ЈАВНО ПРЕДУЗЕЋЕ
ПУТЕВИ СРБИЈЕ

ENVIRONMENTAL MANAGEMENT PLAN
- FINAL DOCUMENT -

Contract ID: RRSP/CS3-IB2328BZU/2015-13

PREPARATION OF MAIN DESIGN FOR HEAVY MAINTENANCE (ROAD REHABILITATION - UPGRADING) OF THE STATE ROAD IB 23/28, SECTION: KNEZEVICI – BELA ZEMLJA - UZICE, L=15,234 km

ENVIRONMENTAL CATEGORY B

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ABBREVIATIONS AND ACRONYMS

CEP	Contractor's Environmental Plan
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
IFIs	International Financing Institutions
INP	Institute for Nature Conservation of the Republic of Serbia
IPCM	Institute for Protection of Cultural Monuments of the Republic of Serbia
MoAEP	Ministry of Agriculture and Environmental Protection
MoCTI	Ministry of Construction, Transport and Infrastructure
PERS	Public Enterprise "Roads of Serbia"
PSC	Project Supervision Consultant
RE	Resident Engineer
RRSP	Road Rehabilitation and Safety Project
SLMP	Safety Labour Management Plan
WB	The World Bank Group
WMP	Waste Management Plan

INTRODUCTION

The Republic of Serbia has applied for financing towards the costs of the Road Rehabilitation Project (RRSP). International financing institutions are: World Bank, European Investment Bank and European Bank for Reconstruction and Development.

The Republic of Serbia plans to invest part of the funds for the project of heavy maintenance (road rehabilitation – upgrading) of the State road IB 23/28 section: Knezevici – Bela Zemlja – Uzice, km 145+140,00 to km 160+374,00.

This Environmental Management Plan (EMP) has been prepared for subject road section, Knezevici – Bela Zemlja – Uzice, to ensure application of the good environmental practice and document compliance with the requirements of the International Financing Institutions (IFIs) which finance Serbian Road Rehabilitation and Safety Project (RRSP).

The subject road section (Uzice – Susica) belongs to Zlatibor Administrative District located in western part of Republic of Serbia, in the city of Uzice and municipality Cajetina. Road section starts 420m before node 2319 (node Uzice) in direction opposite to chainage, towards the city of Pozega, and includes node 2320 Bela Zemlja and finishes 150m after node 2321 Susica (Knezevici) including complete interchange in node Susica. The Project has been classified as Environmental Category B. i.e. a project requiring an EMP pursuant to IFIs Safeguard Policies.

The purpose of the EMP is to present the potential negative environmental impacts and management problems during the rehabilitation works, as well as the necessary mitigation measures and appropriate monitoring program.

Project Proponent is the Government of the Republic of Serbia, represented by the relevant Ministry, and the project is realised by PE “Roads of Serbia” (hereinafter PERS).

The design is under preparation in accordance with Serbian legislation, procedures and policies and IFIs safeguard policies. The preparation of this EMP is undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders.

EXECUTIVE SUMMARY

Project description

The subject road section (Uzice – Susica) belongs to Zlatibor Administrative District located in western part of Republic of Serbia, in the city of Uzice and municipality Cajetina.

The beginning of the section is at the entrance in the town Uzice, km 145 + 140.00 (Fig. 1), and the end of the section is after interchange of subject state road IB no. 23/28 and state road IB no. 28, loop Susica, meaning after finishing the ramp which connects the loop to main direction at km 160 + 374.00 (Fig. 2). The complete loop Susica is included in the design.

Figure 1. The start of the section – entrance in the town Uzice

Figure 2. The end of the Section, end of the connecting ramp of the loop Susica

Policy, legal and administrative framework

The Ministry of Agriculture and Environmental Protection (MoAEP), former Ministry of Energy, Development and Environmental Protection, is the key institution in the Republic of Serbia, responsible for producing and implementing the environmental policy.

Legislation in the field of environmental protection that is currently in force in the Republic of Serbia is summarized in the Appendix 3.

In the Republic of Serbia the procedure for Environmental Impact Assessment is governed by the Law on Environmental Impact Assessment, which is fully in accordance with the European Directive 85/337/EEC. Therefore, an assessment is not done for road rehabilitation projects, except when a section is in the vicinity or passes through protected natural or cultural properties.

PE „Roads of Serbia submitted a request to the Institute for Nature Conservation of Serbia in order to get the conditions under which the proposed design should be implemented. Acting on the request by PE „Roads of Serbia“ from Belgrade, the Institute for Nature

Conservation of Serbia issued a statement on conditions for nature protection no. 020-1262/3 dated 12.07.2016.

PE „Roads of Serbia“ submitted a request to the Republic Institute for Protection of Cultural Monuments in order to get the conditions under which the proposed design should be implemented. Acting on the request by PE „Roads of Serbia“ from Belgrade, the Republic Institute for Protection of Cultural Monuments forwarded the request to Kraljevo, and Kraljevo Institute for Protection of Cultural Monuments issued a statement on conditions for protection of cultural monuments no. 943/3 dated 12.08.2016.

A request for decision on the need for producing EIA Study is submitted to the MoAEP together with other relevant technical documentation, including the conditions of the Institute for Nature Conservation and Institute for Protection of Cultural Monuments.

Final Environmental Approval is obtained from the MoAEP (No. 011-00-180/2016-16 dated September 5th, 2016) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (see Appendix 6)

Upon receiving the stated documentation (the conditions of the Institute for Nature Conservation and Institute for Protection of Cultural Monuments and the decision of the Ministry of Agriculture and Environmental Protection), as well as based on the conditions set in the Environmental Management Plan, PE „Roads of Serbia“ will ensure full implementation of environmental protection measures defined by the design and thus reduce the impact on local population and natural environment.

In accordance with a statement issued by the Institute for Nature Conservation of the Republic of Serbia (INP), the subject road section is not located within a protected area for which a procedure for protection was carried out or initiated, but it is within the scope of an ecological network – Gorge Djetinja. Due to the proximity of the river Djetinja, it is requested to provide, through design proposal, preservation of air, soil, groundwater and surface water, as well as during the execution of the works only existing road network is used.

Conditions of the Republic Institute for Protection of Cultural Monuments state that along subject road section there is no immovable cultural property of great importance. With conditions of the Kraljevo Institute for Protection of Cultural Monuments is requested not to leave corridor of subject road section, and that the Investor has to notify the Institute 7 days before start of the works. Also, if in the case of excavation archaeological remains are found, it is necessary to stop the works and notify the Institute. The archaeologist can prescribe additional requirements according to the situation on site. IFIs request that the design be prepared in line with laws of the Republic of Serbia, but also with the EU standards.

Creditors require that the following be applied:

- Environmental Impact Assessment Operational Policy (OP 4.01)
- Environmental and Social Policy, EBRD (2008)
- Environmental and Social Principles and Standards, EIB (2008)

The European Bank for Reconstruction and Development, European Investment Bank and the World Bank demand that the project complies with the laws of the Republic of Serbia and the European Union standards. World Bank Group requires that the project complies with the Serbian legislation and operational policies of the World Bank.

Baseline conditions assessed during route survey

The road section that is the subject of heavy maintenance (road rehabilitation and upgrading) is situated in the western Serbia, Zlatibor district and partly belongs to the town of Uzice (CM Uzice, CM Drijetanj, CM and CM Ljubanje Kaser), and partly belongs to the municipality of Cajetina (CM Mackat and CM Branesci). After the exit from Uzice to the end of the road section, close to the loop Susica, road section passes through the only larger municipality Bela Zemlja.

The road section is parallel with the river Djetinja in length of about 5.5 km and cross it in one place (Lozionicki bridge) in Uzice. In addition, the road section crosses the river flows Krivaja, Grabovica, Susica and several unnamed streams. Riverbed of river Djetinja is mainly regulated in the downstream part. Upstream of Uzice, the quality of the water is at the level of the class I to class II. Class I is water which in natural state or after disinfection can be used or exploited for supplying the village with drinking water, the food industry and for the cultivation of edible fish (salmonids). Class II are waters that are suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which after normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water in the food industry. From Uzice towards Pozega stream is exposed to intense pollution and quality of the water is the III or IV class. Class III is water that can be used or exploited for irrigation and industries except food industry, and class IV is water that can be used or exploited only after special treatment. It is noticeable degradation of river ecosystems through the city of Uzice and downstream from it.

At km 148+760.00 km, about 3 km from Uzice is a stone quarry 'Surduk'. The stone from that quarry is used mainly for the construction company A.D. "Roads" Uzice and a few small private enterprises. Trucks which are using the subject road section are often loaded over the permitted limit and have a negative impact on the state of the road pavement. In addition, it should be noted that the dust from the quarry reduces the visibility of the subject road section and thereby adversely affect the safety of traffic (Fig. 3).

Figure 3. The section in the zone of the quarry, quarry dust

Access road that leads to the stone quarry is attached by unfavourable angle to the subject road, and, as a result of uncontrolled vehicle movement, represents a dangerous place. Apart from intersection with difficult angle, large number of cars parked right next to the connection place contributes to reducing both, traffic safety and visibility in the zone of intersection (Fig. 4).

Figure 4. Connecting the access road to the quarry the relevant section km 148 + 760.00

Along the subject road, next to the quarry within which is also the asphalt base, there are no other large industrial facilities that would lead to a cumulative effect on the environment. From small industrial facilities companies "Bel plast" Ltd. and "Zlatiborac" Ltd. could be highlighted.

Along the section is identified a large number of business activities on the part of the road that is close to quarry Surduk, but also in the zone of node Bela Zemlja, in Mackat, as well as the part of the road on the approximate chainage km 158+100 (before the bridge over the river Susica).

Drainage of storm water in most of the subject road section is open system, and some elements of the system depend on the height and position of road alignment (embankment, cut, cut-out). For shorter sections there is existing closed drainage system (section near the bridge Lozionicki in Uzice on Djetinja and on the sections near the gas station). Open drainage system consists of concrete curbs and gutters along the pavement edge, retaining walls along the pavement edge, a shoulder, earthen ditches and road culverts. Runoff water, in places where it is possible, drains down the slope of the embankment, through transversal and longitudinal falls over the shoulders of the roadway. On the road section in the cut, drainage is also led down by transverse and longitudinal falls through curbs leading runoff water to road culverts and continues into the surrounding ground or directly to the recipient.

For section Uzice – Bela Zemlja – Knezevici (Susica), a three-day continuous traffic counting was performed and the existing traffic load of 11,786 vehicles/day is collected.

The section of the state road IB no. 23/28 Uzice – Bela Zemlja – Knezevici (Susica), intersects at km 145+802 km with railroad Belgrade - Bar, intersection is the grade separated meaning that road passes under the railway by road structure (gallery). Along the road section, 6 grade separated intersections are placed at the following chainages:
- km 145+551 (intersection with the state road IB no. 28 - node Uzice)
- km 151+270 (Popova Voda)
- km 153+211 (intersection with the state road IIA no. 195 - node Bela Zemlja)
- km 153+730 (Bela Zemlja)
- km 157+460 (Mackat)
- km 160 + 224 (intersection with the state road IB no. 28 - node Susica).

In addition to these grade separated intersections along the road section, there is a large number of connections with the local municipal roads and streets as well as many individual approaches to private buildings and plots.

Bus stops on the subject road section are located outside of road but they should be regulated in order to enable safe in/out bus from/to the main road.

Summary of Environmental Impacts

Due to the rehabilitation works involved, temporary negative impacts may occur at the location of the subject works, and may include interruption of traffic flow, decreased road safety, damages on access roads, dust and gas emissions and temporary disturbance of residents of the neighbouring areas (due to air pollution and increased noise pollution). Short-term biocenosis disturbance may occur, and potential pollution of soil and water. Works in the quarry, borrow-pits and asphalt plants are performed outside the site and may cause negative impact if not managed properly. The existing road section belongs to a network of state roads and represents significant road with large traffic load, and after road rehabilitation, in accordance with the declared traffic analyses and forecasts, increase of road traffic is not expected. The vehicle speed after the upgrading will not increase.

The road maintenance works will be performed entirely on public land, without any collision with private properties. In respect with the provisions of WB OP 4.12 (Involuntary Resettlement), Design does not require any land acquisition, resettlement or long-term disturbance of human activities.

Impact on the quality of water in the river Djetinja is expected to be minimal or negligible, since the expected amount of water drained from the carriageway is small.

In the course of the works, wastewater may negatively affect the quality of ground and surface water. Because of this, appropriate mitigation measures and a monitoring plan have been provided for. In the road operational phase, only environmental accidents may lead to water pollution, in which case the relevant procedures (setting out actions to be conducted in accident situations), defined by Ministry of the Interior and in accordance with the Law on Water (Official Gazette of RS, No 30/10, 93/12), are applied. Negative cumulative effects may occur in the future (noise and air pollution) as a result of potential construction of new facilities near the road.

If measures from the Mitigation Plan are properly applied, occurrence of cumulative effects will be prevented or reduced to minimum.

