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ENVIRONMENTAL AND SOCIAL ASPECTS
MANAGEMENT PLAN (ESAMP) CHECKLIST
FOR THE RECONSTRUCTION OF
"PETAR CHAULEV" STREET
URBAN COMMUNITY (UC) VLAE - 1
MUNICIPALITY OF KARPOSH



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## ENVIRONMENTAL AND SOCIAL ASPECTS MANAGEMENT PLAN (ESAMP)CHECKLIST Reconstruction of "Petar Chaulev"Street in Karposh Municipality

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#### **ABBREVIATIONS**

E&S Environmental and Social

EIA Environmental impact assessment ESF Environmental and social framework

ESMF Environmental and Social Management Framework
ESAMP Environmental and Social Aspects Management Plan

ESS Environmental and social standards

EU European Union H&S Health and safety

LRCP Local Road Connectivity Project

MOSHA Macedonian Occupational Safety and Health Association

MTD Material safety data MT Ministry of Transport

OSH Occupational safety and health
PMU Project Management Unit
PIU Project Implementation Unit
PPE Personal protective equipment

RM Republic of Macedonia

RNM Republic of North Macedonia

WB World Bank

#### 1. Introduction

The road infrastructure in the Republic of North Macedonia consists of national, regional and local roads, of which approximately 65% of the total length of all roads is local. National and regional roads are under the jurisdiction of institutions and enterprises at national level, while local authorities are responsible for the infrastructure of local roads.

The local road network is in a poor condition, as a result of unsatisfactory road maintenance due to the lack of finances, mainly due to the weakness of investments in the transport and distribution sector, etc. The main reason for the poor condition of roads is that each region of the Republic of North Macedonia manages different financial capacities, which is why certain regions do not have enough financial resources to upgrade/reconstruct the existing roads that lead to hospitals, schools and markets, so this issue brings further social problems.

An investment worth 70 million euros provided by the World Bank will be realised by the Ministry of Transport through the implementation of the Local Road Connectivity Project (LRCP) for the purpose of reconstructing the existing local road infrastructure (urban/rural streets, regional and local roads), footpaths, street lighting, drainage and municipal staff capacity building.

### 2. Environmental category

In order to address the potential environmental and social problems arising from the Project, in October 2019, an Environmental and Social Management Framework (ESMF) was prepared (as part of the LRCP of MT), in accordance with the requirements of the World Bank by an Environmental and Social Aspects Expert (ESAE). ESMF is a tool for evaluation and management of environmental and social standards, which enables the implementation of an in-depth analysis of environmental and social problems.

The preliminary screening according to the World Bank's risk classification determined two risk categories of sub-projects: significant or moderate risk, for which different due diligence instruments should be prepared.

<u>"Significant risk projects"</u> require site-specific ESAMPs, which should contain site-specific information, as well as mitigation measures and a monitoring plan.

<u>"Moderate risk projects"</u> require the preparation of an ESAMP Checklist, which identifies the potential opportunities for improving the environment and recommends measures to prevent, minimise and mitigateany adverse environmental and social impacts.

Table 1Environmental screening for LRCP sub-projects

Types of project activities	Necessary documents for environmental impact assessment	Applicable to:
1	Environmental and Social Aspects Management Plans (ESAMPs) for each individual upgrade (sub- project)	Upgrading works on local roads (interventions in the body and structure of the road, in addition to the replacement of pavement, whereby upgrading works serve to strengthen the body of the road and install new pavements).
2	ESAMP Checklist	Reconstruction of existing local roads/streets (improving the condition of the road without changing the basic functional characteristics – changing the asphalt layer and replacing it with a new one, patching and other works on the road surface, etc.)

### 3. Project location

The project activities for the reconstruction of "Petar Chaulev" Street will take place on the territory of the Municipality of Karposh. The municipality of Karposh is one of the ten municipalities that form the City of Skopje. It is located in the central part of the city, and borders the municipalities of Saraj and Gjorche Petrov to the west, the municipality of Chucher Sandevo to the north, the municipality of Butel to the northeast, the municipalities of Chair, Centar and Kisela Voda to the east and the municipality of Sopishte to the south. According to the 2002 census, the Municipality of Karposh had a population of 59,810 inhabitants.

The project area where the project activities for the reconstruction of "Petar Chaulev" Street will take place is located in the Municipality of Karposh, in the central part of the City of Skopje (Figure 2).

In accordance with the needs of the Municipality of Karposh and in accordance with the standards and norms for design and other technical regulations, as well as the legal regulations, the Law on Building, the Law on Spatial and Urban Planning, the Law on Environmental Protection and other laws and regulations, a Basic Project for the reconstruction of "Petar Chaulev"Street - UCVlae I, Municipality of Karposh was prepared. According to the on-site situation, the locality subject to the Project is located within the territory of the Municipality of Karposh - Skopje.

The length of the street to be reconstructed is 567.44m in total. The project scope area is located in the settlement of Vlae I - Municipality of Karposh.

The street is located in a mixed zone of individual housing in houses, residential buildings and commercial activities.

Micro location layout of the street:

- on the east side, it is bordered by individual houses;
- on the north side, it is bordered by individual houses;
- on the west side, it is bordered by Boulevard Partizanski Odredi.

#### Macro location layout of the street:

- on the east side, it borders the bed of the Vardar River;
- on the north side, it borders with Aco Shopov Street;
- on the west side, it borders the commercial and residential complex Porta Vlae.



Figure 2Location of "Petar Chaulev" Street due for reconstruction in the Municipality of Karposh.

(source: Google maps)

The current condition of "Petar Chaulev" Street is relatively poor, with longitudinal and transverse cracks, damage and excavations for the installation of an underground atmospheric sewage system (activities already implemented by the municipal services) (Figure 3).



Figure 3(a,b)Local Street "Petar Chaulev" in the Municipality of Karposh

An environmental and social screening was carried out on 03.12.2024 by representatives of the municipality of Karposh and representatives of the Project Implementation Unit for the Local Road Connectivity Road (Environmental and Social Aspects Specialist, Transport Infrastructure Expert and Traffic Expert), whereby the following sensitive receptors shown in the pictures below were found:

- Petrol stationMakpetrol and tank station;
- Zur Market;
- Betting house Zlatna Kopachka;
- Stojche car service;
- Business facility for rental;
- Access to side streets;
- Eurofarm Pharmacy;
- Private healthcare institution Medica Vera;
- Dr. Sanja Dent Dental Office;
- Practice of general medicine Dr. Ofelija;
- Individual housing;
- Oil shop at the end of the street.





























Figures 3-28. Current condition of Petar Chaulev Street and sensitive receptors along the street

It is important to emphasise that Petar Chaulev Street intersects with many side and service streets, and it accepts traffic from Boulevard Partizanski Odredi. It is a street quite heavily loaded with traffic. The street has variable width pavements on both sides, an occasional tree line, atmospheric sewage system and existing street lighting.

This project belongs to Chapter XI - Infrastructure projects, point 1 - Reconstruction of local streets, for which it is necessary to prepare an elaborate for environmental protection. The elaborate for environmental protection was prepared in March 2024, by the consulting company Enviro Resourses DOO from Skopje.

The decision on the approval of the elaborate for environmental protection was issued by the Mayor of the Municipality of Karposhunder archive number 57-428 dated 26.11.2024, for the reconstruction of Petar Chaulev Street (Appendix 3).

According to the Basic Project, neither cutting trees nor damaging roots, nor confiscation of land, demolition of buildings and structures is anticipated.

A detailed description of all project activities is given below in the text that follows.

The sub-projects for the reconstruction of "Petar Chaulev" Street in the Municipality of Karposh will include the following activities:

- Preparatory activities:
  - Marking and ensuring the route (567,44m);
  - Removal of existing asphalt and pavement;
  - Replacement of damaged gutters and adjustment of the height of the existing manholes.
- Reconstruction phase
  - Soil removal;
  - Excavation of the existing asphalt with its foundation;
  - Preparing a buffer layer from crushed stone;
  - Applying asphalt, concrete and bitumen layers;
  - Placing the buffer layer for pavements;
  - Laying behaton pavers and curb stones.
- Operational phase
  - Clearing the construction site;
  - Street maintenance (especially in the winter).

#### **Current condition**

The street has two lanes of constant width. On both sides there are connections from local streets. The pavements are interrupted, that is, they do not extend along the entire length and are of variable width. The pavements at the onset, that is, on the east side, are narrower and made of paver elements, while pavements on the west side are made of asphalt. Judging from a visual point of view, the road structure is in a very bad condition, as well as the curbs, and the pavement made of asphalt is in a poor condition, too.

#### Input for project development

The input for the development of this project is, of course, the project assignment which defines all underlying principles. Other inputs used are: the updated geodetic survey, and valid norms and rules for designing civil engineering facilities.

#### **Technical solution**

After the reconnaissance of the terrain by the surveyors, the creation of a computer model of the terrain was performed and the project design was conceived. The technical solution was taken over from the DUP (Detailed Urban Plan). The axis coincides with the axis of the DUP. The width of the street corresponds to the width on site. The pavements will remain as provided by the design brief. The twisting is placed centrally along the axis and is projected at 2.5% constant along the entire length. The vertical solution, that is, the level line matchesthe existing level lineon site. The connections to theother streets are designed with scraping up to 5m in the part of the intersection. The road structure should contain two layers of asphalt, the lower base layer is of type BNS 22 with a thickness of 7cm and the upper - asphalt layer is of type AB with a thickness of 5cm. The bottom layer is projected as a 30cm buffer layer of natural stone buffer

with a grain size of 63mm. The buffer layer under the pavements is 20cm thick. The pavements are designed with paver elements and asphalt type AB8 with a thickness of 3cm.

#### Drainage

The existing street has anatmospheric sewage system only in the part of the petrol station. This basic project does not include the atmospheric sewage in the project assignment. Atmospheric waters are channelled through the transverse and longitudinal slopes.

## TECHNICAL CONDITIONS FOR THE EXECUTION OF WORKS PREPARATORY WORKS

#### Reconstruction of the route byensuring vertices and main points

Before the start of works, marking and restoring the route shall be performed and the vertices and main points of the route shall be ensured. Ensuring all this should be carried out beyond the belt of works and a separate sketch should be drawn up. This segment also covers the control of transverse profiles on site.

## Demolition of structureson site Description

The works include excavation and dismantling of traffic signs, gutters, concrete channels, shafts for demolishing brick, stone or concrete walls, demolishing existing road structures, removing curbs, demolishing fences, demolishing buildings, demolishing existing slab culverts, pipe culverts and their inlet and outlet heads or other similar obstacles made of material and waste that could interfere, in some way, during the execution of works, i.e. any demolitions neededrelated to the construction of the contracted facility or the extension of the existing roadways and culverts. The works do not include the removal of various installations in use, such as power lines, high and low voltage cables, telephone lines and cables, plumbing installations, cemeteries that need to be relocated or reworked, but include parts of such facilities such as foundations or segments of buildings made of massive stone material, concrete or bricks, etc. which need to be demolished after the relocation or it there is a need to rework the specified types and facilities.

#### **Execution**

The demolition of structures on site should be carried out on all marked or designated areas, as well as on separate places that will be determined by the Supervisory Authority, and which require cleaning, due to the execution of construction works or due to the aesthetics of the arrangement of the immediate surroundings of the road. The excavation and dismantling of traffic signs, guardrails and other fences, barriers, direction signs, kilometre markers, etc. should be done in such a way that all the components are preserved undamaged and can be reused. For this purpose, before dismantling, in agreement with the Supervisory Authority, it should be determined which parts will be preserved, stored and protected from deterioration, and which parts can be thrown away, that is, removed. The storage area shall be determined by the Supervisory Authority, and the contractor shall be obliged to temporarily store the dismantled parts, until takeover is performed by the Investor's representative and takento his warehouses, accessible for transportation. The day of takeover shall be determined by the Supervisory Authority. The demolition of walls and buildings of all kinds should be carried out in a way that will ensure there is no damage done to neighbouring buildings or agricultural land - crops, that is, to the existing road itself. The demolition of existing roads should be carried out in such a way that the area of demolition must be prepared for functional use according to the intended purpose, which is foreseen after the project completion, that is, as determined by the Supervisory Authority. The removal of curbs, gutters, manholes, the demolition of fences and buildings and similar obstacles should be carried out in such a way that the said obstacles are completely removed and do not interfere with the construction, nor the quality of the works, nor the aesthetic appearance of the road and its surroundings. The removal of those parts of the buildings and various types of installations, which due to the construction of the road must be reworked, and whose foundations or massive construction parts cannot be dismantled or cut so as to be removed, should be carried out in full analogy with the rest of the works that will be removed, i.e. cleaning the site. The manner of performing worksshall be determined by the Contractor himself, but he must comply with all regulations for the safety of works and prevent any damage to other people's property and obstruction of it. Any damage that might occur due to the worksshall be exclusively borne by the Contractor. All the material can be used for the agreed works and the Investor shall have no right to demand any payment for it, except for material taken over by the Supervisory Authority. Demolition of buildings shall be carried out in such a way as to preserve the material as much as possible.

#### Arranging the existing roadway - Roughening with profiling, planing (scraping) and cutting

This work covers the arrangement of the existing roadway when it is upgraded, strengthened or widened. For this purpose, the following operations shall be applied: roughening with profiling, scraping and cutting (removal of a part of the existing road). This includes loading and transporting the scraped material, as well as mechanical cleaning of the scraped surfaces.

