RSSP/CS3-IB21IR/2015-05

Project name:

ROAD REHABILITATION AND SAFETY PROJECT

STATE ROAD IB 21
SECTION: IRIG 2 – RUMA 1 (HIGHWAY)
from km 26+680 to km 42+260

MAIN DESIGN FOR HEAVY MAINTENANCE

ENVIRONMENTAL MANAGEMENT PLAN

Environmental Category - B

Date:

October 2016.
CONTENTS:

INTRODUCTION ........................................................................................................................................ 4
SUMMARY .................................................................................................................................................. 5
1. PROJECT DESCRIPTION ......................................................................................................................... 20
2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK ................................................................ 22
3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY .............................................. 24
4. SUMMARY OF ENVIRONMENTAL IMPACTS ...................................................................................... 28
5. ENVIRONMENTAL MANAGEMENT PLAN .......................................................................................... 32
   A. MITIGATION PLAN ............................................................................................................................ 32
   B. MONITORING PLAN .......................................................................................................................... 41
   C. INSTITUTIONAL IMPLEMENTATION AND REPORTING .............................................................. 42
6. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATIONS, AND PARTICIPATION .................................................................................................................. 45
7. REFERENCES .......................................................................................................................................... 45
Attachment I ............................................................................................................................................... 47
MITIGATION PLAN ...................................................................................................................................... 47
Attachment II ............................................................................................................................................... 57
MONITORING PLAN ...................................................................................................................................... 57
Attachment III ............................................................................................................................................ 74
LEGISLATION .............................................................................................................................................. 74
Attachment IV ............................................................................................................................................. 76
STAKEHOLDER ENGAGEMENT AND REPORTING FROM PUBLIC CONSULTATIONS .................................................. 76
Attachment V .............................................................................................................................................. 81
DECISIONS OF RELEVANT INSTITUTIONS ............................................................................................. 81
ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADT</td>
<td>Annual Average Daily Traffic</td>
</tr>
<tr>
<td>CEP</td>
<td>Contractor’s Environmental Plan</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>HSE</td>
<td>Health, Safety and Environment</td>
</tr>
<tr>
<td>IFIs</td>
<td>International Financing Institutions</td>
</tr>
<tr>
<td>INC</td>
<td>Institute for Nature Conservation of the Republic of Serbia</td>
</tr>
<tr>
<td>IPCM</td>
<td>Institute for Protection of Cultural Monuments of the Republic of Serbia</td>
</tr>
<tr>
<td>MoAEP</td>
<td>Ministry of Agriculture and Environmental Protection</td>
</tr>
<tr>
<td>MoT</td>
<td>Ministry of Transport (fmr. Ministry of Infrastructure and Energy – MoIE)</td>
</tr>
<tr>
<td>PERS</td>
<td>Public Enterprise “Roads of Serbia”</td>
</tr>
<tr>
<td>PSC</td>
<td>Project Supervision Consultant</td>
</tr>
<tr>
<td>RE</td>
<td>Resident Engineer</td>
</tr>
<tr>
<td>RRSP</td>
<td>Road Rehabilitation and Safety Project</td>
</tr>
<tr>
<td>SE</td>
<td>Site Engineer</td>
</tr>
<tr>
<td>SLMP</td>
<td>Safety Labor Management Plan</td>
</tr>
<tr>
<td>SSIP</td>
<td>Site Specific Implementation Plan</td>
</tr>
<tr>
<td>WB</td>
<td>The World Bank Group</td>
</tr>
<tr>
<td>WMP</td>
<td>Waste Management Plan</td>
</tr>
</tbody>
</table>
INTRODUCTION

This Environmental Management Plan (EMP) has been prepared for the proposed rehabilitation of the state road of the IB class, no. 21, section Irig 2 – Ruma 1 (highway) to ensure good environmental practice and documented compliance with the requirements of the International Financing Institutions which will finance the Project. This section starts 200 m after the node 2104 Irig (Vrdnik), old marking Irig 2, and ends at app. 280 m after the node 2108 Ruma (link with A3), old marking Ruma 1 – highway. New marking of the nodes has been taken from the map of the reference system of state roads of I and II category. Total length of the section is 15.245 km.

In accordance with the Safeguard Policies issued by the International Financing Institutions, the Project has been classified as Environmental Category B, i.e., a project requiring an EMP.

The Project Proponent is the Government of Serbia. Project implementing Agency is the Public Enterprise “Roads of Serbia” (PERS).

The objective of this EMP is to address the environmental impacts and management issues associated with the proposed road rehabilitation and define necessary mitigation measures that need to be applied by the Contractor. The key parts of the EMP are: Mitigation Plan and Environmental Monitoring Plan.

The project development will comply with Serbian legislation, rulebooks and policies, international conventions and safeguard policies published by the International Financing Institutions.

The EMP for the proposed section is focused on heavy maintenance and is a part of the relevant contract for execution of civil works. The activities related to regular maintenance of the section, although not being in focus of this plan, will be mentioned briefly in order to make the Plan complete.

The preparation of this EMP was undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders. The EMP is based primarily on field investigations performed during May and June 2016.
SUMMARY

- Project Description

The Republic of Serbia has applied for a loan from the World Bank, European Investment Bank and European Bank for Reconstruction and Development for financing of the costs of Road Rehabilitation and Safety Project and intends to apply a part of loan proceeds for heavy maintenance on state road IB no. 21 Irig 2 – Ruma 1 (highway).

The observed section belongs to Vojvodina Region and is located in Srem Administrative District. The municipalities where the section is located are Irig and Ruma.

Picture 1 – Start of the section – Irig 2

Picture 2 – End of the section – Ruma 1
The section of the state road IB no. 21 Irig 2 – Ruma 1 (highway) starts at the exit of Irig settlement (km 26+680), tangents the settlement of Ruma and ends at location where the subject section goes over the E-75 motorway (km 42+259.66).
The observed road represents the shortest road between Novi Sad and the border with Bosnia and Herzegovina, therefore all heavy goods vehicles and passenger vehicles use it for traffic when travelling to Novi Sad. The road is the shortest link between Zlatibor and Novi Sad, so all tourist traffic in that direction is done over it. Additionally, the touristic importance of this road section is even more highlighted by a fact that it goes through the national park “Fruška Gora” and near numerous monasteries on slopes of Fruška Gora (Hopovo, Mala and Velika Remeta, Krušedol, Jazak, etc.). Besides, in Vrdnik settlement there is a special hospital for rehabilitation „Termal“, which, in addition to medical treatments and rehabilitation, offers great conditions for recreation and training of sportsmen. There are four bus lines provided daily from the bus station at Novi Sad. The average annual daily traffic amounts to app. 9000 vehicles/day, and out of this number 17% are heavy goods vehicles.

The Works planned by this design will be performed on the existing road, without any change of the road axis. The design does not state resettlement of population or land acquisition as defined by the OP 4.12, or long lasting disturbance of environment, settlements or regular activities. More details on this matter may be found in the Resettlement Policy Framework.

- **Policy, legal and administrative framework**

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

The environmental legislation in force in Serbia is summarized in the Attachment III.

In the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment, which is completely in line with the European EIA Directive - 85/337/EEC. Therefore, an Environmental Impact Assessment is not required for road rehabilitation projects unless their alignment is placed within or in the vicinity of natural/cultural protected areas. According to the decision issued by the Institute for Nature Conservation of Vojvodina Province provided in the Attachment V (Decisions of relevant institutions), the road section is not placed in vicinity of any protected area for which the protection proceedings have been initiated or completed. The decision issued by the Institute for protection of cultural monuments “Sremska Mitrovica” (please refer to the Attachment V (Decisions of relevant institutions) listed the cultural monuments and natural resources under preliminary protection for which technical protective measures have been planned. The Secretariat for Urban Planning and Environmental Protection of the Province issued the opinion (no. 140-501-1074/2016-01) which stated that there was no obligation for having the Environmental Impact Assessment done (please see the Attachment V).

Under this project, the following creditors’ requirements will be applied:

- Operational Policy OP 4.01 Environmental Assessment;
- EBRD Environmental and Social Policy 2008;
The EBRD and EIB require that the project is compliant with requirements of the Republic of Serbia and EU standards.

- **Baseline conditions assessed during route survey**
  
  In the area of the subject road section Irig 2 – Ruma 1 there are following cultural monuments and natural resources that under the preliminary protection: “Kipovi”, “Krišo” monument, archeological site “Kod barutane”, archeological site “Batinačka strana”, archeological site “Gradina”, archeological site “Turski šanac”.

![Picture 5 – “Kipovi” monument, left side of the road](image-url)
From the aspect of protection of immovable cultural assets, execution of the Works on maintenance and remedy of defects on the state road is permitted with appliance of conditions and measures of technical protection as stated by the Decision of the Institute for protection of cultural monuments Sremska Mitrovica (no. 77-07/16-4 from March 31, 2016). Out of the mentioned cultural monuments, the monument “Kipovi” is located immediately close to the subject section and it is composed of 2 monuments, on the left and right side of the road. The monument was erected in memory of the plague and represents an immovable cultural asset. Within the specified decision of the Institute for protection of cultural monuments Sremska Mitrovica there are special conditions and protective measures prescribed for the monument “Kipovi”. 
During the project implementation, there will be no land acquisition as defined by the operational policy 4.12.
Along the subject section, the following industrial structures and facilities have been identified:

- Municipal solid waste landfill – on the left from the subject section, at the entrance to Ruma;
- Asphalt plant “Borovica” – on the right from the subject section;
- Asphalt and concrete plant - on the right from the subject section, towards the very end of the section;
- “Galenika – Fitofarmacija” - production of pesticides and herbicides;
- Space of special purposes (military) – at the immediate vicinity of the section, on the left side.

*Picture 9 – Facilities in the immediate vicinity of the section*
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B

Picture 10 – Municipal solid waste landfill
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B

Picture 11 – Asphalt Plant “Borovica”

Picture 13 - „Galenika – Fitofarmacija“ and asphalt and concrete plant
In the immediate vicinity of the section, on the left, there is an office building “Planter”- cold storage units, pumping station and reservoir used for water supply in Irig.
A dispersive drainage system has been applied on the subject section i.e. all water from pavement is drained along the shoulders and slopes of the embankment onto the surface of the surrounding terrain or into the side channels. Stretches on high embankments from km 34+160 to km 34+380 on the left, from km 35+200 to km 35+480 on the right, from km 37+700 to km 38+340 on the left, from km 38+340 to km 39+100 on the right and from km 41+920 to km 42+260 on the right are excluded from this principle as the water on these stretches is drained from pavement by means of channeling by curbs and then by means of drain flumes it is directed to the foot of the embankment where it is discharged onto the terrain without treatment.

In the subject area there are two watercourses – Jelenački potok and Borkovački potok (two streams – Jelenački and Borkovački). On one part the observed section (Ruma Bypass) is located in the immediate vicinity of Jelenački potok and it goes over it by means of a bridge on km 37+740. On app. 500 m from the bridge on the Jelenački potok, on the right of the road, there is a place of separation of Jelenački potok and Borkovački potok. After the bridge, Jelenački potok flows in parallel with the road and is located to its left.
The traffic load was taken from the publication “Traffic counting on state roads of the Republic of Serbia” for 2011, issued by the PE “Roads of Serbia” and it is used for preparation of the technical documentation. In accordance with the data, the AADT is 9605 vehicles/day for the section Irig 2 – Ruma 2, while for the section Ruma 3 – Ruma 1, the AADT is 8508 vehicles/day.

For the observed area, dominant source of noise is the traffic itself performed on the section Irig 2 – Ruma 1, as well as railway traffic on the state railway Belgrade – Šid – Zagreb and regional railway Ruma – Šabac – state border. Both railways have a junction grade separation with the subject section near Ruma.
Summary of environmental impacts

The possible temporary impacts as consequence of the construction activities will consist of, among others, disruption of current traffic circulation, traffic safety, damage to access roads, dust nuisance, and gaseous emissions, potential pollution of soil and water resources, brief disturbance to biotope, and momentary interference to neighboring settlements through various operation activities. Off-site activities include quarry, burrow pit and asphalt plant operations, which if not managed properly, may cause localized adverse impacts. The contractor’s site offices and workers’ camp can be potential sources of temporary adverse impacts.

No relocation and resettlement issues are anticipated.

In terms of exploitation, based on position of the road in the road network, no increase of road traffic is expected as a result of rehabilitation. The impact of potential increase of speed of vehicles on the rehabilitated section will be resolved as part of traffic safety analysis which is an integral part of the design and embraces implementation of active and passive measures for speed control.

During the execution of the Works on heavy maintenance of road, local population will not be exposed to a greater air pollution or increased levels of noise as the first houses, located in the suburbs of Ruma, are at 60 to 200 m away from the road.

During the execution of the Works on heavy maintenance of road on the road, as well as during the life of the road, water pollution may occur. Waste water being discharged during construction may have an adverse impact on quality of ground and surface water. In compliance with the Law on Waters ("Official Gazette of RS", 54/96, 101/05), appropriate measures for mitigation and monitoring have been planned. Regarding possible water pollution during road exploitation, it is limited to occurrence of accidents. In such cases, as defined by the Ministry of Interior and Law on Waters, procedures for acting in accidental situations will be closely followed.