Environmental Management Plan

EMP consists of the following: Mitigation Plan, Monitoring Plan and Institutional Arrangements and Reporting Procedures. As regards the time, environmental mitigation refers to the design, heavy maintenance and operational phase of the road. Environmental Mitigation Plan sums up all the anticipated impacts, suitable mitigation measures in the design, heavy maintenance and operational phase, approximate location, time frame and responsibility for implementation and supervision. Monitoring Plan defines the parameters to be monitored and how they are checked, locations, duration, incidence, valid standards and criteria and also institutional responsibility for monitoring and supervision.

Contractor shall execute the works in accordance with the laws of the Republic of Serbia, EU standards and creditor's requests. During rehabilitation works, the Contractor is obligated to perform in accordance with Environmental Protection Plan (which is based on EMP) and which is approved by PERS. Contractor shall include all costs of the implementation of environmental mitigation measures into the total costs. Contractor shall also provide an expert responsible for coordinating the Environmental Protection Plan and EMP.

Stakeholder engagement - Information disclosure, consultations and public participation

In accordance with IFIs safeguard policy, public consultations will be organised and performed during the EMP preparation. In accordance with the World Bank Operational Policy OP 4.01 draft EMP document will be available to local communities within the premises of the local Municipality, in the premises of PERS and on the PERS website.

Participation of stakeholders is significant in order to understand the nature and intensity of social and environmental impacts, as well as proposed measures for their mitigation. Public consultation is one of the ways to get feedback from stakeholders and enhance involvement of the local community in design implementation. The stakeholders may use a complaint mechanism that is publicly available (see Appendix 4)

Summary of public disclosure process

EMP will be presented to public and all the comments will be collected, but the conclusions will be presented in the report from public presentation, which will be included in this document.

1. PROJECT DESCRIPTION

Cross section of the existing road consists of two traffic lanes ~7.0-7.5 m total width, on the section where additional slow lane should be designed total width is~ 10.0-10.5 m. Shoulder width varies from 1.0 to 2.0 m, with some places of widening for parking or walkways. The major part of the section is in the classic side cut, so that the river bank side is drained through concrete gutter 0,9 m wide to the culvert or through the earth trench to the culvert.

In the exit zone from Uzice is existing sidewalk, but in other places pedestrian and bicycle traffic is performing along the pavement or along mentioned widening of the existing shoulders.

New designed geometrical profile consists of:

- two traffic lanes	tv =3,25 m
- two marginal strips	ti = 0,35 m
- shoulders	b = min 1,25 m
- gutters	r = 0,90 m
- berms	b = min 0,50 m

On the section of the slow lane is planned additional lane min. 3.0 m width.

Total width of the subject road is 7.20 m respectively 10.2 m, with shoulders on one side and gutters on the other. Newly designed road section is conditioned by the position of the existing road, that is, by the borders of road reserve and terrain configuration.

The designed width of the carriageway on the section from the exit of Uzice, from the beginning of the slow lane after passing the intersection with the street Zlatiborska to the junction with street Ljubica Cakarevic, from km 145 + 950 to km 146 + 600, varies and ranges from 9.0 to 9, 5m. Considering that the mentioned road section is mainly in cut with supporting structures to both the left and the right, and in accordance with the horizontal geometry of the existing road which mostly corresponds to the parameters for the design speed Vr = 60km / h, on that part of subject road section shall be adopted a narrower geometric profile.

Design of the new axle was developed, taking into account the Terms of Reference, all obtained requirements and approvals of the responsible institutions, and rulebooks and standards in road design. Given that the existing roadway width and geometric elements generally correspond to the range of the road, in the framework of the design proposal, the biggest changes will relate to the correction of the cross fall of the carriageway.

On the subject road section, in accordance with the existing state, bus stops are planned off-road. The width of the bus stop is 3.0 m. On the section of the exit zone from Uzice and on the section through Bela Zemlja pedestrian path is designed.

Location Description

Considered section is located in the western part of the Republic of Serbia, Zlatibor District and is located in the city of Uzice and Cajetina municipality. (Figure 5).

The beginning of the section is at the entrance in the town Uzice, km 145 + 140.00 (Fig. 1), and the end of the section is after interchange of subject state road IB no. 23/28 and

state road IB no. 28, loop Susica, meaning after finishing the ramp which connects the loop to main direction at km 160 + 374.00 (Fig. 2).

The road section is parallel with the river Djetinja in length of about 5.5 km and cross it in one place (Lozionicki bridge) in Uzice. In addition, the road section crosses the river flows Krivaja, Grabovica, Susica and several unnamed streams.

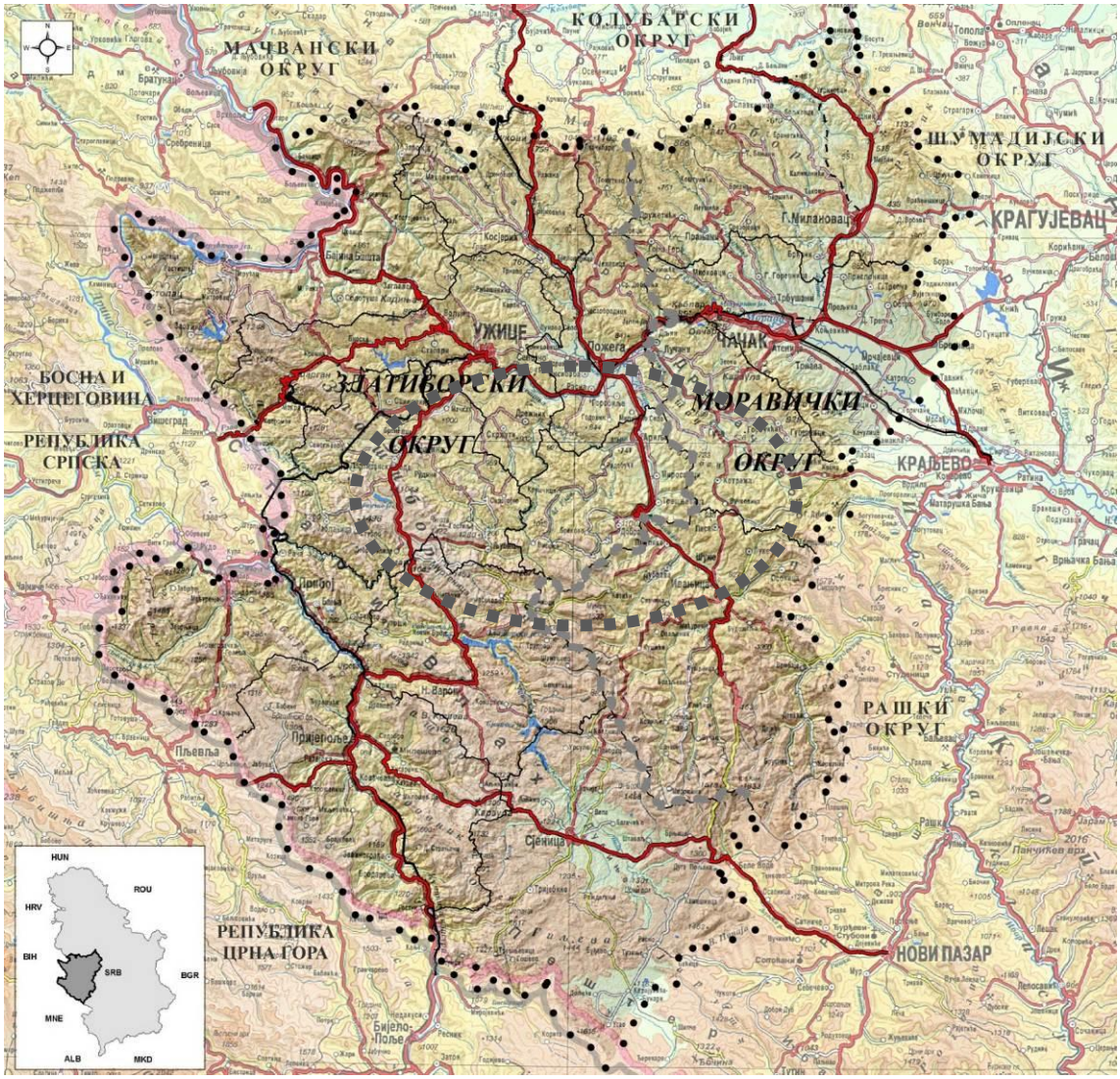


Figure 5. Location of Uzice shares -Susica (Knezevici)

Rehabilitation works description

Widening of the road is designed on shorter sections up to a minimum required width of 7.2 m or, on the part of the road with the lane for slow vehicles, up to 10.2 m. In addition to the widening, a proposal of footpaths and arrangement of bus stops is designed. The design does not require the resettlement of the local residents or any long-term disturbance of the natural environment, settlements or activities of the locals.

For the purpose of increasing road safety, it is proposed shortening of the slow lane from the direction of Uzice, to eliminate the conflict of left turn lane and overtaking lane (Fig. 6).

Also, as part of the design documentation, the arrangement of lateral connections is proposed. In order to increase road safety, setting up of appropriate road markings is envisaged together with checking whether existing signs are in accordance with the applicable standards and additional vertical signage.

Figure 6. Location junction with Ljubica Cakarevic - conflict lane for the left turn lane and overtaking

For the rest of the subject road section it is necessary to eliminate the damage of the pavement together with the pavement upgrading and bringing the functional status of all elements of the drainage, gutters, ditches, drainage and others. In addition to the aforementioned, design documentation provides rehabilitation of existing structures, retaining walls, culverts, bridges, tunnels and reconstruction of pedestrian safety and guardrails (Fig. 7, 8 and 9). Overall objective of design documentation is rehabilitation and repairs of all damage together with removing the causes that led to the damage, which increases the utility value and durability of the road and improving road safety.

Figure 7. Example of damage of the road section

Figure 8. Damage of structures

Figure 9. Damage to the lining of the tunnel

At the part of the subject road, from the beginning of the section at the km 145+140 to the km 148+500, runoff water from pavement and slopes is directed to the river Djetinja. Drainage of storm water in most of the subject road section is open system which consists of concrete curbs and gutters along the pavement edge, a shoulder, earthen ditches and inlet ducts and manholes of road culverts, and road culverts.

At the part of the subject road from km 146+540 to km 145+690 there is existing closed drainage system (common system of fecal and rain sewerage pipeline diameter ϕ1000mm and ϕ250mm with drains and revision manholes).

Atmospheric water from the roadway is separated by the gutters from the slope's water, and diverted into the appropriate pipeline through the separator with sedimentation, and brought to the casting manhole of road culverts. Separators are placed in positions which are conditioned by the road geometry. Along the mentioned road sections, waters from the slopes drains through open channels directly into the inlet manholes of road culverts, without prior purification.

This kind of separator position is conditioned by unfavourable topographical terrain features of the downstream side of road culverts (high-deleveling, retaining walls), so they are located in front of the inlet manholes.

Road culverts and storm water outlets pf the runoff water from the pavement which gravitate toward the river Djetinja are located in the following chainages:
P1 - km 146+615
P2 - km 146+967
P3 - km 147+195
P4 - km 147+270
P5 - km 147+375
P6 - km 147+461
P7 - km 147+527
P8 - km 147+875
P9 - km 148+135
P10 - km 148+361

Purified water from pavement and from slopes is discharged through the road culvert to the other side of the road. At such a places there is existing reinforced concrete retaining wall, or the water directly drains down the slope of the embankment. It is envisaged that the outlet of the road culverts is overlaid by stone in cement mortar in the length of 3 - 5m.

Design proposal for drainage of storm water from km 145 + 690 to km 146 + 540, where there is a general system of urban sewage and network (common system sewerage and storm sewer diameter ϕ1000 mm and ϕ250 mm with drains and revision manholes) is unchanged compared to the current situation. That is, atmospheric water from designed pavement flow into the existing drains and pipes. The difference in the quantity of water from the existing and designed pavement is negligible, so the designer has used the current system of public urban sewage network as a recipient.

While the current system is in operation, and the capacity of the collected water is not increased, the designer believes that it is legitimate solution to use it for drainage of water from the carriageway, with minor corrections, the eventual reconstruction or replacement of damaged parts of the system.

We emphasize that, in accordance with the Law on public roads, the subject road section is the public road in the village, for which is maintenance of the roadway and traffic equipment within the jurisdiction of the PERS, and for all other supporting systems maintenance is the responsibility of local government.

Also point out that waste water from the general public city sewage system must be in accordance with the Regulation on limit values for emissions of pollutants in water and deadlines for their achievement (Off. Gazette RS no. 67/2011,48/2012 и 1/2016) - article19.

This means that the entire system of public sewage must be treated according to the aforementioned regulations and limit values for emissions of pollutants for complete system of waste water at the inflow into the recipient must comply with the limit values set out in the Regulation, within this time frame. For that is responsible and accountable local government.

