



## ALBANIAN INFRASTRUCTURE TOURISM ENABLING PROGRAM (AITP)

### **NON - TECHNICAL SUMMARY**

***“NATURAL SITE (4): ENHANCING THE TOURISM OFFER OF  
NATURAL SITES IN BERAT REGION, BY IMPROVING  
ACCESSIBILITY AND TOURISM INFRASTRUCTURE, IN AREAS  
OF TOMORRI PARK”***

**ROAD VODICE –QAFE DARDHE AND CEZMA E TARIKOS**

**March 2025**

**Disclaimer**

*The Albania Infrastructure and Tourism-Enabling Project “the Project” is financed by the European Union through technical assistance and investments grants for a total amount of EUR 40 million, and by complementary sovereign loan facility provided by the EBRD to the Government of Albania. The Project is implemented by the Albanian Development Fund as executing agency (the “Client”) and the European Bank for Reconstruction and Development (the “Bank”). The EU grants are identified by the EU in close cooperation with the Albanian Development Fund.*

*The above-named client intends to use part of the proceeds of European Union grant administered by the European Bank for Reconstruction and Development (the Bank) towards the cost of this Contract*

## Table of Content

1 INTRODUCTION.....	6
1.1 PURPOSE OF THE ALBANIAN INFRASTRUCTURE TOURISM ENABLING PROGRAMME (AITP).....	7
2 RECONSTRUCTION OF RPAD VODICA-QAFE DARDHE.....	9
2.1 PACKAGE 1- ROAD “VODICA – QAFE DARDHE” .....	9
Existing Underground Network .....	9
2.1.1 Existing and Designed Road Characteristics .....	9
2.2 PACKAGE 2- TARIKOS SPRING SQUARE.....	10
2.2.1 Proposed Interventions.....	10
2.3 Project location .....	10
3 LEGAL ASPECTS AND COMPLIANCE .....	11
3.1 National Requirements .....	11
3.2 EBRD Requirements .....	11
4 SUMMARY OF EXPECTED PROJECT-RELATED IMPACTS.....	12
4.1 Negative Impacts on the Environment .....	12
4.2 Impact of Current Climate on Project Activities .....	13
4.3 Impacts on Biodiversity.....	14
4.4 Effects on flora and fauna .....	15
4.5 Impact During Operation and Maintenance .....	17
4.6 Duration of the impact.....	17
4.6.1 Mitigation Measures.....	18
4.6.2 Impacts on Natural heritage and Protected Areas .....	19
4.7 Impacts on Water.....	19
4.7.1 Groundwater.....	19
4.7.2 Possible Impacts on Surface Water .....	20
4.7.3 Duration of the impact.....	20
4.7.4 Mitigation Measures.....	21
4.8 Impacts on Land .....	21
4.8.1 Mitigation Measures.....	22
4.9 Geology .....	23
4.9.1 Mitigation Measures.....	24
4.10 Effects on Air Quality .....	24
4.10.1 Mitigation Measures.....	25
4.11 Noise and Vibrations.....	26
<b>Duration of the Impact</b> .....	27
4.11.1 Mitigation measures .....	27
4.12 Waste generation.....	28
4.12.1 Mitigation Measures.....	29
4.13 Impact on the Landscape .....	30
4.13.1 Mitigation measures .....	31
4.14 Social and Economic Impact .....	32
<b>Potential Temporary Impacts During Construction</b> .....	32
4.14.1 Mitigation Measures.....	32

4.15	Land Use.....	33
4.16	Impact on Infrastructure.....	34
4.16.1	Mitigation measures .....	34
	<b>Road and Surface Protection.....</b>	<b>34</b>
	<b>Coordination with Utility Providers.....</b>	<b>35</b>
	<b>Minimizing Service Disruptions .....</b>	<b>35</b>
	<b>Good Construction Practices .....</b>	<b>35</b>
4.17	Workplace Safety.....	36
4.17.1	Mitigation measures .....	36
4.18	Public Safety.....	37
5	Stakeholder Consultation, Engagement & Disclosure of Project Information .....	39
6	ENVIRONMENTAL AND SOCIAL MANAGEMENT .....	41
6.1	Project Management and Delivery .....	41
6.2	Environmental and Social Management Plan.....	41
6.3	Stakeholder Engagement Plan.....	41
6.4	Grievance Mechanism .....	42
7	CONCLUSIONS AND RECOMMENDATIONS .....	43
7.1	Conclusions.....	43
1.	<b>Environmental and Social Impacts.....</b>	<b>43</b>
2.	<b>Biodiversity and Natural Environment.....</b>	<b>43</b>
3.	<b>Water, Land, and Geological Stability .....</b>	<b>43</b>
4.	<b>Infrastructure and Community Safety .....</b>	<b>43</b>
5.	<b>Long-Term Economic and Social Benefits.....</b>	<b>44</b>
6.	<b>Compliance with Environmental and Social Requirements .....</b>	<b>44</b>
7.2	Recommendations.....	44
1.	<b>Environmental and Safety Monitoring.....</b>	<b>44</b>
2.	<b>Stakeholder Engagement and Communication.....</b>	<b>44</b>
3.	<b>Sustainable Construction and Climate Resilience.....</b>	<b>44</b>
4.	<b>Minimizing Community and Traffic Disruptions .....</b>	<b>45</b>
5.	<b>Waste and Pollution Control .....</b>	<b>45</b>
6.	<b>Rehabilitation and Maintenance.....</b>	<b>45</b>
8	Annex 1: PROJECT PLANVIEW.....	46

## List of Acronyms

<b>Abbreviation</b>	<b>Meaning</b>
ADF	Albanian Development Fund
AITP	Albanian Infrastructure Tourism Enabling Programme
DCM	Decision of Council of Ministers
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
ESMP	Environmental and Social Engagement Plan
EU	European Union
LARP	Land Acquisition Resettlement Plan
NEA	National Environmental Agency
NGO	Non-Governmental Organisation
NTS	Non-Technical Summary
PAP	Project Affected Person
PR	Performance Requirements
SEP	Stakeholder Engagement Plan

## 1 INTRODUCTION

The Government of Albania is aiming to turn sustainable tourism as one of the strongest competitive pillars of the country.

Albanian Infrastructure Tourism Enabling Programme (AITP or the "Programme") is a new programme of the Albanian Government, developed for supporting innovative models for local economic development based on touristic potentials, financed by EU grant and EBRD Loan.

The European Bank for Reconstruction and Development (the "EBRD" or the "Bank") has provided a loan facility consisting of a sovereign loan of up to EUR 60 million to the Government of Albania ("GoA") to finance tourism-enabling infrastructure sub-projects in Berat, Korca, Fier and Shkoder (the "Designated Municipalities") and general municipal and transport infrastructure sub-projects across the country - (the "Programme" or the "AITP").

The Programme aims at tackling the issues hindering the tourism sector in Albania through investments both in infrastructure and tourist related businesses and helping the GoA achieve the objective of the National Strategy for Development and Investment to improve Albania's competitiveness and economic growth through high quality and sustainable tourism.

The program has two components:

**Component 1:** which focus on tourism competitiveness in four pilot territories Berat, Fier, Korca and Shkodra. Strategic objectives of Component 1 are:

- SO1: To raise the quality and sustainability of integrated tourism offer in the Pilot Territories
- SO2: To enhance and preserve the attractiveness of cultural, natural, and other assets in the Pilot Territories for tourists.

**Component 2:** concerns transport and municipal infrastructure investments throughout the country aiming to boost local development and to support the implementation of the recently introduced territorial reform as well as to support local small and medium enterprises. Strategic objectives of Component 2 are:

- SO3: To improve local sustainable development of priority infrastructure and improve its climate resilience in the framework of the Albanian regional development policy.
- SO4: To provide access to finance to local MSME to increase their competitiveness in the Albanian economy.

The entity responsible for implementing the Project will be a Project Implementation Unit ("PIU") within the Albanian Development Fund (ADF).

## 1.1 PURPOSE OF THE ALBANIAN INFRASTRUCTURE TOURISM ENABLING PROGRAMME (AITP)

The Government of Albania is now implementing the Albanian Infrastructure Tourism Enabling Program (AITP), a new program developed to improve competitiveness and economic growth of Albania through high quality sustainable tourism. Within the mentioned programme the EBRD is supporting GoA efforts to foster regional development of the Tourism Market in Albania by enhancing and preserving the attractiveness of the bespoke tourist destinations of Shkoder, Berat, Fier, Korca and Laberia area.

The project focuses on the following 8 priority sites, divided into 6 clusters, identified by ADF's PIU:

- Natural Site (1): entry point to Shiroka from Ura e Bunes and Zogaj village;
- Natural Site (2): waterfronts of Shkodra Lake, Shiroka surrounding hills and Museum of the Shkodra Lake
- Natural Site (3): Tomorri Park, Osum river valley
- **Natural Site (4): Tomorri Park, Road "Vodice – Qafe Dardhe"& Cezma e Tarikos Square, Berat**
- Natural Site No.5: Fier Coastline, Darezeza Road
- Natural Site No. 6: Dardhe, Arrez, Sinec and Nikolica villages
- Natural Site No. 7: Thethi, Valbona, Vermoshi, Boga and Lepusha villages
- Natural Site No. 8: Laberia Area

The goal of this programme is to provide expert advice and supervision to ensure that important road and infrastructure improvements in Albania are completed on time and to a high standard.

The programme focuses on the project: "***Enhancing the tourism offer of natural sites in Berat region, by improving accessibility and tourism infrastructure, in areas of Tomorri Park***".

Through communication methods, a program will be created which will define the roles and their importance in this process through all the phase of the project implementation, being preconstruction, construction and operational phase.

The goal of this programme is to provide project advice and works supervision to ensure that important road and infrastructure improvements in Albania are completed on time and to a high standard.

To ensure everything is done properly, a consultant (JV "ARS Progetti" and Bolles & Wilson has been hired to:

1. **Check and approve design** – The consultant will review designs and suggest improvements to make sure the work is high quality, cost-effective, and efficient in compliance with Albanian legal requirements as well as the EBRD PRs.
2. **Ensure environmental and social responsibility** – The consultant will make sure the project follows environmental rules and social guidelines, reducing any negative impact

on the community and nature in compliance with Albanian legal requirements as well as the EBRD PRs.

3. **Supervise construction work** – The consultant will monitor the work closely, making sure it follows international and Albanian building standards, protecting the interests of the government.

The project “Enhancing the tourism offer of natural sites in Berat region, by improving accessibility and tourism infrastructure, in areas of Tomorri Park” includes two components:

- ***PACKAGE 1- Reconstruction of the ROAD “VODICA – QAFE DARDHE”***
- ***PACKAGE 2- Restoration of the TARIKOS SPRING SQUARE***

The consultant has carefully reviewed all the project documents for these two sections and has given their professional opinion to help the government submit the final design for approval by the European Bank for Reconstruction and Development (EBRD). More details on the consultant’s findings can be found in this report.

## 2 RECONSTRUCTION OF ROAD “VODICA-QAFE DARDHE” & TARIKO’S SPRING

### 2.1 PACKAGE 1- ROAD “VODICA – QAFE DARDHE”

The road section is in the Municipality of Berat. The road total length is 15.2 km. From kp 0+000 to kp 4+350 the road will be paved with asphalt. The rest of the road will remain on gravel layer.

Table 01: The coordinates of the road

Coordinates	Points	
	Start of the Road	End of the Road
GAUSS - System	X: 4484418.34 Y: 4487759,19	X: 4483903.318 Y: 4482372.794
KRGJSH	X: 569026.06 Y: 4487931.04	X: 568572.11 Y: 4482538.89

#### Existing Underground Network

- The sewage network does not exist.
- The storm water drainage network does not exist.
- The potable water supply network does not exist.
- The street lighting network does not exist.
- Horizontal and vertical road signs do not exist.

#### 2.1.1 Existing and Designed Road Characteristics

The existing road body has a width of 4.0 meters width. The designed road has the following geometric characteristics:

- Asphalted road width: 4.0 m
- Unpaved sidewalk: 0.5 m
- Drainage channel: Concrete (0.7 m) or earthen (1.0 m), depending on the section
- Passing bays: Every 250 m, with a total of 60 bays

The design includes all necessary traffic signs in accordance with Albanian standards.

The permitted speed limit ranges from 20 to 60 km/h, considering the proximity of residential entrances to the asphalted road. For this reason, the design speed is set at 30 km/h.

The segment of the road from KP 0+000 to KP 4+350 will be constructed with a flexible pavement structure, consisting of the following asphalt layers:

- Asphalt concrete (wearing course): 4 cm
- Binder course: 6 cm
- Base layer (stabilized material): 20 cm
- Sub-base layer (granular material): 20 cm

## 2.2 PACKAGE 2- TARIKO'S SPRING SQUARE

At the Nene Tarikos Spring, two green squares will be created near the spring area and the main road leading to the spring. In these squares, several metal structures in the shape of umbrellas will be placed, serving as resting points for tourists/visitors. Stone-paved pathways and stone walls with cement mortar will be found throughout the spring area. Informative signs/panels and urban furniture will be installed. "Cezma e Tarikos" will serve as a resting point and access to other touristic attractions in Berat.

### 2.2.1 Proposed Interventions

The proposed interventions in the project include:

- Construction of a rooftop square;
- Paving and organizing the stone squares (cobblestone and stone slabs);
- Construction of an info point with integrated wooden structures;
- Installation of info point equipment;
- Installation of informative signs and panels;
- Construction of stone walls and restoration of existing stone walls;
- Painting of metal structures;
- Construction of cobblestone pathways around the squares;
- Thatched roof coverings for structures;
- Electrical works for square lighting;
- Construction of two fireplaces with wooden benches;
- Installation of CCTV surveillance;
- Installation of wooden benches and waste bins at various points in the squares.

The materials used will be locally sourced.

