# REPUBLIC OF MOLDOVA ROAD SECTOR PROGRAM



# STATE ROAD ADMINISTRATION

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# **ADDENDUM No.2**

# to the Tender Documents

RSP/W15/03: Rehabilitation Works on R34 Hîncești - Leova - Cahul - Giurgiulești road, km 82+000 – 125+000

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Issued on November 09, 2024

#### General:

The Tender Documents for the Contract RSP/W15/03: Rehabilitation Works on R34 Hînceşti - Leova - Cahul - Giurgiuleşti road, km 82+000 - 125+000 is amended as per the following articles:

#### **Article 2**

Section IV: Eligibility and Qualification Criteria; Table 3. Experience; 3.3 Specific Experience, second column, Requirement, the footnote's<sup>6</sup> text shall be replaced with the following text:

"All terms in this paragraph shall be considered as ending in November 2024 and shall be calculated backward, each year of such term containing twelve months. The 5 year period is therefore November 2019 – November 2024."

#### **Article 3**

Section IV: Eligibility and Qualification Criteria; Table 3. Experience; 3.3 Specific Experience, Table 3. Experience 3.3 Specific Experience:

Item (i) is amended to be read as follows:

"production and laying of asphalt concrete on a single contract not less than 90,000 tonnes.

Item (ii) is amended to read as follows:

"annual average asphalt concrete production and laying at a rate of not less than 50,000 tonnes / year.

Item (iii) is amended to read as follows:

"Bridge construction/rehabilitation works, with a combined total surface area (measured abutment – abutment) of not less than 4000 square meters"

Item (iv) is amended to read as follows:

"average annual average production and laying Cement stabilized base / cold recycling stabilized with cement layer not less than 60,000 cubic metres.

#### **Article 4**

Section V: Forms; form EXP-3W-Specific Experience shall be replaced with the following:

FORM EXP-3W Specific Experience				
Participant's Legal name				
JVCA Partner's Legal name	[delete if not applicable]			
Date:				
Tender No.:				
Pageofpages				
Complete one (1) form per Contract				
Contract with similar ke	y activities			

Contract Noof		Conti	ract Identifi	cation			
Award Date:				Complet	ion Date :		
Role in Contract	☐ Cor	ntracto	r	☐ Management Contractor		☐ Sub-Contractor	
Total Contract Amount				Euro			
If partner in a JVCA or subcontractor, specify participation of total Contract amount:			Percent o	f Total	Amount (E	uro)	
Nature of work for which firm was responsible							
*Production and laying of asphalt concrete <i>on a single</i> <i>contract</i> , tonnes	202	24	2023	2022	2021	2020	
Average annual asphalt				2024 - 1	2020		
concrete production and laying over the past five years (tonnes)							
Bridges constructed/rehabilitated, (no	202	24	2023	2022	2021	2020	
& size in square metres.							
Production and Laying	202	24	2023	2022	2021	2020	
Cement stabilized /cold recycling stabilized with cement - <i>cubic meters</i>	_						
Brief description of site Conditions							

Section IV: Eligibility and Qualification Criteria; Table 2, Financial Situation, the text in subheading shall be modified to read:

"the information shall be provided for the period 2021 - 2023."

# **Article 6**

Tender Documentation, BoQ\_R34\_ver\_l.0 \_Bill 500- Item 50502 "Closed Concrete Channel" is corrected to read as follows:

No.	Item	Unit of Measure
50502	Closed concrete channel,(b=0,3; h=variable) (accordance with the technical drawings)	Linear Metre

Tender Documentation, BoQ, Bill 700, the item description no. 70106.4 has been changed to read as follows:

No.	Item	Unit of Measure
70106.4	Install new signs on new poles Type 2000x1020 Instalarea indicatoarelor rutiere noi pe stilpi noi 2000x1020mm	pcs/buc.

# Article 8

Tender Documentation, Technical Specification, in the description of para. Measurement of Chapter 701 [Permanent Traffic Control], the following text shall be added:

"The metallic gantry frame Type PMT installation includes the individual signage installation."

