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ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN - ESMP

Serbia – K10 (Corridor 10) Project

EBRD Loan 39750

Component C3:

Rehabilitation and improvement of certain sections of
A-I (E75) Motorway Nis – Border of Northern Macedonia:

"Graovo" Project

Construction of a bridge on the Juzna Morava in Graovo with access roads, at CP no. 1372/1 and 1372/2 KO Bocevica and Reconstruction of the local road to Graovo, km 0+003.37 to km 4+278.30

- Environmental Category B -

Draft

Belgrade, October 2021

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APPENDICES

ABBREVIATIONS AND ACRONYMS

EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIS	Environmental Impact Study
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
HSE	Health, Safety and Environment
INCS	Institute for Nature Conservation of Serbia
IPCM	Institute for Protection of Cultural Monuments of the Republic of Serbia
KS	Koridori Srbije (“Corridors of Serbia”)
MEP	Ministry of Environmental Protection
NM	Northern Macedonia
PAP	Project Affected Person
PERS	Public Enterprise “Putevi Srbije” (PE “Roads of Serbia”)
SSIP	Site Specific Implementation Plan
WMP	Waste Management Plan

INTRODUCTION

Construction of the Corridor X, an important Pan-European transport corridor, in the Republic of Serbia had a significant impact on the surrounding regions and road infrastructure, both physical and economic. Republic of Serbia has applied, through the project implementing entity Ltd. ''Koridori Srbije'' (KS), for restructuring of the remaining funds from a previous Corridor X loan, proposing approval of new project components thus enabling utilization of non-allocated proceeds which have been regarded as Loan savings. Following this request, EBRD has conducted a Due Diligence mission to assess the technical, environmental and social aspects of the new components.

Upon KSDOO's request for approval of the restructuring of the Loan, the Republic of Serbia had negotiated with the EBRD during 2017 and 2018 and the Amendment No.3 to the Loan was signed on May 30, 2018. Amendment reflects the inclusion of new Parts C, D and E and the Extension of Last Availability Date of Loan to December 31, 2022.

In accordance with the Amendment No.3 Project financed from EBRD Loan consists of:

Part A: Construction of two new sections of the branch of Corridor X that runs from Nis to Dimitrovgrad

A-1: Construction of the section from Crvena Reka to Ciflik

A-2: Construction of the section from Pirot (East) to Dimitrovgrad

Part B: Construction of a local road from Bela Palanka to Pirot

Part C: Construction of:

C1: New Regional Motorway Control Centre at Nis; and

C2: New State Road Section and Rehabilitation of Existing Sections of State Roads connecting to the Corridor X Nis - Dimitrovgrad Motorway including the reconstruction of Sopot Interchange (E80).

C3: Rehabilitation of certain sections of A-I (E75) Motorway, including improvement of Batajnica Interchange and reconstruction of Gramadje Interchange. After cancelation of Gramadje Interchange project two new projects were proposed as alternative project for financing from Loan savings:

- Reconstruction of the bridge over Juzna Morava river, railway Belgrade – Nis – Presevo – State border - (Tabanovce) and two local roads, on the state road II-A no. 258 on km: 29+261.85, also known as **"Sarajevo bridge" Project**
- Construction of a bridge on the Juzna Morava in Graovo with access roads, at CP no. 1372/1 and 1372/2 KO Bocevica and Reconstruction of the local road to Graovo from km 0+003.37 (intersection on local road at cadastral plot no.2926 Cadastral District Palojce) to km 4+278.30 (on the crosspath with asphalt road at cadastral plot no.6786,6776 and 2370 in Cadastral District Graovo), City of Leskovac, also known as **"Graovo" Project**

Restructuring of the loan lent by the EBRD for the Corridor X project has allowed for the financing towards the works on the subject **"Graovo" Project**. Technical documentation, including this Environmental and Social Management Plan, are being financed by the Republic of Serbia from the national budget.

This Environmental and Social Management Plan (ESMP) is related to **"Graovo" Project**, i.e. **Construction of a bridge** on the Juzna Morava in Graovo with access roads, at CP no. 1372/1 and 1372/2 KO Bocevica and **reconstruction of the local road to Graovo** from km 0+003.37 to km 4+278.30 in Cadastral District Graovo).

The Project Proponent is the Government of Serbia, acting through its Ministry of Reconstruction, Transport and Infrastructure (MCTI). Project implementing entity is Limited Liability Company "Koridori Srbije" (KS).

"Graovo" Project is located inside a rural area, in front of the entrance in Grdelica gorge. The Project has been classified as Environmental Category B. i.e. a project requiring an ESMP pursuant to EBRD Performance Requirements (PR).

This document presents the Environmental and Social Management Plan (ESMP), which has been prepared to ensure that the proposed bridge construction and local road reconstruction project ("Graovo" Project) is implemented in accordance with the European Bank for Reconstruction and Development (EBRD) Performance Requirements (PRs) and local legislation relating to environmental protection.

The aim of the Environmental and Social Management Plan (ESMP) is to highlight the potential negative environmental impacts and management problems during execution of the "Graovo" Project, as well as the necessary mitigation measures that the Contractor must apply. The key components of the Environmental Management Plan are: Plan for the mitigation of adverse impacts on the environment and Plan for monitoring of the impacts on the environment.

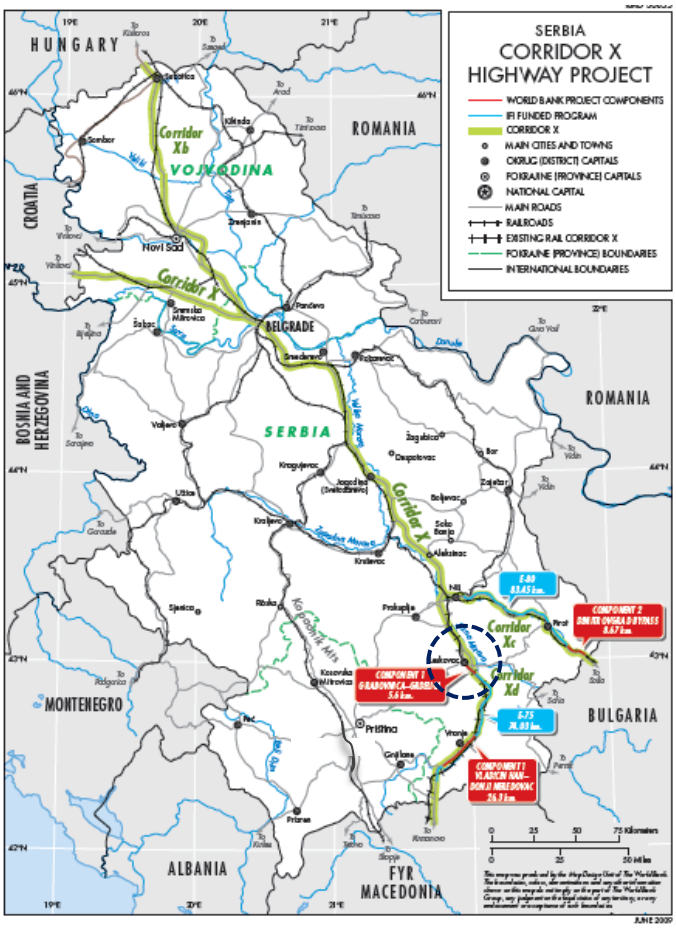
The preparation of this ESMP was undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders. The ESMP is based primarily on field investigations performed during spring and summer 2021.

1. PROJECT DESCRIPTION

The subject of this Environmental and Social Management Plan (ESMP) is **construction of a bridge** on the Juzna Morava in Graovo with access roads, at CP no. 1372/1 and 1372/2 KO Bocevica and **reconstruction of the local road** to Graovo from km 0+003.37 (intersection on local road at cadastral plot no.2926 Cadastral District Palojce) to km 4+278.30 (on the crosspath with asphalt road at cadastral plot no.6786,6776 and 2370 in Cadastral District Graovo), City of Leskovac, also known as **"Graovo" Project**. Area aimed for "Graovo" Project implementation is located in the near vicinity of newly constructed A-I (E75) motorway from Nis to border of Northern Macedonia, section from Grdelica (Gornje Polje) to Caricina Dolina, at motorway chainage km 876+973, close to settlement Graovo. The expanded area of the "Graovo" Project encompasses three rural settlements in Leskovac Municipality: Graovo, Palojce and Bocevica.

1.1. Construction of a bridge on the Juzna Morava in Graovo with access roads

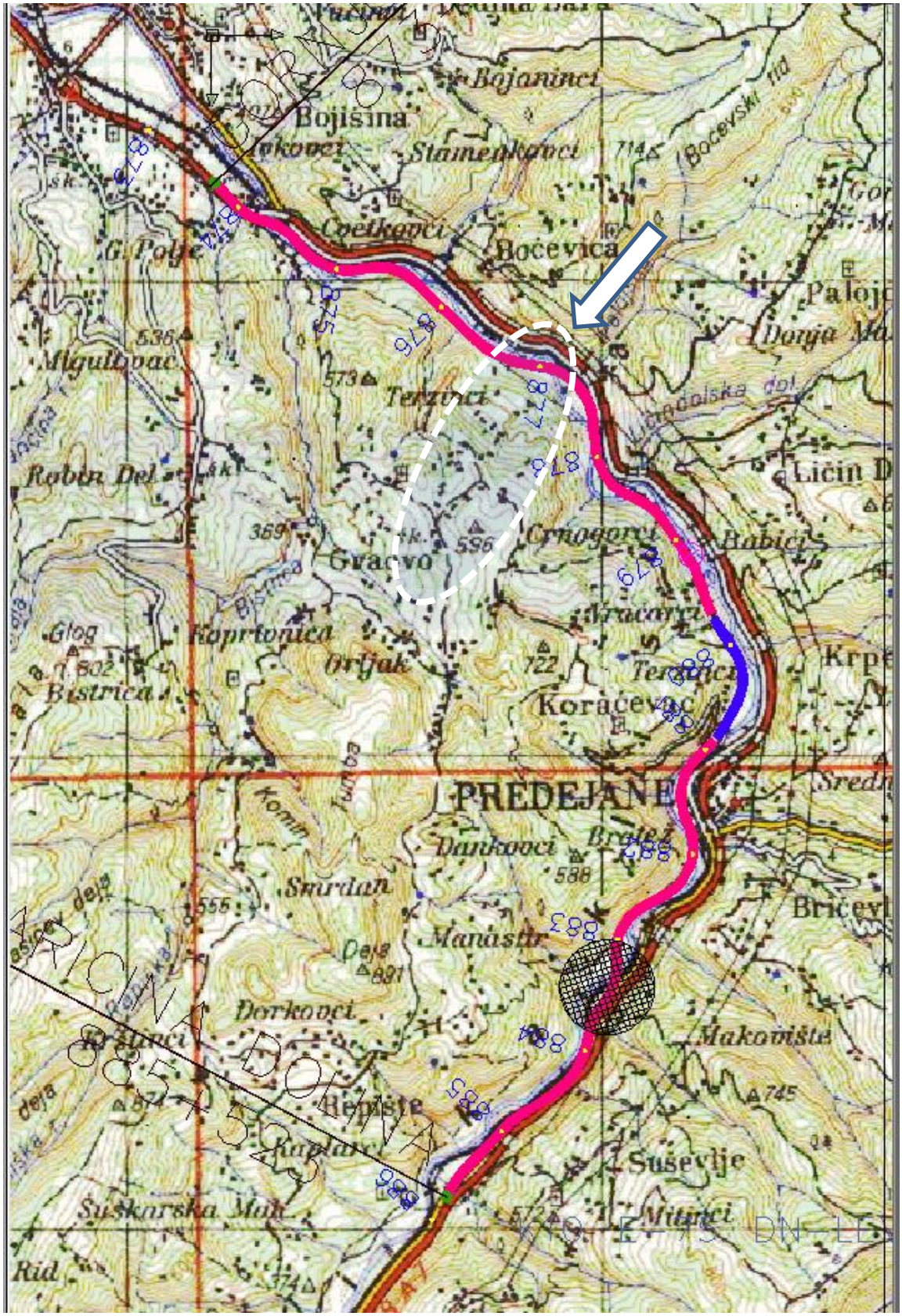
The bridge is situated in the bridge 05 zone (km 876+973) of the E-75 motorway Nis – Border of Northern Macedonia, section Gornje Polje – Caricina Dolina. It is placed on the left side of the motorway, on local road which leads to Graovo settlement.



Picture 1: Location of project zone on Motorway Corridor Xd through Serbian

Steel bridge is adopted as most appropriate solution. On the top of the subject steel bridge ("Graovo bridge") the reinforced concrete plate (RS plate) is installed. The bridge will be constructed as three field based continuous girder with axis distance 14.0+27.0+14.0=55m. Road surface width is 3,5 m, with two pedestrian pathways 75cm, so the total bridge width is 5.0m. On the gradation from the roadway to the pedestrian pathway, high curb is installed. It is planned to

install pedestrian railing 1.1m height, 25cm from the end of the curb rim. In the in- between curb zones, two layer asphalt is installed, total thickness 7cm, width 3.5cm.

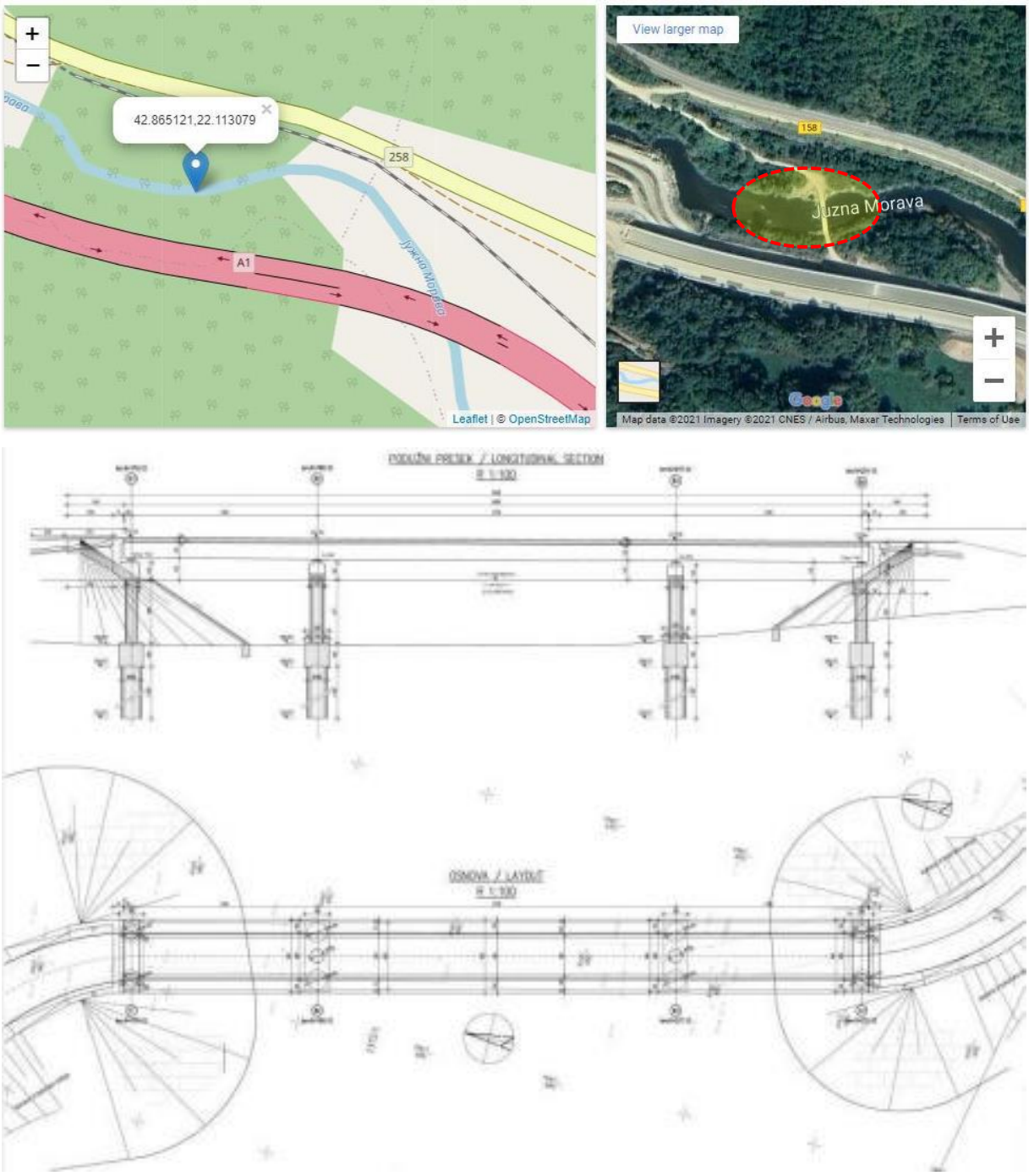


Picture 2: Location of "Graovo" Project in near vicinity of E75 motorway

On top of the main steel girders the RS plate 20cm thickness is mounted. Connection of the RS plate is through steel dowels (made of pipes diameter 139.7mm, thickness 5mm) which are

mounted in 50cm separation. Bracing is not calculated in, but these dowels have the sole role to fixate RS plate to the main steel girders.

Main girders contain of 2 steel girders I-cross-section, constant height 2.5m. The main girders are formed by welding to the upper and lower panel 300.20 and vertical tin thickness 12mm. Depending on the position in the bridge construction, upper and lower panel are changing its width and thickness, so the maximum width is 400mm, and maximum thickness of the panel is 30mm. The vertical funnel is formed in the support zone from the tin thickness 15mm.



Picture 3: Location plan and disposition of "Graovo" bridge

The main girders are interconnected with transversal girder, which is installed on every 3.5m in the first and third field, and on every 4.5m in the middle field. Height, longitudinal girders are installed at the middle height of the main girder. Transversal girder is of I-cross-section with haunches on both sides by the main girders.

In the support zone the transversal girders are stronger, due to bearing replacement. The dowels are made of pipes diameter 139.7mm, thickness 5mm.

On top of the steel girders 20 cm thick RS plates are concreted, which is supported by steel girders and have a 1.0m culvert on both sides, on the steel girders, but it is not understood that they are performing as a composite section. On top of the RS plate, hydro-insulation is installed, full width, and over the hydro-insulation high curbs and pedestrian pathway with massive curb rim.

Finish grade level is adopted in such a manner that the free space between the lower edge of the construction and high water level must have free space of 1.3m along the whole construction.

The roadway on the bridge is in one-sided longitudinal drop and one-sided transversely inclination of 2.5%, while the pedestrian pathways in transversal inclination of 4% (towards the middle of the bridge). Bridge inclination is obtained by a haunch in the concrete, over one of the main girders.

Steel girders are resting on the RS pillars through bearings. River pillars have round cross-section, with diameter of 1.0m. At the top, the pillars are linked to the RS beam which is mounted on the bearings.

The pillars are resting on the capping beam of the piles, which link the tops of the piles. Piles of 1.5m in diameter are adopted.

On the bridge ends, in the bank pillars U1 and U4 zone, dilatational sockets are planned.

Corrosion protection of the steel construction is made according to the SRPS EN 12944 1-8 . The System is epoxy based, with polyurethane finishing coating, corrosivity class C5-I, with long lifetime – more than 15 years.

1.1.1. Construction permit

Koridori Srbije d.o.o. obtained the Construction Permit of the Leskovac Municipality (No. 351-20160/20-02 ROP-LES-33489-CPI-3/2020 dated 15 May 2020). Construction permitting procedure did not asked for environmental impact assessment for subject bridge construction project.

1.1.2. Bridge equipment

Hydro insulation is installed on entire width of the bridge. The material quality must be in accordance with the Republic of Serbia Rulebook for road design – part 9.12.3. from 2012.

Curb rim je massive, with concrete quality C 30/37. Across the horizontal surface of the curb rim anti-slip coating is applied (thickness 4mm).

The rail is of steel, box section, material quality S235 according to EN 10025: 2003. System adopted in epoxy based, with polyurethane finishing coating, corrosivity class C5-I, with long lifespan – more than 15 years.

Concrete quality for piles, pillars, bank pillars and roadway plate is C 30/37, reinforcement quality is B500B.

Steel construction material is S235 according to EN 10025: 2003. Entire steel construction of the main girder is welded. The seams quality has acceptance level B, according to SRPS EN 25817. The construction is performance class 3, according to SRPS EN 1090-2.

Steel construction corrosion protection shall be made according to SRPS EN 12944 1-8 . System adopted is epoxy based, with polyurethane finishing coating, corrosivity class C5-I, with long lifespan – more than 15 years.

1.1.3. Installation

Steel construction installation is planned to be performed with automobile crane. The whole bridge is consisted of 5 installation units. Every unit is consisted of two main girders and belonging number of transversal girders. The order of installation:

- Firstly, two furthermost prefabricated girders MN1 and MN2 (weight of cca. 17.5-18 tons) in beside bridge zone are forming, and after that prefabricated pillar bearings on pillars C1 and C2 (C3 and C4) are mounted with an automobile crane.
- After that, middle piece of cca. 12-13 tons is inserted, and binded through welding.
- RS plate formwork is mounted. Formwork girders can rest on transversal girders between main girders.
- - At the end, dismantle of the formwork is being done. Dismantling can be done during installation of the massive curb rim.

1.1.4. Approach ramp to the bridge

Taking into consideration that the roadway which links Graovo village with the municipal road Grdelica-Predejane is not the subject of this project, it is planned to make a temporary solution of access roads i.e. approach ramp to the bridge.

Approach ramp length is determined by the condition that the longitudinal inclination is not higher than 25%. Approach ramps are made of bank material with finishing layer (l=30cm) made of broken stone. Slope round heads on both sides of the bridge will be protected with stone or concrete cladding so it would prevent harmful effect of water in the watercourse zone.

1.1.5. Juzna Morava river arrangement in the planned bridge zone

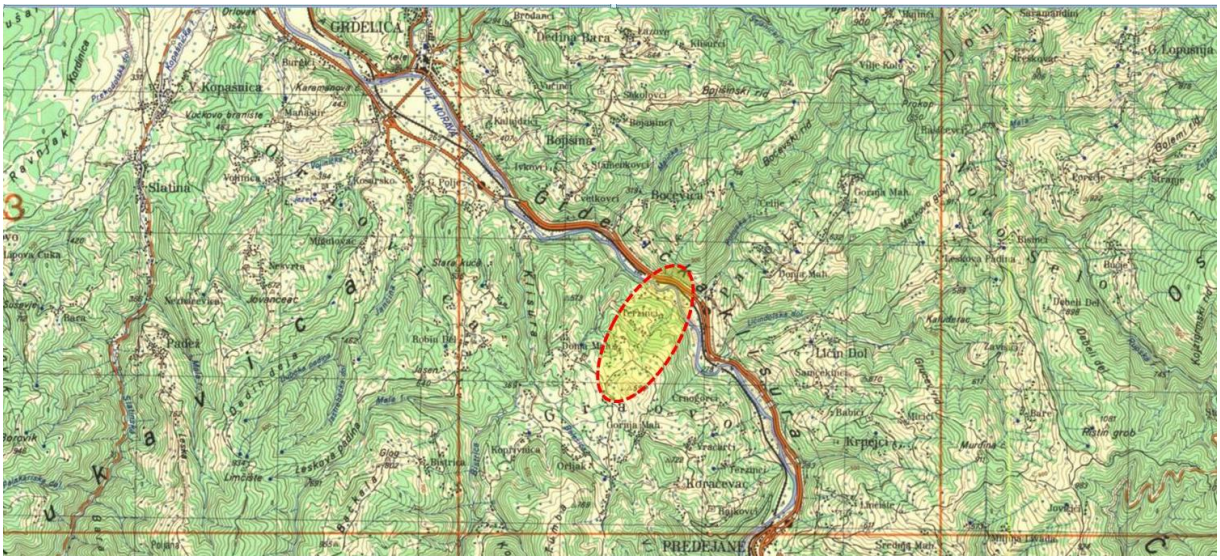
It is planned that the bridge is positioned just before the river enters the gorge. The right river bank, upstream and downstream to the place where the bridge is planned to be situated is extremely steep and at this position the watercourse formed by cutting its way through the massive rocks formation. The right bank of the bridge have milder slopes, parallel with it there is a highway built, which is positioned on the concrete pillars on this particular section, it also crosses the river downstream of the planned position of the bridge, and from that point on follows the river Morava flow, and makes a makeshift protective embankment. The left bank is additionally protected downstream through construction of retaining wall made of reinforced soil, which has primary function to protect the highway, and at the same time to stabilize the river banks.

1.2. Reconstruction of the local road to Graovo from km 0+003.37 to km 4+278.30

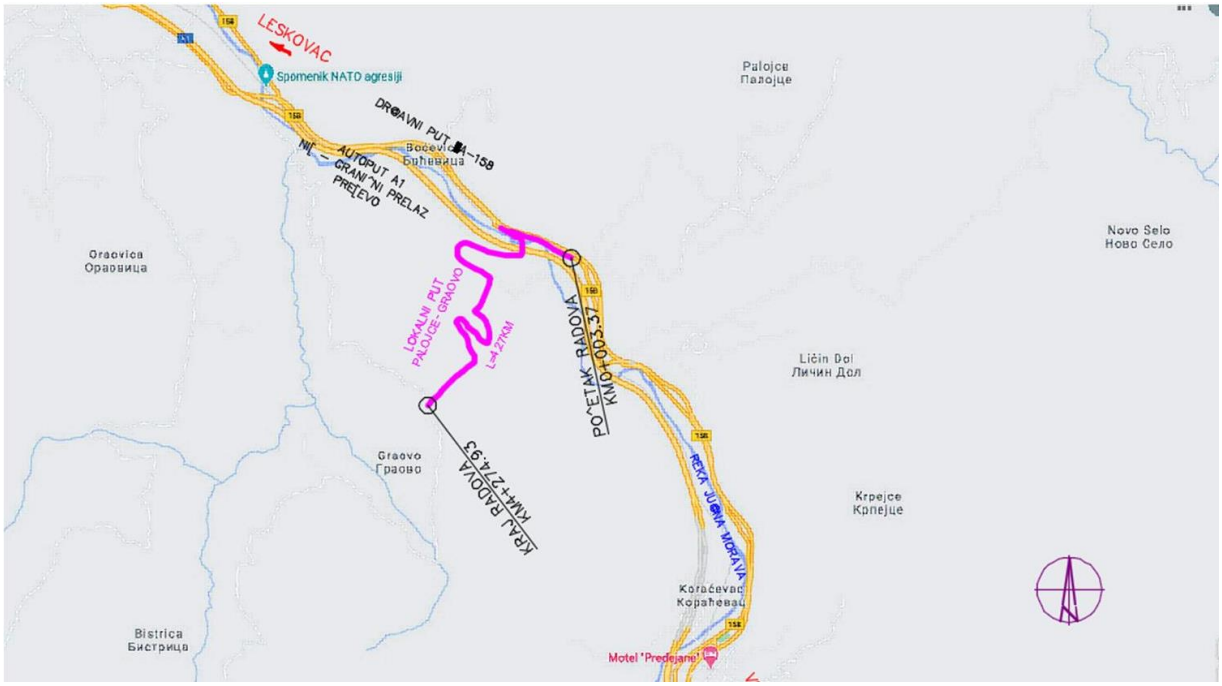
The second part of this project is the reconstruction - improvement of the local road that connects the town of Graovo with the municipal road Grdelica - Predejane on the territory of the town of Leskovac. Total length of the section to be reconstructed is L = 4274.93 m. The project highlights 3 characteristic sections that are determined by the conditions of the terrain, the existing infrastructure - the state road, the railway and the watercourse of the Juzna Morava river. The first section stretches from km 0 + 003.37 to km 705.05, represents the direction of the road Grdelica - Predejane and passes between the state road II A No. 258 Leskovac - Presevo and the railway E70 / E85 Belgrade - Leskovac - Presevo. The characteristic of the section is that in the first part from km 0 + 003.37 to km 0 + 324.74 the projected width to be reconstructed is 5.0 m and in the part from 0 + 324.74 to km 0 + 618.22 the projected width is min 3.5 m which is conditioned by the existing retaining wall of the state road and the position of the railway infrastructure. The second section stretches from the intersection at km 0 + 655.00 over the newly-projected bridge (from km 0+ 869.00 to km 0 + 922.00) across the Juzna Morava river basin to the overpass of the highway at km 0 + 960.00 and it is predominantly located in a high

embankment due to the projected elevation of the bridge conditioned by the elevation of high water 270.55. The carriageway width was adopted at 4.0 m with 1.0 m wide shoulders on both sides. The third section continues to the second and goes to the end of the projected route. The pavement width of at least 3.5 m with 0.5 m wide embankments on the sections was adopted, due to the insufficient existing width in the notches, the drainage of the pavement is done with asphalt gutters 60 cm wide bordered with concrete curbs.

