### **Summary**

1. Historic Centre of Bukhara (Uzbekistan) (C 602bis)

Year of including in the List of World Heritage: 1993

Criteria (ii) (iv) (vi)

Previous monitoring missions:

October 2010

Joint mission: World Heritage Centre / ICOMOS response monitoring mission; March 2016

Joint mission: World Heritage Centre / ICOMOS response monitoring mission;

Today, the conservation of cultural heritage in Uzbekistan is climbing to a new qualitative level. This, of course, requires great effort and revision of the existing postulates in this field. Aware of the significance of the Uzbekistan cultural heritage, both for the residents of the Republic and for the entire world community, the leadership of Uzbekistan strongly supports initiatives and adherence to the generally accepted international principles.

The 2016 mission also called attention to other issues, such as degradation of traditional houses, lack of guidelines for the rehabilitation of housing and structural restoration projects, and the use of new materials and technologies, as well as the inadequate documentation of major historic buildings and urban fabric.

To address these problems, the mission recommended that measures be taken to strengthen institutional capacity, remedies, and planning, financial support for the restoration of traditional houses and documentation and assessment procedures.

The mission reaffirmed that the establishment of the Bukhara World Heritage Division (BWHD) and / or the Steering Committee with legal authority to implement the Management Plan will be important to ensure better protection and property management.

It was also recommended to develop and consolidate a coordinated conservation plan, as well as guidelines for the conservation, reconstruction and rehabilitation of the Historic Centre of Bukhara, with a view to bridging the main conservation measures to improve the protection for the site, to strengthen heritage legislation, establishing by-laws / regulations / guidelines for urban planning, the reconstruction of housing and historic urban areas, to design new facilities, tourism services, to present heritage and etc.

Thus the World Heritage Committee in its decision (41 COM 7B.99) indicates some points such as:

In particular, the Committee reports that it welcomes the progress in the development of the Management Plan and requests the State party to present the World Heritage Centre for consideration by the Advisory bodies as soon as possible, the final text of the Management Plan, completed together with the

new Master Plan for the Historic Centre of Bukhara and in close consultation with local communities, as proposed by the 2016 mission;

We are pleased to note that in 2016 a seminar on the historic urban landscape (HUL) was held with the support of the UNESCO / Netherlands Trust Fund;

There is a grave concern that neither the 2016 response mission report, nor the follow-up on its recommendations has been mentioned in the report of the State party; and that no details have been provided to address the problems raised by the mission regarding the degradation of traditional houses, lack of guidelines for the rehabilitation of housing and structural reconstruction projects, use of new materials and methods, inadequate documentation of major historic buildings and urban fabric, and the need to strengthen protection, planning tools, documentation and conservation plan, many of which have already been raised in the 2010 mission report;

Urges the State party to implement the recommendations of the 2016 response monitoring mission regarding strengthening protection, planning, conservation, documentation, management systems, and capacity building to address management deficiencies identified by the mission, paying particular attention to the following:

Establish a Bukhara World Heritage Division (BWHD) and / or a Steering Committee with legal authority to implement the Management Plan with a view to providing better protection and property management;

Develop and consolidate a coordinated conservation plan, as well as guidelines for the conservation, rehabilitation and reconstruction of the Historic Centre of Bukhara, with a view to bridging the main conservation measures to improve property protection;

Strengthen legislation on national heritage by creating by-laws / regulations / guidelines on urban planning, reconstruction of housing and historic urban areas, development of new structures, tourism services, heritage presentations, inter alia, to ensure legal protection for the property;

Reiterates its concern about the high vulnerability of the property, especially due to the impact of gradual changes on the ensemble of traditional buildings, which represents a potential threat to key attributes of outstanding universal value;

Also requests the State party to submit to the World Heritage Centre by December 1, 2018, an updated report on the state of site conservation and the implementation of the above for consideration by the World Heritage Committee at its 43rd session in 2019.

Centre historique de Bukhara /Historic Centre of Bukhara / C 602 rev 11/12/93 (II) (IV) (VI) Uzbekistan

#### **REPORT**

State of conservation of the World Heritage site Introduction:

- a) Republic of Uzbekistan
- b) The city of Bukhara
- c) In 1993 was included in the List of World Heritage
- d) Interregional Inspectorate for the Protection and Use of Cultural Heritage Sites
  - e) December 2018

Accordingly with all the comments and recommendations, including the decisions of the World Heritage Committee, positive dynamics have been reached to date in the field of cultural heritage conservation and as a result of World Heritage.

The work undertaken at both the national and local levels is aimed at exploring possible solutions to improve the efficiency of the cultural heritage management mechanisms.