Due to presence of asphalt and concrete plant, industrial plant "Fitofarmacija" and intersection with the railroad as well as due to potential construction and functioning of new buildings and facilities, there is a possibility for occurrence of cumulative impacts in the observed area, which will not have a significant impact on condition of the environment.

By proper appliance of measures from the Environmental Management Plan, as stated in the Attachment I (Mitigation Plan), impacts on biotope and local population, which may be in connection with any other long-term negative effect, are prevented or minimized.
• Environmental management plan

Possible environmental impacts will be mitigated during the design, rehabilitation, and operation phases, as summarized in the Attachment I of the Environmental Management Plan.

A basic assessment of the proposed road rehabilitation project concluded that with proper appliance of mitigation measures, the adverse impacts will be minor. The EMP consists of 3 parts: Mitigation Plan (Attachment I), Monitoring Plan (Attachment II) and institutional arrangements and reporting procedures (Attachment IV).

Prior to any work, the Contractor will prepare the Contractor’s Environmental Protection Plan. During the road rehabilitation, the Contractor will work in accordance with requirements of the Contractor’s Environmental Protection Plan (which is based on the Environmental Management Plan). The Contractor’s Environmental Protection Plan will present in detail how the Contractor will act in regards to activities described in the section and in relation to rehabilitation within the Environmental Management Plan. The Contractor shall submit its Environmental Protection Plan to the PE “Roads of Serbia” for approval.

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

The Contractor’s obligation shall be to include the costs of implementation of measures for mitigating negative impact on environment into the total costs. The Contractor shall provide a brief statement to confirm that:

• The EMP has been included in the price;
• The Contractor has qualified and experienced member of staff in its team, who will be made responsible for harmonized relations between the environment and EMP;
• Contractor and sub-contractors work in accordance with national laws of the Republic of Serbia, EU standards and Borrower’s requirements.

PE “Roads of Serbia” is responsible for issuing and implementing penalties for incompliance with contract provisions.

A monitoring plan for the proposed project (Attachment II) has been prepared. The main components of the monitoring plan include:

• Environmental issues to be monitored and the means of verification,
• Specific areas, locations and parameters to be monitored;
• Applicable standards and criteria;
• Duration and frequency and estimated monitoring costs; and
• Institutional responsibilities for monitoring and supervision.
- Information disclosure, consultations and public participation

Within the forthcoming period, the EMP will be made publicly disclosed.

- Summary of public disclosure (public consultations)

Within the forthcoming period, the EMP will be made publicly disclosed.
1. PROJECT DESCRIPTION

The Republic of Serbia has applied for financing from the World Bank, European Investment Bank and European Bank for Reconstruction and Development towards the costs of the Road Rehabilitation and Safety Project. Part of the funds is allocated for maintenance and remedy of damages on state road IB 21, Novi Sad – Ruma –Šabac - Valjevo – Požega – Ivanjica – Sjenica, section Irig 2 – Ruma 1.

- Location Description

The subject section is located in Vojvodina region and belongs to Srem administrative district. It goes through municipalities of Irig and Ruma and belongs to the state road of IB category no. 21. The starting chainage is on km 28+680 (Irig – intersection to Vrdnik), and ending chainage is on km 42+259.66 (Ruma - to motorway).

Picture 17 – Presentation of the section

In the territory of Irig, the observed section is away from the urban settlement and it goes through agricultural areas, close along the road there are industrial
facilities, warehouses, nursery gardens, cold storages, etc. In the territory of municipality of Ruma, the section firstly goes through arable land, and then goes along the periphery of the settlement near solid waste landfill, warehouse, cold storage, two asphalt plants, railway station and factory “Galenika – Fitofarmacija”.

The lack of major watercourses was successfully compensated by three Ruma streams (Borkovački potok, Kudoški potok and Jelenački potok), which can be also found on the coat of arms of the city, and in the early seventies there was an artificial lake built in the immediate vicinity of Ruma called Borkovac lake with water accumulation from the stream of the same name.

The subject section embraces total of 11 intersections, out of which 7 are three-way intersections, 1 is four-way intersection and 3 are junctions at grade separation. The section in question has a big number of accesses of local roads and streets, as well as of individual accesses, 31 on the right and 36 on the left side of the road.

The following industrial facilities have been identified along the section: solid waste landfill, asphalt plant “Borovica”, asphalt and concrete plant, space of special purposes (military), “Galenika – Fitofarmacija” – production of pesticides and herbicides.

A dispersive drainage system has been applied on the subject section i.e. all water from pavement is drained along the shoulders and slopes of the embankment onto the surface of the surrounding terrain or into the side channels. Stretches on high embankments from km 34+160 to km 34+380 on the left, from km 35+200 to km 35+480 on the right, from km 37+700 to km 38+340 on the left, from km 38+340 to km 39+100 on the right and from km 41+920 to km 42+260 on the right are excluded from this principle as the water on these stretches is drained from pavement by means of channeling by curbs and then by means of drain flumes it is directed to the foot of the embankment where it is discharged onto the terrain without treatment.

Heavy maintenance of the drainage system comes down to cleaning of side channels and trench drain systems. This means that the existing drainage system is kept.

As for possible contamination during operation, they are limited to accidents. In this case, as defined by the Ministry of Interior and the Law on Waters, procedures for the actions in emergency situations are to be followed.

- **Rehabilitation works description**

Newly designed road in terms of a layout follows the existing condition. Major Works cover: removal of the existing pavement, construction of new asphalt layers, cleaning of culverts and ditches, construction of accesses on classified and unclassified local roads and construction of individual accesses.

The project therefore entails no resettlement and land acquisition, nor long lasting disruptions to the natural environment and human settlements and activities.
2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

- Relevant Institutions

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

The other aspects of environmental management related to road projects are dealt with by several other institutions, among which are the Institute for Nature Conservation of Serbia (INC) and the Institute for Protection of Cultural Monuments of the Republic of Serbia (IPCM) and the Public Enterprise “Roads of Serbia” (PERS).

- Existing Serbian legislation

Environmental protection in Serbia is regulated by several national laws and by-laws. The environmental legislation in force in Serbia is summarized in the Attachment III.

- EIA procedure in the Republic of Serbia

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

The Secretariat for Urban Planning and Environmental Protection of the Province issued an opinion (no. 140-501-1074 / 2016-01 from 08/08/2016) that there is no obligation for having the environmental impact assessment done (see Attachment V).

- Important guidelines and requirements of International Financing Institutions

Road rehabilitation is financed by the International Financing Institutions, so the following requirements of the Borrower shall apply for all the Works:

- World Bank: Operational Policy OP 4.01 Environmental Assessment which requires a partial EIA, as well as EMP for B category Projects;

- European Bank for Reconstruction and Development: Environmental and Social Policy 2008;

European Bank for Reconstruction and Development and European Investment Bank require that the design is prepared in accordance with the legislation of the Republic of Serbia and EU standards. However, in accordance with the regulations of the Government of the Republic of Serbia for this type of investment, the EMP preparation is not required, while in accordance with the policies of the World Bank, preparation of the EMP is mandatory for every section.
3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

The section Irig 2 – Ruma 1 in length of 15.245 km goes through the territory of municipalities of Irig and Ruma.

Immediately close to the road, there is a cultural monument, “Kipovi”, an immovable cultural asset for which conditions and measures of protection have been defined by a decision of relevant Institute for Protection of Cultural Monuments. During the design appliance, there will be no land acquisition as defined by the operational policy 4.12.

- **Natural resources and cultural heritage**

Immediately on the route of the road Irig 2 – Ruma1 there are no protected natural resources that could become endangered in the course of heavy maintenance on the road. According to the decision of the Institute for the Nature Conservation of the Province no. 03-438/2 from March 25, 2016, there are certain conditions for the environmental protection that need to be met.

Through a decision of the relevant Institute for Protection of Cultural Monuments Sremska Mitrovica, no. 77-07/16-4 from March 21, 2016, conditions and measures for technical protection for preparation of technical documents have been specified due to existence of the following cultural monuments and resources under preliminary protection:

- "Kipovi" – the monument erected in the memory of plague epidemic. It is positioned on the cadastral parcel 9724 of Irig Cadastral Municipality – road in property of the state, Beneficiary is PERS, it is an immovable cultural asset – Decision of the Institute for Protection of Cultural Monuments Sremska Mitrovica No. 170 from May 05, 1976;

![Picture 18 - Monument "Kipovi"](image-url)
- Monument „Krilo“ on part of the exit lane towards the E-70 motorway which is an asset under preliminary protection;

![Picture 19 - Monument „Krilo“](image)

- Archeological site „Kod barutane“ in Ruma;
- Archeological site „Batinačka strana“ in Irig;
- Archeological site „Turski šanac“ in Irig.

- **Settlements**

The subject section goes over the territories of municipalities of Irig and Ruma.

**Irig** is an urban settlement in Serbia, in the municipality of Irig in Srem District. According to the census in 2011, there were 4,415 residents. There are two primary schools, secondary vocational school and health center in the settlement.

It lies on a very important road, which starts at Novi Sad and goes over Iriški venac (Irig wreath), middle part of the southern slopes of Fruska Gora and descends to Ruma. It is recognized as fruit and wine growing region and a center of vineyards of Fruška Gora with famous "Irig vine cellar". Fruška Gora monasteries provide a significant tourism potential of this settlement.

**Ruma** is a town in Serbia, in the municipality of Ruma in the Srem District. According to the census from 2011, there were 30,076 inhabitants, while the entire
municipality has 54,339 inhabitants, 16 villages and one urban settlement. Ruma is located near the southern slopes of Fruška Gora, at an altitude of 111 meters. It is characterized by lowland terrain, fertile soil and gentle landscapes of central Srem.

In addition to developed agriculture, there are also other industrial branches: leather, rubber and footwear industry, industry of building materials, metal, graphics, food, transport, trade, crafts and catering.

There are four elementary schools in the town, three vocational schools, gymnasium, pre-school, four churches and a health center.

*Picture 20 – Town unity Square in Irig*

*Picture 21 Town square in Ruma*
• Watercourses

The route of the subject section in terms of territory belongs to the water management area of Sremska Mitrovica. The nearest watercourses are Jelenci, Channel no. 34 and Channel no. 35 and these belong to the Sava River basin.

Jelenci watercourse intersects with the subject section on km 3+248, while the mentioned channels are positioned in parallel with the road.

• Air

In the corridor of the section Irig 2 – Ruma 1 there is no significant source of air pollution.

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

Based on the previous experience and expected traffic load, in the course of Works on rehabilitation and after them there should be no increase in the current level of air pollutants.

• Roads and Railroads

There are 11 intersections on the subject section, out of which 7 are three-way intersections, 1 is a four-way intersection and three are junctions at grade separation. The subject section also involves a great number of accesses of local roads, streets and of individual accesses, 31 on the right and 36 on the left side of the road.

In the subject area there is a state road of IIA category number 120 Croatian state border (Šid Border Crossing) – Šid – Kuzmin – Sremska Mitrovica – Ruma – Pećinci – Bečmen – Obrenovac, road of IIA category Ruma – Putinci – Indija – Stari Slankamen, state railroad Belgrade – Šid – Zagreb and regional railroad Ruma – Šabac – state border. Both railroads have delevelled intersections with the subject section near Ruma.

• Noise

Based on the previous experience and expected traffic load, in the course of Works on road rehabilitation and remedy of defects, as well as during the use of the road after the rehabilitation, there should be no increase in the noise levels.
4. SUMMARY OF ENVIRONMENTAL IMPACTS

<table>
<thead>
<tr>
<th>The following table provides a summary of environmental impacts expected during the project</th>
<th>Importance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>impacts on use of land / settlements</td>
<td>low</td>
<td>During the project realization there will be no new land acquisition</td>
</tr>
<tr>
<td>groundwater and surface water</td>
<td>low</td>
<td>Due to the small quantity of water which by draining can reach watercourses, the negative impact is minimal or negligible</td>
</tr>
<tr>
<td>air quality</td>
<td>low</td>
<td>Temporary impact</td>
</tr>
<tr>
<td>flora and fauna (protected areas and species)</td>
<td>low</td>
<td>In accordance with recommendations stated within conditions received from the Institute for Nature Conservation</td>
</tr>
<tr>
<td>noise</td>
<td>low</td>
<td>Temporary impact</td>
</tr>
<tr>
<td>access points of intersections of main and local roads</td>
<td>low</td>
<td>The rehabilitation shall not have impact on the existing points of intersections</td>
</tr>
<tr>
<td>land management</td>
<td>low</td>
<td>With appliance of relevant measures for waste management</td>
</tr>
<tr>
<td>waste</td>
<td>low</td>
<td>Secured through waste management - waste and waste water management plan will be prepared and implemented</td>
</tr>
<tr>
<td>cumulative impacts, etc.</td>
<td>low / medium</td>
<td>Execution of rehabilitation works temporarily may cause a slight increase in the noise level and concentration of pollutants in the air</td>
</tr>
</tbody>
</table>

Road rehabilitation project for the proposed section Irig 2 – Ruma 1 will have a low impact on the environment (B category). Most impacts are of temporary nature and will cease after completion of the Works on the road rehabilitation.