#### **Article 9**

Tender Documentation, Technical Specification, para. Measurement of Chapter 701 [Permanent Traffic Control], the items description nos. 70101 and 70102 have been changed to read as follows:

No.	Item
70101	Install new signs on metallic gantry frame Type PMF-1m, including individual signage
70102	Install new signs on metallic gantry frame Type PMF-3m, including individual signage

#### **Article 10**

Tender Documentation, Bill of Quantities, Bill 700 [ROAD MARKING AND SIGNING], the items description nos. 70101 and 70102 have been changed to read as follows:

70101	Install new signs on metallic gantry frame Type PMF-1m, including individual signage Instalarea noilor indicatoare rutiere pe construcţii cadru Tip PMF-1m, inclusiv indicatorul individual
70102	Install new signs on metallic gantry frame Type <b>PM</b> \(\tilde{\text{-}}\)3m, including individual signage

Instalarea noilor indicatoare rutiere pe construcții cadru Tip PMF-3m, incluysiv indicatorul individual

## **Article 11**

Tender Documentation, Bill of Quantities, Bill 000 [GENERAL REQUIREMENTS], the quantity for item no. 00402 has been changed to read as follows:

Item No.	Item description	Unit of measure	Quantity
1	2	3	4
00402	Maintain contract office Întreţinerea biroului prevăzut în contract	Month	33

# **Article 12**

Tender Documentation, Bill of Quantities, Bill 500 [DRAINAGE STRUCTURES], the item's description no. 50304 has been changed to read as follows:

50304	Consolidation of rectangular channel Type 3 Consolidarea rigolei trapezoidal de Tip 3
	Consolidarea rigorei trapezoldar de Tip 3

## Article 13

Tender Documentation, Bill of Quantities, Bill 500 [DRAINAGE STRUCTURES], the following item:

50405.2	Precast RC slab 300x100x20cm
50405.2	Dala prefabricata de beton armat 300x100x20cm

Has been replaced with the following:

50405.3	Precast RC slab 300x100x20cm Dala prefabricata de beton armat 300x100x20cm
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Tender Documentation, Bill of Quantities, Bill 500 [DRAINAGE STRUCTURES], the following item

	DRAINS, MANHOLES, EXIT GULLY / DRENE DE FILTRARE, CĂMINE DE VIZITARE, GURI DE SCURGERE		
50903	Construction of manholes (accordance with the technical drawings) Construcţia căminelor de vizitare (conform desenelor tehnice)	<b>L.m.</b> / m.l.	76.00

Has been changed as follows:

	DRAINS, MANHOLES, EXIT GULLY / DRENE DE FILTRARE, CĂMINE DE VIZITARE, GURI DE SCURGERE		
50903	Construction of manholes (accordance with the technical drawings) Construcţia căminelor de vizitare (conform desenelor tehnice)	Pcs/buc	25

## **Article 15**

Tender Documentation, Technical Specification, Chapter 509 [DRAINS, MANHOLES, EXIT GULLY], the unit of measure for the items nos. 50903 and 50904 has been changed as follows:

No.	Item	Unit of Measure
50903	Construction of the manhole	Pcs.
50904	Construction of the exit gully	Linear metre

## **Article 16**

Tender Documentation, Bill of Quantities, Bill 300 [PAVEMENT], the description of item no. 30303 has been changed to read as follows:

20202	Base course of optimal mixture crushed stone, 0-63 LA30, h -100 mm
30303	Strat de fundație din piatra sparta amestec optimal 0-63 LA30, h –100 mm

Tender Documentation, Technical Specification, Sub-Chapter 305.08 [Asphalt Mix Design and Testing], the table for Specific Characteristics of Asphalt Mixtures for Wearing Course (SM SR EN 13108-5) has been changed as follows:

No	Characteristics	
1.1	Volume of voids at 80 gyrations (revolutions), %	3-6
1.2	Volume of voids filled with bitumen, %	77- 83
1.3	Shellenberg Test, %, maximum	0,2
1.4	Water sensitivity, SM SR EN 12697-12, method A, % minimum	80

#### **Article 18**

Tender Documentation, Technical Specification, Sub-Chapter 301.05 [Preparation of mixture], the second paragraph has been changed to read as follows:

"The content of aggregates coarser than 5.00mm shall be of  $\geq$  35%. The crushed stone used in the mixture must have a resistance to fragmentation not more than LA30, as per SM SR EN 13242."

