

#### CONTRACT ID: RRSP/CS3-RRD4-1/2017-03

PREPARATION OF MAIN DESIGNS FOR HEAVY MAINTENANCE (ROAD REHABILITATION-UPGRADING) OF THE STATE ROADS IA1 AND IB22: LOT 1: IA1, BRESTOVAC (INTERCHANGE) – DOLJEVAC (INTERCHANGE), L=6.022 KM LOT 2: IB22, UŠĆE-RAŠKA (KOSOVSKA MITROVICA), L=32.127 KM LOT 3: IB22, NOVI PAZAR (BRDJANI) - RIBARIĆE, L=24.360 KM

#### БР. УГОВОРА: RRSP/CS3-RRD4-1/2017-03

ИЗРАДА ГЛАВНОГ ПРОЈЕКТА ПОЈАЧАНОГ ОДРЖАВАЊА ДРЖАВНОГ ПУТА IA1 И IБ22 : ЛОТ 1: IA1, БРЕСТОВАЦ (ПЕТЉА) – ДОЉЕВАЦ(ПЕТЉА), L =6.022 KM ЛОТ 2: IБ22, УШЋЕ – РАШКА (КОСОВСКА МИТРОВИЦА), L =32.127 KM И ЛОТ 3: IБ22, НОВИ ПАЗАР (БРЂАНИ) - РИБАРИЋЕ, L =24.360 KM









# **ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN:**

Draft no. 2:

LOT 3: IB22, NOVI PAZAR (BRDJANI) - RIBARIĆE, KM 257+708 - KM 282+068, L=24.360 KM





Април 2022. April 2022.

#### Document quality information / Информације о документу

General Informati	on / Опште информације
Author	Marina Komad, dipl. Civil Engineer
Аутор	Milica Milenković, MSc Spatial Planner
Project title Назив пројекта	CONTRACT ID: RRSP/CS3-RRD4-1/2017-03 PREPARATION OF MAIN DESIGNS FOR HEAVY MAINTENANCE (ROAD REHABILITATION-UPGRADING) OF THE STATE ROADS IA1 AND IB22 БР. УГОВОРА: RRSP/CS3-RRD4-1/2017-03 ИЗРАДА ГЛАВНОГ ПРОЈЕКТА ПОЈАЧАНОГ ОДРЖАВАЊА ДРЖАВНОГ ПУТА IA1 И IБ22
Document title Назив документа	ЕNVIRONMENTAL AND SOCIAL MANAGEMENT PLAN: Draft no.1 LOT 3: IB22, NOVI PAZAR (BRDJANI) - RIBARIĆE, KM 257+708 - KM 282+068, L=24.360 km ПЛАН УПРАВЉАЊА ЖИВОТНОМ СРЕДИНОМ: Нацрт бр. 1 ЛОТ 3: IB22, НОВИ ПАЗАР(БРЂАНИ) – РИБАРИЋЕ, KM 257+708 - KM 282+068, L=24.360 KM
Date	Април 2022.
Датум	April 2022.

# General information / Опште информације

#### Addressed on: / Адресира се на

Sending to / Шаље се					
Name / Име	Organization / Организација	Date / Датум			
Igor Radovic, dipl. ing.	РЕ "Roads of Serbia" ЈП "Путеви Србије"	13.04.2022.			
Jelena Cvetkovic, dipl.ing.	РЕ "Roads of Serbia" ЈП "Путеви Србије"	13.04.2022.			
Miodrag Radeka, dipl.ing.	Egis Belgrade/ Егис Београд	13.04.2022.			
Marko Ilic, MSc	Egis Belgrade/ Егис Београд	13.04.2022.			

Сору to / Копија се шаље					
Name / Име	Organization / Организација	Date / Датум			
Gordana Subotički Đorđević, dipl.ing. (C.E.)	РЕ "Roads of Serbia" ЈП "Путеви Србије"	13.04.2022.			
Marko Stevanović, dipl.ing. (C.E.)	РЕ "Roads of Serbia" ЈП "Путеви Србије"	13.04.2022.			
Dragan Vuković, dipl.ing. (C.E.)	РЕ "Roads of Serbia" ЈП "Путеви Србије"	13.04.2022.			

#### History of modifications / Историја исправки

Version Верзија	Date Датум	Author Аутор	Approved and signed by: Одобрено и потписано од стране:
Draft 1 /Нацрт 1	06.01.2022.	Marina Komad, dipl. Civil Engineer Milica Milenković, MSc Spatial Planner	06.01.2022.
Draft 2 /Нацрт 2	13.04.2022.	Marina Komad, dipl. Civil Engineer Milica Milenković, MSc Spatial Planner	13.04.2022.

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

# Contents

I.	INTRODUCTION	4
II.	SUMMARY	4
III.	Summary of Environmental Impacts	19
IV.	PROJECT DESCRIPTION	21
V.	POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK	27
VI.	BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY	29
VII.	SUMMARY OF ENVIRONMENTAL IMPACTS	32
VIII	ENVIRONMENTAL MANAGEMENT PLAN	34
IX.	REFERENCES	41
Х.	APPENDIXES	42
X.1	. MITIGATION PLAN	43
X.2	. MONITORING PLAN	51
X.3	. LEGISLATION	74
X.4	. STAKEHOLDER ENGAGEMENT	77
X.5	. CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS	83
X.6	. FINAL ENVIRONMENTAL APPROVAL	93

#### ABBREVIATIONS

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

# I. INTRODUCTION

The Republic of Serbia has applied for financing towards the costs of the Road Rehabilitation Project (RRSP). International financing institutions are: World Bank, European Investment Bank and European Bank for Reconstruction and Development. The Republic of Serbia plans to invest part of the funds for the project of heavy maintenance (road rehabilitation – upgrading) of the road IB 22 section: Novi Pazar (Brdjani) - Ribarice, L = 24.360 km.

Environmental and Social Management Plan (EMP) relates to the heavy maintenance and road rehabilitation-upgrading on the IB state road no. 22 section Novi Pazar (Brdjani) - Ribarice, L = 24.360 km.

The subject section belongs to the Raska Administrative district, it is passing through the City of Novi Pazar and the Municipality of Tutin and it is located in the South-westem part of the Republic of Serbia. The section in length of 24.390 km. belongs to the State Road of IB category no. 22 (old road mark M-22) (Official Gazette of RS", No. 93/2015) and represents a part of the longitudinal traffic link through the south-western part of Republic of Serbia.

The purpose of the ESMP is to highlight the negative environmental impacts and management problems during the construction works and the necessary mitigation measures to the Contractor must apply. Key components of the Environmental and Social Management Plan are: Environmental Mitigation Plan and Environmental Monitoring Plan.

International financing institutions (IFI) have classified the project as environment category B, which requires an Environmental Management Plan to be carried out.

Road rehabilitation and Safety Project (RRSP) is a project of support of support of international financing institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementation of the National State Road Network Rehabilitation Program. This Project represents the implementation of the first phase of the Government's Program for the period 2014-2022. The project is realized by PE "Roads of Serbia" (hereinafter PERS).

The design will be made in accordance with Serbian legislation and the conventions and safeguard guidelines issued by IFI. The Environmental and Social Management Plan was carried out using theoretical studies, on-site investigation, and consultation with representatives of local and regional authorities.

# II. SUMMARY

#### **II.1. Description**

The subject of the Services is preparation of ESMP document for the section: Novi Pazar (Brdjani) - Ribarice for length of 24.360 km. The beginning of the section is defined 30 m after node 2233 Novi Pazar (Brdjani), looked in direction of chainage growth, in approximate chainage km 257+708. The end of the section is defined in node 2234 Ribarice, in approximate chainage 280+068. Intersection in node 2234 Ribarice is included within the subject design.



Picture 1. The beginning of the section – Novi Pazar



Picture 2. The end of the section, the existing intersection in node 2234 Ribarice

Table 1: Traffic sections and nodes according to reference system

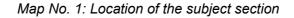
ltem no.	Old mark of section*	Mark of section	Mark of start node	Marko of end node	Title of start node	Title of end node	Section length(km)
1	0562	02234	2233	2234	Novi Pazar (Brdjani)	Ribarice	24.390 (**24.360)
Total :						24.390 (**24.360)	

\* mark of section according to old reference system /2009 (JV CPL- Nievelt) \*\* length of section to be rehabilitated

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km



PREGLEDNI SITUACIONI PLAN / REVIEW SITUATION PLAN 1:20 000 Državni put IB 22 / State Road IB 22 LOT 3: IB 22, NOVI PAZAR (BRĐANI) - RIBARIĆE, L=24.360 km



#### **II.2.** Policy, legal and administrative framework

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

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

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

PE "Roads of Serbia" (PERS) submitted a request to the Institute for Nature Conservation of Serbia (INCS) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PERS, the INCS issued a statement on conditions for nature protection 03 no. 020-3556/3 dated January 31<sup>st</sup> 2019.

Also PERS submitted a request to the Institute for Protection of Cultural Monuments Kraljevo (IPCMK) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PERS, IPCMK issued a statement on conditions for protection of cultural monuments no. 1825/3-2018 dated February 26<sup>th</sup> 2019.

Panpro team d.o.o. submitted a request to the Institute for Protection of Cultural Monuments Serbia- Belgrade for cadastral municipality Novi Pazar in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by Panpro team d.o.o, IPCMS issued a statement on conditions for protection of cultural monuments no. 1-1250/2020 dated Decembar 1<sup>st</sup> 2020.

A request for decision on the need for producing EIA Study is submitted to the MoEP together with other relevant technical documentation, including the conditions of the INCS, IPCMK and IPCMS.

# Final Environmental Approval is obtained from the Ministry of Environmental Protection (MoEP) (No. 011-00-00826/2020-03 dated August 14<sup>th</sup> 2020.) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (Appendix 6).

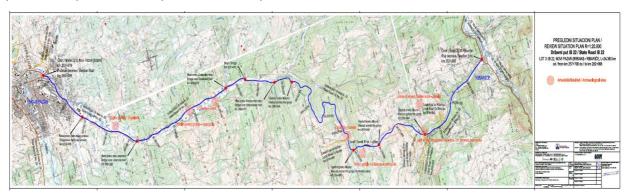
Upon receiving mentioned documentation (the conditions of the INCS, IPCMK and IPCMS and the decision of the Ministry of Environmental Protection), as well as based on the conditions set in the Environmental Management Plan, PERS will ensure full implementation of environmental

protection measures defined by the design and thus reduce the impact on local population and natural environment.

In accordance with a statement issued by the INCS, the subject road section is not located within a protected area for which a procedure for protection was carried out or initiated. It is not in the scope of the ecological network, nor in the area of natural resources. It is requested to provide, through design proposal the functionality of the ecological corridors.

In the conditions of the IPCMK, there are identified immovable archaeological content, Due to the existence of archeological sites on the route during the road maintenance works on certain parts of the route, it is necessary to organize professional archaeological supervision at the following archeological sites: Greek cemetery / Zaguljaca-remains of the church and necropolis, Mur (cadastral municipality Mur N: 4774118 E: 7458777), Muslim Cementry- necropol, G. Josanica (Cadastral municipality Lukarsko Gosevo, N: 4770992 E: 7458242), Crkvina-church, G. Josanica (Cadastral municipality Lukare N: 4769843 E: 7458191), Duvarine-settlement, Kominje (Cadastral municipality Kozlje N: 4764420, E: 7455382), Greek cemetery on Botun-necropolis, Zuce (c.m. Kozlje N : 4764498 E: 7454637), Ledine near Mrkonjska vodenica-object, necropolis, Orlje (Cadastral municipality Orlje N: 4761784 E: 7454211), Livade Grebeje / Greek homes-settlement, Orase (Cadastral municipality Vesenice N: 4761699 E: 7454501), it is forbidden to perform any earthworks, without previously provided archaeological research. PE "Roads of Serbia" is obliged to inform the competent IPCMK or IPCMS, seven (7) days before the start of works in order to ensure supervision over the works. In the case that an unrecorded site or part is discovered during earthworks, the investor is obliged to immediately stop the works and notify the IPCMN without delay, provide conditions for archaeological research, conservation and presentation. Investor is obliged to provide funds for research, protection, publication and presentation of the same. International financial institutions demand that the project be in accordance with the laws of the Republic of Serbia, but also with the standards of the European Union. It is necessary to comply with all conditions specified by the Institute for the Protection of Cultural Monuments in Kraljevo.

In the conditions of the Republic Institute for the Protection of Cultural Monuments-Belgrade, the same archeological sites were confirmed as in the issued conditions of the Institute for the Protection of Cultural Monuments in Kraljevo. In case the archeological remains, cultural layer and movable find are discovered during the earthworks, the contractor is obliged to stop the works immediately, first to ensure that the find is preserved in the position and place where it was discovered. Then, to inform the Republic Institute for the Protection of Cultural Monuments-Belgrade about it without delay, to provide conditions for archeological research, conservation and presentation of the same. The investor is obliged to provide funds for archaeological supervision, protection, preservation, publication and presentation of the same.



Map No. 2: Location of the Archeological Sites

Creditors require that the following is applied:

- Environmental Impact Assessment Operational Policy (OP 4.01)

- Environmental and Social Policy, EBRD (2008)
- Environmental and Social Principles and Standards, EIB (2008).

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

#### II.3. Baseline conditions assessed during route survey

The section of the road that is the subject of heavy maintenance (road rehabilitation), is located in Raska Administrative district, located in the southwestern part of the Republic of Serbia. Section: Novi Pazar (Brdjani) - Ribarice, L = 24.360 km. The subject section passes through the territory of the City of Novi Pazar and the Municipality of Tutin.

For the section Novi Pazar - Ribarice, a control counting of traffic was performed for 7 days, in the period from July 20 to 27, 2020, on the traffic section 02234, at the approach to Ribarice (km 278 + 000).

In the process of processing and analysis of the results of the control counting of motor vehicle traffic, data on the traffic flow from the automatic traffic counter ABS 1163 "Ribarice" were used.

The total AADT on the subject section for 2020 is: **4156 vehicle / day**, which should represent the relevant traffic flow in 2020, if there was no significant impact of the Corona virus pandemic on the intensity of traffic flows that year.

The following table shows the traffic flow for the period 2013-2019. on the traffic section ID 02234, which shows a stable, moderate growth of traffic flow (between 2.5% and 5.8% annually) in the specified period.

Year	PC	BUS	LT	MT	HT	ТТ	AADT (veh/day)	Data obtained
2013	4272	71	67	114	45	131	4700	ATC
2014	4390	72	66	100	40	140	4808	ATC
2015	4580	73	65	101	39	154	5012	ATC
2016	4870	72	69	98	38	157	5304	ATC
2017	70	74	109	49	151	157	5695	ATC
2018	5474	65	76	98	45	158	5916	ATC
2019	5744	64	76	106	38	132	6160	ATC

Table 2. The traffic flow for the period 2013-2019. Year (section ID 02234: Novi Pazar (Brdjani) – Ribarice, L=24.4 km)

However, the calculated value of AADT for 2020, on the traffic section 02234, Novi Pazar (Brdjani) - Ribarice, of 4156 vehicle/day, represents almost 34% less traffic flow compared to AADT from 2019. For such a significant decrease in intensity of the traffic on the subject section, the main reason is the COVID 19 pandemic.

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km All of the above in favor of the fact that 2020 will undoubtedly be a year that will deviate significantly from long-term trends and data, when it comes to traffic flow, on most sections of state roads with long-distance traffic, which also applies to the subject section of road IB22 from Novi Pazar to Ribarice. The results of the traffic control count completely confirmed this attitude.