The subject section belongs to the road network where no increase of traffic is expected as a result of the road rehabilitation. A potential increase in speed of
vehicles on the rehabilitated road will be regulated through a traffic safety design which will include the appliance of active and passive measures for speed control.

The possible temporary impacts as consequence of the construction activities will consist of, among others, disruption of current traffic circulation, traffic safety, damage to access roads, dust nuisance, and gaseous emissions, potential pollution of soil and water resources, brief disturbance to biotope, and momentary interference to neighboring settlements through various operation activities. Off-site activities include quarry, borrow pit and asphalt plant operations, which if not managed properly, may cause localized adverse impacts. The contractor’s temporary offices on the site and workers’ camp can be potential sources of temporary adverse impacts.

The EMP is more focused on the phase of execution of the Works on road heavy maintenance and remedy of defects as it will become a part of appropriate contract for implementation and as such shall become the Contractor’s activity. The actions related to routine maintenance of the section will not be in focus of the EMP, but shall be presented only with the aim of getting a full picture.

- **Air and noise pollution within the residential areas**

  It is expected that local residents will be affected with air pollution and increased noise levels during rehabilitation works on the proposed road section. It is expected that air quality will undergo some moderate and temporary deterioration. Generally, dust from construction traffic and elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhaust will be the primary pollutants. The dust will settle on vegetation, crops, structures and buildings.

  Noise caused by the rehabilitation Works will have only a temporary impact.

- **Potential water contamination**

  Water contamination may occur during the rehabilitation of the project road. Wastewater discharged during the works will consist of wash-water from the equipment maintenance shops and sanitary wastewater effluent from the work camps.

  Regarding possible water pollution during road exploitation, it is limited to occurrence of accidents. In such cases, as defined by the Ministry of Interior and Law on Waters, procedures for acting in accidental situations are closely followed. Fuel and lubricant spills can, in most instances, occur at the contractor's work camp and motorpool while maintaining and washing equipment and work vehicles. The oily wash-water should be passed through an adequately sized, gravity oil separator prior to discharge.

  Should spills occur in any part of the road, especially where the road intersects the watercourses or makes a linear contact with them, to mitigate the problem the contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and disposed them in
approved facility in accordance with the Law on Waters ("Official Gazette of the RS", 54/96, 101/05).
• Potential cumulative impacts

During the execution of the Works on heavy maintenance on the section Irig 2 – Ruma there are no cumulative impacts such as noise, pollution of the air, water and soil expected.

A proper appliance of EMP would minimize any negative impact on people and biotope, which could be linked with negative cumulative effects. If defined protective measures are applied, a cumulative impact will be minimal.
5. ENVIRONMENTAL MANAGEMENT PLAN

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

A basic assessment of the proposed road reconstruction and rehabilitation project concluded that the rehabilitation impacts will be minor and manageable if the mitigation measures as given in the EMP are properly implemented. The EMP (Attachment I and Attachment II) is based on the type, extent and duration of the identified environmental impacts. PE “Roads of Serbia” will manage the design and supervision consultants and contractors on the implementation of the EMP.

A. MITIGATION PLAN

The findings and proposed mitigation measures have been compiled into an Environmental Mitigation Plan (Attachment I). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the design, rehabilitation and operational phases. It makes reference to the conditions as issued by the relevant institutions, laws, approximate location, timeframe, and the responsibility for its implementation and supervision.

- Contractor’s Management

The recommendations and proposed mitigation measures are provided within the Attachment I. Mitigation measures constitute an integral part of design and execution of the Works on heavy maintenance and as such their costs are included in costs of the Works.

The experience shows that the inappropriate appliance of Environmental Management Plan by contractors results from its weak connection with the contract documents. The EMP is a constituting element of Program of Works and the Contractor should also see it as such and implement it as requested.

The Contractor shall use this document to check the compliance with the EMP. The Contractor’s obligation shall be to include mitigation measures in its total costs.

The Contractor’s obligation shall be to include the costs of implementation of measures for mitigating negative impact on environment into the total costs. The Contractor shall provide a brief statement to confirm that:

- The EMP has been included in the price;
- The Contractor has qualified and experienced member of staff in its team, who will be made responsible for harmonized relations between the environment and EMP;
- Contractor and sub-contractors work in accordance with national laws of the Republic of Serbia, EU standards and Borrower’s requirements.
• Design phase

Mitigation measures are part of the standard method of design preparation and rehabilitation and therefore their costs will be included in the costs of rehabilitation.

• Site organization plan

Preparation of the Site organization plan represents the Contractor’s responsibility and at the same time the Contractor is obliged to act in accordance with the Plan.

The subject section is not located within the protected area for which the proceedings for the environmental protection have been initiated or completed nor it is covered by the area of ecological network. Accordingly, the Institute for Nature Conservation issued conditions related to the site organization (Attachment V) which must be taken into consideration while preparing the site organization plan.

Preparation of the site and establishment of facilities relates to all Contractor’s facilities such as: warehouses, workshops, concrete plant, asphalt plant, etc. The locations and development of the Contractor’s facilities will be approved by the Engineer who is permanently engaged on the site.

Taking into consideration conditions for the environmental protection, protection of cultural monuments, legislation and requirements for the environmental protection, while deciding on the location and organization of the site, as well as while executing the Works, the following conditions shall be fully met:

1. temporary locations for storage of necessary construction and other materials and equipment shall be located beyond the coastal line of watercourses, areas with high vegetation and they shall be limited exclusively to time for execution of the Works;
2. temporary or permanent locations (the existing developed utilities/landfills) for storing and disposing debris and other waste material of any form, as well as communal waste generated from construction shall be provided. Storing/depositing in coastal lines of watercourses and on arable land shall be prohibited;
3. it is necessary to plan that all surfaces degraded in any manner by the construction works are repaired immediately upon completion of such works;
4. during execution of the works one must strictly comply with the designed route and surrounding corridor as to avoid adverse impact of earth works and machinery on the area;
5. material to be used for renewal of pavement surfacing from the aspect of protection should comply with the following requirements: decrease in noise levels and vibrations, enablement of efficient and effective water draining from pavement surfacing, etc.;
6. during execution of the works on the road alignment immediately close to watercourses, it is necessary to ensure a maximal preservation of coast and coastal vegetation. On banks of streams, where the road is with a bridge used for crossing of small animals, it is necessary to preserve low bushy vegetation which would direct animals towards the crossing. Vegetation in front of the crossing should be physically connected with the natural vegetation of the surroundings and of open type (grass or low bushes) in central part of the area, on both sides of the bridge or culvert;

7. functioning of local ecological corridors by cleaning of parts with pipes or culverts for water should be enabled;

8. during execution of the works, it is forbidden to deposit and store away any kind of waste material, especially construction material in the shore area;

9. servicing of vehicles and machinery along the road should be prohibited. In case of accidental spills of fuel, oils/lubricants and other harmful materials, it is necessary to remedy the surface and return it into original condition;

10. subject works on the section which goes through settlements shall be executed only during day due to possible noise nuisance generated by construction machinery and equipment;

11. erection of protective fences and pedestrian crossings and crossings shall be done on locations where it is reasonably needed and meaningful, especially on locations in vicinity of the existing settlements;

13. during execution of the works it is of utmost importance to maintain the maximum level of communal hygiene. Locations for the placement of containers for temporary storage of waste should be defined. For solid waste disposal it is necessary to use containers that provide isolation of waste substances from the environment. Containers must be emptied regularly by the relevant municipal services;

14. the area under the Contractor's facilities should be limited to minimum in order to reduce unnecessary clearing of vegetation;

15. Contractor's facilities should be fenced by proper protective fences;

16. the site must be properly drained. Asphalt surfaces, including parking areas, workshops and fuel storages, shall be drained in a manner that fluids are directed to a separator for water and oil;

17. sanitary waste and polluted water must be treated before discharging into recipient (the system of surface waters) in accordance with the Law on Waters ("Official Gazette of RS", No. 101/05);

18. storage of fuel shall be at least 20 m away from watercourses;

19. if on the site more than 5000 liters of fuel is stored, it should be kept in closed tanks on concrete bedding which can withstand up to 110% of tank capacity;

20. all workshops need to be equipped with oil and water separators;

21. the Contractor must have trained staff, competent to handle fuel and repair the damage after accidental spill;

22. lubricants and fuel needed for machinery shall be transported, deposited (stored) and handled in close compliance with protective measures stated by the regulations related to hazardous materials;
23. all waste oil, filters for oil and fuel will be collected and deposited at safe locations. When closing the site, all contaminated soil must be excavated and replaced with a new layer of soil;
24. in case of accidental discharge of pollutants, the polluted layer of soil must be removed immediately and placed in the packaging that must be discharged to, for this purpose only, intended section, outside the natural habitat. At the location of the accident, new, uncontaminated soil layer shall be placed;
25. removed material should be stacked in heaps of appropriate size, in line with the requirements for handling and reuse of such material;
26. volume of excavation should be limited in order to reduce the possibility of soil erosion. The Contractor shall provide protective measures to prevent soil erosion;
27. the methodology for protection and conservation of areas at risk should be applied to reduce runoff of storm water with eroded material from the location;
28. excavation and use of machinery (work with machinery) should be avoided in wet terrain conditions;
29. upon completion of the Works, it is necessary to remove the machinery as soon as possible, as well as the construction materials, containers, spare parts and other pieces of equipment;
30. levelling of the terrain should be provided after completion of the works in order to reduce the potential spread of weeds;
31. after completion of the work, it is necessary to cultivate the terrain on all vulnerable locations by using appropriate flora and species that are biologically stable under the given climatic conditions, resistant to adverse impacts (emissions) and compatible with the surrounding area and purpose;
32. in length of at least 10 meters to the north and south from the location of the monument “Kipovi”, i.e. in length of app. 30 meters on both sides of the road, it shall not be allowed to set up additional road signs and information boards – billboards;
33. in the specified road reserve it is allowed to execute the works on technical maintenance of pavement. The Works should be done with special care to prevent any damage to the monument. Use of vibrating equipment for compacting the bedding shall not be allowed on the section in length of app. 30 m. Execution of the works that may statically endanger the constructed monument “Kipovi” is prohibited;
34. during the execution of the Works within the specified area near the monument “Kipovi”, it shall not be allowed to deposit materials and equipment, flammable and hazardous materials, and it shall be mandatory to carry out all measures to protect the monument from damage. The Employer’s obligation will be to repair and restitute in accordance with special conditions of service for protection of immovable cultural heritage any damage possibly occurring during execution of the Works;
35. it is allowed to place the additional signage for access to the monument on both sides of the road at location of entrance to the subject road section of 30 m of length;
36. it is allowed to execute the Works on technical maintenance of pavement in the area of the monument “Krilo”.

PE “Roads of Serbia” shall be obliged to check, through the engaged supervision consultant, whether the requirements of EMP and Safety Management Plan are included in the site organization.

- Mobilization – Contractor’s EMP

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

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

Contractor prepares CEP: following the award of the contract and before commencing the work, the Contractor will prepare a Contractor’s Environmental Plan (CEP) that addresses the conditions of the rehabilitation in the EMP related to the Contract Documents including measures to comply with national legalization and Borrower's requirements. The CEP will detail how the Contractor will address the activities in the rehabilitation section of the EMP. The contractor will submit the CEP to the PERS for approval.

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

- Works on urgent maintenance and repair of damages

Technical specifications for execution of the Works that relate to the environmental protection, health and safety at workplace:

1. Preliminary Works;
2. Rehabilitation works on the existing pavement;
3. Earthworks;
4. Drainage;
5. Traffic signage systems.
• Environmental Management during Rehabilitation works

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

• Layout of the work camp and details of the proposed measures to address adverse environmental impacts resulting from its installation. Description and layout of equipment maintenance areas and lubricant and fuel storage facilities including distance from water sources;

• Sewage and wastewater management plan for provision of sanitary block to prevent pollution of watercourses;

• A plan (mechanism and organizational structure) detailing the means by which local people and other project affected persons (PAP) can raise grievances arising from the rehabilitation process and how these will be addressed (e.g., through dialogues, consultations, etc.) (see Attachment IV for the Project grievance mechanism);

• Soil Management Plan detailing measures to be undertaken to minimize effects of wind and water erosion, measures to minimize loss of fertility of topsoil, timeframes, haul routes and disposal sites;

• Dust management plan which shall include schedule for water spraying on access road and in nearby settlements along the project road, as well as list of equipment to be used; This applies to all of construction sites and haul roads. During rehabilitation, when dust may be generated, the Contractor will monitor the worksite conditions and apply dust control measures, which include reducing construction traffic movements and spraying water on exposed areas.

• A plan indicating the location of the proposed material extraction site as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion;

• Waste and wastewater management plan. Disposal of waste materials: All construction waste materials including barrels, lumber, sand and gravel, cement bags etc. are to be suitably disposed of. If these cannot be recovered for scrap value, these materials should be taken to an approved landfill sites for safe disposal. Hazardous waste will be stored and removed from the construction site on demobilization, in accordance with the Law on Waste Management (“Official Gazette of RS”, 36/09) The Contractor’s SSIP should cover all aspects of waste management, including implementation of practice standards such as reduce, re-use and recycle. It should specify final disposal alignments for all waste and demonstrate compliance to national legislation and best practice procedures on waste management.

