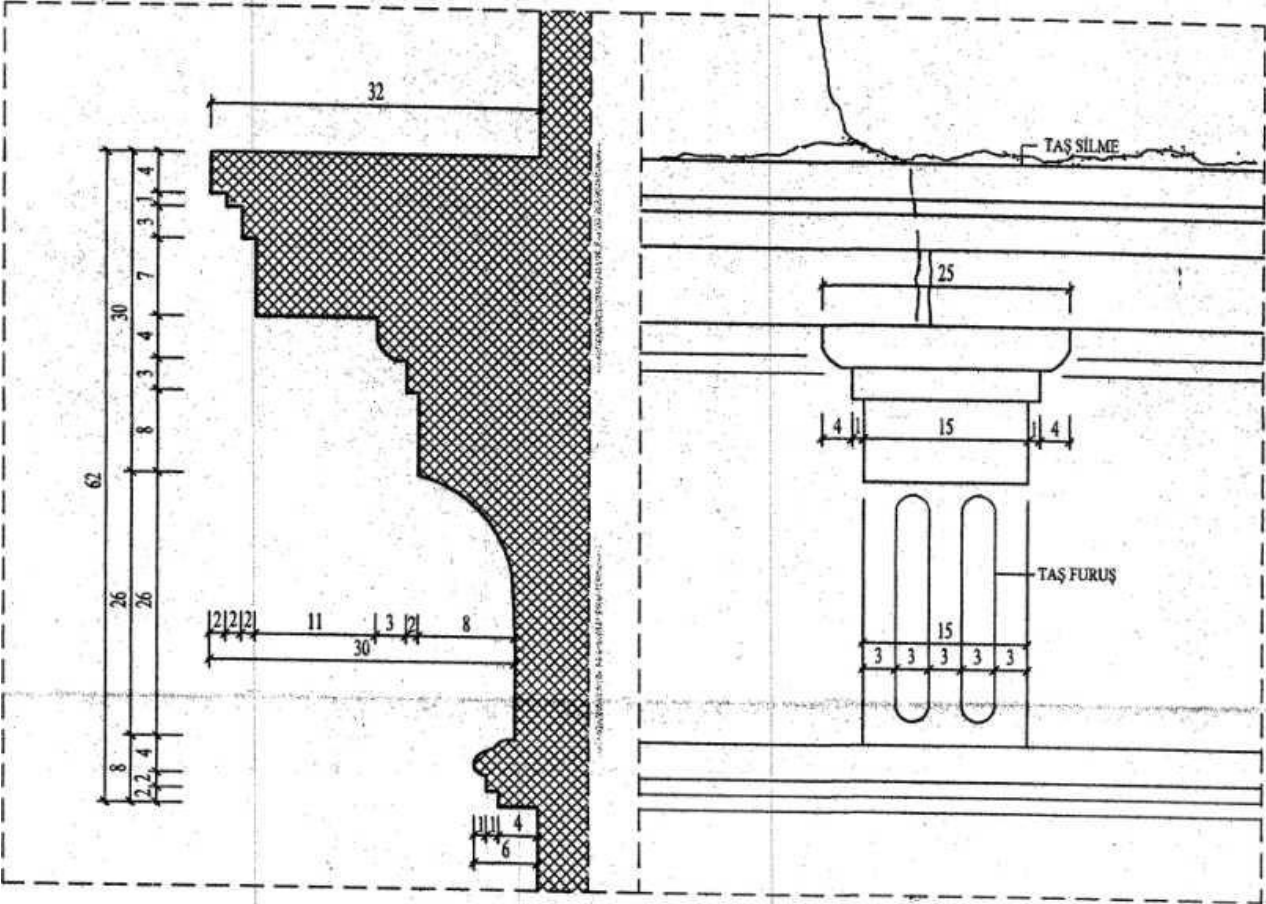


APPENDIX 21. BMH DETAIL-B DRAWINGS





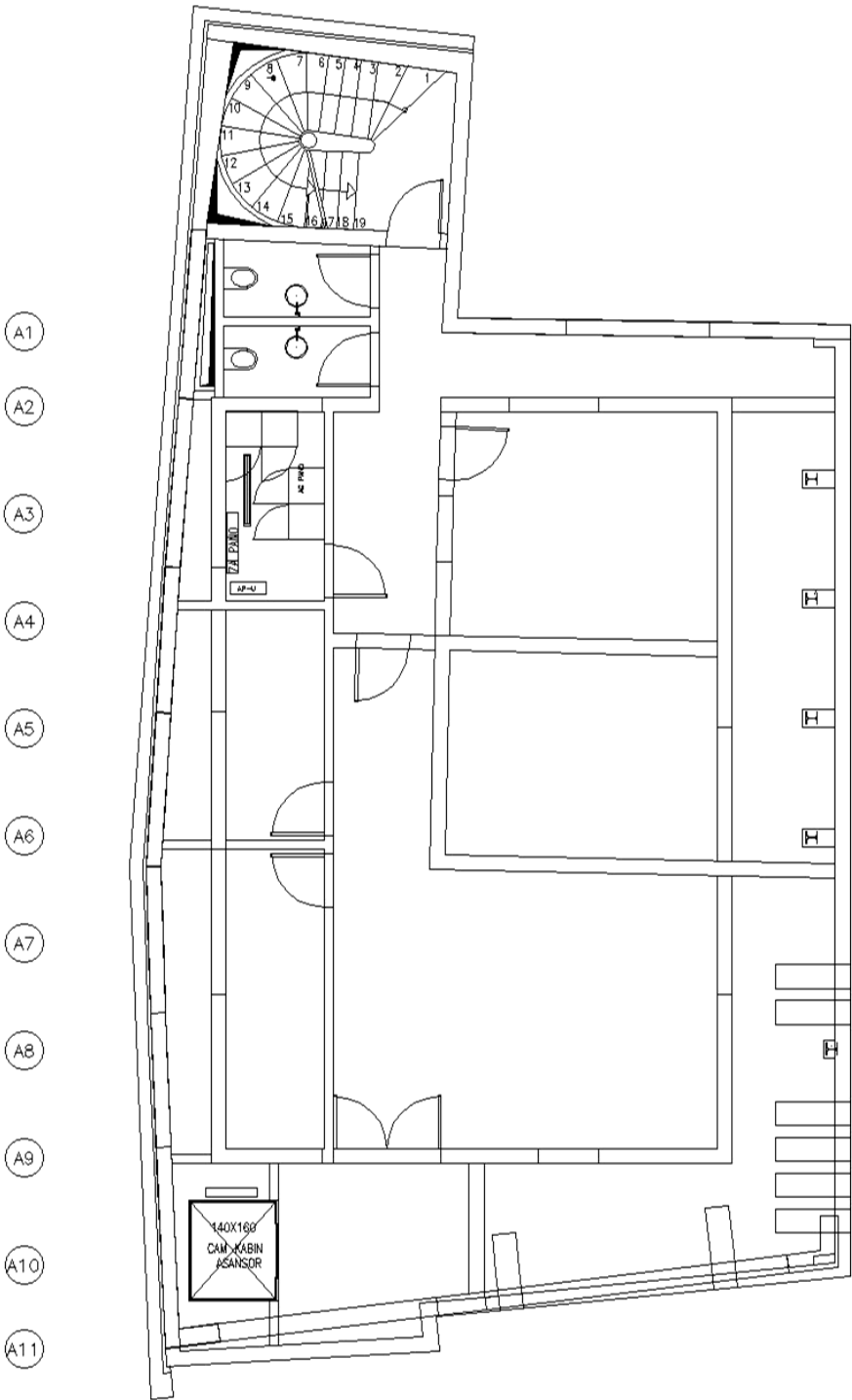
APPENDIX 22. BMH DETAIL-A DRAWINGS