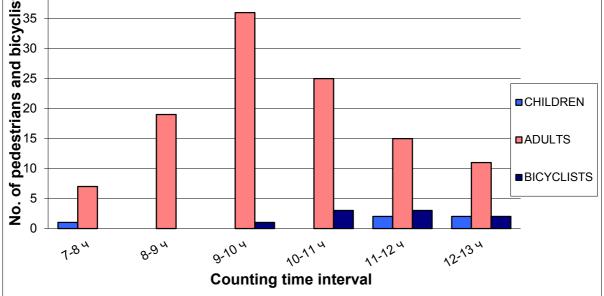
Based on the presented facts, it is possible to conclude that the results of the traffic control count and the calculated AADT for 2020 cannot be used as authoritative and representative for the traffic flow forecast in the ten-year planning period of operation of the subject section of road IB22.

For the traffic forecast on the subject traffic section, data on the traffic flow and structure from 2019 (ATC 1163 "Ribarice") will be used, which according to its characteristics can represent a representative, authoritative base year.

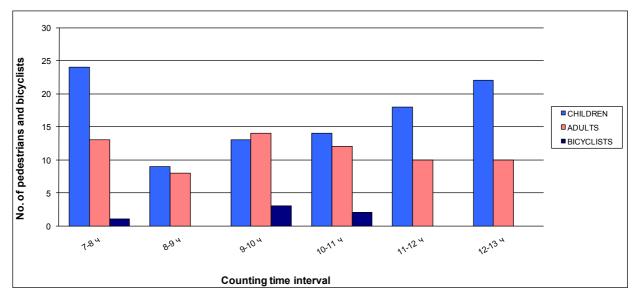
Along the subject section is such that the formed pedestrian paths exist only in the town of Novi Pazar and to small part in the settlement of Ribarice.

A control counting of pedestrians and cyclists was performed and the data are shown in Graphics

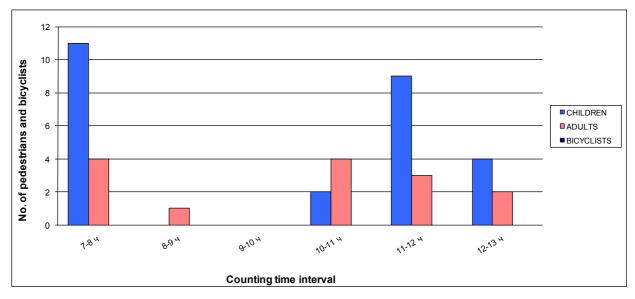
no. 1, 2, 3 and 4 in the settlements of Novi Pazar, Lukare, Kozlje and Ribarice:



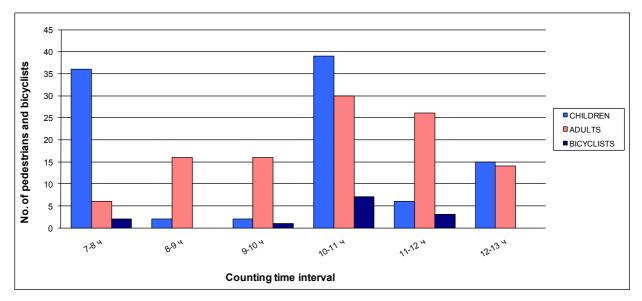
Graphic No.1: Graphical presentation of pedestrian and bicyclist counting at Novi Pazar



Graphic No.2: Graphical presentation of pedestrian and bicyclist counting at Lukare



Graphic No.3: Graphical presentation of pedestrian and bicyclist traffic counting at Kozlje



Graphic No.4: Graphical presentation of pedestrian and bicyclist counting at Ribarice

# II.3.1. Existing condition of road facilities

On the section of the state road IB no. 22 from Novi Pazar to Ribarice, there are 9 bridges, more than 94 different culverts and about 5440m of retaining walls. On the subject section, there is a tunnel at the approximate stationing from km 275 + 425 to km 275 + 635, which was built in the seventies (about 40 years ago).



Picture 3. Poor condition of pavement and pedestrian path on the bridge



Picture 4. Poor condition of pavement, pedestrian path and fences on the bridge



Picture 5. Bridge over the gorge near Kozlja



Pictures 6 and 7. Tunnel ID 64 starting at chainage km 275 + 426.42, end at chainage km 275 + 635.72

There are 9 bridges on the section of the state road IB 22 from Novi Pazar to Ribarice:

- Bridge over Azirovski potok, km 259 + 888
- Bridge over the river Josanica, km 262 + 361
- Bridge over the Goshevska river, km 266 + 578
- Bridge, km 267 + 475
- Bridge over the Brezovacka river, km 268 + 727
- Viaduct across the gorge, km 269 + 548
- Viaduct over the gorge (Kominske bare), km 274 + 915
- Viaduct across the gorge, km 276 + 044

#### II.3.2. Existing connections

On the route of the state road IB order no. 22 Novi Pazar (Brdjani) - Ribarice, there are about 20 connections with local roads, as well as connections of city streets, and to industrial facilities and individual approaches to households in settlements.

On the route of the state road IB order no. 22 Novi Pazar (Brdjani) - Ribarice, there is a large number of connections with municipal roads and local streets as well as numerous individual approaches to private buildings and plots. The route has a total of 56 connections to the streets, 388 connections to car accesses, 2 connections to gas stations, 137 connections to parking areas, 4 connections to roads and 39 to agriculture roads.

Some of the more important intersections with local roads, leading to villages and hamlets in the hinterland, have been located at the following locations:

- km 262+570 right Bajevica (asphalt)
- km 268+650 right Krusevo, Casic, Dolac (gravel)
- km 274+460 right Kozlje 1 (asphalt)
- km 275+310 right Kozlje 2 (asphalt)
- km 275+750 right Zuce (gravel)

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

- km 276+120 right Orlje 1 (asphalt)
- km 277+030 right Orlje 2 (asphalt)
- km 278+305 right Paljevo (gravel, dirt)
- km 278+880 right Orase (asphalt)

Connections of other roads that connect the hinterland with the primary route are included in the approaches of uncategorized roads.

Also, the section is characterized by the diversity and ambiguity of the solution of bus stops, as functional accompanying contents of the road. Along it, there are only a few built niches or seminiches intended for stopping buses and handing over passengers. Most of the existing bus stops have not been built, nor are they marked with traffic signs and road markings.

The preliminary project solution on the subject section, envisages a total of 22 bus stops on both sides, with a separate niche for stopping buses, if space possibilities allow. For each bus stop, a decision on bus stops is required from the local government.



Picture 8. Bus stop at km 257+790 in Novi Pazar



Picture 10. Unbuilt bus stop at km 264+425



Picture 9. Bus stop at km 262+580 left (unpaved) and at km 262+605 right (unbuilt)



Picture 11. Bus stop in zone of the intersection at km 266+605



Picture 12. Bus stop on the inside of the curve, km 274+505



Слика 13. Unbuilt bus stops at km 278 + 920 left and km 278 + 890 right

#### II.3.3. Other facilities

On the subject section there are 2 gas stations, from the chainage km 259 + 423 to km 259 + 485 on the right side of the route and on the chainage km 258 + 573 to km 258 + 629, also on the right side of the route. Along the route of the state road, there are no arranged and marked public parking areas in the zones of the settlement. In front of some commercial and catering facilities, there is an individually arranged space by the content owner, intended for parking exclusively for their users.

#### II.3.4. Existing state of the environment

Along the entire section in question, a considerable number of illegal landfills have been observed, especially in places of watercourses, extensions, and existing road culverts, thereby endangering the efficient drainage of the road. The green belt, slopes, berms and gutters are unmaintained and overgrown with shrubs, which significantly reduced their function.



Picture 14. Illegal landfill on the intersection with the river Josanica



Picture 15. Illegal landfill near the bridge that intersects with the river Josanica

#### II.3.5. Existing condition of the drainage system

Drainage in the settlement of Novi Pazar

The drainage system in Novi Pazar is mostly closed type. The city section stretches from the station km 257 + 708 to km 261 + 300. Water from the road is drained mainly through drains and grates.

On the part of the section from the stationing km 257 + 708 to km 258 + 450 (seen in the direction of stationing growth), along the left side of the section flows the river Josanica, which is the main recipient of atmospheric water on this part of the route. The river Josanica belongs to the basin of the river Ibar and flows opposite to the direction of growth of the road station. Drainage of the road is done mainly by means of drains. Drains are located at a distance of 30-50 m from each other, while in some parts of the route these distances are up to 100 m.

On the part of the section from the stationing km 258 + 000 to km 258 + 200, there is a curve to the left (in the direction of the growth of the stationing) along which there are three "ravines" (Picture 16), at a distance of about 75 m. By visiting the terrain, on this part of the route, it was noticed that there are side streets with a large slope of the terrain towards the subject section, from which a large amount of water flows directly to the subject section during the rainy period. It is assumed that the existing drains cannot receive that much water, and that the surplus is collected by "ravines" and poured directly into Josanica. Excessive amounts of water flowing directly from side streets onto the road can have a negative impact both from the point of view of road drainage and from the point of view of traffic safety. Water from side streets should be drained in a controlled manner before pouring into the subject section.



Picture 16. "Ravines"

At the stationing km 258 + 410, there is an outflow of atmospheric sewage collectors into the river Josanica. Next to it is the outlet of the drain (Picture 17).



Picture 17. Outflow of drains and collectors into the river Josanica

Most of the road area as well as the drainage system are quite polluted with solid waste and many drains and culverts are clogged due to the accumulation of waste materials on the drain grates and at the culvert openings themselves.

# Drainage outside the settlement

Drainage of the road on parts of the route outside the settlement is of the open type. The suburban section, starting from the exit from Novi Pazar (km 261 + 300) all the way to the settlement of Ribariće at the end of the subject section, is located in a larger or smaller cut or embankment. The edge of the road section located in the cut drains only coastal water, or also coastal water and water from the road through gutters and road channels. Water from the gutter is poured into existing culverts or into road channels. Drainage, except to gutters and earthen road channels, is done by draining water through the embankment into open earthen road canals or water flows down the embankment into the surrounding terrain where it evaporates and infiltrates into the soil.

Most of the earthen road channels are completely overgrown with vegetation (Figure 18), so it is necessary to clean and profile them.



Picture 18. Overgrown channel

In addition to the overgrown vegetation, a large number of channels and gutter outflows are full of various debris (Picture 19) and on the subject route along the road as well as in the vicinity of bridges, the existence of illegal landfills was observed in several places (above-mentioned Pictures 14 and 15).



Picture 19. Waste at the outlet of the gutter

The part of the route that passes through the settlement of Lukare from the stationing km 266 + 410 to km 266 + 810 is drained by draining water through the sholder. In the settlement of Lukare, the subject section intersects with the Zenska river at the stationing km 266 + 578. At the stationing km 267 + 475, the river Josanica again intersects with the subject section of the road and crosses to the left side of the road. From this intersection with the section of the road, looking in the direction of the growth of the station, the river Josanica is in another short part relatively close to the road, and from the station km 269 + 300 it is gradually moving away from the section in question.

From km 278 + 400 to km 279 + 480 - cut on the left side, on the right side of this stretch, parallel to the subject route, there is the Paljevska river, which is the main recipient of atmospheric water on this stretch of the subject route. All rivers mentioned in the subject analysis that intersect the route of the road or extend parallel to it, belong to the Ibar river basin. At the stationing km 279 + 480, you enter the settlement of Ribarice.

Drainage in the settlement of Ribarice

Drainage of the settlement Ribarice is done according to the same principle as the suburban section. The settlement does not have atmospheric sewage, and the drainage system is dominated by drainage through gutters and culverts or drainage of water through the embankment. This part of the route in question is on the left side of the road in the direction of stationary growth. On a certain part of the route, there are no curbs that would drain the coastal water and water from the road, so that water is retained on those parts of the route. In places where there are curbs, they are in a very bad condition, dilapidated, and the water in these places does not have a continuous flow or spills along the road to the part that is not arranged for pedestrians, which further complicates traffic for pedestrians and negatively affects safety and motor and pedestrian traffic.

# II.4. Other conditions assessed during route survey

Pursuant to Article 117 of the Law on Waters ("Official Gazette of RS", No. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018-other law) for the reconstruction of state roads of I and II order, culverts and bridges do not issue water conditions. This statement was confirmed in the opinion obtained by the designer from PE "Srbija vode" no.1334 from 03.02.2021. (Appendix no.5)

In the vicinity of the watercourse, and during a visiting of the terrain and a review of the available documentation, the existence of illegal landfills was noticed near the river Josanica and the river Paljevska (described above in the existing state of drainage in the II.3.5. Existing condition of drainage system).

# III. Summary of Environmental Impacts

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

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

In addition to the previously mentioned Regulation, it is important to note that in the Republic of Serbia, the Regulation on Limit Values of Pollutants in Surface and Groundwater and Sediment and Deadlines for Reaching Them ("Official Gazette of RS", No. 50/2012) is in force.

Impact to the quality of water in the recipient is expected to be minimal or negligible, according to the conducted tests that the designer of the hydrological predicted. The designer foresaw the cleaning of the terrain and illegal landfills that interfere with the rehabilitation of the subject section.

During the course of the works, wastewater may negatively affect the quality of ground and surface water. Because of this, appropriate mitigation measures and a monitoring plan have been provided for. During the road operational phase, only environmental accidents may lead to water pollution, in

which case the relevant procedures (setting out actions to be conducted in accident situations), defined by Ministry of the Interior and in accordance with the Law on Water (Official Gazette of RS, No 30/10, 93/12, 101/16, 95/18 and 95/18-oth.law), are applied. Negative cumulative effects may occur in the future (noise and air pollution) as a result of potential construction of new facilities near the road.

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

# III.1. Environmental Management Plan

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

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

# III.2. Stakeholder engagement - Information disclosure, consultations and public participation

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

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

# III.3. Summary of public disclosure process

ESMP will be presented to public and all the comments will be collected. The conclusions was presented in the report from public presentation, which are included in this document (Appendix 4).

# IV. PROJECT DESCRIPTION

The geometric profile of the existing road consists of two lanes. The existing basic width of the road on the subject section is about 7.0 m.

Starting and ending parts on the observed section are in the settlements of Novi Pazar and Ribarice. In the settlement of Novi Pazar, in the length of about 3 km, there is a pedestrian path 1.5 m wide.

The sholders are on both sides, 1.20-1.50 m wide, with occasional extensions from the gravel curtain.

The green belt, the slopes of the embankment and the cut are unmaintained and overgrown with bushes. Gutters and culverts are also unmaintained and neglected, which significantly reduced their function.

Most of the subject section is in the notch.

At the beginning of the section, in the settlement of Novi Pazar, there is a closed drainage system, ie. the water from the road is drained further into the atmospheric sewage.

The newly designed geometric cross section consists of:

- two lanes of width	tv = 3.25 m
- two edge strips of width	ti = 0.35 m
- sholder width	b = min1.25 m
- pedestrian paths	tp = 2.0 m

The total width of the subject road is 7.00-7.20m, with sholders on both sides. The newly designed route is conditioned by the position of the existing route, ie the boundaries of the road land, as well as the configuration of the terrain.

The width of the road through the settlements is 7.00 m. Due to restrictions in the form of the existing edge construction, the planned pedestrian paths were run along the road.