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

- Oil and fuel storage management plan. The Contractor’s SSIP should cover
all procedures for storage, transportation and usage of oils and fuels,
refuelling of plant and machinery and procedures for minimizing the risk of
ground and water contamination. All oils and fuels will be required to be
stored within secondary containment of 110 % capacity and all spillages
shall be cleaned up immediately. Re-fuelling vehicles will carry Spill Kits to
enable spillages to be cleaned up as soon as possible. All categories of
spillage will be reported in accordance with the Plan.

- In-river works management plan. The Contractor’s SSIP should cover
procedures and plans for safeguarding aquatic habitats and fish during in-
river work.

- Site management plan. The Contractor’s SSIP should contain procedures for
establishing and operating construction camps in order to safeguard nearby
communities and environmental resources.

- Emergency response plan. The Contractor’s SSIP should contain
procedures for emergency response in the event of accidents or major
incidents, in order to safeguard people, property and natural resources.
Details of the spill response equipment to be provided on site are to be
specified to mitigate the consequences of hazardous materials spillage.

- Noise – all equipment shall be licenced and approved in accordance with
EU standards. This applies to all machinery, vehicles and construction sites
where noise and vibration may affect susceptible receptors. The contractor
will be responsible for ensuring that noise and vibration do not affect the
adjacent communities, in accordance with the Law on noise protection
(“Official Gazette of RS”, 36/09). The Contractor will confine all work to
daylight hours (0700hrs - 1900hrs) should the community find that any night
time operations become a nuisance.

- Rehabilitation Plan: Clearance and rehabilitation of construction sites and
removal of contractor's facilities: It is the Contractor's responsibility to
address site cleanup. This includes the removal of all waste materials,
machinery and any contaminated soil. The contractor will develop a plan for
handover, sale or removal of all plant, vehicles and machinery to ensure
that no unserviceable items are left on the construction site, in accordance
with the Law on Waste management (“Official Gazette of RS”, 36/09). All
construction sites and work areas will be rehabilitated so that these can be
returned as close as possible to their previous uses. This includes the
stabilization and landscaping of all of the construction sites. No waste will
be left on site after the work is completed, in accordance with the Law on
Should the Contractor fail to remove the waste, the PERS is entitled to
withhold payment and arrange the clean-up and deduct the cost of the
clean-up and administrative charges from the final payment.
• **Safety**

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

- The contractor will be required to keep the site free of drugs and alcohol.
- The contractor’s site safety plan will include provision for a safe work environment and provide safety measures and protective equipment to all workers including; hand, head, eye and ear protection and safety footwear.
- Safety and Labour Management Plan (SLMP), shall include a provision for first aid in situ and trained person for the first aid assistance shall be hired in accordance with the Law on health and safety at workplace (“Official Gazette of RS”, No. 101/05).
- The Contractor shall provide supply of running water for its workers, wash water, water for toilets;
- SLMP is necessary to ensure provisions for health and safety during rehabilitation Works;
- Contractor is obliged to perform all project activities by respecting SMP recommendations and all Serbian laws and sub-laws which are covering H&S issues.

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

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

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

Prior to commencement of construction activities/site works, all of the above plans will be submitted by the Contractor to the Sector for Investment within the PERS for approval.

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

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

Road Maintenance: Routine maintenance (grass cutting, clearing of drainage system and repairs, together with regular control and maintenance of drainage structures and retention) will be undertaken on regular basis. Seasonal maintenance and the regular upkeep of safety features and road signs will be undertaken as necessary. Major maintenance that include resurfacing and repairs are typically scheduled over periods of several years.
B. MONITORING PLAN

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

- Environmental issue to be monitored and the means of verification,
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Monitoring of noise levels near residential areas;
- Monitoring of the supply of materials (checks that valid permits are in place)
- Duration and frequency and estimated monitoring costs; and
- Institutional responsibilities for monitoring and supervision.

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

The PE “Roads of Serbia” will maintain a Complaints Database, which will contain all the information on complaints or grievances received from the communities or other stakeholders. This would include: the type of complaint, location, time, actions to address these complaints, and final outcome.
C. INSTITUTIONAL IMPLEMENTATION AND REPORTING

- Project Implementation

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

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

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

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

- clearly set out that the Contractor’s obligation is to prepare CEP and undertake environmental mitigation measures as specified in the Environmental Mitigation Plan in Attachment I;
- No compensation for the costs of the required environmental mitigation measures and monitoring activities in the form of the particular item in the BoQ shall be given to the Contractor, except for the water quality analysis and noise measurement. It shall be regarded as if the Contractor has included these costs in the other items of the BoQ. Real expenditures of water quality analysis and noise measurement shall be compensated to the Contractor in the form of the particular item in the BoQ. For noncompliance with requested environmental mitigation measures and monitoring activities the Contractor shall suffer specific liquidated damages in a form of demerit points. Demerit points are provided as a measure that should stimulate the Contractor to carry out his obligations in an organized and timely way and to perform his duty meeting high standards. Demerit points have in the same time two meanings – numeric and monetary. Each demerit point has associated monetary value which represents permanent payments reduction for determined noncompliance of the contracted obligations. Number of received demerit points has cumulative effect. If the Contractor receives more than certain number of demerit points specified in the Contract, the Contractor will for a period of 2 years not be allowed to compete for any other PERS works contract. Also, if the Contractor is awarded over a specified number of demerit points, the Employer has a right to terminate the Contract. Monetary value of each demerit point as well as limits for other possible actions by the Employer shall be clearly specified in the Contract. Application of explained two measures - compensation for specific costs and penalties for noncompliance – should assure implementation of all requested environmental mitigation measures and monitoring activities, and
- Explicitly require the Contractor to recruit an environmental specialist. The contractor will be responsible for the implementation of environmental mitigation measures during construction and shall employ an environmental
specialist who will supervise implementation of the Contractor’s environmental responsibilities and coordinate with the PERS and MoT. The contractor, in coordination with PERS and the ministry in line, shall deal with any complaints during project implementation. During project implementation, the PERS shall monitor the compliance of the Contractor with the EMP provisions. It is proposed that the project supervision consultants (PSC) employ an environment specialist (with civil engineering/environmental management background) to assist the environmental supervision.

Upon Project completion, the PE “Roads of Serbia” will be in charge of the operation and maintenance of the Project Road. Routine and random monitoring will be undertaken as scheduled in the monitoring plan.

The Public Enterprise “Roads of Serbia” (PERS) is also responsible for:

- Implementation of requests for environmental protection given by: national state environmental authorities, IFIs and other institutions, Law on environmental protection (“Official Gazette of RS”, 36/09, 72/09),
- Implementation of requests for environmental protection through contractor’s specifications,
- Supervision of the project through the consulting services for supervision and implementation of the project,
- Supervision of environmental monitoring through the consulting services for environmental monitoring,
- Preparation of the final environmental reports.

The Contractor will make proposal for environmental protection, including safety of persons associated with the works and the public within the Environmental Management Plan. This proposal will be reviewed by PERS in order to obtain the agreement with the proposal’s recommendations. In this regard, attention will be given to:

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

The Ministry in line will have the authority for immediate suspension of works if performance is not in accordance with environmental standards and regulations. Inspection will then inform the PERS about suspension and order to proceed according to its directive. Public consultations will be organized in the forthcoming period.
The Contractor Reporting Arrangements

A) Contractor to PERS

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

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

If any kind of accident or endangerment of environment happens, reporting will be immediate. Contractor is obliged to inform the project manager and local authorities about accidents immediately after it happened. In case that project manager is not responding on a call, the Contractor is obliged to inform PERS about accident (phone number +381113040701 or via E-mail on following address: office@putevi-srbije.rs).

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

B) Project Supervision Consultant to PERS

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

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

C) PE “Roads of Serbia” to Ministry of Transport, World Bank, European Bank for Reconstruction and Development and European Investment Bank

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

In case of fatalities or major incidents on site the PERS will immediately report to the Bank which is financing the road section.

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

EMP shall be publicly disclosed in the forthcoming period.

7. REFERENCES

3. EIB ENVIRONMENTAL AND SOCIAL PRACTICES HANDBOOK, Environment and Social Office Projects Directorate Version 2 of 24/02/2010
4. EBRD Environmental and Social Policy 2008
ATTACHMENTS
Attachment I

MITIGATION PLAN
## MITIGATION PLAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>Issue</th>
<th>Mitigating measure</th>
<th>Institutional responsibility</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Pre-Construction | Detailed Design                                                      | Compliance with the procedure for the environmental protection  

PE “Roads of Serbia” obtained conditions from the Institute for Nature Conservation of Vojvodina Province and Institute for Protection of Cultural Monuments Sremska Mitrovica to avoid environmental risks during heavy maintenance  

The location and development of the contractor’s facilities will be approved by the PE. Location will be selected so that:  

- Is out of coastal line of Jelenački potok  
- There is no adverse impact on the environment, social welfare of community (e.g. dust, vibrations, etc.)  
- Is out of the area covered with high vegetation  
- Size of the buildings and facilities is limited to minimum to reduce unnecessary removal of vegetation;  
- Sanitary waste and polluted water are treated before discharging into the surface water system in accordance with the Law on Waters (“Official Gazette of RS”, No. 101/05)  
- Paved areas, including vehicle parking areas, workshops and fuel storage areas, areas for oil and water takeoff to separators and fuel storage areas Clearing of sites and removal  

PE “Roads of Serbia”, Designer  

PE “Roads of Serbia”  

PE “Roads of Serbia”, Contractor  

PE “Roads of Serbia” |
and disposal of vegetation;
- Wherever possible limit area to be cleared and avoid excessive machine disturbance of the topsoil.
- Cleared material is to be piled, stored and/or used again according to the necessity.

Prevention of soil erosion on construction site:
- The contractor will be responsible for ensuring that the erosion is contained by soil conservation protection methods
- The contractor will limit the extent of excavation to reduce soil erosion.
- The contractor shall apply soil conservation protection methodology to susceptible areas to prevent / minimize storm water runoff carrying eroded materials off-site.
- The contractor shall avoid excavation and operating machinery in wet ground conditions.

| Site selection for construction camps, near or within existing settlements. Impact on public health and sociological setting | Proper site selection, observing criteria which primarily protect the public interest. Observe a minimum distance (buffer zone) between camp site and nearest residential area. Observe local wind conditions to avoid/reduce nuisances. Work safety and environmental protection measures to be specified by the Contractor in his Site Management Plan. Planning for independent water and electric supply network and a medical service station at the site. | Designer – Consultant for Detailed Design PE “Roads of Serbia” |
| Road safety issues associated with pedestrians and pedestrian crossing | Plan for safe and adequate pedestrian crossing facilities that will be equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams. | Designer – Consultant for Detailed Design | Technical Control for Detailed Design PE “Roads of Serbia” |
| Stakeholder engagement | Details of the proposed road alignment, access points and safety features will be disclosed in the locality of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered in the final design will be recorded. | PE “Roads of Serbia” Designer – Consultant for Detailed Design | PE “Roads of Serbia” Technical Control for Detailed Design |

**CONSTRUCTION MANAGEMENT PLAN**

Contractor to prepare implement the following plans as described in the EMP to ensure compliance with legislative and Borrower requirements.

- Site organization
- Sewage and waste water
- Project grievance mechanism
- Soil Management Plan
- Dust management plan
- Location of the borrow pit, measures for restating for the borrow pits and access roads after completion of the project;
- Oil and fuel storage management plan.
- In-river works management plan.
- Emergency response plan.
- Rehabilitation Plan
- Safety and Hazard Assessment
- Safety and Labor Management Plan (SLMP),

**CONSTRUCTION** Entry to the site

All workers and visitors to site shall be given a Health, Safety and Environment Induction and instructed in the need and use of PPE
<table>
<thead>
<tr>
<th>CONSTRUCTION</th>
<th>Supply of materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt plant dust, fumes, workers’ health and safety, ecosystem disturbance</td>
<td>Use existing asphalt plants; requirement should be placed for official approval or valid operating license</td>
</tr>
<tr>
<td>Stone quarry dust, workers health and safety, ecosystem disturbance</td>
<td>Use the existing stone quarries. requirement should be placed for official approval or valid operating license</td>
</tr>
<tr>
<td>Sand and gravel borrow pit disturbance of river bed, water quality, ecosystem disturbance</td>
<td>Use existing borrow pits or buy material at licensed separations; requirement should be placed for official approval or valid operating license.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONSTRUCTION</th>
<th>Transport of material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt dust, fumes</td>
<td>All trucks are to be covered. This is a problem area throughout the region and this will not be achieved unless the selection contractors operating trucks is managed</td>
</tr>
<tr>
<td>Stone Dust</td>
<td>wet or cover truck load</td>
</tr>
<tr>
<td>Sand and gravel Dust</td>
<td>wet or cover truck load</td>
</tr>
<tr>
<td>Traffic management noise, vehicle exhaust, road congestion</td>
<td>• haul material at off peak traffic hours (preferably 9-14h); • use alternative routes to minimize major traffic sites; • Need to ensure that adequate signs to work</td>
</tr>
</tbody>
</table>
Archaeological chance finds

In case of chance finds Contractor is obliged to stop the works immediately and inform institute for protection of Cultural Monuments and PE “Roads of Serbia” about it.