Roughening by profiling d=0-3cm

Thisshall be carried out by a machine on a cold track for the existing roadway with the depth and width of the surfaces envisaged by the project. The aim is to achieve permissible (minimum) technological thicknesses of the new superstructure layer (levelling layer).

After machine cleaning, the roughened surface must have a homogeneous appearance. The use of defective roughening equipment shall not be permitted.

After roughening by profiling, the cleaned and dust-free surface of the new asphalt layer shall be treated with bitumen emulsion before installation to achieve inter-layer adhesion.

Scraping (planing) of the existing roadway

This shall be done by a machine in a cold procedure. The surfaces and depth of scraping are defined with the project. During the lateral expansion of the existing roadway, stepped scraping shall be carried out in a width of 0.5m and a depth according to the project. The scraped surface must be uniform and with a homogeneous appearance (without distinct uneven furrows). Use of defective equipment shall not be permitted. The scraped material shall be transported far from the route. After scraping, cleaning and dusting shall be performed. The preparation of the scraped substrate before the installation of the new layer shall be done in accordance with the weather conditions.

#### **EARTH WORKS**

#### **Humus excavation**

Excavation of humus in a layer of the projected thickness should be carried out in the belt that covers the earthworks and on the borrow pits. If in the course of the works it is determined that there is a need to excavate humus in a thicker or thinner layer, the Supervisory Authority shall record the changed amount in the construction diary, and the contractor shall act upon that finding. Determining the thickness of humus during construction shall be carried out according to MKS U.B1.024/68 standards. The excavated humus should be deposited on the side near the later incorporation in approximately regular shapes. The humus must not be used as an embankment, and after the completion of earthworks, it must be used for the green areas, borrow pits, etc.

#### Subsoil preparation

After removing the humus, the subsoil of the lower part of the embankmentshall be compacted with suitable mechanical means according to the type of soil material. The required compaction according to the standard Proctor method in layers of 20-30cm shall be as follows:

- For depths up to 2.0m below the level of the roadway 100% of the maximum laboratory compaction = 100%,
- For depths over 2.0m below road level (subsoil) under high embankments = 95% of the maximum laboratory compaction.

The examination shall be carried out every 40-50m<sup>2</sup> of prepared subsoil. Quality control of the material shall be carried out according to the standards: MKS U.B1.010/79; 012/79; 014/88; 016/92; 018/80; 020/80; 024/68; 038/68 and MKS U.E1.010/81, and quality control of the installation of material according to the standards MKS U.B1.010/79; 012/79; 016/92 and 046/68.

#### Fabrication and machine compaction of embankments

Application of and spreading the material for the construction of an embankment shall be carried out in layers of 20-60cm. Depending on the geomechanical characteristics of the material as well as the application of mechanical compaction means, the required compaction can be obtained along the entire depth of the layer. During the construction of the embankment, it is necessary to execute the layers with a suitable decline in order to ensure proper drainage. The material for the embankment must not contain organic impurities. Each compacted layer should be examined, while for large embankments the examination should be performed on every 30m or every 200m<sub>3</sub> of embankment. The test should be performed by removing cylinders or by the calibration sand method, depending on the type of material, and the compaction should be:

- For an embankment with thickness of up to 2m measured from the level line elevation, it should be 100% of the maximum laboratory compaction according to the standard Proctor procedure.
- For embankment layers higher than 2m from the level line elevation, it should be 95% of the maximum laboratory compaction according to the standard Proctor procedure. In addition to compactness, it should have a humidity close to the optimum, and therefore it is necessary to dry or wet the material before starting the compaction of the layer.

#### Planing and roller alignment of the subgrade

After the embankment is completed, the subgrade should be planed and roll aligned along the entire width of the planum. Any irregularities should be cut off with a grader, and the depressions should be filled with fine material from which the embankment is made, so that after rolling the subgrade gets the projected longitudinal and transverse slopes of +/-2cm. By rolling the subgrade, a flat surface without unevenness should be achieved through which the road surface water would flow off. The surface of the subgradeshall be tested with a plate F30cm, while the compressibility module Ms=30MPa shall beestablished with a counter load vehicle. The frequency of the compaction tests shall be carried out every 50-100m, with two tests in close proximity that give the same result. Quality control of the subgrade should be carried out according to the standards: MKS U. B1.010/79; 012/79; 014/88; 016/92; 018/80; 020/80; 024/68; 022/68; 026/68; 030/92; 038/68; 040/68; 042/59.

#### **Executing road shoulders**

The compactness of the manufactured shouldershall be checked by controlling the bulk weight, requiring a compactness of 90% from a laboratory test according to the standard Proctor method. The construction of the shoulders in terms of height should be harmonised with the construction of the upper structure. The fully constructed shoulder should have the slope foreseen with the project and the envisaged compaction level.

#### **UPPER STRUCTURE**

#### Installation of a buffer layer along with spreading and vibrating according to MKS U.E9.020

Crushed stone material is meant to be crushed manually or mechanically with a crusher, which is used for the production of supporting (bearing) bases. The stone from which the crushed stone is obtained must be in good condition, homogeneous, solid, with little water absorption and stable under the influence of ice. The buffer layer should be applied on top of the previous quality made subgrade (with CBR>20%). It should be made of crushed material that should meet the criteria prescribed by the final documentation for the construction and reconstruction of roads in R. Macedonia. Surface stone, or stone containing impurities of clay, iron oxides, granular carbonates, sulphates, bionite must not be used to obtain the crushed stone, to such an extent that it is not subject to decay under the influence of moisture, ice, etc. By applying this granulometric composition of crushed stone material with good compaction of the layers, the substrateshall have the least voids. After planing and rolling the subgrade, the preparation of the buffer layer of crushed stone material shall begin. After spreading and vibrating the crushed stone in layers of about 15 cm, the buffer layer must have the intended thickness and the correct profile according to the project with an accuracy of +/-1 cm. When testing the required density of the buffer layer, it is required that the compressibility modulus is not less than 30 MRa/cm<sub>2</sub>.

Supply and placement of MB-40 concrete curb stoneson MB-20 concrete base

Concrete curb stonesare made of concrete MB-40 with dimensions according to the project, and the same shall be laid on a substrate of concrete MB 20. Curb stones shall be laid on a fresh concrete substrate and the same should be cleaned beforehand if curb stones are smeared with mud in order to enable a better connection with the concrete base. The joints shall be filled with cement mortar 1:3. 11

#### Placement of prefabricated concrete elements (behaton)

These elements shall be placed as prefabricated, from MB 40 concrete, according to a previously established draft and according to concrete-specific standards. Quality control of the finished elements shall be carried out according to concrete-specific standards. The installation shall be carried out according to the projected elevations given in the project.

Upper bearing bases of bituminous granular stone materials produced in a BNS hot procedure Contemporary upper load-bearing bases of bituminous granular stone materials produced in an asphalt base according to the hot procedure defined in the MKS U.E9.021/86 standard.

In the technical specifications, the upper bearing surfaces are designated as a bituminous base layer with the abbreviation BNS. The division of BNS is carried out according to the largest diameter of the grain in the stone material, into the following types:

BNS 22 with grains from 0 – 22mm.

The manufacturing of BNS includes the procurement of standardised stone fines and binding agents (bitumen), the production of asphalt mixtures for BNS, the installation of asphalt mixtures for BNS, according to the standard MKS UE9.021/86and the conditions of the roadway construction project. The production and installation of the asphalt mixture for BNS shall be carried out in favourable weather conditions, without precipitation and when the temperature of the substrate and the air (without wind) is +5°C. The bituminous upper bearing bases, depending on the type of layer, shall be applied accordingly, from very heavy to light and very light traffic load. As a rule, these are installed above the lower support (bearing) base.

#### **Basic materials**

Standardised stone aggregates, sand, fillers and binding agents—bitumen shallbe used as basic materials for the production of asphalt mixtures for BNS.

#### Stone aggregates

Depending on the traffic load group (very heavy, heavy, medium, light, very light) stone aggregates shall be applied according to the technical conditions given by the Investor.

#### **Binding agents**

Different types of bitumen shall be used for the production of asphalt mixtures for BNS (BIT 60; BIT 90; BIT 130 and BIT 200). The type of bitumen applied shall depend on the traffic load group. The type of applied bitumen shall depend on the thickness of the layer as well as the weather conditions.

#### Technological layer thicknesses for different types of BNS

The thickness of the BNS shall depend on several factors, such as traffic load, the bearing capacity of the buffer layer, local conditions, climate, etc. The thickness shall be determined by dimensioning in the road construction project. The smallest thickness of the layer mainly depends on the production process, installation and the very type of BNS defined by the granulometric composition of the stone aggregate.

#### Previous proven composition for the production and installation of asphalt mixture for BNS

The physical-mechanical properties of the constructed BNS layers depend, first of all, on the quality of the basic materials (fine stone, sand, filler and bitumen), the correctly selected

granulometric composition, the amount of binding agents, the method and mechanical equipment for the production of asphalt mixture and its embedding, the weather conditions, the bearing capacity and the cleanliness of the layer above which it is being embedded. To define the quality of the asphalt mixture for individual BNS types, a preliminary composition of the asphalt mixture is made (MKS UE9.021/86, point 7) - a preliminary formulation. The previous composition with proven physical-mechanical properties shall be approved by the Supervisory Authority. The previous composition (formulation) shall also contain all the certificates for the basic materials from which the BNS will be produced. The contractor shall be obliged to submit the previous composition to the Supervisory Authority 15 days before asphalting. After the approval of the previous composition by the Supervisory Authority, the construction of a trial section shall begin. The choice of the place for the trial section shall be defined by the Supervisory Authority. The trial section serves to determine the technological process of producing the asphalt mixture for the appropriate BNS (through the asphalt base), its transport to the place of embedding (paver, compacting means, method of rolling, number of passes, flatness of the layer, electronic guidance of the finisher's trowel, etc.). With a record of the production and installation of the asphalt mixture for BNS, and based on the laboratory results of samples taken for BNS from the built-in layer of the trial section, which must meet the conditions shown in the table, the proof procedure for the production and installation of asphalt mixture for BNSshall be completed. For each change in the composition of the proven working formulation, the procedure shall be the same as for the first trial of the working composition for production, transport and installation, that is, a new trial section must be made.

#### Embedding and compaction of the asphalt mixture (BNS)

The surface on which the BNS is embedded must be clean, dry and technically approved (compactness, flatness, etc.). The supervisory authority shall approve the start of the embedding procedure. Before embedding (as required by the Supervisory Authority), the dry, clean and compacted surface shall be promptly and evenly sprayed with a bituminous agent that will provide the necessary interlayer adhesion bond. As a rule, the bituminous agent shall either be an unstable bitumen emulsion (0.25-0.50 kg/m²) or less diluted bitumen. Right before embedding the asphalt mixture for BNS, the bituminous agent for the interlayer adhesion bond must be completely dried out (evaporated) and well adhered to the surface of the substrate. Application of asphalt mixture on insufficiently dry bitumen emulsion is prohibited. Embedding shall be carried out mechanically and with a finisher that corresponds to the capacity of the asphalt base.

#### Asphalt concrete finishing layer (A.B.)

Hot-mix asphalt concrete is used as a finishing layer in road constructions. Manufacturing and embedding are defined by the standard MKS U.E4.014/90. The installation of asphalt concrete includes: procurement of standardised stone fine, binding agent (bitumen), production, transportation and embedding of asphalt concrete mixture in the final layer of the road structure. Asphalt concrete installation shall be carried out in favourable weather conditions, without precipitation and wind, and at an air and substrate temperature above 5°C. Depending on the type of crushed stone used and the type of binding agent (bitumen), asphalt concretes are used as finishing layers of roadway structures for all groups of traffic loads, from very heavy, heavy, medium, light to very light loads.

#### **Basic materials**

Standard stone aggregates, sand, fillers and binding agents - bitumen shall be used as basic materials for the production of asphalt mixture for A.B.

#### Stone aggregates

Depending on the traffic load group (very heavy, heavy, medium, light, very light) stone aggregates shall be applied according to the technical conditions given by the Investor

#### Binding agents

Different types of bitumen shall be used for the production of asphalt mixtures for A.B. The type of bitumen applied shall depend on the traffic load group. The type of applied bitumen shall also depend on the thickness of the layer as well as the weather conditions.

#### Technological layer thicknesses for different types of A.B.

The thickness of the A.B. depends on several factors, including traffic load, the bearing capacity of the buffer layer, the local conditions, the climate, etc. The thickness shall be determined by dimensioning in the road construction project. The smallest thickness of the layer mainly depends on the production process, embedding and the very type of A.B. defined by the granulometric composition of the stone aggregate.

#### Previous proven composition for production and installation of asphalt mixture for AB

The physical-mechanical properties of the constructed A.B. layers depend, first of all, on the quality of the basic materials (fine stone, sand, filler and bitumen), the correctly selected granulometric composition, the amount of binding agents, the method and mechanical equipment for the production of asphalt mixture and its embedding, the weather conditions, the bearing capacity and the cleanliness of the layer above which it is being embedded. To define the quality of the asphalt mixture for individual BNS types, a preliminary composition of the asphalt mixture is made (MKS UE9.021/86, point 7) - a preliminary formulation. The previous composition with proven physical-mechanical properties shall be approved by the Supervisory Authority. The previous composition (formulation) shall also contain all the certificates for the basic materials from which the A.B. will be produced. The contractor shall be obliged to submit the previous composition to the Supervisory Authority 15 days before asphalting. The trial section serves to determine the technological process of producing the asphalt mixture for the appropriate A.B. (through the asphalt base), its transport to the place of embedding (paver, compacting means, method of rolling, number of passes, flatness of the layer, electronic guidance of the finisher's trowel, etc.). With a record of the production and installation of the asphalt mixture for A.B, and based on the laboratory results of samples taken for A.B. from the built-in layer of the trial section, which must meet the conditions shown in the table, the proof procedure for the production and installation of asphalt mixture for BNS shall be completed. For each change in the composition of the proven working formulation, the procedure shall be the same as for the first trial of the working composition for production, transport and installation, that is, a new trial section must be made.