In addition to the project task, the main task that set before the designers was to, through a detailed scan of the existing state and the collection of field data, prepare preliminary design for the reconstruction - improvement and, in the same time, by interventions on the road in terms of widening the curves, drainage of driveway surface and the surrounding area, place this road into a proper condition, both horizontally and vertically. Using the existing route of the road and the present driveway as the base for the reinforcement, was a basic prerequisite for the design.



Picture 3: Location of "Graovo" Project in near vicinity of E75 motorway



Picture 4: Alignment of local road to Graovo settlement

1.3. Environmental and Social Assessment

"Graovo" Project will be implemented in the immediate vicinity of the E-75 motorway Nis - border of Northern Macedonia, whose construction was completed and for which the environmental impact assessment procedure was completed in 2009 by obtaining the Final Environmental Approval on EIA Study prepared for A1 (E75) motorway section from Gornje Polje to Caricina Dolina. For these reasons, the "Graovo" Project envisages that bridge construction and road reconstruction designs retain and meet all the requirements expressed in the Environmental Impact Assessment Study.

For the needs of this project, new preconditions of the Institute for Nature Conservation of Serbia were obtained (03 no. 021-1609 / 2 dated Jun 10, 2021) confirming that no protected natural assets at the project location. However, the subject area is located within the scope of the ecologically significant area "Kukavica" of the ecological network of the Republic of Serbia.

All project works will be performed within the existing footprint of "Graovo" bridge and local road to Graovo. The project entails no resettlement and land acquisition as defined by PR 5, nor long lasting disruptions to the natural environment and human settlements and activities.

Finally, according to the Serbian Regulations (Official Gazette of RS 114/08) bridge construction and road reconstruction project **are not** included in either List 1 or List 2 of the Decree on determining the list of projects for which an impact assessment is required and the List of projects for which an environmental impact assessment may be required, confirming that the subject project does not require an environmental impact assessment.

According to the EBRD Environmental and Social Policy 2019, this project is classified as Category "B" i.e. a project requiring an ESMP pursuant to EBRD Performance Requirements (PR).

EIA procedure prescribed by the Serbian Law on EIA ("Official Gazette of RS" No. 135/2004, 36/2009) for the Gornje Polje – Caricina Dolina Motorway section is completed. Public Consultation and Public Disclosure for the Draft Environmental Impact Study (EIS) are finished.

Final Environmental Approval for E-75 motorway section from Gornje Polje to Caricina Dolina is obtained from the Ministry of Environment and Spatial Planning. Final environmental approval of the EIS set out specifically the conditions and measures, which should be undertaken to prevent, reduce or eliminate the adverse effects on the environment. All conditions and measures are presented in this ESMP.

Corridors of Serbia obtained the Location permit and Construction permit for the construction of bridge over Juzna Morava river in Graovo, confirming that the subject project does not require an environmental impact assessment study.

This ESMP also reflects the additional baseline refinement data work required prior to works commencing, such as data contained in site-specific implementation plan, prepared by the contractors and approved prior to commencing works. **This ESMP should be a part of the bidding documents**, to ensure the contractors are aware and meet their formal obligations in this respect. The Contractor (successful bidder) is obliged to prepare his own site specific implementation plan (SSIP), to be approved by KS, containing the detailed information on meeting the requirements detailed in this ESMP. The SSIP shall be highly site-specific and be compiled as part of the reconstruction planning for aspects such as fuel stores, plant selection and performance and material sourcing and sub-contracting.

ESMP is developed to point at the essential environmental requirements during the construction of a bridge on the Juzna Morava and reconstruction of local road to Graovo and guide the Contractors in preparation of SSIP in order to eliminate, offset, or reduce potentially adverse

environmental impacts to acceptable levels. Description of mitigation measures and Description of monitoring program are key parts of this document.

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

2.1. Relevant Institutions

Ministry of Environmental Protection (MEP) is the key institution in Republic of Serbia responsible for formulation and implementation of environmental policy matters.

The other aspects of environmental management related to "Graovo" Project are dealt with several other institutions, among which are the Institute for Nature Conservation of Serbia (INCS); the Institute for Protection of Cultural Monuments of the Republic of Serbia (IPCM), and KS.

2.2. Existing Serbian legislation

Environmental protection in Serbia is regulated by many republic and municipal laws and by-laws. The environmental legislation in force in Serbia is summarized in Appendix IV.

2.3. Main steps of national procedure on EIA in the Republic of Serbia

In the juridical system of the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment, which is completely in line with European EIA Directive - 85/337/EEC. Therefore Environmental Impact Assessment is not required for bridge construction and road reconstruction projects unless theirs alignment is placed within or in the vicinity of natural/cultural protected areas. In that case Project proponent is obliged to submit Request for Decision-making on the necessity of preparation of the Environmental Impact Assessment to the MEP. Depending on assessment of significance of potential environmental impacts of project it could be decided that it is necessary to implement full EIA procedure for that kind of projects.

The decision states that projects of urgent maintenance, reconstruction, rehabilitation and elimination of road/bridge damages are not on the prescribed Lists of projects for which an impact assessment is required or for which an environmental impact assessment can be required (Official Gazette RS No. 114/08). However, EBRD policies require the development of a partial evaluation - ESMP and a preparation of the Contactors specific SSIP for the reconstruction site.

2.4. Relevant EBRD and European environmental policy

EBRD Environmental and Social Policy 2019 is relevant for this project.

Based on the purpose of the safeguards put forth by the EBRD, environmental assessments should be integrated with the project cycle as such that environmental screening occurs at the project identification stage and scoping and preliminary analysis at the prefeasibility stage. The magnitude and sensitivity of the project and the attendant issues, determine whether a full assessment is required. The emphasis of the environmental assessment should be on identifying environmental issues early in the project cycle, designing environmental improvements into projects, and avoiding, mitigating, or compensating for adverse impacts. The objective is to address environmental issues as early as possible, so as to avoid costs and delays in implementation due to unanticipated problems. This ESMP document is addressing those requirements.

The Bank categorizes projects according to their environmental and social impacts as follows:

EBRD Classification of Projects for Environmental Assessments

Category A	A full EIA is required, as the project may have diverse and significant environmental impacts
Category B	Although a full EIA is not required, environmental analysis is appropriate, as the project may have specific environmental impacts
Category C	Environmental analysis is unnecessary, as the project is unlikely to have any environmental impacts

Some aspects of the project need to be assessed for environmental impact, but the specific actions are not yet known and therefore this ESMP has been prepared. The Project's expected environmental and social impacts correspond to Category B projects.

EBRD performance requirements that could be triggered by the project are as follows:

- Assessment and Management of Environmental and Social Impacts and Issues PR 1: The works on bridge construction and reconstruction of local road to Graovo will have a smaller impact on the environment (B category of the environmental protection). Most impacts are temporary and will disappear after the completion of works on bridge construction and local road reconstruction.
- Land Acquisition, Involuntary Resettlement and Economic Displacement PR 5: Rehabilitation works will be realized within the existing Right of Way and there will not be any additional land acquisition, involuntary resettlement or economic displacement. This performance requirement will not be triggered.
- Cultural heritage PR 8: The project includes construction works typical for bridge construction and road reconstruction projects, as well as earthworks and physical cultural resources could be found/affected during earthworks. Although unlikely given that the Works are to be realized within the existing bridge and approach roads footprint, it is necessary to include screening procedures to ensure that reconstruction sites are assessed for the presence of any physical cultural resources and to ensure that no works will affect known cultural sites. Mitigation procedures for handling resources that are identified during the site preparation and reconstruction phase - "chance find procedures" are presented in chapters 3.7, 4 and 5.1.5 of this ESMP document.
- Information Disclosure and Stakeholder Engagement PR 10: Public consultations were held regarding the ESMP preparation. ESMP and other project related information were disclosed to the public and made available to the local community. After the completion of public consultations, a full report on public consultations will become a key part of this ESMP. Report on public consultation is presented in appendix VI.

Performance Requirements triggered by the "Graovo" Bridge construction and reconstruction of local road to Graovo are as follows:

Safeguard Policies Triggered by the Project	**Yes**	**No**
PR 1: Assessment and Management of Environmental and Social Impacts and Issues	**X**	
PR 2: Labour and Working Conditions	**X**	
PR 3: Resource Efficiency and Pollution Prevention and Control	**X**	
PR 4: Health and Safety	**X**	

PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement		**X**
PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources		**X**
PR 7: Indigenous Peoples		**X**
PR 8: Cultural Heritage	**X**	
PR 9: Financial Intermediaries		**X**
PR 10: Information Disclosure and Stakeholder Engagement	**X**	

As a conclusion, it could be stated that Government of Serbia regulations do not require separate section-specific ESMP to be undertaken for this type of investments (bridge construction and local road reconstruction), while the IFI's policy requires partial EIA assessment and preparation of site-specific ESMP for each section.

3. BASELINE CONDITIONS ASSESSED DURING ALIGNMENT SURVEY

3.1. Geology and soil

For the studied area of the "Graovo" Project in the near vicinity of A1 (E–75) Motorway Belgrade - Nis – border of NM there are no available data on the presence of polluting material in the soil. Empirically, it can be expected that the intensification of traffic and agricultural activities may lead to excessive pollution of the environment, including the soil.

Landslides have been registered in the valley of the Juzna Morava river in the valleys of rivers, brooks and ravines which flow into it and along their very banks, whereas sliding terrain away from the waterways do not occur so frequently.

3.2. Surface and ground water

In order to define the existing condition of the quality of surface waters, more specifically the rivers in the corridor of the A1 motorway (Juzna Morava river, Palojska river, Licindolska river and Predejanska river), data was used from the Republic Hydro-meteorological Bureau and that only for the Juzna Morava river, with consideration for the fact that measurements are not taken for the remaining waterways in the studied area.

In the observed area there are no registered water supply wells. Except Juzna Morava river, main water body on proposed motorway section are Terzinci creek at km 876+760 and Palojska river at km 877+380.

A review of the existing condition of water of the Juzna Morava river indicates a low level of quality. By analyzing the data on measurements of the concentration of the physical-chemical parameters in the waters of the aforementioned river collected at the measurement stations, it can be concluded that there is a deviation from Maximum Permitted Concentrations (MDK) for second class waterways, which the Juzna Morava belongs to according to the Regulation on Categorization of Waterways (Official Gazette RS, No. 5/68).

The value of dissolved O_2 as well as the percentage of oxygen saturated water occasionally corresponded to class III, class IV and VK condition of water quality. Furthermore, the measured values of suspended materials at all locations corresponded to class III. By reviewing the results of the conducted analysis, one can notice that in one case there was the occurrence of excess values of ammonium nitrate (class III/IV).

Of dangerous and harmful materials there were individual cases at individual locations of excess concentrations of manganese (Mn) and hexavalent chromium (C_r^{6+}).

A study of the quality of surface waters in the sense of a more detailed definition of the existing condition in the corridor of the planned section of the motorway was performed for the Juzna Morava river. Data on the quality of water of the Juzna Morava river is displayed in table T1.

Table T1 Results of the analysis of the quality of water for the Juzna Morava river

No.	Dangerous material	MDK for class II	S. Morava
1	BPK5	4	19.01
2	HPK	12	25.44
3	Suspended material	30	24.80
4	Dissolvable material	1000	154.59
5	Ammonia	0.1	0.65
6	Nitrites	0.05	0.039
7	Nitrates	10	3.22
8	Phenol	0.001	0.009
9	Detergents	0.4	0.37
10	Mineral oil	0.05	0.00
11	Iron	0.3	0.07
12	Chromium (Cr^{+6})	0.1	0.00
13	Zinc	0.2	0.00
14	Copper	0.1	0.07
15	Sulphides	0.00	0.01
16	Cadmium	0.005	0.00
17	Nickel	0.05	0.002
18	Chromium (Cr^{+3})	0.1	0.00
19	Cyanide	0.1	0.01

3.3. Air

Within the bridge and local road to Graovo zone, in the corridor of the A1 (E75) motorway section between Gornje Polje and Caricina Dolina, there are no significant non-point or point sources of air pollution. The A1 motorway, major road M-1, as well as the regional road R-214, are linear sources which can cause an increased concentration of air pollutants. Due to no industrial structures being marked within the studied area which could cause increased levels of concentrations of pollutants in the atmosphere it can be justifiably assumed that the quality of the air is at a satisfactory level.

Data on the measured values of air pollution in the observed corridor were not available. It is presumed that the planned section of the motorway will become the dominant linear air polluter within the observed area.

3.4. Climate factors

The entire area within the project zone is characterized by a mild - continental climate. It is especially evident in the valley of the Juzna Morava and along its banks, characterized by mild summers, cold winters with heavy precipitation and clearly defined transitional seasons of which autumn is exceptionally long. There is a relatively small volume of precipitation during the summer, but there are strong wind currents. The annual mean air temperature for the period of 1931 - 1970 at

meteorological station Predejane is 10.8° C. The annual mean temperature amplitude is 20.8° C. Average precipitation is 693.3mm.

The Grdelica gorge has a climate which is somewhere between moderately continental and Mediterranean climate, with certain peculiarities conditioned by its geographic position, and especially its orographic (topographically induced rain) and hydrographic characteristics.

3.5. Ecosystems (Flora and Fauna)

Preconditions of INCS related to zone of E-80 Motorway from Nis to Bulgarian border, including motorway section Gornje Polje - Caricina Dolina, are relevant for "Graovo" Project too respecting the extremely close distance between the A1 motorway and subject bridge (see picture 3). Preconditions of INCS are given in the document No 03-853/2 from 29.06.2006, and No 03-237/2 from 27.02.2008 (Appendix V).

For the needs of this project, new preconditions of the Institute for Nature Conservation of Serbia were obtained (03 no. 021-1609 / 2 dated Jun 10, 2021) confirming that no protected natural assets at the project location (Appendix V).

The key comments from INCS noted: There is no statutory protected natural resources along the motorway route between Gornje Polje and Caricina Dolina, where "Graovo" Project is located.

Within the project zone, the diversity of plants is above all conditioned by the presence of waterways. They further influence the regime of moisture in the ground and as such also the composition of phytocoenosis which find more or less suitable conditions for life. Various plant communities can be found in the waterways and that being in the form of free floating or submerged hygrophilous species. They are mutually characterized by various needs for sunlight and content of mineral and organic components which are dissolved in the water.

Full list of animal and plant species which habitats are located within the area of E-75 Motorway section between Gornje Polje and Caricina Dolina is presented within the EIS for construction of Gornje Polje - Caricina Dolina motorway section.

None of aforementioned plant or animal species are rare, vulnerable, endangered or protected.

3.6. Inhabitants

The territory which belongs to the Gornje Polje – Caricina Dolina Motorway section encompasses 6 settlements which belong to the municipality of Leskovac. Data which relates to the basic characteristics of the inhabitants and their activities is displayed in table T2.

Table T2.Comparison of inhabitants' characteristics

Settlement	Year of census	No. of residents
Bojisina	1991. 2002.	265 245
Bocevica	1991. 2002.	193 151
Bricevlje	1991. 2002.	231 241
Palojce	1991. 2002.	512 502
Predejane (town)	1991. 2002.	1396 1222

Graovo	1991. 2002.	356 277

3.7. Immovable cultural assets

For the needs of this project, new preconditions of the Institute for Protection of Cultural Monuments (no. 693/2-02 dated May 28, 2021) confirming that no protected cultural assets exist at the project location (Appendix V).

Preconditions obtained from IPCM, related to E-75 Motorway section from Gornje Polje to Caricina Dolina are given in the document No 10/2233 from 24th September 2008. This document is available in Appendix V of this ESMP Document, and recorded cultural assets in the zone of proposed project are listed within the Table T3.

Table T3. Recorded cultural assets in project zone

Place	Name of locality
Bocevica	Latin Graveyard
Bocevica	Seliste

No statutorily protected archaeological sites will be directly affected by the "Graovo" Project.

At all locations **is not necessary** to carry out preliminary archeological excavation.

Before beginning any kind of earthworks on the aforementioned locations, it is necessary to inform the Institute for the Protection of Cultural Monuments of Serbia – Belgrade.

In case of chance finds, The Contractor is required to immediately, without delay, halt works and inform the authorized Institution for Protection of Cultural Monuments and to undertake measures to ensure the findings are not destroyed or damaged and to protect the area and position in which they are discovered.

Assets may be vulnerable to indirect impacts such as vibrations and air pollution. In some cases the precise locations and boundaries are not known (e.g. Bocevica and Predejane). Overall, the knowledge regarding these sites is very limited.

4. SUMMARY OF ENVIRONMENTAL IMPACTS

Issues/Impact	Significance	Comment
Impacts on land use/settlements	low	There will be no land acquisition, involuntary resettlement or impact on private property
Underground and surface waters	low	Due to low amount of water that can come to the recipient by drainage, the consequential impact is minimal to negligible. The project does not entail any watercourse regulation works
Air quality	low	Temporary impact during the execution of works
Flora and fauna (protected areas and species)	low	According to the mitigation measures described by the INC. Temporary impact during the execution of works. Construction works entail previous clearing of the existing vegetation within the road alignment. Contractor's Camp may affect the degradation of the existing flora. Impact is mitigated by appropriately applying SSIP
Noise and vibration	low	Temporary impact during the execution of works. Noise generated by the works, may have a negative impact on the local population. Impact is mitigated by restricting the works to daylight hours and reacting upon submitted grievances
Soil management	low	Mitigated with the application of appropriate measures of waste management. Use licensed waste disposal contractors to ensure disposal at licensed sites
Waste management	low	According to the plan of waste and waste water management and material spillage/loss during transport, delivery and storage. Use licensed waste transport companies, and deposit waste at licensed locations
Dust	low	Temporary impact during the execution of works
Chance Find of Cultural Artifacts	low	If found contact authorities – relevant Institute for Protection of Cultural Monuments
Soil and water pollution	low	During construction activities, when using machinery, there is a possibility of soil contamination due to accidental spills of oils and fuel from construction machinery
Access roads and work areas	low	Temporary adverse effects relating to construction activities. Contractor is required restore all affected areas in their original condition

Issues/Impact	Significance	Comment
Spillages	low	Accidental spillages of oils and fuels when refuelling the construction machinery may occur
Cumulative impacts	Moderate / minor	Temporarily, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only

Bridge construction and local road reconstruction works will have only minor impacts on the environment. Most of the impacts are of temporary character and they disappear after the bridge construction and road reconstruction works are completed.

In respect to future use of the rehabilitated bridge - significant increase of road traffic as a result of rehabilitation works is not expected.

The possible temporary impacts as consequence of the bridge construction and road reconstruction activities will consist of, among others, disruption of current traffic circulation, roadway safety, dust nuisance, and gaseous emissions, potential pollution of soils and water resources and brief disturbance to biota. Off-site activities include quarry, borrow pit and asphalt plant operations, which if not managed properly, may cause localized adverse impacts. The Contractor's yard and workers' camp can be potential sources of temporary adverse impacts.

This ESMP document is focusing more on the rehabilitation phase of the selected investment, as it will become part of the respective Contract for the implementation of civil works, and as such, the future contractor's obligation. The activities related to subsequent regular maintenance of this section are not the main focus of this ESMP, but are presented herewith for the purpose of completeness.

4.1. Air and noise pollution within the residential areas

Local residents will not be affected with air and noise pollution during bridge construction and road reconstruction works on proposed road section.

Local Air quality may experience some moderate and temporary deterioration due to dust from construction traffic and elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhaust are the primary pollutants. The dust may settle on vegetation, crops, structures and buildings, and may cause some degree of impact.

Noise caused by the rehabilitation works will be only a temporary impact. Relatively low traffic load, leads to the conclusion that protective noise barriers are unnecessary on this project. Subject section passes through residential areas, accordingly works will be limited to daytime conditions

4.2. Potential water contamination

Cases of water contamination may occur during the bridge construction and road reconstruction works from site run off, spills and -water from the equipment maintenance areas and sanitary wastewater effluent from the work camps.

The main sources of pollutants during operation of the observed section are: vehicles, precipitation and dust. During the phase of operation of the bridge, pollution of water will mostly be the consequence of the following processes: settling of exhaust gases, wearing of tires,

spilling of loads, discarding organic and non-organic waste, settling from atmosphere, carrying by wind, dispersal due to passing vehicles, etc.

Pollution as a consequence of the aforementioned processes, according the characteristics of its duration, may be constant, seasonal and incidental (accidental).

In a case of accident, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

Fuel and lubricant spills can, in most instances, occur at the Contractor's work camp and motorpool while maintaining and washing equipment and work vehicles. The oily wash-water should be passed through an adequately sized, gravity oil separator prior to discharge.

Should spills occur in any part of the road / bridge, especially where the rivers are closest to the road, to mitigate the problem the Contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and dispose them in approved facility, in accordance with the Law on water ("Official Gazette of RS", 54/96, 101/05).

4.3. Social impacts

The subject "Graovo" Project will have a minor social impact. There will be no land acquisition, involuntary resettlement or impact on private property as defined by the PR 5.

Previous experiences from similar projects show that the project should create many social benefits in almost all socially important aspects. From the perspective of the interests of certain social groups as users of the space and the structures within that space, the bridge construction and road reconstruction may have a twofold effect on the socio-economic and commercial development of the specific area.

If some of the unemployed are employed or if employment has impact on unemployment, the project creates social benefits due to decreased social support or aid to the unemployed.

4.4. Potential impacts to the neighboring flora

During the execution of "Graovo" Project on the subject section, removal and damages of the existing low vegetation may occur.

The Project does not entail removal of existing trees or damages to the root systems.

For the purpose of mitigating potential negative impacts on the existing flora during works execution, it is necessary to implement all precautionary measures so as to maximally protect and preserve trees/tree lines along the road section/alignment or its immediate vicinity from potential damage.

4.5. Potential Cumulative impacts

The execution of works on subject bridge construction and local road reconstruction project could have limited temporary cumulative impacts (noise, air pollution, water and soil pollution).

Proper application of the Environmental and Social Management Plan would minimize any negative impact on people and the biotope, which could be associated with negative long-term cumulative effects. If the foreseen protection measures are conducted, the cumulative impact will be minimal.

5. DESCRIPTION OF MITIGATION MEASURES

Possible environmental and social impacts will be mitigated during the pre-rehabilitation, rehabilitation, and operation phases, as summarized in this Environmental and Social Management Plan.

A basic assessment of the proposed bridge construction and road reconstruction project concluded that the "Graovo" Project impacts will be minor, reversible and manageable if the mitigation measures as given in the ESMP are properly implemented.

Appendix I (Mitigation Plan) and Appendix II (Monitoring Plan) of this ESMP are based on the type, extent and duration of the identified environmental impacts. KS (the Implementing Agency) will control the project supervision engineers and Contractors on the implementation of this ESMP.

5.1. Site-specific mitigation measures

The findings and proposed mitigation measures have been compiled into an Environmental Mitigation Plan (Appendix I). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the rehabilitation and operational phases. It makes reference to the law and contract documents, approximate location, timeframe, and the responsibility for its implementation and supervision.

5.1.1. Soil

Reconstruction phase

- Strict protection of all areas outside the immediate zone of the agreed work sites, such that no additional areas may be used as a permanent or temporary disposal sites for materials, as borrow pits, or for machine parking or repair;
- Removal, storage and handling of topsoil in such a manner that it can be used in final reinstatement, bio-restoration and stabilization of slopes;
- Storage and handling of fuels, oils and other hydrocarbons in a controlled process, involving measures to prevent soil and water contamination. Work camps should include storage on sealed surfaces and within secondary containment; refueling of all plants, vehicles and machinery should not be allowed within 50m of any watercourse, drain or channel leading to a water course.
- Forbidding any opening of non-controlled access roads to any part of the reconstruction sites;
- Temporary storage of reconstruction waste will be limited to within the site, and within areas approved by the Engineer.
- The Contractor shall not dispose of any waste and/or reconstruction debris by burning, or by burying. All waste shall be disposed of offsite at an approved landfill site.
- The Contractor will be responsible to remove and transport all waste material off site to an approved landfill.
- The Contractor is advised that cement and concrete will be regarded as materials that are potentially damaging to the natural environment on account of the very high pH of the material, and the chemicals contained therein. The Contractor shall ensure that all operations that involve the use of cement and concrete are carefully controlled.
- Concrete mixing, in the purpose of pre-stress girders, shall only take place in the reconstruction camp or in dedicated plateau. Water and slurry from concrete mixing operations shall be contained to prevent pollution of the ground surrounding the mixing points. Old cement bags shall be placed in wind and spill proof containers as soon as they

are empty. The Contractor shall not allow closed, open or empty bags to lie around the site.