<table>
<thead>
<tr>
<th>CONSTRUCTION</th>
<th>Construction site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful effect of noise on workers and local population</td>
<td></td>
</tr>
<tr>
<td>- limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities);</td>
<td></td>
</tr>
<tr>
<td>- equipment operating with noise mufflers and licensed and approved in accordance with EU standards;</td>
<td></td>
</tr>
<tr>
<td>- Noise screens/barriers for noisy works for those longer than one day in the same location/area;</td>
<td></td>
</tr>
<tr>
<td>- Noisy equipment will be located as far as possible from residential or other sensitive receptors.</td>
<td></td>
</tr>
</tbody>
</table>

| Dust |
| - water construction site and cover material storage areas limited speed of vehicles; |
| - Implement a Dust Management Plan: measures to avoid/minimize dust emissions, including use of hoardings; |
| - wetting down/spraying of construction areas, accesses, materials stockpiles and during loading/unloading activities; covering of vehicles carrying dusty materials; wheel washing/spraying of vehicles, etc. |

| Vibrations |
| - limit activities to daylight working hours (not |
| Contractor | Contractor |
between 8 p.m. and 7 a.m. or as agreed with public and authorities;  
- If any material damage proved to have been caused to local houses, buildings and other infrastructure (including access roads) by the works will be compensated for under the project and subject to repair on a timely basis;  
- Earthmoving equipment will be located as far away as possible from vibration-sensitive receptors.

<table>
<thead>
<tr>
<th>Traffic disruption during construction activity</th>
<th>Contractor</th>
<th>Contractor</th>
</tr>
</thead>
</table>
| Traffic management plan with measures to redirect traffic that are easily seen or easy to follow; include traffic police assistance if needed  
Preparation of the Traffic Management Plan will establish speed limits for construction vehicles and organize traffic to avoid as much as possible populated areas.  
During execution of the Works, the existing road network shall be used to the greatest possible scope and construction of new roads for temporary use shall be avoided in order not to have additional fragmentation of space and the existing habitats;  
Local residents should be kept informed about planned Works | Contractor | Contractor |

<table>
<thead>
<tr>
<th>Reduced access to roadside activities</th>
<th>Contractor</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent alternative access to activities in road reserve should be enabled.</td>
<td>Contractor</td>
<td>Contractor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicle and pedestrian safety where/when there is no construction activity</th>
<th>Contractor</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting and well defined safety signs and protection measures.</td>
<td>Contractor</td>
<td>Contractor</td>
</tr>
</tbody>
</table>
### Environmental Management Plan

**Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B**

<table>
<thead>
<tr>
<th>Water and soil pollution from improper material storage, management and usage</th>
<th>Contractor</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• organize and cover material storage areas;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• isolate concrete, asphalt and other works from watercourse by using sealed formwork or covers;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• isolate wash down areas of concrete and asphalt trucks and other equipment from watercourse by selecting areas for washing that are not free draining directly into watercourse;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Operate construction site in a way to reduce the risk of generating sediments and wastewater that may pollute local soils or receiving water bodies (considering situations such as including stormwater runoff, wastewater generated from facilities on site such as wheel washing facility).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Soil Management Plan shall be prepared for the controlled removal of top soil, storage and reuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Prevent sediments flowing into surface waters and drainage channels by localized control measures (e.g. sediment fences, check dams, mulch barriers, rock groins, or geofabric barriers, sediment basins), contouring to optimize slope angle and steepness, prevent wind erosion via fencing, covering, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Depositing of surplus of earth and stone material, etc. may be of temporary nature only and limited to the time of completion of the Works. After completion of Works, all excessive earth, stone and other waste material shall be removed and repair of all surfaces degraded during the Works shall be applied.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Water and soil pollution from improper disposal of waste materials | • dispose waste material at location protected from washing out, should be marked in the site plan; if not on site, then at authorized landfill / depot  
• Storage of waste material according to international best practice (IFC EHS General Guideline).  
• Apply additional measures for storage of hazardous wastes (such as use of secondary containment, access restriction, provision of PPE etc.) as necessary to prevent harm to construction staff, environment and public.  
• Appoint responsible persons for collecting waste and its storage (hazardous and non-hazardous). | Contractor | Contractor |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential contamination of soil and water from improper maintenance and fueling of equipment</td>
<td>apply best engineering practice in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose to permitted waste recovery facility</td>
<td>Contractor</td>
<td>Contractor</td>
</tr>
</tbody>
</table>
| Water and soil pollution from improper disposal of waste materials | • Transport of waste in marked vehicles designed to the type of waste to minimize the risk of release of materials (hazardous and non-hazardous materials)  
• Training of drivers in handling and disposal of their cargo and the documentation of the transport describing the nature of the waste and its degree of hazard. | Contractor | Contractor |
| Workers' safety | • provide workers with safety instructions and protective equipment;  
• provision of safe alternative for traffic | r | Contractor |
<table>
<thead>
<tr>
<th>Operation</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporarily occupies surfaces</td>
<td>Undertaking of re-vegetation progressively with native endemic species and monitor its effectiveness. Where initial plantings were not successful, replacement plantings will be carried out.</td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td><strong>Maintenance</strong></td>
</tr>
<tr>
<td>Noise disturbance to human and animal population and workers</td>
<td>• limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public); • equipment operating with noise mufflers</td>
</tr>
<tr>
<td>Possible air, water and soil pollution dust, vehicle exhaust, fuel and lubricants spills</td>
<td>• apply best engineering practice in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose in line with the Law on waste management; • organize and cover material storage areas; • isolate asphalt from watercourse by using sealed formwork; • selecting areas for washing of concrete transporting vehicles and other pieces of equipment that are not free draining directly or indirectly into watercourse • dispose waste material at location protected from washing out</td>
</tr>
<tr>
<td>Vibrations</td>
<td>limit activities to daylight working hours (not between 8 p.m. and 7 a.m. or as agreed with public and authorities)</td>
</tr>
<tr>
<td>Workers' safety</td>
<td>• provide workers with safety instructions and protective equipment; • safe organization of bypassing traffic</td>
</tr>
</tbody>
</table>
### Increased vehicle speed
- install traffic signs for speed limit

<table>
<thead>
<tr>
<th>Maintenance Contractor</th>
<th>Maintenance Contractor</th>
</tr>
</thead>
</table>

### Erosion, rockfall, hazardous conditions
- install warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal or pedestrian crossing, school, slow moving vehicles), reflective markers to indicate steep edge or convex mirrors to see oncoming traffic at blind curves; locate warnings at points considered necessary by good engineering practice, or as agreed in writing with public and authorities

<table>
<thead>
<tr>
<th>Maintenance Contractor</th>
<th>Maintenance Contractor</th>
</tr>
</thead>
</table>

- this could really be expanded
Attachment II

MONITORING PLAN
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored?</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored? Type of monitoring equipment</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCTION</td>
<td>Supply of material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt plant</td>
<td>possession of official approval or valid operating license</td>
<td>Asphalt plant</td>
<td>Inspection / supervising engineer</td>
<td>before work begins</td>
<td>assure plant compliance with environment, health and safety requirements</td>
<td>Plant Operator</td>
</tr>
<tr>
<td>Stone quarry</td>
<td>possession of official approval or valid operating license</td>
<td>Stone quarry</td>
<td>Inspection / supervising engineer</td>
<td>before work begins</td>
<td>assure quarry compliance with environment, health and safety requirements</td>
<td>Quarry Operator</td>
</tr>
<tr>
<td>Sand and gravel borrow pit</td>
<td>possession of official approval or valid operating license</td>
<td>sand and gravel borrow pit or separation</td>
<td>Inspection / supervising engineer</td>
<td>before work begins</td>
<td>assure borrow pit compliance with environment, health and safety requirements</td>
<td>Borrow pit or Separation Operator</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>Material transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt</td>
<td>truck load covered</td>
<td>site</td>
<td>supervision</td>
<td>unannounced inspections during work, at least once per week</td>
<td>assure compliance of performance with environment, health</td>
<td>Supervision</td>
</tr>
</tbody>
</table>

RRSP/CS3-IB21IR/2015-05
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored? Type of monitoring equipment</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>truck load covered or wetted</td>
<td>site</td>
<td>supervision</td>
<td>announced inspections during work, at least once per week</td>
<td>assure compliance of performance with environment, health</td>
<td>Supervision</td>
</tr>
<tr>
<td>Sand and gravel</td>
<td>truck load covered or wetted</td>
<td>site</td>
<td>supervision</td>
<td>announced inspections during work, at least once per week</td>
<td>and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
<tr>
<td>Traffic Control</td>
<td>hours and routes selected</td>
<td>site</td>
<td>supervision</td>
<td>announced inspections during work, at least once per week</td>
<td>assure compliance of performance with environment, health, and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
</tbody>
</table>

**CONSTRUCTION**

<p>| Site | Noise disturbance to workers and neighboring population | noise levels | site; nearest homes at suburban area of Ruma | equipment – hand-held analyzer with relevant software | once at the beginning of the project and later on quarterly basis, and on complaint. If the results of monitoring are not satisfactory, monitoring should be conducted on monthly basis | assure compliance of performance with environment, health, and safety requirements and enable as little disruption to traffic as it is possible | Contractor (Monitoring) |</p>
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored? Type of monitoring equipment</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>air pollution (suspended solid particles)</td>
<td>at and near the site</td>
<td>inspection and visual observation</td>
<td>unannounced inspections during material delivery and construction</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision (Monitoring)</td>
</tr>
<tr>
<td>Vibrations</td>
<td>limited time of activities</td>
<td>Site</td>
<td>inspection</td>
<td>unannounced inspections during material delivery and construction</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
<tr>
<td>Traffic disruption during construction activity</td>
<td>existence of traffic management plan; traffic patterns</td>
<td>at and near the site</td>
<td>inspection and observation</td>
<td>before works start; once per week at peak and non-peak periods</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
<tr>
<td>Monitoring Plan Phase</td>
<td>What is the parameter to be monitored?</td>
<td>Where the parameter should be monitored?</td>
<td>How the parameter should be monitored? Type of monitoring equipment</td>
<td>When the parameter should be monitored? (frequency of measurement or continuous)</td>
<td>Why the parameter should be monitored? (optional)</td>
<td>Institutional responsibility</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Reduced access to roadside activities</td>
<td>Provided alternative access</td>
<td>Site. Main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection during planning, design, construction and operating of this Project are listed below:</td>
<td>inspection</td>
<td>random checks at least once per week during construction activities</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
</tbody>
</table>

1. Law on Planning and Construction ("Official Gazette of RS", No. 72/09, 81/09, 64/10, 24/11, 121/12, 42/13, 50/13, 98/13, 132/14, 145/14);
2. Law on nature protection ("Official Gazette of RS", No. 36/09, 88/10, 91/10, 14/16);
3. Law on environmental protection ("Official Gazette of RS", No.135/04, 36/09, 72/09,43/11, 14/16);
4. Law on EIA ("Official Gazette of RS", No.135/04, 36/09);
5. Law on Strategic EIA ("Official Gazette of RS", No.135/04, 88/10);
6. Law on waste inspection (optional)
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored? Type of monitoring equipment</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle and pedestrian safety when there is no construction activity</td>
<td>visibility and appropriateness</td>
<td>at and near the site</td>
<td>observation</td>
<td>random checks at least once per week in the evening</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
<tr>
<td>Water and soil pollution from improper material storage, management and usage</td>
<td>water and soil quality (suspended solids, oils, pH value, conductivity)</td>
<td>On the Jelenci watercourse</td>
<td>unannounced sampling; analysis at accredited laboratory with necessary equipment</td>
<td>At least 3 times during project period. Monitoring should be done prior construction (or on a referent point upstream of construction site) and during and after rehabilitation works</td>
<td>assure compliance of performance with environment health and safety requirements</td>
<td>Contractor (Monitoring)</td>
</tr>
<tr>
<td>Workers safety</td>
<td>protective equipment; organization of bypassing traffic</td>
<td>Site</td>
<td>Inspection</td>
<td>Unannounced inspections during work.</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>Supervision</td>
</tr>
</tbody>
</table>

**OPERATION**

Maintenance
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored? Type of monitoring equipment</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise disturbance to human population and workers</td>
<td>noise levels</td>
<td>site; nearest houses</td>
<td>equipment – hand-held analyzer with application software</td>
<td>unannounced inspections during maintenance activities and on complaint</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>PE “Roads of Serbia”</td>
</tr>
<tr>
<td>Vibrations</td>
<td>limited time of activities</td>
<td>site</td>
<td>supervision</td>
<td>unannounced inspections during maintenance activities and on complaint</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>PE “Roads of Serbia”</td>
</tr>
<tr>
<td>Workers safety</td>
<td>protective equipment; organization of bypassing traffic</td>
<td>site</td>
<td>inspection</td>
<td>unannounced inspections during maintenance activities and on complaint</td>
<td>assure compliance of performance with environment health and safety requirements and enable as little disruption to traffic as it is possible</td>
<td>PE “Roads of Serbia”</td>
</tr>
</tbody>
</table>

