ALBANIAN
DEVELOPMENT FUND

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

"REVITALIZATION OF THE "ÇERCIZ TOPULLI" SQUARE, GJIROKASTRA"

(PIUTD)

Subprojects:

Revitalization of the Çerçiz Topulli square;

Revitalization of the municipality square;

and Revitalization of the Square "House of Pioneer

October 2022

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ABBREVIATIONS

ADF	Albania Development Fund
CHMP	Cultural Heritage Management Plan
EIA/ ESIA Assessment/	Environmental Impact Assessment/ Environmental and Social Impact
EHSG	Environmental Health and Safety Guidelines
EMP	Environmental Management Plan
ESMP	Environmental and Social Management Plan
GOA	Government of Albania
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanism
LMP	Labor-Management Procedures
OHSE	Occupation Health Safety Environment
NEA	National Environmental Agency
MoTE	Ministry of Tourism and Environment
MoIE	Ministry of Infrastructure and Energy
MoHSP	Ministry of Health and Social Protection
WB	World Bank
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan

EXECUTIVE SUMMARY

The Project for Integrated Urban and Tourism Development (PIUTD), funded by the World Bank Group and implemented by the Albanian Development Fund (ADF), supports the Government of Albania (GoA) to develop the economy and improve living conditions in its southern region by financing subprojects in the municipalities of Saranda, Gjirokastra, Berat and Përmet.

The objectives of the Project are: (a) improve urban infrastructure; (b) enhance tourism assets; and (c) strengthen institutional capacity to support tourism related local economic development in Selected Areas in the south of Albania.

The Project consists of the following components:

a) Urban upgrading and infrastructure improvement;

b) Touristic sites upgrading;

c) Institutional capacity budding;

d) Implementation Support.

ESIA Purpose

This Environmental and Social Impact Assessment Report is prepared for the project "Revitalization of the "Çerciz Topulli" Square, Gjirokastra" and is part of the necessary documentation required for this project.

The purpose of this ESIA is to ensure that the environment and social aspects in the project area are considered among all other important issues at any stage thereof. This report is prepared based on the Albanian environmental and related World Bank Operational Manual, OP 4.01 on Environmental Assessment, aiming to identify, anticipate and assess all potential impacts in a systematic, comprehensive and objective manner.

The report identifies negative and positive impacts and propose mitigation measures considering the economic interests of the investor as well as rational use of natural resources and coordination of the economic and social development of the area with the requirements of sustainable development

Sub-Project Area

The project is located under the administrative borders of Gjirokastra Administrative Unit, part of Gjirokastra Municipality. The area is known as the Qenter road of Gjirokatra, Cerciz Topulli Square.

Gjirokastra, is one of the 4 municipalities benefiting from this large project. After a deep technical analysis by the project team and based on the results of meaningful consultations with the stakeholders, it was proposed the following package for the investment.

The selected project package consists of 3 separate projects.

- Revitalization of the Çerçiz Topulli square;
- Revitalization of the municipality square; and

- Revitalization of the Square "House of Pioneer

The interventions proposed will provide the rehabilitation of the 3 squares distributed within the project area. The project is located in the urban area, representing the city center of Gjirokastra, very close to the historical cultural center.

Environmental Impacts and their Mitigation

The common environmental issues likely to be encountered are predominantly short-term, local and typical construction-related disturbances such as dust, air pollution, waste generation, soil erosion, disposal of excavated materials and other construction waste, occupation and community health and safety risks, etc. In proportionate with the risks of the project the site specific Environmental and Social Management Plan (ESMP) has been prepared. The expected environmental and social impacts identified for the revitalization of the Cercizi square project are evaluated to be moderate and their presence will be mainly related to the construction activities. The impacts will be generated mainly due to construction works and are expected to be easily managed through the application of the detailed mitigation measures proposed as per the ESMP.

Meanwhile from the social point of view it will be required small scale of acquisition which will be carefully followed up by the preparation and application of community impacted during construction and closing of this area for public use.

Stakeholder Consultation and Information Disclosure

Present ESIA report will be disclosed through the web page of ADF in Albanian and English languages and delivered to the local residents in Gjirokastra through the medium and in the format most suitable for their easy access.

1. INTRODUCTION

1.1. Project purpose

The Project for Integrated Urban and Tourism Development (PIUTD), funded by the World Bank Group and implemented by the Albanian Development Fund (ADF), supports the Government of Albania (GoA) to develop the economy and improve living conditions in its southern region by financing subprojects in the municipalities of Saranda, Gjirokastra, Berat and Përmet.

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1.2. Project objective and location

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The selected project package consists of 3 separate projects.

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The area of intervention is as shown in the Area map, below:

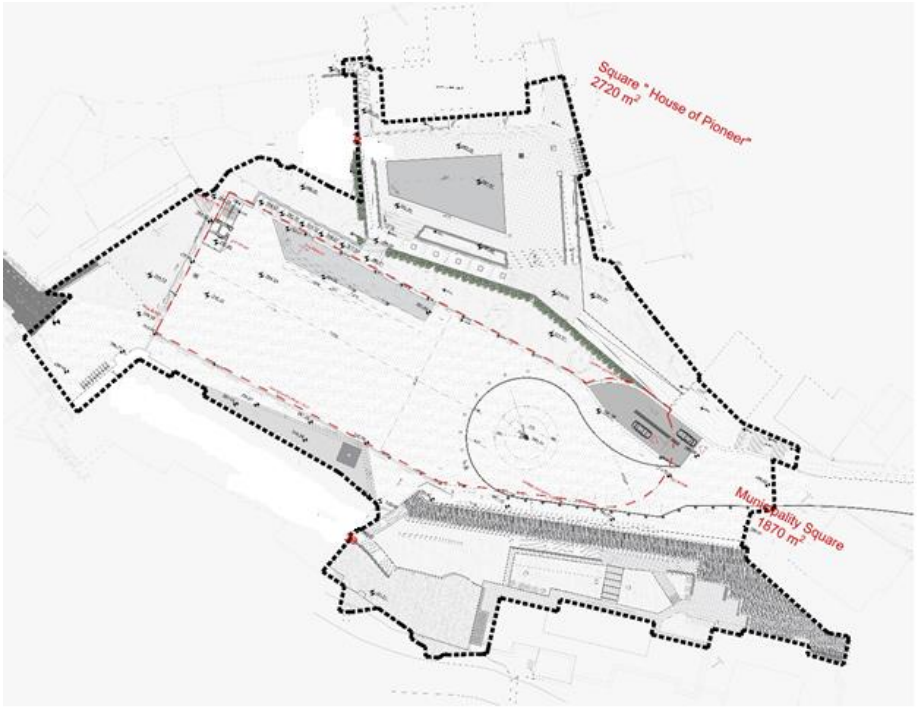
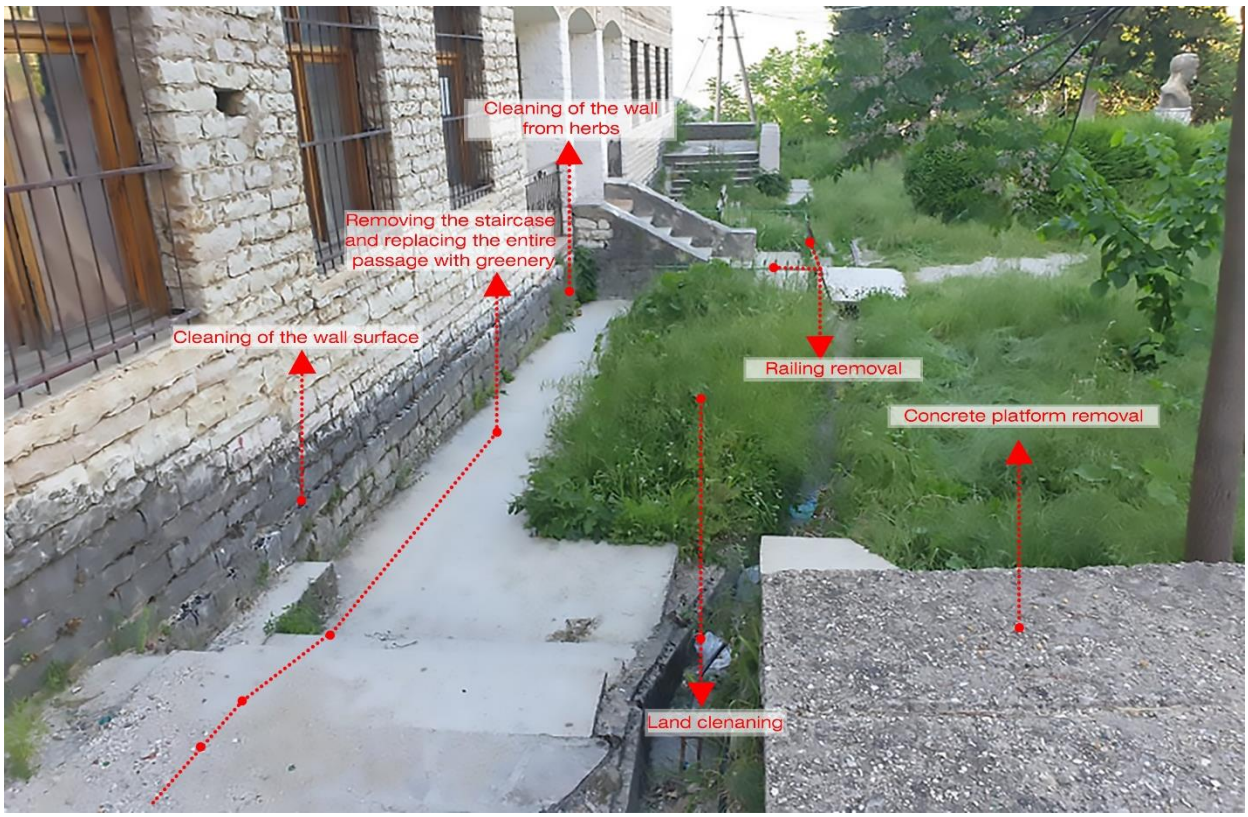


Figure 1. Map of the intervention of proposed project

The current condition of the square in front of the Pioneer House

The square is in a degraded condition, has quota levels and untreated green areas. The presence of a concrete platform and a passage in front of the building, are the only alleys that enable the passage.


HOTEL
KASTRO
Removing the staircase and replacing the entire passage with greenery
Land cleaning and configuration according to the project
Removal of the concrete platform
Stone wall removal
Stone wall removal


Cleaning of the wall from herbs
Removing the staircase and replacing the entire passage with greenery
Cleaning of the wall surface
Railing removal
Concrete platform removal
Land clenaning

The current condition of the square in front of the City Hall

The green areas are untreated, the current paving in front of the Socialist Party is with asphalt and partly with concrete. Also, the paving with stone slabs is partially degraded and needs to be replaced. The surfaces of the stone walls are uncleaned by moss and some of them are covered with stone like the rest. The lightning is placed on metal parapets painted in purple.

Photo of the area

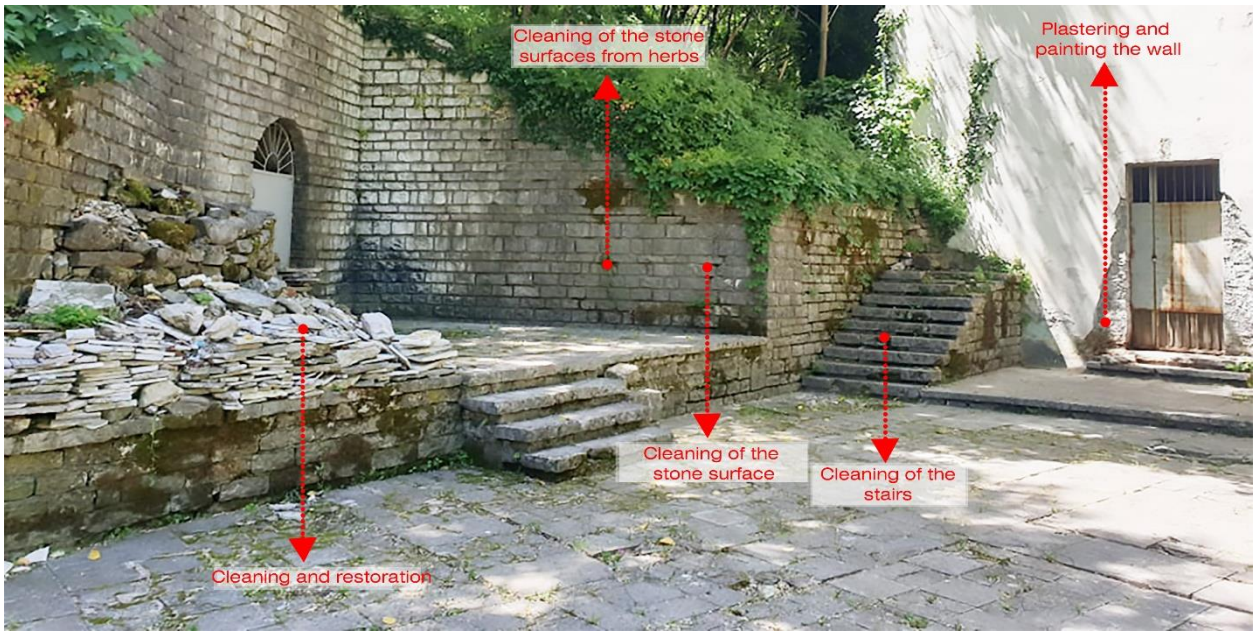


Photo of site

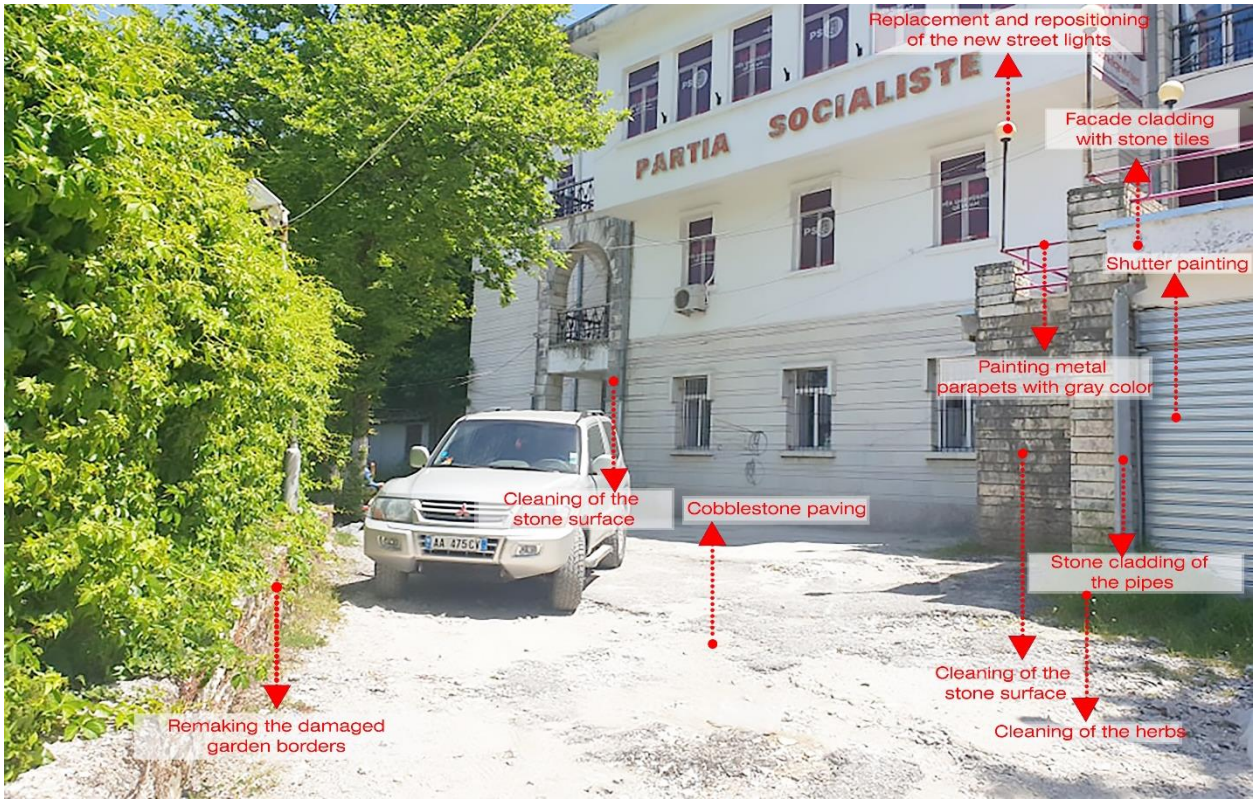


Photo of the area

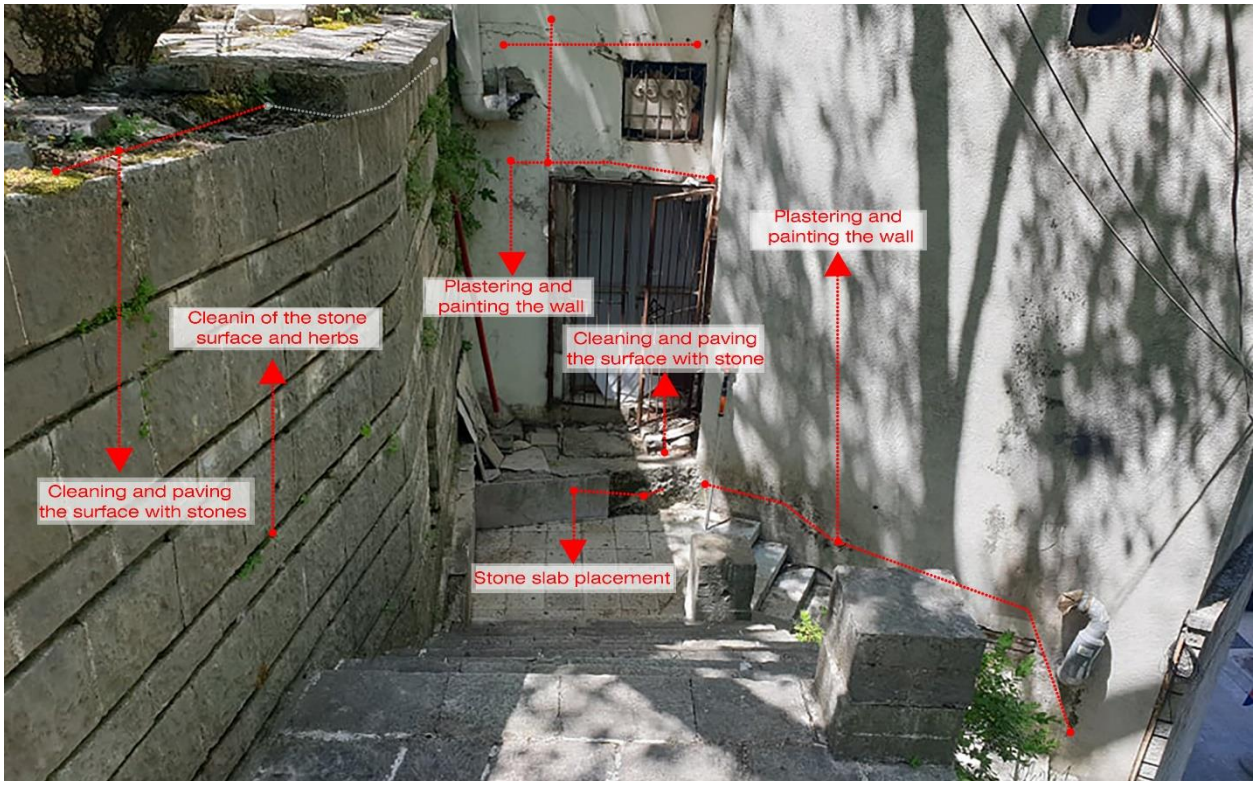


Photo of the area

The overall objectives of the project defined as Revitalization of the Çerçiz Topulli municipality and "House of Pioneer" squares, are as follows:

- design of a tourist-friendly environment, defined by thematic interpretive pathways/trails connecting the different museums, enhanced by activities experience in the study area.

- support the development of a tourism product by offering improved and/or new experiences in exploring the city of Gjirokastra as to encourage tourists to stay longer and have a more enlightening and interesting stay in Gjirokastra.

-Increasing the tourism and the economy in the project area;

- Good management and prevention from degradation of Çerçiz Topulli square, municipality square; and Square "House of Pioneer.

"Dea Studio team architects and MVM Architectural" the consultant, have been contracted by the Albanian Development Fund to develop a Detail Design for the interventions proposed in the Revitalization of the "Çerciz Topulli" square, Gjirokastra. The project implementation aims to activate the touristic potential and enable the local population to benefit from it.

Under the same project area, actually is under construction the underground parking in Çerçiz Topulli Square. The construction of the underground parking has been financed by the American Albanian Development Fund (AADF), and its main aim is to accommodate and facilitate the management of the growing tourism flows in the area, while bringing coherence in the urban places without altering the cultural heritage of Gjirokastra. While the underground parking under construction is not financed by the Bank, this underground parking is considered

an associated facility to the Cercizi Square which is currently being included in the urban upgrading investments under PIUTD and it must comply with the Safeguards Requirements.

Current construction phase of Underground Parking

Based on the last report of the supervisor of the works (Report of July 2022) the physical progress of the works is at 82% of the contract (meanwhile the monthly progress for July 2022 was reported at 5%). Taking into consideration the supervisor report of July 2022, it can be foreseen that the total amount of the works would be finalized by November – December 2022. The current status of the works for the construction of the underground parking are shown in the photographs below taken on the site visits of July and September (from left to right).

Photo July 2022, September2022

Current construction phase of underground parking

The underground parking will be a building of 3 floors. Its entrance, exit and the exchange points for the floors are created as a roundabout which is situated in the extreme east of the "Çerçiz Topulli" square perimeter wall in order to be connected directly to the vehicle access road. The roundabout is connected directly to the "Cercizi Square" as well as to the existing alley that connects the "Cercizi Square" with the "Pioneer House" square. As the "Pioneer House" square is situated below the "Cercizi Square" and the entry point of the underground parking, the actual path that connects the two squares will be modified with ramps in order to facilitate the access to "Pioneer House" square to people with disabilities. The stairs will be used to link the two squares to the North of "Cercizi Square" (near the Bazaar entry).

Inside the underground parking will be a lift scale that can be used as link stair between the two squares, which also gives access directly to the touristic info-point of Gjirokastra.

The square in front of the city hall and its accessibility is not impacted from the construction works of the Underground Parking and of the Revitalization of Cercizi Square. It is connected to Cercizi Square with stairs and in front of it is situated the Municipality of Gjirokastra.

The ADF will be required to implement Life & Fire Safety (LFS) risk mitigation measures to the underground parking currently undergoing construction. ADF will need to ensure that, prior to the underground parking being put into use, it meets the Life & Fire safety requirements of the World Bank Group Environmental Health and Safety (EHS) Guidelines and includes an emergency preparedness and response plans including a Traffic Management Plan (TMP). Prior to the underground parking being put into use, a Life & Fire Safety expert should be hired to sign-off on the construction of the underground parking for the implementation of Life & fire safety measures and the Emergency Preparedness and response plans and measures. The LFS and EPR measures and TMP should all be done in accordance with requirements of the WGB General EHS guidelines on LFS, EPR and TMP

1.3. Project description

Interventions

The intervention envisages the restoration and rehabilitation of the squares and all its urban elements, through the cleaning of the square and its reconfiguration, positioning of children's games in a sandy space and spaces dedicated to various functions. The paving of the spaces is done with stone tiles and one-color cobblestones. The bust of the bust with a massive stone wall is rebuilt and also repositioned respecting its previous position. The stone walls are cleaned of moss and the railings in front of the entrance to the building are removed. The square will be added greenery using decorative flowers & various trees such as; olives, laurel, lofata and cerasus japonica, will be paved with grass and low greenery like oleandra will be planted to give it color. Positioning of urban furniture such as; lighting, waste bins and information panels. The square will also be equipped with the necessary orientation signage, as provided in the project.

Main construction activities that will take place at the Cercizi, municipality and Pioner house square rehabilitation will consist on:

- SITE CLEANING - DISCHARGE OF WASTE - REMOVAL OF TREES AND BUSHES,

The revitalization project of "Cerciz Topulli" Square will be developed on the existing underground parking cover. This project will start the works after the works for the construction of this underground parking, positioned below the square, the object of this project, have been completed. This means that in the construction of this surface, in addition to the structure and paving, the protection against moisture and water will also be realized.

In general, it should be taken into account that during the cleaning works, those trees which do not hinder the revitalization of the square are not damaged. In cases where their removal is necessary, protective measures must be taken so that during their fall, people and surrounding objects are not damaged. For this, for trees that are over 10 m high, their cutting should be done in parts of 3 m. The part to be cut must be tied with a rope or cable and pulled from the side where the protection of personnel and objects is ensured.

Demolition of movable structures: The Contractor shall carefully remove only fences, or other structures as drawn or directed by the Supervisor. Components must be disassembled, cleaned and separated into piles and sorted. In general, demolition work should begin by removing as much unnecessary load as possible, without interfering with the basic structural elements. Careful work will be done to remove the main loads under the most difficult conditions. Other sections to be demolished will be transported by elevators, then separated and lowered to the ground under control.

- LAYING OUT THE SQUARES

Paving of square 1; 2 and 3 are how the works with stone slabs will be carried out in those spaces where we only have foot traffic. The layers used below the tiles are: 5cm thick sand, 15cm thick gravel, geotextile layer, natural soil. The paving of Cerciz Topulli square will be done with stone slabs.

- TERRITORY WORKS, ROADS, SIDEWALK, COBLING, ETC

Sub-base and road base

Subbase means the plot of land on which the base and paving of the road will be placed. The base must meet the needs and conditions of earthworks as described in the relevant item in the estimate.

The base is the bearing layer of the road. It should be worked in this way: After removing the soil to a depth of approximately 30 cm (to the sub-base), it should be filled with a gravel material of 0/32 mm to 0/56 mm. The material will be placed in layers and compacted well. The slope of at least 1% must also be maintained during the placement of the base.

- Dewatering

During the opening of the drainage, since previously there was an opening of the geological material, therefore any excavation in the drainages of this project in the revitalization of the square should be carried out in the presence of an licensed Archaeologist.

After the survey is completed, all layers are placed as before and the yard is completely restored.

- ELECTRICAL WORKS

The general objective of the project is to improve the infrastructure, to meet the growing needs for contemporary facilities.

Reference values relative to lighting are:

- Average luminous flux>1.5cd/m2
- General uniformity>0.4

Protection from direct contact is planned to be done in two ways. Automatic protection opening (ground contact) / Use of second-class protection (double or reinforced insulation)

Emergency lighting system.

The emergency lights are installed in accordance with the design planning min. LED1x11W, with internal battery (minimum autonomy 2 hours, maximum charging time 12 hours) and electronic equipment. Emergency lights are always ready in case of power failure.

- URBAN landscape and FURNITURE

Landscape - Leveling and preparation of the ground

Regardless of the leveling of the terrain, it must be prepared in such a way as to guarantee the maintenance of the landscape. In case of lack of good soil (humus), humus should be brought from another place and spread with a layer of min. 20 cm or according to the project.

Basket made of galvanized steel sheet with dimensions 28 x 44 (h), covered with pine wood slats.

Bench composed of two side parts of cast iron support, suitable for fixing to the ground by means of pins connected between them by three galvanized steel tie rods with a diameter of 12 mm, threaded at the ends with bolts.

Bicycle racks; Bicycle parking composed of galvanized steel tubular elements, placed in the side parts with a diameter of Ø 40 mm, as well as internal elements for parking bicycles with a diameter of Ø 25 mm.

- Planting and fertilizing

A specialist in the field should be consulted for planting and landscape maintenance.

The maintenance and care of the landscape is of great importance. It must be watered constantly, cut and other works needed for its maintenance

By square is meant this work: With a special machine for that work, which has rotating knives, a cut is made in the layer of grass with a depth of 1-3 cm in short intervals of 2-3 cm. Verticalization is recommended to be done at the beginning of grass growth (March/April) after the grass has been cut. This process removes the grass that has grown and does not allow water to penetrate.

The proposed interventions are expected to significantly improve the conditions in which the facilities are and positively impact the increase of the visitor's numbers. In line with national priorities, the project will offer an advanced, environmentally friendly technology that optimizes tourism in the Project area, meeting local and regional requirements and achieving sustainable economic development in the future. The project methodology and layout are selected by ensuring the lowest possible impact on the environment, sustainable development of all other economic and social sectors and increasing the quality of life of the local population.

2. Environmental And Social Impact Assessment

2.1 ESIA Purpose

This Environmental and Social Impact Assessment Report is prepared for the project "Revitalization of the "Çerciz Topulli" Square, Gjirokastra" and is part of the necessary documentation required for this project.

The ESIA study contains a description of the project and the current state of physical, biological and human environment in the project area, assessment of key environmental and social impacts, and details the measures planned to prevent, minimize, mitigate or offset these impacts.

The report was prepared in accordance to the Law No. 10431, dated 9 June 2011 "On Environmental Protection" and other normative acts of the Ministry of Tourism and Environment and is in line with the Environmental and Social Management Framework of the World Bank.

The purpose of this ESIA is to ensure that the environment and social aspects in the project area are considered among all other important issues at any stage thereof. This report is prepared based on the Albanian environmental and related World Bank Operational Manual, OP 4.01 on Environmental Assessment, aiming to identify, anticipate and assess all potential impacts in a systematic, comprehensive and objective manner.

The report aims to consider the environmental and social impacts of the proposed project in order to orient the institutions or decision-making bodies in approving the performance of the activity.

The report aims to identify negative and positive effects and to propose mitigation measures considering the economic interests of the investor as well as rational use of natural resources and coordination of the economic and social development of the area with the requirements of sustainable development. The main purposes of this assessment are to:

1. Identify potential environmental impacts in the study area during the restoration and management of the " Cercise Topolli " Square in Gjirokastra, namely: Revitalization of the Çerçiz Topulli square; Revitalization of the municipality square; and Revitalization of the Square "House of Pioneer
2. Identify possible socio-economic impacts in the study area during and after the implementation of the project
3. Propose the necessary measures to be undertaken for minimizing and preventing the effects created on the environment
4. Ensure that environmental considerations are explicitly addressed and considered in the decision-making process.
5. Protect and rehabilitate the natural environment ensuring the sustainable continuity of the biological environment comprising flora and fauna in the environments surrounding of the area taken into consideration.
6. Protect the cultural heritage and promote sustainable development.

2.2 Project Classification

The World Bank's OP 4.01 Environmental Assessment is considered to be the umbrella policy for the Bank's environmental safeguard policies. These policies are critical for ensuring that potentially adverse environmental and social consequences are identified, minimized, and properly mitigated. The WB carries out screening of each proposed project to determine the appropriate extent and type of EA to be undertaken and whether or not the project may trigger other safeguard policies. The safeguard policies, the triggers for each policy, as well as status of their relevancy for the proposed project are presented in the table 5, below:

Table 1. World Bank Environmental and Social Safeguard operational policies

Operational Policy	Triggers	Status
Environmental Assessment (OP 4.01)	If a project is likely to have potential (adverse) environmental risks and impacts in its area of influence.	Yes
Forests (OP 4.36)	Forest sector activities and other Bank sponsored interventions which have potential to impact significantly upon forested areas.	No
Indigenous Peoples (OP 4.10)	If there are indigenous peoples in the project area, and potential adverse impacts on indigenous peoples are anticipated, and indigenous peoples are among the intended beneficiaries.	No
Pest Management (OP 4.09)	If procurement of pesticides is envisaged; If the project may affect pest management in the way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk, (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and/or pose significant health or environmental risks.	No
Physical Cultural Resources (OP 4.11)	The policy is triggered by projects which, prima facie, entail the risk of damaging cultural property (e.g. any project that includes large scale excavations, movement of earth, surface environmental changes or demolition).	YES
Natural Habitats (OP 4.04)	The policy is triggered by any project with the potential to cause significant conversion (loss) or degradation of natural habitats whether directly (through construction) or indirectly (through human activities induced by the project).	No
Projects on International Waterways (OP 7.50)	If the project is on international waterway such as: any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states (or any tributary or other body of surface water that is a component of this waterway); any bay, gulf, strait, or channel bounded by two or more states or, if within one state, recognized as a necessary channel of communication between the open sea and other states-and any river flowing into such waters.	No

OP 4.11 - Physical Cultural Resources.

This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above or below ground, or under water. Their cultural interest may be at the local, provincial or national level, or within the international community.

Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people's cultural identity and practices.