### In particular:

- a. A resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated June 9, 2018, was adopted, according to which the status of cultural heritage sites and their territories was determined. Thus, according to this Resolution, the policy pursued in the field of the preservation of the cultural heritage in Uzbekistan will fully and truly meet the requirements of the Convention on the Conservation of Cultural and Natural Heritage which was ratified by Uzbekistan earlier;
- b. As well as to address emerging issues at the national level for the World Heritage Site of the Historic Centre of Bukhara, an Interagency Task Force consisting of heads and specialists of ministries and departments concerned was created;
- c. To address problems arising in the field of cultural heritage conservation a Road Map was developed. This "Roadmap" indicates interventions with timelines for implementation;
- d. All construction and upgrading works on the territory of the Historic Centre of Bukhara have been suspended until the data from drafts on the approval of experts from the Ministry of Culture and UNESCO is received
- e. The Master City Plan being developed, and in particular, the Detailed Planning Draft being developed for the period up to 2022 for the Historic Centre of Bukhara should take into account the OUV (Outstanding Universal Value) of the site of universal significance;

f. Resolution of the Cabinet of Ministers of Uzbekistan No. 435 dated June 9, 2018, defined the status of the "Historic Centre of Bukhara" site as a specially protected area.

Also following the recommendations and decisions of the World Heritage Committee, the leadership of the city of Bukhara has taken a number of measures:

At the initiative of the Inspectorate for the Conservation of Cultural Heritage an order of the Khokim (Mayor) of the city of Bukhara No. 272-f on the creation of a Steering Committee (World Heritage Property Steering Committee) for the World Heritage Site "Historic Centre of Bukhara" was developed and adopted in September 2018. This Committee is headed by an experienced specialist in the field of the cultural heritage of Bukhara conservation who has devoted many years to the archaeology of Bukhara. Other members of this Committee are architects, archaeologists, ethnographers, representatives of communities living in the territory of the Historic Centre of Bukhara, as well as experts and experienced professionals in the field of cultural heritage conservation. This Committee is vested with relevant powers, and decisions of this Committee are subject to execution by the leadership of the city of Bukhara.

In accordance with recommendations of the 2016 ICOMOS response monitoring mission to Bukhara, the World Heritage Property Steering Committee and the city's architects have developed a regime for the support and use of protective zones for the Master City Plan, and in particular for the Detailed Planning Draft (DPD) of Historic Centre of Bukhara developed for until 2022 to provide better protection and management for the conservation of cultural heritage sites, given the slight modifications to the boundaries of cultural heritage included in the List of World Heritage by the Decision 40 COM 8B.41 of the World Heritage Committee. The developed draft of a regime for support is attached to this report and will be sent for information and advice.

Thus, it is planned to establish urban planning rules for the World Heritage site and its buffer zone; this integrates the boundaries of the World Heritage site and the buffer zone in the state land and urban cadastre system, in the Master Plan for the city of Bukhara.

This will help address the problems raised by the mission regarding the degradation of traditional homes "...lack of guidelines for the rehabilitation of housing and structural reconstruction projects, use of new materials and methods, inadequate documentation of major historic buildings and urban fabric and the need to enhance protection, planning tools, documentation and conservation plan, many of which have been already covered by the 2010 mission report."

The Inspectorate for the Conservation of Cultural Heritage - the state body responsible for the conservation of the cultural heritage site of Bukhara

city, also worked to improve the quality of management in the field of cultural heritage conservation. In particular:

An intensive community outreach is being carried out to raise awareness of the significance of the Historic Centre of Bukhara as a site included in the World Heritage List. In particular, regular meetings are held with representatives of Makhalya and religious organizations;

- a. An inventory was undertaken on the territory of the Historic Centre of Bukhara to define the boundaries of the site;
- b. A proposal was also made for the adoption of a special regime for use with the definition of the site's borders throughout the World Heritage site;
- c. Today, the issue of the quality of the material used for the implementation of the current and larger conservation and restoration works is also relevant. In particular, one of the main tasks is to find the compositions and technological cycles of production of materials used in the restoration work. Since it is very important to always accurately find the appropriate solutions in each specific case and approach this issue individually, because this not visible, but significant detail can affect the integrity of the attributes and sometimes contradict the principles of the Outstanding Universal Value of the World Heritage Site;
- d. Considering the importance and integrity of the scientific approach in the field of conservation and restoration, an experimental research laboratory has been established at the Inspectorate for the Conservation of the Cultural Heritage of Bukhara. The organization of this laboratory is also one of the UNESCO recommendations. Experts with extensive experience and who worked in such well-known laboratories as the laboratory of the State Hermitage Museum in St. Petersburg have been invites to work in this laboratory. The laboratory will be engaged in research and analysis of solutions and materials of buildings in the territory of the Historic Centre of Bukhara to develop further recommendations for conservation work at cultural heritage sites. Also one of the objectives of this laboratory is to search for materials, compositions and methods applied at landmarked buildings that will not compromise the integrity of cultural heritage sites;
- e. At the initiative and in cooperation with the leadership of the city of Bukhara and following the recommendations of ICOMOS, signs were installed along the streets on the border of the Historic Centre of Bukhara, informing about the border of the World Heritage site;
- f. The Management Plan which was also revised and updated to reflect the current realities and submitted for approval and adoption to the Cabinet of Ministers of the Republic of Uzbekistan;
- g. Active work with the media. The Inspectorate for the Conservation of the Cultural Heritage of Bukhara recruited experts in the field of media outreach. Briefings and roundtables with specialists and representatives

of the public are held regularly to increase the awareness of the population of Bukhara city. These activities are broadcast on central channels.

