

**T TYPOLOGY OF  
HISTORICAL TURKISH BATHS  
IN URLA AND SEFERİHİSAR, İZMİR**

**A Thesis Submitted to  
The Graduate School of Engineering and Sciences of  
İzmir Institute of Technology  
in Partial Fulfillment of the Requirements for the Degree of**

**MASTER OF SCIENCE**

**in Architectural Restoration**

**by  
Aysun ALP**

**July 2016  
İZMİR**

We approve the thesis of **Aysun ALP**

**Examining Committee Members:**

---

**Assoc. Prof. Dr. Mine HAMAMCIOĞLU TURAN**

Department of Architectural Restoration, İzmir Institute of Technology

---

**Assist. Prof. Dr. F.Nurşen KUL**

Department of Architectural Restoration, İzmir Institute of Technology

---

**Assist. Prof. Dr. Seçkin KUTUCU**

Department of Architecture, Yaşar Univesity

**29 July 2016**

---

**Assoc. Prof. Dr. Mine HAMAMCIOĞLU TURAN**

Supervisor, Department of Architectural Restoration,  
İzmir Institute of Technology

---

**Prof. Dr. Başak İPEKOĞLU**

Head of the Department of  
Architectural Restoration

---

**Prof. Dr. Bilge KARAÇALI**

Dean of the Graduate School of  
Engineering and Sciences

## **ACKNOWLEDGEMENTS**

First of all, I would like to express my special thanks to my supervisor Assoc. Prof. Dr. Mine HAMAMCIOĞLU TURAN for her scientific support, guidance and incredible patience during the study. This thesis could not be completed without her moral and technical support.

Also, I would like to express my thanks to the committee members Assist. Prof. Dr. F.Nurşen KUL and Assist. Prof. Dr. Seçkin KUTUCU for their valuable comments and suggestions.

Finally, I dedicate this thesis to my family and I am very thankful for their love, support and patience during my studies.

# ABSTRACT

## TYOLOGY OF HISTORICAL TURKISH BATHS IN URLA AND SEFERİHİSAR, İZMİR

In this study, spatial characteristics of the historic baths in Urla-Seferihisar region, İzmir belonging to the Turkish period are investigated.

The methodology includes documentation of the baths with the tools of the discipline of architectural restoration, historical and archive research, development of tables for analysis of spatial characteristics, visual analysis of spatial characteristics and their alterations via mapping, presentation of schematic restitution plans and evaluation of typologic characteristics.

It is concluded that single baths with the rectangular *sıcaklık* with two *halvets* plan scheme are widespread in the region. The overall plan layout is always linear, while spaces are brought together in additive fashion. The circulation scheme is generally L formed in order to achieve privacy at the main entrance and terminates in alternating order.

The silhouette is generally a composition of one large cubic mass, one group of small cubicals and a prismatic mass addition of another prismatic mass or reduction of the large cubic mass is possible in relation with the desired scale. In turn, types with *ılıklik* and without *soyunmalık* are created.

## ÖZET

### İZMİR, URLA VE SEFERİHİSAR'DAKİ TARİHİ TÜRK HAMAMLARININ TİPOLOJİSİ

Bu çalışma kapsamında, İzmir, Urla ve Seferihisar bölgesindeki tarihi Türk hamamlarının mekânsal kurgusu incelenmiştir.

Çalışma, hamamların mimari restorasyon disiplinine uygun araçlarla belgelenmesini, tarih ve arşiv araştırmalarını, mimari özellikler ve değişmişlik analizlerini, şematik restitüsyon planlarını ve tipolojik özelliklerin değerlendirilmesini içermiştir.

Sonuç olarak, iki halvetli, dikdörtgen sıcaklıklı plan şemasına sahip olan hamamlar bölgede yaygın olarak görülmüştür. Tüm mekânlar birbirine doğrusal bir düzen içinde eklenmiştir. Hamamların mekânları arasındaki sirkülasyonun ana girişten L şeklinde başlayıp alternatif düzenle son bulduğu gözlemlenmiştir.

Genellikle yapıların silüetleri istenilen büyüklükte kübik bir kütle, bir grup küçük küp şeklinde kütleler ve bir prizmatik kütlede oluşmuştur. Sırasıyla ılık içeren ve soyunmalık olmayan tipler oluşturulmuştur.

# TABLE OF CONTENTS

LIST OF FIGURES .....	viii
LIST OF TABLES .....	xi
CHAPTER 1. INTRODUCTION .....	1
1.1. Aim .....	10
1.2. Method .....	10
1.3. Content .....	11
CHAPTER 2. GEOGRAPHICAL CHARACTERISTICS AND HISTORICAL BACKGROUND .....	18
2.1. Geographical Characteristics .....	18
2.2. Historical Background .....	20
2.3. History of Baths .....	22
2.3.1. Spatial Elements .....	24
CHAPTER 3. ANALYSIS OF SPATIAL CHARACTERISTICS .....	27
3.1. Baths in Urla .....	27
3.1.1. Kamanlı <i>Hamamı</i> .....	27
3.1.2. Özbek <i>Hamamı</i> .....	37
3.1.3. Rüstem Paşa <i>Hamamı</i> .....	45
3.1.4. Yeni <i>Hamam</i> .....	51
3.1.5. Hersekzade Ahmet Paşa <i>Hamamı</i> .....	57
3.2. Baths in Seferihisar .....	69
3.2.1. Ulamış <i>Hamamı</i> .....	69
3.2.2. Düzce (Hereke) <i>Hamamı</i> .....	77
3.2.3. Sığacık Kaleiçi <i>Hamamı</i> .....	86
3.2.4. Küçük <i>Hamam</i> .....	93
3.2.5. Büyük <i>Hamam</i> .....	101

CHAPTER 4. EVALUATION .....	110
4.1. The Size .....	110
4.2. The Presence of Soyunmalık and its Characteristics.....	110
4.3. The Presence of Ilıklık and its Characteristics .....	111
4.4. The Sıcaklık Plan Scheme and Overall Spatial Organization .....	111
4.5. The Circulation Pattern.....	113
4.6. The Mass Composition.....	114
CHAPTER 5. CONCLUSION .....	116
REFERENCES .....	118

## LIST OF FIGURES

<b><u>Figure</u></b>	<b><u>Page</u></b>
Figure 1.1. Geographical distribution of the studied baths on Urla Peninsula .....	2
Figure 1.2. Typology of Ottoman Baths according to K. Klinghardt .....	7
Figure 1.3. Typology of Ottoman Baths according to H. Glück.....	8
Figure 1.4. Typology of Ottoman Baths according to S. Eyice.....	9
Figure 2.1. Physical map illustrating the studied region.....	19
Figure 2.2. Plan Scheme of a Roman Bath .....	23
Figure 2.3. Diagram illustrating the heating system .....	26
Figure 3.1. General view of the bath from the southwest.....	31
Figure 3.2. Eastern iwan in the main <i>sıcaklık</i> space .....	32
Figure 3.3. Openings on the west wall of the main <i>ılıkılık</i> space.....	32
Figure 3.4. Muqarnas decorated fountain niche in he main <i>sıcaklık</i> space.....	33
Figure 3.5. Analysis of spatial characteristis at Kamanlı <i>Hamamı</i> , Urla.....	35
Figure 3.6. Analysis of alterations at Kamanlı <i>Hamamı</i> , Urla.....	36
Figure 3.7. General view of he bath from the south .....	39
Figure 3.8. Northwest iwan in the main <i>sıcaklık</i> space.....	40
Figure 3.9. Wash basins in the northwest iwan .....	40
Figure 3.10. Entrances of the <i>halvets</i> .....	41
Figure 3.11. Analysis of spatial characteristis at Özbek <i>Hamamı</i> , Urla .....	43
Figure 3.12. Analysis of alterations at Özbek <i>Hamamı</i> , Urla.....	44
Figure 3.13. General view of the bath from the west.....	46
Figure 3.14. Closed openings on the southeast wall of the space .....	47
Figure 3.15. Entance on the northwet wall of the space .....	47
Figure 3.16. Analysis of spatial characteristis at Rüstem Paşa <i>Hamamı</i> , Urla.....	49
Figure 3.17. Analysis of alterations at Rüstem Paşa <i>Hamamı</i> , Urla.....	50
Figure 3.18. Door openings in the <i>sıcaklık</i> .....	53
Figure 3.19. Southwest <i>halvet</i> .....	53
Figure 3.20. Analysis of spatial characteristis at Yeni <i>Hamam</i> , Urla .....	55
Figure 3.21. Analysis of alterations at Yeni <i>Hamam</i> , Urla.....	56
Figure 3.22. General view of the bath from the north .....	60



Figure 3.23. Bursa arch in the <i>ılıklik</i> space .....	61
Figure 3.24. Entrance in the main <i>sıcaklık</i> .....	61
Figure 3.25. Wash basins in the southeast <i>halvet</i> .....	61
Figure 3.26. <i>Soyunmalık</i> space of men's section .....	65
Figure 3.27. Analysis of spatial characteristis at Hersekzade Ahmet Paşa <i>Hamamı</i> , Urla .....	67
Figure 3.28. Analysis of alterations at Hersekzade Ahmet Paşa <i>Hamamı</i> , Urla.....	68
Figure 3.29. General view of the bath from the north .....	72
Figure 3.30. Western iwan in the main <i>sıcaklık</i> space .....	72
Figure 3.31. Observation window in the western <i>halvet</i> .....	73
Figure 3.32. Depressed pointed arched door with <i>yaşmak</i> .....	73
Figure 3.33. Analysis of spatial characteristis at Ulaş <i>Hamamı</i> , Seferihisar .....	75
Figure 3.34. Analysis of alterations at Ulaş <i>Hamamı</i> , Seferihisar.....	76
Figure 3.35. General view of the bath from the east .....	80
Figure 3.36. East wall of the <i>soyunmalık</i> space .....	81
Figure 3.37. West wall of the <i>soyunmalık</i> space.....	81
Figure 3.38. Eastern iwan in the main <i>sıcaklık</i> space .....	82
Figure 3.39. South wall of the eastern <i>halvet</i> .....	82
Figure 3.40. Analysis of spatial characteristis at Düzce (Hereke) <i>Hamamı</i> , Seferihisar.....	84
Figure 3.41. Analysis of alterations at Düzce (Hereke) <i>Hamamı</i> , Seferihisar.....	85
Figure 3.42. Northwest wall of the <i>soyunmalık</i> space .....	89
Figure 3.43. Southeast wall of the northeastern <i>halvet</i> .....	89
Figure 3.44. Analysis of spatial characteristis at Sığacık Kaleiçi <i>Hamamı</i> , Seferihisar.....	91
Figure 3.45. Analysis of alterations at Sığacık Kaleiçi <i>Hamamı</i> , Seferihisar.....	92
Figure 3.46. General view of the bath from the northeast .....	96
Figure 3.47. Western iwan and belly stone in the main <i>sıcaklık</i> .....	96
Figure 3.48. Eastern iwan in the main <i>sıcaklık</i> .....	97
Figure 3.49. Observation window in the western <i>halvet</i> .....	97
Figure 3.50. Analysis of spatial characteristis at Küçük <i>Hamam</i> , Seferihisar.....	99
Figure 3.51. Analysis of alterations at Küçük <i>Hamam</i> , Seferihisar.....	100
Figure 3.52. General view of the bath from the northeast .....	104
Figure 3.53. West wall of the <i>soyunmalık</i> space.....	105

Figure 3.54. Western iwan in th main <i>sıcaklık</i> .....	105
Figure 3.55. Mihrab niche in the west iwan of <i>ılıkık</i> .....	106
Figure 3.56. Analysis of spatial characteristis at Büyük <i>Hamam</i> , Seferihisar.....	108
Figure 3.57. Analysis of alterations at Büyük <i>Hamam</i> , Seferihisar.....	109

## LIST OF TABLES

<b><u>Table</u></b>		<b><u>Page</u></b>
Table 1.1.	Preliminary studies on Urla-Seferihisar Baths. ....	3
Table 1.2.	Measured drawings of the studied baths in Urla-Seferihisar.....	12
Table 1.3.	Spatial characteristics for each bath .....	13
Table 1.4.	Identification table for each bath .....	14
Table 1.5.	Classification of spatial and architectural characteristics and their color codes.....	15
Table 1.6.	Classification of alterations and their color codes.....	16
Table 1.7.	Restitution drawings of the studied baths in Urla-Seferihisar .....	17
Table 3.1.	Identification table of Kamanlı <i>Hamamı</i> .....	31
Table 3.2.	Spatial characteristics of Kamanlı <i>Hamamı</i> .....	34
Table 3.3.	Identification table of Özbek <i>Hamamı</i> .....	39
Table 3.4.	Spatial characteristics of Özbek <i>Hamamı</i> .....	42
Table 3.5.	Identification table of Rüstem Paşa <i>Hamamı</i> .....	46
Table 3.6.	Spatial characteristics of Rüstem Paşa <i>Hamamı</i> .....	48
Table 3.7.	Identification table of Yeni <i>Hamam</i> .....	52
Table 3.8.	Spatial characteristics of Yeni <i>Hamam</i> .....	54
Table 3.9.	Identification table of Hersekzade Ahmet Paşa <i>Hamamı</i> .....	60
Table 3.10.	Spatial characteristics of Hersekzade Ahmet Paşa <i>Hamamı</i> Women’s Section.....	62
Table 3.11.	Spatial characteristics of Hersekzade Ahmet Paşa <i>Hamamı</i> Men’s Section .....	66
Table 3.12.	Identification table of Ulamış <i>Hamamı</i> .....	71
Table 3.13.	Spatial characteristics of Ulamış <i>Hamamı</i> .....	74
Table 3.14.	Identification table of Düzce (Hereke) <i>Hamamı</i> .....	80
Table 3.15.	Spatial characteristics of Düzce (Hereke) <i>Hamamı</i> .....	83
Table 3.16.	Identification table of Sığacık Kaleiçi <i>Hamamı</i> .....	88
Table 3.17.	Spatial characteristics of Sığacık Kaleiçi <i>Hamamı</i> .....	90
Table 3.18.	Identification table of Küçük <i>Hamam</i> .....	95
Table 3.19.	Spatial characteristics of Küçük <i>Hamam</i> .....	98
Table 3.20.	Identification table of Büyük <i>Hamam</i> .....	104

Table 3.21. Spatial characteristics of Büyük <i>Hamam</i> .....	107
Table 4.1. Typology of baths in Urla-Seferihisar .....	115

# CHAPTER 1

## INTRODUCTION

Yegül (1995) has defined the characteristics of the bath building type in classical antiquity. Large, luxurious bathing complexes are *thermeas*, and there are relatively small bathing buildings for the public. The tradition of bathing in small neighborhood baths has continued in the Turkish period, following the Roman and Byzantine periods in Anatolia (Yegül, 2010: 265). There are some similarities in these buildings. They all have hypocaust system heated with furnace in which wood has been burned. However, the tradition of making sportive activity before bathing is not seen in Turkish societies. In turn, there is no *palestra*. Similarly, bathing with cold water is not seen; so, there is no *frigidarium* with a swimming pool. In Turkish baths, bathing has been done with hot water taken from a small wash basin. In Roman baths, hot bathing is also realized in pools.

The resting function in the *frigidarium* of a Roman bath has been realized in the changing hall (*soyunmalık/soğukluk*) of a Turkish bath. The decorative pool at its center may be an abstraction of the Roman swimming pool. The massaging function is relevant for both. The sweating function is realized in the *halvets* in a Turkish bath. This is similar to Roman *laconicum*.

The circulation scheme of a Roman neighborhood bath is generally in form of a ring; *caldarium* makes a projection in the building mass and it is oriented to the south and east. There are large windows for lighting. The spaces are vaulted and relatively large. In a Turkish bath the circulation scheme is generally linear. The spaces are domed and vaulted, and lighted through the *oculus* in their superstructural zone in a dim manner.

This study discusses characteristics of ten historic public baths that are located in the boundaries of Urla-Seferihisar, İzmir constructed after the Turkish arrival (Figure 1.1).

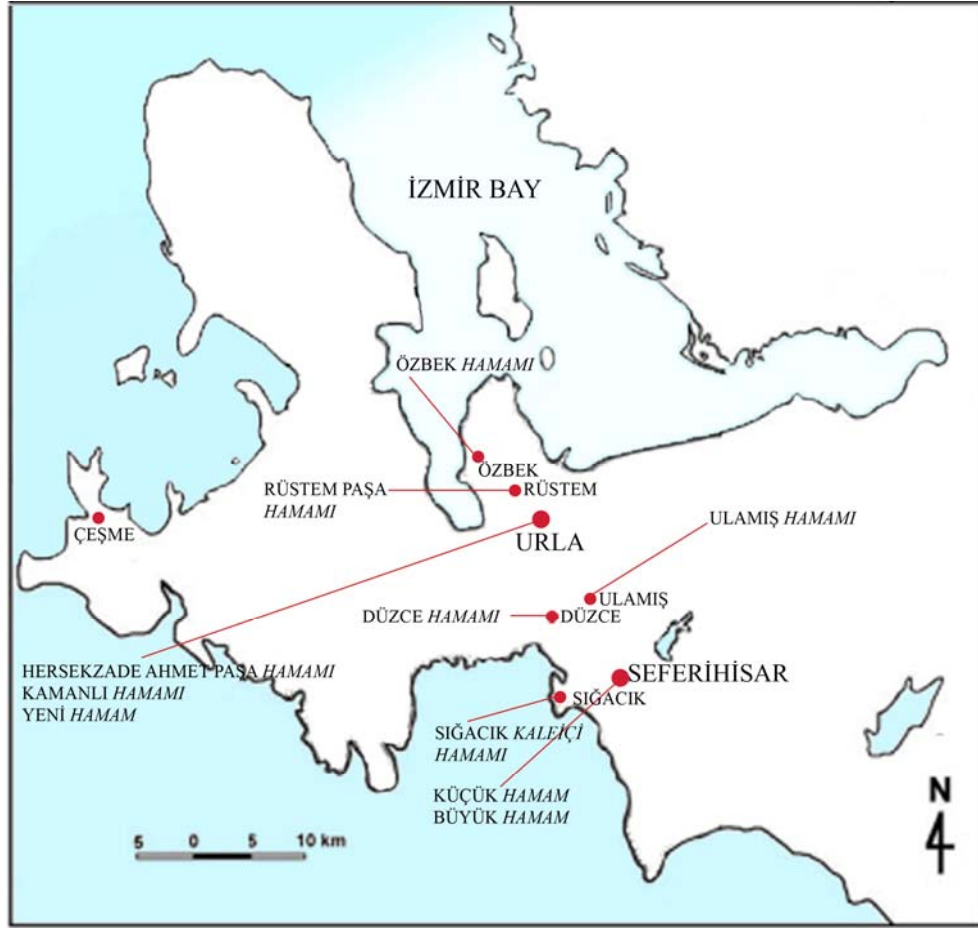


Figure 1.1. Geographical distribution of the studied baths on Urla Peninsula.

There are many monographs published on historical Turkish baths and some studies focusing on baths in a specific region. E.g.; Manisa baths (Acun, 1999); Edirne baths (Büyükdıgan, 1991), Tire baths (Çakmak, 2002) and Arapgir baths (Eyüpçiller, et al., 2011). There are some preliminary studies on the historical baths in Urla and Seferihisar region (Table 1.1). Restoration design studios in İYTE and ODTÜ, thesis and summer practice in İYTE Department of Architectural Restoration, and an art historian evaluation published as a book.

Table 1.1. Preliminary Studies on Urla-Seferihisar Baths.

Study Type	Supervisor and, or Author	Year	Emphasis of work	Related publications
Design Studio	Hamamcıoğlu-Turan	2002	Heritage Characteristics and Conservation Problems (Seferihisar, Büyük <i>Hamam</i> )	Çizer, and Hamamcıoğlu-Turan, 2003a Çizer, and Hamamcıoğlu-Turan, 2003b Hamamcıoğlu-Turan, and Reyhan, 2005
Design Studio	Madran, Özgönül, Kul and Uçar	2002	Heritage Characteristics and Conservation Problems (Urla, Hersekzade Ahmet Paşa <i>Hamamı</i> Men's Section, Kamanlı <i>Hamamı</i> )	–
Thesis	Böke, İpekoğlu and Çizer	2004	Mortar Characteristics	Çizer, Böke and İpekoğlu, 2004
Article	Daş	2007	Evaluation from art historian point of view (Sığacık <i>Hamamı</i> )	–
Thesis	İpekoğlu and Reyhan	2004	Structural Elements	Reyhan İpekoğlu and Böke, 2010 Reyhan, 2013
Thesis	Böke and Uğurlu	2005	Plaster Characteristics	Uğurlu and Böke, 2011
Book	Bayrakal	2009	Evaluation from art historian point of view (Urla Baths)	–
Thesis	Hamamcıoğlu-Turan and Çıtak	2010	Tachometric Documentation (Urla, Hersekzade Ahmet Paşa <i>Hamamı</i> )	Çıtak and Hamamcıoğlu-Turan, 2011
Thesis	İpekoğlu and Reyhan	2011	Dome Characteristics	Reyhan, İpekoğlu, and Böke, 2013
Design Studio	Tunçoku and Kul	2012	Heritage Characteristics and Conservation Problems (Seferihisar, Ulaş <i>Hamamı</i> )	–
Summer Practice	Hamamcıoğlu-Turan	2012	Conventional Documentation	–
Conference Paper	Hamamcıoğlu-Turan and Balta	2013	Photogrammetric Documentation (Seferihisar, Ulaş <i>Hamamı</i> )	Balta, Hamamcıoğlu-Turan and Ocalı, 2013

The preliminary studies are introduced in the below in chronologic order.

The design studio of Seferihisar Büyük *Hamam* makes a detailed documentation of the building (Çizer and Hamamcıoğlu-Turan, 2003a; 2003b) and also schematic documentation of the baths in the region (Hamamcıoğlu-Turan and Reyhan, 2005); and presents a restoration design for Seferihisar Büyük *Hamam*. The design studio of Urla Hersekzade Ahmet Paşa *Hamamı* Men's section and Urla Kamanlı *Hamamı* makes a detailed documentation of the buildings and presents restoration designs for Urla Hersekzade Ahmet Paşa *Hamamı* Men's section and Urla Kamanlı *Hamamı*. The master thesis of Çizer examines the mortar characteristics for the conservation of the Ottoman baths in Seferihisar and Urla region. The master thesis of Reyhan examines construction techniques and materials of the Ottoman period baths in Seferihisar and Urla Region. Daş evaluates Sığacık *Hamamı* from the view point of an art historian. The thesis of Uğurlu investigates horasan plasters of the baths in Seferihisar and Urla region. Ottoman Baths in İzmir. The design studio of Urla Kamanlı *Hamamı* makes a detailed documentation of the building and presents a restoration design for Urla Kamanlı *Hamamı*. The book of Bayrakal describes historical monuments in Urla region belonging to Turkish period. He evaluates seven baths in Urla: Hersekzade Ahmet Paşa *Hamamı*, Sungurlu *Hamamı*, Kamanlı *Hamamı*, Özbek *Hamamı*, Gazideresi *Hamamı*, Rüstem Paşa *Hamamı* and Fatih İbrahim Bey (Köprübaşı) *Hamamı*. Sungurlu and Gazideresi examples are in ruined condition; their superstructures are unrepresent and there is extensive vegetation hiding them. Bayrakal presents a plan sketch for Sungurlu and only photographs for Gazideresi. Bayrakal presents the photographs dated 1994 and the plan sketch available in the archives of Ege University Department of Art History for Rüstem Paşa and Fatih İbrahim Bey, respectively. In fact, only a single space of Rüstem Paşa and only some ruins of Fatih İbrahim Bey have reached today. The master thesis of Çıtak presents a three dimensional model of Urla, Hersekzade Ahmet Paşa Bath based on tachometric measurement. The doctorate thesis of Reyhan examines architectural characteristics and construction techniques of domes in a group of Ottoman baths in Urla, Seferihisar and Tire. The design studio of Seferihisar Ulamış *Hamamı* makes a detailed documentation of building and presents a restoration design for Seferihisar Ulamış *Hamamı*. The summer practice makes conventional documentation of Hersekzade Ahmet Paşa *Hamamı*, Kamanlı *Hamamı* and Özbek *Hamamı*. The study of Balta, et al. presents a three dimensional model via photographs for documentation of Seferihisar Ulamış *Hamamı*.



So, the preliminary studies provide rich information for this study, but there is no classification of the baths in this region based on their spatial characteristics.

There are a number of studies on typology of Ottoman baths. Karl Klinghardt (1921) (Figure 1.2), Heinrich Glück (1927) (Figure 1.3), Hermes Balducci (1931), Kemal Ahmet Aru (1941), Semavi Eyice (1960) (Figure 1.4), and Michael Kiel (1976) have presented typologies based on study of baths located in important historical Turkish settlements such as Istanbul, Bursa, Konya and Rhodes. These scholars preferred to make classification only by using *sıcaklık* spaces. They gave information about the superstructure, but third dimension knowledge is missing in their classifications. Their typological studies do not consider the baths as a whole.

Nevertheless, there is a tendency for understanding the historical Turkish bath building as a whole and presenting classifications in some relatively new studies. Yaman (2010) investigated the development, and architectural elements of Istanbul Turkish baths before and after Ottoman Empire period, and developed a typology in his study. Orhan (2003) examined Çardaklı Bath considering the articulation of *soyunmalık*, *ılıklik*, *sıcaklık* and water reservoir in his classification.

This study claims that the classification of the historical bath of Turkish period in Anatolia should be based on other criteria in addition to the organisation of the *sıcaklık*. Within this scope, definition of building type and building typology is made.

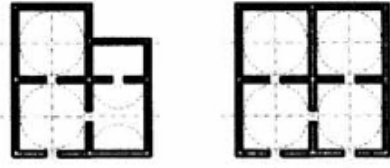
In turn, this study presents the common characteristics of the historical buildings with bathing function, in Urla and Seferihisar region, fulfilling the socio-cultural needs of Turkish population, in the period after the Turkish settlement (14<sup>th</sup> century) and until the end of the 16<sup>th</sup> century. The emphasise of the study is the spatial features.

A building type is the sum of morphologic characteristics of a group of buildings belonging to a specific period, and constructed with the aim of fulfilling functional, cultural and psychologic necessities of that society. (Petruccioli, 2008: 27,28). In addition to functional, cultural, social, psychologic and periodic inputs; geography may be a criterion in the formation of the building type. Petruccioli discusses this with the variation in topography and Meiss (2008) with the variation in the limits of a site. Local material characteristics and development of a specific structural system may be added to this discussion (Meiss, 2008: 165). Petruccioli emphasizes the importance of identification of a basic type with its common social and physical characteristics. Rhythmic articulation of the basic units should be possible.

A building type develops from a single, unspecialized spatial unit, which is the physical reflection of the smallest social unit utilizing it (Petruccioli, 2008: 63). In the second step, other spatial units specialized in different functions are formed. Finally, the developed building types are formed with the repetition of the developed spaces.

Typology is the systematic classification of the building types according to their common characteristics.

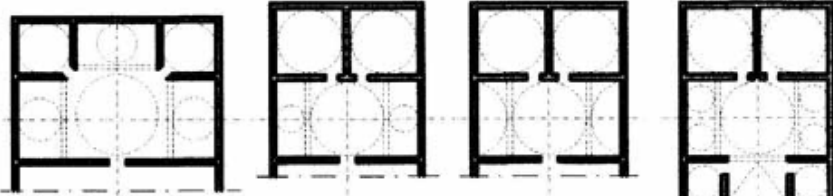
TYPE 1



Kasım Paşa, Bozoyuk

Yukarı Pazar, İzmit  
İsmail Bey, İzmit  
Sadık Bey İnönü

TYPE 2



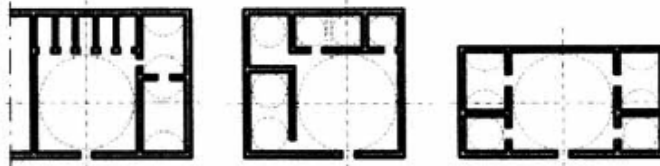
Langa Hamam, İstanbul  
Çukurçeşme Hamam,  
(men's section) İstanbul

Ahmet Ağa Hamam,  
İstanbul

Çoban Mustafa Paşa  
Hamam, Gebze  
At pazarı Hamam, Bursa

Çukurçeşme Hamam,  
(women's section) İstanbul

TYPE 3

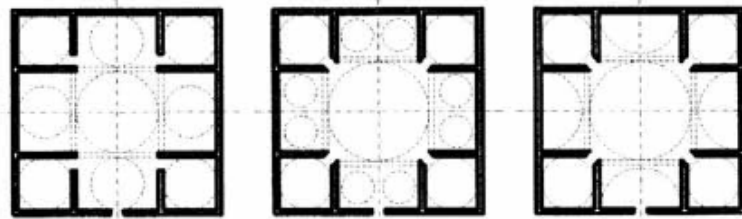


Girdik Hamam, Bursa

Yeşil Hamam, Bursa

Tahtakale Hamam, Bursa

TYPE 4

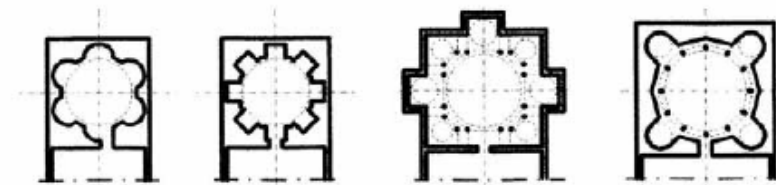


Bayazid Hamam, İstanbul

Çinili Hamam, İstanbul

Sahip Ata Hamam, Konya  
Perşembe Hamam, Bursa  
Edirne Kapsı Hamam, İstanbul  
Hacı Hamza Hamam, İzmit

TYPE 5



Sokullu Mahmut Paşa  
Hamam, Lüleburgaz

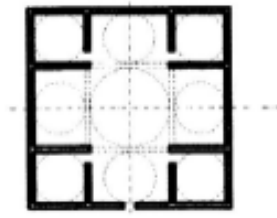
Mahmut Paşa Hamam,  
İstanbul  
Yeni Kaplıca, Bursa  
Tahtakale Hamam,  
(men's section) İstanbul

Cağaloğlu Hamam,  
İstanbul

Eski Kaplıca, Bursa  
Çemberlitaş Hamam, İstanbul

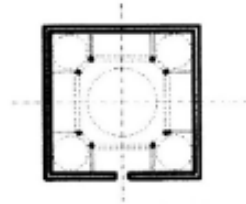
Figure 1.2. Typology of Ottoman Baths according to K. Klinghardt.  
(Source: Kanetaki, 2004)

TYPE 1

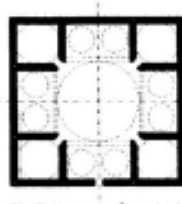


Bayazid Hamam, İstanbul

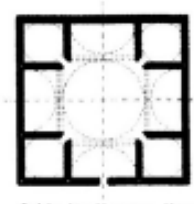
TYPE 2



Süleymaniye Hamam, İstanbul

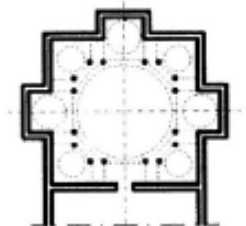


Çinili Hamam, İstanbul



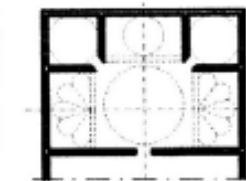
Şehip Ata Hamam, Konya  
Perşembe Hamam, Bursa  
Edirne Kapısı Hamam, İstanbul  
Hacı Hamza Hamam, İzmit  
Çukur Hamam, (men's section)  
İstanbul

TYPE 3

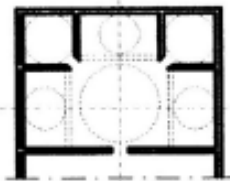


Cağaloğlu Hamam,  
İstanbul

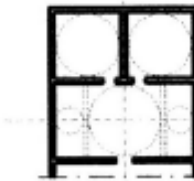
TYPE 4



İshak Paşa Hamam, İstanbul

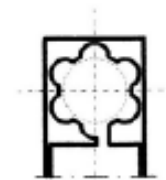


İlona Hamam, İstanbul  
Çukurçesme Hamam,  
(men's section) İstanbul

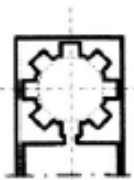


Ahmet Ağa Hamam,  
İstanbul

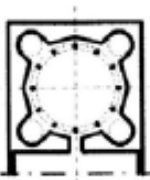
TYPE 5



Sokullu Mahmut Paşa Hamam,  
Lüleburgaz



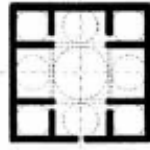
Mahmut Paşa Hamam,  
İstanbul  
Yeni Kaplıca, Bursa  
Tahtakale Hamam,



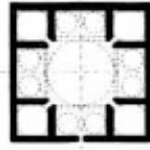
Eski Kaplıca, Bursa  
Çemberitaş Hamam,  
İstanbul

Figure 1.3. Typology of Ottoman Baths according to H. Glück.  
(Source: Kanetaki, 2004)

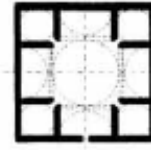
TYPE A



Bayazid Hamam, İstanbul



Çinili Hamam, İstanbul

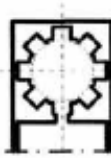


Şehip Ağa Hamam, Konya  
Perşembe Hamam, Bursa  
Edirne Kapısı Hamam, İstanbul  
Hacı Hamza Hamam, İznik

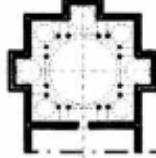
TYPE B



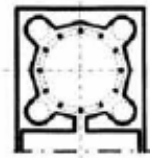
Sokullu Mahmut  
Paşa Hamam,  
Lüleburgaz



Mahmut Paşa Hamam,  
İstanbul  
Yeni Kaplıca, Bursa  
Tahtakale Hamam,  
(men's section) İstanbul

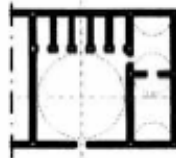


Cağaloğlu Hamam,  
İstanbul

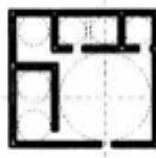


Eski Kaplıca, Bursa  
Çemberitaş Hamam,  
İstanbul

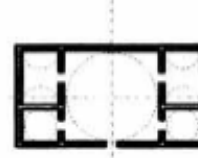
TYPE C



Girik Hamam, Bursa

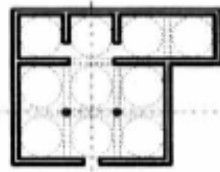


Yeşil Hamam, Bursa



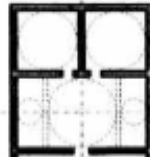
Tahtakale Hamam, Bursa

TYPE D

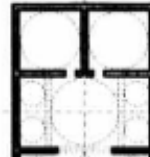


Haseli Hamam, İstanbul

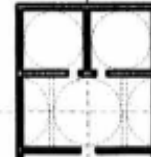
TYPE E



Ahmed Ağa Hamam,  
İstanbul



Çukurçeşme Hamam,  
(women's section) İstanbul

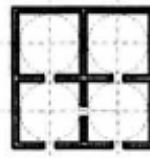


Çoban Mustafa Paşa Hamam,  
Gebze  
Atpaşan Hamam, Bursa

TYPE F



Kasım Paşa, Bozöyük



Yukarı Pazar, İzmit  
İsmail Bey, İznik  
Sadık Bey, İnönü

Figure 1.4. Typology of Ottoman Baths according to S. Eyice.  
(Source: Kanetaki, 2004)

## 1.1. Aim

The aim of the study is to identify the spatial characteristics of the historical Turkish baths in Urla and Seferihisar, and present a typology based on the bath whole, so that their restorations can be planned.

