PUBLIC ENTERPRISE
ROADS OF SERBIA

Beograd, Bulevar kralja Aleksandra 282
tel: +381 11 30 40 700
fax: +381 11 30 40 699

site-specific

ENVIRONMENTAL MANAGEMENT PLAN

for
Urgent maintenance and remedy of damages on
State Road of the IB Category No. 28,
Mali Zvornik - Ljubovija - Uzice

section:
MALI ZVORNIK (GRACANICA) – LJUBOVIJA 1

- Environmental Category B -

Draft
BELGRADE, September 2015

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

AADT	Annual Average Daily Traffic
CEP	Contractor's Environmental Plan
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
HSE	Health, Safety and Environment
IFIs	International Financing Institutions
INP	Institute for Nature Protection of the Republic of Serbia
IPCM	Institute for Protection of Cultural Monuments of the Republic of Serbia
MoAEP	Ministry of Agriculture and Environmental Protection
MoT	Ministry of Transport (fmr. Ministry of Infrastructure and Energy – MoIE)
PERS	Public Enterprise "Roads of Serbia"
PSC	Project Supervision Consultant
RE	Resident Engineer
RRSP	Road Rehabilitation and Safety Project
SE	Site Engineer
SLMP	Safety Labour Management Plan
SSIP	Site Specific Implementation Plan
WB	The World Bank Group
WMP	Waste Management Plan

INTRODUCTION

This Environmental Management Plan (EMP) has been prepared for urgent road maintenance of the State Road of the IB Category No. 28, section Gracanica – Ljubovija 1,to ensure application of the good environmental practice and document compliance with the requirements of the International Financing Institutions (IFIs) which will finance Serbian Road Rehabilitation and Safety Project (RRSP).This road section 13.526 km long, chainage Gracanica km 28+160 and chainage Ljubovija 1 km 41+686. The Project has been classified as Environmental Category B. i.e. a project requiring an EMP pursuant to IFIs Safeguard Policies.

The Project Proponent is the Government of Serbia, acting through its Ministry of Agriculture and Environmental Protection (MoAEP). Project implementing entity is Public Enterprise “Roads of Serbia” (PERS).

The aim of the environmental management plan is to highlight the negative environmental impacts and management problems during the construction works execution, 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 the impact on the environment.

Project will comply with Serbian legislation, procedures and policies, international conventions and IFIs safeguard policies.

This site specific EMP is focusing more on urgent road maintenance, as it will become part of the respective Contract for the implementation of civil works. The activities related to subsequent regular maintenance of this section are not the main focus of this EMP, but are presented here with for the purpose of completeness.

The preparation of this EMP was undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders. The EMP is based primarily on field investigations performed during April and May 2015.

EXECUTIVE SUMMARY

Project description

The Republic of Serbia has applied for financing the *“Road Rehabilitation Project”* by the World Bank, the European Investment Bank and the European Bank for Reconstruction and Development. A part of the funding is directed to urgent maintenance and repair of damage of the state road IB category No.28 Mali Zvornik - Ljubovija - Uzice, section: Gracanica - Ljubovija 1 (picture 1 and picture 2).The here stated project is a part of urgent unforeseen works within the project of road rehabilitation which is necessary for the purpose of rehabilitation and repair of damage caused by severe floods in May 2014.

Proposed road section is located in Western Serbia, Macva Administrative District, and it goes through Municipality of Ljubovija.

Picture 1. Beginning of the section – Gracanica

Picture 2. End of the section – Ljubovija 1

The following settlements are located along the section: Crnca, Selanac, Uzovnica and Lonjin. The road alignment is laid along the Drina River, more precisely, with the middle part of its course, which is 163 km long. On the stretch from Visegrad to

Zvornik, Drina River often changes course; and forms small alluvial plains, such as Crnca plain, Uzovnica plain and Lonjin plain.

At the end of the observed section there is the quarry „Teko mining Ljubovija“ (picture3, 4, and 5.), landfill of granite grit on the left side of the road at km 40+740 (picture 6.), and granite sand on the right side of the road (picture 7.) in the direction of the chainage growth. The quarry with additional landfills could contribute to a cumulative impact on the environment.

Picture 3. Stone quarry „Teko mining Ljubovija“ - administrative building

Picture 4. Stone quarry

Picture 5.The quarry – conveyor for granite

Picture 6. Landfill of granite grit

Picture 7.Landfill of granite sand

The road works covered by the Project will be carried on the existing road with no change of the alignments. The project entails no resettlement and land acquisition as defined by OP 4.12, nor long lasting disruptions to the natural environment and human settlements and activities. More details about this are available in Project's Resettlement Policy Framework.

Policy, legal and administrative framework

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

The environmental legislation currently in force in Republic of Serbia is summarized in Appendix III.

In 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 road rehabilitation projects unless theirs alignment is placed within or in the vicinity of natural/cultural protected areas. Based on the decision issued by the Institute for Nature Conservation of Serbia (Appendix V – Conditions from Relevan Public Institutions), section Gracanica – Ljubovija 1 is not located within a protected area which is implemented or initiated the process of protection for, but Drina River represents ecological coridor of international importance. Under the terms issued by the Institute for Protection of Cultural Monuments "Valjevo" (Appendix V – Conditions from Relevan Public Institutions), directly on the alignment, there are no registered archaeological sites or cultural monuments. Within the conditions, the archaeological sites are listed, monuments

and goods that are in the vicinity, but they are not under the influence of works on urgent maintenance of the road and the elimination of the damage.

Lender requirements will also apply to this project and include the following Environmental Policies

- Operational Policy OP 4.01 Environmental Assessment;
- EBRD Environmental and Social Policy 2008
- EIB Statement of Environmental and Social Principles and Standards (2008).

EBRD and EIB will require that the project complies with the Republic of Serbia national laws and EU standards.

Baseline conditions assessed during route survey

Directly on the alignment of the road Gracanica – Ljubovija 1 there are no protected natural or cultural resources, which could be compromised during the urgent maintenance and elimination of damages at the road. In Terms published by the Institute for Protection of Cultural Monuments "Valjevo" (the number of the decision 242/1) the archaeological sites are listed, as well as the monuments and registered goods that are nearby, and according to the protection of immovable cultural property, it is allowed to perform maintenance works and elimination of the damages at the state road. The closest facility is at the approximate distance of 220 m from the road, so that the works on the urgent maintenance and remedy of the damages will not affect the archaeological sites, monuments and recorded goods.

During the Project implementation, there will be no land aquisition, as defined by OP 4.12.

The road on a short distance passes along the Drina River, into which flow numerous smaller watercourses which intersects the alignment at several places.

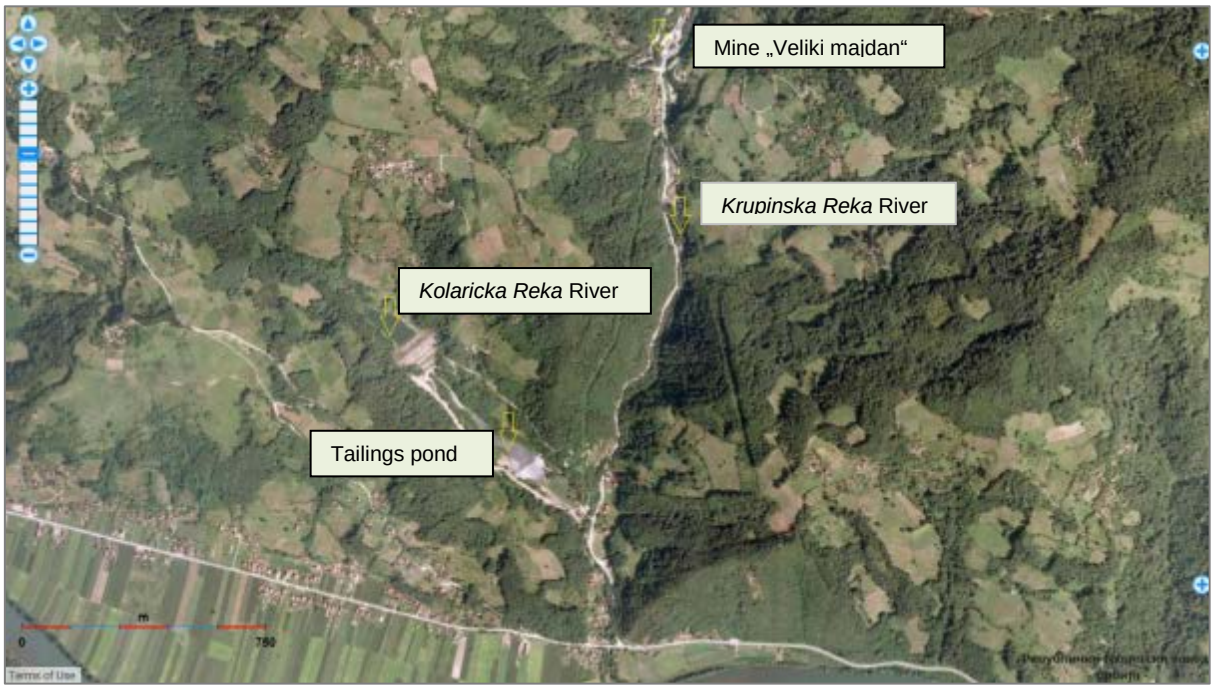
Drainage of the road is provided in both directions, transverse (to the gutters, through the shoulders to sewers or along the slopes of the embankment) and longitudinal (to the gutters and drainage channels and culverts). However, due to existing river classification - Drina River at this section belongs to class II, which means that on the basis of the limit values of the quality elements provides conditions for the functioning of ecosystems, life and protection of fish and can be used for drinking water supply with pre-treatment filtration and disinfection, swimming and recreation, irrigation and industrial use. Due to the nature of road rehabilitation works of the watercourses will not be affected by the works through the implementation of good construction management practices.

Stone quarry „Teko mining Ljubovija“, is existing point sources of air pollution. On turning for Sekulic village km 31 + 715 the road crosses over Krupinska Reka River that flows near Lead and Zinc Mine "Veliki Majdan" (picture 8, 9, 10)

Picture 8. Lead and Zinc Mine "Veliki Majdan"

Picture 9. *Krupinska Reka* River at the place of intersection with the road

Picture 10. Location of the mine and tailings related to the road



Kolaricka Reka River flows into Krupinska Reka River, which riverbed is extended on one part. Immediately below this enlargement there is a tailing that threatens the environment.(picture 11. and 12.)

Picture 11. Extended riverbed of *Kolaricka Reka* River

Picture 12. Tailings pond

For the study area, there are no additional industrial facilities that would cause an increase in the level of concentration of pollutants in the atmosphere.

Current traffic load (AADT) on section: Gracanica – Ljubovija 1 is 1809 vehicles/day.The considered section of road has one node Ljubovija 1 (No. 0347 according to the reference system).

There are two dominant noise sources on proposed road section Gracanica – Ljubovija 1: the existing road as linear source and stone quarry „Teko mining Ljubovija“, as point source.

Summary of environmental impacts

The possible temporary impacts as consequence of the construction activities will consist of, among others, disruption of current traffic circulation, roadway safety, damage to access roads, dust nuisance, and gaseous emissions, potential pollution of soils and water resources, brief disturbance to biota, and momentary interference to neighbouring settlements through various operation activities. 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.

No relocation and resettlement issues are anticipated.

In respect to future use of the rehabilitated road section - this section belongs to network of remote interregional roadson which significant increase of road traffic as a result of rehabilitation works is not expected. In respect to impact of the potential increase of the vehicle speed on rehabilitated roads, this issue will be addressed through the project's road safety component, which will include

implementation of the active and passive measures to control the vehicle speed on rehabilitated road sections.Local residents will be affected with air and noise pollution during urgent road maintenance works on proposed road section.

Various cases of water contamination can occur during the rehabilitation of the road and future operation. Wastewater discharged during the works can jeopardize the quality of the surface and underground water. Adequate mitigation measures and monitoring activities are planned, in accordance with the Law on Water (“Official Gazette of RS”, 54/96, 101/05). As for the potential pollution during operation, these are limited to accidents only. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

Due to the existence of quarry "Teko mining Ljubovija" and Lead and Zinc Mine "Veliki Majdan" as well as the potential construction and operation of new facilities, there is a possibility of the resulting cumulative impacts that will not significantly affect the environment. Most important cumulative impacts are noise and air pollution.

The proper implementation of the EMP measures, as listed in Appendix I (Mitigation plan) would offset or minimize any impact on local human and biotic environment that might be related with any long-term cumulative negative effects.

Environmental management plan

Possible environmental impacts will be mitigated during the design/pre-rehabilitation, rehabilitation, and operation Phases, as summarized in the Environmental Management Plan as shown in Appendix I.

A basic assessment of the proposed road rehabilitation project concluded that the rehabilitation impacts will be minor, reversible and manageable if the mitigation measures as given in the EMP are properly implemented. The EMP consist 3 parts: Mitigation Plan (Appendix I), Monitoring Plan (Appendix II) and Institutional arrangements and reporting procedures (Appendix IV).