The design of the new axis has been approached, having in mind the Terms of Reference, as well as all the conditions and approvals obtained from the competent institutions, as well as the applicable laws, regulations and standards in road design. Considering that the existing width of the road as well as the geometric elements mostly correspond to the rank of the road, within the project solution, the biggest changes will be related to the correction of the position of pedestrian paths in the cross profile of the road.

Also, pedestrian paths have been designed in the zones of bus stops in accordance with the requirements on the ground.

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

The construction of pedestrian paths on the following sections is planned:

Location	Chainage	Chainge		
Location	Right side	Left side		
	km 257+693.00	km 257+696.00		
	km 260+620.00	km 261+170.00		
Novi Pazar	partly demolishing the existing pedestrian path and building a new one	partly demolishing the existing pedestrian path and building a new one		
Ribarice	km 280+420.00 km 282+068.00	km 280+420.00 km 282+068.00		
	building a new pedestrian path	building a new pedestrian path		

# IV.1. Location Description

The subject section belongs to the Raska Administrative district, it is passing through the City of Novi Pazar and the Municipality of Tutin and it is located in the South-westem part of the Republic of Serbia. The section in length of 24.390 km. belongs to the State Road of IB category no. 22 (old road mark M-22) "Official Gazette of RS", No. 93/2015) and represents a part of the longitudinal traffic link through the south-western part of R. of Serbia. The subject section is a part of the RRSP planned for heavy maintenance during the fourth year of the Project implementation.

In the ToR's the beginning of the section is defined 30 m after node 2233 Novi Pazar (Brdjani), looked in direction of chainage growth, on app. chainage km 257+708. The end of the section is defined in node 2234 Ribarice, on app. chainage 280+068. Intersection in node 2234 Ribarice is included within the subject design.



Picture 20. Location of the subject section

#### IV.2. Rehabilitation works description

The project envisages on the suburban part of the route the widening of the road to the minimum required width of 7.2 m. Also, on the part of the route through the settlements, the construction of pedestrian paths is planned.

Due to the fact that bicycle traffic on the subject route has not been noticed, no bicycle route passes through the section, as well as spatially limited environmental conditions that do not enable independent continuous bicycle traffic, the construction of these areas has no economic and functional justification.

Also, within the subject documentation is envisaged the arrangement of side approach. In addition to the above, in order to increase traffic safety, it is planned to install appropriate horizontal signs with checking whether the existing signs are in accordance with applicable standards and to addition the vertical signs.

On the rest of the section, it is necessary to eliminate the damage caused by the erosive action of water, to eliminate the causes that led to the damage as much as possible, to increase the use value, the durability of the road, as well as traffic safety.

In general, the aim of preparing the subject technical documentation is to repair all the damage while eliminating the causes that led to the damage, which increases the use value and durability of the road and improves traffic safety.

In addition to the mentioned, the subject documentation also envisages the rehabilitation of existing buildings, retaining walls, culverts, bridges, tunnels, as well as the renovation of the protective pedestrian and safety fence.

The project solution of the drainage system of the section Novi Pazar (Brdjani) - Ribarice, length 24.390 km, which belongs to the state road IB-22 (old road sign M-22) ("Official Gazette of RS", No. 93/2015), is based on correct functional and technical characteristics of the elements of the existing state, which are supplemented by certain new elements. All the mentioned elements fit into the projected condition of other parts of the roads (a detailed solution was given by the designer in the Preliminary solution).

The concept of drainage in the project solution is considered within the following units:

- The route of the road outside the settlement
- The route of the road in the settlement
- The route of the road in the zone of existing bridges and viaducts.

#### The route of the road outside the settlement

On the parts of the route outside the settlement, several basic types of drainage of water from the road and the surrounding terrain have been designed.

- Type 1 On one side of the shoulder, on the other a gutter or canal
- Type 2 On both sides of the gutter
- Type 3 On both sides of the shoulder

#### Type 1

The drainage system consists of a gutter or chanhel on one side of the road and the shoulder on the other. The drainage system collects and drains water from the road and water from the surrounding terrain, which flows into the road from the cut side.

On one side of the road, in the embankment, it is planned that due to the transverse fall of the road, the water will be drained through the slope of the embankment into the surrounding terrain, where the water will infiltrate and a smaller part of the water will evaporate.

On the other side of the road, in the cut, envisaged a gutter with drainage (type 1a) or a channel (type 1b). The gutter and the channel, in addition to the water from the road, collect coastal water from the surrounding terrain.

For the most part of the route, a gutter with drainage is planned, which also collects coastal water from the cut side.

# Type 2

The drainage system consists of gutters on both sides of the road, which accept water from the road and coastal water from the surrounding terrain. Under the gutter in the cut, drainage is provided for the reception of coastal water. The gutters on the side of the embankment is provided in the case when the slopes of the embankment are on a large slope and when the height of the embankment is large. Also, the gutter is provided on the parts of the route where it is not possible for water to flow over the shoulders due to some obstacles on the surrounding terrain, such as the facilities built in the immediate vicinity of the road. The water from the road is collected by a gutter

and discharged in a controlled manner into the surrounding terrain through the gullies in places suitable for outflow. The outflow of the hull into the surrounding terrain should be covered with stone in concrete.

# Type 3

The drainage system involves the drainage of water from the road in the embankment through longitudinal and transverse slopes over the shoulder and slopes of the road body into the surrounding terrain, where water infiltrates into the soil or evaporates.

#### The route of the road in the settlement

#### Atmospheric sewerage in the settlement of Novi Pazar

On the part of the route from the station km 257 + 700 to the station km 261 + 168 in the settlement of Novi Pazar, a closed drainage system with drains at an appropriate distance is planned for the drainage of water from the road.

#### Atmospheric sewerage in the settlement of Ribarice

On the part of the route from the stationing km 280 + 418 to the stationing km 281 + 995.62 in the settlement Ribarice, planned is the design of a closed drainage system with drains at the appropriate distance (which will be finally determined in the next design phase). It is planned that the recipient of the newly designed atmospheric sewage collectors will be the Paljevska river. It is envisaged that the collectors will conduct water to the outflow into the river or to the existing culverts whose final recipient is the Paljevska river.

#### The route of the road in the zone of existing bridges and viaducts

#### Bridge over stream Azirovski at stationing km 259 + 888

At the stationing km 259 + 888 in the settlement of Novi Pazar, the road intersects with the watercourse stream Azirovski. On the right side, seen in the direction of the growth of stationing, the outflow of atmospheric sewage into the Azirovski stream is planned. Before and after the bridge, the water is collected through drains and collectors of the atmospheric sewage, and is carried to the mentioned recipient through spillways. It is planned regulation and arrangement of watercourses before and after the bridge with lining of the bottom and slopes of the riverbed with stone in concrete.

#### Bridge over the river Josanica at the station km 262 + 361

At the stationing km 262 + 361, the road intersects with the river Josanica. On the right side, seen in the direction of the growth of stationing, the water before the bridge flows down the shoulder and the slope into the surrounding terrain. After the bridge, the water is collected with a gutter and poured into the AB shaft and over the pouring head into the mentioned recipient. It is planned regulation and arrangement of watercourses before and after the bridge with lining of the bottom and slopes of the riverbed with stone in concrete.

#### Bridge over the river Josanica at the station km 267 + 475

At the stationing km 262 + 361, the road intersects with the river Josanica. The water before the bridge flows over the shoulder down the slope. On the left side, seen in the direction of stationary growth, water is discharged in a controlled manner through the hull into the mentioned recipient. It is planned regulation and arrangement of watercourses before and after the bridge with lining of the bottom and slopes of the riverbed with stone in concrete.

#### Bridge over Brezovacka river at stationing km 268 + 727

On the right side, seen in the direction of growth the stationary, water after the bridge is collected by a gutter which flows into the AB shaft and over the outflow structure flows down the slope into the surrounding terrain. It is planned to line the slope in the outflow zone. It is envisaged the formation of a closed system of water drainage from the road on the bridge. It is envisaged that water from the road will be collected by drains connected by a collector under the bridge structure. The collecting collector flows into the collecting shaft, from which the water over the hull flows in a controlled manner into the surrounding terrain. It is planned to lining the slope in the outflow zone.

#### Viaduct across the gorge at the stationing km 269 + 548

On the right side, seen in the direction of growth of the stationary, water after the viaduct is collected by a gutter which flows into the AB shaft and through the outflow structure flows down the slope into the surrounding terrain. It is planned to lining the slope in the outflow zone. It is envisaged the formation of a closed drainage system from the road on the viaduct. It is envisaged that water from the road will be collected by drains connected by a collector under the bridge structure. The collecting collector flows into the collecting shaft, from which the water over the hull flows in a controlled manner into the surrounding terrain. It is planned to lining the slope in the outflow zone.

#### Viaduct across the gorge (Komitske bare) at the stationing km 274 + 915

On the left side, seen in the direction of growth, the stationary water after the viaduct is collected by a gutter that flows into the existing concrete channel and flows down the slope into the surrounding terrain. It is planned to lining the slope in the outflow zone. The formation of a closed drainage system from the road on the viaduct is envisaged. It is envisaged that water from the road will be collected by drains connected by a collector under the bridge structure. The collecting collector flows into the collecting shaft, from which the water over the hull flows in a controlled manner into the surrounding terrain. It is planned to lining the slope in the outflow zone.

#### Viaduct across the gorge at the stationing km 276 + 044

On the left side, seen in the direction of growth, the stationary water after the viaduct is collected by a gutter that flows into the existing concrete channel and flows down the slope into the surrounding terrain. It is planned to lining the slope in the outflow zone. It is envisaged the formation of a closed drainage system from the road on the viaduct. It is envisaged that water from the road will be collected by drains connected by a collector under the bridge structure. The collecting collector flows into the collecting shaft, from which the water over the hull flows in a controlled manner into the surrounding terrain. It is planned to lining the slope in the outflow zone.

#### Viaduct across the gorge at the stationing km 278 + 379

On the left side, seen in the direction of growth of the stationary, water before the viaduct is collected by a gutter which flows over the hull through the slope into the surrounding terrain. It is

planned to lining the slope in the outflow zone. It is envisaged the formation of a closed drainage system from the road on the viaduct. It is envisaged that water from the road will be collected by drains connected by a collector under the bridge structure. The collecting collector flows into the collecting shaft, from which the water over the hull flows in a controlled manner into the surrounding terrain. It is planned to lining the slope in the outflow zone.

#### Traffic prognosis

The traffic prognosis has been made for the period 2020–2030, including the 11-year period, which is justified by the fact it is not real to expect the rehabilitation works on the section will be finished before 2021.

Year	PC	BUS	LT	МТ	нт	тт	AADT (vhcs /day)
2019	5744	64	76	106	38	132	6160
2020	3793	4	67	109	52	131	4156
2021	6213	69	82	115	41	143	6663
2022	6461	72	85	119	43	149	6929
2023	6720	75	89	124	44	154	7206
2024	6989	78	92	129	46	161	7495
2025	7233	81	96	133	48	166	7757
2026	7486	83	99	138	50	172	8028
2027	7748	86	103	143	51	178	8309
2028	8019	89	107	148	53	184	8600
2029	8300	92	110	153	55	191	8901
2030	8590	96	114	159	57	197	9213

Table 4: Traffic load prognosis for the 10-year period

# V. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

# **Relevant Institutions**

The relevant Ministry of Environmental Protection of the Republic of Serbia is responsible for producing and implementing the environmental policy. Other relevant institutions are: PERS, Institute for Nature Conservation of Serbia (INCS), Republic Institute for the Protection of Cultural Monuments of Serbia-Belgrade (IPCMS) and Institute for Protection of Cultural Monuments Kraljevo (IPCMK).

# **Existing Serbian legislation**

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

# EIA procedure in the Republic of Serbia

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

In the statement 03 no. 020-3556/3 dated January 31<sup>st</sup> 2019. Institute for Nature Conservation of Serbia (INCS) the issued conditions for the subject road section. By reviewing the Central Register of Protected Goods and documentation of the INCS, and in accordance with the legislation governing the field of nature protection concluded that the subject area is not situated within a protected area, for which the protection procedure has been carried out or initiated, is not within the scope of the ecological network, nor in the area of recorded natural resources.

In the statement no. 1825/3 dated 26.02.2020. Protection of Cultural Monuments Kraljevo (IPCMK) issued technical protection measures necessary for the preparation of project technical documentation. In the subject conditions, the archeological sites are listed, as follows: Greek cemetery / Zaguljaca-remains of the church and necropolis, Mur (K.O. Lukarsko Gosevo, N: 4770992 E: 7458242), Crkvina-church, G. Josanica (K.O. Lukare N: 4769843 E: 7458191), Duvarine- settlement, Kominje (K.O. Kozlje N: 4764920, E: 7455382), Greek cemetery on Botunnecropolis, Zuce (K.O. Kozlje N : 4764498 E: 7454637), Ledine near Mrkonjska watermill - medieval building, necropolis, Orlje (K.O. Orlje N: 4761784 E: 7454211), Livade Grebeje / Greek houses- settlement, Orase (K.O. Vesenice N: 4761699 E: 7454501), it is forbidden to perform any earthworks, without previously provided archaeological research. The issued conditions state the obligations of the Contractor / Investor during the project implementation.

Final Environmental Approval is obtained from the Ministry of Environmental Protection (MoEP) (No. 011-00-00826/2020-03 dated 14.08.2020.) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (see Appendix 6). Consequently, that there is no need for producing the Environmental Impact Study of the subject section of the state road.

# **Relevant IFIs Policies and Statements**

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

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

EBRD and EIB request that the design be made in line with the laws of the Republic of Serbia and EU standards. However, the regulations of the Republic of Serbia do not provide for an EMP to be made for this type of investment, while the World Bank guidelines require a partial Environmental Impact Assessment and ESMP for each section.

# VI. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

Subject section: Novi Pazar (Brdjani) - Ribarice. belongs to the Raska administrative district located in the southwestern part of the Republic of Serbia, in the City of Novi Pazar and the municipality of Tutin.

There are no protected natural assets, but that is why there are archeological sites on the location according to the conditions of the Institute for the Protection of Cultural Monuments of Kraljevo.

Considering the fact that the subject section extends on the territory of two municipalities (Tutin, City of Novi Pazar) and the social aspect of the ESMP document, information on the requests of the local community was collected from representatives of both municipalities.

Based on the provision of the Institute for Nature Protection, which is related to water generated by leaching from the road, and are loaded with oils and other petroleum products, an analytical calculation was performed for certain types of pollutants according to the method defined in "Calculation of loads of chronic pollution from roads runoffs (Sétra, July 2006) ", which provides a link between pollutant emissions and average annual daily traffic. The results of the conducted calculation indicate that the values of pollutants caused by traffic load, and expressed using the values of PGDS for 2030 for the observed section, are below the permitted values prescribed in the Regulation on emission limit values for pollutants and deadlines for reaching them. "Official Gazette of RS", 67/11, 48/12, 1/16 for the second class of surface water quality. This means that on the subject there is no need for treatment of atmospheric waters section according to the mentioned regulation.

The calculation of the mass balance required to make a comparison with the limit values of pollutants "Official Gazette of RS", No. 50 of 18 May 2012, has not been performed - since there are no input data relating to the amount of existing pollutants in the watercourse, as well as on the magnitude of the flow at the minimum water level in the watercourse. It is also noted that according to European monitoring and measurement programs, pollution from traffic flow is considered only when the values of PGDS reach the values of 15,000 vehicles per day. (European Conference of Route Directors, CEDR). The calculation of pollution from traffic flow is given in Annex 5.4.3.