Physical Cultural Resources within Environmental Assessment

The borrower addresses impact on physical cultural resources in projects proposed for Bank financing, as an integral part of the environmental assessment (EA) process. The steps elaborated below follow the EA sequence of: screening; developing terms of reference (TORs); collecting baseline data; impact assessment; and formulating mitigating measures and a management plan. The following projects are classified during the environmental screening process as Category B, and are subject to the provisions of this policy: (a) any project involving significant excavations, demolition, movement of earth, flooding, or other environmental changes; and (b) any project located in, or in the vicinity of, a physical cultural resources site recognized by the borrower. Projects specifically designed to support the management or conservation of physical cultural resources are individually reviewed, and are normally classified as Category B.

The project triggers the World Bank Safeguard Policy on Environmental Assessment (OP/BP 4.01) primarily, due to the rehabilitative nature of the proposed interventions, which will involve limited construction activities.

According to World Bank policies the project has been classified as **Category B**, meaning no significant impact to the environment is expected from the implementation of the project activities.

For activities classified as category B, based on the World Bank Safeguard Policies and national legislation, the project is subject of Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) preparation, which are tools used to identify the social and economic impacts of a project prior to decision-making. With regard to the associated facility, ADF will be required to implement Life & Fire Safety (LFS) risk mitigation measures to the underground parking currently undergoing construction and to meet the Life & Fire safety requirements of the World Bank Group Environmental Health and Safety (EHS) Guidelines. Prior to the underground parking being put into use, a Life & Fire Safety expert should be hired to sign-off on the construction of the underground parking for the implementation of Life & fire safety measures and the Emergency Preparedness and response plans and measures.

2.3 The ESIA team

The project team comprised environmental and social specialists with a combination of ESIA experience in Albania and experience in undertaking ESIAs for sustainable developments.

In addition, a series of studies were undertaken by a number of other specialists to address key issues. External specialists that have contributed to this report are listed in the table below.

Table 2. ESIA Team

No.	Name	Role
1	Adela Dako	Social Expert
2	Fatjona Levani	Environmental Expert

3. LEGAL FRAMEWORK AND SAFEGUARD PROCEDURES

2.1. Environmental related international conventions

Albania is signatory to a number of international agreements relevant to the Project. A comprehensive list of them is given below (Table 2)

Table 3: List of International Conventions and agreements signed/ratified by Albania

Convention/Agreement	Overview	Ratified	Relevance to the Project
General			
Aarhus Convention on Access to Information, Public Participation in decision-making and Access to Justice in Environmental Matters (1998)	The Convention establishes a number of rights to the public, with regard to the environment; including access to environmental information; public participation in environmental decision-making and access to justice.	26 October 2000	Arrangements are to be made by public authorities to enable the public potentially affected by the project and environmental non-governmental organizations, to comment on proposals for projects affecting the environment, or plans and programmes relating to the environment. The comments received are to be taken into due consideration in decision-making, and information to be provided on the final decisions and the reasons for it.
Climate Change			
UN Framework Convention on Climate Change (UNFCCC) (1992) entered into force in 1994	The United Nations Framework Convention on Climate Change (UNFCCC) has been crucial in addressing climate change and the need for a reduction of emissions of greenhouse gases. The ultimate objective of the Convention is to stabilize greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system.	01 December 1994	As Albania is signatory to the convention, every effort should be made to limit GHGs.
Paris Agreement at the COP21 in Paris on 12 December 2015, entered into force on 4 November 2016	The Paris Agreement builds on the Climate Change Convention to combat climate change.	21 September 2016	The project should adopt mitigation measures to minimize greenhouse gas emissions.
Kyoto Protocol	The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change; signatories commit to setting	01 April 2005	The project should adopt mitigation measures to minimize greenhouse gas emissions.

Convention/Agreement	Overview	Ratified	Relevance to the Project
	internationally binding emission reduction targets1.		
Water			
Convention on the Protection and Use of Trans boundary Watercourses and International Lakes (1992)	Avoid or minimize adverse effects on water resources and water quality.	5 January 1994	The study area is situated in the Seman River watershed basin.
Biodiversity			
Convention on Biological Diversity (CBD) (1992)	Avoid or minimize adverse effects on important habitats and species, internationally and naturally designated nature conservation sites; conservation, sustainable and equitable use of biodiversity.	5 April 1994	The Convention requires, under Principle 17, that ESIA shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.
Convention on the Protection of Wild Flora and Fauna and Natural Habitats in Europe (Bern Convention) (1976)	The Convention aims to ensure the conservation of wild flora and fauna species and their habitats. Special attention is given to endangered and vulnerable species, including endangered and vulnerable migratory species2; to avoid or minimize adverse effects upon important habitats and species, internationally and naturally designated nature conservation sites.	2 March 1998	There are IUCN protected areas in the Study area, including Category II (National Park).
Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (1979)	Avoid or minimize adverse effects upon migratory species	1 September 2001	The Project Area includes protected sites that contain globally vulnerable species of birds as well as migratory birds. There are specific resolutions and instruments such as species action plans under this convention that apply to Albania.
Agreement on the Conservation of African-Eurasian Migratory Water birds (1995)	African-Eurasian Migratory Water birds Agreement (AEWA) covers 254 species of birds ecologically dependent on wetlands for at least part of their annual cycle. All AEWA species cross international boundaries during their migrations and require good quality habitat for breeding as well as a network of	1 September 2001	Species and habitats protected by this agreement may be present in the study area. Mitigation measures for the protection of flora and fauna have been identified in the ESIA.

1 https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol

2 https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104

Convention/Agreement	Overview	Ratified	Relevance to the Project
	suitable sites to support their annual journeys. Avoid or minimize adverse effects upon migratory water bird species.		
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1975)	CITES is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.	27 June 2003	Threatened and endangered species and their habitats have been identified in the study area. Mitigation measures for the protection of flora and fauna have been identified in the ESIA.
Cultural Heritage			
Convention on the Protection of the World Cultural and Natural Heritage (1989)	Avoid adverse effects upon Albanian and World Cultural Heritage sites; minimize adverse effects on unknown and intangible cultural heritage sites, material assets and other infrastructure.	10 July 1989	Cultural and natural heritage sites have been identified in the Study area. Mitigation measures for the protection of cultural heritage have been proposed.

2.2. Social related international conventions

Albania is also signatory to a number of social related international agreements relevant to the Project. A comprehensive list of them is given below (Table 3)

Table 4: Social related International Conventions and agreements signed/ratified by Albania

Convention/Agreement	Overview	Ratified	Relevance to the Project
Cultural Heritage			
Convention on the Protection of the World Cultural and Natural Heritage (1989)	Avoid adverse effects upon Albanian and World Cultural Heritage sites; minimize adverse effects on unknown and intangible cultural heritage sites, material assets and other infrastructure.	10 July 1989	Cultural and natural heritage sites have been identified in the Study area. Mitigation measures for the protection of cultural heritage have been proposed.
Labor			
ILO Convention 29 Forced Labour Convention (1930) and ILO 105 Abolition of Forced Labour Convention (1957))	Its object and purpose are to suppress the use of forced labour in all its forms, irrespective of the nature of the work or the sector of activity in which it may be performed.	25 June 1957 27 February 1997	Local workers will be employed on the project. The project should adopt monitoring measures to ensure compliance with the convention.
ILO Convention 87 Freedom of Association and Protection of the Right to Organize (1948)	Protects the rights of workers and employers to join organizations of their own choosing without previous authorization.	3 June 1957	Local workers will be employed on the project. The project should adopt monitoring measures to ensure compliance with the convention.
ILO Convention 98 Right to Organize and Collective Bargaining	The convention provides for workers to be able to join unions and engage in collective bargaining.	3 June 1957	Local workers will be employed on the project. The project should adopt monitoring

Convention/Agreement	Overview	Ratified	Relevance to the Project
			measures to ensure compliance with the convention.
ILO Convention 100 Equal Remuneration Convention (1951)	Each member shall, by means appropriate to the methods in operation for determining rates of remuneration, promote and, in so far as is consistent with such methods, ensure the application to all workers of the principle of equal remuneration for men and women workers for work of equal value.	03 Jun 1957	Local workers will be employed on the project. The project should adopt monitoring measures to ensure compliance with the convention.
CESCR – International Covenant on Economic, Social and Cultural Rights	free human beings enjoying freedom from fear and want can only be achieved if conditions are created whereby everyone may enjoy his economic, social and cultural rights, as well as his civil and political rights	04/10/1991	Proposal to be inclusive of all social groups without discrimination.
UNESCO Convention for Safeguarding the Intangible Cultural Heritage (2003)	Avoid adverse effects upon Albanian and World Cultural Heritage sites	04/04/2006	Cultural and natural heritage sites have been identified in the Study area. Mitigation measures for the protection of cultural heritage have been proposed.

Other International laws, regulations, guidelines applicable on cultural heritage places:

- International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter) (1964) - Charter for the Conservation of Historic Towns and Urban Areas (The Washington Charter) (1987)
- International Cultural Tourism Charter - Managing Tour-ism at Places of Heritage Significance (1999)
- Principles for the Preservation of Historic Timber Structures (1999)
- Charter on the Built Vernacular Heritage (1999)
- ICOMOS Charter – Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage (2003)
- ICOMOS Charter on Cultural Routes (2008)
- ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites (2008)
- The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas (2011)
- Venice Charter on Conservation and Restoration (1964) -Nara Document on Authenticity (1994)
- Burra Charter for Places of Cultural Significance (1979, revised in 1999)

- Resolutions of the International Symposium on the Conservation of Smaller Historic Towns, at the 4th ICOMOS General - Assembly (1975)
- Declaration of Rome (1983)
- The Declaration of San Antonio (1996)
- Principles for the recording of monuments, groups of buildings and sites (1996)
- The Quebec Declaration on the Preservation of the Spirit of the Place (2008)
- Lima Declaration for Disaster Risk Management of Cultural Heritage (2010)
- The Paris Declaration On heritage as a driver of development (2011)
- Florence Declaration (2014)
- Delhi Declaration on Heritage and Democracy (2017)
- Athens Charter for the Restoration of Historic Monuments (Athens Conference, 21-30 October 1931)
- Final Report of the Meeting on the Preservation and Utilization of Monuments and Sites of Artistic and historical Value held in Quito, Ecuador, 1967
- Declaration of Amsterdam Congress on the European Architectural Heritage, 21-25 October 1975)
- European Charter of the Architectural Heritage (Council of Europe, October 1975)

International laws, regulations, guidelines applicable on museums

Recommendation concerning the Protection and Promotion of Museums and Collections, their Diversity and their Role in Society Adopted by the General Conference at its 38th Session Paris, 17 November 2015

- Convention for the Protection of the World Cultural and Natural Heritage (1972)
- Convention for the Safeguarding of the Intangible Cultural Heritage (2003)
- Convention on the Protection and Promotion of the Diver-sity of Cultural Expressions (2005)
- Recommendation concerning the Most Effective Means of Rendering Museums Accessible to Everyone (UNESCO, 1960)
- Rules for Functions in Historic Buildings – Caterers (DEMHIST,2007)
- Profile for a Historic House Museum Curator (2008)
- Statement of Principles of Museum Documentation (CIDOC, 2012)
- The CIDOC Conceptual Reference Model (CIDOC, 2011)
- Lightweight Information Describing Objects (CIDOC, 2010)

- The CIDOC Conceptual Reference Model (CIDOC, 2001)
- International Core Data Standards for Ethnology/Ethnography (CIDOC, 1996)
- International Guidelines for Museum Object Information: the CIDOC Information Categories (CIDOC, 1995)
- Recommendations for Identity Photography (CIDOC Fact Sheet 3, 2010)
- Labelling and Marking Objects (CIDOC Fact Sheet 2, 1993)
- Registration Step by Step: When an Object Enters the Museum (CIDOC Fact Sheet 1, 1993) - CIDOC Core Data Standard for Archaeological Objects (1992)

2.3. Environmental legislation in Albania

Law No. 10431 dated 9 June 2011 "On Environmental Protection" is the main law in the field of environment is the Law No. 10431, dated 9 June 2011 "On Environmental Protection". This law establishes national and local policies on environmental protection, requirements for the preparation of estimates of environmental impact and strategic environmental assessment, requirements for permitting activities that affect the environment, the prevention and reduction of environmental pollution, environmental norms and standards, environmental monitoring and control tasks of state bodies in relation to environmental issues, the role of the public and sanctions imposed for violation of the Law.

Other pieces of environmental legislation, related to this ESIA are:

Table 5. Environment Legislation in Albania

Legislation	Overview of main issues
Law No. 10440, dated 7 July 2011 "On Environmental Impact Assessment",	Law sets out the rules, procedures and deadlines for identifying and assessing the impacts of direct and indirect environmental projects or activities. The law defines the steps necessary to implement ESIA procedures: submission of application, preliminary review, selection and classification criteria, hearings and public consultations, access to information, tasks and rights of other bodies. The law also provides the list of activities that should be subject to the Profound and Preliminary ESIA. Some articles of the law were amended by Law No. 12/2015 on Amendments to the Law No. 10 440, dated 07.07.2011, "On environmental impact assessment".
Law No. 10448, dated 14.7.2011 "On Environmental Permits"	Law aimed at preventing, reducing and maintaining control of pollution caused by certain categories of activities, in order to achieve a high level of environmental protection in general, human health and quality of life. This law defines the rules for allowing the development of some activities that cause environmental pollution in Albania. Pursuant to Law No. 60/2014, Appendix 1 of the Law No. 10 448, dated 14.7.2011, "On environmental permits" has changed.
Law No. 162/2014, dated 04.12.2014 "On Protection of	The aim of this law is improving public health and ensuring a high level of environmental protection through integrating ambient air quality issues in other policies as well as establishing requirements on its monitoring, assessment and

ambient air quality"	planning and promoting international cooperation to this end. The Law consists of 6 Chapters: General provisions (I); Environmental air quality (II); Air emissions (III); Trans boundary air pollution (IV); Offences (V); Transitional provisions (VI). This Law fully complies with Directive 2008/50/EC of the European Parliament and of the Council on ambient air quality and cleaner air for Europe.
Law No. 10463, dated 22.09.2011 "On integrated waste management", as amended by the law 156/2013,	Law aims to ensure the protection of environment and human health against pollution and damage resulting from solid waste. To this end, it sets out rules governing the environmental treatment of solid wastes at every stage: creation, collection, separation, transportation, recycling, processing and disposal. The Law further aims at waste reduction and the reduction of the hazardous and dangerous impact of waste.
DCM No. 686 (29.07.2015) Amended "On the rules, responsibilities, timelines for the EIA procedure ..."	The act sets specific and detailed rules for the procedure, framework and structure of the ESIA report and appendices, timeframe of the procedure, application for approval, final decision and impact monitoring and reporting during the project execution.
DMC No. 247 (30.04.2014) "On the determination of rules, requirements and procedures for public information and involvement in the environmental decision-making process"	The act sets specific requirements for consultation with stakeholders, focusing on consultation with local communities. It also gives details on the procedure to be followed, timeline and media publishing.

In addition to the above-mentioned legislation, the preparation of the ESIA is based on the following legislation:

- Law No. 81/2017, dated 18.05.2017 "On Protected Areas"
- Law No. 9774, dated 12.07.2007 "On the Assessment and Management of Environmental Noise".
- Law No. 9587, dated 20.07.2007 "On Protection of Biodiversity".
- Law No. 9385, dated 04.05.2005 "On Forests and Forest Service".
- Law No. 9115, dated 24.07.2003 "On Environmental Treatment of Polluted Waters.
- Law No. 8897, dated 2002, "On protection of air from pollution".

- DCM No. 417, dated 25.06.2014 "On approval of the Environmental Permit fees"
- DCM No. 227, dated 30.04.2014 "On establishing the rules, requirements and procedures for informing and involving the public in environmental decision-making".
- DCM No. 47, dated 29.01.2014 "On defining the regulation for the organization and functioning of the National Environment Agency and Regional Environment Agencies"
- DCM No. 48, dated 29.01.2014 "On the creation and manner of organization of the state Inspectorate on Environment, Forestry and Water administration"
- DCM No. 175, dated 19.01.2011 "On approval of the national strategy and waste management plan of the national waste management"
- DCM No. 587, dated 7.07.2010 "On the monitoring and control of noise levels in urban and tourist centres".
- DCM No. 853, dated 28.12.2005 "On approving the list of hazardous wastes, residues and other wastes to be imported for purposes prohibited storage, disposal and destruction".
- DCM No. 248, dated 24.04.2003 "On Approval of the Interim Standards on Air Emission and their implementation".
- DCM No. 435, dated 12.09.2002 "On Approval of the air emission norms in the Republic of Albania".

2.4. Social legislation

2.4.1 Legislation on territory planning, cultural heritage and chance finds

Projects for all types of building above ground and underground and engineering infrastructure projects across the entire country are based on standards and technical requirements of legal acts in force.

Law no. 120/2020

"On some changes and additions to law no. 8402, dated 10.9.1998, for the control and discipline of construction works" amended

LAW No. 8378, dated 22.7.1998 "Road code of the Republic of Albania"

(amended by: laws no. 8738, dated 12.2.2001, no. 9189, dated 12.2.2004, no. 9808, dated

24.9.2007; decision of the Constitutional Court no. 12, dated 14.4.2010; laws no. 10 488, dated 5.12.2011, no. 175/2014, dated 18.12.2014, no. 28/2019, date

8.5.2019, no. 63/2021, dated 7.5.2021) (updated).

Law No. 107/2014 "On territory planning and development" aims at ensuring the sustainable development of the territory through the rational use of land and natural resources; assessing

the actual and future potential of the territory development on a local and national level by balancing natural resources with economic demand and public and private interests. It also aim to coordinate the effort for: i) conservation of natural resources such as land, air, water, forests, flora and fauna; ii) creation of territories eligible for functional construction; iii) promoting the economic, social, and cultural life in local and national level; iv) safeguarding the resources of adequate supplies; v) providing for life safety, national security, public order and public health; and vi) promoting the balanced regional development to ensure sustainable distribution of population. The Law is implemented by:

- Regulation No. 408 date 13.5.2015 approving the territory planning and development regulation.
- Regulation 686 date 22.11.2017 on the territory planning.
- Regulation No. 739 date 13.12.2017 amending and supplementing Regulation No. 725 date 2.9.2015 on the organization and functioning of the Territory Development Agency.
- Regulation No. 427 date 8.6.2016 on the organization and functioning of the National Agency of Territory Planning.
- Amended by
- Law No. 28/2017 amending and supplementing Law no. 107/2014 on the territory planning as amended.

Law No. 27/2018, dated 17.05.2018 "On Cultural Heritage and Museums" is the primary legal framework governing the management of tangible and intangible cultural heritage in Albania. The Law aims to promulgate and protect the cultural heritage in the territory of the Republic of Albania.

This Law, in relation to the field of territorial planning and development, defines inter alia:

- the cases of construction in public or private properties, which must obtain written approval from the National Council of Restorations and the National Council of Archeology;
- cases of excavations, restorations, uses and any other action in the cultural monuments, as well as any alteration on the ground under their protection, to be done with the authorization of the National Council of Restoration, Archaeological Institute, Archaeological Service Agency;
- the rules and types of constructional interventions in the Museum Areas, museum ensembles, historical centers, archaeological parks.

According to the law, if anything unusual will be found during the digging and excavation process the contractor has to stop immediately works, urgently inform the local authorities, the Culture Monuments Institute and the Ministry of Culture. They will send archaeologists

and field specialists in order to check and evaluate the supposed archaeological objects and the works will restart only if the Culture Monuments Institute will issue the official permit.

Other important pieces of legislations are:

- Decision of Councils of Ministers No. 426, date 13.7.2007 "On the approval of the Albanian restoration charter".
- Decision of Councils of Ministers No. 619, date 07.07.2015 "On the approval of the Regulation for the Administration of the Museum City of Gjirokastra"

2.4.2 Labour related legislation

The Labour Code of the Republic of Albania: Law No. 7961, dated 12.07.1995, amended by Law No. 8085, dated 13.03.1996, Law No. 9125, dated 29.07.2003 and Law No. 10053, dated 29.12.2008 "Labour Code of the Republic of Albania" regulates relations between employers and employees. The law reflects Constitutional principles, as well as the basic principles of international conventions on labour, trade unions, prevention of discrimination, etc. The code is widely considered to be a fair and effective law.

The Labour Code provides for basic rights regarding the prohibition of compulsory labour, prohibition of discrimination, the freedom to join a trade union and collective bargaining.

The Labour Code provides general rules for the employee's obligations and responsibilities, as well as the prohibition of competition after the termination of labour relationship. Also, the employer's general obligations are specified in accordance with article 32-38 of this law. Safety and health protection are the responsibility of employers.

Labour Code also stipulates the duration of work and breaks, including daily and night work and extra payment; the weekly working time and holidays, the maximum duration of extra hours and compensation.

The Labour Code provides for special protection for juveniles and women, special provisions on payment and minimum wage. A separate chapter (XIV) provides rules for the termination of the work relationship. Also, general consideration is provided on the protection of the right to work and the right to strike.

Law "On health and safety in the workplace". On 22.12.2016, the Albanian Parliament approved the law no. 135/2016 "On health and safety in the workplace, emergencies and the salvation in the mining activity and in underground works of hydropower activities". Law 135/2016 was published in the official gazette no. 265, dated 12.01.2017 and entered into force 15 days after its publication.

Law 135/2016 defines the general principles governing health and safety at work in the mining activities and underground works of hydropower activities, and guarantees the safety and protection of the health of employees and other persons working in these sectors.

Pursuant to this law entities engaged in activities, studies or projects in the mining sector and underground works of hydropower activities are obliged to fulfill the requirements of safety in the workplace provided in the law and the secondary legislation.

2.4.3 Legislation on Private Property and Expropriation

Expropriation process. The legislation governing the expropriation process for the private properties is described below:

- Law no. 11/2020, dated 05.03.2020 "On some changes and amendments on Law no. 8651, dated 22.12.1999 'On expropriation and temporary use of private property for public interest.
- Law no. 8651, dated 22.12.1999 'On expropriation and temporary use of private property for public interest', as amended and;
- Decision of Council of Ministers (DCM) no. 126, dated 23.3.2000 'On the composition and procedures of special committees for expropriation',
- DCM no. 127, dated 23.3.2000 'On the content and procedures for submission of request for expropriation and temporary use of private property for public interest',
- DCM no. 138, dated 23.3.2000 'On the technical criteria for the evaluation and calculation for compensation of expropriated properties, devaluated properties and third party rights(as amended)';

Under Law no. 8561, dated 22.12.1999 on expropriation and temporary use of private property for public interest provides for the State's right to expropriate or take private property for temporary use for purposes of a "public interest" that cannot be achieved or protected in another manner. The State must compensate the value of land expropriated and any reduction in the value of property caused to properties bordering with the expropriated property.

Under the Expropriation Law, the expropriation value (compensation) is calculated by a special committee based on the assessment of the properties subject to expropriation (by considering their initial value, depreciation, destination, location, indexes of the market price changes and of the currency). A Decision of the Council of Ministers no. 138 dated 23.03.2000 explains the evaluation methodology of the land subject to expropriation procedures is defined (in ALL/m2) by decisions of the Council of Ministers approving the price reference according to Law no. 9235, dated 29.07.2004, on restitution and compensation of properties.

The Republic of Albania Law on Expropriation and Temporary Takings of the Private Property for Public Interest (passed in 1999, amended in 2016) guides land acquisition and serves as a general framework for expropriation in the Republic of Albania.

The Law does not use the term „involuntary resettlement", which is used in the relevant World Bank policy documents, but instead uses the term expropriation.

This law enables government institutions, and to a certain extent private legal person to acquire private property for projects that are deemed to be of national and/or local interest,

while protecting the interests of all project affected persons with legal title, whose assets are to be expropriated. The law also enshrines the principle of fair compensation.

The most important features of the Law on Expropriation are:

• The Law provides an exhaustive list of what is deemed as public interest (Art. 8/ç of Law "On Expropriation...)";

• The beneficiary subject in the expropriation process will be the relevant Municipality of each city (Art. 9 of the Law "On Expropriation…)"

• The procedure will be considered complete, when the owners through a statement approve the transaction of the property in favor of the Government;

• The decision of expropriation (for owners not agreeing to the expropriation) will be approved by the Council of Ministers and will enter into force immediately, and published in the Official Journal;

• The affected owners have access to judicial procedures if amicable settlement on the compensation is not reached. However, if there is no contest, the decision of the Council of Ministers will be final and binding.

• The devaluation of property. Compensation is due in cases when, although there is no land take but the assets or access to assets, and livelihood is affected (land is devaluated and the livelihood has deteriorated as a result of the project).

The estimation of the value is based on the type of land to be expropriated (agricultural land, woodland, meadow etc.); the characteristics for the estimation are different (i.e. in case of the agricultural land: the land category; the range from the urban area; situation under or above the water level etc.).

The Civil Code establishes the obligation to compensate for property damage which consists of the value of the damage caused and the expected profit (Art. 640).

Law on Cadastre: The new Law on Cadastre, or Law no.111/2018 on "Cadaster" ("the Law") adopted by the Albanian Parliament on 2 February 2019, entered into force on 21 March 2019. It supersedes Law no.33/2012 dated 21 March 2012 on "Registration of Immovable Properties".

The Law governs the registrations of immovable property transactions that occur after its entry into force. In addition, it introduces certain new principles on registration process, rights over immovable properties and related documents.

Mandatory notification and registration of public authorities' deeds. The Law requires that all deeds related to immovable properties must be registered and undergo a preliminary registration. Such preliminary registration is initiated with the online declaration of deeds by courts, notaries, bailiffs and other state authorities with the digital national cadaster. The online declaration must be done upon formalization of the deed. Any subsequent deed or transaction for disposal of the immovable property which lacks a chronological sequence and creates an overlap will be refused by the Agency. Further to the online declaration, the

abovementioned authorities must submit hard copies of such deeds to the Regional Cadaster Directorate within 10 days from the formalization.

Extension of the mortgage over the land into the new building. The mortgage over the land may be extended only to a future building or parts of it that are free of any preliminary transfer agreement. In addition, the land owners are not allowed to transfer their rights over their future parts of a building in case a mortgage is registered over the land. The above provisions aim to improve the practice and solve all disputes arising so far with regard to the extension of mortgage.

Law "On the completion of the ownership transitional processes in the Republic of Albania". The Law 20/2020 is published on the Official Gazette no. 70, dated 22.04.2020. The purpose of the Law 20/2020 is to establish a simplified and harmonized legal framework for the finalization of the transitional registration procedures of the state and private land consisting of:

- The registration of ownership titles of agricultural land;
- The finalization of the transfer to their users of the ownership of agricultural land previously owned by cooperatives and agricultural enterprises;
- The legalization and registration of illegal constructions, constructions without an ownership title and yards granted for use;
- The specification of ownership rights of individuals and entities, which have benefited from the Law no. 7665, dated 21.01.1993 "On development of economic areas with touristic priority", repealed;
- The finalization of the inventory update process of public real estate; Handling of the problems related to the overlapping of ownership immovable property titles.

2.4.4 Legislation on the Access to Information

Law No 119/2014 "On the Right to Information" regulates the right of access to information being produced or held by public sector bodies. The rules contained in this law are designated to ensure the public access to information, in the framework of assuming the rights and freedoms of the individual in practice, as well as establishing views on the state and society situation. This law aims also at encouraging integrity, transparency and accountability of the public sector bodies

Law No. 8672, dated 26.10.2000, "On the Aarhus Convention Ratification on public right to information, to participate in decision-making and to have access to justice in environmental matters". The international agreements ratified by the Republic of Albania, pursuant to the Constitution, occupy a privileged rank at the domestic legal order. An international agreement ratified by law of the parliament prevails over the laws of the country that are incompatible with it, and it is directly applicable, except the case when it is not self-executing and its application requires the adoption of a law. In the field of environment, the major part of the international treaties is not self-executing and require positive measures in order to be properly implemented at the domestic level.

2.5. World Bank environmental and social safeguard policies

The project is financed by the World Bank and is subject to Environmental and social safeguard policies the environmental and social safeguards as defined in the Bank's Operational Procedures (OPs) will be respected for the purposes of this project implementation.

World Bank classifies its projects into four Environmental Assessment categories according to the likely impacts on the environment they will have. This classification is as follows (only main conditions mentioned):

1. *Category A*: A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts.
2. *Category B*: A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects.
3. *Category C*: A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further Environmental Assessment action is required for a Category C project.
4. *Category FI:* A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts; this case, in any way, is not applicable to the PIUTD project as was discussed internally.

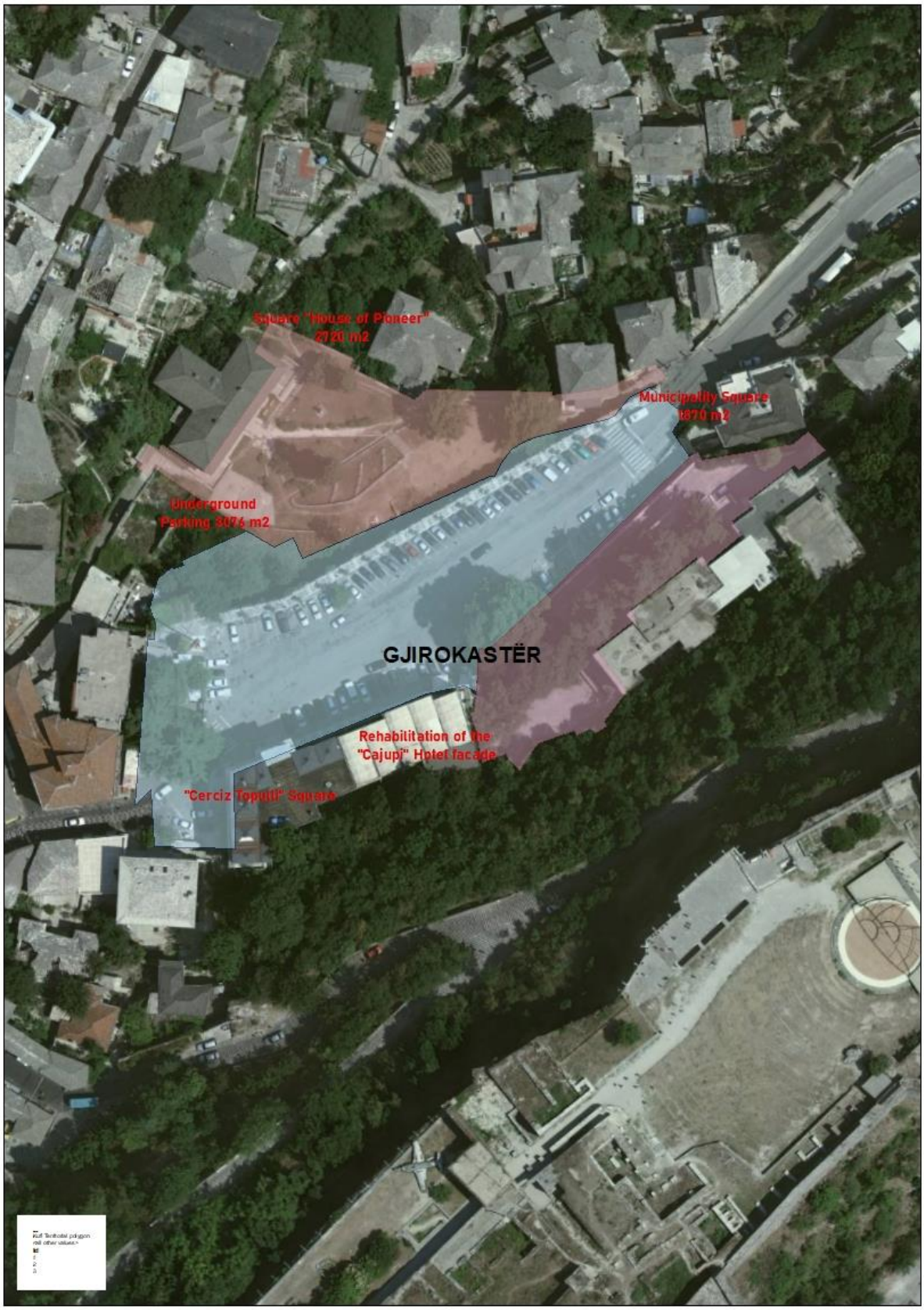
This Project has been categorized as Category B project.

4. ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

3.1. Social baseline

3.1.1. Project Area of influence

Located in the south of Albania, beside its key geographical position as the south door of the country, the city is an important administrative and economic center for the region and in the same time a communication node between the dynamic coastal area and the inner surroundings. Gjirokastra is also one of the main heritage areas of the country with 156 monuments of 1st category in the city and its surrounding. The historical center of the city was declared as a "Museum City" since 1961 and as such was protected by the government of Albania. In 2005, Gjirokastra was inscribed as a UNESCO World Heritage Site in recognition of the importance of its architecture and unique values. The historical center today contains 72 monuments of 1st category and 327 monuments of 2nd category, while there are more than 1200 historical buildings in total. Together with its built heritage assets Gjirokastra certainly has an untapped potential in showcasing its multi-layered history through exposed artefacts and stories. A potential that is not fully realized until today.