- All unsuitable and surplus spoil rock shall be removed from the site to an alternative recycling opportunity. Last alternative is to transport it to a dumping site or sites where it shall be dumped, spread and leveled.
- No dumpsite shall be used without the prior written approval of the Contractor and the owner of the property.
- No spoil material shall be stockpiled in violation of any legal requirement or to obstruct any watercourse or drainage channel.
- Concrete remains will be crashed into pieces of cca 20cm diameter and will be used for the backfilling.
- All visible remains of excess concrete shall be physically removed immediately and disposed of as waste. Washing the visible signs into the ground is not acceptable. All excess aggregate shall also be removed.
- The process of separating rock material into acceptable grades for backfilling and layer works material will result in noise and dust. The Contractor shall suppress dust caused by the screening process. The screening process shall be positioned so as not to cause any disturbance-to surrounding villages.
- Waste steel will be sent to steel recycling facility, which will provide transport service;
- Wastewater from the WWTF facilities and sedimentation ponds/tanks on site wilt is reused for dust suppression and vehicle wash down as a priority over discharging the water to stormwater or creek.
- The Contractor shall dispose of all refuse generated by his staff and Sub-Contractors on a weekly basis at a registered Domestic Waste Disposal Site. Contractor will engage specialized utility company for removal and disposal of domestic waste.
- In a purpose of temporary waste disposal, Contractor will ensure scavenger, water and windproof containers, for collected waste until disposed of.
- The Contractor shall supply waste bins/skips throughout the site at locations where reconstruction personnel are working. The bins shall be provided with lids and an external closing mechanism to prevent their contents blowing out and shall be scavenger-proof to prevent baboons and other animals that may be attracted to the waste.
- The Contractor shall ensure that all personnel immediately deposit all waste in the waste bins for removal by the Contractor. Bins shall be emptied on a daily basis at waste containers.
- No waste to be buried or burnt onsite and litter and gross pollutants to be removed as part of ongoing maintenance operations;
- The bins shall not be used for any purposes other than domestic waste collection.
- All hazard materials have to be storage at the fenced and secured area. All hazardous and danger material will be undertaken
- Liquid hazard materials have to be kept on the waterproof surface, supplied with WWTF.
- All areas used as storage of the liquid hazard materials, must be supplied with the adsorbent, such is prefabricated peat, sand or cutting, which has to be used in the accidents to collect liquid.
- Collected liquid hazardous waste will be kept in specialized liquid waste containers, which will be carried out by the licensed company engaged by the Contractor.
- All content from the separator and coalescent filters are dangerous waste and handling requires well-trained persons. Extracting and temporary storage will be done using specialized liquid waste containers.
- Used tires, or other rubber parts of equipment will also be treated as hazardous waste.
- The Contractor shall ensure that he is familiar with the requirements for the safe storage, handling and disposal of petroleum, chemical, harmful and hazardous materials.

- The Contractor Shall is responsible for establishing an emergency procedure for dealing with spills of release of these substances. He shall also ensure that the relevant reconstruction personnel are familiar with these emergency procedures.
- Petroleum, fuel and oil throughout the site shall be stored in enclosed separated areas at reservoirs with double shield, at the location of which shall be determined on site in conjunction with the Engineer. The enclosed areas shall be clearly marked.
- Usage of oil and fuel will be 'allowed only to the training persons, who will be nominated by the Contractor. All activates with fuel and oils will be at the dedicated areas.
- Special care will be taken during deliveries, especially when fuels and hazardous materials a being handled. A responsible person, who will check storage tank levels, before delivery to prevent overfilling, supervises all deliveries and that the product is delivered to the correct tank.
- Tanks containing fuels shall have lids and shall remain firmly shut. Only empty and externally clean tanks *may* be stored on the bare ground. All empty but externally dirty tanks shall be stored on an area where the ground is protected (e.g. concrete slab, covered store house, etc.).
- Fuel stores shall be placed on a concrete, or similar, base surrounded by a brick bund. The bund shall have a volume of 10% of the volume of the largest tank in the storage area plus 10% of the volume of all other tanks. The slab shall be sloped towards a sump to enable any spilled fuel and water to be removed. Any wastewater collected at the sump shall be disposed of as hazardous waste.
- Gas and liquid fuel shall not be stored in the same storage area.
- The Contractor shall take all the necessary precautions to prevent fires or spills at the fuel stores. No smoking shall be allowed inside the stores and within 3m of a bund.
- The Contractor shall ensure that there is adequate fire-fighting equipment at the fuel stores.
- Lubricants will be stored in drums or tins that are either sealed or have tightly fitting caps. All containers must be closed unless in use. Decanting of lubricants must be carried out in a specific area that has been previously identified and suitably protected.
- The floor of any storage of decanting area shall be impervious (such as concrete) to lubricants and kept clean at all times. The floor shall slope towards a central sump, all liquids collected in the sump shall be disposed of as hazardous waste.
- Lubricants shall be stored under cover in a no smoking area.
- All lubricant impregnated cotton waste and rags shall be promptly disposed of and handled as hazardous waste.
- The Contractor shall ensure that all servicing and/or refueling of vehicles and equipment takes place within the reconstruction camp. The ground under the servicing and refueling areas shall be protected against pollution caused by spills and/or tank overfills. The method of protecting the ground shall be identified by the Contractor and approved by Engineer;
- All waste shall be collected, contained on site and stored in water-tight containers prior to disposal off-site as hazardous waste at approved site. All equipment that leaks shall be repaired immediately or removed from the site;
- The Contractor shall only change oil or lubricants at agreed and designated locations, except if there is a breakdown or an emergency repair. In such instances, the Contractor, shall ensure that he has sorbent (sand, cutting or Similar) and/or drip trays available to collect any oil or fluid. The only permitted method of refueling and refilling lubricants is by means of a pump;
- In the purpose of smaller interventions for re-fueling it will be used small fuel delivery vehicle. It will be supplied with Spill-Kit equipment.

- Parking of machines and equipment only at designated sites, which should be provided with specific measures for protection against soil pollution with fuel, oil, or oil derivatives. In the event that soil is contaminated by spillage, the affected layer should be removed and disposed of at approved dump sites, in accordance with the Contractors waste management plans (WMP);
- Systematic collection of solid waste during reconstruction (including food and material packaging, and other types of waste) should be undertaken and should be disposed of two agreed licensed facilities, in accordance with the WMP;
- Cleaning equipment and vehicles will only be allowed in dedicated facilities, designed to avoid ground and water pollution. Similarly, washing out of concrete mixers and uncontrolled removal of remaining concrete should be a controlled operation; the use of „slush pits" (lined pits) or tanks should be employed for washing out concrete contaminated equipment following concrete pours. The resultant set concrete can then be disposed of as inert solid waste or reused in bulk fill areas, as appropriate;
- Upon completion of material extraction, all borrow pits and waste disposal sites should be reinstated to reduce the visual effect and re-establish natural vegetation. Limitations to this will occur, especially where material is extracted from currently operating, licensed quarries, in which Project influences are restricted, as will be the case for licensed waste disposal facilities.
- Since the project envisages river control works, it is necessary to avoid this type of works in the period of fish spawning.
- Organizing the reconstruction within the minimum amount of space needed for its functioning, and during selection of the location, ensuring that it is not an area with developed plant and wildlife characteristics in order to avoid unnecessary loss of biotope.
- Collecting humus material and storing it in an organized storage area so that it may be used during finishing works for recultivation and biological protection;
- Carrying out all activities with petroleum and its derivatives during reconstruction or the filling of vehicles in a specially defined place with the maximum mitigation measures to ensure that spilling does not occur. Collecting all packaging for oil and other petroleum derivatives and taking them to a controlled storage area;
- If damage occurs to a vehicle with dangerous liquid materials, traffic must be stopped as in the previous case and transferred to a parallel carriageway. In the meantime the authorized service at the level of the municipality shall be informed and the specialized team for sanitizing damage shall be deployed. The spilled material is removed from the motorway using special sorbents. If the liquid reaches outside of the profile and pollutes the soil, sanitization shall be done by removing the soil. All materials which are collected in this way are treated according to the special procedures of regeneration or are stored in the storage area envisaged for such materials.

Operation phase

No specific measures to be implemented, except applying good engineering practice.
General mitigation measures are:

- Provide suitable road markings, signs and signals for the section
- Draw up operational plans for winter maintenance procedures, taking into account environmental protection;
- Slopes of embankments need to be landscaped and planted both to improve the visual effect and reduce potential for surface erosion;
- Provide a road protection zone that will not be used as an arable zone. Considering the expected concentrations of the pollutants, this belt should not spread beyond 5 meters

from the edge of the road right of way. The grass obtained by the maintenance of green surfaces in the vicinity of the road shall not be used as cattle feed. It will be important to inform and educate local communities regarding the dangers of using this vegetation. According to the law, PERS is responsible to perform all sampling, measuring and other monitoring activities during the operation phase, by following all recommendations given within the monitoring plans (component of site specific EIA and this ESMP). All the monitoring results are to be provided to the Serbian Environmental Protection Agency. PERS will also inform local communities about monitoring results, including on potential pollution of land nearby the motorway. No herbicides shall be used for elimination of weeds;

- Substitute the use of sodium chloride with by other substances with a similar or higher defrosting effect in order to minimize the effects of salinization of soil in the vicinity of motorway resulting from the winter maintenance. Where sodium chloride is used in the maintenance process, precise planning of time distribution and quantities is of critical importance;
- Ensure that other support and other service facilities along the route are designed and erected in after the appropriate EIA and/or studies are made and approved by the relevant national institutions;
- The complexes of accompanying content must be supplied with special containers for collection of solid waste so that pollution of soil in the zone of the road is avoided during operation. The containers must be emptied by the authorized company and solid waste must be stored at the proper dump area.

5.1.2. Surface and ground water

The mitigation measures for underground and surface waters encompass all procedures which are necessary for bringing quantified negative effects to within the allowed limits, as well as procedures for minimizing the effects of the phase of reconstruction and phase of operation.

The Project does not entail any watercourse regulation works.

During the execution of “Graovo” Project, as well as utilization, different cases of water pollution are possible. Wastewaters effluent during construction works, may reduce the quality of surface and ground waters. In accordance with the Water Law, adequate mitigation and monitoring activities have been planned. Regarding possible water contamination during road / bridge utilization, it is limited to accidents only.

In case of accidents, as defined by the Ministry of Internal Affairs and the Water Law, procedures for acting in emergency situations are implemented. If an accident occurs, in accordance with the Water Law and the Law on Emergency Situations, it is necessary to inform: sanitary inspector, police and other legal entities which in the scope of their regular activities deal with monitoring, evidenting, analysing and forecasting certain occurrences and states in hydrometeorology, seismology, fire protection, water management, chemical and radiological protection, health, agriculture, electricity management, traffic and other areas.

In regards to the necessity of treating wastewaters effluent from the carriageway, Institute for Nature Conservation of Serbia has issued the following condition:

"For water that is mixed with oil and other petroleum products, generated by washing away from the carriageway, certain intake pipes and separators of fat and oil should be foreseen, if the Environmental Management Plan establishes/assesses that the average annual daily traffic negatively impact the water quality of watercourses crossing or parallel with the subject road section, in other words that the limit values defined in the Regulation on Emission Limit

Values of Pollutants in Water and deadlines for their achievement and Regulation on emission limit values of polluting substances in surface and ground waters and deadlines for their achievement".

Considering the fact that current traffic load (AADT) for the subject section is 650 vehicles per day as well as the baseline conditions assessed during route survey, the Designer believes that collected runoff from the carriageway should not be purified in the zone of registered watercourses (50-100 m in front and behind the registered watercourse).

Contractor should carefully plan potentially sensitive operations such as in-river works. Typical procedures will include:

- No reconstruction materials or pollutants, such as cement shall be allowed to fall/flow into water features. All storage of spilling material will be covered to avoid possible emissions with wind blow.
- Extreme caution shall be taken during reconstruction owing to the high erosion potential of the river embankments. The EM shall assess any preventable damage caused by the Contractor and prescribe rehabilitation measures to be completed.
- Reconstruction in the river bed (if any) will take place during low water level period;
- No washing of equipment or vehicles will be allowed in the vicinity of watercourses; it is strictly forbidden to wash construction machinery, especially concrete mixers in the river
- The river banks in the studied area must be protected by barriers during the reconstruction phase for the purpose of preventing negative effects which could be caused by driving and unloading material in the vicinity of the same.
- Driving of machinery within rivers, streams or on their banks should be prevented except in cases when it is impossible to avoid due to construction of a certain structure or building.
- Excavation and construction of foundations for shoreline columns, support walls, and other structures which are located on or in the vicinity of bodies of water, are carried out during periods of low water level (July - September), in order to reduce the negative effects on the rivers and their shorelines to a minimum.
- Maintaining, refueling and cleaning reconstruction machinery shall be carried out at locations which are far from waterways and which will be defined before the works are begun.
- In the direct vicinity of rivers, spillage of any kind of dangerous substances must be avoided. In that sense, the contractor will be required to use biodegradable compounds for lubricating machinery as well as biodegradable transmission fluid in order to reduce pollution down to a minimum during the carrying out of works.
- Providing training to machine operators regarding the sensitivities and working procedures to be followed;
- Checking all machines and equipment for leaks prior to use;
- Preparing site specific emergency plans to respond to any incidents or spillages of hazardous material;
- Storing all fuels at a safe distance from the watercourse;
- Preventing re-fuelling near the watercourse and/or taking precautionary measures to prevent spillage.
- Construction of foundations for bridge piers, retaining walls, and structures located at or in the vicinity of rivers should take place in the period of low water levels (July - September) so as to minimize negative impacts on rivers, their banks and river ecology;
- Storage and handling of fuels, oils and other hydrocarbons through a controlled process, involving measures to prevent soil and water contamination. Those should include fuel and oil storage on sealed surfaces and within secondary containment; refueling of all

plant, vehicles and machinery at minimum 50m of any watercourse, drain or channel leading to a water course.

- Similar measures for storage of fuels and re-fuelling of equipment should be put in place in floodplains to prevent groundwater pollution. No storage of fuels and oils will be allowed in floodplains where the potential for washout exists.
- All sites near rivers will be protected by fencing and other means to prevent loss of reconstruction materials, particularly hazardous materials.
- Prevent the movement of machines inside rivers, streams, or on their banks, except when it is unavoidable due to the construction of a structure or reconstruction.
- The Contractor shall construct and operate the necessary collection facilities to prevent pollution.
- The Contractor shall dispose/discharge of collected wastewater in a manner in accordance with Water Protection Conditions.
- Each parking, service, or cleaning and washing plateau will be equipped with Waste water treatment facilities (WWTF) in the manner of sedimentation tank and grease and oil separator. All these WNTF will be temporary objects.
- Contractor will consider in detail all recommended locations of the coalescent filters, described in the ESMPC as reconstruction site facilities, and prepare detail plan of their usage in the purpose of works. Moreover, working progress schedule will have influence on facilities installation.
- All washing of plant/equipment/concreting equipment etc. shall take place within the reconstruction camp. Water from washing operations shall be collected in a sedimentation tank, then to be purified through grease and oil separator. Recycled water will be discharged into natural recipient, The Contractor is encouraged to recycle dirty wash water to avoid obligation of removing it off-site.
- Trucks delivering concrete shall not wash the trucks or the chutes on the site or anywhere outside site boundary. All washing operations shall take place at a dedicated location where wastewater can be collected, purified, and discharged of in an acceptable manner.
- All reconstruction camps will be equipped with sanitation. Sanitation facilities contain temporary sewage and disposal tank (sump), which will be discharged in a necessary period by the licensed company.
- Adequate chemical latrines/toilets shall be provided for all staff near the alignment. They shall be emptied I serviced on a regular basis to prevent overflowing by the licensed company;
- All latrines provided by the Contractor shall be efficient, sanitary and non-offensive. A minimum of one toilet shall be provided per 20 persons at each working area and the reconstruction site.
- Strom Water is clean run-off water from the up-slope areas, mostly it will be catch on the perimeter of the site, and discharged into the recipients;
- During reconstruction. the Contractor will ensure that erosion control structures - either permanent or temporary - are installed prior to commencement of reconstruction.
- Any erosion channels developing during the reconstruction period or during the operational and maintenance period shall be backfilled and consolidated immediately and the area restored to the proper condition. All erosion damage shall be repaired as soon as possible. Displaced topsoil will be replaced from approved topsoil.
- Up-slope ditches will be constructed and used during reconstruction phase to divert away from areas of exposed soil to prevent the contamination of clean runoff. .
- Side ditches will be installed down-slope of all erodible stockpiles and upslope protection measures will be used to divert runoff in the event of rain;
- Sandbags will also be placed around storm water inlets/grates, throughout the site to prevent sediment entering piped storm water system.

- All vehicles and plants shall be well maintained to ensure that there are no oil or fuel leakages.
- The Contractor will provide a dished concrete plateau to prevent infiltration of hydrocarbon products.
- Drip trays will be utilized during servicing,
- Drainage from the service area will be channeled into a grease and oil-skimming tank, where it shall be treated to remove old hydrocarbons. Drainage from the washing platform will firstly be channeled into the skimming tank before being released by drain to the sedimentation pond.
- Soil contaminated by oil, fuel or chemicals shall be removed and disposed of at a registered Hazardous Waste Disposal Site or rehabilitated in-situ,
- The Contractor shall educate workers on the appropriate methods for workshop maintenance and fuel points to prevent fuel and oil being washed out of containment areas.
- Toxins and oil must be recovered from the system at least once a week, and if necessary the Engineer should require a higher frequency;
- Toxins and oil recovered must be stored in sealed drums on a covered, bounded area and removed from site either for recycling or disposal at a registered waste disposal Site.
- All spillage of oil onto concrete surfaces shall be controlled by the use of an accepted absorbent material.
- The servicing of equipment and vehicles will only be allowed in the Reconstruction Camp within the dedicated areas.
- The Contractor shall provide grease and oil separation tanks at all areas where oil spillage or collection will occur, i.e. workshops, oil storage, vehicle wash areas and fuel points.
- The Contractor shall provide a method for oil recovery. Recovered oil shall be collected in waterproof drums for recycling or disposed of at a registered Waste Disposal Site. These drums will be stored on site only on a covered, bounded area,
- The Contractor will test effluent discharged from the oil separator tanks for Conformity with relevant effluent conditions if requested to do so by the Engineer when pollution is suspected.
- In the closure to the local water intake area it is forbidden to organize any activates with liquid hazardous material, such a fuel, oil, cleaning and washing waste water, etc.;
- The Contractor must demarcate each location, and all staff will be informed about water intake presence.
- It is forbidden to open any new well in the water intake protected area.
- The Contractor is to ensure that the quality of the water discharged is compliant with the Water Protection Conditions, with respect to the receiving environment.

Operation phase

- The obligation of cleaning water runoff from the motorway is based on the application of the Law on Bodies of Water (Official Gazette RS No. 46/91), the Regulation on Classification of Water (Official Gazette RS No. 5/68) and the Plan on Protection of Water (Official Gazette RS No. 6/91). According to legal regulations, atmospheric water which is released into waterways, canals or other water surfaces must be cleaned at least to the quality which corresponds to the class of water in the recipient waterway.
- Removal of water from the motorway on the subject section is achieved by free flow over the shoulder and slope of the embankment and on parts of the section with smaller radius, water collected along the median is drained through a closed system to natural recipients outside of the road base.

- Considering that contamination is present in water runoff from the motorway in the first 10-15 minutes of rainfall which is of a high enough intensity to move a majority of particles deposited on the motorway as a measure for preventing infiltration of pollutants into lower layers of soil and underground water or surface water, the already envisaged humus layer can be used on slopes of embankments which has filtering characteristics in the sense of retaining polluting material during vertical permeation into the soil. This can also be used in zones of cuts by laying humus in the collateral drainage ditches. The capacity of a humus layer depends on the intensity of traffic and the relation between drained surfaces of the road and surface infiltration.
- On bridge structures, along the protective barriers and raised curbs, bridge collections areas have been planned by which all atmospheric water from the surface of the bridge and the elastic connections will be collected, guided into the appropriate drainage pipe, hung on the bridge cantilever or proper support, which must be defined in the main design.
- Within the framework of the internal system, surface water removal must be resolved for all accompanying content (rest stops, tollgates, loops, including disconnected sections as well as other operational surfaces) and all structures (viaducts, bridges) on the alignment of the newly planned section of the motorway.
- The continuous cleaning of components is necessary for the functioning of the water drainage system. A very important item in a series of other items aimed at ensuring the regular and efficient maintaining of the functions of the system is checking over the condition of the retention basin and cleaning the device during the operation phase. In that way the appropriate protection from pollution of the surrounding soil will be provided considering that over time pollutants become concentrated in the areas of retention basins.

5.1.3. Air quality

No specific measures to be implemented, except applying good engineering practice. Use existing asphalt plant, which is located outside project impact zone.

General mitigation measures during reconstruction phase are:

- The Contractor acts appropriately to minimize the generation of dust caused by reconstruction works. Such measures include frequent watering during dry periods or by comparable means approved by the Engineer.
- Speed limits must be enforced in all areas, including public roads and private property to limit the levels of dust pollution;
- Dust must be suppressed on access roads and overall reconstruction sites during dry periods y the regular application of water. Water used for this purpose must be used in quantities that will not result in the generation of run-off.
- Water trucks dampen haul roads and exposed surfaces to minimize dust generation and utilize dust suppressant products to assist in binding fine surface dust, improve water infiltration and reduce water usage;
- Dust dispersion from reconstruction activities, roads, spoil dumps and other reconstruction locations shall be limited and suppressed to the maximum extent practical.
- Spoil dumps shall be positioned such that they are not vulnerable to wind erosion.
- An appropriate freeboard shall be maintained in trucks hauling dirt, sand, soil and other loose material when leaving the road reserve.

5.1.4. Noise

In accordance with the preconditions obtained from the Institute for Nature Conservation of Serbia, execution of works during nightime hours is not allowed, because of negative impact of noise generated by the construction machinery, as well as disturbances to bird habitats.

If measurements taken as a part of planed monitoring activities (see Appendix II) show increased noise levels, contractor is obliged to take appropriate mitigation measures which are predefined within the Appendix I – Mitigation plan.

Contractor should also perform following activities:

- Raising workers awareness that noisy activities should be minimized;
- Adjusting the working hours in line with local conditions;
- Use of modern equipment and machines with noise suppressors when working in the vicinity of populated areas;
- Regular maintenance of reconstruction vehicles and equipment in view of the elimination of unnecessary sources of noise;
- Avoiding the concomitant operation of several noisy machines, when possible;
- Switching-off the machines when out of use;
- Using natural acoustic barriers or screens for protection against the noise round the machines;
- Regular maintenance of access and temporary roads and limiting the speed of vehicles on unpaved roads for transportation of materials.

5.1.5. Impacts on cultural environment

- Contractor is responsible for following national requirements with respect to “chance finds” which may emerge during reconstruction.
- Before beginning any kind of earthworks on the aforementioned locations, it is necessary to inform the relevant Institute for the Protection of Cultural Monuments so that they may carry out an archeological study;
- If at any time during reconstruction archeological findings or archeological objects are uncovered, The Contractor is required to immediately, without delay, halt works and inform the authorized Institution for Protection of Cultural Monuments and to undertake measures to ensure the findings are not destroyed or damaged and to protect the area and position in which they are discovered.
- Contractor is not allowed to perform excavation, demolition, alteration or any works that may harm the properties of the cultural monument.
- KS will timely inform the IPCM and authorized expert about the commencement of earth and other works at the archaeological site or in its immediate vicinity, in order to timely perform all the necessary preparations until the archaeological exploration license is obtained. This aspect has been included in the ESMP and a costing allowance has been made to cover archaeological watching brief and any subsequent investigations.
- In case of chance finds, Contractor shall mark and secure new identified sites (with a protective railing or other means of protection) to avoid damage in the course of bridge construction and local road reconstruction and immediately notify the relevant IPCM.
- KS is obliged to provide for and ensure archaeological intervention in the case they come across new finds. This involves the immediate discontinuation of works and notifying the competent IPCM about the discovery. Carrying out the above activities will require occasional archaeological supervision during reconstruction.

5.1.6. Flora, Fauna and visual impact

In accordance with the preconditions obtained from the Institute for Nature Conservation of Serbia, during works execution it is necessary to implement all precautionary measures so as to maximally protect and preserve trees/tree lines along the road section/alignment or its immediate vicinity from potential damage, especially damage to the root system, as well as breaking of branches and removal of tree bark when manipulating construction mechanization, or in any other way reduce their important features.

The following mitigation measures are necessary:

- Clearing up and removal of vegetation should be minimized to the extent necessary for the execution of works.
- Natural vegetation shall be kept in as undisturbed a state as possible. Special attention shall be paid to preserve trees and plant communities such as wetlands or montage forests, strictly according to the preconditions obtained from INCS (see appendix V). Vegetation removals as part of the development requirements - such as along the proposed scarp road - are excluded.
- Based on the detailed design for this project, The Contractor is obliged to prepare his own plan (Re-foresting Plan) for re-foresting those areas and to perform re-foresting activities according to this plan.

5.1.7. Work Camps

The Contractor shall submit a locality and site plan of all reconstruction camps indicating the location of fuel supplies, stockpile sites, offices and the reconstruction area for approval by the Engineer to be approved prior to establishing any camps. The Contractor shall submit a locality and site plan of all reconstruction camps indicating the location of fuel supplies, stockpile sites, offices and the reconstruction area for approval by the Engineer prior to establishing any camps.