With regards to the territory of the former Shakhristan market which is located to the east of the Ark citadel and North-West from the ensemble of Poi-Kalon:

To date, according to the recommendations of the World Heritage Centre and the ICOMOS mission that visited Bukhara in April 2018, a certain amount of work has been done. In particular, at the initiative of the leadership of the city and the region of Bukhara, financial resources were allocated to provide expertise. Since the recommendations indicated the lack of adequate information on the study of this area, experts from the Institute of Archaeological Research of the Academy of Sciences of Uzbekistan were invited. The purpose of their work will be to identify and study the cultural layer available in the former bazaar market and the respective archaeological materials. Upon completion of this archaeological research, a full report on the activities undertaken will be provided. Based on this report, experts will provide recommendations for further design work. For the research, it is planned to use modern methods and techniques, such as phototrigonometry, geophysical scanning and so on.

Funding has also been allocated to involve international ICOMOS experts. In particular, there is an agreement with the UNESCO International Institute for Central Asian Studies (IICAS). The headquarters of this international institute is located in Samarkand. This institute acts as a consolidating authority that will involve various experts for the development of the HIA (Heritage Impact Assessment). The Heritage Impact Assessment will be conducted for all projects planned in the territory of the Historic Centre of Bukhara for further sending to the World Heritage Centre for approval and recommendations.

#### **CONCLUSIONS**

Following the recommendations of the 2016 response monitoring mission related to the strengthening of protection measures, planning, conservation, in particular the decisions made at the 41st WHC session / 17 / 41.COM / 18, p. 177 of the World Heritage Committee (Krakow, 2017) concerning the documentation, management system and capacity building, with a view to identifying management weaknesses by 2018, the progress has been made in implementing remedial actions. Thus:

- a) By the order of the Khokim (Mayor) of Bukhara city dated September 2018 No. 272-f, the World Heritage Site Steering Committee was established with legal authority to properly implement and comply with the Management Plan to ensure the protection and management of the site. The proposals on the initiative of the Directorate General for Scientific and Production on the establishment of the Bukhara World Heritage Division (BWHD) under the Directorate General for Scientific and Production of the Ministry of Culture were also prepared;
- b) According to the approved activities of the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 435 dated June 9, 2018 agreements have been reached between the designer MADANIY MEROS LITI LLC and Directorate General for Scientific and Production on the development of a coordinated conservation plan, as well as the Conservation Guidelines, reconstruction and rehabilitation of the Historic Centre of Bukhara, with a view to bridging the main conservation measures to improve site protection; Draft and Master City Plan development, in particular, the Detailed Planning Draft (DPD) of the Historic Centre of Bukhara to provide better protection and management for the conservation of the cultural heritage site;
- c) Also, according to the approved activities of the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 435 dated June 9, 2018, states the need to strengthen legislation on national heritage by creating by-laws / regulations / guidelines on urban planning, reconstruction of housing and historic urban areas, development of new structures, tourism services, heritage presentations, inter alia, to guarantee legal protection for the World Heritage site;
- d) Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 435 dated June 9, 2018, Part III, states the need for consultation of the Working Committee with the Ministry of Culture, the Ministry of Construction, the Ministry of Justice, UNESCO and the National Commission for UNESCO and other stakeholders;
- e) Likewise, progress has been made in understanding the high vulnerability of a cultural heritage site, especially due to the impact of rapid changes around traditional buildings, which represents a potential threat to key attributes of outstanding universal value;
- f) All construction and upgrading works on the territory of the Historic Centre of Bukhara have been suspended until the data from drafts on the approval of experts from the Ministry of Culture and UNESCO is

received. It is reflected in the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated June 9, 2018 No. 435.