Within the considered section of the road, there are no protected natural areas, which could be affected by the project of heavy maintenance and elimination of damage. During the implementation of the project, there will be no new occupation of areas, as defined in OP 4.12. and all extensions are within the roadway.

Regarding the level of road damage, the dominant types of damage on the section in question were singled out:

- longitudinal and transverse cracks as a consequence of thermal influences and the influence of traffic flow during exploitation,

- road repairs, as a consequence of interventional periodic maintenance due to intensive damage during the previous period of operation,
- mesh cracks as a consequence of fatigue of the road construction.

The following figures show the characteristic damages observed during the field research.



Picture 21. Damage of pavement



Picture 22. Damage of pavement

# Settlements

# The City of Novi Pazar

The city of Novi Pazar belongs to the Raska district in southwestern Serbia and is located in the valley which looks like on the star of the rivers Josanica, Raska, Dezevska and Ljudska river, at an altitude of 496 m. It is surrounded by high mountains Golija and Rogozna and Pesterska plateau.

According to the 2011 census report, there were 66,527 inhabitants. The wider area of the city of Novi Pazar has 100,410 inhabitants. It covers an area of 742 km<sup>2</sup>.

# **Municipality Tutin**

Tutin is a municipality in the Raska district in southwestern Serbia. The municipality of Tutin is one of the highest municipalities in Serbia, with an average altitude above 1,000 m. The municipality of Tutin has 31,155 inhabitants (census from 2011), which makes it the third municipality in the Raska district in terms of population. It covers an area of 741 km<sup>2</sup>.

# **Bicycle traffic**

Bicycle traffic is of low intensity and occurs only in settlements, and takes place on the road.

# School zone

A total of 5 parts of the route, marked the school zone, Novi Pazar, Lukare, Ribarice, two are located outside the settlement (km 274 + 185 - km 274 + 620) (intersection zone Kozlje) and km 276 + 895 - km 277 + 230 (zone intersections of Orlje)).

In the settlement of Lukare, the school zone covers almost the entire settlement, in the length of about 400 m.

#### **Railway traffic**

On the subject section there is no railway traffic.

#### Watercourses

The watercourse listed below passes and intersects with the section Novi Pazar (Brdjani) - Ribarice:

#### Josanica River

The river Josanica is a tributary of the Raska river. It belongs to the watercourses of the second order according to the categorization of the City of Novi Pazar (Operational Plan for Flood Defense, City of Novi Pazar, 2019), since the riverbed is not regulated throughout.

#### Gosevska river

Gosevska river is a stream that springs at 1,017 m above sea level.

#### Brezovacka river

Brezovacka river is a stream that springs at 612 m above sea level.

#### Azirovski potok

Azirovski potok belongs to the smaller watercourses, i.e. streams flowing through Novi Pazar.

#### Paljevska river

Paljevska river is a stream that springs at 684 m above sea level.

#### Other watercourses

Smaller watercourses, i.e. the streams that intersect with the subject section are also: Krusevacka river, Hozorovac river and Mala river.

#### Air

There are no additional sources of air pollution within the observed section of the road Novi Pazar (Brdjani) - Ribarice.

Based on the traffic count, it is not forecasted that after increased maintenance and elimination of damage, its volume will increase. In the phase of rehabilitation and exploitation of the road, no increase in the concentration of pollutants in the air is expected.

#### Noise

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

# VII. SUMMARY OF ENVIRONMENTAL IMPACTS

The following table listed the environmental impacts during the road rehabilitation

INFLUENCE	SIGNIFICANCE	COMMENT
Impacts on land use and	Does not exist	During the realization of the project,
settlements		there will be no new occupation of the
		land
Ground and surface water	Low	Due to the low amount of water that can
		reach the river through drainage, the
		negative impact is minimal and
		negligible.
Air quality	Low	Temporary impact during the road
		rehabilitation.
Flora and fauna (protected	Low	Under the terms of the Institute for
areas and species)	Low/Middle	Nature Conservation of Serbia
Monuments	Low/ivildale	Under the terms of the Institute for Protection of Cultural Monuments
		Kraljevo and under the terms of the
		Republic Institute for the Protection of
		Cultural Monuments
Noise	Low	Temporary impact during the road
	2011	rehabilitation.
Access/crossing points of	Low	There is no impact on existing
the main road and local		intersection points and access points
roads		
Soil management	Low	With the application of appropriate
		measures of waste management.
Waste	Low	Ensured through environmental
		management – waste and wastewater
		management plan will be prepared and
		implemented
Cumulative impacts	Minor	Temporary, rehabilitation works may
		cause a slight increase of noise levels
		and air pollutants concentrations during
		the works only

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

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

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

#### **Overview of Key Impacts**

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

#### Noise and Air Pollution in Residential Areas

During the rehabilitation works, use of construction machinery and equipment with exhaust fumes leads to an increase in the concentration of nitrogen oxide and sulfur oxide in the air. Local residents will not be temporarily impacted by non-significant air and noise pollution and dust emission, since there is no residential zone nearby.

#### Possible water contamination

Water pollution may occur on site, on the locations where the equipment, vehicles and machinery are washed and also on the parking area. The contaminated water shall be filtered through a gravity oil-water separator. If there is a spillage on the road, especially near the watercourses, the Contractor shall use absorbent materials and remove the contaminated layer of soil, which is then transported to a location defined in the Law on Water ("Official Gazette RS" Nos. 30/2010, 93/2012, 101/2016, 95/2018 µ 95/2018-oth. law ).

#### **Potential Cumulative Impacts**

If the ESMP is properly implemented, all negative effects on the people and the environment resulting from cumulative impacts will be reduced.

Determining the location for landfilling is a very big problem in the Republic of Serbia, given the small number of regulated sanitary landfills, the recommendation of the Environmental and Social Management Plan is to use a regulated and sanitary landfill of municipal and construction waste, all in accordance with valid planning and urban documentation for the subject section and European Union standards, all in accordance with domestic laws in force in the Republic of Serbia.

#### **Other Impacts:**

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

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

# VIII. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance and road rehabilitation- upgrading on the section Novi Pazar (Brdjani) - Ribarice will be insignificant and reversible. Mitigation measures provided in the ESMP, relating to the design, construction and operational phase, must be carried out appropriately. ESMP consists of the Mitigation Plan and Monitoring Plan and is based on the types of environmental impact, their scope and duration. PERS manages the design, supervision and the contractor in the implementation of ESMP.

# A. Environmental Mitigation Plan

The Environmental Mitigation Plan defines the environmental impacts and measures to be implemented during the design, construction and operational phase (Appendix 1). The Plan conforms to the conditions received from the Institute for Nature Conservation of Serbia and valid laws. It states the locations, time frame, responsibility for its implementation and supervision. Costs of mitigation measures are included in the cost of the works. Contractor shall implement the environmental mitigation measures, include them in the total costs, and execute the works in accordance with national laws, EU standards and creditor's requests.

# Site Organization Plan

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

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

- Vehicle and machinery servicing on the road section shall be prohibited. In the event of a road traffic accident resulting in oil or service fluids spillage, the road area must be cleaned and reinstated;
- On the parts where the section is located in a populated area the works must be performed only during the day, to minimize the impact of noise on local residents;
- > Guardrails and pedestrian crossings must be placed where necessary;
- Locations for containers for temporary tipping of communal waste produced during the works must be determined;
- The area for Contractor's facilities must be of the smallest possible size, to avoid unnecessary removal of vegetation. All facilities must be fenced;
- Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator;
- Only trained workers, who can remove any consequences of accidental spillage, may handle the fuel;
- Waste oil, oil filters and fuel must be stored on safe locations; Sanitary wastewater and polluted water must be treated before the water is discharged into the surface water flow system, in line with the Law on Water ("Official Gazette of RS", Nos. 30/2010, 93/2012, 101/2016, 95/2018 μ 95/2018-oth. law);
- Contractor must provide safety measures to prevent soil erosion and use the methods to decrease the storm water runoff that carries eroded material;
- > Excavations and machinery works must be avoided when the soil is damp;
- > Upon the completion of works, machinery, construction material, containers and all other equipment must be removed in due time;
- When the site is ready to be closed, all contaminated soil must be excavated and replaced with a new layer of soil;
- Upon the completion of works, the soil must be cultivated on all the critical locations, using suitable plants which are biologically adapted to the subject climatic conditions, resistant to air pollution and visually fitting for the surrounding area. Invasive species, such as the black locust, Indigo bush, ash leaf maple, ailanthus, American ash and species that cause allergic reactions, such as poplar, should be avoided.

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

#### **Environmental Protection Plan**

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

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

Environmental Protection Plan consists of the following:

- 1. *Site Management Plan* defines the procedures for setting up and functioning of a site with a view to preserving the local community and natural resources.
- 2. *Site Organization Plan* description and arrangement of areas, with maintenance equipment and oil and lubricant storage facilities, including the distance from water areas;
- Oil and Fuel Storage Management Plan procedures for storing, transporting and using oil and fuel, refueling the facilities and machines, procedures for decreasing the risk of water and soil pollution. Vehicles used for refueling will have the suitable equipment used for cleaning fuel spills. All classes of spills will be reported in line with the Plan;
- 4. Waste Management Plan contains details of temporary waste storage, waste transport and treatment before its final disposal or recycling. Licensed facilities must be used for storing solid and liquid waste and the waste leaving the site must be traceable, in accordance with the jurisdictions. As part of the Plan, Contractor shall provide chain-ofresponsibility forms for the waste that leaves the site. Therefore, waste controller shall keep one copy of the form, and the driver shall have a copy, to make sure that all the listed waste is brought to the landfill. Contractor shall keep all records for audit purposes.
- 5. Sewerage and Waste Water Management Plan
- 6. Soil Management Plan steps to be taken to minimize the effect of erosion, measures to reduce topsoil depletion, transport roads and landfills;
- 7. Noise all the equipment must have a license and must be approved in accordance with the EU standards. This applies to all machinery, vehicles and sites where noise and vibrations affect the noise-sensitive receptors. In accordance with the Law on Protection against Environmental Noise (RS Official Gazette No 36/09, 88/10), Contractor is responsible for ensuring the noise and vibrations do not affect the local community. Contractor shall limit his works to a period from 07:00 am to 07:00 pm.
- Dust Emission Reduction Plan during the works, when dust may form, Contractor shall monitor the conditions on site and application of measures to control dust emissions, which include reduced traffic during road rehabilitation works and spraying water on the exposed surfaces;
- 9. *Material Excavation and Extraction Location Plan* defines the reparation measures to be implemented for the areas of borrow-pits and access roads after the project is finished;
- 10. *Management Plan for Works on the River* includes plans and procedures for water habitat and fish preservation during the works.
- 11. *Emergency Response Plan* sets out the procedures for reacting in case of emergency or accidents of a bigger or smaller scale, to protect the people, property and natural resources. Equipment to be brought on site to minimize the effects of the spillage of polluting substances must be included in the Plan.
- 12. Recultivation Plan cleaning and recultivation of the site and removal of Contractor's facilities. Contractor is responsible for clearing the site. This includes the removal of all waste material, machinery and contaminated soil. In line with the Law on Waste Management (RS Official Gazette No 36/09, 88/10, 14/10), Contractor shall develop a plan for handover, selling or removal of all vehicles and machinery, to remove them from site. All site and work areas will be rehabilitated, in order to be reinstated as much as possible. This includes stabilization and landscaping of all sites. In line with the Law on Environmental Protection (RS Official Gazette No 135/04, 36/09, 72/09,43/11, 14/16), after the works are completed, waste must not remain on site. If waste is not removed by the Contractor, PERS is entitled to withhold payment and organize the cleaning of the area. The costs of the cleaning and the administrative costs will be included in the final payment.
- 13. *Plan of Environmental Complaints* means used by the local residents and third parties affected by the project to call attention to environmental issues and file a complaint, defining how and to whom these should be addressed (Appendix 4, Grievance Mechanism);

## Health and safety

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

- > Contractor shall ensure that drugs and alcohol are not used on site;
- Contractor is to include in his Site Safety Plan a provision for safe working environment and safety measures and personal protective equipment (PPE) for all workers, including gloves, hard hats, goggles, ear protection and safety footwear;
- Site Safety Plan is to include a provision for first aid to be administered on site and a trained person must be engaged in line with the Law on Occupational Health and Safety (Official Gazette RS No 101/05, 91/15 and 113/17-oth. law);
- Contractor shall provide to his workers potable water supply, toilets and water supply for washing;
- Safety Labour Management Plan is required to ensure health and safety provisions during the works on heavy maintenance;
- Contractor shall perform all project activities following the SLMP and all Serbian laws and bylaws regarding health and safety;

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

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

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

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

## **Operational Phase**

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

Regular road maintenance consists of the following: grass mowing, cleaning the drainage system, road patching and various repairs and regular checks and maintenance of drainage structures. Seasonal maintenance, regular maintenance of safety characteristics and road signs shall be

performed as needed. Primary road maintenance, which includes asphalting and major repairs, is usually planned for a period of a few years.

# **B. Environmental Monitoring Plan**

Basic components of the Monitoring Plan are:

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

A monitoring control list is prepared on the basis of EMP and Monitoring Plan (Appendix 2). The list is used by the supervision engineer on site. Signed control lists are submitted to PERS, which is responsible for compliance monitoring and reporting. PERS will have a Database of grievances, listing the information on complaints received from local communities and other interested parties. This includes: type of grievance, place, time, actions to be taken to resolve the grievance and the final outcome.

# C. INSTITUTIONAL IMPLEMENTATION AND REPORTING ARRANGEMENTS

# **Project Implementation**

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

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

- Contractor shall prepare Environmental Protection Plan and take all steps to mitigate ecological effects as stated in the Environmental Mitigation Plan (Appendix 1);
- Contractor should not be compensated for the costs of the required mitigation measures and monitoring activities in the form of a specific item in the total price, except for the analysis of the quality of water and noise measuring. Contractor will be deemed to have included these costs in the total price. The actual costs of the analysis of water quality and noise measuring will be paid to the Contractor as part of a specific item in the total price. Failure to follow the requested environmental mitigation measures on the Contractor's part will result in penalizing the Contractor in the form of negative points. Negative points have been established as a measure to stimulate the Contractor to perform his obligations in an organized and timely manner and perform his duty with a high degree of excellence. Negative points consist of two elements numerical and financial. Each negative point is connected to a sum, representing a permanent reduction in payment for the determined non-conformances in contractual obligations. The number of negative points earned has a cumulative effect. Should the Contractor receive more than a certain number of negative points stated in the Contract, he will not be allowed to participate in PERS tenders in the next two years. Also, if the Contractor is awarded a certain number of negative points, the employer has the right to

break the contract. Monetary value of each negative point and the deadlines for other possible actions by the employer must be clearly stated in the contract. Explanation for the application of these two measures – fees for specific costs and penalties for non-compliance should provide the implementation of all the requested environmental mitigation measures and monitoring activities.

Contractor must be explicitly requested to employ an environmental expert. Contractor will be responsible for implementing environmental mitigation measures during road rehabilitation works and should employ an environmental specialist who will supervise the implementation of Contractor's environmental responsibilities. This person will coordinate the work of the Contractor, PERS and the relevant ministry and will deal with every complaint received during the project implementation. In the course of the project, PERS will monitor if the Contractor complies with EMP provisions. Project Supervision Consultant is advised to employ an environmental expert (with knowledge of civil engineering and environmental management), to assist in environmental monitoring.