The municipality of Gjirokastra is located in southern Albania. The present Gjirokastra municipality was formed in 2015 according to the local government reform (Law 115/2014 "On Territorial and Administrative Division of Local Government Units in the Republic of Albania").

The Municipality was formed by merging the previous Municipality of Gjirokastra and the communes of Cepo, Lazarat, Picar, Lunxhëri, Odrie and Antigonea. The area of the Municipality is 469.25 km² and 38 villages are part of it. The seat of the municipality is the city of Gjirokaster. Gjirokastër city lies in a valley between the Mali i Gjerë (wide mountain) and the river Drino, at 300 metres above sea level.

Figure 1. *Map of Gjirokastra Region*

3.1.2. Population

Gjirokastër by the population is the largest municipality in the Gjirokastër District (Prefercture). According to INSTAT, based on the 2011 Census, Gjirokastër Municipality was estimated to have 28,673 residents (a density of 53.91 persons/km2) living in 6,919 housing units, while the county as a whole has a total of 72,176 inhabitants. The population of the municipality includes the urban and rural population in its Administrative Units such as: Antigonë; Cepo; Lazarat; Lunxhëri; Odrie and Picar.

The city of Gjirokastër itself has a resident population of 19,836 inhabitants which are a predominantly urban population. In the municipality, the population was spread out with 16.76% from the age 0 to 14, 69.24% from 15 to 64, and 13.98% who were 65 years of age or older. As far as the city itself is concerned, the population was spread out with 16.93% from the age 0 to 14, 70.27% from 15 to 64, and 12.78% who were 65 years of age or older.

Statistics show that immigration phenomenon involved some important parts of population of the region. According to INSTAT during the period 1989-2001, migrants that left the country consist in 11.0% of population in 1989, while immigrants consist in 25.3% of population in our region in 1989. According to the assessment of the survey's data, situation result to be really critical. After 1990, round 50 % of population and 45.4% of families in 1989. It has a negative migrating rate for the mountainous communes of the region (with small surface of agricultural land, around 0.27 ha/inhabitants, with problems in infrastructure etc). The most affected communes who have a negative migratory balance are: Buz (-46.3 ‰), Lopes, Kurvelesh Suke, Deshnice, etc, known as mountainous areas, and problematic infrastructure, etc. After 1990, from the district of Gjirokastra has immigrated 55.7% of its total population and about 40.0% of families. Assessment of survey data show that in Tepelenë District, population is involved more in internal migration toward the metropolis areas such are Tiranës, Sarandës, Vlorës etc. This phenomenon is noticed have high levels in those areas of the region where are present ethnic and cultural minorities of Greek and Vlahos population (Duri, 2016).

3.1.3. Infrastructure

Gjirokastra is accessible only by national road in a very good condition. The main access road to Gjirokastra town, linking it also with neighbouring municipalities of Tepelene, Libohove and Dropull as well as the local settlements, is made from the highway SH4. This national highway links the Municipality from north with the road SH8 coming from Tirana, from the south with the road towards Saranda and more in south with border-cross point of Kakavia with Greece. Another access road construction, through Kardhiqi valley and Kalasa valley, has begun and is planned to link Gjirokastra and Saranda by shortening the travelling distance and time.

The distance from Tirana Airport to Gjirokastra is 218 km, from Saranda to Gjirokastra 55 km, from Vlora to Gjirokastra 126 km and from Permet to Gjirokastra 59.4 km, while the distance from Gjirokastra to Ioannina Airport (Greece) is 83.3 km.

The local settlements (villages) are linked with paved roads but generally the local roads are in a very bad condition, most of them are very narrow dirt roads. The main cultural heritage sites in the nearby area (Antigonea Archaeological Park and the Church of Saint Mary "Labova e Kryqit) are accessible by asphalted roads.

Gjirokastra Municipality has an intercity transport with the urban centres of Tirana, Saranda, Vlora, Korce and Permet. According to General Local Development Plan for Gjirokastra the bus service links Gjirokastra town with the following local destinations to: Lazarat, Sofratike, Zagori, Libohove, Polican and Kakavije.

According to the General Local Plan (Territory Development Plan) for Gjirokaster Municipality, the total population, as referred by new administrative composition and INSTAT, is 28,673 in a total area of 469.25 km² which is 39,73% of total population of Gjirokasta district (Prefecture). City of Gjirokaster has a population of 19,836 which is 69.18% of the municipality.

3.1.4. Economic Development and Employment

In 2017, according to INSTAT there were 2,122 registered businesses in the Municipality of Gjirokastra, out of which 62.5% were businesses relying on services (trade, transport and

storage, accommodation and food service, information and communication, other services). 30% of registered businesses were engaged into agriculture, forestry and fishing businesses and 7.5% in industry and construction. According to General Local Development Plan for Gjirokastra referring to INSTAT data, the weight of these sectors in 2011 was respectively 66.7%, 24.6% and 8.7%, showing a 5.4% increase of the agriculture sector in 2017 compared to 2011.

Several nationally renowned companies have their headquarters or location of their production units in Gjirokastra such as Gea sha, Elka sh.a, Marmo shpk,, Eurobeton, Gjirofarm, Tecnotrof, Aliko ndertim shpk, Argjiro Building, Kozi fason, Linekx. These companies operate in different sectors such as agro-processing, construction, Textile and Façon industry, etc., employing between 100 to 400 employees in each of these businesses.

Rural areas of the Municipality play a major role in socio-economic development with livestock and agriculture being the main economic activities. The main agriculture products are fruits and vegetables and recently there is an increase of vineyards in the areas of Picari and Lunxheria. The rural area is known for its cattle breeding and qualitative livestock products. Livestock farming in Gjirokastra Municipality is based in small family farms. Tourism services have increased significantly, especially in the city of Gjirokastra, following the year 2005 when Gjirokastra was inscribed as a UNESCO site.

3.1.5. Culture and Religion

Gjirokastra was founded in the 3rd century BCE as a fortified settlement of the kingdom of Epirus, one of several Greek city-states in the area. In the 2nd century BCE, the Romans conquered the area, destroying the hilltop town and fort; new fortifications were not built until the 6th century.

(Lamprakos, 2010). The town survived through the medieval period under the rule of feudal families, especially the Zenebishi family. The Ottomans conquered Albania in the early 15th century and Gjirokastra, with its strategic location and rich agricultural hinterland, was made a provincial capital. The majority of inhabitants converted to Islam - a process facilitated by the Bektashi dervishes who accompanied the Ottoman troops (the order had a special link to the elite Janissary corps (Lamprakos, 2010).

The city's name has either legendary or more mundane origins. In historical sources, the city of Gjirokastra is mentioned for the first time in 1336 by the Byzantine emperor Johan VI Kantakuzeni in the form of "Argjiropolene", so the field of Argur or Argurinëve. In the XII - XIV century, according to archaeologists, the castle of Gjirokastra takes full shape, around it rise the dwellings and neighborhoods of the town (Nika, 2020).

The linguistic form "gjino + kastër", that is, "Gjino Castle", is formed in a pure Arbërian environment. Gjirokastra, consequently the principality of Gjin Zenebish, replaced Adrianople (Dryinopolis), which from the sixth century onwards, has been the capital of the twenty-fourprovinces of Southern Albania (Nika, 2020).

The culture of the Gjirokastra district is characterised by a wealth of folk costumes, musical traditions and regional customs. It is famous for wood and stone work, as well as for its dairy

products and raki (an alcoholic drink) production. Gjirokastra lace is famous throughout the country and, like many of these crafts, skills are passed down from generation to generation. Gjirokastra is also known for the Iso-Polyphonic Music. Rendered mainly by male singers, the music traditionally accompanies a wide range of social events, such as weddings, funerals, harvest feasts, religious celebrations and festivals such as the Albanian folk festival in Gjirokastra. Albanian polyphonic music has been UNESCO-recognized since 2005 as an "intangible cultural heritage." There are several major cultural annual events organized in Gjirokastra; but mostly they take place in the Castle or at "Qafe e Pazarit" during the tourist season. The highlight of these cultural activities remains the Albanian folk festival held every 5 years in the Castle.

The World Heritage property Museum-City of Gjirokastra was inscribed on the World Heritage List in 2005. It is a compact city with a Historical Center made by stone building one above other. A good part of the alleys are pedestrian routes because are conceived on another era. In the characteristics of these ensembles a crucial role plays the configuration of the terrain on which they arise. The most picturesque ensembles we can find in Gjirokastra are: "Pazar i Vjeter", quarters of "PIIake" and "Hazmurat" Road of "Qafa Pazarit" is part of the Museum Area, of first category, with a width of 5-6m, high sloped and paved with stone.

The Albanian legislation defines the objects of Cultural Heritage as follows: a) 'Archaeological Centre' is the area where monuments and archaeological objects on and under the ground are preserved; b) 'Historic Centre' is the urban or rural ensemble of historic and cultural values under protection of the state; c) 'Museum Town' (or 'Museum City') is the urban Centre protected by the state for its historical and cultural value.

Monuments are categorized according to the following criteria:

- 1st Category monuments are "constructions of distinguished values and special importance to the cultural heritage. They are preserved in the entirety of their architectonic and technical components".

- 2nd Category monuments are "all the buildings located within the museum areas and those located within the protected areas of the Museum Cities in the Historic Centres not defined as monuments of 1st category". Although according to Albanian law, "2nd category monuments are those constructions which represent salient values, mainly externally", in Gjirokastra and Berat, 2nd category monuments are all the constructions in the historic centres which are not defined as 1st category monuments.

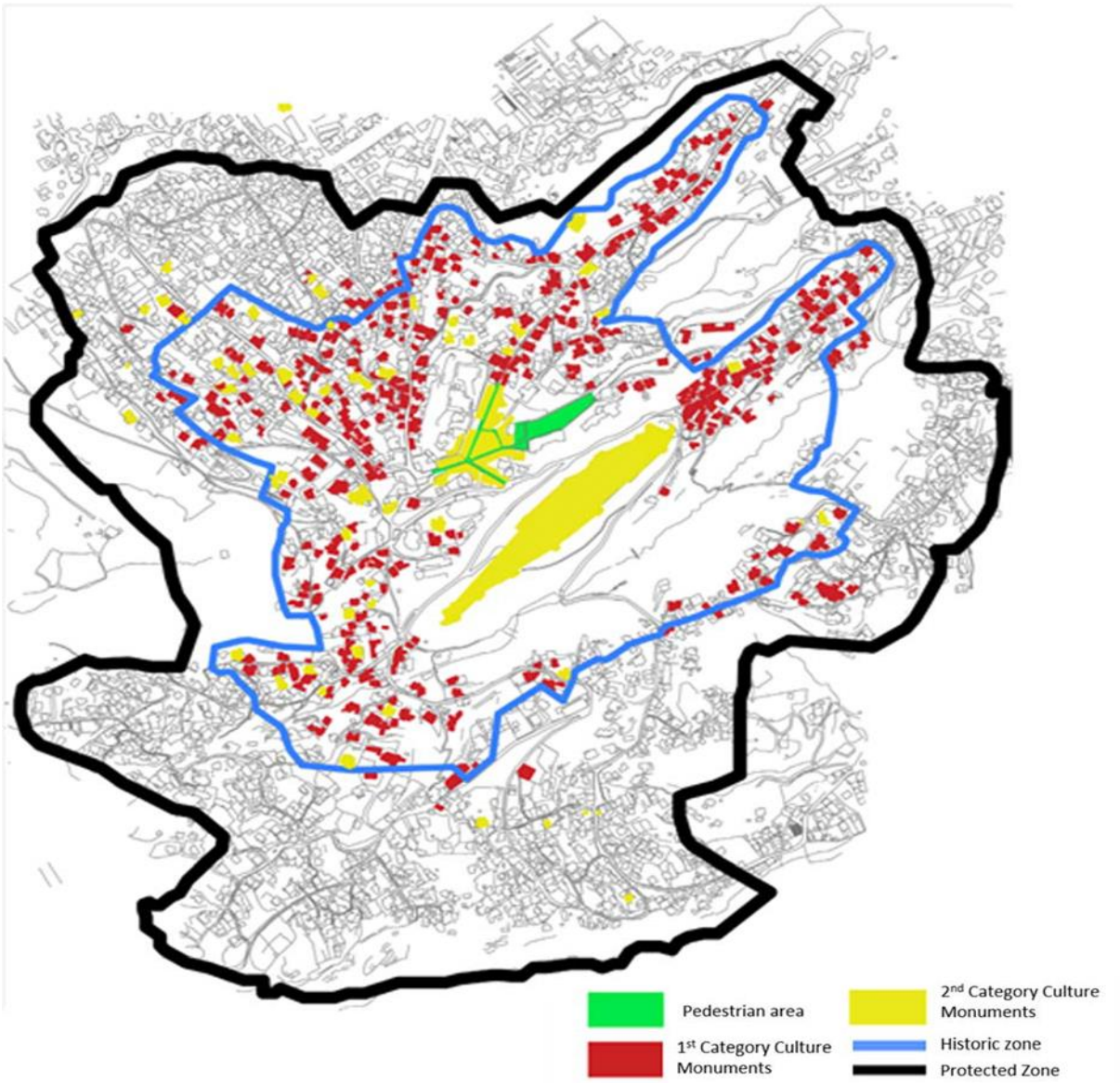


Figure 2. *Map of Historic Area and Culture Monuments in Gjirokastra*

Taken together, within the historic area of Gjirokastra are found 323 Monuments of Culture, distributed as follows:

1. PALORTO Quarter: 65 Monuments of Culture
2. PAZAR I VJETËR Quarter: 55 Monuments of Culture
3. VAROSH Quarter: 38 Monuments of Culture
4. DUNAVAT Quarter: 48 Monuments of Culture
5. MANALAT Quarter: 12 Monuments of Culture
6. CFAKË Quarter: 14 Monuments of Culture
7. HAZMURAT / MEÇITE Quarter: 70 Monuments of Culture
8. PARTIZANI Quarter: 21 Monuments of Culture

According to the 2011 census, the percentages of the local population per religious group are: Islam 42,3%, Bektashis 5,3%, Eastern Orthodox 14,6%, Roman Catholics 2,8%, while a 35,2 had not declared any religion or is non-religious. According to the Gjirokastër county census data (which includes other municipalities besides Gjirokastër), it had the highest percentage of atheists compared to all other counties in Albania, with Vlora being the second (6.3% compared to 6.01%).

3.1.6. Tourism in Gjirokastra

Considering the existing accommodation capacities in registered establishments and the additional ones identified through online platforms, it results with an approximate number of 1,111 beds present on the market in Gjirokastra Municipality. The accommodation businesses are mostly small and medium enterprises run as family businesses.

Table 6. Registered and identified capacity of accommodation establishments in Gjirokastra

Type of establishment	*Number of establishments*	*Approximated number of beds*
Hotels	*40*	*935*
Hostels	*4*	*60*
Motels	*36*	*100*
Guesthouses	*3*	*16*
B&B	*2*	*-*
Total	**85**	**1,111**

Source: Horwath 2019

According to the list of the accommodation, in Gjirokastra there is only 1 hotel with 80 beds in the centre of the old town and 2 others with 60 beds each in lower part of the city and they account for 21.4% of the total hotel capacities in Gjirokastra.

Some 55 small hotels and guesthouses are located in the historic area. Most of them are adopted in the renovated old Ottoman style houses. The accommodation businesses are mostly small and medium enterprises run as family businesses.

Referring to the interviews carried out with the accommodation establishments during the field mission, the accounted ADR for upscale hotels is 45-60 EUR, for mid-range hotels is 30-45 EUR and for hostels is 11-13 EUR.

Table 7. Gjirokastra key attractions

Cultural attractions	
UNESCO World Heritage List	*Gjirokastra's Historical Centre:* *Bazaar* *Castle Isopolyphonic music*
Monuments	*The Big Bridges of Dunavat, Hammam and the Seven Springs, Antigonea Archaeological Park, Paleokastra castle, Kardhiq castle, Castle of Libohova, Kollorca bridge, Roman amphitheatre ruins of Adrianopoli, Ruins of ancient theatre in Sofratikë,*
Vernacular architecture prototypes	*Zekate house, Skenduli house, Babameto house, Babaramo house, Ismail Kadare house, Inn of Zagoria, Inn of Dulaj, Hammam of 7 Fountains*
Museums and galleries	*Gjirokastra museum and Army museum in the Castle, Ethnographic Museum, Cold War Tunnel Museum, Art Gallery "Gjin Zenebishi"*
Sacral heritage attractions	
Churches and monasteries	*Mitropolia church, Church of St. Mehilli, Church of Saint Mary (Labovë e Kryqit), Church of St. Mary Sleeping in Sopik*
Mosques	*The Bazaar Mosque, Bektashi Tekke of Melan, Tekke of Zalli*
Natural attractions	
Mountains	*Mountain "i Gjere", Shendelli-Lunxheri-Burreto Mountains ridge*
Rivers and canyons	*Drino River, Kardhiq River, waterfall and canyons of "Gurra e Progonatit", water source of Glina*
Monuments	*National Natural Park of Sotira, Natural park of Viroi, 600-years old Plan tree of Libohova*
Gastronomy	
Infrastructure	*15 restaurants in hotels and 30 restaurants from TripAdvisor*
Cuisine	*Traditional, Mediterranean and Greek*
Local ingredients	*Vegetables, fruits, dairy products, meat, honey, herbs*
Events	
Cultural	*National Folk Festival (every five years), Folk International Festival "Argjiro-Fest", Festival "Divani Lunxhiot", Day of Isopoliphony, European Heritage Days (Craft Fair)*

Gastronomy	*Dough festival*
Other	*Wood and stone carvings*
Honor of Gjirokastra	
Personalities	*Musine Kokalari (1917-1983), linguistic Eqerem Çabej (1908- 1980), writer Ismail Kadare*

Source: Horwath, 2019

3.1.7. Tourism demand

A total number of 97,294 arrivals in Gjirokastra were estimated for the year 2017 with a total of 146,730 overnights. Average length of stay in Gjirokastra is 1.5 nights on whole year basis. Arrivals and overnights were estimated based on data regarding occupancy rate and average length of stay gathered through interviews. The average occupancy of the accommodation establishments in Gjirokastra is reflecting the seasonality pattern. Occupancy rates are around 60-70% during the peak months (July- September), around 50-55% during the shoulder season (May, June and October) and very low during the spring and winter months.

The seasonality in Gjirokastra is not as sharp as in the coastal destinations. From March to end of October there are more organized groups (70-80%) while individuals come year-round. Package tours with the purpose of active and adventure activities are mainly organized from March to May and cultural tours from May to October with peak during summer period July – August.

Table 8. Visitors to the national cultural attractions in Gjirokastra

Key attractions	2013	2014	2015	2016	2017
Gjirokastra Castle	*9,023*	*32,317*	*34,499*	*62,503*	*76,666*
Antigonea Archaeological Park	*7,339*	*528*	*424*	*805*	*1,023*
Total visits	16,362	32,845	34,923	63,308	77,689

Source: Institute of Culture Monuments

Visitors to the national cultural attractions in Gjirokaster (year 2017)

Key attractions	Domestic	Foreigners	Visitors with no tickets	Total Visitors
Gjirokastra Castle	*23,767*	*50,059*	*2,840*	*76,666*

Antigonea Archaeological Park	*102*	*318*	*603*	*1,023*
Total visits	23,869	50,377	3,443	77,689

Source: Institute of Culture Monuments

Some 11,000 people visited the Ethnographic Museum in 2017, while the house of Ismail Kadare was visited by 3,000 visitors and around 5-6,000 students/pupils.

According to the interviews with the Albanian tour operators offering Gjirokastra (South Albania) in their tours and with tourism businesses during the field mission in Gjirokastra, two groups of guests were identified:

Overnight tourists:

Individuals visiting Gjirokastra as part of their tour in Albania or in transit from Greece. They mostly stay 1 night in Gjirokastra in high season and up to 3 nights in low season as they also engage in nature- based activities;

Package tours, spending 1-2 overnights in Gjirokastra as part of the overall tour in South Albania with the purpose of active and adventure activities (hiking to Zagoria and Pogoni areas, hiking to Kurveleshi and Zagoria areas, horseback riding from Gjirokastra to Ionian coast);

Foreign tourists on cultural tours with 1-2 nights in Gjirokastra coming with the purpose of visiting historic centre of Gjirokastra town;

Business tourists with overnight in Gjirokastra town;

Same day visitors:

Individuals and package same day tours visiting historic centre of Gjirokastra town; they mainly come from Saranda.

Referring to the interviews done with tourism businesses during the field mission in Gjirokastra and Tirana based tour operators offering Gjirokastra (South Albania) in their tours, the main source markets are Germany, France, Italy, UK, Austria and Switzerland, followed by Spain, Netherlands, Poland, USA and Australia. International market counts for around 70-80%. The rest are Albanian speaking visitors (Albanian citizens, Albanian expatriates and citizens of Kosovo). Guests come both in organized package bus tours and individually in small groups of friends. Most of tourists visiting Gjirokastra are second and third age followed by other younger travellers. Tourists participating in package tours with the purpose of active and adventure activities are mainly of age 40 and 50 and they travel in couples and group of friends, but also as individuals gathered in a group.

3.2. Environmental baseline conditions

3.2.1. Climate

The geographical position of Albania determines its Mediterranean climate (Figure 2), characterized by mild and humid winters followed by hot and dry summers. Rainfall occurs mainly during the second half of the year. Climatic conditions differ considerably according to regions. The coastal plains have a strong maritime influence, causing a gradient of lower temperatures and reduced precipitation eastwards from the coast (MoE, 2016).

Analysis of mean temperature for the period 1930 to 2006 against the 1961 to 90 average shows that the period 1931 to 1970 had a positive anomaly followed by a negative anomaly between 1971 and 2000 (MoE, 2016). After 2000 there has been a period with a positive anomaly from 2001 to present. This is a consequence of an increase in both maximum and minimum daily temperatures, especially in summer time. Several years after 1990 are characterized by an increasing rate of minimum temperature, higher than that of the maximum temperature in the summer. Further analysis shows that since the turn of the century there has been a positive trend of increasing temperature for all seasons (winter: from +1.60 to +2.5oC; spring: from +2.00 to +3.0oC; summer: +3.0oC; and autumn: +2.0oC). The northern part of the coastal area does have lower temperatures in the winter season compared to the middle and southern areas, but summer temperatures are similar across all coastal regions (MoE, 2016).

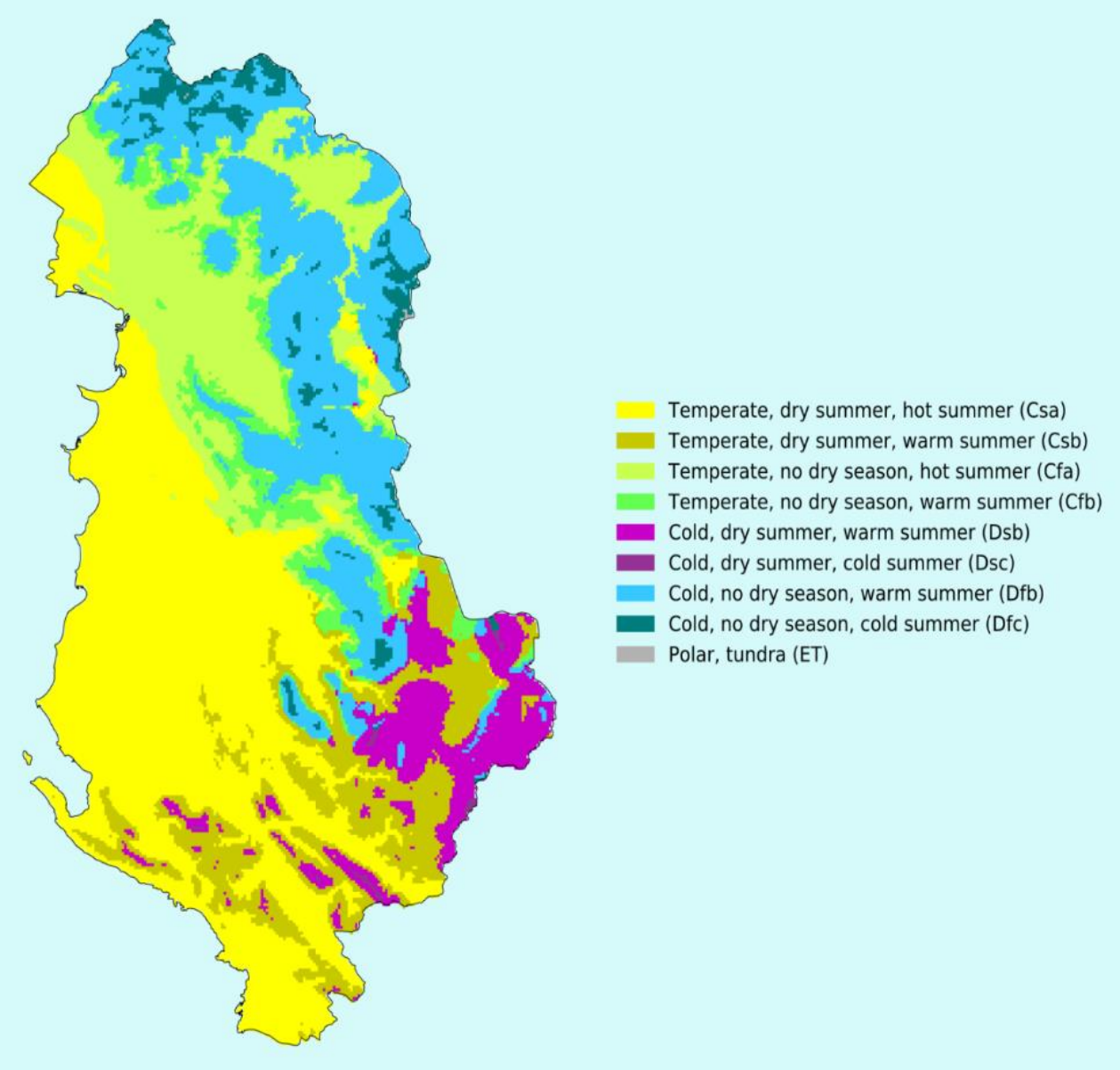


Figure 3. Köppen-Geiger climate classification map for Albania (1980-2016) (Source: Beck et al. 2018).

Gjirokastra lies on 233m above sea level. The climate is warm and temperate in Gjirokastra. There is more rainfall in the winter than in the summer in Gjirokastra. The climate here is classified as Csa (Hot Mediterranean Summer) by the Köppen-Geiger system. The temperature here averages 14.3 °C. The warmest month of the year is August, with an average temperature of 23.4 °C. January has the lowest average temperature of the year. It is 5.5 °C.

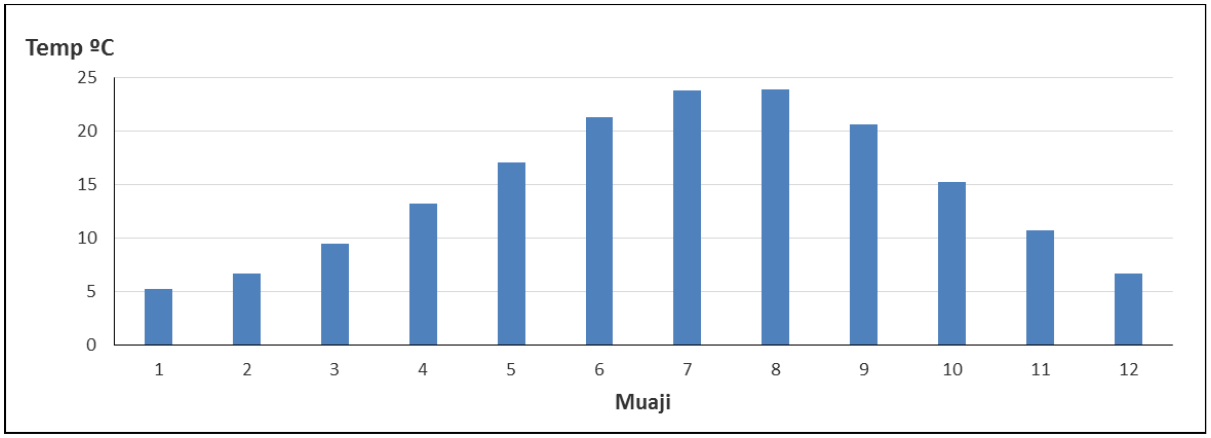


Figure 4. Average Annual Temperature for Gjirokastra

The driest month is July, with 20 mm of rainfall. With an average of 286 mm | 11.3 inch, the most precipitation falls in December. The annual rainfall is 1593 mm.

Table 9. Climate data for Gjirokastra (1982-2012)

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	5.5	7	9.4	12.7	16.9	21	23.3	23.4	19.9	15.2	10.7	6.9
Min. Temperature (°C)	1.7	3	5.1	8	11.7	15.2	17	17.1	14.4	10.5	6.7	3.2
Max. Temperature (°C)	9.4	11	13.7	17.4	22.2	26.8	29.6	29.7	25.5	19.9	14.7	10.7
Avg. Temperature (°F)	41.9	44.6	48.9	54.9	62.4	69.8	73.9	74.1	67.8	59.4	51.3	44.4
Min. Temperature (°F)	35.1	37.4	41.2	46.4	53.1	59.4	62.6	62.8	57.9	50.9	44.1	37.8
Max. Temperature (°F)	48.9	51.8	56.7	63.3	72.0	80.2	85.3	85.5	77.9	67.8	58.5	51.3
Precipitation / Rainfall (mm)	224	212	145	102	67	32	20	29	77	155	244	286

(Source: https://en.climate-data.org/europe/albania/gjirokastra/gjirokastra-28421/)

3.2.2. Geological Overview of Gjirokasta area

The region of Gjirokastra is located south of the Shkoda-Peja fault, which divides the Dinaric Mountains from the Hellenides Montains, within the territory of which the region falls. The Hellenides Mountains, which in turn can be divided in internal and external, are part of the Dinaric-Albanian-Hellenic thrustbelt, which was formed during the Alpine orogeny. The external Hellenides, in particular, include the tectonic-sedimentary domains Krasta-Cukali, Kruja, Ionian, Sazani and Durres.

The region of Gjirokastra falls into the Ionian area. This area includes areas characterized by synclines and anticlines with NW-SE orientation (Figure 4), which from east to west are: Permeti syncline, anticline of Berat, the syncline of Memaliaj, anticline of Kurveleshi, syncline of Shushica and Cika anticline. These structures exhibit a westward asymmetry and are complicated by thrust faults located at their western flanks. The amount of tectonic transport of the thrust faults, both in the area of Kruja and in the Ionian area is estimated to be between fifteen and fifty km (Xhufi and Canaj, 1999; Frasheri et al., 2009).

The historic center of Gjirokastra is located, from a geological point of view, along the eastern flank of the Mali i Gere anticline, which is connected to the western flank of the Drino syncline. The deposits identified, mainly Mesozoic carbonates and Paleogene terrigenous units (Figure 4), constitute a homoclinal with a general NNW-SSE trend, gently dipping to ENE (ca. 20°). The terrigenous portion of the geological substrate, which houses the castle and much of the historic city center, lies in unconformity above the underlying carbonate units (Figure 4).