## 2.3 PROJECT LOCATION

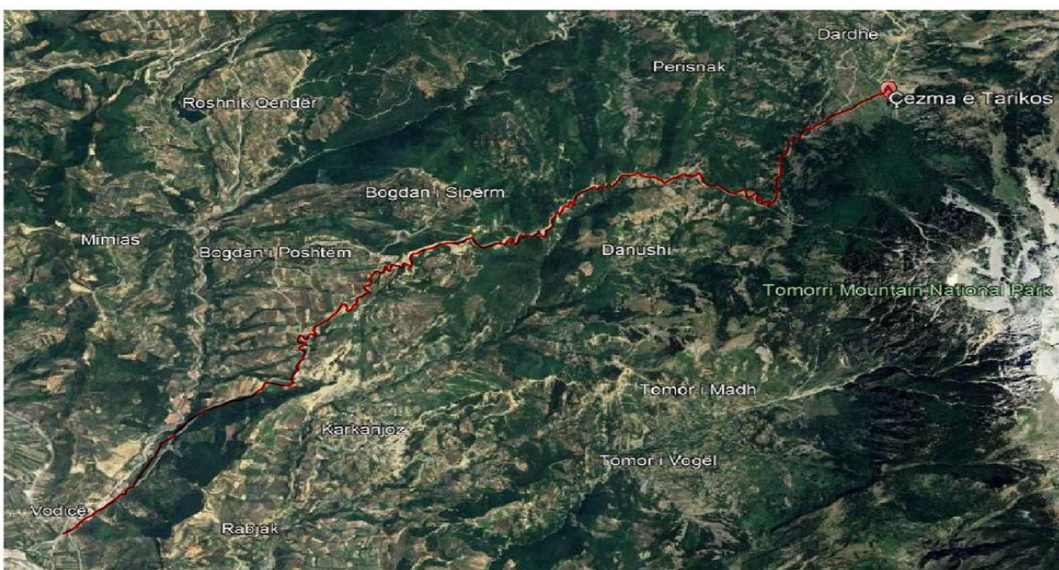


Figure 01: Planview \_project location

## 3 LEGAL ASPECTS AND COMPLIANCE

### 3.1 NATIONAL REQUIREMENTS

Based on regulatory requirements, the Project is subjected to an EIA as part of the permitting procedure in Albania in accordance with the requirements of the Albanian Environmental Legal Acts, including Laws no.10440 and 10431. Whilst the Albanian regulatory system requires an EIA, the Project is also considering the socioeconomic characteristic and cultural heritage values of the Project area. Also, the project should meet all the national Health and Safety laws, (Decisions of the Council of Ministers (DCMs), Directives and EU requirement. This will enable the Project to meet international best practice and EBRD's Performance Requirements. The approval of EIA issued on the **31.07.2024 with No. AN090720240006** by National Environmental Agency (NEA).<sup>1</sup>

### 3.2 EBRD REQUIREMENTS

The EBRD is an international financial institution which uses investment as a tool to build market economies. Commitment to sustainable energy and safeguarding the environment are central to the EBRD's activity. The EBRD Performance Requirements were introduced to provide guidance for EBRD clients to manage and improve their environmental and social performance through a risk and outcomes-based approach. The Project's EIA has been prepared by designer considering also EBRD's Performance Requirements, which are as follows:

- PR 1: Assessment and Management of Environmental and Social Impacts and Issues;
- PR 2: Labor and Working Conditions;
- PR 3: Resource Efficiency and Pollution Prevention and Control;
- PR 4: Health and Safety;
- PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement;
- PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- PR 7: Indigenous Peoples;
- PR 8: Cultural Heritage;
- PR 9: Financial Intermediaries;
- PR 10: Information Disclosure and Stakeholder Engagement.

The Project includes international best practice measures in accordance with the mitigation hierarchy to avoid, minimize / mitigate and restore / rehabilitate any adverse changes in environmental and social conditions (grievance mechanism, census). The EIA also considers international conventions and treaties, relating to environmental and social issues, particularly with regards to biodiversity.

## 4 SUMMARY OF EXPECTED PROJECT-RELATED IMPACTS

### 4.1 NEGATIVE IMPACTS ON THE ENVIRONMENT

During the construction phase of the Road “Vodicë–Qafë Dardhë” and Tarikos Square projects, several activities may generate temporary adverse environmental and social impacts. The main construction activities include:

- Excavation works, site clearing, and earthworks;
- Rehabilitation and improvement of access roads and traffic connections with surrounding areas;
- Establishment and operation of construction camps and temporary site facilities;
- Temporary traffic management and designation of parking and storage areas for construction vehicles and machinery;
- Construction of vehicle passing bays and maneuvering areas where required;
- Construction of retaining and protection walls to prevent soil erosion and slope instability;
- Transportation, storage, and handling of construction materials and equipment;

These activities may result in the following potential environmental impacts:

- Temporary occupation and disturbance of land during construction activities;
- Soil disturbance, erosion, and localized landscape alteration;
- Dust generation and air pollution caused by excavation works, transportation of materials, and operation of machinery;
- Noise and vibration generated by construction equipment, machinery, and transport vehicles;
- Increased traffic and temporary disruption to local circulation and pedestrian access;
- Consumption of fuel, water, and construction materials during implementation works;
- Risk of accidental spills of fuel, oil, or lubricants from machinery and vehicles;
- Generation of construction and demolition waste, including improper storage or disposal risks if not adequately managed;
- Temporary impacts on local vegetation and surrounding habitats due to construction activities;
- Visual impacts associated with construction works, material stockpiles, and temporary facilities.

Following completion of the works, some residual environmental and social impacts may remain during the operational and maintenance phase, including:

- Permanent land take associated with the completed infrastructure;
- Occasional noise and emissions related to maintenance activities and service vehicles;
- Increased number of visitors and human activity in the Tarikos Square area, potentially resulting in higher waste generation and pressure on local services;

- Increased vehicle movement along the rehabilitated road, with associated traffic noise and air emissions;
- Positive long-term impacts through improved accessibility, road safety, urban functionality, and enhancement of public spaces.

*Table 02: List of impacts from the project*

Impacts	Road Vodica-Qafe Dardhe	Square Tarikos spring
Biodiversity	x	x
Water	NA	x
Land	x	N/A
Earthquake	N/A	x
Geology	x	N/A
Air quality	x	x
Noise and vibration	x	x
Waste generation	x	x
Landscape	x	x
Flood risk	N/A	N/A
Protected areas	N/A	N/A
Social Economic Impact	x	x
Infrastructure	x	x

## 4.2 IMPACT OF CURRENT CLIMATE ON PROJECT ACTIVITIES

The project area is characterized by a Mediterranean climate (Csa), with mild and rainy winters and hot, dry summers. These climatic conditions are typical for the region and are influenced by geographical location, terrain characteristics, and elevation.

The prevailing climate conditions are generally favorable for the implementation of construction activities, allowing works to be carried out during most periods of the year. The dry summer season provides suitable conditions for earthworks, road construction, and outdoor activities. However, construction activities may be temporarily affected during periods of intense rainfall, particularly in the autumn and winter seasons.

Heavy rainfall events, especially in hilly and sloped areas such as the Vodice–Qafë Dardhë road section, may increase the risk of:

- Soil erosion and surface runoff;
- Slope instability and localized landslides;
- Sediment transport to nearby drainage channels and watercourses;
- Temporary difficulties for access and transportation during construction activities.

To minimize these potential impacts, the Contractor will implement appropriate erosion and drainage control measures, including:

- Proper design and stabilization of slopes and embankments;
- Construction of retaining and protection structures where necessary;
- Installation and regular maintenance of drainage channels and culverts;
- Periodic cleaning of drainage systems to prevent blockage and flooding;
- Application of good construction practices during periods of adverse weather conditions.

These mitigation measures will help protect both the project infrastructure and the surrounding environment from climate-related impacts during the construction phase.

#### **4.3 IMPACTS ON BIODIVERSITY**

The Road Vodicë–Qafë Dardhë and Tarikos Square projects are expected to improve accessibility and create better opportunities for residents and visitors, including tourists, to access and enjoy the area. Although the projects are mainly developed within existing urbanized and road infrastructure areas, some temporary impacts on local biodiversity may occur during the construction phase.

The project area is characterized mainly by modified urban and roadside environments with limited natural habitats. The fauna observed in the area consists primarily of common urban and peri-urban bird species, including seagulls, swallows, and other small urban birds that are seasonally or permanently present. No critical habitats, protected ecosystems, or sensitive biodiversity areas have been identified within the project footprint.

Potential impacts on biodiversity during construction may include:

- Temporary disturbance to birds and small fauna caused by construction noise, vibrations, movement of machinery, and increased human presence;
- Minor disturbance to nesting or resting behavior of urban bird species during active construction periods;
- Temporary dust generation that may affect nearby vegetation and surrounding habitats;
- Localized impacts associated with excavation works, transportation of materials, and operation of heavy machinery;
- Temporary visual disturbance and increased activity levels within the construction area.

The project does not involve demolition of buildings, bunkers, or large existing structures. Construction activities are mainly limited to excavation works, installation of manholes and underground infrastructure, paving works, and concrete structures. As a result, impacts on habitats and fauna are expected to be limited and localized.

Existing mature trees and the majority of urban vegetation within and around the project area will be preserved to the maximum extent possible. Any necessary trimming or removal of vegetation will be minimized and carried out in accordance with the approved environmental management measures and relevant national regulations.

To reduce impacts on biodiversity, the Contractor will implement the following mitigation measures:

- Limiting construction activities to designated work areas;
- Avoiding unnecessary removal or damage to existing vegetation;
- Applying dust suppression measures, including regular watering of exposed surfaces and construction roads;
- Maintaining construction machinery in good technical condition to minimize noise and air emissions;
- Proper management of construction waste and prevention of material dispersion into surrounding areas;
- Restricting construction activities during sensitive periods where feasible, particularly near bird resting or nesting locations.

Considering the limited ecological sensitivity of the project area, the temporary nature of the construction works, and the mitigation measures to be implemented, the overall impact on biodiversity is expected to be low and manageable.

#### 4.4 EFFECTS ON FLORA AND FAUNA

The Road Vodicë–Qafë Dardhë and Tarikos Square projects will be implemented in the area of Berat, which is characterized by a Mediterranean climate and a predominantly urban, agricultural, and roadside landscape. The project area does not include protected habitats or environmentally sensitive ecosystems; therefore, impacts on flora and fauna are expected to be limited, localized, and mainly temporary during the construction phase.

- **Birds:** The project area may host common urban and rural bird species typically found in the Berat region, including swallows, seagulls, sparrows, pigeons, and other small birds that may nest on buildings, bridges, roadside structures, or nearby vegetation. Construction activities such as excavation works, operation of machinery, transportation of materials, and increased human presence may temporarily disturb these bird species through noise and vibrations.

The disturbance is expected to be temporary and of low to moderate significance, considering the limited scale of the works and the already modified environment. During site visits and investigations, no significant nesting areas or protected bird species were identified within the direct project footprint. Nevertheless, special attention will be given during construction to avoid unnecessary disturbance to active nests if identified.

Where feasible, noisy construction activities near nesting locations will be minimized during sensitive breeding periods, particularly during spring and early summer seasons. The Engineer and supervising staff will instruct the Contractor to ensure that bird nests and nearby vegetation are not unnecessarily damaged during implementation works.

- **Flora and Vegetation:** The project area mainly consists of existing roadside vegetation, grasses, shrubs, and scattered urban trees. No rare, endemic, or protected plant species were identified within the project footprint.

The existing trees and vegetation will be preserved as much as possible during construction activities. Temporary impacts may include minor vegetation clearance, dust deposition on plants, and localized disturbance caused by machinery movement and material storage. These impacts are expected to be limited and reversible.

Appropriate mitigation measures will be implemented, including:

- Minimizing unnecessary vegetation removal;
- Protecting existing trees and landscaped areas during construction;
- Applying dust suppression measures through periodic watering;
- Properly managing construction materials and waste to avoid impacts on surrounding vegetation.
- Insects, Amphibians, and Reptiles

Due to the urbanized and roadside nature of the project area, populations of insects, amphibians, and reptiles are limited and not considered ecologically sensitive. Some temporary disturbance or displacement may occur during excavation and earthworks; however, the impacts are expected to be very low and temporary.

No protected amphibian or reptile habitats were identified during the site assessment.

- **Aquatic Flora and Fauna:** The project does not involve direct interventions in rivers, lakes, or other aquatic habitats. Therefore, no significant impacts on aquatic flora and fauna are anticipated.

However, improper management of construction materials, excavated soil, or runoff during heavy rainfall could potentially affect nearby drainage channels or water flows. To avoid such impacts, the Contractor will implement appropriate erosion and sediment control measures, including proper drainage management and regular cleaning of construction areas.

Overall, considering the characteristics of the project area, the absence of sensitive habitats, and the implementation of mitigation measures, the impacts on flora and fauna are expected to be low, temporary, and manageable throughout the construction period.

#### **4.5 IMPACT DURING OPERATION AND MAINTENANCE**

Once the Road Vodicë–Qafë Dardhë rehabilitation works are completed, the project area will continue to function mainly as an existing transportation corridor within a modified rural and mountainous environment. During the operation and maintenance phase, environmental impacts are expected to be minimal and manageable.

The improved road infrastructure is not expected to cause significant adverse impacts on flora, fauna, or natural habitats, as the project follows the existing road alignment and does not cross protected ecological areas or sensitive biodiversity zones. No impacts on rare, endangered, or protected species are anticipated during operation.

Potential impacts during the operational phase may include:

- Slight increase in vehicle traffic and associated noise emissions;
- Minor increase in vehicle exhaust emissions along the rehabilitated road section;
- Periodic maintenance activities that may generate temporary noise, dust, or localized disturbances;
- Risk of small-scale erosion or drainage blockage if regular maintenance is not properly carried out.

However, the rehabilitation of the road will also generate important positive impacts, including:

- Improved road safety and driving conditions;
- Better accessibility for local communities, visitors, and emergency services;
- Reduced dust generation compared to the existing road condition;
- Improved drainage and slope stabilization, reducing erosion risks and long-term environmental degradation.