At the locations of bridges and grade separated crossings, according to the terms of the Institute for Nature Conservation of Serbia and the Decision on Water Conditions, it is indicated that the polluted water and hazardous substances arising from the carriageway of the road and structures (bridges) must consolidate in order to prevent or limit the impact on the environment, using the appropriate devices for water treatment up to quality class II of recipient water at minimum sustainable flow rates of $Q_{30.95\%}$ calculated based on data received from Republic Hydrometeorological Service of Serbia. Class II - waters that are suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which are subject to normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water in the food industry.

The designer is considering all relevant factors, decided to apply the method of previous purification through appropriate separators of fats and oils. Drainage from bridges (Susica 1 and Susica 2, river Grabovica, river Krivaja) is solved with the closed system (piping, drains), for the bridge, and with open system (gutters and concrete channels along the slopes), for the road sections that gravitate toward the bridge. Water from both of these systems, and it is the water from the carriageway, is purified before discharge into the watercourse.

Atmospheric water from bridges and grade separated crossings (loop Susica) and which flaw to existing streams is lead through an open system of channelling (gutters and concrete channels along the slopes). Before discharging into the stream, water that is collected in this way is also purified in the appropriate separators of fats and oils.

Existing regulations in the field of emissions of pollutants from wastewater are:
- Regulation on emission limit values of pollutants in water and deadlines for their achievement ("Off. Gazette of RS", no. 67/2011, 48/2012 and 1/2016)
- Regulation on limit values of pollutants in surface and ground waters and sediments, and the deadlines for their achievement ("Official Gazette of RS, no. 50/2012).

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Relevant Institutions

The relevant Ministry of Agriculture and Environmental Protection of the Republic of Serbia is responsible for producing and implementing the environmental policy. Other

relevant institutions are: PERS, INP and Institute for Protection of Cultural Monuments of the Republic of Serbia (IPCM).

Existing Serbian legislation

The environmental laws and by-laws in force in the Republic of Serbia are summarised in Appendix 3.

EIA procedure in the Republic of Serbia

According to the Serbian Law on EIA (Official Gazette 135/04, 36/09) full EIA procedure, including preparation of EIA Study are not necessary for road rehabilitation projects, except when there are protected natural or cultural properties nearby. In such cases the Project Proponent shall submit a Request for Decision about Need for Environmental Impact Assessment to the MoAEP. The Law on Environmental Impact Assessment regulates the EIA procedure and is in accordance with European Directive EIA - 85/337/EEC.

In the statement no. 020-12623/3 dated 12.07.2016. the Serbian Institute for Nature Conservation issued nature conditions for the subject road section. By reviewing the Central Register of Protected Goods and documentation of the Institute for Nature Conservation, and in accordance with the legislation governing the field of nature protection concluded that the subject area is not situated within a protected area, but it is covered by area of an environmental network. Since the works are planned only in the existing road area, planned works do not endanger nearby areas of the environmental networks

In the statement no. 943/3 dated 12.08.2016. Institute for Protection of Cultural Monuments Kraljevo issued technical protection measures needed for development of project technical documentation. It states that there is no immovable cultural property of great importance and that it is necessary to notify Institute when the works are about to begin, as well as obligations of the Contractor/Investor during the project implementation.

Final Environmental Approval is obtained from the MoAEP (No. 011-00-1180/2016-16 dated September 5th, 2016) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (see Appendix 6). Consequently, the there is no need for producing the Environmental Impact Study of the subject section of the state road.

Relevant IFIs Policies and Statements

IFIs request that the following requirements be applied to all of the works:

- World Bank: Operational Policy OP 4.01, environmental impact assessment, which requires a partial Environmental Impact Study and a suitable EMP for environmental category B projects;
- EBRD: Environmental and Social Guidelines 2008;
- EIB: Statement on Ecological and Social Principles and Standards (2008).

EBRD and EIB request that the design be made in line with the laws of the Republic of Serbia and EU standards. However, the regulations of the Republic of Serbia do not

provide for an EMP to be made for this type of investment, while the World Bank guidelines require a partial Environmental Impact Assessment and EMP for each section.

3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

The subject road section (Uzice – Susica) belongs to Zlatibor Administrative District located in western part of Republic of Serbia, in the city of Uzice and municipality Cajetina.

The road section is parallel with the river Djetinja in length of about 5.5 km and cross it in one place (Lozionicki bridge) in Uzice. Riverbed of river Djetinja is mainly regulated in the downstream part. Upstream of Uzice, the quality of the water is at the level of the I class to II, from Uzice towards Pozega stream is exposed to intense pollution and quality of the water is the III or IV class. Class I is water which in natural state or after disinfection can be used or exploited for supplying the village with drinking water, the food industry and for the cultivation of edible fish (salmonids). Class II are waters that are suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which after normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water in the food industry. Class III is water that can be used or exploited for irrigation and industries except food industry, and class IV is water that can be used or exploited only after special treatment.

There are no protected natural or cultural properties in the vicinity of the subject road section. On the other side, part of the subject road section (from the entrance in Uzice from the Pozega direction, toward the location of Bela Zemlja), is located within the ecological network - an environmentally significant area - Djetinja Gorge. Anyhow the ecosystem of river Djetinja is not exposed to risk from existing road, since there is existing closed system for runoff water, which will be kept according to this rehabilitation design, and all other works which are proposed with this design will be conducted only in the existing road area and completely in accordance with Statement no 02-1262/3 dated 12.07.2016. issued by INP.

At km 148+760.00 km, about 3 km from Uzice is a stone quarry 'Surduk'. The stone from that quarry is used mainly for the construction company A.D. "Roads" Uzice and a few small private enterprises. Trucks which are using the subject road section, are often loaded over the permitted limit and have a negative impact on the state of the road pavement. In addition, it should be noted that the dust from the quarry reduces the visibility of the subject road section and thereby adversely affect the safety of traffic (Fig. 3).

Drainage of storm water in most of the subject road section is open system, and some elements of the system depend on the height and position of road alignment (embankment, cut, cut-out). For shorter sections there is existing closed drainage system (section near the bridge Lozionicki in Uzice on Djetinja and on the sections near the gas station). Open drainage system consists of concrete curbs and gutters along the pavement edge, retaining walls along the pavement edge, a shoulder, earthen ditches and road culverts. Runoff water, in places where it is possible, drains down the slope of the embankment, through transversal and longitudinal falls over the shoulders of the roadway. On the road section in the cut, drainage is also led down by transverse and longitudinal falls through curbs leading runoff water to road culverts and continues into the surrounding ground or directly to the recipient.

Along the subject road, next to the quarry within which is also the asphalt base, there are no other large industrial facilities that would lead to a cumulative effect on the environment. From small industrial facilities companies "Bel plast" Ltd. and "Zlatiborac" Ltd. could be highlighted.

For section Uzice – Bela Zemlja – Knezevici (Susica), a three-day continuous traffic counting was performed and the existing traffic load of 11,786 vehicles/day is collected.

In addition to these aforementioned 6 grade separated intersections along the road section, there is a large number of connections with the local municipal roads and streets as well as many individual approaches to private buildings and plots.

Bus stops on the subject road section are located outside of roadway but they should be regulated.

Figure 10. The deformation of the road

There are no protected natural areas along the subject road section that could be influenced by the works on heavy maintenance, and also there are no protected cultural areas. Subject road section is in scope of ecological network so importance of following of this document is even more emphasized. In the implementation of the project, there will be no new land acquisition, as defined by OP 4.12. since the road widening will be done on the public land.

On Figure 11 a damage to the drainage system of roadway is shown:

Figure 11. Damage to the drainage elements

Settlements

The beginning of the road section could be defined as urban road and mixed characteristics. From km 145+140 to km 146+615 road section passes the periphery of the city of Uzice and except for transit traffic is characterized by the local traffic movement.

After the exit from Uzice to the end of section, at the node loop Susica, road section can be characterized as a typical city bound with passage through the only major municipality Bela Zemlja.

City of Uzice according to the reliefs belongs to medium-mountain area (400 - 1500 m.a.s.l.) intersected by river valleys that are the basic directions of communication. Area of Uzice, according to the spatial plan, 666.615 km^2, with an average population density of 125 inhabitants/km^2. Out of a total population of 83,022 about 80% of the population lives in settlements emerged at very favorable terrain in the river valleys, on the gentle hillsides. The highest population density has city Uzice 2680 inhabitants/km^2. In settlements of scattered type, inhabitants ranges from 4 inhabitants./km^2 in the mountainous area, to 40 inhabitants/km^2 in the transition zone.

The territory of the municipality Cajetina belongs to a mountainous area (650 - 1100 m.a.s.l.) with developed hydrological network. The municipality Cajetina, according to the spatial plan of the municipality is about 647 km^2, with a total of 15928 inhabitants. Municipal Center is Cajetina, which with the settlement Zlatibor, represents the urban and

economic center. Rural settlements are an agricultural settlements scattered type, gravitating to the existing centres of the villages.

The significance of the aforementioned individual centres, the city of Uzice and the municipality of Cajetina with Zlatibor village is of great importance for the development of both territorial units. City of Uzice, as a place of crossing the state road and transversal traffic corridor, is an important link of the surrounding mountainous hinterland and the beginning of the west Moravian lowlands, while the area of Zlatibor including significantly greater area than the village, is a tourist center of national importance.

Watercourses

The largest watercourse in the vicinity of the section of the state road IB 23/28, Knezevici – Bela Zemlja -Uzice, L = 15.234km is river Djetinja, left tributary of the Western Morava, with length of 75 km. River Djetinja tributaries are Skrapez, Karacica, Susica, Krivaja, Bukavac, Derventa. Subject road route is parallel to the river Djetinja in length of about 5.5 km and intersects with it in one place (Lozionicki bridge) in Uzice. Riverbed of river Djetinja is mainly regulated in the downstream part. Upstream of Uzice, the quality of the water is at the level of the I class to II, from Uzice towards Pozega stream is exposed to intense pollution and quality of the water is the III or IV class. Class I is water which in natural state or after disinfection can be used or exploited for supplying the village with drinking water, the food industry and for the cultivation of edible fish (salmonids). Class II are waters that are suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which after normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water in the food industry. Class III is water that can be used or exploited for irrigation and industries except food industry, and class IV is water that can be used or exploited only after special treatment.

The biggest polluters of the river Djetinja are settlements Uzice, Sevojno and Pozega with the corresponding industry. In its upper stream river gets first pollution mainly organic nature.

At the road section in the cut water is drained through the transverse and longitudinal slopes, with concrete channels along the slopes leading atmospheric water to road culverts and further in the surrounding terrain.

In all culverts, smaller damages are mostly visible in the form of cracks and structure damages of the mouth and the inlet.

Most of the culverts are buried by applied material, natural or artificial means. Also, the mouth and the inlet are covered by dense vegetation (Fig 12)

It is necessary to carry out thorough cleaning, in order to smoothly carry out the functions of dewatering and determine the precise extent of remediation.

Figure 12: Example of reducing bandwidth of the culvert and need for rehabilitation

For the most parts of the road section storm water drains through the shoulder or down the embankment of the road through culvert into the surrounding terrain, which is at a relatively great distance from the natural recipient (Fig 13).

Figure 13: Example of the outflow of the road culvert in the retaining wall to the remote recipient

In the spring, due to the melting of snow in the mountain area, which surrounds the riverbed of river Djetinja, there is often an increased water level. In rainy periods throughout the year it happens the same. The subject road section runs parallel to the river Djetinja in length of about 5.5 km and cuts the flow of rivers Grabovica, Krivaja, Susica and nameless creeks. The pass of road over the rivers is performed by tubular culverts and omissions, and bridges. On the road section there are the following bridges:
- bridge over river Djetinja (Lozionicki)
- bridge over river Krivaja
- bridge over river Grabovica
- bridge over river Susica 1
- bridge over river Susica 2
- 2 bridges over tributary of Susica (loop Susica)
- 2 bridges over nameless stream.

Drainage from bridges (Susica 1 and Susica 2, river Grabovica, river Krivaja) is resolved with the closed system (piping, drains), as far as the sections of the bridge, and with the

open system (gutters and concrete channels along the slopes), for the sections that gravitate toward the bridge. Water from both of these systems, and it is the water from the carriageway, is purified before inflow into the watercourse.

Atmospheric water from bridges and grade separated crossings (loop Susica) and which flaw to existing streams is lead through an open system of channelling (gutters and concrete channels along the slopes). Before discharging into the stream, water that is collected in this way is also purified in the appropriate separators of fats and oils.

Figure 14: One of the bridges along the subject road section

Due to the configuration of the terrain, and the creation of torrential flows, regular cleaning and maintenance of drainage systems is required.

Pollution of the river is possible if there is an environmental accident during the road operational phase. Then the procedures setting out actions to be conducted in accident situations (defined by Ministry of the Interior and in accordance with the Law on Water) shall be applied.

Air

There are no significant additional sources of air pollution within the planned road section Knezevici – Bela Zemlja – Uzice, except existing quarry 'Surduk'. No information on the measured air pollution values on the subject section was available.