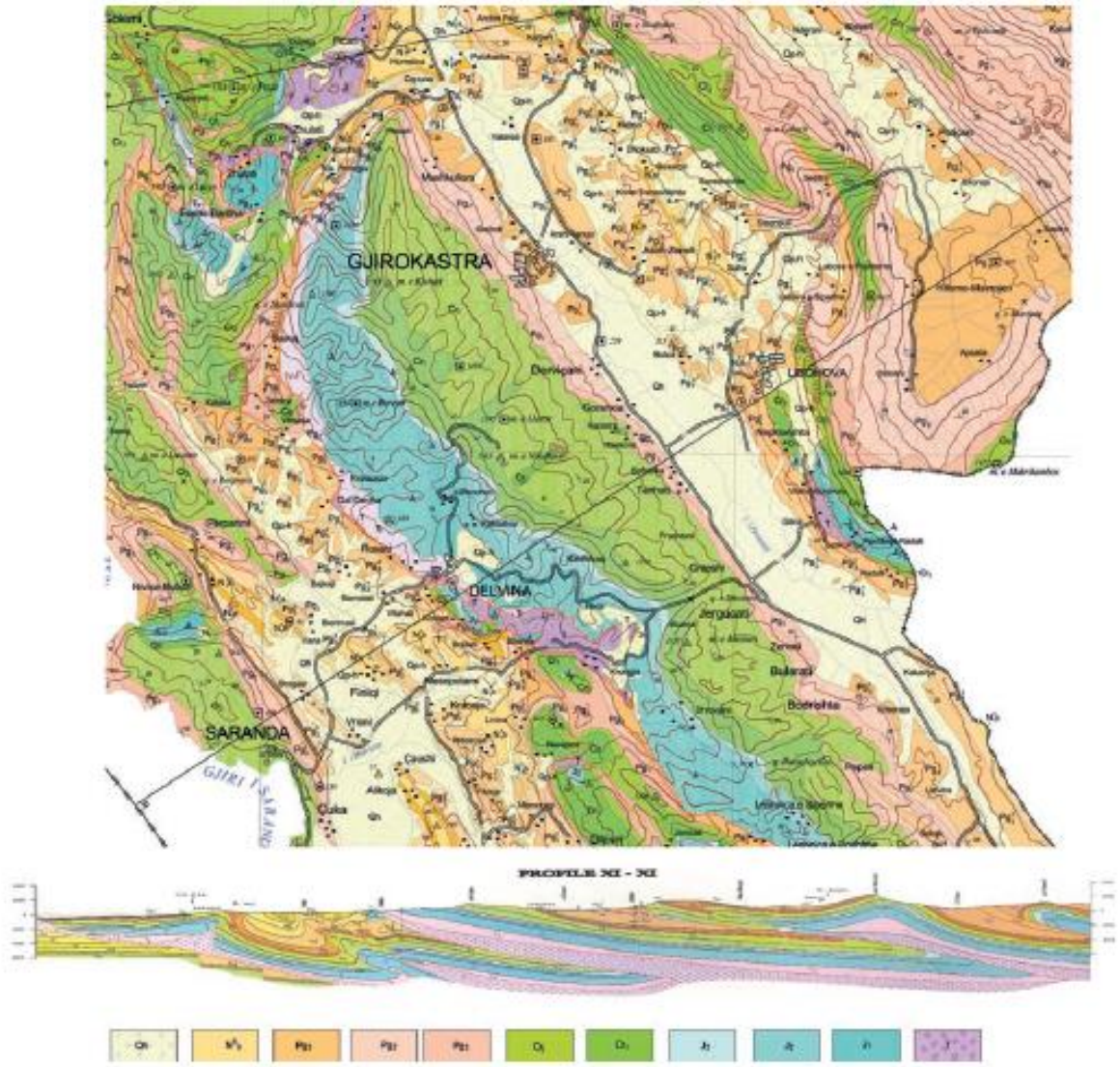


Figure 5. Geological Map of Gjirokastra and Geological Cross section (Source: Jigyasu et al, 2014)

Based on all the previous information, the geological-geotechnical stability of the level of support on which the exterior walls of the castle are built has been studied, establishing the risk level for the different sections of the wall, based on the probability that produce a failure in the geological substrate and its possible impact on the walls it supports.

3.2.3. Hydrogeology

The Mali Gjere karst massif is located in south Albania on the border with Greece (Figure 5); its total surface area is 440 km², mostly located in Albanian territory (54 km² in Greek territory). The highest point of the massif is at 1798 m a.s.l., whereas the mean altitude is about 900 m a.s.l. The crest of the Mali Gjere Mountain is the natural water divide between the Drinos River basin located on the east, and the Bistrica River basin located on the west. Some sulphate springs recharge the Drinos River in Greek territory; the biggest of them is Rogozi Spring with the mean discharge of about 0.5 m³/s and with the sulphate ion concentration of about 700 mg/l.

The Mali Gjere Mountain is an anticline dipping to the east with 25-30°, whereas the structure is overthrown to the west. The major units constituting the study area are the carbonate formations, like the Triassic dolomites, the Jurassic limestone with siliceous rocks and the Cretaceous and Palaeogene stratified limestone. The carbonate rocks are surrounded mainly by the Palaeogene and Noegen flysch formation, while the Permo-Triassic clayey-gypsum has a small outcrop in the western side of the Mali Gjere Mountain. In the central-eastern side of the karst massif, in the Jorguct-Dervican area, along a length of 6.5 km, the carbonate rocks contact the Quaternary gravel deposits of the Drinos River valley.

Most of the karst water drains to the western side of the Mali Gjere massif where the Blue Eye Spring (mean discharge 18.4 m3/s) issues at an elevation of about 45 m lower than that of the Drinos Valley. Also some springs, each with a discharge of less than 0.1 m3/s, issue from this side of the massif. The biggest spring of the eastern side of the massif is the Viroi ephemeral spring (maximal discharge more than 40 m3/s). The total discharge of all the springs of Mali Gjere karst massif results about 743*106 m^3/year, (23.6 m^3/s). By the balance calculations results that the total discharge of the springs of studied karst massif is about 30-35 % bigger than the calculated mean efficient precipitation of the massif, which corresponds to a water quantity of about 226*106 m^3/year (7.17 m^3/s).

Usually from May month to October or November the karst groundwater level steadily decreases and the ground water flows mainly to the west of the massif, to Blue Eye Spring. At that season all the springs of the eastern side of the massif including the Viroi Spring, dry up. The yearly amplitude of the karst water fluctuation in Goranxi Cave is about 32 m. During the dry season the Drinos River is totally lost in the gravely aquifer which piezometric level suffers an unusual yearly decrease of about 20 to 25 m. Water level counters suggest the seepage of the gravely aquifer groundwater to the karst massif in the area Jorgucat - Dervican, and particularly around the Goranxi Cave (Figure 5).

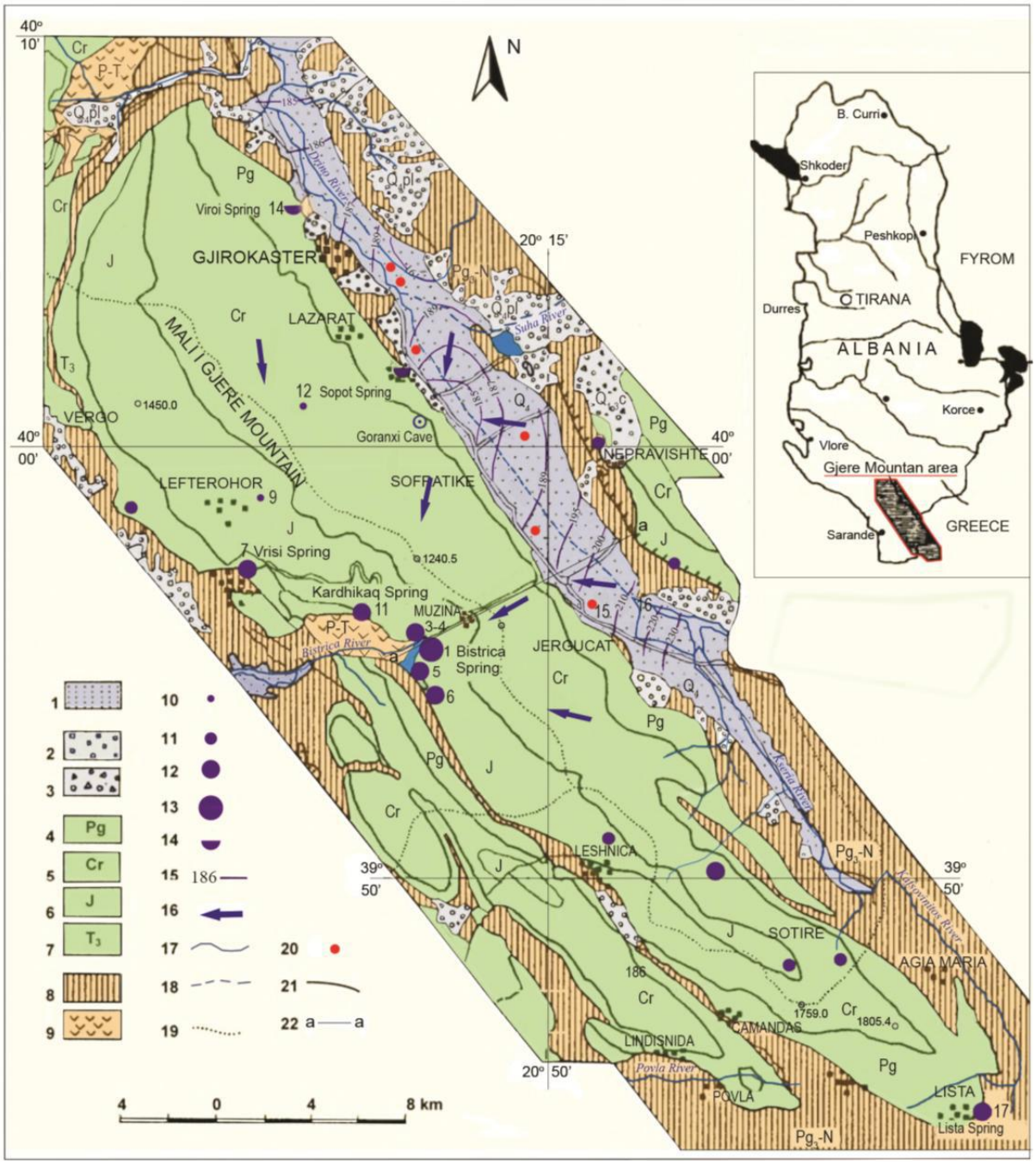


Figure 6. Hydrogeological map of the project area (Source: Efthimi et al., 2007)

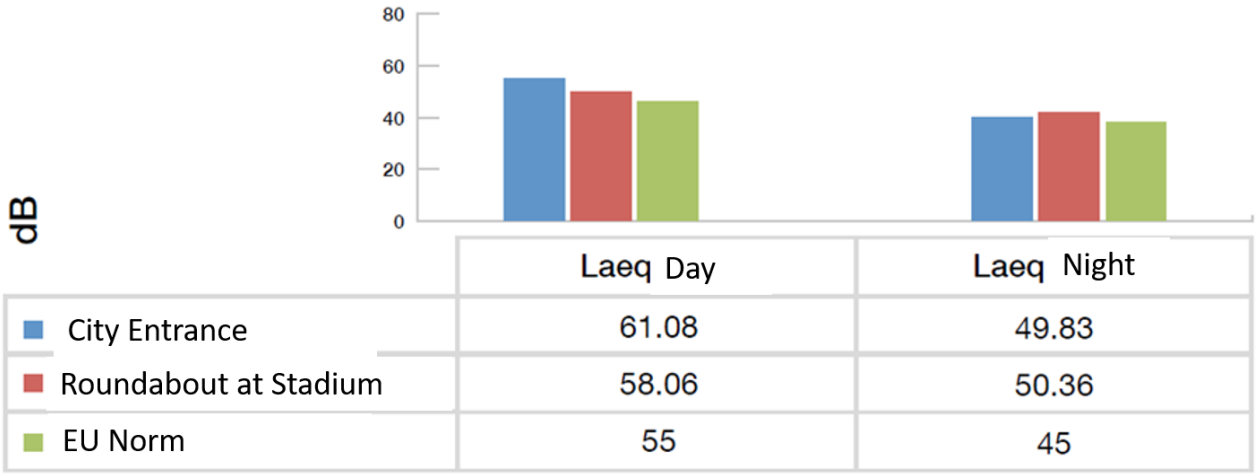
3.2.4. Air Quality

Albania currently has no comprehensive database about national air quality. However, motor vehicles are major emission sources for several air pollutants, including nitrogen oxides (NOX), carbon monoxide (CO), particulate matter (PM), and hydrocarbons (HCs). They represent the main indicators for the assessment of air quality, based on guidelines EU and reflected in Decision of Council of Ministers of Albania No. 803, dated 04.12.2003 "On approval of the air quality standards". Unfortuantely, no data are available for Gjirokastra.

3.2.5. Noise (Acoustic pollution)

The urban noise monitoring in the city of Gjirokastra is conducted by the Institute of Public Health aims to measure the level of acoustic pollution. Monitoring is done at two stations; city entrance road intersection and the roundabout near the stadium during the day and the night (L*aeq* day and L*aeq* night). When the noise level is about 65 dBA, sleep becomes serious concern and most of the annoying population.

As it can be depicted from the Figure 6, the values recorded exceed the standards (EU norms) for both stations during the day and the night. At the city entrance road intersection, the noise level during the day exceeds the norm by 11% while during the night the norm is exceeded by 10%. At roundabout near the stadium, the noise level during the day exceeds the norm by 5% while at night this value is exceeded by 12%.



	Laeq Day	Laeq Night
City Entrance	61.08	49.83
Roundabout at Stadium	58.06	50.36
EU Norm	55	45

Figure 7. Noise monitoring in the city of Gjirokastra (Source: AKM2 2019)

3.2.6. Seizmic Hazardous in Gjirokastra

Albania is characterized by shallow crustal seismicity. The different present-day tectonic regime in eastern and western Albania requires the use of separate strong motion relations. The extensional region, into which the normal faulting earthquakes are generated, is located in eastern Albania. The compressional region, into which mainly thrust faulting and much rare strike-slip faulting earthquakes are generated, is located in western part of it.

According to seismic regionalization map, the municipality of Gjirokastra is included in the area where within the next 100 years, for the average land conditions, earthquakes with intensity I0 = 7 degree (MSK-64) can be expected.

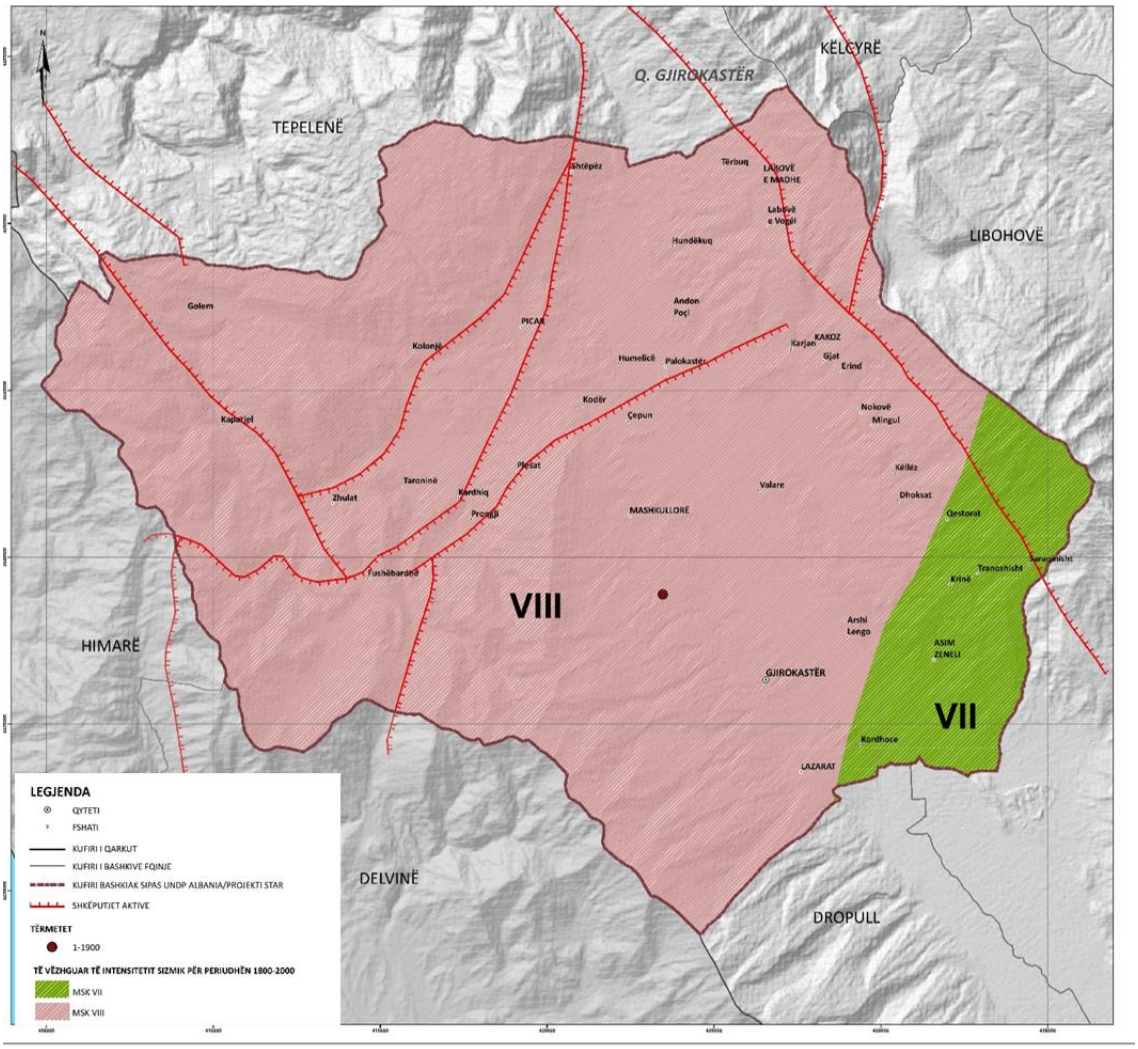


Figure 8. Seismic macrozonation in Gjirokastra (Souce: GLP Gjirokastra, 2017)

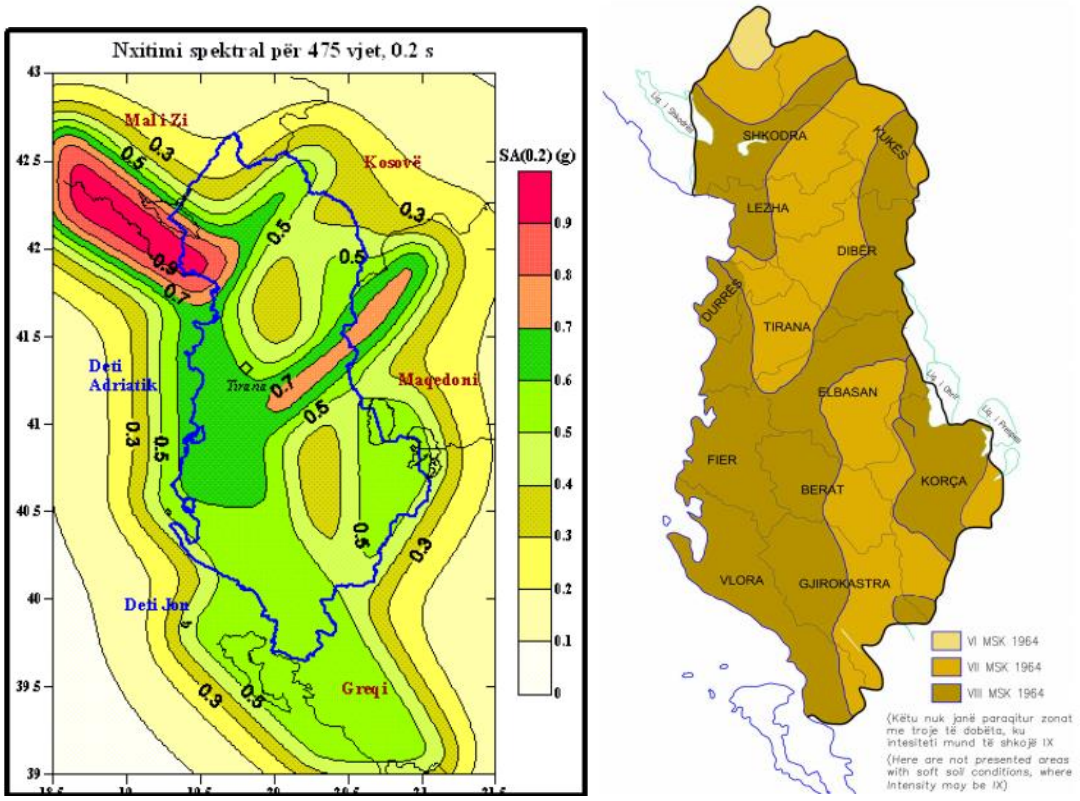


Figure 9. Map of Sa (0.2) 5 % damping for Albania on rock site and for probability 10 % / 50 years or 475 years return period (Left) and the Map of Seismic Hazard in Albania (Right) (Source: Aliaj et al. 2010).

3.3. Biological environment

Biodiversity is a very important component of the natural resources of a country, area or region. The origins of this diversity lie in the geographic position, geological, pedologic, hydrological, relieve and climate factors.

The geographic position, geological construction, climatic conditions, water resources and the soil in the territories of Gjirokastra have created habitats suitable for the living plant and animal world.

3.3.1. Protected Areas

In phyto-geographic terms, the territory of the district of Gjirokastra lies in the Mediterranean Region. The whole territory of this district is located between three mountain ranges: Trebeshine – Dhembel –Nemercke, Shëndëlli-Lunxhëri-Bureto and Murganë-Mali i Gjerë-Mali i Lucës, which are part of the SouthMountaneous Region. The direction of the mountain ranges, which run almost parallel to each other, is South-East/North-West. It is this direction of the mountain ranges that creates specific climatic and terrain conditions for the growth and development of a varied, spontaneous flora. (Malo & Shuka, 2007). These mountain ranges create two deep valleys: the Drino Valley and the Zagoria Valley with altitudes ranging from 200 m to 2400 m a.s.l. and energy up to 700 m/km^2. From the records over the past years, it turns out that in the district of

Gjirokastra there are 719 naturally growing plant taxa constituting almost 22 % of the flora of our country.

There are several nature monuments and one protected area within the territory of Gjirokastra. Of particular interest is Kardhiqi, which has the status of "Strict natural reserves \ scientific reserves (Category I of protected areas based on the International Union for Conservation of Nature (IUCN) categorisation. The current surface is 1,800.00 ha. Represents a rugged slope, with steep cliffs, steep cliffs and canyons. The combination of rocky, forest and pasture landscape gives this region a special beauty. The area represent high biodiversity of both habitats and species. The existence of virgin or almost virgin forests significantly increases its natural values. Area is covered mainly with oak forests accompanied by other trees such as *Fraxinus ornus, Acer campestre, Acer obturatum,* rare trees of *Tilia platyphyllos* and *Tilia tomentosa*. The most important and best preserved forest formation remains that of *Abies borisii-regis,* which occupies even the steepest terrains. Pure forest of *Acer pseudoplatanus*, a rare phenomenon in Albanian forest, adds even more the values of this territory. Some of the endangered plants species listed at Albanian Red List book, such as: *Aesculus hippocastanum, Taxus baccata, Achillea grandifolia,* etc. are also found in the area. There are bird and mammal communities associated with forest, aquatic and rocky environments.

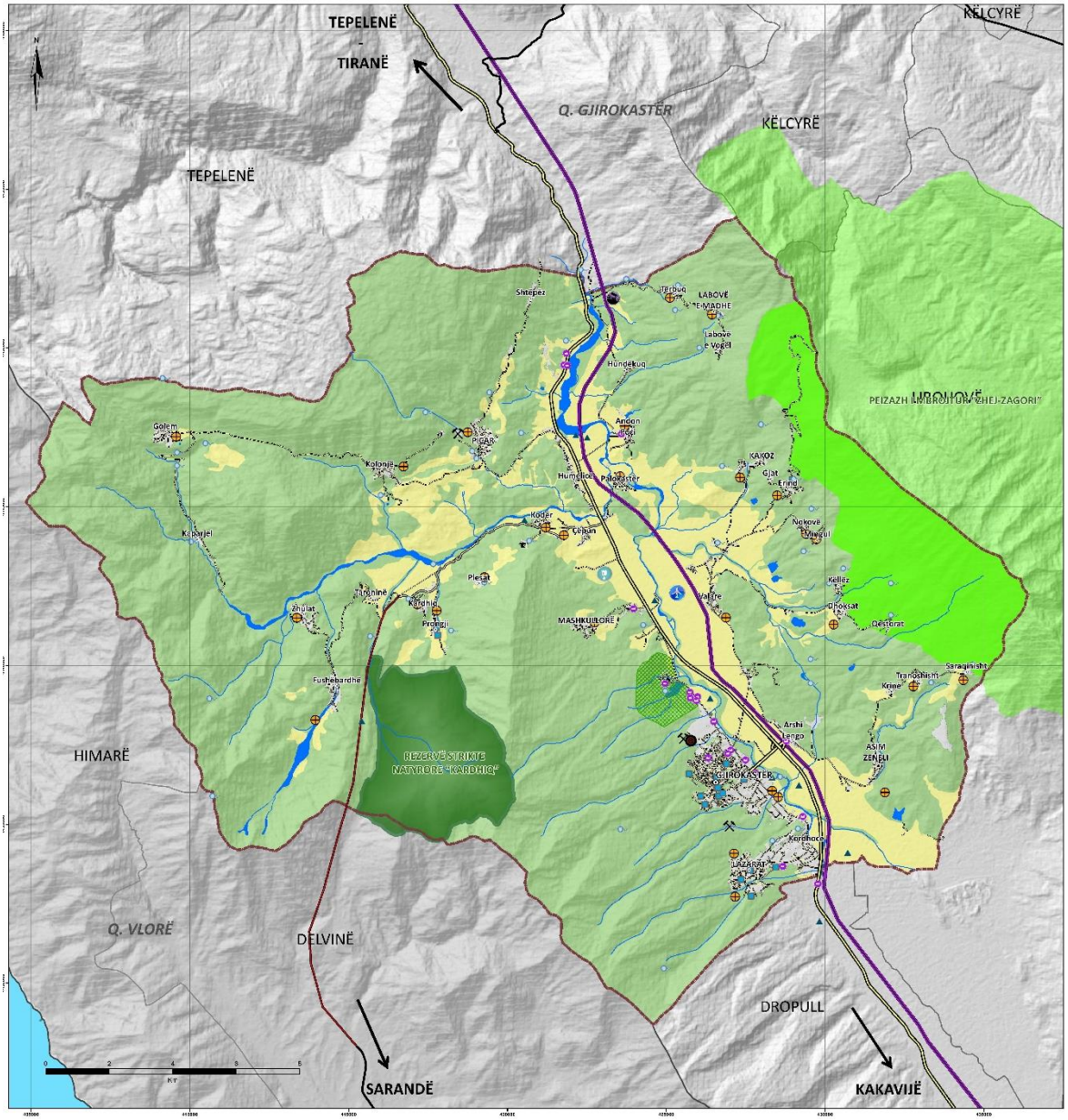


Figure 10. Map of Protected area-Municipality of Gjirokastra (Source: GLP Gjirokaster)

The municipality of Gjirokastra has a large number of nature monuments (Category III of Protected area as per IUCN Categorization). The list includes: Plane tree of Fushë-Bardha; Plane tree of Zhulati; Plane trees of School in Sheper; Oak trees of Çarroku – Sheper; Oak trees of Monastery – Nivan; Plane trees of Nivani; Plane tree of Ndëranit; Oak trees of Skoresë; Plane trees of Çatista; Cypress trees of Hllomo; Plane tree of Poliçani; Oak trees of Poliçani; Plane trees of Koshovica; Oak tree of Tërbuqi: Plane trees of Selo; Pine trees of Kërre; Oak tree of Bodrishtë; Chestnut tree of Nepravishtë; Plane trees of Tranoshishtë; Plane trees of of Monastery- Stegopul; Plane tree of Dhoksati; Plane trees of Këllezi; Plane tree of Mashkullorë (No longer exists); Plane tree of Libohovë; Plane tree of Derviciani; Vënjat of Konckë; Plane tree of Topovë; Canyon of Piksi; Terrace

of Ndërani; Stone "forest" of Ndëran; Pass of Çajupi; Stone of Zheji; "Naked" stones of Muzinë; Magmatic rocks on Karst substrates near Picari; Shembja e Zhulalit; Landslides of Këllezi; Landslides of Kaparieli mountain; Vithimat e Buretos; Holes of Konckë; Cave of Vanistrë (Skotinia); Gorge of Selckë; Circus of Lunxhërisë; long stones in Fushë-Bardhe; Pass of Dhëmbeli, etc.

3.3.2. Endemic and endangered species

Four Albanian endemic taxa are reported in Gjirokastra municipality, in altitudes from 300 m to 2480 m above sea level. Three of these endemic species do not have any conservation status, mainly because of their late discovery and limited knowledge about their distribution. One of these species is included in the Albanian species red list.

In the territory of Gjirokastra municipality 27 sub-endemic taxa are found. These include: *Astragalus baldaccii* Degen. *Asperula chlorantha* Boiss at Heldr; *Athamanta macedonica* (L) Spreng. subsp albanica Alst. et Sand; *Centaurea epirota* Halácsy. *Centaurea graeca* Griseb.; *Centaurea zuccariniana* DC. *Crataegus heldreichii* Boiss; *Crepis turcica* Degen & Bald; *Crocus boryi* Gayr; *Dianthus haematocalyx* Boiss. et Heldr. subsp. pindicola (Vierh.) Hayek; *Fritillaria thessala* subsp. Ionica; *Gymnospermum altaicum* subsp. Scipetarum, *Herniaria parnassica* subsp. Parnasica; *Fritillaria thessala* (Boisss.) Kamari subsp. ionica (Halacsy) Kamari, *Herniaria parnassica* Heldr. et Sart. subsp. parnasica Chaudhri. *Lilium chalcedonicum* L.; *Malcolmia bicolor* Boiss. et Heldr.; *Nepeta spruneri* Boiss.; *Ophrys helenae* Renz.; *Ophrys sphegodes* subsp. Epirotica (Renz) Golz & Rrinhard; *Scabiosa epirota* Halacsy et Bald; *Sideritis raeseri* subsp. raeseri Boiss. et Heldr.; *Solenanthus albanicus* (Degen et al.) Degen et Baldacci; *Silene caesia* Sibth. et Sm; *Silene ungeri* Fenzl.; *Pedicularis graeca* Bunge; *Viola epirota* (Halacsy) Raus, *Linum flavum L. subsp. Albanicum (Hartvig); Viola heterophylla Bertol. var. euboea sensu W. Becker; Viola heterophylla Bertol. subsp. epirota* Halacsy and *Linum flavum* L. subsp. albanicum (Janchen) Hartvig (Malo & Shuka, 2012).

3.3.3. Vegetation at the project site

The proposed project is located inside the city of Gjirokastra. The "Stone city" leaves a little space for any important tree, schrubs or perennial species. Along the "Sokaku i të marëve" street, in some of the stone walls, a climbing plant species, namely, *Hedera Helix*, has grown grows relatively well. The restoration of alleys and buildings does not foresee cuttings of vegetation. Meanwhile, inside the courtyards of the houses, fruit trees dominated by figs and walnuts are found, but these trees will not be affected by the project.

5. Analysis of Alternatives

5.1. Alternative 1: No project alternative

As the squares in the project area are damaged and in a state in which cannot fulfill the functions for what they are created a "No Project" alternative should be rejected. Therefore the alternative of the revitalization of the squares should be taken into consideration.

5.2. Alternative 2: No proposed from the designer

No proposed from the designer

5.3. Alternative 3 Revitalization of the "Çerçiz Topulli" Square; Revitalization of the municipality square; and Revitalization of the Square "House of Pioneer in a same location

The alternative 3 is the implementation of the proposed project. The option of selecting another location was discussed and agreed with local community, the municipality of Gjirokastra, Environmental Agency, the ADF and is not acceptable as an opportunity

.