#### Embedding and compaction of the A.B. asphalt mixture

The surface of the substrate on which the asphalt concrete layer will be embedded must be prepared in time; it must be dry, clean and timely sprayed with anionic unstable emulsion or diluted bitumen - DB, that is, with a suitable agent for adhesive interlayer permanent bond. The surface directly in contact with the finisher's trowel must be dry (the water from the unstable anionic emulsion must be evaporated). The quantity of the required unstable anionic emulsion should approximately amount to 1.3 to 1.5 kg/m2. Embedding shall be performed by a machine and a finisher with at least one vibrating tamp beam, with an effect of at least 85% compaction of a layer with a thickness of 6.0cm. Manual embedding is generally prohibited. The Supervisory Authority, by way of derogation in case of an inaccessible place, may authorise manual embedding. Compaction in such a case shall be done with appropriate compaction means. When embedding an asphalt mixture, the finisher shall be directed towards the rise of the road level. As a rule, the asphalt concrete layer is applied in one layer and along the entire width of the roadway in the case of a two-lane roadway. Any interruption of works should be carried out along the entire width of the planum. The transverse layer, which occurs in this case, should be perpendicular to the axis of the road and cut vertically. When continuing application, the "working" joint must be evenly coated with bitumen emulsion or with a spread of diluted bitumen, and the environment of the "working" joint heated by indirect heating. The heating burners for heating the finisher's trowel (with propane - butane gas) must be in proper working order, and the trowel heated to the temperature of the asphalt-concrete mixture. The compacting rollers for the joint must provide gradual "densification" (compaction) of the layer to the required degree of compaction along the entire projected width of the roadway. The rolling always starts from the lower to the higher edge of the roadway. Inaccessible places for rollers must be compacted by machine, with suitable compacting means, to the required degree of compaction. Applying a new layer or the release of traffic on the constructed asphalt concrete layer can begin when the temperature along the entire thickness of the layer reaches about 20°C.

#### Raw materials and auxiliary materials

In order to determine the necessary material resources for this project as an infrastructural part of the local road network, separate estimates were made for all individual positions, and based on them, a general summary estimate was established, by which specific results were obtained for the quantities in the basic project. The construction waste created during the implementation of the project shall be taken over by the contractor and safely transported for disposal or properly stored and properly used by the contractor. During the implementation of the project, i.e. the production of asphalt and similar materials, only existing asphalt bases that have an environmental permit for work in accordance with the national legislation shall be used. During construction activities, some construction waste (removed asphalt layer, soil material, etc.) will be generated. The contractor should act in accordance with the Law on Waste Management and all activities undertaken should be in accordance with the Investor and the Public Utility Companies. As for the projected activities, the contractor should prepare a plan for the organisation of activities, which will define the timeframe, the dynamics and the method of realisation of construction activities, such as procurement of construction material, the method of implementation, the quantities of construction material needed, etc.

The contractor shall define the locations of the associated plants (asphalt plant, access roads, etc.) and determine if there are sensitive areas nearby, where additional measures to reduce the impact should be foreseen.

	PRE-MEASURE OF WOR	KS			
Basic	Project for the reconstruction of "PETAR CHAULEV" Street in tech. number 188/24	n UC VLAE I,	Municipali	ty of Karp	osh with
POS.	DESCRIPTION OF WORKS	Unit measure	Quantity	Unit price	Total
	PREPARATORY WORKS				
1.1	Marking and securing the route according to the attached graphic and numerical data	m1	567		
1.2	Breaking concrete surfaces with loading and transportation to a landfill up to 5km at the choice of the Investor. (Placed on the curb of the street to alleviate the height difference between the street and the pavement)	m3	2		
1.3	Cutting asphalt surfaces with a road milling cutter up to 7cm	m1	150		
	TOTAL PREPARATORY WORKS				
II	LOWER STRUCTURE				
II.1	Mechanical removal of existing curbstones from the route with loading and transportation to a landfill up to 5km at the choice of the Investor.	m1	919		
II.2	Mechanical removal of existing small curb stones from the route with loading and transportation to a landfill up to 5km at the choice of the Investor	m1	285		
II.3	Mechanical removal of existing concrete behatonpavers with storage in pallets and transportation to a landfill up to 5km at the choice of the Investor	m2	690		
11.4	Mechanical removal of asphalt surfaces, with loading and transportation to a landfill up to 5km at the choice of the Investor.	m2	4025		
II.5	Mechanical excavation of earth material to the required depth with loading and transportation to a landfill up to 5m at the choice of the Investor.	m3	2160		
11.6	Subgrade manufacturing	m2	5850		
	TOTAL LOWER STRUCTURE		•		•
    .1	UPPER STRUCTURE  Roughening asphalt surfaces from 0-5cm to 5m, at street entrances intersecting with Petar Chaulev Street	m2	581		
III.2	Procurement, transportation and installation of buffer material from crushed stone with grain size 0-64mm, embedding in layers to the required compaction of 100MR, levelling to an accuracy of ±2cm and preparation for asphalting, d=30cm.	m2	1490		
III.3	Procurement, transportation and installation of buffer material from crushed stone with grain size 0-64mm, embedding in layers to the required compaction of 100MR, levelling to an accuracy of ±2cm, d=20cm.	m3	360		
III.4	Procurement, transportation and installation of concrete curb stones 24/18/100cm of MB40, placed on a concrete base of MB20 with d=10cm and final grouting.	m1	572		
III.5	Procurement, transportation and installation of concrete curb stones 18/24/100cm of MB40, placed on a concrete base of MB20 with d=10cm and final grouting.	m1	338		
III.6	Procurement, transportation and installation of small concrete curb stones 20/8/100cm of MB40, placed on a concrete base of MB20 with d=5cm.	m1	430		

	the allege of the second of th	. •	20	
111.7	Levelling existing shafts to the required elevation level by	piece	20	
	breaking the slab and walls and re-formwork, with F16			
	reinforcement in two directions and applying concrete			
	with H630.			
111.8	Procurement, transportation and installation of a	m2	4060	
	bituminous BNS base layer 22 with a thickness of 7 cm.			
111.9	Procurement, transportation and installation of a	m2	4060	
	bituminous AB base layer 11 with a thickness of 5 cm.			
III.10	Procurement, transportation and installation of a	m2	1100	
	bituminous AB8 base layer with a thickness of 3 cm.			
III.11	Procurement, transportation and installation of concrete	m2	690	
	behaton pavers 20/10/6 placed on a layer of gravel with a			
	thickness of 3 - 5cm and final compaction with a vibrating			
	plate and grouted with fine sand.			
	TOTAL UPPER STRUCTURE		•	•
CONST	TRUCTION WORKS			
- 1	PREPARATORY WORKS			
П	LOWER STRUCTURE			
Ш	UPPER STRUCTURE			
	TOTAL			
	18% VAT			
	GRAND TOTAL			

#### **Green areas**

Planting greenery in the city space underlines the recognition of the basic criteria for the selection and use of vegetation in function of incorporating the ecological dimension of the greenery. As a result, ecological balance will be ensured in the extremely complex urban system and the effectiveness of greenery will increase.

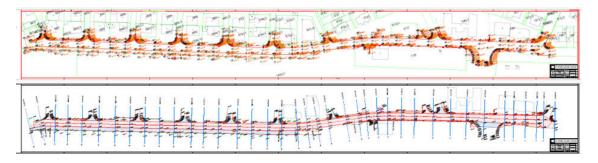
In order to preserve and improve the quality of the environment, solutions should be sought in a new concept of spatial-functional organisation through the integration of urban functions from the aspect of greenery planning, which means the structuring of green areas analogous to residential and central activities, across different gravity fields.

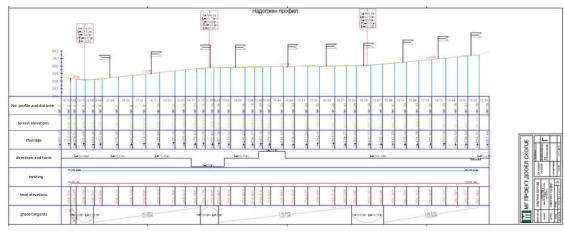
JP Parks and Greenery, Skopje, is in charge of maintaining the existing greenery, planting new green areas, rehabilitating tree rows (colonnades), planting new seedlings, horticultural landscaping with dendro material, as well as restoration of degraded and damaged greenery. The protection and preservation of all greenery is a task carried out by the custodian service.

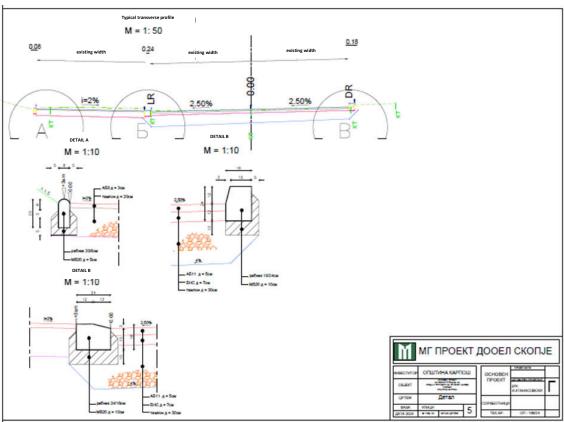
On the roadway itself, there are deciduous and evergreen trees that would not be threatened by the execution of this project because these are located in yard and green areas.

Geodetic works

SL Name	Station	×	Y
1	0+000.00	7,531,613.11	4,651,500.89
2	0+012.13	7,531,601.69	4,651,504.96
3	0+019.55	7,531,594.70	4,651,507.45
4	0+031.66	7,531,583.29	4,651,511.52
5	0+044.34	7,531,571.34	4,651,515.77
6	0+053.99	7,531,562.26	4,651,519.01
7	0+075.98	7,531,541.70	4,651,526.83
8	0+095.20	7,531,523.74	4,651,533.67
9	0+112.22	7,531,507.69	4,651,539.35
10	0+130.94	7,531,490.05	4,651,545.59
11	0+151.16	7,531,470.98	4,651,552.33
12	0+165.16	7,531,457.78	4,651,557.00
13	0+179.93	7,531,443.83	4,651,561.83
14	0+191.06	7,531,433.16	4,651,565.01
15	0+202.65	7,531,421.92	4,651,567.82
16	0+211.09	7,531,413.66	4,651,569.53
17	0+224.62	7,531,400.32	4,651,571.83
18	0+244.22	7,531,381.00	4,651,575.07
19	0+256.27	7,531,369.11	4,651,577.06
20	0+267.16	7,531,358.38	4,651,578.93
21	0+278.09	7,531,347.71	4,651,581.31
22	0+294.93	7,531,331.58	4,651,586.11
23	0+309.92	7,531,317.45	4,651,591.14
24	0+327.25	7,531,301.14	4,651,596.97
25	0+342.41	7,531,286.86	4,651,602.07
26	0+363.01	7,531,267.46	4,651,608.99
27	0+378.77	7,531,252.62	4,651,614.29
28	0+391.99	7,531,240.16	4,651,618.74
29	0+410.77	7,531,222.48	4,651,625.05
30	0+426.40	7,531,207.76	4,651,630.31
31	0+442.29	7,531,192.80	4,651,635.65
32	0+458.42	7,531,177.60	4,651,641.08
33	0+474.38	7,531,162.58	4,651,646.45
34	0+491.92	7,531,146.05	4,651,652.35
35	0+510.06	7,531,128.98	4,651,658.44
36	0+525.50	7,531,114.44	4,651,663.64
37	0+539.20	7,531,101.53	4,651,668.24
38	0+554.20	7,531,087.12	4,651,672.28
39	0+567.44	7,531,073.95	4,651,673.67







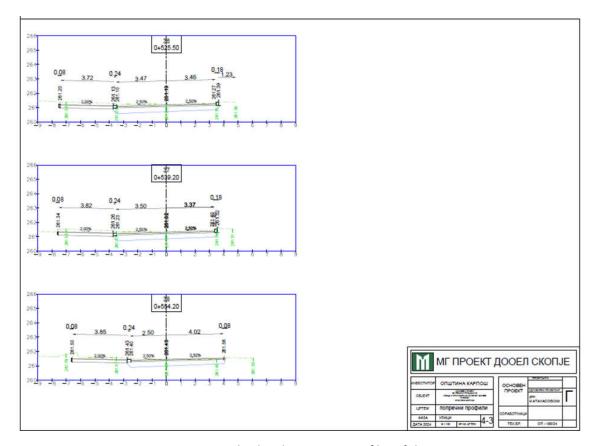


Figure 29. Longitudinal and transverse profiles of the street

Mount Vodno has been declared a protected area in category V - protected area. This protected area is at a distance of about 3km south of the project site for the reconstruction of "Petar Chaulev"Street (Figure ). The projected construction works will not impact the protected area in any way. There are no water bodies in the vicinity of the street. The Vardar River is at a distance of 500m from the construction site in question.