On the basis of traffic counting performed in recent years (information available on PERS website), no increase in the traffic volume is anticipated after heavy maintenance. In the

road rehabilitation and operational phase, no increase in the air pollutants concentration is expected.

Noise

Based on the current and expected traffic loading during and after the works, no increase in the existing noise level is expected.

4. SUMMARY OF ENVIRONMENTAL IMPACTS

During the road rehabilitation and operational phase, there are certain environmental impacts listed below, together with the intensity of their actions.

INFLUENCE	SIGNIFICANCE	COMMENT
Impacts on land use and settlements	low	During the realization of the project, there will be no expropriation of land
Ground and surface water	low	Due to low amount of water that can come to the recipient by drainage, the consequential impact is minimal to negligible
Air quality	low	Temporary impact
Flora and fauna (protected areas and species)	low	Under the terms of the Institute for Nature Conservation of Serbia
Monuments	low	Under the terms of the Institute for Protection of Cultural Monuments of Serbia
Noise	low	Temporary impact
Access/crossing points of the main road and local roads	low	The rehabilitation and widening works will not affect existing crossing points. Without impact.
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	Moderate/minor	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only

Most of the impacts on the environment are temporary and stops after the completion of works on heavy maintenance on the section Knezevici – Bela Zemlja - Uzice. The project is classified as environmental category B due to a small impact on the environment. After completion of the works, increase of road traffic is not anticipated, and potential increase of vehicle speed will be regulated through a safety design, by applying active and passive speed control measures.

The road maintenance works will be performed entirely on public land, without any collision with private properties. In respect with the provisions of WB OP 4.12 (Involuntary Resettlement), Design does not require any land acquisition, resettlement or long-term disturbance of human activities.

EMP relates to the road rehabilitation phase and is part of the relevant agreement for implementation and future commitment of the Contractor. The following problems may occur during the rehabilitation works: disturbance in the traffic and movement of residents from local settlements, decreased road safety, damages on access roads, noise pollution, dust emission, inefficient waste disposal, air pollution, impact on the soil, water, flora and fauna. The works outside the site area, such as the works in a quarry, asphalt plant and borrow-pits may have local negative impact and must therefore be managed properly.

Overview of Key Impacts

EMP focuses more on the heavy maintenance phase, while activities on the regular maintenance will not be detailed in this EMP, but will only be presented in order to have an overall view of the situation.

Noise and Air Pollution in Residential Areas

During the rehabilitation works, use of construction machinery and equipment with exhaust fumes leads to an increase in the concentration of nitrogen oxide and sulphor oxide in the air. Local residents will be temporarily impacted by non-significant air and noise pollution and dust emission.

Due to the existence of quarry 'Surduk' near the subject road section, it is important not to increase environmental impacts during the works on road rehabilitation, which are an inevitable consequence of the works in the existing quarry, as foreseen in the mitigation plan within this document.

Possible water contamination

Water pollution may occur on site, on the locations where the equipment, vehicles and machinery are washed and also on the parking area. The contaminated water shall be filtered through a gravity oil-water separator. If there is a spillage on the road, especially near the river Djetinja, the Contractor shall use absorbent materials and remove the contaminated layer of soil, which is then transported to a location defined in the Law on Water.

Potential Cumulative Impacts

If any industrial facilities are built in the vicinity of the section in the future, this may have cumulative negative effects on the environment. Whether this will be the case depends also on the nature of industrial facilities and if they cause pollution themselves. If the EMP is properly implemented, all negative effects on the people and the environment resulting from cumulative impacts will be reduced (stone quarry Surduk, Bel plast Ltd., Zlatiborac Ltd.).

Other Impacts:

- Social impacts: in the construction phase, these include all social-economic conflicts, including health and safety. All temporary locations used for activities that have short-term impact are included, such as quarries and borrow-pits, locations for stockpiling surplus soil and asphalt plants are included in this. Impact of these types of activities is expected to cease when the Project is ended and the Contractor leaves the subject location;

- ❖Pollution: during the heavy maintenance works, a steady, though not significant emission of pollutants is expected. These include: air pollution, water pollution, soil pollution, noise and vibrations;
- ❖Solid waste: activities on the heavy road maintenance are expected to generate a certain amount of solid waste, which is collected on site and transported onto a landfill, outside the site zone.

5. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance on the section Knezevici – Bela Zemlja - Uzice will be insignificant and reversible. Mitigation measures provided in the EMP, relating to the design, road rehabilitation and operational phase, must be carried out appropriately. EMP consists of the Mitigation Plan and Monitoring Plan and is based on the types of environmental impact, their scope and duration. PERS manages the design, supervision and the contractor in the implementation of EMP

A. MITIGATION PLAN

The Environmental Mitigation Plan defines the environmental impacts and measures to be implemented during the design, construction and operational phase (Appendix 2). The Plan conforms to the conditions received from the Institute for Nature Conservation and Serbian Institute for Protection of Cultural Monuments and valid laws. It states the locations, time frame, responsibility for its implementation and supervision. Costs of mitigation measures are included in the cost of the works. Contractor shall implement the environmental mitigation measures, include them in the total costs, and execute the works in accordance with national laws, EU standards and creditor's requests.

Site Organization Plan

Contractor shall carry out and follow the Site Organisation Plan. Conditions issued by INP shall be included in the Site Organisation Plan. Location of the facilities (warehouses, workshops, asphalt and concrete plant etc.) shall be approved by a Resident Engineer. The following conditions have to be met when selecting the location and organising the site:

- ❖Temporary locations for storing the construction and other material and equipment must be outside the area with high vegetation and river flood areas and limited only to the duration of the works;
- ❖Temporary or permanent locations must be provided (the existing organised communal facilities/ landfills) for disposal and tipping of debris and other waste material in any form and communal waste produced during the works. Waste disposal/ dumping into the river Djetinja littoral zone shall be prohibited;
- ❖After the completion of the works, all areas that have been degraded in any way by road rehabilitation works must be rehabilitated as soon as possible;
- ❖During the works, the planned road sections and corridors around it must be followed, so that the earthworks and machinery do not affect the surrounding areas. Also, the existing road network must be used, without building new roads, to prevent habitat fragmentation;
- ❖During the road works directly along the river Djetinja, river bed, river bank and littoral vegetation must be preserved as much as possible;

- ❖Vehicle and machinery servicing on the road section shall be prohibited. In the event of a road traffic accident resulting in oil or service fluids spillage, the road area must be cleaned and reinstated;
- ❖On the parts where the section is located in a populated area the works must be performed only during the day, to minimise the impact of noise on local residents;
- ❖Guardrails and pedestrian crossings must be placed where necessary;
- ❖Locations for containers for temporary tipping of communal waste produced during the works must be determined;
- ❖The area for Contractor's facilities must be of the smallest possible size, to avoid unnecessary removal of vegetation. All facilities must be fenced;
- ❖Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator;
- ❖Only trained workers, who can remove any consequences of accidental spillage, may handle the fuel;
- ❖Waste oil, oil filters and fuel must be stored on safe locations.
- ❖Sanitary wastewater and polluted water must be treated before the water is discharged into the surface water flow system, in line with the Law on Water (RS Official Gazette of RS, No 30/10, 93/12);
- ❖Contractor must provide safety measures to prevent soil erosion and use the methods to decrease the stormwater runoff that carries eroded material;
- ❖Excavations and machinery works must be avoided when the soil is damp;
- ❖Upon the completion of works, machinery, construction material, containers and all other equipment must be removed in due time;
- ❖When the site is ready to be closed, all contaminated soil must be excavated and replaced with a new layer of soil;
- ❖Upon the completion of works, the soil must be cultivated on all the critical locations, using suitable plants which are biologically adapted to the subject climatic conditions, resistant to air pollution and visually fitting for the surrounding area. Invasive species, such as the black locust, Indigo bush, ash leaf maple, ailanthus, American ash and species that cause allergic reactions, such as poplar, should be avoided.

PERS is responsible for checking, via his Supervision Consultant, if the Site Organisation Plan includes the requirements from EMP and Safety Labour Management Plan (SLMP).

Environmental Protection Plan

Based on the EMP, the Contractor shall prepare his Environmental Protection Plan and submit it to PERS for approval, and by the financier. Contractor shell be obligated to follow and to implement the plan with continuous supervision of plan implementation by consultant for supervision of road rehabilitation works at the site.

The contractor is required to have a qualified and experienced person in the team, which will be responsible for coherence between the works, the environment and the Environmental Management Plan. PE "Roads of Serbia" will independently monitor the works, and if any irregularity is noticed, it will be transmitted to continuously present Supervision, and The Contractor will be requested to rectify such irregularities.

Environmental Protection Plan consists of the following:

1. *Site Management Plan* – defines the procedures for setting up and functioning of a site with a view to preserving the local community and natural resources.
2. *Site Organization Plan* – description and arrangement of areas, with maintenance equipment and oil and lubricant storage facilities, including the distance from water areas;
3. *Oil and Fuel Storage Management Plan* – procedures for storing, transporting and using oil and fuel, refuelling the facilities and machines, procedures for decreasing the risk of water and soil pollution. Vehicles used for refuelling will have the suitable equipment used for cleaning fuel spills. All classes of spills will be reported in line with the Plan;
4. *Waste Management Plan* – contains details of temporary waste storage, waste transport and treatment before its final disposal or recycling. Licensed facilities must be used for storing solid and liquid waste and the waste leaving the site must be traceable, in accordance with the jurisdictions. As part of the Plan, Contractor shall provide chain-of-responsibility forms for the waste that leaves the site. Therefore, waste controller shall keep one copy of the form, and the driver shall have a copy, to make sure that all the listed waste is brought to the landfill. Contractor shall keep all records for audit purposes.
5. *Sewerage and Waste Water Management Plan*
6. *Soil Management Plan* – steps to be taken to minimize the effect of erosion, measures to reduce topsoil depletion, transport roads and landfills;
7. *Noise* – all the equipment must have a license and must be approved in accordance with the EU standards. This applies to all machinery, vehicles and sites where noise and vibrations affect the noise-sensitive receptors. In accordance with the Law on Protection against Environmental Noise (RS Official Gazette No 36/09, 88/10), Contractor is responsible for ensuring the noise and vibrations do not affect the local community. Contractor shall limit his works to a period from 07:00 am to 07:00 pm.
8. *Dust Emission Reduction Plan* – during the works, when dust may form, Contractor shall monitor the conditions on site and application of measures to control dust emissions, which include reduced traffic during road rehabilitation works and spraying water on the exposed surfaces;
9. *Material Excavation and Extraction Location Plan* – defines the reparation measures to be implemented for the areas of borrow-pits and access roads after the project is finished;
10. *Management Plan for Works on the River* – includes plans and procedures for water habitat and fish preservation during the works.

11. *Emergency Response Plan* – sets out the procedures for reacting in case of emergency or accidents of a bigger or smaller scale, to protect the people, property and natural resources. Equipment to be brought on site to minimize the effects of the spillage of polluting substances must be included in the Plan.
12. *Recultivation Plan* – cleaning and recultivation of the site and removal of Contractor's facilities. Contractor is responsible for clearing the site. This includes the removal of all waste material, machinery and contaminated soil. In line with the Law on Waste Management (RS Official Gazette No 36/09, 88/10, 14/10), Contractor shall develop a plan for handover, selling or removal of all vehicles and machinery, to remove them from site. All site and work areas will be rehabilitated, in order to be reinstated as much as possible. This includes stabilization and landscaping of all sites. In line with the Law on Environmental Protection (RS Official Gazette No 135/04, 36/09, 72/09,43/11, 14/16), after the works are completed, waste must not remain on site. If waste is not removed by the Contractor, PERS is entitled to withhold payment and organize the cleaning of the area. The costs of the cleaning and the administrative costs will be included in the final payment.
13. *Plan of Environmental Complaints* – means used by the local residents and third parties affected by the project to call attention to environmental issues and file a complaint, defining how and to whom these should be addressed (Appendix, Grievance Mechanism);

Safety

Contractor is to identify potential risks before the commencement of works. The emergency response provisions should include a Site Safety Plan, which includes a proposal for a contact person available in the event of an accident. Site Safety Plan is submitted to the Project Supervision Consultant for approval.

- ❖Contractor shall ensure that drugs and alcohol are not used on site;
- ❖Contractor is to include in his Site Safety Plan a provision for safe working environment and safety measures and personal protective equipment (PPE) for all workers, including gloves, hard hats, goggles, ear protection and safety footwear;
- ❖Site Safety Plan is to include a provision for first aid to be administered on site and a trained person must be engaged in line with the Law on Occupational Health and Safety (RS Official Gazette No 101/05, 91/15);
- ❖Contractor shall provide to his workers potable water supply, toilets and water supply for washing;
- ❖Safety Labour Management Plan is required to ensure health and safety provisions during the works on heavy maintenance;
- ❖Contractor shall perform all project activities following the SLMP and all Serbian laws and by-laws regarding health and safety;

PERS and the Contractor are jointly responsible for reporting on and investigating any incidents.

