

Building Resilient Bridges Project – Albania

Loan No: 94790-AL
Project ID: P174595

Consultancy Selection - Consultancy Firm

Terms of Reference


for

Supervision of the Works for “Group A” Bridges in Albania- Uzina Rubik Bridge, Klosi Bridge and Karica Bridge

Ref. No:

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1. BACKGROUND INFORMATION

1.1. Introduction

The Government of the Republic of Albania has received financing from the International Bank for Reconstruction and Development (IBRD) in the form of Loan toward the cost of Building Resilient Bridges Project (BRBP). The Albanian Road Authority (ARA), under the Ministry of Infrastructure and Energy (MoIE), is the designated implementing agency of the project. In this context, ARA intends to apply a portion of the proceeds of this loan to eligible payments under the contract for which the terms of reference are issued for the consultancy services for the supervision of the works for the Bridges of “Group A.1”, located in the north and central of Albania, as below:

- i. Rubiku Bridge is located in the Lezhe region of Albania. It is part of the SH30 road, located at coordinates 41°45'50"N 19°46'53"E .
- ii. Klosi Bridge is located in the vicinity of the town of Klos, local coordinates are 41°29'51"N 20°05'33"E
- iii. Karica Bridge is located in the vicinity of the town of Burrel, local coordinates are 41°38'09"N 19°58'53"E

This Terms of Reference (ToR) document outlines the scope and requirements for the consultancy services to be provided in relation to this project.

1.2. Bridge Infrastructure in Albania

Over the past nine decades (since 1930), bridges and other structures of the National Road Network (NRN) in Albania have been designed to different Bridge Design Standards (BDS), including the Soviet Standards, the Italian Standards, Albanian standards etc. Based on previous studies, the NRN in Albania includes 803 bridges, numerous culvert structures, and other related structures. These structures were constructed at different stages of Albania’s road system development based on different bridges and structures design standards (BDS). As part of the ongoing reforms, Albania is gradually aligning its road and structure design and construction (including bridges) standards with the European Eurocodes.

Albania’s bridge infrastructure is highly vulnerable to climate change and natural disasters as they were designed to meet older engineering standards and may not be capable of withstanding modern climate change impacts or natural disasters such as intense rainfall, flooding, and seismic events. The “Climate resilient road assets in Albania” study carried out by the World Bank in 2019 concludes that bridges and culverts on the NRN corridors are among the most vulnerable and exposed elements of the infrastructure assets in Albania. The most common hazards include meteorological, hydrological, climatological event with floods, earthquakes, and landslides posing significant risks to the road network. This study was created in order to support the Ministry of Infrastructure and Energy and the Albanian Road Authority, to identify and prioritize investments that would provide a more resilient road transport network in Albania. In that sense, bridges and culverts proved to be most vulnerable and exposed elements of the road network with estimated high AED.

In Albania, floods frequently affect the north and south of the country, and climate change is expected to result in more intense and frequent rainfall events, exacerbating flood risk. Flooding is one of the main risks faced by bridges in Albania. Floods can cause different types of damage: instantaneous damage, such as water overtopping that can cut off traffic, or

permanent damage, such as the scour, unbalancing the foundations, potentially transferring damage to the piers and increasing the likelihood of deck collapse or the failure of the bridge piers due to large debris entrainment. Over the last decade, Albania has experienced more frequent and severe floods. For instance, the floods of December 2010 and 2015 affected large parts of the country, including bridge infrastructure. In addition, the intense rainfalls in November 2020 and January 2021 resulted in floods and landslides, substantial disruption to traffic and damage to the road and bridge infrastructure and also have left several parts of the country stranded and vulnerable communities isolated. The earthquake in 2019 and the floods of 2020 exhibited the vulnerability of the road and bridge network and the whole economy to natural hazards. The devastating earthquake in November 2019 affected 1.9 million people (about 66 percent of total population) and the country's economy and also damaged several road infrastructures (embankments and retaining walls due to landslides). Those events highlighted the high vulnerability of the Albanian road and bridge assets to natural disasters and climate change (including earthquakes, intense floods and landslides, intense windstorms, extreme temperature, etc.), and their potential heavy impacts on the economy and the populations' livelihood.

Within the Building Resilient Bridges Project P_174595, which is aimed at enhancing the reliability of the bridges and associated infrastructure along Albania's National Road Network through modernization and climate resilience, the Group A1 bridges have been initially targeted. To this end, the Group A1 bridges has been identified as one of the critical structures to be constructed and is one of the sub-activities under Component 1 of the Building Resilient Bridges Project (BRBP).

1.3. General Considerations

In geographical terms, Rubiku Bridge, Klosi Bridge and Karica Bridge are planned for development in the north and central part of Albania. These bridges were identified through a national screening and prioritization process due to their structural vulnerability, strategic location, and their socio-economic importance to the local communities. As Albania continues to align its infrastructure development with EU standards, the rehabilitation or replacement of aged bridges is essential to enhance road safety, ensure climate resilience, and improve serviceability.

In fulfilment of the above, Consultancy services for the Feasibility Study and Detailed Engineering Design for the construction works were undertaken by an external consultant. The consultant carried out detailed condition survey of each bridge with the objective of determining for each bridge the type of intervention needed for either repairing, rehabilitating, upgrading, or replacing the bridge. The designs of the bridges were independently audited (by a third-party consultant) to assure the designs incorporate the standards needed to be resilient to climate change. Also, the designs of each bridge were audited from the road safety perspective by an independent Road Safety Auditor. The Consulting Firm worked together closely with the third-party consultants and incorporated the outcomes and recommendations arising out of these audits in the design before the detailed designs of the bridges were finalized, to mitigate any potential hazards related to climate resilience and road safety. Furthermore, the detailed bridge design includes the necessary traffic safety risk mitigation measures. In addition, the Consultancy services for the generation of the Environmental and Social Safeguards documentation were carried out by external consultant, based on an initial environmental and social scoping.



1.4. Existing Bridge Condition

1.4.1 Rubik Bridge

The bridge serves a vital role in the local transportation network, providing essential connectivity for the rural communities of the Rubik area. The local population relies on the bridge for access to markets, educational institutions, healthcare facilities, and employment centers. Rubik Bridge is a vital transportation link located in the Rubik District, central Albania, along the national road SH30 – Interurban Secondary Road. Due to significant structural deterioration, the bridge shows evident moisture stains and traces of water flow on the deck elements (deck slab and girders) and the substructures surfaces (abutments and pier). On the surfaces of girders, the concrete is deteriorated and there are uncovered/oxidated bars. The steel bearings are oxidated. On the piers and the abutments there is high intensity local scour.

Rubik Bridge spans the Fani i Madh River, a significant tributary of the Mat River in northern Albania. The river's catchment covers an area of approximately 542 km² for the Fani i Madh branch, with a total catchment area of 1015 km² at the Rubik gauge station. The catchment features steep gradients, narrow valleys, and a predominantly mountainous landscape, resulting in rapid runoff and high peak discharges during intense rainfall events. Under climate change scenarios, the maximum water surface elevation increases to 47.0 m a.s.l., while downstream velocities reach 5.7 m/s. The bridge has a structure made of reinforced concrete with 5 span of 20 m each. Total length of this bridge is 100m.

This situation has raised safety concerns and limiting its capacity to handle modern traffic loads. In conclusion, Uzina Rubik Bridge is a vital infrastructure asset that requires urgent intervention.



Figure 1: Uzina Rubik Bridge – Picture taken from the existing situation

Structure of the Bridge	The bridge has a structure made of reinforced concrete with 5 span of 20 m each. Total length of this bridge is 100m
Bridge Length	100 meters
Bridge Width	7.4 m
Bridge Spans	20 meter each
Road Category and	Category "C" Secondary Urban Road

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Name	
Name	U-30-01-09 on SH30
Traffic lanes	Single lane each way
Lane width	3 m
Traffic signalization (Horizontal and Vertical)	Standard road markings with no dedicated traffic signalization at the bridge itself
Sidewalk width	0.7 cm
Shoulder width	No designated shoulders
Installations (Utilities)	Nothing to mention
Construction Year	1950-1960
Obstacle	Nothing to mention

1.4.2 Klosi bridge

Klosi Bridge is a vital transportation link located in the Burreli District, central Albania, along the national road SH6 – Interurban Secondary Road. Due to significant structural deterioration, the bridge shows evident moisture stains and traces of water flow on the deck elements (deck slab and girders) and the substructures surfaces (abutments and pier). Constructed decades ago, the Klosi bridge is a concrete slab structure on masonry piers, currently exhibiting signs of structural wear, limited hydraulic capacity, and potential risks under increased climatic pressures. As Albania continues to align its infrastructure development with EU standards, the rehabilitation or replacement of aged bridges like Klosi is essential to enhance road safety, ensure climate resilience, and improve serviceability. Klos Bridge spans the Bejnë Stream, located in central Albania. The stream originates from the Balgjaj Mountain and feeds into the Mat River. The catchment area upstream of the bridge is approximately 35 km², with a rugged terrain typical of northern Albania. The watershed is defined by steep slopes and moderate vegetation cover, contributing to high runoff rates during heavy rainfall events.

This situation has raised safety concerns and limiting its capacity to handle modern traffic loads. In conclusion, Klosi Bridge is a vital infrastructure asset that requires urgent intervention.



Figure 2: Klosi Bridge – Picture taken from the existing situation

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Data	Results
Structure of the Bridge	A structure made of reinforcement concrete slab with three spans of 6m each, supported on stone wall piers. Each pier is 1m thick, also the abutments are made of stone wall.
Bridge Length	22 meters
Bridge Width	5.25 Road layer and 80 cm sidewalk in each side of the bridge
Bridge Spans	6 meter each
Road Category and Name	Category C Secondary urban road
Name	ID U-06-04-01 on SH6
Traffic lanes	Single lane each way
Lane width	2.6 m
Traffic signalization (Horizontal and Vertical)	Standard road markings with no dedicated traffic signalization at the bridge itself
Sidewalk width	80 cm
Shoulder width	No designated shoulders
Installations (Utilities) Under the bridge	Multiple water supply pipelines
Construction Year	Not available
Obstacle	One of the bridge spans is obstructed by land protected with a gabion structure

1.4.3 Karica bridge

Karica Bridge is a vital transportation link located in the Burreli District, central Albania, along the national road SH6 – Interurban Secondary Road. Due to significant structural deterioration, the bridge shows evident moisture stains and traces of water flow on the deck elements (deck slab and girders) and the substructures surfaces (abutments and pier). On the surfaces of girders, the concrete is deteriorated and there is a high-level corrosion of the bars and stirrups. On one of the abutments there is the detachment of one of the wingwalls with vertical, horizontal, and diagonal cracks. On abutments and pier there's low intensity local scour. The bridge was identified through a national screening and prioritization process due to its structural vulnerability, strategic location, and socio-economic importance to local communities.