**OPERATION**

Road Safety
<table>
<thead>
<tr>
<th>Monitoring Plan Phase</th>
<th>What is the parameter to be monitored</th>
<th>Where the parameter should be monitored?</th>
<th>How the parameter should be monitored?</th>
<th>When the parameter should be monitored? (frequency of measurement or continuous)</th>
<th>Why the parameter should be monitored? (optional)</th>
<th>Institutional responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Increased vehicle speed</em></td>
<td>condition of traffic signs; vehicle speed</td>
<td>road section included in project</td>
<td>visual observation; speed detectors</td>
<td>during maintenance activities; unannounced</td>
<td>enable safe and economical traffic flow</td>
<td>Maintenance Contractor; Traffic Police</td>
</tr>
<tr>
<td><em>Erosion, rockfall, hazardous conditions</em></td>
<td>condition of hazard signs</td>
<td>road section included in project</td>
<td>visual observation</td>
<td>during maintenance activities</td>
<td>enable safe and economical traffic flow</td>
<td>Maintenance Contractor; Monitoring</td>
</tr>
</tbody>
</table>
**Proposed Template - additional data required that should be incorporated into monitoring plans:**

<table>
<thead>
<tr>
<th>1. General</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the project materially compliant with all relevant Performance Requirements (taking account of agreed action plans, exemptions or derogations)?</td>
<td>Yes</td>
<td>If No, please provide details of any material non-compliances:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Is the project materially compliant with all applicable environmental and social laws and regulations?</td>
<td>Yes</td>
<td>If No, please provide details of any material non-compliances:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities, affected project labor or local communities, affected cultural asset, or created liabilities for the company?</td>
<td>Yes</td>
<td>If yes, please describe, including details of actions to repair and prevent reoccurrence:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Have there been any changes to environment, social, labor or health and safety laws or regulations that have materially affected the company?</td>
<td>Yes</td>
<td>If yes, please describe:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>How many inspections did you receive from the environmental authorities?</td>
<td>Number:</td>
<td>Please provide details of these visits, including number and nature of any violations found:</td>
</tr>
<tr>
<td>How many inspections did you receive from the health and safety authorities during the reporting period?</td>
<td>Number:</td>
<td>Please provide details of these visits, including number and nature of any violations found:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many inspections did you receive from the labor authorities during the reporting period?</td>
<td>Number:</td>
<td>Please provide details of these visits, including number and nature of any violations found:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have these visits resulted in any penalties, fines and/or corrective action plans?</td>
<td>Yes</td>
<td>If yes, please describe, including status of implementing corrective actions to address any violations found:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Has the Company engaged any sub-contractors for project-related work in the reporting period?</td>
<td>Yes</td>
<td>If yes, please state for which types of work, and how the company has monitored the compliance of contractors with Performance Requirements and the Environmental and Social Action Plan:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Were any of the violations stated above the responsibility of sub-contractors?</td>
<td>Yes</td>
<td>If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Sub-Contractor:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labor reasons?</td>
<td>Yes</td>
<td>If yes, please describe:</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Please describe any environment or social programs, initiatives or sub-projects undertaking 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). If the ESAP has been updated during the reporting period, please attach a copy of the new plan.

3. Environmental Monitoring Data
Please provide the name and contact details for your environmental manager:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
<th>Compliance Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total waste water generated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspended Solids</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Other]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO₂</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 be 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 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:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
<th>Compliance Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particulates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CH4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N₂O</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFCs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFCs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF₆</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Other]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
<th>Compliance Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Other]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Measurement Unit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Measurement Unit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuels used</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lignite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid Electricity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Purchased</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedstocks and raw materials consumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name 1</td>
<td>Name 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product output</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5. Human Resources Management

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

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Recruited in this reporting period</th>
<th>Dismissed in this reporting period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of direct employees:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of contracted workers:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were there any collective Yes</td>
<td>If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RRSP/CS3-IB21IR/2015-05

**Environmental Management Plan** - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>If yes, please state how many, split by gender, summarize the issues raised in grievances and explain how the Company has addressed them:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any planned redundancies to the workforce in the next year?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:</td>
</tr>
<tr>
<td>Were there any changes in trade union representation at Company facilities during the reporting period?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please provide details, and summarize engagement with trade unions during reporting period:</td>
</tr>
<tr>
<td>Were there any other worker representatives (e.g. in the absence of a trade union)?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please provide details and summarize engagement with them during reporting period:</td>
</tr>
<tr>
<td>Were there any changes in the status of Collective Agreements?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please provide details:</td>
</tr>
<tr>
<td>Have employees raised any grievances with the project during the reporting period?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please state how many, split by gender, summarize the issues raised in grievances and explain how the Company has addressed them:</td>
</tr>
<tr>
<td>Have employees raised any complaints about harassment or bullying during the reporting period</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please state how many, split by gender, summarize the issues raised by male and female staff and explain how the Company has addressed them:</td>
</tr>
<tr>
<td>Have there been any strikes or other collective disputes related to labor and working conditions at the Company in the reporting period?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please summarize nature of, and reasons for, disputes and explain how they were resolved</td>
</tr>
<tr>
<td>Have there been any court cases related to labor issues during the reporting period?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please summarize the issues contested and outcome:</td>
</tr>
<tr>
<td>Have there been any changes to the following policies or terms and conditions during the reporting period in any of the following areas:</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please give details, including of any new initiatives:</td>
</tr>
<tr>
<td>Union recognition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Non-discrimination and equal opportunity
- Equal pay for equal work
- Gender Equality
- Bullying and harassment, including sexual harassment
- Employment of young persons under age 18
- Wages (wage level, normal and overtime)
- Overtime
- Working hours
- Flexible working / work-life balance
- Grievance mechanism for workers
- Health & safety

6. Occupational Health and Safety Data

<table>
<thead>
<tr>
<th>Direct employees</th>
<th>Contracted workers</th>
<th>Direct employees</th>
<th>Contracted workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of man-hours worked this reporting period:</td>
<td></td>
<td>Number of Fatalities*¹:</td>
<td></td>
</tr>
<tr>
<td>Budget spent on OHS in this period (total amount and currency):</td>
<td></td>
<td>Number of disabling injuries:</td>
<td></td>
</tr>
<tr>
<td>OHS training provided in this period in person or days:</td>
<td></td>
<td>Number of Lost Time Incidents (including vehicular)*²:</td>
<td></td>
</tr>
<tr>
<td>Number of lost workdays*³ resulting from incidents:</td>
<td></td>
<td>Number of cases of occupational disease:</td>
<td></td>
</tr>
</tbody>
</table>

*¹If you have not already done so, please provide a separate report detailing the circumstances of each fatality.
*²Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.
### Number of Sick Days

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

### 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 the Banks, including total compensation paid due to occupational injury or illness (amount and currency):

### Please summarize any emergency prevention and response training that has been provided for company personnel during the report period:

### Please summarize any emergency response exercises or drills that have been carried out during the report period:

### 7. Stakeholder Engagement

<table>
<thead>
<tr>
<th>Please provide the name and contact details for your external relations or community engagement manager:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Please provide information on the implementation of the stakeholder engagement plan and summarize interaction with stakeholders during the reporting period, including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Meeting or other initiatives to engage with members of the public or public organizations during the report period,</td>
</tr>
<tr>
<td>- information provided to members of the public and other stakeholders during the report period relating to environmental, social or safety issues</td>
</tr>
<tr>
<td>- coverage in media,</td>
</tr>
<tr>
<td>- and interaction with any environmental or other community groups.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Please describe any changes to the Stakeholder Engagement Plan:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How many complaints or grievances did the project receive from members of the public or civil society organizations during the reporting period? Please split by stakeholder group. Summarize any issues raised in the complaints or grievances and explain how they were resolved:</th>
</tr>
</thead>
</table>

### 8. Status and Reporting on Resettlement Action Plan

---

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.

RRSP/CS3-IB21IR/2015-05

Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
**Existing Land Acquisitions**
Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP), using the monitoring indicators as detailed in the RAP and complete the table below. Please provide the results of any other related monitoring and attach any additional information you think would be useful.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>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:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have all the affected persons been fully compensated for their physical displacement and, if applicable, any economic losses resulting from the project?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, 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:</td>
</tr>
<tr>
<td>Has the land acquisition had any additional, unforeseen impacts on affected persons’ standard of living that were not previously covered in the RAP?</td>
<td>Yes</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>Have any vulnerable groups been identified?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, list the groups that were identified and describe any additional measures undertaken in order to mitigate impacts specific to these groups.</td>
</tr>
<tr>
<td>If applicable, have all transit allowances been paid?</td>
<td>Yes</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>Has legal support been provided to all the affected persons?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, specify how many persons effectively made use of the legal support.</td>
</tr>
<tr>
<td>Have all outstanding land and/or resource claims been settled?</td>
<td>Yes</td>
<td>No</td>
<td>If no, specify how many claims are still outstanding and state what the expected timing is for settling them.</td>
</tr>
<tr>
<td>Have there been any new land acquisition-related complaints or grievances?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please state how many and summarize their content.</td>
</tr>
<tr>
<td>Has the company regularly reported to the affected communities on progress made in implementing the RAP?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, please state how many meetings were held and how many participants attended.</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>If yes, how many?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have any persons been physically displaced?</td>
<td>Yes</td>
<td>No</td>
<td>If yes, how many?</td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
<td>No</td>
<td>If yes, how many?</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>------------------</td>
</tr>
<tr>
<td>Have any persons been economically displaced?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was it a government assisted resettlement?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Community Interaction and Development

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

LEGISLATION
MAIN SERBIAN LEGISLATION:

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

1. Law on Planning and Construction ("Official Gazette of RS", No. 72/09, 81/09, 64/10, 24/11, 121/12, 42/13, 50/13, 98/13, 132/14, 145/14);
2. Law on nature protection ("Official Gazette of RS", No. 36/09, 88/10, 91/10, 14/16);
3. Law on environmental protection ("Official Gazette of RS" No.135/04, 36/09, 72/09,43/11, 14/16);
4. Law on EIA ("Official Gazette of RS" No.135/04, 36/09);
5. Law on Strategic EIA ("Official Gazette of RS" No.135/04, 88/10);
6. Law on waste management ("Official Gazette of RS", No. 36/09, 88/10, 14/16);
7. Law on noise protection ("Official Gazette of RS", No. 36/09, 88/10);
8. Law on water ("Official Gazette of RS" No. 30/10, 93/12);
9. Law on forest ("Official Gazette of RS", No. 30/10, 93/12, 89/15);
10. Law on air protection ("Official Gazette of RS", No. 36/09, 10/13);

Regulations established on the basis of the Law on EIA include the following:
12. Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08);
13. Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS" No. 69/05);
14. Rulebook on the contents of the EIA Study ("Official Gazette of RS" No. 69/05);
15. Rulebook on the procedure of public disclosure, presentation and public consultation about the EIA Study ("Official Gazette of RS" No. 69/05);
16. Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS" No. 69/05);
17. Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 72/10);
18. Decree on allowed values of contaminating materials and surface and ground water and sediment and deadlines for achieving such values ("Official Gazette of RS", No. 50/12);
19. Regulations on dangers of pollutants in waters ("Official Gazette of SRS" No. 31/82);

Other relevant Serbian legislation:
20. Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of RS", 38/09);

Attachment IV

STAKEHOLDER ENGAGEMENT AND REPORTING FROM PUBLIC CONSULTATIONS
Stakeholders Identification

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

Potential affected parties:
- Employees of PERS and Contractors;
- Representatives of companies operating the area immediately adjacent to the Project;
- Residents from settlements within the zone of influence of the Project

Statutory regulatory authorities, on local or regional level, such as:
- Local landowners and leaseholders within Project easements; and
- Potentially affected industries/businesses.

Interested parties:
- General public;
- Other companies operating on the National Grid; and
- Non-Governmental Organizations (NGO).

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

Flowchart of Complaints/Grievance Procedure

Grievances are to be resolved within 15 working days.
Grievance Reference Number:

<table>
<thead>
<tr>
<th>Contact Details</th>
<th>Name and Surname:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Address:</td>
</tr>
<tr>
<td></td>
<td>Tel:</td>
</tr>
<tr>
<td></td>
<td>e-mail:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How would you prefer to be contacted? Please tick box</th>
<th>By post</th>
<th>By phone</th>
<th>By e-mail</th>
</tr>
</thead>
</table>

Name and the identification information (from identity card).

Details of your grievance. Please describe the problems, who did it happen to, when, where and how many times, as relevant

What is your suggested resolution for the grievance?

How to submit this form to person in authority for dealing with the matter

<table>
<thead>
<tr>
<th>By Post to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>By hand: please drop this form at:</td>
</tr>
<tr>
<td>By e-mail: Please email your grievance, suggested resolution and preferred contact details to:</td>
</tr>
</tbody>
</table>

Signature

Date
Results from the EMP public consultations

1. BACKGROUND

2. REPORT ON PUBLIC CONSULTATIONS

3. LIST OF PARTICIPANTS

4. DOCUMENTATION
Attachment V

DECISIONS OF RELEVANT INSTITUTIONS
ПРЕДМЕТ: Захтев за издање Услове за израду техничке документације пројекта Појачаног одржавања део ице државног пута из реда бр. 21 (стара ознака M-21) Ириг (раскрсници за Врдник) — Рума (до аутопута).