Due to the increased number of vehicles on the roads through populated places, safety of local residents must be considered. Contractor shall ensure that the traffic passing through populated places is managed safely. Contractor shall provide the following:

- ❖Safe maintenance of all trucks and equipment;

- ❖Appropriate training and responsible behaviour of all drivers and machine operators (prescribed in the Contractor's Site Safety Plan);
- ❖Ensuring that all the truck load which may create dust emissions is covered and secured (e.g. excavated soil and sand);
- ❖Safety and instant removal from site of the drivers who disregard any of the conditions regarding the safety of the local community;
- ❖Obeying speed limits;

Before the works start, Contractor shall submit all the above listed plans to PERS Sector for Investments for their approval. After the works are completed Contractor shall reinstate the location into its original condition.

Operational Phase

In the road operational phase, special attention must be paid to safety of pedestrians, by using measures for traffic calming in the vicinity of schools and populated areas, improving road signs and markings, keeping a record of traffic accidents that are recurring on some locations, and marking them as black spots.

Regular road maintenance consists of the following: grass mowing, cleaning the drainage system, road patching and various repairs and regular checks and maintenance of drainage structures. Seasonal maintenance, regular maintenance of safety characteristics and road signs shall be performed as needed. Primary road maintenance, which includes asphalting and major repairs, is usually planned for a period of a few years.

B. MONITORING PLAN

Basic components of the Monitoring Plan are:

- ❖Environmental issue to be monitored and means of verification;
- ❖Specific areas, locations and parameters to be monitored;
- ❖Valid standards and criteria;
- ❖Monitoring noise levels near populated areas;
- ❖Monitoring material supply (verification of valid licenses);
- ❖Duration, frequency and evaluation of monitoring costs;
- ❖Institutional responsibility for monitoring and supervision.

A monitoring control list is prepared on the basis of EMP and Monitoring Plan (Appendix 3). The list is used by the supervision engineer on site. Signed control lists are submitted to PERS, which is responsible for compliance monitoring and reporting. PERS will have a Database of grievances, listing the information on complaints received from local communities and other interested parties. This includes: type of grievance, place, time, actions to be taken to resolve the grievance and the final outcome.

C. INSTITUTIONAL IMPLEMENTATION AND REPORTING ARRANGEMENTS

Project Implementation

PERS is the institution responsible for implementing the project in accordance with the EMP and Monitoring Plan. Day-to-day project implementation and monitoring its compliance is the responsibility of the Project Supervision Consultant.

Before the start of the works on this section, PERS will submit to the Bank for their approval a specific EMP. Contractor will provide the results of "zero monitoring" prior to the start of the works, during the mobilization stage. Project Proponent shall do the following to ensure that the Contractor implements the proposed mitigation measures in the construction phase:

- ❖Contractor shall prepare Environmental Protection Plan and take all steps to mitigate ecological effects as stated in the Environmental Mitigation Plan (Appendix 2);
- ❖Contractor should not be compensated for the costs of the required mitigation measures and monitoring activities in the form of a specific item in the total price, except for the analysis of the quality of water and noise measuring. Contractor will be deemed to have included these costs in the total price. The actual costs of the analysis of water quality and noise measuring will be paid to the Contractor as part of a specific item in the total price. Failure to follow the requested environmental mitigation measures on the Contractor's part will result in penalizing the Contractor in the form of negative points. Negative points have been established as a measure to stimulate the Contractor to perform his obligations in an organized and timely manner and perform his duty with a high degree of excellence. Negative points consist of two elements – numerical and financial. Each negative point is connected to a sum, representing a permanent reduction in payment for the determined non-conformances in contractual obligations. The number of negative points earned has a cumulative effect. Should the Contractor receive more than a certain number of negative points stated in the Contract, he will not be allowed to participate in PERS tenders in the next two years. Also, if the Contractor is awarded a certain number of negative points, the employer has the right to break the contract. Monetary value of each negative point and the deadlines for other possible actions by the employer must be clearly stated in the contract. Explanation for the application of these two measures – fees for specific costs and penalties for non-compliance should provide the implementation of all the requested environmental mitigation measures and monitoring activities.
- ❖Contractor must be explicitly requested to employ an environmental expert. Contractor will be responsible for implementing environmental mitigation measures during road rehabilitation works and should employ an environmental specialist who will supervise the implementation of Contractor's environmental responsibilities. This person will coordinate the work of the Contractor, PERS and the relevant ministry and will deal with every complaint received during the project implementation. In the course of the project, PERS will monitor if the Contractor complies with EMP provisions. Project Supervision Consultant is advised to employ an environmental expert (with knowledge of civil engineering and environmental management), to assist in environmental monitoring.

When the project is completed, PERS will be responsible for the operation and maintenance of roads. Routine and random monitoring will be undertaken as scheduled in the Monitoring Plan.

PERS shall also be responsible for the following:

- ❖Implementation of the requests for environmental protection provided by: State environmental authorities, IFIs and other institutions, Law on Environmental Protection (RS Official Gazette No 135/04, 36/09, 72/09, 43/11, 14/16);
- ❖Implementation of the requests for environmental protection through Contractor's specifications;
- ❖Project supervision via consulting services for supervision and project implementation;
- ❖Environmental monitoring supervision via consulting services for environmental monitoring;
- ❖Preparation of final environmental reports.

Before the start of the road rehabilitation works, the Contractor will provide a proposal for environmental protection, including the safety of persons involved with the works, as part of the EMP. The proposal will be reviewed by PERS for acceptance. With respect to that, particular emphasis must be placed on:

- ❖Taking all reasonable steps to protect the environment during the commencement and completion of site works, so as to avoid damage of property or disturbance to the people, resulting from the existence of a site;
- ❖Maintaining safe conditions for all persons entitled to be on site;
- ❖Providing lighting, security guard, fences, warning signs and traffic controls, aiming to protect the works and other property, but also public safety and interest.

MoAEP will have the authority to stop the works directly if the performance is not in line with the environmental standards and regulations. The inspection will then inform PERS about the suspension. The Design will be amended subsequently with public disclosure feedback.

The Contractor Reporting Arrangements

1. Contractor to PERS

Contractor will prepare his compliance reports in respect to EMP and Contractor's Project Implementation Plan as quarterly progress reports and will submit them to PERS in English and Serbian, both in hard copy and in electronic copy.

Contractor will provide quarterly reports to PERS which document environmental mitigation measures, together with the prescribed monitoring activities performed in the reporting period. Contractor will take due care of the quality of the environment, in accordance with Mitigation Plan and Monitoring Plan, which form an integral part of the EMP and will provide quarterly reports to PERS.

In the event of any accidents or environmental threats, there will be immediate reporting about these events. Contractor shall inform the project manager and local authorities immediately after the accident. If the project manager is not available, Contractor shall

inform PERS about the accident (phone number +381113040701 or by e-mail: office@putevi-srbije.rs).

Contractor shall monitor the quality of the environment in line with the Monitoring Plan which is an integral part of the EMP and will report to PERS on quarterly basis. These reports will include a list and details of all the activities performed on the location and the results of on-site investigation, in addition to the recommendations for future site activities and safeguard measures.

2. Project Supervisor Consultant to PERS

Conclusions of regular monitoring activities, including the activities stated in the Monitoring Plan, performed by the Contractor, will be included in the quarterly progress report.

In the case of an accident or environmental threat, these events must be reported immediately.

3. PERS – Ministry of Transport, World Bank, EBRD and EIB

Annual Health and Safety and Environmental Report, including the indicators for monitoring and reporting on the implementation of the conditions established in the EMP will be prepared by PERS and submitted to IFIs for their consideration. IFIs will review the reports and verify their content in periodic site visits. PERS will provide annual reports to the Ministry of Transport and IFIs regarding the status of the Contractor's implementation of mitigation measures, additional mitigation measures to be realized, cases of non-compliance, complaints received form the local residents, NGOs etc. and the manner in which they were addressed.

In the event of any lethal or major incidents on site, PERS will immediately report those to the Bank that finances the section of the road.

6. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

As requested by IFI safeguard policy, public consultations were held in the EMP preparation. EMP and other project-related information were disclosed to the public and made available to the local community.

PERS office	Vlajkoviceva St 19 a, Belgrade, Contact person: Igor Radovic, 011 3206811
Local community centres	City Uzice, Municipality Cajetina
Web site - PERS	www.putevi-srbije.rs

A detailed report on the public consultation process is shown in Appendix 5 to this document and contains a list of participants identified, which will be updated accordingly.

Consultation with users will be made during the road rehabilitation stage, while all the records of environmental and social issues, complaints received during consultation, site visits, informal discussions, formal reports etc. will be monitored, recorded and kept in PERS Project office.

Before the start of the works, PERS will provide information using the following:

- Newspaper articles in one of the national and one of the local media,
- Posters on the main notice board in all local community offices of communities potentially at risk,
- Radio announcements on traffic diversions,
- Providing contact with the person responsible and nominated for working with the local communities.

A grievance mechanism will be implemented to ensure that the complaints from local communities are appropriately addressed, corrective measures taken and complainants informed about the outcome. This applies to the complaints of all interested parties. The complaint form is shown in the Appendix, while hard copies will be available in local community centres.

The Report on Public Consultation is presented in Appendix 5 to this EMP.

7. REFERENCES

- Environmental Assessment No 25, Environmental Management Plans, World Bank Environment Department, January 1999.
- Roads and the Environment: A Handbook, World Bank Environment Department.
- EIB, Environmental and Social Practices Handbook, Environmental and Social Office, version 2 24/02/2010.
- EBRD, Environmental and Social Policy 2008.
- EIB, Environmental and Social Principles and Standards (2008)
- EMP for the rehabilitation of roads, bridges and tunnels, as part of the World Bank project, Road Management and Traffic Safety, Republika Srpska, Roads Directorate, Banja Luka, 2001.
- Environmental Assessment Report and EMP for the Serbian Transport Rehabilitation Project, report ref: E866, project title: YF – Transport Rehabilitation Project – Br. P075207, document date 30/11/2003

APPENDICES

APPENDIX 1 MITIGATION PLAN

MITIGATION PLAN

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
Pre-construction	**Main Design**			
	Following the environmental protection procedure	Conditions from the Institute for Nature Conservation and Institute for Protection of Cultural Monuments Kraljevo are obtained to avoid environmental risks	PERS And Main Design Designer- Consultant	PERS
	Site location and organisation will be approved by PERS and selected so as to:	- be outside of the river Djetinja flood area - have no impact on the environment and the local community (noise, dust, vibrations etc.) - be outside the high vegetation area - minimise the size of the facilities to minimise the unnecessary removal of vegetation - have the sanitary waste water treated before the water is discharged into the surface water system, in accordance with the Law on Water (RS Official Gazette No 30/10, 93/12) - properly drain the locations. Paved areas, including parking areas, workshops and fuel storages must be drained toward an oil-water separator - whenever possible, limit the area to be cleared and avoid topsoil degradation - the material removed will be collected, disposed and/ or re-used as needed - prevent soil erosion on site - contractor is responsible for implementing the measures for erosion protection - contractor shall limit the scope of the excavations to	PERS Contractor	PERS

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		mitigate soil erosion - contractor shall implement soil conservation method in sensitive areas to prevent or minimize the storm water runoff, which causes material erosion - contractor is to avoid excavation and machine operations in damp site conditions.		
	Selection of the location for temporary settlement construction, in the vicinity of or within an existing settlement Influence on public health and sociological circumstances	- minimum distance must be kept (buffer zone) between the site and the nearest populated area - influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects -contractor's EMP defines health and safety and environmental measures - independent water and electricity supply, in addition to a medical service station on site must be planned for.	Contractor	PERS
	Safety of pedestrians and suitable crossings	- a suitable pedestrian crossing must be provided, equipped with kerb ramps that allow the use of wheelchairs, trolleys, bicycles and prams.	Main Design Designer- Consultant	Main Design Technical Control PERS
	Stakeholder engagement	Details of the proposed road section, access points and safety features will be disclosed at the location of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered will be recorded in the Main Design.	PERS and Main Design Designer- Consultant	Main Design Technical Control PERS
Construction	**Management plans**			

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	Contractor shall prepare the implementation of the Plans described in the EMP, to ensure that the legislation and Creditor's requirements have been met: - Site Organization Plan - Sewerage and Wastewater Management Plan - Soil Management Plan - Dust Management Plan - A plan indicating the location of borrow-pits, and measures for recultivation of borrow-pits and access roads after the project is completed - Waste and Wastewater Management Plan, in line with the Law on Waste Management (RS Official Gazette No 36/09, 88/10, 14/16) - Oil and Fuel Storage Management Plan - In-river Works Management Plan - Emergency Response Plan - Complaints Procedure - Safety and Hazard Assessment - Safety and Labour Management Plan			
Construction	**Site Induction**			
	All workers and visitors to the site shall be given a health and safety induction and instructed on the need to use PPE.			
Construction	**Material Supply**			
	asphalt plant: dust, fumes, health and safety of workers, ecosystem disturbance	- use the existing asphalt plants; - requirement for official approval or valid operating license	asphalt plant	asphalt plant
	quarry: dust, health and safety of workers, ecosystem disturbance	- use the existing quarries; - requirement for official approval or valid operating license	quarry	quarry