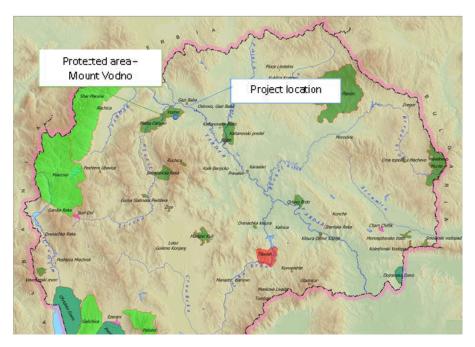


Figure 30 Map of protected areas in the wider environment of the project site in the Municipality of Karposh

To ensure that potential road safety risks to road users and affected communities are prevented and mitigated, a road safety audit will be carried out by an independent qualified team of auditors engaged by the Project Implementation Unit (PIU) (design stage audit). A formal report will be drawn up for the audit of road safety, which shall present the established omissions and gaps in road safety, as well as recommendations for their elimination or reduction of their negative impact on traffic safety. The OSH measures adopted by the Municipality will be implemented within the project. The proposed OSH measures will be presented in the table for ESAMP.

During street reconstruction activities, access will be limited according to the temporary changes to the traffic regime in the course of the reconstruction of Petar Chaulev Street.

### 4. Potential environmental and social impacts

It is expected that the potential risks and impacts of the implementation of the LRCP for smaller scale projects will be temporary and/or reversible, with a small magnitude and specific to the location. Such impacts are related to:

- Noise and vibrations;
- Dust and gas emissions;
- Different types of hazardous and non-hazardous waste;
- Potential soil pollution (incidental leaks of motor oils, lubricants, fuel, etc...);
- Possible temporary disruption of current traffic;
- Aggravated access to homes, entrances, garages, Makpetrol petrol station, Zur Market, Eurofarm pharmacy, health clinics, Makpetrol petrol station, car service, motor oil store, side streets, boulevardPartizanskiOdredi;
- Traffic safety and occupational safety and health of people using the street;
- Safety and health at work of hired workers;
- Local negative impact on soil and water;

- Damage to access roads;
- **Cumulative** impact from the performance of construction works by third-party contractors (operators) who are not part of this project; and
- Temporary land use if necessary.

Land acquisition is not foreseen for this sub-project because the property of the land where the local streets are located is owned by the state. For the Contractor's needs to temporarily set up machinery and equipment at a location adjacent to the project, which is privately owned (if necessary), the Contractor shall sign an Agreement with the owner of the plot for temporary land use during the implementation of the project. The Contractor shall give preference to land having impervious parking surface with surface runoff collection and treatment/sewer connection, if any. The agreement will define the terms and obligations for the use of the land or other premises (e.g. garage, storage space, etc.) in accordance with the prepared RPR for the project. In addition, the full fee shall be paid prior to access to the respective land. The Contractor shall not be permitted to occupy land from a third party without the prior written consent of the third party (for example, an agreement). Any damage to third parties caused by the Contractor shall be compensated solely by the Contractor.

### 5. Purpose of the ESAMP Checklist

The ESAMP checklist shall be used for Local Road Reconstruction projects - simple, less risky subprojects, usually consisting only of asphalt replacement or exit road drainage. The ESAMP Checklist represents "pragmatic good practice" and is designed to be easy to use and compatible with the WB protection requirements and the environmental and social standards framework.

This document will assist in evaluating potential environmental impacts associated with the proposed sub-project, in determining potential opportunities for environmental improvement, and in recommending measures to prevent, minimise, and mitigate adverse environmental and social impacts.

The ESAMP checklist is a document prepared by the user, who is also liable for it. The process of designing and implementing the works foreseen in the sub-project will take place in three stages:

- 1) Phase of general identification and scope, in which the necessary road reconstruction works will be carried out. In this phase, the potential negative/adverse impacts can be determined, based on the works performed. Parts 1, 2 and 3 have been produced as a draft version. The second part of the ESAMP Checklist contains all typical activities and their connection to usual environmental problems and the corresponding mitigation measures.
- 2) This phase comprises the technical project specifications and the cost estimate for construction works and other services related to the sub-project. In this phase, the public call, the awarding of the contracts for the performance of the works and the obligations determined in the Contractor's agreement are defined. The ESAMP Checklist should be published in the public call phase.

3) During the implementation phase, the Contractor implements the mitigation and monitoring measures prescribed in the ESAMP Checklist, while ensuring compliance with environmental standards at the appropriate location (ESAMP Checklist and the Environment, Health and Safety Regulation) and other qualitative criteria, whereby their application shall be checked/monitored by the Supervision Authority, which can be a supervisory engineer and/or a supervisory consultant, hired by side of the Municipality.

During the construction phase of the project, the mitigation and monitoring measures included in the ESAMP Checklist shall be implemented by the Contractor. Compliance with environmental and qualitative criteria shall be examined by the supervisor, that is, the engineer.

The Contractor's environmental compliance shall be demonstrated through monitoring and a mitigation plan. However, overall responsibility for compliance remains with the Borrower/PMU.

The practical application of the ESAMP Checklist shall consist of the implementation of Part 1 regarding the provision and documentation of all relevant site specifics. In the second part, the activities to be undertaken shall be checked according to the foreseen type of activity, and in the third part, the monitoring parameters shall be determined and applied (Part 3) in accordance with the activities outlined in Part 2. Monitoring shall include surveillance over the implementation of the mitigation plan.

The fully completed ESAMP Checklist, presented in a table for each type of works, shall be attached as an integral part of the tender (public call) procedure and the contracts for the execution of works and a document that is analogous to all the technical and commercial conditions that the contracting parties have to sign.

### 6. Application of the ESAMP Checklist

After completing the Environmental and Social Screening Checklist by the Environmental and Social Expert, the project shall be classified as a "moderate risk project".

The ESAMPChecklist is used for projects that include **only the reconstruction of existing local roads/streets** (changing the asphalt layer and replacing it with a new one, re-paving, repairing potholes, patching and any other maintenance of the road surface).

The checklist is divided into 4 segments:

- Introduction, in which the project is presented, with a definition of the ecological category and an explanation of the concept of the ESAMP Checklist;
- Part 1 Descriptive part of the project ("site passport"), in which the location, the legislation, the description of the project and the public hearing process are given;
- Part 2 Analysis of the environmental and social aspects of each activity through closedended questions, followed by mitigation measures for each activity;
- Part 3 Plan for monitoring the activities in all three phases: preparation, construction and operation.

The ESAMP Checklist for the street reconstruction works includes the environmental and social impacts and the appropriate mitigation measures in order to minimise the environmental impact (air, soil and water pollution). The list also provides hazardous and non-hazardous waste

management practices and measures to control construction site discharges. The ESAMP Checklist also contains steps that should be taken in the event that objects of cultural or archaeological significance exist or are found at the reconstruction site.

#### 7. Grievance Mechanism

The PMU has introduced a GrievanceMechanism within the MT to ensure that all concerns and complaints, particularly from stakeholders and communities, are addressed. In order to receive comments from stakeholders (local citizens and workers at project sites), the PMU has established a grievance mechanism procedure that includes a complaint form for the construction phase of the project that will be available electronically on the MT website, the website of the Municipality and the website of the Contractor. Once the draft checklist for the specific location of the ESAMP is prepared, it will be published on the official websites of the Municipality and the Ministry of Transport and Communications within a period of 14 days. During this period, affected local residents and other stakeholders could have a chance to read the document and if they have any queries/comments regarding the projected activities, they could email them through the available Complaint Form to the designated responsible person for environment and social aspects in thePMU. The responsible person in the PMU must respond to any received complaints within a period of 15 days.

A grievance redressal mechanism (GRM) will be set up at municipality level after the Contractor and the supervising engineer are engaged. Before starting the construction works on site, a kick-off meeting will be held to discuss in detail the purpose and function of the GRM. Also, all selected municipalities will appoint a responsible person-municipal official and representatives from the affected local communities for GRM who will remain active during the construction period and they will have links with the local stakeholders and other actors involved in the activities of the project.

A complaint form that can be used during the construction phase shall be prepared for the local population (in case of an incident or damage to private property) and for workers (complaint about lack of protective equipment, increased working hours, work without a rest period, etc.) that will be included in the construction activities.

Before commencing construction activities, the Contractor shall inform the workers of the complaint form and the opportunity to express their complaints and grievances regarding the operations on the construction site. The local population shall become familiar with this opportunity through information published on the InformationBoard within the local community, the website of the Municipality and through local radio or TV stations.

The PMU shall ensure that the Grievance Mechanismaddresses all concerns and complaints, particularly from affected stakeholders and vulnerable groups.

The following steps should be taken to ensure the full functioning of the Grievance Mechanism:

- **Step 1:**Records of received complaints in the register of the Grievance Mechanism;
- **Step 2:**Issuing a confirmation to the person who submitted the complaint about the admittance of the same within 5 days;
- Step 3:Investigation of the complaint allegations;
- Step 4: Resolution of the complaint within 15 days from its admittance;

#### Step 5:Follow-up.

In cases where the complaint/grievance is not completely filled out or is not clear enough, the PMU shall assist and give advice on formulating/supplementing the submitted complaint, so that it can become clear and the PMU can reach a decision, which will be in the best interest of the persons affected by the project.

If the PMU is not able to find a short-term solution to the problems, then long-term corrective measures shall be undertaken to solve these complaints. The applicant shall be informed about the proposed corrective measures and their follow-up within 25 calendar days after the acknowledgment of the complaint. In a situation where the PMU is unable to resolve the particular issue through the Grievance Mechanism or if no action is required, then it will provide a detailed explanation/ justification as to why the matter has not been resolved. The response shall also contain an explanation of how the person/organisation that filed the complaint can lodgeanappeal in the event that the outcome of the procedure is not satisfactory. At any time, the complainants can seek other legal remedies in accordance with the legal regulations of the Republic of North Macedonia, including a formal court appeal.

Complaints can be filed orally, over the phone, in writing (by mail or e-mail) or by filling out the complaint form (Error! Reference source not found. The complaint form will be available on the website of the implementing agencies along with clear information on how feedback, questions, comments, concerns and complaints can be submitted by any interested party as well as information regarding the management of the Grievance Mechanism from PMU and in relation to the procedure and deadlines. Furthermore, the website also provides an opportunity to file a complaint electronically.

Contact person for receiving and responding to complaints	Contact information			
PIU Sashka Bodganova Ajceva	E-mail saska.bogdanova.ajcevaplace@piu. mtc.gov.mk	Tel. 070 858 039		
Municipality of Karposh Jovan Cvetanoski	E-mail: jovan.cvetanoski@karpos.gov.mk	Tel. 078 487 060		

In order to track the complaints received regarding the project, a register of the Grievance Mechanism is projected. Specially nominated staff members will keep records of complaints in the grievance register. This will include:

- Number of complaints;
- Date of accepting the complaint;
- Name of interested party, gender, age and contact information;
- Date of acknowledgment;
- Description of complaint;
- Description of undertaken activities;
- Date of resolution of the complaint.

The PMU will share the Grievance Register with the WB on a monthly basis.

### 8. Monitoring and reporting

To monitor the due diligence, the site supervisor or responsible person appointed by the Municipality, including an environmental engineer and a civil engineer, shall monitor their part of the project activities as specified in the monitoring plan (Part 3).

The tabular parts of the documentshall containall mitigation and monitoring measures explained in detail, in order to be included in the contracts for the performance of works.

Mitigation measures related to project activities include, but are not limited to: use of Personal Protective Equipment (PPE) by site workers, prevention of air pollution, amount of water used and discharged from the site, wastewater treatment, maintenance of prescribed sanitary facilities for workers, collection of waste of various types (soil, metals, plastics, hazardous waste, i.e. paint residues, hydraulic motor oils),waste quantities, the proper organisation of disposal routes and facilities or, whenever possible, the reuse or recycling of waste. Apart from Part 3, the Site Supervisor should also check whether the Contractor is compliant with the mitigation measures from Part 2 as well as the degree of implementation of the mitigation measures.

If non-compliances during the implementation of the ESAMPChecklistare established and/or these are recorded in the monitoring report, the previously provided penalties in the contract shall be activated. In extreme cases, the contract provides for its termination.

Good communication between all involved stakeholders (Contractor, Supervision, municipal staff, PMU from MT and other relevant persons from the Municipality of Karposh) shall becritical to ensure continuous execution of project activities and successful completion of the overall project.

Environmental monitoring during project implementation shall provide information on key environmental aspects of the project, particularly the project's environmental impact and the effectiveness of mitigation measures. Monitoring and reporting of compliance with the Site-Specific ESAMP Checklist shall be provided by the PMU (ES Specialist) and the Supervising Engineer. The ES specialist shall be responsible for preparing Implementation Reports for the ESAMP, including reports on compliance of the project's progresswith the Environment and Social Aspects. The supervising engineer shall report to the PMU on a monthly basis, and the PMUshall submit a Report on ESAMPimplementation to the World Bank twice a year. For short-term activities, the ESAMP Implementation Report shall be prepared every six months (at least once before the completion of the project activities). An acceptable report on the implementation and monitoring of the Environmental and Social Aspects measures by the Contractor or the site supervisor shall be a prerequisite for the full payment of the agreed remuneration, as well as technical quality criteria or quality surveys.