Figure 11. *Photo from Çerçiz Topulli Square before the Construction of an underground Parking*

Figure 12. *Existing photos from Çerçiz Topulli Square*

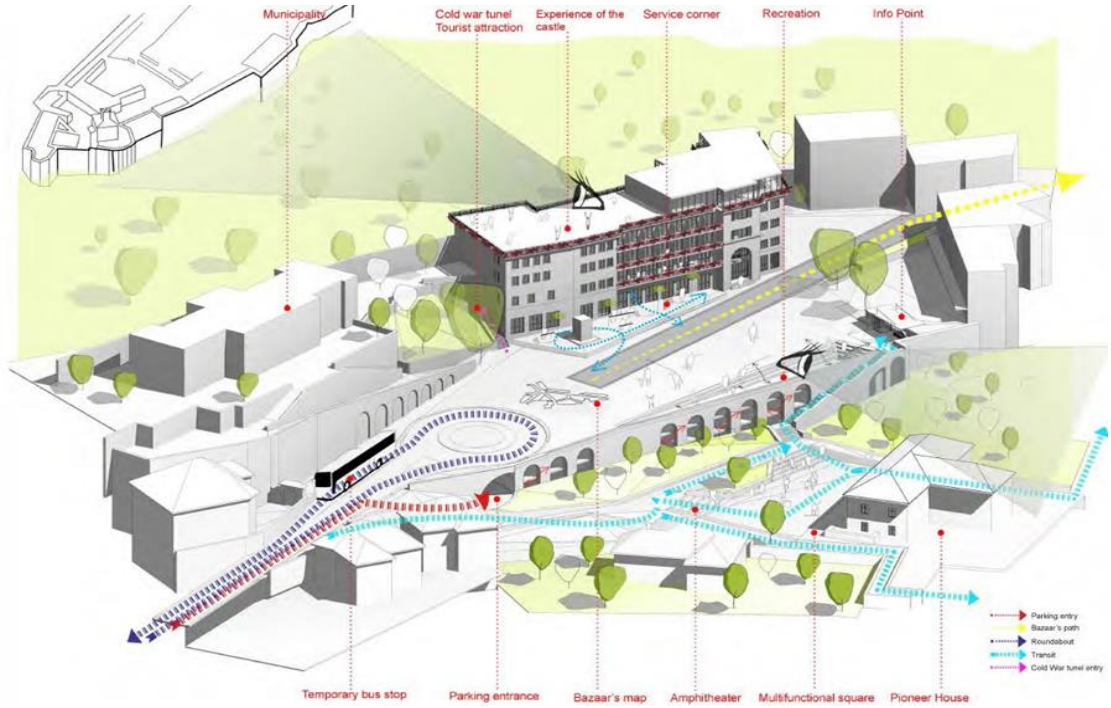


Figure: Proposed project scheme

Figure 13. *Existing photos from “Shtëpia e Pionerëve“2022*

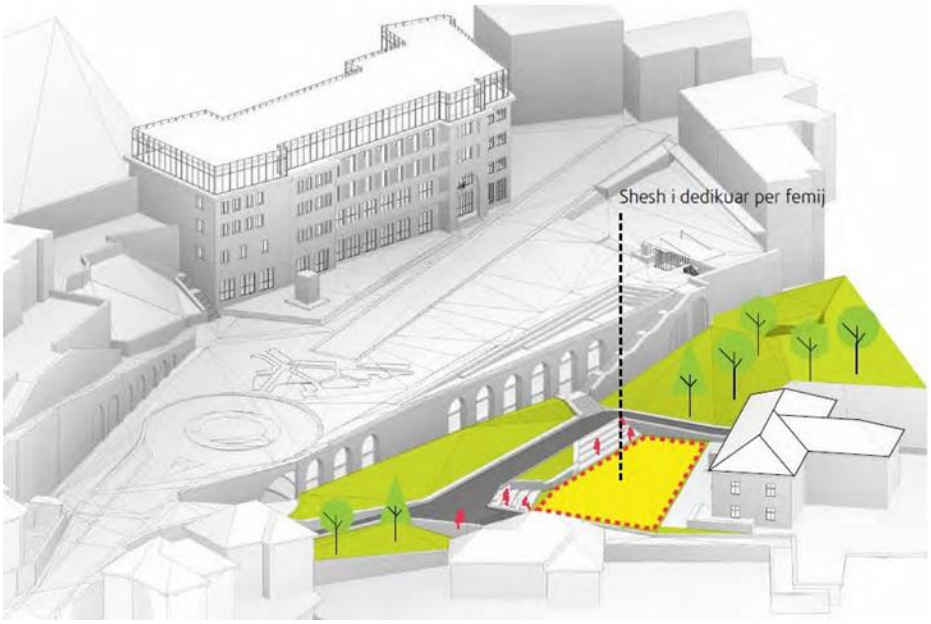
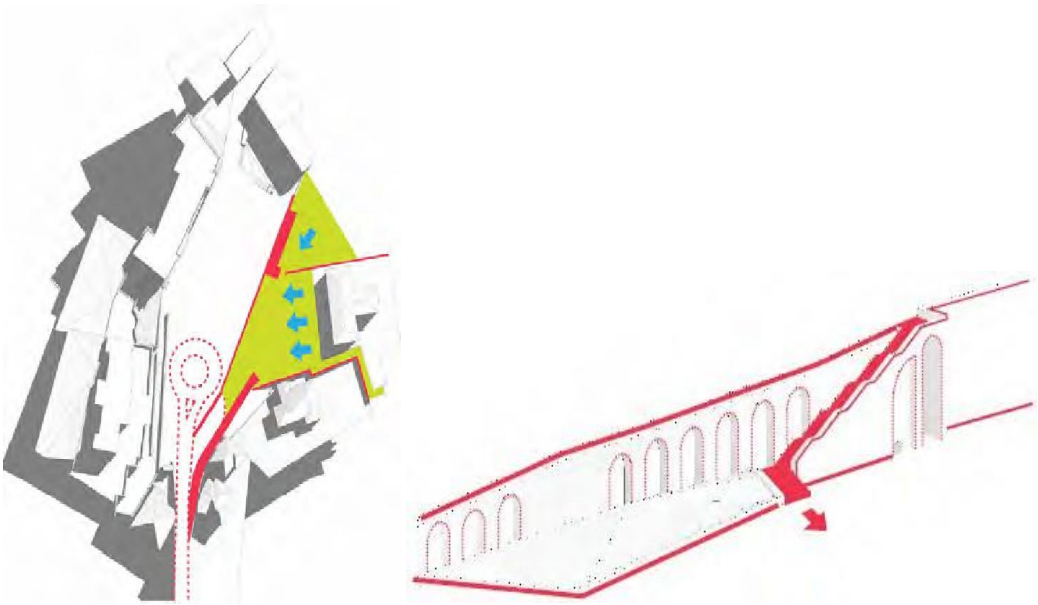


Figure 14. *Proposal of the revitalization of the “Shtëpia e Pionerëve” square*

Proposal of the connection between two squares

Proposing a connection between the square in front of the "House of Pioneers" which is currently a dead space and the square of "Çerçiz Topulli" through a public staircase which better connects these two levels to make it accessible from both sides and as much as possible interactive as possible.



5.3.1.1. Conclusion

After reviewing the proposed alternatives, considering the environmental and social point of view, the alternative 3 was selected as the most appropriate.

6. IDENTIFICATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

6.1. Methodology for impact identification and analysis

6.1.1. Methodology for environmental impact assessment and analysis

Impact Significance

Impact significance is determined from an impact significance matrix (Table 7) which compares severity of the impact with probability of its occurrence. Impact significance criteria are as follows:

- Very High (VH) and High (H): These denote that the impact is unacceptable and further mitigation measures must be implemented to reduce the significance. Shaded red in Table 7.
- Medium (M): Impacts in this region are considered tolerable but efforts must be made to reduce the impact to levels that are as low as reasonably practical. Shaded yellow in the impact significance matrix.
- Low (L): Impacts are considered acceptable. Shaded light violet.
- Negligible (N): Impacts are very low or no impact at all. Shaded green.

Table 10. Determination of impact severity

	Sensitivity of receptor			
	Very low	Low	Medium	High

			1	2	3	4
Intensity of impact	Very low	1	1 Negligible	2 Minor	3 Minor	4 Minor
	Low	2	2 Minor	4 Minor	6 Moderate	8 Moderate
	Medium	3	3 Minor	6 Moderate	9 Moderate	12 Major
	High	4	4 Minor	8 Moderate	12 Major	16 Major

Cumulative Impacts

Cumulative effects manifest when socio-environmental conditions are already or will be affected by past or reasonably probable future development or activities. The ESIA identified current, past and probable future similar activities that compound social and environmental conditions in the project area.

Mitigation of Environmental Impacts

Mitigation measures are designed in order to avoid, reduce, mitigate, or compensate for adverse environmental and social impacts and inform the Environmental Management Plan (EMP).

Impact Description

Describing a potential impact involved an appraisal of its characteristics, together with the attributes of the receiving environment. Relevant impact characteristics included whether the impact is:

- Adverse or beneficial;
- Direct or indirect;
- Short, medium, or long-term in duration; and permanent or temporary;
- Affecting a local, regional or global scale; including trans-boundary; and
- Cumulative (such an impact results from the aggregated effect of more than one project occurring at the same time, or the aggregated effect of sequential projects. A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions").

Each of these characteristics is addressed for each impact. Consideration of the above gives a sense of the relative intensity of the impact. The sensitivity of the receiving environment was determined by specialists based on the baseline data collected during the study.

Impact Evaluation

Each impact is evaluated using the criteria listed in Table 8. To provide a relative illustration of impact severity, it is useful to assign numerical or relative descriptors to the impact intensity and receptor sensitivity for each potential impact. Each is assigned a numerical descriptor of 1, 2, 3, or 4, equivalent to very low, low, medium or high. The severity of impact was then indicated by the product of the two numerical descriptors, with severity being described as negligible, minor, moderate or major, as illustrated in Table 8. This is a qualitative method designed to provide a broad ranking of the different impacts of a project. Illustrations of the types of impact that were assigned the different grades of severity are given in Table 8.

Table 11. Classification of impact evaluation

	Classification	Description
1	Extent:	Evaluation of the area of occurrence/influence by the impact on the subject environment; whether the impact will occur on site, in a limited area (within 2 km radius of the site); locally (within 5 km radius of the site); regionally (district wide, nationally or internationally).
2	Persistence/ Duration:	Evaluation of the duration of impact on the subject environment, whether the impact was temporary (<1 year); short term (1 – 5 years); medium term (5 – 10 years); long term (>10); or permanent.
3	Regulatory and Legal Compliance:	Evaluation of the impact against Local and International legislative requirements. *High:* Prohibition terms for specific activities/emissions. Major breach of regulatory requirements resulting in potential prosecution or significant project approval delays. *Medium:* Potential breach of specific regulatory consent limits resulting in non-compliance. *Low:* No breach of specific regulatory consent limits anticipated.
4	Overall Impact rating (Severity):	Using a combination of the above criteria, the overall severity of the impact was assigned a rating Severe, Substantial, Moderate, Minor and negligible. Refer to Table 7 for broad categories of impact for each rating.

Note: These are only guidelines that will lead the professional judgment required for every case.

6.1.2. Methodology for social impact assessment and analysis

The purpose of the assessment of social influences is to assess the temporary and permanent impacts of the proposed project. It should emphasize the need to create positive effects and benefits for the community, not just for investors.

In the assessment of possible social impacts, the following topics were considered:

- Impact on Cultural Heritage
- Potential Landscape and Visual Impact
- Changes in the health and safety of the community
- Changes in housing and infrastructure
- Work force and working conditions
- Income to material/ equipment suppliers and contractors:
- Impact on private property, and common property used by individuals

The Social Impact Assessment Approach (SIA) follows the standard procedure of the established international practice for assessing social impacts: a description of the current social / social environment (taken as a starting point), reviewing the changes in that social environment caused by the Project, determining the significance of those impacts and address appropriate mitigation measures.

The objective of the SIA process is to create a situation where the project will have no major residual impacts (impacts that will remain despite the application of mitigation measures); especially those that are long-lasting or that cover a larger area. However, it is possible for some aspects to have residual impacts, although all practical measures for reducing impacts have been exhausted.

The SIA identifies the social impacts arising from the realization of the project at its various stages: pre-construction, construction and operational phase. The pre-construction phase is the phase preceding the construction activities and includes the preparation of the necessary plans, tender procedures, planning activities and project organization. The construction phase encompasses the preparation of the construction site and the construction activities themselves. The operational phase follows the activities undertaken in the life cycle of the project.

Criteria for assessing possible social impacts of the project are given in the following table.

Table 12. Criteria for Impact Assessment

Criteria	Score	Description
Nature	Positive	Impact that creates an improvement in the current situation or introduces a positive change
	Negative	Impact creates negative changes in the existing situation or introduces unwanted elements in the same
Type	Immediate (Direct)	Impacts are the result of direct (immediate) interaction between project activity and resources / receivers

	Indirectly	Impacts that are the result of non-project activities that occur as a result of the project
	Cumulative	A product of multiple environmental / social impacts on a single receiver or effects that result as a combined effect of various development projects
Area	On the spot	Impact effects limited to 1 km from the project area
	Local	Effects of impact in width 1-20 km from the project area
	Regional	Effects of impact, 20-50 km from the project area
	National	Effects of impact over 50 km from the project area
Duration	Short term	Impacts predicted to last for a short time, usually only during construction
	Mid-term	Impacts foreseen to last a mid-term until the completion of the construction / realization of the entire construction part of the project
	Long term	Impact and its effects will continue or will last throughout the operational phase of the project
	Permanently	The impact and its effects will continue or will last even after the life cycle of the project
Probability	Surely	The impact will occur under normal operating conditions
	Probably	Influence may appear in some time, under normal operating conditions
	Not likely	Impact is not expected to occur, but may occur under normal operating conditions
Reversibility	Reversible	Potential impact is occasionally and reversible
	Nonreversible	Potential impact is permanent and irreversible
Magnitude	Negligible	There is no noticeable change in the assessed situation
	Low	A noticeable, but slight change in the assessed state
	Medium	A noticeable change in the assessed state, which does not result in a fundamental temporary or permanent change
	High	A fundamental change in a given assessed condition resulting in a long or permanent change, typically spread in nature, and requiring substantial intervention to return to the original state, exceeding national standards and limitations
Significance	Negligible	Impact of negligible meaning exists when the resource or receiver is not affected in any way by the activity given, or the intended effect is inconspicuous or background levels inseparable
	Small	Influence with little significance, when the effect is felt, but the magnitude is small enough and quite within the permissible limits and / or the receiver is of low sensitivity
	Moderate	The impact of moderate significance is within the permissible limits and standards. The emphasis of moderate influence is placed on the display that the impact is reduced to a level of reasonably acceptable limits. This does not mean that moderate impacts should be reduced to small ones, but that moderate consequences are properly and effectively managed.

	Large	Impact of great importance is what exceeds the permissible limits and standards, or an impact with great significance occurs in highly valued / sensitive resources / resources

Determining the significance of impacts relies on a reasonable argument, a professional judgment, and consideration of the views and considerations of the respective organizations.

On some topics, possible impacts are evaluated by quantitative thresholds and scaling in determining significance. In determining any impact in one of the four categories of significance, it allows different topics to be set on the same scale, which allows direct comparison.

Significance is considered as a function of the magnitude of the impact and the likelihood of its occurrence. The significance matrix is described in the following table.

Table 13. Matrix for determination of significance

SIGNIFICANCE =Magnitude x Probability		PROBABILITY		
		Not likely	Probably	Surely
MAGNITUDE	Negligible	Negligible	Negligible	Negligible
	Low	Negligible	Small	Small
	Moderate	Small	Moderate	Moderate
	Large	Moderate	Large	Large

Since all the social impacts considered in this study are not always negative, but have influences that are favorable to the local or wider community and to affected groups, the next color coding is created to help in visual identification of the impacts that this project will cause.

Table 14. Color Significance Coding

Negative assessment	Positive assessment
Negligible	Negligible
Small	Small
Moderate	Moderate
Large	Large

6.2. IDENTIFICATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

6.2.1. Environmental impacts

Impact on vegetation and fauna

Construction Phase

During the construction phase there will be an impact on the flora species. Due to the nature and area of the works it is necessary for the cleaning of some vegetation that created problems to the structures. Due to the lack of maintenance and deposition of clay from the rain falls there is evident the growth of low vegetation in between the cobble stones. Originally the small gaps between stones are filled only with sand that plays the role of the building material but also does not allow the growth of the vegetation. With time the rain brings clay that year by year is deposited between the stones in the gaps created by the washed-out sand. The vegetation start creating problems in the cobbled surface by moving the stones and deforming the surfaced. Because of that and because in the parts when the stones will be removed and replaced again the loss of this vegetation is inevitable. But can be considered and a minor impact as these are vegetations that will start grow again if a short time.

The design of the public spaces considers as main element the increase of the green areas within the historical center. The plants and trees that will be planted in these public spaces are local ones.

So, the impact on flora species during construction is ***minor*** and can be mitigated by technical means for a ***short-term*** duration. Impacts on fauna are more significative during construction but they are temporary and site specific therefore the magnitude will be medium and significance will be moderate before mitigation.

Operational Phase

During the operational phase no negative important impacts are expected on the vegetation of the area.

The impacts during the operational phase are likely to be ***local*** and ***continuous***. The magnitude is therefore considered to be ***small***.

Impacts on Geology, Geomorphology and Landscape

Construction Phase

The construction activities will include:

- *movement of vehicles for the transport of raw materials*
- *loading and unloading of materials to be used as raw materials.*

In addition, the visual environment created during the construction period would be temporary, of a short-term duration, limited to the construction phase only. For the duration of construction, the visual impacts will be of a negative nature and will be noticeable within the Project site.

However, the usage of heavy cars will be very limited and the transformation of the landscape not considerable as there are no significant changes proposed in the project. Therefore, the magnitude of the impact is considered ***medium***. As there are no key sensitive visual receptors that would be affected, the receiving environment is determined to be of a ***medium*** sensitivity. Given all the above, such an impact is considered to be of ***moderate*** significance without need for mitigation.

Operational Phase

During the operational phase the impact on the landscape of the area is considered in relation of the increased visitors and the waste they can create during their movements within the historical center. This impact can be minimized with a good management of the wastes by the municipality. Thus, the magnitude of the visual impact is considered small to medium.

Impacts on Hydrology and Hydrogeology

Construction Phase

During the construction phase there will be no significant impacts on terms of geological changes and hydrogeology. The works to be carried out, will be small size interventions and mainly above the ground. The project does not involve opening of significant cuts in hilly or mountainous terrain or tunnel openings. The work to be carried out will mainly take place above the ground and will affect only the top layer of arable land.

There will not be potential changes in siltation patterns as a result of construction activities. The construction will not destabilize soils potentially leading to soil erosion during heavy rainfall and sedimentation in drainage canals and irrigation canals of the area. Other related impacts may include accidental events (spills, leaks and uncontrolled releases) due to the presence of hazardous materials on site, including fuel. The contractor must make sure that no oils spills come from their vehicles and machineries. In case of accidental spills, the contractor must take all the emergency measures to properly clean the accident location and waste to be properly stored and transported in designated places. In any case, specific measures have to be taken in order to secure accidental pollution during construction. Such measures are presented in the next chapter of the study.

The magnitude of the impacts is therefore considered to be ***low***. The significance of the impacts is therefore considered to be ***moderate*** prior to mitigation.

Operational Phase

During the Operational phase, impacts are anticipated to be less significant. The Project area, will not be changed the destination of use.

Impacts on water resources

Construction Phase

Impacts during the construction phase (only in accidental case) consists of:

- Accidental discharge of hydrocarbons from transport and work vehicles
- Inert material uncontrolled disposal during the works on the pools
- Deposited next to rivers and streams of raw materials and soil deposits as it may be subject to rainwater erosion and solids reach the water bodies.
- Disposed of non-biodegradable substances on the ground.
- Heaps of materials-debris created inside or very close to streams.

According to the project, there will not be intersection works or crossings with these water bodies.

The magnitude of the impact is considered to be small. The impact of the Project on water resources is therefore considered to be minor prior to mitigation.

Operational Phase

Impacts on water resources during the operational phase of the project is expected to be very small if we take proper measures. Impacts may come as a result of:

- Hydrocarbon/oil accidental spillage during movement of cars
- Wastewater discharges and solid waste from the campers and people visiting the project sites;
- Accidental spills of hydrocarbons from the camper area.

Increase in waste amounts

Construction Phase

The implementation of the project will be associated with the generation of solid (inert) waste. Remnants can be made up, inter alia, of wood pieces or metal cuttings, various plastic materials, paper /cement bags, empty ink cartridges and solvents, broken glass. Some of the waste materials such as paint, cement, adhesives and cleaning solvents contain hazardous substances, while some of the waste materials, including metal or plastic pieces, are not biodegradable and may have long-term and cumulative effects on the environment. These affect the environment by blocking drainage systems and at the same time have negative impacts on human health. Other wastes that may arise from non-construction activities due to the presence of workers in the construction

site and these include food waste, contaminated water from washing and cleaning of construction equipment or tools.

Improper disposal of construction waste or spillage may have medium or long-term impacts on the environment or on public health. The extent of this impact will be local in the areas where waste will be thrown, or in neighborhoods nearby. Gjirokastra have an inert waste landfill. For that reason, the inert waste generated from project implementation and construction activities will be mainly reused and/or will be transported and sent in a legally approved inert landfill as been defined from Municipality of Gjirokastra as below:

Në përgjigje të kërkesës tuaj administruar nga Bashkia Gjirokastër me Nr.3416 Prot, datë 06.04.2021 me anë të së cilës na kërkoni miratimin e vendepozitimit të dherave dhe mbetjeve të dala nga ndërtimi i objektit: **"Ndërtimi i Godinës së Parkimit dhe Hapësirave mbështetëse Gjirokastër"**, ju sqarojmë se:

Volumi i gërmimeve të dala nga ndërtimi i objektit për rastin që ju kërkoni për depozitim është 33.615 m³, sasi kjo e konsiderueshme.
Vëndi i depozitimit do të jetë sheshi i depozitimit të mbetjeve urbane të qytetit.

Nisur nga volumi i madh kërkojmë që sistemimi i mbushjes që do të krijohet në sheshin e depozitimit të mbetjeve urbane të bëhet nën monitorimin e Drejtorisë së Shërbimeve Utilitare, Komunitare.

KRYETAR

Flamur Golemi

Operation Phase

The improvement in the systems of museum is expected to increase the number of their visitors, domestic and foreign. As a results waste is expected to be generated. These residues will mainly be of the character of household waste, without risk. Unsuitable collection, treatment and disposal of these wastes can cause public health hazards due to environmental pollution: air pollution, water contamination, and infections when people or children require wastes. The potential risk from uncontrolled waste is also pollution of riversides as the project is implemented not very far from the watercourses.

The impact will *be long-term* that can last throughout the project's lifespan. The impact intensity is *low* if the Municipality and community take the necessary measures to address them. The sensitivity to the receptors will be *low*, giving little impact to the effect

Impacts on air quality

Construction phase

During the construction phase, temporary impacts will be caused on the air quality of the under-study area. These impacts are caused by the following:

- Excavations and earthworks
- Partial dismantling of cobles stones, stone walls or concrete surfaces
- Transport of materials
- Transport of personnel, related to the construction phase
- Operation of machinery and worksites.

Air pollutants emitted during the construction phase can be classified into two categories. The first category is related to the dust emissions, due to construction works and the movement of vehicles and machinery. The second category includes the emissions caused by the operation of the engines of machinery, heavy vehicles and cars. Dust emissions can cause a serious problem, especially when the project is located close to residential areas. However due to the landscape of the city it is not possible for heavy cars to approach almost all of the sites, beside the Ethnographic museum. So the use of heavy cars will be very limited. In this case proper mitigation measures are needed in order to minimize these environmental impacts.

During the movement of diesel vehicles, the most significant air pollutants emitted are the following: CO_2 from the combustion, CO from inadequate combustion, hydrocarbons (HC or VOC) which are created also by the inadequate combustion and NOx which are produced in high combustion temperatures.

The pollution from the combustion products of the engines of vehicles and machinery is not expected to be significant, mostly due to the small quantities of emissions, which will be produced by a limited number of machineries. A small increase is expected on the concentrations of the pollutants from the increase in the traffic during the construction of the project.

The increase in concentrations of certain pollutants will be local and temporary during construction works.

To sum up, the impacts on the air quality during the construction phase are considered to be local, temporary, with a **medium negative** magnitude of impact, and with a **medium** sensitivity. The air impacts can be minimized to minor with the application of the relevant working standards and measures referring to machinery emissions and worksite vehicles.

Operational Phase

During the operation, it is expected to have an increase on the air pollutant emissions caused mainly by the increase numbers of visitors and tourist cars. Consequently, in the operational phase of the project, the impacts on the air quality will be **minor negative** considering the operation of

the parking areas before the arrival at the bazaar of Gjirokastra from where the tourists usually walk to the sites, and further mitigated by the application of the appropriate mitigation measures, partially reversible and long-term.

Impacts on the acoustic environment - Vibrations

Construction Phase

Noise from the construction activities may be significant for a limited period of time. The noise levels caused by the construction activities (vehicles, equipment, tools machinery, etc.) can vary widely, depending on the phase of construction and specific tasks being performed. All noise emitting equipment will be properly maintained to minimize the noise impact on the area. Noise emitting equipment will comply with the applicable EU noise standards for such equipment as found in EU Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000, on the approximation of the laws of the Member States, relating to the noise emissions in the environment by equipment for use outdoors.

During the construction phase, locally medium negative impacts are expected in the area adjacent to the occupied area of the under-study project. The noise produced during the construction phase, will derive mainly from the operation of the construction tools/equipment's/machineries. The noise can become a problem depending on the distance of the project area from the receiver/receptors, the sound reflection, the existence or not of natural and artificial obstacles, from the meteorological conditions and the type of surface between the worksite area and the receiver.

The impacts on the acoustic environment from the construction of the project, is generally characterized as partially mitigated, since temporal mobile noise barriers can be placed around the worksite.

The negative impacts from the emission of noise during the construction phase will be caused during the working days and hours and especially during the combined operation of the machinery. The increased noise levels due to the construction works will be short-term and fully reversible after the completion of the construction works. With proper mitigation measures to be taken, the noise impacts can be reduced to a minor level.

Operational Phase

During the operational phase of the system of museums, it is expected to have an increased noise disturbance by an increasing visit of cars of visitors. Consequently, in the operational phase of the project, the impacts on the noise environment will be minor negative. With proper mitigation measures, the noise impacts can result in minor negative to insignificant levels.

6.2.2. SOCIAL IMPACTS

In order to Identify the social impacts regarding the construction and operational phases of “Cercizi Square” it is needed to analyse the interrelation between the current status of the works for the Parking of Gjirokastra which is an associated facility to the project of Cercizi square and its components.

Current construction phase of Underground Parking

Based on the last report of the supervisor of the works (Report of July 2022) the physical progress of the works is at 82% of the contract (meanwhile the monthly progress for July 2022 was reported at 5%). Taking into consideration the supervisor report of July 2022, it can be foreseen that the total amount of the works would be finalized by November – December 2022. The current status of the works for the construction of the underground parking are shown in the photographs below taken on the site visits of July and September (from left to right).

Photo July 2022, September2022

Current construction phase of underground parking

The underground parking will be a building of 3 floors. Its entrance, exit and the exchange points for the floors are created as a roundabout which is situated in the extreme east of the "Çerçiz Topulli” square perimeter wall in order to be connected directly to the vehicle access road. The roundabout is connected directly to the “Cercizi Square” as well as to the existing alley that connects the “Cercizi Square” with the “Pioneer House” square. As the “Pioneer House” square is situated below the “Cercizi Square” and the entry point of the underground parking, the actual path that connects the two squares will be modified with ramps in order to facilitate the access to “Pioneer House” square to people with disabilities. The stairs will be used to link the two squares to the North of “Cercizi Square” (near the Bazaar entry).

Inside the underground parking will be a lift scale that can be used as link stair between the two squares, which also gives access directly to the touristic info-point of Gjirokastra.

The square in front of the city hall and its accessibility is not impacted from the construction works of the Underground Parking and of the Revitalization of Cercizi Square. It is connected to Cercizi Square with stairs and in front of it is situated the Municipality of Gjirokastra.

A Parking Management Plan will be created and will be implemented under the responsibility of ADF and Municipality of Gjirokastra.

1. Employment

Construction Phase

Construction will avail skilled and unskilled job opportunities. This would be a positive but mid-term and reversible impact, lasting only during the construction period. Wherever feasible, local people should be considered for job opportunities commensurate with their level of skills. Adequate occupational health and safety standards should be provided to ensure the work environment is conducive.

This impact can be defined as: positive, direct, local, mid-term reversible, with moderate magnitude and moderate significance.

Operational Phase

Opportunities for opening small businesses (i.e. coffee shop, accommodation) along the itineraries.

The impact, defined as above will be manifested during the construction and operational phase

2. Income to material suppliers and contractors:

Construction Phase

Development of the project will entail civil works requiring materials such as gravel, stones, timber, steel materials and cement. This is a positive but short-term and reversible impact. Considering that construction labor would be local or national and some of the equipment can be procured internationally, this impact has local, national and international spatial extent.

Operational Phase

No impacts are expected during the operational phase.

3. Impact on Cultural Heritage

Construction phase

During the construction phase, the impact of project on cultural heritage could be direct or indirect. There are no possible direct impacts in Cultural Heritage during the implementation of the works as the works do not propose large excavation works but only interventions in the surface.

The indirect impacts include:

- Limited access to cultural Heritage assets (general for the community and the visitors)

Operational Phase

No impacts are expected during the operational phase

The magnitude is considered low and the sensitivity of the area is considered small. The overall significance of the impacts is considered minor, to insignificant with proper application of mitigation measures.

4. Visual Impacts and Aesthetics

Construction Phase

Construction activities will require use of material and equipment at the site. Since the intervention area is inhabited and will remain open for access for the local community/tourists, the presence of such activities and materials will cause temporary visual blight at the construction site and will alter visual impressions which the residents were accustomed too. This impact will mainly by visible at the "Cercizi Square" which has the most attendance by the locals and tourists during all year long. However, it must be specified that such impact will be short-term only lasting through the construction phase.

The impact intensity will be very low considering the dilapidated state of all existing facilities; therefore sensitivity on receptors will be low, hence minor impact significance.

Operational Phase

The project will have a positive impact on the landscape and visuality. The implementation of other projects, such as Gjirokstra Bypass will help to avoid the entrance of vehicles at "Cercizi Square"

and at the historical center and thus makes possible the use of this area as a dedicated pedestrian place. The Revitalization of Cercizi Square will create a wider area increasing and improving the visibility of Gjirokastra landscape with its mountains and of other city parts such as the square in front of the "Pioneer's House".

As a result of the increased visibility of the "Pioneer's House" square and of the construction of the access (stairs) from the Cercizi Square we have a unification of these two different areas visually and physically. This is a positive impact as the "Pioneer's House" square was not visible and for this reason was not considered as a touristic destination for this city. The same positive impact will be created also for the square in front of the Municipality. The effect will be long-term, moderate.

5. Impact on private property and common property

Construction Phase

The "Revitalization of Cercizi Square" will be implemented on public property and therefore no expropriation will take place. The project foresees the realization of some specific actions. Such a replacement will be included in the scope of the civil works contractor's contract and fully financed by the project, and will not result in any loss of private assets. These interventions are related to the improvement of the condition for the visitors and locals: with conditions meaning physical accessibility, added access generally in information about the city and safety.

The legal status of the parcels that are affected from the implementation of this project, is proved from a response letter prepared by the Municipality of Gjirokastra in which is clearly stated that the cadastral assets which are affected have the legal status of state property.

Respectively, the evidence of this fact was brought by the Municipality of Gjirokastra as follows:

"Following the project planning and drafting process, we inform you about the legal status of ownership for the areas:

- Complete square Çerçiz Topulli (4900 m2)

- Square in front of the Pioneer House (3100 m2)

- Square between Hotel Çajupi and the Municipality (500 m2)

From the information received from the State Cadaster Agency, Gjirokastra Local Directorate on the legal status of assets where the project of revitalization of Çerçiz Topulli Square and construction of underground parking will be located, as well as in support of the intervention map, it results that this project extends to these assets:

1- Çerçiz Square is in the mortgage registers with Property No. 8/142 with an area of

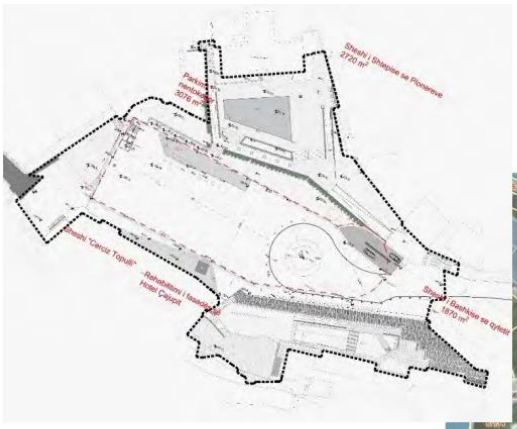
6112.8 m2 and legal status of state ownership.

2- The square between Hotel Çajupi and the Municipality of Gjirokastra with Property No.

8/137 with an area of 3100 m2 and the legal status of state ownership.

3- The square between Hotel Çajupi and the Municipality of Gjirokastra with Property No.

8/134 with an area of 521.5 m2 and the legal status of state ownership."



Project area boundary view (designer source)

Extract of cadastral parcels in the study area (source ASIG)

The interventions foreseen in this project do not request acquisition of land and the related assets. There is no loss of shelter, no need for relocation and there will not be any displacement.

Based on the available project, there are foreseen interventions on the squares and for the restoration of the facades which are public properties. There are no interventions on private properties

6. Accessibility

Referring to the current status of the works for Gjirokastra Parking, the contractor has fenced the project area and has provided a pedestrian dedicated track in front of "Hotel Cajupi" in order to access the hotel, Gjirokastra Bazaar and other touristic destination in the surrounding area. With the finalizing of the works for the Parking of Gjirokastra it is expected to begin the works of Cercizi Square.

The required intervention can have a temporary impact in the access of cultural heritage areas, touristic areas, hotels and other accommodation amenities for tourists or residents (home, apartments etc.).

Hotel Cajupi is the only accommodation structure that has its entrance directly related to the Cercizi Square. In order to have accessibility to it, it is necessary that during the works for the square, based on their status and progress, to provide a dedicated access track for the pedestrians (tourists and residents)

The area that connects the vehicle road, "Cercizi Square" and "Pioneer's House" square is at present an access road for the hotels and the houses that are at the boundary of the project area, and thus makes it a much frequented road, from tourists and residents. For this reason, measures

should be taken for the facilitation of the access to this road, and orientation in the case that during construction, this road (which is a stair road) is going to be closed temporarily.