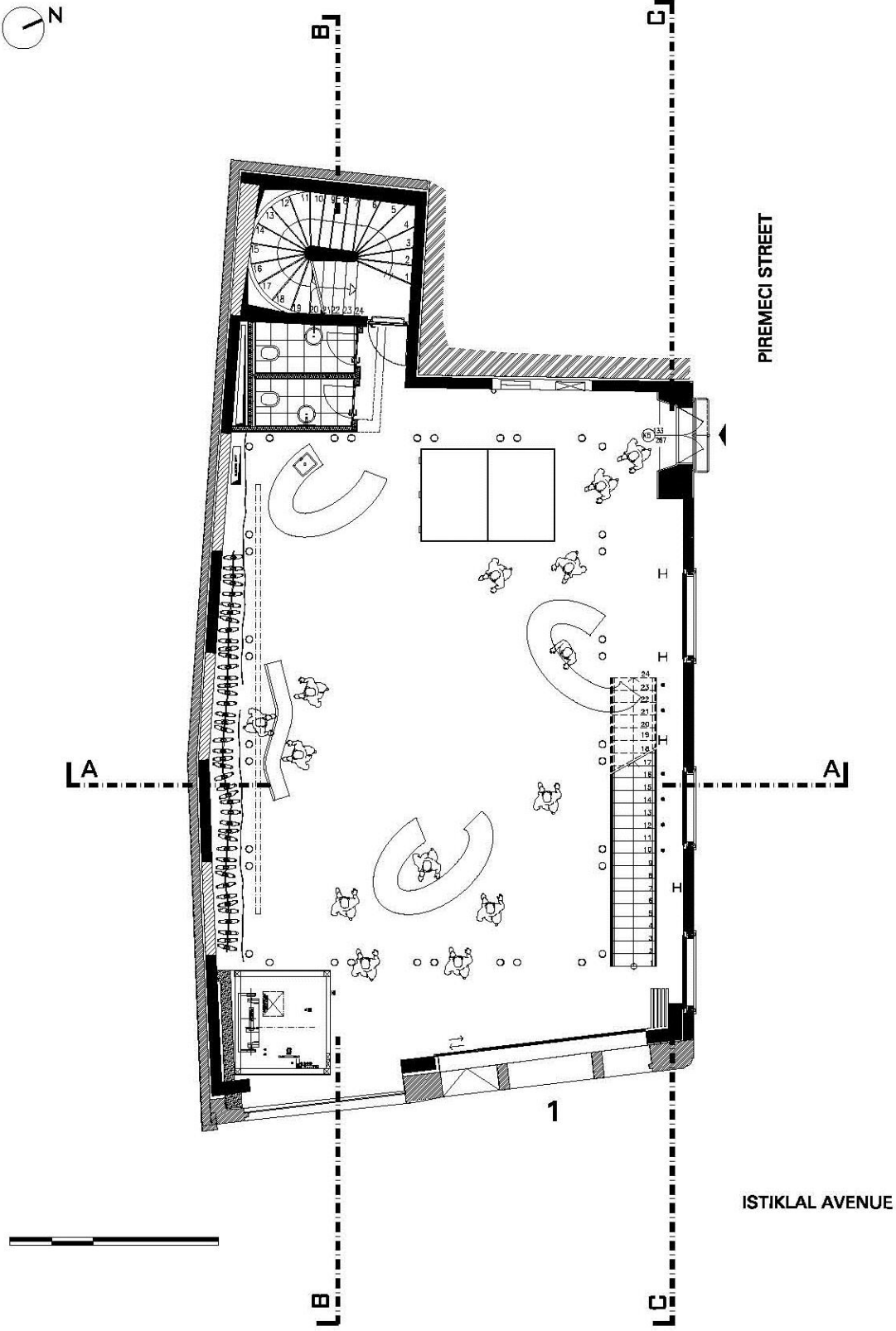
**APPENDIX 23. BMH NEW BASEMENT FLOOR**



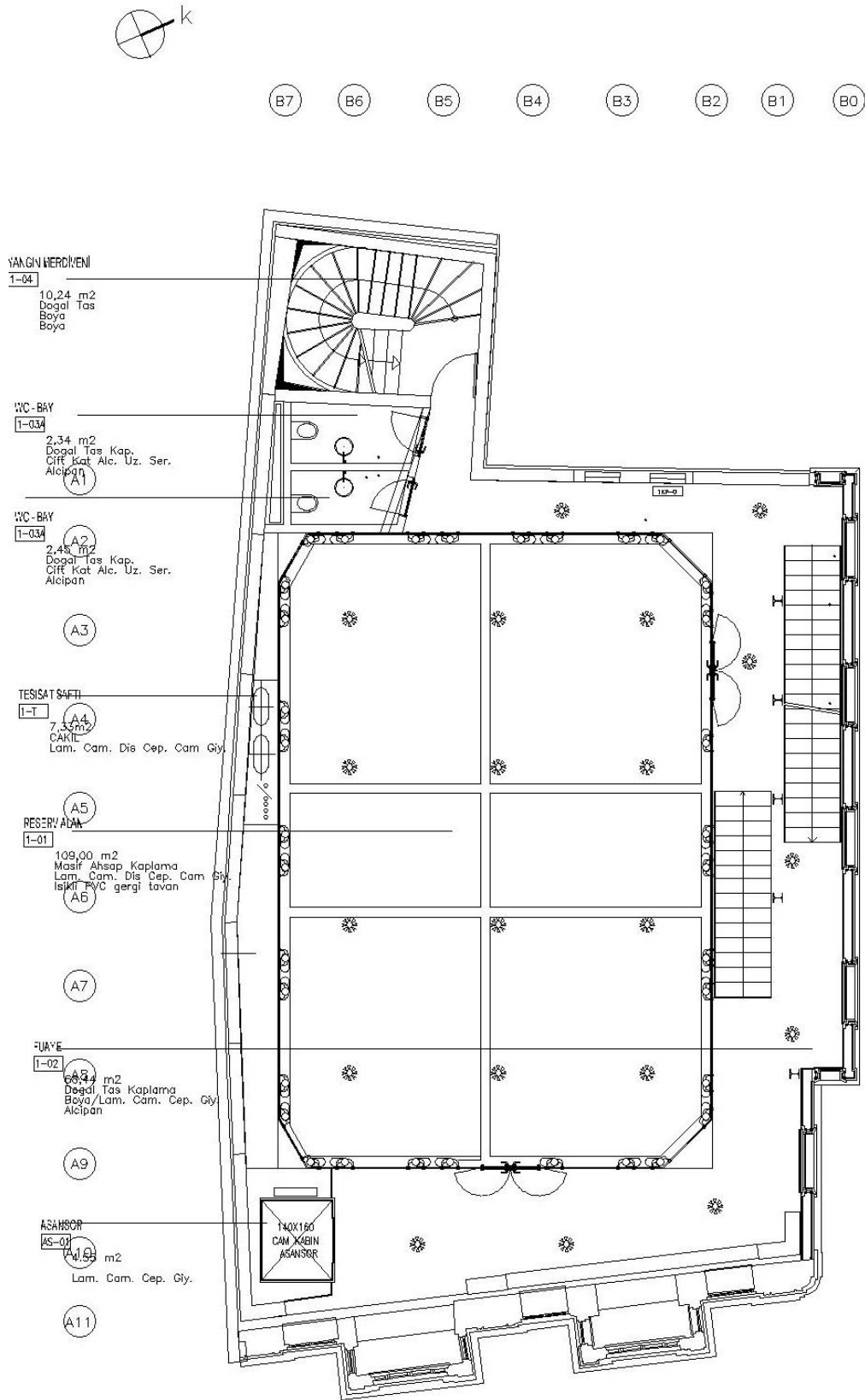
(B7) (B6) (B5) (B4) (B3) (B2) (B1) (B0)