### **ESAMP** Checklist for reconstruction works

PART 1 : INSTITUTIONAL AND ADMINISTRATIVE ISSUES							
Country Republic of North Macedonia							
Name of the	•						
sub-project	Project for connecting local roads, Republic of North Macedonia						
Scope of the sub- project and specific activities	Reconstruction of "Petar Chaulev"Street in the Municipality of Karposh						
Institutional arrangements	WB (Project Team Leader)	Project management		Local Partner and/or Recipient			
(Contact name and details)	Wenyu Jia Phone: / E-mail: wjia@worldbank.org	Maja Lazarevska Tel: +389 2 3145 497 E-mail: maja.lazarevska@piu.mtc.gov.mk		Jovan Cvetanoski phone: +389 7 487 060 E-mail: jovan.cvetanoski@karpos.			
Implementation arrangements (Contact name	Security supervision	Supervision of the local partner		gov.mk Supervision of the local inspectorate	Contractor		
and details)	Not determined Tel: E-mail:	Not determined Tel: E-mail:		Not determined Tel: E-mail:	Not determined Tel: E-mail:		
Implementation arrangements (Contact name and details)	Supervising Engineer shall	the procedure is completed, the name and contact details of the nall be added in the fields below).  Since after the end of the public procurement procedure for the					
	needs of the sub-project.						
Name of the location	Reconstruction of "Petar (	Chaulev"Street in the	Municipality of	Karposh.			
Location description (geographical description)	The description of the presented in Chapter 3 Checklist						
Who owns the land?	Republic of North Macedo	onia					
Geographical description	Country: RNM Region: Skopje Municipality: Karposh Place of residence: City of	Skopje					
LEGISLATION							
To determine national and local regulations and permits that apply to the subproject activity(ies).	<ul> <li>Law on Environment (Official Gazette No. 53/05, 81/05, 24/07, 159/08, 83/2009, 124/2010, 51/2011, 123/12, 93/13, 163/13, 42/14, 44/15 129/15, 192/15, 39/16, 99/18, 89/22);</li> <li>Law on Waters (Official Gazette No. 87/08, 6/09, 161/09, 83/10, 51/11, 44/12, 163/13);</li> <li>Law on Waters (Official Gazette No. 68/04, 71/04, 107/07, 102/08, 134/08, 124/10 and 51/11, 123/12, 147/13, 163/13, 146/15, 192/15);</li> <li>List of types of waste (Official Gazette No. 100/05);</li> <li>Law on Nature Protection (Official Gazette No. 67/06, 16/06, 84/07, 59/12, 13/13, 163/13, 146/15);</li> <li>Law on Protection Against Environmental Noise (Official Gazette No. 79/07, 124/10, 47/11, 163/13, 146/15);</li> </ul>						

- Law on Chemicals (Official Gazette of the Republic of Macedonia No. 145/10, 53/11, 164/13, 116/15 and 149/15);
- Law on Ambient Air Quality (Official Gazette No. 67/04 with amendments in No. 92/07, 35/10, 47/11, 59/12, 163/13, 10/15, 146/15);
- Law on Protection of Cultural Heritage (Official Gazette No. 20/04, 115/07, 18/11, 148/11, 23/13, 137/13, 164/13, 38/14, 44/14);
- Law on Safety and Health at Work (Official Gazette No. 92/07, 98/10, 93/11, 136/11, 60/12, 23/13, 25/13, 164/13);
- Law on Health Protection (Official Gazette No. 07/07, 44/11, 145/12, 87/13);
- Law on Free Access to Public Information (Official Gazette of the Republic of Macedonia No. 13/06, 86/08, 06/10, 42/14, 148/15, 55/16);
- Law on Road Traffic Safety (Official Gazette of the Republic of Macedonia No. 169/15, 55/16);
- Law on Public Roads (Official Gazette of the Republic of Macedonia No. 84/08).

#### **PUBLIC HEARING**

To determine when/where the public hearing was held and what were the comments of the consulted stakeholders

Checklist of the draft environmental and social aspects management plan (ESAMP) (for moderate risk projects) will be available to the public within 14 days, on the website of the Municipality of Karposh(https://karpos.gov.mk/) and on the PIU website (www.wbprojects-mtc.mk), accompanied by a Form for submitting comments (Attachment 1).

The public announcement shall be made with a brief description of the purpose of the project, the project activities and the duration of the activities, the impact on the environment and social activities, the proposed measures, the availability of the ESAMPlist along with the Form for submitting comments on the website of MT and the website of the Municipality of Karposh, and on the Information Board within the Local Community. The announcement shall also contain information about the possibility for citizens to give their opinion/proposals/comments regarding the preparedESAMPlist by filling in the Form for submitting comments and delivering it to the responsible person in MT Mrs. Sashka Bogdanova Ajceva (e-mail: <a href="mailto:saska.bogdanova.ajceva@piu.mtc.gov.mk">saska.bogdanova.ajceva@piu.mtc.gov.mk</a>). The submission form can be completed with full identity or anonymously, and the comment or suggestion should be fully described to be considered in the final version of the Environmental and Social Aspects Management Plan (ESAMP)Checklist.

The public announcement shall be broadcasted on a local radio or TV station and on the Information Board within the Local Community.

Social media of the Municipality of Karposh(Facebook profile:https://www.facebook.com/OpstinaKarpos)shall be used to raise awareness about the implementation of the project and identified risks, influences and measures to reduce the impact of risks.

All relevant comments and suggestions received from stakeholders will be included in the final environmental and social aspects management plan (ESAMP) checklist and will be submitted to the Project Management Unit for approval bodies by the MT environmental expert and a World Bankspecialist. The approved final version of the ESAMPChecklist shall be included in the Grant Agreement with the proponent and the corresponding bidding documents and contract agreements. The final version of the ESAMPChecklist shall be published on the above-mentioned websites (locally and on the website of MT PMU) for the entire duration of the implementation of the project.

## **BUILDING INSTITUTIONAL CAPACITY**

Will there be any capacity building?

[x] N or [] Y

l site activities	Activity	Status	Additional reference
olve any of the lowing potential	A. General Terms and Conditions	[x] Yes [ ] No	See Part <b>A</b>
oblems/risks:	B. General Reconstruction Works		
	Vehicular traffic on the site itself		
	<ul> <li>Increase in the amount of dust and noise due</li> </ul>	[x] Yes [ ] No	If yes, see Part <b>A, B</b> below
	to reconstruction works		
	Creating waste		
	Transportation of materials and waste		
	C. Activities that take place near water bodies, such		
	as rivers, lakes, international waters, etc. (No		
	interventions are planned on water flows near the		
	project sites)	[] Yes [x] No	If yes, see Part <b>A, B, C</b> below
	<ul> <li>Increase in sediments in water bodies</li> </ul>		
	<ul> <li>Changing the water flow</li> </ul>		
	<ul> <li>Water pollution due to temporary waste</li> </ul>		
	disposal or leaks		
	D. Impact on forests and/or protected areas		
	Proximity to declared protected areas	[] Yes [x] No	If yes, see Part <b>A, B, D</b> below
	<ul> <li>Violation of the protected habitats of animals</li> </ul>		
	Cutting down trees/forests		
	E. Impacts on Surface Drainage Systems	[x] Yes [ ] No	If yes, see Part <b>A, B, E</b> below
	F. Proximity to Historic Site(s) or Areas		
	Dialy of downson to large way (value over 1999)	[] Yes [x] No	If yes, see Part <b>A, B, F</b> below
	<ul> <li>Risk of damage to known/unknown historic buildings/areas</li> </ul>		
	G. Traffic and Pedestrian Safety	[ ] N = [ ] N =	
	·	[x] Yes [ ] No	If yes, see Part <b>A, B, G</b> below
	Vehicular traffic on the site itself		

PART 2.1: ENVIRONMENTAL/SOCIAL SCREENING		
The location is in a populated area		
H. Use of Hazardous or Toxic Materials and		
Generation of Hazardous Waste <sup>1</sup>		
<ul> <li>Removal and disposal of toxic and/or hazardous waste during reconstruction activities</li> </ul>	[x] Yes [ ] No	If yes, see Sections <b>A, B, H</b> below
<ul> <li>Storage of motor oils and lubricants</li> </ul>		
I. Installation of electric poles		If yes, see Sections <b>A, B, I</b> below
<ul> <li>Relocation of electric poles</li> <li>Dismantling of electric poles</li> <li>Installation of underground cables on electric poles</li> </ul>	[] Yes [x] No	
J. Acquisition of land <sup>2</sup>	[] Yes [x] No	If yes, see Sections <b>A, B, J</b> below
K. Temporary acquisition of land	[x] Yes [] No	If yes, see Sections <b>A, B, K</b> below

<sup>&</sup>lt;sup>1</sup>Toxic/hazardous materials include, but are not limited to: fuels, motor/hydraulic oils, lubricants, toxic paints, etc.

<sup>&</sup>lt;sup>2</sup>Land acquisition includes displacement of population, changes in lifestyle, disturbance of private property and impact on whether people will move and/or stay or carry out some activity (kiosks) on or near the land

PART 2.2 MITIGATION MEASURES			
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
<b>A.</b> General Terms and Conditions	Community protection and safety and occupational health and safety (OHS) for workers	<ul> <li>Measures for community protection and safety: <ul> <li>(a) The local construction and environmental inspection services and the citizens in the Municipality of Karposh will be notified about the Reconstruction of "Petar Chaulev" Street in the Municipality of Karposh;</li> <li>(b) The people of the Municipality of Karposh will be informed about the works through an appropriate announcement in the media and/or in publicly accessible places (including at the construction site, on the municipal notice board and on the website of the municipality https://karpos.gov.mk/)</li> <li>(c) The contractor must not start performing construction works until the Supervisory Team for Environment, Social Aspects, Safety and Health at Work and Traffic Safety have conducted a field inspection and prepared a Field Report which will confirm that all measures at the construction sitehave been implemented and the same is ready for construction works.</li> <li>(d) The contractor shall organise a meeting with the stakeholders, the community and other interested parties before the onset ofconstruction works (take minutes with a list of attendees and images) to inform them about the construction works, complaints and Grievance Mechanism, etc.</li> <li>(e) People living along the street shall be informed in due time about the schedule of project activities in order to plan their activities accordingly.  Activities:Relocating cars for the smooth execution of construction works; Implementation of the dynamic plan and realisation of activities shall be strictly implemented and monitored in order to minimise the impact, especially at entrances of houses and buildings;</li> <li>(f) In case the municipality hires a third Contractor (operator for any installation), it shall organise a coordination meeting by the Municipality of Karposh, at which representatives of PIU, the Contractor, the Supervision and the third Contractor shall be present, whereby the planned dynamics of the two Contractors will be discussed, the construction works wi</li></ul></li></ul>	

PART 2.2 MITIGAT	PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		<ul> <li>(i) Installation of a Notice Board with basic information about the project, the Contractor and the Supervision of the project site (including telephone contacts)</li> <li>(j) Adequate placement of signs at project sites to inform workers of key rules and regulations to be followed;</li> <li>(k) Adequate marking on and beyond the construction site (part by part) and limiting the speed of vehicles;</li> <li>(l) Providing access to family houses, petrol stations, shops, car service, motor oil shop, practices of general medicine, petrol station tanks, other significant/sensitive facilities;</li> <li>(m) Relevant stakeholders shall be promptly notified of any possible obstacles;</li> <li>(n) Installation of warning tapes and signalling of prohibited access to unauthorised persons at the construction site. The same shall be enclosed byinstalling physical barriers and corridors for the safe movement of pedestrians, cyclists, people with wheelchairs, etc.;</li> </ul>	
		<ul> <li>(o) Temporarily stored material shall be clearly markedto be coveredand fenced with wire fence;</li> <li>(p) Preparations before the start of works and implementation of the Traffic Management Plan;</li> <li>(q) The emergency response plan shall be prepared before starting the project activities;</li> <li>(r) The OSH plan shall be prepared before starting the project activities;</li> <li>(s) Workers shall receive first aid and OSH training appropriate to the type of work, before starting project activities. Sufficient first aid and OHS equipment shall be provided and be available at all times.</li> </ul>	
		<ul> <li>(t) When organising project activities, extreme weather conditions (e.g. health) and appropriate adjustment of working hours and supplies (eg. availability and supply of drinking water) shall be taken into account.</li> <li>(u) All works shall be carried out in a safe and disciplined manner, designed so that the impacts on workers and citizens using the road and the environment are minimal.</li> <li>(v) Safe pedestrian crossings shall be providedfor the people who live along the street;</li> <li>(w) Setting up and clearly marking safe passages and corridors for smooth and safe movement of the local community in and around the construction site;</li> </ul>	

PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES
		<ul> <li>(x) Any dangerous places at the construction site, such as pits, trenches, etc. Shall be clearly marked and fenced. Mandatory visible marking of metal, iron, steel bars and outbuildings on the street/local road shall be placed to ensure safe movement of pedestrians, workers and other users of the local road;</li> <li>OSH measures for workers:</li> <li>(y) Workers who will be engaged shall be trained and follow the best construction practices (always wear a helmet, mask and safety goggles, safety belts and safety boots, as well as</li> </ul>
		other means of personal protection for the specific work)(constantly wear a helmet, mask and protective goggles, gloves, safety belts and safety boots, as well as other means of personal protection for specific positions and specific work - work with cement, demolition of buildings, etc.);  (z) OSH measures for the community and workers shall be implemented (first aid, protective
		clothing for workers, appropriate machinery and tools);  (aa) Machines shall be operated exclusively by experienced and trained operators, thus reducing the risk of accidents;  (bb) Application of emergency procedures (Emergency Response Plan) shall be available at the construction site;  (cc) A Road Safety Audit (RSA) shall be carried out before commissioning the street;
		<ul><li>(dd) Constantly following the latest instructions/recommendations given by official authorities;</li><li>(ee)Nomination of one person at the Contractor responsible for monitoring the measures adopted by the Government and applying them in the operation of the construction site at the project location.</li></ul>