## 1.2. Method

The method of the study consists of site survey, preparation of documentation drawings, development of spatial analysis tables, mapping of spatial characteristics and alterations, historical research, proposition of schematic restitution plans and proposal of the typology. Site survey is carried out in order to document the present condition of the studied baths and prepare their measured drawings. During the site survey, sketches of plans and longitudinal sections of the baths were drawn. Then, basic measurements of the spaces (widths, lengths, heights) were taken with conventional techniques. Following that, photographic documentation of the baths was completed.

After the site survey, drawings were prepared in 1/100 scale using AutoCAD 2012 software (Table 1.2). Information about listing decisions, block, sheet and parcel numbers of the baths was provided from inventories of İzmir Number 1 Regional Conservation Council of Immovable Cultural Assets. Tables identifying general spatial characteristics of each bath were developed (Table 1.2, Table 1.3). Spatial elements, spatial boundaries, architectural elements and alterations in the baths were classified (Table 1.5, Table 1.6) and mapped on the conventional drawings.

Finally, schematic restitution plans were prepared based on traces coming from the buildings themselves, comparative study within the building and with other baths in the studied region. Baths were grouped according to their spatial characteristics to identify different types. The parameters of the developed bath typology are size, presence of *soyunmalık* and its characteristics, presence of *ılıkık* and its characteristics, the *sıcaklık* plan scheme and overall spatial organization, circulation pattern and mass composition.

The very ruined examples such as Sungurlu, Gazideresi, Rüstem Paşa and Fatih İbrahim Bey, and the very much altered example, Yeni *Hamam*, are not included in the

classification. Nevertheless, spatial characteristics of the present state of Rüstem Paşa *Hamamı* and Yeni *Hamam* are included in the documentation and spatial analysis.

### **1.3. Content**

The content of the study consist of five chapters. In the first chapter definition of the study, aim, method and content are stated. The second chapter explains geographical characteristics and historical background of Urla-Seferihisar region. Then, architectural characteristics of Turkish baths with emphasis on 15th-16<sup>th</sup> centuries are mentioned. In chapter three, analysis of spatial characteristics of the studied baths in Urla and Seferihisar is made. After a general description of the site and the building mass, detailed information about the spaces such as; *soyunmalık*, *ılıkık*, *sıcaklık*, *halvets* and water reservoir are described from superstructure to floor. It is followed by the identification tables, analysis of spatial and architectural elements and alterations. Fourth chapter is the evaluation of the studied baths in terms of size, presence of *soyunmalık*, presence of *ılıkık*, spatial organization, circulation pattern, and mass composition is presented. Chapter six remarks a general conclusion about the study.

Table 1.2. Measured Drawings of the studied Baths in Urla-Seferihisar

	Hersekzade Ahmet Paşa Hamamı, Urla	Kamanlı Hamamı, Urla	Özbek Hamamı, Urla	Ulaş Hamamı, Seferihisar	Düze (Hereke) Hamamı, Seferihisar	Sığaick Kaleiçi Hamamı, Seferihisar	Küçük Hamam, Seferihisar	Büyük Hamam, Seferihisar	Yeni Hamam, Urla	Rüstem Paşa Hamamı, Urla
PLAN										
SECTION										



Table 1.3. Spatial characteristics for each bath.

	Spatial Elements		Iltiklik				Sicaklik			Water reservoir	Wood shed	Court-yard
	Soyunmalk	Main space	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets				
<b>Number of Space</b>												
<b>Superstructure</b>												
<b>Transition element</b>												
<b>Arch</b>												
<b>Wall</b>												
<b>Floor</b>												
<b>Illumination element</b>												
<b>Window</b>												
<b>Door</b>												
<b>Niche</b>												
<b>Wash basin (kurna)</b>												
<b>Water pipe (künk)</b>												
<b>Platform</b>												
<b>Surface finishing</b>												
<b>Fountain</b>												
<b>Furnace</b>												
<b>Channel</b>												
<b>Cehennemlik</b>												

Table 1.4. Identification table for each bath.

<b>Location</b>	
<b>Listing</b>	
<b>Site Relations</b>	
<b>Type of <i>Sıcaklık</i></b>	
<b>Façade Characteristics</b>	
<b>Block / Sheet / Parcel No</b>	
<b>Date of Construction</b>	
<b>Donor</b>	
<b>Conservation State</b>	
<b>Double or Single</b>	
<b>Plan Size</b>	

Table 1.5. Classification of Spatial and Architectural Characteristics and their color codes


A. Spatial Elements		C. Architectural Elements	
<p><b>B. Spatial Boundaries</b></p> <p>1. Superstructure</p> <ul style="list-style-type: none"> <li>Dome           <ul style="list-style-type: none"> <li>-circular cornice with muqarnas </li> <li>-circular cornice without muqarnas </li> <li>-octagonal cornice </li> <li>-turkish triangles </li> <li>-pendentives </li> <li>-lobed squinches </li> <li>-squinches </li> <li>-octagonal exterior drum </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Vault           <ul style="list-style-type: none"> <li>-barrel, spanning short side of space  V1</li> <li>-barrel, spanning long side of space  V2</li> <li>-panelled  V3</li> </ul> </li> <li>Timber roof  T</li> <li>No superstructure  X</li> </ul> <p>2. Walls</p> <ul style="list-style-type: none"> <li>with blind arch </li> <li>without blind arch </li> </ul> <p>3. Arches</p> <ul style="list-style-type: none"> <li>Depressed pointed arch </li> <li>Semi-circular arch </li> <li>Bursa arch </li> </ul> <p>4. Floor</p> <ul style="list-style-type: none"> <li>Marble </li> <li>Cut stone </li> <li>Earth </li> <li>Concrete </li> <li>Debris </li> </ul>	<p>1. Oculi and Cupola</p> <ul style="list-style-type: none"> <li>Circular shaped oculi  O1</li> <li>Star shaped oculi  O2</li> <li>Hexagonal shaped oculi  O3</li> <li>Hemispherical cupola  O4</li> </ul> <p>2. Windows</p> <ul style="list-style-type: none"> <li>Observation window (Depressed pointed arched)  W1</li> <li>Rectangular window  W2</li> </ul> <p>3. Doors</p> <ul style="list-style-type: none"> <li>Depressed pointed arched  Do1</li> <li>Semi-circular arched  Do2</li> <li>Pointed arched  Do3</li> <li>Semicircular arched crowned with <i>Yaşmak</i>  Do4</li> </ul> <p>4. Niches</p> <ul style="list-style-type: none"> <li>Rectangular niche </li> <li>Depressed pointed arched niche </li> <li>Blind niche (Depressed pointed arched) </li> <li>Mihrab niche </li> </ul>	<p>6. Washing Elements</p> <ul style="list-style-type: none"> <li>Platform (Stone seats) </li> <li>Wash basin </li> <li>Fountain trace </li> <li>Terracotta water pipes </li> <li>Water channel </li> <li>Well </li> </ul> <p>10. Heating Elements</p> <ul style="list-style-type: none"> <li>Furnace  Fu</li> <li>Chimney  C</li> <li><i>Tüteklik</i> </li> <li><i>Cehennemlik</i> </li> <li>Sheet iron  S</li> </ul>

Table 1.6. Classification of Alterations and their color codes

























1. Additional Elements	
Additional Space	
Additional Timber Roof	
Additional Lantern	
Additional Wall	
Additional Panel	
Additional Door	
Additional Floor Finishing	
2. Missing Elements	
Totally Missing Space	
Half Missing Space	
Missing Superstructure	
Missing Wall	
Missing Cupola	
Missing <i>Tüteklik</i>	
Missing Oculi Glass	
Missing Faucet	
Missing Platform	
Missing Washbasin	
Missing Door Leaves / Curtains	
3. Renewed Elements	
Renewed Door Leaves	
Renewed Wash Basins	
Renewed Platforms	
Renewed Floor Covering	
Renewed Paint	
4. Converted Elements	
Converted Opening	

Table 1.7. Restitution Drawings of the studied Baths in Urla-Seferihisar

	Hersekzade Ahmet Paşa <i>Hamamı</i> , Urla	Kamanlı <i>Hamamı</i> , Urla	Özbek <i>Hamamı</i> , Urla	Ulaşış <i>Hamamı</i> , Seferihisar	Düzce (Hereke) <i>Hamamı</i> , Seferihisar	Sığacık Kaleiçi <i>Hamamı</i> , Seferihisar	Küçük <i>Hamamı</i> , Seferihisar	Büyük <i>Hamamı</i> , Seferihisar
PLAN								
SECTION								

## CHAPTER 2

### GEOGRAPHICAL CHARACTERISTICS AND HISTORICAL BACKGROUND

In this chapter, geographical characteristics of Urla-Seferihisar region and its historical background are introduced.

#### 2.1. Geographical Characteristics

Urla and Seferihisar, the two sub provinces of İzmir city within which the studied baths are located; are in Urla peninsula at the very west of Anatolia. The other sub provinces of İzmir in the peninsula are Çeşme and Karaburun.

Urla is located 35 km and Seferihisar is located 45 km at the southwest of İzmir center. Urla is surrounded by Güzelbahçe at the east and Seferihisar at the southeast; Çeşme at the west; Karaburun at the northwest; and Aegean Sea at the north and south. Seferihisar is surrounded by Güzelbahçe and Urla at the north; Menderes at the east; Aegean Sea at the west and south. Urla has 16 villages and 37 neighborhoods.. Seferihisar has 8 villages and 6 neighborhoods. Surface area of Urla is 704 km<sup>2</sup>. Surface area of Seferihisar is 386 km<sup>2</sup>. Their centers are recessed from the coast. Land structure of Urla and Seferihisar region is composed of low slopes and low hills. Çakmaktepe with its 680 m height is the highest hill in Seferihisar. Seferihisar has planes in its southwest, known as Azmak and Sığacık lowlands. Height of land increases in East direction in Urla. Kızıldağ (1040 m) and Çataldağ are eastern borders of Urla. Morphologically, high areas in the region are less observed. Mountains in the region extend perpendicular to the coast (Baykara, 1991; Mater,1982).

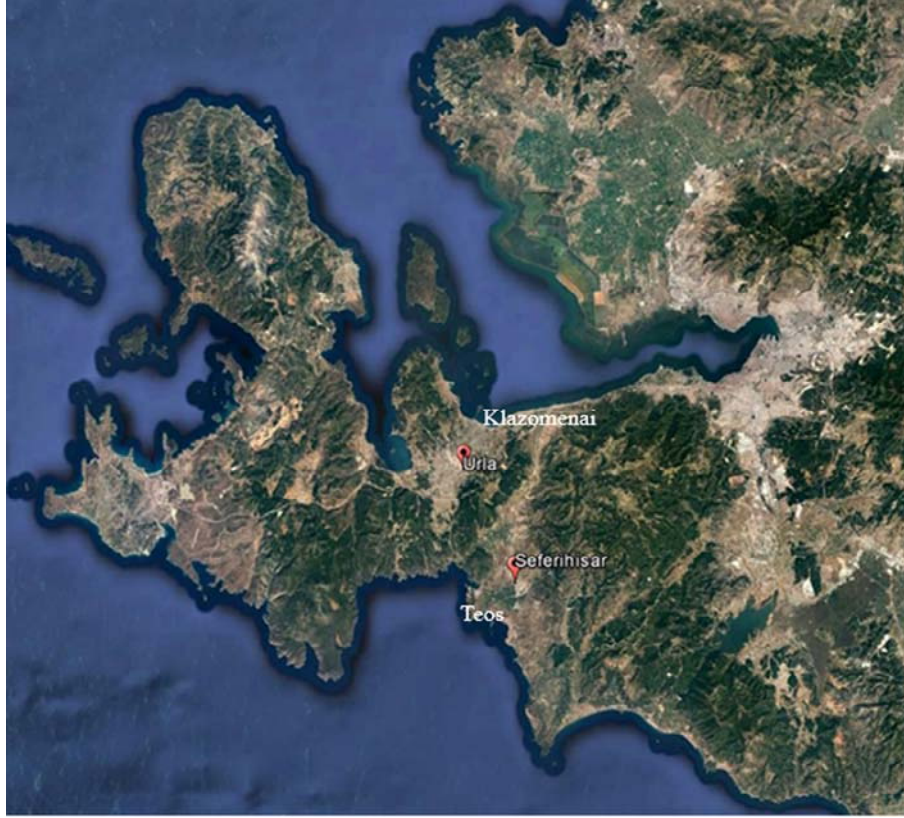


Figure 2.1. Physical map illustrating the studied region.  
(Revised from Google Earth, 2015)

Seferihisar is partly fragmented by streams. Azmak brook and Yassıçay, and their connections are water sources of the region.

Hot water sources in Seferihisar are Tuzla *Ilıcısı*, Cumalı *Kaplıcası*, Doğanbey *Kaplıcası*, Karakoç *Kaplıcası*. In Urla, Gülbahçe *Ilıcısı* and Malkaça *İçmeleri* are present.

The region has Mediterranean climate. In other words, winters are warm and rainy, summers are hot and arid. Average temperature in the region changes between 8.3 and 26,7 °C.

Flora in the region consists of maquis (ryegrass, terebinth, nerium and genista) and forest groups (oak and calabrian pine). Also, olive and citrus trees are in natural flora. The economic activities in the region are composed of agriculture such as olive cultivation, citrus and artichoke farming, growing vegetables in greenhouses and stock farming. In addition, especially in Urla, vineyards are widespread (Mater, 1982).

The coves in the region are import in term of tourism. Sığacık Port and Urla Pier are famous not only with their picturesque characteristics, but also in terms of supporting fishing and trade.

## 2.2. Historical Background

History of Urla and Seferihisar region goes back to Paleolithic Era (10.000 B.C.) (Kansu, 1963 cited in Meriç, et al., 2012). Limantepe at the northern coast of Urla was a very famous developed port settlement with overseas commercial links in Early Bronze Age (3000 B.C.).

This ancient city known as Limantepe in Bronze Age took the name of Klazomenai in the classical period (480-330 B.C.). The two important ancient cities Klazomenia on northern coast of Urla and Teos at the southwestern coast of Seferihisar are among the famous twelve Ionian cities of western Anatolia together with Miletos, Priene, Myus, Ephesos (Efes), Kolophon, Erythrai (Çeşme), Phokaia, Samos, Chios, and Lebedos that were established by Ionians who were migrants from Greece. Then, Klazomenia was moved to the Karantina Island for protection purposes against the Persian attacks. The Urla region was ruled by the Lydians, Persians, Romans, Byzantines and Turks, respectively (Erkanal, 1998).

İzmir and Urla-Seferihisar region came under the domination of *Çaka Bey* in the 1080s. After the death of *Çaka Bey*, Turkish and Byzantine struggle continued for two centuries in Western Anatolia. *Aydın* principality was established by *Aydınoğlu Mehmet Bey* in Birgi, Ödemiş, İzmir in 1308. Starting with 1330s, Aydın Emirate conquers the peninsula and Turkish period starts. The Turkish settlements were generally established at positions from the seaside and a brook runs through them in the peninsula. From the view point of the thesis, three important centers of Urla-Seferihisar region in 14<sup>th</sup>-15<sup>th</sup> and 16<sup>th</sup> centuries will be evaluated in detail. These are Urla, Seferihisar and Düzce. Limited information will be provided for the smaller settlements or villages.

*Aydınoğulları* settled around the Fatih Bey Mosque, 3-4 km recessed from the seaside, instead of *İskele* (port) district as in ancient times (Baykara, 1991). Since it was first established, Urla had the features of a market place because of the port and Çeşme commercial center. It is referred as *Karye Pazarı* in old documents. The region was conquered in 1390 by the Ottomans. The region was completely taken under the rule of Ottomans in 1425. Urla continued its commercial development. Approximately, 200 shops were present in Urla in the 15<sup>th</sup> century. In accordance with the development of commercial route between Sakız, Çeşme, Urla, Seferihisar and Ayasuluk, the settlements in this region developed in between early 15th century and mid 16th century



(Telci, 2004). Urla was a *nahiye* (province) of İzmir *Kaza* of Aydın *Sancağ* in the 15<sup>th</sup> - 16<sup>th</sup> centuries. Consequently, in this period, the Muslim population became dominant in the peninsula (Kütükoğlu, 2010).

Seferihisar center (Sivrihisar, Nefs-i Seferihisar) is recessed 5 km from the coast. Its harbor is Sığacık. In 1478 records, Seferihisar was a *nahiye* of İzmir *Kaza*. In the 16<sup>th</sup> century, it became a *nahiye* of Çeşme *Kaza*. In the 16<sup>th</sup> century, its population increased as a result of migration from inner regions of Anatolia due to rebellion of Celali. In 1575 records, its population is totally Muslim. On the other hand, its harbor Sığacık (Nefs-i Sığla) was famous with pirot activities in 15<sup>th</sup> and 16<sup>th</sup> centuries. Its saltpan was important for the economic activities of the 16<sup>th</sup> century (Arıkan, 2004). Today's Düzce (Hereke, Tahin) village of Seferihisar province of İzmir was known as *Hereke* Nahiyesi in 15<sup>th</sup> and 16<sup>th</sup> centuries. In a record dated early 15<sup>th</sup> century, the name Tahin village is referred for the settlement at the position of Hereke. In a 1467 record, *Nahiye-i Hereke* is mentioned and Ulamış is one of its villages. Its population reached 4500 in mid 16<sup>th</sup> century, and it diminished 1100 in the late 17<sup>th</sup> century (Telci, 2004). Özbek village of Urla was also famous with its saltpan in the 16<sup>th</sup> century.

İzmir and Urla Piers were commercially linked only to Ottoman ports, whereas Çeşme port was used for international trade. On the other hand, Seferihisar's Sığacık Cove was used as a training and gathering center for military activities (Mater, 1982).

The developments in the 17<sup>th</sup> century can be followed in the travelogue of Evliya Çelebi (Danışman, 1969). Evliya Çelebi who visited Urla in the late 17<sup>th</sup> century recorded 250 olive mills, 70 soap factories and 200 shops. According to Evliya Çelebi, the citadel of *Sığla* which was the harbor of Seferihisar had 120 houses, a mosque, two masjids, one school and a bath at the last quarter of the 17<sup>th</sup> century. Evliya Çelebi visited Seferihisar (Sivrihisar) in 1671/1672. He refers to three baths in Seferihisar center. He states names of two of them: Kadı and Mahkeme. Çakmak (2004) interpretes Mahkeme Bath as the one close to Güdük Minare Mosque.

After İzmir center becoming an international trade center starting with 17<sup>th</sup> century, the importance of the caravan route passing through Urla - Seferihisar region diminishes and settlements loose population.

In turn, Turkish settlements developed in the region as a result of its outstanding position in commerce, military activities and agricultural fertility.

Accordingly, the historical Turkish baths which are studied in this thesis are representative of these economic, cultural and social developments. In addition to these

baths, there were mosques, madrasahs, dervish lodges, children schools, tombs, fountains and bridges built in this glorious period after Turkish arrival (Kütükoğlu, 2010). The studied baths are among the monuments presenting the Turkish life style starting with 14th century and flourished until mid 16th century in the region.

Greek population moves to Urla peninsula in the second half of the 19th century from the islands and Greece. The Greeks invaded the Urla - Seferihisar region in 18 May 1919 after they invaded İzmir in 15 May 1919. The region was re-liberated on 12 September 1922 at the end of the Independence War.

### 2.3. History of Baths

Baths are buildings which are used by people for collective washing. “*Hamma*” in Arabic means to heat; “*Hamam*” in Hebrew means to be hot (Tascıoğlu, 1998). Today, the word “*hamam*” in Turkish means a place where one washes or bathes. In the past, people were always in need of washing due to health, cleanliness or religious reasons. People, therefore, were in need of special spaces, which were called “bath structures” or “*hamam*”s for bathing in water (Eyice, 1997).

It is believed that water removes sin and evil things in the past. Therefore, the Indians Ganger River, the Egyptians Nil and Assyrians Fırat considered sacred. They believed that get rid of their sins entering this rivers in special days (Aru, 1941).

As the level of civilization progressed bath buildings were constructed for bathing. It is understood from ruins of the bath structures that come from the early past. In later times, developed plan schemes of baths in Roma, Greek and Byzantine show that bathing started to be a culture and luxury in civilizations (Aru, 1941).

In the 4th century B.C., it is observed that public baths that are used for treatment in the Greek culture, and ruins of hot and cold baths with installation system that are found in the homes of Greek Gymnazes. (Aru, 1941).

Before the empire era, in the year 100 BC, it is known that there were public and private baths in Roman culture. Then, magnificent baths were constructed in the empire era of Romans. Caracalla, Titus, Diocletianus and Constantinus Baths were the main ones. It was called that Balneum (*çarşı hamamı*) for public ones of these. Roman baths consist of several spaces. Frigidarium (soğukluk) included a pool and Apoditerium (*soyunmalık*) ,dressing room, were the first ones. From Apoditerium was passed to Tepidarium (*ılıkılık*).

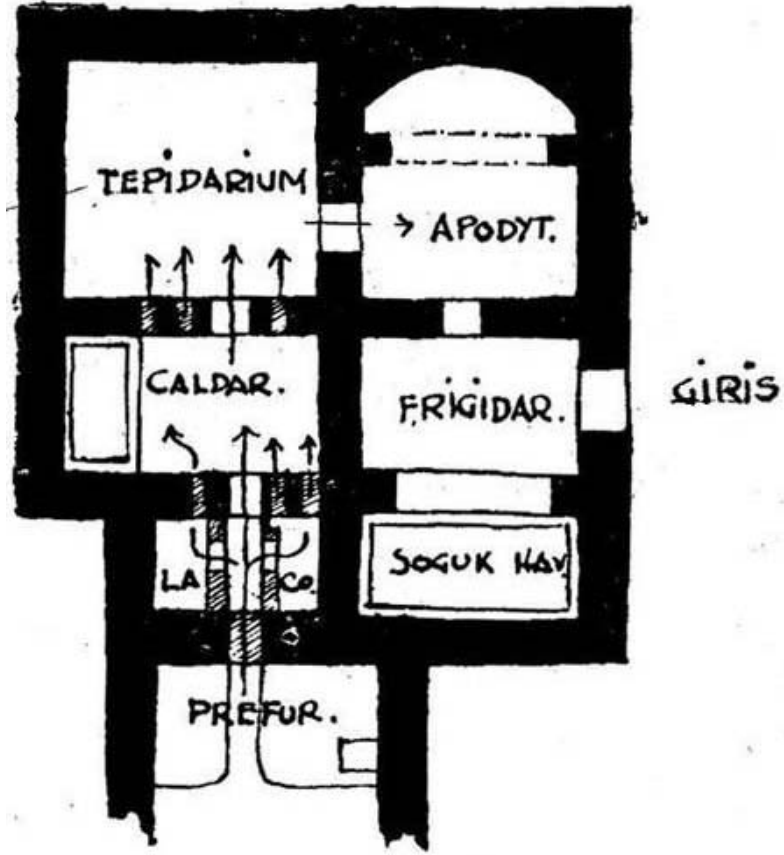


Figure 2.2. Plan Scheme of a Roman Bath.  
(Source: Aru, 1941)

Tepiderium was a transition space between the to prepare the body high temperature. This space is followed by Calderium (sıcaklık) surrounded by private rooms. In the walls of the Calderium, pipes (*künk-tüteklik*) were present and there was Hypocaustum (*cehennemlik*) under the floor of that spaces. Although there was no frigidarium in some baths, apoditerium, tepiderium, calderium always existed. In addition, courtyards that were called Palaestra and Atrium were found in the Roman baths. Palaestra was used for games, Atrium was waiting place (Yegül, 1992; Eyice 1997; Ergin 2011).

Byzantine baths were continuation of Greek and Roman baths. The large and famous architectural monuments like Constantinus, Arkadius and Zeuxippus were constructed.

Turkish baths in Anatolia have a self-enclosed and simple appearance from outside, but when we look from the inside, they have impressive interior architecture. They are commercial buildings that provide money to their *vakıfs* which are generally

religious, health and social institutions. Turkish baths in Anatolia, as well as cleaning, also include entertainment activities like birth and marriage for women.

### 2.3.1. Spatial Elements

These historical Turkish baths in the 14th, 15th and 16th centuries consist of nine spaces (Önge, 1995; Taşçıoğlu, 1998; Çakmak, 2002; Eyüpgiller, 2011):

1. *Soyunmalık*
2. *Aralık*
3. *Ilıklık*
4. *Keçelik*
5. *Sıcaklık*
6. Water reservoir
7. Furnace (*Külhan*) and *cehennemlik*
8. Woodshed
9. Courtyard

***Soyunmalık:*** *Soyunmalık* is changing and resting hall. This space is the largest space of the bath, and includes platforms at the wall sides for resting and pool at the center. Also, there are deep niches for preparing coffee and drying towels in that space. It is generally in square or rectangular in plan and covered with dome or timber roof. Lanterns and top windows provide light for *soyunmalık*.

In 15th century, arched niches underneath the platforms for shoes and niches for putting clothes in walls of *soyunmalık* began to appear.

An entrance space is in front of the *soyunmalık* for protection from climatic reasons may be seen. Also, domed or vaulted portico built in front of *soyunmalık* is possible. İstanbul Haseki Sultan Bath and Edirne Sokullu Mehmet Paşa Bath are the examples of that portico.

***Aralık:*** It is the transition space that is placed between *soyunmalık* and *ılıkık* for preventing heat and steam loss from *ılıkık*. This space includes toilets and shaving space and covered with a dome or vault. Size of the space began to shrink in 15th century and then it disappeared from 16<sup>th</sup> century onwards. In later periods, chimney over the door between *soyunmalık* and *ılıkık* does the job of *aralık*

**Ilıklık:** It is a resting space for acclimatizing the body before entering the sıcaklık. Toilets and shaving spaces linked to *ilıklık* in baths without *aralık*. There is no specific plan typology for this. Square or rectangular plans are both possible.

**Keçelik:** *Keçecilik* is an old handcraft of Turks. This space is for producing felt. The material is first boiled and then forged onto the ground. Then, it is carried into the bathing area (*sıcaklık*) and cleaned. *Keçelik* is related with *ilıklık*. It has generally rectangular plan and vaulted.

**Sıcaklık:** It is the hottest part of the bath and it is used for cleaning. It composed of iwans and *halvets* that are private cleaning portions with wash basins (*kurna*). *Halvets* are generally square planned and domed, iwans are mostly covered with vault. There is a marble platform at the central space called *göbek taşı* that has octagonal, hexagonal or polygonal plan and 40 cm above the ground for sweating and resting.

**Water reservoir:** It is a water storage space that is covered with a barrel vault behind the *sıcaklık*. There are skylights at the top of the vault to provide illumination. A copper boiler is mounted here to provide heating of the water. Also, there is an interior window on the wall flanking an iwan or *halvet* to control water level.

**Furnace and *cehennemlik*:** Heating of the bath and water is provided by burning of fire in furnace (*külhan*) that is under the water reservoir. Fire is lighted through an arched opening that stands under the water reservoir. It is also under of the copper boiler. Boiler that is heated by burning fire starts to heat water. The heated water is transmitted with terracotta water pipes to wash basins (*kurna*).

There is a space underneath the floor of sıcaklık called *cehennemlik*. This space includes short earthen columns in gridal order. Hot gases of the furnace circulate in this space and heat the floor from bottom. In addition, chimneys that are placed in the walls called *tüteklik* provide heating of the walls and disposition of the fume of the furnace (Figure 2.3).