# MAINTAINING AND USE OF PROTECTED ZONES REGIME

# MONITORING OF KEY DIRECTIONS OF ARCHITECTURAL-PLANNING TRANSFORMATIONS OF HISTORICAL ZONES





The Historic Center of Bukhara World Heritage site

(Design Solutions)

**BUKHARA-2018** 

# The Historic Center of Bukhara **World Heritage Site**

(Design Solutions)

Centre historique de Bukhara/Historical Center of Bukhara/ C 602 rev 11/12/93 (II) (IV) (VI) Uzbekistan



#### Chapter No 1.

#### Design solutions.

- & 1. The composition of security zones
- & 2. The boundaries of the protection zone of the group of monuments and the surrounding spatial-planning environment, forming the territory of the historic center.
- & 3. Borders of protected zones of separately standing monuments located beyond the historical and architectural
- & 4. The boundaries of the construction regulation.

# Chapter № 2. Regime of maintaining and use of protected zones.

- & 1. Regime of maintaining and use of protected zones of the group of monuments and the surrounding spatial-planning environment, forming the territory of the Bukhara historical and architectural center
- & 2. Regime of maintaining and use of the construction area

# Chapter № 3 The key directions of architectural and planning transformations of historical zones.

- & 1. The key directions of architectural and planning transformations in the protected zone of the group of monuments and the surrounding spatial - planning environment, forming the territory of the Bukhara historical and architectural
- & 2. The main directions of architectural and planning transformations in the area of construction regulation.

### INTRODUCTION

In the modern structure of Bukhara, the historically established core of the city in the form of a single compact array occupies a central part surrounded by new areas of mass housing construction. In the course of its development, it almost completely preserved the integrity of the architectural appearance and scale.

The creative efforts of generations of great architects created a unique architectural and planning structure, documentally reflecting the medieval urban planning art of Central Asia. The beauty of the cityscape, revealed here in a diverse change of landscape pictures and impressions, amazes with the grandeur of the town-planning composition,

Particularly characteristic features of the city are the dense one-storey and two-storey buildings of the quarters, which forming the environment for the placement of architectural monuments and their ensembles.

During the modern period of Bukhara, the most significant urban planning activities were carried out mainly below the line of the historical core.

The city faces the problem of combining old and new, emerging and outgoing, remaining and destructible.

Under these conditions, any, even a slight combination of the new urban environment with elements of the ancient one leads to gradual changes in the historical environment instead of preserving it.

Therefore, when reconstructing the historical cores of cities, documentation ensuring the preservation of the historical, architectural and archaeological heritage is needed.

The project developments, defining the system of protected zones of monuments of architecture and urban planning are such documentations. They consider the issues of theoretical estimation of the adopted system of zones, allowing to solve a number of problems arising in the reconstruction of historic settlements.

In connection with the urgent need for the reconstruction of the historic city of Bukhara, it is required to develop following project documentation for determining the territory of Bukhara historical center on the basis of normative

- 1. The Urban Planning Code Manual for planning and development of cities with historical and cultural monuments.

  - 3. Regulations and instructions on the organization of historical zones in populated areas.
- 4. Law of the Republic of Uzbekistan from 2001 "On the Protection and Use of Cultural Heritage Monuments".
- 5. Archive materials of the Main Directorate for the Protection and Use of Monuments of Cultural Heritage under the

# CHAPTER № 1 Project solution.

### & 1. The composition of the protected zones.

\* The history of Bukhara goes back deep into the centuries. Recent archaeological researches in Bukhara resulted in discovery of ceramics belonging to the III - II centuries BC. The city of Bukhara has been known for more than two thousand years.

Works of Arab and Central Asian authors, who wrote about Bukhara in the 10th-17th centuries, especially witness about the flourishing of this city. In the 16th century, the architectural image of Bukhara already acquired its finished appearance. At that time, the existing market domes were erected, the construction of the largest ensembles was completed, the largest basins were dug, the underground arches and spillways were streamlined and expanded, the oldest baths in Bukhara were built.

And today, in the planning of Bukhara, all the old highways remained unchanged, more than a hundred architectural monuments belonging to different epochs with a variety of designs and forms, which are a living example of the building skills of architects of Central Asia, have survived.

Comparative data from the field study and data from archival research concerning the historical development of the city required to consider the issues of preservation of architectural monuments and the surrounding planning environment, to determine the limits of permissible intervention in the historical planning and development, to identify the possibilities of new functional use of the architectural monuments preserved on its territory and the deployment of new construction.

The natural continuity of the town-planning traditions, used by our ancestors architects, cannot be preserved under the onslaught of the need for renovation put forward by modern life.

Approaching the solution of conflict situations arising between architectural monuments, the surrounding spatial-planning environment with a new project that displaces this environment is proposed to zoning the territory of the historical core into zones with different operating regimes:

- protected zone of a group of monuments and the surrounding spatial-planning environment, interpreted as a territory of the historical and architectural center;
- protected zones of separate monuments located outside the territory of the historical and architectural center;
- development (construction) regulation zone with the allocation of a zone of special reconstruction conditions around the territory of the historical and architectural center;
- protected landscape zones.