Before commencing the work, the Contractor will prepare a Contractor‘s Environmental Plan (CEP). During the rehabilitation, the Contractor will work according to the requirements of the Contractor‘s Environmental Plan (based on the EMP). The CEP will amplify how the Contractor will address the activities in the rehabilitation section of the EMP. The contractor will submit the CEP to the PERS for approval.

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

It is the Contractor’s obligation to cost implementation of environmental mitigation measures in his overall cost. The Contractor will be required to provide a short statement that confirms that:

- the EMP 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 EMP
- the Contractor and its sub-contractors will comply with Republic of Serbia national laws, EU standards and Lender requirements.

PERS will build fines and penalties for any non-compliance into contracts, and enforce them.

A Monitoring Plan for the proposed Project (Appendix II) has been prepared. The main components of the monitoring plans are the following:

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

Stakeholder engagement - Information disclosure, consultations and public participation

As required by IFIs Safeguards Policies, public consultations will be undertaken during the preparation of EMP.

Summary of public disclosure process

The EMP will be disclosed to the Public.

1. PROJECT DESCRIPTION

The Republic of Serbia has applied for financing the Road Rehabilitation Project by the World Bank, the European Investment Bank and the European Bank for Reconstruction and Development. A part of the funding is directed to urgent maintenance and repair of damage of the state road IB category No. 28 Mali Zvornik – Ljubovija – Uzice section: Gracanica – Ljubovija 1 which is 13,526 km long. The here stated project is a part of urgent unforeseen works within the project of road rehabilitation which is necessary for the purpose of rehabilitation and repair of damage caused by severe floods in May 2014.

LocationDescription

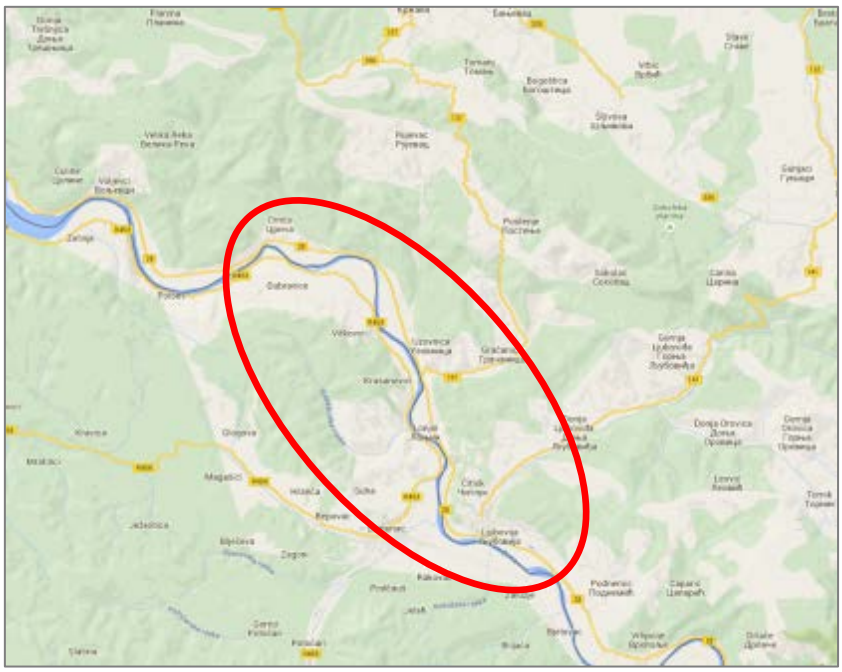
Proposed road section is located in Western Serbia, Macva Administrative District. It goes through the territory of Ljubovija Municipality (Picture 13.). It belongs to state road IB category No. 28, starts at chainagekm 28+160 (Gracanica), and ends at chainage km 41+686 (Ljubovija 1).

The following settlements are located along the section: Crnca, Selanac, Uzovnica and Lonjin.

On the observed section there is an intersection with state road IIA categoryNo. 137. Sabac - Volujac - Zavlaka - Krupanj - Gracanica and numerous approaches to municipal roads, unclassified roads and streets.

This road section intersects 3 rivers: Krupinska, Uzovnicka and Gracanicka, as well as numerous smaller watersources.

Picture 13. Location of road section: Gracanica – Ljubovija 1

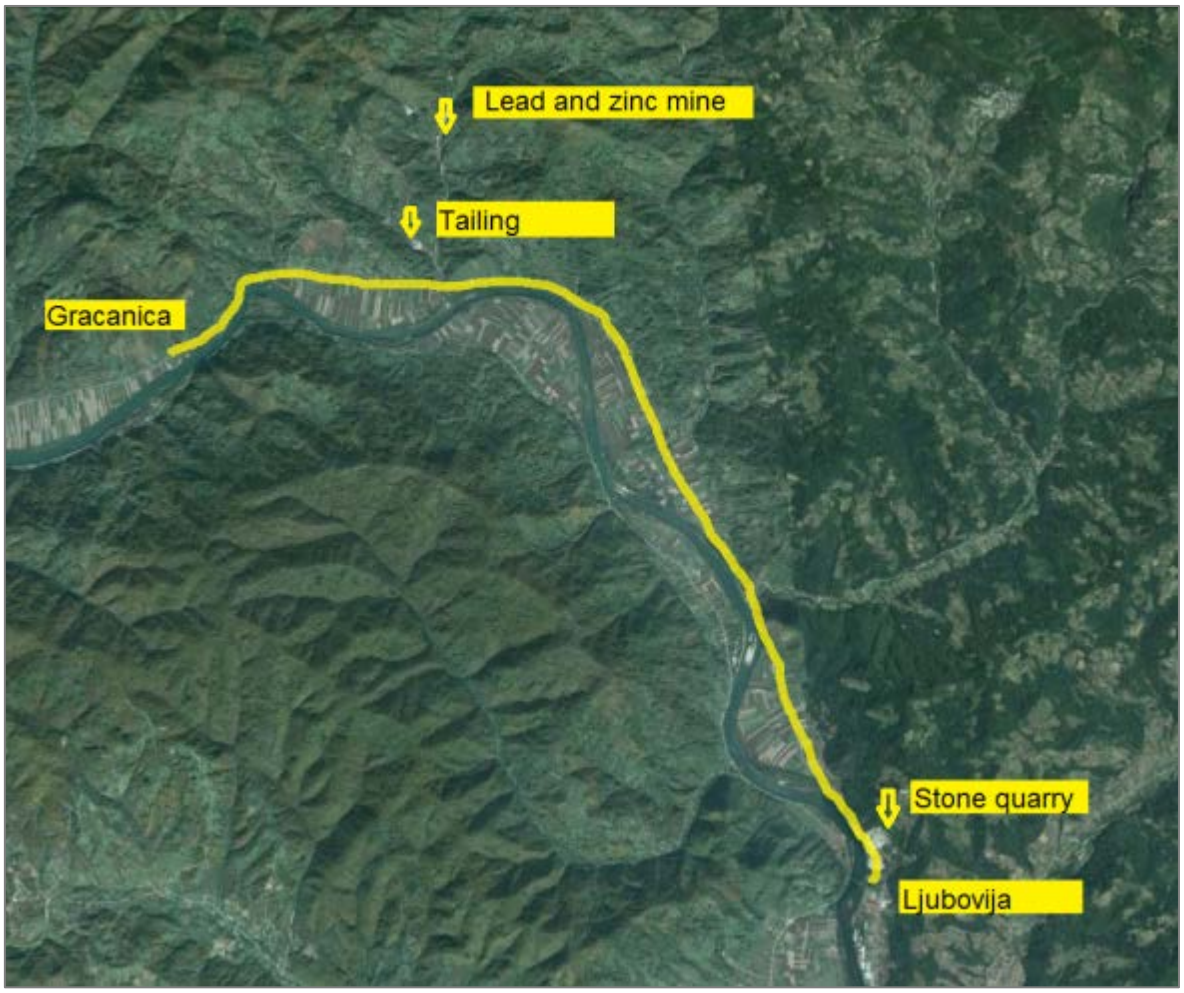


Along the section, there are: stone quarry "Teko mining Ljubovija", Lead and zinc mine "Veliki Majdan" and tailings (picture 14.).

Current situation of precipitation drainage of the road is by free spilling over shoulders, swelling to the side ditches, over embankments across the moat and

longitudinally through the gutters and ditches to the culvert. Based on the terms of reference, and a given traffic load, it is not intended to constructa closed drainage system. Existing situation of drainage system requires thorough cleaning of ditches and culverts of accumulated waste and vegetation. As for the potential pollution during operation, these are limited to accidents only. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

Picture 14. Plants along the section



Rehabilitation works description

The newly designed road in situational and longitudinal monitoring is following the existing conditions. The major works include removal of the existing pavement, construction of new asphalt layers, construction of shoulders by using gabions, cleaning of the existing culverts, construction of new bus stops and connections to categorized and uncategorized local roads and construction of individual household connections. The works also include the restoration of bridges in terms of removing excess layers and repairing of concrete and reinforcement as needed, as well as regulation of the Drina River in the area of the bridges.

The project entails no resettlement and land acquisition, nor long lasting disruptions to the natural environment and human settlements and activities.

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORKS

Relevant Institutions

Ministry in charge of environmental protection (The Ministry of Agriculture, and Environmental Protection) 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 road rehabilitation projects are dealt with several other institutions, among which are the Institute for Nature Protection of Serbia (INP) and the Institute for Protection of Cultural Monuments of the Republic of Serbia (IPCM), and the Public Enterprise “Roads of Serbia” (PERS).

ExistingSerbianlegislation

Environmental protection in Republic of Serbia is regulated by several national and municipal laws and by-laws. The environmental legislation in force in Serbia is summarized in Appendix III.

EIA procedure 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 road rehabilitation 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 MoAEP. 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.

Based on the above criteria, the project does not require EIA.

RelevantIFIsPoliciesandStatements

As the road rehabilitation will be funded by IFIs the following Lender requirements will need to be applied to the any works:

- WB: Operational Policy OP 4.01 Environmental Assessment, which require partial EIA and development of site specific EMPs for projects belonging to Category B.;
- EBRD: Environmental and Social Policy 2008
- EIB: Statement of Environmental and Social Principles and Standards (2008).

EBRD and EIB will require that the project complies with the Republic of Serbia national laws and EU standards.

As a conclusion, it could be stated that GoS regulations do not require separate section-specific EMP to be undertaken for this type of investments (road rehabilitation), while the WB policy requires partial EIA assessment and preparation of site-specific EMP for each section.

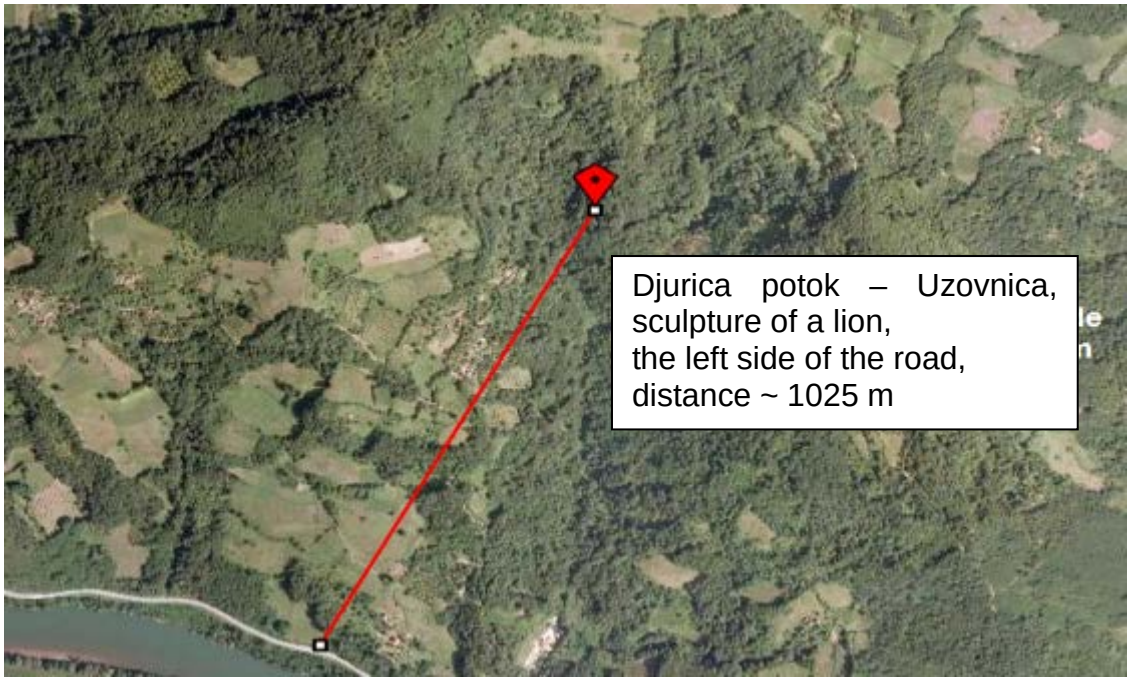
3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