Routine maintenance activities, including cleaning of drainage channels, maintenance of retaining structures, and vegetation management, will help ensure the long-term stability and environmental sustainability of the road infrastructure.

Overall, the environmental impact during the operation and maintenance phase is expected to be low, localized, and predominantly positive in the long term.

#### **4.6 DURATION OF THE IMPACT**

The environmental impacts associated with the Road Vodicë–Qafë Dardhë and Tarikos Square projects are expected to occur mainly during the construction phase and will generally be

temporary, localized, and reversible. Construction activities such as excavation works, transportation of materials, operation of machinery, and earthworks may temporarily disturb the surrounding environment and nearby fauna due to increased noise, dust generation, vibrations, and human presence.

Temporary impacts may include:

- Disturbance to birds and small fauna caused by construction noise and machinery operation;
- Temporary displacement of wildlife from nearby areas during active construction periods;
- Dust emissions affecting surrounding vegetation and air quality;
- Localized soil disturbance and minor erosion risks during excavation and slope works;
- Temporary visual impacts associated with construction equipment and material stockpiles;
- Potential fire risks during dry seasons if construction activities are not properly managed.

These impacts are expected to last only during the construction period and will significantly decrease once the works are completed and the construction equipment is removed from the site. No significant long-term adverse impacts on biodiversity or natural habitats are anticipated during the operational phase of the road.

#### **4.6.1 Mitigation Measures**

To minimize environmental impacts during construction and ensure protection of the surrounding environment, the Contractor will implement the following mitigation measures:

- **Minimization of Construction Noise:**

Construction machinery and equipment will be properly maintained to reduce excessive noise emissions. Noisy activities will be limited where possible, particularly near residential or environmentally sensitive areas.

- **Restriction of Construction Activities to Daytime Hours:**

Construction works will primarily be carried out during daytime hours to minimize disturbance to nearby communities, birds, and wildlife.

- **Dust Suppression Measures:**

Water spraying and other dust control methods will be regularly applied on exposed surfaces, excavation areas, and access roads to minimize airborne dust and protect nearby vegetation and air quality.

- **Protection of Existing Vegetation:**

Existing trees, roadside vegetation, and landscaped areas will be preserved as much as possible. Unnecessary vegetation clearance will be avoided.

- **Erosion and Drainage Control:**

Appropriate slope stabilization measures, retaining structures, and drainage systems will be implemented to reduce soil erosion and prevent uncontrolled runoff during rainfall events.

- Proper Waste Management:

Construction waste, excavated materials, and hazardous substances such as fuel and lubricants will be properly stored, handled, and disposed of in accordance with environmental requirements.

- Fire Prevention Measures:

Preventive measures will be implemented during dry periods, including proper storage of flammable materials, regular cleaning of dry vegetation near work areas, and availability of fire extinguishing equipment on-site.

- Traffic and Machinery Management:

Vehicle movement and machinery operation will be controlled within designated construction areas to minimize unnecessary disturbance to surrounding land and habitats.

These measures are intended to ensure that the project is implemented with minimal environmental impact while improving road safety, accessibility, and infrastructure conditions for local communities and visitors.

#### **4.6.2 Impacts on Natural heritage and Protected Areas**

The area where the road will be built is not home to any rare or endangered plants or animals. There are no protected natural areas nearby, so the project won't harm any special natural heritage.

### **4.7 IMPACTS ON WATER**

#### **4.7.1 Groundwater**

The Road Vodice–Qafë Dardhë and Tarikos Square projects are located in a rural and mountainous area outside the main urban zones of Berat, with limited residential development along the road alignment. The project does not involve deep excavations or activities expected to significantly affect groundwater resources. However, during the construction phase, certain activities may pose temporary risks to groundwater quality if not properly managed.

Possible impacts on groundwater may include:

- Accidental spills or leakage of fuel, oil, lubricants, or other hazardous materials from construction machinery and transport vehicles;
- Infiltration of polluted runoff generated from construction activities;
- Improper disposal of wastewater or construction waste;
- Temporary contamination risks to nearby drainage channels, springs, or small local water sources located close to the road corridor.

Considering the nature and scale of the project, these impacts are expected to be localized, temporary, and of low significance if appropriate environmental protection measures are implemented.

#### **4.7.2 Possible Impacts on Surface Water**

Construction activities may temporarily affect nearby surface water resources, drainage systems, and runoff patterns, particularly during periods of heavy rainfall. Earthworks, excavation activities, slope stabilization works, and movement of machinery may increase the risk of sediment transport and localized pollution.

Potential impacts on surface water may include:

- Increased sedimentation and turbidity caused by excavation works and soil disturbance;
- Erosion and uncontrolled runoff from exposed surfaces and embankments;
- Pollution from accidental spills of fuel, oil, concrete residues, or other construction materials;
- Temporary blockage or alteration of existing drainage channels;
- Improper disposal of solid waste or excavated materials near watercourses or drainage systems.

No direct interventions in rivers or major water bodies are foreseen under the project. Therefore, impacts on surface water are expected to be temporary, localized, and manageable through proper construction practices.

#### **4.7.3 Duration of the impact**

Potential impacts on groundwater and surface water are expected mainly during the construction phase of the project. These impacts are temporary and associated primarily with excavation works, machinery operation, transportation of materials, and construction site activities.

Risks related to fuel or oil spills, sediment runoff, and wastewater generation will exist only during active construction periods and can be significantly reduced through implementation of proper environmental management measures and good construction practices.

Temporary impacts on surface water may occur during rainfall events when exposed soil surfaces and excavation areas are more vulnerable to erosion and runoff. However, these impacts are expected to remain local, of low probability, and minor in magnitude.

Once construction activities are completed and disturbed areas are stabilized, no significant long-term impacts on groundwater, surface water, or natural drainage patterns are anticipated. On the contrary, the improved road drainage infrastructure is expected to contribute positively to runoff management and reduction of erosion problems along the road corridor.

#### 4.7.4 Mitigation Measures

To minimize potential impacts on groundwater and surface water during construction, the Contractor will implement the following mitigation measures:

- **Strict Fuel and Oil Management:**  
Construction vehicles and machinery will be regularly inspected and maintained to prevent leaks. Fueling and maintenance activities will only be carried out in designated and controlled areas away from drainage channels and sensitive locations.
- **Proper Storage of Hazardous Materials:**  
Fuel, oils, lubricants, and chemicals will be stored in sealed and labeled containers within secure storage areas equipped with secondary containment systems.
- **Use of Spill Prevention and Response Measures:**  
Spill kits, absorbent materials, and emergency response procedures will be available on-site to immediately address accidental leaks or spills.
- **Erosion and Sediment Control Measures:**  
Silt fences, sediment traps, drainage channels, and temporary barriers will be installed where necessary to prevent soil erosion and uncontrolled runoff.
- **Proper Wastewater Management:**  
Wastewater generated from construction activities and equipment cleaning will be properly collected and managed in accordance with environmental requirements. Direct discharge into the environment will not be allowed.
- **Proper Disposal of Construction Waste:**  
Construction debris, excavated materials, and solid waste will be regularly collected, transported, and disposed of at approved locations.
- **Stormwater and Drainage Management:**  
Temporary and permanent drainage systems will be maintained to ensure proper water flow and prevent flooding, erosion, or sediment accumulation.
- **Scheduling of Earthworks During Suitable Weather Conditions:**  
Excavation and earth-moving activities will be planned, where possible, during dry weather periods to reduce sediment runoff and erosion risks.
- **Rehabilitation of Disturbed Areas:**  
Disturbed surfaces and slopes will be stabilized and rehabilitated after completion of construction activities to minimize long-term erosion risks.

By implementing these mitigation measures, the potential impacts on groundwater and surface water are expected to remain low, temporary, and manageable throughout the construction phase. After completion of the project, no significant long-term adverse impacts on water resources are anticipated.

#### 4.8 IMPACTS ON LAND

The implementation of the Road Vodicë–Qafë Dardhë project will involve excavation works, earthworks, slope stabilization, transportation of materials, and operation of construction machinery along the existing road corridor. These activities may temporarily affect land and soil conditions during the construction phase.

Since the project is mainly located in a rural and mountainous area, temporary impacts on land are expected primarily within the construction footprint and nearby working areas. Potential impacts may include:

- Soil compaction caused by the movement and operation of heavy construction machinery and transport vehicles;
- Localized soil disturbance and alteration of the terrain during excavation and road widening activities;
- Increased risk of erosion on exposed slopes and embankments, particularly during periods of heavy rainfall;
- Accidental contamination of soil from fuel, oil, lubricants, or other hazardous substances associated with construction machinery;
- Improper disposal of construction waste, excavated materials, or wastewater that could affect soil quality;
- Temporary occupation of land for construction activities, material storage, and machinery movement.

The impacts on land are expected to be temporary, localized, and reversible following completion of the construction works and implementation of rehabilitation measures.

#### **4.8.1 Mitigation Measures**

To minimize impacts on land and soil quality during construction, the Contractor will implement the following mitigation measures:

- **Controlled Movement of Vehicles and Machinery:**  
Designated access routes and working areas will be established to minimize unnecessary soil disturbance and reduce land degradation outside the project footprint.
- **Soil Protection Measures:**  
Protective measures such as gravel layers, temporary coverings, or stabilization materials will be used in high-traffic and sensitive areas to reduce soil compaction and erosion.
- **Erosion Prevention and Slope Stabilization:**  
Appropriate retaining structures, drainage systems, slope stabilization works, and erosion control measures will be implemented, particularly in steep or vulnerable sections of the road.
- **Spill Prevention and Management:**  
Fueling and maintenance activities for machinery will be carried out only in designated controlled areas equipped with spill containment systems. Spill kits and absorbent materials will be available on-site to immediately manage accidental leaks.
- **Proper Waste Management:**  
Construction waste, excavated materials, and hazardous substances will be properly collected, stored, transported, and disposed of in accordance with environmental regulations. Disposal of waste directly onto the soil will be strictly prohibited.

- **Topsoil and Excavated Material Management:**  
Where applicable, topsoil will be temporarily stored and reused for rehabilitation and landscaping purposes after completion of works.
- **Rehabilitation of Disturbed Areas:**  
Following construction, all temporarily disturbed areas will be cleaned, stabilized, and rehabilitated through regrading, revegetation, and landscaping where necessary.
- **Good Housekeeping Practices:**  
Construction sites and storage areas will be maintained in an orderly condition to minimize unnecessary impacts on surrounding land and soil quality.

With the implementation of these mitigation measures, the impact on land and soil is expected to remain low, temporary, and manageable throughout the construction phase. Following completion of the project, the rehabilitated road infrastructure and stabilized slopes are expected to improve long-term land stability and reduce erosion risks along the project corridor.

#### 4.9 GEOLOGY

The Road Vodicë–Qafë Dardhë project is located in a hilly and mountainous area near Berat, characterized by natural slopes, rocky formations, weathered soils, and locally unstable terrain conditions. The geological structure of the area has been shaped over time by tectonic activity, erosion processes, surface runoff, and natural weathering.

The project mainly follows the existing road alignment; therefore, large-scale geological alterations are not anticipated. However, construction activities such as excavation works, slope cutting, earthworks, and drainage improvements may temporarily affect local geological and soil stability conditions if not properly managed.

Potential geological impacts during construction may include:

- Localized soil erosion and instability of exposed slopes;
- Minor landslide or rockfall risks in steep sections during excavation activities;
- Temporary destabilization of embankments and cut slopes;
- Surface runoff and sediment transport during heavy rainfall events;
- Soil degradation and compaction caused by heavy construction machinery.

The project design includes slope stabilization measures, retaining structures, and drainage improvements intended to enhance the long-term stability of the road corridor and reduce erosion risks in vulnerable areas.

During the operational and maintenance phase, no significant adverse geological impacts are expected. On the contrary, the rehabilitation of the road and implementation of stabilization works are expected to improve the structural stability of the terrain and reduce future erosion and landslide risks along the project area.

#### 4.9.1 Mitigation Measures

To minimize geological and soil stability impacts during construction and operation, the following mitigation measures will be implemented:

- **Erosion Control During Construction:**
  - ✓ Temporary barriers, drainage channels, and protective coverings will be installed around excavation and earthwork areas to reduce erosion caused by rainfall and surface runoff.
  - ✓ Earthworks and excavation activities will be planned, where possible, during favorable weather conditions to minimize erosion risks.
- **Slope Stabilization Measures:**
  - ✓ Retaining walls, gabions, protective structures, and slope reinforcement measures will be constructed in areas prone to instability or erosion.
  - ✓ Excavated slopes and embankments will be stabilized immediately after completion of works.
- **Proper Soil and Excavated Material Management:**
  - ✓ Excavated materials and topsoil will be stored in designated and stable locations to prevent uncontrolled runoff and slope loading.
  - ✓ Unnecessary removal of vegetation and disturbance of natural slopes will be avoided.
- **Drainage Management:**
  - ✓ Adequate drainage systems, culverts, and runoff channels will be installed and regularly maintained to prevent water accumulation and slope erosion.
  - ✓ Drainage structures will be regularly cleaned to ensure proper water flow during heavy rainfall.
- **Rehabilitation and Revegetation of Disturbed Areas:**
  - ✓ Disturbed slopes and exposed surfaces will be rehabilitated through revegetation, landscaping, and application of erosion control materials where necessary.
  - ✓ Native vegetation species will be used where possible to improve long-term soil stability.
- **Monitoring and Maintenance:**
  - ✓ The project area, especially vulnerable slopes and retaining structures, will be periodically monitored for signs of erosion, instability, or landslide risk.
  - ✓ Maintenance interventions will be carried out promptly if any instability or drainage problems are identified.

By implementing these mitigation measures, the project will minimize potential geological and erosion-related impacts while improving the long-term stability and safety of the Road Vodicë–Qafë Dardhë corridor.