This impact can be defined as: negative, direct, local, short-term (it will be manifested only in the construction phase), reversible, with moderate magnitude and moderate significance (impact can be mitigated and managed).

Operational Phase

After the construction phase, the project which will be functionally related to businesses at the square area. This will enable life on the street, and the possibility to experience the landscape, which is provided. This impact can be defined as: positive, direct, local, long-term

Loss of Parking area

Before the beginning of the construction of the Underground Parking, the main parking area near the city center and bazaar was the Cercizi Square, which was used not only from tourists, residents and locals but also from the institutions.

As the underground parking is under construction, the only parking possibility for tourists and residents is on both sides of the vehicle road that leads to the square, and in a parking area that is situated down the road and that is used for touristic busses and for the taxis which have their dedicated placed assigned from the municipality.

Such negative impact is short term as with the finishing of the construction works for the underground parking, there will be an increased number of parking places and a bigger space so it can cope with the increased attendance of the area.

7. Occupational health and safety (OHS)

The construction works for Cercizi Square should begin with the finalization of the works for the underground parking. This scenario implies that workers for both projects may be on site in different phases (construction and operational).

Regarding the security on site for the Underground parking, based on the last supervision report and site visits, all measures have been taken for the security of the workers on site, as well as their periodic training. Moreover, as it seen from the current photographs, the parking area is finished including its top (that is part of Cercizi Square) and now the contractor is working on finishing and closing the roundabouts at the entrance of the parking.

According to the supervisor report, the responsible personnel of the contractor for the technical security has conducted the necessary trainings for the workers in order to continue with the works implementation. The contractor has provided its workforce and the technical staff of the construction site with the necessary security equipment (working shoes, security glasses, helmets etc.)

The supervisor has requested the rigorous implementation of the technical security regulations at the construction site. Trainings over the protection from COVID-19 pandemics have been conducted and the adequate measures according to the instruction of the competent public bodies have been taken:

- Maintaining the necessary distance in a work process
- Supply with sanitizing materials according to the instructions of the Institute of Public Health and WHO
- Supply with protection material (masks and gloves)
- Placement of informational posters related to the protection measures to be taken
- Disinfection of the spaces, transport vehicle of the working personnel and work vehicles.

July 2022

Construction activities have the potential to pose occupational risks, some of which could be life-threatening, for example, fatal falls if workers do not use safety latches when working at heights. Such risks can be considered as potential and for some of the works that are going to be implemented near the edge of the Cercizi Square, taking into consideration its height from the square “Pioneer House” due to the construction of the underground parking. Working with high voltage and hot works (welding) pose a risk of electrocution. In addition, these activities could injure workers if personal protective equipment are not provided or properly used. Back injury could occur if workers lift heavy objects using inappropriate body posture.

Other potential hazards might be: inadequate lighting during the night working hours or limited level of visibility during rainstorms creating difficulty for staff driving heavy equipment, driving equipment with improper brake system, lack of concentration while working and exposure to hazardous wastes such as paints, cement, adhesives and cleaning solvents.

This impact can be defined as: Duration of the impact will be mid-term which can occur during the construction and the operational phase. Extent of the impact will be local. Intensity of the impact will be medium, given that some accidents could be minor and not life threatening while others can be grave leading to permanent disability or loss of life of construction workers. Sensitivity of the receptor is medium resulting in a moderate impact significance.

Organization of the site

The instructions of labour protection on the site are used in addition to the others, to ensure safe conditions on the construction site. They are the key elements of safety at work on the construction site.

The following rules apply:

• Compliance with the safety at work instructions by everyone.

• The communication of the safety at work instructions before the

beginning of the works.

• Updating of the safety instructions at work will be done for objective reasons (ex: accidents), in which case the changes will be communicated before the beginning of the works.

• The annexation of the safety instructions at work specified in the contract or generated by other reasons. The working areas must be surrounded by warning tapes and signal panels will be positioned at the entrances within the perimeter of the site indicating:

• The obligation to wear personal protective equipment;

• The rules on line of safety and health at work must be complied with in

the premises of the site;

• Risks of accidents specific to the working area The movement within the site: The pedestrian circulation plan will be drawn up at the beginning of the works for each point of work by the supervisor on the line of safety and health at work, together with the representatives of the and the contractor and will be improved over the work with the indications of the constructors.

Prior to commence of the work the contractor should prepare a Occupational Health and Safety Plan..

8. Community health and safety (CHS)

Problems related to workers' behavior towards the local environment

Often, there is no complete picture of the sensitivity of the project area, because its approach, more or less, is mechanical without paying too much attention to the local human environment. Contractors' employees, if they do not come from local populations, most often have less understanding of the needs and values of the local population, especially if they are about neighborhoods that are in close proximity to construction activities. There are cases where workers are subject to conflict between the developer and the local community.

These conflicts arise due to anxiety over property loss, endangered home security, and disruption of domestic peace of the local population.

The narrow distance between the houses and the construction site, can become a source of frustration that will problematize the relationship between the contractor and the local residents,

private businesses, property owners or tourists. The presence of workers, unknown persons, close to homes / property has a great impact on the fear of the Project and the nervous reaction of the local population.

For such reason we can consider that the interventions that will be implemented in the "Cercizi Square" and "Pioneer House" can mainly create conflicts between the contractors' workers and the business owners/employees (shops, hotels, restaurants, bars), residents, locals, tourists etc.

This impact can be defined as: negative, indirect, local, short-term (it will be manifested only in the construction phase), with the possibility of occurrence- probably, reversible, with low magnitude and low significance (impact can be mitigated and managed).

The emergence of accidents by transporting materials

Traffic accidents have become one of the most significant causes of injuries and fatalities among members of the public worldwide. Traffic safety should be promoted by all project personnel during displacement to and from the workplace, and during operation of project equipment on private or public roads. Prevention and control of traffic related injuries and fatalities should include the adoption of safety measures that are protective of project workers and of road users, including those who are most vulnerable to road traffic accidents.

This impact can be defined as: negative, direct, of a local character, mid-term, with little possibility of occurrence - probably, irreversible, high magnitude and moderate significance (mitigation measures can partially help to recover from the impact).

Labour influx

The contractor, based on the nature of the works can require labour force which cannot be fully supplied locally for a number of reasons, among them worker unavailability and lack of technical skills and capacity. In such cases, the labour force (total or partial) needs to be brought in from outside the project area.

The rapid migration to and settlement of workers and followers in the project area is called labour influx and it can affect project areas negatively in terms of public infrastructure, housing, sustainable resource management and social dynamics as social conflicts within and between communities, increased risk of spread of communicable diseases, and increased rates of illicit behaviour and crime.

Once a contractor is appointed he decides on sourcing the required labour force. This means that not all specific risks and impacts can be fully assessed prior to project implementation, and others may emerge as the project progresses.

The influx of people may bring communicable diseases to the project area, including sexually transmitted diseases (STDs), or the incoming workers may be exposed to diseases to which they have low resistance. This can result in an additional burden on local health resources.

Gender-based violence: Construction workers are predominantly younger males. Those who are away from home on the construction job are typically separated from their family and act outside

their normal sphere of social control. This can lead to inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors from the local community.

Based on the status of the works of the underground parking, on site there are currently 20 workers, a number which can vary based on the needs and the type of the works to be implemented. As for now, all the labour force currently on site is local. After the signing of the contract for the Cercizi Square implementation works, the contractor will determine the recruitment of the labour force (as for now we do not know who is the contractor who will implement the works for Cercizi Square). The labour influx, will have no impact in relation with the undergrond parking as the implementation works are towards the end

Disturbance from noise and vibration due to construction activities

Noise and vibration will undoubtedly be the main problems in the construction phase. directly affected populated areas will contribute significantly to the anxiety of the population in these settlements.

Based on the nature of the interventions and on the areas that the project will be implemented there is the possibility of the noise related disturbance on the community, such as residents, tourists, and clients of the bars, restaurants and hotels that are situated at the boundaries of the project area. Such disturbance will have a major impact in the period from May to October as this is the main period for visiting Gjirokastra and will have the bigger number of tourists. The impact will be minor at the Municipality Square as it is not a service area (no bars, restaurant or hotels).

This impact can be defined as: negative, direct, on the spot, short- term (it will be manifested only in the construction phase), with the possibility of occurrence - probably, reversible, with moderate magnitude and moderate significance (impact can be mitigated and managed).

Accidents

There is only one vehicle road to access the project area that due to the construction works and the lack of parking spaces is used both for vehicles, construction vehicles and pedestrians. For this reason, the attendance and the human activity in the project area and the areas nearby is very high and therefore there will be an increase of community risk of traffic-related accidents or injuries.

Duration of the impact will be short-term occurring only during the construction phase. Extent of the impact will be local or regional depending on origin of construction workers. The likelihood of the impact occurring is medium considering the usually low level of road safety caution by drivers and pedestrians in Albania. The sensitivity of receptors is high given that some accidents would lead to permanent damage and others loss of life while the intensity of the impact is low given the relatively high volume of traffic assessing the area. Therefore, significance of the impact is moderate.

This risk can be defined as: negative, direct, local, short - term (it will be manifested in the construction phase and operational phase), with the possibility of occurrence - probably, irreversible

9. Social Protection

Vulnerable groups in the project area may include: Ethnic minorities, Youth, Persons with disabilities, Elderly people. Based on the current situation (implementation of the works for the underground parking), the actual project (Cercizi Square), the analysis of the interventions, the area, the community and the nature of the project to be implemented there are no impacts related specifically to the vulnerable groups and there is no need for specific action plans for the identified vulnerable groups:

Regarding the delivery of the necessary care and assistance from the social and health care institutions, there will be no delay on delivering these services during the construction period to the recipients of such assistance

The possible identified groups are

- Persons with disabilities
- Elderly People

These categories can be affected form the construction works in regard to the difficulties in the mobility and accessibility. A better and more detailed identification is expected to be done during the construction phase through Focus Groups Meetings and Public Hearings.

The matrix of social impacts during construction phase

Impact \ Condition	Nature of impact	Type of impact	Area	Duration	Probability to appear	Reversibility	Impact magnitude	Significance of impact	Mitigation measures
CONTRUCTION PHASE									
Income to material suppliers and contractors	Positive	Directly	National	Short-term	Surely	Reversible	Moderate	Moderate	No
Employment	Positive	Directly	Local	Mid-term	Surely	Reversible	Moderate	Moderate	No
Visual Impacts and Aesthetics	Negative	Directly	On the Spot	Short-term	Probably	Reversible	Low	Small	Yes
Impact on private property and common property used by individuals	Negative	Directly	On the Spot	Short-term	Probably	Irreversible	Moderate	Moderate	Yes
Accessibility	Negative	Directly	Local	Short-term	Probably	Reversible	Moderate	Moderate	Yes
Loss of Parking area	Negative	Indirectly	On the Spot	Short-term	Probably	Reversible	Low	Small	Yes
Occupational health and safety	Negative	Directly	Local	Mid-term	Probably	Reversible	Moderate	Moderate	Yes
Disturbance from noise and vibration due to construction activities	Negative	Directly	On the spot	Short-term	Probably	Reversible	Moderate	Moderate	Yes
Problems related to workers' behavior towards the local environment	Negative	Indirectly	On the spot	Short-term	Probably	Reversible	Low	Small	Yes
Communicable and transmittable diseases	Negative	Directly	Local/National	Long-term	Probably	Reversible	Moderate	Moderate	Yes
Accident	Negative	Directly	Local	Mid-term	Probably	Irreversible	High	Moderate	Yes
Cultural heritage	Negative	Indirectly	Local	Short-term	Probably	Irreversible	Small	Small	Yes

Gender Based Violence	Negative	Directly	Local	Short-term	Probably	Irreversible	Moderate	Moderate	Yes
Vulnerable people	Negative	Directly	Local	Short-term	Probably	Irreversible	Low	Small	Yes

7. MITIGATION Measures

7.1. MITIGATION MEASURES FOR ENVIRONMENTAL IMPACTS

Mitigation measures for impacts on flora, fauna and habitats

Construction phase

The presence of several plant species was observed during the baseline study. A number of measures will be incorporated into the Project to mitigate impacts arising from Project activities to the surrounding environment:

- ❒ Develop a pre-construction survey prior to the commencement of construction works
- ❒ Vegetation clearing shall be limited to areas where it is absolutely necessary;
- ❒ Demarcate work areas clearly for construction workers to ensure that the disruption of vegetation does not occur outside of designated areas;

Operational Phase

During the operational phase, maintenance works should follow as mitigation measures for the protection of sensitive flora and fauna. These measures are expected to ensure the quality of the surrounding environment and minimize the impact on vegetation and habitats during the operational Phase of the project.

After construction, rehabilitate and re-vegetate disturbed areas to the extent that this is feasible. With the implementation of the mitigation measures, the residual impact magnitude will become small and the residual impact on biodiversity will be reduced to minor significance during operation.

Mitigation measures for impacts on geomorphology – landscape

Construction phase

Impact on the landscape of the project's area during the construction phase will be temporary, while the environmental transformation will be caused by construction elements and movement of heavy transport vehicles and labour. To minimize this impact, it is recommended to:

- ❒ Transport materials as much as possible during the night hours so to expedite construction time;
- ❒ Construction phase should be limited as close as possible to minimize impacts in the project area;
- ❒ Take precaution measures to remove of the woody materials, salvage of topsoil and erosion control;
- ❒ To avoid adverse morphological effects, the necessary occupancy area must be preserved during the construction phase.

Plantation and stabilization works must be implemented, which should be configured with appropriate gradients and terraces. The landscape restoration and plantation study should include the areas of construction sites, possible deposit areas and quarries.

Operational Phase

During the operational phase, in order to mitigate the impact of landscape changing, it is recommended to take the following measures:

Develop a rehabilitation plan and implement it over the years, to plant native trees and other native vegetation species where possible in order to improve the surrounding landscape and minimize visual impacts;

No further mitigation required.

Mitigation measures for impacts on geology and soil

Construction phase

Negative impacts on soil erosion will be mitigated by proper landscaping, replanting or reforesting and specific erosion control measures. Proper soil management (separation of top and sub soils etc.) during soil stripping will ensure appropriate restoration standards are achieved. Proper waste management practices including of hazardous materials and pollution prevention measures will avoid and minimize soil contamination. For the construction phase, the mitigation measures to be taken are:

- ❒ Implement good environmental working practices;
- ❒ Follow the adequate international guidelines and requirements, develop and follow a site-specific Emergency Preparedness and Response Plan (EPRP), which includes the procedures for soil clean-up and decontamination from any event of spillages of oil, fuel or chemicals, etc.;
- ❒ Implement waste management plan (as part of the ESMP) to ensure that waste is handled and disposed of correctly such that soil contamination is minimized;
- ❒ Surface water of the work sites should be gathered in drainage channels;
- ❒ Caution should be taken for drainage channels in the parking lots;
- ❒ Rehabilitation and re-vegetation of cleared areas adjacent to the Project site which shall include the re-vegetation of bare soils before the next wet season; A special survey is deemed necessary to verify such potential erosion or landslide risks and needs to be carried out, prior to reservoir first impoundment.

With the implementation of the mitigation measures listed above, the impacts on soil and geology, the impact magnitude will be reduced from minor to neglectable. The receptor sensitivity remains medium, and therefore the residual impact will remain neglectable.

Operational phase

During the operation of the project, the contractor responsible for the operation, should monitor the development of settlements and the general stability of the geological formations that are affected by the project, or embankments with emphasis on high slopes. Where significant changes occur proper mitigation measures will be implemented.

During the operational phase, the following measures will be implemented:

- ❒ Surface rainwater has to be transmitted to the drainage channels.
- ❒ Stability of the slopes of embankments and cuts will be monitored and if necessary remedial actions will be implemented.

Following implementation of the mitigation measures outlined above, it is anticipated that the impact magnitude will be reduced from minor to negligible. The overall residual significance of the impact will therefore become negligible.

Mitigation measures for impacts on air quality

Construction phase

During the construction phase, the following measures must be implemented for the minimization of the deterioration of the air quality of the area:

- ❒ Frequent and periodic maintenance of all the construction machines by specialized personnel
- ❒ Systematic wetting of aggregates with fixed or transportable systems especially during the dry season.
- ❒ A speed limit of 20 km/hr. will be enforced on the construction site/access road;
- ❒ Prohibition of permanent parking of worksite vehicles in places outside the worksites.
- ❒ Use, to the extent possible, of inert materials produced from excavations, to avoid transportation of aggregates from distant-off points.
- ❒ Project planning preparation so that soil materials from excavations are taken within the shortest possible period of time at embankments positions.
- ❒ The stored quantities of inert materials for the needs of the project should be limited to necessary and where possible be covered
- ❒ All materials with the potential to lead to dust emissions shall be transported in sheeted trucks;
- ❒ The operation of the machines working in the area should be done with careful manipulations, so as to limit dust emissions.
- ❒ The moving of heavy trucks through settlements during the public rest hours should be prohibited.

- ❒ In case of extended excavations during the dry period of the year, soil materials should first be wetted where possible, to minimize the emitted dust.
- ❒ The worksite areas should be paved with gravel material for the restriction of dust emissions.

To sum up, for the minimization of dust emissions, the frequent wetting of heaps of soil materials and the areas of movement of trucks is proposed and the coverage of the cart of the trucks carrying soil materials, sand etc. For the minimization of air pollutant production, the proper maintenance of worksite machinery and vehicles is proposed.

The movement of the trucks carrying aggregates should be allowed only if the trucks are covered. It should be pointed out, that the reduction of the speed of the vehicles (especially in unpaved roads) contributes to the reduction of the emitted dust. Indicatively it should be mentioned that 20% reduction in speed of 70km/h respectively reduces dust emissions by 20%. In the following table are presented statistical emissions in the atmosphere and measures to minimize this emission are presented.

Table 15. Statistical emissions in the atmosphere and measures to minimize this emission

Source	Emission	Mitigation measures
Movements of transport of raw materials and wastes means	LGP (total particles)	Movement of means only in the existing roads
	PM_{10}	To wet the roads of the work place in order to minimize the particles increase in the atmosphere.
	Gases from the movement of vehicles	Periodic technical condition check of vehicles
	CO, SO_2, NOx	Avoid movement in peak traffic hours
Construction activity: • Excavations • Loading/unloading • Stuffing •Aggregates deposition • Earth moving etc.	LGP (total particles) PM_{10} Gases from the vehicle's movement CO, SO_2, NOx	Periodic technical condition check of vehicles To wet the roads of the work place in order to minimize the particles increase in the atmosphere. Movement of means only in the existing roads.

Operational Phase

During operational phase the air quality impact is only from car movement increase from tourism development. The mitigation measures for impacts on air quality are:

- ❒ Vehicle speeds shall not exceed 40km/h along dust roads or 20km/h when traversing unconsolidated and non-vegetated areas.

- A detailed plan of management of the area with the maximum visitors that the site can accommodate needed to be development.
- After mitigated the residual impact significance is classified as minor negative.

Mitigation measures for impacts on water resources

Construction phase

During the construction phase, mitigation measures that ought to be taken to avoid the impact on the water bodies are:

- Raw materials and soil deposits should not be deposited next to rivers and streams as it may be subject to rainwater erosion and solids reach the water bodies;
- Periodical checking of the work sites for accidental leak of hydrocarbons from work vehicles.
- Periodical checking of transport and work vehicles for its technical condition.
- The washing of machinery and vehicles at a distance less than 50m from the nearest stream will not be allowed;
- The washing of the wheels of the trucks and the removal of mud before the exit of the trucks from the worksites should be implemented, with proper collection and disposal of waters (installation of an Irish ditch at the entrance - exit of the worksites and collection of the produced sludge);
- During the construction (and operation) of the project, the smooth flow of surface water (rivers, streams, etc.) must be ensured, with the construction of the necessary technical works, after the elaboration of a hydraulic study and considering a flood return period of at least 50 years;
- The design of the drainage works in the parking area must be done to ensure the complete draining and to avoid the phenomena of stagnant water on the corridor (due to rain).

Operational Phase

During operational phase the preventive and mitigation measures that have to be taken are the following:

- In the case of hydrocarbons leak immediate measures should be taken to stop the leakage, repair and clean the contaminated surface;
- Regular maintenance of the technical works is necessary, for the drainage of their design flow. The periodic maintenance of the technical works should include the removal of

debris, garbage and cutting of pests. The non-periodic maintenance will include examination for erosion, sedimentation, obstruction or even the case of technical failure.

- ❒ Pollution of waters of streams should be avoided with the uncontrolled use of pesticides and fertilizers in the plantation areas.
- ❒ Wastewater from the project area will be emptied at stations and from there will be driven along with the stations wastewater, to sewage systems or cesspools.

After mitigated the residual impact significance is classified as negligible.

Mitigation measures for impacts on the acoustic environment

Construction phase

Measures for reducing noise during construction can be summarized in noise reduction of machinery by using new models, in which provision is made for reducing the noise emitted etc. Means of transport and work must be checked for the technical condition and be equipped with the technical control certificate.

- ❒ The work near areas with considerable biodiversity and high-density populations should be only done during the daylight hours.
- ❒ Continuous measurements of the noise level emitted from the construction activity should be carried making sure that limit values in the Regulation No. 8 dated 27.11.2007 "For the limit noise levels in certain environments are not exceeded.

Operational Phase

According to the project design, the integrated acoustic pressure level, shall be as low as possible.

For this the contractor shall make information indicators like newsletters for visitors etc., to inform them of the sensitive and problematic areas. After mitigated the residual impact significance is classified as minor negative.

Mitigation measures for Waste

Construction phase

Measures to minimize the waste production in site from construction activities as well as from the workers on site. During construction, the majority of inert waste and soil excavation will be reused for the project implementation purpose as much as possible.

Operational Phase

According to the project design, waste bins will be placed in the project areas in order to properly manage the waste generated from local population as well as tourist daily activities.

7.2. MITIGATION MEASURES FOR SOCAL IMPACTS

Mitigation measures on visual impacts and aesthetic

Visual impacts and aesthetic are temporary and are linked to the construction phase and operational phase.

Construction phase

During this phase, there will be significant use of machinery, construction materials and cretiion of construction waste material in the area of the project nearby the accommodation structures, restaurants, houses and institutions. Moreover, the project area will be fenced, obstructing the view.

The Project will aim to prioritise the use of existing access roads, and it is considered that there will be minimal, if any, additional visual or landscape impact.

Temporary lighting will be needed during construction

The project area should be monitored constantly in order to preserve the visual aesthetic of the project site.

Operational Phase

During this phase actions to clean the project site should be taken. The contractor must remove all temporary structures built, that were needed for the implementation of the construction works, as well as take away all the construction waste material generated during the construction phase

Mitigation measures for impacts on Cultural Heritage

Construction phase

A Cultural Heritage Management Plan has been established in an attempt to minimize impact to the area's unique cultural heritage from Project activities,

In order to mitigate the possible impact on Cultural Heritage the following measures will be taken:

1. Site Recording and mapping of sites within the areas of disturbance should be conducted as part of preconstruction surveys:

• Infill surveys are required to clarify recorded site locations.

• The definition of the locations of some minor permanent facilities, access roads, equipment and materials storage sites are confirmed

2. Management Programs: The cultural heritage management plan will make provision for:

• Management of cultural heritage objects within the area of the project, and the documentation and storage of salvaged materials.

• Measures will include procedures to increase cultural awareness and set standards of behavior for project personnel to prevent illegal acquisition, misuse and export of cultural heritage.

3. In the Bid documents should be clearly specified that the company, which will implement the project, should have the experience and all the necessary licenses for interventions in historical areas and culture monuments

4. Contractor to organize Chance find procedure training for Construction site Managers and other lower level staff who shall organize and manage part of the construction (civil) works.

Although there are limited chances to have any findings during excavation and other earthwork activities considering the size and type of construction works a Cultural Heritage Management Plan is developed to address these issues

Mitigation measures for impacts on Accessibility

Measures should be taken for the facilitation and the orientation of the access to Hotel Cajupi, the Bazaar and the other accommodation facilities. During the interventions on the "Pioneer House" square a stair road which leads to the square and is an access roads to houses and hotel will be temporarily closed.

Construction phase

Signage should be placed, (replacing existing information boards), in order to orient the tourists on how to access the bazaar, the other squares and the accommodation facilities. In case of the temporarily closure of the stair road that leads to the "Pioneer House" the signage should be placed in order to redirect and show the tourists and the residents how to access the accommodation structure using the alternative roads. The best alternative is the road that leads towards Cercizi Square and then turning right through the alleys.

Public disclosure of Traffic management plan throughout the city must be created, in regards of the project. (accessibility of location/castle/carshi, project related traffic scheme throughout the city, location of temporary replacement parking for visitors, pedestrian accessibility paths and other relevant issues)

Existing Information board that leads to Hotel Kastro and the "Pioneer House"

Information boards should be placed containing information relative to the alternative access roads and paths, to the period of the closing of the access roads, and to the mobility schedule

The access to the Cercizi Square should always stay available as it is the only access road for "Hotel Cajupi", the Municipality and the institutions around it. (accessibility of location/castle/carshi, project related traffic scheme throughout the city, location of temporary replacement parking for visitors, pedestrian accessibility paths and other relevant

Operational Phase

During the operational phase there will be no negative impact on the accessibility to the touristic sites, private businesses, public institutions or any other private properties. We will have an improvement of accessibility to the Cercizi Square and especially to the "Pioneer House" square, which will be easily accessible from the persons with disabilities.

Mitigation measures on Loss of parking area

Referring to the current status of the works for the underground parking the Municipality should place information boards and temporarily yellow markings to designate taxi parking places, in order to have clear places for taxis and tourist busses. The Municipality should also define the number available for the taxi places.

In case it is necessary, the Municipality can designate other parking places in different areas besides the actual designated one.

The information related to the taxi places should be made through placing visible information boards in the main road before arriving in the designated place, and should contain very clear orientations regarding on the mobility orientation and on how to access the area. A better Traffic and Parking Management Plan should be created, until the underground parking will be functional, based on the previous experience of the implementation of the works for the underground parking.

Operational Phase

With the finalization of the works the square and the parking are expected to be fully functional and thus improving the availability of the parking area in order to cope with the influx of tourists and residents that use that part of the city.

Mitigation measures on Labour influx

These mitigations measures will be implemented in the case that the designated contractor for the implementation of the works for the construction of the three squares will not engage the local workforce but will engage workers from other areas for specific works. Nevertheless, we suggest to promote the engagement of local workforce as there is a great number of projects that are being implemented in this area.

Mitigation measures that may be implemented on Gender Violence:

- Repeated training and awareness rising for the workforce about refraining from unacceptable conduct toward local community members, specifically women;
- Informing workers about national laws that make sexual harassment and gender based violence a punishable offence which is prosecuted;
- Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for non-compliance
- Contractors adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

Mitigation measures that may be implemented are on Communicable and transmitted Diseases:

- Free testing facilities
- Monitoring of local population health data, in particular for transmissible diseases
- Community sensitization campaigns
- Awareness raising about public health impacts from labor influx.

As a result of the presence of the workers during the maintenance period, such measures may be implemented also in the operational phase

Mitigation measures for impacts on Occupational Health and Safety

Based on the latest supervision reports and site visits, regarding the construction of the underground parking, the contractor has implemented concrete measures regarding Occupational Health and Safety. HSE is present in the site periodically. Nevertheless, should be taken into account the possibility of the beginning of the implementation of the Cercizi Square works during the finalization works for the underground parking. In such case scenario alternative measures should be taken for the Occupational Health and Safety for the workforce of the two operating contractors in site. With the beginning of the works for the Cercizi Square the area should fenced in order to have a clear view of the two sites.

Prevention boards should be placed with information regarding the height of the area and the risks related to it. The contractor should place lightning during the night in order to prevent possible accidents.

The contractor of the Underground Parking should continue with the implementation of the Occupational Health and Safety Management Plan

Construction phase

The contractor will create Occupational Health and Safety Management Plan. Occupational Health and Safety measures will be in line with "General EHS Guidelines: Construction and Decommissioning"[3].

In order to avoid over-exertion and ergonomic injuries and illnesses the following measures should be taken:

- Training of workers in lifting and materials handling techniques in construction and decommissioning projects,
- Planning work site layout to minimize the need for manual transfer of heavy loads
- Implementing administrative controls into work processes, such as job rotations and rest or stretch breaks

Mitigation measures to avoid slips and falls on the same elevation associated with loose construction materials, liquid spills, and uncontrolled use of electrical cords and ropes on the ground, include:

- Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths
- Cleaning up excessive waste debris and liquid spills regularly
- Locating electrical cords and ropes in common areas and marked corridors
- Use of slip retardant footwear

Albania Guidelines require that workers exposed to a noise level greater than 80 dB(A) for a duration of more than 8 hours per day wear hearing protection. Other mitigation measures include:

- Orient all construction workers on safe work practices and guidelines and ensure that they adhere to them.
- Training will be conducted on how to prevent and manage incidences. This will involve proper handling of electricity, water etc. and sensitization on various modes of escape,

[3] https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=jOWim3p

conduct and responsibility during such incidences. All workers will fully be aware and mentally prepared for potential emergency.

- Strict instructions shall be given for drivers of heavy equipment.
- Supervision of works shall be done regularly to ensure that safety conditions are met while any deviation from safety regulations is immediately reclaimed following the best practices regarding safety at work equipment.
- Communication will be ensured in between workers and drivers of heavy equipment.
- Develop evacuation procedures to handle emergency situations.

Working at Heights.

Fall prevention and protection measures should be implemented whenever a worker is exposed to the hazard of falling more than two meters; into operating machinery; into water or other liquid; into hazardous substances; or through an opening in a work surface. Fall prevention / protection measures may also be warranted on a case-specific basis when there are risks of falling from lesser heights.

Fall prevention may include:

• Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area • Proper use of ladders and scaffolds by trained employees

• Use of fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or self-retracting inertial fall arrest devices attached to fixed anchor point or horizontal life-lines

• Appropriate training in use, serviceability, and integrity of the necessary PPE

• Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall

Workers' rights and obligations

Workers' rights including occupational health and safety need to be considered to avoid accidents and injuries, loss of man-hours, labour abuses and to ensure fair treatment, remuneration and working or living conditions. These issues should be considered not only for those who are directly employed by contractor and within the supply chain.

In terms of labour rights, all workers (including contractors and subcontractors) will have contracts with clearly expressed rights and conditions for their employment, and their legal rights. Contracts will be explicitly explained to all workers when necessary to ensure that workers understand their rights. Contracts must be concluded before the commencement of the working activities. All workers (including contractors and subcontractors) will be able to join trade unions of their choice and have the right to collective negotiations

Mitigation measures to reduce the spread of COVID -19

The implementation of safe work practices to limit exposure to COVID-19 at work requires first assessing the risks, and then implementing the hierarchy of controls. To eliminate the risk and if this is not possible, to minimize it, the following mitigation measurements should be taken:

- The contractor should carry out only essential work for the time being; it may be possible to postpone some work to when the risk is lower. Ensure that only workers who are essential to the job are present at the workplace and minimize the presence of third parties.
- The contractor should reduce, as far as possible, physical contact between workers (e.g. during meetings or during breaks). Isolate workers who can carry out their tasks alone safely and who do not require specialized equipment or machinery that cannot be moved.
- The contractor should place an impervious barrier between workers, especially if they are not able to keep a two-meter distance from each other. Barriers can be purpose-made or improvised using items such as plastic sheeting, partitions, mobile drawers, or storage units.
- If close contact is unavoidable, keep it to less than 15 minutes.
- Soap and water or appropriate hand sanitizer should be supplied at convenient places. Clean your premises frequently, especially counters, door handles, tools and other surfaces that people touch often and provide good ventilation if possible.
- Workers will avoid contact with local residents and keep physical distance not smaller than 2m from the residents.
- Workers should undergo regular medical checks during Pandemic state
- Wearing of protective masks during the work should be obligatory

Concerning the stakeholder engagement and disclosure of information, the following mitigation measurements should be taken by ADF:

- Design alternative approaches to engagement that: i) enables two-way communication; ii) prioritizes engagement activities; iii) communicates timely updates;
- Prioritize critical engagement activities
- Consider virtual and remote alternatives that best meet the objectives of the planned activities;
- Based on the analysis of factors such as access to and quality of connectivity, use the social media platforms, mobile phone coverage, internet access, mobile network providers and alternate nonelectronic engagement channels to provide a range of options to meet different stakeholders' needs
- Providing alternate secure channels for grievances to protect complainants against potential retaliation. These options should consider factors such as accessibility, confidentiality, privacy, anonymity, digital protections, and secure communication through electronic and nonelectronic methods

Organization of the site

The circulation paths, must be calculated, placed and arranged so that they can be used easily, in accordance with their intended purpose. The circulation paths used by the workers in order to execute the works assigned to them must be maintained free, without irregularities, stable and solid so that the works to be carried out in a safe manner. The emergency routes and exits must be clear at all times and lead by the most direct means possible to a safe area.