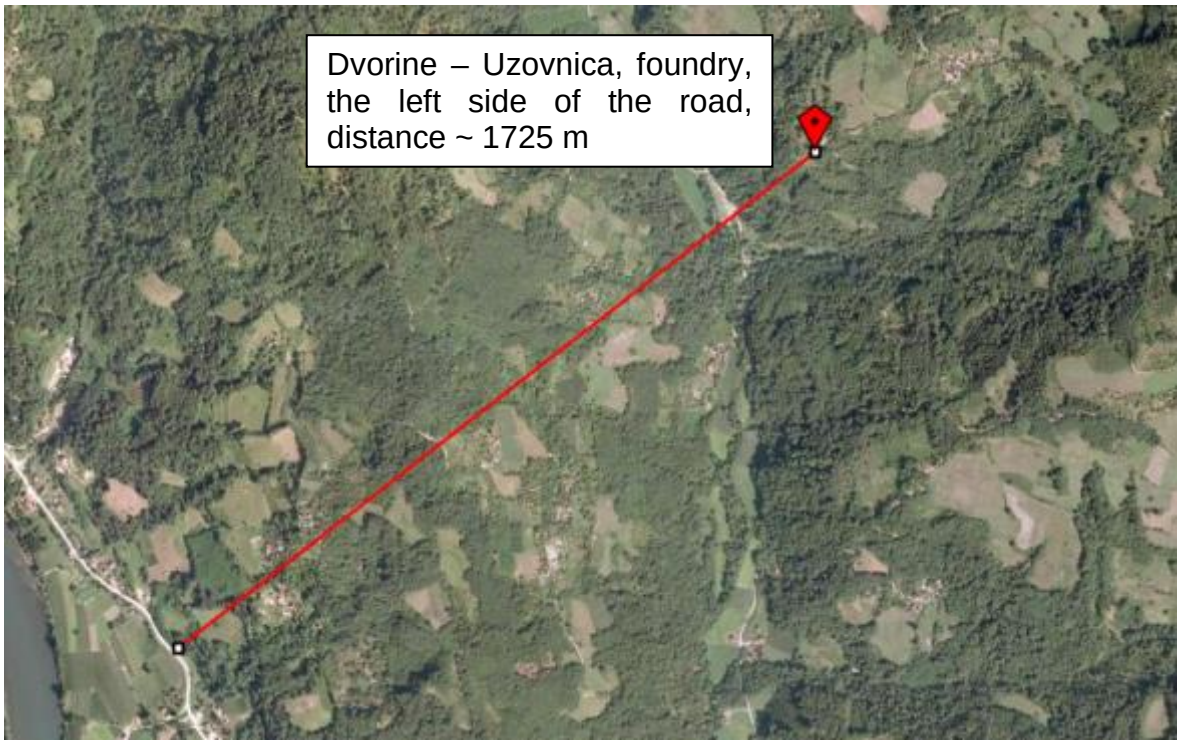
Road section Gracanica – Ljubovija 1 in the length of 13,526 km goes through the Manucitality of Ljubovija.

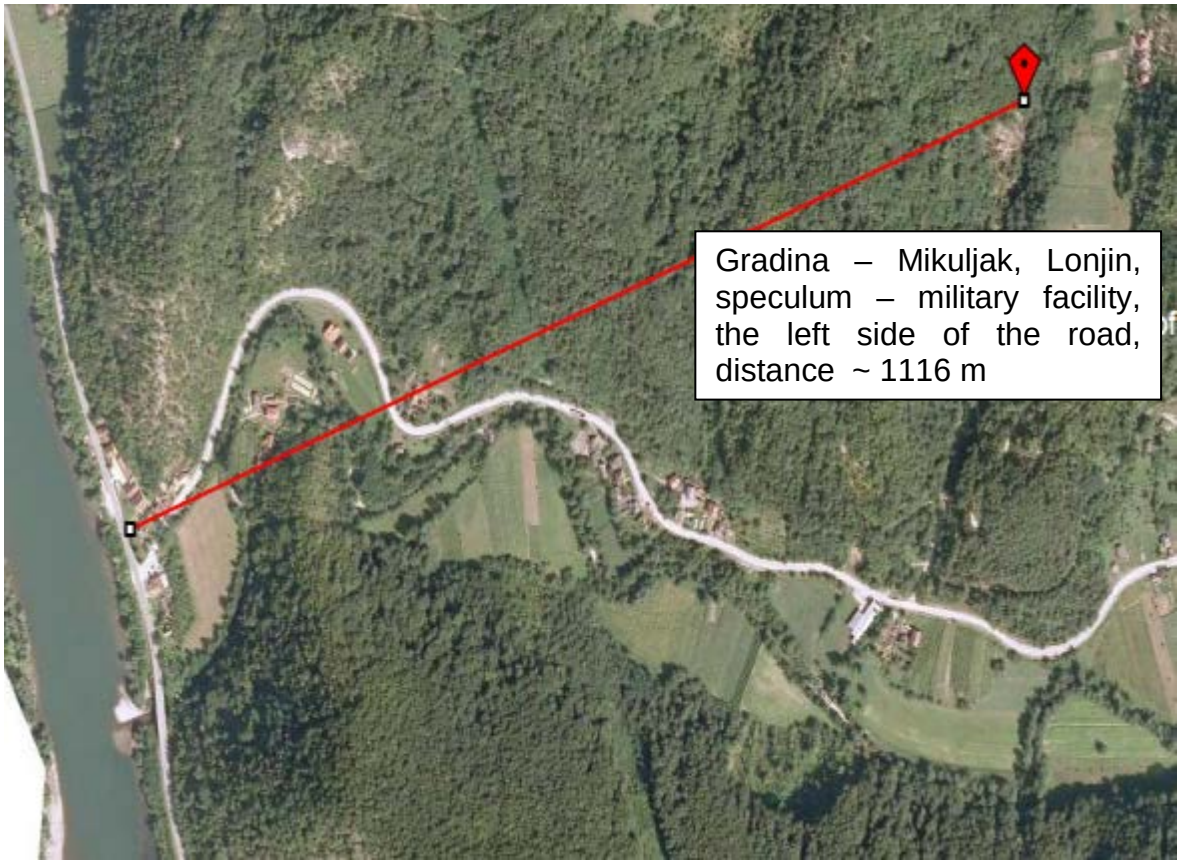
Within road section there are no protected natural or cultural areas which could be impacted by the road rehabilitation works. There will be no land acquisition as defined by OP 4.12 during the project implementation.

Natural resources and cultural heritage

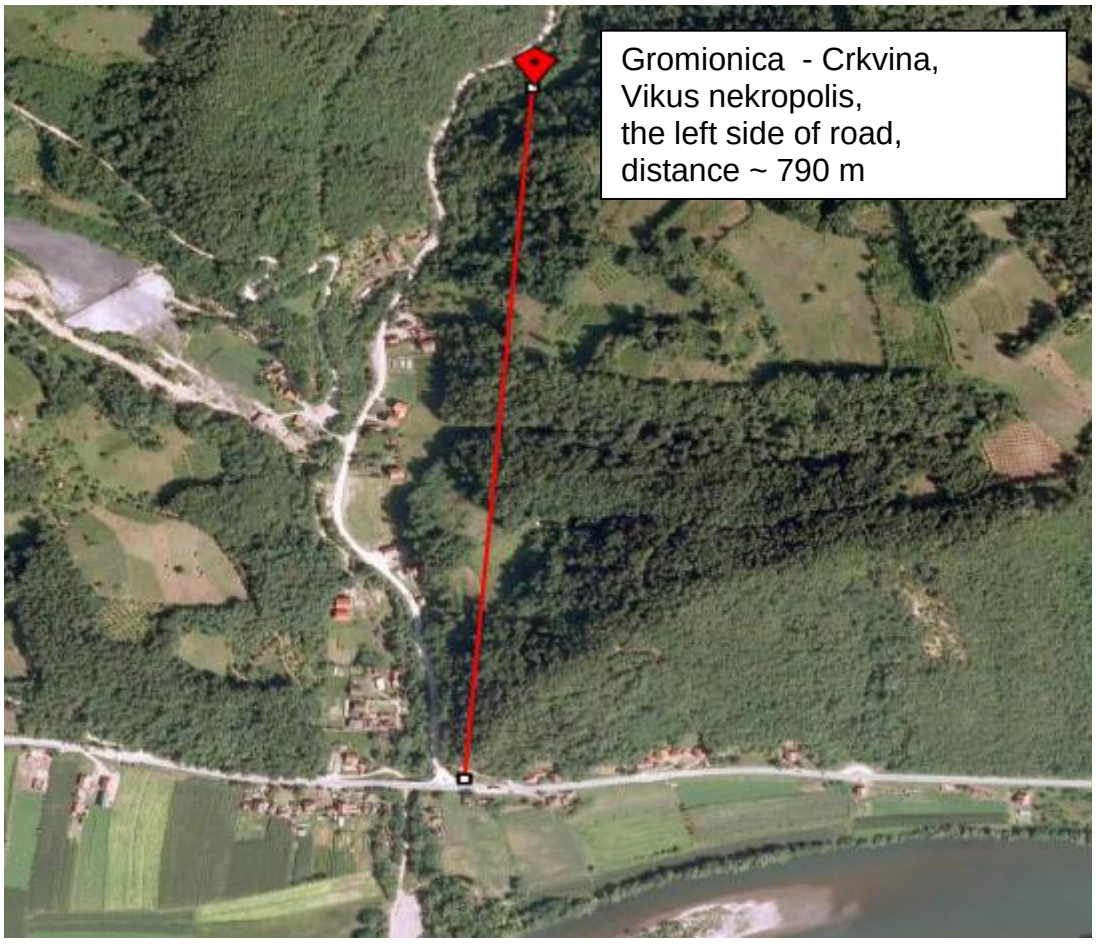
Directly on the alignment of the road Gracanica - Ljubovija 1 there are no protected natural or cultural resources, which could be compromised during the urgent maintenance and elimination of damages at the road. In Terms published by the Institute for Protection of Cultural Monuments "Valjevo" (the number of the decision 242/1) the archaeological sites are listed, as well as the monuments and registered goods that are nearby, and according to the protection of immovable cultural property, it is allowed to perform maintenance works and elimination of the damages at the state road. In the pictures that follow afterwards, it is given the position of archaeological sites, monuments of culture and registered sites with their location, position in relation to the road in the direction of the growth of chainage and distance from the road. The closest facility is at the approximate distance of 220 m from the road, so that the works on the urgent maintenance and remedy of the damages will not affect the archaeological sites, monuments and recorded goods.In the following photos the locations are presented.