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

PERS shall also be responsible for the following:

- Implementation of the requests for environmental protection provided by: State environmental authorities, IFIs and other institutions, Law on Environmental Protection (RS Official Gazette Nos. 135/04, 36/09, 36/09- oth.law, 72/09- oth.law, 43/11-decision US, 14/16, 76/18, 95/18- oth.law and 95/18-oth.law);
- Implementation of the requests for environmental protection through Contractor's specifications;
- > Project supervision via consulting services for supervision and project implementation;
- > Environmental monitoring supervision via consulting services for environmental monitoring;
- > Preparation of final environmental reports.

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

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

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

# The Contractor Reporting Arrangements

1. Contractor to PERS

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

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

In the event of any accidents or environmental threats, there will be immediate reporting about these events. Contractor shall inform the project manager and local authorities immediately after the accident. If the project manager is not available, Contractor shall inform PERS about the accident (phone number +381113040701 or by e-mail: office@putevi-srbije.rs).

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

2. Project Supervisor Consultant to PERS

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

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

3. PERS – MoCTI, World Bank, EBRD and EIB

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

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

# VIII.4. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

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

PERS office	Vlajkoviceva St. 19 a, Belgrade,
	Contact person: Igor Radovic, dipl.ing. and Jelena Cvetkovic, dipl.ing.
	011 3206811
Local community centres	City of Novi Pazar, Municipality Tutin

Web site - PERS	www.putevi-srbije.rs

A detailed report on the public consultation process is shown in Appendix 4 to this document and contains a list of participants identified, which will be updated accordingly.

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

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

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

A grievance mechanism will be implemented to ensure that the complaints from local communities are appropriately addressed, corrective measures taken and complainants informed about the outcome. This applies to the complaints of all interested parties. The complaint form is shown in the Appendix 4, while hard copies will be available in local community centers.

The Report on Public Consultation is presented in Appendix 4 to this ESMP.

# IX. REFERENCES

- Environmental Assessment No 25, Environmental Management Plans, World Bank Environment Department, January 1999.
- > Roads and the Environment: A Handbook, World Bank Environment Department.
- EIB, Environmental and Social Practices Handbook, Environmental and Social Office, version 2 24/02/2010.
- > EBRD, Environmental and Social Policy 2008.
- EIB, Environmental and Social Principles and Standards (2008)
- EMP for the rehabilitation of roads, bridges and tunnels, as part of the World Bank project, Road Management and Traffic Safety, Republika Srpska, Roads Directorate, Banja Luka, 2001.
- Environmental Assessment Report and EMP for the Serbian Transport Rehabilitation Project, report ref: E866, project title: YF – Transport Rehabilitation Project – Br. P075207, document date 30/11/2003
- Environmental Management Framework Document EFD, PE Roads of Serbia, february 2013. Available on the link: <u>http://www.putevi-srbije.rs/images/pdf/investicije/rrsp\_environmental\_management.pdf</u>

# X. APPENDIXES

Appendix 1

X.1. MITIGATION PLAN

# **MITIGATION PLAN**

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
Pre-construction	Main Design			
	Following the environmental protection procedure	Conditions from the Institute for Nature Protection of Serbia and Institute for Protection of Cultural Monuments Kraljevo and Republic Institute for Protection of Cultural Monuments- Belgrade, are obtained to avoid environmental risks	PERS And Main Design Designer- Consultant	PERS
		- be outside of the river banks and river flood area of Ibar		
		- have no impact on the environment and the local community (noise, dust, vibrations etc.)		
	Site location and organisation	- be outside the high vegetation area	PERS	
	Site location and organisation will be approved by PERS and selected so as to:	- minimise the size of the facilities to minimise the unnecessary removal of vegetation	Contractor	PERS
		- have the sanitary waste water treated before the water is discharged into the surface water system, in accordance with the Law on Water (RS Official Gazette No30/2010, 93/2012, 101/2016, 95/2018, 95 / 2018- oth. law)		

		Mitigation measure		
			Implementation	Supervision
		- properly drain the locations. Paved areas, including parking areas, workshops and fuel storages must be drained toward an oil-water separator		
		- whenever possible, limit the area to be cleared and avoid topsoil degradation		
		- the material removed will be collected, disposed and/ or re- used as needed		
		- prevent soil erosion on site		
		- contractor is responsible for implementing the measures for erosion protection		
		- contractor shall limit the scope of the excavations to mitigate soil erosion		
		- contractor shall implement soil conservation method in sensitive areas to prevent or minimize the storm water runoff, which causes material erosion		
		- contractor is to avoid excavation and machine operations in damp site conditions.		
Selection of the location for temporary settlement construction, in the vicinity of	Selection of the location for temporary settlement	- minimum distance must be kept (buffer zone) between the site and the nearest populated area	Contractor	

	Mitigation measure		
		Implementation	Supervision
or within an existing settlement	- influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects		PERS
and	-contractor's EMP defines health and safety and environmental measures		
	<ul> <li>- independent water and electricity supply, in addition to a medical service station on site must be planned for.</li> </ul>		
			Main Design
Safety of pedestrians and	ť	Main Design	Technical Control
suitable crossings		Designer- Consultant	
			PERS
			Main Design
Stakeholder engagement	đ	and Main Design	Technical Control
		Designer- Consultant	PERS
	and s	ement       - influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects         - contractor's EMP defines health and safety and environmental measures         - independent water and electricity supply, in addition to a medical service station on site must be provided, equipped with kerb ramps that allow the use of wheelchairs, trolleys, bicycles and prams.         Details of the proposed road route, access points and safety features will be disclosed at the location of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered will be recorded in the Main Design.	ement       - influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects       -         - contractor's EMP defines health and safety and environmental measures       -         - independent water and electricity supply, in addition to a medical service station on site must be provided, equipped with 

Phase	Issue	Mitigation measure	Institutional responsibility	responsibility
			Implementation	Supervision
Construction	Management plans			
	Contractor shall prepare the implementation of the Plan legislation and Creditor's requirements have been met:	Contractor shall prepare the implementation of the Plans described in the EMP, to ensure that the legislation and Creditor's requirements have been met:		
	- Site Organisation Plan			
	- Sewerage and Wastewater Management Plan	nagement Plan		
	- Soil Management Plan			
	- Dust Management Plan			
	- A plan indicating the location of borrow-p access roads after the project is completed	<ul> <li>A plan indicating the location of borrow-pits, and measures for recultivation of borrow-pits and access roads after the project is completed</li> </ul>		
	- Waste and Wastewater Management Plan, in line with the L Gazette No 36/2009, 88/2010, 14/2016 и 95/2018 –oth. low)	- Waste and Wastewater Management Plan, in line with the Law on Waste Management (RS Official Gazette No 36/2009, 88/2010, 14/2016 и 95/2018 –oth. low)		
	- Oil and Fuel Storage Management Plan	ent Plan		
	- In-river Works Management Plan	UE		
	- Emergency Response Plan			
	- Complaints Procedure			
	- Safety and Hazard Assessment			

Phase	Issue	Nitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
	- Safety and Labour Management Plan	t Plan		
Construction	Site Induction			
	All workers and visitors to the site need to use PPE.	All workers and visitors to the site shall be given a health and safety induction and instructed on the need to use PPE.		
Construction	Material Supply			
	asphalt plant: dust, fumes, health and safety of workers, ecosystem disturbance	<ul> <li>use the existing asphalt plants;</li> <li>requirement for official approval or valid operating license</li> </ul>	asphalt plant	asphalt plant
	quarry: dust, health and safety of workers, ecosystem disturbance	<ul> <li>use the existing quarries;</li> <li>requirement for official approval or valid operating license</li> </ul>	quarry	quarry

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
	sand and gravel borrow-pits:	<ul> <li>use the existing borrow pits or buy material from licensed</li> </ul>		
	river bed disturbance, quality	separation facilities;	contractor or gravel and sand separation facility	contractor or gravel and sand separation facility
	of water, ecosystem disturbance	- requirement for official approval or valid operating license	-	-
Construction	Material Transport			
	asphalt:	- all trucks need to be covered		
	dust, fumes	- contractor's machinery to be carefully selected	נו מרא סליבו פרטי	נומכא סלובן פניסן
	stone:			
	dust	אוכר דומרא וממע	נו מרא ס ליבו פרטי	יומרא סליבו פוסיו
	sand and gravel:	wettrick load	truck operator	truck operator
	dust			

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
	management of traffic noise, exhaust fumes and road	- haul material at off-peak traffic hours (9-14h) - use alternative roads to avoid main roads	transport manager	transport manager
		- proper road signs and markings of the site, to minimise chances of a wrong turn	truck operator	truck operator
		If any archeological remains are found during the works, the contractor, ie the PE "Roads of Serbia", must inform the competent IPCMK and for cadastral municipality Novi Pazar must inform IPCMS.		
		Due to the existence of archeological sites on the route, during the execution of works on road maintenance on certain parts of		contractor's supervision
	Possibility of encountering an	the route, it is necessary to organize professional archeological supervision, namely the archeological sites, as follows: Greek	contractor	IPCMK
	C	(K.O. Lukarsko Gosevo, N: 4770992 E: 7458242), Crkvina-church, G. Josanica (K.O. Lukare N: 4769843 E: 7458191), Duvarine-		PERS
		cemetery on Botun-necropolis, Zuce (K.O. Kozlje N : 4764498 E: 7454637), Ledine near Mrkonjska watermill - medieval building,		
		necropolis, Orlje (K.O. Orlje N: 4761784 E: 7454211), Livade Grebeje / Greek houses- settlement, Orase (K.O. Vesenice N:		
		4761699 E: 7454501), it is forbidden to perform any earthworks, without previously provided archaeological research. The issued		

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
		conditions state the obligations of the Contractor / Investor during the project implementation.		
		PE "Roads of Serbia" is obliged to inform the competent Institute about the beginning of works 7 days before the start of works in order to ensure supervision over the works.		
	the possibility of encountering geological-paleontological or mineral-petrological objects	If during the works geological-paleontological or mineral- petrological objects are encountered, which are presumed to have the property of a natural good, the Contractor is obliged to inform the Ministry of Environmental Protection within 8 days, ie to take all measures to ensure that the natural good is not would damage until the arrival of an authorized person.	contractor	contractor's supervision
Construction	Construction Site			
		- limit the activities to daylight working hours		
	negative impact of noise on the	- use equipment with noise mufflers, licensed and approved in accordance with the EU standards	contractor	contractor
	שטואביז מוש וסכמו כטווווושווויץ	<ul> <li>use noise barriers for the works that produce noise for more than one day on the same location.</li> </ul>		
		- locate noise-making equipment as far away as possible form		

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
		residential buildings and other noise-sensitive receptors.		
	dust	<ul> <li>spray the problematic areas on site with water</li> <li>cover the material stored and limit vehicle speed</li> <li>implement the Dust Management Plan: measures for avoiding dust emission, including hoarding, spraying the problematic areas, accesses, material and stockpiles during the loading and unloading activities covering the trucks that carry ducty material</li> </ul>	contractor	contractor
		- limit activities to davlight working hours		
	vibrations	- if there is material damage to the local houses, buildings and infrastructure (access roads included) caused by the works, the damage will be compensated for and will have to be rectified	contractor	contractor
		- locate the equipment for earth works as far away as possible form vibration-sensitive receptors		
	traffic disruption during construction activities	- Traffic Management Plan with appropriate measures for traffic diversions that can be easily noted and followed, including traffic police assistance	contractor	contractor
		- Traffic Management Plan which will define a speed limit for the		

safety of vehicles when / where there are no construction activities	- organise and cover material storage areas         - isolate the concrete, asphalt and other from the watercourse by         soil and water pollution from       using sealed formwork or covers         improper material storage,         management and use       -isolate the areas for washing the concrete or asphalt trucks and
where lighting and well-defined safety signs and protection measures	

contractor
Implementation
Institutional responsibility

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
		<ul> <li>apply additional measures for storing hazardous waste (secondary containment, limiting the access, providing PPE etc.) to prevent negative effects on the workers, local community or environment</li> </ul>		
		<ul> <li>nominate a person responsible for waste collection and storage (hazardous and non-hazardous)</li> </ul>		
	potential contamination of soil and water from improper maintenance and fuelling of equipment	apply the best engineering practice in handling and safe storage of lubricants, fuel and solvents, ensure proper loading of fuel and equipment maintenance, collect all waste and dispose it on authorised recycling locations	contractor	contractor
	soil and water pollution from improper waste material disposal	<ul> <li>transport the waste in marked vehicles designed for waste transport, to minimise the risk of releasing hazardous and non- hazardous substances</li> <li>train the drivers in handling and disposal of the load they transport and transport documents describing the nature of the load (waste) and its degree of hazard</li> </ul>	contractor	contractor
	safety of workers	<ul> <li>provide workers with safety instructions and PPE</li> <li>provide a safe alternative traffic flow</li> </ul>	contractor	contractor

Phase	Issue	Mitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
	areas temporarily occupied	<ul> <li>undertake re-vegetation with native species and monitor the effects (avoid invasive species those that cause allergic reactions)</li> <li>where initial plantings were not successful, carry out re-planting</li> </ul>	contractor	contractor
Operation	Maintenance			
	negative impact of noise on local residents and workers	<ul> <li>limit activities to daylight working hours, or as agreed with the authorities</li> <li>use the equipment with noise mufflers installed</li> </ul>	maintenance contractor	maintenance contractor
	potential air, water and soil pollution: dust, exhaust fumes, spilt fuel, oil and lubricants	<ul> <li>apply the best engineering practice in handling and safe storage of lubricants, fuel and oil</li> <li>ensure proper loading of fuel and maintenance of equipment</li> <li>collect and dispose all waste in accordance with the Law on Waste Disposal</li> <li>properly organise and cover the areas for material storage</li> <li>isolate concrete and asphalt works from the watercourse by using sealed formwork</li> <li>isolate the area for washing trucks for the transport of concrete</li> </ul>	maintenance contractor	maintenance contractor

План управљања животном средином и социјалним окружењем

Phase	Issue	Nitigation measure	Institutional	Institutional responsibility
			Implementation	Supervision
		and asphalt and all other equipment from the watercourse, by choosing the area for washing where the water is not freely drained directly or indirectly into the rivers		
		- dispose the waste material to suitable locations protected from washing out		
	vibrations	limit activities to daylight working hours, or as agreed with the authorities	maintenance contractor	maintenance contractor
	safety and health of workers	<ul> <li>provide workers with safety instructions and PPE</li> <li>organise safe traffic bypass</li> </ul>	maintenance contractor	maintenance contractor
	increased vehicle speed	install speed limit signs	maintenance contractor	maintenance contractor
	erosion, rockfall, hazardous situation	install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal crossing, slow traffic zone), reflective markings indicating steep slopes or convex mirrors in curves where there is a lack of visibility, warning signs on locations considered appropriate in line with good engineering practice or as agreed with the authorities	maintenance contractor	maintenance contractor