Built decades ago, the existing bridge is a three-span structure with T-shaped concrete beams supported on a massive concrete pile. Currently, all structural elements of the bridge show signs of structural deterioration, limited load-bearing capacity and potential hazards under increased climatic pressures. As Albania continues to align its infrastructure development with EU standards, the rehabilitation or replacement of old bridges like the Karica is essential to increase road safety, ensure climate resilience and improve serviceability.

The bridge has a structure made of reinforced concrete with 2 span of 15.8 m each. Total length of this bridge is 30.2m

This situation has raised safety concerns and limiting its capacity to handle modern traffic loads. In conclusion, Karica Bridge is a vital infrastructure asset that requires urgent intervention.



Figure 3: Karica Bridge – Picture taken from the existing situation

Data	Results
Structure of the Bridge	The bridge has a structure made of reinforced concrete with 2 span of 15.8 m each. Total length of this bridge is 30.2m. The superstructure is made of R/C T-Girders (5pcs/span).
Bridge Width	8 m
Bridge Spans	15.1 meter each
Road Category and Name	Category "C" Secondary Urban Road
Name	U-06-02-04 on SH6
Traffic lanes	Single lane each way
Lane width	3 m
Traffic signalization (Horizontal and Vertical)	Standard road markings with no dedicated traffic signalization at the bridge itself
Sidewalk width	0.8 cm
Shoulder width	No designated shoulders
Installations (Utilities)	Nothing to mention
Construction Year	Not available
Obstacle	The current setup of the bridge, including the placement of temporary concrete barriers and red cones, has been implemented for safety reasons by the ARA. These measures are designed to manage traffic flow and limit the width and weight of vehicles crossing the bridge, ensuring that it remains safe for use despite potential structural concerns.

1.5. Construction of Bridges under Group A

As previously mentioned, the Group "A.1" Bridges were selected as priority bridges for investment due to their strategic significance, as determined by the Feasibility Study conducted by an external consultant. After thorough evaluation, prepared by an external consultant under a separate contract, it was determined that construction of new bridges would provide the most cost effective and resilient solution, offering enhanced safety, greater load capacity, and a

longer design life.

To address climate resilience, the designs incorporate flood management measures such as increased girder clearance to accommodate peak flows under climate change scenarios and the inclusion of sediment traps to maintain flow capacity. Scour protection strategies, including riprap and reinforced abutments, mitigate erosion risks, while long-term monitoring and biennial inspections ensure sustained structural integrity.

Traffic management during construction will minimize disruptions through detailed plans involving temporary signage, barriers, and alternate routes. Safety features in the final design include modern guardrails, reflectors, and pedestrian walkways.

1.5.1 Uzina Rubik Bridge

The new bridge proposed designed crosses the Fani i Madh River in Mirdita Municipality and is with 5 light spans with ordinary prefabricated b/a beams that are assembled in place and with two side supports (fronts) b/a and on the 4 middle piers for a total length 113,5m. The general description of the bridge is given below:

Bridge with a clear span of $HD=22.7$ meters; The bridge superstructure consists of 7 reinforced concrete beams with a total length of 21.80m symmetrical to the bridge axis and connected in the transverse direction to reinforced concrete diaphragms. The beams are double T-shaped, where the section in the middle of the span is different and in the support areas it becomes a full rectangular section. Substructure with cast-in-place b/a gables supported on piles which transmit forces to solid formations according to geological survey; The middle supports of the bridge will consist of tree column pier which have a cap beam at their head with a diameter of 140 cm. The pile will rest on its reinforced concrete foundation in a rectangular shape which will rest on piles which transmit the forces to the solid formations according to the geological survey;

During the construction period of the new bridge, according to the project, the existing temporary metal bridge, which is positioned next to the bridge to be built, will be used.

The total width of the superstructure is 12m, which includes (3.50+3.50)m for the vehicle passage, (0.5+0.5)m for the gutter and (2+2)m for the service sidewalks on both sides of the bridge. The new bridge will significantly improve the existing road alignment and safety of motorized traffic and pedestrians.



Rubik Bridge– Plan view

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The engineering design has taken into account the hydrological and geological study. The Uzina Rubik Bridge spans the Fan i Madh River, a significant tributary of the Mat River in northern Albania. The catchment features steep gradients, narrow valleys, and a predominantly mountainous landscape, resulting in rapid runoff and high peak discharges during intense rainfall events. The Fan River basin is characterized by steep slopes, rapid flow velocities, and significant seasonal variations in discharge.

The Uzina Rubik Bridge is located within the Mirdita Zone of northern Albania, a region characterized by complex geological formations. The site primarily consists of Lower to Middle Jurassic (J1-2) deposits, including nodular limestone and marl formations with manganese nodules. *These formations are typically dense, with high compressive strength, making them suitable for deep foundations.* The site also contains Quaternary alluvial deposits, which present challenges due to their water-saturated nature and moderate compaction.

Based on the geological mapping and borehole investigations, the geological profile at the Uzina Rubik Bridge site consists of the following primary layers:

Layer 1: Road Filling and Construction Debris:

Layer 2: Mixed Gravel and Sand Deposits:

Layer 3: Quaternary Alluvial Deposits:

Layer 4: Weathered Limestone:



Geological Schematic Map of Uzina Rubik Bridge

1.5.2 Klosi Bridge

The new proposed bridge is designed with 2 spans with a length of 9 m and a superstructure with dimensions in the transverse direction larger than the existing one. The new bridge is conceived as a box culvert with two modules. This decision was based on actual findings (hydropower pipe laying under river bed), cost analysis, topographical study and on geological study. The middle pier is 7.2 m high and have plan dimensions of 1.6 m. The pier rest on a reinforced concrete foundation of 8.7x3 m. While the lateral abutments have the same height but are 1.5 m thick. The monolithic slab is continuous along the entire length of the bridge, and The total width of the superstructure is 10.5m, which includes (3.50+3.50)m for the passage of vehicles, (0.25+0.25)m for the embankment and (1.5+1.5)m for the service sidewalks on both sides of the bridge. is 80 cm. The total length of the bridge is 23m.

During the construction period of the new bridge according to the project, the new culvert box (3 boxes with dimensions 4x4 with a length of 8m), which are positioned accordingly the design for traffic deviation, will be used.

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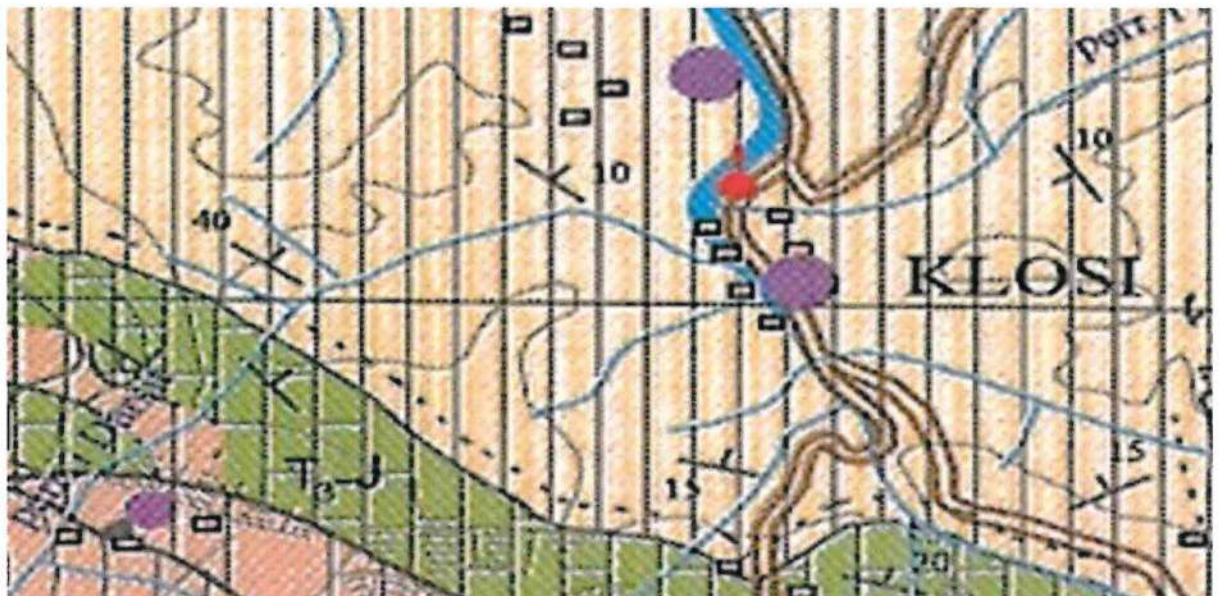


Klos Bridge– Plan view

The Klos Bridge site lies in the Mat region of Albania, within a geologically complex area influenced by the tectonics of the Burrel Trench. The geological formations present include Tortonian molasse (conglomerates, clays, siltstones), Upper Jurassic–Lower Cretaceous flysch, and Upper Triassic–Lower Jurassic carbonates, composed mainly of limestones and dolomites. These formations reflect a mix of sedimentary and flysch environments, typical for central Albania rates during heavy rainfall events.