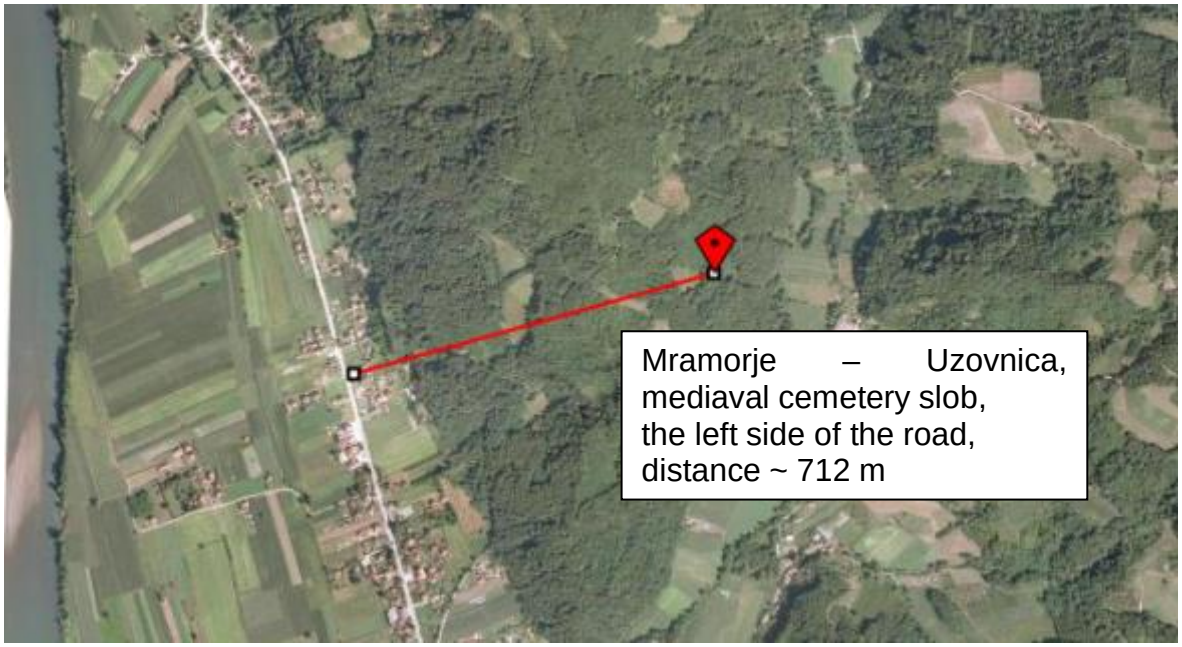


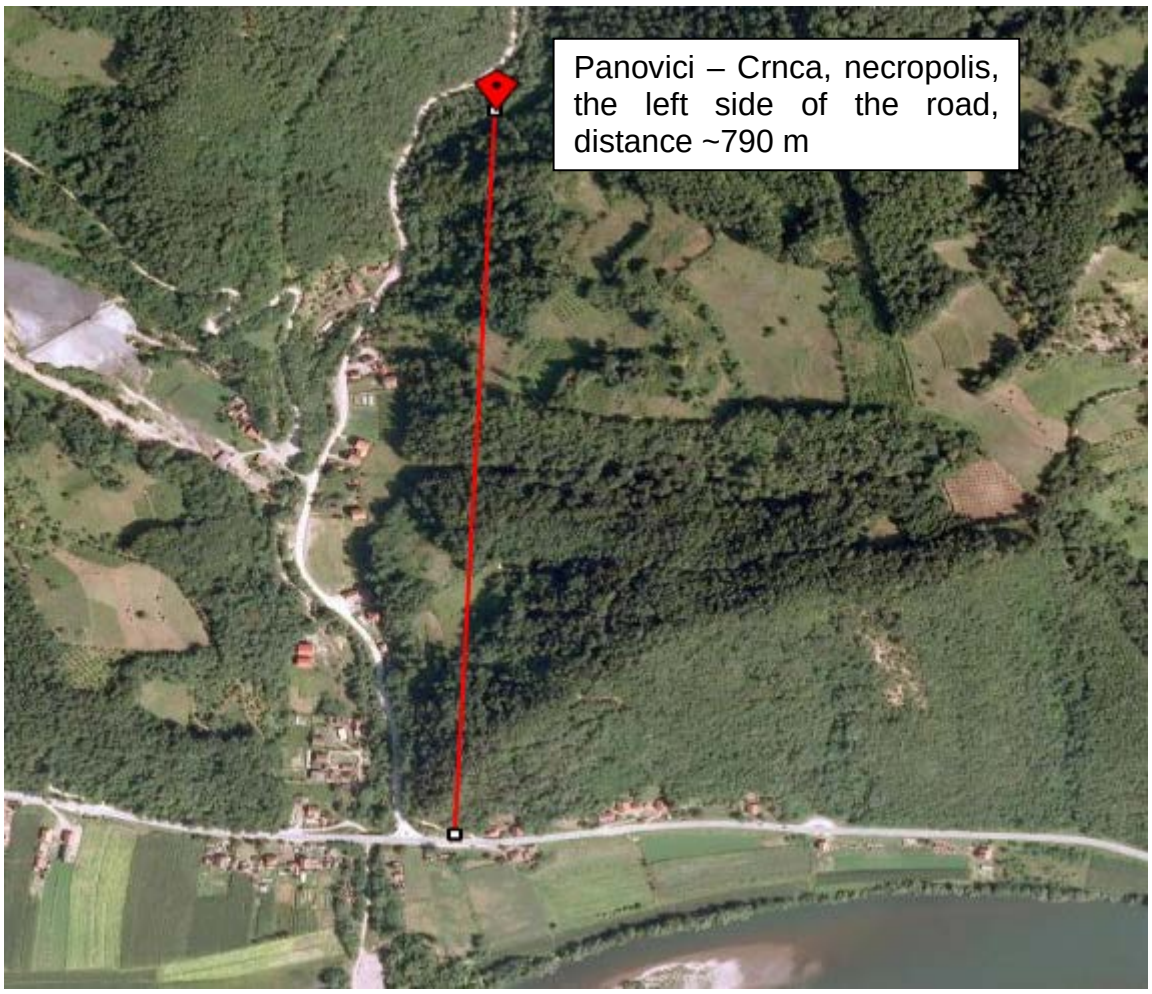

Dvorine – Uzovnica, foundry, the left side of the road, distance ~ 1725 m


Gradina – Mikuljak, Lonjin, speculum – military facility, the left side of the road, distance ~ 1116 m


Groblje – Lonjin, Beneficial statio – military facility, the left side of the road, distance ~ 220 m


Gromionica - Crkvina,
Vikus nekropolis,
the left side of road,
distance ~ 790 m


Mramorje – Uzovnica,
mediaval cemetery slob,
the left side of the road,
distance ~ 712 m


Panovici – Crnca, necropolis,
the left side of the road,
distance ~790 m

Settlements

The following settlements are located along the section: Crnca, Selanac, Uzovnica and Lonjin.

Crnca is a rich farming and fruit growing rural village of road type on the verge of alluvial plain of the right bank of the Drina River with the mountainous surrounding - mountainous terrain (picture 15). According to the census of 2011, in the village live 951 inhabitants and has 333 households P to P+2. In the immediate vicinity of the road there is an elementary school for four grades (picture 16) and cottage village by the Drina River. At a greater distance from the alignment there are: local office, local community, church of St.Demetrius (wooden church), a community center and cemetery.

Picture 15. Crnca plain

Picture 16. Elementary school, Crnca

Selanac is fruit growing and farming village of scattered type (picture 17) with 141 households P to P+2 and 383 people. It has a four-year elementary school, mine "Veliki Majdan", St. Apostles Peter and Paul church, the cemetery and cultural center, and all of the above facilities are at a greater distance from the road. From market products in the village are represented raspberries, plums and potatoes.

Picture 17. Village Selanac

Uzovica is fruit growing and farming village of scattered type on the verge of alluvial plain of the right bank of the Drina River with the hilly terrain. In the village live 797 residents and it has 266 households P to P + 2. In the center there is a church dedicated to the Assumption of the Virgin (picture 18), elementary school "Sava Vujanovic Zuca" (picture 19 and 20), post office (picture 21) and the local community.

Picture 18. Church, Uzovnica

Picture 19. Elementary school (new), Uzovnica

Picture 20. Elementary school (old), Uzovnica

Picture 21. Postoffice, Uzovnica

Lonjin is suburban farming and fruit growing settlement on the right bank of the Drina River along the road. Along the river a cottage village was built. According to the census of 2011 in Lonjin live 324 residents in 108 households P to P + 2. Cemetery of Lonjin is on the right side of the road in the direction of growth of chainage from km 39 + 600 to km 39 + 700. The main market products are vegetables, raspberries and tobacco.

Watercourses

There are three bridges on proposed road section.

Bridge No.	chainage (km)	length (m)	river
1 (picture 22)	31 + 680,28	10,6	Krupinska
2 (picture 23)	35 + 436,45	7,95	Uzovnicka
3 (picture 24)	37 + 867,86	12+16+12	Gracanicka

Picture 22. Bridge, *Krupinska Reka* River

Picture 23. Bridge, *Uzovnicka Reka* River

Picture 24. Bridge, *Gracanicka Reka* River

On the alignment of the road there are several culverts for occasional torrential streams.

The Drina River (picture 25) belongs to the Black Sea basin, and it is formed by the merger of the Tara River and Piva River at Scepan Polje. The catchment area covers the southwestern and western part of Serbia. Wild power of Drina River is tamed by dams and lakes: Visegrad, Perucac and Zvornik (picture 26).

Picture 25. Canyon – Drina River

Picture 26. Hydroelectric power plant Zvornik

Hydrological regime of the Drina River belongs to typical types of snow-rain, with the primary peak water levels in April and in second part of December. Much of the current course is flowing through the mountains, while the whole upper course is in the high mountains of the Dinarides, which leads to heavy precipitation and melting of snow which leads to high flows. River fall, on the length of about 500 km, is 2000 meters (the spring is located at about 2000 meters above sea level, at the mouth at about 80 meters). High concentrations of dissolved limestone lead to a characteristic green color of Drina's water. The river is the narrowest at Ljubovija and the widest near the village Crnca. It makes numerous river islands.

Gracanicka Reka River drains the southwest sides of the mountain Sokol, formed from components: Postenjska Reka River and Sokolska Reka River in village Gracanica by whom it was named. Its total length is 15 km and the absolute fall is 696 m. Uzovnicka Reka River is 12 km long and has a particularly large fall of 600 m. It's a fast-flowing mountain river, of gorge valley and high erosive power.

Based on the measurements of Republic Hydrometeorological Service of Serbia from 2013, Drina River belongs to the second class of water quality, which means that on the basis of the limit values of the quality elements provides conditions for the functioning of ecosystems, life and protection of fish and can be used for drinking water supply with pre-treatment filtration and disinfection, swimming and recreation, irrigation and industrial use. Due to the nature of road rehabilitation works of the watercourses will not be affected by the works through the implementation of good construction management practices.

Air

Within the corridor of road section Gracanica – Ljubovija 1 there is one existing point sources of air pollution, stone quarry „Teko mining Ljubovija“. It is up to the Contractor to decide if this stone quarry will be used by the project.

In the exploratory area there is lead and zinc mine "Veliki Majdan".In the target area there are no other industrial plants that affect air pollution. PERS will monitor all Contractors activities, including possession of valid working permits and environmental approvals for all subcontractors.

Data on the measured values of air pollution in the observed corridor were not available.

Based on experience and expected traffic load the urgent road maintenance works, and operation of road after rehabilitation will not increase existing levels of air pollutants within the corridor of proposed road section.

Roads and Railways

On the observed section there is an intersection with state road IIA category No. 137, node Ljubovija 1 (No. 0347 according to the reference system) and numerous approaches to municipal roads, unclassified roads and streets.

Noise

Based on experience and expected traffic load the planned road rehabilitation works, and operation of road after rehabilitation will not increase existing levels of noise within the corridor of proposed road section.

4. SUMMARY OF ENVIRONMENTAL IMPACTS

The following table provides a summary of the Environmental Impacts that are predicted for the project impact	significance	comment
impacts on land use/ settlements	low	No land acquisition is planned within the project
ground and surface water	low	Due to low amount of drainage water that can be drained into Drina River, the consequential impact is minimal to negligible
air quality	low	Temporary impact
flora and fauna (protected areas and species)	low	According to the recommendations presented in the framework of the conditions obtained by the Institute for Nature Protection.
noise	low	Temporary impact
access/crossing points of the main road and local roads	low	The rehabilitation works won't affect existing crossing points.
soil management	low	With the application of appropriate measures of waste management.
waste	low	Ensured through environmental management - waste and wastewater management plan will be prepared and implemented
cumulative impacts etc.	Medium/ low	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only

Road rehabilitation works on proposed Gracanica – Ljubovija 1 section will have only minor impacts on the environment (environmental category B). Most of the impacts are of temporary character and they disappear after the road rehabilitation works are completed.

In respect to future use of the rehabilitated road section - this section belongs to the local and regional roads network, on which significant increase of road traffic as a result of rehabilitation works is not expected. In respect to impact of the potential increase of the vehicle speed on rehabilitated roads, this issue will be addressed through the project's road safety component, which will include

implementation of the active and passive measures to control the vehicle speed on rehabilitated road sections.

The possible temporary impacts as consequence of the construction activities will consist of among others: disruption of current traffic circulation; roadway safety; damage to access roads; noise, waste and dust nuisance; and air emissions; potential impacts of soils and water resources; brief disturbance to biota, and momentary interference to neighbouring settlements through various construction and operation activities. 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 site specific EMP 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 EMP, but bare presented herewith for the purpose of completeness.

Air and noise pollution within the residential areas

It is expected that local residents will be affected with air and noise pollution during rehabilitation 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 small traffic load on proposed road lead to the conclusion that noise barriers will not be implemented within this project.

Potential water contamination

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

As for the potential pollution during operation, these are limited to accidents only. In such a case, 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, 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).

Potential Cumulative impacts

The works execution on the urgent maintenance and remedy of damages on the section Gracanica – Ljubovija 1 could have some cumulative impacts that are temporary (noise, air pollution, water and soil).

At the observed area, the potential sources of environmental pollution are rehabilitated road section, quarry "Teko mining Ljubovija" and Lead and Zinc Mine "Veliki Majdan". Proper application of the Environmental 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. ENVIRONMENTAL MANAGEMENT PLAN

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

A basic assessment of the proposed road rehabilitation project concluded that the rehabilitation impacts will be minor, reversible and manageable if the mitigation measures as given in the EMP are properly implemented. The EMP (Appendix I and Appendix II) is based on the type, extent and duration of the identified environmental impacts. PERS (the Implementing Agency) will monitor the design and supervision engineers and Contractors on the implementation of the EMP.

A. MITIGATION PLAN

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 design, rehabilitation and operational phases. It makes reference to the law and contract documents, approximate location, timeframe, and the responsibility for its implementation and supervision.

ContractorManagement

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 EMP by the Contractor may occur due to weak linkages of the EMP with the contract documents. The EMP 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 EMP. 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 EMP 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 EMP.
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws, EU standards and Lender requirements.

Design Phase

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.