In the event of danger, all work stations should be able to be discharged quickly and as safely as possible for the workers. The number, distribution and size of the emergency routes and exits are determined according to the use, equipment and dimensions of the site and the maximum number of persons that may be present.

During the night the circulation paths, ways of emergency and workstations must be artificially lit properly and sufficiently. When on the circulation paths risky manoeuvres are executed (turns, lever back etc.) the vehicles or machines will be routed. The persons who are doing this should be placed in areas where they may be seen by the driver of the vehicle and can view the manoeuvring zone in such a way as to prevent access in the area of persons or other equipment. In the case of observation of a danger they will immediately signal and stop the handling / machine. The driver of the vehicle will start/resume maneuvers only after having received a signal from the person who controls the operation.

The areas for the parking of the motor vehicles will be signaled in an appropriate manner. The motor vehicles and equipment will be parked only in areas specifically provided for them. While parked these will have the engine stopped and will be properly secured (parking brake or locking method). They will not leave the motor vehicles or machinery unattended with the engine running or the keys in contact. It is expressly forbidden to handle motor vehicles or machinery by unqualified people.

Code of Conduct

A company code of conduct shall be prepared for employees of a contracting and subcontracting companies to inform the employees of the company's expectations. Code of Conduct will be considered as guidelines to prevent certain specific types of behavior (e.g. conflict of interest, self-dealing, bribery, and inappropriate action), and to ensure worker that employer also has obligation toward the workers. The code of conduct shall be developed based on the following key points:

- Loyalty (following codes of conducts, commitment to work, commitment to environmental and social, health and safety measures)
- Prohibited behaviors like gambling, drunkenness, and irregular and immoral habits
- Existence of a Workers Grievance Mechanism.

Workers Grievances Mechanism

The main objective of the Workers Grievance Mechanism is to receive, attend and resolve grievances in the workplace and provide a procedure to follow when a workplace grievance arises.

All Contractors and Subcontractors workers will be acquainted with existence of the WGM during the act of signing the Code of Conduct.

Grievances from Employees (including both direct and indirect employees, including local workers and migrant workers through contractors) can be lodged as a result of, but not limited to:

- Complaints pertaining to amount of wage, salary, other remuneration or benefits as per Company's Human Resource policy;
- Delays in disbursement of remuneration;
- Gender discrimination;
- Issues related to worker's organization.
- Labour Accommodation
- Health and Safety issues
- Extended working hours
- Other issues that workers find it useful to express concerns and grievances.

Engaging with workers and responding to their concerns and grievances is essential for the successful operation of any business. The purpose of this Grievance Mechanism is to manage workers concerns and grievances in an effective, timely, and transparent manner. This Grievance Mechanism helps the contractor to adequately manage grievances and prevent conflicts with workers –therefore improving the working environment- and align with international best practices in labour and working conditions.

The figure below describes the process that will use to resolve worker's grievances:

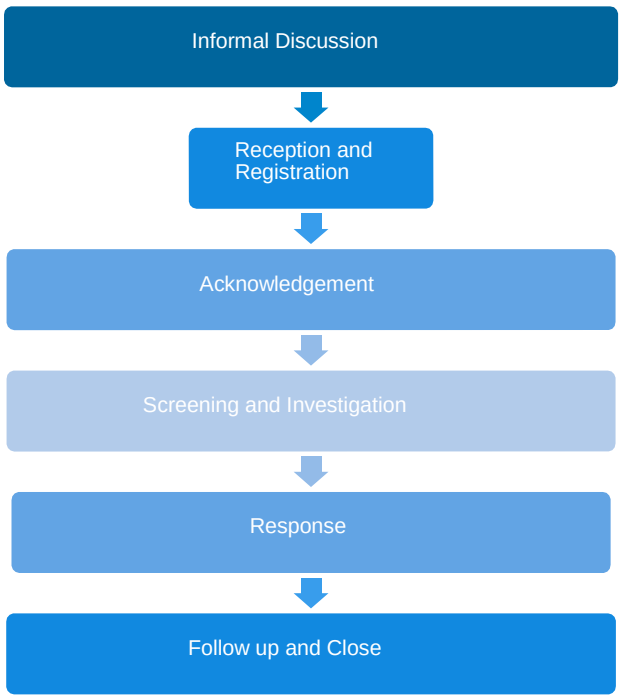


Figure 15. Workers Grievance Mechanism Procedure

Informal discussion

Workers are encouraged to use informal discussion to resolve grievances. They should, whenever it is possible, talk it over with their manager. Informal agreement on a solution may be possible, which makes it more likely that resolution is faster and more accurate.

Reception and Registration

If the grievance is serious or the worker wishes to raise it formally, it must set out the grievance in writing to his manager, using a form especially designed by contractor. A grievance database should be developed to keep all grievance cases information for further analysis. All stages of the grievance handling must be documented in the database.

Acknowledgement

Contractor must report to the complainant that the grievance has been received and that it is currently been attended by Mechanism owners.

Screening and Investigation

Grievance Mechanism owners must screen all grievances to make sure that they belong in the Mechanism and to establish their level of priority. Screened and admitted cases must be investigated to establish facts and to determine how the grievance should be resolved.

Response

Every effort should be made to secure a resolution in the best interests of the worker and company. The response will inform the complainant of the outcome of the grievance attention process, in order to explain the scope of the response and clear any doubts the complainant may have.

In first instance, the estimated time of resolution is 15 days (maximum) upon receiving the grievance. In case of appeal, the estimated time is one month from the date the second instance receives the grievance.

The contractor must define people in charge of resolving grievance in first and second instance. The decision is final after the second instance within the terms of contractor's internal Grievance Mechanism

Follow up and Close

Once a response has been issued, reception of the response by the complainant shall be recorded with a form. Worker satisfaction with the process must be recorded (for example, through a survey) to ensure continuous improvement.

Disclosure of grievance mechanism on the ADF website and throughout the construction site and Gjirokastra municipality's website

Operational phase

Similar to the construction phase, potentially workers may be exploited and occupational health & safety risks may occur in the regular and emergency maintenance and repair works. The likelihood of these risks is lower, as there will be less labour hired and fewer activities, compared to the construction phase.

Mitigation measures on Community Health and Safety Potential impacts on the communities along the Project may occur mainly during the construction phase and are driven mainly due to the temporary deployment of Contractors workforce in the area were the Project will be implemented. The main mitigation measures with regards to community health, safety and security issues foreseen in Management Plans are listed below

- Avoid, minimize or change traffic density with impact on other road users and on the local community, in general (Transportation Management Plan, in particular the management of impacts using the new access paths and public roads);
- Introduction of new staff as a guarantee of security in order to avoid conflicts, accidents or other forms of disturbance of public peace and healthy social local climate (Stakeholders Engagement Plan, in particular with regards to training and briefing the workers;
- Avoid, minimize or change the direct impact on activities of the local services providers (providers of water supply, electricity, etc.) and local entrepreneurs
- Prevent, avoid or minimize exposure of communities to diseases caused by noise, water and pollution
- Improve / raise the response level of authorized institutions (police, hospitals, etc.) to emergencies (Emergency Response Plan, especially in terms of responding to accidents and off- site incidents);
- Identify sensitive areas from, so that all necessary measures can be taken so as to avoid any elements of local discomfort or inconvenience and approach solutions early in order to limit socioeconomic impact
- Implement measures to reduce the impact on socio-economic environment even before the start of works (setting deviation routes, installation of warning elements related to the area of the works, provision of alternative networks of utilities, etc.)
- Worker's Code of Conduct will aid in mitigating any unforeseen issues regarding community disturbance
- Contractors will develop appropriate Emergency Response Plans for off-site activities in line with the Emergency Response Plan and Contractor Management Plan (Emergency Response Plan);
- Contractor is required to prepare a Traffic Management Plans detailing the routes and mitigation measures for construction and construction materials transportation.
- Access should be via existing tracks. Use of common corridors and roads in order to minimize area disturbance (Roads and Traffic Management Plan);

- Ensure workers' vehicles are parked in designated areas to minimise any disruption to local communities (Roads and Traffic Management Plan);

Emergency plan for Construction and operation

Emergency planning should begin before the commencement of any works on site. These measures should be planned in accordance with current status and progress of the works of the underground parking as well as the progress of the works of the Cercizi Square. The initial emergency plan may be based on a generic plan adapted to the specific project. As the project progresses it will generally be necessary to amend the plan to take account of any changes, in particular, if an emergency or near miss has occurred

An emergency plan should take into consideration:

Hazard identification/assessment

Emergency resources

Communication systems

Emergency response procedure

Communication and review

It is important to identify which resources are available and have contingency plans in place to make up for any deficiencies. The most important resource on most projects will be an emergency phone call system. It is essential to verify that emergency number is in effect in the area.

Whatever the situation may be, people, equipment, facilities, and materials are needed for emergency response. Where they will come from must be determined in advance. Moreover, the people supplying these resources must be made aware of their role in the plan. An emergency can be reported from any source from a worker on site, an outside agency, or the public.

To be effective, an Emergency Response Procedure must be clearly communicated to all site personnel. The following activities should be considered:

• Review the procedure with new site subcontractors and new workers to ensure that it covers their activities adequately.

• Review the procedure with suppliers to ensure that it covers any hazards that the storage or delivery of their materials might create.

• Review new work areas i with owner/client to ensure that new hazards are identified and covered in the procedure.

• Review the procedure with Health and Safety Representative on a regular basis to address new hazards or significant changes in site conditions.

• Post the procedure in a conspicuous location.

The Emergency Response Procedure for a construction project must continually undergo review and revision to meet changing conditions

Problems related to workers' behavior towards the local environment.

In order to avoid problems related to workers' behaviour towards the local environment the Contractor should seek to employ as many workers as possible from the area who know the local people and local environment aiming that at least 2/3 of them are locals. For this reason the local workforce who is actually on site for the construction of the underground parking can be engaged. Moreover encouraging the engagement of the local workforce can be used as a constant incentive for the increase of the local employment and as a way to familiarize the local community with the workforce

The emergence of accidents by transporting materials

Road safety initiatives proportional to the scope and nature of project activities should include:

- Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public. Measures should include:
  - Emphasizing safety aspects among drivers
  - Improving driving skills and requiring licensing of drivers
  - Adopting limits for trip duration and arranging driver rosters to avoid overtiredness
  - Avoiding dangerous routes and times of day to reduce the risk of accidents
  - Use of speed control devices (governors) on trucks, and remote monitoring of driver actions
- Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.
- Minimizing pedestrian interaction with construction vehicles
- Collaboration with local communities and responsible authorities to improve signage, visibility and overall safety of roads, particularly along stretches located near schools or other locations where children may be present.
- Collaborating with local communities on education about traffic and pedestrian safety
- Using locally sourced materials, whenever possible, to minimize transport distances.

A Traffic Management Plan, which will organize the traffic throughout the city during construction activities, will be prepared and adopted by the contractor. The traffic management plan will be prepared by the construction company and will need the approval from Municipality and ADF and its implementation will be supervised by the Municipality and the local police.

Prior to starting the project implementation, the contractor should prepare a "Community Health and Safety Management Plan".

Operation phase

In addition to the potential negative impacts which would require mitigation, the operation of the sub-projects also has the potential to improve community health safety and security through the following means:

▪ Improved access to facilities and touristic attraction for communities due to rehabilitated squares and parking construction and widened paths;

▪ Improved workforce health awareness;

Disturbance to humans and houses from noise and vibration due to construction activities

In order to protect the project against unforeseen risks, as well as the inhabitants of the settlements from possible negative consequences related to damage to houses, it is desirable for the contractor to record the current state of all houses contacting project borders. The condition of all houses should be checked and recorded during the area that will impact directly or not. The following mitigation measurements should be taken:

- Construction activities should be carried out only during the day to minimize noise levels to the residents
- Contractor will be careful when selecting equipment to avoid use of old or damaged machinery with high level of noise emissions.
- Contractor will ensure that equipment is properly serviced and efficient.
- When possible, contractors will cordon off construction site with noise absorbing materials, for example, plywood rather than iron sheets.
- Construction workers will be aware of the sensitive nature of workplaces they are operating in and advised to limit verbal noise or other forms of noise.
- The contractor shall ensure that noise levels emanating from machinery, vehicles and noisy construction activities are kept at a minimum for the safety, health and protection of people in the nearby buildings.
- Noise and vibration will be minimized at the project site and surrounding areas through sensitization of construction truck drivers to switch off vehicle engines while offloading materials.
- All generators will be insulated or placed in enclosures to minimize disrupting ambient noise levels

If some of the houses later (during the operation report damage due to excavation or other work, there will already be a record of the condition of the house before the commencement of the construction.

All damages caused must be compensated in total, at full replacement cost.

Taking into consideration that the construction works of the "Gijrokastra Underground Parking" and "Revitalization of Cercizi Square" are implemented in an area surrounded from houses, accommodation services, restaurants and institutions, it is very important to organize meetings with the local residents and the owners of the businesses and according with Stakeholder Engagement Program and activities.

Operation Phase

The operation and maintenance create a lower number of potential external safety risks to the communities living close to the squares. The likelihood of these risks is generally low

Accidents

Construction phase

This environment and social incidents response toolkit (ESIRT) will be used in case such incidents occur during the implementation of the project.

ADF will ensure that incidents are investigated to determine what happened and why, so that processes and measures can be put in place to avoid reoccurrences and so that appropriate remedies are applied.

In case of the accident on any of the project sites, the Contractors will inform the ADF and/or the Bank Team; inform appropriate authorities in compliance with local regulations; secure the safety of workers, public, and provide immediate care. As soon as any member of the Contractor's or ADF team member becomes aware of an alleged or actual incident, the team member will notify the ADF. This initial communication will be sent regardless of the severity of the incident.

Based on information received, the Contractor and ADF will classify the incident based on several factors, including the nature and scope of the incident, as well as the urgency in which a response may be required.

ADF will ensure that incidents are investigated to determine what happened and why, so that processes and measures can be put in place to avoid reoccurrences and so that appropriate remedies are applied.

The following mitigation measurements should be taken:

- ❒ Traffic routes, including stairs, fixed ladders and loading bays and ramps, must be calculated, placed and arranged and be accessible so that they can be used easily, in complete safety and in accordance with their intended purpose and the workers employed in the vicinity of these traffic routes are not exposed to any risk.
- ❒ Routes used for pedestrian traffic and/or for goods and those where loading or unloading operations are executed must be dimensioned according to the number of potential users and the type of the activity.
- ❒ The traffic routes must be clearly marked, regularly checked and maintained.

- ❒ Traffic routes must be placed in such a way that there is a sufficient distance from the traffic routes and doors, gates, passages for pedestrians, corridors and staircases.
- ❒ Contractors will adopt best transport safety practices with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.
- ❒ Project will require contractors to regularly maintain vehicles to minimize potentially serious accidents such as those caused by brake failure commonly associated with loaded construction trucks.
- ❒ The site shall be fenced and signs put in place with security personnel to stop unauthorized people from accessing the site.

A Traffic Management Plan, which will organize the traffic throughout the city during construction activities, will be prepared and adopted by the contractor. The traffic management plan will be prepared by the construction company and will need the approval from Municipality and ADF and its implementation will be supervised by the Municipality and the local police.

Prior to starting the project implementation, the contractor should prepare a "Community Health and Safety Management Plan".

Creation and implementation of a Campaign for the safety of the population during the construction of infrastructure projects.

Operational PhaseCommunity Risk Assessment

The impact of this open public spaces is the area of Cercis Topulli Square where people will tend to gather together, may lead to potential crowd-gathering risk. The requirements of CRS report to be prepared from Municipality of Gjirokastra proposes a method to assess the rank and spatial distribution of potential crowd-gathering risk in open public spaces in a medium urban area as will be Cerciz Topulli Square . Then, a reasonable crowd density threshold is delimited to detect critical crowd situations in this open public spaces and find out the key open public spaces that need to have intensive crowd-gathering prevention. For estimating the crowd-gathering risk in key open public spaces, the quantified risk assessment approach is conducted based on the classical risk theory that simultaneously considers the probability of an accident occurring, the severity of the accident consequence, and the risk aversion factor. A thematic map that describe the ranks and spatial distribution of crowd-gathering risk will be generated and be part of the CRA. According to the risk maps, the Gjirokastra Municipality must determine the control measures in different areas to reduce the potential -gathering risk and prevent dangerous behaviors, high falls, car accidents, etc.

Stakeholder Engagement

The project plan will include consultation with various stakeholders such as host communities, nearby facility owners, regulatory bodies and experts. As the Project approaches the end of its economic viability, plans will be put in place to wind down operations and maintenance. This will allow for a carefully planned redeployment and, where necessary, disengagement of personnel

as appropriate. A correct analysis related to SE will be developed more precisely in the Stakeholder Engagement Plan (SEP).

Some of the mitigation measures that should be implemented during the construction phase are:

- Realization of a series of consultative activities with stakeholders. A mechanism for grievance and complaints must be created, and it should be publicly available at the City Hall.
- Drafting a Stakeholder Engagement Plan (SEP) that will be developed in accordance with good international practice and WB OPs
- Organization of a facility / office (in cooperation with the Municipality of Gjirokastra) that will serve as an information office of the project. It will be a public location where all information and documents related to the project will be available to the public.
- Maintain an open communication channel with stakeholders and project stakeholders in the construction phase.
- The consultant must regularly hold meetings with representatives of local populations and other interested stakeholders. A strong emphasis must be put on the presence of women at those meetings.
- Communication and information channel must be established between the contractor and the local authorities and the affected communities, at the very beginning of the construction phase. It should be maintained until the very completion of the construction activities.
- Disclosure of grievance mechanism on the ADF website, Gjirokastra municipality's website and throughout the construction site

7.3. POSSIBLE TRANSBOUNDARY IMPACT

The proposed project will not have negative impacts on the transboundary environment. The Municipality of Gjirokastër share the border with Republic of Greece but project area is located around 31 km (aerial distance) from the border. One of the Drinos river's branch has it sources in the section located in the Republic of Greece, while the project area is downstream of the river flow. As noted above, the impact on the environment is very small and within the territorial waters of Republic of Albania without any impact on international waters.

7.4. Environmental and social residual impacts

As previously established, the assessment of impacts will be resource/receptor led. In the previous sections were presented the following:

- The predicted impacts – the sensitivity of the affected resource/receptor and the magnitude of the potential impact/risk, prior to the implementation of any mitigation measure; and

- Mitigation measures to address the impact / risk – the key measures adopted, as well as a discussion on the various alternatives considered where appropriate

Following the mitigation measures, below are presented the residual impacts – the significance of any remaining impacts after the incorporation of mitigation, whether not significant, minor, moderate or major (major impacts are likely to be of high stakeholder concern).

7.4.1. Generation of construction waste

❒ *Construction Phase*

The significance of this impact without mitigation measures was estimated to be high and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is *Medium*. Therefore, the significance of the residual effect is considered to be *Moderate*.

❒ *Operational Phase*

The significance of this impact without mitigation measures was estimated to be slight, and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be *Slight*.

7.4.2. Impact on biodiversity

❒ *Construction Phase*

The significance of this impact without mitigation measures was estimated to be minor and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is even lower. Therefore, the significance of the residual effect is considered to be *Slight*.

❒ *Operational Phase*

The significance of this impact without mitigation measures was estimated to be slight, and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be *Slight*.

7.4.3. Impact on water regimes

Surface water

Impairment of water quality due to the introduction of pollutants

• The significance of this impact without mitigation measures was estimated to be moderate and the probability of success of the mitigation measures is considered to be high. Therefore, the magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be *Slight*.

Leaks and accidental spills of fuel and lubricants from construction machinery

• The significance of this impact without mitigation measures was estimated to be moderate and the probability of success of the mitigation measures is considered to be high. Therefore, the magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be *Slight*

Groundwater

Impairment of groundwater quality due to the introduction of pollutants

The significance of this impact without mitigation measures was estimated to be moderate and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be *Slight*.

7.4.4. Generation of noise and vibration

- ❒ *Construction Phase*

Impairment of acoustic quality due to noise emissions from construction vehicles and machinery

The magnitude of this impact without mitigation measures was estimated to be Large, and the probability of success of the mitigation measures is considered to be moderate. The magnitude of the impact with the implementation of mitigation measures is medium. Therefore, the significance of the residual effect is considered to be *Moderate.*

Impairment of acoustic quality due to vibration from construction vehicles and machinery

The impact of vibration without mitigation measures was estimated to be of major significance, and the probability of success of the mitigation measures is considered to be moderate. The magnitude of the impact with the implementation of mitigation measures is medium. Therefore, the significance of the residual effect is considered to be *Moderate.*

- ❒ *Operational Phase*

Impairment of acoustic quality due to traffic noise emission

The magnitude of this impact without mitigation measures was estimated to be Large, and the probability of success of the mitigation measures is considered to be moderate. The magnitude of the impact with the implementation of mitigation measures is medium. Therefore, the significance of the residual effect is considered to be *Moderate*.

7.4.5. Traffic and associated emissions

- ❒ *Construction Phase*

Impairment of air quality due to emission of construction-borne air pollutants

The significance of this impact without mitigation measures was estimated to be low and the probability of success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures is low. Therefore, the significance of the residual effect is considered to be Slight.

- *Operational Phase*

Impairment of air quality due to emission of pollutants from the traffic

The significance of this impact without mitigation measures was estimated to be Slight. No mitigation measures are required.

7.4.6. Community health and safety

Construction Phase

Potential impacts due to the proposed construction can be identified as follows:

- Workforce, Jobseekers and Social Conflict.

The magnitude of the impacts without mitigation measures was estimated to be low. The probable success of the mitigation measures is considered to be high. The magnitude of the impacts with the implementation of mitigation measures remains low. The significance of the residual effect is then neutral/slight.

- Spread of COVID -19

The magnitude of the impact without mitigation measures was estimated to be high. The probable success of the mitigation measures is considered to be low (impacts are hard to be mitigated and managed). Therefore, the magnitude of the impact will remain high, thus the significance of the residual effect is then *high*.

- Spread of communicable diseases

The magnitude of the impact without mitigation measures was estimated to be low. The probable success of the mitigation measures is considered to be moderate. The magnitude of the impacts with the implementation of mitigation measures becomes low. The significance of the residual effect is then *slight*.

- Disturbance from noise and vibration due to construction activities

Noise and vibration will undoubtedly be the main problems in the construction phase. Apart from earthworks and cobblestones, the increased volume of traffic of people, vehicles and materials on local roads through historic quarter and other directly affected populated areas will contribute significantly to the anxiety of the population in these settlements.

Based on the set criteria, this impact can be defined as: *negative, direct, on the spot, short-term* (it will be manifested only in the construction phase), with the possibility of occurrence - probably, reversible, with *medium* magnitude and *moderate* significance (impact can be mitigated and managed).

- Problems related to workers' behavior towards the local environment

The magnitude of the impact without mitigation measures was estimated to be low. The probable success of the mitigation measures is considered to be moderate. The magnitude of the impacts

with the implementation of mitigation measures becomes low. The significance of the residual effect is then slight.

- ❒ The emergence of accidents by transporting materials

The magnitude of the impacts without mitigation measures was estimated to be low. The probable success of the mitigation measures is considered to be moderate. The magnitude of the impacts with the implementation of mitigation measures remains low. The significance of the residual effect is then slight.

7.4.7. Information disclosure and stakeholder engagement

- ❒ Stakeholder Engagement during the Construction Phase

The magnitude of the impact without mitigation measures was estimated to be moderate. The probable success of the mitigation measures is considered to be high. The magnitude of the impacts with the implementation of mitigation measures becomes moderate. The significance of the residual effect is then *moderate. Reference to SEP prepared.*

- ❒ Impact on social life of local community

Increase of the number of tourist and visitors in the narrow streets of Cercis Topolli quartier might adversely impacts the local people. In addition, some of the houses could become restaurants and Café bars, thus after centuries of quiet place, could easily turn into noisy environment unpleasant for regular life.

7.4.8. Cultural heritage

Cultural heritage and archaeological sites, either known or to be discovered, are resources of a high sensitivity. The significance of this impact without mitigation measures is estimated to be Large. The probable success of the mitigation measures is considered to be high. The magnitude of the impact with the implementation of mitigation measures becomes low. Therefore, the significance of the residual effect is considered to be *Slight*.

7.4.9. Improving aesthetics and increasing the value of real estate property.

The proposed activity will have a great visual impact on the aesthetics of the site by substantially improving it.

Regeneration of the Old historic quarter by addressing and highlighting the historical and traditional elements of the Cercis Topolli quarter where every path is treated as a "vibrant corridor", and restoring all the characteristic wooden gates and surrounding; improvement of public lighting and street furniture, will give another view of this area

In addition to increasing the interest of local and foreign tourists, the value of the area will increase as it automatically turns into a very important tourist attraction.

7.5. CUMULATIVE IMPACTS ASSESSMENT

Cumulative impacts result from the successive, incremental and/or combined effects of a project or activity, when added to other past, existing, planned and/or reasonably anticipated future ones. They may occur because, for example, several projects of the same type are being developed in close spatial or temporal proximity.

World Bank ES procedures require for the ESIA process to consider cumulative impacts of the project in combination with impacts from other relevant past, present and reasonably foreseeable developments as well as unplanned but predictable activities enabled by the project that may occur later or at a different location.

The spatial area of influence (AOI) is the geographical area impacted by the project and cumulative impacts. The "Revitalization of the "Çerçiz Topulli" Square; Revitalization of the municipality square; and Revitalization of the Square "House of Pioneer - Municipality of Gjirokastra" project AOI was defined as the spatial area affected by:

- the project footprint and the adjoining areas within the city of Gjirokaster
- the area of influence (including direct and indirect project-related impacts)
- cumulative impacts, as defined based on the valued environmental components impacted upon by the project.

The spatial scope of the cumulative assessment focuses on potential developments within the Gjirokastra city area that may interact with impacts (both positive and negative) arising from the project.

The temporal AOI is the timescale over which a project is likely to have impacts. The temporal boundaries of the CIA are also limited by the extent of current knowledge of other sources of cumulative impact, particularly non-project related activities. Different development projects within the area are likely to occur at different stages. The temporal scope of the analysis can also be defined as the period of time during which the proposed mitigation measures and post construction monitoring and management practices will be implemented.

7.5.1. Cumulative Impacts

Based on review of General Local Plan and consultation with Local government representatives, the following known and foreseeable developments in the Gjirokaster Municipality are considered:

- "Identification, Design or Prioritized Measures to Address Safety Concerns and Prevent Loss of Heritage Structures in the Castle of Gjirokastra" (ADF)(Project1)
- Gjirokastra Castle Sustainable Management and Tourism Valorization Masterplan (ADF) (Project 2)
- Construction of underground parking at Cerciz's square (AADF)(Project 3)

Potential environmental and social impacts caused by a combination of planned projects and the actual "Revitalization of the "Çerçiz Topulli" Square; Revitalization of the municipality square; and Revitalization of the Square "House of Pioneer" project have been assessed and results are set out in Table 13 below, where an "+" denotes a potential adverse cumulative impact; a "-" denotes that no potential cumulative impact is expected, while " * " denotes a positive cumulative impact.

Table 16. Cumulative Impacts Assessment Matrix

Development Name	Air Quality	Biodiversity	Soils	Water Resources	Noise and Vibration	Visual	Waste	Traffic	Population Influx	Employment	Livelihoods	Community Health and Safety	Cultural Heritage
Project 1	x	-	-	x	x	-	x	x	-	*	*	x	-
Project	-	-	-	-	-	*	-	-	-	*	*	-	*
Project 3	x	-	-	x	x	-	x	x	-	*	-	x	-

The Temporal Area of Influence (TAOI) of Project

The study area itself includes a spatial bound which includes the footprint of all works associated with the construction and operation of the proposed Project, and those areas within which most project-environment interactions could reasonably be expected to occur. It is not possible to establish a single study area boundary that accurately reflects the spatial characteristics of the potential project-environmental interactions. Temporal project boundaries include the timeline for the short-term construction activities, as well as the long-term operation of the facility of approximately thirty years and its eventual decommissioning.

Erosion and sedimentation, if they occur, will be temporary, since all areas to be disturbed by construction will be stabilized both during and after construction. The likelihood of an accident or malfunction resulting in a release is quite low; should it occur, the volume is anticipated to be very small, i.e., below reportable levels.

Annoyance caused by noise during construction, if it occurs, will be temporary and short term. Concerns of residents over noise during Project operation is expected to be minor.

The Project is not anticipated to have a significant residual environmental effect on migratory and breeding birds. While any effect will be negative, it will be small in magnitude, reversible, and local. The environmental effect on migratory and breeding birds is predicted to be minor.

Disturbance of birds during construction, if any, will be temporary and short term, with no disturbance of nests due to timing of clearing. Effects on birds during Project operation via mortality from collisions is expected to be low in number based on low sensitivity of the site. Post-construction monitoring will verify the effect in accordance with regulatory requirements.

As discussed previously, while the habitat in the Project site is not particularly unique, the area does host flora and fauna that are of value in Albania. A significant environmental effect would result if a substantive change could be identified in population of a flora or fauna species that was attributable to the Project. During operation, noise from the outdoor activities may affect fauna that use the area as part of their habitat. Given the predicted residual significant effect on ambient noise levels as minor in relation to residents, the parallel effect on fauna is expected to be negligible given the adaptability of fauna and the extent of similar habitat.

While emissions will occur for the full duration of the Project, changes in air quality will have substantial temporal variability due to the natural variability in meteorology (wind speed, wind direction, temperature) and also short and long-term variability in emissions. In addition, the highest concentrations typically occur for very short durations and there may be infrequent upset conditions. Long-term duration is defined as extending more than two years beyond the operational life of the Project.

Traffic can often be an issue of community concern. Accordingly, vehicular traffic has been identified as a socio-economic aspect. A significant environmental effect would result if either substantive damage to the existing road system occurred that was attributable to the Project or a substantial delay in traffic flow could be attributable to the Project. The Contractor will work closely with the Municipality and the local community to evaluate the most practical approach to ensure road integrity, the safety of the travelling public, and minimal inconvenience to travelers.

With regard to the impacts during the operation phase they will be present as long as the project area will be used as well. Also, the number of people who will attend this area is valued as a factor. These impacts are not of particular importance, they are comparable to any other service or trade object located in the city of Gjirokaster. All of the above impacts are not permanent and long-term, they are temporary and short-term. Impact on the landscape will be temporary for the construction phase.

Table 17. Duration of impacts

Duration of impact	Air Quality	Biodiversity	Geology and Soils	Water Resources	Noise & Vibrat	Visual	Waste	Traffic	Population Influx	Economics	Employment	Livelihoods	Community Health and Safety	Cultural Heritage
Temporary	x	-	-		x	-	-	-	-	-	-	x	-	-

Short- term	-	x	-	x	-	-	-	x	-	-	-	-	x	-
Long term	-	-	-	-	-	-	x	-	-	-	x	-	-	-
Permanent (irreversible)	-	-	x	-	-	x	-	-	-	-	-	-	-	x

The Spatial Area of Influence (SAOI) of Project

The rehabilitation and re-qualification of the area and the impacts on the environment are expected to be minimal. The spatial potential impacts of the project it is expected to be very.

Pathways that may adversely affect ambient noise levels include sound pressure that will be generated during site preparation and construction, as well as decommissioning activities (i.e., trucks, equipment, etc.). As distance from the site increases, noise levels will be attenuated. Nevertheless, noise from construction activities may be heard by the nearby residents. Construction noise may also temporarily disrupt the short-term activities of fauna and birds at or in the vicinity of the Project site. In summary, noise resulting from construction activities may cause some temporary inconvenience.

As noted in the sections above, where all the environmental elements that may be affected by the project have been considered, they have a limited spatial scope:

- Impact on plant cover will be insensitive because existing vegetation will be preserved and reconstruction will be done without damaging the trees and the existing vegetation
- Construction waste generation will be limited only to the project area
- The temporary deterioration of visual appearance will occur only in the project area during the construction phase and this will be partial.
- During the construction phase of the area are expected to record relatively high levels of noise, but these will be limited within the project area.
- Dust emissions will derive from construction activities (restoration and reconstruction interventions) and construction vehicle traffic. Emissions from construction activities will have limitations in terms of spatial expansion.
- Traffic-generated emissions include dust and smoke. Trucks used to transport different building materials from their source to the construction site emit different gases such as SO2, CO2, CO, NOx and particles. Impacts of such emissions may be greater in the construction site and in the communities between which the construction vehicles will travel.
- Planned project activities have only minimal impact on groundwater, water or sewage. This impact will be very limited in terms of spatial scope, limited only to the area of the project.