Based on the geological mapping and borehole investigations, the geological profile at the Klosi Bridge site consists of the following primary layers:

- Layer 1: Road Filling and Construction Debris
- Layer 2: Mixed Gravel and Sand Deposits
- Layer 3: Quaternary Alluvial Deposits
- Layer 4: Weathered Flysch



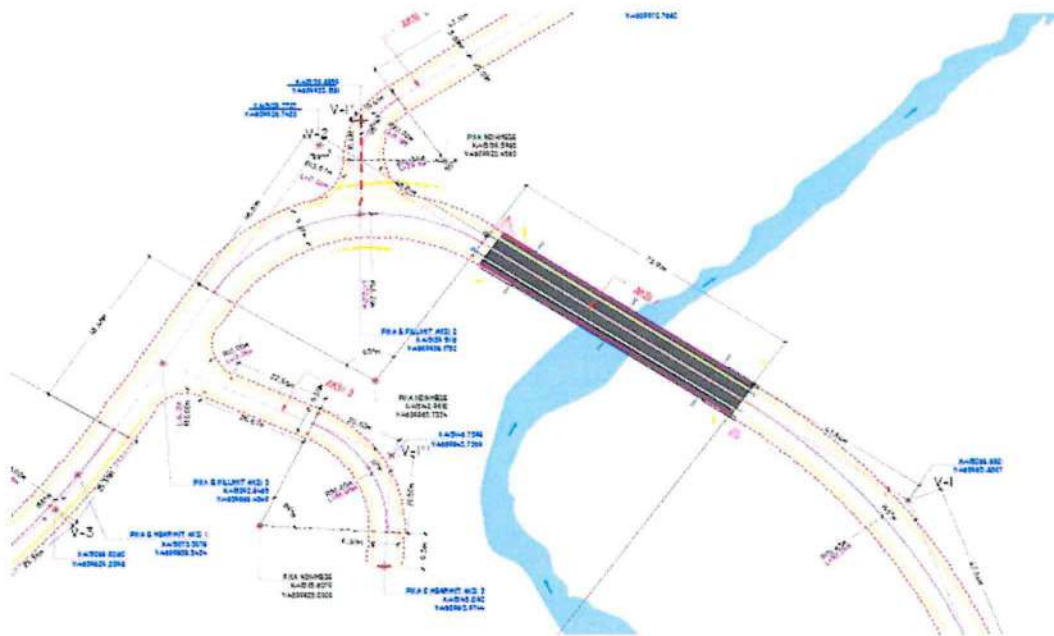
Hydro-geological map of the area under study

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1.5.3 Karica Bridge

The new bridge is designed with a length of 55 m (71.5 m including the abutments) and a superstructure measuring 10.8 m in the transverse direction. The new bridge is conceived as an arch bridge. This decision was based on the terrain conditions, cost analysis, topographic study and geological study. The bridge superstructure is supported on two arches with a height of 8.4 m, and a length of 49.45 m.

Referring to the existing road as well as the composition and volume of traffic, the proposed profile on the new bridge has two lanes, each 3.5 meters wide, with a 1.5-meter side sidewalk and a 40 cm shoulder. The total width of the carriageway is 10.8 meters, ensuring sufficient capacity for current traffic levels and typical rural use.



Karica Bridge– Plan view

The Karica Bridge crosses the Karica Stream, a tributary of the Mat River located 4 km north of Burrel (Dibër Region). The catchment covers 28.8 km², originating from peaks over 1150 m a.s.l. and discharging into the Mat River at Ulza Lake. It is mountainous with an average slope of 5.7%. Land cover is dominated by transitional woodland-shrub (47%), agriculture with natural vegetation (27%), and broad-leaved forest (18%). Low-permeability soils and a Curve Number of about 62 indicate high runoff potent.

Regional geology: The site lies within the Albano–Thessalian Lowland, over the Burreli submontane zone (Burreli Trench). Relief is hilly (400–500 m elevation). Main formations:

- N13t Tortonian molasse deposits – conglomerates, clays, siltstones, occasional coal layers.
- Flyscht deposits – sandstones and conglomerates.

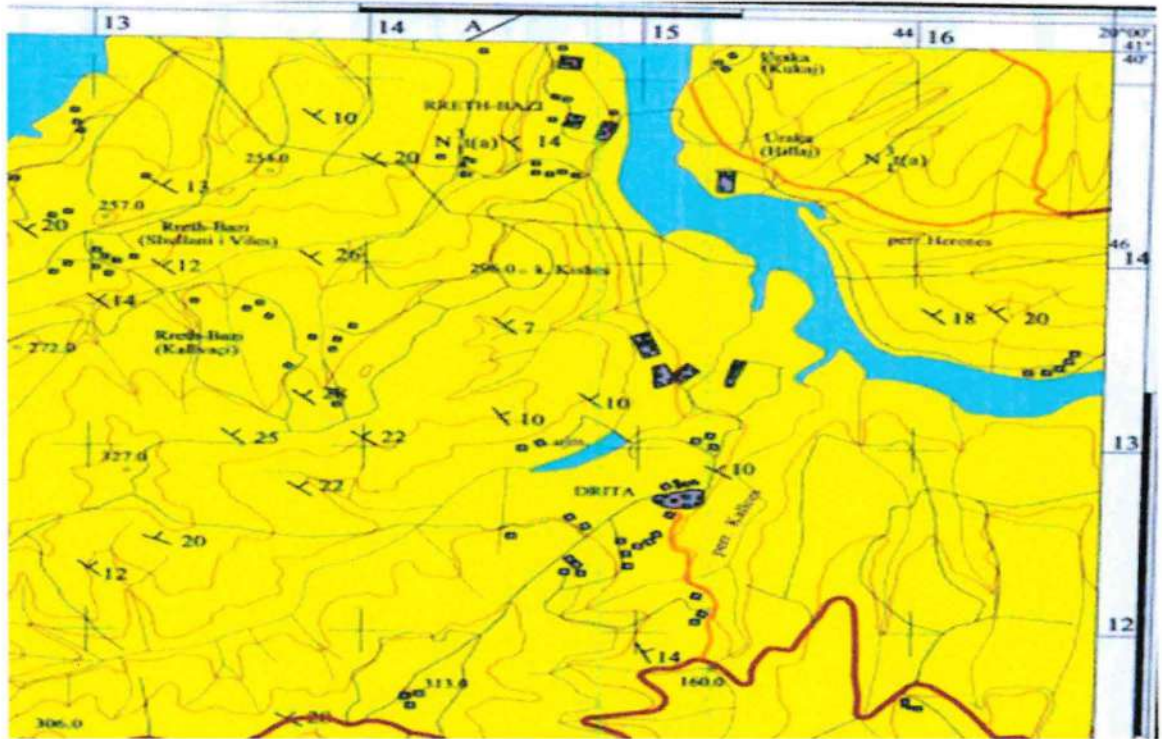
From two boreholes (~10 m depth each):

Layer 1 – Road Fill (0.0–2.3 m / 0.0–2.9 m): Gravel, rock fragments, concrete

Layer 2 – Deluvial-Eluvial Deposits (2.3–3.2 m / 2.9–3.5 m)

Layer 3 – Weathered Flyscht Deposits (3.2–10.0 m / 3.5–10.0 m)

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Geological map of the area under study

2. OBJECTIVES OF THE ASSIGNMENT

2.1 Overall Objective of the Assignment

The objective of the consultancy service under this Terms of Reference (ToR) is to engage a qualified and experienced Consulting Firm to provide supervision services during the construction process to ensure proper execution of the works and defect liability period, ensuring compliance with road safety standards, management of environmental and social risks and impacts in line with requirements of GoA and the World Bank's ESF. In the case GoA and WB ESF requirements and standards differ, stricter ones will prevail.

The selected Consulting Firm, upon completion of the technical and economic assessment of the detailed design, shall provide Engineering services to achieve the assignment's goals and, to this purpose ensuring that the selected bridges are constructed in accordance with the drawings, technical specifications, and contract requirements.

The overarching objective of this assignment is to ensure the timely, efficient, and high-quality construction of Group A.1 bridges, meeting or exceeding all technical, environmental, social, safety, and climate-resilient standards, with due regard to the construction schedule and the financial aspects of the civil works.

2.2 Specific Objectives

The specific objectives of this assignment are as follows:

- To provide comprehensive supervision throughout the construction phase to ensure that all works are carried out in strict compliance with the approved designs, specifications, and conditions of contract. The Consultant's responsibilities will include but are not limited to overseeing quality control, in adherence to project schedules, contractor performance, safety standards, sound engineering, and cost management. The Consultant must also ensure that all construction works comply with the required environmental and social WB ESF.

- To provide supervision services throughout the Defect Notification Period (DNP) following the completion of construction. The consultant shall oversee the works during the Defect Notification Period (DNP), until the Final Taking Over of the works and the issuance of the Performance Certificate.
- To provide any other activities necessary for the successful completion of the assignment.

2.3 Results to be achieved by the Consulting Firm

The assignment is composed of 2(two) main phases, in which the Consulting Firm is expected to achieve the results as listed below:

2.3.1 Phase 1 – Supervision of Works

The ultimate objectives of various tasks during Phase 1 of this assignment is the supervision of the Works with due diligence and efficiency and in accordance with sound technical, financial and economic practices.

The Consultant shall perform all duties associated with such tasks to ensure that only the best construction practices are followed, and that the final product is in all respects equal to, or better than that specified, at the most economic cost and is carried out in full compliance with the governing specifications. In particular, the Consultant tasks under this phase shall include but not limited to the following:

- Review the designs (drawings), contract and technical specifications, contractor's mobilization and construction schedule, prior to mobilization of the Contractor and the commencement of works, to check for completeness of the designs and contract documentation. This should also encompass the incorporation of any recommendations and outcomes arising from the Road Safety Audit (RSA) into the design.
- Verify the completeness of all required administrative authorizations and permit procedures prior to mobilization of the contractor and the commencement of works. Additionally, ensure that Contractor's site mobilization provisions, site organization, safety and security of the construction site and used materials, or any additional measurements as deemed necessary, have been properly performed prior to the commencement of works.
- Works are supervised using, as contractual framework, the World Bank standard form of work contracts, and were applicable, in accordance with Albanian law and regulations, and World Bank requirements;
- Monitor that the tasks have been properly performed and the amounts claimed by the contractor(s) have actually and necessarily been incurred in accordance with the requirements of the contracts. Additionally, address community health and safety risks, including noise, dust, and construction traffic increase. Health, Safety and Environmental (HSE) requirements are ensured on sites;
- Review, approve and supervise C-ESMP, associated E&S subplans and monitoring plan implementation, ensuring full compliance with Project Environmental and Social Management Plan (ESMP) and the Environmental and Social Management Framework (ESMF) and national requirements (EIA and Albanian legislation) throughout project implementation. Prepare and submit ESMP implementation monthly reports to PIT (unless differently agreed, and confirmed by the WB). This should also encompass the supervision of Management Strategies and Implementation Plans (ES-MSIP). Ensure compliance with E&S and occupational health and safety (OHS) and take prompt corrective actions to strengthen supervision and monitoring.
- Monitor and ensure that works are completed within the specified time (i.e., meeting the

contractually binding Works Schedule and any Variation Order and/or Extension of Time) and within the Contracted budget. Variations in works should be minimal, only done when necessary, addressing all identified deficiencies/ additions and processed with the approval of the Client when there is a cost/time implication or any change in specification.