# & 2. The boundaries of the protection zone of the group of monuments and the surrounding spatial-planning environment, forming the territory of the historic center

- \* protected zone of a group of monuments and the surrounding spatial-planning environment was created due to the concentration of numerous unique structures and ensembles in close proximity to each other, to ensure the safety of monuments and their ensembles of the surrounding volume-spatial environment, to identify and use architectural-art and town-planning features of this environment, creating the necessary conditions for mass familiarization of the population and tourists with them.
- This zone includes elements of the historical and artistic valuable urban environment, architectural monuments, preserved sections of streets and open spaces, which provide an optimal perception of the monuments, an archaeologically valuable cultural layer. It covers several spatial planning systems, from the initial intention of the city organization to the top of the town-planning art without significant changes that have reached our time, with a sustainable location of a number of major architectural structures. The residences of the rulers, public and religious buildings, houses of the court nobility, the first city squares, the types and sizes of residential buildings, differentiated depending on the class of the owners are located here.
- Following architectural monuments are located on the territory of the zone:

### Architectural monuments located on the territory of the zone

- Toki Telpakfurushon sales dome
- Toki Sarrafon sales dome
- Toki Zargaron sales dome
- Tim Abdullakhon
- Kulita Caravanserai
- Olimjon Caravanserai
- Nugay Caravanserai
- Sayfiddin Caravanserai
- Fathullojon Caravanserai
- Ayozzhon Caravanserai
- Akhmadjon Caravanserai
- Mirzo Ulugbek Tamokifurush Caravanserai
- Preserved fortress wall
- Gulomjon Caravanserai
- Karakul Gate
- Rashid Caravanserai
- Chukur medrese
- The Talipoch Gate
- Jurabek Caravanserai
- Abdullahan medrese
- Modarixon medrese
- Ulugbek medrese
- Abdulazizkhan medrese
- Miri Arab medrese
- Kukaldash medrese

- Nodir Devon begi medrese
- \* Goziyon medrese
- Tursunion medrese
- Amir Olimkhon medrese
- Gavkushon medrese
- Said Kamal medrese
- Rakhmonkul medrese
- Turkmen medrese
- Isteza medrese
- Mextar Ambar medrese
- Mir Kamol medrese
- Khoja Parsa medrese
- Mavlonoi Assori medrese
- Hotam Khundi medrese
- Khurdjin medrese
- Domullo Khasan medrese
- Rashid medrese
- Chor Minor
- Nadir Devon begi shrine
- Mavlonoi Sharif Mausoleum
- Dungeon
- The arch walls
- Kalon Mosque
- Khoja Kalon Mosque
- Boloxauz Mosque

- Magoki Atori Mosque
- Magoki Kurpa Mosque
- Kuyi Darakht Mosque
- Rugangaron Mosque
- Khodjaxo Mosque
- Tagbandbofon Mosque
- Arabon mosque
- Abdullo Kuchkar Mosque
- Khoja Zainuddin Mosque
- Toki Zargaron Mosque
- Bozori Kord Mosque
- Sarrafon Mosque
- Zabiyon-Dabiyon Mosque
- Imam Gazali Veli Mosque
- Kuyi Hanako Mosque
- Khauzi Kozi Kalon Mosque
- Dust Chori Gozi Mosque
- Mevlana Şerif Mosque
- Mir Ibrahim Mosque
- Poyi ostona mosque
- Kemukhgaron Mosque
- Kokuli Khurd Mosque
- Mullo Payravi
- Oybinok mosque
- Sallakhane Mosque
- Khodjaxo Mosque
- Synagogue
- Kukaldosh Mosque

- Hamamomi Kundjak Mosque
- Siddikion Mosque
- Eshoni Pir Mosque
- Khoja Bulgor Mosque
- Namazgox Mosque
- Shokhi zanjir Mosque
- Bozori Gul Mosque
- Mirzo Usman Mosque
- Khoja Tabbond mosque
- Imam Kozikhon Mosque
- Buyon Kulikhan Mausoleum
- Turki Djandi Mausoleum
- Hammomi Sarrafon
- Hammomi Kundjak
- Passage building
- Shakhristan hospital
- Pedagogical Institute
- Theater
- Chashma Ayub Mausoleum
- Ismail Samoniy mausoleum
- Khalifai Khudoydod Complex
- Juybori Kalon medrese
- Baland mosque
- Tosh saroy medrese
- Ibrokhim Okhund medrese

In the architectural landscape, buildings of various historical periods are organically combined. Therefore, the most historically valuable buildings of the late XIX and early XX centuries are among the protected monuments of architecture as well, including.