#### 4.10 EFFECTS ON AIR QUALITY

The Road Vodicë–Qafë Dardhë and Tarikos Square projects are located in a predominantly rural and mountainous area near Berat, where air quality is generally good due to the limited industrial activity and relatively low traffic density. However, temporary impacts on air quality may occur

during the construction phase as a result of excavation works, earth movements, transportation of materials, operation of heavy machinery, and road rehabilitation activities.

Construction activities may generate dust emissions and exhaust gases, particularly during:

- Excavation and earthworks;
- Transportation and loading/unloading of construction materials;
- Operation of heavy machinery and construction vehicles;
- Slope stabilization and road surface rehabilitation works;
- Movement of vehicles on unpaved or exposed surfaces.

The main pollutants expected during construction include dust particles (PM10), exhaust emissions from diesel-powered machinery, and gaseous pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), and hydrocarbons.

Temporary increases in dust levels may affect construction workers, nearby residents, road users, and surrounding vegetation, particularly during dry and windy weather conditions. However, these impacts are expected to remain localized, short-term, and limited mainly to the immediate construction area.

No significant long-term impacts on air quality are expected during the operational phase of the project. Following completion of the road rehabilitation works, improved road conditions are expected to contribute positively by reducing dust generation from damaged road surfaces and improving traffic flow efficiency.

- **Duration of the Impact**

Air quality impacts are expected primarily during the construction phase and will be temporary in nature. Dust generation and machinery emissions will occur intermittently during excavation, transportation, and road construction activities.

These impacts are not expected to cause permanent deterioration of air quality and will remain localized near active work areas. Once construction activities are completed and disturbed surfaces are stabilized, dust emissions and construction-related air pollution will cease.

With the implementation of proper environmental management measures, the impact on air quality is expected to remain low and manageable throughout the construction period

#### **4.10.1 Mitigation Measures**

To minimize impacts on air quality during construction, the Contractor will implement the following mitigation measures:

- **Dust Control Measures:**  
Water spraying will be regularly applied on construction roads, excavation areas,

exposed surfaces, and stockpiles, especially during dry and windy weather conditions, to reduce dust generation.

- **Covering and Proper Storage of Materials:**  
Fine construction materials such as sand, soil, and aggregates will be properly stored and covered where necessary to minimize wind dispersion and dust emissions.
- **Maintenance of Vehicles and Machinery:**  
Construction vehicles and equipment will be regularly inspected and maintained to ensure efficient operation and minimize exhaust emissions.
- **Control of Vehicle Speed and Traffic Movement:**  
Speed limits will be applied for construction vehicles within the work area to reduce dust generation and unnecessary emissions.
- **Restriction of Idling Machinery:**  
Unnecessary idling of construction machinery and vehicles will be avoided to reduce fuel consumption and air pollutant emissions.
- **Scheduling of Construction Activities:**  
Dust-generating activities will be managed and scheduled appropriately to minimize prolonged impacts on nearby communities and road users.
- **Transportation Management:**  
Trucks transporting fine materials will be covered during transport to prevent material dispersion along the road corridor.
- **Site Housekeeping:**  
Construction areas will be regularly cleaned to prevent accumulation of dust and debris.
- **Air Quality Monitoring:**  
Air quality monitoring, including dust (PM10) levels where required by the environmental permit and relevant regulations, will be conducted periodically during construction activities.

Following completion of the project, no significant adverse impacts on air quality are anticipated during the operational phase. The rehabilitated road infrastructure is expected to improve driving conditions, reduce dust emissions from deteriorated surfaces, and contribute to safer and more efficient transportation in the area.

#### **4.11 NOISE AND VIBRATIONS**

During the construction phase of the Road Vodice–Qafë Dardhë project, noise and vibrations will mainly be generated by construction machinery, excavation activities, transportation vehicles, and road rehabilitation works. Equipment such as excavators, loaders, rollers, compressors, trucks, and other heavy machinery may temporarily increase noise levels within and around the project area.

The project is located mainly in a rural and mountainous area near Berat, with relatively low population density; therefore, the number of receptors potentially affected by noise and vibration is limited. However, nearby residents, road users, and workers.

Potential noise and vibration sources include:

- Excavation and earthworks;
- Operation of heavy construction machinery;

- Transportation of construction materials;
- Compaction and road surface rehabilitation activities;
- Movement of heavy trucks along the construction corridor.

Temporary vibration effects may occur close to active construction areas, particularly during excavation and operation of heavy equipment. Indicative vibration influence distances may include:

- Excavation and compaction works: noticeable within approximately 10–15 meters;
- Heavy trucks and machinery movement: noticeable within approximately 5–10 meters.

These impacts are expected to be temporary, localized, and limited to the construction phase only. No significant long-term vibration impacts are anticipated once the project is completed.

Following completion of the road rehabilitation works, operational noise levels are expected to remain similar to existing road traffic conditions, with potential improvements in driving comfort and traffic flow due to the improved road surface.

### **Duration of the Impact**

Noise and vibration impacts will occur primarily during the construction phase and will be temporary in nature. The most noticeable effects will occur during excavation, earthworks, transportation activities, and operation of heavy machinery.

The impacts are expected to remain localized around active construction areas and will gradually decrease once construction activities are completed. No permanent or significant long-term noise and vibration impacts are anticipated from the operation of the rehabilitated road.

#### **4.11.1 Mitigation measures**

To minimize noise and vibration impacts during construction, the Contractor will implement the following mitigation measures:

- **Restriction of Working Hours:**  
Noisy construction activities will be limited to daytime working hours to minimize disturbance to nearby residents and local communities. Construction activities during nighttime hours will be avoided unless strictly necessary and approved.
- **Use of Properly Maintained Equipment:**  
Construction machinery and vehicles will be regularly maintained to reduce excessive noise and vibration caused by mechanical defects or poor operation.
- **Use of Lower-Noise Equipment Where Feasible:**  
Modern and less noisy machinery will be used whenever practical to minimize overall sound emissions.
- **Control of Vehicle Movement and Speed:**  
Construction vehicles and trucks will operate at controlled speeds within the project area to reduce unnecessary vibration and noise generation.

- **Temporary Noise Barriers Where Necessary:**  
In sensitive locations close to residential areas or public facilities, temporary barriers or protective screens may be installed if required.
- **Vibration Monitoring:**  
Vibrations generated by heavy machinery and construction activities will be monitored where necessary to ensure compliance with environmental requirements and avoid excessive impacts on nearby structures.
- **Traffic Management Measures:**  
Transportation routes and schedules for heavy vehicles will be organized to minimize impacts on nearby communities and road users.
- **Communication with Local Communities:**  
Nearby residents and stakeholders will be informed in advance about construction schedules and activities that may generate temporary high noise levels.
- **Occupational Health and Safety Measures:**  
Workers exposed to elevated noise levels will be provided with appropriate personal protective equipment (PPE), including hearing protection.

With implementation of these mitigation measures, noise and vibration impacts are expected to remain temporary, localized, and manageable throughout the construction period. After completion of the project, no significant adverse noise or vibration impacts are anticipated.

#### 4.12 WASTE GENERATION

Construction activities for the Road Vodice–Qafë Dardhë project will generate different types of waste during the implementation phase. The majority of the waste will originate from excavation works, road rehabilitation activities, slope stabilization works, packaging materials, and routine activities of the construction workforce.

The main types of waste expected during construction include:

- Excavated soil and rock materials generated from earthworks and road widening activities;
- Construction and demolition waste such as broken concrete, asphalt, aggregates, and surplus materials;
- Packaging waste including plastic, metal, paper, and wood materials;
- Municipal-type waste generated by construction workers, including food waste and sanitary waste;
- Small quantities of hazardous waste such as used oils, lubricants, fuel residues, oily rags, filters, paint containers, and contaminated materials from machinery maintenance activities.

Where possible, excavated materials and reusable construction waste will be reused within the project for backfilling, embankment stabilization, or other engineering purposes in order to minimize the quantity of waste requiring disposal.

Hazardous waste generated during construction will be limited in quantity and will be managed in accordance with national environmental legislation, the approved Environmental Permit, EU waste management principles, good international industry practice, and relevant environmental and social standards, including EBRD PR3 requirements.

All waste materials that cannot be reused or recycled will be transported and disposed of at approved disposal sites designated by the relevant local authorities and in accordance with the Environmental Permit requirements.

During the operational phase, no significant hazardous waste generation is anticipated. Minor amounts of waste may be generated during routine road maintenance activities and from road users; however, such waste will be managed through the local municipal waste collection system.

- **Duration of the Impact**

Waste generation impacts are expected mainly during the construction phase and will be temporary in nature. The largest quantities of waste will be produced during excavation works, earthworks, and road rehabilitation activities.

The impacts associated with waste generation are considered manageable and localized, provided that proper waste management practices are implemented throughout the construction period.

After completion of construction works, waste generation will be limited mainly to routine maintenance activities and normal municipal waste associated with road use. No significant long-term adverse impacts related to waste generation are expected during operation of the rehabilitated road.

#### **4.12.1 Mitigation Measures**

To minimize impacts associated with waste generation and ensure environmentally sound waste management, the Contractor will implement the following mitigation measures:

- **Waste Segregation and Recycling:**  
Waste materials will be separated into reusable, recyclable, hazardous, and non-hazardous categories. Recyclable and reusable materials, including excavated soil and aggregates where suitable, will be reused whenever possible.
- **Proper Management of Excavated Materials:**  
Excavated soil and rock materials suitable for reuse will be utilized for backfilling, embankment formation, and stabilization works. Surplus material that cannot be reused will be transported to approved disposal locations.
- **Hazardous Waste Handling:**  
Oils, fuels, lubricants, filters, and other hazardous substances will be stored in sealed and properly labeled containers within designated protected areas. Disposal will be carried out only through licensed operators and approved facilities.

- **Spill Prevention Measures:**  
Spill kits and absorbent materials will be available on-site to immediately address accidental leaks or spills from machinery and hazardous materials.
- **Proper Disposal of Construction Waste:**  
Construction debris such as broken concrete, asphalt, and packaging waste will be regularly collected and transported to authorized recycling or disposal facilities.
- **Provision of Waste Collection Facilities:**  
Designated waste collection containers will be installed at construction sites and worker areas to ensure proper storage and collection of municipal and construction waste.
- **Sanitary Waste Management:**  
Adequate sanitary facilities, including portable toilets where necessary, will be provided for workers. Wastewater and sanitary waste will be managed in accordance with environmental and public health requirements.
- **Good Housekeeping Practices:**  
Construction areas will be kept clean and organized to prevent uncontrolled waste dispersion and environmental contamination.
- **Worker Awareness and Training:**  
Construction personnel will be instructed on proper waste management procedures, environmental protection measures, and emergency response actions.

With implementation of these mitigation measures, waste generation impacts are expected to remain temporary, localized, and manageable throughout the construction phase, with no significant long-term environmental impacts anticipated during operation of the road infrastructure.

#### 4.13 IMPACT ON THE LANDSCAPE

The Road Vodice–Qafë Dardhë project will be implemented within a rural and mountainous landscape near Berat, characterized by natural slopes, agricultural areas, scattered vegetation, and panoramic views typical of the region. During the construction phase, temporary visual impacts on the landscape are expected due to excavation works, movement of heavy machinery, stockpiling of materials, and construction activities along the road corridor.

Temporary landscape impacts may include:

- Disturbance of the natural appearance of the area caused by excavation and earthworks;
- Temporary removal or trimming of roadside vegetation and shrubs where necessary for construction activities;
- Visual intrusion from construction machinery, vehicles, equipment, and material stockpiles;
- Exposure of soil surfaces and temporary alteration of slopes during rehabilitation works;
- Increased dust and movement of construction traffic affecting the visual quality of the surrounding environment.

These impacts are expected to be localized and temporary, limited mainly to the active construction period.

Following completion of the rehabilitation works, the overall impact on the landscape is expected to be positive. The improved road infrastructure, stabilized slopes, drainage improvements, and rehabilitation of disturbed areas will contribute to a more organized, safer, and visually improved road corridor. The project is also expected to improve accessibility to the surrounding area and enhance the overall appearance of the road environment.

- **Duration of the Impact**

Landscape impacts during construction will be temporary and reversible. The most noticeable visual changes will occur during excavation, slope stabilization, and active construction works.

Once the construction activities are completed and disturbed areas are rehabilitated, the visual quality of the area is expected to improve compared to the existing condition. Therefore, the long-term impact on the landscape is considered positive and beneficial.

#### **4.13.1 Mitigation measures**

To minimize temporary impacts on the landscape during construction, the following mitigation measures will be implemented:

- **Minimization of Vegetation Disturbance:**  
Removal of vegetation will be limited only to areas strictly necessary for construction activities. Existing trees and natural vegetation will be preserved where possible.
- **Proper Management of Construction Areas:**  
Construction materials, machinery, and waste will be stored in organized and designated areas to minimize visual disturbance and unnecessary occupation of land.
- **Dust and Site Cleanliness Control:**  
Dust suppression measures and regular cleaning of construction areas will be implemented to reduce negative visual impacts and maintain acceptable environmental conditions.
- **Controlled Movement of Vehicles and Machinery:**  
Construction traffic and machinery movement will be managed within designated access routes to minimize unnecessary disturbance to surrounding land and vegetation.
- **Rehabilitation of Disturbed Areas:**  
Following completion of works, disturbed slopes, embankments, and temporary work areas will be rehabilitated, stabilized, and revegetated where necessary.
- **Landscaping and Revegetation:**  
Native vegetation and appropriate landscaping measures will be applied, where feasible, to improve the visual integration of the rehabilitated road within the surrounding natural environment.
- **Removal of Temporary Structures:**  
Temporary facilities, construction debris, and unused materials will be removed immediately after completion of the works to restore the natural appearance of the area.

These mitigation measures will help ensure that temporary construction impacts on the landscape are minimized and that the final outcome contributes positively to the visual quality, safety, and functionality of the Road Vodice–Qafë Dardhë corridor.

#### **4.14 SOCIAL AND ECONOMIC IMPACT**

The Road Vodice–Qafë Dardhë project is expected to generate positive social and economic impacts for local communities in the area of Berat. The rehabilitation of the road infrastructure will improve accessibility, road safety, connectivity, and transportation conditions for residents, visitors, local businesses, and service providers.