The Engineer shall not issue variation orders or contract instructions unless expressly delegated by the Project Manager. No thresholds of authority is implied under the contract; all such power remain subject to the Project Manager's delegation.

- Ensure that financial, quality and quantity related oversight ensuring the works remain within budget, or if the works are likely to exceed the budget early warning is given and the Client is adequately and timely advised on how to manage the shortfall.
- Provide written instructions to the contractor during the implementation of the civil works, who must comply with them. The latter has the right to submit in writing to the Client any remarks regarding the instructions and directives received.

2.3.2 Phase 2 – Defect Notification Period (DNP)

To provide supervision services throughout the Defect Notification Period (DNP) following the completion of construction. The Consultant shall oversee the works during the Defect Notification Period (DNP). In particular, the Consultant tasks under this phase shall include but not limited to the following:

- Ensure and support the Client in the Taking Over of the Works. Ensure that all financial safeguards for the Contracting Authority are in place and remain valid, including guarantees and insurances throughout the works contract duration, until the end of the Defects Notification Period, expected to last twelve (12) months after the Taking Over Certificate is issued.
- Inspect the completion of all outstanding works, including Environmental Restoration and grievance resolution, following the issuance of the Taking Over Certificate(s) to ensure that they are completed satisfactorily and within the agreed time period at issue of the certificate(s);
- Ensure that recommendations for corrective measures, enhancements, or future design guidance, by the Road Safety Auditor, are adequately and timely ensured on sites;
- Provide periodic and/or continuous inspection services during Defects Notification Period and if any defects are noted, instruct the Contractor to rectify accordingly;
- Undertake a final inspection of the Works, and after consulting with the PIT/ARA, and all other interested parties, and if satisfied, sign the Performance Certificate at the end of the Defects Notification Period;
- In consultation with ARA/PIT, review and approve the Final Environmental Social Health and Safety Mitigations Report for the Project as prepared by the Contractor.

Other Activities: To carry out any other tasks or activities deemed necessary by the Client, for the successful completion of the assignment, ensuring all aspects of the project are effectively managed and delivered to the required standards.

3 ASSUMPTIONS AND RISKS

3.1 Assumptions

- All required technical, administrative and legal relevant documents according to current legislation for the implementation of the works are fulfilled.
- The responsible authorities will co-operate fully with the Works Contractor and the



Supervision Consulting Firm.

- The responsible authorities will ensure adequate access to the works which is given to the Contractor and the Supervision Consulting Firm.

3.2 Risks

- Unsuccessful Contractor's bid.
- Non-compliance of the Works Contractor in accordance with his Work Program hindering the Consulting Firm's ability to effectively plan their work.

4 SCOPE OF THE SERVICE

4.1 General description of the assignment

The Consulting firm shall perform the duties and the obligations of "The Engineer" and be fully responsible for the supervision of the construction works under Group "A.1" bridges. This shall include undertaking of all the engineering activities necessary to achieve a successful assignment.

A dedicated Team Leader will be appointed for the Group "A.1" bridges and will be fully involved throughout the duration of the works. Additionally, experienced staff will be assigned to supervise the works on site, up to to the final successful completion of the construction contract, including the Defects Liability Period.

4.2 Specific Activities

The following represents a list of the specific activities required to satisfy the objectives of this Consultancy. This list is not exhaustive and the absence of any 'activities' necessary to satisfy the objectives does not preclude the Consultant's obligation to satisfy the objectives. The services to be provided by the Engineer under this contract include, but not limited to the following scope:

Phase 1: Pre-construction and during construction services

The Engineer shall undertake supervision of construction works as stipulated in the Contract. This phase is expected to take 20 months and will commence when the Civil Work Contract for construction under Group "A.1" Bridges will be awarded, and the ARA/PIT will issue the Notice to Commence to the Engineer.

The Engineer will be required to satisfy the following reporting requirements:

4.2.1 Inception Report

Within 15 days of commencement of Phase.1, the Engineer will submit to the ARA/PIT , for its approval, detailing in full, the arrangements for project supervision, including a detailed implementation plan, and confirmed staffing, together with his general organization and communications with Contractors and ARA/PIT and his proposed administrative procedures for:

- health and safety on site;
- quality assurance & quality control;
- monitor and report the progress of the works;
- measurements of completed works;
- checking interim and final payments, their certification for the PIT's payment;
- modifications/variations of work items;
- performance/works programme;



- proposed E&S compliance monitoring and reporting arrangements and forms;
- monitoring and control of costs to prevent overruns;
- process contractor's claims, ensure they are following the contractual requirements; and notify the Client in advance of any risks, or action that would result in claims;
- taking over strategy;
- commissioning;
- completion of defects;
- final certification and other such matters;
- ARA/PIT's approvals before taking actions.

The Engineer will organize regular coordination meetings with the ARA/PIT and keep them informed on the progress of this task as well as get their approval on the proposed procedures.

4.2.2 Works Implementation

The Engineer will at all times use good professional judgement and keep the ARA/PIT fully apprised of all relevant matters as they arise during the works implementation. The Engineer's duties are listed, but not limited to, below:

Approval of Contractor's Works Programme

Review the contractor's workplan including construction schedule and comment on the procedures, methods, and sequence of the work. The Team Leader shall review and approve the Contractor's Work programme, particularly the mobilization of plant and equipments on site, and the deployment of specialized trades and of sub-contractors. The Engineer will pay specific attention to the part of the Contractor's Works Program and traffic management, to avoid and/or minimize any traffic disruption during construction phase.

Monitoring the progress of the works

The Engineer's supervision staff shall monitor the actual progress of the Works by preparing progress charts at the end of each month and comparing the actual progress with the anticipated progress as detailed in the approved Contractor's Works Programme.

The Engineer shall organize monthly progress meetings, keep records and distribute the minutes of the meetings to the ARA/PIT, Contractor, and any other Project stakeholders. The meetings will be conducted in English with simultaneously translation into Albanian if requested. The minutes will be prepared in English and translated to Albanian, if requested by the ARA/PIT.

Consultant's monthly programme, and corresponding manning schedule

The Engineer shall prepare monthly programmes, and a corresponding manning schedule, showing the timing of activities and the corresponding staff input required for execution of the services, to provide sound advisory and technical services to the ARA/PIT. The Consultant will be responsible to align its site supervision inputs in line with the Contractor's Works Programme and further monitored to ensure that service is provided as required for each construction phase. In case of any discrepancies or delays in the implementation of civil works, the Consultant shall inform adequately and timely and consult with the Client on the allocation of working days, in order to follow the actual construction work plan.

Measurement of Works

The Engineer is responsible for measurements of the Works and shall keep accurate records of permanent works executed by the Contractor on site. Measurements shall be carried out with

the assistance of the Contractor. The measurement sheets and drawings justifying the executed quantities are prepared by the Engineer's staff and signed by both the Engineer's and the Contractor's delegated staff.

Monitoring and conducting quality assurance of the Works

The Engineer's staff shall carry out inspections of the Works on site as considered necessary to check the performance of the Contractor and ensure that the execution of the Works is in accordance with the contract documents and sound engineering practice. This may necessitate the inspection and testing of any materials and manufactured products that will be incorporated in the Works. Laboratory tests shall be carried out in accordance with the Contract Conditions, Technical Specifications, or at the Engineer's specific request.

Health and Safety, other incidental situations

The Supervision Team shall maintain continuous oversight of all health, safety, and environmental aspects of the works, ensuring full compliance with the ESMP, the ESMF, national legislation, and World Bank ESF requirements. The Team Leader shall ensure that all incidents, near-misses, unsafe conditions, and environmental or social non-compliances are immediately identified, documented, and addressed.

The Team Leader shall promptly notify (within 24 hours), the ARA/PIT of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers. This includes, but is not limited to, serious injuries, fatalities, major spill events, structural failures, traffic accidents, and cases of sexual exploitation and abuse (SEA) or sexual harassment (SH) and accidents that result in death, serious or multiple injury. Notifications must include sufficient detail regarding the scope, severity, and possible causes of the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and/or supervising firm, as appropriate. Subsequently, at the ARA/PIT request, prepare a report on the incident or accident and propose any measures to address it and prevent its recurrence. If requested, provide subsequent incident/accident investigation report to the ARA/PIT within 30 days from the time the incident/accident was reported, unless another timeframe is agreed upon with the ARA/PIT.

The Supervision Team shall verify that the Contractor implements all agreed corrective and preventive measures in a timely manner and shall monitor their effectiveness through follow-up inspections and documentation.


Monitoring of the financial resources

The Engineer shall immediately advise the ARA/PIT on any potential cost savings, and if the construction costs are likely to exceed the available budget.

Variations and amendments to the Work Contract.

Any act by the Engineer in response to a Contractor's request except as otherwise expressly specified shall be notified in writing to the Contractor within 21 days of receipt. The Engineer shall obtain the specific approval of the Client before taking action.

If, in exceptional circumstances, the Engineer assess that a Variation would be essential and / or unavoidable, unless, in his opinion, an emergency occurs affecting the safety of life or of the Works or of adjoining property, or any delay with the variation shall give rise to a substantial cost or time overrun, he shall swiftly provide a preliminary report to the ARA/PIT outlining the basis for the Engineer's valuation of such Variation.



Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Client, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction. The Engineer shall promptly notify the Client within 24 hours.

In case a variation is approved and instructed, the Engineer following the execution of the variation by the Contractor, must provide the final report based on his/her preliminary report to demonstrate the facts in comparison to his/her above assessments explaining any deviations with the analysis whether they are material.

Performance Guarantees, Insurance Policies, Indemnities, Certificates, etc.

The Team Leader shall check and confirm the adequacy, validity and authenticity of all guarantees, insurance policies, indemnities, certificates, etc. for which the Contractor is liable under the Work Contract.

Surveys, site investigations and setting out of the Works

The Engineer shall check and approve all the Contractor's surveys, investigations and setting out of the Works.

Interim Payment Certificates (IPCs)

The Engineer shall check the Contractor's Interim Payment Statements claiming the performed Works against the Bill of Quantities included in the Work Contract and, after any due corrections, issue Interim Payment Certificates to the ARA/PIT in an agreed format, within the timeframe stipulated in the Work Contract. The Consultant shall ensure the timely submission by the Contractor of monthly statements indicating the estimated value of the work executed.