- 1. Passage Building.
- 2. Hospital in Shakhristan.
- 3. Pedagogical Institute.
- 4. Theater
- 5. Former building of the regional committee (obkom)
- 6. Building of the Department of Internal Affairs

The protected zone of the group of monuments and the surrounding planning-spatial environment includes the territory enclosed between the streets: in the north - Maxim Karim str., section of the Hofiz Sheroziy st., Mirzo Gofur st.; in the east - Samarkand, Khuzha Nurobod, Nizomi, B.Nakshband, Bozor Khuzha and Hodja Bulgor steets, plot of residential building between Gulobod street and the new city center; in the south - Tukay street; in the west - Kosagaron and Usto Sharif streets, western extremity of traditional building (unplanned local type) Sh.Rustaveli St.: Khodja Aspgardon, Khavzi Nav street in the direction of the park to the Shokhrud channel, the existing street behind the maternity hospital and theater with access to the street behind the Bolo House mosque.

A city area of 150 hectares is allocated under the protection zone of the group of monuments and the surrounding spatial-planning environment. It is also considered the territory of the Bukhara historical center.

 & 3 The boundaries of protected zones of separately standing monuments located outside the Bukhara historical center, currently reflected on the World Heritage List

The following monuments of architecture are located within the historic core of the city:

- 1. Chashma Ayub Mausoleum
- 2. Ismoil Samani Mausoleum
- 3. Remains of the fortress wall
- & 3.1 Borders of protected zones of separately standing monuments located outside the Bukhara historical center
- 4. Khalifa Khudoydod Complex.
- 5. Djuybari Kalon Djumahoni Validai Complex.
- 6. Balyand Mosque.

Their boundaries are the security zones of each monument. The purpose and method of delimitation is similar to the protection zone of the group of monuments and the surrounding spatial-planning environment.

- a) the "Balyand Mosque" zone includes the whole area between Khavzi Nav Street, Usta Sharif Street, Tinchlik Street, Masjidi Baland street.
- 6) "Djuybari Kalon-Dzhumahoni Validai" zone includes the entire area between Goziyon and Havzi Nav streets
- в) The "Chashma Ayub Mausoleum", "Ismail Samani" zone includes the entire area between the Havzi Nav street, the main park alley and city fortress wall,
- r) Zone of "fortification walls" includes the entire area at a distance of 50 meters from the outer and inner sides.
- д) "Khalifa Hudoydod" zone

### & 4. The boundaries of the construction regulation zone.

The construction regulation zone was created to regulate possible changes in the planning and development in the territories located around the territory of the historical and architectural center, but subject to the preservation of the historical layout, the nature of the landscape and the limitation of the height of the buildings. Comparing the visibility of individual structures and their groups, built on the basis of observations and graph-analytical method, the data of materials to identify the prevalence of the historical value of the planning, classification of architectural monuments and the position relative to the protected zone of the group of monuments it can be concluded that this zone, which was the boundary of the city for almost twenty centuries, currently has artistic disparity.

For the purposes of urban planning reconstruction, a zone of special regime for reconstructive measures and a zone of a protected landscape have been allocated in the construction regulation zone. This will allow more purposefully regulate the development of the historical core and establish the most optimal methods of reconstruction of the material environment and techniques of the historical architectural landscape for each zone. Zoning of indicators (social, city-planning, historical-architectural, environmental).

At the same time, built-up areas with a complex of homogeneous characteristics are combined into the zone of one or

The analysis of the town planning structure of the city, taking into account the specified set of criteria, made it possible to impartially identify the zones and establish their boundaries in the city plan. This zone includes the area of the historical core of the city, the beginning of the formation of which belongs to different historical periods, with different values of the existing layout. This zone is mixed by functional use of the territory. The residential formations and enterprises are

The following territory enclosed between the streets is allocated to this area:

- in the north an existing canal passing along the remains of the city walls, Khazrat Imam cemetery, to Nizomi street.
- in the east Nizomi street.
- in the south the future project continuation to the western tip of the city wall.
- in the west the Project Street along the western remains of the city wall.

The total area of the construction regulation zone is 420 hectares. Following zones of the total area of the construction regulation are delimitated:

a) zone of special reconstruction conditions (strictly regulated.)

It includes the territory enclosed between the streets: Khoki Rokh street, conditional straight to Samarkand street, Gulobod street, conditional straight from Gulobod street to Rokhat street and further to Kh.Nurobod St., Samarkand St., Mirzo Gofur St., Hofiz Sheroziy St., Maxim Karim St., the territory between the B.Nakshband, Uzbekistan Mustakilligi, Zhalol Ikromiy Steets, Rokhat Street, an existing street that runs along the Government House and the Bukhara Hotel, the eastern end of the existing residential building between the Gulobod street the new city center, territory among the streets of Kosagaron, Sobungaron and Usta Sharif, Western extremity of traditional construction (unplanned local type) Sh.Rustaveli St., Aspgaron St., Havzi Nav, Gozien St., the territory between Maksum Karim Street, the existing street behind the Bolo House mosque, steet behind the theater, overlooking the Shakhrud channel, the Shakhrud channel,

The total area of special reconstruction zone is 250 hectares.