- No one of the Camps will be in the area of influence on the water bodies (watercourse, water intake, etc.), Storage of hazardous materials will be afar of watercourse, and under specific conditions.
- Site facilities and offices will 00 selected in the manner to ensure that there is a minimal impact on the environment. All facilities will follow international health and safety standards furnished with power and telecommunication installations, fresh water supply, sanitary and wastewater collecting and treatment installations, solid waste collecting by category and hazardous waste collecting eco-receptacle;
- All Camps will be placed within an existing disturbed area, as far as possible. There will be no Contractor's objects, structures, parking, services, nor material storage in sensitive areas, such as wetlands or erosion potential land;
- All site buildings are containers and other temporary structures. No permanent structures will be built. All objects will be sound-proofing built, and will not pose a danger to personnel and surrounding environment.
- With the decommissioning of the structures all compacted platforms and slab foundations must be ripped and removed.
- Welding, gas cutting or cutting of metal will only be permitted in a specialized protected area inside the Reconstruction site.
- No fires are allowed in or outside the Reconstruction Camp. Adequate and well-maintained firefighting equipment- according to the fire hazard strategies - must be maintained on site during the reconstruction period.
- The Contractor shall be liable for any costs related to extinguishing fires started by the Contractor's employees or subcontractors. Additional penalties for infringements will also be imposed by the EM

- The boundaries of the site shall be demarcated prior to any work commencing on the site. The site boundary demarcation shall be removed when the site is disestablished.
- The method of demarcating the boundaries shall be determined by the Contractor and agree to by the Engineer prior to any work being undertaken. The method of demarcation consists of steel droppers placed at regular intervals, with nylon rope between the markers where this prove to be safe, but where any unauthorized person move closely pass reconstruction work, netting should be provided preventing building material from falling into these paths.
- The Contractor shall ensure that a/l his plant. equipment and materials remain within the boundaries of the site, unless otherwise agreed with Engineer.
- Contractor will ensure that materials used for reconstruction on the site do not blow on or move outside the Site and environs, or pose a threat to animals in the area. Failure to do so may result in the Engineer requiring the Contractor to fence the boundaries of the site with wire mesh, prepare covering material etc., at his own expense to the satisfaction of the Engineer.
- Wire mash fences will be constructed around heritage resources. to prevent access into such areas during reconstruction.
- Fencing shall be kept neat at all times. The Contractor shall be responsible for the maintenance of all fences. Breaches in the fencing must be repaired immediately.
- If fencing is removed temporarily for the execution of work, the Contractor shall reinstate it as soon as practicable. Until re-instatement, the contractor shall demarcate the working area by surrounding it with danger-tape marking.
- Demarcating/Fencing of the reconstruction site shall be suitable to allow access by livestock and local fauna to their natural routes. The purpose of the fenced areas is to control reconstruction and personnel activity within the designated areas, and limit unauthorized access.
- No unauthorized pedestrian or vehicular access shall be allowed into demarcated off-limit areas.
- All vehicles and equipment will be allocated a dedicated parking area in the Camp site;
- No storage of equipment and vehicles will be allowed outside of the designated area:
- All parking, service, cleaning and washing areas will be made of waterproof structure with equipment for collecting spillage. All parking areas will be equipped with WNTF;
- Existing roads (arterial road M-1.12, regional road R-121 and local road network) will be used, as far as possible. No temporary access roads will be permitted, unless, otherwise is accepted by the Engineer, and under agreement with affected landowners.
- In the purpose of the Project, if any existing local road need extension or reinforcement to carry out Contractor's heavy machinery it will be done in accordance with local standards, and approved by the Engineer prior to use;
- If any, temporary roads required Shall be decommissioned by the Contractor and rehabilitated using stockpiled topsoil. Topsoil shall be removed as described under 'Clearing and Grubbing' prior to the reconstruction of the bridge.
- Access roads shall be regularly brushed or scraped and kept free from dust and mud deposits. In dry weather dust suppression measures may be required.
- The accommodation of traffic is an important aspect on the roads identified for upgrade / maintenance. Where required, temporary works to facilitate the accommodation of traffic during reconstruction, should be completed first as road closures will be avoided as far as possible.
- Adequate and appropriate traffic warning signage will be placed along the route to be used by the reconstruction vehicles from the Camp.
- Adequate and appropriate traffic warning signage will be placed along the route to warn public of reconstruction work and heavy vehicle traffic.

- Transporters of fine materials must ensure that their operation does not pose a nuisance through the spillage of material or the creation of dust.
- All trucks and vehicles removing spoil from the site shall have the load areas covered by a tarpaulin to prevent rocks and spoil from falling onto the road surfaces, or causing a nuisance to persons in the vicinity.
- Deliveries shall be scheduled for off-peak hour traffic time schedules, as far as possible.

5.1.8. Site Organization Plan

The plan of construction site organization is the responsibility of the Contractor and the obligation is to comply with it and treat it.

The respective section is not located within the protected area which it is implemented or initiated the process of protection for, nor in the coverage area of the ecological network. Accordingly, the Institute for Nature Conservation of Serbia has issued the requirements relating to the organization of the site (Appendix V) and which must be taken into account for the plans production for the organization of construction.

Preparation of site and establishment of contractor‘s facilities: This applies to all of the Contractor‘s facilities, storage areas, workshops, labour camps (when needed), concrete batching areas, asphalt plant, etc. The location and development of the Contractors facilities will be approved by the RE.

Taking into account the conditions of nature protection, legislation and environmental requirements when choosing a location and organization of the construction site, as well as during the bridge construction and road reconstruction works, it must comply with the following:

- temporary location for storing the necessary construction and other material and equipment is needed to be located outside the space with tall vegetation, and limited only to the duration of the works execution;
- Provide temporary or permanent locations (existing regulated utility facilities/landfills) for disposal of service rubble and other waste material in any state, and municipal waste generated during the bridge construction and road reconstruction. Restrict storage / disposal in river areas, as well as other smaller watercourses of a temporary nature, as well as on agricultural land;
- provide after completion of the works that all areas which are in any way degraded by rehabilitation works should be as soon as possible remedied;
- During the works execution, strictly observe the planned alignment and corridor around it, in order to the earthworks and the use of machines would not leave consequences on the environment;
- when performing the bridge construction and road reconstruction works, it should be predicted the maximum preservation of the vegetation, wild species and their habitats;
- prohibit the servicing of machinery and vehicles along the road alignment. In case of accidental spills of fuel, oils / lubricants and other harmful substances, the surface must be repaired and reset;
- the respective bridge construction and road reconstruction works should be executed only during the daylight because of the potential impact of noise from construction equipment and vehicles;
- during the bridge construction and reconstruction of local road to Graovo along the whole alignment it should be maintained the maximum level of communal hygiene. Define locations for containers for temporary storage of waste;
- the size of contractor‘s facilities are limited to absolute minimum to reduce unnecessary clearing of vegetation.
- the contractor‘s facilities are to be contained within an adequate security fence.

- Contractor's Camp is properly drained. Paved areas, including vehicle parking areas, workshops and fuel storage areas are to drain to an oil and water separator.
- sanitary waste and grey waters are treated before release into surface water systems, in accordance with the Law on water ("Official Gazette of RS", 101/05).
- Fuel storage areas are not located within 20m of a water course.
- Where fuel in excess of 5,000 litres is stored on site, it will be stored in sealed tanks on a concrete base that is bunded to hold 110% of the tank capacity.
- All workshops would be provided with oil and water separators.
- The contractor must have trained personnel who are competent in fuel handling procedures and for cleaning up accidental spills.
- All waste oil, oil and fuel filters will be collected and disposed of in secure landfill areas. At the closure of the site, all contaminated soil will be excavated, removed and replaced with fresh topsoil;
- Cleared material is to be piled into manageable sized heaps according to disposal or re-use requirements.
- Limit the extent of excavation to reduce soil erosion potential. The contractor will be responsible for ensuring that the erosion is contained by soil conservation protection methods.
- Apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site.
- Avoid excavation and operating machinery in wet ground conditions.
- Upon the completion of all works, it is necessary to remove the machinery, construction materials, containers, spare parts and others. equipment, as soon as possible;
- after the completion of all works, it is required to cultivate the ground at all vulnerable areas by using the appropriate flora and species that are biologically stable under the given climatic conditions, resistant to adverse impacts (exhaust gases) and compatible with the surrounding area and purpose;

Company „Koridori Srbije" Ltd. acting through their supervision consultant checks if the requirements stated in the Environmental and Social Management Plan and Health and Safety Management Plan have been implemented in the Site Organization Plan.

Upon completion of the Project, Public Enterprise "Roads of Serbia" will be responsible for the use and maintenance of the road. Routine and occasional monitoring will be done according to the plan and monitoring program.

5.2. Contractor's Site Specific Implementation Plans - SSIP

During the rehabilitation, the Contractor will work according to the requirements of the Contractor's Environmental Protection Plan (SSIP), based on this ESMP, which has been prepared by the Contractor and approved by KS. Supervision and monitoring of the SSIP activities will be undertaken as follows:

- The contractor has the initial responsibility for preparing and implementing the SSIP as per the works contract.
- The Resident Engineer (RE) will direct the Contractor with regard to compliance with the SSIP.
- The KS will carry out independent monitoring of the work and can issue Defect Notices to the RE who will transmit these to the Contractor.
- The contractor will have his own representative on site – the Site Engineer (SE) who will be responsible for implementing the contract and complying with the SSIP.

Before commencing the work, the Contractor will prepare his own Site Specific Implementation Plan - Contractor‘s Environmental Plan (SSIP) that addresses the conditions of the rehabilitation in the ESMP that has been attached to Contract Documents including measures to comply with national legalisation and Lender requirements.

The Contractors are required to engage adequate, experienced ES staff, in order to meet projects ES requirements. Key Environmental and Social Experts are evaluated as part of tender evaluation process.

The SSIP will detail how the Contractor will address the activities in the rehabilitation section of the ESMP. The contractor will submit the SSIP to the KS for approval.

Following the approval of the SSIP, the Contractor together with the person on the Contractor‘s staff who will be responsible for supervising the SSIP will meet the Project Supervision Consultant PSC (Environment) on-site. If the plan is appropriate and implementable, the PSC will advise the PE that the Contractor can now commence work.

General environmental protection will be contractually provided for in the organization and planning of the work and operations on work site. Each Contractor should build upon the mitigation measures described in the EIA and ESMP and should prepare his own site specific implementation plan (SSIP), to include *inter alia*

- Waste and wastewater management plan
- Traffic Management Plan
- Oil and fuel storage management plan
- In-river works management plan
- Camp management plan
- Emergency response plan
- Re-foresting plan
- Grievance mechanism

Minimum requirements for each of above plans are shown in Appendix I – Mitigation Plan.

- Layout of the work camp and details of the proposed measures to address adverse environmental impacts resulting from its installation. Description and layout of equipment maintenance areas and lubricant and fuel storage facilities including distance from water sources/bodies;
- Sewage and septage management plan for provision of sanitary latrines and proper sewage collection and disposal system to prevent pollution of watercourses
- A plan (mechanism and organizational structure) detailing the means by which local people and other project affected persons (PAP) can raise grievances arising from the rehabilitation process and how these will be addressed (e.g., through dialogues, consultations, etc.) (see Appendix VI for the Project grievance mechanism) .
- Soil Management Plan detailing measures to be undertaken to minimize effects of wind and water erosion on stockpiles, measures to minimize loss of fertility of topsoil, timeframes, haul routes and disposal site;
- Dust management plan which shall include schedule for water spraying on access road and in nearby settlements along the project road, as well as list of equipment to be used; this applies to all of construction sites and haul roads. During rehabilitation, when dust may be generated, the Contractor will monitor the worksite conditions and apply dust control measures, which include reducing construction traffic movements and spraying water on exposed areas.
- A plan indicating the location of the proposed material extraction site as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion;

- Waste and wastewater management plan. Disposal of waste materials: All construction waste materials including drums, lumber, sand and gravel, cement bags etc. are to be suitably disposed of. If these cannot be recovered for scrap value these materials should be taken to an approved landfill sites for safe disposal. Hazardous waste will be stored and removed from the construction site on demobilization, in accordance with the Law on Waste management ("Official Gazette of RS", 36/09) The Contractor's SSIP should cover all aspects of waste management, including implementation of practice standards such as reduce, re-use and recycle.
- The Waste Management Plan will, as a minimum, include details of temporary waste storage, waste transfer and pre-treatment prior to final disposal or recycling. Licensed/approved facilities for solid and liquid waste disposal must be used and a duty of care and chain of custody for all waste leaving the site will be followed. As part of the plan Contractors will be expected to produce waste handling forms for chain of custody, which will be used to control waste leaving site. Thus the waste controller will keep a copy of the form and the driver will always carry a copy and will ensure that the load is signed for at the final disposal site. All records will be kept by the Contractor for audit purposes and to demonstrate that the project is complying with best practice and applicable legislation.
- Oil and fuel storage management plan. The Contractor's SSIP should cover all procedures for storage, transportation and usage of oils and fuels, refuelling of plant and machinery and procedures for minimizing the risk of ground and water contamination. All oils and fuels will be required to be stored within secondary containment of 110 % capacity and all spillages shall be cleaned up immediately. Re-fuelling vehicles will carry Spill Kits to enable spillages to be cleaned up as soon as possible. All categories of spillage will be reported in accordance with the Plan to be developed by The Contractor. Toolbox Talks would be expected to be delivered on an ongoing basis as „continued training" and following any significant incident.
- In-river works management plan. The Contractor's SSIP should cover procedures and plans for safeguarding aquatic habitats and fish during in-river work (Juzna Morava river and other smaller rivers) and will complement the bridge construction and road reconstruction Method Statements.
- Camp management plan. The Contractor's SSIP should contain procedures for establishing and operating construction camps in order to safeguard nearby communities and environmental resources.
- Emergency response plan. The Contractor's SSIP should contain procedures for emergency response in the event of accidents or major incidents, in order to safeguard people, property and environmental resources. Details of the spill response equipment to be provided on site are to be specified.
- Noise. The contractor will be responsible for ensuring that noise does not affect the adjacent communities, in accordance with the Law on noise protection ("Official Gazette of RS", 36/09).. While it is unlikely that noise will be an issue due to the large distances between the activities and the communities the Contractor will confine all work to daylight hours (07:00hrs – 19:00hrs) should the community find that any night time operations become a nuisance.
- Rehabilitation Plan: Clearance and rehabilitation of construction sites and removal of contractor's facilities: It is the contractor the Contractor's responsibility to address site clean-up. This includes the removal of all waste materials, machinery and any contaminated soil. The contractor will develop a plan for handover, sale or removal of all plant, vehicles and machinery to ensure that no unserviceable items are left on the construction site, in accordance with the Law on Waste management ("Official Gazette of RS", 36/09). All construction sites and work areas will be rehabilitated so that these can be returned as close as possible to their previous uses. This includes the stabilization and landscaping of all of the construction sites. No waste will be left on site after the work is completed, in accordance

with the Law on environmental protection ("Official Gazette of RS", 135/04, 36/09, 72/09). Should the Contractor fail to remove the waste, the KS is entitled to withhold payment and arrange the clean-up and deduct the cost of the clean-up and administrative charges from the final payment.

5.3. Health and Safety on Site

Each Contractor should include HSE staff as part of his workforce and they should report to the HSE staff of the Project Supervision Consultant advising KS. In addition, the Project is to include Independent Consultants to provide informal advice and undertake monitoring and auditing activities.

All reconstruction sites should be managed in accordance with national legislation on reconstruction and HSE, such as the Law on Occupational Safety and the Law on Occupational Health and Safety and the Regulation on Occupational Safety for Reconstruction Works (Official Gazette of RS, No. 53/97).

Safety and Hazard Assessment: Before commencing work, the Contractor will be required to identify potential hazards. Provisions for emergency responses are to be included in the Contractor's site safety plan which is to include nomination of a person who will be immediately contacted should an accident occur. The site safety plan will be submitted to the PSC for approval one week prior to starting work.

- The contractor will be required to keep the site free of drugs and alcohol.
- The contractor's site safety plan will include provision for a safe work environment and provide safety measures and protective equipment to all workers including; hand, head, eye and ear protection and safety footwear.
- The site safety plan will include provision for first aid facilities on-site and employ a trained first aid person, in accordance with the Law on Safety and Health at work ("Official Gazette of RS", 101/05).
- The contractor will provide supplies of potable water, toilets and wash water to the workers.
- Contractor is obliged to perform all project activities by respecting SMP recommendations and all Serbian laws and sub-laws which are covering H&S issues.

The KS and Contractor together have responsibility for reporting and investigating incidents.

Community safety from increased vehicle movements: This applies to all vehicles and particularly to haul trucks that pass through villages. The contractor will ensure that all vehicles which pass through villages are operated safely without endangering these communities. The contractor is to ensure that:

- all trucks and equipment is maintained in a safe operating condition,
- all drivers and machinery operators are trained and act responsibly (to be stipulated in the Contractor's site safety plan),
- all loads are secured and all loads with potential dust generating materials (e.g. excavated soil and sand) will be covered with tarpaulins,
- The Contractor will immediately remove any drivers that ignore any of the community safety requirements.
- Speed limits will be observed

Prior to commencement of bridge construction and road reconstruction works, all of the above plans will be submitted by the Contractor to the Environmental Consultant within the KS for approval.

Following the completion of works a Site restoration will take place. It is Contractor obligation to restore location of the project as it was at beginning of the project.

Operational Phase

People Safety: During operation, road safety features will include (i) measures to slow the traffic; e.g. decreasing of speed at selected places (e.g. settlements, schools, markets, etc.), (ii) dust suppression sealing, (iii) improvements in road signage and pavement markings, and (iv) attention to road accident black spots.

Road Maintenance: Routine maintenance (grading, grass cutting, drain clearing, and pothole patching and shoulder repairs, together with regular control and maintenance of drainage structures and retention) will be undertaken on regular basis. Seasonal maintenance such as flood repairs, emergency maintenance to reinstate roads after major failures, and the regular upkeep of safety features and road signs will be undertaken as necessary. Major maintenance that include resurfacing and repairs are typically scheduled over periods of several years.

5.4. Contractor Management

The recommendations and proposed mitigation measures are shown in Appendix I. Mitigation measures will be incorporated as part of the standard design and rehabilitation practices and as such their costs will be included in the rehabilitation cost.

Experience shows that inadequate application of the ESMP by the Contractor may occur due to weak linkages of the ESMP with the contract documents. The ESMP is a part of the work program and as such it must be addressed by the Contractor and carried out as required.

The contractor will use this document to cost his compliance with the ESMP. It is the Contractor's obligation to cost the implementation of environmental mitigation measures in his overall cost. The Contractor will be required to provide a short statement that confirms that:

- the ESMP conditions have been costed into the bid price,
- the Contractor has a qualified and experienced person on the Contractor‘s team who will be responsible for the environmental compliance requirements of the ESMP.
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws and Lender requirements.

5.5. Check List – Mitigation Plan

Phasing, issues and mitigation measures are covered in Appendix I.

6. DESCRIPTION OF MONITORING PROGRAM

Monitoring of the effects of the Project will commence during the reconstruction phase and will continue during the bridge operation. This ESMP sets out the basic parameters to be monitored in order to determine that mitigation measures identified above are being implemented effectively.

A monitoring plan for the proposed Project (Appendix II) has been prepared. The main components of the monitoring plans include:

- Environmental issue to be monitored and the means of verification,
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Duration and frequency and estimated monitoring costs; and
- Institutional responsibilities for monitoring and supervision.

A field monitoring checklist has been prepared based on the ESMP and monitoring plan (Appendix II). The field monitoring checklist will be used by the supervising field engineers. The signed checklists will be provided to the KS who will be responsible for the follow-up and compliance reporting.

The KS will maintain a Complaints Database, which will contain all the information on complaints or grievances received from the communities or other stakeholders. This would include: the type of complaint, location, time, actions to address these complaints, and final outcome.

6.1. Environmental monitoring requirements for "Graovo" Project

Shortly after mobilization to country The Contractor will develop the monitoring plan in conjunction with the Project Supervision Consultant and relevant statutory authorities. The parameters in the monitoring plan are expected to focus on potential soil and water pollution, especially in areas of higher sensitivity, such as Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), suspended solids, oils and greases to represent potential impact due to construction of a bridge on the Juzna Morava and reconstruction of local road to Graovo, based on the nature of the site activity.

6.1.1. Noise

During bridge construction and local road reconstruction works the level of noise increases due to the transport of loads by heavy freight vehicles (removal and delivery of materials) and the use of the reconstruction machinery. These sources of noise are of a temporary character and last until the completion of reconstruction works. The level of noise must be controlled when necessary, meaning upon the occasion of a complaint being filed for an excess level of noise while works are being carried out. The Rulebook on Allowed Levels of Noise in the Environment defines the methods of measurement, selection of measurement location and the time intervals of measurement.

Within the framework of monitoring noise during the carrying out of works, the following is required:

- measurement of the zero point,
- measurement of the highest levels (peaks) of noise during reconstruction,
- If during the course of works the limits of allowed levels of noise are significantly exceeded, in agreement with the owner of the structure, necessary mitigation measures are undertaken.

The Contractor is responsible for all consequences which arise from excess levels of noise during the phase of reconstruction.

6.1.2. Air Pollution

Constant monitoring has been envisaged for when there are residential buildings located closer than 400 m. In the case of a complaint from a local resident, monitoring of the effects may be organized at that time.

6.1.3. Water

Monitoring of water during the phase of bridge construction and road reconstruction includes determining the effects on the quality of water while reconstruction works are being carried out in the vicinity of waterways or water collectors.

For surface water, the program includes the following parameters: pH, concentration of dissolved oxygen in the water, waste materials, murkiness, concentration of organic compounds and mineral oil. Limit Values for Serbian water class standard are determined by Serbian Legislation ("Official Gazette of SRS" No. 05/68, 31/82).

The taking of samples shall be done on a part of a surface waterway downstream from the reconstruction site. The monitoring program is administered in such a way that it can be used to establish which reconstruction works affect the quality of surface waterways. Samples must be taken before the commencement of works, at the time when humus is being removed and when excavation or the building of embankments from earth material is being carried out. Sampling is done in monthly intervals.

In the situation when the measurement results and analysis indicate an increase of negative effects, it is necessary to determine the cause of the deteriorating condition and undertake the necessary mitigation measures. Until the cause of the deteriorating condition is determined, only works which do not have an influence on pollution of surface waters may be carried out.

All measurements begin one month before the beginning of preparatory works. The parameters which are the subject of monitoring are divided into the groups geological-hydrological, physical-chemical and chemical. Measurement of the basic and indicative parameters of underground waters should be done at least four times a year with an interval of at least two months. Measurements of the chemical and physical-chemical parameters are done quarterly. The days when samples are taken will depend on the level of underground water, precipitation and other geological and hydrological relations.

6.2. Check List – Monitoring Plan

Details related to the monitoring program are tabulated in Appendix II.

7. STAKEHOLDER ENGAGEMENT: INFORMATION DISCLOSURE, CONSULTATIONS AND PARTICIPATION

This chapter will be completed after Public Consultations on this ESMP document.

8. INSTITUTIONAL ARRANGEMENTS

8.1. Project Implementation

KS is the Implementing Agency for the Project and will be responsible for the implementation and compliance with the ESMP and Monitoring Plan. Day-to-day implementation and compliance will be the task of PSC.

Project Supervision Consultants (PSC) is regularly engaged during project implementation. PSC control the Contractors ESHS performance on daily basis and report timely to the Client in case of any non-compliance with ES requirements. Particular issues are discussed with the Contractor during regular project progress meetings, and checking of Contractor rectification actions of any ES non-compliance is mandatory part of each project.

The Contractor will provide "Zero monitoring" results prior to commencement of earth works, during its own mobilization phase.

To ensure that the proposed mitigation measures will be carried out by the Contractors during the construction stage, the Project Proponent will undertake the following:

- clearly set out in the tender and contract documents the Contractor's obligation to prepare SSIP and undertake environmental mitigation measures as specified in the Environmental Mitigation Plan in Appendix I (to be appended to Contract specifications);
- No compensation for the costs of the required environmental mitigation measures and monitoring activities in the form of the particular item in the BoQ shall be given to the Contractor, except for the water quality analysis and noise measurement. It shall be regarded as if the Contractor has included these costs in the other items of the BoQ. Real expenditures of water quality analysis and noise measurement in scope defined by the BDs and the Contract shall be compensated to the Contractor in the form of the particular item in the BoQ. For noncompliance with requested environmental mitigation measures and monitoring activities the Contractor shall suffer specific liquidated damages in a form of demerit points. Demerit points are provided as a measure that should stimulate the Contractor to carry out his obligations in an organized and timely way and to perform his duty meeting high standards even though those tasks does not appear to be of a serious nature. Demerit points have in the same time two meanings numeric and monetary. Each demerit point has associated monetary value which represents permanent payments reduction for determined noncompliance of the contracted obligations. Number of received demerit points has cumulative effect. If during the Contract the Contractor receives more than certain number of demerit points specified in the BDs and the Contract, the Contractor will for a period of 2 years not be allowed to compete for any other KS works contract. Also, if the Contractor is awarded over a specified number of demerit points, the Employer has a right to terminate the Contract. Monetary value of each demerit points as well as limits for other possible actions by the Employer shall be clearly specified in the BDs and the Contract. Application of explained two measures - compensation for specific costs and penalties for noncompliance – should assure implementation of all requested environmental mitigation measures and monitoring activities, and
- Explicitly require the Contractor to recruit an environmental specialist. The contractor will be responsible for the implementation of environmental mitigation measures during construction and shall employ an environmental specialist who will supervise implementation of the Contractor's environmental responsibilities and coordinate with the KS and Ministry of Construction, Transport and Infrastructure (MCTI). The contractor, in coordination with KS, shall set-up a grievance redress committee that will address any complaints during project implementation. During project implementation, the KS shall monitor the compliance of the Contractor with the ESMP provisions. It is proposed that the

project supervision consultants (PSC) employ an environment specialist (with civil engineering/environmental management background) to assist the environmental supervision.

Upon Project completion, the Public Enterprise "Roads of Serbia" will be in charge of the operation and maintenance of the new "Graovo" bridge. Leskovac municipality is responsible for maintenance of local road to Graovo. Routine and random monitoring will be undertaken as scheduled in the monitoring plan.

The Company "Koridori Srbije" (KS) is also responsible for:

- Implementation of requests for environmental protection given by:
  - Government environmental authorities and EIA document (if exists),
  - IFIs and other institutions,
  - Law on environmental protection
- Implementation of requests for environmental protection through contractors specifications,
- Supervision of the project through the consulting services for supervision and implementation of the project,
- Supervision of environmental monitoring through the consulting services for environmental monitoring,
- Preparation of the final environmental reports.

The Contractor will make proposal for environmental protection, including safety of persons associated with the works and the public, during a pre- construction period within the Environmental and Social Management Plan. This proposal will be reviewed by KS in order to obtain the "no objection" to the proposal's recommendations. In this regard, attention will be given to:

- taking all reasonable steps to protect the environment on and off site and avoid damage or nuisance to persons or property arising from its operations,
- maintaining conditions of safety for all persons entitled to be on site and
- Provision of all lights, guards, fencing, warning signs, traffic control and watching for protection of the works and other property and for the safety and convenience of the public.

MCTI will have the authority for immediate suspension of works if performance is not in accordance with environmental standards and regulations. Inspection will then inform the KS about suspension and order to proceed according to its directive.

8.2. Reporting requirements

8.2.1. Contractor to KS

The Contractor will prepare his compliance reports in respect to this ESMP and his SSIP as a Quarterly Progress Reports (SAPR) by using prescribed template given In Appendix III of this ESMP document. The Contractor shall submit its SAPR to Project Supervision Consultant and KS, in English language, in hard copy and electronic versions.

The Contractor will provide quarterly reports to the KS which document the environmental mitigation and protection measures, together with prescribed monitoring activities carried out during that quarter's reporting period. The Contractor will take care on environment quality according to the mitigation and monitoring plan which are a consisting part of ESMP (Appendix I and Appendix II) through those phases and will report quarterly to the KS.

If any kind of accident or endangerment of environment happens, reporting will be immediate. Contractor is obliged to inform the project manager and local authorities about accidents immediately after it happened. In case that project manager is not responding on a call, the

Contractor is obliged to inform KS about accident (phone number 011/ 3344-148; 011/ 3344-174) or via E-mail on following address: office@koridorisrbije.rs).