Unscheduled or New works items

For any unscheduled or new items of Works, the Engineer shall negotiate their price with the Contractor and make recommendations to the ARA/PIT. The Engineer shall obtain the specific approval of the ARA/PIT before issuing any instructions to the Contractor.

On-site tests during construction

The Engineer shall instruct the Contractor to carry out any on-site tests, including load tests, if considered necessary to confirm the adequacy of the Works. The Engineer's staff shall supervise such tests, record any measurements and verify their compliance with the Contract technical specifications/requirements.

Contractor's designs, construction reports and as-built drawings

The Engineer shall ensure that the Contractor submits to the ARA/PIT all surveys, works on site diary, technical reports, construction records and maintenance manuals, including as-built drawings and calculations prepared during the Works implementation period, by the Completion Date. The Engineer shall check and approve such documentation before the issuing of the Taking-Over Certificate.

Provisional Acceptance of the Works

The Engineer shall carry out joint site inspections and surveys and agree any snagging list with



the ARA/PIT and instruct the Contractor accordingly, after receiving from the Contractor's a formal request in which he declares that the Works are substantially completed.

When, in the Engineer's opinion, the Contractor has carried out all the requested remedial actions and the Works can be considered as completed, the Engineer shall issue a Taking-Over Certificate to the Contractor. If the Work Contract allows for it, the Engineer may issue a Taking-Over Certificate of part of the Scope of Works.

Contractor's Claims

The Engineer shall carefully monitor the progress of the works and provide timely warnings to the Client, in such a way that reasons for contractor's claims are avoided. If Contractor's claims are unavoidable, the Engineer shall evaluate and assist the ARA/PIT on such claims, throughout the procedure stated in the Work Contract.

In the event of receipt of a Notice of Claim from the Contractor, the Engineer shall immediately inform and provide copy of such claim to the Client, provide him with an assessment of the Contractor's contemporary records and the Engineer's preliminary conclusions and instructions, with regard to the potential outcome of the claim. The Engineer shall consult with the Client on any further actions which should be undertaken against the Contractor's claim.

Prior to certification of any payments to the Contractor in relation to any of his claims, the Engineer shall consult and obtain a formal approval from the Client. The Engineer shall provide the Client with any particulars to enable the Client to take a decision with regard to the Engineer's proposed payment to the Contractor.

E&S Monthly Reports (compliance with the relevant national and E&S instruments, mitigation and monitoring measures).

The Consultant shall be responsible for the formal review, assessment, and approval of the Contractor's Environmental and Social, Health and Safety documentation prior to commencement of works. This shall include, as a minimum, the Contractor's C-ESMP, Health and Safety Plan, Traffic Management Plan, Waste Management Plan, Emergency Preparedness and Response Plan, and any other site-specific Environmental and Social Management Plans.

The review shall ensure that all proposed activities, construction methodologies, sequencing of works, mitigation measures, monitoring arrangements, and implementation timelines are fully aligned with the requirements of the approved ESMP and ESMF, as well as applicable national legislation and lender standards. Approval shall be granted only upon confirmation by the Client that the plans are complete, technically adequate, and operationally feasible.

In addition, the Consultant shall verify that the Contractor's mobilization of plant, equipment, workforce, and subcontractors is consistent with the approved management plans. This verification shall include confirmation that all required permits, licenses, environmental authorizations, and statutory clearances have been duly obtained prior to the commencement of works. No construction activities shall proceed without documented evidence of such compliance.

The Consultant will regularly monitor implementation of E&S measures as defined in the WB ESIA (and integral ESMP, CHMP, Biodiversity Management Plan and other applicable ESF documents and measures), implementation of ARA PIT prescribed corrective measures and state of the environment as prescribed in E&S instruments and requested by ARA PIT.

Reporting will take place monthly, unless greater frequency is agreed with the ARA PIT. Specifically, as part of its obligations for the EIA, the Consultant must ensure that the



Contractor delivers its ES obligations under its contract. This includes, but is not limited to the following:

- Reviewing the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);
- Reviewing all other applicable contractor's documents related to ES aspects including the health and safety manual, security management plan, road traffic management plan and SEA prevention and response action plan, Contractor's Cultural Heritage Management Plan (C-CHMP) if applicable, Contractor's Biodiversity Management Plan (C-BMP);
- Reviewing and consider the ES risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;
- Undertaking, as required, audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities under its contract, to verify the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH).
- Undertaking audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ES related documentation, as necessary, to confirm the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH).
- Determining remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ES obligations.
- Ensuring appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations.
- Ensuring that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations.
- Reviewing and critiquing, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation.
- Undertaking liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues.
- Establishing and maintaining a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g., of those reporting allegations of SEA and/or SH.
- Ensure the capacity of Contractor to implement proposed mitigation measures is maintained.
- On the cultural protection make sure harm is avoided to cultural property and consult with relevant stakeholders to document the presence and significance of physical cultural resources.

4.2.3 Reporting during Phase 1

The Engineer will prepare and submit the following reports:

- Inception Report;
- Engineer's Works Programme Report;
- Consultant's monthly programme, and corresponding manning schedule;
- Monthly Progress Reports;
- E&S Monthly Reports;



- Monthly progress meetings, Site Meetings and other Meetings records;
- Accident Reports;
- Completion Report;
- Quality Assurance Dossier, finalized As-Built – Drawings, including maintenance manuals;
- Any other reports as might be required by ARA/PIT.

Phase 2: During Defect Notification Period (DNP)

The DNP shall commence individually upon the completion and acceptance of each bridge, in accordance with the provisions specified in the civil works contract. During the Defects Notification Period (DNP), the Consultant shall remain responsible for supervising and inspecting the construction and completion of the Works as stipulated in the works contracts. During this period, the Engineer shall be expected to draw the attention of the Contractor to any defects as soon as such defects are noticed and shall ensure that the Contractor fulfils his contractual obligations during the Defect Notification Period, including rectifying all defects in the Works in a timely manner and supervise the subsequent remedial works.

The Consultant will submit detailed reports to the Client after each inspection, covering defects, faults, accidents, breakdowns, estimated repair costs, and timelines for completion. Additionally, quarterly reports summarizing the Consultant’s activities during the DNP will be submitted. A final report at the end of the DNP will provide a comprehensive summary of all work carried out during this period. The Engineer shall ensure that the Contractor fulfils his contractual obligations during the Defect Notification Period, including rectifying all defects or failures in the Works.

The duration of this phase is expected to last 12 months following of the issuing of Taking-Over Certificate for the civil works under Group “A.1” Bridges. The consultant shall oversee the works during the Defect Notification Period (DNP), until the Final Taking Over of the works and the issuance of the Performance Certificate.

Inspections during the DNP

The Consultant shall undertake quarterly inspections (every three months) throughout the DNP. In addition, if ARA/PIT will request an ad hoc inspection by the Team Leader to assess a specific defect on-site, such inspection shall be considered separate from the quarterly inspections and shall cover the specific event, including the issuance of instructions to the Contractor to remedy any defects identified. Following each inspection, the Team Leader shall:

- Monitor the performance of the Contractor during the DNP, ensuring that any defects identified are rectified in a timely manner.
- Conduct periodic inspections during the DNP and instruct the Contractor to remedy any defects identified.
- Prepare an Inspection Report on the status of the Works and on the operation and maintenance of the Works, to date. Photos, measurements and any other evidence of the status of the Works will accompany such report.

4.2.4 Final Inspection on expiry of the DNP

At the end of the 12-month of the Notification Period, the Consultant will conduct a final inspection to confirm that the Contractor has completed works and is ready for the joint inspection and handover. This final inspection will occur just before or on the expiry of the DNP and will be conducted in the presence of at least representative from the Contractor and

the ARA/PIT.

If any defects are identified, the Consultant will issue a snag list to the Contractor, specifying the required rectifications within the timeframe outlined in the works contract. Once the snags have been remedied, a second joint site inspection will be conducted. If, in the Consultant's opinion, the works have been satisfactorily completed or remediated, the Team Leader will issue the Performance Certificate. The results of these inspections and the issuance of the Final Completion Certificate will be documented in the Consultant's Final Report.

4.2.5 Reporting during Phase 2

The Engineer will prepare the following reports:

- Quarterly Inspection Reports during DNP;
- Ad-Hoc Reports for additional inspections requested by the ARA/PIT.
- Final Completion Report.

Note: Further details regarding the content of these reports, as well as those required for Phase I and Phase II, are outlined in Annex I, which forms part of these Terms of Reference (TOR).

5. LOGISTICS AND DURATION OF THE ASSIGNMENT

5.1. Location

The services to be provided by the Consultant shall be performed in the vicinity of Burrel, located in the northern region of Albania, within the area corresponding to Group A.1 bridges (the "Project Area" in Rubik bridge, Klos bridges, Karica bridge). The Consultant shall ensure that its personnel and experts are provided with a well-organized, fully self-sufficient operational base, including but not limited to accommodation, transportation, office facilities, and any other resources necessary for the satisfactory execution of the services specified in this ToR. The main operational base for the assignment will be in Tirana. A Project main office accommodation in Tirana, Albania, in close proximity to the offices of the Albanian Road Authority (ARA) and the Project Implementation Team (PIT), of a reasonable standard and sufficient working space for the experts working on this assignment, is to be provided by the Engineer. Office accommodation and any related costs are to be covered within the financial proposal.

5.2. Commencement Date and Duration of the Assignment

The anticipated commencement date for the assignment is mid-2026, subject to the completion of the necessary procedures for the award of the service contract. The consultancy is to be undertaken over a period of **thirty-two (32)** calendar months totally which includes the supervision of works of **twenty (20) months** and defect liability period of **twelve (12) months**. The Service Contract will commence upon the issuance of the Notice to Commence by the Contracting Authority to the Engineer. The Consultant shall commence work within fifteen (15) days after receipt of Letter of Commencement.

The implementation period will be divided into two distinct phases, each with specific objectives and timelines, as outlined below:

Phase I: **Twenty (20) months** for the duration of the Works Supervision during the execution of the Works

Phase II: **Twelve (12) months** for the duration of the Defects Notification Period (DNP).



6. DELIVERABLES TIMEFRAME AND PAYMENTS

6.1. Form of Contract

The Engineer will sign a Service Contract with the ARA which shall be structured and paid as a time-based assignment in which the Engineer will carry out the tasks described in this TOR, whereby the payments are linked with time inputs of the Key Experts in the assignment.