Поштомано Вам се са Захтевом за издање УСЛОВА за израду техничке документације пројекта Појачаног одржавања део ице државног пута из реда бр. 21 (стара ознака M-21) Ириг (раскрсници за Врдник) — Рума (до аутопута).

Проект појачаног одржавања део ице државног пута из реда бр. 21 (стара ознака M-21) Ириг (раскрсници за Врдник) — Рума (до аутопута) састоји се од два Проекта реконструкције путева и унапређења безбедности саобраћаја на мрежи државних путева, који је подциркул јединородних финансијских институција Националном програму реконструкције државних путева Републике Србије.

Прва циљ је израда техничке документације у виду Главног пројекта појачаног одржавања којим се обезбеђује посебне употребе вредности и трајности пута, унапређење безбедности саобраћаја, укључујући захтеве заштите животиња(собиранак аспект) и поштовање захтева мјеста животне средине у максимално могућој мери у датим условима просторног ограничења и ограничења која произилазе из роста дозвољених трговских и саобраћајних ванредности (законски основ).

Врста радова која је планирана углавном суштеству радова овајања постојеће канализације конструкције (на подручју мјеста до дубине од 50-60 ци од постојећег коловоза.), у постојећем путном профилу, у постојећим и санацијам системом одводњавања у умјереним условима који плодујући влажност радове и унапређују систем биодиверзитета и у потпуности је реализована одрживост (чл. 67-68) Закона о јавним путевима СПУ:бр.101/65, 123/07. 03/2 и 104/13.

На основу израде техничке документације и одобривања финансирања љуто Вас обавестити о датуму почетка радова.

Прилог:

• Прегледне карте региона са маркираном део ице државног пута из реда, бр. 21 на којим су планирано појачано одржавање

Контакт особа:
Предвод Тодорчић, дипл. инж. рад., 060/640 2297

Средњак поддршка,

Доставља:
• Инвентар
• Сектор за инвестиције
• Архив
To: Institute for Nature Conservation of the Republic of Serbia  
91, Dr Ivana Ribara  
11000 Belgrade  

SUBJECT: Request for provision of conditions for preparation of technical documentation for the project Heavy Maintenance of State Road of Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway)

Dear Madam/Sir,

Herewith we address you requesting the provision of CONDITIONS for preparation of technical documentation for the project Heavy Maintenance of State Road Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway).

Project of heavy maintenance of State Road Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway) is a constituting element of the Road Rehabilitation and Safety Project being implemented on the state road network, which represents a support of the International Financing Institutions to the National State Road Rehabilitation Program of the Republic of Serbia.

The first objective is preparation of technical documentation in form of the detailed design for heavy maintenance aimed at increase of use value, durability of the road, improvement of road and traffic safety, inclusion of requirements of local community (social aspect) and compliance with the requirements for the environmental protection to the greatest possible extent under spatial limitations and limitations resulting from the type of the allowed construction and traffic interventions (legal grounds).

The type of Works being planned mostly covers works on improvement of the existing pavement (on certain locations up to the depth of 50-60 cm from the existing pavement surface) within the existing road profile, with the existing and rehabilitated drainage system and designing of all elements which prolong durability of the Works and improve the road and traffic safety system and is regulated by provisions (Article 57-60) of the Public Road Law (“Official Gazette of RS”, No. 101/05, 123/07, 93/12 and 104/13).

After completion of technical documentation and selection of the Contractor, we will inform you additionally on the date of the Works commencement.

Attachment:
- Comprehensive map of the region with marked section of the state road of Ib category no. 21, where the Works on heavy maintenance are planned.

Contact person:  
Predrag Todosić, M.Sc. (C.E.), 060/840 2297

Best regards

PUBLIC ENTERPRISE “ROADS OF SERBIA”  
Executive Director for Investments  
Gordana Subotić-Dorđević (signed) (round company seal)

To be delivered to:  
- Addressee  
- Sector for Investments  
- Archive
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Ref. No. 020-308/2
Date: February 24, 2016

Ref. No. II 953-3214/16-1
Date: February 29, 2016

Subject: Notification in regards to the request for provision of conditions for nature protection for preparation of technical documentation for the project of heavy maintenance of the section on state road of Ia category no. 21 (old marking M-21) Irig (intersection to Vrdnik) – Ruma (to the highway)

PE “Roads of Serbia” has addressed the Institute for Nature Conservation of the Republic of Serbia with the request no. 953-32/4 for provision of conditions for the nature protection for preparation of technical documentation for the project Heavy maintenance of the section on state road of Ia category no. 21 (old marking M-21) Irig (intersection to Vrdnik) – Ruma (to the highway).


Best regards,

Director
Aleksandar Dragišić (Signed)
(round seal of the Institute)

www.zzps.rs

To be delivered to:
- Archive
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Покрајински завод за заштиту природе на основу чланова 9., 57. и 102. Закона о заштити природе (Службени гласник РС, бр. 36/06, 88/10 и 09/10) и члана 192. Закона о општем управном поступку (Службени гласник РС, 33/97 и 31/01) решавајући по захтеву ЈП „Путеви Србије“ у предмету за добијање услова заштите природе за израду техничке документације пројекта Појачаног одрањивања пута деонице државног пута Је реда бр. 21 (стара ознака М-21) (раскрсница за Бродник – Рума (до аутопута), доноси следеће РЕШЕЊЕ:

1. Израда техничке документације пројекта Појачаног одрањивања пута Је реда бр. 21 (стара ознака М-21) (раскрсница за Бродник – Рума (до аутопута), може се коментарисати поштујући следеће услове заштите природе:

1. За обнављање колосвог застора користити материјал који се налази у складу са функционалном и експлозивном вредном разредом, који није убедљиво доказана вредност буке и вибрације, окоњавање едификације, одземањем поля, одземањем експлозивних агрегата, и сл.;

2. Обезбећити функционалност поодних експлозивних калорија, чињеним заобластих делова или пропуста за воду;

3. На обалама водотока потока, где је путна права два или више пута и као процеса за стине животиња, потребно је сачувати ниску хулу на вегетацију која усмерава кретање животиња преко прелаза;

4. Вегетација прелаза био је прикусно повећана са посевом вегетације поједине биљке и оптерећен типови (траванак или нискоизрастни) у централном делу прелаза, радар свих стена или пропуста;

5. Обезбећити равномерну терених површину прелаза рада ради смањења могућности ширења гореве;

6. За обезбећивање својоста прелаза користити контејнер који овлашћују овај комплекс од орнаменталних дела, односно постоји и од стране оправданих комплетних служби;

7. Материјал и подривац потребно за обезбеђење механизације неподном је транспортовању депоновану (пута) и њима рукувати поштујући при том мерама заштите прелаза законом регулативом који се односи на опасне материје;

8. У случају акцидентог излагања загађујућих материја на простору станишта заштите и строго заштите делима врста биљака, животиња и гљива или у зони утицаја, загађени око око земљишта мора се тише одржавати и локализовани, изван природних станишта. На место акцidentа нанети нова, незгађени око земљишта.
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Pursuant to the articles 9, 57 and 107 of the Law on Nature Protection ("Official Gazette of RS", No. 36/09, 88/10 and 91/10) and Article 192 of the Law on General Administrative Procedure ("Official Gazette of RS", No. 33/97 and 31/01), the Institute for Nature Conservation of Province of Vojvodina, by acting based on the request of the PE “Roads of Serbia” in the matter of provision of conditions for nature protection for the purpose of preparation of technical documentation for the project of Heavy Maintenance of State Road of Ia category no. 21, (old road mark M-21), section: (intersection to Vrdnik) – Ruma (to the highway), makes the following:

**DECISION**

I  Preparation of technical documents of the project of Heavy Maintenance of State Road of Ia category no. 21, (old road mark M-21), section: (intersection to Vrdnik) – Ruma (to the highway) may be performed in strict compliance with the following conditions for nature protection:

1. Material to be used for renewal of pavement surfacing from the aspect of protection should comply with the following requirements: decrease in noise levels and vibrations, enablement of efficient and effective water draining from pavement surfacing, etc;
2. Functioning of local ecological corridors by cleaning of parts with pipes or culverts for water should be enabled;
3. On banks of streams, where the road is with a bridge used for crossing of small animals, it is necessary to preserve low bushy vegetation which would direct animals towards the crossing.
4. Vegetation in front of the crossing should be physically connected with the natural vegetation of the surrounding and of open type (grass or low bushes) in central part of the area, on both sides of the bridge or culvert;
5. Levelling of the terrain should be provided after completion of the works in order to reduce the potential spread of weeds;
6. For solid waste disposal it is necessary to use containers that provide isolation of waste substances from the environment. Containers must be emptied regularly by the relevant municipal services;
7. Lubricants and fuel needed for machinery shall be transported, deposited (stored) and handled with close compliance with protective measures stated by the regulations related to hazardous materials;
8. In case of accidental discharge of pollutants on locations of habitats of protected or strictly protected wild species of plants, animals or fungi or in the area of impact, the polluted layer of soil must be removed immediately and placed in the packaging that
must be discharged to, for this purpose only, intended spoil area, outside the natural habitat. At the location of the accident, new, uncontaminated soil layer shall be placed.

Conditions for revitalization of the terrestrial and aquatic habitats shall be requested from this Institute.

II The Applicant shall perform the works and activities fully in compliance with the conditions from the part I of this Decision.

III If within two years from the date of receipt of the decision, the Applicant fails to initiate the Works and activities for which this decision on conditions for protection of nature has been issued, the Applicant shall obtain a new decision. Also, in case of any change in the activities as presented in the request or in case of change of the location/area, the activity holder shall submit a new request for provision of conditions for the nature protection to the Institute for Nature Conservation of the Province of Vojvodina.

IV This decision shall in no way release the Applicant from the obligation to obtain all other conditions, permits and consents stated by the positive regulations.

V The Contractor shall comply with all other provisions for the environmental protection as stated by the Law on Nature Protection, other regulations as well as valid plans of higher order.

JUSTIFICATION

PE “Roads of Serbia” from Belgrade, Bulevar kralja Aleksandra 282, has addressed the Institute for Nature Conservation of the Province of Vojvodina with the request no. 953-4355 from March 01, 2016 for preparation of technical documentation for the project of Heavy Maintenance of State Road of Ia category no. 21, (old road mark M-21), section: (intersection to Vrdnik) – Ruma (to the highway). In accordance with the Information base of the Institute for Nature Conservation of the Province of Vojvodina, in the ecological network the subject road intersects local ecological corridors.

Pursuant to the Appendix 3 of the Regulation on the ecological network, on the ecological corridors located within the ecological network it is not allowed to, inter alia, cause any change to morphological and hydrological features of the area on which the functionality of the corridor relies.

According to the Article 15 of the Law on Nature Protection (hereafter referred to as the Law), protection of species shall be accomplished by carrying out measures and activities on the preservation of species themselves, their populations and habitats, ecosystems and the corridors connecting them", while in accordance with the Article 16, protection of habitats is done by "implementation of measures and activities for the protection and by sustainable use of natural resources and protected natural resources, planning and landscaping. Pursuant to the Articles 71 and 72, The favorable state of wild species shall be provided by a protection of their habitats and protection measures for particular species, while the conservation of wild species and their habitats shall make an integrated part of the measures and conditions for nature protection referred to in the Article 9 of the Law. The Article 74 of the Law strictly prohibits to endanger or destroy habitats of strictly protected species, their harassment, especially during mating, breeding, migrations or hibernation, as well as any disruption of their migratory routes.

Article 5, Para 7 of the Law stipulates the principles of direct application the generally accepted rules of the international law and approved international agreements as an integral part of the legal system by state authorities, autonomous province authorities and the authorities of the local self-government unit, organizations and institutions, as well as other legal and private entities, when carrying out their operations and assignments.

In accordance with the Convention on Biological Diversity (“Official Gazette of FRY – International Agreements”, no. 11/2001), we are obliged to prevent the import and to control
or destroy the foreign species that endanger natural ecosystems, habitats or (autochthonous) species. In our regions the following plant species are regarded as invasive: *Asclepias syriaca*, *Acer negundo*, *Ailanthus glandulosa*, *Amorpha fruticose*, *Celtis occidentalis*, *Gladichia triachantos*, *Lycium halimifolium*, *Parthenocissus inserta*, *Prunus serotina*, *Reynouria syn. Fallopia japonica*, *Robinia pseudoacacia*, *Ulmus pumila*.

Within the Article 8, the Convention on Biological Diversity points out at need to regulate or manage the biological resources of importance for preservation of biological diversity within or beyond the protected area, with the aim of its protection and sustainable use.

By review of the submitted documents and documents at disposal of the Institute, the decision as presented above has been made.

Attachment: A: a map of the subject section with presentation of local ecological corridors.


Instruction on legal remedy:
Against this decision, an appeal may be made to the Secretariat for Urban Planning, Construction and Environmental Protection of the Province of Vojvodina, and through the Institute for Nature Conservation of the Province of Vojvodina, within 15 days from the date of delivery of this Decision with evidence on payment of the Republic administrative fee of RSD 420,00 made to the account no. 840-742221843-57, reference to the number: 59013, model 97.