The Contractor will monitor quality of environmental conditions according to the monitoring plan which is a consisting part of ESMP (Appendix II) through those phases and will report quarterly to the KS. These reports will encompass a list and explanation of all undertaken activities at the site and results of the field research, as well as recommendations for future field activities and protection measures.

8.2.2. Project Supervision Consultant to KS

The findings of the regular monitoring activities, including activities specified in the Monitoring Plan (Appendix II) carried by the Contractor will be included in the monthly PSC progress reports.

Monthly Environmental, Social, Health and Safety (ESHS) reports, including monitoring indicators and reporting on the implementation of the requirements set forth in the ESMP will be prepared by Project Supervision Consultant and delivered to KS as integral part of its Monthly Progress Reports.

If some kind of accident or endangerment of environment happens, reporting will be immediate.

8.2.3. KS to MCTI, EBRD

Annual Environmental Health and Safety (EHS) reports, including monitoring indicators and reporting on the implementation of the requirements set forth in the ESMP will be prepared by KS and submitted for IFIs review. IFIs will review the reports and verify their contents through periodic site visits. The KS shall provide Annual reports to MCTI and IFIs regarding the status of implementation of mitigation measures by the Contractors, additional mitigation measures that may need to be implemented, incidents of non-compliance with applicable environmental permits, complaints received from local residents, NGOs, etc. and how these were addressed.

In case of fatalities or major incidents on site the KS will immediately report to the Bank.

9. REFERENCE

1 Design for Construction Permit: **Construction of Graovo bridge** with access roads, DB Inzenjering, Belgrade, 2019

2 Preliminary Design: **Reconstruction of local road** for populated place Graovo from km 0+003.37 (intersection on local road at cadastral plot no.2926 Cadastral District Palojce) to km 4+278.30 (on the crosspath with asphalt road at cadastral plot no.6786,6776 and 2370 in Cadastral District Graovo), GEO TEAM FUTURE, Smederevska Palanka, 2021

3 **Construction permit** issued by Leskovac Municipality, ROP-LES-33489-CPI-3/2020, Nr. 351-20160/20-02, 2020

4 **Location permit** issued by Leskovac Municipality, ROP-LES-33489-LOCH-2/2019, Nr. 353-324/19-02, 2019

5 Detailed **site-specific EIA** for E-75 Motorway Nis – Border of NM, section Gornje Polje - Caricina Dolina, CIP Institute Belgrade, 2008

6 BoQ and **List of protected cultural heritage** within the zone of A1 (E75) motorway Nis – border of Northern Macedonia, Institute for protection of Cultural Monuments – Belgrade, No.163/122 dated Dec 21, 2010

7 **EBRD Environmental_and_Social_Policy**, April 2019

Appendix I

CHECK LIST

MITIGATION PLAN

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
Bridge construction and road reconstruction	Relocation of services	Effective co-ordination with utility companies during relocation.	Contractor, KS	Contractor, KS	
	Inadequate prevention of reconstruction-related noise from vehicles, asphalt plants, crushing and batch plants and equipment	The plants and equipment used for reconstruction will strictly conform to noise standards.	Contractor	Contractor	
	Noise Impact - Disturbance to residents	Working hours/activities will be adjusted to reduce noise disturbance and working time restricted to 0630 to 1930hrs, or as otherwise agreed locally. Maintain dialogue or use grievance mechanism to allow residents to contact Project staff to make representations.	Contractor	Contractor	
	Noise impact - Protection of workers H&S	Noise standards will be strictly enforced to protect reconstruction workers from noise impacts, in accordance with international HSE procedures. All Project works will adhere to international H&S standards, including minimum PPE standards, e.g. hard hat, safety boots, ear defenders and noise exposure limited to 85 dB(A).	Contractor	Contractor	
	Reconstruction waste.	Heavy metals are separated and should be removed and disposed of at approved dump sites, in accordance with The Contractors waste management plans (WMP).	Contractor	Contractor	
	Potential contamination of soil and water resources.	Each parking, service, or cleaning and washing plateau will be equipped with waste water treatment facilities which will be temporary objects	Contractor	Contractor	
	Maintaining animal mobility through culverts and bridges	Use of designed culverts and bridges as animal crossing points.	Contractor	Contractor	
	Emission from reconstruction vehicles and machinery	All vehicles, equipment and machinery used for reconstruction will be regularly maintained and inspected/certificated to ensure that the pollution emission levels conform to the standards prescribed.	Contractor	Contractor	
	New borrow pits damaging	Contractor have to use the Borrow pits on a specific	Contractor	Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	agricultural, archaeological or ecological resources	locations which are predefined within the Detailed design			
	Asphalt plant-dust, fumes, workers health and safety, ecosystem disturbance	Contractual requirement-use existing asphalt plants; requirement for official approval or valid operating license or new plants require certification and approval.	Contractor	Contractor	
	Stone quarry	Contractual requirement-use existing quarries; requirement for official approval or valid operating license.	Contractor	Contractor	
	Sand and gravel borrow pit-disturbance of river bed, water quality, ecosystem disturbance	Contractor has to use the Borrow pits on specific locations which are predefined within the Detailed design . It is allowed to use existing borrow pits or buy material at licensed facilities; no borrowing from rivers. Or use new pits which require approval and licensing.	Contractor	Contractor	
	Reconstruction related dust, from movement of vehicles at site and to sites from borrow pits and quarry sites, etc.	Dust suppression will be used on unsealed road surfaces, asphalt mixing sites and temporary service areas. Water truck bowser with spray bar will be used.	Contractor	Contractor	
	Vehicles hauling materials will generate dust nuisance	Vehicles delivering material will be covered.	Contractor	Contractor	
	Failure to properly manage/store topsoil, leading to degraded and substandard site reclamation and re-vegetation	Cleary defined topsoil storage and handling in contract specification and management plan and follow up with regular inspection & monitoring and reporting.	Contractor	Contractor	
	Flora - vegetation protection	Clearing up and removal of vegetation should be minimized to the extent necessary for the execution of works	Contractor	Contractor	
	Landscape impact, soil erosion	Develop and implement landscape planting; Re-forest ground of classes 6 and 7 under high and excessive erosion	Contractor, KS	Contractor, KS	
	Damage to agricultural lands, including drainage and	Liaise effectively with PAPs before start of reconstruction, maintain dialogue, develop a grievance	Contractor	Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	irrigation infrastructure	procedure, strictly control machinery and vehicle access and reinstate all affected areas.			
	Livestock resources damaged by machinery and vehicles	Liaise effectively with PAPs before start of reconstruction, maintain dialogue, develop a grievance procedure, strictly control machinery and vehicle access, and consider fencing for protection.	Contractor	Contractor	
	Contamination of soil or water resources	Storage and handling of fuels, oils and other hydrocarbons will be a controlled process, involving measures to prevent soil and water contamination. Designs will include storage on sealed surfaces and within secondary containment and refueling of all plant, vehicles and machinery will not be allowed within 50 m of any watercourse, drain or channel leading to a water course.	Contractor	Contractor	
	Damage to aquatic ecosystems	Prevent the movement of machines inside rivers, streams, or on their banks, except when it is unavoidable due to the construction of a structure or reconstruction of local road.	Contractor	Contractor	
	Contamination of soil or water resources	All sites near rivers shall be protected by fencing and other means to prevent loss of reconstruction materials, particularly hazardous materials.	Contractor	Contractor	
	Traffic disruption to residents and longer distance travelers	Develop Traffic Management Plan in conjunction with road authorities to manage all temporary accesses, delivery of material and machinery.	Contractor	Contractor	
	Residents injured by reconstruction traffic and machinery	Conduct safety awareness campaigns, focusing on schools and children.	Contractor	Contractor	
	Workers injured during reconstruction	Implement international HSE standards in all contracts.	Contractor	Contractor	
	Illegal or excessive borrowing may damage archaeological or land resources	No earth borrowed from unauthorized locations.	Contractor	Contractor	
	Reduced land or property	Establish and maintain dialogue with PAPs to reduce	Contractor, KS	Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	values	adverse effects as part of ongoing design and reconstruction.			
	Contamination of soil or water resources	Contaminated or hazardous waste such as bitumen waste to be disposed of in selected areas approved by the Ministry of Environment. All waste disposal to comply with a Waste Management Plan, to be developed at the start of reconstruction.	Contractor	Contractor	
	Pollution of groundwater and soils during demolition of properties	Develop working method statement to include effective management of materials.	Contractor	Contractor	
	Damage to water resources	All abstractions and any formalized discharges must be licensed/ approved by relevant authorities.	Contractor	Contractor	
	Damage to aquatic habitats and fish	All in-river works will be conducted outside of the fish spawning season and Contractors will prepare management plans for such works as a part of their Reconstruction Method Statements.	Contractor	Contractor	
	Damage to river morphology	Digging and making the foundations for bridge piers, retaining walls, and structures located at, or in the vicinity of, surface water bodies, will take place in the period of low water levels (July-September) so as to minimize negative impacts on rivers and their banks.	Contractor	Contractor	
	Soil and water pollution	Reconstruction vehicles and equipment will be maintained and refueled at protected refueling stations. Fuel storage and handling sites located away from drainage channels and important water bodies in accordance with Management Plan.	Contractor	Contractor	
	Soil and water pollution	Develop plans for cement and wash-water management.	Contractor	Contractor	
	Water pollution	Develop monitoring program for sensitive water courses, such as major river crossings and reporting, feedback and remedial action procedures. This should be linked to the Management Plans to be developed by The Contractors.	Contractor	Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	Temporary access-vegetation removed, soil compacted, landscape and vegetation impacted	Remove topsoil layer initially and afterwards de-compact alignments and reinstate topsoil and perform re-vegetation	Contractor	Contractor	
	impact on fish and other animals that depend on water as eco-system	Avoid river control works in the period of fish spawning. All in-river works will be conducted outside of the fish spawning season and Contractors will prepare management plans for such works as a part of their Reconstruction Method Statements.	Contractor	Contractor	
	Land resources damaged	Identify work areas with contractor(s) and describe system approvals for extensions and fines for violations.	Contractor	Contractor, KS	
Construction camps	Community tension and disruption	Locations for camps are predefined within the Detailed Design of the Project. Contractor should prepare Camp Management Plan	Contractor	Contractor	
	HSE Standards	Work camps are required to conform to international Health, Safety and Environment (HSE) standards	Contractor	Contractor	
	Wastewater collection and disposal/treatment	Camps should be furnished with sanitary and wastewater collection and disposal/treatment facilities and should operate fully compliant waste systems, involving storage of waste by waste category.	Contractor	Contractor	
	Contamination of soil or water resources	Storage of fuels and re-fuelling of equipment will be controlled in floodplains to prevent groundwater pollution. No storage of fuels and oils will be allowed in floodplains where the potential for washout exists.	Contractor	Contractor	
	Spread of disease, including STIs	Conduct awareness campaigns for camp workers and if relevant nearby communities.	Contractor	Contractor	
	Water and soil pollution	The sewage system for such camps will be properly designed and built so that no water pollution takes place. Such facilities will be decommissioned at end of the reconstruction period.	Contractor	Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	PRE-CONSTRUCTION				
	The location and development of the contractor‘s facilities will be approved by the PE. Locations will be selected so that:	- they do not interfere with the environment and social well-being of the surrounding communities re noise, dust, etc., - is located outside of the area with tall vegetation - the size of contractor‘s facilities are limited to absolute minimum to reduce unnecessary clearing of vegetation, - sanitary waste and grey waters are treated before release into surface water systems, in accordance with the Law on water (“Official Gazette of RS”, 101/05). - the sites are properly drained. Paved areas, including vehicle parking areas, workshops and fuel storage areas are to drain to an oil and water separator, and fuel storage areas - Wherever possible limit area to be cleared and avoid excessive machine disturbance of the topsoil. - Cleared material is to be piled into manageable sized heaps according to disposal or re-use requirements. Prevention of soil erosion on construction site: - The contractor will be responsible for ensuring that the erosion is contained by soil conservation protection methods. - Limit the extent of excavation to reduce soil erosion potential. - Apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site. - Avoid excavation and operating machinery in wet ground conditions. -	KS Contractor	KS	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	Site selection for construction camps, near or within existing settlements. Impact on public health and sociological setting	Proper site selection, observing criteria which primarily protect the public general. Observe a minimum distance (buffer zone) between camp site and nearest residential area. Observe local wind conditions to reduce nuisances. Work safety and environmental protection measures to be specified by the Contractor in his Site Management Plan. Planning for independent water and electric supply network and a medical service station at the site.	Rehabilitation Contractor	RE and KS	
	Pedestrian safety and appropriate road crossings	Plan for a safe and adequate road crossing which shall be equipped with ramps and objects allowing usage of wheelchairs, carts, bicycles and baby carriages			
	Stakeholder engagement	Details of the proposed road alignment, access points and safety features were disclosed in the locality of the planned works. Feedback from local stakeholders is sought and recorded.	Rehabilitation Contractor	RE and KS	
	Management Plans				
	All workers and visitors to site shall be given a Health, Safety and Environment Induction and instructed in the need and use of PPE.		Rehabilitation Contractor		
	Asphalt plant dust, fumes, workers health and safety, ecosystem disturbance	use existing asphalt plants; requirement for official approval or valid operating license	Asphalt plant	Asphalt plant	
	Stone quarry dust, workers health and safety, ecosystem disturbance	Use existing stone quarry. Requirement: Official approval or valid operating license	Stone quarry	Stone quarry	
	Contractor to prepare implement the following plans as described in the ESMP to ensure compliance with legislative and Lender requirements. • Site organisation plan • Sewage and septage management • Project grievance mechanism • Soil Management Plan • Dust management plan • A plan indicating the location of the proposed material extraction site as well as		Rehabilitation Contractor		

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	rehabilitation measures to be implemented for the borrow areas and access roads upon project completion; • Waste and wastewater management plan in accordance with the Law on Waste management ("Official Gazette of RS", 36/09). • Oil and fuel storage management plan. • In-river works management plan. • Camp management plan. • Emergency response plan. • Rehabilitation Plan • Safety and Labour Management Plan – SLMP Contractors are required to sign the letter of Environmental and Social Covenant related to E&S, EHS, OHS, Labour and working conditions, Public H&S				
	Site Induction				
	Sand and gravel borrow pit disturbance of river bed, water quality, ecosystem disturbance	use existing borrow pits or buy material at licensed separations; requirement for official approval or valid operating license	Sand and gravel Contractor or Separation	Sand and gravel Contractor or Separation	
	Asphalt dust, fumes	All trucks are to be covered.	Truck operator	Truck operator	
	Stone Dust	wet or cover truck load	Truck operator	Truck operator	
	Sand and gravel Dust	wet or cover truck load	Truck operator	Truck operator	
	Traffic management noise, vehicle exhaust, road congestion	haul material at off peak traffic hours (preferably 9-14h); use alternative routes to minimize major traffic sites Need to ensure that adequate signs to work fronts to minimise 'wrong turn' chances causing even more congestion	Transport manager; Truck operator	Transport manager; Truck operator	
	Archaeological chance finds	In case of chance finds Contractor is obliged to stop the works immediately and inform institute for protection of Cultural Monuments Nis and KS about it.	Contractor	Supervision Contractor	
	COVID-19 Pandemic				
	Potential increased	Implementation of CD and HIV/AIDS education program;	Maintenance Contractor	Maintenance	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	transmission risks of communicable diseases and temporary pressure on local health and sanitation infrastructure Presence of temporary workers in the local area-potential COVID-19 infection	Information campaigns on STDs among the workers and local community; Special education program for the Roma population and women. Education about the transmission of diseases; Provision of condoms. designated as contractor responsibility; Monitoring of local population health data, in particular for Transmissible diseases. Mitigation COVID-19 measures for workers: • Notify your supervisor and stay home if you have symptoms. • If you are sick, you should not return to work until the criteria to discontinue home isolation are met, in consultation with healthcare providers, your employer, and state and local health departments. • Notify your supervisor if you are well but have a sick family member at home with COVID-19. • Limit close contact with others by maintaining a distance of at least 2 meters, when possible. o Limit the number of workers in small workspace areas such as job site elevators, trailers and vehicles, and spaces under construction if possible. • Wear cloth face coverings in public settings where other social distancing measures are difficult to maintain, especially in areas where there is significant community-based transmission of COVID-19. • Clean and disinfect frequently touched surfaces such as shared tools, machines, vehicles and other equipment, handrails, ladders, doorknobs, and portable toilets. Clean and disinfect frequently touched surfaces periodically throughout the shift but also: o At the beginning and end of every shift o After anyone uses your vehicle, tools, or workstation • Limit tool sharing if possible. • Practice proper hand hygiene.		Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	Construction site				
	Noise disturbance to human and animal population and workers	Limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities);	The Contractor	The Contractor	
	Dust	Water spraying of construction site and covering material storage areas. Implementing of a Dust Management Plan: measures to avoid/minimize dust emissions, including use of hoardings; wetting down/spraying of construction areas, accesses, materials stockpiles and during loading/unloading activities; covering of vehicles carrying dusty materials; wheel washing/spraying of vehicles; and management of spoil, etc.	The Contractor	The Contractor	
	Traffic disruption during bridge construction and road reconstruction activity	traffic management plan with measures to redirect traffic that are easily seen or easy to follow; include traffic police assistance if needed Construction Traffic Management Plan will establish speed limits for construction vehicles and organize traffic to avoid as much as possible populated areas. Local residents will be kept informed of planned works	The Contractor	The Contractor	
	Material transport				
	Reduced access to roadside activities	provide alternative access to roadside activities at all times	The Contractor	The Contractor	
	Vehicle and pedestrian safety when there is no construction activity	Lighting and well defined safety signs and protection measures.	The Contractor	The Contractor	
	Water and soil pollution from improper material storage, management and usage	organize and cover material storage areas; isolate concrete, asphalt and other works from watercourse by using sealed formwork or covers; isolate wash down areas of concrete and asphalt trucks and other equipment from watercourse by selecting areas for washing that are not free draining directly into watercourse Operate construction site in a way to reduce the risk of generating sediments and wastewater that may pollute	The Contractor	The Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
		local soils or receiving water bodies (considering situations such as including storm water runoff, wastewater generated from facilities on site such as wheel washing facility). Soil Management Plan shall be prepared for the controlled removal of top soil, storage and reuse. Prevent sediments flowing into surface waters and drainage channels by localized control measures. (e.g. sediment fences, check dams, mulch barriers, rock groynes, or geofabric barriers, sediment basins), contouring to optimize slope angle and steepness, In order to prevent leaching of sediments is also necessary to take into account the slope of the terrain and protection from wind erosion by fencing, covers installation, etc. Depositing of surplus of earth, stone and similar may only be temporary and limited in time to the completion of the planned works. After the completion of all works, all excesses of soil, stones and other waste materials should be removed and the full rehabilitation of degraded areas all over the degraded surfaces should be executed.			
	Water and soil pollution from improper disposal of waste materials	dispose waste material at location protected from washing out, should be marked in the site plan; if not on site, then at authorized landfill / depot Storage of wastes according to international best practice (IFC EHS General Guideline). Apply additional measures for storage of hazardous wastes (such as use of secondary containment, access restriction, provision of PPE etc.) as necessary to prevent harm to construction staff, environment and public. Use and labelling of designated waste collection containers and storage areas for different kinds of wastes (hazardous and non-hazardous).	The Contractor	The Contractor	
	Potential contamination of	apply best engineering practice in safe storage and	The Contractor	The Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
	soil and water from improper maintenance and fuelling of equipment	handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose to permitted waste recovery facility			
	Water and soil pollution from improper disposal of waste materials	Transport of waste in marked vehicles designed to the type of waste to minimise the risk of release of materials (hazardous and non-hazardous materials) and windblown debris. Training of drivers in handling and disposal of their cargo and the documentation of the transport describing the nature of the waste and its degree of hazard.	The Contractor	The Contractor	
	Workers safety	provide workers with safety instructions and protective equipment; safe organization of bypassing traffic	The Contractor	The Contractor	
	Temporarily occupied area	Landscaping - Undertaking of re-vegetation progressively with cover crop and native endemic species and monitor its effectiveness. Where initial plantings were not successful, replacement plantings will be carried out.	The Contractor	The Contractor	
	OPERATION Maintenance				
	Noise disturbance to human and animal population and workers	limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public);	Maintenance Contractor	Maintenance Contractor	
	Possible air, water and soil pollution dust, vehicle exhaust, fuel and lubricants spills	apply best engineering practice in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose in line with the Law on waste management; organize and cover material storage areas; isolate asphalt from watercourse by using sealed formwork; selecting areas for washing that are not free draining directly or indirectly into	Maintenance Contractor	Maintenance Contractor	

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
		watercourse (rivers and other small watercourses); dispose waste material at location protected from washing out			
	Workers safety	provide workers with safety instructions and protective equipment; safe organization of bypassing traffic. This could really be expanded as it rather limited.	Maintenance Contractor	Maintenance Contractor	
	Increased vehicle speed	install traffic signs for speed limit	Maintenance Contractor	Maintenance Contractor	
	Erosion, rockfall and dangerous situations	Separate the quarry surface area from the edge of the road (New Jersey) Place appropriate warning signs (rockfall, landslide, wet or slippery carriageway, dangerous curve, pedestrian crossing, school, slow moving vehicles in traffic), fluorescent (reflective) signs which point towards slippery slopes or convex mirrors in order to follow traffic coming on from the opposite direction in dangerous curves, place warning signs at spot according to good engineering practice or in communication with public institutions	Maintenance Contractor	Maintenance Contractor	
	Relevant mitigation measures prescribed by relevant institutions				
	The Institute for Nature Conservation of Serbia	• Design will envisage such solutions and measures which will provide conditions for conserving nature (bio- and geo- diversity), air, land, ground and surface waters, conservation of river and rivercourses in the vicinity of the Corridor X, project East E-80 • During works execution it is necessary to implement all precautionary measures so as to maximally protect and preserve trees/tree lines along the road section/alignment or its immediate vicinity from potential damage, especially damage to the root system, as well as breaking of branches and removal of tree bark when manipulating construction			

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
		mechanization, or in any other way reduce their important features • Execution of works during nighttime is prohibited, due to possible noise impacts of construction machinery, as well as disturbing local bird habitats • Integral part of the Design should be a part relating to the construction site organization (with clearly defined locations for objects, parking lots, landfills, mechanizations passageways etc.) as well as a design of land rehabilitation and landscaping, e.g foresee that all surfaces which have been in any way degraded by the construction and other works be rehabilitated as soon as possible, after the completion of the works • Construction site should be located on a minimal surface needed for its functioning, and manipulative surfaces should be spatially limited • Define that the drainage of the carriageway be solved by gravitational flowing of surface waters and if necessary construct open channels for accepting surface waters			
	The Institute for Nature Conservation of Serbia	• Implement all land protection measures so as not to allow for spillages of fuels and oils from transport and construction machines engaged during works execution. In cases of accidents, immediately clean affected surfaces and remove the affected layer of land, to prevent polluting matters reaching underground waters and transport the affected layer of land to the landfill • When executing works during the summer months, reduce dust generation by occasionally spraying the construction waste and remaining materials with water • Systematically collect and deposit solid waste which will occur during works execution and workers stay			

Phase, location	Issue	Mitigation	Institutional responsibility		Notes
			Install	Operate	
		in construction area (food packaging, other solid waste) and remove all remaining construction material, waste and equipment from the site, upon works completion • If during works execution any geological/paleontological artefacts are found, which may be assumed to present a natural good, the Contractor is obligated to contact the relevant ministry for nature protection in no longer than 8 days, and take all necessary measures as to not damage the discovered natural good • Foresee all nature protection measures in accidental situations, obligation of informing all competent inspection services and entities • If the Project implementation is given up on, after the start of the works, the Investor is obligated to return the impacted area to its original state, prior to works execution.			
	The Institute for Protection of Cultural Monuments of Nis	• If during works execution any archaeological artefacts or objects are discovered, the Contractor is to cease the Works immediately and contact the Institute for Protection of Cultural Monuments Nis, regardless if the archaeological supervision is contracted with a different relevant institution, and apply necessary measures as to not damage or destroy the finding and preserve it in the same location it was discovered in; • If there is immediate risk of damaging archaeological site or artefact the relevant Institute for Cultural Protection may temporarily suspend the works; • The Investor, is obligated to supply funding for research, protection, safekeeping, publishing and exposure of cultural goods discovered during the works, until handing over to the relevant institution			

Prior to initiating works, the Contractors will be required to prepare and submit for approval Site-Specific Implementation Plans (SSIP) consisting of:

Waste and wastewater management plan

The Contractor's SSIP should cover all aspects of waste management, including implementation of practice standards such as reduce, re-use and recycle. It should specify final disposal alignments for all waste and demonstrate compliance to national legislation and best practice procedures on waste management.

The WMP will, as a minimum, include details of temporary waste storage, waste transfer and pre-treatment prior to final disposal or recycling. Licensed/approved facilities for solid and liquid waste disposal must be used and a duty of care and chain of custody for all waste leaving the site will be followed. As part of the plan Contractors will be expected to produce waste handling forms for chain of custody, which will be used to control waste leaving site. Thus the waste controller will keep a copy of the form and the driver will always carry a copy and will ensure that the load is signed for at the final disposal site. All records will be kept by The Contractor for audit purposes and to demonstrate that the project is complying with best practice and applicable legislation.

Oil and fuel storage management plan

The Contractor's SSIP should cover all procedures for storage, transportation and usage of oils and fuels, refueling of plant and machinery and procedures for minimizing the risk of ground and water contamination. All oils and fuels will be required to be stored within secondary containment of 110 % capacity and all spillages shall be cleaned up immediately. Re-fuelling vehicles will carry Spill Kits to enable spillages to be cleaned up as soon as possible. All categories of spillage will be reported in accordance with the Plan to be developed by The Contractor. Toolbox Talks would be expected to be delivered on an ongoing basis as „continued training" and following any significant incident.

In-river works management plan

The Contractor's SSIP should cover procedures and plans for safeguarding aquatic habitats and fish during in-river reconstruction work and will complement the Reconstruction Method Statements.

Camp management plan

The Contractor's SSIP should contain procedures for establishing and operating reconstruction camps in order to safeguard nearby communities and environmental resources.

Re-foresting plan

In accordance with the preconditions obtained from INCS, The Contractor will prepare plan for reforesting areas which were destroyed during reconstruction phase.

Emergency response plan

The Contractor's SSIP should contain procedures for emergency response in the event of accidents or major incidents, in order to safeguard people, property and environmental resources.