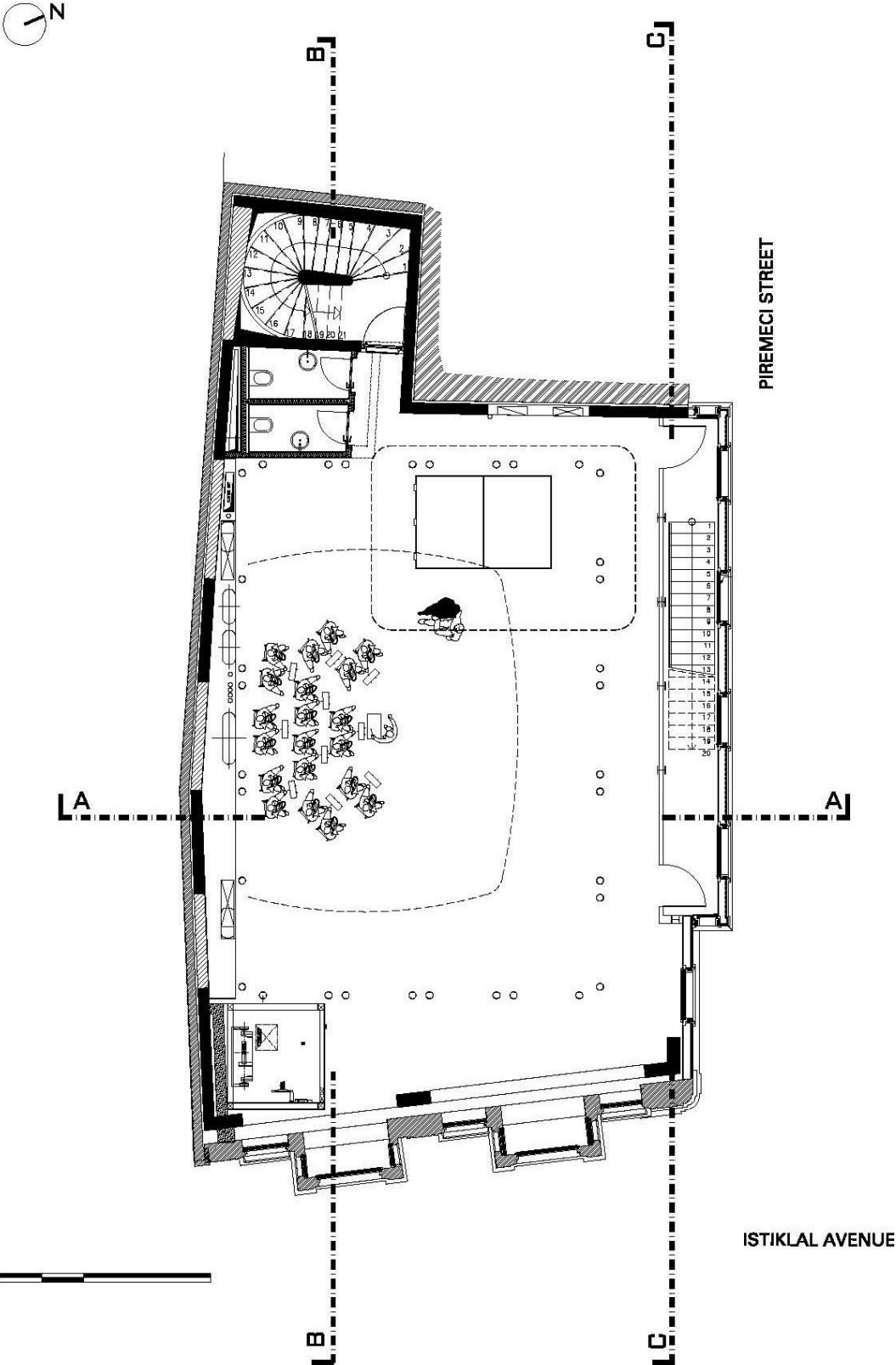
APPENDIX 24. BMH NEW GROUND FLOOR



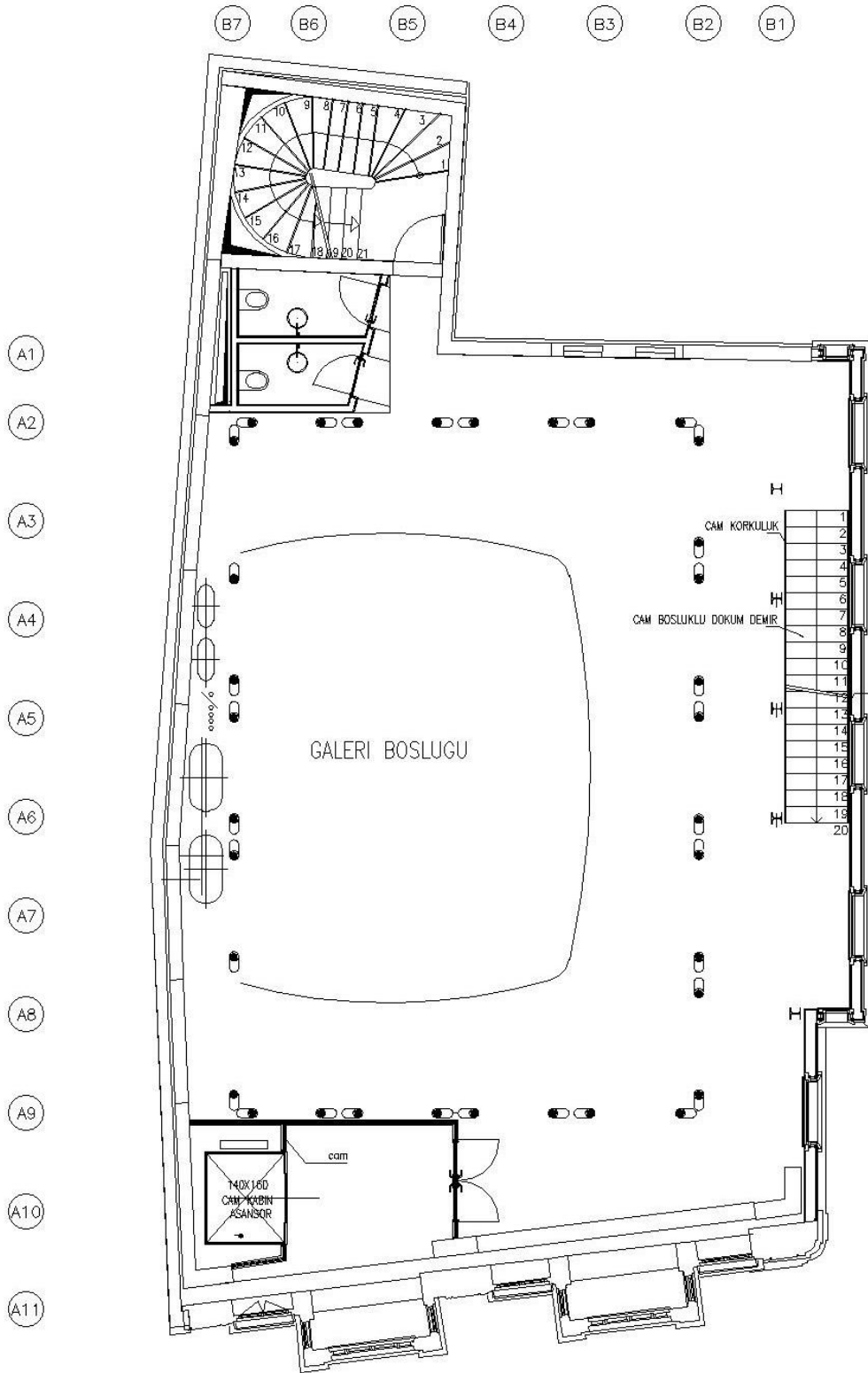
# APPENDIX 25. BMH NEW FIRST FLOOR



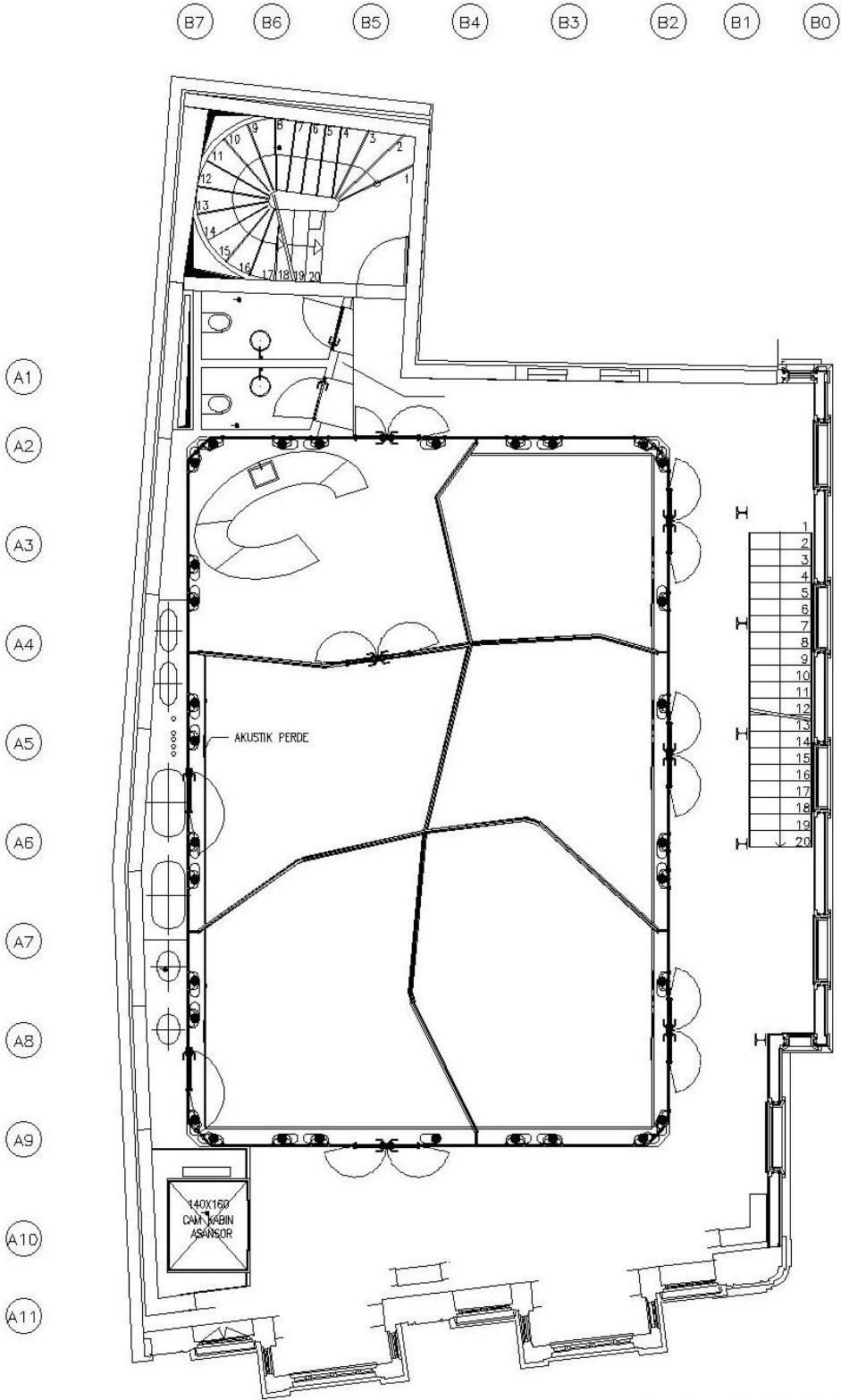