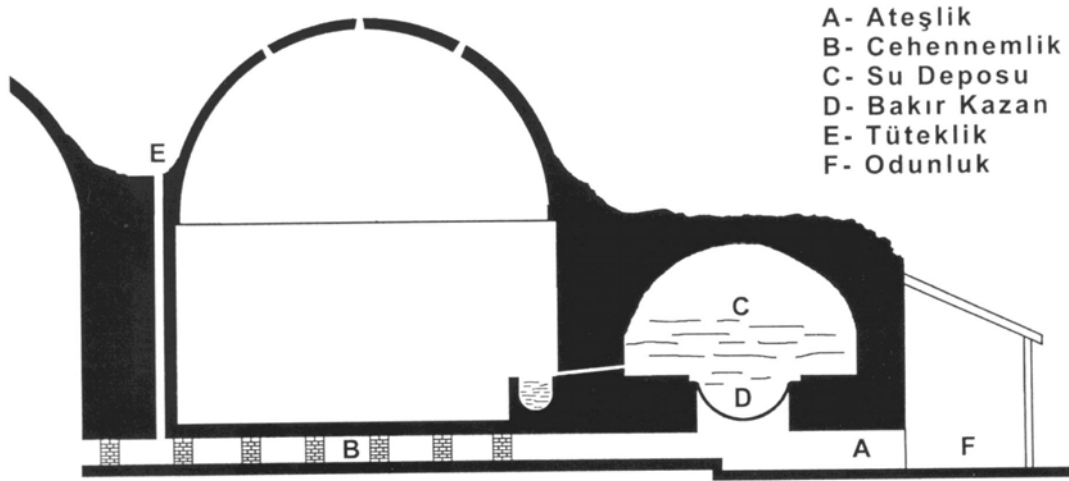


Figure 2.3. Diagram illustrating the heating system.  
 (Source: Çakmak, 2002)

**Wood shed:** It is a wood storage space that is generally covered with a timber roof. Fire is burned from here. In many cases, archeological excavation is necessary to discover its traces.

**Courtyard:** It is an open space in front of the wood shed providing access to the woodshed and serving for activities such as drying towels. It is rarely observed in historical Turkish baths in the present state. Excavation is necessary for its deciphering.

## CHAPTER 3

### ANALYSIS OF SPATIAL CHARACTERISTICS

In this chapter, the spatial characteristics of the case studies are identified.

#### 3.1. Baths in Urla

The baths in Urla are introduced in the below. As Baykara (1991) states, Urla has been established as a Turkish settlement composed of a number of villages around a bazaar center in 1320s after its conquest by Aydın Emirate.

##### 3.1.1. Kamanlı *Hamamı*

The Bath (Table 3.1, Table 3.2) is situated in a historical village of Urla, which has integrated with Urla provincial center today and is known as Kamanlı neighborhood. The near-by environment of the bath has preserved its rural characteristics (Figure 3.1).

The bath is an element of a building group composed of a fountain, a mosque, a dervish lodge (*tekke*), a tomb and a graveyard. This building group was constructed by Halil Yahşi Bey, one of the commanders of Murat the second during 1420s (Kütükoğlu, 2000). The mosque, tomb, lodge and the graveyard are at an elevated position, while the two water structures, the bath and the fountain are at the northwest in a lower position.

The bath is listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 2883 and dated 13.12.2007. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012).

It is a single bath (Madran et al., 2002; İpekoğlu, 2009). Its exterior dimensions are 9.15 x 19.65 m. It has a plain facade composition composed of massive, blind walls exposed without plastering and crowned with dome and vault series. It is composed of one large cubical, one group of small cubical spaces, and one prismatic mass. The cubical mass is the largest space comprehending changing function, but it has lost its third dimension (h: 6.2 m). The group of cubical spaces are thermal conditioning,

washing, shaving and toilet units each crowned with a single small dome (6.15 m) or sometimes vault (3.85 m). The prismatic one is the service space comprehending water storage. All of the spaces are added to one another to determine a compact building order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults at different heights is created.

The bath includes *soyunmalık*, *ılıklik*, *sıcaklık* spaces and a water reservoir. The spaces are added to each other in linear order from south to north. The original circulation within the building was made with a linear path with L formed entrance starting from the street entrance at the west of the *soyunmalık* and terminating in the two *halvets* at the north. At present, the *sıcaklık* space is composed of a main *sıcaklık* space and two *halvets*. The main *sıcaklık* space is composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its east and west sides. There are two *halvets* at the north of the main space. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*.

The *soyunmalık* is a space located at the south of the building and has a rectangular plan (6.25 x 10 m.), but it has lost its third dimension. The superstructure of the *soyunmalık* has collapsed and there are no traces observed. However, it can be thought that its superstructure was a timber roof considering the rectangular plan. The remaining parts of south and east walls are 1.50 m. in height, but for the west wall, there is only a trace on the ground. There are also some traces which indicate that the entrance of the building was at the west side from the street. Since the ground is covered with debris, the floor cannot be seen.

The rectangular planned *ılıklik* space (3 x 4.30 m.) consists of a square planned, domed central unit, a barrel vaulted iwan at its east side and a domed shaving-toilet unit at its west. The superstructure of the main *ılıklik* space has collapsed. Therefore, oculi on the dome cannot be observed. However, in an earlier study (Hamamcıoğlu-Turan and Reyhan, 2005), it is stated that the hexagonal shaped oculi were present. *Ilıklık* main space is a transition space providing link to the eastern iwan for resting and conditioning the body, to the *sıcaklık* at the north to the shaving-toilet space at the west, and to the *soyunmalık* at the south. Lighting is provided through the three hexagonal shaped oculi along the central axis of the vault in the iwan. The oculi at the shaving-toilet space are arranged in two circular rows and hexagonal in shape, decreasing in number towards the top. The transition to the superstructure in the *ılıklik* spaces is



provided by pendentives and cornices. The side barrel vaulted iwan is entered through a depressed pointed arch. A rectangular niche and the traces of horizontally placed terracotta pipes providing usage water are observed on the east wall of the iwan, but a basin trace cannot be observed. The entrance on the south wall of the *ılıklik* space is filled with rubble stones in random order and only the trace of the door can be seen here today. In the shaving-toilet space, there are two openings on the east wall (Figure 3.3), and a niche in the southeast corner, which were closed with rubble stones in random order. Also, a depressed pointed arched door opening (65 cm) which provides passage to main *sıcaklık* space is present on the north wall of shaving-toilet space. The floor is covered with debris in the whole *ılıklik* spaces.

The main *sıcaklık* space is entered from *ılıklik* main space by a depressed pointed arched door opening (73 cm) at the north. The *sıcaklık* is composed of the main *sıcaklık* space and two *halvets*. The rectangular planned main *sıcaklık* space (3.30 x 7.75 m.) consists of a square planned, domed central unit and two barrel vaulted iwans on its east and west sides (Figure 3.2). Lighting to the main *sıcaklık* space is provided by a hemispherical cupola, which is situated at the center of its dome and the star and hexagonal shaped oculi that are placed in three rows. There are also three hexagonal shaped oculi on the vaults of the side iwans. The transition elements of the main *sıcaklık* space are muqarnas decorated pendentives and cornices. On the north wall of the central unit, there is a fountain niche with muqarnas decoration between the entrances of the two *halvets* in the north (Figure 3.4). This is interpreted as a unique element since Eyice (1960) points out that a niche, but not a fountain is almost always observed in the mentioned position. Today, an entrance is directly opened to the main *sıcaklık* space from the street through an irregular opening at its western iwan. The side barrel vaulted iwans are entered through depressed pointed arches on the east and west sides of the main *sıcaklık* space. On the west and east walls of each iwan, there are traces of wash basins and platforms on their both sides. Two domed *halvets* (3.40 x 3.35 x 6.45 m) are at the north of the *sıcaklık*. The oculi at the northeast *halvet* are arranged in three circular rows and the oculi at the northwest *halvet* are placed in two circular rows, all hexagonal in shape, decreasing in number towards the top. The transition element is lobed squinch at the corners in the northeast *halvet* and also four blind niches are placed between the transition elements of the dome. (Figure 3.7) Belt of Turkish triangles in the northwest *halvet* is the element that provides the transition to the superstructure. A depressed pointed arched observation window (40 cm) is present on the wall of the

northwest *halvet* which is related to the water reservoir. The floors of the *sıcaklık* spaces are paved with cut stone. Moreover, channels are observed on the door sill between the *ilklık* and main *sıcaklık* space.

The rectangular planned barrel vaulted water reservoir (1.30 x 7.75 m.) is placed at the north side of the *halvets*. The water reservoir has a semi-circular arched opening on its east side. As the furnace at the north wall of the water reservoir indicates, there should be also a wood shed space that is adjacent to the water reservoir. However, it cannot be seen today.

The walls are out of rubble stone, while the superstructure and transition elements are out of brick (Reyhan, 2004).

The distinguishing characteristics of the bath are the presence of *soyunmalık*; usage of pendentives, Turkish triangles and lobed squinches in the transition zone, presence of hexagonal and star shaped oculi, and the presence of a fountain at the *sıcaklık* main space.

There is no inscription panel on any of the buildings. On the other hand, M. Kütükoğlu dated the bath in 1420s (Kütükoğlu, 2000). The donor of the bath is Halil Yahşi Bey.

As a result, the major alteration is the loss of the third dimension of the *soyunmalık* and provision of entrance directly to the *sıcaklık* main space from the street through an irregular opening at the west. Nevertheless, many of the authentic characteristics have been preserved. Based on the traces coming from the building itself and comparative study with the other studied baths, the *soyunmalık* and woodshed were completed in the restitution to further emphasize the linear order.

Table 3.1. Identification table of Kamanlı *Hamamı*.

<b>Location</b>	Kamanlı District, Urla/İZMİR
<b>Listing</b>	Listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural and Natural Assets, decision no: 2883, decision date: 13.12.2007.
<b>Site Relations</b>	Element of a building group composed of a fountain, mosque, a children school, a tomb and a graveyard.
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960).
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series, original entrance design unobserved.
<b>Block / Sheet / Parcel No</b>	275 / - / 9
<b>Date of Construction</b>	15 <sup>th</sup> century
<b>Donor</b>	Halil Yahşi Bey
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	19.65x9.15 m



Figure 3.1. General view of the bath from the southwest.



Figure 3.2. Eastern iwan in the main *sıcaklık* space.



Figure 3.3. Openings on the west wall of the main *ılıklik* space.



Figure 3.4. Muqarnas decorated fountain niche in the main *sıcaklık* space

Table 3.2. Spatial Characteristics of Kamanlı Hamamı

	Spatial Elements		İtiklik					Sıcaklık			Water reservoir	Wood shed	Court-yard
	Soyunmalık		Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets					
	Main space	Iwan						Northwest	Northwest				
<b>Number of Space</b>	1	1	1	1	1	1	1	2	1	1	1	1	
<b>Superstructure</b>	collapsed	domed (collapsed)	domed	barrel vaulted	barrel vaulted	domed	barrel vaulted	barrel vaulted	domed	domed	barrel vaulted	collapsed	
<b>Transition element</b>	-	pendentive	pendentive	-	-	muqarnas decorated pendentive, cornice	-	-	lobed squinches	Turkish triangles	-	-	
<b>Arch</b>	-	3 depressed pointed blind arches on the walls	4 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	emphasized by a depressed pointed arch	2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	-	-	-	-	-	
<b>Wall</b>	rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	rough cut stone and rubble stone bond	
<b>Floor</b>	debris	debris	debris	debris	debris	debris	debris	debris	debris	debris	unobserved	earth	
<b>Illumination element</b>	-	missed	hexagonal shaped oculi	3 hexagonal shaped oculi	3 hexagonal shaped oculi	star-hexagonal shaped oculi, hemispherical cupola	3 hexagonal shaped oculi	hexagonal shaped oculi	hexagonal shaped oculi	hexagonal shaped oculi	-	-	
<b>Window</b>	-	-	-	-	-	-	-	-	-	1 observation window	1 observation window	-	Unobserved
<b>Door</b>	1 exterior, 1 interior	1 interior, 1 exterior door trace filled with rubble stones	1 interior depressed pointed arch	1 interior depressed pointed arch	1 interior depressed pointed arch	1 additional opening 4 original depressed pointed arch	-	-	1 interior depressed pointed arch	1 interior depressed pointed arch	-	-	
<b>Niche</b>	2 rectangular niches	-	1 niche on the southwest corner	1 rectangular niche on the east wall	1 rectangular niche on the east wall	1 muqarnas decorated fountain niche	1 muqarnas decorated fountain niche	-	4 blind niches	-	-	-	
<b>Wash basin (kurna)</b>	-	-	-	-	-	trace	unobserved	unobserved	unobserved	unobserved	-	-	
<b>Water pipe (küink)</b>	-	-	-	traces of terracotta pipes	traces of terracotta pipes	-	traces of terracotta pipes	traces of terracotta pipes	traces of terracotta pipes	traces of terracotta pipes	-	-	
<b>Platform</b>	unobserved	-	traces	-	-	-	traces on the corners	traces on the corners	traces on the corners	traces on the corners	-	-	
<b>Surface finishing</b>	plaster trace	plastered	plastered	plastered	plastered	plastered	plastered	plastered	plastered	plastered	plastered	exposed without plastering	
<b>Fountain</b>	-	-	-	-	-	1 muqarnas decorated fountain niche	-	-	-	-	-	-	
<b>Furnace</b>	-	-	-	-	-	-	-	-	-	-	1	1	
<b>Channel</b>	-	trace on the door sill between the <i>itiklik</i> and <i>sıcaklık</i>	-	-	-	trace on the door sill between the <i>itiklik</i> and <i>sıcaklık</i>	-	-	-	-	-	-	
<b>Cehennemlik</b>	-	-	-	-	-	cavity observed	unobserved	unobserved	unobserved	unobserved	unobserved	-	

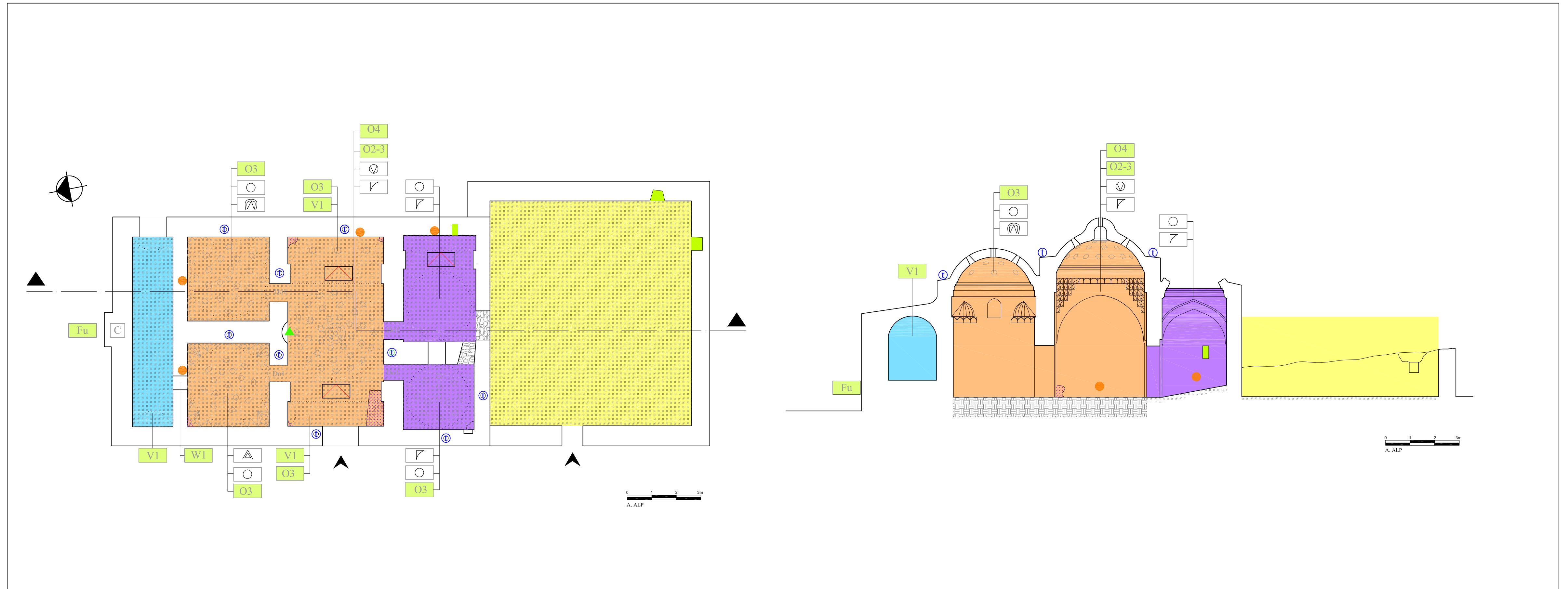


Figure 3.5. Analysis of Spatial Characteristics at Kamanlı *Hamamı*, Urla

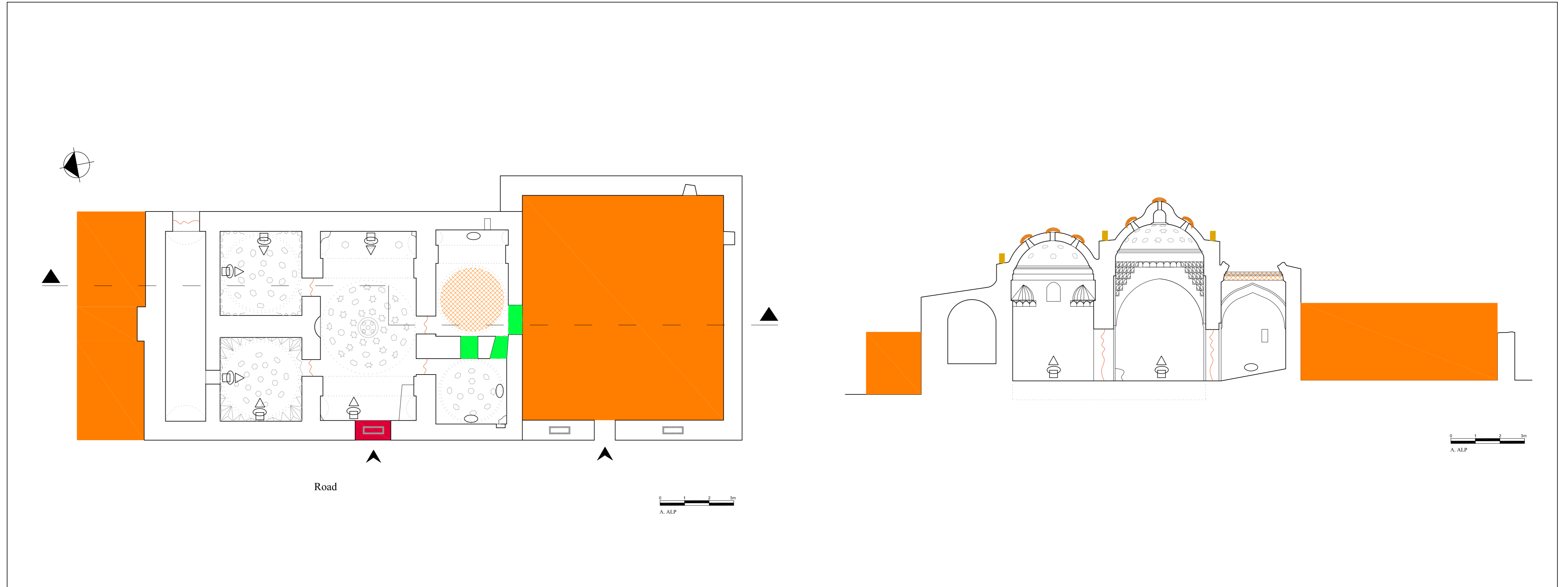


Figure 3.6. Analysis of Alterations at Kamanlı *Hamamı*, Urla



### 3.1.2. Özbek *Hamamı*

The Bath (Table 3.3, Table 3.4) is situated in a historical village of Urla, which is Özbek village. Özbek is a neighborhood of Urla at present. It is 50 km from İzmir, 7 km from Urla provincial center. Southwest, northeast and southeast sides of the bath are surrounded by roads and there is a brook at the northwest side (Figure 3.6).

It is a single bath. Its exterior dimensions are 7.00 x 13.80 m. It has a plain facade composition composed of massive, blind walls with plastering and crowned with dome and vault series. It is composed of a group of cubicals and one prismatic mass at present. The cubicals are the main spaces comprehending *ılıklik* and *sıcaklık*, while the prismatic one is a service space comprehending the water storage. All of the masses are added to one another in a linear order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults at different heights is achieved. The *soyunmalık* and the woodshed have been partially demolished.

The bath includes a ruined *soyunmalık*, a ruined toilet, *sıcaklık* spaces, a water reservoir and a ruined woodshed. At present, the *sıcaklık* space is composed of a main *sıcaklık* space and two *halvets*. The main *sıcaklık* space is composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its northwest and southeast sides. The *halvets* are placed at the northeast of the main *sıcaklık* space. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*. However, the zigzag circulation scheme, stemming from the presence of a direct access only to one of the *halvets* from the main *ılıklik* space differ from the typical plan type with both of the *halvets* entered from the main *sıcaklık* space. The spaces are added to each other in linear order from southwest to northeast. The original circulation within the building was made with a linear path starting from the entrance at the west of the *soyunmalık* and terminating in a zigzag manner in the two *halvets*.

The *soyunmalık* is a space located at the southwest of the building and has a rectangular plan (4.20 x 5.70 m). Today, the space and the superstructure had collapsed. However, it was recorded (Hamamcıoğlu – Turan and Reyhan, 2005) that its superstructure was a timber roof in accordance with the rectangular plan and the entrance of the space was at the southwest wall. At this entrance facade, there was a window. At the northwest wall of the *soyunmalık*, another door opening was seen. This

was recorded as a toilet space (1.10x1.30 m.) (Hamamcıoğlu – Turan and Reyhan, 2005). Since the ground is covered with debris, the floor pavement cannot be seen.

The *sıcaklık* is composed of the main *sıcaklık* space and two iwans. The rectangular planned *sıcaklık*, which has 2.50 x 5.75 m. dimensions, consists of a square planned, domed central unit and two vaulted iwans on its both sides. The dome with slightly depressed semi-circular profile rests on a circular cornice (25 cm in height) and then on pendentives (136 cm. in height) and finally on depressed pointed arches. Lighting is provided through the oculi on the vaults and domes. There is a circular skylight at the top of the dome and circular oculi in two rows and three oculi in each row. The iwans have circular shaped oculi in their central axis; two in the northwestern and three in the southeastern one. The side barrel vaulted iwans are emphasized by depressed pointed arches and the platform (20 cm. in height) is arranged as wide as the iwans (2.50 m) (Figure 3.7). The floors are paved with cut stone. The used water is discharged through a channel coming from the door and continuing along the east wall of the northwest iwan and going to the brook.

The northern *halvet* is entered through a semi-circular arched door (65 cm. in width) from the *sıcaklık* main space. The *halvets* (2.55 x 2.55 m.) are connected to each other with a 65 cm. wide door opening (Figure 3.9). On the four wall surfaces of the *halvets*, there are depressed pointed blind arches. An observation window is present on the wall of the southeast *halvet* which is related to the water reservoir. On the north wall of this *halvet*, a depressed pointed niche is present. Basins are located at the center of the L planned platforms which are arranged along the walls (Figure 3.8). The stone wash basins in the *halvets* have semi-circular plans and enriched with muqarnas decorations at their upper sides. The floors of the *sıcaklık* spaces are paved with cut stone. However, channel traces cannot be observed on the floor of the *halvets*.

The rectangular planned barrel vaulted water reservoir (1.35 x 5.75 m.) is placed at the northeast side of the *halvets*. Water boiler in the water reservoir is seen from the observation window.

The wood shed adjacent to the water reservoir which includes a furnace and chimney still exist at the northeast today.

The walls are out of with rubble stone, while the superstructure and transition elements were built with brick. The interior surfaces are all plastered, while the exterior walls are exposed without plastering. The roof is finished with over and under tiles (Reyhan, 2004).

There is no inscription panel. The donor of the construction is unknown.

As a result, the major alteration is the loss of the third dimension of the *soyunmalık* and the wood shed. Nevertheless, many of the authentic characteristics have been preserved.

Table 3.3. Identification table of Özbek *Hamamı*.

<b>Location</b>	Özbek village, Urla/İZMİR
<b>Listing</b>	-
<b>Site Relations</b>	Northeast, southeast and southwest sides of the bath are surrounded by roads and there is a brook at the northwest side
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series
<b>Block / Sheet / Parcel No</b>	- / - / -
<b>Date of Construction</b>	15 <sup>th</sup> century
<b>Donor</b>	Özbek Han
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan size</b>	7.00x13.80 m



Figure 3.7. General view of the bath from the south.



Figure 3.8. Northwest iwan in the main *sıcaklık* space.



Figure 3.9. Wash basins in the northwest *halvet*.



Figure 3.10. Entrances of the *halvets*.

Table 3.4. Spatial Characteristics of Özbek Hamami

	Spatial Elements			Ikkiklik			Sicaklik			Water reservoir	Wood shed	Court-yard
	Soyunmalik	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvors					
							Northwest	Southeast				
<b>Number of Space</b>	1				1	2	1	1	1	1		
<b>Superstructure</b>	collapsed				domed	barrel vaulted	domed	domed	barrel vaulted	collapsed		
<b>Transition element</b>	-				pendentive, cornice	-	pendentive, cornice	pendentive, cornice	-	-		
<b>Arch</b>	-				2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	4 depressed pointed blind arches on the walls	-	-	-		
<b>Wall</b>	rubble stone bond				rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond		
<b>Floor</b>	debris				cut stone	cut stone	cut stone	cut stone	cut stone	earth		
<b>Illumination element</b>	-				circular shaped oculi	3 hexagonal shaped oculi at northwest, 2 hexagonal shaped at southeast	circular shaped oculi	-	-	-		
<b>Window</b>	unobserved				-	-	-	1 observation window	1 observation window	-		
<b>Door</b>	unobserved				depressed pointed arch, 1 exterior, 1 interior	-	1 interior depressed pointed arch	1 interior depressed pointed arch	-	1 opening at southeast wall		
<b>Niche</b>	-				-	-	-	1 depressed pointed arch	-	-		
<b>Wash basin (kurna)</b>	-				unobserved	unobserved	2 present	2 present	-	-		
<b>Water pipe (künk)</b>	-				-	-	unobserved	unobserved	-	-		
<b>Platform</b>	unobserved				present	present	present	present	-	-		
<b>Surface finishing</b>	plaster trace				plastered	plastered	plastered	plastered	plastered	exposed without plastering		
<b>Fountain</b>	-				-	-	-	-	-	-		
<b>Furnace</b>	-				-	-	-	-	1	1		
<b>Channel</b>	-				along the northeast wall	observed at northwest iwan	unobserved	unobserved	-	-		
<b>Cehennemlik</b>	-				unobserved	unobserved	unobserved	unobserved	unobserved	unobserved		

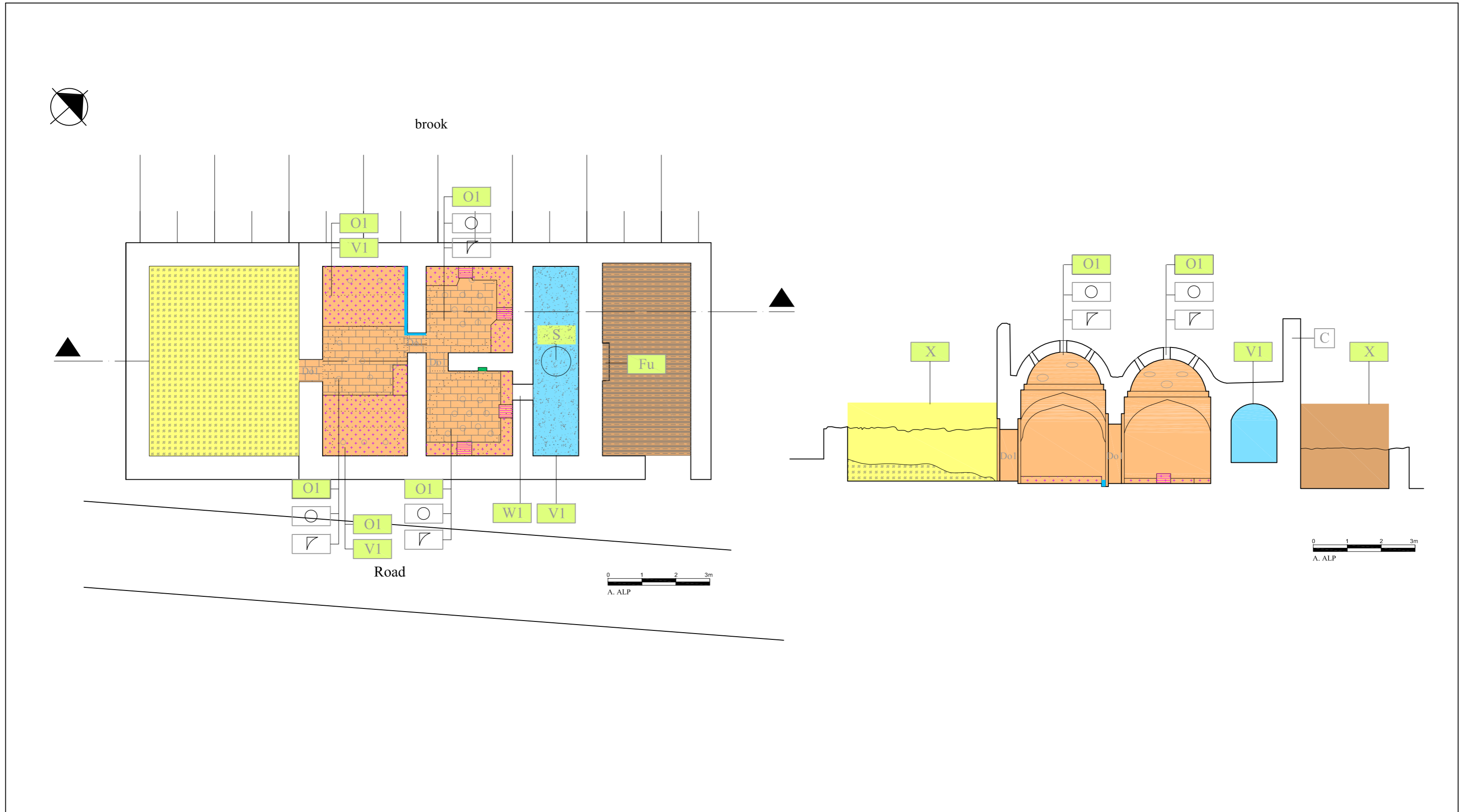


Figure 3.11. Analysis of Spatial Characteristics at Özbek *Hamamı*, Urla

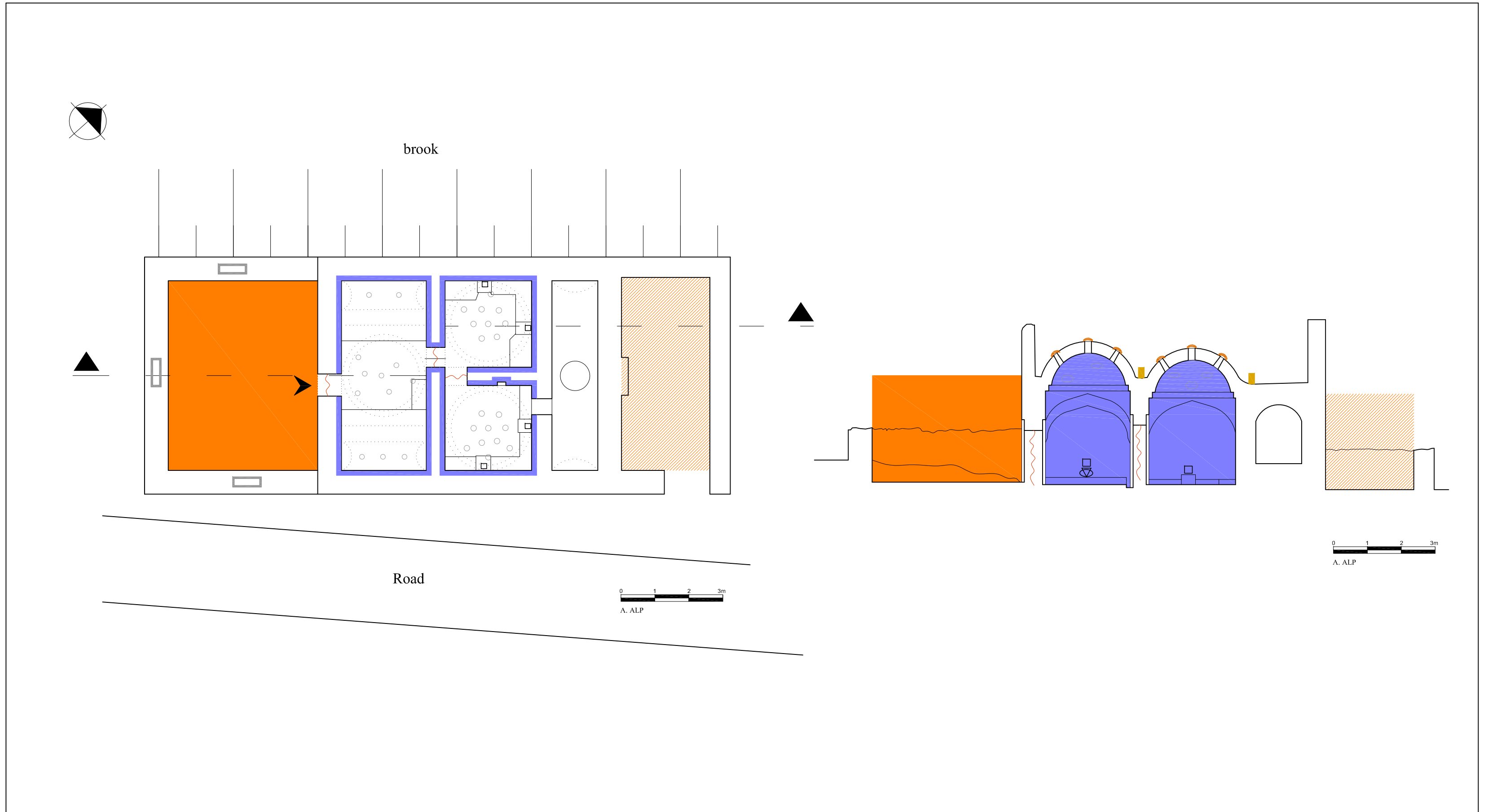


Figure 3.12. Analysis of Alterations at Özbek *Hamami*, Urla



### 3.1.3. Rüstem Paşa *Hamamı*

The Bath (Table 3.5, Table 3.6) is situated in Rüstem district, Barbaros Hayrettin street of Urla. Today, there is the Rüstem Paşa Mosque positioned at the north of the bath. Therefore, the bath can be an element of a building group. Three sides of the bath are surrounded with roads, northeast side with a courtyard (Figure 3.12).