Appendix II

CHECK LIST

MONITORING PLAN

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Reconstruction						
Contamination of surface water during reconstruction	suspended solids, organic compounds, lubricants, fuel, solvents, heavy metals, pH value, mineral oils	On a part of a surface waterway downstream from the reconstruction site.	Water quality analysis	before the commencement of works, at the time when humus is being removed and when excavation or the building of embankments from earth material is being carried out. During reconstruction sampling will be done on monthly basis	EIA compliance	Contractor
Contamination of underground water during reconstruction	suspended solids, organic compounds, lubricants, fuel, solvents, heavy metals, pH value, mineral oils	On the basis of the program prescribed within the main design of environmental protection	Water quality analysis	One month before the commencement of works. During reconstruction sampling will be done quarterly.	EIA compliance	Contractor
Contamination of soil during reconstruction	Heavy metals and greases and oils	On the basis of the program prescribed within the main design of environmental protection	Soil quality analysis	One month before the commencement of works. During reconstruction sampling will be done quarterly.	EIA compliance	Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
	Damage to irrigation and Drainage infrastructure	Agricultural lands	Visual observations, discussions with PAPs	weekly	Compliance to EIA and social commitments	Contractor e.g. Environmental staff
	Dust	At reconstruction sites	Visual monitoring	Regularly site visits	Check environment and H&S requirements	Contractor
	Waste water from reconstruction camps and portable sites	At reconstruction camps and portable facilities at work sites	Monitoring of appropriate installation and operation of wastewater units, latrines and septic tanks	Regularly site visits	Check environment requirements are being maintained	Contractor
	Community tension and disruption.	Reconstruction sites	Observation	Regularly site visits	EIA compliance	Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Air Quality	Measuring carbon monoxide (CO) and nitrogen dioxide (NO2) is recommendable in stage one. If the measurement results show exceeded allowable concentration values, the list of pollutants should be extended by measuring the concentrations of nitrogen monoxide (NO), sulphur dioxide (SO2), hydrocarbon (CXHY), and solids/particulates (PM10).	Characteristic profiles according to the monitoring program produced by Contractor and approved by KS	Laboratory equipment	Two times during Reconstruction works	Settlement potentially affected with the air pollution	Contractor
	Asphalt plant - possession of official approval or valid operating license	asphalt plants	Supervision inspection	before work begins	Ensure plant compliance with environment, health and safety standards	Plant Operator, contractor
	Stone quarry - possession of official approval or valid operating license	stone quarry	Supervision inspection	before work begins	Ensure compliance with EIA	Quarry Operator, contractor
	Sand and gravel borrow pit - possession of official approval or valid operating license	sand and gravel borrow pit	Supervision inspection	before work begins	Ensure compliance with EIA	Quarry Operator, contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
	Asphalt, dusty, bulk materials - truck load covered and/or wetted	job site	Supervision inspection	Regular inspections during work	Ensure compliance of performance with environment, health and	Contractor
	Traffic management - hours and alignments selected	job site	Supervision inspection	Regular inspections during work	Ensure compliance with EIA	Contractor
Reconstruction site						
Vibration	Vibration levels	job site	Supervision, observations	Regular inspections during work and on complain	Ensure compliance to ESMP	Contractor
Noise disturbance to human and animal population	noise levels; equipment	job site; nearest homes	Mobile noise meter	once per week and on any complaint	assure compliance to ESMP	Contractor
Traffic disruption	existence of traffic management plan; traffic congestion	at and near job site, local roads	inspection; observation	before works start; once per week at peak periods	assure compliance to ESMP	
Workers safety	Protective equipment; organization of bypassing traffic	job site	inspection	Regular inspections during work	Ensure compliance to ESMP and H&S standards.	Contractor
Operation						

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Contamination of soil during motorway operation	Heavy metals and greases and oils	On the basis of the program prescribed within the main design of environmental protection	Soil quality analysis	Quarterly, at least 5 years during operational phase of motorway section	EIA compliance	Contractor
Contamination of soil or water resources.	Concentration of dissolved oxygen, waste materials, oil, suspended solids, organic compounds, lubricants, fuel, solvents, heavy metals, pH value, color and odor	On Juzna Morava river, characteristic profiles according to the monitoring program produced by Contractor and approved by KS	it is necessary for the measurement and processing of data to be carried out continuously every four months. (January, April, July and October)	Monthly, at least 5 years during operational phase of motorway section	EIA compliance	PERS
Maintenance						
Noise disturbance residents, workers	noise levels	job site; nearest homes	Noise meter	Regularly	Ensure compliance to HSE Standards.	Maintenance Contractor
Possible air, water and soil pollution	air, water and soil quality (suspended solids, organic compounds, lubricants, fuel, solvents, heavy metals, pH value, water conductivity	job site; material storage areas; wash down areas for equipment; equipment maint. facilities	laboratory with necessary equipment	Regular inspections during maintenance activities and on complain	Ensure compliance to HSE Standards.	Maintenance Contractor
Vibrations	limited time of activities	job site	supervision	Regular inspections during maintenance activities and on any complaint		Maintenance Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Workers safety	Protective equipment; organization of bypassing traffic	job site	inspection	Regular inspections during maintenance activities and on any complaint		Maintenance Contractor
Road / Bridge safety						
Increased vehicle speed	condition of traffic signs; vehicle speed	road section included in project	visual observation; speed detectors	during maintenance activities; unannounced	a)-b) enable safe and economical traffic flow	Traffic Police
Erosion, rockfall, hazardous conditions	condition of hazard signs	road section included in project	visual observation	during maintenance activities	Maintenance Contractor	Traffic Police, Supervision Contractor
	Material supply					
Asphalt plant	possession of official approval or valid operating license	asphalt plant	Inspection / supervising engineer	before work begins	assure plant compliance with environment, health and safety requirements	Plant Operator
Sand and gravel borrow pit	possession of official approval or valid operating license	sand and gravel borrow pit or separation	Inspection / supervising engineer	before work begins	assure plant compliance with environment, health and safety requirements	Borrow pit or Separation Operator

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Quarry	possession of official approval or valid operating license	sand and gravel borrow pit or separation	Inspection / supervising engineer	before work begins	assure plant compliance with environment, health and safety requirements	Quarry manager
Concrete plant	possession of official approval or valid operating license	sand and gravel borrow pit or separation	Inspection / supervising engineer	before work begins	assure plant compliance with environment, health and safety requirements	Concrete plant manager
	Material transport					
Asphalt	truck load covered	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Stone	truck load covered or wetted	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Sand and gravel	truck load covered or wetted	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Concrete plant	Removing concrete accidentally spilled from the mixer on to the transport roads within 6 hours	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
	Construction Site					
Traffic management	hours and routes selected	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Noise disturbance to workers and neighbouring population	noise levels	job site; nearest homes at nearby settlements	equipment – hand-held analyser with application software	Once at the beginning of the project and later on quarterly basis, and on complaint. If the results of monitoring are not satisfactory, monitoring should be conducted on monthly basis	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	The Contractor
Dust	air pollution (solid particles)	at and near job site	inspection and visual observation	unannounced inspections during material delivery and bridge construction and reconstruction of local road	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Vibrations	duration	Job site	visual observation	unannounced inspections during works and if related grievances arise	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Traffic disruption during bridge construction and road reconstruction activity	existence of traffic management plan; traffic patterns	at and near job site	inspection; observation	before works start; once per week at peak and non-peak periods	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Reduced access to roadside activities	provided alternative access	job site	supervision	random checks at least once per week during bridge construction and road reconstruction activities	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Vehicle and pedestrian safety when there is no bridge construction and road reconstruction activity	visibility and appropriateness	at and near job site	observation	random checks at least once per week in the evening	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Water and soil pollution from improper material storage, management and usage	water and soil quality (suspended solids, oils, pH value, conductivity)	on affected nearby watercourses	unannounced sampling; analysis at accredited laboratory with necessary equipment	At least 3 times during project period. Monitoring should be done prior construction (or on a referent point upstream of construction site) and during and after rehabilitation works	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	The Contractor
	OPERATION Maintenance					
Workers safety	protective equipment; organization of bypassing traffic	job site	inspection	Unannounced inspections during work. It is recommended to use EBRD template for this purpose (next table)	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Noise disturbance to human population and workers	noise levels	job site; nearest homes	equipment – hand-held analyser with application software	unannounced inspections during maintenance activities and on complaint	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	PE "Roads of Serbia"
Vibrations	duration	Job site	supervision	unannounced inspections during maintenance activities and on complaint	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	PE "Roads of Serbia"
Workers safety	protective equipment; organization of bypassing traffic	job site	inspection	unannounced inspections during maintenance activities and on complaint	assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible	PE "Roads of Serbia"
	OPERATION Road / Bridge Safety					

Phase, item	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored?/ type of monitoring equipment	When is the parameter to be monitored? (frequency of measurement or continuous)	Why is the parameter to be monitored? (optional)	Install and operate
Increased vehicle speed	condition of traffic signs; vehicle speed	road section included in project	visual observation; speed detectors	during maintenance activities; unannounced	enable safe and economical traffic flow	Maintenance Contractor; Traffic Police
Erosion, rockfall, hazardous conditions	road section included in project	condition of hazard signs	visual observation	during maintenance activities	enable safe and economical traffic flow	Maintenance Contractor

Appendix III

REPORTING TEMPLATE FOR CONTRACTORS

Quarterly Environmental & Social Report

1. Company Details
Company Name:
Company Address:
Country:
Town/Location:
Company authorized representative I certify that the data contained in this report completely and accurately represents operations during this reporting period. Signature: Title: Date: **Contact Details** Telephone: Mobile: E-mail:

Reporting Period:

1. Brief Project Description:

2. General		
2.1. Is the Company materially compliant with all applicable environmental and social laws and regulations?	Yes ❑ No ❑	If No, please provide details of any material non-compliances:
2.2 Have there been any accidents or incidents that have caused injuries, fatalities, damage to the environment, or local communities, affected cultural property, or created liabilities for the company?	Yes ❑ No ❑	If yes, please describe (number of injuries, fatalities, damages to assets, amount of compensation paid, etc.):, including details of actions to repair and prevent reoccurrence:
2.3. Have there been any changes to environment, social, labour or health and safety laws or regulations that have materially affected the company?	Yes ❑ No ❑	If yes, please describe:
2.4 How many inspections did you receive from the environmental authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
2.5 How many inspections did you receive from the health and safety authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
2.6 How many inspections did you receive from the labour authorities	Number:	Please provide details of these visits, including number and nature of any violations found:

2. General

during the reporting period?		
2.7 Have these visits resulted in any penalties, fines and/or corrective action plans?	Yes ❑ No ❑	If yes, please describe, including status of implementing corrective actions to address any violations found:
2.8. Has the operator put in place any improvement/mitigation measures to improve the road safety performance such as increased 'radar' surveillance, better and more frequent signage and increased speeding fines, etc., to avoid increased risk of pedestrian accidents due to improved roads, faster speeds and greater traffic volume?	Yes ❑ No ❑	If yes, please explain:
2.9. Is there a road maintenance programme in place?	Yes ❑ No ❑	If yes, has the maintenance been carried out as planned in this programme?
2.10. Has there been any significant road improvement works carried out during the reporting period?	Yes ❑ No ❑	If yes, please describe:
2.11. Are periodic road safety audit/inspections carried out for the project?	Yes ❑ No ❑	If yes, how often are they being carried out? When was the last audit and inspection?

Please fill in the below table:

Year	Number of Accidents	Number of accidents involving fatalities	Number of fatalities
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			

Please describe any environment or social programmes, initiatives or sub-projects undertaking during the reporting period to improve the company's environmental or social performance and/or management systems:

Please indicate the level of associated expenditure (capital expenditure and operating expenditure):

3. Status of the Environmental and Social Management Plan

Please provide information on the status of each item in the Environmental and Social Management Plan (ESMP) agreed with WB. If the ESMP has been updated during the reporting period, please attach a copy of the new plan.

3. Status of the Environmental and Social Management Plan

4. Environmental Monitoring Data[1]

Please provide the name and contact details for your environmental manager:				
Parameter[2]	**Value[3]**	**Unit**	**Compliance Status[4]**	**Comments[5]**
Waste Water				
Total waste water generated				
BOD				
COD				
Suspended Solids				
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO_2				
NO_X				
Particulates				
CO_2				
CH_4				
N_2O				
HFCs				
PFCs				
SF_6				
[Other]				
Other Parameters				
Noise				
[Other]				
Solid Waste				
Please provide details of the types and amounts of solid wastes generated by the project. Indicate where wastes are classified as hazardous. Indicate the final re-use, recycle or disposal method for each waste type.				

[1] Please provide the results of any environmental monitoring carried out by the Company or its consultants. If you already have all the data requested available in another format, then this can used instead.
[2] Not all parameters will necessarily apply. Please complete those rows that are most relevant to the industry sector. Additional parameters can be added as necessary.
[3] Please ensure that the units of measurement are clearly stated
[4] Please report on compliance against the standards agreed with WB for this project (typically local, EU and/or other)
[5] In addition to any other relevant comments, please indicate whether the measurements reported apply to all or only some process operations at the facility

4. Environmental Monitoring Data[1]

5. Resource Usage and Product Output

Parameter	Value	Measurement Unit	Comments[6]
Fuels used			
Oil			
Gas			
Coal			
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

6. Human Resources Management

Please provide the name and contact details for your Human Resources manager:	

	Total	**Recruited in this reporting period**	**Dismissed in this reporting period**
Number of direct employees:			
Number of contracted workers:			

How many of the employees belong to a trade union?		
Were there any changes in the status of Collective Agreements?	Yes ❑ No ❑	If yes, please provide details:
Were there any collective redundancies during the reporting period?	Yes ❑ No ❑	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were selected, consultation undertaken, and measures to mitigate the effects of redundancy:
Are any redundancies to the workforce planned for the next year?	Yes ❑ No ❑	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:
Have employees raised any grievances with the project during the reporting period?	Yes ❑ No ❑	If yes, please state how many, split by gender, summarise the issues raised in grievances by male and female staff and explain how the Company has addressed them:
Have there been any strikes or other collective disputes related to labour and working conditions	Yes ❑ No ❑	If yes, please summarise nature of, and reasons for, disputes and explain how they were resolved

[6] In addition to any other relevant comments, please indicate whether the measurements reported apply to all or only some process operations at the facility Please include any relevant fuel quality parameters (e.g. calorific value)

6. Human Resources Management

at the Company in the reporting period?		
Have there been any court cases related to labour issues during the reporting period?	Yes ❑ No ❑	If yes, please summarise the issues contested and outcome:
Do you have Human Resource policies or terms and conditions in the following areas: • Union recognition • Collective Agreement • Non-discrimination and equal opportunity • Equal pay for equal work • Gender Equality • Bullying and harassment, including sexual harassment • Employment of young persons under age 18 • Wages (wage level, normal and overtime) • Overtime • Working hours • Flexible working / work-life balance • Grievance mechanism for workers • Health & safety	Yes/No for each	If yes, summarise status briefly:

7. Occupational Health and Safety (OHS) Data

Please provide the name and contact details for your Health and Safety manager:					
	Direct employees	**Contracted workers**		**Direct employees**	**Contracted workers**
Number of man-hours worked this reporting period:			Number of Fatalities[7]:		
Budget spent on OHS in this period (total amount and currency):			Number of disabling injuries:		
OHS training provided in this period in person-days:			Number of Lost Time Incidents (including vehicular)[8]:		
Number of lost workdays[9] resulting from incidents:			Number of cases of occupational disease:		
Number of sick days:					
Accident causes:					

[7] If you have not already done so, please provide a separate report detailing the circumstances of each fatality.
[8] Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.
[9] Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

7. Occupational Health and Safety (OHS) Data

Please provide details of any fatalities or major accidents that have not previously been reported to WB, including total compensation paid due to occupational injury or illness (amount and currency):
Please provide details of OHS training provided during the reporting period (e.g. types of training, types of staff trained, frequency, etc)
Please summarise any emergency prevention and response training that has been provided for company personnel during the report period:
Please summarise any emergency response exercises or drills that have been carried out during the report period:

8. Stakeholder Engagement

Please provide the name and contact details for your external relations or community engagement manager:	
Please provide information on any road safety awareness campaigns undertaken amongst roadside communities and drivers (especially where there were major changes in the traffic environment).	
Please provide information on the implementation of the community engagement activities, such as public disclosure and consultation, including: - Meetings or other initiatives to engage with members of the public or public organisations during the report period, - information provided to members of the public and other stakeholders during the report period relating to environmental, social or safety issues - coverage in media, - and interaction with any environmental or other community groups.	
Please describe any changes to the Stakeholder Engagement Plan agreed with WB:	
How many complaints or grievances did the project receive from members of the public or civil society organisations during the reporting period? Please split by stakeholder group. Summarise any issues raised in the complaints or grievances and explain how they were resolved:	

9. Status and Reporting on Resettlement Action Plan/Livelihood Restoration Framework

Existing Land Acquisitions

Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), using the monitoring indicators as detailed in the RAP or LRF, and complete the table below. Please provide the results of any other related monitoring carried out by the Company or its consultants and attach any additional information you think would be useful.

9. Status and Reporting on Resettlement Action Plan/Livelihood Restoration Framework

Have all the affected persons been fully compensated for their physical displacement and, if applicable, any economic losses resulting from the project?	Yes ❑ No ❑	If no, specify how many compensation payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payment will be made:
Has the land acquisition had any additional, unforeseen impacts on affected persons' standard of living or access to livelihoods that were not previously covered in the RAP?	Yes ❑ No ❑	If yes, quantify these impacts and specify what measures have been undertaken to minimize and mitigate these impacts. If no, specify how potential impacts on livelihoods have been monitored.
Have any vulnerable groups been identified?	Yes ❑ No ❑	If yes, list the groups that were identified and describe any additional measures undertaken in order to mitigate impacts specific to these groups.
If applicable, have all transit allowances been paid?	Yes ❑ No ❑	If no, specify how many payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payments will be made.
Has legal support been provided to all the affected persons?	Yes ❑ No ❑	If yes, specify how many persons effectively made use of the legal support.
Have all outstanding land and/or resource claims been settled?	Yes ❑ No ❑ Not applicable ❑	If no, specify how many claims are still outstanding and state what the expected timing is for settling them.
Have there been any new land acquisition-related complaints or grievances?	Yes ❑ No ❑	If yes, please state how many and summarize their content.
Has the company regularly reported to the affected communities on progress made in implementing the RAP?	Yes ❑ No ❑	If yes, please state how many meetings were held and how many participants attended.
New Land Acquisitions If the company acquired any new land for the project during the reporting year, please provide documents to show closure of land acquisition transactions. Please attach new/revised RAP covering the new land acquisition and describe mitigation measures, compensation, agreements reached, etc., and provide in tabular form a list of affected people and status of compensation.		
Have any persons been physically displaced?	Yes ❑ No ❑	If yes, how many?
Have any persons been economically displaced?	Yes ❑ No ❑	If yes, how many?
Was it a government assisted resettlement?	Yes ❑ No ❑	

10. Community Interaction and Development

Please summarise any social or community development initiatives undertaken by the company during the reporting period, and any associated expenditure:

10. Community Interaction and Development

11. Road and Traffic Collsion Data

Please provide road traffic statistical data for the road traffic collisions along the road section for the reporting period:

Number of Collisions	Fatal Injury		Major Injury		Vehicle Type		Traffic Flow
	Pedestrian	Vehicle	Pedestrian	Vehicle	Truck	Car / Motorcycle	

Appendix IV

LEGISLATION

MAIN SERBIAN LEGISLATION:

The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection during planning, design, reconstruction and operating of this Project are listed below:

- Law on planning and construction ("Off. Gazette RS", no. 72/2009, 81/2009 - correction, 64/2010 - CC decision, 24/2011, 121/2012, 42/2013 - CC decision, 50/2013 - CC decision, 98/2013 - CC decision, 132/2014, 145/2014 and 83/2018);
- Law on environmental protection ("Off. Gazette RS", no. 135/2004, 36/2009, 36/2009 - state law, 72/2009 - state law, 43/2011 - CC decision , 14/2016 and 76/2018)
- Law on EIA ("Official Gazette RS" no. 135/2004, 36/2009);
- Law on Strategic EIA ("Official Gazette RS" no.. 135/2004 and 88/2010);
- Law on waste management ("Off. Gazette RS", no. 36/2009, 88/2010 and 14/2016);
- Law on noise protection ("Off. Gazette RS", no. 36/2009 and 88/2010);
- Law on water ("Off. Gazette RS", no. 30/2010, 93/2012 and 101/2016)
- Law on forests ("Off. Gazette RS", no. 30/2010, 93/2012 and 89/2015)
- Law on air protection ("Official Gazette RS", 36/2009 and 10/2013);
- Law on health and safety at work ("Off. Gazette RS", no. 101/2005, 91/2015 and 113/2017 - state law)
- Law on public roads ("Official Gazette RS" No. 101/2005, 123/07, 101/11, 93/12 and 104/13)
- Law on roads ("Official Gazette RS" No. 41/2018)

Regulations established on the basis of the Law on EIA include the following:

- Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08)
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIS ("Official Gazette of RS" No. 69/05)
- Rulebook on the contents of the EIS ("Official Gazette of RS" No. 69/05)
- Rulebook on the procedure of public inspection, presentation and public consultation about the EIS ("Official Gazette of RS" No. 69/05)
- Rulebook on the work of the Technical Committee for the EIS ("Official Gazette of RS" No. 69/05)
- Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 54/92)
- Decree on establishing class of water bodies ("Official Gazette of SRS" No. 5/68)
- Regulations on dangers pollutants in waters ("Official Gazette of SRS" No. 31/82)

Other relevant Serbian legislation

- Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of RS", 38/09)
- Law on public roads ("Official Gazette of RS" No. 101/2005, 123/07)

Appendix V

PRECONDISIONS FROM THE RELEVANT INSTITUTIONS

1. PRECONDITIONS OBTAINED FROM INCS

Р е п у б л и к а С р б и ј а
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
Нови Београд, Др Ивана Рибара бр. 91
Тел: +381 11/2093-802; 2093-803
Факс: + 381 11/2093-867

Завод за заштиту природе Србије, Београд, Ул. др Ивана Рибара бр. 91, на основу члана 9. Закона о заштити природе („Службени гласник РС“, бр. 36/2009, 88/2010, 91/2010–исправка, 14/2016 и 95/2018-други закон), а у вези са чл. 8б. Закона о планирању и изградњи („Службени гласник РС“, бр. 72/2009, 81/2009, 64/2010 - Одлука УС РС, 24/2011, 121/2012, 42/2013 - Одлука УС РС, 50/2013 - Одлука УС РС, 98/2013 - Одлука УС РС, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019-др. закони и 9/2020 и 52/2021), Правилником о поступку спровођења обједињене процедуре електронским путем („Службени гласник РС“, бр. 68/2019), Уредбом о локацијским условима („Службени гласник РС“, бр. 115/2020), и чланом 136. Закона о општем управном поступку („Службени гласник РС“, бр. 18/2016 и 95/2018-аутентично тумачење), поступајући по захтеву ROP-LES-14109-LOC-1/2021 заводни бр. 353-198/21-02 од 25.05.2021. године, Градске управе града Лесковца, Одељења за урбанизам, ул. Пана Ђукића бр. 9-11, Лесковац, за издавање услова заштите природе за потребе израде локацијских услова за реконструкцију локалног пута за насељено место Граово од km 0+003.37 до km 4+278.30 (на укрштању са асфалтним путем у КО Граово), град Лесковац, дана 10.06.2021. године под 03 бр. 021-1609/2, доноси

Р Е Ш Е Њ Е

1. На подручју на коме се планира реконструкција локалног пута за насељено место Граово од km 0+003.37 (раскрсница на локалном путу на кп. бр. 2926 КО Палојце) до km 4+278.30 (на укрштању са асфалтним путем на кп. бр. 6786,6776 и 2370 у КО Граово), град Лесковац, нема заштићених подручја за које је спроведен или покренут поступак заштите. Предметно подручје налази се у обухвату еколошки значајног подручја „Кукавица“ еколошке мреже Републике Србије. Сходно томе, издају се следећи услови заштите природе:

1) Планирана реконструкција може се извршити на простору који је дефинисан пројектном документацијом, од насељеног места Граово од km 0+003.37 (раскрсница на локалном путу на кп. бр. 2926 КО Палојце) до km 4+278.30 (укрштање са асфалтним путем на кп. бр. 6786,6776 и 2370 у КО Граово), град Лесковац;
2) Планираним радовима испоштовати основне критеријуме за реконструкцију саобраћајница: морфологију терена, геолошке и педолошке карактеристике, нагибе падина и слично, како би се избегли деградациони процеси на подручју радне зоне и шире;

3) Градилиште организовати на минималној површини потребној за његово функционисање, а манипулативне површине просторно ограничити како би се избегле негативне последице на непосредно окружење;
4) Сав грађевински материјал привремено депоновати на обележеним и заштићеним локацијама унутар парцела;
5) Обезбедити услове очувања ресурса, односно рационално коришћење земљишта при ископу земље на траси. У том смислу, хумусни слој земљишта, уклоњен током извођења радова, депоновати на означеном месту, сачувати и употребити у поступку санације, односно спровођења биолошких и био-техничких мера стабилизације тла;
6) Заштитити појединачна стабла, дрвореде и групе стабала која се налазе у близини извођења предметних радова, а која могу бити угрожена приликом манипулације грађевинским машинама, транспортним средствима или складиштењем опреме;
7) Уколико је за потребе извођења радова неопходно уклањање стабала, свести га на најмању могућу меру и то уз дознаку стабала за сечу од стране надлежне институције; Није дозвољено уклањање недозначених стабала, стабала пречника испод таксационе границе, као ни стабала изван трасе саобраћајнице и дуж приступних путева до локације на којој се радови изводе;
8) За коловозни застор користити материјале којима се обезбеђује смањење нивоа буке и вибрација и који омогућавају ефикасно дренирање воде са површине коловоза;
9) За озелењавање слободних површина користити претежно аутохтоне, брзорастуће врсте, које имају изражене естетске вредности. Избегавати врсте које су детерминисане као алергене (тополе и сл.), као и инвазивне (багрем, кисело дрво и др.);
10) Забрањено је уништавање и нарушавање станишта, као и убијање и узнемиравање дивљих врста;
11) Није дозвољено уклањање стубова и стабала са гнездима птица. Уколико се радови планирају у непосредној близини гнезда птица, исте реализовати искључиво када гнезда нису активна, тј. пре 01. априла или после 15. јуна, док се радови ван зона стабала, дрвореда и живица могу реализовати без ограничења;
12) Уколико се током извођења радова наиђе на активно гнездо са пологом или младунцима птица, неопходно је привремено обуставити радове на тој локацији и обавестити Завод за заштиту природе Србије;
13) Није дозвољено извођење радова ноћу;
14) Сервисирање возила и радних машина на предметној парцели није дозвољено, а уколико дође до хаваријског изливања горива и уља или било којих других опасних и штетних материја, обавезна је санација површине, у циљу заштите земљишта и подземних вода;
15) Ниво буке током извођења радова, не сме прећи прописане дозвољене граничне вредности за радну средину, посебно у близини насеља и већих шумских комплекса;
16) Током извођења радова неопходно је одржавати примерен ниво комуналне хигијене, односно предвидети систематско прикупљање и депоновање отпада који се јавља у процесу реконструкције и боравка радника;
17) Након завршених радова инвеститор је обавезан да изврши комплетну санацију локације и свих манипулативних површина девастираних током извођења радова, доводећи их у одговарајуће функционално стање усаглашено са непосредном околином укључујући планско озелењавање;

18) Дефинисати одговарајуће поступке и мере за заштиту животне средине и превенцију акцидената до којих може доћи у поступку предметне реконструкције уз обавезу обавештавања надлежних инспекцијских служби и установа;
19) Уколико се током радова наиђе на геолошко-палеонтолошке или минералошко-петролошке објекте, за које се претпоставља да имају својство природног добра, извођач радова је дужан да у року од осам дана обавести Министарство заштите животне средине, односно предузме све мере како се природно добро не би оштетило до доласка овлашћеног лица.