APPENDIX 26. BMH NEW SECOND FLOOR



# APPENDIX 27. BMH NEW THIRD FLOOR



**APPENDIX 28. BMH NEW FOURTH FLOOR**



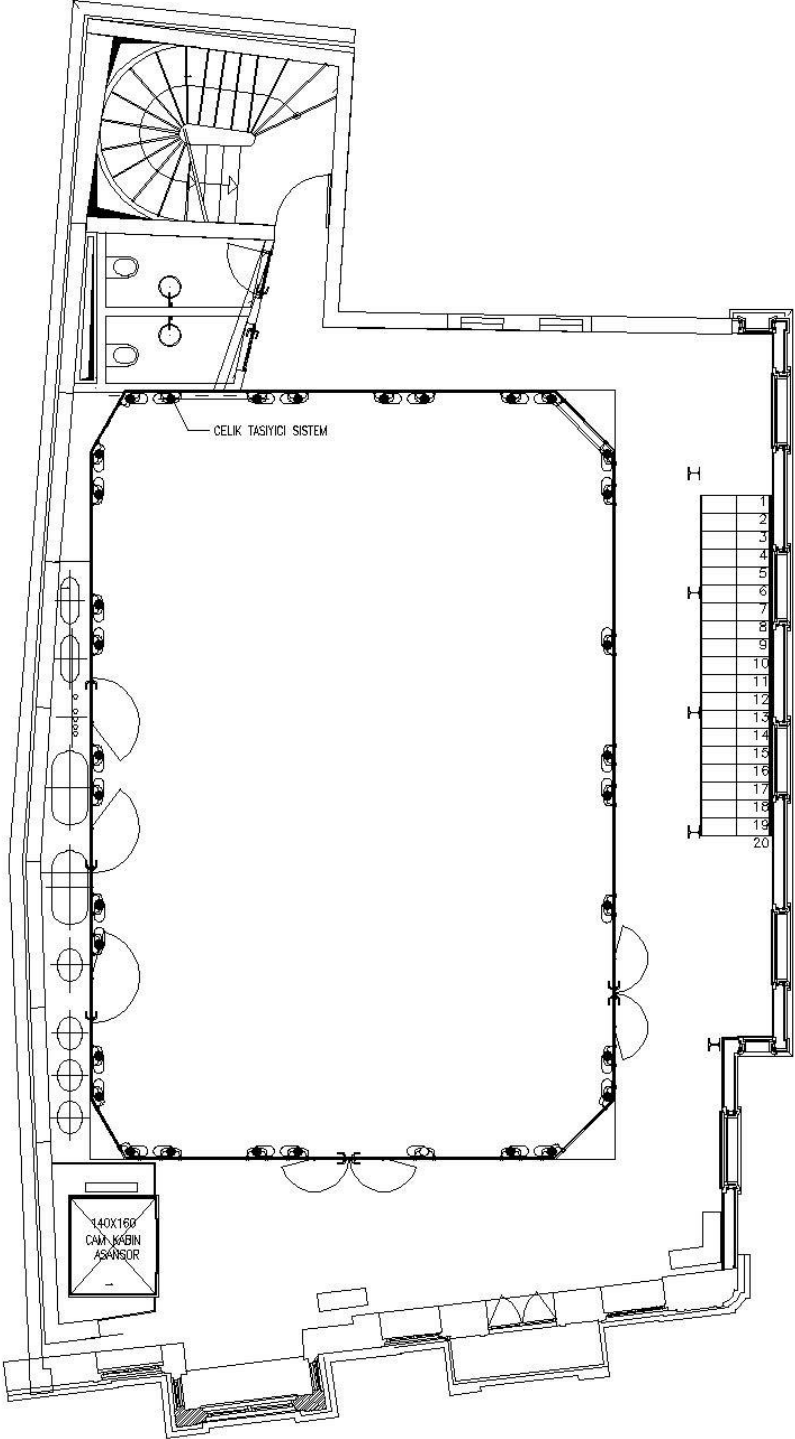