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	sand and gravel borrow-pits: river bed disturbance, quality of water, ecosystem disturbance	- use the existing borrow pits or buy material from licensed separation facilities; - requirement for official approval or valid operating license	contractor or gravel and sand separation facility	contractor or gravel and sand separation facility
Construction	**Material Transport**			
	asphalt: dust, fumes	- all trucks need to be covered - contractor's machinery to be carefully selected	truck operator	truck operator
	stone: dust	wet truck load	truck operator	truck operator
	sand and gravel: dust	wet truck load	truck operator	truck operator
	management of traffic noise, exhaust fumes and road congestion	- haul material at off-peak traffic hours (9-14h) - use alternative roads to avoid main roads - proper road signs and markings of the site, to minimize chances of a wrong turn	transport manager truck operator	transport manager truck operator
	Possibility of encountering an archaeological site	if an archaeological site is encountered, contractor shall immediately suspend the works and inform IPCM and PERS.	contractor	contractor's supervision
Construction	**Construction Site**			
	negative impact of noise on the workers and local community	- limit the activities to daylight working hours - use equipment with noise mufflers, licensed and approved in accordance with the EU standards - use noise barriers for the works that produce noise for more than one day on the same location.	contractor	contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		- locate noise-making equipment as far away as possible form residential buildings and other noise-sensitive receptors.		
	dust	- spray the problematic areas on site with water - cover the material stored and limit vehicle speed - implement the Dust Management Plan: measures for avoiding dust emission, including hoarding, spraying the problematic areas, accesses, material and stockpiles during the loading and unloading activities, covering the trucks that carry dusty material, washing the trucks etc.	contractor	contractor
	vibrations	- limit activities to daylight working hours - if there is material damage to the local houses, buildings and infrastructure (access roads included) caused by the works, the damage will be compensated for and will have to be rectified - locate the equipment for earth works as far away as possible form vibration-sensitive receptors	contractor	contractor
	traffic disruption during construction activities	- Traffic Management Plan with appropriate measures for traffic diversions that can be easily noted and followed, including traffic police assistance - Traffic Management Plan which will define a speed limit for the construction vehicles and organise traffic in such a way that populated areas are avoided as much as possible - During the works, maximum use of the existing road network. Avoid the construction of new temporary roads, which would increase the habitat fragmentation - inform the local community about the works planned	contractor	contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	reduced access to roadside activities	provide an alternative access to roadside activities at all times	contractor	contractor
	safety of vehicles and pedestrians when / where there are no construction activities	lighting and well-defined safety signs and protection measures	contractor	contractor
	soil and water pollution from improper material storage, management and use	- organize and cover material storage areas - isolate the concrete, asphalt and other from the watercourse by using sealed formwork or covers -isolate the areas for washing the concrete or asphalt trucks and other equipment from the watercourse by choosing areas for washing which are not freely drained directly or indirectly into the watercourse - organize the site so as to minimize the risk of generating sediments and accumulating waste water, which could cause pollution of the surrounding soil and water - Soil Management Plan to provide controlled removal, storage and re-use of topsoil - use local controlled measures to prevent sediment flowing into surface water and drainage channels. Some of the measures include physical obstacles such as fences, mulch barriers, geotextile, rock groynes, and sediment basins. - to prevent sediment flowing into surface water, slope of the soil and protection form wind erosion must also be considered, by installing fences, covers etc. - any deposits of excess soil, stone etc. may only be temporary, until the works have been completed. After that, excess soil, stone and other waste material must be removed and complete rehabilitation of all areas degraded by the works must be done.	contractor	contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	soil and water pollution from improper waste material disposal	- dispose waste material at a location protected from washing out, on a marked location, if not on site, then on an authorized landfill - dispose waste in accordance with best international practice (IFC, EHS – general guidelines). - apply additional measures for storing hazardous waste (secondary containment, limiting the access, providing PPE etc.) to prevent negative effects on the workers, local community or environment - nominate a person responsible for waste collection and storage (hazardous and non-hazardous)	contractor	contractor
	potential contamination of soil and water from improper maintenance and fuelling of equipment	apply the best engineering practice in handling and safe storage of lubricants, fuel and solvents, ensure proper loading of fuel and equipment maintenance, collect all waste and dispose it on authorised recycling locations	contractor	contractor
	soil and water pollution from improper waste material disposal	- transport the waste in marked vehicles designed for waste transport, to minimize the risk of releasing hazardous and non-hazardous substances - train the drivers in handling and disposal of the load they transport and transport documents describing the nature of the load (waste) and its degree of hazard	contractor	contractor
	safety of workers	- provide workers with safety instructions and PPE - provide a safe alternative traffic flow	contractor	contractor
	areas temporarily occupied	- undertake re-vegetation with native species and monitor the effects (avoid invasive species those that cause allergic reactions) -where initial plantings were not successful, carry out re-planting	contractor	contractor
Operation	**Maintenance**			

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	negative impact of noise on local residents and workers	- limit activities to daylight working hours, or as agreed with the authorities - use the equipment with noise mufflers installed	maintenance contractor	maintenance contractor
	potential air, water and soil pollution: dust, exhaust fumes, spilt fuel, oil and lubricants	- apply the best engineering practice in handling and safe storage of lubricants, fuel and oil - ensure proper loading of fuel and maintenance of equipment - collect and dispose all waste in accordance with the Law on Waste Disposal - properly organize and cover the areas for material storage - isolate concrete and asphalt works from the watercourse by using sealed formwork - isolate the area for washing trucks for the transport of concrete and asphalt and all other equipment from the watercourse, by choosing the area for washing where the water is not freely drained directly or indirectly into the river Djetinja - dispose the waste material to suitable locations protected from washing out	maintenance contractor	maintenance contractor
	vibrations	limit activities to daylight working hours, or as agreed with the authorities	maintenance contractor	maintenance contractor
	safety of workers	- provide workers with safety instructions and PPE - organise safe traffic bypass	maintenance contractor	maintenance contractor
	increased vehicle speed	install speed limit signs	maintenance contractor	maintenance contractor
	erosion, rockfall, hazardous situation	install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal or	maintenance contractor	maintenance contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		pedestrian crossing, school, slow traffic zone), reflective markings indicating steep slopes or convex mirrors in curves where there is a lack of visibility, warning signs on locations considered appropriate in line with good engineering practice or as agreed with the authorities		

APPENDIX 2 MONITORING PLAN

MONITORING PLAN

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility Implementation
Construction	**Material supply**					
asphalt plant	possession of an official approval or valid (operating) license	asphalt plant	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the plant with the health and safety and environmental requirements	plant manager
quarry	possession of an official approval or valid (operating) license	quarry	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the quarry with the health and safety and environmental requirements	quarry manager
sand and gravel borrow-pit	possession of an official approval or valid (operating) license	sand and gravel borrow-pit or separation facility	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the borrow-pit with the health and safety and environmental requirements	borrow-pit or separation facility manager
Construction	**Material transport**					
asphalt	truck load covered	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
stone	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
sand and gravel	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
traffic management	hours and routes selected	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
Construction	**Construction site**					
negative effects of noise on the workers and local residents	noise levels	site; nearest homes in the local settlement	sound meter with suitable software	-once at the beginning of the project and later quarterly -after receiving a complaint -if the monitoring results are not satisfactory, monitoring to be done on monthly basis	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	contractor (monitoring)

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
dust	air pollution (suspended solids)	on and near the site	inspection and visual observation	unannounced inspections during material delivery and road rehabilitation	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision (monitoring)
vibrations	limited time of activities	site	supervision	unannounced inspections during road rehabilitation works and after a complaint is received	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
disruptions to traffic during road rehabilitation works	existence of a Traffic Management Plan and traffic pattern	on and near the site	inspection and visual observation	prior to the start of the works; once a week in peak and non-peak hours	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
reduced access to roadside activities	alternative access provided	site	supervision	random checks at least once a week during the road rehabilitation works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
safety of vehicles and pedestrians where there are no construction activities	visibility and suitability	on and near the site	observation	random checks at least once a week in the evening	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
water and soil pollution resulting from improper material storage, management and use	soil and water quality (suspended solids, oils, Ph values, conductivity)	the river Djetinja	unannounced sampling, analysis in a certified laboratory possessing the required equipment	at least three times for the entire Project duration, monitoring to be done before the construction (or at a reference point upstream of the site during) and after the rehabilitation works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor (monitoring)
safety of workers	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	supervision contractor
Operation	**Maintenance**					
negative effect of noise on the workers and local residents	noise levels	site; nearest homes	sound meter with suitable software	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
vibrations	limited time of activities	site	supervision	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
safety of workers	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
Operation	**Road safety**					
increased vehicle speed	condition of traffic signs; vehicle speed	road section included in the design	visual observation; radar speed detectors	during the maintenance activities; unannounced	ensure a safe and economical traffic flow	maintenance contractor; traffic police
erosion, rockfall and hazardous situations	condition of traffic signs	road section included in the design	visual observation	during the maintenance activities	ensure a safe and economical traffic flow	maintenance contractor, monitoring

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				

[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

Please provide the name and contact details for your environmental manager:				
Parameter[2]	**Value[3]**	**Unit**	**Compliance Status[4]**	**Comments[5]**
HFCs				
PFCs				
SF_6				
[Other]				
Other Parameters				
Noise				
[Other]				
Solid Waste				
Please provide details of the types and amounts of solid wastes generated by the project. Indicate where wastes are classified as hazardous. Indicate the final re-use, recycle or disposal method for each waste type.				

4. Resource Usage and Product Output

Parameter	Value	Measurement Unit	Comments[6]
Fuels used			
Oil			
Gas			
Coal			

[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)

4. Resource Usage and Product Output

Parameter	Value	Measurement Unit	Comments[6]
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
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	Yes ❑ No ❑	If yes, please give details, including of any new initiatives:

• Working hours • Flexible working / work-life balance • Grievance mechanism for workers • Health & safety		

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):					

[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 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:	

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 payments 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 3 LEGISLATION

RELEVANT SERBIAN ENVIRONMENTAL LEGISLATION:

The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection are listed below:

- Law on planning and construction (RS Official Gazette No 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014);
- Law on nature protection (RS Official Gazette No 36/09, 88/10, 91/10, 14/16);
- Law on environmental protection (RS Official Gazette No 135/04, 36/09, 72/09, 43/11, 14/16);
- Law on EIA (RS Official Gazette No 135/2004, 36/2009,);
- Law on Strategic EIA (RS Official Gazette No 135/2004, 88/10);
- Law on waste management (RS Official Gazette No 36/09, 88/10, 14/16);
- Law on noise protection (RS Official Gazette No 36/09, 88/10);
- Law on water (RS Official Gazette No 30/10, 93/12);
- Law on forests (RS Official Gazette No 30/10, 93/12, 89/15);
- Law on air protection (RS Official Gazette No 36/09, 10/13);
- Law on safety and health at work (RS Official Gazette No 101/05, 91/15).

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

- Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested (RS Official Gazette No 114/08);
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the contents of the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the work of the Technical Committee for the EIA Study (RS Official Gazette No 69/05);
- Regulations on permitted noise level in the environment (RS Official Gazette No 72/10);
- Decree on establishing class of water bodies (RS Official Gazette No 5/68);
- Regulations on dangers pollutants in waters (RS Official Gazette No 31/82).

Other relevant Serbian legislation

- Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area (RS Official Gazette No 38/09);

Law on public roads (RS Official Gazette No 101/2005, 123/07, 101/11, 93/12, 104/13).