2. Ово решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
3. За све друге радове/активности на предметном подручју или промене пројектне документације, потребно је поднети нови захтев.
4. Уколико подносилац захтева у року од две године од дана достављања овог решења не отпочне радове и активности за које је ово решење издато, дужан је да поднесе захтев за издавање новог решења.
5. Подносилац захтева је ослобођен плаћања накнаде за издавање овог Решења у складу са чланом 4. став 1. тачка 2 Правилника о висини и начину обрачуна и наплате накнаде за издвање акта о условима заштите природе („Службени гласник РС“, бр. 73/2011, 106/2013).

О б р а з л о ж е њ е

Надлежни орган – Градска управа града Лесковца, Одељење за урбанизам, обратила се Заводу за заштиту природе Србије захтевом заведеним под 03 бр. 021- 1609/1 од 25.05.2021. године, за издавање услова заштите природе за потребе израде локацијских услова за реконструкцију локалног пута за насељено место Граово од km 0+003.37 (раскрсница на локалном путу на кп. бр. 2926 КО Палојце) до km 4+278.30 (на укрштању са асфалтним путем на кп. бр. 6786,6776 и 2370 у КО Граово), град Лесковац. Захтев за издавање локацијских услова за предметну реконструкцију Градској управи града Лесковца, поднео је Град Лесковац ул. Пана Ђукића бр. 9-11, преко пуномоћника Зорице Сатарић.

На основу достављеног захтева и пратеће документације подносиоца захтева, утврђено је да се планира реконструкција - унапређење локалног пута који повезује село Граово са општинским путем Грделица - Предејане на територији града Лесковца. Укупна дужина деонице која се реконструише је Л=4274.93m. Пројектом се издвајају 3 карактеристичне деонице које су условљене конфигурацијом терена, постојећом инфраструктуром - државног пута, пруге и водотока реке Јужне Мораве. Прва деоница се простире од km 0+003.37 до km 705.05, представља правац пута Грделица - Предејане и пролази између државног пута IIA бр. 258 Лесковац - Прешево и железничке пруге Е70/Е85 Београд - Лесковац - Прешево. Друга деоница се простире од раскрснице на km 0+655.00 преко новопројектованог моста (од km 0+869.00 до km 0+922.00) преко реке Јужне Мораве до надвожњака аутопута на km 0+960.00.Ова деоница се претежно налази у високом насипу због пројектоване коте моста условљене котом велике воде 270.55. Трећа деоница се наставља на другу и иде до краја пројектоване трасе. Усвојена је ширина коловоза мин 3.5 m са банкинама ширине 0.5m и на деоницама, услед недовољне постојеће ширине у

засецима, одводњавање коловоза врши се са асфалтним риголама ширине 60 cm оивичене са бетонским ивичњацима.

Увидом у Централни регистар заштићених природних добара и документацију Завода, установљено је да на простору предвиђеном за изградњу нема заштићених подручја за које је спроведен или покренут поступак заштите. Предметно подручје налази се у обухвату еколошки значајног подручја „Кукавица“ (бр. 87) еколошке мреже Републике Србије („Службени гласник РС“, бр. 102/2010) у оквиру којег је одабрано подручје за дневне лептире (PBA - Prime Butterfly Area).

Услови заштите природе из диспозитива овог решења утврђени су у складу са прописима који регулишу област заштите природе. Законски основ за доношење решења: Закон о заштити природе, Закон о заштити животне средине („Службени гласник РС“, бр. 135/04, 36/2009 - други закон, 72/2009 – други закон, 43/2011 одлука – УС, 14/2016, 76/2018 и 95/2018-други закон), Уредба о еколошкој мрежи („Службени гласник РС“, бр. 102/2010)

Планирана реконструкција локалног пута за насељено место Граово од km 0+003.37 (раскрсница на локалном путу на кп. бр. 2926 КО Палојце) до km 4+278.30 (на укрштању са асфалтним путем на кп. бр. 6786,6776 и 2370 у КО Граово), град Лесковац, може се реализовати под условима дефинисаним овим Решењем, јер је процењено да неће значајније утицати на природне вредности подручја.

Упутство о правном средству: Против овог решења може се изјавити жалба Министарству заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје писмено или изјављује усмено на записник Заводу за заштиту природе Србије.

в.д. Д И Р Е К Т О РА

Марина Шибалић

НАЧЕЛНИК ОДЕЉЕЊА
Горан Дрмановић, маст.правник
Goran Drmanović 411431
Digitally signed by Goran Drmanović 411431
Date: 2021.06.10 11:00:25 +02'00'
по Одлуци директора
02 бр. 012-1542/1 од 20.05.2021. године

ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
СЕДИШТЕ • 11070 Н. Београд, Др Ивана Рибара 91 • тел. 011/2093-800, 2093-801 • факс: 011/2093-867 • beograd@natureprotection.org.yu

датум 29. 06. 2006.
број 03 – 853 / 2

САОБРАЋАЈНИ ИНСТИТУТ ЦИП Д.О.О.
Немањина 6
11000 БЕОГРАД

УСЛОВИ ЗАШТИТЕ ПРИРОДЕ И ЖИВОТНЕ СРЕДИНЕ ЗА ПОТРЕБЕ ИЗРАДЕ ИДЕЈНОГ ПРОЈЕКТА АУТОПУТА Е-75, БЕОГРАД – НИШ – ГРАНИЦА БЈР МАКЕДОНИЈА, ДЕОНИЦА ГОРЊЕ ПОЉЕ – ЦАРИЧИНА ДОЛИНА ОД km 873+714.86 ДО km 886+050.91

Саобраћајни институт ЦИП д.о.о. поднео је захтев за издавање услова који су од значаја за израду Идејног пројекта аутопута Е-75, Београд – Ниш – Граница БЈР Македонија, деоница Горње Поље – Царичина долина од km 873+714.86 до km 886+050.91 (бр. 566-329/97 од 19. 05. 2006.).

На основу достављене документације и увида у Регистар заштићених природних добара у Републици Србији, Завод за заштиту природе Србије констатује, да се на траси Идејног пројекта аутопута Е-75, Београд – Ниш – Граница БЈР Македонија, деоница Горње Поље – Царичина долина, не налазе посебно заштићена природна добара те Обрађивач Идејног пројекта нема посебних обавеза према чл. 51. и 61. Закона о заштити животне средине („Службени гласник РС", бр. 66/91).

Међутим, Обрађивач Идејног пројекта је обавезан да према релевантној законској регулативи изврши валоризацију и утврди начин, мере и услове заштите природе и животне средине, односно адекватно коришћење и уређење простора у складу са наменом, највише у вези са чињеницом да је због своје угрожености флора и Фауна на читавој територији Србије под одређеним видом заштите (Уредба о заштити природних реткости «Службени гласник Републике Србије» бр. 50/93; Уредба о стављању под контролу коришћења и промета дивље флоре и фауне «Службени гласник Републике Србије» бр. 31/2005). Са тим у вези

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потребно је у што већој мери очувати сва станишта на току Јужне Мораве и у њеној плавној зони.

Надаље, већи део предметне деонице аутопута Е-75 пролази кроз Грделичку клисуру која представља рефугијум терцијерне флоре, ретких угрожених биљних врста и мешовите реликтне вегетације, те су њено очување и заштита од изузетног значаја. Овде се могу наћи врсте које су у Србији постале ретке или су сасвим ишчезле. Такве су ендемичне балканске врсте, *Consolida uechtritziana* (Pančić ex Huth), Soo (ихтрицхов жаворњак), чије се станиште налази у непосредној близини деонице (Царичина долина) у клисури Дервен. Наиме, овај таксон је уврштен у Црвену књигу флоре Србије I. Обзиром да ова врста расте на оранicама поред путева, претпоставка је да и у самој Грделичкој клисури (на деоници аутопута Царичина долина - Владичин Хан), има станишта на којима би се могла пронаћи. У случају да се негативни утицаји наставе ова станишта би постала еколошки лабилна и рањива.

Такође, клисура представља и један од коридора којим се поједини представници херпетофауне шире од југа према северу. Овај коридор је уједно и најкраћи пут између Врањске и Лесковачке котлине. Врсте који користе овај коридор су Степски гуштер *Podarcis tauricus*, као и Балкански зидни гуштер *Podarcis erhardii*. Очување овог дела коридора је изузетно значајно ако се има у виду да се рубови ареала ових врста налазе на управо поменутим просторима.

Фауну птица Грделичке клисуре карактерише већи број заштићених и угрожених врста. То су пре свега грабљивице, као што су сури орао *Aquila chrysaetos* и сиви соко *Falco peregrinus*. Популације ове две врсте су у неповољном положају, зависе од заштите, па је неопходно смањење или елиминисање негативног антропогеног утицаја. Поред њих, не треба занемарити остале, карактеристичне врсте термофилних, каменитих станишта овог подручја, као што су велика ушара *Bubo bubo*, јаребица камењарка *Alectoris graeca*, планински кос *Monticola saxatilis*, медитеранска белка *Oenanthe hispanica*, даурска ласта *Hirundo daurica*.

ЕКОЛОШКИ КОРИДОРИ

Изградњом аутопута врши се фрагментација станишта биљних и животињских врста и ствара се непропустљива баријера за највећи (или велики) број животињских врста. Ради очувања биодиверзитета региона неопходно је обезбедити слободно кретање јединки између очуваних субпопулација природних станишта. Због тога је неопходна изградња еколошких коридора, који повезују просторне јединице изолованих природних станишта. Очување проходности ових еколошких коридора је од приоритетног значаја за очуваање биодиверзитета региона, како врста Законом заштићених као природне реткости, тако и значајних ловних врста. У ту сврху потребно је током пројектовања и изградње аутопута планирати и изградњу пролаза за ситне и крупне животиње, изнад или испод аутопута, зависно од потребе и карактеристике терена како би се негативни ефекти саобраћајнице што више ублажили.

Користећи нека досадашња позитивна иностранa искуства, сматрамо да су се мултифункционални пролази за ситне и крупне животиње, превасходно сисаре, показали као једина решења овог проблема:

- Предвиђени прелази (мостови) преко водотока такође се могу искористити као својеврсни еколошки коридори, уз мале преправке. Корито водотока треба да заузима највише једну трећину пролаза испод пута;
- Димензије пролаза пројектовати тако да испуне овај услов;
- Профил корита унутар пролаза треба да има нагиб мањи од 45° (оптимално 30°);
- Странице обалоутарда водотока унутар пролаза треба да буду грубо храпаве (нпр. прављењем хоризонталних ребара), чиме би се спречило клизање животиња у воду, и омогућио њихов лакши излазак из воде;
- Простор испред и иза пролаза треба да буде прекривен истоветним типом земљишта на датом локалитету, и природном вегетацијом околине;
- Као пролазе за водоземце и неке друге врсте животиња које преферирају влажна станишта и живе у близини воде, могуће је искористити већ пројектоване цеви за дренажу тла.

ПОЗАЈМИШТА

Позајмишта песка и земљишта имају вишеструки негативни утицај на биодиверзитет. У случају стварања отвореног воденог окна фреатске издани на позајмишту, долази до загађивања фреатске издани. Отворено фреатско окно својим испаравањем негативно утиче на природни режим околних влажних станишта. После напуштања позајмишта, обновљена природна вегетација и водена површина привлачи животињске врсте, које могу да страдају на аутопуту. Дугорочно посматрано овакво станиште функционише као клопка за многе врсте. Највише су угрожене популације птица, водоземаца и гмизаваца.

Услови:
- Позајмишта не могу да се копају дубље од максималног нивоа подземне воде, да би се спречила појава отвореног фреатског окна;
- Позајмишта код прелаза за дивљач треба да садрже очуване делове плодног земљишта оригиналне структуре (обезбедити потребну количину плодног земљишта) ради формирања ремиза;
- Приликом ревитализације обновити вегетацију која је карактеристична за дату област. Избегавати озелењавање дрвенастим врстама и врстама са привлачним плодовима да би се спречавало привлачење птичјих врста и њихово страдање уз аутопут.

УТИЦАЈ АУТОПУТА НА ЗЕМЉИШТЕ

Изградња и експлоатација аутопута утичу на земљиште на коме сем флоре и фауне обитава и људска популација, па је неопходно дефинисати ужу и ширу зону утицаја изградње и функционисања објекта аутопута на животну средину (посебно са аспекта очувања пољопривредног земљишта и производње хране одговарајућег квалитета). С тим у вези треба предвидети зоне утицаја и количине загађивача који спирањем са коловоза аутопута доспевају у земљиште и воду, те на основу тога утврдити мере и препоруке за коришћење земљишта.

На површинама и зонама где су концентрације тешких метала и других загађивача веће од дозвољених мора се утврдити таква намена површина којом ће се избећи културе које служе за исхрану људи и стоке (земљиште поред аутопута може се користити у пољопривредне сврхе на удаљености 30 м од ивице коловоза). На површинама за које се утврди да су у таквој зони утицаја аутопута најсврсисходније је предвидети пошумљавање, односно културе засада дрвета или других индустријских биљака.

Осим наведених мера које се односе на заштиту флоре, фауне, и земљишта, Идејним пројектом аутопута Е-75, Београд – Ниш – Граница БЈР Македонија, деоница Горње Поље – Царичина долина обезбедиће се услови за изградњу саобраћајних површина, инфраструктурних мрежа и објеката, као и уређење простора, те са тим у вези морају бити испуњени и следећи услови:

1. Обрађивач Идејног пројекта аутопута Е-75 је дужан да, у складу са Законом о процени утицаја на животну средину („Службени гласник РС", бр. 135/04), код надлежног органа покрене поступак процене утицаја планираних радова на животну средину.

2. Приликом израде идејног пројекта аутопута Е-75 на предметној локацији посебну пажњу обратити на подручја значајна са аспекта заштите природе. Ово се посебно односи на шумске комплексе, водотокове и њихова приобаља, барске и мочварне површине, ливаде и сл. Иако се ради о мањим површинама, окруженим насељима и пољопривредним земљиштем, оне представљају посебне остатке природних станишта флоре и фауне. Стога треба настојати да траса аутопута буде тако дефинисана да се планираним радовима не униште потпуно, односно уништење постојеће флоре и фауне свести на најмању могућу меру, а по завршетку радова обавезно је успоставити биљни покривач (култивисати терен) на свим угроженим местима, применом одговарајуће флоре и таквих врста које су биолошки постојане у датим климатским условима, отпорније на штетне утицаје (издувне гасове и сл.) као и да је избор врста усклађен са околним простором и његовом наменом.

3. Предвидети формирање зелених појасева уз аутопут, као и заштитних конструкција различитих апсорпционих својстава, у функцији заштите од буке и умањења негативних ефеката загађења ваздуха. Ове заштитне појасеве треба лоцирати нарочито на оним деоницама где траса аутопута тангира рурална и урбана насеља.

4. Идејним пројектом утврдити начин организације градилишта аутопута са јасно прецизираним локацијама за објекте, паркинге и путеве проласка тешке механизације, као и позајмишта, односно депоније материјала, те начин и мере санације и уређења путног појаса, односно стављања простора у намену утврђену пројектном документацијом.

5. Посебну пажњу посветити заштити и уређењу простора, односно локалитета где су смештене базе за одржавање пута. Мере заштите треба да спрече негативне ефекте на животну средину које ови објекти, са машинама и пратећим садржајима, могу изазвати.

6. Начин транспортовања, утовар, истовар и депоновање грађевинског материјала одредити посебно за сваку деоницу аутопута, тј. градилиште.

7. Забрањено је сервисирање и одржавање возила, грађевинских машина и сл. дуж трасе пута. Уколико дође до хаваријског изливања уља или горива неопходно је извршити санацију локације.

8. Текуће одражавање возила, грађевинских машина и сл. вршити на прописно изграђеном каналу. Инвеститор је у обавези да обезбеди сакупљање отпадних материја при сервисирању, и њихово одлагање у складу са законом.

9. Забрањено је депоновање шута, земље и осталог отпада у зони трасе пута и непосредно уз њу, током и по завршетку радова, осим на локацијама које ће се пројектом организације градилишта утврдити као привремене или трајне депоније.

10. Хумус који ће бити коришћен за радове на санацији терена засебно депоновати и заштити од спирања.

11. Строго је забрањено бацање комуналног и другог отпада у водотоке и земљиште.

12. Комунални отпад се може привремено депоновати дуж трасе аутопута на одговарајући начин постављањем одговарајућих специјалних судова за његово прикупљање. Током извођења радова, инвеститор је обавезан да у оквиру простора одржава максимални ниво комуналне хигијене.

13. Посебно предвидети заштиту водотока и земљишта, од пробоја загађења у случају акцидентних ситуација, нарочито код превоза

опасних материја. У случају акцидента и изливања загађујућих материја (горива, моторног уља и др.) како у водотоке, тако и у земљиште, неопходно је загађено место евакуисати под условима надлежне комуналне службе, а локацију санирати.

14. При пројектовању система одвођења атмосферских вода применити таква решења која ће спречити директно изливање штетних материја са коловоза, у водотоке и земљиште.

15. Такође, евентуалне усеке и насипе пројектовати тако да прате и да се уклапају у природни облик терена, односно применити био-инжењерске мере заштите терена од ерозије.
Приликом покривања шкарпи вегетацијом, треба имати у виду да постоји природни, максимални степен нагиба до кога се вегетација може одржати без помоћи техничких мера. Земљиште доста стрмих шкарпи треба ућврстити жичаном мрежом испод које се сади трава и аутохтоно шибље.

16. Сва позајмишта по завршетку радова треба довести у одговарајуће функционално стање усаглашено са непосредном околином. Позајмишта рекултивисати тако што се земљиште прво насипа хумусом, а затим се пошумљава – озелењава одговарајућим аутохтоним врстама флоре.

17. На свим ризичним пунктовима трасе аутопута обезбедити одговарајуће противпожарне мере заштите, посебно шума, људства, технике на градилишту и др.

18. Уколико се приликом извођења грађевинских радова на траси аутопута јави потреба за уређењем водотокова, обавезна је примена тзв. „натуралног уређења", применом природних материјала, вегетације и сл., из самог окружења истих. Забрањује се бетонирање обала и корита водотокова, те је обавезно њихово максимално очување, посебно обала и корита реке Јужне Мораве, а све у циљу заштите и очувања станишта аутохтоне водене, и приобалне флоре и фауне тога подручја.
У случају да је неопходно измештање корита водотокова, потребно је то чинити у што мањем обиму, и то само колико је неопходно за изградњу аутопута. При формирању новог корита и обала, водити рачуна да се њихов изворни и аутентични изглед и намена очува.
Такође, уколико се јави потреба пресецања корита водотокова, неопходно је обезбедити одређене пропусте за несметан ток воде, а самим тим и несметан живот и развој водене флоре и фауне.

19. Идејним пројектом обавезно предвидети да, уколико се у припреми локација планираних за изградњу аутопута, односно свих објеката везаних за исти, открије природно добро које је геолошко – палеонтолошког или минеролошко – петрографског порекла, а могло би да има својства природног споменика, извођач радова има обавезу

да о томе обавести Завод за заштиту природе Србије и да предузме све мере како се природно добро не би оштетило до доласка овлашћеног лица.

20. По усвајању пројекта, молимо вас да нас повратно информишете о реализованом концепту, посебно за сегмент који се односи на заштиту природе и животне средине, како би смо сличне, прихватљиве варијанте и даље примењивали у пракси (нпр. ефикасност постојања одређених прелаза и пролаза за животиње, њихово одржавање, економичност за сам пројекат итд.).

21. Обрађивач је дужан да поштује и све друге одредбе заштите утврђене Законом о заштити животне средине, другим прописима, као и важећим планским актима вишег реда.

О б р а з л о ж е њ е

Одредбом члана 33. и 34. Закона о заштити животне средине („Службени гласник РС", бр.135/04) и члана 51. и 61. Закона о заштити животне средине („Службени гласник РС", бр. 66/91), одређено је да организација за заштиту природе, тј. Завод за заштиту природе Србије утврђује услове заштите и даје податке о заштићеним природним добрима у поступку израде просторних и других планова, односно основа (шумских, водопривредних, ловних, риболовних и др.) и друге инвестиционо – техничке документације.

У складу са наведеном законском одредбом, САОБРАЋАЈНИ ИНСТИТУТ ЦИП д.о.о., поднео је захтев бр. 566-329/97 од 19. 05. 2006. године за издавање услова заштите природе и животне средине за потребе израде Идејног пројекта Е-75, Београд – Ниш - Граница БЈР Македонија, деоница Горње Поље – Царичина долина од km 873+714.86 до km 886+050.91.

Достављено:

- Наслову
- Министарству науке и заштите животне средине
  Управа за заштиту животне средине
-Архиви

Директор Завода,

Проф. др Лидија Амиџић

ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
СЕДИШТЕ ♦ 11070 Н. Београд, Др Ивана Рибара 91 ♦ тел: 011/2093-800, 2093-801 ♦ факс: 011/2093-867 ♦ beograd@natureprotection.org.yu

Датум 27. 02. 2008.
Број 03 – 237 / 2

САОБРАЋАЈНИ ИНСТИТУТ - ЦИП д.о.о.
БЕОГРАД
Примљено: 29. FEB. 2008
Орг. јед. | | |
И | 566-369/07

САОБРАЋАЈНИ ИНСТИТУТ ЦИП д.о.о.
Немањина 6/IV
11000 БЕОГРАД

Предмет: **Допуна и измена Услова заштите природе и животне средине за потребе израде Идејног пројекта аутопута Е-75, Београд – Ниш - Граница БЈР Македонија, деоница Горње Поље – Царичина долина од km 873+714.86 до km 885+726.739**

Саобраћајни институт ЦИП д.о.о., поднео је захтев за допуну и измену Услова заштите природе и животне средине бр. 03 – 853/2 , издатих 29. 06. 2006. године, за изградњу и експлоатацију планираних објеката, са предлогом евентуалних мера заштите за подручје које обухвата зону утицаја аутопута Е-75, Београд – Ниш - Граница БЈР Македонија, деоница Горње Поље – Царичина долина.

Допуна и измена наведених услова је потребна због измене дела Идејног пројекта (промена трасе аутопута од km 878+960.41 до km 881+819.43). Траса аутопута се поред насеља Предејане „помера" у брдо и пролази тунелом дужине 1000 m.

Увидом у достављену документацију и Регистар заштићених природних добара у Републици Србији, Завод за заштиту природе Србије констатује, да се на траси аутопута Е-75, Београд – Ниш – Граница БЈР Македонија, деоница Горње Поље – Царичина долина, од km 878+960.41 до km 881+819.43, која обухвата предметни тунел, не налазе посебно заштићена природна добара те Обрађивач Идејног пројекта нема посебних обавеза према чл. 51. и 61. Закона о заштити животне средине („Службени гласник РС", бр. 66/91).

На основу наведеног, Завод за заштиту природе Србије потврђује Услове заштите природе и животне средине за потребе израде Идејног пројекта Е-75, Београд – Ниш - Граница БЈР Македонија, деоница Горње Поље – Царичина, издате под бројем 03 - 853/2, дана 29. 06. 2006. године.

РАДНА ЈЕДИНИЦА У НОВОМ САДУ | РАДНА ЈЕДИНИЦА У НИШУ | ПРИВРЕМЕНА РАДНА ЈЕДИНИЦА
www.natureprotection.org.yu

Такође, осим већ утврђених Услова, у вези израде Идејног пројекта аутопута Е-75, Београд – Ниш – Граница БЈР Македонија, деоница Горње Поље – Царичина, на делу трасе аутопута на којој се налази планирани тунел, Завод исте допуњује следећим мерама и условима:

1.Планску и техничку документацију новопројектованог тунела, на траси аутопута Е-75, потребно је ускладити са најновијим знањима технике пројектовања и изградње тунела, са захтевима безбедности саобраћаја, са економским начелима и мерилима за оцену оправданости његове изградње и са прописима о заштити животне средине, тако да штетни утицаји на природу, због очекиваног утицаја на исту, буду што мањи.

2.Потребно је настојати да се радовима на изградњи тунела уништење постојеће флоре и фауне, око планираних излазних, односно улазних портала, леве и десне тунелске цеви, као и на падинама које засвођују тунелске цеви, сведе на најмању могућу меру, јер ће исте послужити као ефикасни прелази за различите животињске врсте, односно за њихово одржање на овом простору.

3.Идејним пројектом је предвиђено да планирани тунел у дужини од 1000 m прође кроз стенски комплекс шкриљаца. С тим у вези потребно је водити рачуна да је при неповољним морфолошким, хидролошким, хидрогеолошким и вегетационим условима, овај материјал подложан клизању, дубоком јаружењу и површинском спирању. Ове појаве су управо најинтензивније на појединим теренима у сливу Јужне Мораве, пре свега у пределу Грделичке клисуре, те је обзиром на наведено, потребно кроз Пројекат предвидети мере и решења која ће омогућити успостављање стабилности терена, односно који ће онемогућити евентуална обрушавања истог.

4.Утврдити и начин организације градилишта тунела са јасно прецизираним локацијама за објекте, паркинге и путеве проласка тешке механизације, као и позајмишта, односно депоније материјала, те начин и мере санације и уређења путног појаса, односно стављања простора у намену утврђену пројектном документацијом.

5.Радови на минирању, при изградњи предметног тунела, морају се планирати и изводити по шеми строго контролисаног минирања и са квалификованим лицима за ту врсту посла. Допрему експлозива и иницијалних средстава планирати из одговарајућег овлашћеног магацина, а њихово допремање вршити возилима за ту намену.

6.Забрањено је депоновање ископаног стенског материјала, земље и сл. у зони око тунелских улазних портала и непосредно уз њих, те у обалној зони Јужне Мораве, током и по завршетку радова. Исти депоновати на локацијама које ће се пројектом организације градилишта утврдити као привремене или трајне депоније.