Just one space can be observed today. It is square planned (5.50 x 5.60 m.) and domed. It has a plain facade composition composed of massive, blind walls exposed without plastering. Today, it is composed of one large cubical mass. The cubic mass may be the largest space comprehending *sıcaklık*. Other masses cannot be observed since under the earth. The plan type of the building can be determined after a further detailed excavation.

The entrance to the space is through a 97 cm. wide opening from the northwest façade of the bath (Figure 3.14). The lighting is provided by hexagonal shaped oculi in six rows on the dome of the space. The transition to the dome is provided by pendentives and a two leveled cornice. One circular top cornice 27 cm in height and a bottom hexagonal planned cornice with muqarnas 25 cm in height. There are traces of depressed pointed arched openings on the southeast and southwest walls. However, these openings were filled and closed later (Figure 3.13). It is thought that the space is the main *sıcaklık* space considering its dimensions and muqarnas decorations on the transition zone of the dome. However, dimensions of the space and the central dome are too large compared with the main *sıcaklık* spaces of the other baths. Therefore, there is a dilemma in that point. The floor pavement and the platforms could not be observed since the ground was filled with debris.

The walls are out of with cut stone and rubble stone, while the superstructure and transition elements were built with brick (Reyhan, 2004).

The installation system consisting of water system and heating system could not be observed because of the debris.

There is no inscription panel. The donor of the construction is Rüstem Paşa.

As a result, the major alteration is the loss of the spaces. Therefore, many of the authentic characteristics cannot be observed and the monument has lost its integrity.

Table 3.5. Identification table of Rüstem Paşa *Hamamı*.

<b>Location</b>	Rüstem District, Barbaros Hayrettin Street, Urla/İZMİR
<b>Listing</b>	-
<b>Site Relations</b>	Rüstem Paşa Mosque positioned at the north of the bath. Three sides of the bath are surrounded with roads, northeast side with a courtyard.
<b>Type of <i>Sıcaklık</i></b>	The plan type of the building can be determined after a further detailed excavation
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome
<b>Block / Sheet / Parcel No</b>	- / - / -
<b>Date of Construction</b>	16 <sup>th</sup> century
<b>Donor</b>	Rüstem Paşa
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	5.60x5.50 m



Figure 3.13. General view of the bath from the west.



Figure 3.14. Closed openings on the southeast wall of the space.



Figure 3.15. Entrance on the northwest wall of the space.

Table 3.6. Spatial Characteristics of Rüstem Paşa Hamamı

	Spatial Elements			İhtiklik			Sıcaklık			Water reservoir	Wood shed	Court-yard
	Soyunmalık	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets					
<b>Number of Space</b>					1							
<b>Superstructure</b>					domed							
<b>Transition element</b>					pendentive, 1 circular, 1 octagonal cornice with muqarnas							
<b>Arch</b>					-							
<b>Wall</b>					rough cut stone							
<b>Floor</b>					debris							
<b>Illumination element</b>					hexagonal shaped oculi in 6 rows							
<b>Window</b>					-							
<b>Door</b>		Unobserved	Unobserved	Unobserved	3, depressed pointed arched. 2 is closed with rubble stones			Unobserved		Unobserved		Unobserved
<b>Niche</b>					-							
<b>Wash basin (kurna)</b>					unobserved							
<b>Water pipe (küink)</b>					unobserved							
<b>Platform</b>					unobserved							
<b>Surface finishing</b>					plastered							
<b>Fountain</b>					-							
<b>Furnace</b>					-							
<b>Channel</b>					-							
<b>Cehennemlik</b>		Unobserved			unobserved							

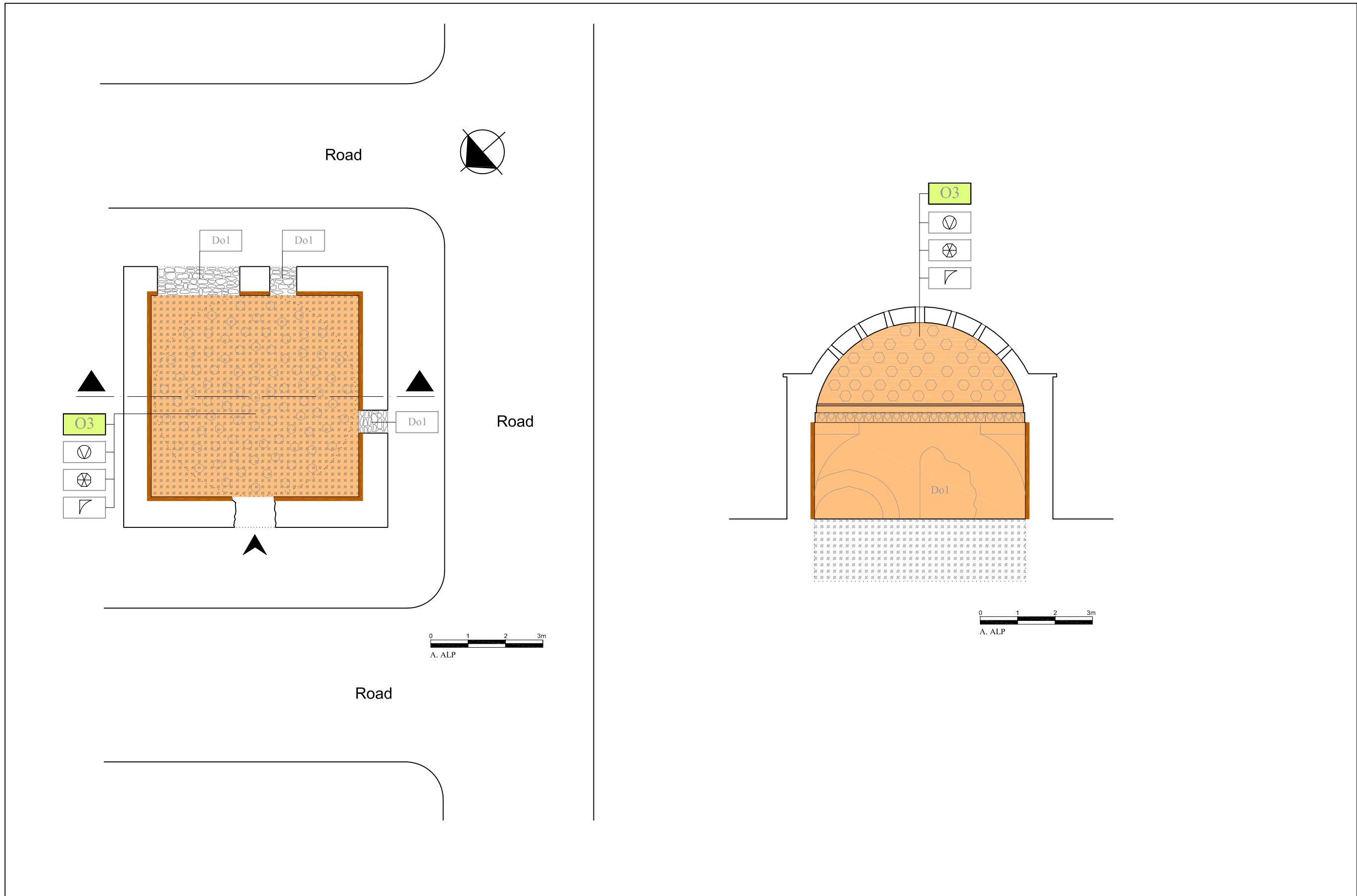


Figure 3.16. Analysis of Spatial Characteristics at Rüstem Paşa *Hamamı*, Urla

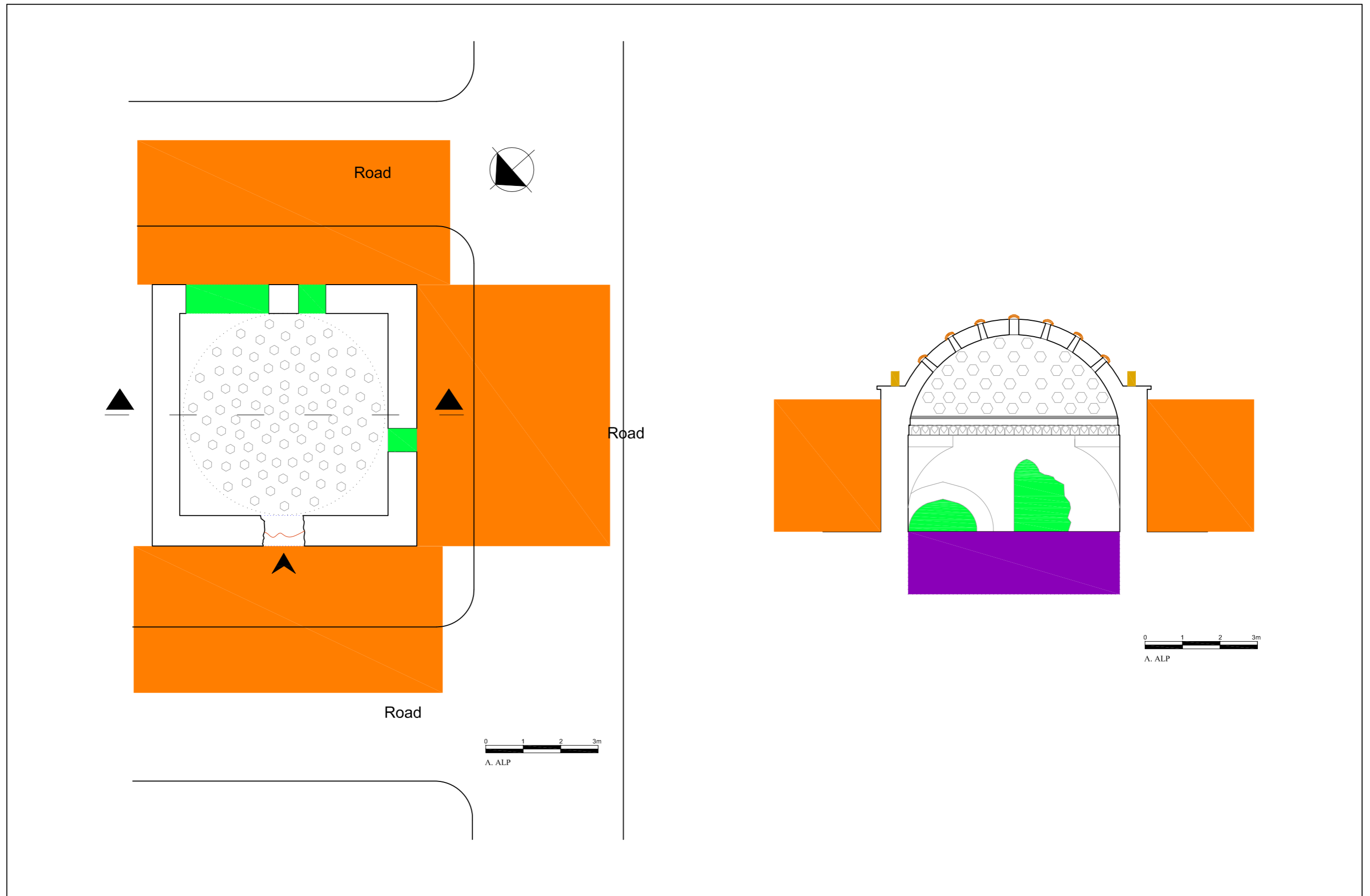


Figure 3.17. Analysis of Alterations at Rüstem Paşa *Hamamı*, Urla

### 3.1.4. Yeni Hamam

The Bath (Table 3.7, Table 3.8) is situated in Urla. Today, three sides of the bath is surrounded with housing units.

It is a single bath. Its exterior dimensions are 8.20 x 9.15 m. It has a plain facade composition composed of massive, blind walls with plastering. It is composed of three cubic masses crowned with domes comprehending washing function at present and an additional *soyunmalık*. The water reservoir could not be observed.

The bath includes an additional *soyunmalık* space, an *ılıklik* space and *sıcaklık* spaces. The original spaces are all square planned. Original plan scheme cannot be perceived because of extensive alterations. The present organization of the plan scheme is not in line with any of Eyice's *sıcaklık* plan types. The southwestern space has an observation window; so, this is interpreted as a *halvet*. The arches of the door openings in these three spaces have irregularities (Figure 3.17). In turn, it is difficult to interpret the original circulation scheme.

The additional *soyunmalık* space is entered from an entrance below the street level with five steps. The space is two floored and includes changing rooms.

The spaces are connected to each other with narrow door openings and covered with domes. The entrance of the northwest *ılıklik* space is provided by a semi-circular arched opening (68 cm in width) on its west wall. It has a square plan (2.90 x 2.95 m). Superstructure of the space is dome and transition to the dome is provided by plain triangles at the corners. The circular shaped oculi in two rows are the lighting elements. There is a depressed pointed arched blind niche between the plain triangles on each wall of the space. There is a wash basin on platform (35 cm) on the west and east walls. The renewed floor is covered with marble and channels are observed.

The main *sıcaklık* space is entered from the *ılıklik* space through a irregular depressed pointed arched door opening (65 cm in width). The main *sıcaklık* space, which is placed on the east side of the building, has a square plan (3.82 x 3.82 m). Superstructure of the space is dome and transition to the dome is provided by plain triangles at the corners. The circular shaped oculi in three rows are the lighting elements. There is a depressed pointed arched blind niche between the plain triangles on each wall of the space. There are four wash basins on platforms (32 cm) along the walls

in the space. At the center of the space, a belly stone (72 cm in height) is placed. The renewed floor is covered with marble and channels are observed.

The southwest *halvet* space (3.00 x 3.10 m.) is entered from the main space through a depressed pointed arched door opening (60 cm in width). Superstructure of the space is dome and transition to the dome is provided by lobed squinches at the corners. The circular shaped oculi in two rows are the lighting elements. There is a depressed pointed arched blind niche between the squinches on each wall of the space. On the west wall, there is a trace of depressed point arched door opening which is closed (Figure 3.18) and on the south wall there is a trace of observation window in rectangular form, which is filled today. There are four wash basins on platforms (32 cm) along the walls in the space. The renewed floor is covered with marble and channels are observed.

The walls are covered with marble at their lower parts and plastered, painted at their upper parts. So, their construction technique and use of material could not be determined.

The installation system which is composed of water and heating systems could not be observed because the ground and the walls were renewed and they were covered with marble.

The building has no inscription. The donor of the construction is unknown.

As a result, the major alteration is the loss of the original spatial organization. Therefore, the authentic characteristics of the bath have not been preserved.

Table 3.7. Identification table of Yeni *Hamam*.

<b>Location</b>	Urla/İZMİR
<b>Listing</b>	-
<b>Site Relations</b>	Three sides of the bath surrounded with housing units.
<b>Type of <i>Sıcaklık</i></b>	Type of plan that has <i>soyunmalık</i> , <i>sıcaklık</i> and <i>halvets</i> of same size (Eyice 1960)
<b>Façade Characteristics</b>	
<b>Block / Sheet / Parcel No</b>	- / - /-
<b>Date of Construction</b>	16 <sup>th</sup> century
<b>Donor</b>	Unknown
<b>Conservation State</b>	Moderate, used
<b>Double or Single</b>	Single
<b>Plan Size</b>	8.20x9.15 m





Figure 3.18. Door openings in the *sicaklık*.



Figure 3.19. Southwest *halvet*.

Table 3.8. Spatial Characteristics of Yeni Hamam

	Spatial Elements		Hiklik			Sicaklik			Water reservoir	Wood shed	Court-yard
	Soyunmalik	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvet				
<b>Number of Space</b>		1			1		1				
<b>Superstructure</b>		domed			domed		domed				
<b>Transition element</b>		plain triangles on the corners			plain triangles on the corners		lobed squinches				
<b>Arch</b>		-			-		-				
<b>Wall</b>		undetermined			undetermined		undetermined				
<b>Floor</b>		marble			marble		marble				
<b>Illumination element</b>		circular shaped oculi			circular shaped oculi		circular shaped oculi				
<b>Window</b>		-			-		1 trace of observation window				
<b>Door</b>		1 interior, 1 exterior			2 interior, depressed pointed arch		1 depressed pointed arch, 1 closed depressed pointed arched opening				
<b>Niche</b>		4 blind niches			4 blind niches		4 blind niches				
<b>Wash basin (kurna)</b>		2 present			6 present		4 present				
<b>Water pipe (künk)</b>		unobserved			unobserved		unobserved				
<b>Platform</b>		present			present		present				
<b>Surface finishing</b>		plastered, painted and marble covered			plastered, painted and marble covered		plastered, painted and marble covered				
<b>Fountain</b>		-			-		-				
<b>Furnace</b>		-			-		-				
<b>Channel</b>		present			present		present				
<b>Cehennemlik</b>		unobserved			unobserved		unobserved				
		Unobserved			Unobserved		Unpresent			Unobserved	

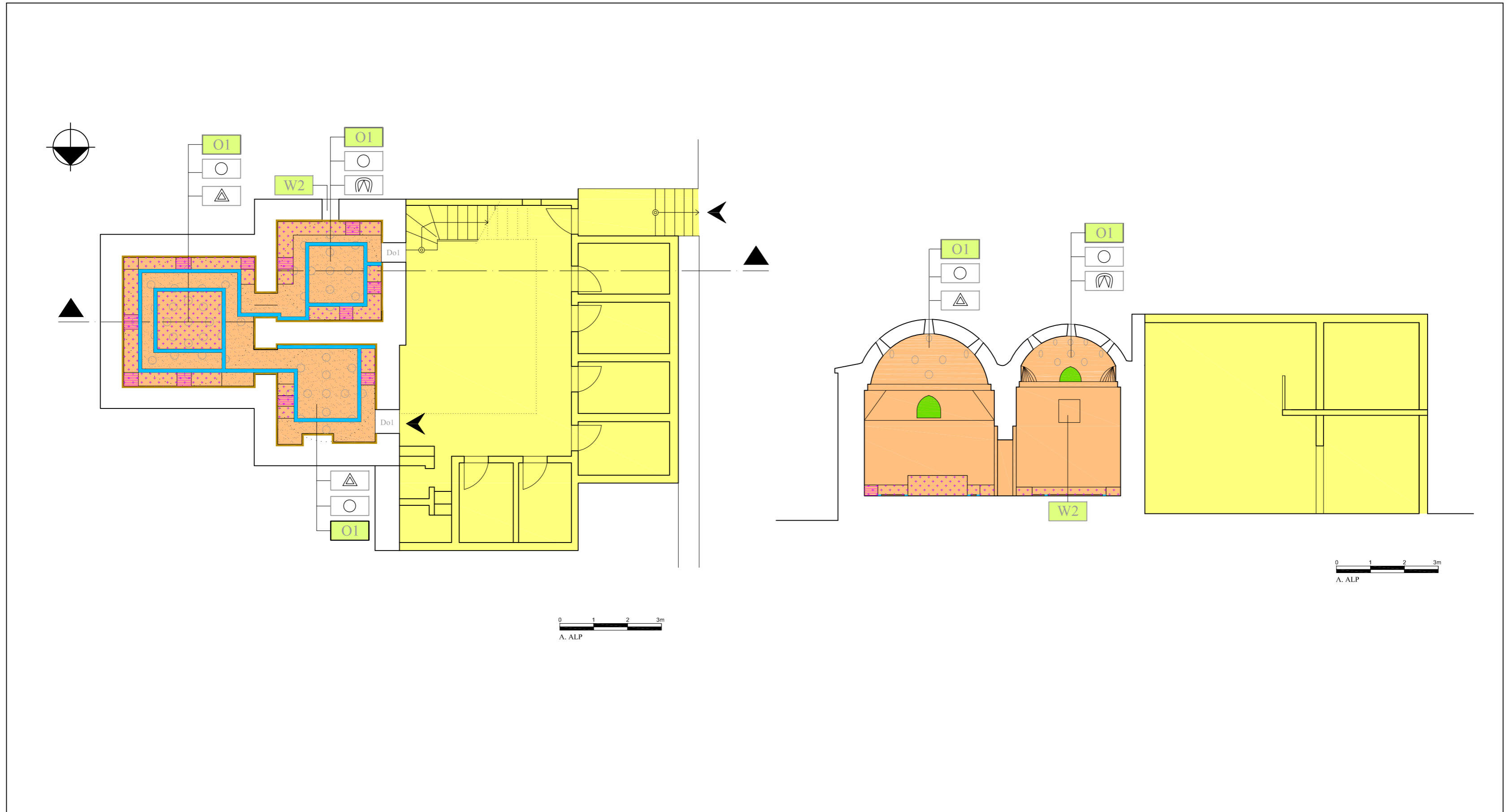


Figure 3.20. Analysis of Spatial Characteristics at Yeni *Hamam*, Urla

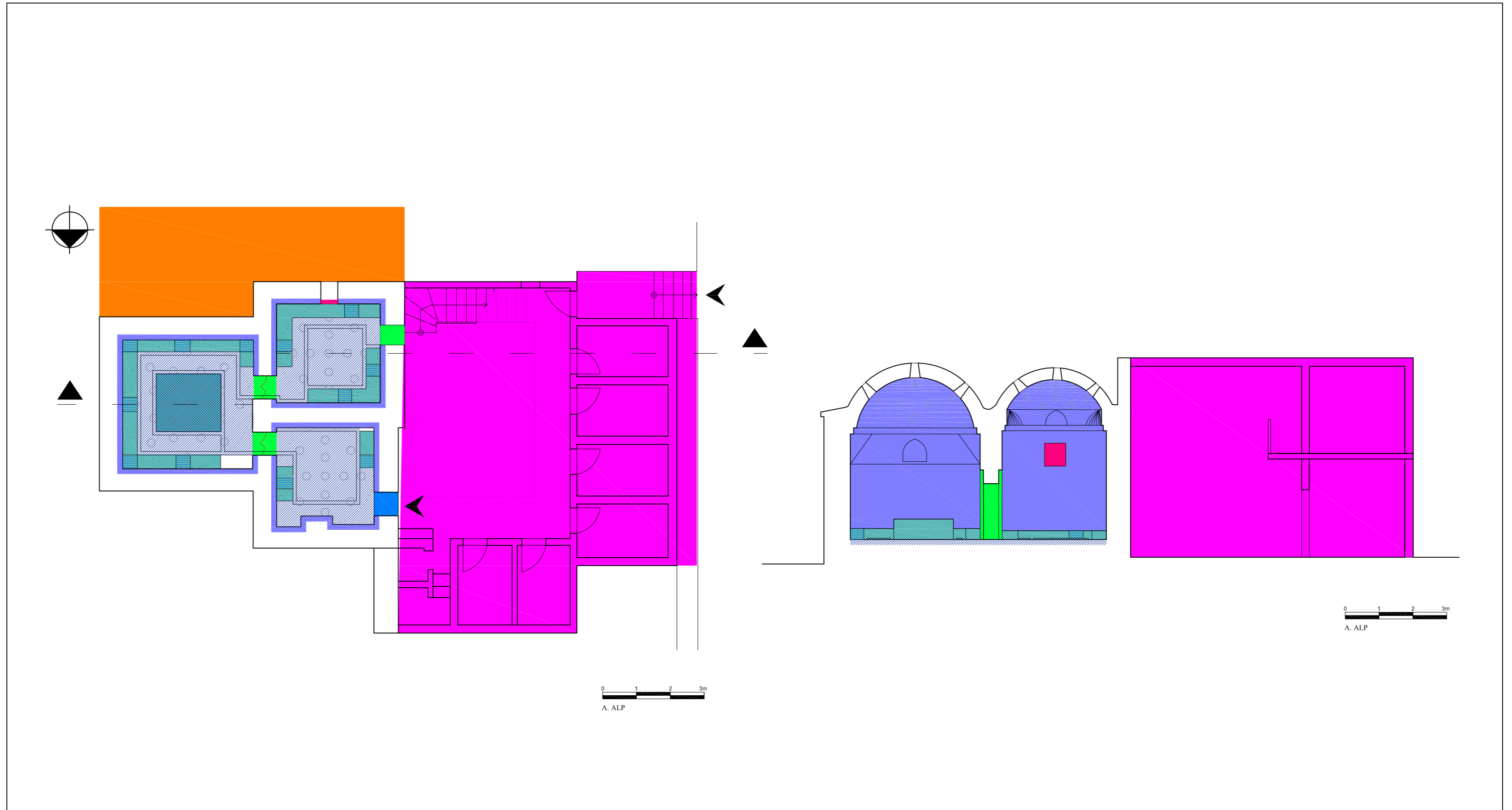


Figure 3.21. Analysis of Alterations at Yeni *Hamam*, Urla

### 3.1.5. Hersekzade Ahmet Paşa *Hamamı*

The Bath (Table 3.9, Table 3.10, Table 3.11) is located at the center of Urla, on Mustafa Kemal Paşa Street. Today, three sides of the bath are surrounded with housing units. There is a mosque positioned at the north of the bath. The bath is an element of a building group which is Hersekzade Ahmet Paşa Building Group composed of a mosque, a tomb, a fountain and a bath (Akyıldız, 1988). However, only the bath and the mosque (Kapan Mosque, 1554) of this complex have reached today.

The bath is listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 241 and dated 26.04.1984. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012). Then, this decision was re-stated by İzmir Number 1 Regional Conservation Board of Cultural Assets: decision number 3895 and date 06.08.1992. The restoration project of the bath was prepared by Aktivite İnşaat and Municipality of Urla in 2013 and the application is completed in 2016.

It is a double bath with a men's section (9.4 x 23.5 m) at the southeast and a women's section (11.8 x 22.4 m) at the northwest. It has a plain facade composition composed of massive, blind walls exposed without plastering and crowned with dome and vault series. It is composed of one large cubical space, one group of small cubical spaces and one prismatic mass. The cubical mass is the largest space comprehending changing function, but it has lost its third dimension. The group of cubical spaces are thermal conditioning, washing, shaving and toilet units each crowned with a single small dome or sometimes vault. The prismatic one is the service space comprehending water reservoir. All of the spaces are added to one another to determine a compact building order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults at different heights is created. The original silhouette can be still comprehended.

Both sections of the bath include *soyunmalık*, *ılıklik*, *sıcaklık* spaces, a water reservoir and a common courtyard at the southwest. The spaces in the both sections are added to each other in linear order from northeast to southwest. The original circulation within the both sections of the building was made with a linear path with L formed starting from the entrance of the *soyunmalık* space and terminating in the two *halvets*. At present, the *sıcaklık* spaces are composed of a main *sıcaklık* space and two *halvets* in the women's section, three *halvets* in the men's section. The main *sıcaklık* spaces are

composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its both sides. In Semavi Eyice's (1960) typology, both sections of the bath can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*. However, the plan of the men's section differs from the typical plan type with a third *halvet* at its northwest. Nevertheless, Eyice (1960) points out the possibility of variation of this plan scheme.

**Women's Section:** The *soyunmalık* spaces are located on the northeast of the building, but both of them have collapsed today (Figure 3.21). The wall traces can be observed. The men's section is separated from the women's section with a common wall. The entrance to the *soyunmalık* of the women's section is from the northwestern side. The *soyunmalık* (8.4x10.2 m) is a rectangular space whose third dimension has been lost. There is a pool trace at the center and platform traces at the sides. The entrance to the main *ılıklik* space is provided with the semi-circular arched door opening (72 cm) from the *soyunmalık*.

The *ılıklik* space (3.10 x 4.05 m) consists of a square planned, domed central unit with a rectangular planned, wide arched iwan at its southeast side and a square planned, domed shaving space at its northwest which is entered through a semi-circular arched door opening. The iwan of the *ılıklik* space is differently surmounted by wide semi-circular arch or short barrel vault at northwest – southeast direction, spanning the long side of the iwan. Also, the iwan is emphasized by a Bursa arch and platform (40 cm. in height) is arranged as wide as the iwan (3.10 m) (Figure 3.22). Lighting to the main *ılıklik* space is provided by the circular shaped oculi that are placed in two rows on the dome of the space. The oculi on dome of the shaving space are arranged in one circular row, circular in shape, and one square shaped oculus at the center. The transition to the superstructure in the central *ılıklik* space is provided by pendentive and cornice. In the shaving space, the transition element is Turkish triangles and cornice. A partition wall and four steps are present in the shaving space. Also, on the northwest wall, faucet traces are observed. So, the wall may be arranged for privacy. The floor covering of the *ılıklik* spaces could not be determined since the debris.

The entrance from the *ılıklik* to the main *sıcaklık* space is provided by a depressed pointed arched door opening on the southwest wall of the main *ılıklik* space. The *sıcaklık* space is composed of the main *sıcaklık* space and two *halvets*. The rectangular planned main *sıcaklık* space (3.90 x 8.30 m.) consists of a square planned, domed central unit and two wide arched iwans on its both sides. The iwans of the

*sıcaklık* space are similarly surmounted by wide semi-circular arch or short barrel vault at northwest – southeast direction, spanning the long side of the iwan. Also, they are emphasized by a depressed pointed arch and platform (40 cm. in height) is arranged as wide as the iwan (3.90 m). The northwest iwan projects out of the main mass about 1.25 m. Lighting is provided by a hemispherical cupola which is situated at the center of the octagonal dome of the main *sıcaklık* space and the circular shaped oculi that are placed in three rows. The transition elements of the main *sıcaklık* space are pendentives and an octagonal cornice. A wash basin is placed on the center of the northwest and southeast walls of the iwans. Two domed *halvet* spaces which are equal in size (3.70 x 3.75 m.) are located on the southwest side of the main *sıcaklık* space. They are entered from the main *sıcaklık* space through semi-circular arched door openings (Figure 3.23). The circular shaped oculi that are placed in three rows on the dome of the *halvets* provide lighting to space. The pendentives and the cornices are the transition elements of the *halvets*. In the northwest *halvet* of women's section, there is a pointed arched niche on the southwest wall. In the *halvets* of women's section, there is no observation window related to the water reservoir as a prerequisite of privacy. Marble wash basins and platforms are arranged in both *halvets*. There are four marble wash basins with different forms and decorations in the southeast *halvet* (Figure 3.24) and two marble wash basins with different forms and decorations in the northwest *halvet*. Also, faucet traces are observed in the *halvets*.