6.2. Reporting Requirements and Time Schedule for Deliverables

The Consultant will report to the Client's nominated representative on all aspects of the Assignment. A list of formal reports to be prepared and submitted by the Consultant is provided below. The Reports should cover, but not necessarily be limited to, the information provided in Annex 1. All Project reports issued by the Consultant are subject to review by the ARA/PIT.

Item	Deliverables	Timing
During Supervision of Works		
1	Inception Report	Within two weeks after the issue of Notice to Commence to the Contractor
2	Engineer's Works Programme Report	Within twenty-eight days after the submission of the Contractor's Work
3	Consultant's monthly programme, and corresponding manning schedule	Within five days after the submission of the Contractor's Work Program.
4	Monthly Progress Report	Within 7 days after the end of the relevant month
5	Monthly progress meetings, Site Meetings and other Meetings records	Within 24 hours after the meeting
6	E&S Monthly Reports	Within 7 days after the end of the relevant month
7	Accident Reports	Communicate immediately upon the occurrence of an accident electronic mail and hard copy within five (5) calendar days after incidents happened.
8	Completion Report	Within thirty days after the completion of the works
9	Quality Assurance Dossier	Within thirty days after the completion of the works
10	Any other reports as might be required by ARA/PIT	As required or upon request
During Defect Notification Period (DNP)		
11	Quarterly Inspection Reports	Within 2 weeks of carrying out each required Site Inspection
12	Ad-Hoc Reports for additional inspections requested by the	As required or upon request
13	Final Completion Report	At the end of the project
14	Any other report any other reports as might be required by ARA/PIT	As required or upon request

Table 1 Description of deliverables and time schedule

- Submission Requirements

The Consultant is required to submit all deliverables in both Albanian and English languages and in a format, quality and quantity approved by the ARA/PIT. Each deliverable must be provided in both hard copy (i.e., full color prints and perfect binding type) and soft copy. The hard copies must be signed by the Consultant's authorized representative. The soft copies should be provided in the appropriate digital formats such as PDF, MS Excel, AutoCAD, or other mutually agreed formats. Both versions (Albanian and English) should be submitted simultaneously. Additionally, extra copies of any deliverables may be requested by the ARA/PIT, and the Consultant shall provide them as required.

In addition, the Consultant shall keep full records relating to all aspects of the work covered by his service contract. A digital copy of all the materials will be uploaded/stored by the Consultant in a dedicated cloud-based area.

- Digital Archive

The selected Consulting Firm shall create a dedicated and secure online project document storage library. This library will be used to upload and store digital copies of all the documents, reports, maps, working papers, site dairy, progress pictures, and other reference material used and/or created during the period of the assignment. The Engineer will be responsible for providing and maintaining in full operating mood this dedicated cloud-based area throughout the entire duration of this assignment including the defect notification period.

The Engineer must ensure that the chosen online project document storage system is secure. This means implementing measures such as encryption, firewalls, and regular backups to prevent unauthorized access or loss of data. Additionally, the system should have user access controls in place to limit who can edit, view, and download specific documents. This will safeguard sensitive information and grant appropriate access to parties involved in the assignment based on their roles and responsibilities.

During the course of the assignment the Consultant must keep the project library in good order and in a reference format. Upon completion of the assignment, the entire contents of the project library will be transferred to the ARA/PIT in an organized and properly referenced manner.

6.3. Consultant's Fees and Payment

Payment shall be structured and paid monthly as a time-based assignment in which the Consulting Firm will carry out the tasks described in this TOR. The consultant's remuneration shall be deemed to cover all costs necessary for the successful completion of the assignment. The level of effort for Phase I is estimated at **120 person/months**. During this phase, the Consultant must ensure that site supervision inputs align with the progress of the civil works. The estimated effort for Phase II is **4 person/months**. During this phase the Consultant will inspect the works at appropriate intervals, supervise any necessary remedial work, and issue a Performance Certificate to the Contractor.

In the case of failure to timely report on significant E&S incompliances and/or failure for Contractor to carry our corrective measures, the ARA PIT can withhold payments until E&S compliance and reporting is reestablished.

7. REQUIRED QUALIFICATIONS AND EXPERIENCE

7.1. Selection Method

The service will be selected under the provisions of the World Bank Procurement



Regulations for Borrowers under Investment Project Financing” dated July 1, 2016, revised on November 2017, August 2018 and November 2020. The selection process will follow the Quality and Cost-Based Selection (QCBS) method.

7.2. Consultant’s Profile

The Consultant Firm (which may be a single firm or a Joint Venture -JV) must be able to demonstrate previous experience in similar assignments as follows:

- Minimum of ten (10) years of previous national or international experience with projects similar scale and scope to the services described in these TOR;
- Successful completion of at least two (2) similar contracts within the last 5 years, which match the scope and complexity of this assignment;
- The Consultant should not have any pending litigation and non-performing contracts during the last 5 years.

The consulting firms participating to the bid, will be assessed in order to determine a shortlist comprising the most qualified candidates. The criteria to be used for shortlisting will be the following:

- Core business and years in business (30 points)
- Past experience in similar assignments (60 points)
- Firms’ organization and staffing (10 points)

Note: The consulting firms experience in similar assignments will be assessed with reference mainly to the following components: Time Frame, Minimum Contract Value, Scope of Work.

7.2. Team Composition

In order to execute his obligations, the Engineer shall provide suitable, experienced and qualified experts for the assignment with experience in works supervision to provide sound advisory and technical services to the ARA/PIT and shall prepare a Work Programme, and a corresponding manning schedule, showing the timing of activities and the corresponding staff input required for execution of the services.

All experts who have a crucial role in implementing the contract are referred to as key experts and *their CVs should be submitted in bid*. The CVs of Key experts will not be evaluated during the ranking process. They will be evaluated after the issuance of the Request for Proposal to the shortlisted consultants. The estimate of the key professional staff requirements is only indicative and could be construed as skill mix requirements for these Services. The Consultant shall employ only such key staff whose CVs have been approved by the ARA/PIT. The Consultant must provide in the proposal, CVs for all professional and technical staff including the duration in person-months during which the staff will be deployed under the Contract. In addition to the key personnel, the Consultant shall determine the support staff to assist with on-site supervision of the works.

The working language of the project is English. All reporting outcomes shall be of Albanian and English proofreading quality. Day-to-day communication language with the ARA/PIT will be either English or Albanian language.

Note: In the event that any of Key Experts required is to be permanently substituted, the Consultant shall notify the Employer in written at least; no less than thirty (30) days and no more than sixty (60) days in advance, in order to complete the procedures for handover or



overlap period between the departing and incoming of the new Key Expert.

7.2.1. Key Staff Requirement

The following are qualification and experience requirements for key professional staff:

Team Leader (Key Expert 1)

A. Team Leader (TL) shall retain the overall responsibility for the management and coordination of the assignment. He/She shall lead and coordinate the activities of the Engineering team. He/she is expected to be responsible for all technical and contractual matters and the communication between the Engineer, the Contractor(s), the Client as well as the relevant authorities.

The Team Leader (TL) shall assure a timely and proper supervision of the Works throughout the construction contract period and shall be engaged in full time-basis. During the works supervision phase, he/she will act as Engineer's Team Leader / Project Manager's representative. He/she shall be based either on site or in Tirana, but he/she is expected to participate to all progress meetings and management meetings where his/her presence may be required. During DNP the Team leader might be present on a part-time basis, in accordance with the Engineer's proposal and as required for successful completion of the Services.

Qualifications and skills

- University Degree + Master of Science in Civil Engineering. A postgraduate qualification in Highway, Structure or Bridge Engineering is an added advantage;
- The Team Leader is expected to possess as minimum fifteen (15) years of post- graduate professional international experience related to works supervision projects of similar size and complexity.
- Fully familiar with project implementation procedures, financed by the World Bank or other international financial institution
- He/she has acted as Team Leader or equivalent capacity in bridge and/or road construction projects of similar size and complexity.
- Experience in managing works contracts under World Bank or other international recognized conditions of contract.
- Proficiency in English with strong written and oral reporting skills.

The Team Leader shall be the head of engineering team responsible for all technical and administrative aspects of supervision activities on site. He/she shall be the principal contact person between the design review and engineering team and the ARA/PIT.

Resident Bridge/Structure Engineer and Deputy Team Leader (Key Expert 2)

The Bridge/Structural Engineer shall be responsible for ensuring the bridges and other drainage structures are constructed according to design and conform to the contract technical specifications. He/She shall assist the Team Leader in full time-basis, acting under the Team Leaders control and coordination. Additionally, the Resident Engineer's duties and responsibilities shall comprise road surveys, construction of bridges and pavement structures, measuring of quantities and management of site operations. During DNP, he/she might be present on a part-time basis, in accordance with the Engineer's proposal and as required for successful completion of the Services.



Qualifications and experience

The experts shall possess:

- Must have a Master degree in Bridge/Structure Civil Engineering.
- Must have a minimum of ten (15) years of cumulative professional experience related to road and bridge work contracts of similar magnitude and complexity;
- Must have served in similar capacity in at least 2 road and bridge construction projects of similar magnitude and complexity;
- He/she has acted as Deputy Team Leader or equivalent capacity in bridge and/or road construction projects of similar size and complexity.
- Previous experience working on World Bank-funded infrastructure projects or other major international financing institutions will be considered an advantage
- Proficiency in written and spoken English is mandatory.

Note: In the event that the Team Leader is temporarily unavailable, the Deputy Team Leader can temporarily take over some of the duties as delegated by the TL during the assignment, *subject to prior notification to the Employer.*

Geological Engineer/Geologist (Key Expert 3)

The Geological Engineer/Geologist will play a pivotal role in managing and overseeing all geological aspects of the project. This expert will work under the supervision of the Team Leader and will be responsible for conducting, ensuring that actual ground conditions comply with the geotechnical design, technical specifications, and safety requirements, while identifying and reporting any unforeseen geological conditions that may affect the works. Minimum site presence requirement should be maintained for the overall construction period of all bridges and particularly during critical construction stages (taking of samples for laboratory test) the site presence is mandatory.

Qualifications and skills

- University Degree in Geological Engineering, Geology or a related field.
- He/she shall have a minimum of fifteen (10) years of professional experience, in geological investigations, including field in supervision of geotechnical investigations, earthworks, and foundation works in projects of similar size and complexity.
- Previous experience working on World Bank-funded infrastructure projects or other major international financing institutions will be considered an advantage
- Proficiency in written and spoken English is mandatory.