During the construction phase, the project will create temporary employment opportunities for local workers, including skilled and unskilled labor. Local suppliers, transport operators, construction-related services, and nearby businesses may also benefit from increased economic activity associated with the implementation of the project.

The improved road infrastructure is expected to provide several long-term socio-economic benefits, including:

- Improved access for local communities, emergency services, and public transportation;
- Better connectivity between villages and surrounding areas;
- Increased accessibility for visitors and tourists to the region;
- Improved transportation conditions for agricultural and local economic activities;
- Reduced travel time and improved road safety;
- Enhanced opportunities for future economic development and tourism-related activities.

Despite these positive impacts, temporary disturbances may occur during the construction phase, particularly for nearby residents, road users, and local economic activities along the road corridor.

#### **Potential Temporary Impacts during Construction**

- Temporary traffic disruptions and restricted access along certain road sections during construction activities;
- Delays in transportation and movement of local residents and vehicles;
- Increased noise, dust, and vibration affecting nearby communities and businesses;
- Temporary reduction in accessibility to private properties, agricultural land, or local services in some locations;
- Increased movement of heavy vehicles and construction machinery along local roads;
- Temporary safety risks associated with construction activities and traffic diversions.

These impacts are expected to be temporary, localized, and limited to the construction period.

##### **4.14.1 Mitigation Measures**

To minimize social and economic impacts during construction, the following mitigation measures will be implemented:

- **Phased Construction Planning:**  
Construction activities will be organized in phases to maintain traffic circulation and access wherever possible during implementation works.
- **Traffic Management Measures:**  
Temporary traffic signs, warning signals, barriers, and alternative access routes will be established to ensure safe movement of vehicles and pedestrians during construction.
- **Maintaining Access to Properties and Services:**  
Access to residential properties, businesses, agricultural land, and public services will be maintained as much as possible throughout the construction period.
- **Communication with Local Communities:**  
Residents, local authorities, and stakeholders will be regularly informed about construction schedules, traffic restrictions, and planned activities through appropriate communication channels.
- **Dust and Noise Control Measures:**  
Measures such as water spraying, controlled working hours, and proper maintenance of machinery will be implemented to minimize nuisance to nearby communities.
- **Occupational and Community Safety Measures:**  
Appropriate safety signage, fencing, and protective measures will be implemented to reduce risks for workers, residents, and road users.
- **Use of Local Workforce Where Possible:**  
The Contractor will be encouraged to employ local labor and use local services where feasible to maximize local economic benefits.
- **Rapid Rehabilitation of Disturbed Areas:**  
Construction areas and temporarily affected access roads will be restored promptly after completion of works.

In the long term, the rehabilitated Road Vodicë–Qafë Dardhë is expected to provide significant social and economic benefits by improving transportation infrastructure, supporting local development, increasing accessibility, and enhancing opportunities for tourism and economic growth in the region.

#### 4.15 LAND USE

The Road Vodicë–Qafë Dardhë and Tarikos Square projects will be implemented primarily on state-owned land and within existing public road and urban infrastructure corridors. Based on the current project design and land ownership status, no large-scale land acquisition or physical displacement of residents is anticipated for the implementation of the works.

A Land Acquisition and Resettlement Plan (LARP) has been prepared for the project and includes detailed information regarding land use conditions, potential impacts, affected assets, and applicable mitigation and compensation measures, where required.

The projects are expected to generate positive impacts on land use and local development by improving accessibility, transportation infrastructure, public spaces, and connectivity within the area of Berat and the surrounding Tomorr Mountain and Tomorri Park area. The rehabilitation of the road and improvement of public infrastructure are expected to support tourism development, improve mobility for local residents, and contribute to the economic and social growth of the area.

During the construction phase, temporary impacts on land use may occur, including:

- Temporary occupation of land for construction activities, storage areas, and machinery movement;
- Temporary restrictions to access roads, agricultural areas, or nearby properties;
- Minor disturbances to existing infrastructure or utilities during excavation and rehabilitation works.

Any damage caused to existing infrastructure, access roads, utilities, private property, or surrounding areas during construction will be repaired, restored, or replaced by the Contractor in coordination with the relevant authorities and affected parties.

#### **4.16 IMPACT ON INFRASTRUCTURE**

During the construction phase of the Road Vodinë–Qafë Dardhë and Tarikos Square projects, temporary impacts on existing infrastructure may occur due to excavation works, transportation of materials, operation of heavy machinery, and increased movement of construction vehicles.

Potential impacts on infrastructure may include:

- Minor damage or deterioration of existing local roads caused by heavy trucks and construction machinery;
- Temporary disruption or obstruction of traffic circulation along narrow road sections;
- Temporary impacts on roadside drainage systems, retaining structures, sidewalks, or public access areas during construction works;
- Possible accidental damage to underground or surface utilities, including water supply lines, electricity networks, telecommunications infrastructure, or drainage systems, where present;
- Temporary interruptions to local services or access during excavation and rehabilitation activities.

Considering the scale and nature of the project, these impacts are expected to be localized, temporary, and manageable through proper construction planning and implementation of mitigation measures.

##### **4.16.1 Mitigation measures**

To minimize impacts on existing infrastructure and public services during construction, the following mitigation measures will be implemented:

##### **Road and Surface Protection**

- Weak or sensitive road sections that may be affected by heavy construction traffic will be reinforced where necessary using gravel, temporary stabilization layers, or other appropriate protection measures.
- Designated routes for construction vehicles and machinery will be established to minimize unnecessary impacts on local roads and surrounding infrastructure.
- Vehicle load limits and traffic management procedures will be implemented to reduce excessive stress on existing road infrastructure.
- Any damage caused to roads, pavements, drainage systems, or public infrastructure during construction will be promptly repaired by the Contractor.

### **Coordination with Utility Providers**

- The Contractor will coordinate closely with relevant utility companies and local authorities before excavation works begin in order to identify and protect existing underground and surface infrastructure.
- Existing utility networks, including water supply, electricity, telecommunications, and drainage systems, will be clearly identified and marked where possible prior to construction activities.
- In the event of accidental damage to utilities or infrastructure, immediate corrective actions and repairs will be undertaken in coordination with the responsible authorities and service providers.

### **Minimizing Service Disruptions**

- Residents, businesses, and local communities will be informed in advance regarding planned construction activities, temporary traffic diversions, or potential service interruptions.
- Access to residential properties, businesses, and public services will be maintained as much as possible throughout the construction period.
- Temporary signage, barriers, and safety measures will be installed to ensure safe movement of vehicles and pedestrians around active construction areas.

### **Good Construction Practices**

- Construction activities will be carefully managed to minimize unnecessary disturbance to surrounding infrastructure and public spaces.
- Machinery operation and material storage will be restricted to designated areas to avoid accidental damage to adjacent infrastructure.
- Construction areas will be regularly inspected to identify and address any emerging infrastructure-related issues.

With the implementation of these mitigation measures, impacts on existing infrastructure are expected to remain minor, temporary, and localized throughout the construction phase. Following completion of the project, the rehabilitated infrastructure is expected to improve transportation conditions, accessibility, and overall public infrastructure functionality in the project area.

## 4.17 WORKPLACE SAFETY

The implementation of the Road Vodicë–Qafë Dardhë and Tarikos Square projects will create employment opportunities for local workers and contractors during the construction phase. Ensuring occupational health and safety (OHS) for all workers, supervisors, and site personnel will be a key priority throughout project implementation.

Construction activities may expose workers to several occupational risks associated with:

- Operation of heavy machinery and construction vehicles;
- Excavation works and earth movements;
- Working on slopes and uneven terrain;
- Handling of construction materials, tools, and equipment;
- Electrical installations and use of powered equipment;
- Exposure to dust, noise, vibrations, and hazardous substances;
- Traffic-related risks within active construction zones;
- Potential slips, trips, falls, or accidents at the construction site.

The Contractor will be responsible for implementing all required occupational health and safety measures in accordance with Albanian legislation, good international industry practice, project Environmental and Social Management Plans (ESMP), and applicable environmental and social standards.

In order to ensure proper management of workplace and community-related impacts, the implementation of the following project instruments will support all stakeholders throughout the project lifecycle:

- Environmental and Social Management Plan (ESMP);
- Stakeholder Engagement Plan (SEP);
- Land Acquisition and Resettlement Plan (LARP), where applicable;
- Grievance Mechanism (GM) for workers and affected communities.

The project investor, supervising engineer, and relevant authorities will monitor compliance with workplace safety requirements and implementation of occupational health and safety procedures throughout the construction period.

### 4.17.1 Mitigation measures

To minimize occupational risks and ensure a safe working environment, the following mitigation measures will be implemented:

- **Occupational Health and Safety Training:**  
All workers will receive regular training on occupational health and safety procedures, safe equipment operation, emergency response measures, and accident prevention practices.

- **Mandatory Use of Personal Protective Equipment (PPE):**  
Appropriate PPE, including helmets, safety boots, gloves, reflective vests, eye protection, hearing protection, and safety harnesses where required, will be mandatory for all personnel on-site.
- **Safe Operation of Machinery and Equipment:**  
Only trained and authorized personnel will operate heavy machinery and specialized equipment. Machinery will be regularly inspected and maintained to ensure safe operation.
- **Site Safety Management:**  
Construction sites will be clearly marked, fenced where necessary, and equipped with warning signs, barriers, and controlled access points to reduce accident risks.
- **Provision of Worker Facilities:**  
Adequate worker facilities, including rest areas, drinking water, first-aid kits, sanitary facilities, and emergency response equipment, will be provided at construction sites.
- **Emergency Preparedness and Response:**  
Emergency procedures for accidents, fires, spills, and medical incidents will be established and communicated to all workers. Emergency contact information and evacuation procedures will be displayed on-site.
- **Monitoring and Safety Inspections:**  
Regular safety inspections, audits, and supervision will be carried out by the Contractor, supervising engineer, and project representatives to ensure compliance with occupational health and safety requirements.
- **Traffic and Community Safety Measures:**  
Appropriate traffic management measures and safety signage will be implemented to protect both workers and local communities from construction-related risks.
- **Worker Grievance Mechanism:**  
Workers will have access to a grievance mechanism through which occupational concerns, complaints, or incidents can be reported and addressed in a timely manner.

Through implementation of these mitigation measures and continuous supervision, workplace safety risks are expected to remain manageable and minimized throughout the construction phase of the project.

#### 4.18 PUBLIC SAFETY

Ensuring the safety of local communities, residents, road users, businesses, visitors, and vulnerable groups during the implementation of the Road Vodice–Qafë Dardhë and Tarikos Square projects is of critical importance. Construction activities may temporarily increase risks related to traffic movement, operation of heavy machinery, excavations, dust, noise, and restricted access areas. Therefore, appropriate community health and safety measures will be implemented throughout the construction phase.

The Contractor will apply the following measures to minimize risks and disturbances to the surrounding communities:

- **Restricted Access and Safe Movement:**  
Active construction zones will be clearly marked, fenced, and secured to prevent

unauthorized access. Safe pedestrian pathways and temporary access routes will be maintained wherever possible to ensure safe movement for residents, visitors, and local businesses.

- **Traffic and Machinery Management:**  
Construction vehicles and heavy machinery will operate only within designated routes and approved working hours. Traffic management measures, warning signage, speed limits, and trained traffic control personnel will be implemented to minimize risks for road users and nearby communities.
- **Excavation and Open Trench Safety:**  
Excavations, drainage works, manholes, and other hazardous construction areas will be properly protected using barriers, covers, warning tape, and safety signage to prevent accidental falls or injuries.
- **Protection of Public Infrastructure and Utilities:**  
Existing infrastructure and utility networks will be identified and protected during construction activities. Appropriate safety measures will be implemented during works near electrical installations, water supply systems, and telecommunications infrastructure.
- **Electrical Safety Measures:**  
Temporary electrical installations and powered equipment on-site will be installed and maintained in accordance with safety standards to minimize risks of electric shock, fire, or accidental service interruptions.
- **Dust and Noise Reduction Measures:**  
Dust suppression and noise control measures will be implemented to reduce nuisance and potential health impacts on nearby residents, businesses, and sensitive receptors.
- **Emergency Preparedness and Response:**  
An emergency response plan will be established for accidents, fires, spills, or other incidents. Emergency contact numbers and response procedures will be displayed at visible locations within the project area.
- **Public Information and Communication:**  
Local communities and stakeholders will be regularly informed about construction schedules, traffic restrictions, temporary access limitations, and safety precautions through signage and communication with local authorities.
- **Protection of Vulnerable Groups:**  
Particular attention will be given to the safety of children, elderly persons, persons with disabilities, and other vulnerable groups through appropriate signage, barriers, and safe access arrangements.
- **Regular Site Inspections:**  
Regular inspections and monitoring will be carried out by the Contractor, supervising engineer, and project representatives to ensure implementation of all required community health and safety measures.

Through implementation of these measures, risks to the public and surrounding communities are expected to remain temporary, localized, and manageable throughout the construction period.

## 5 Stakeholder Consultation, Engagement & Disclosure of Project Information

The successful implementation of the Road Vodicë–Qafë Dardhë and Tarikos Square projects depends on effective communication, consultation, and cooperation with all relevant stakeholders, including local communities, residents, businesses, road users, visitors, municipal authorities, and other interested parties.

Stakeholder engagement activities will be carried out throughout the project lifecycle in accordance with the project Stakeholder Engagement Plan (SEP), applicable national legislation, and international environmental and social standards. The engagement process aims to ensure that stakeholders are properly informed about the project, its potential impacts, planned mitigation measures, and opportunities for participation and feedback.