PART 2.2 MITIGAT	PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		Fire prevention measures:	
		(a) Procedures in case of fire shall be communicated to all employees;	
		(b) Constant presence of fire extinguishers shall be ensured at the project sites in case of fire or	
		other damage. Their location shall be marked and workers shall be duly notified. The level of	
		firefighting equipment shall be assessed and evaluated using a typical risk assessment;	
		(c) There shall be an appointed person at the construction site responsible for fire protection;	
		(d) All employees shall be informed of applicable fire procedures;	
		(e) The section of the road that is not being repaired, shall be kept clean.	
		Accidents:	
		(f) WB must be informed of all (environmental, OSH, community safety, etc.) significant	
		accidents (injuries, casualties, major spills, etc.) within 48 hours of the event;	
		(g) Things must be organised to protect workers at all times. Adequate communication (e.g.	
		radio lines, cell phones, etc.) must be maintained with isolated workers;	
		(h) Marking of all live electrical devices and lines with warning signs;	
		(i) Establishing "No Access" zones around or under high voltage power lines.	
		(a) In case of accidental archaeological finds, the site shall be cordoned off (protected) and the authorities (Ministry of Culture, Directorate for the Protection of Cultural Heritage) shall be informed within 24 hours, with all national procedures duly followed. Works shall continue after the approval of the competent authorities. Their instructions must be followed in the further course of works;	
	Protection of cultural heritage	<ul> <li>(b) If reconstruction works take place near archaeological sites, local authorities shall be notified and all approvals/permits shall be obtained, whereby allreconstruction works shall be planned and carried out in accordance with local and national legislation; No archaeological/cultural heritage sites have been identified near the project sites, so no negative impacts are expected;</li> <li>(c) Adequate care shall be taken and the awareness of construction workers about the possible discovery of archaeological remainsshall be raised;</li> <li>(d) In the event that the works significantly and adversely affect trees of specific historical or cultural value, the sameshall be relocated.</li> </ul>	

ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES
	Accident prevention	<ul> <li>(a) Spill containment equipment should be on site to prevent further spread of spilled materials. In the event of a spill, the contaminated soil/water shall be removed in a closed container and treated as hazardous waste;</li> <li>(b) Fire extinguishers should be certified and in proper condition;</li> <li>(c) The work location should be protected with a fence and appropriate signage;</li> <li>(d) Traffic around the project locations should take place strictly in accordance with the Traffic Management Plan, approved by the Ministry of Interior Affairs (local traffic police);</li> <li>(e) Vehicles and construction machinery should be certified and in proper working condition;</li> </ul>
<b>B.</b> General reconstruction works	Air emissions and air quality	<ul> <li>(a) To keep dust to a minimum, building materials should be stored in appropriate places and covered;</li> <li>(b) During dry and windy days, the construction site, transport routes and material handling areas should be sprayed with water, if necessary. Dust emissions must be preventedduring loading and unloading at the construction site. Therefore, dust-producing materials should be covered during transport;</li> <li>(c) The speed of vehicles should be limited to a maximum of 30 km/h on the construction site and</li> <li>(d) be adapted accordingly to project locations;</li> <li>(e) Transport vehicles and wheels should be washed regularly at pre-determined locations, equipped at least with a collector for crude oil and oils;</li> <li>(f) When transporting waste/materials, vehicles must be covered to reduce dust emission;</li> <li>(g) All machines should be equipped with appropriate emission control equipmentin accordance with international Stage IV or Tier 4d standards and/or as it is defined in the technical specifications;</li> <li>(h) Trucks should have an engine with at least EURO 5 emissions and/or as defined in the technical specifications;</li> <li>(i) Excavation and clearing works and earthworks must be carried out during the agreed periods and permitted weather conditions, in order to avoid spreading sand and dust in the neighbouring areas;</li> <li>(j) Avoid machinery working in idle mode;</li> <li>(k) All transport vehicles and machines should be regularly maintained and certified;</li> <li>(l) All vehicles and machines should use petrol from official sources (authorised petrol stations)</li> </ul>

PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES
	Noise	and fuel as determined by the manufacturer of the machines and vehicles;  (m) Working within the approved construction site and minimising the impacton neighbouring areas. Third parties must not enter theconstruction site without permission(written consent) and the impact on nearby areas must be minimised in any possible way;  (a) The noise level shall not exceed the national limit level (according to national legislation and EU requirements)  • An area with first degreenoise protectionincludes areas of tourism and recreation, areas near healthcare institutions for hospital treatment, as well as areas of national parks and nature reserves (Ld – 50 dB, Le – 50 dB, Ln – 40);  • An area with second degree noise protectionincludes areas that are mainly intended for living, residential areas, areas near educational institutions, educational facilities and social protection services for adults and children (Ld – 55 dB, Le – 55 dB, Ln – 45); The project site for "Petar Chaulev" street is located within this area;  • An area with third degree noise protectionis an area in which certain human activities with noise are accepted. These include commercial areas, mixed residential areas, craft and manufacturing activities (combined areas) (Ld – 60 dB, Le – 60 dB, Ln – 55);  • An area with fourth degree noise protectionis an area in which activities that may lead to increased environmental noise are allowed. It includes non-residential areas, which are exclusively intended for industrial activities (Ld – 70 dB, Le – 70 dB, Ln – 60);  (b) Construction activities should not be allowed during the night – site operations should be limited to the timeframe between 7:00 a.m. and 7:00 p.m.;  (c) Noise prevention measures must be applied to all construction equipment. During operation, engine covers of generators, air compressors and other mechanical equipment running on electricity should be closed. If the vehicles or equipment are not in proper working order, the contractor may be ordered to remove the defective vehicles or machin
	Waste management	(a) It is necessary to determine the different types of waste that can be created during

PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES
ACTIVITY	PARAMETER	reconstruction along the street in the Municipality of Karposh and to classify them according to the List of types of waste (Official Gazette of the Republic of Macedonia, no. 100/05);  (b) Containers should be provided for each defined category of waste in sufficient number and placed and marked for separate disposal;  The main quantities of waste should be classified under Chapter 17 on waste "Construction and demolition debris (including excavated soil from contaminated areas)" with waste code 17 01 – Waste from concrete, asphalt, 17 05 04 – Excavated soil, 17 09 04 – Mixed materials from construction sites. Small amounts of municipal solid waste (beverages, food) as well as packaging waste (plastic, paper, glass, etc.) can be found;  (c) Waste shall be collected regularly and disposed of/treated in an appropriate landfill. Paths and places for collecting and depositing waste shall be identified for the expected types of waste from the project activities related to cleaning and reconstruction;The municipality should apply good practice of appropriate treatment, selection, recycling of municipal waste, hazardous waste, debris, etc. on the site.  (d) Options for reuse/recycling of generated waste material (e.g. reuse of removed asphalt layer, excavated soil, etc.) shall be considered.  (e) If stored temporarily, the waste shall be stored in containers that do not let water in and do not allow waste to leak onto the soil. It shall be protected from adverse weather conditions so it doesn't endanger the health and safety of workers;  (f) Construction waste shall be separated from the rest of the generated waste on the construction site itself, by selection and disposal in non-regulated containers and shall be deposited in a licensed landfill;  (g) Hazardous waste shall be separated from other waste located at the project site, by sorting
		<ul><li>and depositing in appropriate containers and depositing at a licensed landfill;</li><li>(h) Construction waste from the site shall be removed immediately. Inert waste can be reused if it is proven to be harmless and the use is appropriate;</li></ul>
		(i) Any reuse of waste must be recorded properly;
		(j) Records of waste disposal (waste declaration) shall be regularly updated and archived;
		(k) Construction debrisshall be collected and disposed of exclusively by authorised waste handlers;
		(I) All records of disposed waste shall be kept as evidence of proper management;

PART 2.2 MITIGAT	PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		<ul> <li>(m) Regarding any possible hazardous waste (motor oils, vehicle fuels), authorised waste handlers shall be appointed to properly collect, transport and manage hazardous waste (export outside RNM as there is no landfill for hazardous waste or reuse/renewal in an authorised IPPC licensed installation);</li> <li>(n) During transportation, all materials should be covered to avoid dispersal of the waste;</li> <li>(o) Burning any type of waste, depositing it near water courses or any other inappropriate location is strictly prohibited;</li> <li>(p) After finalising the works, all generated waste should be removed from the construction site;</li> </ul>	
		(q) Historic waste on the site shall be removed before the start of works.	
	Water and soil	<ul> <li>(a) In the event of a hazardous leak, it should be stopped and removed, the site cleaned up and hazardous waste management measures implemented;</li> <li>(b) The contractor must sign an agreement with an authorised company/person for the collection and transport of hazardous waste, in accordance with national legislation, with an emphasis on the transport of dangerous (toxic) goods: issuing a license to the company/person for the collection and transport of hazardous waste, obligations in terms of packaging and labelling of hazardous waste, transportation of hazardous waste;</li> <li>(c) According to the national legislation (List of types of waste – Official Gazette No. 100/05), hazardous waste should be identified and classified;</li> <li>(d) Appropriate packaging and labelling of hazardous waste boxes;</li> <li>(e) All packaging must comply with the requirements of the national legislation;</li> <li>(f) Marking should contain the classification code of hazardous waste, indicating"HAZARDOUS</li> </ul>	
	vvater and som	<ul> <li>WASTE", followed by general data on the waste producer, R – risky, S – safe, the amount of waste, the physical condition of the hazardous waste and a graphic symbol;</li> <li>(g) Transport of hazardous waste is prohibited if it is not packaged and labelled according to the requirements of the national legislation;</li> <li>(h) In case of leakage that occurred during the works and in order to avoid pollution of the area, the leakage should be collected on site and placed in a temporary retention pool;</li> <li>(i) Provision/installation and maintenance of prescribed sanitary facilities for workers (mobile toilets) must be ensured. Toilets should be cleaned and waste water properly transported for further purification by the company authorised to maintain and clean the mobile toilets;</li> </ul>	

PART 2.2 MITIGATION	PART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
ACTIVITY	PARAMETER	<ul> <li>(j) Waste water collected on site must not be discharged into the environment without prior treatment;</li> <li>(k) Temporary or permanent disposal of waste near water courses (Pena River) is prohibited;</li> <li>(l) Servicing of vehicles and machinery at the construction site is prohibited;</li> <li>(m) Prevention of oil spills and other pollutants into water and soil to the greatest extent possible;</li> <li>(n) If necessary, waste material should bypass the construction site within the drainage boundaries;</li> <li>(o) Application of soil stability measures, when necessary;</li> <li>(p) Prevention of soil erosion using gabions, screens, specialised fences, greening (only with native plants), etc.</li> <li>(q) Hit animals on the road (carcasses) shall be tackled in accordance with the good international industry standards, preferably in a rendering factory.</li> <li>If there are no licensed processing plants or landfills specifically designated forthis type of waste, dead animals on the road (carcasses) shall be relocated to placesapproved by the competent veterinary or sanitary department. Before moving them to certain locations</li> </ul>	
		<ul> <li>(away from water bodies, including groundwater), carcasses shall undergo lime treatment to inhibit any possible pathogens. The disposal locations of such animals must be duly registered and archived. During handling carcasses and transport, appropriate PPE shall be used and other protective proceduresshall be observed.</li> <li>(r) Hit animals on the road (carcasses) shall also be recorded and duly notified.</li> </ul>	
	Protection of natur	<ul> <li>(a) No threatened, significant plant/animal species can be found near the project sites.</li> <li>(b) Reducing the size of the construction site in order to reduce the land that will suffer a negative impact to a minimum –a minimum green areashould be removed and it must be horticulturally enhanced after construction activities are finished;</li> </ul>	

PART 2.2 MITIGAT	ART 2.2 MITIGATION MEASURES		
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		<ul> <li>(g) There shall be no logging. Individual trees may only be removed with the prior approval of a competent authority (e.g. Forestry Department);</li> <li>(h) It is strictly forbidden to collect plants and herbs near the locations;</li> <li>(i) After the end of reconstruction works, the sites should be restored to the original condition before the onset of works, and if this is not possible, then it should be properly revitalised. Only indigenous species shall be used while greening the project sites;</li> <li>(j) Reuse of humus/soil material for revegetation of certain parts, planting grass to provide minimum maintenance for soil stabilisation and provision of habitat communities;</li> <li>(k) In case of removing individual trees (in small numbers), it is necessary to obtain an approval from the competent authorities (e.g. PE "National Forests", PE "Parks and Greenery" Skopje). In case of accidental removal of a large number of trees, drawing up a Revegetation Plan where the ratio of cut: planted trees shall be 1:3 is mandatory, whereby an approval from the WB and PIU ES specialist must be requested.</li> <li>(l) Foliage (including bushes) should be removed only if really necessary and replaced as soon as possible;</li> <li>(m) Reconstruction of pavementsshall provide an optimal setting for the existing vegetation on the project site;</li> <li>(n) If the activities include footpaths and other spaces, the project solutions, materials and work organisation shall be carried out in a way thatprovides adequate protection of trees and roots (if necessary, expert opinion should be requested);</li> <li>(o) Implementation of appropriate good practice in the management of biodegradable waste (e.g. composting, reuse of organic material, etc.);</li> <li>(p) Mandatory recultivation of the construction site before the completion of construction works and inspection and confirmation of completed recultivation of the construction site according to the Revegetation Plan, before executing the technical acceptance.</li></ul>	
	Transportation and material handling	nurnoses for which the local road/street is used and proper coordination must be carried	