Decided at the Institute for Nature Conservation of Vojvodina Province no. 03-4382 dated March 25, 2016.

Director
Biljana Panjković, Ph.D. (signed)
(round seal of the Institute)

Delivered to:
- Addressee
- Archive
- File records
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B

Legenda:
- Staniste strogo zasticenih vrsta
- Lokalni ekološki korisni
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
To: Institute for Protection of Cultural Monuments of the Republic of Serbia  
11, Radoslava Grujića  
11000 Belgrade

SUBJECT: Request for provision of conditions for preparation of technical documentation for the project Heavy Maintenance of State Road Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway)

Dear Madam/Sir,

Herewith we address you requesting the provision of CONDITIONS for preparation of technical documentation for the project Heavy Maintenance of State Road Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway).

Project of heavy maintenance of State Road Ib category no. 21 (old marking M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway) is a constituting element of the Road Rehabilitation and Safety Project being implemented on the state road network, which represents a support of the International Financing Institutions to the National State Road Rehabilitation Program of the Republic of Serbia.

The first objective is preparation of technical documentation in form of the detailed design for heavy maintenance aimed at increase of use value, durability of the road, improvement of road and traffic safety, inclusion of requirements of local community (social aspect) and compliance with the requirements for the environmental protection to the greatest possible extent under spatial limitations and limitations resulting from the type of the allowed construction and traffic interventions (legal grounds).

The type of Works being planned mostly covers works on improvement of the existing pavement (on certain locations up to the depth of 50-60 cm from the existing pavement surface) within the existing road profile, with the existing and rehabilitated drainage system and designing of all elements which prolong durability of the Works and improve the road and traffic safety system and is regulated by provisions (Article 57-60) of the Public Road Law (“Official Gazette of RS”, No. 101/05, 123/07, 93/12 and 104/13).

After completion of technical documentation and selection of the Contractor, we will inform you additionally on the date of the Works commencement.

Attachment:
- Comprehensive map of the region with marked section of the state road of Ib category no. 21, where the Works on heavy maintenance are planned.

Contact person:
Predrag Todosić, M.Sc. (C.E.), 060/840 2297

Best regards

PUBLIC ENTERPRISE “ROADS OF SERBIA”  
Executive Director for Investments  
Gordana Subotić-Dorđević (signed) (round company seal)

To be delivered to:
- Addressee
- Sector for Investments
- Archive
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Translation

PERS Ref. No. 953-4388  
Date 02/03/2016

Institute for the Protection of Cultural Monuments of Serbia - Belgrade  
Radoslava Grujića 11  
11118 Belgrade  
Serbia  
Phone +381 11 24 54 786  
Fax +381 11 31 11 130  
e-mail: office@yaheritage.com

Date: 01/03/2016  
Ref. 3/450  
Inter. Ref. 0302

Institute for Protection of Cultural Monuments Sremska Mitrovica  
Mr. Ljubiša Šolaja, Director

Sremska Mitrovica  
10, Sv. Dimitrija Str.

Dear Mr. Šolaja,

As attachment to this letter, please find a request for provision of conditions for preparation of technical documents for urgent maintenance and repair of damage on the state road:
  - 1b category no. 21 (old road mark M-21), Irig (intersection to Vrdnik) – Ruma (to the highway);
  - section Croatian Border – Kuzmin 1 (motorway).
The Applicant is the Public Enterprise “Roads of Serbia”, Bulevar kralja Aleksandra 282.

On the subject sections there are no cultural assets of great importance, the subject sections are not in the authority of the Institute for the Protection of Cultural Monuments of Serbia – Belgrade, and therefore we forward the letters to the Institute for Protection of Cultural Monuments Sremska Mitrovica for further processing.

Best regards,

Document prepared by:
Maja Đorđević, archeologist

For the Director  
Mirjana Andrić  
Ivana Ranković (signed)  
(Round seal of the Institute)

To be delivered to:  
- Addressee  
- Public Enterprise “Roads of Serbia”, Bulevar kralja Aleksandra 282
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Translation

INSTITUTE FOR PROTECTION
OF CULTURAL MONUMENTS
SREMSKA MITROVICA
“Cultural Institution of National Importance”
No. 77-07/16-4
Date: 21/03/2016

PERS Ref. No. 953-3222/16-1
Date: 23/03/2016

PUBLIC ENTERPRISE “ROADS OF SERBIA”
SECTOR FOR INVESTMENTS
BELGRADE
Bulevar kralja Aleksandra 282

As attachment to this letter and in regards to your request no. 953-3222 dated February 12, 2016, please find conditions and measures of technical protection for preparation of technical documentation for the project of heavy maintenance of section on the state road of Ib category no. 21 (old mark M-21) Irig (intersection to Vrdnik) – Ruma (to the highway).

DIRECTOR
Ljubiša Šolaja (signed)
(Round official seal of the Institute)
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B

Dostaviti: подношењу; документацији; архиви.

ДИРЕКТОР
Љубомир Шулда
Translation

INSTITUTE FOR PROTECTION
OF CULTURAL MONUMENTS
SREMSKA MITROVICA
“Cultural Institution of National Importance”
No. 77-07/16-4
Date: 21/03/2016

Pursuant to the provisions of the Article 99, Para 2, items 1, 27, 104 and 110 of the Law on Cultural Assets (“Official Gazette of RS”, No. 71/94) and Article 131 of the Law on General Administrative Procedure, the Institute for Protection of Cultural Monuments Sremska Mitrovica, acting based on the request of the Public Enterprise “Roads of Serbia”, Sector for Investments from Belgrade, Bulevar kralja Aleksandra 282. Through the Institute for the Protection of Cultural Monuments of Serbia – Belgrade from Belgrade, Radoslava Grujića 11, makes the following:

DECISION

I
Conditions and measures for technical protection – for preparation of technical documentation for the project of heavy maintenance of the section on state road of Ib category no. 21 (old road mark M-21) Irig (intersection to Vrdnik) - Ruma (to the highway), may be applied based on the following conditions:

- in length of at least 10 meters to the north and south from the location of the monument “Kipovi”, i.e. in length of app. 30 meters on both sides of the road, it shall not be allowed to set up additional road signs and information boards – billboards on the road of Ib category no. 21, section: Irig - Ruma;

- in the specified road reserve of the road of Ib category no. 21, section: Irig – Ruma, it is allowed to execute the works on technical maintenance of pavement. The Works should be done with special care to prevent any damage to the monument. Use of vibrating equipment for compacting the road courses shall not be allowed on the section in length of app. 30 m in order to prevent any damage to the monument. Execution of the works that may statically endanger the constructed monument “Kipovi” shall not be allowed;

- during the execution of the Works within the specified road reserve of the road of Ib category no. 21, section: Irig – Ruma, it shall not be allowed to deposit materials and equipment, flammable and hazardous materials, and it shall be mandatory to carry out all measures to fully protect the monument from damage (both from the east and the west side of the monument). The Employer's obligation will be to repair and restitute in accordance with special conditions of the service for protection of immovable cultural heritage any damage possibly occurring during execution of the Works;

- it shall be allowed to place the additional signage for access to the monument from both sides of the road at location of entrance to the subject road section of 30 m of length;

- it shall be allowed to execute the Works on technical maintenance of pavement in the area of the monument “Krilo”.

- during the execution of the Works within the specified road reserve of the road of Ib category no. 21, section: Krilo – Ruma, in the area of the monument Krilo , it shall not be allowed to deposit materials and equipment, flammable and hazardous materials, and it shall be mandatory to carry out all measures to fully protect the monument from damage (both from the east and the west side of the monument). The Investor’s obligation shall be
to repair and restitute in accordance with special conditions of the service for protection of immovable cultural heritage any damage possibly occurring during execution of the Works;

- it shall be allowed to place the additional signage for access to the monument from both sides of the road;
- Required constant archeological supervision of the expert service of the institute during the execution of ground works in the areas which are in close proximity of the archeological locality
- In case someone comes across to archeological site or items during the execution of construction and other works, executors shall be obligated to stop works immediately and inform the Institute for Protection of Cultural Monuments Sremska Mitrovica, without prorogation, and take measures to protect site from being destroyed and damaged and being saved at the same place and position as it discovered, all in accordance with item 109, Para 1 of the Law on Cultural Assets.
- Investor shall be obligated to stop works in the case to come across to the archeological site or items which are of great importance, in order to research site.
- Investor shall be obligated to provide resources for supervision, exploration, protection and preservation of found historical remains which were already protected.

II  Design and documentation have to be made in accordance with issued condition from item I of this Decision

III  This decision shall not release the Applicant from the obligation of provide and other conditions, consent and license provided with Regulation on the construction of the facilities and planning and arrangement of space and settlements.

IV  This decision is valid within the year from the date of issuing.

V  After making the design and documentation in accordance with those conditions, Applicant is obligated to secure consent of the Institute for Protection of Cultural Monuments Sremska Mitrovica

VI  The complaint shall not postpone the execution of the Decision.

JUSTICIFATION

PE “Roads of Serbia”, Sector for investment, from Belgrade, Bulevar kralja Aleksandra 282, has addressed the Institute for the development of technical documentation for Design of severely maintenance of section of the state road of Ib category no. 21 (old mark M-21), section: Irig (intersection to Vrdnik) – Ruma (to the highway) with the request no 953-3222 from February 12, 2016 through the Republic Institute for Protection of Cultural Monuments Belgrade from Belgrade, Radoslava Grujica 110302 no. 3/ 450 from March 01, 2016.

By reviewing the contents of the submitted request for the project of heavy maintenance of the section on state road of Ib category no. 21 (old road mark M-21) Irig (intersection to Vrdnik) - Ruma (to the highway) on the subject area there are following cultural monuments and assets under preliminary protection:

- “Kipovi” – the monument erected in the memory of plague epidemic. It is positioned on the cadastral parcel 9724 of Irig Cadastral Municipality – road in property of the state, Beneficiary is PE “Roads of Serbia”, it is an immobile cultural asset – Decision of the Institute for Protection of Cultural Monuments Sremska Mitrovica No. 170 from May 05, 1976;
- Monument „Krilo“ on part of the exit lane towards the E-70 motorway which is an asset under preliminary protection
- Archeological site „Kod barutane“ in Ruma;
- Archeological site „Batinačka strana“ in Irig;
- Archeological site „Turski šanac“ in Irig.

Due to the presented reasons it has been resolved as detailed above.

Instruction on legal remedy:
Against this decision an appeal may be submitted to the Institute for the Protection of Cultural Monuments of Serbia – Belgrade within 15 days from the date of receipt of the decision. The appeal shall be made through the institution making this decision.

DIRECTOR
Ljubiša Šolaja (signed)
(Round official seal of the Institute)

To be delivered:
Applicant;
File records;
Archive.
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
Environmental Management Plan - Main Design for Heavy Maintenance (Road Rehabilitation-Upgrading) of the State Road IB 21 Section: Irig 2 - Ruma 1 (highway), Environmental Category - B
SUBJECT: Request for Opinion

The Secretariat for Urban Planning and the Environmental Protection has received a request for provision of an opinion on whether the project for heavy maintenance of state road of Ib category number 21 (old road mark M-21), section: Irig (intersection to Rivica) – Ruma (to the highway) requires the appliance of the EIA. Together with a request, a decision on conditions for nature protection no. 03-438/2 from 25/03/2016 issued by the Institute for Nature Conservation of Province of Vojvodina and Decision on conditions and measures of technical protection number 77-07/16-04 from 21/03/2016 issued by the Institute for Protection of Cultural Monuments Sremska Mitrovica have been submitted. After a review of the request, it may be concluded that the project of heavy maintenance of the subject section on the state road is a constituting part of Road Rehabilitation and Safety Project which is being implemented on state road network and covers the Works on improvement or replacement of the current pavement within the existing road profile, with the existing and rehabilitated drainage system with design of all elements that would ensure durability of the Works and improve road and traffic safety.

In connection with the request, we kindly inform you that the Article 3, Para. 1 of the Law on Environmental Impact Assessment (“Official Gazette of RS“, No. 135/2004 and 36/2009) stipulates that subject of the EIA are projects which are planned and executed, change of technology, reconstructions, expansion of capacity, cessation of work and removal of projects that may have a significant impact on the environment. Projects for which the EIA is mandatory are listed in the Regulation for determining the List of projects requiring EIA and List of projects which may require EIA (“Official Gazette of RS“, No.114/2008). The List I, which includes the projects for which it is mandatory to have the EIA implemented, under the item 7, sub-item 2) stipulates the construction of main motorways and roads with four or more lanes, or reconstructions and/or widening of the existing road from two or less lanes, with the aim of ensuring the road with four or more lanes, in cases when such new road or reconstructed and/or widened section have a continuous length of over 10 km or more, including the relevant facilities, except for the facilities related to the main road, while the List II, which includes the structures for which appliance of EIA may be requested, under the item 12, sub-item 5) states the regional roads including supporting structures, except for the supporting road facilities – all projects.

Since the subject project does not embrace the construction or reconstruction of main or regional road, but Works on maintenance of the public road, in accordance with the criteria listed in the Regulation, there is no obligation for having the EIA applied.

Provincial Secretary
Vladimir Salić (signed)
(Round official seal of the Secretariat)

To be delivered to:
- The Applicant;
- Archive.