8. MANAGEMENT AND MONITORING OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

The Environmental and Social Impact Assessment - ESIA for the proposed works in the project area identifies possible environmental and social aspects to be managed and monitored. It identifies the parties responsible for monitoring, necessary expenditures, indicators and training needs or capacity building and reporting. The sections below describe in detail various aspects of the ESIA.

8.1. Management of environmental impacts

8.1.1. Management of environmental impacts

The impacts expected to occur from the implementation of the project activities and the measures for their mitigation are elaborated in Chapter 7 of the ESIA Study in the construction phase and the operational phase. The management plan provides a description of the proposed measures to be implemented in order to achieve a sustainable and acceptable level of environmental impact identified in the ESIA Study and at the same time is a simple tool that can help the requirements to be met and harmonized with the national regulations and regulations of the World Bank.

The Environmental Management Plan including the social in the report (EMP) will be implemented by the Contractor in cooperation with ADF and Municipality. In the operational phase, EMSP will be implemented by Municipality with all its structural units.

Table below presents the necessary measurements for mitigation of adverse impact on environment.

Table 18. Environmental Impacts mitigation measures plan

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
BIODIVERSITY-PLANT SPECIES					
Pre-construction and construction					
Biodiversity-plant species	• Minimize clearing of unnecessary areas at the construction site • Treatment of the areas covered in grasses in public spaces to have healthier grass. • Planting of pomegranate trees (a native plant) for landscaping • Where feasible, noise levels during dawn, dusk, and night hours should be minimized to reduce disturbance to mammals and birds.	Protection of biodiversity, i. e plant species with conservation significance and increase of green area	Independent expert engaged by the contractor of construction work	Pre- construction	Depends on the expert's offer and the workload
SOIL					
Construction					
Soil	• Inspect the site for potential surface erosion. • The surface runoff management will be applied in the entire old historic quartier; • During the cobble stone paving of the street in the subproject "Chronicle in stone" itinerary and traveller's itinerary, cleaning the channels, culverts/ box culverts and having a good maintenance of drainage system will ensure effective	*Minimize the risk of surface soil erosion*	*ADF*	Continuously during the entire construction phase	

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
	protection of the road from erosion and sedimentation; • Placing the tiles and cobblestones at the Public Space, will be done in such a way to minimize the occurrence of soil erosion, even for short periods. Stockpiles will not be placed on the site. Drainage in the back part of the Ethnographic museums as to avoid the humidity in the ground floor and first floor on the south west walls.				
Soil	If there is a risk of serious soil contamination in the event of a major hazard or incident, it is recommended that a detailed analysis and assessment of the scope and intensity of contamination be carried out, and in accordance with the findings, to propose a Remediation Plan for contaminated soils or replace the contaminated soil with a new uncontaminated soil and store it in special landfills.	Soil and other environmental media and areas protection	ADF	Operation	It depends on the pollution scope, the parameters to be analyzed, and the price for the preparation of the Remediation Plan for Polluted Soils
Soil	Continuous monitoring of possible erosion, maintenance of vegetation	Soil and other environmental media and areas protection	ADF	Continuously during the entire operational phase	
HYDROLOGY AND SURFACE WATERS					
Construction					

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
Hydrology and surface waters	Regular control and maintenance of the drainage and stormwater systems (channels, culverts, etc.), as well as the application of good operational practice.	Protection of waters and other media and areas of the environment	ADF	Continuously during the operational phase	Operating costs
AMBIENT AIR					
Pre-construction					
Ambient air	Preparation of: • Plan for the organization of the construction site; • Dust Management Plan; • Traffic Management Plan.	Protection of ambient air and fulfillment of legal obligations	Contractor	Pre- construction	The cost of the measures arising from the plans will be included in the construction costs
Construction					
Ambient air	Setting a protective fence around construction sites at sensitive locations (in settlements)	Protection of ambient air and sensitive receptors	Contractor/ Supervision	Continuously during the construction phase, at sensitive locations	Costs are included in construction costs
NOISE					
Pre-construction					
Noise	A noise management plan in the construction phase, which will envisage appropriate measures for noise reduction and its implementation	Protection of sensitive receptors and fulfillment of legal obligations	Contractor	Pre- construction	The cost of the measures that will emerge from the Plan will be included in the construction costs

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
		Construction			
Noise	Setting of permanent sound barriers or sound insulation of the affected objects	Protection of sensitive receptors and fulfillment of legal obligations	Contractor/ Subcontractor/ Supervision	During construction	
		VISUAL CHARACTERISTICS			
		Construction			
Visual characteristic	Rehabitation of disturbed locations (areas) should be carried out immediately after the completion of the construction work at the specific locations and in accordance with the project documentation prepared for this purpose	Protection of the visual characteristics of the landscape	Contractor/Subcontractor/ Supervision controlled by competent inspection authorities	Continuously during the construction phase	The costs for revitalization of the area, as well as the grassing and afforestation will be included in the construction costs
		Operation			
Landscape (visual characteristic)	Implementation of the measures of the Landscaping Design of the area Maintaining the vegetation	Protection of the visual characteristics of the landscape	ADF	Immediately after the completion of the construction work and during the operation	The price will determined in Landscaping Design
		WASTE			
		Pre-construction and construction			
Waste	Preparation of the Waste Management	Fulfillment of the legal	Contractor	Pre- construction	

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
	Plan in the construction phase.	obligations for waste management and protection of the media and areas of the environment and the health of the population			
	Signing agreements with authorized companies for collection, transport and treatment of waste and handing over of waste	Fulfillment of the legal obligations for waste management and protection of the media and areas of the environment and the health of the population	Contractor/Subcontractor/Supervision	Pre- construction and construction	The price will depend on the offers of the authorized waste handlers
	Engagement of waste manager expert, which will ensure full implementation of the Program in accordance with the legal obligations	Fulfillment of the legal obligations for waste management and protection of the media and areas of the environment.	Contractor/Subcontractor/Supervision	Pre- construction and construction	The price will depend on the offer of the waste manager
		Operation			
Waste	Placing containers with different colors for disposing of different waste streams,	Protection of the media and areas of the environment and the health of the population	Municipality of Gjirokastra	Operation	Depends on the capacity of the containers

Areas/ aspects of the environment	Proposed mitigation measures	Objective	Competent institution	Timetable	Costs for implementation
	Signing agreements with authorized companies for collection, transport and treatment of waste and handing over of waste	Fulfillment of the legal obligations for waste management and protection of the media and areas of the environment and the health of the population	Municipality of Gjirokastra	Operation	The price will depend on the offers of the authorized waste handlers
	Preparation of Waste Management Program in accordance Law on Integrated Waste Management.	Fulfillment of the legal obligations for waste management and protection of the media and areas of the environment and the health of the population	Municipality of Gjirokastra	Operation	The cost of the measures arising from the Program will be included in the operating costs

8.1.2. MANAGEMENT OF SOCIAL IMPACTS

The impacts expected to occur from the implementation of the project activities and the measures for their mitigation are elaborated in Chapter 7 of the ESIA Study in the construction phase and the operational phase. The Table below (Table) shows the plan for management of social impacts and proposes measures to be implemented in order to achieve a sustainable and acceptable social impact identified in the ESIA Study.

Table 19. Social Impacts mitigation measures plan

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
Construction Phase						
Visual impacts and aesthetic	Presence of machinery and construction waste materials on site	Maintain the character of the site by constantly cleaning the material accumulated during the construction of the squares	Minimizing visual impacts on residents and tourists	Contractor/ Subcontractor/ ADF	Pre-construction/ Construction	n/a
Operational phase						
Visual impacts and aesthetic	Presence of machinery and construction waste materials on site	Actions to clean the project site The contractor must remove all temporary structures built, that were needed for the implementation of the construction works	Minimizing visual impacts on residents and tourists	Contractor/ Subcontractor/	Post construction	
Construction Phase						
Cultural heritage	Potential interactions between construction works and cultural activities due to traffic, noise and/or vibration and impacts	Accept existing Cultural Heritage Management Plan and implement its provisions Consult with local communities on activities and potentials for interaction with construction works.	Proper dealing with Cultural Heritage in the Project area	ADF/ Municipality Contractor/ Subcontractor/	Pre-construction/ Construction	n/a
Construction Phase						

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
Accessibility	Temporary blocking of the alley the leads do the "Pioneer House" square and deviation through "Cercizi Square" Accessibility to other destinations	Information boards should be placed containing information relative to the alternative access accommodation facilities or touristic attraction places. Creation and public disclosure of Traffic management plan throughout the city, in regards of the project	Facilitation and the orientation of the access	ADF/ Municipality Contractor/ Subcontractor/	Construction	
Construction Phase						
Loss of parking area	Lack of organization of parking areas as a result of loss of parking	Information boards and temporarily yellow markings to designate taxi parking places In case it is necessary, designating other parking places in different areas besides the actual designated one. Improvement on Traffic and Parking Management Plan for vehicles, busses and taxies. Providing temporary parking space until the Underground parking becomes operative.	Proper information for taxi drivers, resident and tourist	Municipality Contractor	Pre-construction/ Construction	n/a
Operational phase						

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
Loss of parking area	Oorganization of parking areas as a result of loss of parking	With the finalization of the works the square and the parking are expected to be fully functional and thus improving the availability of the parking area in order to cope with the influx of tourists and residents that use that part of the city. Implementation of Parking Management Plan	Proper information for taxi drivers, resident and tourist	Municipality	Post construction	
Construction Phase						
Occupational health and safety (OHS)	Injuries and illness	Planning work site layout to minimize the need for manual transfer of heavy loads Implementing administrative controls into work processes, such as job rotations and rest or stretch breaks	Prevention of accidents and illness of workers through the safe and health standards	Contractor	Construction	n/a
	Slips and falls on the same elevation associated with loose construction materials	Cleaning up excessive waste debris and liquid spills regularly Locating electrical cords and ropes in common areas and marked corridors Use of slip retardant footwear				
	Working at Heights	Use of fall prevention devices Appropriate training in use, serviceability, and integrity of the necessary PPE Inclusion of rescue and/or recovery plans				

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
Construction Phase						
Employment	Lack of information or avoidance of the responsibilities from work obligations.	Workers' rights and obligations Workers (including contractors and subcontractors) will have contracts with clearly expressed rights and conditions for their employment, and their legal rights Contracts will be explicitly explained to all workers when necessary to ensure that workers understand their rights. Contracts must be concluded before the commencement of the working activities.	Information the employees	Contractor	Construction	n/a
		Code of Conduct A company code of conduct shall be prepared to inform the employees of the company's expectations Code of Conduct will be considered as guidelines to prevent certain specific types of behavior	Information the employees	Contractor	Construction	n/a
		Workers Grievances Mechanism All Contractor's and Subcontractors workers will be acquainted with existence of the WGM during the act of signing the Code of Conduct Disclosure of grievance mechanism on the ADF website and throughout the	Information the employees	Contractor	Construction	n/a

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
		construction site (and Gjirokastra municipality's website)				
	Engaging local workforce	Engaging an appropriate % of the workforce for this project from the entire project area, with a special advantage given to the applicants from the rural populated areas of the project area. No use of child labor or forced labor.	Local workforce engagement	Contractor	Construction	n/a
Construction Phase						
Community Health and safety	Lack of plans for the safety of the workers and the community	Emergency plan for Construction and operation (planning should begin before the commencement of any works on site) Emergency Response Procedure must be clearly communicated to all site personnel. Creation and implementation of a Campaign for the safety of the population during the construction of infrastructure projects Creation and implementation of Traffic Management Plan	Minimizing the risks to the population	Contractor ADF	Construction	
	Problems related to workers' behavior towards the local environment.	Employment as many workers as possible from the area Workforce which is actually on site for the construction of the underground parking can be engaged	Minimizing the risks to the population			

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
	Disturbance to humans and houses from noise and vibration due to construction activities	Construction activities should be carried out only during the day to minimize noise levels to the residents Avoid use of old or damaged machinery with high level of noise emissions. Contractors will cordon off construction site with noise absorbing materials, Construction workers will be aware to limit verbal noise or other forms of noise. Noise and vibration will be minimized at the project site and surrounding areas through sensitization of construction truck drivers to switch off vehicle engines while offloading materials.	Minimizing the disturbance to the population	Contractor/ ADF	Pre-construction/ Construction	
	Stakeholder engagement related to the noise disturbance	Meetings with the local residents and the owners of the businesses, where all the negative consequences of the emphasis should be given to the noise produced from the works, the frequency of working vehicles and workers, as well as the safety measures for the residents, locals and tourists during the upcoming period of construction in the immediate vicinity of their homes and businesses	Minimizing the disturbance of the local population due to noise from construction activities	Contractor/ Municipality/ ADF	Pre-construction/ Construction	

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
	Accidents Increased risks and incidents from traffic Accidents by transporting materials	Environment and social incidents response toolkit (ESIRT) will be used in case such incidents occur during the implementation of the project Development and application of procedures for protection of the health and safety of local communities. Plan for the organization of a construction site in order to respond to the unfortunate and urgent cases in a manner appropriate to the construction risks Safe pedestrian and traffic corridors through the construction site marked with visible signs, but also communicated with the representatives of the local communities, as well as the schools	Minimizing the risks to the population	Contractor	Pre-construction/ Construction	
Operational phase						
Community Health and safety		The operation and maintenance create a lower number of potential external safety risks to the communities living close to the squares. The likelihood of these risks is generally low. Implementing Community Risk Assessment (CRA)	Minimizing the risks to the population	Municipality	Post-Construction	
Construction Phase						

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
Stakeholder Engagement	Management of Community concerns linked to impacts associated	Realization of a series of consultative activities with stakeholders. Disclosure of grievance mechanism on the ADF website, Gjirokastra municipality's website and throughout the construction site Stakeholder Engagement Plan (SEP) that will be developed and updated in accordance with good international practice and WB OPs Organization of a facility / office (in cooperation with the Municipality of Gjirokastra) that will serve as an information office of the project. It will be a public location where all information and documents related to the project will be available to the public.	Reduce the negative impacts of the project, but also the negative attitude towards the project and better and timely information of stakeholders concerned.	Consultant/ ADF/ Contractor/ Municipality	Pre-construction/ Construction	Operating costs of the consultant

Indicator	Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Cost of Implementation
		The consultant must regularly hold meetings with representatives of local populations and other interested stakeholders. A strong emphasis must be put on the presence of women at those meetings. Communication and information channel must be established between the contractor and the local authorities and the affected communities, at the very beginning of the construction phase. It should be maintained until the very completion of the construction activities.	Maintaining contact with affected communities	Contractor/ Municipality ADF	Construction	Operating costs of the company
Operational phase						
Stakeholder Engagement	Management of Community concerns linked to impacts associated	Stakeholder engagement must continue even after the operational phase if there are cases not fully addressed or even new ones	Maintaining contact with affected communities	Contractor/ Municipality ADF	Post Construction	

8.2. INSTITUTIONAL ARRANGEMENTS

The institutional responsibility for the implementation of this ESIA and the associated ESMP prepared form the designer falls on the Municipality of Gjirokastër. One of the key municipal roles will be the review of consultants' reports on ESMP compliance. Other roles will be:

- Monitoring the implementation of mitigation actions by contractors
- Coordination of trainings and capacity building, when planned
- Periodic reporting on the implementation of ESMP

Gjirokastra Municipality will require contractors to fully implement this ESIA and the associated ESMP and contractors should designate an Environmental Specialist who will oversee the environment during construction. However, in case the contactor does not have an Environmental Specialist, the supervising engineer should be trained on important environmental issues for the task, so that he also plays the role of overseeing environmental issues when required. In addition, the Municipality should designate a specialist to represent the client's environmental objectives and interests during the construction phase. The basic employment criterion for such a person is to have a background in environmental and social issues, in particular related to construction projects.

In Gjirokastër, environmental representative from the Regional Environmental Agency (ARM) of Gjirokastër are responsible for overseeing environmental protection on behalf of the Environment Protection Reginal Agency. They will also have the role of the monitors during the implementation of this ESMP. Based on their professional knowledge or recommendations in this ESIA, local environmental officials may play a role in project design as consultants for consultant engineers in different aspects.

ADF will regularly monitor progress of construction works on site, as well as implementation of mitigation measures provided in this ESIA.

8.3. MONITORING OF IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL MITIGATION MEASURES

Table 20. Environmental and Social Montoring plan

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
Environmental Impacts						
Generation of construction waste						
Contractor should seek guidance of local environmental officers to identify acceptable disposal sites	Contractor has records of proper waste disposal indicating quantities dumped and location of dumping site	No report of illegal waste dumping in non-designated areas	Throughout construction	Municipality Contractor; Local Environmental Officer.	Negligible	None
Contractors should undertake waste segregation onset to separate hazardous waste from non-hazardous waste	Hazardous waste separated from non- hazardous waste on site and each waste stream disposed of designated sites.	Separate containers for hazardous waste and non-hazardous waste on site	Throughout construction	Municipality Contractor; Local Environmental Officer.	Negligible	Likely hazardous and non-hazardous construction waste
Contractors should undertake waste segregation onset to separate hazardous waste from non-hazardous waste	Hazardous waste separated from non- hazardous waste on site and each waste stream disposed of according to EPA requirements in designated sites.	Separate containers for hazardous waste and non-hazardous waste on site	Throughout construction	Municipality Contractor; Local Environmental Officer.	Negligible	Likely hazardous and non-hazardous construction waste
Waste (such as metal scrap or	Amount of waste disposed	Record of material types	Throughout	Contractor;	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
wood waste) that can be reused/ recycled may be given to local people.	minimized by reuse, wherever feasible	and estimated quantity diverted for reuse	construction	Local environment officer		
CFLs (Compact Fluorescent Lamps) will be carefully removed, individually packed avoiding cracking/damage and placed in an impermeable container.	If needed those yet functioning can be collected by municipality and used in old lighting poles	It will be collected, transported and disposed by licensed companies and to licensed landfills or processing plants.	Throughout construction	Contractor; Local environment officer	Should be part of contractor's BID	None
Temporarily storage on site of all hazardous or toxic substances will be in safe containers labelled with details of composition, properties and handling information.	The containers of hazardous substances should be placed in a leak-proof container to prevent spillage and leaching	The wastes are transported by specially licensed carriers and disposed in a licensed facility	Throughout construction	Contractor; Local environment officer	Should be part of contractor's BID	None
Habitat and Biodiversity Loss						
Loss of vegetation through clearance to pave way for construction	Area cleansed of vegetation is kept at minimum	Minimize clearing of unnecessary areas at the construction site Replant vegetation	Throughout construction	Municipality Contractor; Local Environmental Officer	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
		through landscaping upon completion				
Loss of faunal habitats resulting from vegetation clearance	Possible interventions for habitat restoration	Records are kept for all existing habitats in the area	Throughout construction	Contractor; Local Environment Officer.	Negligible	None
Noise levels during dawn, dusk, and night hours are at high level causing disturbance to mammals and birds.	Noise level should be within the acceptable levels	Record of levels and sources of noise	Throughout construction	Contractor;	Negligible	None
Possible discharges into surface and ground waters						
Contractor should isolate all works from the watercourses.	Where necessary use water pumps, filters and other equipment to prevent turbidity.	No signs of pollution and water turbidity are reported	Throughout construction	Municipality Contractor	Should be part of contractor's BID	None
Contractor should avoid surface water dispersion in case of watering of sand or gravel to control the dusts.	Collectors will be temporary adapted to avoid surface water dispersion	No signs of pollution and water turbidity are reported	Throughout construction	Municipality Contractor	Should be part of contractor's BID	None
Contractor has provided leak control equipment's	A leak control mechanism (bunds, leak proof containers, etc.) is in place and emergency procedures to	No signs of pollution and water turbidity are reported	Throughout construction	Municipality Contractor	800 EUR	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
	control spills are prepares.					
Pressure on infrastructure						
Contractor should provide separate source and storage for to use for construction (use water bowsers for supply);	Uninterrupted water supplies to community	No complaint of irregularities in water supply related to construction activities	Throughout construction	Municipality Contractor	450 EUR	None
Contractor should provide separate source power for construction (use generators);	Uncompromised energy supply to community	No complaint of irregularities in energy supply related to construction activities	Throughout construction	Municipality Contractor	750 EUR	None
Contractor should provide mobile onsite toilets and washrooms and washing water for workers.	Workers do not compete with clients in the neighbor bars for lavatory facilities.	Ablution facilities exist on site	During construction	Municipality	Negligible (should be part of contractor's bid)	None
Generation of noise and vibration						
Construction workers should be sensitized on the sensitive nature of workplace they are operating in and advised to	No excessive noise from workers	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
limit verbal noise or other forms of noise. For example, metallic objects or tools can be passed on to a colleague rather than dropping or throwing them with loud bangs.						
Contractor should ensure that all equipment and machinery are in good and sound condition of old or damaged equipment with high level of noise emissions that would have a negative impact in the environment	Construction activities generate permissible levels of noise.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Negligible	None
All generators and heavy-duty equipment should be insulated or placed in enclosures to minimize disrupting	Construction activities generate permissible levels of noise.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Should be part of contractor's BID	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
ambient noise levels.						
Contractor will ensure that equipment is properly maintained and fully functional.	Construction activities generate permissible levels of noise.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Should be part of contractor's BID	None
Contractors should cordon off areas under construction with noise absorbing materials, for example, plywood rather than iron sheets;	Construction activities generate permissible levels of noise.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Comprised in cost for control of flying debris	None
The contractor should ensure that noise levels emanating from machinery, vehicles and noisy construction activities are kept at a minimum for the safety, health and protection of people in the nearby buildings.	Construction activities generate permissible levels of noise.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
Construction workers and drivers should be sensitized to switch off Equipment, machinery and vehicle engines when not in use and/or offloading materials.	Minimized noise and vibration at the project site.	Community and businesses in the area do not complain about noise during construction	During construction	Municipality Contractor	Negligible	None
Construction activities should be carried out during the day	Afford community noise-free night time to rest	No complaints of restless nights due to noise and vibration from project activities.	During construction	Municipality Contractor	Negligible	None
Traffic and fugitive emissions						
The project area will be cordoned off to minimize on dust and emission migration to nearby facilities by wind;	No excessive dust emissions noted outside construction areas	No complaints of excessive dust from construction areas	During construction	Municipality Contractor	Comprised in cost for control of flying debris	None
Truck drivers should be sensitized on and ensure they observe speed limits on roads especially at business centres;	Minimize dust and exhaust emissions	No complaints of trucks ruthless driving from communities along roads used by project vehicles	During construction	Municipality Contractor	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
Trucks should be covered during haulage of construction materials;	No material spills on roads during haulage to sites	No accidents caused by construction material split on road	Throughout construction	Municipality Contractor; Police	Negligible (should be part of contractor's bid)	None
Wherever dust suppression is necessary, water should be sprayed over dusty areas;	Minimize dust levels	Recognition of locals of contractor's efforts to minimize dust nuisance.	During construction	Municipality Contractor	Negligible	None
Keep all construction equipment in good operating condition to reduce exhaust emissions;	Minimize air pollution levels	No complaints of excessive fumes	During construction	Municipality Contractor	Negligible	None
All dust should be quickly swept away to avoid migration to other non-construction areas;	Reduce dust levels in off-site locations	No dust hips on-site	Throughout construction	Municipality Contractor	Negligible	None
Construction work should be undertaken by an experienced and duly registered contractor with a verifiable sense of environmental	Employment of best Construction practices to minimize adverse impacts	Implementation of proposed mitigation measures	Throughout construction	Municipality Contractor	Negligible	None

Impact and Mitigation/ Enhancement commitments	Desired Outcomes	Monitoring: Performance Indicators/Targets or Acceptance Criteria	Timing	Responsible	Incremental Costs	Capacity Building and Training Requirement
awareness and responsibility;						

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Presence of machinery and construction waste materials on site	Maintain the character of the site by constantly cleaning the material accumulated during the construction of the squares	Minimizing visual impacts on residents and turists	Contractor/ Subcontractor/ ADF	Pre-construction/ Construction	Visual inspection and photographic record	Weekly	n/a
Potential interactions between construction works and cultural activities due to traffic, noise and/or vibration and impacts	Consult with local communities on activities and potentials for interaction with construction works.	Proper dealing with Cultural Heritage in the Project area	ADF/ Municipality Contractor/ Subcontractor/	Pre-construction/ Construction	Ongoing reporting	Monthly/ During cultural activities	n/a

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Temporary blocking of the alley the leads do the "Pioneer House" square and devition through "Cercizi Square" Accessibility to other destinations	Information boards should be placed containing information relative to the alternative access accommodation facilities or touristic attraction places. Creation and public disclosure of Traffic management plan throughout the city, in regards of the project	Facilitation and the orientation of the access	ADF/ Municipality Contractor/ Subcontractor/	Construction	Visual inspection and photographic record Ongoing reports	Monthly	n/a
Lack of organization of parking areas as a result of loss of parking	Information boards and temporarily yellow markings to designate taxi parking places In case it is necessary, designating other parking places in different areas besides the actual designated one. Improvement on Traffic and Parking Management Plan for vehicles, busses and taxies. Providing temporary parking space until the Underground parking becomes operative.	Proper information for taxi drivers, resident and tourist	Municipality Contractor	Pre-construction/ Construction	Visual inspection and photographic record Ongoing reports	Monthly	n/a

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Gender-based violence	Informing workers about national laws Introducing a Worker Code of Conduct as part of the employment contract Contractors adopting a policy to cooperate with law enforcement agencies	Develop a code of behaviours for workers. All workers to receive training on community relations and code of behaviour.	Contractor	Pre-construction/ Construction	Record on awareness	Weekly	n/a
Communicable diseases	▪ Free testing facilities ▪ Monitoring of local population health data, in particular for transmissible diseases ▪ Community sensitization campaigns ▪ Awareness raising about public health impacts from labor influx.	Provide STD awareness material to all workers.			Periodic testing and inspection	Weekly	
Injuries and illness	Planning work site layout to minimize the need for manual transfer of heavy loads Implementing administrative controls into work processes, such as job rotations and rest or stretch breaks	Prevention of accidents and illness of workers through the safe and health standards	Contractor	Construction	Visual observations of work areas for noncompliant -	Monthly	n/a

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Slips and falls on the same elevation associated with loose construction materials	Cleaning up excessive waste debris and liquid spills regularly Locating electrical cords and ropes in common areas and marked corridors Use of slip retardant footwear				Incident report records		
Working at Heights	Use of fall prevention devices Appropriate training in use, serviceability, and integrity of the necessary PPE Inclusion of rescue and/or recovery plans						
Reduce the spread of COVID -19	The contractor should reduce, as far as possible, physical contact between workers The contractor should place an impervious barrier between workers, especially if they are not able to keep a two-meter distance from each other Workers will avoid contact with local residents and keep physical distance	Minimizing the risks to the population	Contractor	Pre-construction/ Construction	Periodic testing and inspection	Monthly	N/A

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Lack of information or avoidance of the responsibilities from work obligations.	Workers' rights and obligations Workers (including contractors and subcontractors) will have contracts with clearly expressed rights and conditions for their employment, and their legal rights Contracts will be explicitly explained to all workers when necessary to ensure that workers understand their rights. Contracts must be concluded before the commencement of the working activities.	Information the employees	Contractor	Pre-construction/ Construction	Compliance check for security plan	Weekly	n/a
	Code of Conduct A company code of conduct shall be prepared to inform the employees of the company's expectations Code of Conduct will be considered as guidelines to prevent certain specific types of behavior	Information the employees	Contractor	Pre-construction/ Construction			n/a
	Workers Grievances Mechanism All Contractor's and Subcontractors workers will be acquainted with	Information the employees	Contractor	Pre-construction/ Construction	Awareness, Records and outcome of	Monthly	n/a

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
	existence of the WGM during the act of signing the Code of Conduct Disclosure of grievance mechanism on the ADF website and throughout the construction site (and Gjirokastra municipality's website)				grievance mechanism		
Engaging local workforce	Engaging an appropriate % of the workforce for this project from the entire project area, with a special advantage given to the applicants from the rural populated areas of the project area. No use of child labor or forced labor.	Local workforce engagement	Contractor	Pre-construction/ Construction			n/a
Lack of plans for the safety of the workers and the community	Emergency plan for Construction and operation (planning should begin before the commencement of any works on site) Emergency Response Procedure must be clearly communicated to all site personnel. Creation and implementation of a Campaign for the safety of the population during the construction of infrastructure projects	Minimizing the risks to the population	Contractor/ ADF	Pre-construction/ Construction	Ongoing reporting to stakeholders on the overall environmental and social performance and the steps taken to mitigate any adverse impacts.	Weekly	

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
	Creation and implementation of Traffic Management Plan						
Problems related to workers' behavior towards the local environment.	Employment as many workers as possible from the area Workforce which is actually on site for the construction of the underground parking can be engaged	Minimizing the risks to the population			Record on labor force on awareness of code of conduct in community relation	Weekly	
Disturbance to humans and houses from noise and vibration due to construction activities	Construction activities should be carried out only during the day to minimize noise levels to the residents Avoid use of old or damaged machinery with high level of noise emissions. Contractors will cordon off construction site with noise absorbing materials, Construction workers will be aware to limit verbal noise or other forms of noise.	Minimizing the disturbance to the population	Contractor/ ADF	Pre-construction/ Construction	Visual observations of work areas	Weekly	N/A

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
	Noise and vibration will be minimized at the project site and surrounding areas through sensitization of construction truck drivers to switch off vehicle engines while offloading materials.						
Stakeholder engagement related to the noise disturbance	Meetings with the local residents and the owners of the businesses, where all the negative consequences of the the emphasis should be given to the noise produced from the works, the frequency of working vehicles and workers, as well as the safety measures for the residents, locals and tourists during the upcoming period of construction in the immediate vicinity of their homes and businesses	Minimizing the disturbance of the local population due to noise from construction activities	Contractor/ Municipality/ ADF	Pre-construction/ Construction	Record of engagement activities and outcome	Monthly review	
Accidents Increased risks and incidents from traffic Accidents by transporting materials	Environment and social incidents response toolkit (ESIRT) will be used in case such incidents occur during the implementation of the project Development and application of procedures for protection of the health and safety of local communities.	Implement a traffic safety plan including design of access point, signalization, speed limits, training of drivers, use of traffic guards, procedures for	Contractor Municipality	Pre-construction/ Construction/ Operational		Monthly review	

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
	Plan for the organization of a construction site in order to respond to the unfortunate and urgent cases in a manner appropriate to the construction risks Safe pedestrian and traffic corridors through the construction site marked with visible signs, but also communicated with the representatives of the local communities, as well as the schools Drafting and implementation of Community risk Assessment	transport of oversized loads (e.g., engines), maintain log of traffic related incidents, sensitization of road users and people living close to the construction site.					
Management of Community concerns linked to impacts associated	Realization of a series of consultative activities with stakeholders. Disclosure of grievance mechanism on the ADF website, Gjirokastra municipality's website and throughout the construction site Drafting a Stakeholder Engagement Plan (SEP) that will be developed in accordance with good international practice and WB OPs Organization of a facility / office (in cooperation with the Municipality of	Reduce the negative impacts of the project, but also the negative attitude towards the project and better and timely information of stakeholders concerned. Inform communities about details of	Consultant/ ADF/ Contractor/ Municipality	Pre-construction/ Construction	Record of engagement activities and outcome Compliance monitoring with plan Following monitoring activities Awareness, Records and	Monthly/ Weekly	Operating costs of the consultant

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
	Gjirokastra) that will serve as an information office of the project. It will be a public location where all information and documents related to the project will be available to the public.	construction activities (e.g., employment opportunities, schedule, timing of noise activities, traffic including movements of oversized loads) by billboards, posters and community meeting			outcome of grievance mechanism		

Potential Impact	Mitigation Measures	Objective	Competent Institution	Timetable	Monitoring	Timing/ Frequency of Monitoring	Cost of Implementation
Communication	The consultant must regularly hold meetings with representatives of local populations and other interested stakeholders. A strong emphasis must be put on the presence of women at those meetings. Communication and information channel must be established between the contractor and the local authorities and the affected communities, at the very beginning of the construction phase. It should be maintained until the very completion of the construction activities.	Maintaining contact with stakeholders Enhance ongoing consultations with local communities (with good representation) create continuous dialogue, trust and planning of community development activities. Coordinate Stakeholder	Contractor/ Municipality ADF	Construction	Compliance with SEP	Continuous process	Operating costs of the company

REFERENCE

I List of EA report preparers--individuals and organizations,

(ii) References--written materials both published and unpublished, used in study preparation,

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Qendra e botimeve zyrtare: http://qbz.al

Annex 1: Photos of site survey

Survey data: 30th July 2022

Cercis Topulli Square

Area around of square

The municipality square


PARTIA SOCIALISTE


PARTIA SOCIALISTE

Square “House of Pioneer