APPENDIX 4 STAKEHOLDER ENGAGEMENT

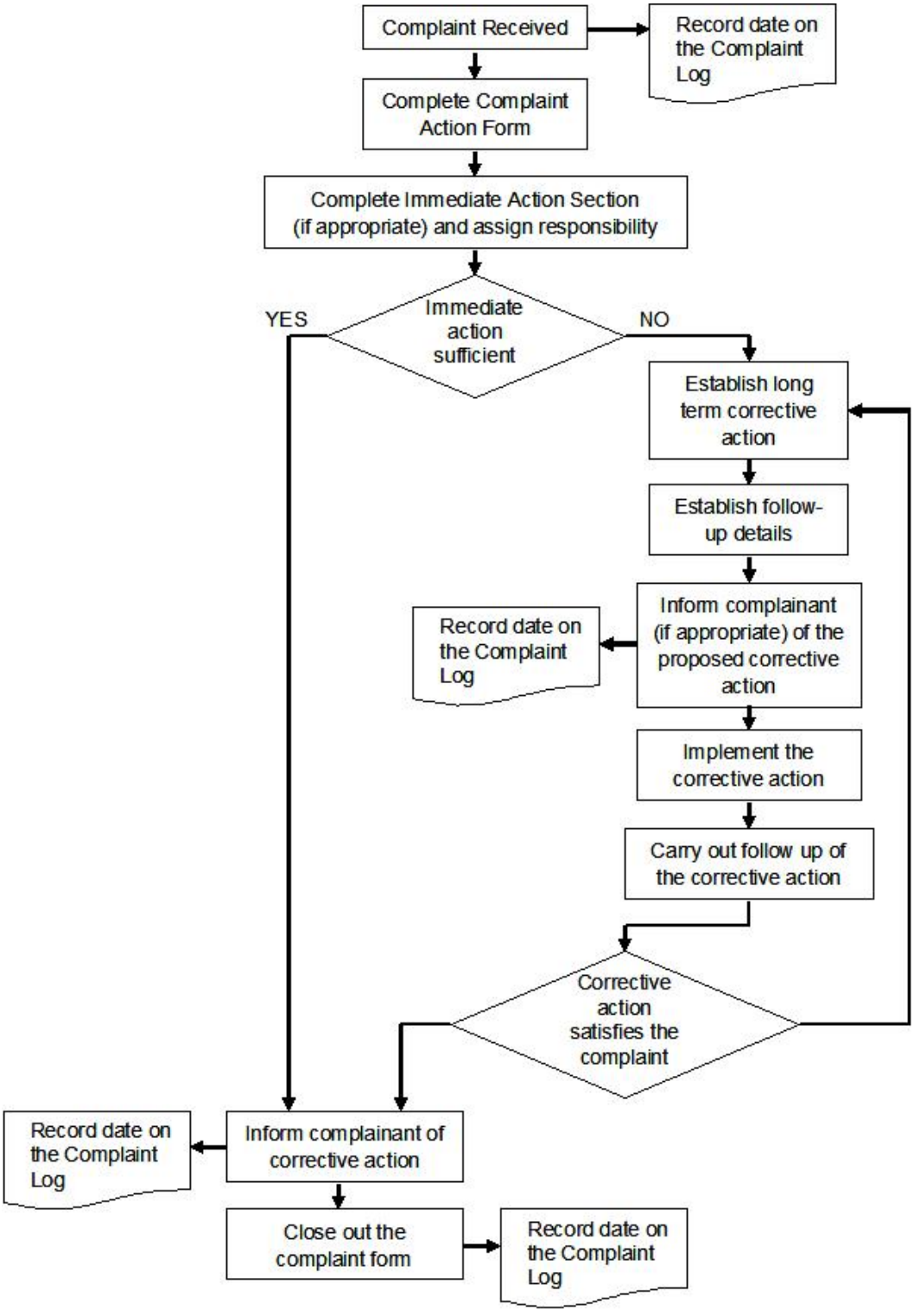
Identification of stakeholders

The stakeholders are people and organisations which may affect, be affected by, or believe to have been affected by a decision or activity. The stakeholders on this Project may be classified as follows:

1. Potentially affected parties:
   - ❖PERS employees and Contractors;
   - ❖Representatives of companies directly bordering the Project;
   - ❖Residents of areas in the Project Influence zone;
   - ❖Local or regional authorities within the legal framework, such as: local land-owners and tenants and potentially affected industry and businesses.
2. Other interested parties:
   - ❖Public;
   - ❖Other companies operating in the National Network;
   - ❖NGOs.

As the Project develops, more stakeholders may appear. Once it is identified, each stakeholder will be characterised as regards its interests, problems and requests and included in the list accordingly.

Grievance mechanism and form



Grievances are to be resolved within 15 working days.

Grievance reference number:			
Contact details	Name:		
	Address:		
	Tel:		
	e - mail:		
How would you prefer to be contacted? Please tick a box	by post	by phone	by e - mail
Name and personal information (JMBG from identity card).			
Details of your grievance. Please describe the problems, whom they occurred to, when, where and how many times, as relevant			
What is your proposal for resolving the grievance?			
How to submit this form to the authorised persons	by post:		
	by hand: please drop this form at:		
	by e - mail: Please e-mail your grievance, proposed resolution and contact details to the following e – mail address:		
Signature		Date	

Feedback from public consultations on EMP:

REPORT ON PUBLIC CONSULTATION, UZICE, 09.05.2017.

In accordance with OP 4.01 World Bank, PE "Roads of Serbia" has prepared a document - Environmental Management Plan for work on urgent maintenance and rehabilitation of State road No. IB. 23/28, section: Knezevici – Bela Zemlja – Uzice of the length of 15.234 km.

Presentation of the Environmental Management Plan began on April 24th 2017, the invitation to interested parties in the daily newspaper Politika was published, which was inviting the public auditorium, authorities and institutions to inspect the proposed rehabilitation works and environmental impact with present mitigation measures and monitoring. Prior to announcement in the newspapers, all the documents were submitted to the City of Uzice and publicly available on the spot, and also placed on the website of PE "Roads of Serbia".

Representatives of local self-government informed the public through local media about the time and place of the public consultation. Publication of the pre-final document of the Environmental Management Plan ended on May 9th 2017. when the public meeting was held in the City of Uzice.

Photo 1: Public discussion in Uzice, May 9th 2017

Photo 2: Public discussion in Uzice, May 9th 2017

Photo 3: Public discussion in Uzice, May 9th 2017

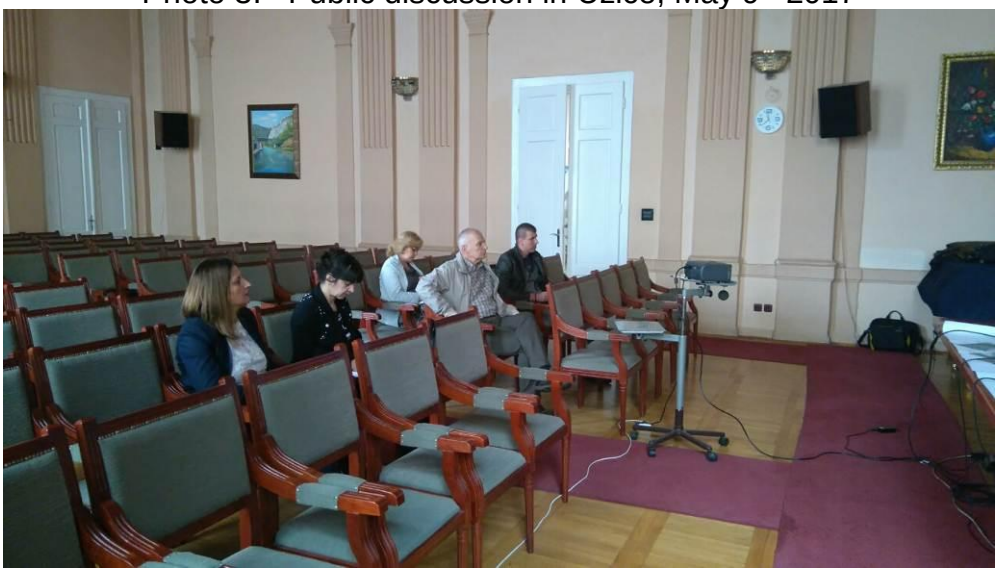


Photo 4: Public discussion in Uzice, May 9th 2017

Public discussion in Uzice was attended by 6 people. Interested representatives of City of Uzice, representatives of the PE Uzice Development (Planning), the representative of local services for the environment, and representatives for public utilities in City of Uzice.

The meeting was attended by the Panpro Team, represented by Road Designer Dragan Ilic.

The meeting began as planned at 11:30 AM. A representative of the Panpro Team, environmental specialist Marina Komad, dipl.ing.civil., presented in detail the Environmental Management Plan to the participants. During the public discussion, there were no complaints regarding to the environmental issues.

During the EMP presentation following questions were raised by present auditorium:

1. Is it planned construction of parallel traffic lanes during rehabilitation works, is closure of subject road section planned for period of rehabilitation works?
   Answer: Works are planned to be performed without total closure of traffic, so no new lanes construction out of the existing road is planned.
2. Is it planned to change existing sewage pipes, and which part of those works are planned with subject design?
   Answer: In subject design is only planned to perform leveling of the existing gulies and manholes, and existing sewage is planned to be kept in total.
3. Are sound protection barriers planned in this design, due the railway noise, and is it planned some specific asphalt for the same purpose?
   Answer: No sound protection barriers are planned with this design, and it is planned to use common pavement mixture.

Apart from above questions, in last 10 minutes of presentation, some questions related to road design were discussed with road designer, which will be further discussed during presentation of road rehabilitation design of subject road section.

The public discussion ended at 12:30 PM local time.

APPENDIX 5 CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

Република Србија
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
03 Број: 020-1262/3
Датум: 12.07.2016.
Нови Београд, Др Ивана Рибара бр. 91
Тел: +381 11/2093-802; 2093-803
Факс: + 381 11/2093-867

Завод за заштиту природе Србије, на основу члана 9. Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 и 14/2016) и члана 192. став 1. Закона о општем управном поступку („Службени лист СРЈ", бр. 33/1997 и 31/2001 и „Службени гласник РС", бр. 30/2010), поступајући по захтеву Јавног предузећа „Путеви Србије" из Београда за издавање услова заштите природе за израду техничке документације пројекта Појачано одржавање деонице државног пута IБ реда бр. 23 (стара ознака: магистрални пут М-5), деоница Ужице – Сушица, доноси

РЕШЕЊЕ

1. Предметно подручје (деоница пута) се не налази унутар заштићеног подручја за које је спроведен или покренут поступак заштите, али део пута (од уласка у град Ужице из правца Пожеге, до локалитета Бела земља, оквирно) је у обухвату еколошке мреже, еколошки значајног подручја – Клисура Ђетиње. Сходно томе, издају се услови заштите природе:

   1) Пројектом предвидети таква решења и мере који ће обезбедити услове за очување ваздуха, земљишта, подземних и површинских вода, посебно реке Ђетиње која је дефинисана као заштићено подручје, Предео изузетних одлика „Клисура Ђетиње", дуж чије границе се једним делом пружа деоница пута.
   2) Саставни део предметног Пројеката треба да буде и део који се односи на организацију градилишта, при чему је неопходно дефинисати:
      - привремене локације за складиштење потребног грађевинског и другог материјала и опреме, које је неопходно лоцирати ван граница заштићеног подручја „Клисура Ђетиње", обалског појаса река (плавне зоне), као и ван простора са високом вегетацијом, и ограничити их искључиво на време трајања радова;
      - привремене или трајне локације (постојеће уређене комуналне објекте/депоније) за и депоновање шута и другог отпада укључујући и комунални настао у току извођења радова, односно забрану одлагања било каквог отпада, посебно грађевинског у обалском појасу и самом кориту река, посебно Ђетиње као заштићеног природног добра, као и простору са високом вегетацијом;
      - 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 и коридора пута како се при манипулацији возилима и машинама не би оставиле последице на шири простор, посебно у делу деонице пута која је у непосредној близини границе заштићеног природног добра „Клисура Ђетиње". Такође, користити постојећу путну мрежу без изградње нових путева, у циљу спречавања фрагментације простора и постојећих станишта.

4) Пројектом предвидети таложнике и сепараторе масти и уља за воде које настају спирањем са коловоза, посебно на трави пута дуж реке Ветиње, у циљу њене заштите од загађења.
5) Пројектом предвидети да се при извођењу радова на деловима трасе која се пружа непосредно уз реку Ветињу, или прелази преко водотока, максимално очува обала и приобална вегетација, а у зони прелаза пута преко водотока где је неопходно уређење, Пројектом предвидети употребу камена и других природних материјала, и у највећој могућој мери избећи бетонирање обала и корита водотока (спровести тзв. натурално уређење водотока), при чему је неопходно максимално очување самог корита, али и обала са постојећом вегетацијом.
6) Током извођења грађевинских радова (полизања асфалта,..) у непосредној близини стамбених објеката, планирати орошавање како би се спречило подизање прашине и негативан утицај на људе.
7) Забрањено је сервисирање возила и машина дуж трасе и коридора пута. Уколико дође до хаваријског изливања горива, уља/мазива и других штетних материја обавезна је санација површине и враћање у првобитно стање.
8) Није дозвољено извођење радова у току ноћних сати, због могућег утицаја буке грађевинских машина.
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 постојећег насеља.
10) Током извођења радова дуж целе трасе одржавати максимални ниво комуналног реда.
11) По изведеним предметним радовима неопходно је што пре укинути сву механизацију и грађевински материјал, а уколико је дошло до нарушавања простора дуж трасе треба га санирати (култивисати терен, односно успоставити биљни покривач уз одговарајуће врсте које су биолошки постојане у датим климатским условима.

2. Ово Решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
3. У случају измене Пројекта, потребно је Заводу за заштиту природе Србије поднети нов захтев за издавање услова заштите природе.
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 заштите природе.
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

Јавно предузеће „Путеви Србије" из Београда, Булевар краља Александра 282, 11050 Београд, обратило се Заводу дописом II бр. 953-12600 од 15.06.2016. године, са захтевом за издавање услова заштите природе за израду техничке документације пројекта Појачано одржавање деонице државног пута 1Б реда бр. 23 (стара ознака: магистарални пут М-5), деоница Ужице - Сушица.