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 Office for Environmental Protection 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 actual construction, it must comply with the following:

1. temporary location for storing the necessary construction and other material and equipment is needed to be located outside the space with tall vegetation and Drina River flooding zones, and limited only to the duration of the works execution;
2. 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 construction. Restrict storage / disposal in coastal area of Drina River, as well as other smaller watercourses of a temporary nature, as well as on agricultural land;
3. provide after completion of the works that all areas which are in any way degraded by construction works should be as soon as possible remedied;
4. 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;

5. when performing the construction works on the alignment of the road which is right next to the Drina River, it should be predicted the maximum preservation of the coastline and coastal vegetation, wild species and their habitats;
6. 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;
7. In the zone of transition of the road (bridge) over the watercourses (Krupinska Reka River, Uzovnicka Reka River and Gracanicka Reka River), where the arrangement is necessary, the project/the design should foresee the usage of stone and other natural materials and largely avoid concreting of coast and riverbeds of the watercourses;
8. 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;
9. the respective construction works on the road alignment that passes through the populated places should be executed only during the daylight because of the potential impact of noise from construction equipment and vehicles;
10. envisage the setting up of the protective fences and pedestrian crossings and passages at the places where it is most appropriate, especially on the locations near existing settlements;
11. during the construction along the whole alignment it should be maintained the maximum level of communal hygiene. Define locations for containers for temporary storage of waste;
12. the size of contractor‘s facilities are limited to absolute minimum to reduce unnecessary clearing of vegetation.
13. the contractor‘s facilities are to be contained within an adequate security fence.
14. 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.
15. 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).
16. Fuel storage areas are not located within 20m of a water course.
17. 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.
18. All workshops would be provided with oil and water separators.
19. The contractor must have trained personnel who are competent in fuel handling procedures and for cleaning up accidental spills.
20. 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;
21. Cleared material is to be piled into manageable sized heaps according to disposal or re-use requirements.
22. 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.

23. Apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site.
24. Avoid excavation and operating machinery in wet ground conditions.
25. 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;
26. 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;

PE “Roads of Serbia“ is obliged to check through the engaged consultant for monitoring/supervision whether the requirements of the environmental management plan and management safety organization plan are implemented at the site.

Mobilisation – Contractor EMP

During the rehabilitation, the Contractor will work according to the requirements of the Contractor‘s Environmental Plan (CEP) (based on the EMP) which has been prepared by the Contractor and approved by PERS. Supervision and monitoring of the CEP activities will be undertaken as follows:

- The contractor has the initial responsibility for preparing and implementing the CEP as per the works contract.
- The Resident Engineer (RE) will direct the Contractor with regard to compliance with the CEP.
- The PERS 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 CEP.

Before commencing the work, the Contractor will prepare a Contractor‘s Environmental Plan (CEP) that addresses the conditions of the rehabilitation in the EMP that has been attached to Contract Documents including measures to comply with national legalisation and Lender requirements.

The CEP will detail how the Contractor will address the activities in the rehabilitation section of the EMP. The contractor will submit the CEP to the PERS for approval.

Following the approval of the CEP, the Contractor together with the person on the Contractor‘s staff who will be responsible for supervising the CEP 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.

Works on urgent maintenance and damage repair

Technical specifications for work execution which address environmental, health and safety protection measures:

1. Preliminary works
2. Rehabilitation works on the existing pavement
3. Earth works
4. Drainage
5. Traffic signage systems

Environmental Management during urgent maintenance works

Considering all the identified impacts, it becomes essential for the Contractor to prepare and later conscientiously implement the EMP throughout the duration of the project to ensure compliance with legislative and Lender requirements. The emphasis of the EMP shall be on the following:

- 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 4 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 (Drina River and smaller rivers) and will complement the Construction 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 – all equipment is licenced and approved in accordance with EU standards. This applies to all machinery, vehicles and construction sites where noise and vibration may affect susceptible receptors. The contractor will be responsible for ensuring that noise and vibration 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 and vibration 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 PERS 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.

Safety

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.
- Safety and Labour Management Plan (SLMP), prepared by the PERS, will be consisting part of bidding documentation, in order to ensure H&S provisions during rehabilitation works.
- 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 PERS 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 construction activities/site works, all of the above plans will be submitted by the Contractor to the Sector for Investment within the PERS 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, according to the assessment performed within the design phase, 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.

B. MONITORING PLAN

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;
- Monitoring of noise levels near residential areas
- Monitoring of the procurement of materials (checks that valid permits are in place)
- Duration and frequency and estimated monitoring costs; and
- Institutional responsibilities for monitoring and supervision.

A field monitoring checklist has been prepared based on the EMP 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 PERS who will be responsible for the follow-up and compliance reporting.

The PERS 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.

C. INSTITUTIONAL IMPLEMENTATION AND REPORTING

Project Implementation

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

Prior to the commencement of works PERS will submit to the Bank for its approval this section specific Environmental Management Plan.

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 CEP 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 PERS 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 PERS and MoT. The contractor, in coordination with PERS, shall set-up a grievance redress committee that will address any complaints during project implementation. During project implementation, the PERS shall monitor the compliance of the Contractor with the EMP 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 PERS will be in charge of the operation and maintenance of the Project Road. Routine and random monitoring will be undertaken as scheduled in the monitoring plan.

The Public Enterprise “Roads of Serbia” (PERS) 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 (“Official Gazette of RS”, 36/09, 72/09),
- 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.

Construction 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 Management Plan. This proposal will be reviewed by PERS 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.

MoAEP 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 PERS about suspension and order to proceed according to its directive.

Public consultations will be held in the future.

The ContractorReporting Arrangements

A) Contractor to PERS

The Contractor will prepare his compliance reports in respect to this EMP and his SSIP as a Quarterly Progress Reports and submit them to PERS, in both Serbian and English language, in hard copy and electronic versions.

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

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 PERS about accident (phone number +381113040701 or via E-mail on following address: office@putevi-srbije.rs).

The Contractor will monitor quality of environmental conditions according to the monitoring plan which is a consisting part of EMP (Annex II) through those phases and will report quarterly to the PERS. 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.

B) Project Supervision Consultant to PERS

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 quarterly PSC progress reports.

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

C) PERS to MoT, WB, EBRD and EIB

Annual Environmental Health and Safety (EHS) reports, including monitoring indicators and reporting on the implementation of the requirements set forth in the EMP will be prepared by PERS and submitted for IFIs review. IFIs will review the reports and verify their contents through periodic site visits. The PERS shall provide Annual reports to MoT 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 PERS will immediately report to the Bank which is financing the road section.

6. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATIONS, AND PARTICIPATION

Public consultations will be held in the future.

7. REFERENCE

1 Environmental Assessment Sourcebook No 25, Environmental Management Plans, The World Bank Environment Department, January 1999

2 Roads and the environment: A Handbook, The World Bank Environment Department

3 EIB ENVIRONMENTAL AND SOCIAL PRACTICES HANDBOOK, Environment and Social Office Projects Directorate Version 2 of 24/02/2010

4 EBRD Environmental and Social Policy 2008

5 EIB Statement of Environmental and Social Principles and Standards (2008).

6 Environmental Management Plan for rehabilitation of roads, bridges and tunnels under the World Bank road management and safety project, Republic of Ruska Road Directorate, Banja Luka, 2001

7 Environmental Assessment REPORT & Environmental Management Plan for Serbian Transport Rehabilitation Project, report No: E866, project name/ID: YF-Transport Rehabilitation Project – P075207, document date 2003/11/30

APPENDICES

Appendix I

MITIGATION PLAN

MITIGATION PLAN

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
PRE-CONSTRUCTION	**Detailed Design**				
	The respect for the procedures related to the protection of the environment	The Highway Institute JSC Belgrade is based on the authorization by the PE "Roads of Serbia" obtained the Requirements of the Institute for Nature Protection and the Institute for Protection of Cultural Monuments "Valjevo", in order to avoid the risks to the environment in the period of increased maintenance.	PERS The Highway institute, Belgrade	PERS	
	The location and development of the contractor‘s facilities will be approved by the PE. Locations will be selected so that:	- is located outside of the flood zone of the Drina River - they do not interfere with the environment and social well-being of the surrounding communities re noise, dust. vibration, 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, andfuel 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.	PERS Contractor	PERS	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
		- 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.			
	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.	Detailed Design Consultant and RC	Technical Control of Detailed Design PERS	
	Road safety issues associated with pedestrian crossing	Plan for safe and adequate pedestrian crossing facilities that can be in most cases over passages equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams.	Detailed Design Consultant and RC	Technical Control of Detailed Design PERS	
	Stakeholder engagement	Details of the proposed road alignment, access points and safety features will be disclosed in the locality of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been	Detailed Design Consultant PERS	Technical Control of Detailed Design PERS	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
		considered in the final design will be recorded.			
CONSTRUCTION	**Management Plans**				
	Contractor to prepare implement the following plans as described in the EMP 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 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 Hazard Assessment • Safety and Labour Management Plan (SLMP),			
CONSTRUCTION	**Site Induction**				
	All workers and visitors to site shall be given a Health, Safety and Environment Induction and instructed in the need and use of PPE.				
CONSTRUCTION	**Material supply**				

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
	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	useexistingstonequarryrequirementforofficialapprovalorvalid operatinglicense	Stone quarry	Stone quarry	
	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	
CONSTRUCTION	**Material transport**				
	Asphalt dust, fumes	All trucks are to be covered This is a problem area through-out the region and I this will not be achieved unless the selection contractors operating trucks is managed	Truck operator	Truck operator	
	Stone Dust	wet or cover truck load	Truck operator	Truck operator	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
	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 and PERS about it.	Contractor	Supervision Contractor	
CONSTRUCTION	**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); equipment operating with noise mufflers and licenced and approved in accordance with EU standards. Noise screens/barriers for noisy works for those longer than one day in the same location/area. Noisy equipment will be located as far as possible from residential or other sensitive receptors.	Construction Contractor	Construction Contractor	
	Dust	water construction site and cover material storage areas limited speed of vehicles Implement 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;	Construction Contractor	Construction Contractor	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
		covering of vehicles carrying dusty materials; wheel washing/spraying of vehicles; and management of spoil, etc.			
	Vibrations	limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities) If any material damage proved to have been caused to local houses, buildings and other infrastructure (including access roads) by the works will be compensated for and subject to repair on a timely basis. Earthmoving equipment will be located as far away as possible from vibration-sensitive receptors.	Construction Contractor	Construction Contractor	
	Traffic disruption during construction 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	Construction Contractor	Construction Contractor	
	Reduced access to roadside activities	provide alternative access to roadside activities at all times	Construction Contractor	Construction Contractor	
	Vehicle and pedestrian safety when there is no construction activity	Lighting and well defined safety signs and protection measures.	Construction Contractor	Construction Contractor	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
	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 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.	Construction Contractor	Construction Contractor	
	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	Construction Contractor	Construction Contractor	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
		(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).			
	Potential contamination of soil and water from improper maintenance and fuelling of equipment	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 to permitted waste recovery facility	Construction Contractor	Construction Contractor	
	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.	Construction Contractor	Construction Contractor	
	Workers safety	provide workers with safety instructions and protective equipment; safe organization of bypassing traffic	Construction Contractor	Construction 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.	Construction Contractor	Construction Contractor	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
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); equipment operating with noise mufflers	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 watercourse (Drina, and other rivers); dispose waste material at location protected from washing out	Maintenance Contractor	Maintenance Contractor	
	Vibrations	limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities)	Maintenance Contractor	Maintenance Contractor	
	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, rock fall, hazardous	Install the information boards for hitting upon a quarry „TEKOminingLjubovija“	Maintenance Contractor	Maintenance Contractor	

Phase	Issue	Mitigating measure	Institutional responsibility		Comments (e.g. secondary impacts)
			Install	Supervision	
	conditions	Separate the surface of the quarry edge from the road (New Jersy) install warning signs (rock fall, landslide, wet or slippery conditions, dangerous curve, animal or pedestrian crossing, school, slow moving vehicles, merge), reflective markers to indicate steep edge or convex mirrors to see oncoming traffic at blind curves; locate warnings at points considered necessary by good engineering practice, or as agreed in writing with public and authorities			

Appendix II

MONITORING PLAN

MONITORING PLAN

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
CONSTRUCTION	**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
Stone quarry	possession of official approval or valid operating license	stone quarry „TEKO mining Ljubovija“	Inspection / supervising engineer	before work begins	assure plant compliance with environment, health and safety requirements	Quarry 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	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
CONSTRUCTION	**Material transport**					
Asphalt	truck load covered	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, healthand safety requirements and enable aslittle 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, healthand safety requirements and enable aslittle disruption to traffic as it is possible	Supervision Contractor
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, healthand safety requirements and enable aslittle disruption to traffic as it is possible	Supervision Contractor

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility Operate
Traffic management	hours and routes selected	job site	supervision	unannounced inspections during work, at least once per week	assure compliance of performance with environment, healthand safety requirements and enable aslittle disruption to traffic as it is possible	Supervision Contractor
CONSTRUCTION	**Construction Site**					
Noise disturbance to workers and neighbouring population	noise levels	job site; nearest homes at settlement Crnca, Selanac, Uzovnica and Lonjin	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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Construction Contractor