PART 2.2 MITIGATION MEASURES			
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		<ul> <li>(d) All dust-generating and weather-sensitive materials shall be protected from adverse weather conditions by windbreaks or covers or sprayed with water or other suitable means;</li> <li>(e) Roads should be regularly swept and cleaned at critical points, cut materials shall be immediately removed from the road and cleaned. Access roads should be well maintained;</li> <li>(f) Spilled materials shall be immediately removed from walkways and cleaned up. Footpaths should be well maintained;</li> <li>(g) The access of construction vehicles and material delivery vehicles should be strictly controlled, especially in wet weather;</li> <li>(h) Soil and material piles shall be kept separately;</li> <li>(i) Material piles shall be kept away from drainage channels, natural watercourses and places prone to soil erosion;</li> <li>(j) Trucks loaded with soil shall be covered when removing soil from the site for reuse/disposal;</li> <li>(k) Material piles must not exceed 2 m in height to prevent scattering and the risk of material falling;</li> <li>(l) Asphalt, gravel and concrete producers should have all necessary work permits, emission permits and quality certificates;</li> <li>(m) Asphalt and concrete producers must present proof of compliance with all national legislation on Environment, Health and Safety (EHS);</li> <li>(n) All transport vehicles must be equipped with appropriate emission control equipment and regularly maintained and tested;</li> <li>(o) There shall be no borrow pits and quarries in the neighbouring areas, especially in the protected areas, without the necessary permits, as well as the presence of illegal landfills;</li> </ul>	
C. Activities that take place near irrigation canals and/or water bodies, such as rivers, lakes, international waters, etc.?		<ul> <li>(a) Good construction practices should be applied to avoid pollution of water bodies or riverbeds;</li> <li>(b) Organisation of proper storage and handling of hazardous materials and daily replenishment of such materials;</li> <li>(c) The temporary or permanent storage or dumping of substances harmful to water (e.g., construction machinery fuels, construction debris, etc.) is strictly prohibited, in order to prevent negative impact on water quality of rivers;</li> <li>(d) Access roads to the project site should be kept clean and neat to prevent the accumulation of oils and soil, which may be taken or washed away during heavy rainfall.</li> </ul>	

PART 2.2 MITIGATION MEASURES				
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES		
<b>E.</b> Impact on the Surface Drainage System	Water quality	<ul> <li>(a) Unregulated pumping of underground water shall not be carried out, as well as uncontrolled discharge of technological water, cement slurry or other contaminated water into the soil or into neighbouring streams or rivers;</li> <li>(b) The contractor should provide all necessary licenses and permits for water abstraction and regulated discharge into the public wastewater system if there is one at the project site;</li> <li>(c) No wastewater shall be discharged without prior proper treatment;</li> <li>(d) Proper stormwater drainage systems should be built and care should be taken not to create sediments, pollute or otherwise adversely affect natural streams, rivers, ponds and lakes with reconstruction activities;</li> <li>(e) Adequate management of stormwater from the street shall be carried out through new downspouts and manholes;</li> <li>(f) Proper maintenance of the drainage system shall ensure effective protection of the street against erosion and sedimentation;</li> <li>(g) Slope grading shall be performed in a manner that doesn't affect the effectiveness and efficiency of protection against erosion and/or flooding of private and public properties, nor does it impair the safety of pedestrians and motorists;</li> <li>(h) Where works are necessary, they shall be undertaken in such a way as to minimise the occurrence of soil erosion, even for short periods. These sites shall be reconstructed as soon as possible (green);</li> <li>(i) Procedures should be in place to prevent and deal with accidental spills of fuels, lubricants and other toxic or harmful substances;</li> <li>(j) Construction vehicles and machinery should be washed only in designated areas, where runoff will not contaminate natural surface water bodies.</li> </ul>		
<b>G.</b> Traffic and Pedestrian Safety	Direct or indirect perils to public transport and pedestrians due to reconstruction works	<ul> <li>The contractor shall adequately secure the construction site, including traffic regulation. It includes but is not limited to the following:</li> <li>(a) The Traffic Management Plan shall bedrafted together with the municipal staff, in order to ensure the prescribed flow of traffic in the project area (and beyond it) and to prevent possible traffic accidents;</li> <li>(b) An on-site operational inspection of traffic management during construction works shall be carried out in order to determine possible cases of non-compliance with the approved Traffic Management Plan (traffic management project during construction works) as well as</li> </ul>		

	PART 2.2 MITIGATION MEASURES				
ACTIVITY PARAMETER	CHECKLIST OF MITIGATION MEASURES				
ACTIVITY PARAMETER	deficiencies in relation toroad traffic safety;  (c) Neighbouring communities (located along/near the project sites) should be informed in due time about the upcoming works;  (d) In case the traffic is interrupted, the Contractor, in cooperation with the Municipality of Karposh and the traffic police, shall provide alternative routes;  (e) Construction works should be carried out in a way that allows local people unhindered access to sensitive receptors;  (f) Placement of traffic signs, warning signs, barriers and traffic diversion signs (vertical signage and signs at the beginning of the construction site where remediation activities are performed): passers-by should be warned of potential dangers;  (g) Good communication between the Contractor and local representatives of the local self-government in the Municipality of Karposh is essential in order to prevent possible injuries to traffic participants and achieve a smooth development of the project activities. Local people should obey the preventive measures outlined by the Contractor;  (h) Placed boards and signs must not disturb traffic safety and visibility. If they are temporarily removed due to works, traffic signs must be reinstalled.Before completing project activities and leaving the project site, all parts must be fully operational (traffic signs, signalling, etc.) in accordance with the national regulations and WB EHS guidelines;  (i) Adequate warning tapes and signs should be provided and placed;  (j) The access of people who are not part of staff to the fenced area should be prohibited;  (k) The traffic management system and employee training should be implemented, especially regarding access to the site and heavy traffic near the site. Safe paths and crossings for pedestrians in places where construction vehicles move must be provided;  (l) Active traffic management should be performed by trained and visible employees at the location, if it is necessary for the safe and easy passage of pedestrians;  (m) A special traffic regime for the contractor				

PART 2.2 MITIGATION MEASURES				
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES		
		safety of school-age children(the site should beproperly fenced off, safe corridors must be established, rush hour traffic must be regulated manually, etc.);  (p) There should be safe and continuous access to offices, workshops and residences with an emphasis on pupils attending schools and people going to healthcare institutions during reconstruction works;		
		(q) The Traffic Management Plan (TMP)shall describe how the Contractor manages traffic during the constructionphase, in order to ensure the safety of workers and local communities, i.e. how the Contractor ensures a safe environment for all the people who work in and travel through the work zone, by adopting measures to manage the temporary traffic regime (TTR);		
		(r) Minimising the impact of works on traffic andneighbouring communities; minimising delays and enabling permanentaccess to public transport; care for the needs of all road users(including pedestrians, disabled people, cyclists, motorcyclists, heavy vehicles, etc.),		
		(s) Application of the Complaints and Grievance Mechanism at the construction site forall road users (including pedestrians, disabled people, cyclists, motorcyclists, heavy vehicles etc.), the local community, commercial businesses etc. and maintaining communication about the plans and impact of all activities affecting traffic and road safety;		
		<ul><li>(t) Once the TMP has been completed or updated, the ESAMP/ESAMPChecklist shall be updated accordingly and presented to the stakeholders;</li><li>(u) Working hours shall be adapted to local traffic trends;</li></ul>		
		(a) Containers containing flammable or reactive waste must be located at least 15 meters (50 feet) from the boundaries of the facility zone. Large quantities of fuel may not be stored on site;		
<b>H.</b> Use of Hazardous or Toxic Materials and Generation of Hazardou Waste	Management of	<ul> <li>(b) The temporary storage of all hazardous or toxic substances (including waste) on site shall be carried out in secure containers with detailed markings as to composition and properties along with handling information. Chemicals shall be handled, used and disposed of and precautions shall be taken in accordance with Material Safety Data Sheets (MSDS);</li> <li>(c) Containers with hazardous substances shall be placed in a leak-proof container to prevent spills and leaks. Such a container shall be equipped with a secondary containment system, such as collection structures (e.g. a double container), double walls, and the like. The</li> </ul>		

PART 2.2 MITIGATION MEASURES			
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES	
		leak and be emptied quickly;  (d) Containers with hazardous substances must be kept closed, except when refilling or emptying of materials/waste. They must not be handled, opened or stored in a way that could lead to leakage;  (e) Hazardous waste should not be mixed, whereas transport and handling should be performed exclusively by authorised companies, in accordance with the national regulations;  (f) Hazardous waste should be managed by a company holding a license for handling hazardous waste, in accordance with the national legislations;	
		(g) Paints with toxic ingredients or solvents or lead-based paints should not be used.	
I. Installation/relocation of electric poles	Occupational health and safety of workers	<ul> <li>(a) Working in conditions of enabled electricity supply should be avoided at all times;</li> <li>(b) Precautionary measures shall be taken for the protection and safety of the community in accordance with WB guidelines and international training for working at heights with electricity and high voltage;</li> <li>(c) Wearing Personal Protective Equipment shall be mandatory;</li> <li>(d) When organising project activities, extreme weather conditions (e.g., health), and appropriate adaptation of working hours and supplies (e.g., availability and supply of drinking water) should be taken into account;</li> <li>(e) Workers must be trained and experienced in working at heights with electricity and high voltage;</li> <li>(f) Workers should receive training appropriate to the type of works;</li> <li>(g) Lighting should be designed to minimise light pollution;</li> <li>(h) Marking of all electrical devices and lines with warning signs shall be ensured;</li> <li>(i) Energy efficient lighting (LED) should be installed;</li> <li>(j) The lighting and the entire electrical installation should be checked before commissioning;</li> <li>(k) An agreement should be concluded with the company responsible for moving the existing electric poles (EVN);</li> <li>(l) Measures should be taken during the installation of underground cables;</li> </ul>	
		(m) If expropriation was not expected, but it is necessary, or if it was not expected, but there may be a loss of access to income of legal or illegal land users, then the Bank's Operational Team should be consulted immediately;	

PART 2.2 MITIGATION MEA	PART 2.2 MITIGATION MEASURES				
ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION MEASURES			
J. Acquisition of land	Occupation of private land	(a) Preparation of a Resettlement Action Plan (RAP) according to the developed Resettlement Framework Policy. During the preparation, it is necessary to take into account the following issues: ownership, plots (area of land covered by the project activities), compensation measures, etc.			
<b>K.</b> Temporary acquisition of land	Use of private land	<ul> <li>(a) It is necessary to conclude an agreement with the plot owner for the temporary use of land during the project implementation period solely for the Contractor's needs to temporary place the machinery and equipment at a location adjacent to privately owned project locations;</li> <li>(b) The contract shall define the conditions and obligations for the use of land or other premises (e.g., garages, storage spaces, etc.), as well as the duration of the contract, the obligation to clear the plot after the completion of the project activities, the removal of generated waste from the plot and the like;</li> <li>(c) It is also possible for the Contractor to negotiate with the owner of the plot the possibility for compensation regarding the use of the land to carry out small construction interventions on the premises of the owners, instead of offering financial compensation.</li> </ul>			

SECTION 3: MONITORING	SECTION 3: MONITORING PLAN									
Which	Where	How	When	Who	What					
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?					
Preparatory phase					•					

SECTION 3: MONITORING	SECTION 3: MONITORING PLAN						
Which	Where	How	When	Who	What		
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?		
Implemented measures for the safety of roads as a result of the implemented Road Safety Control	Basic Project, project documentation and on-site visits	Visual inspection of the documentation of the Basic Project and on-site checks	Basic Project Phase and construction phase	Independent Auditors for road safety	Included in the project cost (Pre-measure or through variation)		
All the necessary permits shall be provided before the start of works on the street in the Municipality of Karposh	In the municipal administration of the Municipality of Karposh and/or the City of Skopje	Checking all necessary documents	Before starting works	Contractor; Supervision of reconstruction activities; Construction inspector in the Municipality of Karposh, the City of Skopje, LRCP,	Included in the project budget		
All public and relevant institutions in the Municipality of Karposh and the City of Skopje have been duly notified	Contractor's business premises	Checking all necessary documents	Before starting works	Contractor; Supervision of reconstruction activities	Included in the project budget		
Protection and security measuresapplied for workers,	In the project area/ along the street in the City of Skopje, in the	Visual inspections and reports	Before starting works	Contractor, Supervision	Included in the project budget		

SECTION 3: MONITORING	PLAN				
Which  parameter should be  monitored?	Where  is the parameter to be  monitored?	How should the parameter be monitored (what and how should it be measured)?	When should the parameter (time and frequency) be monitored?	Who should follow the parameter (responsibility)?	What  is thecost  associated with  monitoring?
employees and citizens who will be affected in the vicinityof project sites	Municipality of Karposh  Municipalinformative board				
Notification of the local communityabout the activities and security measures	and at the project location, as well as on the website ofthe municipality and on thesocial networks ofthe municipality	Visual inspections	Before the onset and during construction activities	Contractor, Supervision, Municipality	Included in the project budget
Reconstruction phase					
Operational and community safety at the project site	Within the project street	Visual inspections and reports Unannounced inspections over the course of the works	Unannounced inspectionsover the course of the works	Supervision	Included in the project budget
Safe flow of traffic in the project area in the City of Skopje Implementation of the Traffic Management Plan	Along and around the project area in the Municipality of Karposh	Visual inspections and reports; Document verification regarding:  - Whether all competent authorities have been notified,  - Whether all the necessary permits and approvals have	During the delivery of equipment	Contractor, Supervision	Included in the project budget