**APPENDIX 29. BMH NEW FIFTH FLOOR**



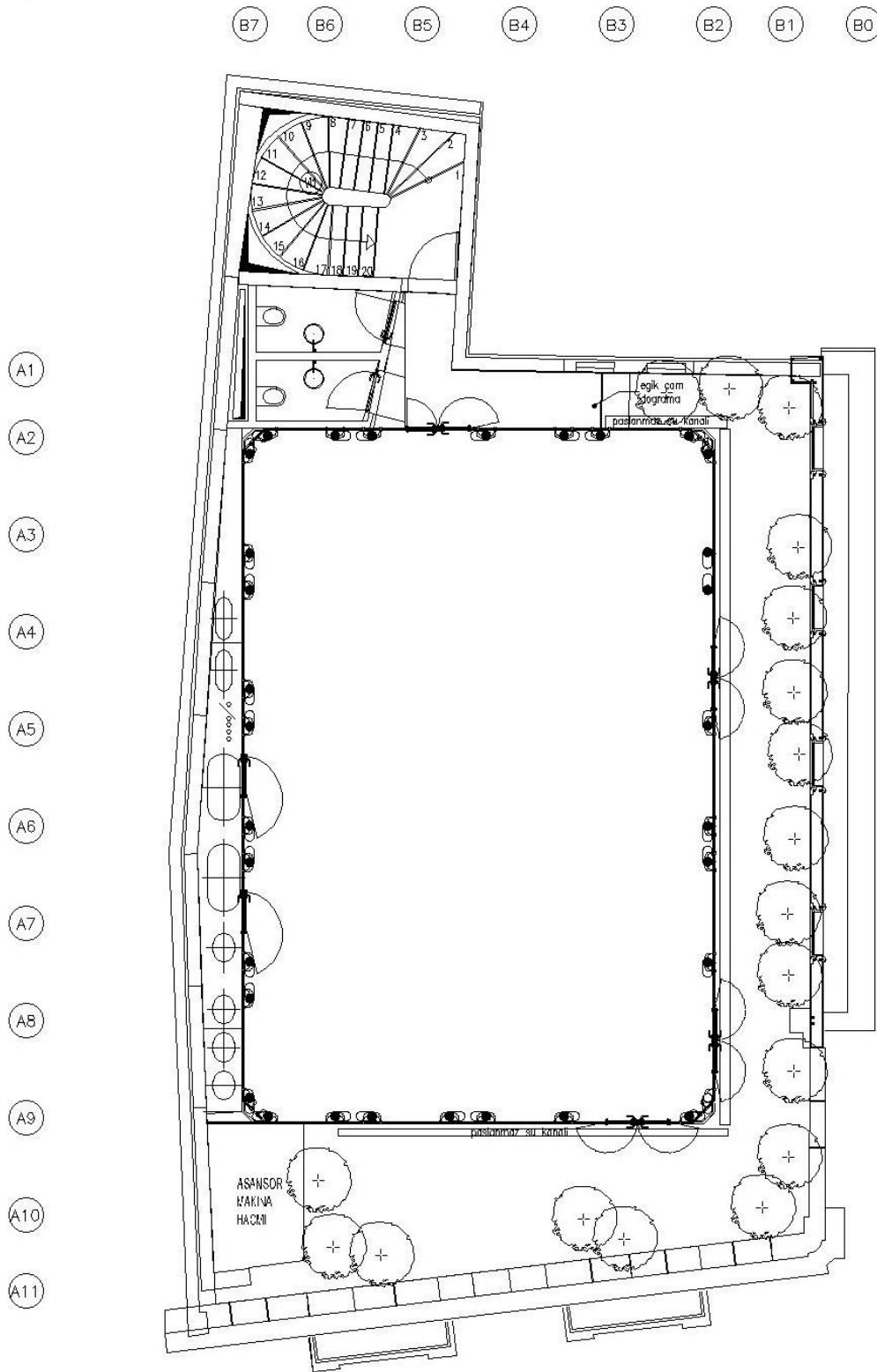
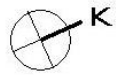
B7   B6   B5   B4   B3   B2   B1   B0