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
Dust	air pollution (solid particles)	at and near job site	inspection and visual observation	unannounced inspections during material delivery and construction	assure compliance of performance with environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Vibrations	limited time of activities	job site	supervision	unannounced inspections during work and on complaint	assure compliance of performance with environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Traffic disruption during construction 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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
Reduced access to roadside activities	provided alternative access	job site	supervision	random checks at least once per week during construction activities	assure compliance of performance with environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Vehicle and pedestrian safety when there is no construction 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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
Water and soil pollution from improper material storage, management and usage	water and soil quality (suspended solids, oils, pH value, conductivity)	on Drina River	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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Construction Contractor

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	Supervision Contractor
OPERATION	**Maintenance**					
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 environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	PERS
Vibrations	limited time of activities	job site	supervision	unannounced inspections during maintenance activities and on complaint	assure compliance of performance with environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	PERS

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored?/ type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored? (optional)	Institutional responsibility
						Operate
Workers safety	protective equipment; organization of bypassing traffic	job site	inspection	unannounced inspections during maintenance activities and on complaint	assure compliance of performance with environmenthealth and safety requirements and enable as little disruption to traffic as it is possible	PERS
OPERATION	**Road Safety**					
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

EBRD Template - additional data required that should be incorporated into monitoring plans:

1. General		
Is the project materially compliant with all relevant EBRD Performance Requirements (taking account of agreed action plans, exemptions or derogations)?	Yes ❑ No ❑	If No, please provide details of any material non-compliances:
Is the project materially compliant with all applicable environmental and social laws and regulations?	Yes ❑ No ❑	If No, please provide details of any material non-compliances:
Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities, affected project labour or local communities, affected cultural property, or created liabilities for the company?	Yes ❑ No ❑	If yes, please describe, including details of actions to repair and prevent reoccurrence:
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:
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
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
How many inspections did you receive from the labour authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:
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:
Has the Company engaged any contractors for project-related work in the reporting period?	Yes ❑ No ❑	If yes, please state for which types of work, and how the company has monitored the compliance of contractors with EBRD Performance Requirements and the Environmental and Social Action Plan:

Were any of the violations stated above the responsibility of contractors?	Yes ❑ No ❑	If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Contractor?
Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labour reasons?	Yes ❑ No ❑	If yes, please describe:
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), and whether this relates to the requirements of the Environmental and Social Action Plan, or to any other initiative:		

2. Status of the Environmental and Social Action Plan

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

3. 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				

[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 EBRD for this project (typically local, EU and/or World Bank Group)
[5] In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility

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.				

4. 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			

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

Product 1			
Product 2			

5. 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:			

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 there any planned redundancies to the workforce in 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:
Were there any changes in trade union representation at Company facilities during the reporting period?	Yes ❑ No ❑	If yes, please provide details, and summarise engagement with trade unions during reporting period:
Were there any other worker representatives (e.g. in the absence of a trade union)?	Yes ❑ No ❑	If yes, please provide details and summarise engagement with them during reporting period:
Were there any changes in the status of Collective Agreements?	Yes ❑ No ❑	If yes, please provide details:
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 employees raised any complaints about harassment or bullying during the reporting period?	Yes ❑ No ❑	If yes, please state how many, split by gender, summarise the issues raised 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 at the Company in the reporting period?	Yes ❑ No ❑	If yes, please summarise nature of, and reasons for, disputes and explain how they were resolved
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:
Have there been any changes to the following policies or terms and conditions during the reporting period in any of 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 ❑	If yes, please give details, including of any new initiatives:

6. Occupational Health and Safety 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 (falling, heavy loads, struck by object, contact with energy source etc.):					
Please provide details of any fatalities or major accidents that have not previously been reported to EBRD, including total compensation paid due to occupational injury or illness (amount and currency):					
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:					

7. Stakeholder Engagement

Please provide the name and contact details for your external relations or community engagement manager:	

[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.

Please provide information on the implementation of the stakeholder engagement plan agreed with EBRD and summarise interaction with stakeholders during the reporting period, including: - Meeting 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 EBRD:
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:

8. 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.

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 ❑	

9. Community Interaction and Development

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

Appendix III

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, construction and operating of this Project are listed below:

2. Law on planning and construction ("Official Gazette of RS" No. 72/2009, 81/2009)
3. Law on nature protection ("Official Gazette of RS", 36/09)
4. Law on environmental protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09)
5. Law on EIA ("Official Gazette of RS" No. 135/2004, 36/2009)
6. Law on Strategic EIA ("Official Gazette of RS" No. 135/2004)
7. Law on waste management ("Official Gazette of RS", 36/09)
8. Law on noise protection ("Official Gazette of RS", 36/09)
9. Law on water ("Official Gazette of RS", 46/91, 53/93, 67/93, 48/94, 54/96, 101/05)
10. Law on forest ("Official Gazette of RS", 46/91, 83/92, 54/93, 60/93, 53/93, 67/93, 48/94, 54/96, 101/05)
11. Law on air protection ("Official Gazette of RS", 36/09)
12. Law on Safety and Health at Work ("Official Gazette of RS", 101/05)

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

13. 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)
14. 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 EIA Study ("Official Gazette of RS" No. 69/05)
15. Rulebook on the contents of the EIA Study ("Official Gazette of RS" No. 69/05)
16. Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of RS" No. 69/05)
17. Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS" No. 69/05)
18. Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 54/92)
19. Decree on establishing class of water bodies ("Official Gazette of SRS" No. 50/2012)
20. Regulations on dangers pollutants in waters ("Official Gazette of SRS" No. 31/82)

Other relevant Serbian legislation

21. 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)

22.Law on public roads ("Official Gazette of RS" No. 101/2005, 123/07)

Appendix IV

STAKEHOLDER ENGAGEMENT

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 PERS 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.

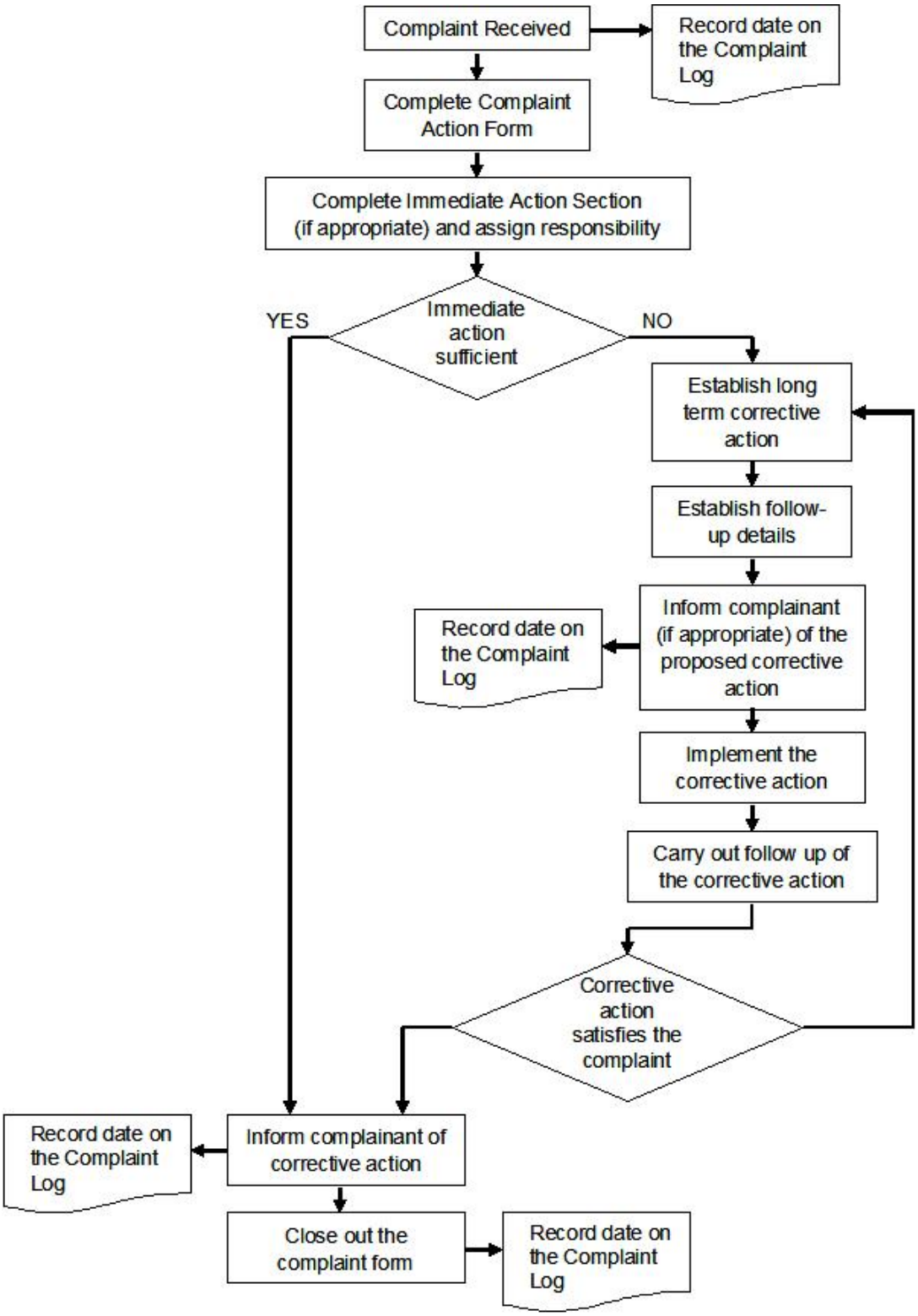
Interested parties:

- 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>By phone</td><td colspan="2">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>

Feedback from public consultation on EMP

1. BACKGROUND

The Republic of Serbia has applied for financing the “Road rehabilitation project” by the World Bank, the European Investment Bank and the European Bank for Reconstruction and Development. A part of the funding is directed to urgent maintenance and repair of damage of the state road IB category No. 28 section: Gracanica – Ljubovija 1. The here stated project is a part of urgent unforeseen works within the project of road rehabilitation which is necessary for the purpose of rehabilitation and repair of damage caused by severe floods in May 2014.

The Project has been classified as Environmental Category B. i.e. a project requiring an EMP pursuant to IFIs Safeguard Policies. According to the current Serbian legislative, particularly following Serbian Law on EIA (Official Gazette of RS, No 135/04, 36/09) – EIA is not required for road rehabilitation projects.

Public consultations will be held in the future.

2. REPORT ON PUBLIC CONSULTATION

Public consultations will be held in the future.

Appendix V

CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

РЕПУБЛИКА СРБИЈА
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
03 Број: 020-753/3
Датум: 18.05.2015.
НОВИ БЕОГРАД, Др Ивана Рибара бр. 91
тел. 011/209-3802; 209-3803; факс. 209-3867

Завод за заштиту природе Србије, на основу члана 9. Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010 и 91/2010-исправка) и члана 192. Закона о општем управном поступку („Службени лист СРЈ", бр. 33/1997 и 31/2001 и „Службени гласник РС", бр. 30/2010), поступајући по захтеву Института за путеве ад Београд за издавање услова заштите природе за израду Пројекта за ургентно оржавање и отклањање оштећења на државном путу ІБ реда бр. 26 деоница: Бања Ковиљача – Мали Зворник (km 0+000 – km 14+150) и државног пута ІБ реда бр. 28 деоница: Мали Зворник – Љубовија 1 (km 28+160 – km 41+686), доноси

РЕШЕЊЕ

1. Предметна подручја, односно деонице пута се не налазе унутар заштићеног подручја за које је спроведен или покренут поступак заштите, али се налазе уз реку Дрину - еколошки коридор од међународног значаја. Сходно томе, издају се следећи услови заштите природе:

   1) Пројектом за ургентно одржавање и отклањање оштећења на државном путу ІБ реда, бр. 26 и бр. 28 на деоницама Бања Ковиљача – Мали Зворник и Мали Зворник – Љубовија 1 предвидети таква решења и мере који ће обезбедити услове за очување ваздуха, земљишта, подземних и површинских вода (посебно Дрине реке од међународног значаја, као и других водотокова).
   2) Саставни део предметног Пројеката треба да буде и део који се односи на организацију радилишта, при чему је неопходно дефинисати и обезбедити:
      - привремене локације за складиштење потребног грађевинског и другог материјала и опреме (уколико има потребе за тим) које не могу бити лоциране у обалском појасу Дрине и на простору са високом вегетацијом, а ограничити искључиво на време трајања радова;
      - привремене или трајне локације (постојеће уређене комуналне објекте/депоније) за одлагање и депоновање шута и другог отпадног грађевинског материјала у било каквом стању и комуналног отпада насталог у току извођења радова, као и забрану њиховог одлагања у обалском појасу Дрине, приобаљу других река и пољопривредном земљишту, осим на локацијама дефинисаним Пројектом;
      - да се након завршетка предметних радова све површине које су на било који начин деградиране грађевинским и другим радовима, што пре санирају.
   3) При извођењу радова строго се придржавати трасе пута како манипулација возилима и машинама не би оставила последице на шири простор.
   4) На траси пута која је непосрдно уз Дрину, еколошки коридор предвидети максимално очување обалског појаса реке, тј. приобалне вегетације, односно забрањено је уништавање и нарушавање дивљих врста и њихових станишта.
   5) У току извођења радова забрањено је одлагање и депоновања било каквог отпада, а посебно грађевинског у обалском појасу Дрине.