План управљања животном средином и социјалним окружењем

Appendix 2

X.2. MONITORING PLAN

		Material transport				Construction
borrow-pit or separation facility manager	ensure the compliance of the borrow-pit with the health and safety and environmental requirements	prior to the start of the works	inspection / supervision engineer	sand and gravel borrow-pit or separation facility	possession of an official approval or valid (operating) license	sand and gravel borrow-pit
quarry manager	ensure the compliance of the quarry with the health and safety and environmental requirements	prior to the start of the works	inspection / supervision engineer	quarry	possession of an official approval or valid (operating) license	quarry
plant manager	ensure the compliance of the plant with the health and safety and environmental requirements	prior to the start of the works	inspection / supervision engineer	asphalt plant	possession of an official approval or valid (operating) license	asphalt plant
		Material supply				Construction
Implementation						
Institutional responsibility	Why the parameter is monitored	When the parameter is monitored (frequency or continuous)	How the parameter is monitored	Location where the parameter is monitored	Parameter to be monitored	Phase

# MONITORING PLAN

		Construction site				Construction
Contractor's supervision	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	unannounced inspections during the works, at least once a week	supervision	site	hours and routes selected	traffic management
Contractor's supervision	ensure the compliance with the health and safety and environmental requirements	unannounced inspections during the works, at least once a week	supervision	site	truckload covered or wetted	sand and gravel
Contractor's supervision	ensure the compliance with the health and safety and environmental requirements	unannounced inspections during the works, at least once a week	supervision	site	truckload covered or wetted	stone
Contractor's supervision	ensure the compliance with the health and safety and environmental requirements	unannounced inspections during the works, at least once a week	supervision	site	truck load covered	asphalt
Institutional responsibility Implementation	Why the parameter is monitored	When the parameter is monitored (frequency or continuous)	How the parameter is monitored	Location where the parameter is monitored	Parameter to be monitored	Phase

План управљања животном средином и социјалним окружењем

	minimal disruptions to traffic	מונכו מ נסוווים חוור וא ובכבועבט				
Contractor's supervision	ensure the compliance of works with the health and safety and environmental requirements and	unannounced inspections during construction works and	supervision	site	limited time of activities	vibrations
Contractor's supervision (monitoring)	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	unannounced inspections during material delivery and construction works	inspection and visual observation	on and near the site	air pollution (suspended solids)	dust
contractor (monitoring)	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	-once at the beginning of the project and later quarterly -after receiving a complaint -if the monitoring results are not satisfactory, monitoring to be done on monthly basis	sound meter with suitable software	site; nearest homes in the local settlement	noise levels	negative effects of noise on the workers and local residents
Implementation						
Institutional responsibility	Why the parameter is monitored	When the parameter is monitored (frequency or continuous)	How the parameter is monitored	Location where the parameter is monitored	Parameter to be monitored	Phase

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
disruptions to traffic during construction works	existence of a Traffic Management Plan and traffic pattern	on and near the site	inspection and visual observation	prior to the start of the works; once a week in peak and non- peak hours	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
reduced access to roadside activities	alternative access provided	site	supervision	random checks at least once a week during the construction works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
safety of vehicles where there are no construction activities	visibility and suitability	on and near the site	observation	random checks at least once a week in the evening	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision

PERS	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	unannounced inspections during the maintenance activities and after receiving a complaint	sound meter with suitable software	site; nearest homes	noise levels	negative effect of noise on the workers and local residents
		Maintenance	-	-		Operation
supervision contractor	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	unannounced inspections during the works	inspection	site	PPE; bypass traffic organisation	safety of workers
Contractor (monitoring)	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	at least three times for the entire Project duration, monitoring to be done before the construction (or at a reference point upstream of the site if performed during the works) and after the rehabilitation works	unannounced sampling, analysis in a certified laboratory possessing the required equipment	the watercourses	soil and water quality (suspended solids, oils, ph values, conductivity)	water and soil pollution resulting from improper material storage, management and use
Implementation	Why the parameter is monitored	When the parameter is monitored (frequency or continuous)	How the parameter is monitored	where the parameter is monitored	Parameter to be monitored	Phase
Institutional				location		

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

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

1. General		
Is the project materially compliant with all relevant EBRD Performance Requirements (taking account of agreed action plans,	Yes 🛛	If No, please provide details of any material non-compliances:
exemptions or derogations)?	No D	
Is the project materially compliant with all applicable environmental and social laws and regulations?	Yes 🗆	If No, please provide details of any material non-compliances:
	No D	
Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities,	Yes 🗖	If yes, please describe, including details of actions to repair and prevent reoccurrence:
affected project labour or local communities, affected cultural property, or created liabilities for the company?	No D	
Have there been any changes to environment, social, labour or health and safety laws or regulations that have materially affected	Yes 🗆	If yes, please describe:
the company?	No	

	No D	
If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Contractor?	Yes 🗖	Were any of the violations stated above the responsibility of contractors?
	No	
If yes, please state for which types of work, and how the company has monitored the compliance of contractors with EBRD Performance Requirements and the Environmental and Social Action Plan:	Yes 🛛	Has the Company engaged any contractors for project-related work in the reporting period?
	No D	
If yes, please describe, including status of implementing corrective actions to address any violations found:	Yes 🛛	Have these visits resulted in any penalties, fines and/or corrective action plans?
Please provide details of these visits, including number and nature of any violations found:	Number:	How many inspections did you receive from the labour authorities during the reporting period?
Please provide details of these visits, including number and nature of any violations found	Number:	How many inspections did you receive from the health and satety authorities during the reporting period?
Please provide details of these visits, including number and nature of any violations found	Number:	How many inspections did you receive from the environmental authorities during the reporting period?

have any operations been reduced, temporarily suspended of $
closed down due to environmental, health, safety or labour reasons?
No
Please describe any environment or social programs, initiatives or sub-projects undertaking during the reporting period to improve the company's environmental or social performance and/or management systems:
Please indicate the level of associated expenditure (capital expenditure and operating expenditure), and whether this relates to the requirements of the Environmental and Social Action Plan, or to any other initiative:
2. Status of the Environmental and Social Action Plan
Please provide information on the status of each item in the Environmental and Social Action Plan (ESAP) agreed with EBRD. If the ESAP has been updated during the reporting period, please attach a copy of the new plan.

LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km

<b>3. Environmental Monitoring Data<sup>1</sup></b>	ng Data <sup>1</sup>			
Please provide the name and contact details for your environmental manager:	ntact details for	your		
Parameter <sup>2</sup>	Value <sup>3</sup>	Unit	Compliance Status <sup>4</sup>	Comments <sup>5</sup>
Waste Water				
Total waste water generated				
BOD				
COD				
Suspended Solids				

<sup>&</sup>lt;sup>1</sup> Please provide the results of any environmental monitoring carried out by the Company or its consultants. If you already have all the data requested available in another format, then this can used instead.

<sup>&</sup>lt;sup>2</sup> 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.

 $<sup>^3</sup>$  Please ensure that the units of measurement are clearly stated

 $<sup>\</sup>frac{4}{2}$  Please report on compliance against the standards agreed with EBRD for this project (typically local, EU and/or World Bank Group)

<sup>&</sup>lt;sup>5</sup> In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km

LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

Please provide the name and contact details for your environmental manager:	d contact details fo	or your		
Parameter <sup>2</sup>	Value <sup>3</sup>	Unit	Compliance Status <sup>4</sup>	Comments <sup>5</sup>
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO <sub>2</sub>				
NOX				
Particulates				
CO2				
CH₄				
N <sub>2</sub> O				
HFCs				
PFCs				
SF <sub>6</sub>				
[Other]				

Please provide details of the t method for each waste type.	Solid Waste	[Other]	Noise	Other Parameters	Parameter <sup>2</sup>	Please provide the name and contact details for your environmental manager:
ypes and amounts o					Value <sup>3</sup>	d contact details fc
f solid wastes gene					Unit	or your
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.					Compliance Status <sup>4</sup>	
ndicate the final re-use, recycle or disposal					Comments <sup>5</sup>	

value) <sup>6</sup> 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 4. Resource Usage and Product Output

Parameter

Value

Measurement Unit

Comments<sup>6</sup>

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km

LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

4. Resource Usage and Product Output	roduct Output		
Parameter	Value	Measurement Unit	Comments <sup>6</sup>
Fuels used			
Qi			
Gas			
Coal			
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

План управљања животном средином и социјалним окружењем

5. Human Resources Management	gement		
Please provide the name and contact details for your Human Resources manager:	ntact details for y	ч 	
	Total	Recruited in this reporting period	Dismissed in this reporting period
Number of direct employees:			
Number of contracted			
Were there any collective redundancies during the reporting	Yes 🗖	If yes, please describe the redundancy plan, including rea were selected, consultation undertaken, and measures to	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were selected, consultation undertaken, and measures to mitigate the effects of redundancy:
period?	No		
Are there any planned redundancies to the workforce in the next year?	S Yes 🗆	If yes, please describe the redundancy plar selection and consultation process:	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:
	S		
Were there any changes in trade	Yes 🛛	If yes, please provide details, and summari	If yes, please provide details, and summarise engagement with trade unions during reporting period:
facilities during the reporting period?	? No		
Were there any other worker representatives (e.g. in the absence	Yes 🗆	If yes, please provide details and summarise engagement	se engagement with them during reporting period:

	_
	План уг
	прављан
l	ња н
	кивотном сре
	ан управљања животном средином и социјалним окружењем
	ис
	оцијални
	и окруз
	<del>кењ</del> ем

		Union recognition
	No D	conditions during the reporting period in any of the following areas:
If yes, please give details, including of any new initiatives:	Yes 🛛	Have there been any changes to the following policies or terms and
	No	reporting period?
If yes, please summarise the issues contested and outcome:	Yes 🛛	Have there been any court cases related to labour issues during the
		Company in the reporting period?
וו yes, piease summanse nature or, מוע ובמסטויז וסי, עוזעעובא מוע בעטמווו ווטע ווובץ עבוב ובסטועבע.	No 🗆	and working conditions at the
	No D	bullying during the reporting period?
If yes, please state how many, split by gender, summarise the issues raised by male and female staff and explain how the Company has addressed them:	Yes 🛛	Have employees raised any complaints about harassment or
	No D	
If yes, please state how many, split by gender, summarise the issues raised in grievances by male and female staff and explain how the Company has addressed them:	Yes 🛛	Have employees raised any grievances with the project during the reporting period?
	No	
If yes, please provide details:	Yes 🛛	Were there any changes in the status of Collective Agreements?
	No	of a trade union)?

<sup>7</sup> If you have not already done so, please provide a separate report detailing the circumstances of each fatality.

amount and currency):

Budget spent on OHS in this period (total

Number of disabling injuries:

reporting period:

Number of man-hours worked this

**Direct employees** 

workers Contracted

Direct employees

Contracted workers

Number of Fatalities':

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km

LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

<ul> <li><sup>8</sup> Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.</li> <li><sup>9</sup> Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of i occupational injury or illness.</li> </ul>	Please summarise any emergency prevention and response training that has been provided for company personnel during the report period:	Please provide details of any fatalities or major accidents that have not previously been reported to EBRD, including total compensation paid due to occupational injury or illness (amount and currency):	Accident causes (falling, heavy loads, struck by object, contact with energy source etc.):	Number of sick days:	Number of lost workdays <sup>9</sup> resulting from incidents:	OHS training provided in this period in person-days:
<sup>8</sup> Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred. <sup>9</sup> 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.	oonse training that has been provided for compar	ts that have not previously been reported to EBR	contact with energy source etc.):		Number	Number of I vehicular) <sup>8</sup> :
	npany personnel during the report period:	BRD, including total compensation paid due to occup			Number of cases of occupational disease:	Number of Lost Time Incidents (including vehicular) <sup>8</sup> :
work activity because of an		upational injury or illness (amount				

План управљања
животном средином
План управљања животном средином и социјалним окружењем

<ul> <li>7. Stakeholder Engegement</li> <li>Please provide the name and context details for your external relations or community yringgement manager:</li> <li>Please provide information on the implementation of the stakeholder engement plan agreed with EBRD and summarise interaction with stakeholders during the reporting period, including:</li> <li>Meeting or other initialives to engage with members of the public or public organisations during the report period, including:</li> <li>and interaction with any environmental or other community groups</li> <li>and interaction with any environmental or other community groups</li> <li>and interaction with any environmental or other community groups</li> <li>Please describe any changes to the Stakeholder Engagement Plan agreed with EBRD.</li> </ul>
--

Have all the affected persons been fully compensated for Yes INO I If their physical displacement and, if applicable, any economic losses resulting from the project?	Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), u monitoring indicators as detailed in the RAP or LRF, and complete the table below. Please provide the results of any other related monitoring carried out by the Company or its consultants and attach any additional information you think would be useful.	Existing Land Acquisitions	8. Status and Reporting on Resettlement Action Plan/Livelihood Restoration Framework		
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:	Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), using the monitoring indicators as detailed in the RAP or LRF, and complete the table below. Please provide the results of any other related monitoring carried out by the Company or its consultants and attach any additional information you think would be useful.		oration Framework		

ЛОТ 3: IБ22, Нови Пазар(Брђани) - Рибариће, km 257+708 - km 282+068, L = 24.360 km LOT 3: IB22, Novi Pazar(Brdjani) - Ribarice, km 257+708 - km 282+068, L= 24.360 km

If yes, please state how many and summarize their content.	Yes 🗆 No 🗖	Have there been any new land acquisition-related complaints or grievances?
	Not applicable	
If no, specify how many claims are still outstanding and state what the expected timing is for setting them	Yes D No D	Have all outstanding land and/or resource claims been
If yes, specify how many persons effectively made use of the legal support.	Yes 🗆 No 🗖	Has legal support been provided to all the affected persons?
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.	Yes I No I	If applicable, have all transit allowances been paid?
If yes, list the groups that were identified and describe any additional measures undertaken in order to mitigate impacts specific to these groups.	Yes 🗆 No 🗖	Have any vulnerable groups been identified?
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.	Yes 🗆 No 🗖	Has the land acquisition had any additional, unforeseen impacts on affected persons' standard of living or access to livelihoods that were not previously covered in the RAP?

План управљања животном средином и социјалним окружењем

ease attach ne		Was it a government assisted resettlement? Yes I No I	Have any persons been economically displaced? Yes I No I If yes, how many?	Have any persons been physically displaced? Yes I No I If yes, how many?	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.	New Land Acquisitions	communities on progress made in implementing the RAP?
----------------	--	---	--	--	--	-----------------------	---

9. Community Interaction and Development

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

# Appendix 3

X.3. LEGISLATION

## RELEVANT SERBIAN ENVIRONMENTAL LEGISLATION:

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

- Law on planning and construction (RS Official Gazette Nos. 72/2009, 81/2009, 64/10, 24/11, 121/12, 42/13,50/13, 98/13, 132/14, 145/14, 83/18, 31/19, 37/19-oth.law and 9/20, 52/21);
- Law on nature protection (RS Official Gazette Nos. 36/09, 88/10, 91/10, 14/16, 95/18oth.law, 71/21);
- Law on environmental protection (RS Official Gazette Nos. 135/04, 36/09, 72/09, 43/11decision US, 14/16, 76/18, 95/18- oth.law and 95/18- oth.law);
- Law on EIA (RS Official Gazette Nos. 135/04, 36/09,);
- Law on Strategic EIA (RS Official Gazette Nos. 135/2004, 88/10);
- Law on waste management (RS Official Gazette Nos. 36/09, 88/10, 14/16 and 95/18oth.law);
- Law on noise protection (RS Official Gazette Nos. 36/09, 88/10);
- Law on water (RS Official Gazette Nos. 30/10, 93/12, 101/16, 95/18 and 95/18- oth.law);
- Law on forests (RS Official Gazette Nos. 30/10, 93/12, 89/15 and 95/18- oth.law);
- Law on air protection (RS Official Gazette Nos. 36/09, 10/13, 26/21-oth.law);
- Law on safety and health at work (RS Official Gazette Nos. 101/05, 91/15, 113/17-oth.law).