In the *sıcaklık* spaces, including *cehennemlik*, the floors were built on masonry walls made of bricks or cut stones which are 90 cm. in height and covered with cut stone, 7 cm. in thickness and 56 x 70 cm. in size (Reyhan, 2004).

Table 3.9. Identification table of Hersekzade Ahmet Paşa *Hamamı*.

<b>Location</b>	Mustafa Kemal Paşa Street, Urla/İZMİR
<b>Listing</b>	Listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 241 and dated 26.04.1984. This decision was re-stated by İzmir Number 1 Regional Conservation Board of Cultural Assets: decision number 3895 and date 06.08.1992.
<b>Site Relations</b>	Element of a building group which is Hersekzade Ahmet Paşa Complex composed of a mosque, a tomb, a fountain and a bath.
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series.
<b>Block / Sheet / Parcel No</b>	- / - / -
<b>Date of Construction</b>	15 <sup>th</sup> century
<b>Donor</b>	Hersekzade Ahmet Paşa
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Double
<b>Plan Size</b>	11.8x22.4 m (Women's section) 9.6x25.3 m (Men's section)



Figure 3.22. General view of the bath from the north.





Figure 3.23. Bursa arch in the *ıkklık* space.    Figure 3.24. Entrances in the main *sıcaklık*



Figure 3.25. Wash basins in the southeast *halvet*.

Table 3.10. Spatial Characteristics of Hersekzade Ahmet Paşa Hamamı.

	Spatial Elements				İhtiklik				Sıcaklık				Water reservoir	Wood shed	Court-yard
	Soyunmatık		Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets		Water reservoir	Wood shed	Court-yard			
	Soyunmatık							Northwest	Southeast						
<b>Number of Space</b>	1	1	1	1	1	1	1	1	1	1	1	1	1		
<b>Superstructure</b>	collapsed	domed	domed	domed	wide arch	domed	wide arch	domed	domed	barrel vaulted	collapsed				
<b>Transition element</b>	-	pendentive	Turkish triangles		-	pendentive, 1 circular, 1 octagonal cornice	-	pendentive	pendentive	-	-				
<b>Arch</b>	-	2 blind Bursa arches on the walls			emphasized by a Bursa arch	2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	4 semi-circular blind arches on the walls		-	-				
<b>Wall</b>	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond				
<b>Floor</b>	marble traces	debris	debris	debris	debris	debris	debris	debris	debris	debris	debris				
<b>Illumination element</b>	-	circular shaped oculi	1 square oculi, 3 circular shaped oculi		-	circular shaped oculi, hemispherical cupola	-	circular shaped oculi		-	-				
<b>Window</b>	-	-	-	-	-	-	-	-	-	-	-				
<b>Door</b>	1 exterior, trace on the northwest wall. 1 interior, semi-circular arched	3 interior semi-circular arched door openings	1 interior semi-circular arched door opening		-	3 interior semi-circular arched door openings	-	1 interior semi-circular arched	1 interior semi-circular arched	-	-				
<b>Niche</b>	unobserved	-	-	-	-	-	-	1 depressed pointed		-	-				
<b>Wash basin (kurna)</b>	-	-	-	-	-	-	-	traces	4 original	-	-				
<b>Water pipe (künk)</b>	-	-	-	-	-	-	-	traces of terracotta pipes		-	-				
<b>Platform</b>	traces	-	-	-	traces	-	traces	traces		-	-				
<b>Surface finishing</b>	exposed without plastering	plaster traces	plaster traces	plaster traces	plaster traces	plaster traces	plaster traces	plaster traces	plaster traces	unobserved	exposed without plastering				
<b>Fountain</b>	-	-	-	-	-	-	-	-	-	-	-				
<b>Furnace</b>	-	-	-	-	-	-	-	-	-	1	1				
<b>Channel</b>	-	-	-	-	-	unobserved	unobserved	unobserved	unobserved	unobserved	unobserved				
<b>Cehennemlik</b>	-	-	-	-	-	observed	observed	observed	observed	unobserved	unobserved				

**Men's Section:** The *soyunmalık* space of this section has also collapsed as mentioned before. The entrance to the *soyunmalık* of the men's section is from the southeastern side of the bath (Figure 3.25). There is a pool trace at the center and platform traces at the sides as similar at the women's section. The entrance to the *ılıklik* space is provided with the pointed arched door opening (72 cm. in width) from the *soyunmalık* at the northeast.

The *ılıklik* space (3.10 x 4.00 m.) consists of a square planned domed central unit with a rectangular planned barrel vaulted iwan at its southeast. Lighting is provided by the hexagonal shaped oculi that are placed in two rows on the dome of the space. The transition to the superstructure in the main *ılıklik* space is provided by pendentive and cornice. The side barrel vaulted iwan is emphasized by depressed pointed arch. Platform (40 cm in height) is arranged as wide as the iwan (3.10 m).

The entrance from the *ılıklik* to the main *sıcaklık* space is provided by a pointed arched door opening (67 cm in width) on the southwest wall of the domed central unit. The *sıcaklık* space is composed of the main *sıcaklık* space and two *halvets*. These spaces are almost symmetrical to the women's section. Therefore, spatial characteristics of the two sections are similar. The rectangular planned main *sıcaklık* space (3.90 x 8.30 m.) consists of a square planned, domed central unit and two rectangular planned, barrel vaulted iwans on its both sides. Lighting is provided by a hemispherical cupola which is situated at the center of the dome of the main *sıcaklık* space and the hexagonal shaped oculi that are placed in three rows. On the vaults of the northern and southern iwan, there are two hexagonal shaped oculi along the central axis of the vaults. The transition elements of the main *sıcaklık* space are decorated pendentives and cornice. The side barrel vaulted iwans are emphasized by semi-circular arches at the northwest and southeast sides of the main *sıcaklık* space and platforms (40 cm in height) arranged as wide as the iwans (3.90 cm in width).

Two domed *halvet* spaces which are equal in size (3.70 x 3.75 m.) are located on the southwest side of the main *sıcaklık* space. They are entered from the main *sıcaklık* space through pointed arched door openings (65x158 cm) at the northeast. The hexagonal shaped oculi that are placed in three rows on the domes of the *halvets* provide lighting to space. The pendentives and the cornice are the transition elements of the *halvets*. There is no wash basin in the *sıcaklık* spaces of this section. However, the faucet traces which point out the existence of the wash basins and the platforms can be observed on the walls of the main *sıcaklık* space and the *halvets*. A depressed pointed

arched observation window (60 cm) is present on the wall of the southeast *halvet* which is related to the water reservoir.

In the *sıcaklık* spaces, including *cehennemlik*, the floors were built on masonry walls made of bricks or cut stones which are 90 cm. in height and covered with cut stone, 7 cm. in thickness and 56 x 70 cm. in size (Reyhan, 2004).

The rectangular planned and barrel vaulted water reservoir (1.95 x 15.10 m.) is located on the southwest of both sections. There is also a semi-circular arched opening on the southeast side of the building, but it cannot be seen from the outside because of the level of the surrounding ground.

The furnace under the water reservoir, *cehennemlik* under the floors of the *sıcaklık* spaces and the terracotta flues in the walls of the *ılıkılık* and *sıcaklık* spaces constitute the heating system. *Cehennemlik*, which was covered with cut stone, was built with brick or stone masonry walls which were nearly 90 cm. high (Reyhan, 2004). As the furnace at the southwest wall of the water reservoir indicates, there should be also a wood shed space that is adjacent to the water reservoir.

The walls are out of rubble stone, while the superstructure and transition elements are out of brick (Reyhan, 2004).

There is no inscription panel on the building. The bath was constructed by governor of Anatolia Hersekzade Ahmet Paşa in 1490s (Baykara, 1991).

As a result, the major alteration is the loss of the third dimension of the *soyunmalık* and the wood shed. Nevertheless, many of the authentic characteristics have been preserved.



Figure 3.26. *Soyunmalık* space of men's section.

Table 3.1.1. Spatial Characteristics of Hersekzade Ahmet Paşa Hamamı Men's Section

	Spatial Elements				Ilıklık				Sıcaklık				Court-yard
	Soyunmalk		Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halıvets		Water reservoir	Wood shed		
	Soyunmalk							Northwest	Southeast			Northwest	
<b>Number of Space</b>	1		1		1	2	1	1	1	1	1		
<b>Superstructure</b>	collapsed		domed		barrel vaulted	barrel vaulted	domed	domed	domed	barrel vaulted	collapsed		
<b>Transition element</b>	-		pendentive		pendentive, 1 circular 1 octagonal cornice	-	pendentive	pendentive	pendentive	-	-		
<b>Arch</b>	-		-		emphasized by a semi-circular arch	emphasized by a semi-circular arch	4 semi-circular blind arches on the walls	4 semi-circular blind arches on the walls	4 semi-circular blind arches on the walls	-	-		
<b>Wall</b>		rubble stone bond	rubble stone bond		rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond		
<b>Floor</b>		marble traces	debris		debris	debris	debris	debris	debris	unobserved	earth		
<b>Illumination element</b>	-		circular shaped oculi		circular shaped oculi, hemispherical cupola	-	-	circular shaped oculi	circular shaped oculi	-	-		
<b>Window</b>	-		-		-	-	-	1 observation window	1 observation window	1 observation window	-	Unobserved	
<b>Door</b>	1 exterior, trace on the northeast wall 1 interior, pointed arched		2 interior pointed arched door openings		4 pointed arched door openings	-	1 interior pointed arched	1 interior pointed arched	1 interior pointed arched	-	-		
<b>Niche</b>	traces		-		-	-	-	-	-	-	-		
<b>Wash basin (kurna)</b>	-		-		-	traces	traces	traces	traces	-	-		
<b>Water pipe (küçük)</b>	-		-		-	unobserved	traces of terracotta pipes	traces of terracotta pipes	traces of terracotta pipes	-	-		
<b>Platform</b>	traces		-		traces	traces	traces	traces	traces	-	-		
<b>Surface finishing</b>	exposed without plastering		plaster traces		plaster traces	plaster traces	plaster traces	plaster traces	plaster traces	unobserved	exposed without plastering		
<b>Fountain</b>	-		-		-	-	-	-	-	-	-		
<b>Furnace</b>	-		-		-	-	-	-	-	1	1		
<b>Channel</b>	-		-		unobserved	unobserved	unobserved	unobserved	unobserved	-	-		
<b>Cehennemlik</b>	-		-		observed	observed	observed	observed	observed	unobserved	-		

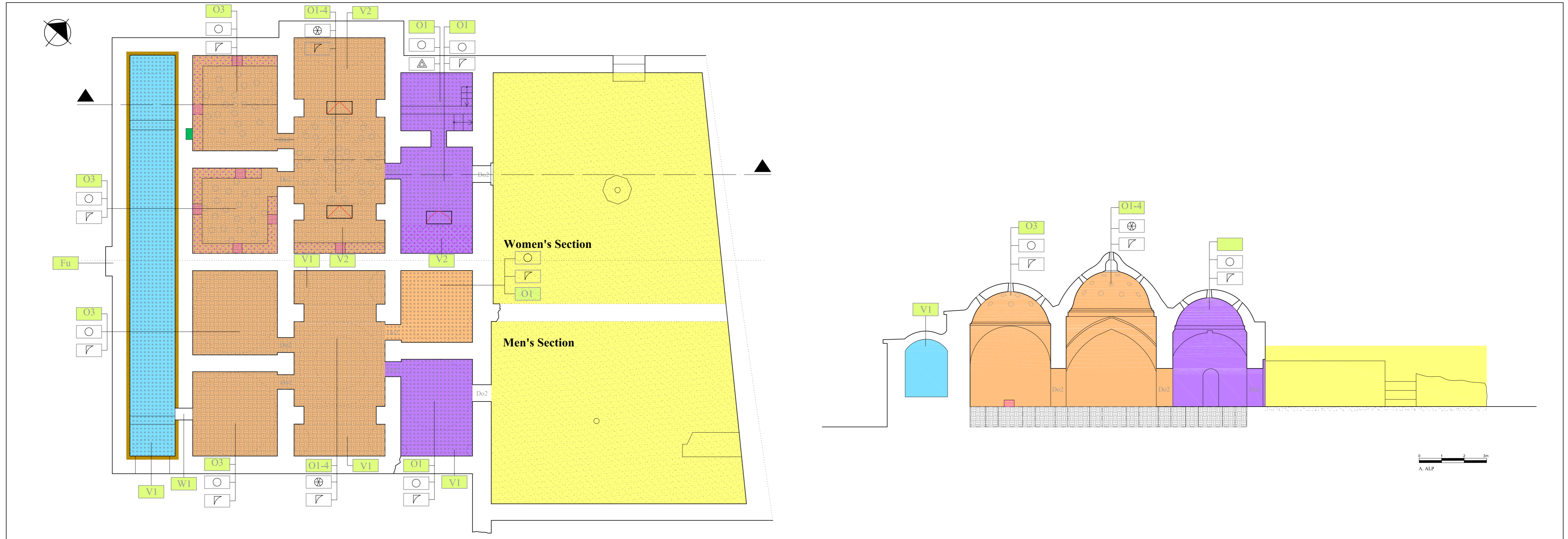


Figure 3.27. Analysis of Spatial Characteristics at Hersekzade Ahmet Paşa *Hamamı*, Urla

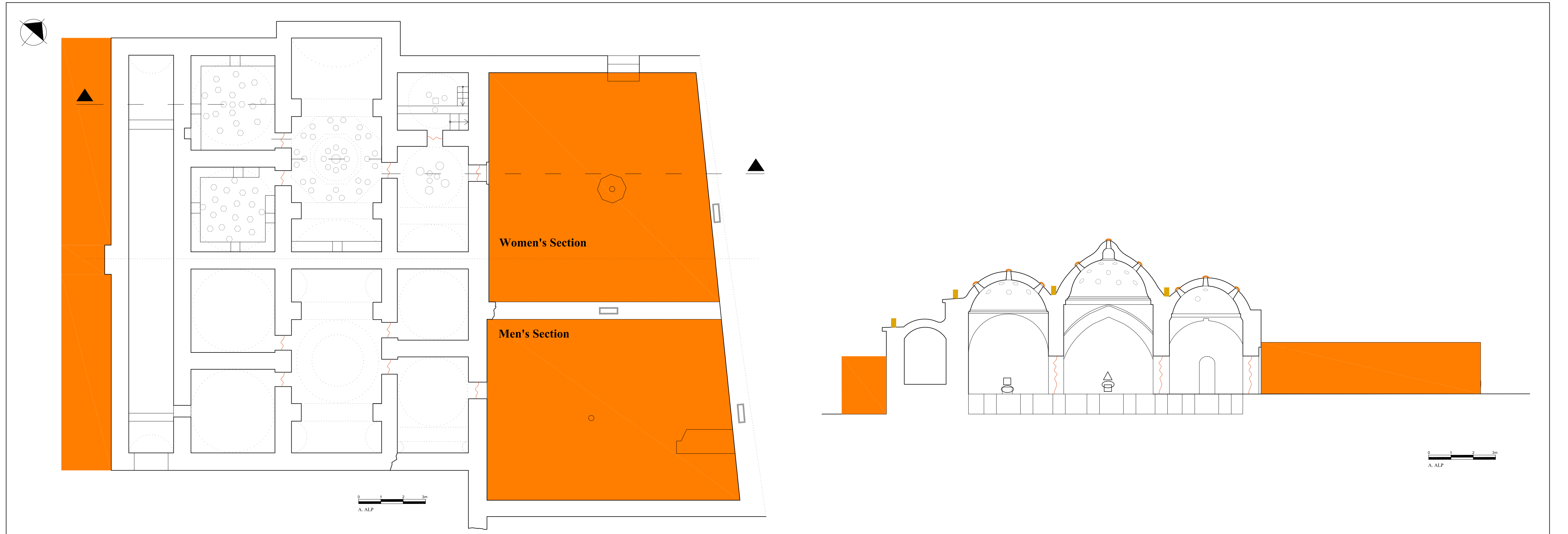


Figure 3.28. Analysis of Alterations at Hersekzade Ahmet Paşa *Hamamı*, Urla



## 3.2. Baths in Seferihisar

The baths in Seferihisar are introduced in the below. Aydın Emirate conquered Seferihisar and Hereke in 1320s (Baykara 1991). After this date, a number of Turkish tribes were settled in these cenetrs and villages were established around them.

### 3.2.1. Ulaış *Hamamı*

The Bath (Table 3.12, Table 3.13) is a village bath which is in the borders of Ulaış neighborhood of Seferihisar sub-province of İzmir. The historical village of Ulaış of Hereke *Nahiye* was one of the earlist villages established by the Turkish tribes who settled in the region in the 14<sup>th</sup> century (Kütükoğlu, 2000). Today, the bath is owned by village legal entity (*köy tüzel kişiliği*) and its four sides are surrounded by roads. There is a well and a brook at the northwest of the bath (Figure 3.28).

The bath is listed with the decision of the Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012).

It is a single bath (Tuncoku and Kul, 2012). Its exterior dimensions are 8.30 x 10.7 m. It has a plain facade composition composed of massive, blind walls exposed without plastering and crowned with dome and vault series. It is composed of one group of small cubicals and one prismatic mass at present. The cubicals are the *sıcaklık* spaces comprehending washing, while the prismatic one is a service space comprehending the water storage and the furnace underneath it. All of the masses are added to one another in a linear order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults at different heights is achieved. There is no trace at the west of the bath providing information about the once existence of *soyounmalık*, but the furnace at the north points out that there should be a woodshed here.

The bath includes *sıcaklık* space and a water reservoir. At present, the *sıcaklık* space is composed of a main *sıcaklık* space and two *halvets*. The main *sıcaklık* space is composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its both sides. There are two *halvets*, one of them is at the northwest and the other one is at the northeast. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit

and two *halvets*. The original circulation within the building was made with a linear path with L formed entrance starting from the street entrance at the northwest of the bath and terminating in the two *halvets* at the north.

The *sıcaklık* is composed of the main *sıcaklık* space and two *halvets*. The rectangular planned main *sıcaklık* space (3 x 6.50 m) consists of a square planned, domed central unit and two vaulted iwans on its both sides. Lighting is provided through the oculi and the hemispherical cupola on the superstructure. Hemispherical cupola is present only at the dome of the main space and the oculi on this dome are hexagonal and star shaped. Transition to the dome from the wall in the main space is provided with pendentives and cornices. The cornices frame the octagonal planned baldaquin. The lower part of this baldaquin is embellished with geometric patterns, and the upper part has a muqarnas decoration. The main space is entered from the western iwan with a depressed pointed arched opening but it differs from the others because of the *yaşmak* that provides control of the heat loss (Figure 3.31). In addition, an irregular opening which is opened later at the southwest is present. The side barrel vaulted iwans are emphasized by depressed pointed arches on the east and west sides of the main space (Figure 3.29). The two square planned, domed *halvets* (3 x 3 m) are located at the north of the main *sıcaklık* space. Lighting to the *halvets* is provided by the hexagonal shaped oculi that are placed in two rows, and a star shaped oculus at the center in the northwest halvet. Transition to the dome from the wall in the *halvets* is provided with pendentives. These spaces are entered from the main space with depressed pointed arched door openings. A depressed pointed arched observation window (50 cm in width) is present on the wall of the west *halvet* which is related to the water reservoir (Figure 3.30). On the north wall of the *halvets*, the traces of faucet and terracotta pipes point out the existence of basins and platforms. The floor pavement could not be determined since the floor is filled with debris.

The rectangular planned barrel vaulted water reservoir (1.35 x 5.60 m) is located at the north of the *halvets*. On the west wall, there is a semi-circular arched opening (45 cm in width). It can be considered that this opening was constructed with the aim of controlling the water level regularly. The well and brook located at the northwest of the bath, are the sources of the usage water.

The furnace is located under the water reservoir as the traces at the north façade indicate. Also, there should be a wood shed space that was used to be adjacent to the water reservoir. However, it cannot be seen today.

There is no inscription panel. The donor of the construction is unknown. However, it may dated earliest to the 14<sup>th</sup> century.

As a result, this is a small village bath. The lack of a *soyunmalık* in the original design is a possibility as revealed in the size of the washing space and the possible size of the village starting with the 14<sup>th</sup> century (Kütükoğlu, 2000). Tunçoku and Kul (2012) propose a restitution scheme with *soyunmalık*. However, there is no trace of an adjacent mass at the western façade. The bath, different than other examples in the region, is entered from the iwan at the short side of the *sıcaklık*. In turn, privacy of the halvets is provided. The central main space dome rests on an octagonal drum providing verticality to the interior space. The wood shed space is missing. The irregular opening at the south is an alteration that has changed the original circulation scheme and light quality. The major alteration can be evaluated as the loss of relations of the bath with its original context. The original solid-void organization cannot be deciphered. The well - bath relation and the expected open spaces in between them, and the housing pattern around cannot be traced. Excavation is necessary.

Table 3.12. Identification table of Ulamiş *Hamamı*.

<b>Location</b>	Ulamiş District, Hamam neighborhood, Street 1403, Seferihisar/İZMİR
<b>Listing</b>	Listed with the decision of the Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986.
<b>Site Relations</b>	Four sides of the bath surrounded with roads, a well placed at the Northwest of the Bath
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series
<b>Block / Sheet / Parcel No</b>	- / 4 / 1776
<b>Date of Construction</b>	14 <sup>th</sup> century
<b>Donor</b>	Unknown
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	8.30x10.65 m



Figure 3.29. General view of the bath from the north.



Figure 3.30. Western iwan in the main *sıcaklık* space.



Figure 3.31. Observation window in the western *halvet*.



Figure 3.32. Depressed pointed arched door with *yaşmak*.

Table 3.13. Spatial Characteristics of Ulamış Hamamı

	Spatial Elements			Ihtiklik			Sıcaklık				Water reservoir	Wood shed	Court-yard		
	Soyunmatik			Main space	Shaving-toilet space	Iwan	Iwan	Halvets		Water reservoir				Wood shed	Court-yard
	Soyunmatik							Northwest							
<b>Number of Space</b>								1	1	1	1	1			
<b>Superstructure</b>								barrel vaulted	domed	domed	barrel vaulted	collapsed			
<b>Transition element</b>								pendentive, 1 octagonal cornice, 1 octagonal drain with decorative figures	pendentive	pendentive	-	-			
<b>Arch</b>								2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	4 semi-circular blind arches on the walls	-	-			
<b>Wall</b>								rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond			
<b>Floor</b>								debris	debris	debris	debris	earth			
<b>Illumination element</b>								hexagonal shaped oculi, hemispherical cupola	3 hexagonal shaped oculi	hexagonal shaped oculi	star shaped oculi, hexagonal shaped oculi	-			
<b>Window</b>								-	-	-	1 observation window	-			
<b>Door</b>								2 interior depressed pointed arched openings	1 additional opening 1 exterior depressed pointed arched opening with <i>yaymak</i>	1 interior depressed pointed arched opening	1 interior depressed pointed arched opening	-			
<b>Niche</b>								-	-	-	-	-			
<b>Wash basin (kurna)</b>								traces	traces	traces	traces	-			
<b>Water pipe (künk)</b>								traces	traces of terracotta pipes	traces of terracotta pipes	traces of terracotta pipes	-			
<b>Platform</b>								traces	traces	traces on the corners	-	-			
<b>Surface finishing</b>								plastered	plastered	plastered	plastered	exposed without plastering			
<b>Fountain</b>								-	-	-	-	-			
<b>Furnace</b>								-	-	-	1	1			
<b>Channel</b>								unobserved	-	-	-	-			
<b>Cehennemlik</b>								unobserved	unobserved	unobserved	unobserved	unobserved			

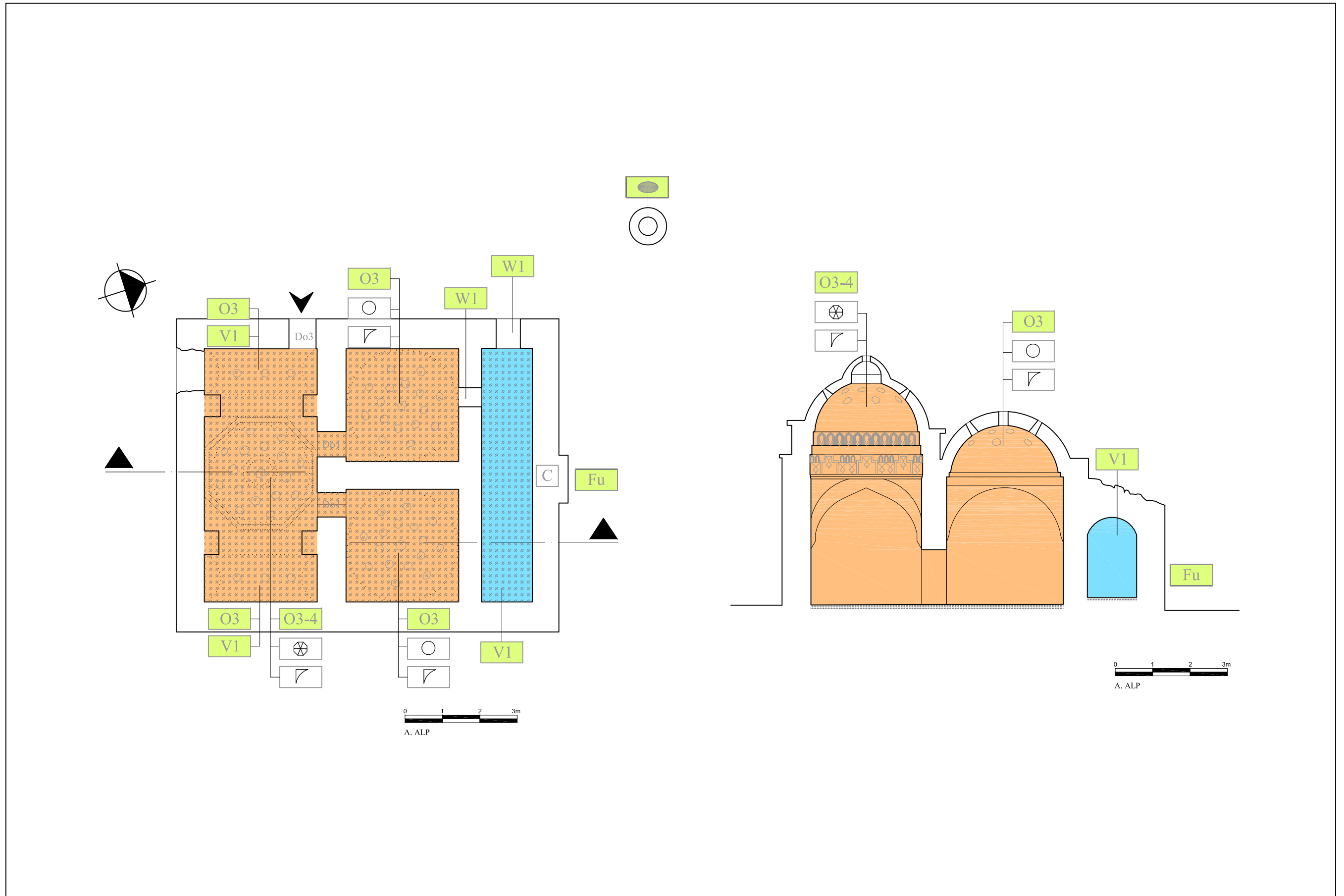


Figure 3.33. Analysis of Spatial Characteristics at Ulamiş *Hamamı*, Seferihisar

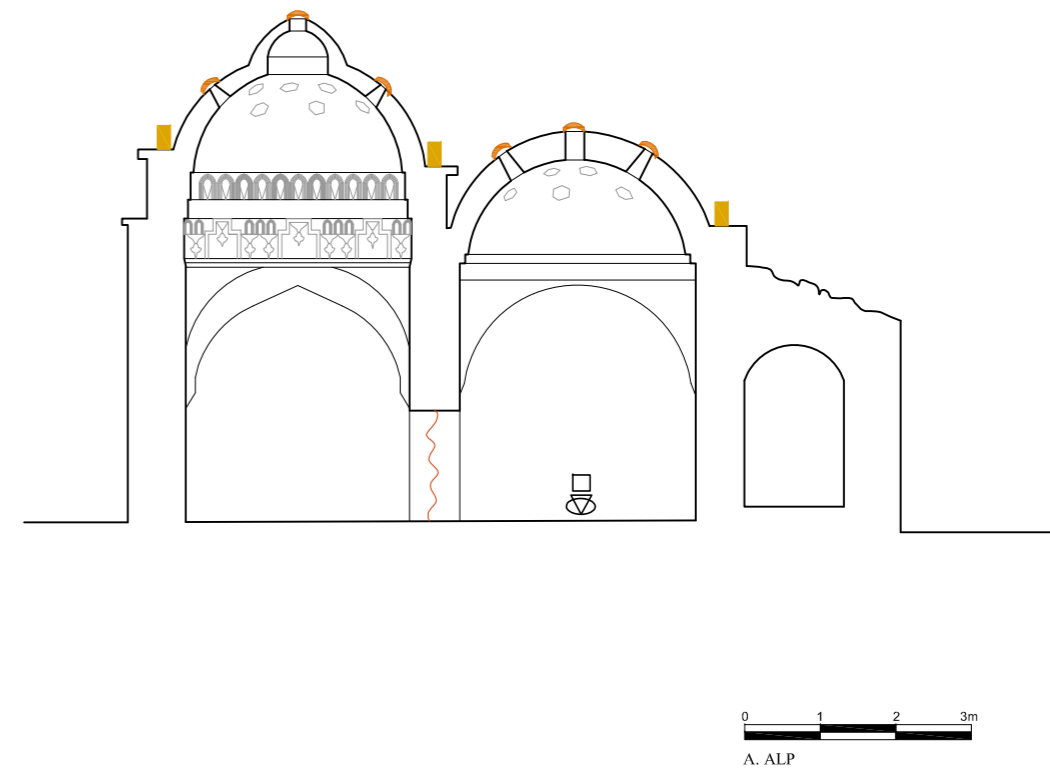
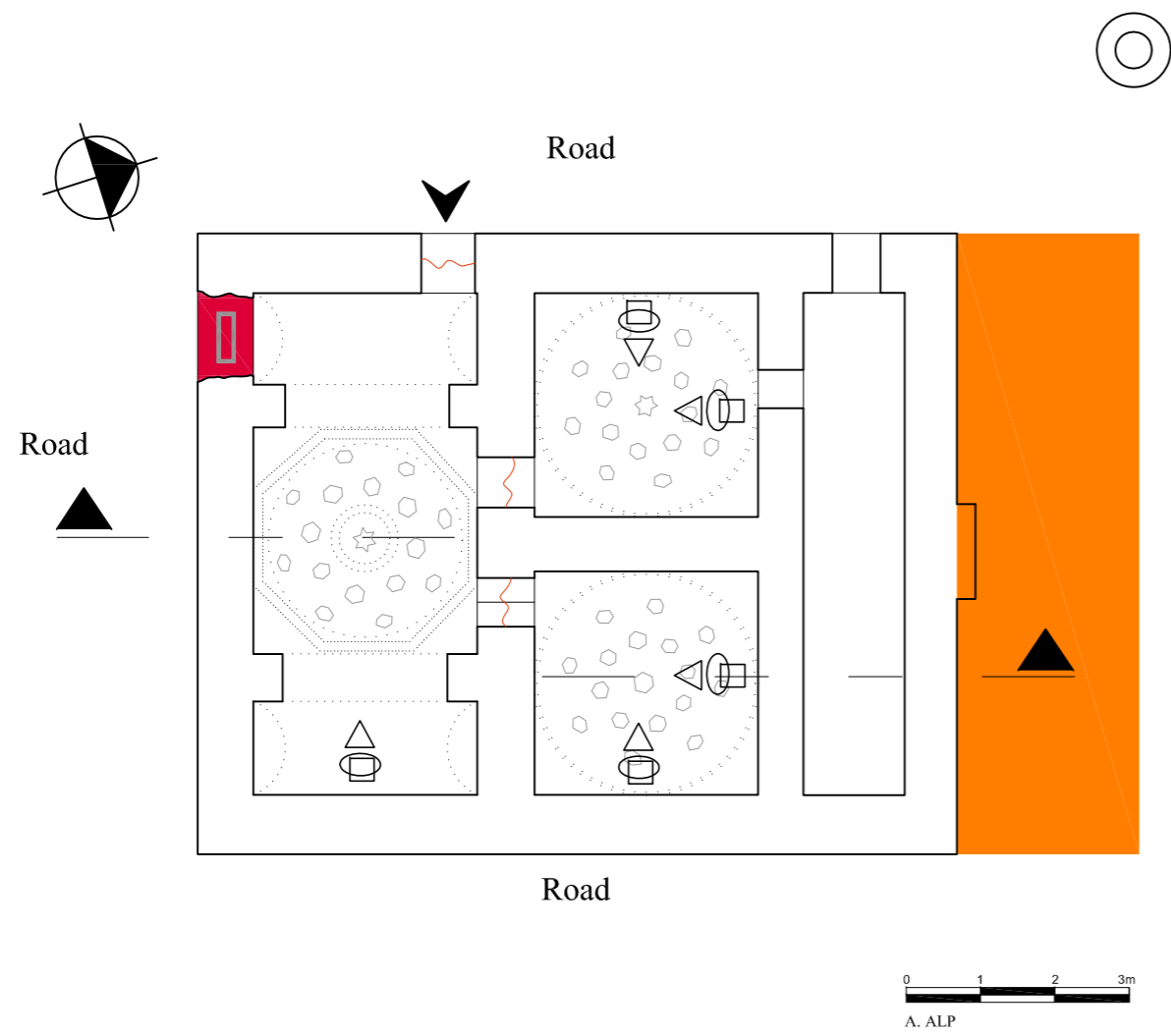


Figure 3.34. Analysis of Alterations at Ulamiş *Hamamı*, Seferihisar



### 3.2.2. Düzce (Hereke) *Hamamı*

The Bath (Table 3.14, Table 3.15) is situated in a village of Seferihisar, which is a sub-province of İzmir. However, Düzce (old Hereke) was a *nahiye* of Çeşme *Kaza*, of Aydın *Sancak* in the 16th century (Kütükoğlu, 2010). The ruins of Kasım Çelebi Mosque and Madrasah are approximately 200 m at its northwest.