A1  
A2  
A3  
A4  
A5  
A6  
A7  
A8  
A9  
A10  
A11



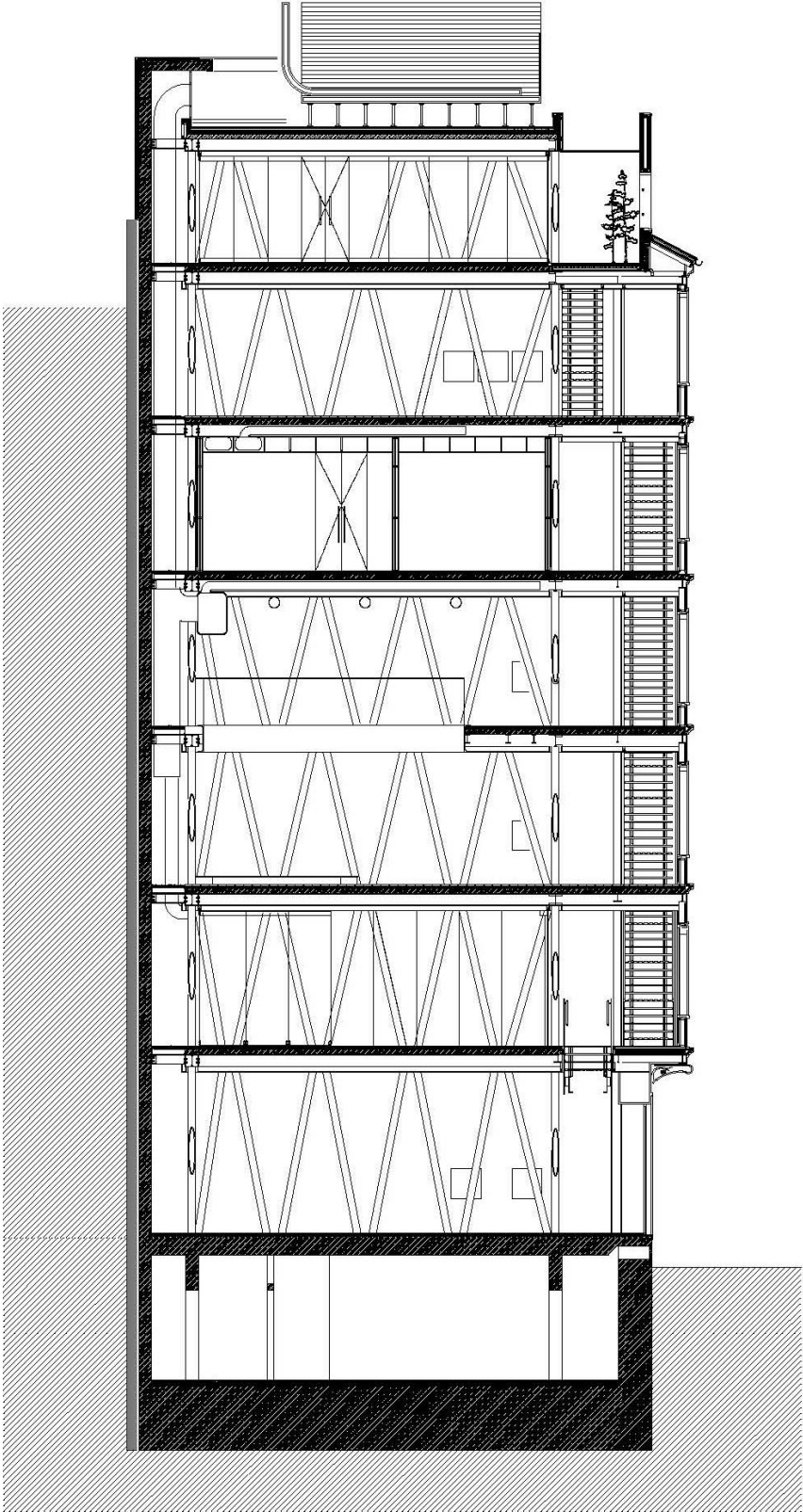
“

# APPENDIX 30. BMH NEW LOFT PLAN

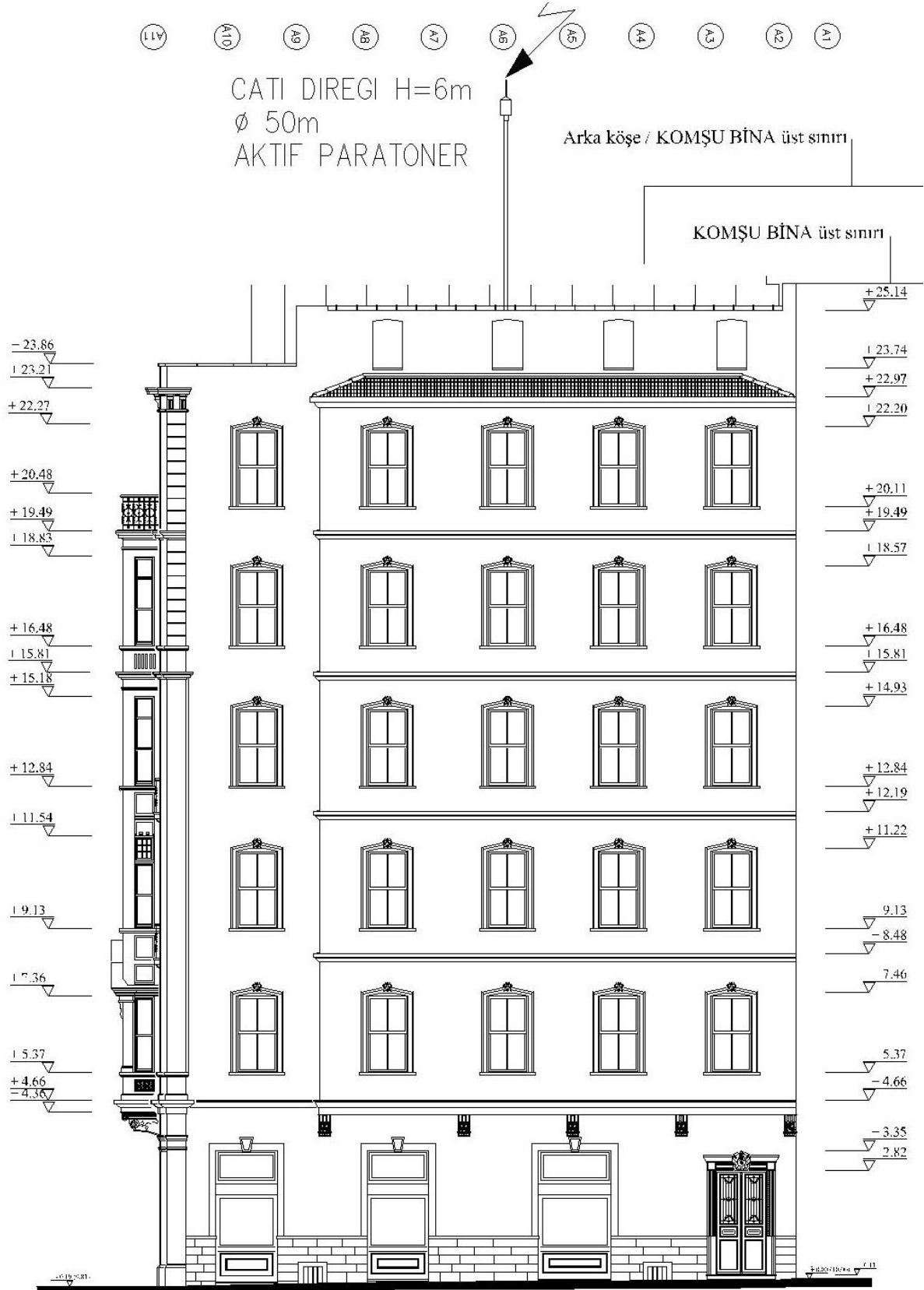




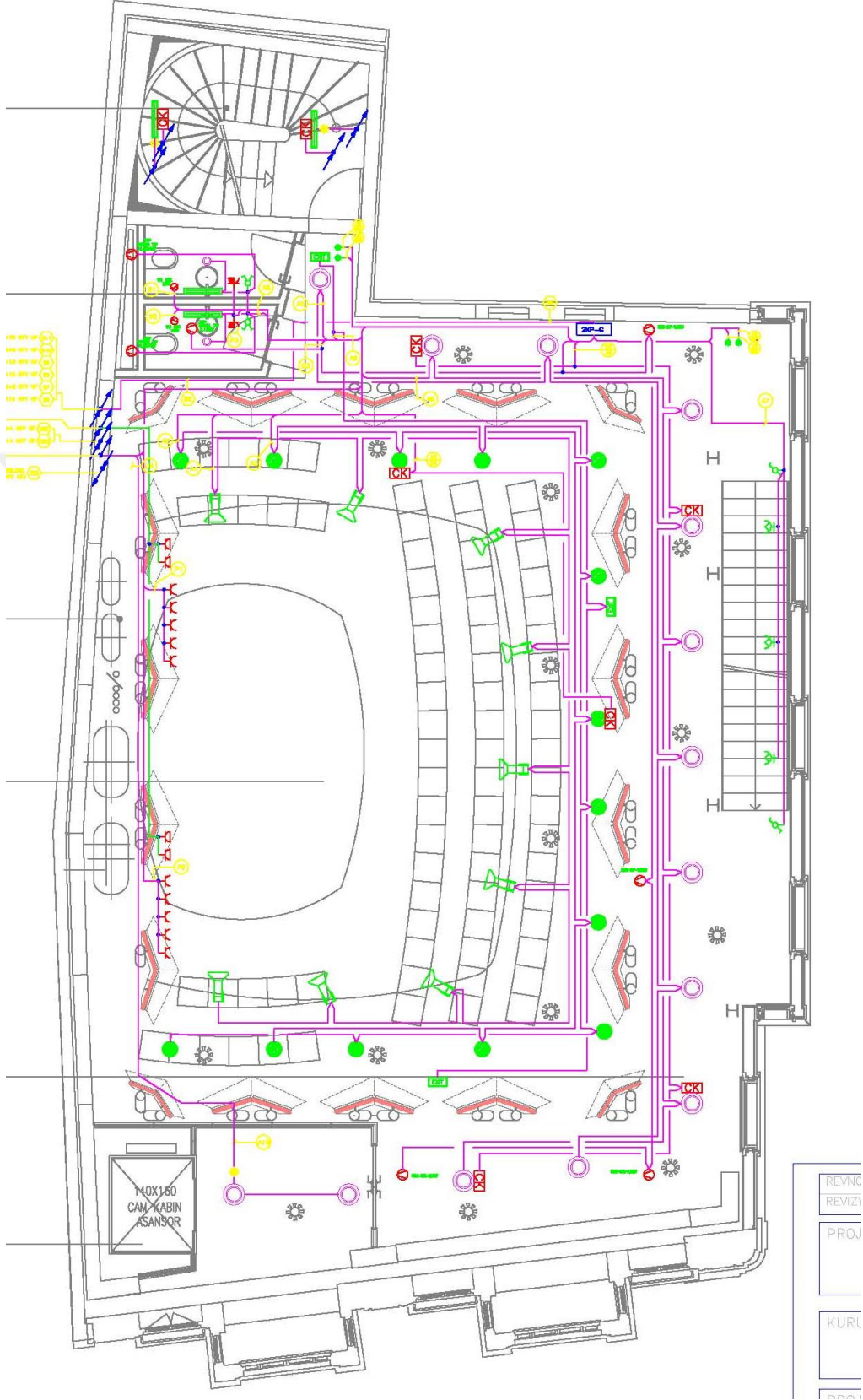
APPENDIX 32. BMH NEW SECTION A-A



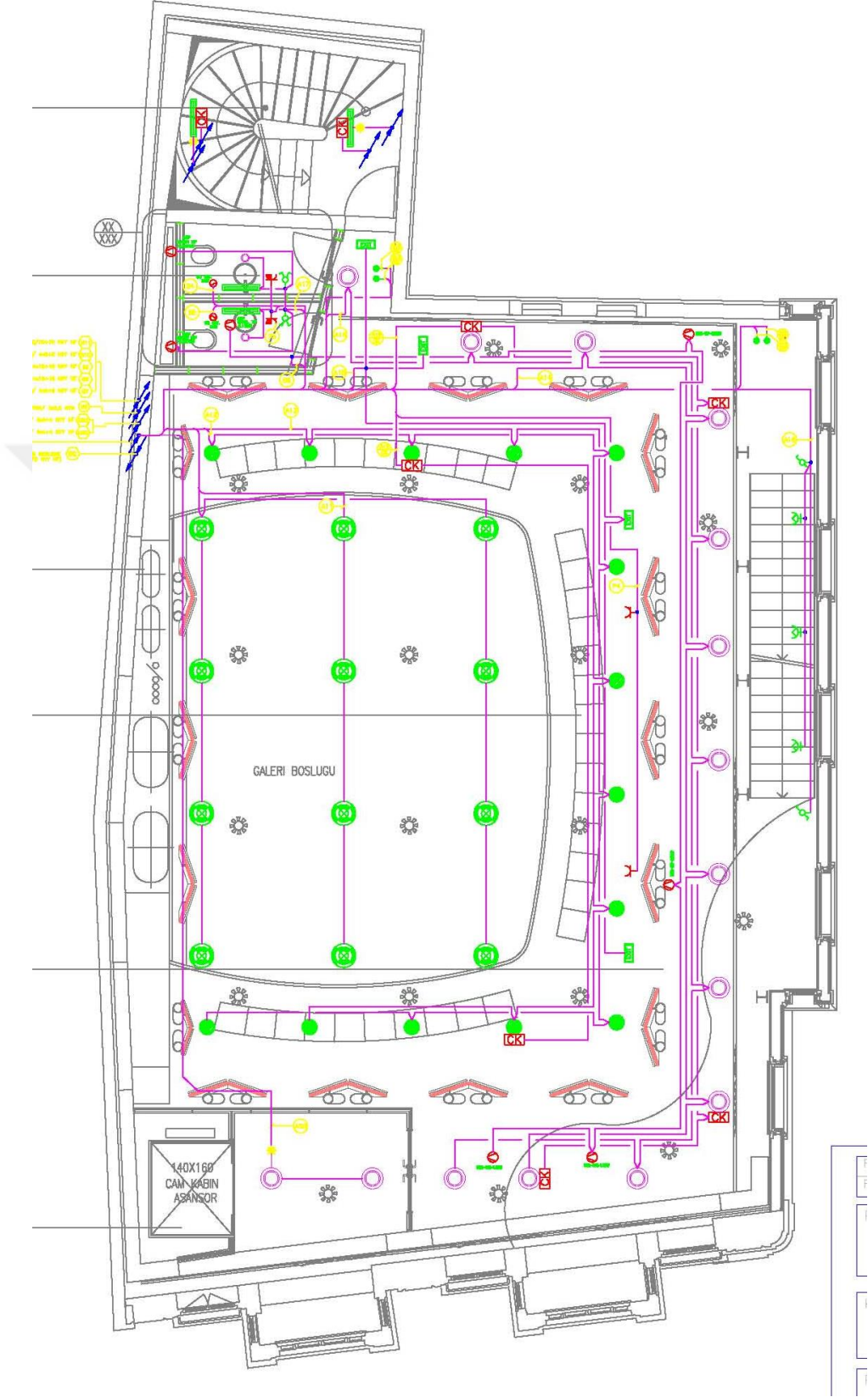
**APPENDIX 33. BMH NEW SIDE VIEW**



APPENDIX 34. BMH NEW SECOND FLOOR ELECTRICAL PLAN

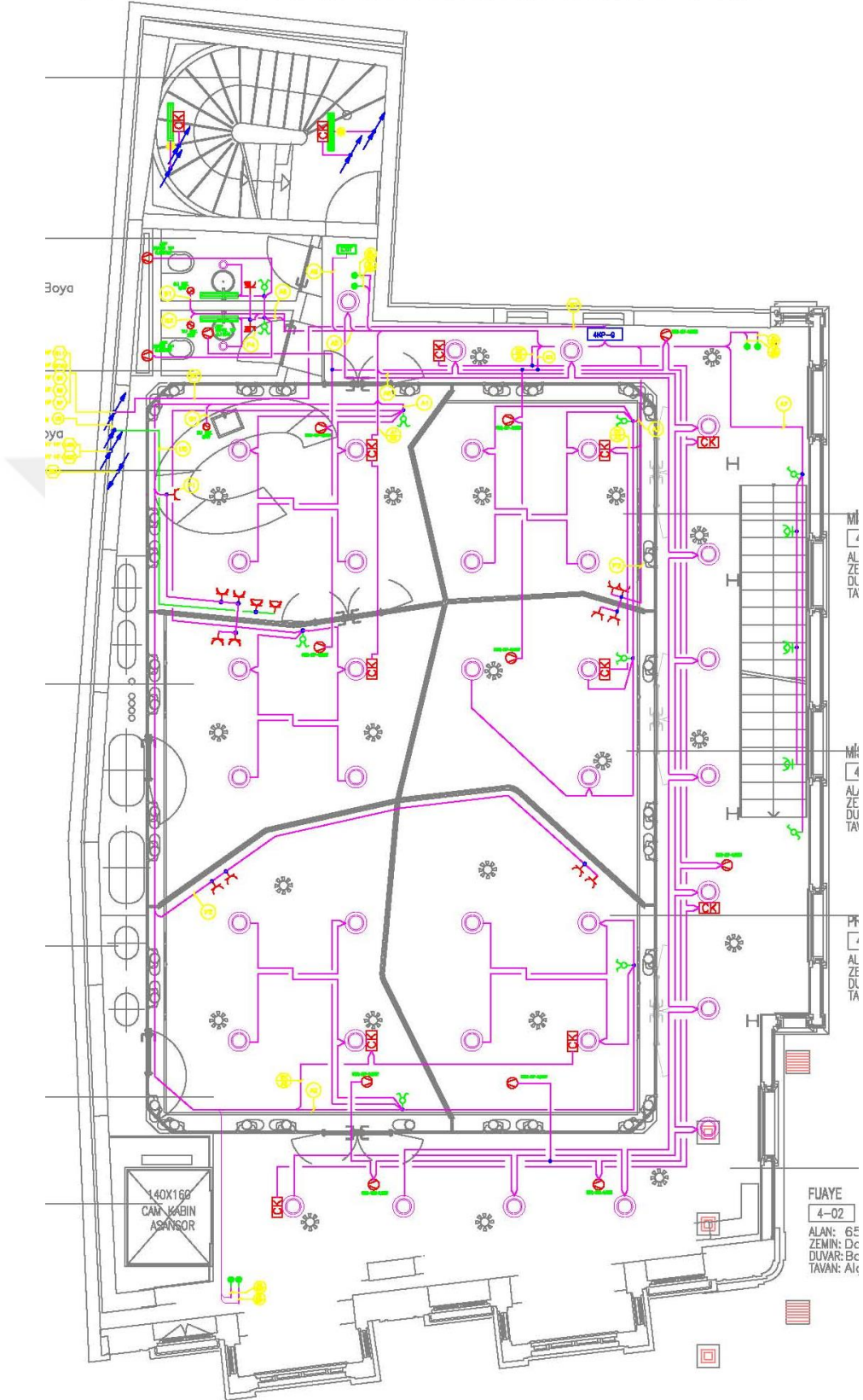


APPENDIX 35. BMH NEW THIRD FLOOR ELECTRICAL PLAN





**APPENDIX 36. BMH NEW FOURTH FLOOR ELECTRICAL PLAN**



## APPENDIX 37. BMH NEW ELECTRICAL PLAN LAYOUT

SEMBOL LİSTESİ	
	TOPRAKLI MONOFAZE PRİZ
	MONOFAZE ETANJ PRİZ
	UPS PRİZİ
	TRİFAZE TOPRAKLI PRİZ
	TRİFAZE ETANJ PRİZ
	CIHAZ BESLEME NOKTASI
	NORMAL ANAHTAR
	KOMİTATOR ANAHTAR
	VAEVIEN ANAHTAR
	LIGHT ANAHTAR
	BUAT
	4x18W SİVAUSTU FLOURESAN ARMATUR
	2x36W SİVAUSTU FLOURESAN ARMATUR
	1x36W SİVAUSTU FLOURESAN ARMATUR
	2x18W SİVAUSTU FLOURESAN ARMATUR
	1x18W SİVAUSTU FLOURESAN ARMATUR
	2x26W SİVAUSTU DOWNLIGHT FL. ARMATUR
	2x26W SİVAALTI DOWNLIGHT FL. ARMATUR
	1x26W SİVAUSTU DOWNLIGHT FL. ARMATUR