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

- Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested (RS Official Gazette No 114/08);
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the contents of the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the work of the Technical Committee for the EIA Study (RS Official Gazette No 69/05);
- Regulations on permitted noise level in the environment (RS Official Gazette No 72/10);
- Decree on establishing class of water bodies (RS Official Gazette No 5/68);
- Decree on limit values of pollutants in surface and deadlines for their achievement ("Official Gazette of RS", Nos. 67/11, 48/12 and 1/16);
- Decree on limit values of pollutants in surface and groundwater and sediment and deadlines for their reach ("Official Gazette of RS", No. 50/12)

Other relevant Serbian legislation

- Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area (RS Official Gazette No 38/09);
- Law on Roads ("Official Gazette of the Republic of Serbia", No. 41/18 and 95/18- oth.law).

Appendix 4

# X.4. STAKEHOLDER ENGAGEMENT

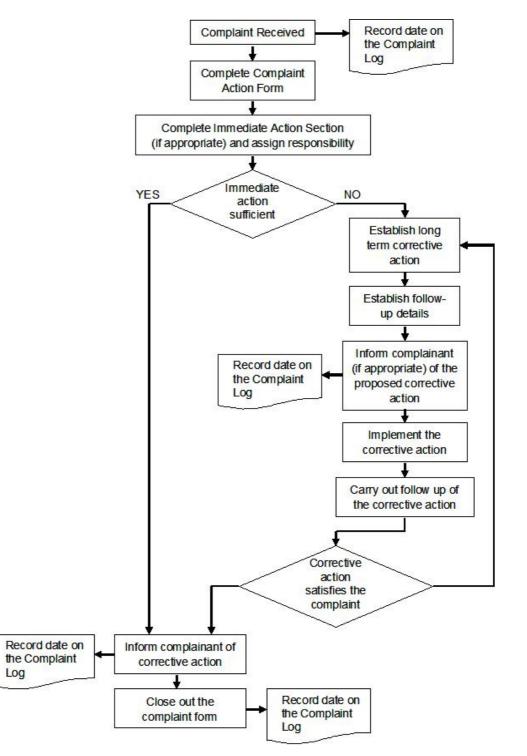
## Identification of stakeholders

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

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

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

Grievance mechanism and form



A formalized grievance mechanism is an important tool to monitor and promptly resolve potential conflicts with stakeholders whose interests may be affected. In accordance with stakeholder engagement best practice requirements the grievance mechanism for external stakeholders shall include:

- ~ A clearly defined and simple procedure for submitting complaints/suggestions;
- ~ Maintaining records of all complaints, jurisdictions and suggestions;
- ~ A procedure for reviewing and handling complaints; and
- ~ A procedure for responding to complaints.

Information on the procedures to follow in order to lodge a grievance will be provided on information boards by Contractor, and on the PERS's website and on the website of Municipality Tutin and The City of Novi Pazar.

Responsibility for dealing with community grievances will be assigned to the Contractor's Project Manager or Contractor's Environmental Manager, responsible for community liaison. Each complaint whether from an individual or a community will be considered and a response to each specific complaint will be directly delivered to the party that raised it. A formal procedure will be used to log the key information provided to each stakeholder and record incoming communication (i.e. general questions, complaints, etc.). A record of actions taken as a result of communications will also be documented and updated on an ongoing basis as part of the Stakeholder Engagement process.

PERS will review, if necessary, the existing grievance mechanisms and develop further grievance mechanisms to ensure that it is responsive to any concerns and complaints, particularly from affected stakeholders and communities.PERS will ensure that the Contractor implements the following measures on Site:

 $\sim\,$  Contractor will establish telephone line for complaints and the phone number will be publicly available;

 $\sim$  Contractor will appoint the person responsible for working with community, who will receive verbal complaints and fill out forms on behalf of community members and read the complaint back to them to provide confidence that the complaint is accurately presented;

 $\sim\,$  An informal forum to address grievances, such as a regular presence in local communities to address problems through regular dialogue; and

~ Visual display of the grievance mechanism such as spreadsheet or a flow chart.

Locations for submission of grievance, besides PERS, Supervisor, relevant Ministry, etc. will also be later defined by PERS and by nominated Contractor with start of works. The Contractor's Project Manager is responsible for Project development and is also in charge of related stakeholder engagement. The Contractor's Project Manager will deal with all issues and problems concerning Project implementation, including consultations with interested parties and stakeholders. With regard to communication, a Register of Communications will be maintained and all written and other forms of communication will be registered within seven (7) days.

The Contractor will make all reasonable efforts to address the complaint upon acknowledgement of the grievance. If the Contractor is not able to address the issues raised by immediate corrective action, appropriate, long-term corrective action(s) will be identified. The complainant will be informed about the proposed corrective action(s) and follow-up of corrective action within 30 days upon the acknowledgement of the grievance. If the Contractor is not able to address the particular concern raised or if action is not required, the Contractor will provide a detailed explanation/justification on why the issue has not been addressed. The response will also contain an explanation on how the person/organization which raised the complaint can proceed with the grievance in case the outcome is not satisfactory. If the stakeholder is not satisfied with the solutions implemented by the Contractor and PE "Road of Serbia" to address in response to a complaint or a grievance, the complainant may seek other legal remedies in accordance with Serbian law.

Grievances are to be resolved within 15 working days.

Grievance reference number:							
Contact details	Name:						
Address:							
	Tel:						
	e - mail:						
How would you prefer	by post	by phone	by e - mail				
to be contacted?							
Please tick a box							
Name and personal info	prmation (JMBG from	identity card).					
	,	<b>,</b> ,					
Deteile of your prior or							
		e problems, whom they	occurred to, when,				
where and how many ti	mes, as relevant						

What is your proposal fo	or resolving the grievance?				
Llow to outprit this	by post				
How to submit this	by post:				
form to the authorised persons	by hand:				
	please drop this form at:				
	by e - mail:				
	Please e-mail your grievance, proposed resolution and contact				
	details to the following e – mail address:				
Signature		Date			

### **REPORT ON PUBLIC CONSULTATION**

The report will be inserted later, after the public presentation and consultations.

Appendix 5

X.5. CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

РЕПУБЛИКА СРБИЈА **ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ** НОВИ БЕОГРАД, Др Ивана Рибара бр. 91 Тел: +381 11/2093-802; 2093-803; Факс: +381 11/2093-867

1040	IPELIYSERE 'IIYTRUS CONTANT
11	SERE ILY INTER TOTAL
lenat	153- 1549
(hho)	the second secon
21	01 -02- 2019
MTYRA -	Nami Andreas and the state of t
500rpa	1, Булевар краља Александра бр. 28%

Завод за заштиту природе Србије, Београд, Ул. др Ивана Рибара бр. 91, на основу члана 9. Закона о заштити природе ("Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 – исправка, 14/2016 и 95/2018-други закон) и члана 136. Закона о општем управном поступку ("Службени гласник РС", бр. 18/2016), поступајући по захтеву II бр. 953-27212 од 24.12.2018. године Јавног предузећа "Путеви Србије", ул. Булевар краља Александра бр. 282, Београд за издавање услова заштите природе за израду техничке документације пројекта појачаног одржавања деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар - Рибариће, дана <u>ЗА.СА</u>.2019. године под 03 бр. 020-3556/З доноси

#### РЕШЕЊЕ

- Траса пута за који се ради техничка документација се не налази унутар заштићеног подручја за које је спроведен или покренут поступак заштите, не налази се у просторном обухвату еколошке мреже нити у простору евидентираног природног добра. Сходно томе, издају се следећи услови заштите природе:
  - Пројектом предвидети таква решења и мере који ће обезбедити услове за очување природе (био- и гео- диверзитета), ваздуха, земљишта, подземних и површинских вода, очување реке Јошанице дуж чијег тока се налазе деонице предметног пута;
  - Забрањено је уништавање приобалне вегетације, нарушавање дивљих врста и њихових станишта;
  - Предвидети заштититу и очување високог зеленила и вреднијих примерака дендрофлоре (појединачна стабла, као и групе стабала) дуж деонице пута, који су значајни са еколошког и пејзажно-архитектонског становишта;
  - Уколико постоје мостовне конструкције могуће је предвидети просторе испод конструкције у функцији еколошких пролаза за животиње;
  - Регулацију делова водотока преко којих прелази траса пута предвидети у складу са биотехничким мерама заштите;
  - Дефинисати одговарајуће поступке и мере заштите, превенције акцидената и умањење негативних ефеката изградње и коришћења пута (бука, загађење ваздуха, вибрације, светлосно загађење);
  - Планом предвидети саобраћајну сигнализацију без површина са рефлектујућим ефектом, односно да наведена сигнализација не ствара ефекат огледала;
  - Предвидети изградњу нових и реконструкцију постојећих заштитних ограда уз насеља као појас заштите од буке, али и прелета птица и слепих мишева и страдања истих на траси пута;
  - 9) Планирати осветљење са сноповима светлости усмереним ка тлу;
  - 10) Предузети мере заштите становништва од удеса применом заштитних ограда и пешачких прелаза и пролаза на местима где је то најцелисходније, нарочито на локацијама у близини постојећих насеља;
  - Планирати радове на уређењу путног појаса са аспекта заштите животне средине, карактера саобраћаја и могућности одржавања пројектованог зеленила;

- 12) Планирати пејзажно обликовање путног предела (ивица пута) на слободним просторима дуж пута, који ће поред визуелно естетског допринети заштити пута (ветрозаштита, снегозаштитни појас);
- 13) Облик и карактер пејзажних интервенција на траси пута ускладити са техничким захтевима пута. У том слислу дефинисати примену зеленила у циљу испуњавања безбедносних, грађевинско-техничких, мелиоративних, пејзажно – естетских и биолошко – еколошких задатака;
- Планирање озелењавање дуж трасе пута планирати у складу са Конвенцијом о биолошкој разноврсности, према којој је неопходно избегавати инвазивне врсте;
- 15) Предвидети све неопходне антиерозионе мере због заштите од клизишта, одрона и сл;
- 16) Предвидети да се током извођења радова дуж целе трасе одржава максимални ниво комуналне хигијене;
- 17) Предвидети изградњу таложника и сепаратора масти и уља за воде које настају спирањем са коловоза и оптерећене су уљима и другим нафтним дериватима, уколико се Планом управљања животном средином утврди/процени да ће просечни годишњи дневни саобраћај негативно утицати на квалитет воде река водотокова са којима се предметни државни пут укршта или паралелно води, односно да ће бити нарушене граничне вредности које су у складу са уредбама којима се дефинисане и регулисане граничне вредности емисије загађујућих материја у воде и роковима за њихово достизање и граничне вредности загађујућих материја у површинским и подземним водама и седименту и роковима за њихово достизање.
- 18) Планом дефинисати да уколико се током радова наиђе на геолошко-палеонтолошка документа или минералошко-петролошке објекте, за које се претпоставља да имају својство природног добра, извођач радова је дужан да у року од осам дана обавести Министарство заштите животне средине, као и да предузме све мере заштите од уништења, оштећења или крађе до доласка овлашћеног лица.
- 19) Предвидети све мере заштите природе у акцидентним ситуацијама уз обавезу обавештавања надлежних инспекцијских служби и установа.
- 2. Ово Решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
- 3. При измени Пројектне документације, потребно је поднети нови захтев.
- 4. Уколико подносилац захтева у року од две године од дана достављања овог решења не отпочне радове и активности за које је ово решење издато, дужан је да поднесе захтев за издавање новог решења.
- 5. Такса за издавање овог Решења у износу од 30.000,00 динара је одређена у складу са чланом 2. став 5. тачка 1. Правилника о висини и начину обрачуна и наплате таксе за издавање акта о условима заштите ("Службени гласник РС", бр. 73/2011, 106/2013).

### Образложење

Завод за заштиту природе Србије примио је дана 25.12.2018. године Захтев заведен под 03 Бр. 020-3556/1 Јавног предузећа "Путеви Србије", ул. Булевар краља Александра бр. 282, Београд, за издавање услова заштите природе за израду техничке документације пројекта појачаног одржавања деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар - Рибариће.

На основу достављене документације, утврђено је да се планира израда пројектне документације за појачано одржавање државног пута, што подразумева радове на постојећој саобраћајници у постојећим габаритима коловозне конструкције, сходно чл. 116. Закона о путевима ("Службени гласник РС", бр. 41/2018) и чл. 59. Закона о јавним путевима ("Службени гласник РС", бр. 101/2005). Пројекат обухвата активности на реконструкцији деонице државног пута IБ реда бр. 22 Нови Пазар – Рибариће. Почетак деонице налази се 30 m пре места укрштања државног пута и улице Руђера Бошковића у Новом Паразу, док је крај деонице раскрсница државних путева IБ-22 и IБ-32 у месту Рибариће.

Увидом у Централни регистар заштићених природних добара и документацију Завода, а у складу са прописима који регулишу област заштите природе, утврђени су услови из диспозитива овог решења. При томе се имало у виду да се траса пута за који се ради техничка документација не налази унутар заштићених подручја за које је спроведен или покренут поступак заштите, утврђених еколошки значајних подручја и еколошких коридора од међународног значаја еколошке мреже Републике Србије, као ни евидентираних природних добара.

Законски основ за доношење решења: Закон о заштити природе ("Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 – исправка, 14/2016 и 95/2018-други закон); Закон о заштити животне средине ("Службени гласник РС", бр. 135/04, 36/09, 36/09 – др. закон, 72/09 – др. закон, 43/11 – УС, 14/16, 76/18 и 95/2018-др. закон); Закон о потврђивању Конвенције о биолошкој разноврсности ("Службени лист СРЈ - Међународни уговори", бр. 11/2001); Уредба о граничним вредностима загађујућих материја у површинским и подземним водама и седименту и роковима за њихово достизање ("Службени гласник РС", бр. 50/2012); Правилник о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива ("Службени гласник РС" бр. 5/2010, 47/2011, 32/2016 и 98/2016); Правилник о специјалним техничко-технолошким решењима која омогућавају несметану комуникацију дивљих врста ("Службени гласник РС", бр. 72/2010).

Израда пројектне документације за појачано одржавање државног пута наведене деонице може се реализовати под условима дефинисаним овим решењем, јер је процењено да његово спровођење неће утицати на природне вредности подручја.

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

Подносилац захтева је ослобођен од плаћања таксе у складу са чланом 18. Закона о републичким административним таксама ("Службени гласник РС", бр. 43/2003, 51/2003, 61/2005, 5/2009, 54/2009, 50/2011, 93/2012, 83/2015, 112/2015, 50/2016, 61/2017, 113/2017, 3/2018 – испр. и 95/2018).

Упутство о правном средству: Против овог решења може се изјавити жалба Министарству заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје писмено или изјављује усмено на записник Заводу за заштиту природе Србије, уз доказ о уплати Републичке административне таксе у износу од 460,00 динара на текући рачун бр. 840-742221843-57, позив на број 59013 по моделу 97.