SECTION 3: MONITORING	SECTION 3: MONITORING PLAN						
Which	Where	How	When	Who	What		
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?		
		been secured,  Visual inspections of the transport of materials, horizontal and vertical signalling, corridors and crossings for pedestrians, traffic regulation, etc.					
Implementation ofroad security measuresas a result of the Road Safety Control implementedin the stage beforecommissioning the road (if anyadditional RSA measures are foreseen)	Along the road/street	Visual verification and reporting whether all road security measures have been applied	The phase before commissioning the road/ putting the street to use	Traffic Management Supervision, Road Safety Auditor	Municipal Budget/the contracted budget (pre-measure orvariation)		
Collection, transport and permanent disposal of solid waste, in accordance with the Waste Management Plan	On and around the project site in the Municipality of Karposh	Visual monitoring and inspection of shipping lists of the Contractor Review of records of generated and managed waste materials, as well as waste collection contracts	Every day, after the collection and transportation of solid waste Solid waste should not be left at the construction site to avoid negative impact on the local environment	Contractor; Supervision of reconstruction activities; Authorised environmental inspector, Construction inspector, ESS of LRCP	Part of the Contractor's regular expenses		

SECTION 3: MONITORING	PLAN				
Which  parameter should be  monitored?	Where  is the parameter to be  monitored?	How  should the parameter be monitored (what and how should it be measured)?	When should the parameter (time and frequency) be monitored?	Who should follow the parameter (responsibility)?	What  is thecost  associated with  monitoring?
Collection and transportation of hazardous waste according to the Waste Management Plan	At a temporary location on the construction site, in separate waste containers	Inspection of shipping lists and warehouse conditions	Before transporting the hazardous waste	Authorised company for the collection and transportation of hazardous waste, Authorised environmental inspector, Construction inspector, ESS of LRCP	Part of the Contractor's regular expenses
Noise exposure of local citizens from vehicle machinery and machinery operating at the project site	At the project site	Review of technical specifications about the noise level of the used vehicle machinery and equipment for their use outside	Before starting works (first day)	Contractor Supervision Environmental Inspector/ Municipality of Karposh	Part of the Contractor's regular expenses
Noise and vibration levels	In and around the project site on the street in the municipality of Karposh	Noise level monitoring in dB (with appropriate equipment) in accordance with national legislation, in case of public complaints	In case of a complaint or a negative inspection finding	Contractor; Authorised agency for noise level measurement provided by the Contractor; Authorised environmental inspector, Construction inspector, LRCP, ESS	Part of the Contractor's regular expenses
Air pollution Parameters for dust and particles (PM10)	Within the project location on the street in the Municipality of Karposh	Sampling by an authorised agency	In case of a complaint or a negative inspection finding	Supervision	Contractor's budget

Which	Where	How	When	Who	What
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?
Water pollution	Check for spills along or around the project area	Visual inspections  Laboratory tests for major spills by an authorised water analysis company, if necessary, in the event of an accident.  In case of larger spills, performing soil/water tests for contaminants and notifying the environmental inspectorate. Following their instructions.	Regularly	Supervising Engineer, Inspection	Part of the Contractor's regular expenses
Incidents or accidents related to the project or that affect the project	On the construction site /along the road/street	Regular visual inspectionson the construction site and when a call/incident report/ accident report is received	Constantly	Contractor;Supervising Engineer;Environmental and Social AspectsSpecialist at the PIU (the WB must be notified if anincident and/or accident occurs)	Included inthe contracted budget

SECTION 3: MONITORING PLAN						
Which	Where	How	When	Who	What	
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?	
Follow-up activities, such as preventivemeasures to stop the occurrence of similarsituations	On the constructionsite/along the road/street	Through regular reportingby the Contractor andthe Supervising Engineer	On a monthly basisup to closing allinvestigative activities	Contractor;Supervising Engineer;Environmental and Social Aspects Specialist at the PIU	Included inthe contracted budget	
Operational phase						
Proper waste management	On site and in the surroundings	Waste is properly collected/sorted	Weekly	Authorised waste collection company	Variable and not included in the project budget	
Dead animals on the new roads/streets and their collection and final disposal at an approved facility/location	Along the project location	Carcasses should be collected by an authorised institution in accordance with the national legislation and eventually disposed of in a factory/site approved by the veterinary or sanitary department.  Evidence of this operation should be kept.	Monthly	Municipality staff or ahired company (licensed) or government/local institution	Municipal budget	

Which	Where	How	When	Who	What
parameter should be monitored?	is the parameter to be monitored?	should the parameter be monitored (what and how should it be measured)?	should the parameter (time and frequency) be monitored?	should follow the parameter (responsibility)?	is thecost associated with monitoring?
Regular maintenance of the street, the street network,including traffic safety measures in the Municipality of Karposh	Along the street	Regular visual inspections of the road condition, in terms of whether there are cracks and damages, the condition of traffic signalling, drainage, possible overgrown vegetation, debris or snow remains	Continuous and especially in case of snowfall, landslides, etc.	Authorized street maintenance companies Supervision	Municipal budget
Implementation of road security measures as a result of the Road Safety Control implemented after commissioning the road (if applicable)	Along the road/street	Visual inspection and reporting whether all road security measures have been implemented	After commissioning the roadduring the warranty period	The municipal employees and those of the engaged companies	Municipal budget

List of Plans on Environment/Social Aspects/Safety and Health at Work to be prepared by the Contractor:

- 1. Environmental and Social Aspects Management Plan of the Contractor (ESAMPC)
- 2. Site Management Plan (SMP)
- 3. Traffic Management Plan (TMP)
- 4. Emergency Preparedness and Response Plan (EPRP)
- 5. Occupational Safety and Health Plan (OSHP)
- 6. Waste Management Plan (WMP)
- 7. Revegetation Plan (PR) (if required)
- 8. Community Safety Plan (CSP)
- 9. Grievance Mechanism Plan (GMP) (can be part of CSP)

The above plans must be prepared by the Contractor within 28 days after the Start Date in accordance with the provisions of the Agreement.

Construction works on siteshall start only after:

- 1. The plans are reviewed and approved by the Supervision of the Environment and Social Aspects and the Supervision of the Safety and Health at Work and accepted by the Environmental and Social Aspects Expert in the PIU;
- 2. The measures for environment/social aspects/safety and health at work, traffic safety and community safety are applied on site, i.e. the construction site is ready for construction works to begin; and
- 3. The supervisory team for environment, social aspects, safety and health at work and traffic safety conductsan on-site inspection and prepares a field report confirming that the construction site is ready for construction works.

## APPENDIX 1: Comment Submission Form

Commentsand suggestions submission form for the ESAMP Checklist regarding the Reconstruction of the existing "Petar Chaulev"Street in the Municipality of Karposh, the City of Skopje

### **Project Description**

The project area where project activities for the reconstruction of "Petar Chaulev" street will take place is located in the Municipality of Karposh, in the central part of the City of Skopje. The current condition of "Petar Chaulev" street is poor, with longitudinal and transverse cracks, damage and excavations for the installation of underground atmospheric sewage. The length of the street to be reconstructed is 567.44m. The project scope area is located in the settlement of Vlae I - Municipality of Karposh. The traffic structure is as follows:

The street is located in a mixed zone of individual housing in houses, residential buildings and commercial activities. As for the micro-location layout:

- on the east side the street is bordered by individual houses;
- on the north side the street is bordered by individual houses;
- on the west side, the street is bordered by Boulevard PartizanskiOdredi.

As for the macro-location layout:

- on the east side, the street borders the bed of the Vardar River;
- on the north side, the street borders with Aco Shopov Street;
- on the west side, the street borders the commercial and residential complex Porta Vlae.

All these facilities have access from other streets and sides and shall not be affected by the construction works nor will the people be hindered in the performance of their daily duties.

The electronic version of the ESAMP Checklist for the Reconstruction of "Petar Chaulev" Street in the urban communityVlae I in the Municipality of Karposh, the City of Skopje is available on the following websites:

- Municipality of Karposh: <a href="https://karpos.gov.mk/">https://karpos.gov.mk/</a>
- PIU: <u>www.wbprojects-mtc.mk</u>

Name and surname of the					
person making the comment *					
Contact information*	E-mail:				
	Phone:				
Comments regarding the ESAMP	Checklist:				
Signature		Date			
If you have any comments/sugge	stions or additions to the	e proposed measures on the ESAMP Checklist for the			
Reconstruction of "Petar Chauley	" Street in the City of Sk	opje, Municipality of Karposh, please submit them to the			
responsible person from the following institution:					
Contact person: Sashka Bogdanova Ajceva					
E-mail: saska.bogdanova.ajceva@piu.mtc.gov.mk					
Within 14 days after the publication of the ESAMPChecklist for the Reconstruction of "Petar Chauley" Street in the					
Municipality of Karposh in the Ci					
(Date of publication:)					
•					
Reference number:					
(filled in by the persons responsible for project implementation)					

<sup>\*</sup> Filling in the fields with personal data is not mandatory

# APPENDIX 2: Complaint Form for the entire period of project implementation

Reference number						
Full name and surname (optional)						
I want to submit my complaint anonymously.						
I ask that my identity is not revealed without my prior consent.						
Contact information	By mail: Please provide a mailing address:					
Note how you would like to be contacted (by post, phone, email).	By phone:					
Preferred language of	_	_				
communication	☐ Macedonian					
	Albanian					
	Other:					
Gender	Female					
	☐ Male	_				
Description of the incident that led						
complaint	problem?					
Date of incident/complaint		_				
		_				
	One-time incident / complaint (date)					
	Occurred more than once (how many times?)					
	☐ Current (currently experiencing a problem)					
What would you like to see happen	?					
Signature:		_				
Date:						
Please return this formto the attention of:						
	rease retain this formed the attention of.					
Name and SashkaB	ogdanova Ajceva Jovan Cvetanoski					
	danova.ajceva@piu jovan.cvetanoski@karpos.gov.mk					
	ntc.gov.mk					
_	mentation Unit Municipality of Karposh Contractor of the activities					
Local Road Connectivity ProjectRN Macedonia						
str. Crvena SkopskaOpsh						
1000 Skopje, R.N. Maced	lonia					

# Appendix 3. Decision for an approved elaborate for environmental protection

MUNICIPALITY OF KARPOSH MAYOR

MKD Certificate MKS ISO 9001:2015 MKS ISO 14001:2015 MKS ISO 45001:2018

IP 1 Number: 57-428 Date: 27.11.2024

Skopje

Pursuant to Article 24, Paragraph 7 of the Law on Environment ("Official Gazette of the Republic of Macedonia" No. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 187/13, 42/14, 44/15, 129/15, 192/15, 39/16 and 99/18 and "Official Gazette of the Republic of North Macedonia" No. 89/22 and 171/22), the Mayor of the Municipality of Karposh, acting upon the Request of the **Municipality of Karposh from Skopje** under IP1 No. 57- 428 dated 26.11.2024, adopted the following

### **DECISION**

1.The Elaborate for Environmental Protection of the **Municipality of Karposh from Skopje** for activity code 84.11 - General activities of public administration, Annex 1, Item 10. INFRASTRUCTURE PROJECTS, Subitem 1. Local roads and streets registered under reference number 238-11/24 dated 22.11.2024 prepared by the **Consulting Company ENVIRO RESOURCES DOO SkopjelS HEREBY APPROVED.** 

2. The legal entity referred to in point 1 of this Decision shall comply with all the prescribed regimes and measures for environmental protection provided for in the Elaborate for Environmental Protection.

### **Explanation**

**The Municipality of Karposh from Skopje**, in accordance with the provisions of the Law on Environmental Protection, submitted a request IP1 no. 57-428 dated 26.11.2024 for issuing a Decision for the Approval of an Elaborate for Environmental Protection.

After reviewing the Elaborate for Environmental Protection and the attached documentation, it was concluded that the same was prepared in accordance with the Regulation on the activities and actions for which an elaborate is mandatory, and for whose approval the Mayor of the Municipality,the Mayor of the City of Skopje and the Mayor of the municipalities in the City of Skopje are responsible ("Official Gazette of the Republic of Macedonia"Mo. 80/09 and 32/12) as well as the requirements outlined in the Rulebook on the form and content of the Elaborate for Environmental Protection, in accordance with the types of activities and actions for which the elaborate is prepared,

## www.karpos.gov.mk, gradonacalnik@karpos.gov.mk

as well as in accordance with the performers of the activity and the scope of activities and actions carried out by legal entities and individuals, the procedure for their approval, as well as the manner of maintaining the registry of approved elaborates ("Official Gazette of the Republic of Macedonia" No. 44/13 and 11/14).

Based on the above, it was decided as in the dispositive part of this Decision.

**LEGAL REMEDY**: An appeal can be lodged against this Decision to the State Commission for Decision-Making in Administrative Procedures and Employment Procedure in Second Instance within 15 days from the date of receiving this Decision.

The appeal is subject to 250 MKDfor administrative fees.

Prepared by: E. Dimkovska Simonovski/personal illegible signature/

## BY AUTHORITY OF THE MAYOR,

Head of Department Petar Teov

/Personal illegible signature/

SUBMITTED TO:

/round stamp of Municipality of Karposh

-The applicant

- Republic of N. Macedonia, Skopje/
- -Department for Ecology and Energy Efficiency/personal illegible signature/
- -Authorised Environmental Inspector/personal illegible signature/
- -Archive.