### б) The protected landscape area.

It includes the area among the following streets: a section of the Sheikh Jalal street from the former city gate, which is the project continuation of Havzi Nav Street, the area is located among the existing city wall and the western part of the city and the projected street running along the wall, the existing channel that runs along the northern remains of the city wall to the Maksum Karim street. The allotment area is 70 hectares.

# Chapter II.

## REGIME OF MAINTAINING AND USE OF PROTECTED ZONES.

- In the architectural-planning transformation of all zones, the system of restrictions must be strictly followed and it is necessary to implement it in a consistent and disciplined manner.
- & 1. Regime of maintaining and use of protected zones of the group of monuments and the surrounding spatial-planning environment, forming the territory of the Bukhara historical and architectural center
- the strict protection measures of architectural monuments and architectural and planning environment should be carried out within its limits to guarantee their safety.
- These measures include conservation of monuments, maintaining them in good condition (both exterior and interior), improvement of sites around monuments, major repairs and restoration of residential buildings taking into account the historical and architectural inventory. Subsequent low-value buildings that distort architectural monuments or interfere with their perception according to GIS are subject to mandatory development.
- Within the protected area, new facilities can be built only with the most stringent urban planning control, and the improvement of all urban planning systems like transport, services, resettlement, etc., should come from the urgent needs of the normal functioning of this area, taking into account the recommendation of ICOMOS and the World Heritage.
- Note: The regime of maintenance and use of protected zones of separate monuments located on the territory and outside the historical and architectural center is regulated according to the regime of maintenance and use of the construction control zone

- & 2. Regime of maintaining and use of the construction regulation zone.
- a) Zone of special reconstruction conditions.

Upon the reconstruction of this zone, it is necessary to strive for the global preservation of buildings and planning that has historical and architectural value:

- modernization of valuable capital housing fund shall be implemented depending on the nature of its use;
- -preserve the structure of residential houses and interiors of quarters valuable in historical and architectural terms;
- a number of streets and site;
- gradually loosen development space by demolishing low-value houses;
- restrictedly accomplishment and landscaping of cleared intra-quarter spaces and streets;
- the renewal of the planning and development should guarantee the preservation of the historical heritage of the old districts and develop in them a new social content that improves their urban development qualities.

- In areas outside the zone of special reconstruction conditions, but included in the zone of construction regulation, which have not preserved the peculiarities of the historical formation of the planning structure and mass development, may be implemented a relatively broad program of comprehensive updating of the planning and development. Creation of high comfort, convenience of transport services, conditions for the realization of various requests of the population, and of course enriching the environment with new architectural and spatial compositions.
- Upon formation of the building, it is required to take into account the silhouette of the external
  panorama of the city in connection with such features of the cityscape as wide panoramic view and
  multiplicity of the development.
  - b) Conserved Landscape Zones.
  - Since this area still maintains a wide spatial visibility of the historically established panorama with domination of the city walls included in the landscape of the building, measures for the protection and use of the territory under the protected landscape zone should include: conditions that ensure a favorable ecological existence of the natural components of the landscape, the gradual elimination of disharmonious development in the most critical areas with the disclosure of imaginal sections and paths.
  - On the territory of the preserved landscape, economic activity is possible without a landscape distortion that does not require the erection of buildings. The field and garden works are possible.

#### CHAPTER III.

### The key directions of architectural and planning transformations of historical zones

& 1. The key directions of architectural and planning transformations in the protected zone of the group of monuments and the surrounding spatial - planning environment, forming the territory of the Bukhara historical and architectural center

The existing architectural and planning structure in the protected zone of the group of monuments does not require fundamental changes in the functional use of the territory. All work in this area should be aimed at improving the living environment. In the conditions of the old-town development, where the historically valuable environment prevails, the implementation of any measures to improve it is associated with certain difficulties, since in this environment it will be necessary to free areas for the organization of green spaces, to modernize the housing fund, to provide engineering improvements, to improve the art quality of development!

all these activities can be carried out only by a strictly regulated system, which in its essence would ensure the preservation of the historical planning and development. To obtain the greatest urban development effect, the restoration works should be focused, as far as possible, on the main composite areas. In the future, it is necessary to erect the most significant buildings and institutions serving the public and tourists along them, as the problems in this zone related to the serving the residents and visitors coming here for various purposes have not been completely solved.

The identification of the main compositional directions and the attraction of the entire arsenal of means for their architectural design cannot occur apart from the range of tasks to improve the spatial organization of the general development environment. Transformations in residential development require the broadest urban planning approach, taking into account social and sanitary tasks. Bringing old quarters to the level of modern requirements will allow to use existing buildings and constructions for a long period of time and to increase their safety. A special urban development effect can be achieved if we take into account the high value of the historical monumental environment and save a number of neighborhoods in their present form (planning, scale), but subject to improvement of their art qualities. Residential buildings are represented here by various types of houses typical for the main city construction period.