The project will implement the following stakeholder consultation and information disclosure measures:

- **Regular Public Consultations and Meetings:**  
Meetings, consultations, and information sessions will be organized periodically with local communities, affected persons, local businesses, and relevant stakeholders to present project activities, construction schedules, expected impacts, and mitigation measures.
- **Transparent Communication and Information Disclosure:**  
Project-related information, including construction schedules, traffic management measures, environmental and social mitigation actions, and project updates, will be communicated through appropriate channels such as municipal announcements, public notice boards, official communications, local media, and other accessible platforms.
- **Stakeholder Engagement During Construction:**  
Continuous communication will be maintained with residents, local authorities, businesses, and road users during construction activities in order to minimize disruptions and address concerns in a timely manner.
- **Grievance Redress Mechanism (GRM):**  
A formal Grievance Redress Mechanism will be established and maintained throughout the project implementation period. The mechanism will allow stakeholders, workers, and affected communities to submit complaints, concerns, or suggestions regarding the project. All grievances will be reviewed and addressed through transparent and timely procedures.
- **Coordination with Local Authorities and Institutions:**  
The Contractor and project representatives will coordinate closely with relevant local authorities, municipal institutions, utility providers, environmental agencies, emergency services, and other organizations to ensure effective project implementation and compliance with applicable requirements.
- **Protection of Community Interests:**  
Particular attention will be given to minimizing temporary impacts on local communities, businesses, traffic circulation, and access to properties during construction activities.
- **Disclosure of Environmental and Social Documents:**  
Relevant environmental and social documents, including the Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), Land Acquisition and

Resettlement Plan (LARP), and other project-related information, will be made available to stakeholders in accordance with project disclosure requirements.

These stakeholder engagement and communication measures will help ensure transparency, improve cooperation with affected communities and institutions, support effective project implementation, and contribute to minimizing social and environmental impacts throughout the construction and operational phases of the projects.

## **6 ENVIRONMENTAL AND SOCIAL MANAGEMENT**

### **6.1 PROJECT MANAGEMENT AND DELIVERY**

The implementation of the Environmental and Social Management measures for the Road Vodicë–Qafë Dardhë and Tarikos Square projects will be carried out through a clearly defined institutional framework, including roles, responsibilities, and monitoring arrangements as set out in the Project Environmental and Social Management Plan (ESMP).

The Albanian Development Fund (ADF), as the Project Implementing Agency, together with the supervising engineer and the construction contractors, will ensure that all environmental and social mitigation measures are properly implemented during all phases of the project.

All contractors, subcontractors, and suppliers will be contractually obligated to comply with the requirements of the ESMP, Environmental Impact Assessment (EIA), and applicable national legislation, as well as relevant international environmental and social standards. Compliance will be ensured through contract clauses, supervision, regular reporting, and site inspections.

### **6.2 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

The Environmental and Social Management Plan (ESMP) has been prepared as an integral part of the updated Environmental Impact Assessment (EIA) for the Road Vodicë–Qafë Dardhë and Tarikos Square projects.

The ESMP defines a comprehensive set of mitigation, monitoring, and management measures aimed at reducing potential environmental and social impacts to acceptable levels. It includes a detailed commitment register outlining specific actions to be implemented by the Contractor and supervising entities.

The ESMP covers key environmental and social aspects, including but not limited to air quality, noise, water resources, soil and land, biodiversity, waste management, occupational health and safety, community safety, and stakeholder engagement.

### **6.3 STAKEHOLDER ENGAGEMENT PLAN**

A Stakeholder Engagement Plan (SEP) has been prepared in line with EBRD requirements and international good practice. The SEP provides a structured framework for continuous stakeholder consultation, communication, and engagement throughout the project lifecycle.

The objective of the SEP is to ensure that stakeholders are properly informed about the project and that their concerns, feedback, and suggestions are effectively considered in project planning and implementation. It also supports the identification, assessment, and management of environmental and social impacts.

Stakeholder engagement is an ongoing and iterative process that includes stakeholder identification and mapping, consultation planning, information disclosure, public participation, grievance management, and feedback reporting to affected communities.

Key stakeholders identified for the project include:

- Berat Municipality
- Ministry of Environment and Tourism
- Ministry of Infrastructure and Energy
- Non-governmental organizations (NGOs)
- Local residents and business owners

Several consultation and engagement activities have already been undertaken, including:

- Two census surveys conducted on 29.03.2024 and 30.07.2024 to identify Project Affected Persons (PAPs), during which stakeholders were informed about the project and expressed their consent for the works to proceed;
- A public consultation meeting organized by the Municipality of Berat on 17.07.2024, which was attended by a significant number of citizens and stakeholders;
- Ongoing engagement during the construction phase, where additional meetings and site-based consultations will be organized as necessary to inform stakeholders of project progress and any temporary impacts.

#### **6.4 GRIEVANCE MECHANISM**

A Project Grievance Redress Mechanism (GRM) has been established by the Albanian Development Fund (ADF) to ensure that all stakeholders have access to a transparent and effective process for raising concerns, complaints, comments, or suggestions related to the environmental and social performance of the project.

The GRM is accessible to all stakeholders, including local residents, businesses, workers, and other interested parties. All grievances will be recorded, assessed, and addressed in a timely and transparent manner in accordance with established procedures.

The mechanism is publicly available and can be accessed through the ADF official website (<https://www.albaniandf.org>).

The GRM will be continuously monitored and updated throughout the project lifecycle to ensure responsiveness, accountability, and effective resolution of stakeholder concerns.

## **7 CONCLUSIONS AND RECOMMENDATIONS**

The Road Vodicë–Qafë Dardhë and Tarikos Square projects represent important infrastructure investments aimed at improving transportation conditions, accessibility, tourism development, public safety, and overall socio-economic development in the area of Berat and the surrounding Tomorr Mountain region. The projects are expected to enhance connectivity, improve road safety, support local communities, and contribute to the sustainable development of the area.

The projects have been designed in accordance with applicable Albanian legislation, environmental requirements, and relevant international standards, including good international industry practice and applicable environmental and social safeguards.

### **7.1 CONCLUSIONS**

#### **1. Environmental and Social Impacts**

The projects will generate mainly temporary and localized environmental and social impacts during the construction phase, including noise, dust emissions, waste generation, traffic disruptions, temporary access limitations, and construction-related disturbances. However, these impacts are expected to remain manageable through implementation of the Environmental and Social Management Plan (ESMP), monitoring procedures, and the project Grievance Mechanism.

#### **2. Biodiversity and Natural Environment**

No significant adverse impacts on biodiversity, protected habitats, or natural heritage are anticipated. Construction activities may temporarily disturb local fauna, including birds and small wildlife species, primarily due to noise and machinery operation. These impacts are expected to be temporary and minor and can be minimized through implementation of appropriate mitigation measures and protection of existing vegetation where possible.

#### **3. Water, Land, and Geological Stability**

Potential impacts on groundwater, surface water, soil, and land stability are expected to be limited mainly to the construction phase. Proper drainage systems, erosion control measures, slope stabilization works, and spill prevention procedures will minimize risks related to sedimentation, erosion, and contamination. The rehabilitation of the road is expected to improve long-term slope stability and drainage conditions along the project corridor.

#### **4. Infrastructure and Community Safety**

The projects will improve transportation infrastructure, road safety, accessibility, and mobility for residents, visitors, and emergency services. Occupational health and safety measures, traffic management procedures, and community protection measures will help ensure the safety of workers, road users, and surrounding communities during construction activities.

## **5. Long-Term Economic and Social Benefits**

The projects are expected to generate positive socio-economic impacts through temporary employment opportunities during construction, improved accessibility for local communities, support for tourism development, and improved transportation conditions for local economic activities. Improved infrastructure is also expected to contribute positively to the development of the Tomorr Mountain and surrounding areas.

## **6. Compliance with Environmental and Social Requirements**

The projects are expected to comply with applicable Albanian environmental legislation, occupational health and safety requirements, environmental permit conditions, and relevant environmental and social standards. Continuous monitoring and implementation of mitigation measures will support compliance throughout the project lifecycle.

## **7.2 RECOMMENDATIONS**

To ensure successful implementation of the Road Vodice–Qafë Dardhë and Tarikos Square projects, the following recommendations should be implemented:

### **1. Environmental and Safety Monitoring**

- Establish regular environmental monitoring activities during construction to assess impacts related to dust, noise, waste management, erosion, and water quality.
- Ensure full implementation of the Environmental and Social Management Plan (ESMP) and all mitigation measures identified for the project.
- Conduct regular occupational health and safety inspections, worker training sessions, and supervision activities to minimize workplace risks and accidents.

### **2. Stakeholder Engagement and Communication**

- Maintain continuous communication with local communities, residents, businesses, and stakeholders through implementation of the Stakeholder Engagement Plan (SEP).
- Provide timely information regarding construction schedules, temporary traffic restrictions, and access limitations.
- Maintain an effective and accessible Grievance Redress Mechanism (GRM) to address concerns and complaints from affected persons and stakeholders in a timely manner.

### **3. Sustainable Construction and Climate Resilience**

- Apply environmentally responsible construction practices and minimize unnecessary disturbance to natural terrain and vegetation.
- Ensure proper drainage design, slope stabilization, and erosion control measures to improve resilience against heavy rainfall and extreme weather events.
- Regularly maintain drainage systems, retaining structures, and rehabilitated slopes to ensure long-term stability and infrastructure performance.

#### **4. Minimizing Community and Traffic Disruptions**

- Implement phased construction activities and appropriate traffic management measures to minimize disruptions to road users and local communities.
- Ensure safe pedestrian and vehicle access to residential areas, businesses, and public services throughout the construction period.
- Coordinate construction activities with local authorities and emergency services where necessary.

#### **5. Waste and Pollution Control**

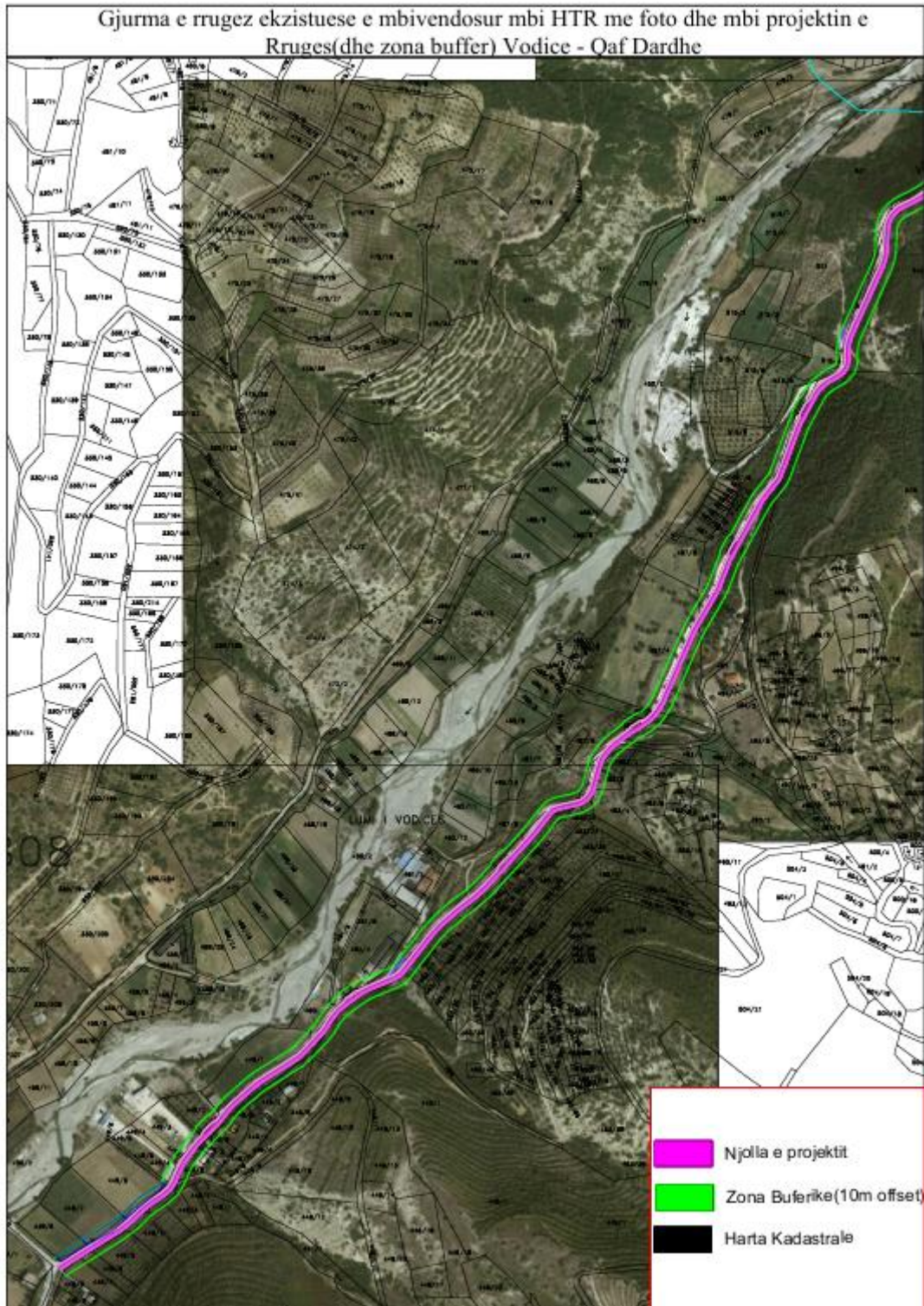
- Implement proper waste management practices, including segregation, recycling, safe storage, and disposal of construction and hazardous waste materials.
- Apply dust suppression and noise reduction measures throughout the construction phase.
- Ensure proper fuel, oil, and hazardous material handling procedures to prevent soil and water contamination.