The bath is listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 14 and dated 04.03.1988. Then, this decision was re-stated by İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 5738 and dated 07.03.1995. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012).

It is a single bath. Its exterior dimensions are 9.1 x 18.2 m. It has a plain facade composition composed of massive, blind walls without plastering and crowned with dome and vault series. It is composed of one large cubical, one group of small cubicals, one prismatic and one low, small cubical masses. The large cubical mass is the *soyunmalık* space comprehending changing function, the small cubicals are the *sıcaklık* spaces comprehending washing, functions and the prismatic one is a service space comprehending the water storage. All of the masses are added to one another in a linear order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults is created. The prismatic mass of the water reservoir and the cubical woodshed which are service spaces, were recessed in their entrance façade sides. Similarly, the small cubical of the toilet-shaving space, which is another service space, is projected in the rear facade direction. The mass organization with the toilet-shaving space making a projection is uncommon for Urla-Seferihisar examples (2/9). Only in Özbek a similar approach is seen. Although the superstructure of the *soyunmalık* is partially missing and the mass of the woodshed are no more present, the original silhouette can be still comprehended (Figure 3.34).

The bath includes a *soyunmalık*, *sıcaklık* spaces, a projecting toilet-shaving space, a water reservoir and a cistern making a projection at the east. The spaces are added to each other in linear order from north to south. The original circulation within the building was made with a linear path with L formed starting from the entrance at the east of the *soyunmalık* and terminating in the two *halvets* at the south. At present, the *sıcaklık* space is composed of a main space, toilet-shaving space and two *halvets*. The

main *sıcaklık* space is composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its both sides. There are two *halvets*, one of them is at the southwest and the other one is at the southeast. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*.

The square planned and domed *soyunmalık* space (7.8 x 7.8 m) is located at the north. At present, the central part of the dome is collapsed. Lighting is provided through the openings at the dome and on the walls of the *soyunmalık*. The transition to the dome is provided by squinches. In the *soyunmalık* space, the windows are two types. The northern rectangular window (1.10 m in width, 1.90 in height) the depressed pointed arched windows (72 cm. in width) on the springing level of the dome are smaller. The rectangular windows are placed on the east and north walls, while the depressed pointed arched windows were placed on the east and west springing levels of the dome. The original entrance is from the west through a depressed pointed arched opening with a width of 90 cm (Reyhan, 2004). Today, the original entrance is closed (Figure 3.36), and the eastern window is converted into an opening that provides entrance to the *soyunmalık* space (Figure 3.35). The rectangular windows are placed in depressed pointed arched niches (12 cm. in depth). The entrance from the *soyunmalık* to the main *sıcaklık* space is provided from depressed pointed arched door opening (68 cm in width) placed at the south wall. The floor is filled with debris.

The rectangular main space (4 x 6.80 m.) of the *sıcaklık* is placed at the south of the *soyunmalık* space with a square planned, domed central unit and two vaulted iwans on its both sides. Lighting is provided through the oculi on the vaults and domes. On the dome of the main space, hexagonal shaped oculi are present. On the vaults of the western and eastern iwans, there are three hexagonal shaped oculi along the central axis of the vaults. In the main space, transition to the dome is provided with an octagonal cornice and the pendentives. The rectangular planned, barrel vaulted iwans are emphasized by semi-circular arches at the north and south sides of the main space. The floor is filled with debris, but the traces of the platforms are legible at the western iwan. Faucet traces and terracotta water pipe cavities are arranged along the west wall of the western iwan. On the east, there is a domed shaving-toilet space (2.26 x 2.26 m). The superstructure of the space has collapsed. Transition to the dome is provided with pendentives. It is entered from the eastern iwan with a depressed pointed arched opening (Figure 3.37).

On the south of the *sıcaklık*, there are two domed *halvets* (3.00 x 3.00 m). Since northern parts of the walls of the *halvets* have collapsed, entrance openings could not be observed. However, it was recorded that the *halvets* were entered through depressed pointed arched door openings (Reyhan, 2004). The superstructure of the southwest *halvet* has collapsed. Moreover, there are oculi on the dome of the southeast *halvet* in two circular rows and these are circular shaped. In the *halvets*, transition to the dome is provided by pendentives. In the southeast *halvet*, transition to the dome is provided by pendentives. A depressed pointed arched observation window is present on the wall of the southeast *halvet* which is related to the water reservoir. The faucet traces on the south walls of each *halvet* point out the existence of wash basins and platforms on the sides (Figure 3.38).

The rectangular planned barrel vaulted water reservoir (1.35 x 6.7 m) is placed at the south side of the *halvets*.

The cistern (1.35 x 3.25 m.) which is placed on the east side of the bath, on alignment of the water reservoir, is connected with a channel (6 m. in length) to the bath. Today, the superstructure of the cistern has collapsed but there are traces of the barrel vault.

The furnace of the bath still exists at the south today. The furnace and a probable wood shed in relation with it can be traced from the remains of the two walls in north-south direction at the two corners of the water reservoir.

The walls of the bath are out of rubble stone, while the superstructure and transition elements are built with brick (Reyhan, 2004).

There is no inscription panel on the building. The donor of the construction is Kasım Çelebi.

As a result, the major alteration is the loss of some parts of the walls of the *halvets* and the superstructures of the *soyunmalık*, southwest *halvet*, shaving space and the wood shed. Also, the presence of a cistern points out to the experimentation of a developed design scope. At urban scale, the original context has been extensively altered. The present access to the building is to its rear façade. Nevertheless, many of the authentic characteristics have been preserved at building scale.

Table 3.14. Identification table of Düzce (Hereke) *Hamamı*.

<b>Location</b>	Düzce District, Seferihisar/İZMİR
<b>Listing</b>	Listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 14 and dated 04.03.1988. Then, this decision was re-stated by İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 5738 and dated 07.03.1995. Board of Cultural and Natural Assets, decision no: 14, decision date: 04.03.1988
<b>Site Relations</b>	Single building with a cistern on the east of the building
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series
<b>Block / Sheet / Parcel No</b>	- / - / 623
<b>Date of Construction</b>	16 <sup>th</sup> century
<b>Donor</b>	Kasım Çelebi
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	9.25x19.80 m



Figure 3.35. General view of the bath from the east.



Figure 3.36. East wall of *soynmalık* space.



Figure 3.37. West wall of the *soynmalık*.



Figure 3.38. Eastern iwan in the main *sıcaklık*.



Figure 3.39. South wall of the eastern *halvet*.

Table 3.15. Spatial Characteristics of Düzce (Hereke) Hamamı

	Spatial Elements				Staklık				Court-yard	
	Soyunmalık		Itklik		Halvets		Water reservoir	Wood shed		
	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Shaving-toilet space				Northwest
<b>Number of Space</b>	1			1	2	1	1	1	1	
<b>Superstructure</b>	domed (collapsed)				barrel vaulted	domed (collapsed)	domed (collapsed)	barrel vaulted	collapsed	
<b>Transition element</b>	squinches with a plain triangle					pendentive, decorated cornice	pendentive, cornice			
<b>Arch</b>	4 depressed pointed blind arches on the walls				emphasized by a depressed pointed arch					
<b>Wall</b>	rubble stone bond				rubble stone bond			rubble stone bond	rubble stone bond	
<b>Floor</b>	debris (cut stone traces)				debris			debris	earth	
<b>Illumination element</b>	unobserved				hexagonal shaped oculi			missed, unobserved oculi		
<b>Window</b>	2 upper depressed pointed arched openings, 1 bottom rectangular opening							1 observation window		
<b>Door</b>	1 exterior additional opening, 1 exterior closed opening, 1 interior depressed pointed arched				1 depressed pointed arched opening at east iwan			collapsed, unobserved		
<b>Niche</b>	2 observed									
<b>Wash basin (kurna)</b>					traces			traces		
<b>Water pipe (küink)</b>					traces of terracotta pipes					
<b>Platform</b>	traces present				traces					
<b>Surface finishing</b>	plaster trace				plastered			plastered	plastered	exposed without plastering
<b>Fountain</b>										
<b>Furnace</b>										
<b>Channel</b>					unobserved			unobserved		
<b>Cehennemlik</b>					unobserved			unobserved	unobserved	unobserved

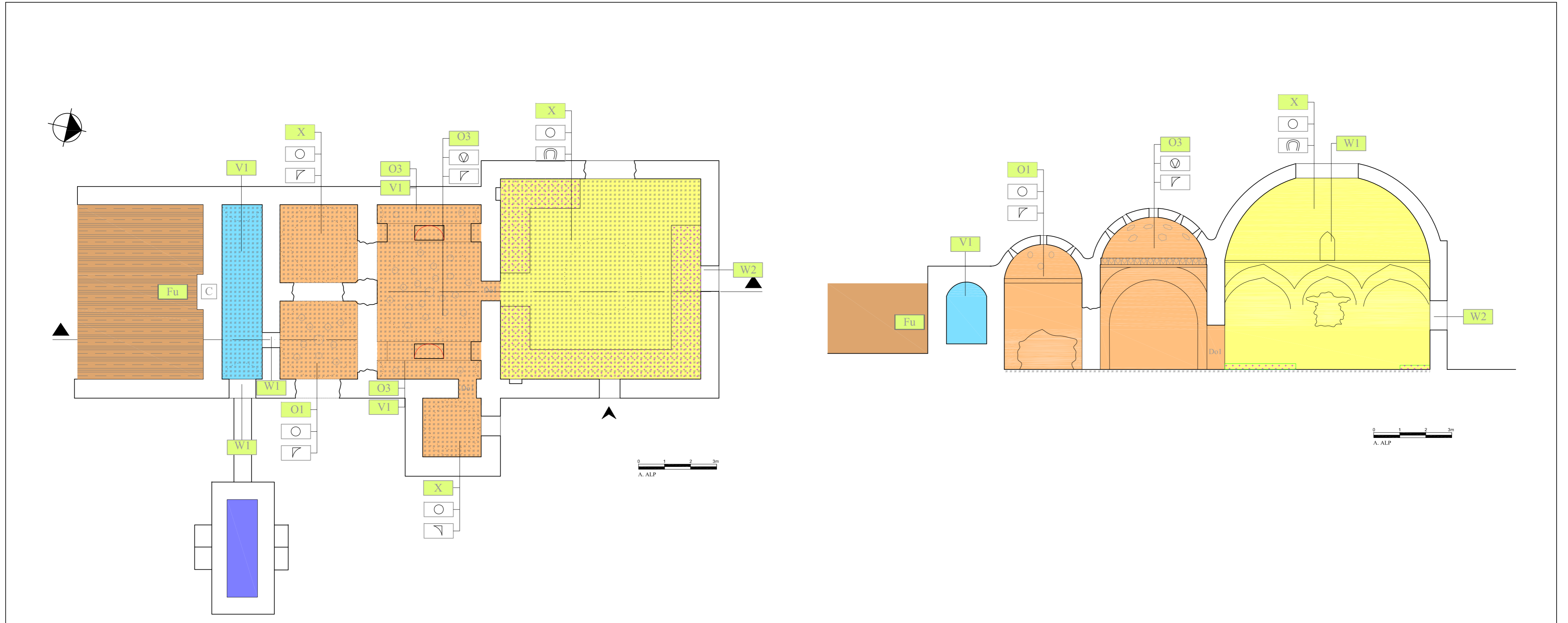


Figure 3.40. Analysis of Spatial Characteristics at Düzce (Hereke) *Hamamı*, Seferihisar



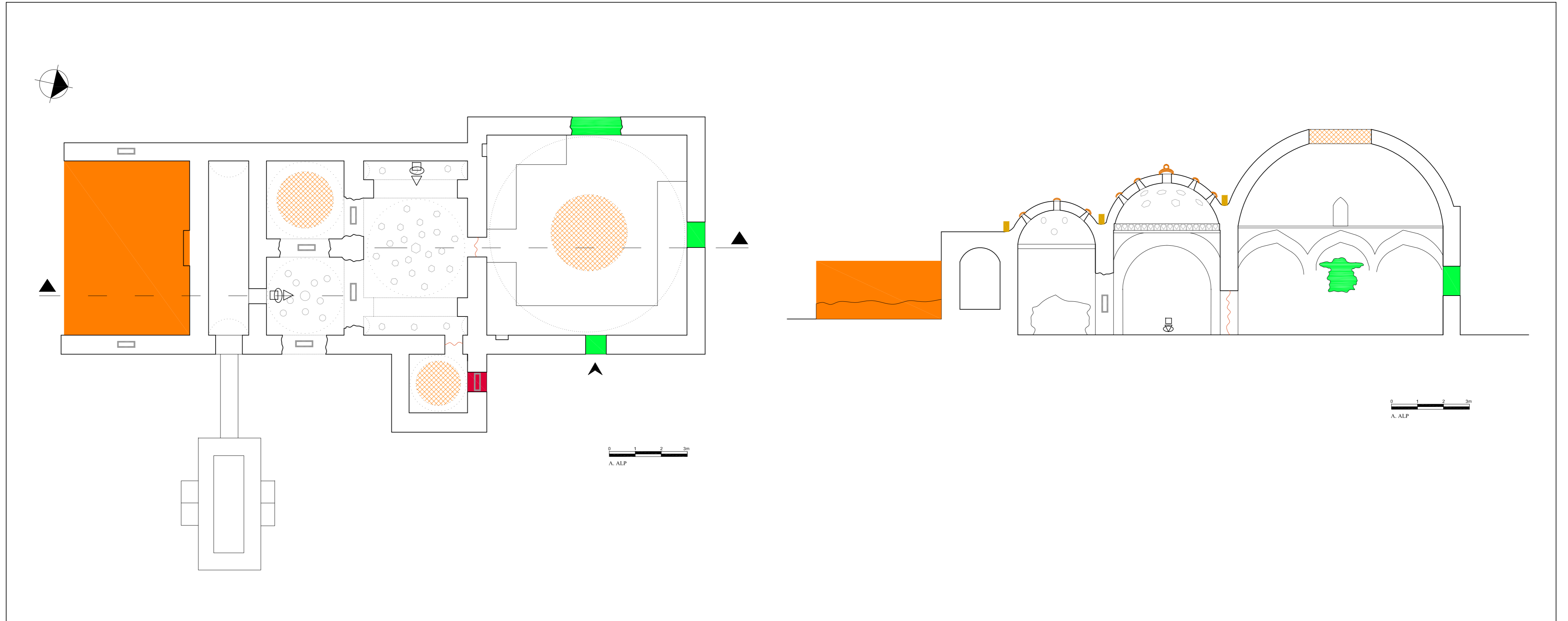


Figure 3.41. Analysis of Alterations at Düzce (Hereke) *Hamamı*, Seferihisar

### 3.2.3. Sığacık Kaleiçi *Hamamı*

The Bath (Table 3.16, Table 3.17) is situated in Sığacık neighborhood of Seferihisar, which is a sub-province of İzmir. The Sığacık Mosque (16<sup>th</sup> c.) is positioned at the northeast of the bath. Today, southeast and southwest of the bath are surrounded with housing units and Street 31 is present at the northwest.

The bath is listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural Assets, numbered 3459 and dated 23.01.1992. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012).

It is a single bath. Its exterior dimensions are 7.60 x 14.50 m. It has a plain facade composition composed of massive, blind walls without plastering and crowned with dome and vault series. It is composed of one large cubical, a group of small cubicals and one prismatic mass. The large cubic mass is the main space comprehending changing function, while the small cubicals are for washing. The prismatic one is a service space comprehending the water storage. All of the masses are added to one another in a linear order, and a silhouette composed of rhythmic articulation of masses is achieved. The original superstructure of the *soyunmalık* and the mass of the woodshed are no more present. The additional timber roof of the *soyunmalık* and the surrounding houses hinder the perception of the original silhouette.

The bath includes a *soyunmalık* and *sıcaklık* spaces and a water reservoir. The spaces are added to each other in linear order from northwest to southeast. The original circulation within the building was made with a linear path starting from the street entrance of the *soyunmalık* space and terminating in the two *halvets* at the southeast.

At present, the *sıcaklık* space is composed of a main space and two *halvets*. The main space is composed of a square planned, domed unit and two rectangular, vaulted iwans placed on its two sides. There are two *halvets*, one of them is at the northeast and the other one is at the southwest (2.65x2.65x3.70 m). In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*. However, the zigzag circulation scheme within the *sıcaklık*, stemming from the presence of a direct access only to one of the *halvets* from the main space differ from the typical plan type with both of the *halvets* entered from the main space. Nevertheless, Eyice (1960) points out the possibility of variation of this plan scheme.

The *soyunmalık* is a space located at the northwest of the building and has a rectangular plan (5.10 x 6.90 m). Today, it is entered to the space from the street at the northwest. In an earlier survey (Hamamcioğlu-Turan and Reyhan 2005), a second entrance (80 cm in width) from the courtyard of the neighboring house at the southwest was recorded. Today, its trace can be seen. The original *soyunmalık* space had collapsed, just low wall traces are observed. The superstructure of the *soyunmalık* has collapsed and there are no traces of the original roof. Since the ground is renewed, the original floor pavement cannot be seen. The entrance from *soyunmalık* space to the *sıcaklık* is provided through a depressed pointed arched opening (60 cm in width) at the northwest (Figure 3.41).

The *sıcaklık* is composed of a main space and two *halvets*. The rectangular planned main space (2.40x6.10 m) consists of a square planned, domed central unit (2.40x2.35x3.90m) and two vaulted iwans (2.40x1.85x2.50m.) on its two sides. The central dome rests on an octagonal cornice, then, on pendentives, and finally on depressed pointed arches. The oculi on the vaults and domes are provided lighting. There are three circular shaped oculi along the central axis of the vault of each iwan and circular shaped oculi in two circular rows on the dome of the main *sıcaklık* space. The iwans are entered through depressed pointed arches at the southwest and northeast sides of the main *sıcaklık* space. The floors are paved with cut stone, but the platforms in the iwans and the channels could not be seen clearly.

The northeastern halvet (2.60x2.70x3.70 m) is entered from a depressed pointed arched door (60 cm in width) on the southeast side of the main *sıcaklık* space. The dome of the space rests on a circular cornice and then on pendentives and depressed pointed blind arches. The circular shaped oculi are arranged in two rows. On the southeast wall of this *halvet*, a depressed pointed niche is present (Figure 3.42). There are two basins in the space on the northeast and southeast wall. However, platforms could not be seen because of the debris. Channel traces are observed sides of the door openings of the *halvets*.

The southeastern halvet (2.65x2.65x3.70 m) is entered from the eastern one from a depressed arched door. The circular shaped oculi are arranged in two rows on dome of the space. The transition to the dome is provided by pendentives and a circular cornice. On the four surfaces of the walls in the *halvets*, there are depressed pointed blind arches as wide as the space. An observation window is present on the southeast wall of the

*halvet* which is related to the water reservoir. A basin is seen under of the window in the space. Platforms could not be seen.

The rectangular planned barrel vaulted water reservoir (1.35 x 5.10 m) is placed at the southeast side of the *halvets*. Since the floor level of the furnace was filled with debris, only the upper part of the furnace niche can be observed. As the furnace at the southeast wall of the water reservoir indicates, there should be also a wood shed space that is adjacent to the water reservoir.

The walls are out of rubble stone, while the superstructure and transition elements are out of brick (Reyhan, 2004).

There is no inscription panel on the building. The donor of the construction is unknown.

As a result, the major alteration is the loss of the third dimension of the *soyunmalık* and the wood shed. Nevertheless, many of the authentic characteristics have been preserved.

Table 3.16. Identification table of Sığacık Kaleiçi *Hamamı*.

<b>Location</b>	Sığacık District, Street 35, No:2, Seferihisar/İZMİR
<b>Listing</b>	Listed with the decision of İzmir Number 1 Regional Conservation Board of Cultural and Natural Assets, decision no: 3459, decision date: 23.01.1992
<b>Site Relations</b>	Element of a building group composed of a mosque and surrounding of houses
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series
<b>Block / Sheet / Parcel No</b>	140 / 112, 108.D.c / 1
<b>Date of Construction</b>	15 <sup>th</sup> century
<b>Donor</b>	Unknown
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	7.80x14.60 m



Figure 3.42. Northwest wall of the *soyunmalik* space.

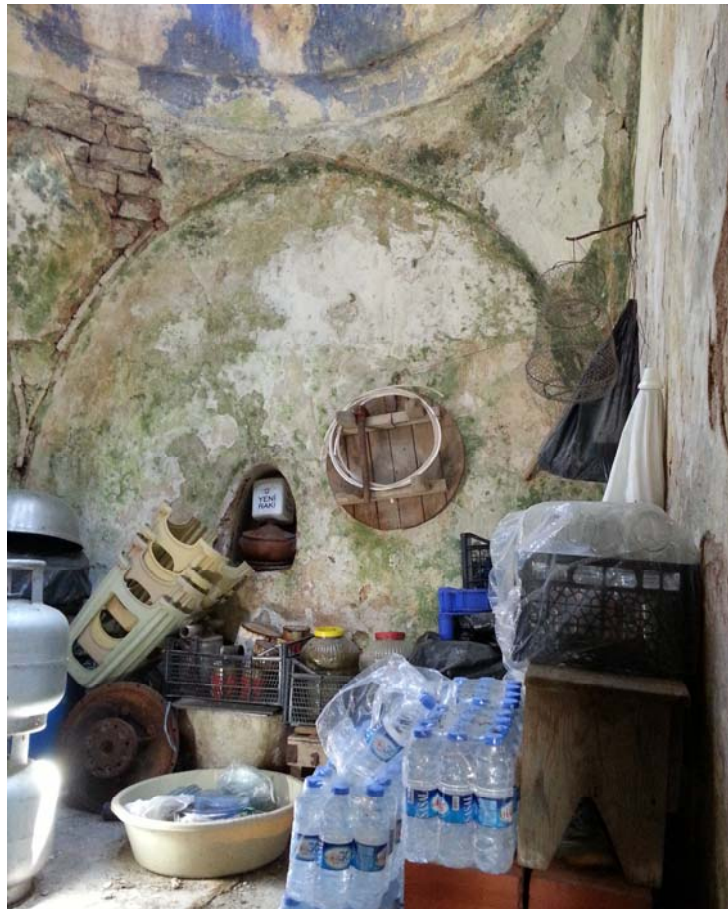


Figure 3.43. Southeast wall of the northeastern *halvet*.

Table 3.17. Spatial Characteristics of Sığacık Kaleiçi Hamamı

	Spatial Elements				İlkklik				Sıcaklık				Water reservoir	Wood shed	Court-yard
	Soyunmatik		Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets		Water reservoir	Wood shed	Court-yard			
	Number of Space	Superstructure						Northeast	Southwest						
Structural Elements	Number of Space	1						1	1	1	1	1			
	Superstructure	collapsed						domed	domed	barrel vaulted	barrel vaulted	collapsed			
	Transition element	-						pendentive, 1 octagonal cornice	pendentive, 1 circular cornice	-	-	-			
	Arch	-						2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch	4 depressed pointed blind arches on the walls	-	-			
	Wall		rubble stone bond					rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond			
	Floor		additional stone covering					cut stone	cut stone	cut stone	cut stone	unobserved	earth		
	Illumination element	-						circular shaped oculi	circular shaped oculi	circular shaped oculi	-	-	-		
	Window	-						-	-	-	1 observation window	1 observation window	-		
	Door	1 exterior, 1 interior						semi-circular arched, 1 exterior, 1 interior	-	1 interior semi-circular arched	1 interior semi-circular arched	-	-		
	Niche	-						-	1 depressed pointed arched	-	-	-	-		
Architectural Elements	Wash basin (kurna)	-						-	unobserved	2 present	1 present	-			
	Water pipe (künk)	-						-	-	unobserved	unobserved	-	-		
	Platform	unobserved						traces	traces	traces	traces	-	-		
	Surface finishing	exposed without plastering						plastered	plastered	plastered	plastered	plastered	exposed without plastering		
	Fountain	-						-	-	-	-	-	-		
	Furnace	-						-	-	-	-	1	1		
	Channel	-						traces	-	traces	traces	-	-		
	Cehennemlik	-						unobserved	unobserved	unobserved	unobserved	unobserved	unobserved	-	

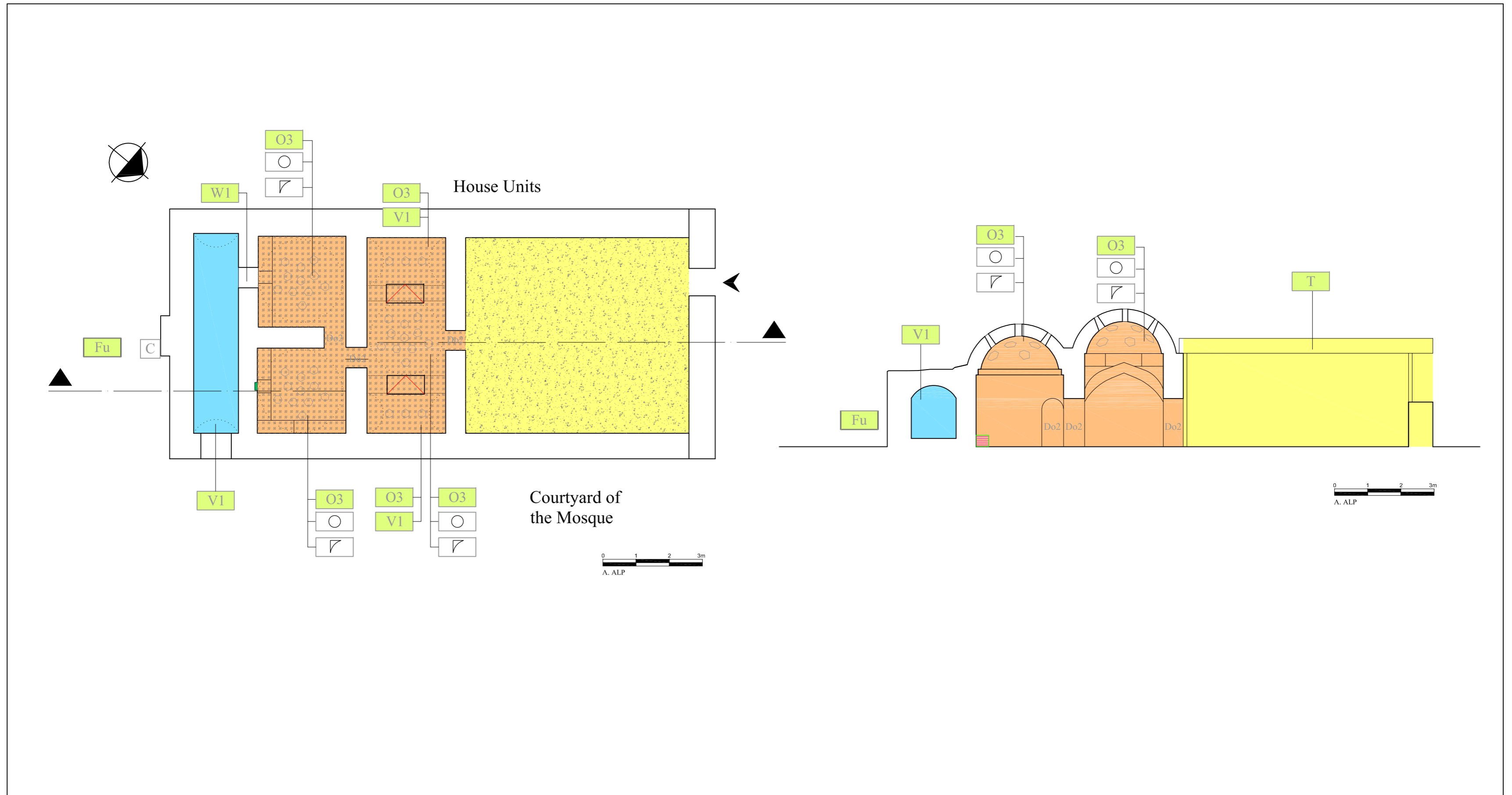


Figure 3.44. Analysis of Spatial Characteristics at Sığacık Kaleiçi *Hamamı*, Seferihisar

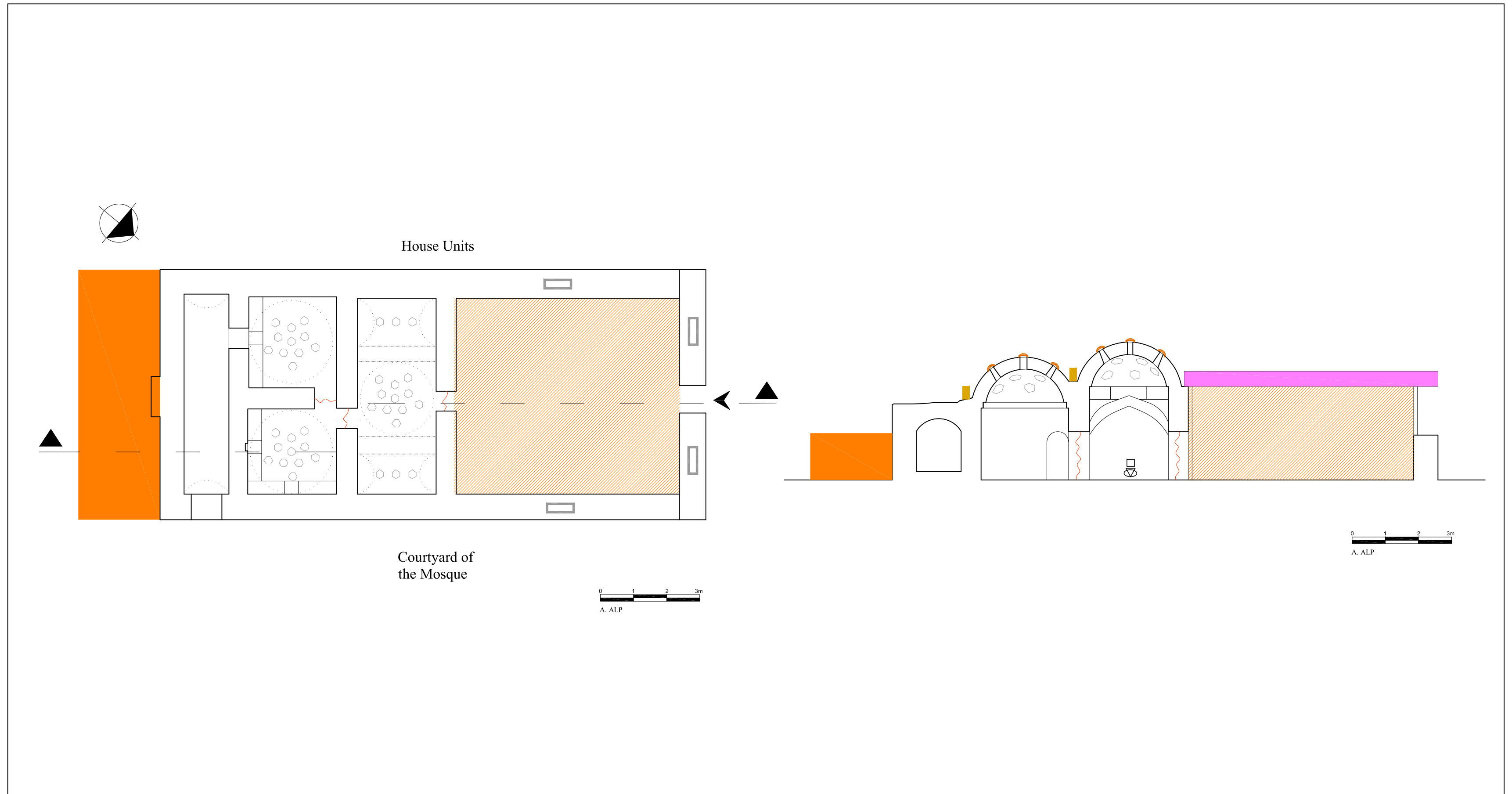


Figure 3.45. Analysis of Alterations at Sığacık Kaleiçi *Hamamı*, Seferihisar



### 3.2.4. Küçük Hamam

The Bath (Table 3.18, Table 3.19) is situated in Seferihisar provincial center. There is the Güdük Minare Mosque positioned at the northwest of the bath. Today, west side of the bath is surrounded with housing units, east side with the courtyard and north side with the road.