6) У зони прелаза пута (мостова) преко водотокова (Радаљска река, Боринска, Узовничка, Крупинска и Грачаничка река, Медал и Требишница) где је неопходно уређење, Пројектом предвидети употребу камена и других природних материјала, и у највећој могућој мери избећи бетонирање обала и корита водотокова (спровести тзв. натурално уређење водотокова) при чему је неопходно максимално очување самих корита, али и обала са постојећом вегетацијом.
7) Забрањено је сервисирање возила и машина дуж трасе пута. Уколико дође до хаваријског изливања горива, уља/мазива и других штетних материја обавезна је санација површине и враћање у првобитно стање.
8) Предметне радове на траси пута која пролази кроз насељена места, изводити само у току дана због могућег утицаја буке од грађевинских машина и возила.
9) Предузети мере заштите становништва од удеса. У том смислу потребно је предвидети постављање заштитних ограда и пешачких прелаза и пролаза на местима где је то најцелисходније, нарочито на локацијама у близини постојећих насеља.
10) Током извођења радова дуж целе трасе одржавати максимални ниво комуналног реда.
11) По изведеним грађевинским радовима неопходно је што пре уклонити сву механизацију, грађевински материјал и друго. Уколико је дошло до нарушавања предметног подручја (терена дуж трасе) треба га санирати. У том смислу, успоставити биљни покривач (култивисати терен) на свим угроженим местима, применом одговарајуће флоре, 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.

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, потребно је Заводу за заштиту природе Србије 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 о условима заштите природе издато, дужан је да од Завода прибави ново решење о условима.

5. Такса за издавање овог Решења у износу од 30.000,00 динара је одређена у складу са чланом 2. став 5. тачка 1. Правилника о висини и начину обрачуна и наплате таксе за издавање акта о условима заштите („Службени гласник РС“, бр. 73/2011, 106/2013). Подносилац захтева је дужан да наведену таксу уплати у корист рачуна Завода у року од 5 дана од дана достављања предрачуна.

О б р а з л о ж е њ е

Институт за путеве ад Београд (11221 Београд, ул. Кумодрашка бр. 257) обратио се дописом бр. 20-2552 од 08.04.2015. године за издавање услова заштите природе за израду Пројекта за ургентно оржавање и отклањање оштећења на државном путу IБ реда бр. 26 деоница: Бања Ковиљача – Мали Зворник (km 0+000 – km 14+150) и државног пута IБ реда бр. 28 деоница: Мали Зворник – Љубовија 1 (km 28+160 – km 41+686).

На основу достављеног захтева и пратеће документације подносиоца захтева, утврђено је да је планирана израда Пројекта за ургентно оржавање и отклањање оштећења на државном путу ИБ реда бр. 26 деоница: Бања Ковиљача – Мали Зворник (km 0+000 – km 14+150) и државног пута ИБ реда бр. 28 деоница: Мали Зворник – Љубовија 1 (km 28+160 – km 41+686). Предметни Пројекат је саставни део Пројекта рехабилитације и безбедности на путевима Републике Србије и подразумева грађевинске – путарске радове у оквиру трасе већ постојећег пута. Врсте радова, технички услови и начин извођења радова дефинисани су Правилником о ургентном одржавању државног пута („Службени гласник РС“, бр. 74/2014 и 87/2014).

Увидом у Централни регистар заштићених природних добара и документацију Завода за заштиту природе Србије, а у складу са прописима који регулишу област заштите природе, утврђени су услови заштите природе из диспозитива овог Решења. При томе се имало у виду да се предметно подручје (траса пута) не налази унутар заштићеног подручја за које је спроведен или покренут поступак заштите, на основу Закона о заштити природе („Службени гласник РС“, бр. 36/2009, 88/2010 и 91/2010-исправка), али се налазе уз реку Дрину - еколошки коридор од међународног значаја (Уредба о еколошкој мрежи, „Службени гласник РС“, бр. 102/2010).

Законски основ за доношење решења је Закон о заштити природе („Службени гласник РС“, бр. 36/2009, 88/2010 и 91/2010- исправка); Уредба о еколошкој мрежи („Службени гласник РС“, бр. 102/2010).

Предметни радови могу се реализовати под условима дефинисаним овим Решењем, јер је процењено да неће угрозити природне вредности предметног подручја.

На основу свега наведеног, одлучено је као у диспозитиву овог Решења.

Подносилац захтева је ослобођен од плаћања таксе у складу са чланом 18. Закона о републичким административним таксама („Службени гласник РС“, бр. 43/2003, 51/2003, 61/2005, 5/2009, 54/2009, 50/2011, 93/2012 и 57/2014).

Упутство о правном средству: Против овог Решења може се изјавити жалба министарству надлежном за послове заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје Заводу за заштиту природе Србије.

ДИРЕКТОР
Александар Драгишић

Достављено:
- Подносиоцу захтева
- Архиви

ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА КУЛТУРЕ "ВАЉЕВО" УСТАНОВА КУЛТУРЕ ОД НАЦИОНАЛНОГ ЗНАЧАЈА
бр. 242/1
17.06.2015 год.

На основу члана 107. став 1 и 2 Закон о културним добрима (Службени гласник Републике Србије" бр.71/94), Завод за заштиту споменика културе "Ваљево" даје :

ИНСТИТУТ ЗА ПУТЕВЕ АД БЕОГРАД
ПРИМЉЕНО: 18.06.2015
Орг. јед. | Број | Прилог
20 | 2552/12

УСЛОВЕ ЧУВАЊА, ОДРЖАВАЊА И КОРИШЋЕЊА ЗА УРГЕНТНО ОДРЖАВАЊЕ И ОТКЛАЊАЊЕ ОШТЕЋЕЊА НА ДРЖАВНОМ ПУТУ ІБ. 26 ДЕОНИЦА: БАЊА КОВИЉАЧА-МАЛИ ЗВОРНИК (0+000-КМ 14+150 КМ) И НА ДРЖАВНОМ ПУТУ ІБ. 28 ДЕОНИЦА МАЛИ ЗВОРНИК-ЉУБОВИЈА(28+160-КМ 41+686КМ)

1. На траси пута и у непосредној околини пута Бања Ковиљача-Мали Зворник (0+000-км 14+150 km) и на државном путу іб. 28 деоница Мали Зворник-Љубовија(28+160-км 41+686km) налазе се следећа археолошка налазишта:

ид. број **1023**

назив	Црквина	**класа**	гробље
место	Бања Ковиљача	**врста**	некропола са стећцима
општина	Лозница	**максимална**	70
катастарска	22	**максимална дужина**	40
х координата	7,351677E+10	**површина**	0,3
у координата	4,931286E+09	**датовање**	нн
тип земљишта	Планосол, Лувисолс	**културна припадност**	провинцијска
геолошка подлога		нб **период**	средњи век
тип рељефа	врх брда	**вишеслојни**	
надморска	334	**поузданост**	3
напомена			

број споменика: **орнаменти натпис:** 0

усадник:	21	**слемењак:**	1	**аморфни**	0
плоча:	6	**сандук:**	7	**крст:**	0

ид. број 1025

назив	Точка	**класа**	гробље
место	Бања Ковиљача	**врста**	некропола са стећцима
општина	Лозница	**максимална**	70

катастарска	22	**максимална дужина**	40
х координата	0	**површина**	0,3
у координата	0	**датовање**	нн
тип земљишта	Планосол, Лувисолс	**културна припадност**	провинцијска
геолошка подлога	нб	**период**	позна антика
тип рељефа	врх брда	**вишеслојни**	
надморска	334	**поузданост**	3
напомена			

број споменика:			**орнаменти натпис:**		0
усадник:	21	**елемењак:**	1	**аморфни**	0
плоча:	6	**сандук:**	7	**крст:**	0

Ид. број 251

назив	Осиште	**класа**	рурална насеобина
место	Брасина	**врста**	неопредељен
општина	Мали Зворник	**максимална ширина**	100
катастарска	00	**максимална**	100
х координата	7,352933E+09	**површина**	1
у координата	4,926849E+09	**датовање**	нн
тип земљишта	Планосол, Лувисолс	**културна**	провинцијска
геолошка подлога	нб	**период**	позна антика
тип рељефа	друга речна тераса	**вишеслојни**	
надморска висина	180	**поузданост информације**	3

напомена Непосредно у селу, на завршетку последње косе која пада са Гучева ка Дрини је локалитет Осиште. На површини 100x100м. Има керамике, опеке, шута и другог. На основу налаза керамике опредељено је ово насеље као римска вила рустика. Одавде вероватно потиче и натпис који је Сима Тројановић забележио.

Ид. број 500

назив	Мост	**класа**	гробље
место	Брасина	**врста**	некропола стећци
општина	Мали Зворник	**максимална ширина**	100
катастарска	22	**максимална**	200
х координата	7,352871E+09	**површина**	0
у координата	4,925428E+08	**датовање**	15
тип земљишта	Планосол, Лувисолс	**културна**	неопредељен
геолошка подлога	нб	**период**	средњи век

тип рељефа друга речна тераса **вишеслојни**
надморска висина 140 **поузданост информације** 4
напомена стећак се налази у дворишту лозничког музеја

број споменика: 1 **орнамент натпис:** 1
усадник: 0 **слемењак:** 0 **аморфни:** 0
плоча: 0 **сандук:** 0 **крст:** 0

Ид. број 502

назив Римско гробље **класа** гробље
место Брасина **врста** некропола под
општина Мали Зворник **максимална ширина** 100
катастарска 22 **максимална** 200
х координата 7,352596E+09 **површина** 0
у координата 4,926266E+09 **датовање** нн
тип земљишта Планосол, Лувисолс **културна** неопредељен
геолошка подлога нб **период** позни средњи век
тип рељефа друга речна тераса **вишеслојни**
надморска висина 140 **поузданост информације** 4

напомена Непосредно у селу, при ушћу Орловачке реке у Дрину, налази се Римско гробље. До скоро је било неколико стећака који су минирани и однети. Мештанл су ископавали и озидане гробнице од камена. Доста стећака је покупио и уградио у кућу трго вац Владић у Лозници почетком овога века.Судећи по стећцима гробље је из 15 века.

број споменика: 10 **орнамент натпис:** 0
усадник: 0 **слемењак:** 0 **аморфни:** 0
плоча: 0 **сандук:** 0 **крст:** 0

Ид. број 252

назив Пећина- Римско гробље **класа** фортификација
место Радаљ **врста** насеље, спекулум, некропола
општина Мали Зворник **максимална ширина** 50
катастарска 00 **максимална** 50
х координата 7,352837E+09 **површина** 0,3
у координата 4,920938E+08 **датовање** нн
тип земљишта Планосол, Лувисолс **културна** српска
геолошка подлога нб **период** средњи век, бронзано

доба, антика

тип рељефа врх брда **вишеслојни локалитет**

надморска висина 280 **поузданост информације** 3

напомена измешент у Београд, Калемегдан

број споменика: 4 **орнамент натпис:** 1

усадник: 0 **слемењак:** 0 **аморфни:** 3

плоча: 0 **сандук:** 1 **крст:** 0

Ид. број 525

назив Пруга **класа** рурална насеобина

место Мали Зворник **врста** неопредељен

општина Мали Зворник **максимална ширина** 100

катастарска 22 **максимална** 200

х координата 0 **површина** 0

у координата 0 **датовање** нн

тип земљишта Планосол, Лувисолс **културна** неопредељен

геолошка подлога нб **период** позна антика

тип рељефа друга речна тераса **вишеслојни**

надморска висина 140 **поузданост информације**

идентификациони 258

назив Громионица-Црквина **врста локалитета** Викус

место Црнча **максимална ширина** 200

катастарска 22 **максимална дужина** 800

х координата 7,365115E+08 **површина** 16

у координата 4,904532E+09 **континуитет налаза** једна зона

тип рељефа друга речна тераса **датовање** 3 не

надморска висина 170 **културна** провинцијска

класа локалитета рурална насеобина **период** позна антика

вишеслојни

напомена некропола у западном делу локалутета на месту Црквине зграда са апсидом ка западу, гробови мала лопашница,

пут средњи век насеље

идентификациони 400
назив Пановићи
место Црнча
катастарска 22
х координата 7,365115E+08
у координата 4,904532E+09
тип рељефа падина брда
надморска висина 180
класа локалитета гробље
врста локалитета некропола
максимална ширина 100
максимална дужина 100
површина 1
континуитет налаза једна зона
датовање 3 не
културна провинцијска
период позна антика
вишеслојни

напомена локалитет се налази око 200 м пре моста на крупини са десне стране пута идући од Љубовије. Приликом изградње две породичне куће откривена су зшта и већи број римских жижакаи керамике. Можда представља јединствену целину са локалитетом Крупина.