	2x18W SİVAUSTU DOWNLIGHT FL. ARMATUR
	1x18W SİVAUSTU DOWNLIGHT FL. ARMATUR
	100W A KADAR E TİPİ ENKANDESAN ARM.
	100W A KADAR C TİPİ GLOP ENKANDESAN ARM.
	100W A KADAR YERE GOMME ARMATUR
	100W A KADAR BOLARD ARMATUR
	EXIT ARMATUR
	CONVERTION KIT
	100W A KADAR HARICI TİP APLİK ARM.
	100W A KADAR DAHİLİ TİP APLİK ARM.
	200W A KADAR AVİZE TİP ARM.
	150W METAL HALİDE DAWNLIĞH ARM.
	150W HALOGEN PROJİKTÖR ARM.
	TALI DAGITIM KUVVETLİ AKIM PANOSU
	HELIUM DICRO 12V/50W
	KRİPTON ARC 2x18W
	PIR DEDEKTÖR
	H=1MT 100W ENKANDESAN BOLARD ARM.

GENEL NOTLAR:  
AKSI BELİRTİLMEYENDE:  
- ANAHTAR VE BUTONLAR h=130cm DE UYGULANACAKTIR.  
- PRİZLER h=30cm DE UYGULANACAKTIR.  
- APLİKLER h=180cm DE UYGULANACAKTIR.  
- GÖMÜLÜ VE SİVAUSTU TİP PANOLARIN KABİN ÜST YÜKSEKLİĞİ 180cm DE UYGULANACAKTIR.  
- KOLON, BESLEME, LİNYE VE SÖRTİ KABLO KESİTLERİ İÇİN AĞ KOLON VE PANO YÜKLEMESİ ESASTIR.  
- SİSTEMDE KULLANILACAK BORU VE KABLOLAR HALOGEN FREE OLACAKTIR.  
- Ø18mm DEN KÜÇÜK İÇ CAPTA BORU, KUVVET TESİSATINDA UYGULANMAYACAKTIR.  
- VERİLEN h YÜKSEKLİKLERİ BİTİMİS DOSEMEDEN İTİBARENDİR.