The bath is listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986. Then, this decision was re-stated by İzmir Number 1 Regional Conservation Board of Cultural Assets: decision number 3459 and date 23.01.1992. (İzmir Taşınmaz Kültür Varlıkları Envanterleri, 2012).

It is a single bath. Its exterior dimensions are 7.60 x 11.5 m. It has a plain facade composition composed of massive, blind walls exposed without plastering and crowned with dome and vault series. It is composed of a group of cubicals and one prismatic mass. The group of cubicals comprehending washing functions, while the prismatic one is the water storage. The masses are brought together in additive fashion, and a silhouette composed of rhythmic articulation of domed and vaulted masses is created. There is the gable wall at the east, spatial boundary wall at the south and plaster remains providing information about the once existence of a *soyunmalık* (Reyhan, 2004). There is no trace of the woodshed, excluding the furnace (Figure 3.45).

The bath includes a *sıcaklık* space and a water reservoir. The original circulation within the building was made with a linear path starting from the entrance of the main *sıcaklık* space and terminating in the two halvets at the north. At present, the *sıcaklık* space is composed of a main *sıcaklık* space and two *halvets*. The rectangular planned main space (2.85 x 6.30 m) consists of a square planned, domed central unit and two barrel vaulted iwans on its both sides. There are two *halvets*, one of them is at the west and the other one is at the east. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*. However, *halvets* differ from each other in size; 2.20 x 2.20 m. and 3.75 x 3.75 m., respectively. Moreover, the entrance to the main space is from its narrow side.

At the center of the *sıcaklık* main space, lighting is provided through the hexagonal shaped oculi in two rows and a hemispherical cupola with a single oculus on the dome. The transition element to the dome of the main *sıcaklık* space is pendentives

and an octagonal cornice. The iwans are peculiarly surmounted by wide semi-circular arches or short barrel vaults at east-west direction, spanning the long side of the iwan (Figure 3.46). The entrance to the main space is provided through a semi-circular arched opening (65 in width) from the east iwan (Figure 3.47). A trace of a depressed pointed arched opening (60 x 1.58 cm) is present in the middle of the south wall of the main *sıcaklık* space. There are also remains of a belly stone (1.4 x 2.20 cm.) in the main *sıcaklık* space, but it is not at the center and very large in size compared to its space. At the west iwan of the *sıcaklık*, a basin at the north corner and platforms at two different levels (20 cm, 98cm) are observed. Also, a platform (105 cm in height) is observed at the east iwan. At present, there is no level difference between the central space and the iwans, debris is observed. The two square-planned and domed *halvets* are entered from the *sıcaklık* with depressed pointed arched door openings (65 cm in widthx160 cm in height). The domes rest on circular circular cornices, pendentives and then on semi-circular blind arches on the four walls. Lighting on the dome of the west *halvet* (3.85x3.85m) is provided through a hemispherical cupola at the center and the hexagonal shaped oculi in three circular rows. A depressed pointed arched observation window is present on the north wall of the *halvet* (Figure 3.48). Platforms (15 cm in height) are observed along the walls of the space. Also, two wash basin traces on the east and west walls are seen. The eastern *halvet* (1.80x1.80 m) is lighted through a hemispherical cupola at the center and the hexagonal shaped oculi in one row. Platform traces are observed on the floor and there is a wash basin on the northwestern corner of the *halvet*.

Since the floor of the spaces is filled with debris, the original pavement could not be observed. However, in an earlier study (Hamamcıoğlu-Turan and Reyhan, 2005), it is stated that the floors of the *sıcaklık* space were paved with cut stone.

The rectangular planned barrel vaulted water reservoir (1.75 x 4.30 m.) is placed at the north side of the *halvets*. Only the upper part of the furnace niche can be observed from the north façade of the bath, its chimney has partially collapsed. Therefore, there should be a wood shed space that is adjacent to the water reservoir. However, it cannot be seen today. As revealed from the two semi-circular arches at the east façade, there are further spaces for water storage, but these could not be entered. There is a well at the east of the bath.

The walls are out of rubble stone, while the superstructure and transition elements are out of brick (Reyhan, 2004).

There is no inscription panel on the building. Reyhan (2004) has evaluated the bath as a 16th century monument because of the plan scheme of the *sıcaklık* main space, but the preference of wide arches instead of vaults at the iwans may be evaluated as an early design feature as in Bilecik Sultan Orhan Mosque (1331). Seferihisar has been a Turkish town starting with 1320s. So, the earliest possible date for the construction of the bath may be the 14<sup>th</sup> century. The donor of the construction is unknown. Çakmak (2004) interpretes this bath as Mahkeme *Hamamı*, which was mentioned by Evliya Çelebi.

As a result, the bath may be a document of a very early Turkish presence in the region. The wood shed space is missing. The well-bath relation cannot be traced. The original entrance, organization of the *soyunmalık*, shaving and toilet spaces are questionable. Nevertheless, many of the authentic characteristics have been preserved.

Table 3.18. Identification table of Küçük *Hamam*.

<b>Location</b>	Seferihisar/İZMİR
<b>Listing</b>	listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986.
<b>Site Relations</b>	West side of the bath is surrounded with housing units, east side with the courtyard and north side with the road
<b>Type of <i>Sıcaklık</i></b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series
<b>Block / Sheet / Parcel No</b>	- / - / -
<b>Date of Construction</b>	14 <sup>th</sup> -15 <sup>th</sup> century
<b>Donor</b>	Unknowm
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	7.80x8.20 m



Figure 3.46. General view of the bath from the northeast.



Figure 3.47. Western iwan and belly stone in the main *sıcaklık*.



Figure 3.48. Eastern iwan in main *sıcaklık*.



Figure 3.49. Observation window in the western *halvet*.

Table 3.19. Spatial Characteristics of Küçük Hamam

	Spatial Elements		İlkklik			Sıcaklık			Water reservoir	Wood shed	Court-yard
	Soyunmatık		Main space	Shaving-toilet space	Iwan	Halvets					
	Unobserved					Main space	Iwan	West			
<b>Number of Space</b>	Unobserved							1	1	1	1
<b>Superstructure</b>	Unobserved					domed	domed	barrel vaulted	collapsed		
<b>Transition element</b>	Unobserved					pendentive, cornice	pendentive, cornice	-	-		
<b>Arch</b>	Unobserved					2 semi-circular blind arches on the walls	4 semi-circular blind arches on the walls	-	-		
<b>Wall</b>	Unobserved					rubble stone bond	rubble stone bond	rubble stone bond	rubble stone bond		
<b>Floor</b>	Unobserved					cut stone	cut stone	unobserved	earth		
<b>Illumination element</b>	Unobserved					hexagonal shaped oculi, hemispherical cupola	hexagonal shaped oculi	circular shaped oculi	-		
<b>Window</b>	Unobserved					-	1 observation window	-	1 observation window		
<b>Door</b>	Unobserved					2 interior depressed pointed arched openings	1 exterior depressed pointed arched opening	1 interior depressed pointed arched opening	-		
<b>Niche</b>	Unobserved					-	-	-	-		
<b>Wash basin (kurna)</b>	Unobserved					-	1 present	traces and 1 present	-		
<b>Water pipe (künk)</b>	Unobserved					traces	traces of terracotta pipes	traces of terracotta pipes	-		
<b>Platform</b>	Unobserved					-	present	traces observed	-		
<b>Surface finishing</b>	Unobserved					plastered	plastered	plastered	plastered	unobserved	
<b>Fountain</b>	Unobserved					-	-	-	-		
<b>Furnace</b>	Unobserved					-	-	-	1	1	
<b>Channel</b>	Unobserved					unobserved	unobserved	unobserved	-	-	
<b>Cehennemlik</b>	Unobserved					unobserved	unobserved	unobserved	unobserved	-	

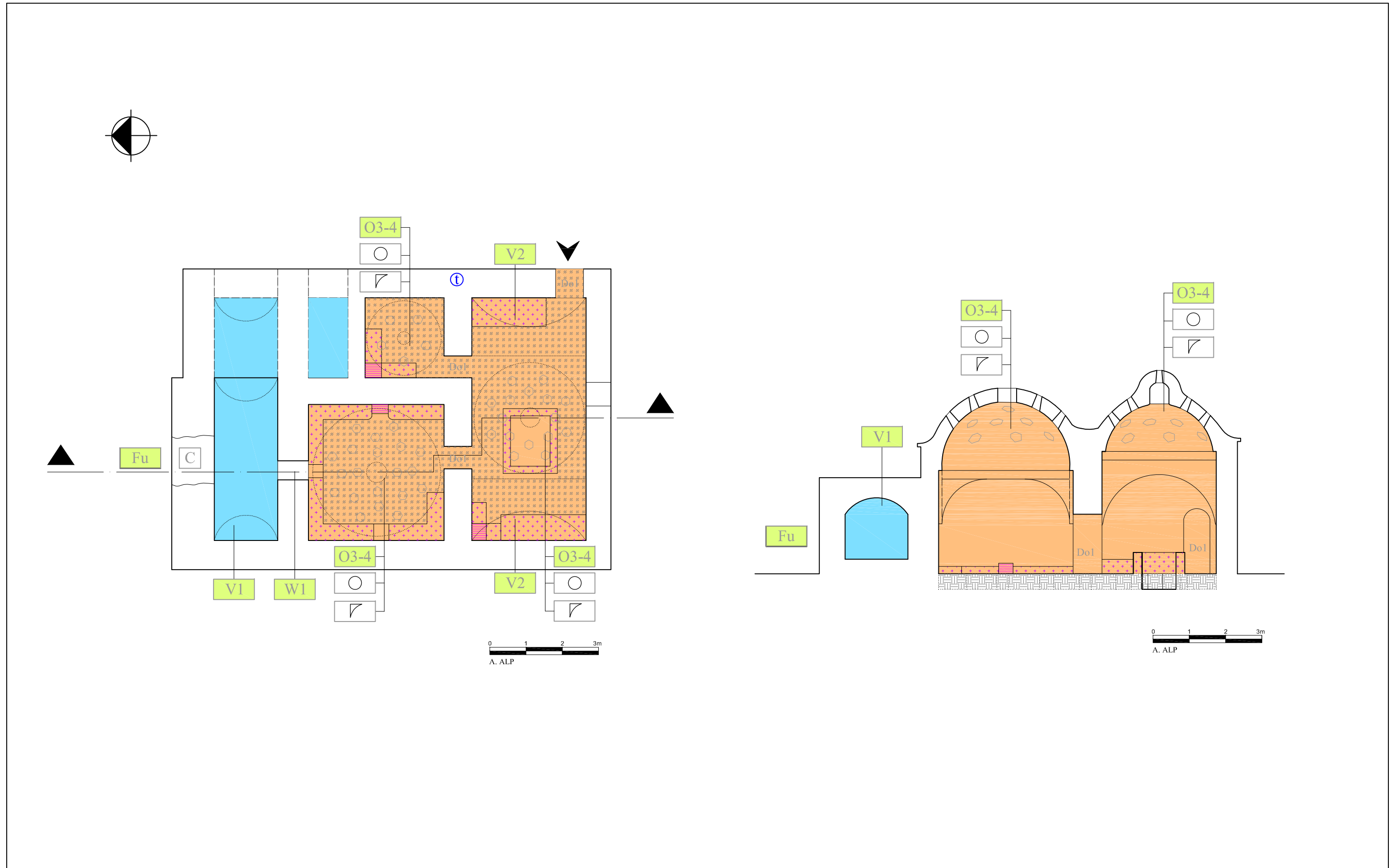


Figure 3.50. Analysis of Spatial Characteristics at Küçük *Hamam*, Seferihisar

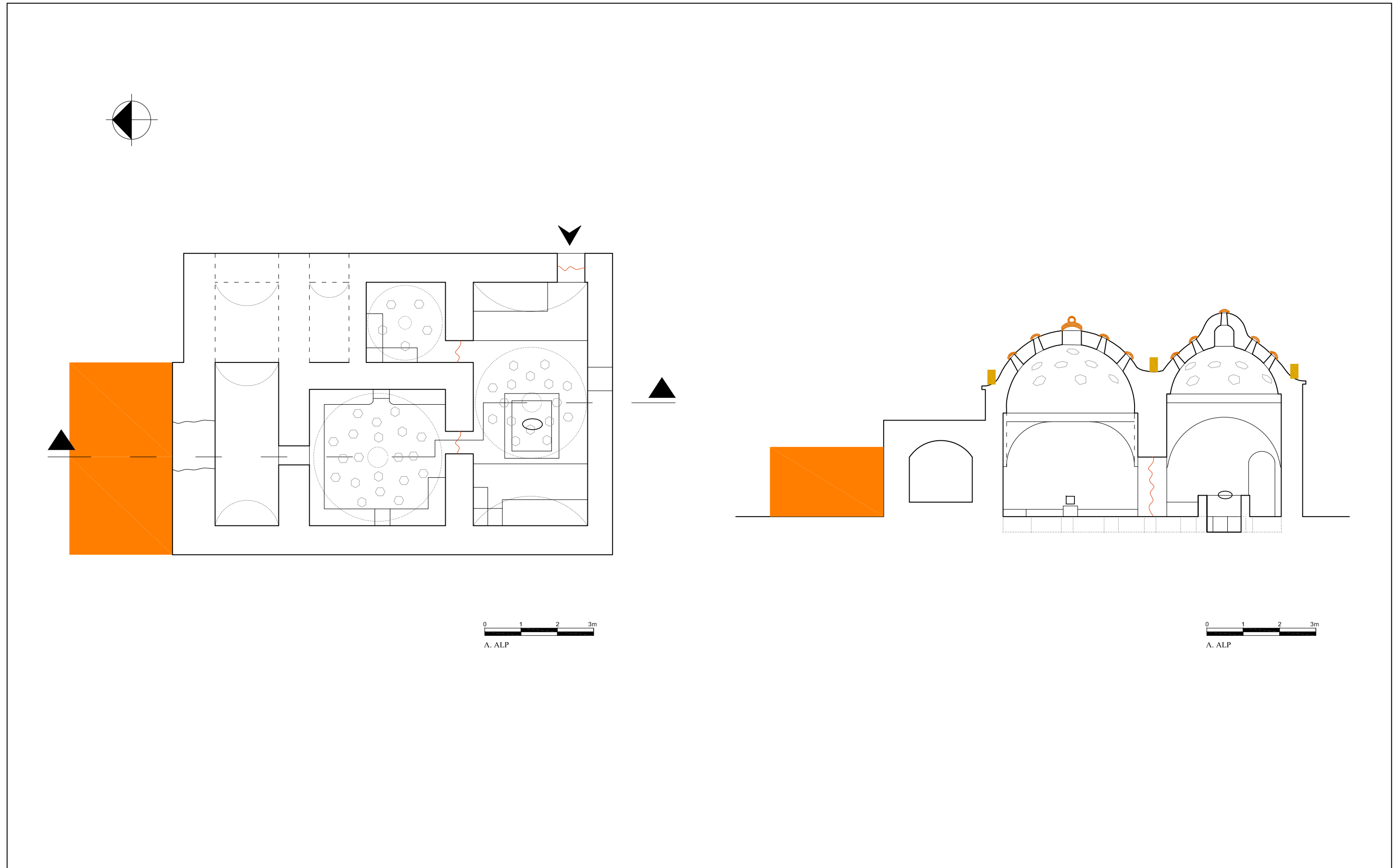


Figure 3.51. Analysis of Alterations at Küçük *Hamam*, Seferihisar



### 3.2.5. Büyük *Hamam*

The Bath (Table 3.20, Table 3.21) is situated in Seferihisar provincial center. Today, three sides of the bath are surrounded by housing units at the north, west and south sides, and recessed from the street 3284 at the east. Therefore, it is not easily perceived with in the housing pattern. It is entered from the street 3284. At the north and east of the bath, there are open spaces (Hamamcıođlu-Turan, 2002; izer and Hamamcıođlu-Turan, 2003a; izer and Hamamcıođlu-Turan, 2003b; Reyhan and Hamamcıođlu-Turan, 2005).

The bath is listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986. (İzmir Taşınmaz Kùltür Varlıkları Envanterleri, 2012). The owner is İsmail ınar, living in the adjacent house at the south.

It is a single bath. Its exterior dimensions are 9.10 x 21.50 m. It has a plain facade composition composed of massive, blind walls with plastering and crowned with dome and vault series. It is composed of one large cubic mass crowned with a dome elevated on an octagonal drum, a group of small cubicals one of which is emphasized with an octagonal drum and one prismatic mass. The large cubic mass is the main space comprehending changing function, while small cubicals are for conditioning of the body and washing. The prismatic one is the water storage. All of the masses are added to one another in a linear order, and a silhouette composed of rhythmic articulation of masses is achieved. Although the house of the owner hinders the perception of the bath at its south, the original silhouette can be still comprehended. A peculiarity of the mass organization is the projection of the *soyunmalık* and *ılıkık* cubicals to the east providing an opportunity for the emphasis of the entrance. This emphasis is further made with the treatment of the related faade with rows of reused cut stones. Each cut stone is framed with two rows of bricks on its all sides (Figure 3.51).

The bath includes *soyunmalık*, *ılıkık* and *sıcaklık* spaces and a water reservoir. The spaces are added to each other in linear order from north to south. The original circulation within the building was made with a linear path with L formed starting from the entrance of the *soyunmalık* space and terminating in the two *halvets*. At present, the *sıcaklık* space is composed of a main *sıcaklık* space and two *halvets*. The main *sıcaklık* space is composed of a square planned, domed unit and two rectangular, vaulted iwans

placed on its both sides. There are two *halvets*, one of them is at the east and the other one is at the west. In Semavi Eyice's (1960) typology, the building can be evaluated within the plan type of elongated rectangular *sıcaklık* with domed central unit and two *halvets*.

The bath is organized in north-south direction. The entrance to the bath and the *soyunmalık* space is provided through a depressed pointed relieving arched opening (2.00 m. in width) at the east. However, the original door wings cannot be observed today. The *soyunmalık* (7.60x7.60x8.4 m.) is a square planned and domed space at the north of the building. It is a monumental space which is dimly lighted through the limited opening at the top of its dome. Here, there is an additional lantern. The transition to the superstructure in the *soyunmalık* space is provided by squinches and cornices. On the east wall of the space, there is a rectangular bottom window (98 cm. in width and 2.4m. in height from the ground level) at the south of the entrance opening. On the north and west walls, there are two depressed pointed arched niches (120x30 cm.) (Figure 3.52). The window opening is located in a depressed pointed arched niche (130x15cm.). In the level of the squinches, on the sides of the square, depressed pointed arched blind niches are arranged. These four niches are articulated to the squinch arches located at the corners. Since the floor is filled with debris, the floor and platforms cannot be observed. There are additional portioning walls at the southeast.

The entrance of *ılıklik* is provided through a depressed pointed arched opening (65 cm. in width) on the south wall of the *soyunmalık*. The rectangular planned *ılıklik* space (1.77 x 7.70 m.) is composed of a square planned, domed main *ılıklik* space, at the west, one square planned, domed iwan, at the east, one rectangular planned, panelled vaulted iwan. The hexagonal shaped oculi in one row and a star shaped oculus at the center of the dome provide lighting to the main *ılıklik* space. Transition to the dome is with pendentives. On the dome of west iwan, lighting is provided by star shaped oculus at the top and hexagonal shaped oculi in one row. Squinches are the transition element of the west iwan. A depressed pointed arched niche, mihrab, (72 cm in width x 1.30 m in height) on the south wall of the west iwan is observed (Figure 3.54). Also, there are blind Bursa arches on the four walls of the west iwan. Both iwans are emphasized with a depressed pointed arch and a platform (20 cm in height) as wide as the western iwan (1.75 m). Two hexagonal shaped oculi on the central axis of the panelled vault and one row of hexagonal shaped oculi on the curved sides provide lighting to the east iwan. At the east, there are partitioning walls that divide the space into sections for service

functions such as shaving area and toilet. The stone of the toilet still exists today. There are channel traces on the floor and they reach the toilet in the *ılıklik* space. The floors of the *ılıklik* spaces are paved with cut stone.

The *sıcaklık* space is located in the south of *ılıklik* and entered from *ılıklik* with a depressed pointed arched door opening (68 cm). This section is composed of the main *sıcaklık* space and two *halvets*. The rectangular planned main *sıcaklık* space consists of a square planned, domed central unit (3.10x3.20x7.15 m) and two rectangular iwans on its both sides with panelled vaults in north-south direction and two domed *halvets* (3.10x3.10x5.20 m). On the dome of the main *sıcaklık* space, lighting is provided by star shaped oculi and a hemispherical cupola. The transition to the superstructure of the main *sıcaklık* space is provided by a cornice over the pendentives. The side iwans are elevated 23 cm from the ground and emphasized with depressed pointed arches (Figure 3.53). Two star shaped oculi on the central axis of the panelled vault and one row of hexagonal shaped oculi on the curved sides provide lighting to the east and west iwans. There is a wash basin in a platform (22 cm in height) in each iwan.

The *halvets* are cubical spaces dimly lighted through the oculi in their domes. They are entered through depressed pointed arched openings from the main *sıcaklık* space. Lighting is provided by two circular rows star shaped oculi and a hemispherical cupola on the dome of the east *halvet* and two circular rows hexagonal shaped oculi and a star shaped oculus at the center on the dome of the west *halvet*. The transition element of the *halvets* is pendentive. On the north walls, there is a platform lying along the wall and a depressed pointed arched niche (53 cm.). A depressed pointed arched observation window (57 cm.) is placed on the south wall of the east *halvet* which is related to the water reservoir. There are basins with platforms on their both sides at the south side of each *halvet*.

The rectangular planned and barrel vaulted water reservoir (1.35 x 7.00 m.) has been divided into two parts with a wall in the north – south direction today. The well on the southwest of the bath is the source of usage water. Since a new building was built at the south of the bath, the furnace could not be observed.

The building is constructed with rubble stone, reused cut stone, brick, and timber in the masonry system. (Reyhan, 2004)

There is no inscription panel on the buildings. The donor of the construction is unknown.

As a result, many of the authentic characteristics have been preserved.

Table 3.20. Identification table of Büyük *Hamam*.

<b>Location</b>	Seferihisar/İZMİR
<b>Listing</b>	Listed with the decision of Supreme Board of Conservation of Cultural Assets, numbered 2136 and dated 14.03.1986.
<b>Site Relations</b>	Three sides of the bath are surrounded by housing units at the north, west and south sides, and recessed from the street 3284 at the east.
<b>Type of Sıcaklık</b>	Elongated rectangular <i>sıcaklık</i> with domed central unit and two <i>halvets</i> (Eyice 1960)
<b>Façade Characteristics</b>	Plain facade composition composed of massive walls exposed without plastering and crowned with dome and vault series.
<b>Block / Sheet / Parcel No</b>	275 / - / 9
<b>Date of Construction</b>	16 <sup>th</sup> century
<b>Donor</b>	Unknown
<b>Conservation State</b>	Moderate, abandoned
<b>Double or Single</b>	Single
<b>Plan Size</b>	21.60x9.10 m



Figure 3.52. General view of the bath from the northeast.



Figure 3.53. West wall of the *soyunmalik* space.



Figure 3.54. Western iwan in the main *sıcaklık*.



Figure 3.55. Mihrab niche in the west iwan of *ilklık*.

Table 3.2.1. Spatial Characteristics of Büyük Hamam

	Spatial Elements			İhtiklik				Sıcaklık				Water reservoir	Wood shed	Court-yard	
	Soyunmatik	Main space	Shaving-toilet space	Iwan	Main space	Iwan	Halvets		Iwan	Water reservoir	Wood shed				Court-yard
							West	East							
<b>Number of Space</b>	1	1	1	1	1	1	2	1	1	1	1	1			
<b>Superstructure</b>	domed	domed	pannelled vaulted	domed	domed	pannelled vaulted		domed	domed	barrel vaulted	collapsed				
<b>Transition element</b>	lobed squinches and cornice	pendentive	-	squinches	pendentive, 1 circular cornice	-	-	pendentive	pendentive	-	-	-			
<b>Arch</b>	4 depressed pointed blind arches on the walls	2 blind depressed pointed arches on the walls	emphasized by a depressed pointed arch	emphasized by a depressed pointed arch, 4 blind Bursa arches	2 depressed pointed blind arches on the walls	emphasized by a depressed pointed arch		4 depressed pointed blind arches on the walls							
<b>Wall</b>	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	reused cut stone and rubble stone bond	unobserved				
<b>Floor</b>	stone covering	stone covering	stone covering	stone covering	stone covering	stone covering	stone covering	stone covering	stone covering	stone covering	unobserved				
<b>Illumination element</b>	an additional lantern	1 star shaped oculi, hexagonal shaped oculi	hexagonal shaped oculi	1 star shaped oculi, hexagonal shaped oculi	star shaped oculi, hemispherical cupola	star and hexagonal shaped oculi	star oculi, star shaped oculi, hexagonal hemispherical cupola	star oculi, star shaped oculi, hexagonal hemispherical cupola	star oculi, star shaped oculi, hexagonal hemispherical cupola	star oculi, star shaped oculi, hexagonal hemispherical cupola	unobserved				
<b>Window</b>	1 rectangular opening	-	-	-	-	-	-	-	-	1 observation window	-		Unobserved		
<b>Door</b>	1 exterior, additional door opening 1 interior, depressed pointed arch	2 interior depressed pointed arch door openings	-	-	3 interior depressed pointed arch door openings	-	-	1 interior depressed pointed arch	1 interior depressed pointed arch	-	-				
<b>Niche</b>	4 depressed pointed arched niches	-	-	mihrab niche	-	-	-	1 depressed pointed	1 depressed pointed	-	-				
<b>Wash basin (kurna)</b>	-	-	-	-	-	1 present	2 present	2 present	2 present	-	-				
<b>Water pipe (künk)</b>	-	-	-	-	-	unobserved	unobserved	unobserved	unobserved	-	-				
<b>Platform</b>	unobserved	-	-	present	-	present	present	present	present	-	-				
<b>Surface finishing</b>	plastered	plastered	plastered	plastered	plastered	plastered	plastered	plastered	plastered	unobserved	unobserved				
<b>Fountain</b>	-	-	-	-	-	-	-	-	-	-	-				
<b>Furnace</b>	-	-	-	-	-	-	-	-	-	1	1				
<b>Channel</b>	-	-	traces	-	unobserved	unobserved	unobserved	unobserved	unobserved	-	-				
<b>Cehennemlik</b>	-	-	-	-	unobserved	unobserved	unobserved	unobserved	unobserved	unobserved	unobserved				

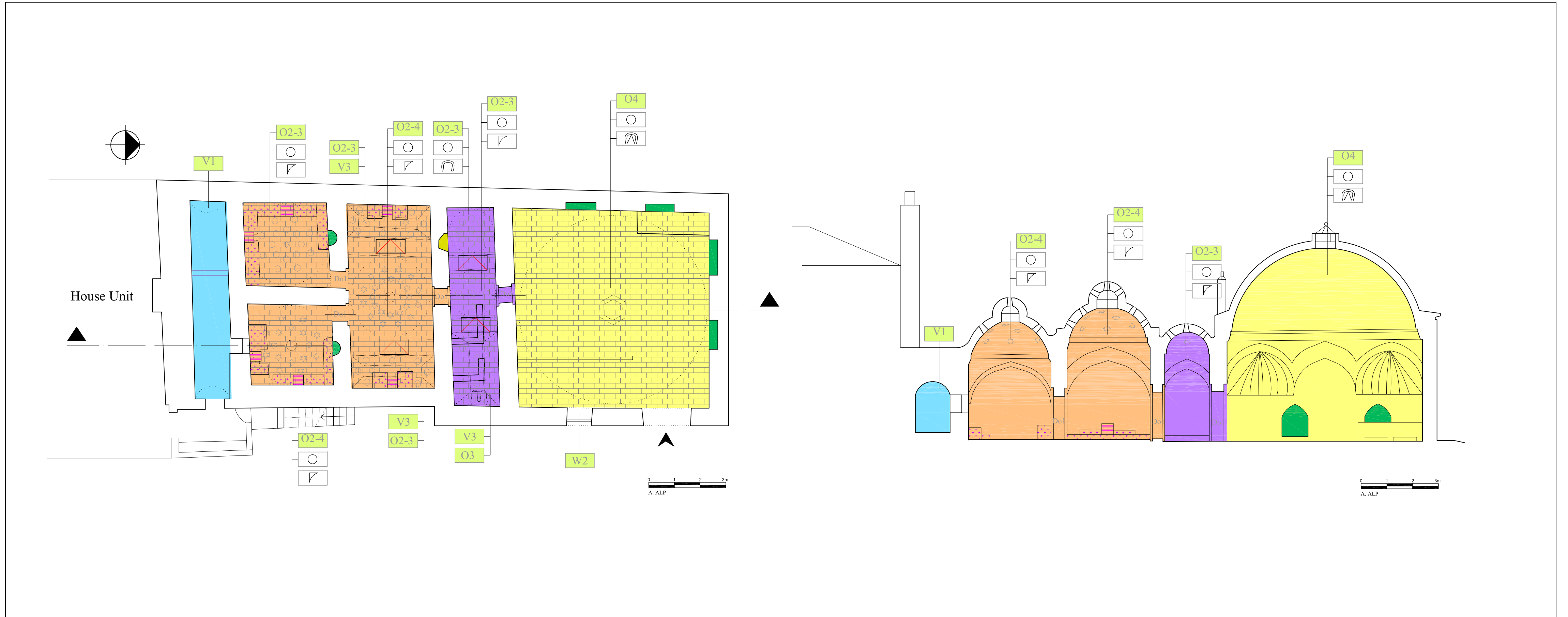


Figure 3.56. Analysis of Spatial Characteristics at Büyük Hamam, Seferihisar



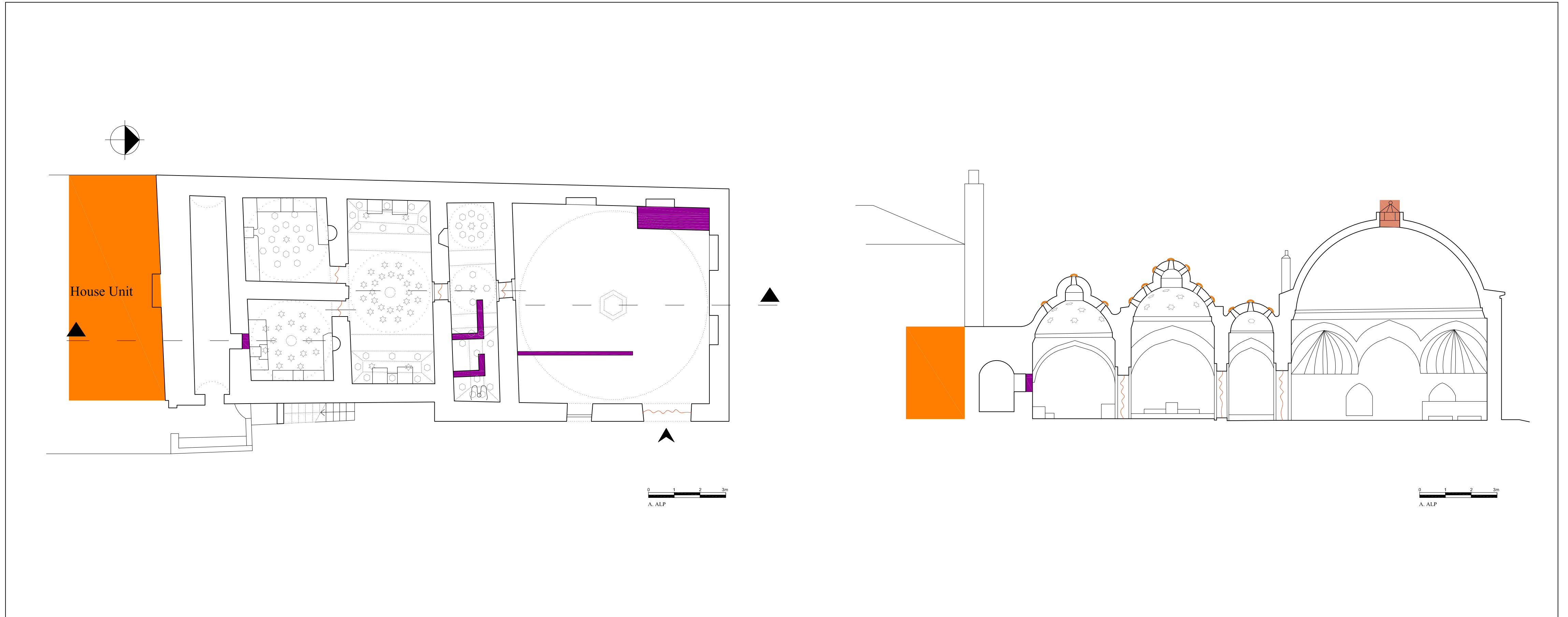


Figure 3.57. Analysis of Alterations at Büyük *Hamam*, Seferihisar

## CHAPTER 4

### EVALUATION

The spatial characteristics of the studied baths are first evaluated in terms of their preservation state. Eight of the ten baths have preserved their authentic spatial composition at a great amount, but two of them have lost their spatial integrity. These are Rüstem Paşa and Yeni Baths. So, they are not evaluated for determining the bath typology of the region. The baths that have preserved their spatial integrity at a great amount (Kamanlı *Hamamı*, Hersekzade Ahmet Paşa *Hamamı* women's section and men's section, Özbek *Hamamı*, Büyük *Hamam*, Küçük *Hamam*, Düzce *Hamamı*, Ulaşmış *Hamamı* and Sığacık Kaleiçi *Hamamı*) are evaluated in the below.