#### **6. Rehabilitation and Maintenance**

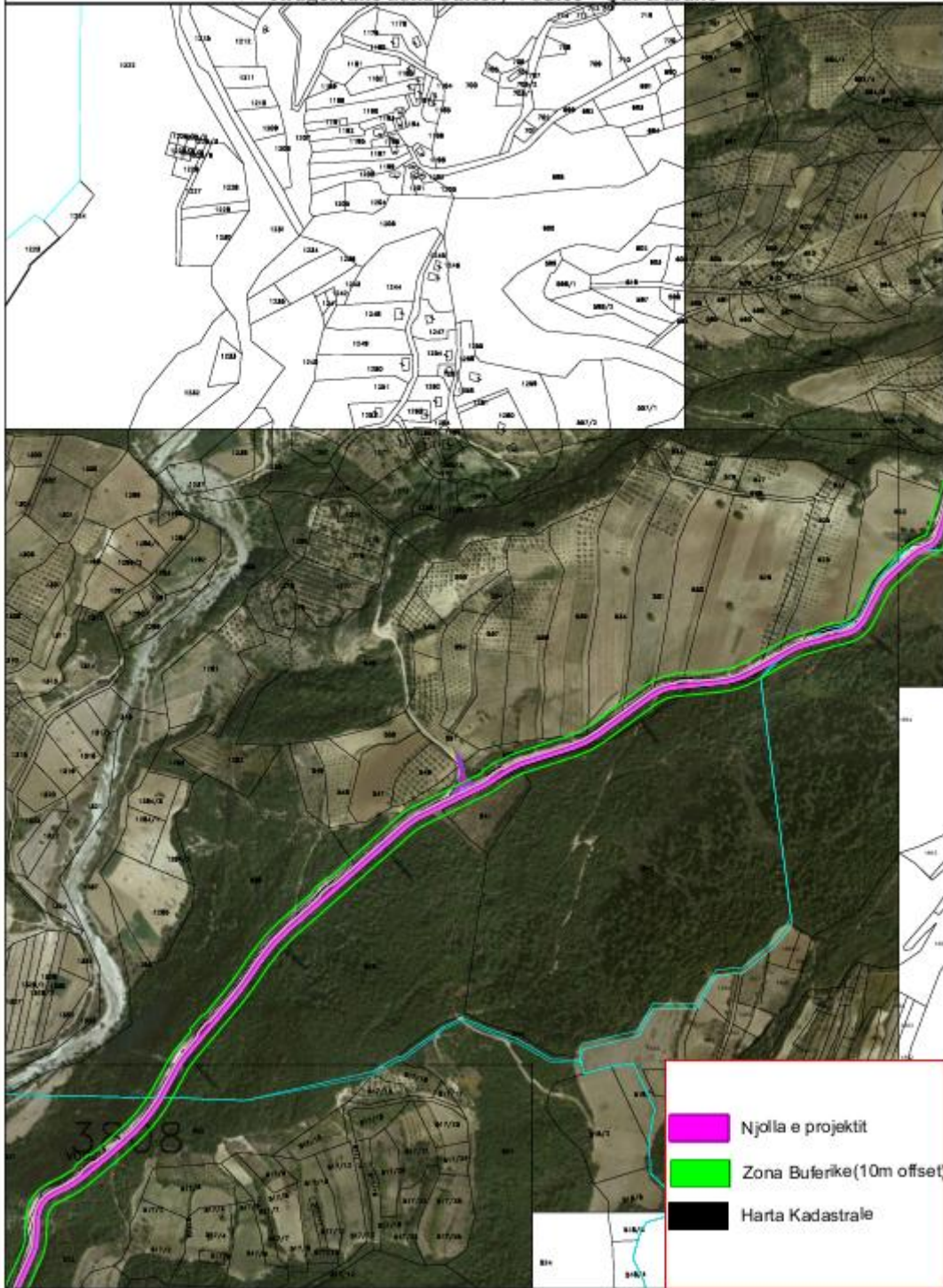
- Rehabilitate all temporarily disturbed areas following completion of construction activities.
- Implement routine maintenance of drainage systems, retaining structures, slopes, and road infrastructure to ensure long-term functionality and environmental protection.
- Continue monitoring vulnerable sections of the road for erosion, slope instability, or drainage issues after project completion.

With proper planning, implementation of mitigation measures, effective stakeholder engagement, and continuous environmental and safety monitoring, the Road Vodicë–Qafë Dardhë and Tarikos Square projects are expected to provide significant long-term social, economic, transportation, and environmental benefits for the region while minimizing adverse impacts during construction and operation phases.

## 8 Annex 1: PROJECT PLANVIEW

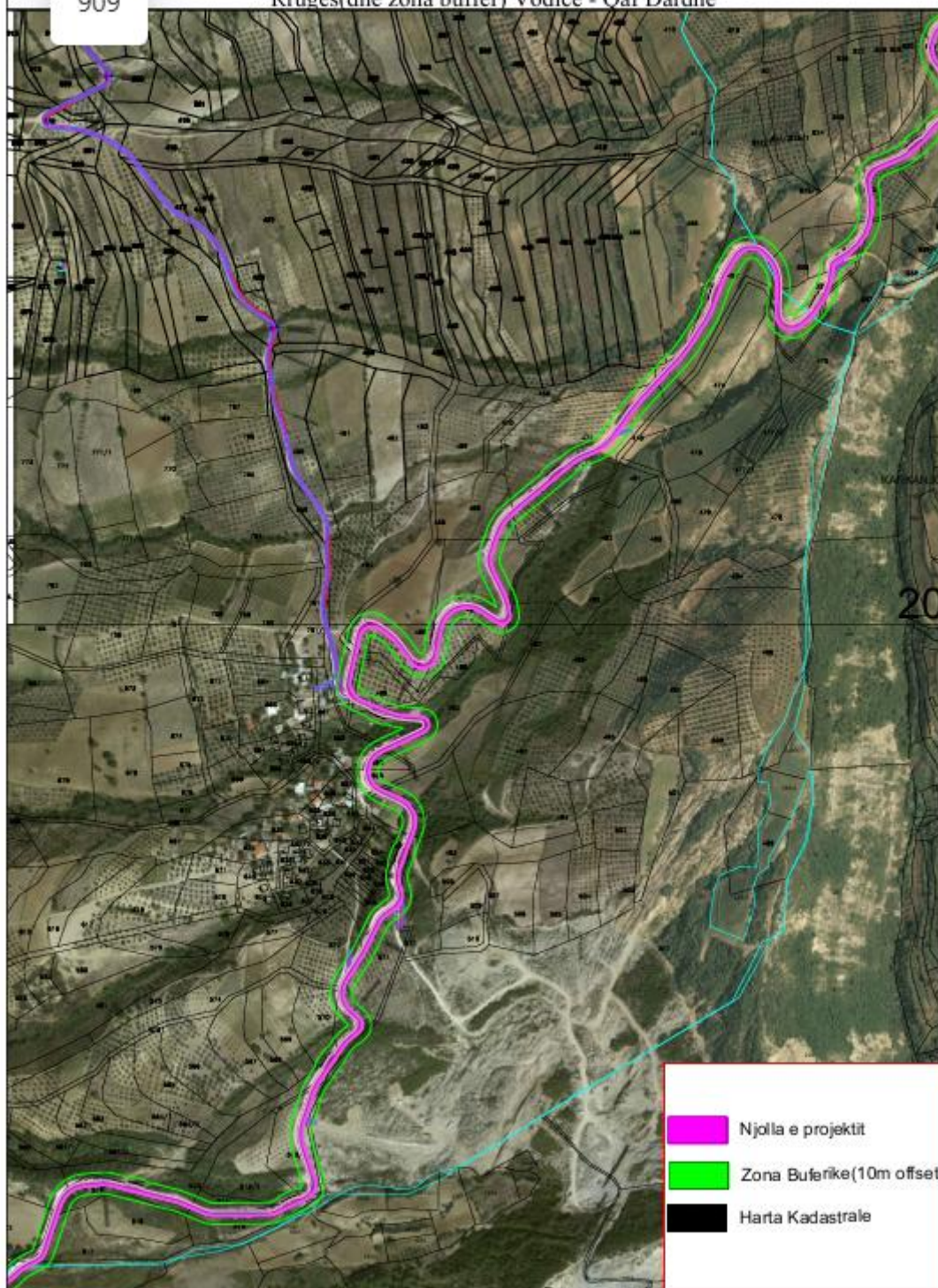


Gjurma e rrugëve ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e Rrugës (dhe zona buffer) Vodice - Qaf Dardhe

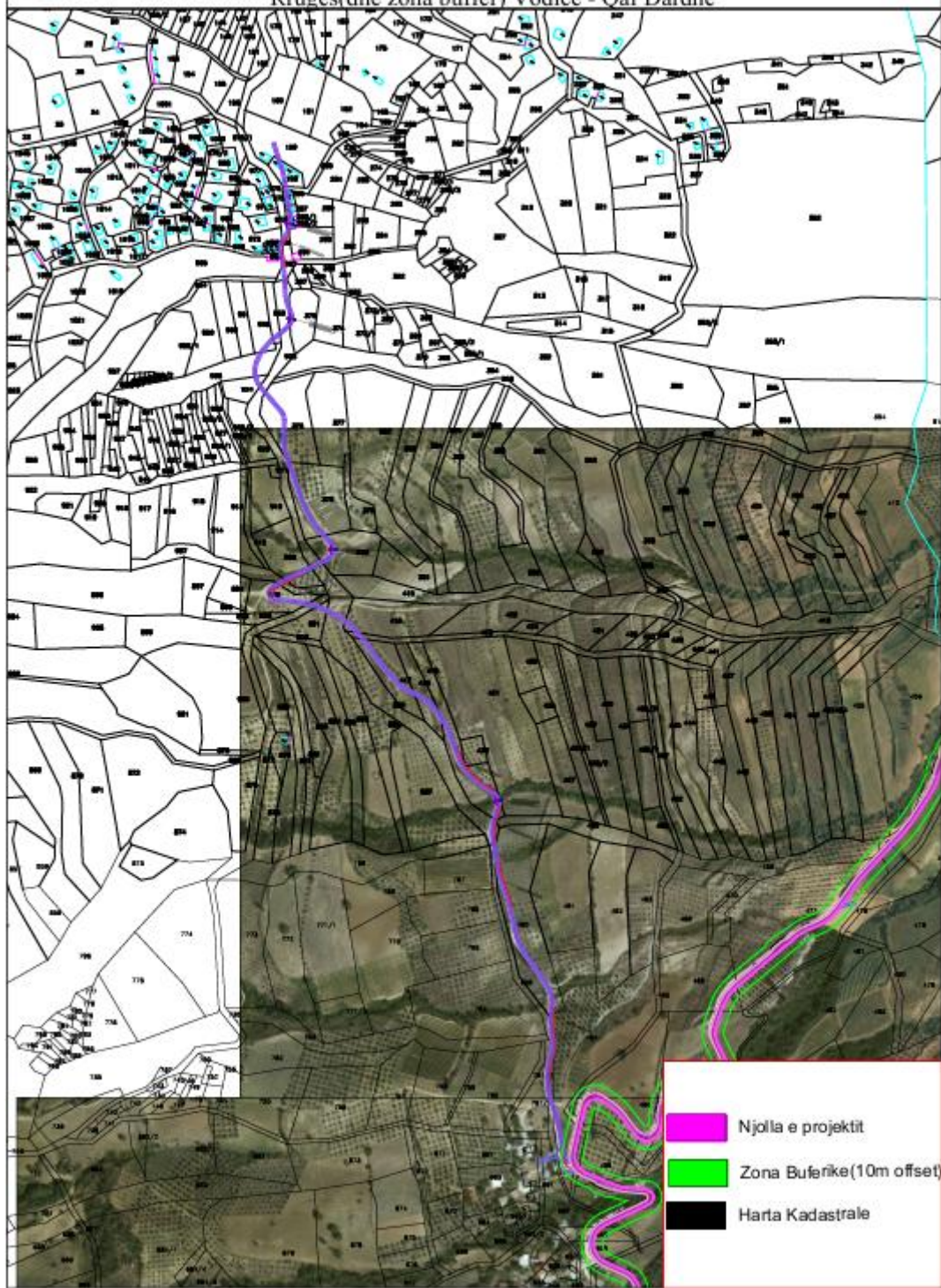


909

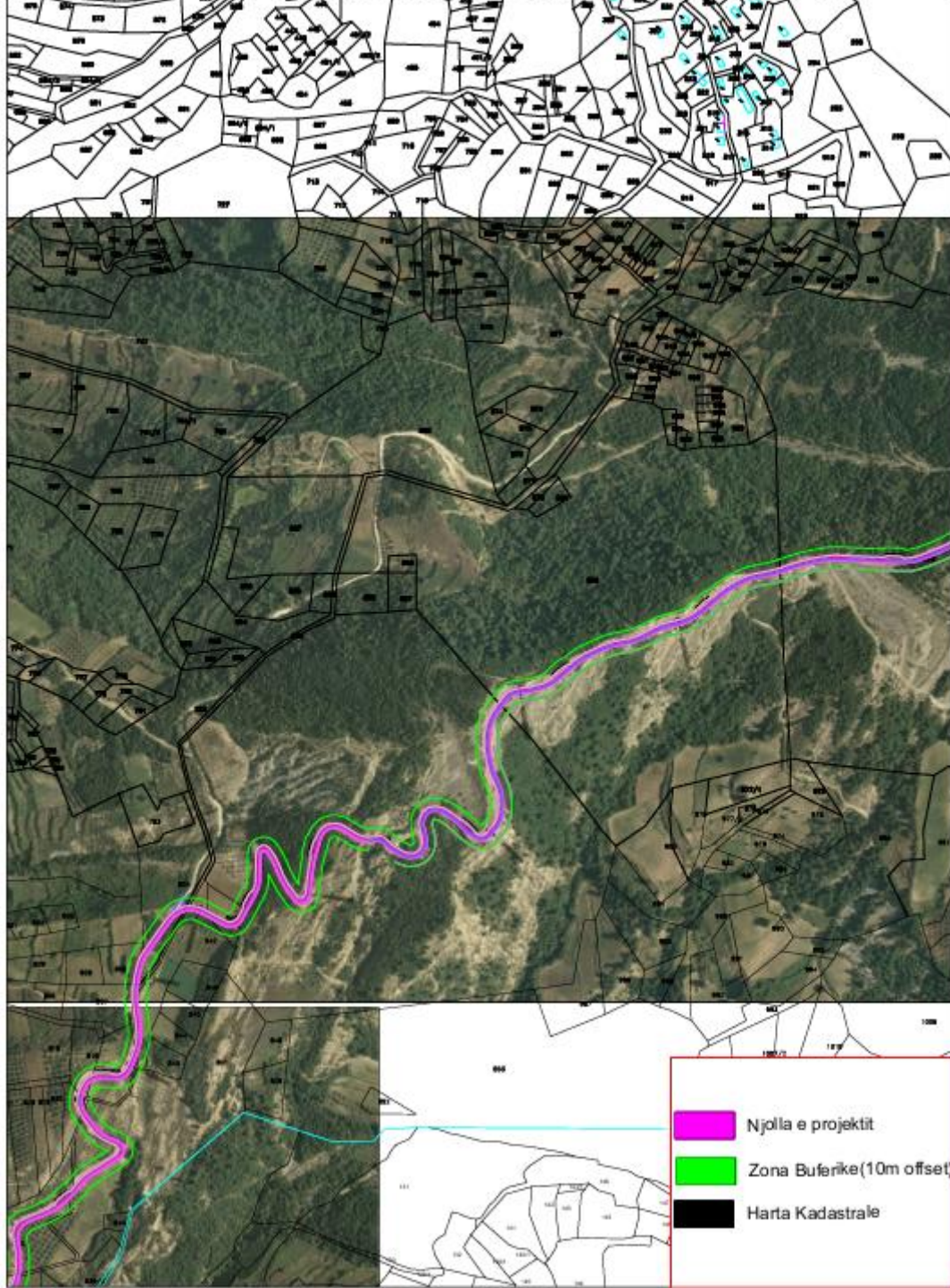
ma e rrugез ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e  
Rrugёs(dhe zona buffer) Vodice - Oaf Dardhe