Quantity Surveyor (Key Expert 4)

The Quantity Surveyor shall be responsible for ensuring that all measurements and evaluation of executed works submitted for payment by the contractor conform to actual quantities executed on site, and are in line with the approved design and contract specifications.

Qualifications and skills

- University Degree in Civil Engineering. A postgraduate qualification in Quantity Surveyor or Building Economics is an added advantage;
- He/she shall have minimum fifteen (15) years of previous professional experience as a



- Quantity Surveyor in projects of similar size and complexity;
- Previous experience in supervision of works contracts under World Bank or other international recognized conditions of contract is an added advantage.
- Proficiency in written and spoken English is mandatory.

Material Engineer-OA/OC (Key Expert 5)

The Material Engineer shall be responsible for ensuring the quality of all materials to be incorporated in the works, as well as the completed works, conform to the contract specifications.

- Must have a degree in Material Engineering, Civil Engineering or equivalent qualification. Postgraduate qualifications in Materials Engineering, Quality Assurance and Quality Control are an added advantage;
- Must have a minimum of ten (15) years cumulative experience in infrastructure design and works supervision of similar magnitude and complexity infrastructure projects with extensive knowledge in materials of roads and bridges and materials investigations;
- Must have served in similar capacity in road and bridge projects of similar magnitude and complexity;
- Previous experience in supervision of works contracts under World Bank or other international recognized conditions of contract is an added advantage;
- Proficiency in written and spoken English is mandatory.

Environmental and Social Specialist (Key Expert 6)

The Environmental and Social Specialist shall be responsible for the supervision and effective implementation of the Environmental and Social Management Plan (ESMP) and for ensuring full compliance with the Environmental and Social Management Framework (ESMF), national legislation, and the World Bank Environmental and Social Framework (ESF). The Specialist will support the Engineering Supervision Team in monitoring environmental, social, health and safety (ESHS) performance throughout all phases of the project, including site inspections, compliance verification, documentation, and reporting. He/she shall ensure the inclusion of disaster and climate risk considerations and recommendations.

Minimum site presence requirement 3visits/month should be maintained for the overall construction period of all bridges and particularly 4visits/month during critical construction stages (mainly but not limited to demolition works and excavation, civil works in water presence, rehabilitation works) the site presence is mandatory.

Qualifications and skills

- Master's degree in environmental in civil, chemical and other relevant engineering, or environmental management, biology or other similar environmental science relevant degree;
- He/she shall have minimum 7 years of previous professional experience related to environmental and social issues management, initiatives and implementation of mitigation measures related to civil engineering infrastructure projects, including monitoring of ESMP

implementation, environmental compliance supervision, and oversight of mitigation measures on construction sites.

- Previous experience working on World Bank-funded infrastructure projects or other major international financing institutions will be considered an advantage
- Proficiency in written and spoken English is mandatory.

Topographical Surveyor (Key Expert 7)

The Topographical Surveyor shall be responsible for conducting and supervising the survey team. And ensuring that the road and bridges structures of “Group A” are constructed according to the design setting out and specifications. He/she will be responsible for planning the fieldwork, selecting known survey reference points, and determining the precise location of important features in the survey area. He/she shall be responsible for searching legal records, looking for evidence of previous references' survey points (geodetic reference points and national benchmarks) and analysing the data to determine the location of boundary lines and record the results of the survey, verifying the accuracy of data, and preparing plans, maps, and reports.

- Must have a degree in Geodetic Engineering or equivalent. Post graduate qualifications in land surveying is an added advantage;
- Must have a minimum of ten (10) years cumulative experience in Land surveying supervision related activities in projects of similar magnitude and complexity;
- Previous experience in supervision of works contracts under World Bank or other international recognized conditions of contract is an added advantage;
- Proficiency in written and spoken English is mandatory.

7.2.2. Non-key Experts, support staff

In addition to the key experts designated above, the Consultant is free to propose a team composition of additional support of non-key/ back-up staff in its proposal as deemed necessary to assist with on-site supervision of the works. The following team composition is indicative only and can include home office back-up specialists and support staff such as assistant surveyor, office engineer, CAD technician, office management secretary, drivers, etc. Additional support or non – key staff may be added and identified by the Consultant in its proposal as needed for proper implementation of the duties prescribed by the current TOR. *The CV for experts other than the key experts shall not be evaluated or examined prior to the signature of the contract;* therefore, they need not be included in the proposal. Their roles, however, should be included in the Technical Proposal, and the associated costs should be included in the Financial Proposal. The cost of both key and non-key staff shall be included in the evaluation of the Financial Proposal.

7.2.3. Staff Requirement during Defects Notification Period

The Engineer shall assign one of its key personnel in addition to the Team Leader to lead a team of experts to conduct inspections during the Defect Notification Period as described in Section 3 of the Terms of Reference.

7.2.4. Estimated Input for Key Expert and Non-key Experts

The allocation of person-months for the respective phases of consulting services is as shown in Table 2 below.



STAFFING		Number of staff	(Phase I)	(Phase II)	Total Input m/m
			20 months Supervision of Works (m/m)	12 months DNP (m/m)	
Key Staff (KE)					
KE-1	Team Leader	1	20	2	22
KE-2	Resident Bridge/Structural Engineer	1	20	2	22
KE-3	Geological Engineer/Geologist	1	3	0	3
KE-4	Quantity Surveyor	1	5	0	5
KE-5	Material Engineer-QA/QC	1	5	0	5
KE-6	Environmental & Social Specialist	1	8	0	8
KE-7	Topographic Surveyor	1	5	0	5
Non-Key Staff (NKE)					
NKE-1	Hydrotechnical Engineer	1	1	0	1
NKE-2	Geotechnical Expert	1	5	0	5
NKE-3	Road Safety Specialist	1	2	0	2
NKE-4	Occupational Health and Safety (OHS) Specialist	1	6	0	6
NKE-5	Site Inspector	2	40	0	40
Total Person Month		13	120	4	124

Table 2: Allocation of Person-Month by Phases

The abovementioned list is the Client's estimate of the minimum key staff input required for the assignment. If the Consultant considers that additional involvement of the key staff is required, it is free to include such input in its proposal. If no additional input will be included in the proposal, it will be deemed that the Consultant is satisfied with the minimum input for key staff provided above and takes full responsibility to fulfil all obligations as set out in the TOR with the indicated inputs.

Note: All experts should work in the beneficiary country 100% of the contracted working days, unless specifically requested and approved by the Contracting Authority.

8. DATA AND ASSISTANCE TO BE PROVIDED BY THE ARA

The following documents will be available to the shortlisted consultants:

- Technical Drawings
- Environmental and Social Scoping
- Technical Specifications
- Time Schedule of Works

The ARA/PIT shall promptly, after signing the contract, place at the disposal of the Engineer the complete set of detailed design documents, reports, and specifications, both hard copy (i.e., full color prints and perfect binding type) together with electronic soft copy, in English and Albanian language.

The ARA will not provide any counterpart personnel. In connection with the work by the Consultant that require inputs from other government agencies, the ARA shall provide assistance in liaising with those agencies and shall ensure that the Consultant has access to any

available information and data that is deemed necessary for the execution of the Services. Technical information available to the ARA and access to the existing records which ARA considers essential for the proper conduct and execution of this assignment will be provided upon request. The Consultant shall be solely responsible for arranging for the translation of any documents, if necessary. The failure of the Consultant to resolve any issues encountered in the performance of its duties in the local context shall not relieve the Consultant from its obligations under the contract with the Contracting Authority.

9. FACILITIES TO BE PROVIDED BY THE CONSULTANT

There will be no facilities provided by ARA. If the Consulting Firm is a consortium, the arrangements should allow for the maximum flexibility during implementation of the assignment. Arrangements offering each consortium member a fixed percentage of the work to be undertaken under the contract, should be avoided.

9.1. Expert Support and Equipment

The Consultant shall be solely responsible for ensuring that its experts are adequately supported and equipped for the performance of the Services. This includes, but is not limited to, providing sufficient administrative, secretarial, and interpreting services to enable the experts to focus on their primary responsibilities. The Consultant shall ensure the timely transfer of any and all funds necessary to support the activities under this service contract and to ensure that his personnel are paid regularly and in a timely fashion.

9.2. Office and Operational Facilities

The Consultant shall arrange for a main office in Tirana, in close proximity to the ARA/PIT office that is adequately equipped and provides sufficient working space. The Consultant is solely responsible for providing all necessary office accommodation, operating facilities, and transport required for the performance of the Services. This responsibility extends to both Tirana and any other location where the services are to be performed.

The Consultant will bear all costs related to accommodation, operating expenses, travel, and logistics for the execution of the Services. These costs must be included in the Consultant's financial proposal. Furthermore, the Consultant assumes full responsibility for all costs associated with the mobilization, accommodation, and maintenance of personnel or resources necessary for the execution of the Services, regardless of their location.

9.3. Site visit by the consultant

The Consultant at their own costs is advised to visit and examine the Sites and obtain all information that may be necessary for preparing their proposals under this assignment. The costs of visiting the Site shall be bore by the Consultant.



ANNEX I– REPORTING REQUIREMENTS DURING THE SUPERVISION & DNP PHASE

With reference to Section 3 of the TOR, the Engineer shall prepare:

Inception Report

The Team Leader will submit an Inception Report within two weeks after the issue of the Notice to Commence to the Contractor.

The Inception Report will be prepared as a strategic plan for the successful completion of this phase of the Project and will address the Engineer’s scope of services, organization/staffing, schedules, deliverables, administrative procedures (general communications, correspondence routing, document control, status reports, invoicing, etc.) and reporting procedures.

So, this report shall elaborate the operational strategy for provision of services against the contract and shall include (not limited to) a work plan, specific outputs and milestones, anticipated results, timeframe, use of budget and inputs against proposed activities, and quantified indicators of achievement of project objectives.

The Inception Report will also include recommendations for solutions to possible anticipated problems.