The baths are classified according to their sizes, the mass composition and the presence of *soyunmalık*, the presence of *ılıklik*, the plan organization of *sıcaklık*, overall circulation pattern, and the order of articulation of spaces to each other (Table 5.1).

#### 4.1. Size

Five of the nine baths are large scaled baths (over 200 m<sup>2</sup>), four of the nine baths are small scaled baths (between 100 and 150 m<sup>2</sup>). The large scaled ones are Hersekzade Ahmet Paşa *Hamamı* women's section and men's section, Kamanlı *Hamamı*, Düzce *Hamamı* and Büyük *Hamam*. The small scaled ones are Sığacık Kaleiçi *Hamamı* and Özbek *Hamamı*, Küçük *Hamam* and Ulaşmış *Hamamı*.

#### 4.2. The Presence of *Soyunmalık* and its Characteristics

In the studied baths over 200 m<sup>2</sup>, *soyunmalık* is present, but in the baths with sizes between 100 and 150 m<sup>2</sup>, *soyunmalık* space could not be found (Ulaşmış *Hamamı* and Küçük *Hamam*). It may be evaluated that small scaled baths do not have *soyunmalık* in their original designs. Seven of nine baths have *soyunmalık* in their original designs (Kamanlı *Hamamı*, Hersekzade Ahmet Paşa *Hamamı* women's section and men's

section, *Özbek Hamamı*, *Büyük Hamam*, *Düzce Hamamı* and *Sığacık Kaleiçi Hamamı*). The *soyunmalık* spaces of Kamanlı, *Özbek*, *Sığacık* and *Hersekzade Ahmet Paşa* baths are rectangular planned. The *soyunmalık* spaces are rarely square planned and covered with a dome (2/7: *Düzce* and *Büyük Baths*). As understood from the gable wall, *Özbek* and *Sığacık* baths have timber roofs. All of the *soyunmalık* spaces are the largest spaces of their buildings (7/7: *Hersekzade Ahmet Paşa* women's section and men's section, Kamanlı, *Özbek*, *Düzce (Hereke)*, *Sığacık Kaleiçi* and *Büyük Baths*). Lighting is provided in *soyunmalık* spaces by a hemispherical cupola in squared plans and windows. Windows in *soyunmalık* spaces are seen in *Büyük*, *Düzce (Hereke)* and *Özbek Baths*.

### 4.3. The Presence of *ılıklik* and its Characteristics

Similarly, the largest three baths (*Hersekzade Ahmet Paşa Hamamı* women's section and men's section, *Kamanlı Hamamı* and *Büyük Hamam*) have *ılıklik*, while the rest do not have *ılıklik* in their original designs. *ılıklik* spaces are generally organized as rectangular *ılıklik* main spaces with a central space flanked by a vaulted iwan and a domed toilet-shaving space (*Kamanlı Hamamı*, *Büyük Hamam* and *Hersekzade Ahmet Paşa Hamamı* women's section). Only in *Hersekzade Ahmet Paşa Hamamı* men's section, a toilet- shaving space is not present. Only one of these *ılıkliks* (*Büyük Hamam*) has a *mihrab* niche at its iwan.

So, small scaled baths lack *ılıklik* in their original design.

### 4.4. The *Sıcaklık* Plan Scheme and Overall Spatial Organization

The *sıcaklık* space is arranged in the same manner in most of the studied baths. They have a similar plan scheme that is one rectangular main *sıcaklık* space composed of a central unit (~ 3.5x3.5 m) and side iwans (~ 150x65 cm) and two square *halvets* in equal size (~ 3x3 m). Only in *Hersekzade Ahmet Paşa Hamamı* men's section, there is a third *halvet*. Another peculiarity is in *Küçük Hamam*, *Seferihisar*; the sizes of the *halvets* are so that one is very small (2.20x2.20 m), whereas the other is even larger than the central main space (3.75x3.75 m). A third difference is seen in *Düzce Hamamı*. The toilet-shaving space is reached from one of the iwans in the *sıcaklık*.

The superstructures of the *sıcaklık* spaces are mostly composed of a dome over the central space and vaults at the side iwans running parallel to the long side of the iwan, and single domes in the *halvets*. However, in Küçük *Hamam* and in Hersekzade Ahmet Paşa *Hamamı* women's section, the vaults of the iwans span the long side of the iwan, creating the effect of a wide arch. Another peculiarity in the design of the superstructure is in Ulamış *Hamamı*. The central main space dome rests on an octagonal drum (height: 42 cm), providing a verticality to the interior space, whereas in others only a cornice is provided instead of a drum (height: between ~ 15 - 36 cm). The central main dome is often enriched with a cupola (6/9: Kamanlı *Hamamı*, Hersekzade Ahmet Paşa *Hamamı* both sections, Ulamış *Hamamı*, Küçük *Hamam* and Büyük *Hamam*). As a peculiarity, a cupola is seen in one of the *halvets* of Seferihisar Büyük *Hamam* and two *halvets* of Seferihisar Küçük *Hamam*. Moreover, it is observed in square planned *soyunmalık* spaces of Düzce and Büyük Baths. The hemispherical cupola is rarely observed (11/52). These both increase light amount and effect of verticality. Juxtaposed spaces in different sizes, in linear order all lighted from different shaped oculi is a common feature of the bath spaces (36/52).

Blind arches on the walls which are vertical limits of the spaces are common in the studied baths (5/52). Creating sub spaces which are called iwans in the main *sıcaklık* spaces is a typical example of the baths. In this case, the vertical limit of the space is determined by arch and platform.

Most of the *sıcaklık* spaces have central entrances to their central domed spaces, creating the effect of a symmetric spatial organization (7/9). However, in Ulamış and in Seferihisar Küçük *Hamam* examples, the entrances are from the side iwans, from their corners. Almost all of the *halvets* are entered from the central domed main space (7/9), but in Özbek and Sığacık, one of their *halvets* is entered from the other *halvet* opening the central main space.

In terms of their architectural elements, all of the *sıcaklık* spaces of the baths have traces or remains of platforms and wash basins. Thirty-one washbasins are observed in the studied baths. Seven of these in the *sıcaklık*, and twenty-four ones are in the *halvets*. Only in Kamanlı *Hamamı*, the central main space has a fountain niche. Similarly, the only *yaşmak* is seen in the entrance door of the *sıcaklık* of Ulamış *Hamamı*.

Windows are less common on the walls of the spaces in the baths (14/52). On the other hand, niches are sometimes seen (15/52). Thirty-six spaces with platform is

determined. Four of these are in the *soyunmalık*, four of these are in the *ılıklik*, nine of these are in the *sıcaklık* and nineteen ones are in the *halvets*.

Furnace which is related with water reservoir is present in all of the studied baths. In the walls of the *sıcaklık* spaces, water pipes (*künk*) are sometimes observed in a horizontal direction, and vertical terracotta flues (*tüteklik*) are clearly seen in Büyük *Hamam*, locally in Küçük *Hamam*, Kamanlı *Hamamı*, Hersekzade Ahmet Paşa *Hamamı* both sections, Özbek *Hamamı*, Ulamış *Hamamı*, Düzce *Hamamı* and Sığacık Kaleiçi *Hamamı*.

The original floor coverings of the spaces are often lost. However, in 28/52 spaces cut stone is observed. Marble traces on the floor of the *soyunmalık* spaces are only observed in Hersekzade Ahmet Paşa *Hamamı* both sections. Channels and their traces are observed in all of the spaces that have washing function.

#### 4.5. The Circulation Pattern

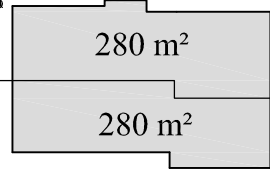
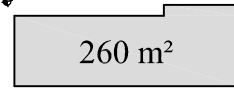
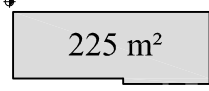
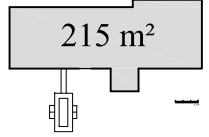
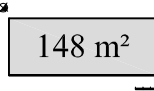
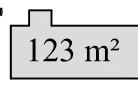
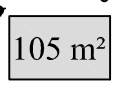
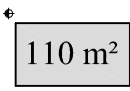
The circulation pattern in six of the baths (Hersekzade Ahmet Paşa *Hamamı*, Kamanlı *Hamamı*, Ulamış *Hamamı*, Düzce *Hamamı*, Büyük *Hamam* and Küçük *Hamam*), is L formed and terminates in alternate directions. This means that the view of the spectator from the main entrance is limited by the L formed path, giving way to an increase in privacy. The bather is to make a choice at the entrances of the *halvets*. In two of the baths (Sığacık Kaleiçi *Hamamı* and Özbek *Hamamı*), there is a linear path terminating in a zigzag manner. This means that the bather takes the shortest way possible through out the bath, but there is a hierarchy among the two *halvets*; one is the entrance of the other. So, the latest is the most private and hottest. The baths are mostly entered from the street entrance of the *soyunmalık* spaces. In the baths with *soyunmalık*, *sıcaklık* is entered from the center. Thus, L shaped path is drawn while *sıcaklık* space is entered from *soyunmalık*. On the other hand, L is formed in the *sıcaklık* of Ulamış and Küçük Baths which have no *soyunmalık*. In these baths, entrance to *sıcaklık* is on the short side of the space, at the corner of the iwan.

## 4.6. The Mass Composition

All of the baths are organized in additive design fashion: *soyunmalık*, *ılıkık*, *sıcaklık*, water reservoir and wood shed juxtapose each other in linear order. Düzce (Hereke) and Özbek are the examples in which the shaving-toilet space makes a projection and does not follow the linear order. The cistern at a lower level from Düzce (Hereke) *Hamamı* is disconnected from the whole mass. In all of these linearly organized baths, there is a rhythmic articulation of masses: a high and large *soyunmalık* cubical (7/9) is neighboured by a lower, smaller group of cubicals (*ılıkık* and *sıcaklık* spaces) lined perpendicular to the main axis of the bath. The axis is continued with a low and narrow prismatic space (water reservoir), and finished with a lower and wider one (wood shed). The large cubical mass is used for changing function. It is generally crowned with a dome and sometimes with a timber roof (2/9: Özbek and Sığacık Kaleiçi Baths). The small cubicals are thermal conditioning, washing, shaving and toilet units each crowned with a single dome or sometimes vault. The prismatic one is the service space comprehending water storage. It is always covered with barrel vault. The other prismatic mass is the service space including furnace, comprehending wood storage and start a fire in furnace.

The chimneys and *tüteklik* pieces are rhythmic vertical elements enriching the silhouettes. Chimneys are only observed in a few examples (4/9: Özbek, Ulaş, Küçük and Büyük Baths). *Tüteklik* pieces are seen in 2/9: Kamanlı *Hamamı* and Büyük *Hamamı*. All of the spaces are added to one another to determine a compact building order, and a silhouette composed of rhythmic articulation of masses crowned with domes and vaults at different heights is created in all baths. In all of the studied baths, the mass units are crowned generally with domes (38/52), sometimes with vaults (10/52), and rarely with timber roof (5/52).

Table 4.1. Typology of Baths in Urla-Seferihisar

	Over 200 m <sup>2</sup>				Between 100 and 150 m <sup>2</sup>			
Size (m <sup>2</sup> )	 280 m <sup>2</sup> Herskzade Ahmet Paşa Hamamı	 260 m <sup>2</sup> Kamanlı Hamamı	 225 m <sup>2</sup> Büyük Hamam	 215 m <sup>2</sup> Düzce (Hereke) Hamamı	 148 m <sup>2</sup> Sığacık Kalesi Hamamı	 123 m <sup>2</sup> Özbek Hamamı	 105 m <sup>2</sup> Ulaş Hamamı	 110 m <sup>2</sup> Küçük Hamam
Presence of Soyunmalık	<b>with Soyunmalık</b>				<b>without Soyunmalık</b>			
Presence of Ilıklık	<b>with Ilıklık</b>			<b>without Ilıklık</b>				
Sıcaklık Plan Scheme	<b>Rectangular Sıcaklık with two halvets</b>							<b>Rectangular Sıcaklık with three halvets</b>
Circulation Pattern	<b>L fromed path terminating in alternate directions</b>						<b>Path terminating in zigzag manner</b>	
Mass Composition	<b>1 cubical, 1 group of cubicals and 2 prismatic masses</b>				<b>1 cubical, 1 group of cubicals, 2 prismatic masses and 1 cubical projection</b>		<b>1 group of cubicals and 2 prismatic masses</b>	

## CHAPTER 5

### CONCLUSION

The studied baths are representatives of Turkish way of life which started in the 14<sup>th</sup> century in the region and developed extensively in the 15<sup>th</sup> and 16<sup>th</sup> centuries. They fulfilled bathing necessity of Turkish society in the newly established neighborhoods.

Most of the baths have preserved many of their authentic characteristics (9/11). All of the baths are organized in additive design fashion: *soyunmalık*, *ılıklik*, *sıcaklık*, water reservoir and wood shed juxtapose each other in linear order. In all of these linearly organized baths, there is a rhythmic articulation of masses: a high and large domed space is neighbored by a low and small series of domed and vaulted spaces lined perpendicular to the main axis of the bath.

Preference of plain grounds and close to brooks are common site characteristics of the baths. Utilisation of local rubble stone, brick and mortar in the constructions; exposition of the exterior facades without plaster; and illumination through oculi in the superstructural zone are other common features of the baths.

In the study, third dimension knowledge presented with longitudinal sections has been considered typologic classifications. In turn, the typology of the baths have been evaluated considering the building whole, not just plan of the *sıcaklık*.

The size of the bath is related with the size of the settlement in which it is located. For example, the large scaled baths (*Büyük Hamam*, *Hersekzade Ahmet Paşa Hamamı*, *Düzce Hamamı* and *Kamanlı Hamamı*) are in provincial centers such as *Seferihisar*, *Urla* and *Düzce* (Hereke).

Large scaled baths that range between 200 and 300 m<sup>2</sup> are enriched with a *soyunmalık* and *ılıklik*, and sometimes with a mihrab nich or a fountain. In smaller examples, *ılıklik* and/or *soyunmalık* are unpresent as a design preference. So, the basic unit of the typology is characterized by a central, domed *sıcaklık* space with side, vaulted iwans interpenetrating into it two *halvets* the water reservoir, the wood shed and the courtyard juxtaposing it. In turn, the developed types may have an extra *halvet*, a projecting shaving / toilet space, *ılıklik* and *soyunmalık*.



Future work in this region should include archeological excavations; further historical and architectural studies at single building scale. In regions presenting ethnic variation, ethnicity should be taken as a criterion in the typology.

## REFERENCES

- Acar, T. (2012). Urla Hersekzade Ahmet Paşa Hamamı'nın Araştırma Kazısı Sonrasında Rölöve-Restitüsyon-Restorasyon Yaklaşım. Tarih Okulu Ocak – Nisan, No XII, 129-153.
- Acun, H. (1999). Manisa'da Türk Devri Yapıları. Türk Tarih Kurumu.
- Akyıldız, B. (1988). Urla Tarihi Doku Araştırması – Koruma ve Restorasyon Önerileri. Yayınlanmamış master tezi. Dokuz Eylül Üniversitesi, İzmir.
- Arıkan, Z. (2004). XVI. Yüzyılda Seferihisar, Sığacık ve Sığla, Dünden Yarına Seferihisar Sempozyumu, 7-8 Ekim 2004, Bildiriler, Seferihisar Kaymakamlığı, Çevre, Kültür ve Turizm Birliği Yayını, No:2, İzmir, 1-13.
- Aru, K. A. (1941). Türk Hamamları Etüdü, *Doçentlik Çalışması*, İ.T.Ü. Mimarlık Fakültesi, İstanbul.
- Balta, H. B., Hamamcıoğlu-Turan, M., Ocalı, O. (2013). Three dimensional modeling via photographs for documentation of a village bath. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-5/W2, 2013 XXIV International CIPA Symposium, 2 – 6 September, Strasbourg, France.
- Baykara, T. (1988). Anadolu'nun Tarihi Coğrafyasına Giriş I : Anadolu'nun İdari Taksimatı, Türk Kültürünü Araştırma Enstitüsü, Ankara.
- Baykara, T. (1991). Türk Devrinde Urla Kazası (1080-1980). Ege Üniversitesi, İzmir.
- Bayrakal, S. (2009). Urla ve Köylerindeki Türk Dönemi Sosyal Anıtları. Ege Üniversitesi, İzmir.
- Büyükdigan, İ. (1991), Edirne Hamamlarının Restitüsyon Sorunları. Sanat Tarihi Araştırmaları Dergisi. İstanbul, No 10, 27-34.
- Çakmak, C. (2002). Tire hamamları. Kültür Bakanlığı Yayınları, Ankara.
- Çakmak, Ş. (2004). Seferihisar Ulu Camii, Dünden Yarına Seferihisar Sempozyumu, 7-8 Ekim 2004, Bildiriler, Seferihisar Kaymakamlığı, Çevre, Kültür ve Turizm Birliği Yayını, No:2, İzmir, 18-28.
- Çıtak, G. (2010). Three Dimensional Modeling of Urla, Hersekzade Ahmet Paşa Bath Based on Tacheometric Measurement, Unpublished MSc Thesis, İzmir Institute of Technology, İzmir.
- Çıtak, G., Hamamcıoğlu-Turan, M. (2011). Urla, Hersekzade Ahmet Paşa Hamamının Takeometrik Ölçüme Dayalı Üç Boyutlu Modellemesi. Tarihi Yapıları Koruma ve Onarım Sempozyumu – TAYKON.

- Çizer, Ö., Hamamcıoğlu-Turan, M. (2003a). Seferihisar'daki Büyük Hamam: Tanıtım ve Değerlendirme. *Arredamento Mimarlık*, No 155, 108-113.
- Çizer, Ö., Hamamcıoğlu-Turan, M. (2003b). Visualisation and Evaluation of Structural Characteristics and Problems of a Classical Ottoman Bath, *Proceedings of the 8<sup>th</sup> International Conference on Structural Studies, Repairs and Maintenance of Heritage Architecture*, Brebbia, C. A. (ed.), WIT Press, Southampton, UK, 377-88.
- Çizer, Ö. (2004). Investigation of Lime Mortar Characteristics for the Conservation of the Ottoman Baths in Seferihisar-Urla Region. Unpublished MSc Thesis, İzmir Institute of Technology, İzmir.
- Çizer, Ö., Böke, H., İpekoğlu, B. (2004). Characterization of Lime Mortars Used in the Walla and Domes of Some Historic Ottoman Baths. *Proceedings of the 10<sup>th</sup> International Congress on the Deterioration and Conservation of Stone*, 27 June – 2 July 2004, 1081-1088, Stockholm.
- Daş, E. (2007). Sığacık'ta Türk Mimarisi (Seferihisar, İzmir). *Sanat Tarihi Dergisi*, No: XVI/1, Nisan 2007, 25-48.
- Danışman, Z. (1969). Evliyâ Çelebî Seyahatnâmesi. *Yaylacık Mat. I.Cilt*, s.5-6-7, İstanbul.
- Ergin, N. (2011). Anadolu Medeniyetlerinde Hamam Kültürü: Mimari, Tarih ve İnceleme. Koç Üniversitesi Yayınları, İstanbul.
- Erkanal, H. (1998). 1996 Liman Tepe Kazıları. XIX. Kazı Sonuçları Toplantısı I. T.C. Kültür Bakanlığı, Anıtlar ve Müzeler Genel Müdürlüğü, Ankara, 379.
- Ertuğrul, A. (2009). Hamam Yapıları ve Literatürü / The Baths: The Structure and A Bibliography. *Türkiye Araştırmaları Literatür Dergisi*, No 13, 241-266.
- Eyice, S. (1997). Hamam, *İslam Ansiklopedisi*, No: XV, 402-430, Türkiye Diyanet Vakfı, İstanbul.
- Eyice, S. (1960). İznik'te Büyük Hamam Ve Osmanlı Devri Hamamları Hakkında Bir Deneme, *İ.Ü. Edebiyat Fakültesi Tarih Dergisi*, Sayı 5 Cilt XI, 99-120.
- Eyüpgiller, K.K., Barlık T., Kasapgil, O. (2011). Arapgir Hamamları Tipolojisi ve Koruma Sorunları. *Tarihi Yapıları Koruma ve Onarım Sempozyumu – TAYKON*, Yıldız Teknik Üniversitesi, İstanbul.
- Glück, K. (1921). *Die Bäder Konstantinoples*, Wien.
- Hamamcıoğlu-Turan, M. (2002). Design Studio of Seferihisar Büyük Hamam. *Architectural Restoration*, İzmir Institute of Technology, İzmir

- Hamamcıođlu-Turan, M., Reyhan, K. (2005). Urla-Seferihisar Bölgesindeki Türk Dönemi Hamamları. *Arkitekt*, No: Ağustos-Eylül 2005/ 501, 10-24.
- Hamamcıođlu-Turan, M. (2012). Measured Survey of Hersekzade Ahmet Paşa, Kamanlı and Özbek baths in Urla, İzmir, SP 191, Summer Practise 1 (Measured Survey). Faculty of Architecture, İzmir Institute of Technology, İzmir.
- İpekođlu, B. (2009). Design Studio of Urla Kamanlı Hamamı. Architectural Restoration, İzmir Institute of Technology, İzmir.
- T.C. İzmir Valiliđi, İl Kültür ve Turizm Müdürlüğü. (2012). İzmir Taşınmaz Kültür Varlıkları Envanterleri, Cilt-1-2-3, İzmir.
- T.C. Vakıflar Genel Müdürlüğü, Abide ve Yapı İşleri Dairesi. (2015). Abide ve Eski Eser Fişleri, İzmir.
- Kanetaki, E. (2004). The still existing ottoman hamams in the Greek territory, *METU Journal of the Faculty of Architecture*, sayı 21, 81-110.
- Kanetaki, E. (2011). Ottoman Baths in Greece: A Contribution to the Study of their History and Architecture, in Nina Ergin (ed.), *Bathing Culture of Anatolian Civilizations: Architecture, History and Imagination*, Louvain: Peeters, 221-255.
- Klinghardt, K. (1927). *Türkische Bader*, Julices Hoffmann, Stuttgart.
- Kul, F.N. (2003). Düzce (Hereke) Köyü Medresesi Restorasyon Projesi, Seferihisar, İzmir, Yüksek Lisans Tezi, Orta Dođu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Ankara.
- Kütükođlu, M.S. (2010). 16. Asırda Çeşme Kazasının Sosyal ve İktisadi Yapısı. *Türk Tarih Kurumu*, Ankara.
- Kütükođlu, M.S. (2000). XV ve XVI. Asırlarda İzmir Kazasının Sosyal ve İktisadi Yapısı. İzmir.
- Madran, E., Ozgonul, N., Kul, F.N., Uçar, M. (2002). Design Studio on Urla Hersekzade Ahmet Paşa Hamamı Men's Section and Kamanlı Hamamı. Middle East Technical University, Faculty of Architecture, Graduate Pogram in Arcitectural Restoration, Ankara.
- Mater, B. (1982). Urla Yarımadası'nda Arazinin Sınıflandırılması ile Kullanılışı Arasındaki İlişkiler. *İstanbul Üniversitesi Edebiyat Fakültesi Yayınları*, İstanbul.
- Meiss, P. von. (1990). *Elements of Architecture: from form to place*. London, Melbourne, Spon.
- Meriç, A.E. Öz, A.K. ve Uhri, A. (2012). Urla Söğüt Kutsal Alani Seramik Buluntularinin Deđerlendirilmesi, *Dokuz Eylül Üniversitesi Edebiyat Fakültesi Dergisi* No 1, 40.

- Orhan, S. (2003). Hamam Mimarisi ve Çardaklı Hamam. Yüksek Lisans Tezi, Yıldız Teknik Üniversitesi, İstanbul.
- Öney, G. (2000). Beylikler ve Erken Osmanlı Sanatına, Sosyal Yaşantısına Genel Bakış, Akdeniz'de İslam Sanatı, Erken Osmanlı Sanatı, Beyliklerin Mirası Arkeoloji ve Sanat Yayınları, İstanbul, p. 20.
- Önge, Y. (1995). Anadolu'da XII.-XIII. Yüzyıl Türk Hamamları, Vakıflar Genel Müdürlüğü, Ankara.
- Önge, Y. (1971). Külliyyelerimizin Yıkılan Hamamları, *Önasya*, Yıl:6 Cilt:6 Sayı:65,6,7,21.
- Önge, Y. (1989). Eski Türk Hamamlarında Aydınlatma, *Vakıflar Dergisi*, XII, 121-135.
- Petrucchioli, A. (2008). Bellek Yitiminin Ardından: Akdeniz İslam kent dokusunun öğrettikleri. Yapı-Endüstri Merkezi Yayınları, İstanbul.
- Reyhan K., İpekoğlu B., Böke H. (2013). Construction techniques of domes in some Ottoman bath. *Journal of Cultural Heritage*, Sayı 14 (3), Supplement, 35-40.
- Reyhan, K. (2013). Batı Anadolu Bölgesi'ndeki Osmanlı Hamam Kubbelelerinin Yapım Teknikleri. *Ege Mimarlık*, İzmir, 54-57.
- Reyhan, K. (2011). Architectural Characteristics and Construction Techniques of Domes in a group of Ottoman Baths. unpublished Doctorate Thesis, İzmir Institute of Technology, İzmir.
- Reyhan K., İpekoğlu B., Böke H. (2010). Osmanlı Hamam Kubbelelerinde Korumaya Yönelik Olarak Malzeme Kullanımı ve Yapım Tekniğinin İncelenmesi. V Ulusal Yapı Malzemesi Kongresi ve Sergisi, Kongre Bildirileri, İstanbul, 409-420.
- Reyhan, K. (2004). Construction techniques and materials of the Ottoman period baths in Seferihisar – Urla region. Unpublished MSc Thesis, İzmir Institute of Technology, İzmir.
- Taşcıoğlu, T. (1998). The Turkish Hamams, İstanbul Basımevi, İstanbul.
- Telci, C. (2004). XV. Ve XVI. Yüzyıllarda Hereke Nahiyesi, CIEPO XIV. Sempozyumu Bildirileri, 18-22 Eylül, 2000, Çeşme, Tük Tarih Kurumu Basımevi, Ankara, 743-751.
- Tunçoku, S., Kul, F.N. (2012). Design Studio of Seferihisar Ulaşmış Hamamı. Architectural Restoration, İzmir Institute of Technology, İzmir.
- Uğurlu, E. (2005). Characterization of Horasan Plasters From Some Ottoman Baths in İzmir, Master Thesis of Architectural Restoration Department, İzmir Institute of Technology, İzmir
- Ürer H. (2002). İzmir Hamamları, Kültür Bakanlığı Yayınları, Ankara.

Yaman, T. C. (2010). Türk Hamamının Mekansal Kurgusu: İstanbul Hamamları, Yüksek Lisans Tezi, Mimar Sinan Güzel Sanatlar Üniversitesi, İstanbul.

Yegül, F. (2011). Roma Dünyası'nda Yıkama, Koç Üniversitesi Yayınları, İstanbul.

Yegül, F. (1995). Baths and Bathing in Classical Antiquity. Architectural History Foundation; Cambridge, Mass.: MIT Press, New York.

Yegül, F. (1992). Baths and Bathing in Classical Antiquity, M.I.T. Press, New York.