Gjurma e rrugës ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e  
Rrugës(dhe zona buffer) Vodice - Qaf Dardhe

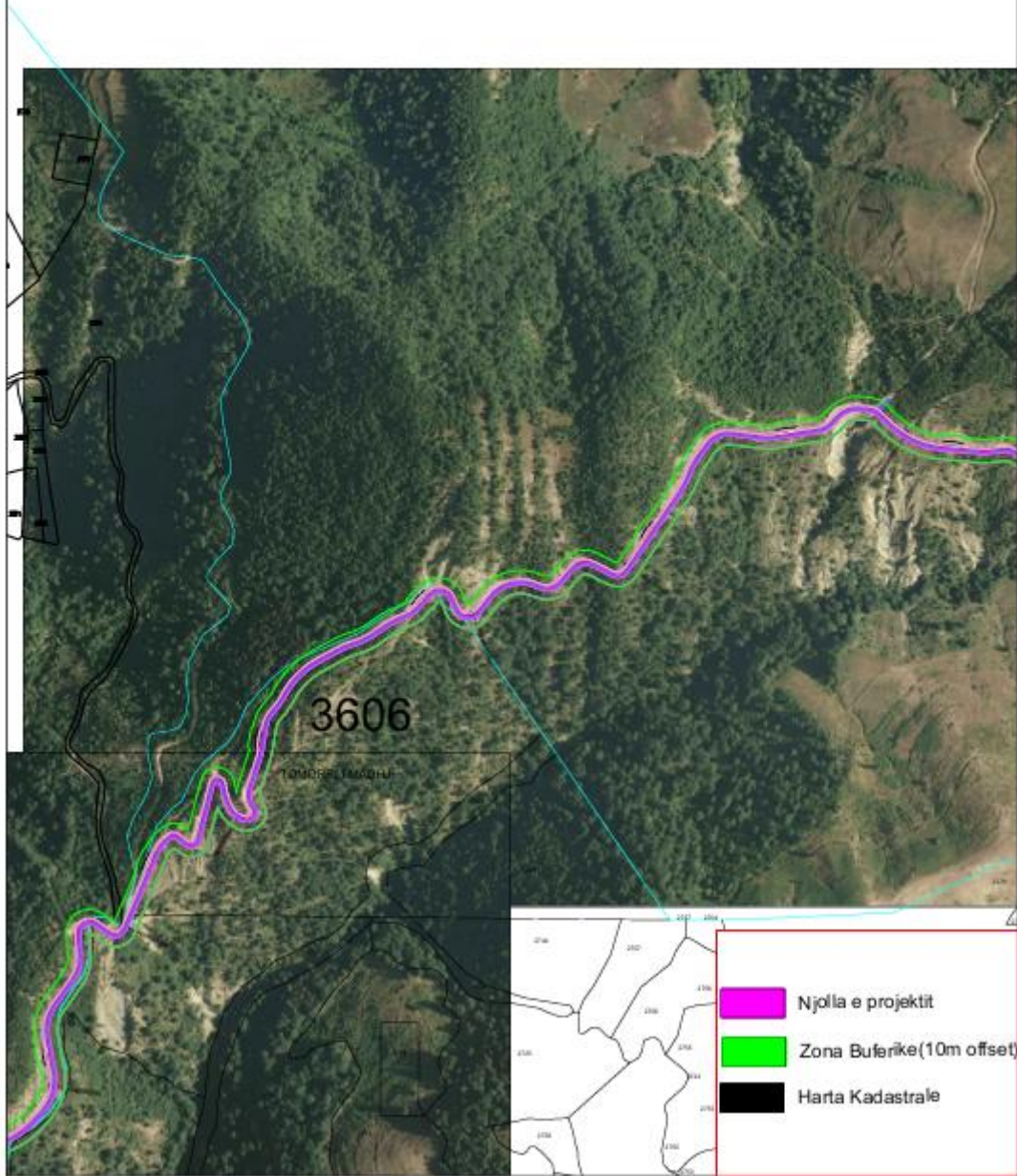


Gjurma e rrugëz ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e Rrugës(dhe zona buffer) Vodice - Qaf Dardhe

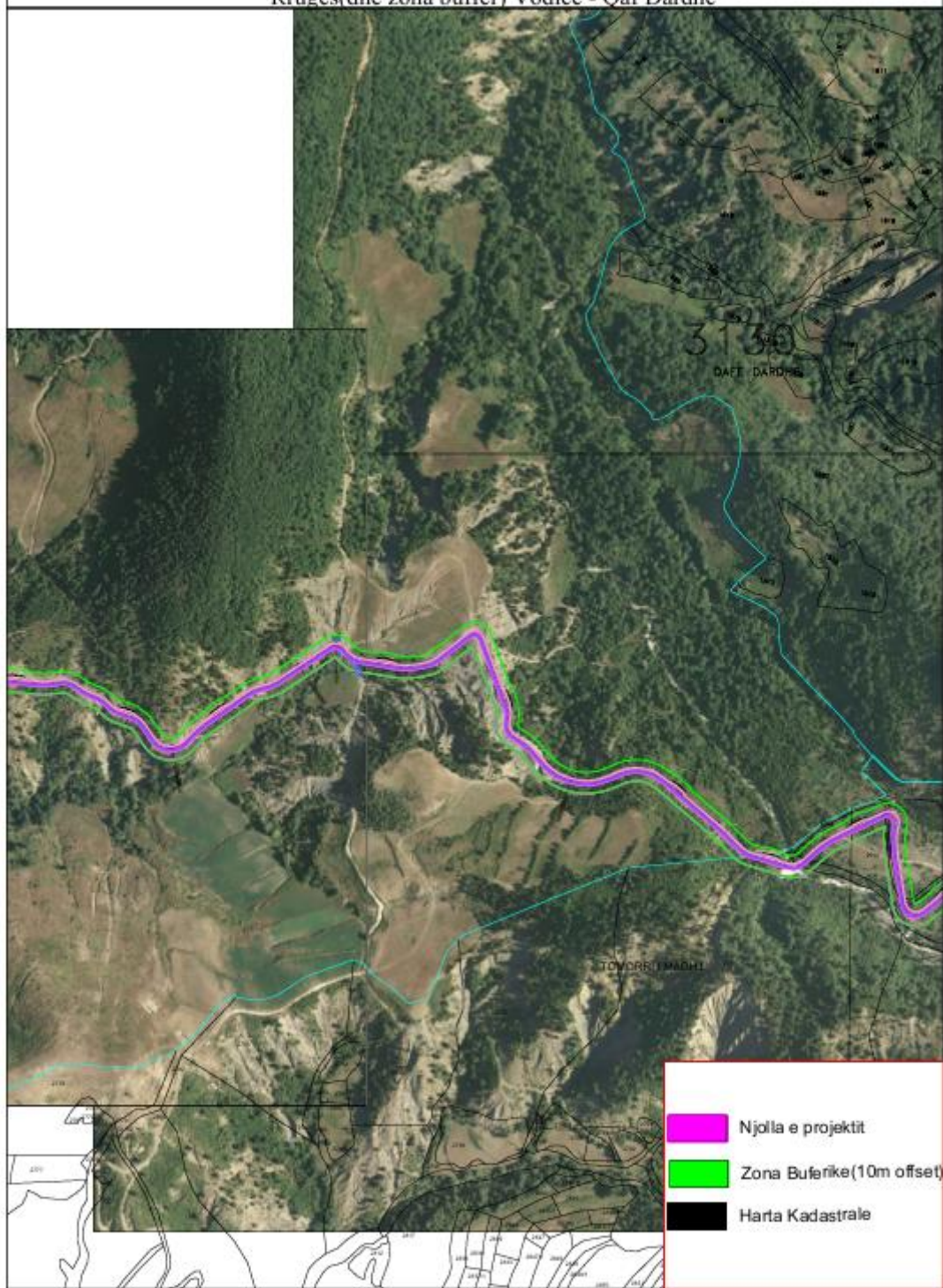




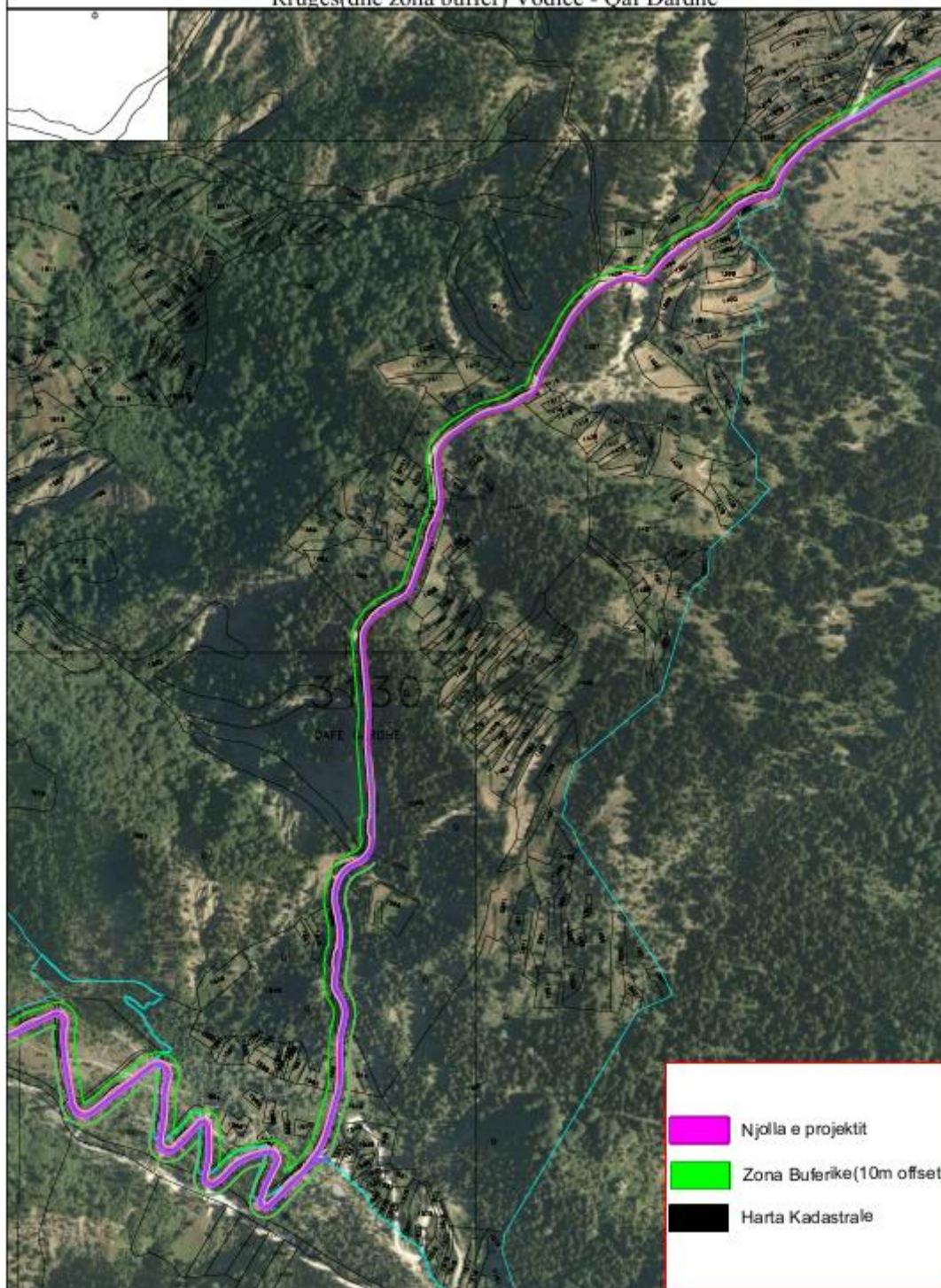
Gjurma e rrugëz ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e Rrugës(dhe zona buffer) Vodice - Qaf Dardhe



Gjurma e rrugëz ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e  
Rrugës(dhe zona buffer) Vodice - Oaf Dardhe



Gjurma e rrugëz ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e Rrugës(dhe zona buffer) Vodice - Qaf Dardhe



Gjurma e rrugëz ekzistuese e mbivendosur mbi HTR me foto dhe mbi projektin e Rrugës(dhe zona buffer) Vodice - Qaf Dardhe



Figure 02\_ Tomorri Park Layout plan