The largest percentage of the total remaining old housing fund is historically valuable houses. When modernizing such houses or their comprehensive overhaul, it is required to avoid giving them any new featureless characteristics, but, as a rule, preserve the architecture of the facades while recreating it by architectural archival data. This will, in aggregate, contribute to the preservation of the old slim appearance of the city.

It is intended to carry out a relatively minor demolition of sites that are particularly unfavorable in sanitary and hygienic terms. It is necessary to replace them with the partial organization of green spaces and creation of sections of cultural and residential institutions, especially kindergartens and nurseries. With the growth of international tourism, many valuable residential buildings can be converted into hotel complexes or accommodation servicing devices. For the needs of the population and tourists. This must be taken into consideration and make preparations for the restoration of the buildings interiors in advance. Along with the listed activities in the architectural and spatial structure, the rational organization of the transport system is another key area for the zone reconstruction. It is very difficult to improve transport services in the conditions of the existing grid of streets along which valuable buildings are located. Therefore, the principle of preserving local streets in this zone should be taken as mandatory in all developments of transport solutions. The implementation of the transport service should be carried out from the intracity transport ring encircling the protected zone of the group through a system of deep deadend inputs. After the construction of this ring, it will serve as a boundary of the protected zone of the group of monuments and the spatial - planning environment.

- & 2. The main directions of architectural and planning transformations in the area of construction regulation.
- a) In the zone of special strict regime of reconstruction.

Reconstructive measures in this zone can occur with less restrictions than in the protected zone of the group of monuments. But according to its planning links and the system of allocation of the architectural monuments, it is in unity with the protected zone of the group of monuments. And in order to further harmonic unity of these zones, it is necessary to improve the principles and patterns in the architectural structure, developed by the ancient architects of the city, enriching them with the achievements of modern urban planning art, creating comfort of life, convenient transport services, conditions for realizing various requests of the population, and of course enriching the environment with new architectural -spatial constructions.

In this regard, the task of functional zoning of the territory and the improvement of the overall development environment by limiting their further development come to the fore.

The housing functions should not decrease here, but on the contrary, they shall increase as a result of the transformation of the outdated system of neighborhood development into a more modern one that meets modern requirements. The unification of today's residential development into a single interconnected group will improve the spatial planning solution of the development of this zone and preserve the individual features of the architectural landscape. When forming the spatial structure, it is necessary to find the nature of the relationship between the general development environment and the stylistic characteristic of the architecture of the group of monuments in the protected zone. In order to preserve the historical landscape, when placing objects of new construction, the latter should not exceed the height of the existing buildings and should not be very contrastingly perceived in comparison with a significant smaller module of old houses.

Currently, the transport network has unorganized structure, spreading through many streets of this area.

It is necessary to streamline the movement, creating external and internal transport links.

The existing meridian and latitudinal directions can be taken as a basis, since these directions are the main channels of vital activity of the population.

By implementing all these requirements of a developing modern city in interconnection with the protection of the architectural landscape, the urban planning effect will be achieved, where all the valuable will be preserved.

In the territories relatively distant from architectural monuments, where the current architectural and planning environment does not represent historical value, regulation is limited to overall compositional consistency, taking into account the attention of the dominant structures in the panorama of the populated area.

The techniques for updating the layout and development here can be applied somewhat differently from the techniques for forming residential quarters in the zones of special reconstruction conditions.

Development can be formed by houses of various heights with a diverse grouping, and only low-rise buildings can be located right in the middle of its territory in the north side of the city.

In general, the building structure should be characterized by a dense perimeter of houses along the existing outer transport ring.

The silhouette line of building streets and highways encircling the historical core of the city must bear the characteristic of the architecture of the city walls which is the most important element of the medieval city. In the locations of the former city gates, it is necessary to arrange gaps among the buildings and form "green passageways" on the territory of the historical core by means of decorated passages.

These networks should probably be transformed mainly as centers of daily services as well.

### b) In the zone of the preserved landscape.

The natural landscape is preserved to give a vivid idea of the peculiar landscape of the surroundings, where the city was formed along the outer side of the entire stretch of the remains of the city walls. Today, the degree of urbanization of this zone is insignificant and the natural features of the landscape are preserved. Therefore, it is necessary to follow the path of restoring the historical landscape view, having made the recultivation of disturbed areas in this zone. Restoration of the historical view of the landscape recreates a picture of the city's organic fusion with the surrounding nature and, in combination with the remains of the city wall, will give an idea of the grandeur of the scale of the city and its fortifications.