## CURRICULUM VITAE

### PERSONAL INFORMATION

**Surname, Name:** İzmitli Yıldırım, İrem Gölay

**Date and Place of Birth:** 12 July 1984, Ankara

**Marital Status:** Married with children

**Phone:** +90 506 404 08 00

**Email:** lakemooniz@hotmail.com



### EDUCATION

Degree	Institution	Year of Graduation
M.Sc.	Çankaya Univ., Interior Architecture	2016
B.Sc.	Çankaya Univ., Interior Architecture	2009
High School	Ayrancı High School	2001

## INTERNSHIP

Year	Place	Enrollment
2007	MNG Holding –TARGEM	Office: <i>Büyük Ölçekli Otel ve Konut Uygulama Proje Çizimleri</i>
2006	MNG Holding-MEPAŞ	Factory: Ahşap Fabrikası <i>Kapı ve Mobilya Kontrolörlüğü</i>
2005	Tepe Holding-Tepe İnşaat	Bilkent Bahçe Evleri <i>İnce ve Kaba İş Kontrolörlüğü</i>

## WORK EXPERIENCE

Year	Place	Enrollment
2013-2014	HAFELE Kalite Noktası	Showroom Tasarımcısı ve Müdürü
2011-2013	PRO-GE Mimarlık ve Dekorasyon	Spec Yöneticisi
2008-2011	MNG Holding	İhale ve Metraj Bölümü İçmimarı

## FOREIN LANGUAGES

Advanced English

## HOBBIES

Swimming, ski, design and korist of TRT