Engineer’s Works Programme Report

In view of the above, The TL shall prepare the “Engineer’s Work Program Report”, within 28 days after the submission of the Contractor’s Work Program. This report which will include, at least:

- Copy of the Contractor’s detailed cash-flow estimates, in monthly periods or in accordance with milestone-based payment schedules, of all payments to which the Contractor will be entitled under the Contract;
- Copy of the Contractor’s detailed Works Program, showing the order in which, the Contractor intends to carry out the Works, including general description of the methods which the Contractors intends to adopt, and of the major stages, in the execution of the Works and other information as may be deemed necessary and appropriate by the Engineer;
- A list of critical path items and the related Contractor’s estimates of delivery periods, accompanied by the Engineer’s estimate of the latest delivery periods for each critical path item to warrant the completion in accordance with the Contract;
- Details of main Plant(s) and Equipment the Contractor intend to use during the implementation of the Works;
- Materials and plant selected by the Engineer for inspections and tests, including an appropriate specification of the tests to be carried out and the associated arrangements;
- Names and particulars, including gender, of the Contractor’s representative and other superintendence personnel approved by the Engineer in accordance with the Contract;
- Names of subcontractors consented by the Engineer in accordance with the Contract and, for each subcontractor, the cost and quantity of the subcontracted Works; this section will include a brief justification for the Engineer’s consent;
- Copies of all relevant notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
- Other information as may be required by the Client.



Monthly Progress Reports

The TL shall submit Monthly Progress Reports to the ARA/PIT, *within 7 days after the end of the relevant month*. The report shall be submitted in a format agreed with the ARA/PIT. The key issues to be addressed in each Monthly Progress Report shall include, but not be limited to:

- Safety: An update of accidents at work, an appraisal of the safety of the Contractor's working practices, and how safety transgression may be remedied.
- Quality: A summary of the Contractor's work and materials, and any problems related thereto, with recommendations for improvements.
- A summary of all samples and tests carried out on materials, plant and the Works.
- Progress: A summary of the progress of the Works, with particular reference to the major activities and those on the "critical path" for completion. The report shall detail delays and difficulties encountered and proposed measures to alleviate them.
- All the milestones, including the intermediate ones, will be incorporated on Monthly Progress Reports to enable progress tracking.
- A copy of the Contractor's approved Works Programme marked up to show actual progress to date shall be included in the reports.
- Resources: A schedule of the Contractor's labour, staff, equipment and materials resources with an updated appraisal as to whether or not these are adequate to complete the Contract on time.
- Contract Administration and Cost: A revised projection of the final cost of the Works which takes into consideration the following:
 - the value of the interim payment certificates to date
 - the valuation of any variation/modification order issued on the Contract
 - substantiation and evaluation of any claims submitted by the Contractor
 - the cost implications of any time overruns with or without extensions of time being granted to the Contractor
 - the value of the completed Works to date.
- Tabulated summaries of:
 - Site Instructions issued to date
 - Variation/modification orders issued to date
 - Claims notified by the Contractor
 - Interim Payment Certificates certified by the Engineer, clearly showing the date in which, the Contractor has received payment, the repayment of any Advance Payment, and the amount of Retention Monies withheld from payment
 - Provisional Sums and Contingencies used to date
 - Other contractual issues, e.g., claims made on insurance policies
 - The Minutes of the Site Meetings and any other meeting attached as an appendix
- Activities of the Engineer



- An appraisal of the working relationship with the PIT/ARA on the works contract and with the Contractor which details any specific administrative, supervision or inspection problems encountered, and recommendations on how these may be overcome
- A summary of the work carried out under the TL's other duties, viz. review of proposed changes to the design of the Works, and their revision
- A summary of the supervision staff and any other relevant information, such as visits to Site by Client on the works contract, the TL, meetings held and the availability of facilities etc.
- A summary of the disbursements made to the Consulting Firm.

Site Meetings and other Meetings

The TL shall prepare minutes of Site weekly and monthly meetings, which shall be held on a regular basis, and all other ad-hoc meetings. Minutes of all meetings shall be available for distribution to all the Project Stakeholders, within 24 hours after the meeting.

Completion Report

On completion of the Works Contract (that is, upon the issue of the Taking Over Certificate), the TL shall prepare and submit a Completion Report to the Client. The Completion Report shall contain, at least:

- copies of the partial acceptance certificate, if relevant.
- verified "as-built drawings" showing all revisions to the design of the Works,
- an overview of the actual progress of the Works, including details of reasons for delays and/or extensions of time,
- commissioning reports for the various mechanical and electrical components (if any) of the Works,
- an overview of site safety procedures, any problems in this respect and recommendations for improvements,
- an overview of the Contractor's working practices and resources,
- an assessment of the quality of materials and workmanship, any problems in this regard and recommendations for improvement,
- a snag list/defect Register if applicable,
- details of technical difficulties encountered and how these were resolved,
- details of administrative difficulties encountered and how these were overcome, and
- an appraisal of the strengths and weaknesses of the design of the Works and the Contract Documents, including design details and drawings, final bills of quantities, with recommendations on how improvements can be achieved for future similar contracts,
- Financial status of the Civil Work Contract, to date.

Quality Assurance Dossier

In addition to the Completion Report, the TL shall prepare and submit a comprehensive Quality Assurance Dossier containing all original requests for inspections, approvals, test forms and certificates relating to the construction of the Works, and to the materials and manufactured products incorporated into the Works. Documentation in the QA Dossier shall

include, but not limited to:

- all manufacturer's test certificates for materials;
- performance test certificates and warranty agreements, where applicable, for mechanical, and electrical components (if any) of the Works;
- test results and approvals for:
 - earthworks (grading, compaction etc),
 - foundation tests
 - concrete (cement, aggregates, mix designs, strength, formwork, reinforcing steel etc),
 - utility connection tests reports
 - manufactured products
 - any other tests required as per Technical Specifications
 - final Energy efficiency report and certification;
- Maintenance manuals for any upgraded utilities networks and/or equipment.

Inspection Reports during the DNP

During the DNP, TL shall prepare and submit Quarterly Inspection Reports, within 2 weeks of carrying out each required Site Inspection.

Each Inspection Report shall detail all defects found, remedial measures proposed, and the Contractor's response thereto. It shall also report on the condition of the Works, particularly in respect to the operation and maintenance by the beneficiary institutions, and any bad practices in this regard.

Final Completion Report

TL shall prepare and submit a Final Completion Report (FR) to the PIT after the issue of the Final Completion Certificate by the end of the Engineer's assignment.

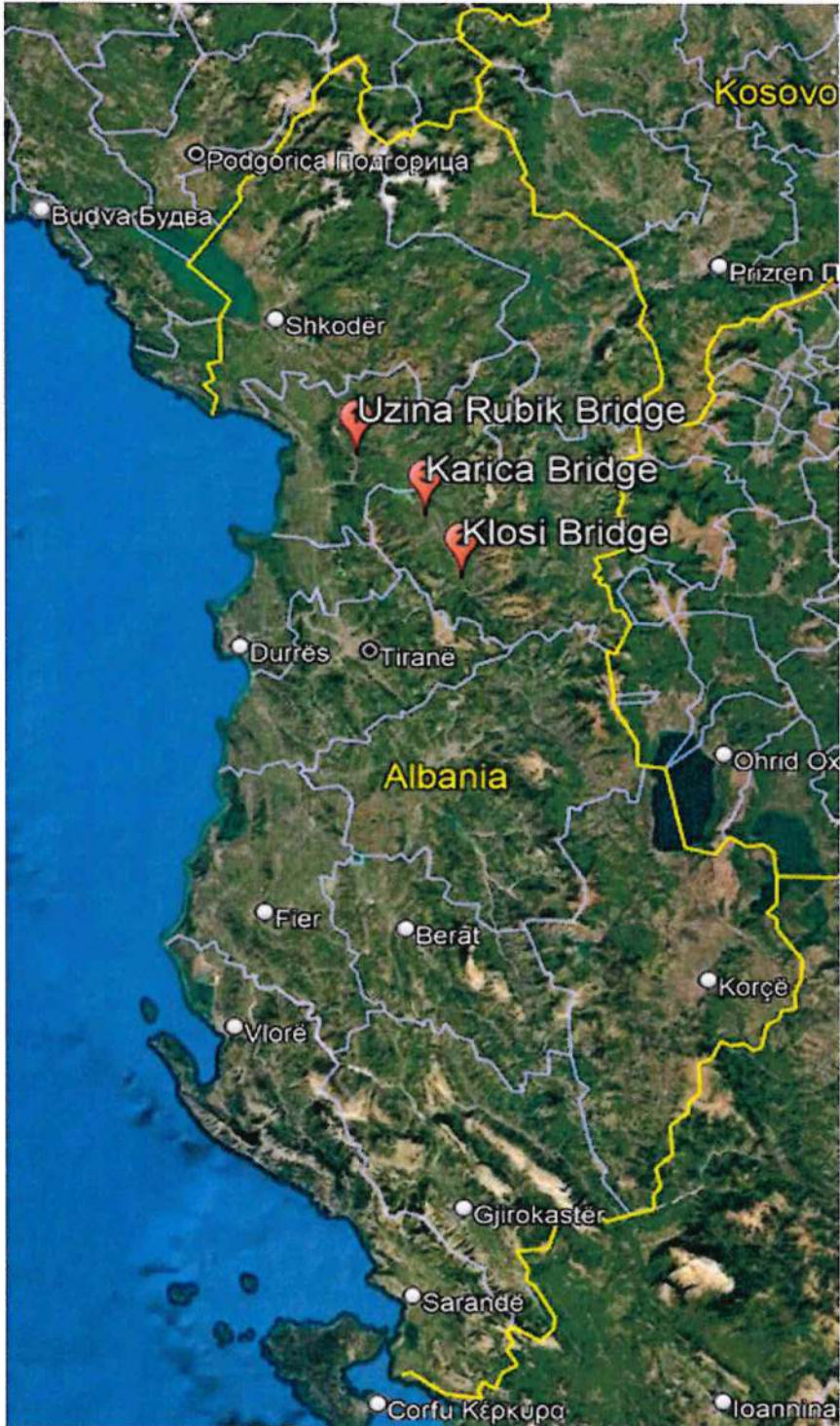
The FR shall summarize information on the Engineer's activities carried out throughout his assignment period and demonstrate that the Engineer's obligations under the Service Contract have been fulfilled with due diligence, as appropriate.

The FR shall be divided into the following, but not limited to, sections:

- Executive Summary
- Engineer's Services during the supervision; in particular, shall contain details of all remedial works carried out by the Contractor to rectify any defects found and shall comment on and make recommendations with regard to the Beneficiary institution's operation and maintenance practices.
- Financial status of the Project, related to the civil works contract disbursements and pending Contractor's/ Client's claims, if any;
- Financial status of the Service Contract;
- Lessons learnt and Engineer's final recommendations.
- Assessment of the Contractor's Performance.



ANNEX II – OVERVIEW OF PROJECT MAP - Rubiku Bridge, Klosi Bridge, Karica Bridge.



[Handwritten signatures in blue ink]