7.На одговарајућим пунктовима у склопу тунела планирати потребне системе сигнализације, вентилације, евентуални видео надзор, одговарајуће противпожарне мере заштите и сл.

8.Након изградње тунела неопходно је уклонити сву механизацију, грађевински материјал, контејнере, резервне делове и др., са трасе пута.

9.По завршетку радова обавезно је успоставити биљни покривач (култивисати терен) на свим угроженим местима, применом одговарајуће вегетације.

10.Идејним пројектом обавезно предвидети да, уколико се у припреми локација планираних за изградњу тунела, односно свих објеката везаних за исти, открије природно добро које је геолошко – палеонтолошког

или минеролошко – петрографског порекла, а могло би да има својства природног споменика, извођач радова има обавезу да о томе обавести Завод за заштиту природе Србије и да предузме све мере како се природно добро не би оштетило до доласка овлашћеног лица.

О б р а з л о ж е њ е

Одредбом члана 33. и 34. Закона о заштити животне средине („Службени гласник РС", бр.135/04) и члана 51. и 61. Закона о заштити животне средине („Службени гласник РС", бр. 66/91), одређено је да организација за заштиту природе, тј. Завод за заштиту природе Србије утврђује услове заштите животне средине и даје податке о заштићеним природним добрима у поступку израде просторних и других планова, односно основа (шумских, водопривредних, ловних, риболовних и др.) и друге инвестиционо – техничке документације.

У складу са наведеном законском одредбом, САОБРАЋАЈНИ ИНСТИТУТ ЦИП д.о.о., поднео је захтев бр. 566-369/97 од 29. 01. 2008. године за допуну и измену Услова заштите природе и животне средине бр. 03 – 853/2 , издатих 29. 06. 2006. године, за потребе израде Идејног пројекта Е-75, Београд – Ниш - Граница БЈР Македонија, деоница Горње Поље – Царичина долина од km 873+714.86 до km 885+726.739.

Достављено:
- Наслову
- Министарству заштите животне средине
- Министарству за инфраструктуру
- Архиви

Директор Завода

Проф. др Лидија Амиџић

2. PRECONDITIONS OBTAINED FROM IPCM

МБ/ЈБ

Републички завод за заштиту споменика културе - Београд, на основу чл. 99. став 2. тачка 1, 100. став 1., 109., 110. и 104. Закона о културним добрима («Службени гласник РС», број 71/94) и члана 131. Закона о општем управном поступку («Службени лист СРЈ», бр. 33/97 и 31/01), на захтев Саобраћајног института СИП из Београда, улица Немањина бр. 6, доноси

Р Е Ш Е Њ Е

I Мере техничке заштите за израду Идејног пројекта Е-75 Београд – Ниш – Граница БЈРМ деоница Горње поље – Царичина долина, могу се предузети према следећим условима:

- на траси Ауто пута Е-75 Ниш – Граница БРЈМ, деоница Горње поље – Царичина долина од км 873+714,86 до км 886+050,91 регистровани су бројни археолошки локалитети;
- не може се са сигурношћу тврдити да су градњом пута на овој деоници угрожени археолошки локалитети;
- како је у непосредној близини трасе ауто пута током 2002. године регистровано пет археолошких налазишта, за која не можемо са сигурношћу тврдити да ли ће бити девастирана градњом трасе ауто пута, неопходно је стално присуство археолога Републичког завода за заштиту споменика културе – Београд током земљаних радова;
- у случају да, у току радова, открије до сада нерегистровани локалитет или његов део, инвеститор је у обавези да о томе, без одлагања, обавести Републички завод за заштиту споменика културе - Београд;
- инвеститор је дужан да обезбеди средства за истраживање, археолошки надзор, заштиту, чување, публиковање и излагање добара која уживају претходну заштиту, а која се открију приликом извођења радова.

II Подносилац захтева дужан је да изради пројекат у свему у складу са издатим условима из тачке I.. овог решења.

III По изради пројекта у складу са овим условима, подносилац захтева је дужан да на исти прибави сагласност Републичког завода за заштиту споменика културе.

IV Ово решење не ослобађа подносиоца захтева обавезе прибављања и других услова, дозвола и сагласности предвиђених прописима о планирању и изградњи.

V Ово решење важи годину дана од дана издавања.

VI Жалба не одлаже извршење овог решења.

О б р а з л о ж е њ е

Овом Заводу се Саобраћајни институт СИП из Београда, улица Немањина бр. 6, захтевом за утврђивање услова за предузимање мера техничке заштите за израду Идејног пројекта Е-75 Београд – Ниш – Граница БЈРМ деоница Горње поље – Царичина долина.

Археолошки локалитети регистровани на предметној деоници ауто пута јесу непокретна добра која уживају претходну заштиту, у складу са одредбама Закона о културним добрима.

По захтеву је, применом одредаба чл. 99. став 2. тачка 1, 100. став 1., 109. и 110. Закона о културним добрима, решено као у диспозитиву.

Прилог бр. 7

На основу члана 104. став 3. Закона о културним добрима, жалба не одлаже извршење решења.

ПОУКА О ПРАВНОМ ЛЕКУ: Против овог решења дозвољена је жалба Министарству културе у року од 15 дана од дана достављања решења. Жалба се подноси преко доносиоца овог решења, а на основу члана 16. Закона о културним добрима, ослобођена је плаћања републичке административне таксе.

Директор

Вера Павловић Лончарски

Доставити:
- Подносиоцу
- Архиви

3. CONSTRUCTION PERMIT

Република Србија
Град Лесковац
Градска управа
Одељење за урбанизам
Број: 351-20160/20-02
ROP-LES-33489-CPI-3/2020
15.05.2020. године
Л е с к о в а ц

Градска управа града Лесковца, Одељење за урбанизам, решавајући по захтеву Града Лесковца ул. Пана Ђукића 9-11, поднетог преко пуномоћника ЈП „Урбанизам и изградња“ из Лесковца, за издавање грађевинске дозволе, на основу члана 134. ст. 2 Закона о планирању и изградњи ("Службени гласник Републике Србије" број 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013-одлука УС, 50/2013-одлука УС, 54/2013-одлука УС, 98/2013-одлука УС, 132/2014, 145/2014, 83/18, 31/19, 37/19 – др.закон и 9/20) и чл. 21. Правилника о поступку спровођења обједињене процедуре електронским путем ("Сл. гласник РС" број 68/19) а у вези са чланом 50 (с7) Закона о изменама и допунама Закона о планирању и изградњи ("Сл.гласник РС", бр. 9/20), доноси

Р Е Ш Е Њ Е
О ГРАЂЕВИНСКОЈ ДОЗВОЛИ

ДОЗВОЉАВА СЕ Граду Лесковцу ул. Пана Ђукића 9-11, извођење радова на изградњи моста на Јужној Морави у Граову на КП. бр. 1372/1 и 1372/2 КО Бочевица, (граница обраде означена је у ситуационом плану приложене техничке документације).
Укупна дужина са навозима 115м (дужина моста 56м, дужина навоза на мост 59м).

Објекат категорије Г, класификационе ознаке 211201 (учешће у укупној површини објекта 55%) и класификационе ознаке 214101 (учешће у укупној површини објекта 45%).

Предрачунска вредност објекта 32,594,746.00 РСД.

Саставни део грађевинске дозволе су:
Локацијски услови бр. 353-324/19-02 од 24.12.2019.године, ROP-LES-33489-LOCH-2/2019;
Извод из пројекта од децембра 2019. године, урађен од ДБ Инжењеринг из Београда, потписан од стране главног пројектанта Зорана Луковића, дипл.грађ.инж. (бр. лиценце 310 3032 03);
Пројекат за грађевинску дозволу бр. 102/19-ПГД од децембра 2019. године, чији је саставни део: главна свеска и пројекат конструкције, урађен од ДБ Инжењеринг из Београда, потписан од стране главног пројектанта Зорана Луковића, дипл.грађ.инж. (бр. лиценце 310 3032 03);
Техничка контрола бр. 11/IV-R од априла 2020.године, урађена од “Триопројект“ ДОО из Београда.

Допринос за уређење грађевинског земљишта се не обрачунава.

Инвеститор се обавезује да 8 дана пре почетка извођења радова поднесе пријаву радова овом одељењу са подацима и доказима прописаним чл. 148. Закона о планирању и изградњи ("Сл. гласник РС" бр.72/09, 24/11, 121/12, 132/14, 145/14, 83/18, 31/19 и 9/20).

Грађевинска дозвола престаје да важи ако се не отпочне са грађењем објекта, односно извођењем радова, у року од **три године** од дана правоснажности овог решења.

Грађевинска дозвола престаје да важи ако се у року од пет година од дана правоснажности решења којим је издата грађевинска дозвола не изда употребна дозвола.

О б р а з л о ж е њ е

Град Лесковац ул. Пана Ђукића 9-11, поднео је дана 08.05.2020. године, захтев овом одељењу за издавање грађевинске дозволе за изградњу моста на реци Јужној Морави у Граову, на КП. бр.1372/1 и 1372/2 КО Бођевица, заведен под бројем 351-20160/20-02 и код АПР-а под бројем ROP-LES-33489-CPI-3/2020.

Уз захтев за издавање грађевинске дозволе инвеститор је поднео: таксу за ЦЕОП у износу од 5.000,00 динара, локацијске услове бр. 353-324/19-02 од 24.12.2019.године, Извод из пројекта од децембра 2019. године, урађен од ДБ Инжењеринг из Београда, потписан од стране главног пројектанта Зорана Луковића, дипл.грађ.инж. (бр. лиценце 310 3032 03), Пројекат за грађевинску дозволу бр. 102/19-ПГД од децембра 2019. године, чији је саставни део: главна свеска и пројекат конструкције, урађен од ДБ Инжењеринг из Београда, техничку контролу бр. 11/IV-R од априла 2020.године, урађену од "Триопројект" ДОО из Београда и пуномоћје.

Техничко лице овог одељења дана 14.05.2020.године, извршило је увид у приложену техничку документацију и констатовало да су подаци наведени у изводу из пројекта у складу са локацијским условима бр. 353-324/19-02 од 24.12.2019. године, ROP-LES-33489-LOCH-2/2019, издатим у поступку обједињене процедуре.

Сходно одредбама члана 17. Правилника о поступку спровођења обједињене процедуре електронским путем ("Сл.гласник РС" бр. 68/2019) и члана 135. став 6. Закона о планирању и изградњи ("Сл.гласник РС" бр. 72/09, 81/09 - испр., 64/10 - одлука УС, 24/11, 121/12, 42/13 - одлука УС, 50/13-одлукаУС, 98/13 - одлука УС, 132/14, 145/14, 83/18, 31/19, 37/19-др.закон и 9/20), ово одељење није прибавило листе непокретности.

Допринос за уређење грађевинског земљишта се не обрачунава на основу члана 97. Закона о планирању и изградњу ("Сл.гласник РС" бр. 72/09, 81/09 - испр., 64/10 - одлука УС, 24/11, 121/12, 42/13 - одлука УС, 50/13-одлукаУС, 98/13 - одлука УС, 132/14, 145/14, 83/18, 31/19, 37/19-др.закон и 92/20).

Како је инвеститор уз захтев за издавање грађевинске дозволе поднео сву потребну документацију из члана 135. Закона о планирању и изградњи ("Сл. гласник РС" бр. 72/09, 24/11, 121/12, 132/14, 145/14, 83/18, 31/19, 37/19 – др.закон и 9/20) и како су испуњени сви формални услови из члана 17. Правилника о поступку спровођења обједињене процедуре електронским путем ("Сл. гласник РС" бр. 68/19) а у вези са чланом 50 (с7) Закона о изменама и допунама Закона о планирању и изградњи ("Сл.гласник РС", бр. 9/20), то је решено као у диспозитиву.

Инвеститор је ослобођен плаћања републичке административне таксе на основу члана 18. Закона о републичким административним таксама ("Сл.гласник РС", бр. 43/03, 51/03-испр., 61/05, 101/05-др.закон, 5/09, 54/09, 50/11, 70/11-ускл.дин.износ, 55/12-ускл.дин, износ .....95/18 и 38/19-ускл.дин.износ).

Сходно члану 8ђ. Закона о планирању и изградњи ("Сл. гласник РС" бр. 72/09, 24/11, 121/12, 132/14, 145/14, 83/18, 31/19, 37/19 – др.закон и 9/20), надлежни орган је проверио испуњеност формалних услова за поступање по захтеву и није се упуштао у оцену техничке документације, нити је испитао веродостојност документације која је достављена, У случају штете настале као последица примене техничке документације, на основу које је издато решење из члана 135. Закона о планирању и изградњи, за које се накнадно утврди да није у складу са прописима и правилима струке, за штету солидарно одговарају пројектант, вршилац техничке контроле и инвеститор.

Против овог решења може се електронским путем изјавити жалба у року од 8 дана од дана пријема истог Министарству грађевинарства, саобраћаја и инфраструктуре Републике Србије - Јабланички управни округ у Лесковцу. Жалба се предаје електронским путем преко АПР-а таксирана са 480,00 динара административне таксе на ж.р.бр. 840-742221843-57 са позивом на број 97 21-058, корисник Буџет РС.

Решење доставити: инвеститору, грађевинској инспекцији, имаоцима јавних овлашћења, архиви града Лесковца и објавити на интернет страници надлежног органа

Обрадио
Биљана Ђорђевић дипл.правник

Шеф одељења
Жикица Стојановић дипл.ецц

Žikica Stojanović 209694152-09069817400 24

Digitally signed by Žikica Stojanović 209694152-09069817400 24
Date: 2020.05.15 23:06:59 +02'00'

Appendix VI

STAKEHOLDER ENGAGEMENT AND GRIEVANCE MECHANISM

Identified Stakeholders

Stakeholders can be defined as those people and organisations who may affect, be affected by, or perceive themselves to be affected by, a decision or activity. For the Project, the stakeholders range according to the following main groups:

Potential affected parties:

- Employees of KS and Contractors;
- Representatives of companies operating the area immediately adjacent to the Project;
- Residents from settlements within the zone of influence of the Project
- Statutory regulatory authorities, on local or regional level, such as: Local landowners and leaseholders within Project easements; and Potentially affected industries/businesses.

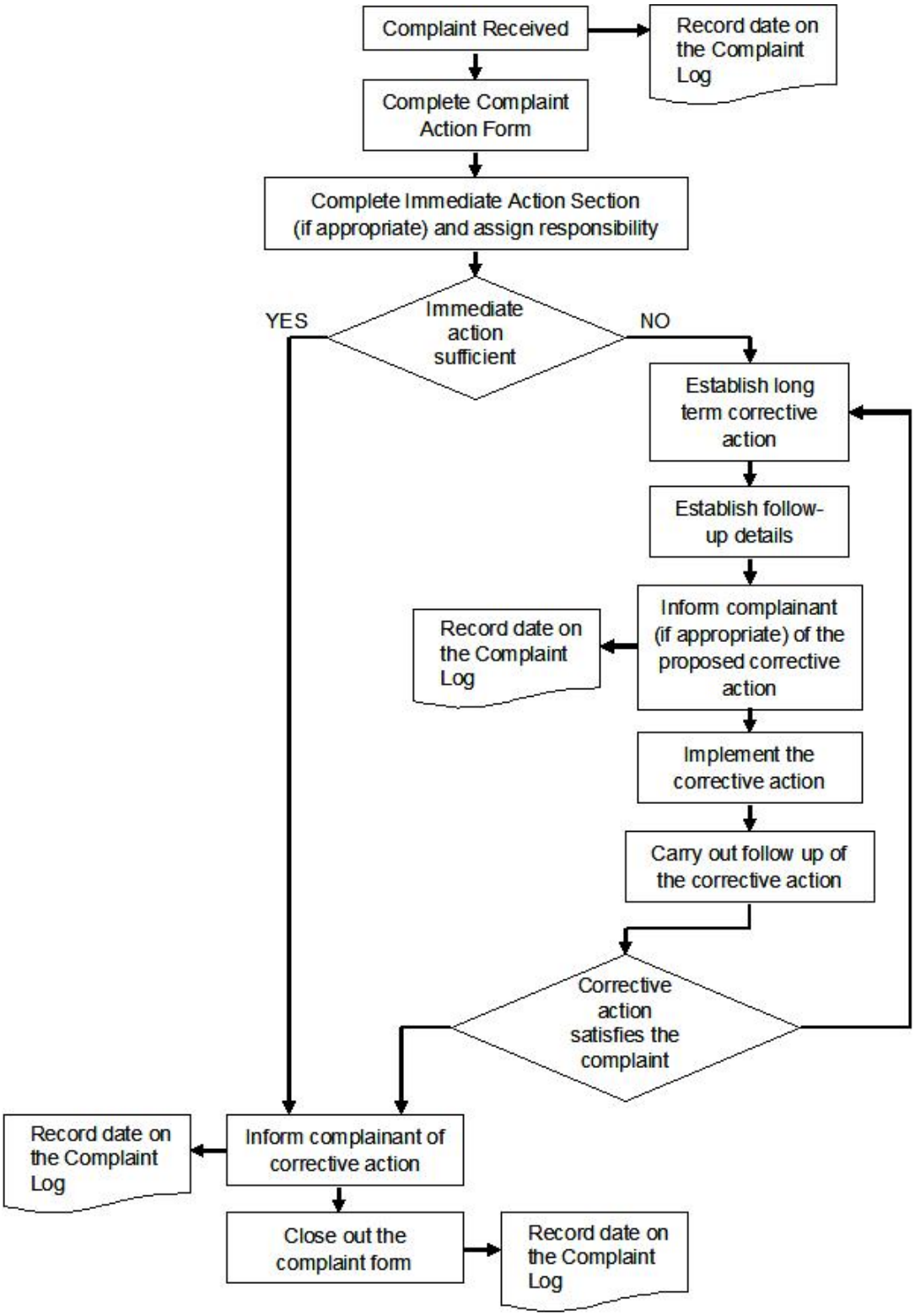
Interested parties:

- General public;
- Other companies operating on the National Grid; and
- Non-Governmental Organisations (NGO).

It is acknowledged that, as the Project develops, more stakeholders may be identified and engaged. In this regard, once identified, each stakeholder will be characterized in terms of their interests, concerns and requirements and will be included within this list.

Grievance mechanism and form

Flowchart of Complaints/Grievance Procedure



Grievances to be resolved within 15 working days.

<table>
<tr><td colspan="5">Grievance Reference Number (to be filled in by [name]):</td></tr>
<tr><td rowspan="4">Contact Details</td><td colspan="4">Name:</td></tr>
<tr><td colspan="4">Address:</td></tr>
<tr><td colspan="4">Tel:</td></tr>
<tr><td colspan="4">e-mail:</td></tr>
<tr><td>How would you prefer to be contacted? Please tick box</td><td>By post</td><td colspan="2">By phone</td><td>By e-mail</td></tr>
<tr><td colspan="5">Name and the identification information (from identity card).</td></tr>
<tr><td colspan="5">Details of your grievance. Please describe the problems, who it happened to, when, where and how many times, as relevant</td></tr>
<tr><td colspan="5">What is your suggested resolution for the grievance?</td></tr>
<tr><td rowspan="3">How to submit this form to /[name of concessionaire]</td><td colspan="4">By Post to:</td></tr>
<tr><td colspan="4">By hand: please drop this form at</td></tr>
<tr><td colspan="4">By e-mail: Please email your grievance, suggested resolution and preferred contact details to:</td></tr>
<tr><td>Signature</td><td colspan="2"></td><td>Date</td><td></td></tr>
</table>

REPORT ON PUBLIC CONSULTATIONS

Appendix VII

GUIDANCE TO THE CONTRACTOR, SUB-CONTRACTORS, AND SUPPLIERS (“THE CONTRACTOR”) OPERATING DURING COVID-19 PANDEMIC

GUIDANCE TO THE CONTRACTOR, SUB-CONTRACTORS, AND SUPPLIERS ("THE CONTRACTOR") OPERATING DURING COVID-19 PANDEMIC

General consideration

The Contractor shall, at all times, take all reasonable precautions to maintain the health and safety of the staff.

Where appropriate, in collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sickbay, and ambulance service are available at all times at the Site and any accommodation for the staff and that suitable arrangement are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

Where appropriate, the Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Employer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Employer may reasonably require.

Epidemics Prevention

The Contractor shall conduct an epidemic awareness programme and shall undertake such other measures as are specified in this Contract or required by the Authorities to reduce the risk of the transfer of the disease between and among the Personnel, the Employer' s Personnel and the local community, where appropriate, to promote early diagnosis and to assist affected individuals.

The Contractor shall throughout the Contract (including the Defects Notification Period):

(i) conduct regular information, education and communication campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's Personnel, all Subcontractors and Employer's Personnel) and to the immediate local communities, as appropriate, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to, of pertaining diseases and infections; provide necessary personal protective equipment for all Site staff and labour, as appropriate; and

(ii) provide necessary epidemics related screening, diagnosis, counselling and referral to a dedicated local or national health authorities of all Site staff and labour.

Health and safety prevention measures for construction sites

The Contractor is required to continue following national laws and regulations, and standards and requirements of the Banks[10]. In line with these requirements and respective national

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Inter alia:
(i) the EIB's Environmental and Social Standards, Standard no. 9 Occupational and Public Health, Safety and Security *(https://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf),*
(ii) the EIB's COVID-19 and Environmental and Social Sustainability Guidance (*https://www.eib.org/en/publications/covid19-guidance-note-to-promoters),*
(iii) EBRD Covid-19 briefing note: Workplace risk assessment checklist (*https://www.ebrd.com/covid19-workplace.pdf),*
(iv) EBRD Covid-19 briefing note: Labour requirements (PR2) (*http://www.ebrd.com/covid19-labour-requirements.pdf),*
(v) EBRD Covid-19 briefing note: Stakeholder engagement (PR10) *(https://www.ebrd.com/covid19-consultation.pdf).*

legislation, the Contractor is required to ensure that the workplaces, machinery, equipment and processes under their control are safe and without risk to health.

Where applicable and where prevention and response management plans and/or health and safety management plans are in place, these should be updated and adapted to include additional procedures and measures related to COVID-19.

The Contractor, in managing health and safety-related challenges during the COVID-19 crisis, may consider the following:

1. Effective communication

2. Basic COVID-19 spread prevention measures

3. Health and safety prevention measures for construction sites

4. Health and safety prevention measures for workers' accommodation

1. Effective communication

The Contractor should consider providing information and regular updates to the workforce and other relevant stakeholders on the different measures, policies and procedures put in place. To this end, the Contractor may consider the following actions:

- regularly publish information, in multiple languages and in a culturally appropriate manner, which is

  easily accessible to all workers (e.g. bulletin board, massive cellular/mobile messages, etc.);

- assign specific staff to keep track of national regulations or other health-related relevant information;

  further identify focal points within the company to help spread information;

- set up a dedicated channel of communication (such as an exclusive email or WhatsApp account), that

  workers can contact to obtain information or ask questions;

- where there is an impact on surrounding communities, the relevant measures need to be disclosed and

  communicated to the relevant affected-stakeholders including local and regional authorities;

- put in place a specific grievance process for COVID-19 related issues for both workers and community

  members.

The Contractor is encouraged to develop a response plan in case someone becomes ill with suspected COVID-19 at the workplace. The plan should cover putting the ill person in a room or area where they are isolated from others in the workplace, limiting the number of people who have contact with the sick person and contacting the local health authorities. The Contractor should encourage any individuals who show symptoms to contact their healthcare provider or the local public health department, giving them details of their symptoms. The Contractor should further identify persons who may be at risk, and support them, without inviting stigma and discrimination into the workplace.

2. Basic COVID-19 spread prevention measures

In the context of the COVID-19 outbreak, the Contractor is required to undertake adequate measures in order to prevent and respond to the infection. These should be an integral part of

their health and safety management plans. All health and safety information should be communicated in an accessible way and, wherever feasible, measures should be implemented in a way that is sensitive to the local social, cultural and gender norms.

The following basic infection prevention measures can help the containment of the spread of the disease and protect the workers and the public:

- promote regular and thorough hand-washing by employees;
- discourage touching the mouth, nose and eyes;
- provide and enforce the use of Personal Protective Equipment (PPE), ensuring that there are adequate facilities to use and dispose safely of it and that staff have been properly trained on how to use and dispose of PPE. Ensure that PPE is suited to both male and female body types;
- promote social distancing: ensure a minimum distance of 2 m between persons, no handshaking;
- make sure workplaces are clean and hygienic, and regularly disinfect surfaces (such as doors, floors and

  desks) and objects (such as machinery and tools);
- enhance air quality controls, especially in the most crowded areas (entrance, changing rooms…);
- ensure that cleaning and disinfecting actions are also applied to food preparation;

3. Health and safety prevention measures for construction sites

For operations at construction phase, the Contractor should consider the following approach:

- ensure physical distancing, by:
  - staggering start times;
  - staggering breaks;
  - staggering lunches;
  - controlling site movement (by limiting the potential for workers to gather, including personnel
  - in material hoists and site trailers);
  - holding meetings in an outside or large space to enable physical distancing;
  - limiting unnecessary on-site contact between workers, and between workers and outside service providers, and encourage physical distancing in these areas (for example, by removing coffee trucks from site).
- focus attention on hygienic conditions of on-site sanitation:
  - access to soap and water or alcohol-based hand sanitiser;
  - washroom facilities;
  - prayer rooms;
  - sanitising commonly touched surfaces or areas (hoists, site trailers, door handles, machinery);

- avoiding the sharing of hand tools and power tools. If sharing is necessary, enable sanitisation of shared equipment;
- posting signage on hygiene in local language as well as in the majority workplace language so everyone can understand how to do their part.

• maintain entry logs to be able to track any potential infection outbreak.

4. Health and safety prevention measures for workers' accommodation

The Contractor providing workers accommodation to their staff may consider conducting an assessment of existing health and hygienic measures and identifying protocols that should be put in place to minimize the risks of infection. Such protocols should reflect the current requirements of social distancing applicable in the specific territory. This may require:

• reducing the number of employees sharing the same room and ensuring the minimum standards for

sleeping space is exceeded and a 2-metre distance is maintained between workers' heads;

• ensuring adequate ventilation of rooms;

• adjusting eating schedules;

• regulating the use of personal hygiene facilities, to ensure increased cleaning and adequate disinfection and avoiding overcrowding;

• providing additional transport to workers so that distance is respected;

• ensuring the isolation of employees showing symptoms of COVID-19 in line with respective national

authority guidance.

The assessment should consider aspects that might enhance vulnerabilities and/or require differentiated protocols. Aspects such as gender, age and underlying health conditions should be taken into account to adequately identify differentiated risk exposure of certain segments of the workforce and what specific measures need to be put in place to protect them.