**ДИРЕКТОР** Александар Драгишић

Достављено: - Подносиоцу захтева - Архиви х 2



Завод за заштиту споменика културе Краљево 36000 Краљево, Цара Лазара 24, ПИБ 100239951, матични број 07101104 тел. 036 331 866, тел/факс 036 321 025, e-mail: <u>zzzskv@gmail.com</u> жиро рачун: 840-69664-74, 840-69668-62

врм/ља ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА КУЛТУРЕ Број <u>1825/3-2018</u> 26. 02. <u>2019</u>год. КРАЉЕВО

ДНО ПРЕДУЗЕЋЕ **"ПУТЕВИ** СРЕМ) 27,02,2019 КСНАД Балаку кемп**а Алекс**ацара

Завод за заштиту споменика културе Краљево, Краљево, Ул. Цара Лазара бр. 24, на основу члана 36 став 1, чл. 99. став 2. тачка 1 и 3, чл. 100 став 1, и чл. 104,109 и 110. Закона о културним добрима ("Службени гласник РС", бр.71/94, 52/2011-др.закон, 99/2011-др.закон) и члана 104. Закона о општем управном поступку ("Службени гласник РС", бр.18/2016), поступајући по захтеву ЛП "ПУТЕВИ СРБИЈЕ", Булевар краља Александра 282, 11050 Београд, II бр. 953-27649 од 27.12.2018. године, за издавање услова за предузимање мера техничке заштите за израду Појачаног одржавња деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар - Рибариће, запримљеног у овом Заводу под бр. 1825/1 од 28.12.2018. године, доноси

#### РЕШЕЊЕ

I Подносиоцу захтева издају се мере техничке заштите за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут M-22), деоница Нови Пазар – Рибариће, и могу се извршити под следећим условима:

- 1. Техничка документација пројекта Појачаног одржавања деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар - Рибариће, може се израдити на основу следећих услова:
  - Због постојања археолошких локалитета у локалности трасе деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар - Рибариће, приликом извођења радова на одржавању пута на појединим деловима трасе је неопходно организовати стручни археолошки надзор.
  - На археолошким локалитетима: Грчко гробље/Загуљача остаци цркве и некрополе, Мур (К.О. Мур N: 4774118 Е: 7458777), Муслиманско гробље некропола, Г. Јошаница (К.О. Лукарско Гошево, N: 4770992 Е: 7458242) Црквина црква, Г. Јошаница (К.О. Лукаре N: 4769843 Е: 7458191), Дуварине насеље, Комиње (К.О. Кожље N: 4764920 Е: 7455382) Грчко гробље на Батуну некропола, Жуче (К.О. Кожље N: 4764498 Е: 7454637), Ледине код Мркоњске воденице срв. објекат, некропола, Орље (К.О. Орље N: 4761784 Е: 7454211). Ливаде Гребеје/Грчке куће насеље, Ораше (К.О. Весениће N: 4761699 Е: 7454501), забрањује се извођење било каквих земљаних радова, без претходно обезбеђених археолошких истраживања.
  - Инвеститор је у обавези да 7 дана пре почетка радова обавести надлежни Завод како би се благовремено организовао надзор.
  - Ако се у току извођења радова на одржавању деонице државног пута и пратеће инфраструктуре (систем одводњавања и др.), наиђе на археолошка налазишта или археолошке предмете (добра која уживају претходну заштиту Закона о културним добрима), извођач радова је дужан да одмах, без одлагања прекине радове и предузме мере заштите како налаз не би био уништен и оштећен и да се сачува на месту и положају у коме је откривен.
  - Уколико се на основу закона утврди да је односна непокретност или ствар културно добро, даље извођење радова и промене облика терена могу се дозволити након претходно обезбеђених археолошких истраживања, уз адекватну презентацију налаза и услове и сагласност службе заштите.



### Завод за заштиту споменика културе Краљево

36000 Краљево, Цара Лазара 24, ПИБ 100239951, матични број 07101104 тел. 036 331 866, тел/факс 036 321 025, e-mail: <u>zzzskv@gmail.com</u> жиро рачун: 840-69664-74, 840-69668-62

-2-

- Завод за заштиту споменика ће зависно од ситуације на терену, уколико је потребно, прописати додатна археолошка истраживања.
- Трошкове надзора над извођењем радова и могућих археолошких истраживања сноси инвеститор.
- Инвеститор објекта дужан је да обезбеди средства за истраживање, заштиту, чување, публиковање и излагање добра које ужива претходну заштиту које се открије приликом изградње инвестиционог објекта – до предаје добра не чување овлашћеној установи заштите.
- За катастарску општину Нови Пазар, надлежан је Републички завод за заштиту споменика културе Београд.
- За израду техничке документације пројекта, за део предметне деонице на територији катастарске општине Нови Пазар, неопходно је прибављање услова за предузимање мера техничке заштите Републичког завода за заштиту споменика културе Београд.
- Због постојања налазишта фосила на траси пута (координате: N: 4773194 Е: 7457983, 3909 MGI 1901/Balkans Zone 7), за подручје Бајевице неопходно је прибавити услове заштите од Завода за заштиту природе Србије.

II – Инвеститор је обавезан да на основу ових услова изради пројектну документацију са свим потребним прилозима у свему према датим условима из тачке 1) овог Решења, и на исту прибави сагласност надлежног органа у складу са Законом.

III – Ово Решење не ослобађа подносиоца захтева обавеза прибављања и других услова, дозвола и сагласности предвиђених прописима о планирању и уређењу простора.

- IV Ово Решење важи две године од дана издавања.
- V Жалба не одлаже извршење овог Решења.

#### Образложење

Овом Заводу обратило се ЛП "ПУТЕВИ СРБИЈЕ", Булевар краља Александра 282, 11050 Београд, захтевом за издавање услова за предузимање мера техничке заштите за издавање услова за предузимање мера техничке заштите за израду Појачаног одржавања деонице државног пута IБ реда бр. 22 (стара ознака: магистрални пут М-22), деоница Нови Пазар – Рибариће.

Увидом у документацију овог Завода и на лицу места дана 28.01.2019, и на основу Извештаја стручног сарадника овог Завода бр. 1825/2-2018 од 01.02.2019. године, утврђено је да се на траси, односно у близини трасе деонице државног пута IБ реда бр. 22, деоница Нови Пазар — Рибариће, налазе локалитети са археолошким садржајем, наведени ун тачки 1. Диспозитива овог Решења. У случају да се на локалитетима са археолошким садржајима или на било којој другој локацији, приликом извођења радова открију археолошки слојеви са објектима или покретним археолошким налазима, инвеститор/извођач радова је дужан да поступи у складу са прописаним условима за предузимање мера техничке заштите.

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

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

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



Завод за заштиту споменика културе Краљево 36000 Краљево, Цара Лазара 24, ПИБ 100239951, матични број 07101104 тел. 036 331 866, тел/факс 036 321 025, e-mail: <u>zzzskv@gmail.com</u>

жиро рачун: 840-69664-74, 840-69668-62

-3-

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

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

Са изложеног, одлучено је као у диспозитиву овог Решења.

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

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

Обрађивачи: Војкан Милутиновић, дипл. археолог и Љиљана Александрић, дипл. правник

Доставити:

- () Подносиоцу захтева
- Републичком Заводу за заштиту споменика културе - Београд
- Архиви Завода

### В.Д. ДИРЕКТОРА ЗАВОДА,

Иван Милуновић

vheao è

План управљања животном средином и социјалним окружење.	-			<b>`</b>		
	Inn	៲៴៲៲៴៴៴៷៴៷	WIIGOMUOM CI	nodijuomi ii	COULINAAUUM	<u> Λνηνιμομοι</u>
	mur	, yn paoloarba			COGGIGIAINAN	UNDYJILLIDLIV

			PRO 512-1-5/ 04.12.	/20	<b>d.o.</b> o.
	Републички завод за заштиту сюменика	Datum:	BE - Deort	OGRAD	
	Inštitute for the Protection of CulfuralMonument Радослава Грујића 11 Ikdoslava Gru 11118 Београд 1118 Belgrade Србија Srbia Тел. (011) 24 54 786 Ihone +381 11 Факс (011) 34 41 430 Fix -381 11 e-mail: office@yukritage.com	ijića 11 e 1 24 54 786	- Belgrac	ie	
Yoy	Датум / Date: 0 1 DEC 2020 Број / Ref. $1 - 1250$ 2.20 Рапрго Теат d.o.o Генерала Рајевског 1				

Госпођа Милица Миленковић, маст.простор.панер

БЕОГРАД

ПРЕДМЕТ: Информација о мерама техничке заштите

Поштовани госпоћо Миленковић,

Поводом Вашег захтева за услове за ираду Главног пројекта појачаног одржавања државног пута 1В 22 ((стара ознака: магисрални пут М-22), деоница Нови Пазар – Рибариће, обавештавамо Вас да се на предметној територији налазе археолошки локалитети: Грчко гробље/Загуљача – остаци цркве и некрополе, Мур (К.О. Мур N: 4774118 Е: 7458777), Муслиманско гробље – некропола, Г. Јошаница (К.О. Лукарско Гошево N:4770992 Е: 7458242), Црквина – црква, Г. Јошаница (К.О. Лукарс Гошево N: 4769843 Е: 7458191), Дуварина – насеље, Коиње (К.О. Кожље N:4764920 Е: 7455382), Грчко гробље на Батуну – некропола, Жуче (Г.О. Кожље N: 4764489 Е: 7454637), Ледине код Мркоњске воденице – ср.објекат, некропола, Орље (К.О. Орље N: 4761784 Е: 7454501), Ливаде Гребеје/Грчке куће – насње, Ораше (К.О. Весниће N: 4761699 Е: 7455382) и да се забрањује извођење земљаних радова без претходно обезбеђених заштитних археолошких истраживања.

Предвиђени радови на читавој траси, која подразумева рехабилитацију пута и унапређење безбедности саобраћаја, захтевајумере техничке заштите усмерене на следеће обавезе Инвеститора и Извођача радова:

 Уколико се у току извођења радова на одржавању деонице државног пута и пратеће инфраструктуре (систем одводњавња и др.) наиђе на археолошке остатке, културни слој и покретне налазе (добра која уживају статус претходне заштите пјема Закону о културним добрима) извођач радова је дужан да одмаах, без одлагања прејине радове и обезбеди да се налаз не оштети и сачува на месту и положају у коме је откривен;

 Стручна служба РЗЗСК процењује налаз и у колико је потребно утврђује потребу за заштитним археолошким истраживањима, уз одговарајућу презентацију налаза;

 Инвеститор је дужан да обезбеди средства за архефлошки надзор, зашгиту, чување, презентовање, публиковање и излагање откривених налаза.

С поштовањем,

Обрађивачи др Невена Дебљовић Ристић, д.и.а М.20000012

Мр Маја Ђорђевић, дипл. археолог Mij- Typherd

Директор

Мирјана Андриј

Доставити:

- Наслову

Завод за заштиту споменика културе Краљево
 Архиви

Водопривредни ц. 18000 Ниш, Тру урстогача@srbijavod Малични број: 1711		ривредни цен Ниш, Трг <u>ava@srbijavode.r</u> и број: 1711710	о предузеће "Србијат гар "Морава" Ниш краља Александра у 55 Текући рачун: 200 06; Наменски рачун п 15; 425-81-86 Факс: 018/45	2, www.srbijavode.r	4;	
	Број: _	1343	Дат	ум:	0 3 FES 1	
The state of the s	EAM	d.o.o.				
Broj: 39-1-5/21	_				Panpro team d.o	.0
Datum: 09.02.2021. BEOGRAD			11.000 Beogr			
					Generala Rajevskog	5
			ОБАВЕШТЕЊЕ			

У вези Вашег захтева бр.166/1-2-5/20 од 06.07.2020.год. (наш бр.5502 од 08.07.2020.год.) којим тражите да "у складу са Закључком Министарства грађевинарства, саобраћаја и инфраструктуре бр.06-00-00126/2016-03 од 09.09.2016.год. издамо мишљење у поступку израде Главног пројекта појачаног одржавања државног пута пута IE-22 реда, деоница Нови Пазар (Брђани) - Рибариће" обавештавамо Вас да је 08.12.2018. год. у "Сл.гласнику РС" бр.95 објављен Указ о проглашењу Закона о изменама и допунама Закона о водама. Чланом 5 промењен је чл.117 ЗОВ-а односно "водни услови се издају за изградњу нових објеката, реконструкцију постојећих објеката осим за реконструкцију државног пута I и II реда, пропуста и мостова на њима, ...".

Измене Закона су извршене после заједничког састанка где су били и ваши представници, представници Министарства пољопривреде, шумарства и водопривреде, републичке дирекције за воде и ЈВП-а (јуна 2018.год.)

уководилац ВПЦ"Моран Симин, дипл.правник.

Appendix 6

# X.6. FINAL ENVIRONMENTAL APPROVAL



Република Србија МИНИСТАРСТВО ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ Број: 011-00-00826/2020-03 Датум: 14.08.2020.године Београд

PANPRO TEAM d.o.o.
Broj: 353-1-5120
Datum: 08.09.2020.
BEOGRAD

### PANPRO TEAM, d.o.o.

Београд Генерала Рајевског бр.1

**ПРЕДМЕТ:** Захтев за информацију о потреби израде студије процене утицаја на животну средину за појачано одржавање државног пута IБ 22: ЛОТ 2: IБ 22 Ушће-Рашка (Косовкса Митровица), L=32,127 km, ЛОТЗ: IБ 22 Нови Пазар (брђани)-Рибариће, L=24,360 km.

У складу са вашим дописом бр.237-2-5/20 од 07.08.2020. године у којем нам се обраћате са захтевом за информацију о потреби израде студије процене утицаја на животну средину за појачано одржавање државног пута IБ 22: ЛОТ 2: IБ 22 Ушће-Рашка (Косовкса Митровица), L=32,127 km, ЛОТЗ: IБ 22 Нови Пазар (брђани)-Рибариће, L=24,360 km, обавештавамо вас о следећем:

На основу Закона о процени утицаја на животну средину, чл. 3. став 1. и став 2. ("Службени гласник Републике Србије", број 135/04, 36/09), предмет процене утицаја су пројекти који се планирају и изводе, промене технологије, реконструкције, проширење капацитета, престанак рада и уклањање пројекта који могу имати значајан утицај на животну средину, а немају одобрење за изградњу или се користе без употребне дозволе.

Такође, у складу са критеријумима за одлучивање о потреби израде Студије о процени утицаја на животну средину, а на основу Уредбе о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину ("Службени гласник Републике Србије", број 114/08) којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II, дефинисани су пројекти за које је неопходно отпочети процедуру процене утицаја.

У предметном случају ради се о потреби спровођења процедуре процене утицаја за појачано одржавање државног пута IБ 22: ЛОТ 2: IБ 22 Ушће-Рашка (Косовкса Митровица), L=32,127 km, ЛОТЗ: IБ 22 Нови Пазар (брђани)-Рибариће, L=24,360 km и ова врста пројеката се не налази на Листама I и II горе наведене Уредбе односно, не подлеже процедури процене утицаја.

У складу са изнетим, не постоји законска обавеза покретања процедуре процене утицаја на животну средину за наведени пројекат.

Међутим, желимо да напоменемо да је процедура процене утицаја поступак који има јасно дефинисан садржај и не може посматрати изоловано неке од наведених објеката/ активности, јер се исти обрађују односно, описују у Студији предметног пројекта, а уколико се утврди да постоји значајан утицај на животну средину (на основу пројектно –техничке документације и услова и сагласности других надлежних институција у складу са посебним законом), прописују се одговарајуће мере заштите животне средине и мониторинг.



Доставити: - Наслову - Архиви