идентификациони 583
назив Гробље
место Лоњин
катастарска 00
х координата 7,36856E+08
у координата 4,898345E+09
тип рељефа врх брда
надморска висина 797
класа локалитета војна инфраструктура
врста локалитета бенефицијарна станица
максимална ширина 50
максимална дужина 100
површина 0,5
континуитет налаза једна зона
датовање 4 не
културна провинцијска
период bronzano doba
вишеслојни

напомена

идентификациони 271

назив Градина-Микуљак

место Лоњин

катастарска 00

х координата 7,369162E+09

у координата 4,899691E+09

тип рељефа врх брда

надморска висина 400

класа локалитета војна инфраструктура

врста локалитета спекулум

максимална ширина 20

максимална дужина 30

површина 0,2

континуитет налаза једна зона

датовање нн

културна провинцијска

период позна антика

вишеслојни

напомена

идентификациони 1023

назив Ђурића поток

место Узовница

катастарска нн

х координата 7,366753E+08

у координата 4,904456E+09

тип рељефа прва речна тераса

надморска висина 205

класа локалитета дислоцирани налази

врста локалитета неопредељен

максимална ширина 0

максимална дужина 0

површина 0

континуитет налаза једна зона

датовање 3

културна провинцијска

период позна антика

вишеслојни

напомена Скулптура лава

идентификациони 267

назив Мраморје

врста локалитета Налази у секундарном контексту

максимална ширина 100

место Узовница

максимална дужина 50

катастарска 00

површина 0,5

х координата 7,36787E+09

континуитет налаза једна зона

у координата 4,902375E+09

датовање 3 не

тип рељефа друга речна тераса

културна провинцијска

надморска висина 280

период позна антика

класа локалитета дислоцирани налази

вишеслојни

напомена парапетна плоча, 2 жртвенока
жртвеник са 26
још један жртвеник од 03.2010, профилисани делови грађевина храм?средњевековно гробље

идентификациони 1011

врста локалитета топионица и ковачница

назив Дворине

максимална ширина 100

место Узовница

максимална дужина 50

катастарска нн

површина 0,5

х координата 7,36831E+09

континуитет налаза једна зона

у координата 4,903946E+09

датовање нн

тип рељефа прва речна тераса

културна српска

надморска висина 205

период позни средњи век

класа локалитета инфраструкура

вишеслојни

напомена Остаци грађевине од ломљенокаменаи канала за воду. У земљи виско концетрација гарежиод ћумура.

2.

УСЛОВИ ЧУВАЊА, ОДРЖАВАЊА И КОРИШЋЕЊА АРХЕОЛОШКИХ НАЛАЗИШТА

- Уколико се накнадно открију археолошки локалитет, исти се не смеју уништавати и на њима вршити неовлашћена прекопавања, ископавања и дубока преоравања.

- Инвеститор објекта је дужан да обезбеди средства за истраживања, заштиту, чување, публиковање и излагање добра које ужива предходну заштиту које се открије приликом изградње инвестиционог објекта- до предаје добра на чување овлашћеној установи заштите.
- (члан 110. Закона о културним добрима)

- У непосредној близини археолошких локалитета инвестициони радови спроводе се уз повећане мере опреза и присуство и контролу надлежних служби заштите.(Завода за заштиту споменика културе "Ваљево")

- Археолошки локалитети се не смеју уништавати и на њима вршити неовлашћено прекопавања, ископавања и дубока заоравања (преко 30 цм).

- -Уколико би се током радова наишло на археолошке предмете извођач радова је дужан да одмах, без одлагања прекине радове и обавести надлежни Завод за заштиту споменика културе и да предузме мере да се налаз не уништи и не оштети, те да се сачува на месту и у полажају у коме је отривен (члан 109. ст.1 Закона о културним добрима).

- -У случају трајног уништавања или нарушавања археолошког локалитета због инвестиционих радова, спроводи се заштитино ископавање о трошку инвеститора.
- (члан 110. Закона о културним добрима)

- -У непосредној близини археолошких локалитета инвестициони радови спроводе се уз повећане мере опреза и присуство и контролу надлежних служби заштите.(Завода за заштиту споменика културе "Ваљево")

- -Забрањује се привремено или трајно депоновањ земље, камена, смећа и јаловине у, на и у близини археолошких локалитета.

- -Дозвољава се инфраструктурно опремање простора археолошких локалитета и његово уређење према посебним условима и стручним мишљењима које доноси Завод за заштиту споменика културе "Ваљево".

- -Забрањено је вађење и одвожење камена и земље са археолошких локалита.

- -Остаци старих рударских радова, окна и шљакишта не смеју се уништавати пре документовања, истраживања и узимања узорка шљаке

од стране надлежне институције заштите (Завод за заштиту споменика културе Ваљево).

Образложење:

Предузеће "Институт за путеве АД Београд" из Београда обратило се 29.04. 2015. године Заводу за заштиту споменика Културе "Ваљево", са захтевом за израду Услова чувања, одржавања и коришћења За ургентно одржавање и отклањање оштећења на државном путу іб. 26 деоница: Бања Ковиљача-Мали Зворник (0+000-км 14+150 km) и на државном путу іб. 28 деоница Мали Зворник-Љубовија(28+160-км 41+686km)

У прилогу је достављена пратећа документација, пројекат и топографска карта у размери 1: 25 000 са назначеним зонама истражног простора.
По обављеном увиду у службену евиденцију Завода, проучавањем литературе обиласком терена утврђено је да на простору деонице Бања Ковиљача-Мали Зворник (0+000-км 14+150 km) и на државном путу іб. 28 деоница Мали Зворник-Љубовија(28+160-км 41+686km)
са становишта заштите непокретних културних добара Дозвољено извођење радова на одржавању и отклањању оштећења на државном путу.

Тачком 2 диспозитива овог решења указује на обавезу која произилази из самог Закона о културним добрима (члан 109 и 110).

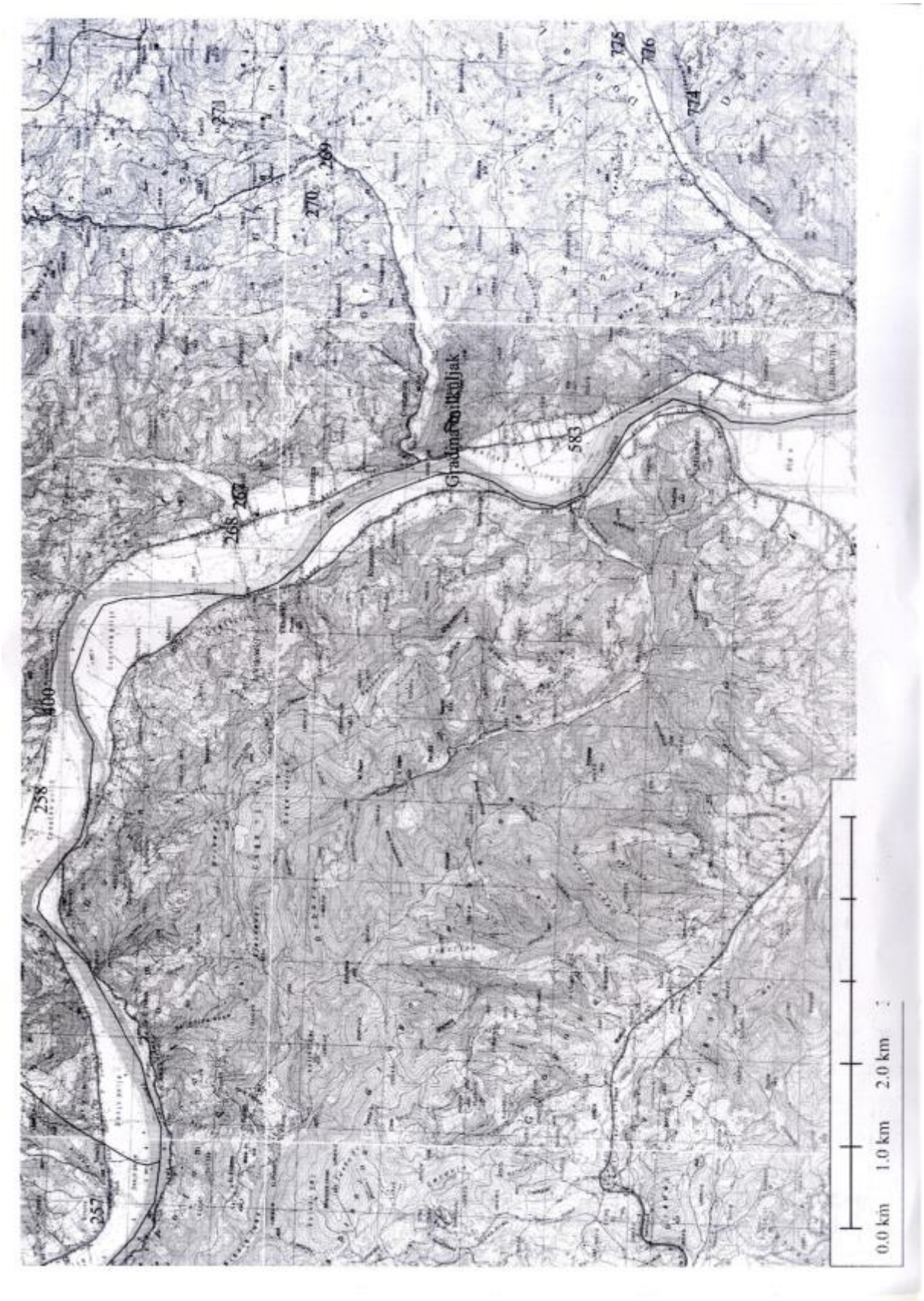
Обрађивачи:

Радивоје Арсић, М.А. археолог

в.д. директора Завода

Наташа Радојичић


1025
1023
Recansko groblje
251
500
Skola D. Borina
282
525
1.0 km
2.5 km
4.0 km


Gradina
583
0.0 km
1.0 km
2.0 km

Република Србија
МИНИСТАРСТВО ПОЉОПРИВРЕДЕ И ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ
Број: 011-00-01004/2015-16
Датум: 13.07.2015.
Београд

ЈАВНО ПРЕДУЗЕЋЕ "ПУТЕВИ СРБИЈЕ"
Број: 955-14380/15-1
21-07-2015
БЕОГРАД, Влајковићева 19а

ЈП ПУТЕВИ СРБИЈЕ
Сектор за инвестиције
11 000 БЕОГРАД
Влајковићева 19а

Предмет: Допис у вези са захтевом

Министарству пољопривреде и заштите животне средине обратили сте се Захтевом за давање мишљења о потреби израде студије о процени утицаја на животну средину пројекта ургентног одржавања и отклањања оштећења на државном путу IБ реда бр. 26 деоница: Бања Ковиљача – Мали Зворник (км 0+055-км 14+150 L=14.205 км) и на државном путу IБ реда бр. 28 деоница Мали Зворник (Грачаница) – Љубовија 1 (км 28+160-км 41+686 L=13,526 км), заведен под бројем 011-00-01004/2015-16 од 07.07.2015.

У допису наводите да пројекат подразумева грађевинско-путарске радове у оквиру трасе већ постојећег пута и да ће се за рехабилитацију предметне саобраћајнице користити уобичајени грађевински материјали (агрегат, цемент, бетонско гвожђе, итд.).

Уз Захтев је приложена и додатна документација:

- Правилник о ургентном одржавању државног пута („Сл. гласник РС" 74/2014 и 87/2014), којим су дефинисане врсте радова, технички услови и начин извођења радова;
- Кратак опис пројекта;
- Решење бр. 020-753/3 од 18.05.2015. које је издао Завод за заштиту природе Србије;
- Решење бр. 242/1 од 17.06.2015. које је издао Завод за заштиту споменика културе "Ваљево";

- Мишљење у поступку издавања водних услова бр. 1188/1 и 1521/1 од 16.04.2015. које је дало ЈКП СРБИЈАВОДЕ;
- Графички прилози, прегледне карте;

На основу члана 4. ст. 1. и 3. Закона о процени утицаја на животну средину („Сл. гласник РС", 135/04 и 36/09) донета Уредба о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину („Сл. гласник РС", 114/08), којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II.

Пројекат ургентног одржавања, рехабилитације и отклањања оштећења на путевима не налази се на прописаним Листама и, сагласно томе, *носилац пројекта није у обавези* да уђе у процедуру процене утицаја, у складу са Законом о процени утицаја на животну средину („Сл. гласник РС" 135/04 и 36/09).

Државни секретар
По решењу о овлашћењу
бр. 119-01-13/2/2015-09 од 12.01.2015.

Проф. др Зоран Рајић

Доставити:
-наслову
-архиви