На основу достављеног захтева и пратеће документације подносиоца захтева, утврђено је да је планирана израда пројекта Појачаног одржавања деонице државног пута IБ реда бр. 23 (стара ознака: магистрални пут М-5), деоница Ужице - Сушица. Предметни Пројекат је саставни део Пројекта рехабилитације путева и унапређења безбедности саобраћаја на мрежи државних путева, који је подршка међународних финансијских институција Националном програму рехабилитације државних путева Републике Србије. Почетак деонице је у Ужицу код спортске хале на уласку у град из правца Пожеге, а крај деонице је раскрсница укрштања државних путева IБ бр. 23 и IБ бр. 28 (петља Сушица). Врста радова која се планира обухвата радове ојачања постојеће коловозне конструкције (на појединим местима до дубине од 50-60 cm) у постојећим габаритима коловоза са постојећим и санираним системом одводњавања.

Увидом у Централни регистар заштићених природних добара Србије 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 (деоница 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, 91/2010 и 14/2016), али део пута (од уласка у град Ужице из правца Пожеге, до локалитета Бела земља, оквирно) је у обухвату еколошке мреже, еколошки значајног подручја – Клисура Трешње, према Уредби 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, 91/2010 и 14/2016); 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 45/2015).

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 х 2

V
ЈАВНО ПРЕДУЗЕЋЕ "ПУТЕВИ СРБИЈЕ"
Број 953-13195
Датум 23-06-2016
БЕОГРАД, Булевар краља Александра бр. 282

Републички завод за заштиту споменика културе - Београд
Institute for the Protection of Cultural Monuments of Serbia - Belgrade

Радослава Грујића 11 Radoslava Grujića 11
11118 Београд 11118 Belgrade
Србија Serbia
Тел. (011) 24 54 786 Phone +381 11 24 54 786
Факс (011) 34 41 430 Fax +381 11 34 41 430
e-mail: office@yuheritage.com

VII
ЈАВНО ПРЕДУЗЕЋЕ "ПУТЕВИ СРБИЈЕ"
Број 953-13195
24-06-2016
Датум
БЕОГРАД, Булевар краља Александра бр. 282

Датум / Date: 21-06-2016
Број / Ref. 3/1189
мб

ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА
КУЛТУРЕ КРАЉЕВО
Господин Иван Милуновић, в.д. директора

36000 КРАЉЕВО
Кнеза Лазара 24

ПРЕДМЕТ: Захтев за издавање услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 23 (стара ознака магистрални пут М-5), деоница Ужице – Сушица

Поштовани господине Милуновићу,

Републичком заводу за заштиту споменика културе Београд, обратило се Јавно предузеће Путеви Србије из Београда са захтевом за издавање услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 23 (стара ознака магистрални пут М-5), деоница Ужице – Сушица. Како на коридору предметне деонице државног пута нема непокретних културних добара од изузетног значаја, као територијално надлежном заводу, шаљемо Вам предмет на обраду.

С поштовањем,

Обрађивач: Марина Бунарџић

За Директор
Мирјана Андрић

Доставити:

- Наслову
- ЈП Путеви Србије Београд
-Архиви

ЗАВОД ЗА ЗАШТИТУ
СПОМЕНИКА КУЛТУРЕ
К Р А Љ Е В О
Установа културе
од националног значаја
Краљево, Цара Лазара бр. 24
Број: 943/3
Датум: 12.08.2016

мм/ља

Завод за заштиту споменика културе Краљево, Краљево, Улица Цара Лазара бр. 24, на основу члана 36 став 1, тачка 4, чл. 99 став 2. тачка 1 и 3, члана 100 став 1 и члана 104.109. и 110. Закона о културним добрима („ Службени гласник РС “, бр.71/94, 52/2011-др.закон, 99/2011-др.закон), као и члана 131 Закона о општем управном поступку („Службени лист СРЈ“, бр.33/97 и 31/01), поступајући по захтеву Јавног предузећа "ПУТЕВИ СРБИЈЕ" , Београд, Ул. Булевар краља Александра бр. 282, Сектор за инвестиције, Београд, Ул. Влајковићева бр. II Бр. 953-12612 19а од 15.06.2016.године, за потребе издавања услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута ИБ реда реда бр. 23 (стара ознака магистрални пут М-5), деоница Ужице - Сушица, запримљеног у овом Заводу под бројем 943/1 од 23.06.2016.године, доноси

Р Е Ш Е Њ Е

I – Подносиоцу захтева, издају се услови за предузимање мера техничке заштите за израду техничке документације пројекта Појачаног одржавања деонице државног пута ИБ реда реда бр. 23 (стара ознака магистрални пут М-5), деоница Ужице - Сушица, општина Ужице, и могу се предузети према следећим условима:

1. Уколико дође до било каквог одступања или промене трасе, Инвеститор је у обавези /да затражи нове услове од стране надлежног Завода.
2. Инвеститор је у обавези да 7 дана пре почетка радова обавести надлежни Завод.
3. У случају да се приликом земљаних радова појаве остаци археолошке материјалне културе инвеститор/извођач мора моментално да обустави радове и обавести надлежни Завод.
4. Археолог који изврши увид на терену може да пропише додатне услове у складу са ситуацијом на терену.
5. Извођач је у обавези да преузме мере заштите како локалитет не би био уништен и оштећен.
6. Забрањено је неовлашћено прикупљање археолошког материјала.
7. Уколико се приликом било каквих земљаних радова наиђе на археолошку материјалну културу, археолог који прати радове може да их обустави и у зависности од ситуације налаза да изда додатне услове под којим се дата локација може даље истраживати.
8. Извођач је дужан да предузме мере заштите како добра под претходном заштитом не би била уништена и оштећена.
9. Трошкови истраживања, заштите, чувања, публиковања и излагања добра које ужива претходну заштиту, све до предаје добра на чување овлашћеној установи заштите сноси инвеститор.

II - Инвеститор је дужан да према условима из тачке I) овог Решења сачини пројектну документацију и на исту прибави сагласност овог Завода.

III – Ово решење не ослобађа подносиоца захтева обавезе прибављања и других услова, дозвола и сагласности предвиђених прописима о планирању и уређењу простора и насеља, изградњи објеката и осталих важећих законских прописа.

IV - Ово решење важи две године од дана издавања.

V – Жалба на решење не задржава извршење овог решења.

О б р а з л о ж е њ е

Овом Заводу обратило се Јавно предузеће "ПУТЕВИ СРБИЈЕ", Београд, Ул. Булевар краља Александра бр. 282, Сектор за инвестиције, Београд, Ул. Влајковићева бр. II Бр. 953-12612 19а од 15.06.2016.године, захтевом за прибављање услова за предузимање мера техничке заштите за израду техничке документације пројекта Појачаног одржавања деонице државног пута ИБ реда реда бр. 23 (стара ознака магистрални пут М-5), деоница Ужице - Сушица, општина Ужице.

Увидом у документацију овог Завода и на лицу места, као и на основу Извештаја број 943/2 од 01.08.2016.године, сачињеног од стране стручног сарадника овог Завода, на траси деонице Ужице - Сушица државног пута ИБ реда бр. 23 (стара ознака магистрални пут М-5), није утврђено постојање културних добара, нити евидентираних добара која уживају заштиту на основу Закона о културним добрима („Службени гласник РС", бр. 71/94, 52/2011-др.закона, 99/2011-др.закон).

Обзиром да су археолошки локалитети специфични са становишта заштите јер се налазе испод површине земље и често није могуће знати за њихово постојање, приликом било каквих земљаних радова могуће је наићи на остатке материјалне културе из прошлости, те је у том случају неопходно организовати праћење спровођења мера заштите од стране археолога Завода.

На основу чл. 36. став 1 тачка 4. Закона о културним добрима прописано је да је сопственик дужан да прибави услове за предузимање мера техничке заштите и прибави сагласност надлежне установе за предузимање мера и радова на добру којима се могу проузроковати промене изгледа, облика или намене добра или повредити његова својства.

На основу чл. 99. став 2. тачка 3. Закона о културним добрима прописано је да се мере техничке заштите и други радови којима се могу проузроковати промене облика или изгледа непокретног културног добра или повредити његова својства, могу предузимати ако се прибаве потребни услови и одобрења на основу прописа о планирању и уређењу простора и изградњи објеката.

Чланом 109. Закона о културним добрима прописано је да уколико се у току извођења земљаних и других радова наиђе на археолошко налазиште или археолошке предмете, извођач радова дужан је да одмах, без одлагања, прекине радове и о томе обавести надлежни Завод за заштиту споменика културе, као и да обезбеди средства за заштитна археолошка истраживања и конзервацију налаза.

Чланом 110. Закона о културним добрима прописано је да је Инвеститор дужан да обезбеди средства за истраживања, заштиту, чување, публиковање и излагање добра које ужива претходну заштиту, све до предаје добра на чување овлашћеној установи заштите.

Са изложеног, одлучено је као у диспозитиву овог решења.

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

ПРАВНА ПОУКА: Против овог решења дозвољена је жалба Републичком заводу за заштиту споменика културе у Београду у року од 15 дана од дана достављања решења. Жалба се подноси преко доносиоца овог решења, а на основу члана 16. Закона о културним добрима ослобођена је плаћања републичке административне таксе.

Обрађивачи:
Др Марија Марић, археолог,
Љиљана Александрић, дипл правник

В.Д.ДИРЕКТОРА ЗАВОДА

Иван Милуновић

Доставити

- Подносиоцу захтева
- Републичком Заводу за заштиту споменика културе у Београду
- Архиви завода

APPENDIX 6 FINAL ENVIRONMENTAL APPROVAL

Република Србија
МИНИСТАРСТВО ПОЉОПРИВРЕДЕ И
ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ
Број: 011-00-1180/2016-16
Датум: 05.09.2016. године
Београд

PANPRO TEAM d.o.o.
Broj: 351-1-5/16
Datum: 09.09.2016.
BEOGRAD

"Panpro Team" д.о.о
Генерала Рајевског 1
11000 Београд

Предмет: Допис у вези захтева за мишљење

ОБАВЕШТЕЊЕ

Министарству пољопривреде и заштите животне средине доставили сте, на основу овлашћења носиоца пројекта ЈП "Путеви Србије" број 953-14998 од 18.07.2016. године, Захтев за мишљење о потреби покретања процедуре у складу са Законом о процени утицаја на животну средину, везано за прву фазу одлучивања тј. за потребу подношења захтева о потреби израде студије о процени утицаја пројекта појачаног одржавања државног пута IБ 23/28, на деоници Књежевићи – Бела Земља – Ужице, укупне дужине 15,234 km, при чему су планирани грађевинско – путарски радови у оквиру постојеће саобраћајнице, без проширивања постојеће и доградње нових саобраћајница.

На основу вашег захтева за мишљење достављеног овом органу, обавештавамо вас о следећем:

- У складу са чланом 3. Закона о процени утицаја на животну средину («Сл. гласник РС», 135/04, 36/09) предмет процене утицаја су пројекти који се планирају и изводе, промене технологије, реконструкције, проширење капацитета, престанак рада и уклањање пројеката који могу имати значајан утицај на животну средину. Процена утицаја врши се за пројекте из области индустрије, рударства, енергетике, саобраћаја, туризма, пољопривреде, шумарства, водопривреде, управљања отпадом и комуналних делатности, као и за пројекте који се планирају на заштићеном природном добру и у заштићеној околини непокретног културног добра. Наведени пројекти могу бити предмет процене утицаја ако је њихово извођење, односно употреба у складу са прописима којима се уређује планирање и изградња.

На основу достављене документације уз ваш захтев, овај орган је мишљења да није потребно покретање процедуре процене утицаја на животну средину за пројекат појачаног одржавања државног пута IБ 23/28, на деоници Књежевићи – Бела Земља – Ужице, укупне дужине 15,234 km, при чему су планирани грађевинско – путарски радови у оквиру постојеће саобраћајнице, без проширивања постојеће и доградње нових саобраћајница. Носилац пројекта је у обавези да при извођењу предметног пројекта испоштује мишљења, услове и сагласности свих других надлежних органа и организација, као и да спречи појаву било каквих негативних и штетних утицаја на животну средину. Уколико се при извођењу пројекта јаве или користе опасне материје, носилц пројекта је у обавези да врши њихово складиштење и прикупљање у складу са одредбама

Закона о управљању отпадом, као и у складу са одговарајућим подзаконским актима (Правилник о начину складиштења, паковања и обележавања опасног отпада, Правилник о условима начину и поступку управљања отпадним уљима итд.).

Доставити:

- Архиви
- инвеститору

Помоћник министра
По решењу о овлашћењу министра број
021-01-43/2016-01 од 17.08.2016. године

Александар Весић