#### **Article 19**

Technical Specification 201.14 Construction and Shaping of Shoulders is amended as follows:

"Where shoulders are to be constructed or reconstructed they may be formed using selected fill from earth brought as filler and mixed in a 50/50 proportion with material resulting from the demolition of the existing road structure. Where required, the existing shoulders shall be reshaped and re-graded to conform to the required cross sections. Excess material shall be removed from the site and run to spoil or additional, approved material shall be provided as necessary.

The selected fill must be in accordance with the requirements specified in Sub-clause 306.02 (PI < 17 and Soaked CBR."

# **Article 20**

Tender Documentation, Bill of Quantities, Bill 300 [PAVEMENT], the description of the followings items has been changed to read as follows:

30501	Wearing course of asphalt mixture MAS16, modified bitumen 50/70, h-40mm Strat de uzură din mixtură asfaltică MAS16, bitum modificat 50/70, h-40mm
30502	Wearing course of dense asphalt concrete BA16, modified bitumen 50/70, h-40mm
30302	Beton asfaltic dens BA 16, bitum modificat 50/70, h-40mm

Tender Documentation, Technical Specification, Chapter 305 [ASPHALT CONCRETE FOR PAVEMENTS], the description of the following payment items has been changed to read as follows:

No.	Item	Unit of Measure
30501	Wearing course of asphalt mixture MAS16, modified bitumen 50/70, h-40mm	Square Metre
30502	Wearing course of dense asphalt concrete BA16, modified bitumen 50/70, h-40mm	Square Metre

#### **Article 22**

Tender Documentation, Construction Drawings Volume 3.1, Construction Drawings for Bus Station, sheets 313 – 319 have been replaced.

## **Article 23**

Tender Documentation, Bill of Quantities, Bill 500 [Drainage Structures], the description of item 50106.2 has been changed to read as follows:

Item No.	Item description
50106.2	Box Culverts, 2x (2,0 m x 2,3 m), (span x rise) the use elements from dismantling Podeţe dreptunghiulare, 2,0 m x 2,3 m, (travee x mărire) DE LA DEMONTARE

#### **Article 24**

Tender Documentation, Construction Drawings, Volume 3.1, Construction Drawings, sheet No.237, for the construction of a box culvert with dimensions  $2x(2.0m \times 2.0m)$  as per article 50106.2 have been changed.

Please refer to the Construction Drawings Volume 3.1\_Addendum 2.

#### **Article 25**

Tender Documentation, Technical specifications, Sub-chapter 201.03, Material, is modified to read as follows:

"The material shall comply with NCM D.02.01:2015.

The materials for the embankment construction shall be free from "Unsuitable materials". Unsuitable material shall include:

- material from swamps, marshes and bogs,
- material with inclusions of peat, logs, stumps, roots and other perishable or combustible material
- highly organic clay and silt material having a liquid limit above 65 %
- soil of low consistency (Index of Consistency of less than 0.75%)
- or such other material as the Engineer may decide.

The materials for the embankment construction up to Formation of Embankment Upper Layer (subgrade) described in below Sub-Chapter 201.13, shall not contain oversize materials larger than 100 mm.

The fill material shall have a Plasticity Index of less than 27 and shall be in accordance with NCM D.02.01:2015, with a soaked CBR Value of not less than 6% when moulded at optimal moisture content."

#### Article 26

Tender Documentation, Technical Specification, sub-chapter 006.05 [AS-BUILT Drawings] has been changed to read as follows:

"

#### 006.01. AS-BUILT Drawings and Construction Book

The Contractor shall prepare and provide to the Engineer accurate record/as-built drawings to the same general scales as the contract drawings, showing Works as executed complete with original and finished levels. The record/as-built drawings must show all significant features of the rehabilitation works so as to form a complete pictorial record of the finished Works. The record/as-built drawings are part of the Contract Documents, and shall be based on the Construction Drawings, modified according to any instruction received from the Engineer during construction. The Drawings shall show details of all utilities affected by the Works.

During the course of the Works, the Engineer shall have the right to call for records/as-built drawings so that he may check them for accuracy and completeness. The record/as-built drawings shall be reproducible and the original and two prints shall be submitted to the Engineer at the Taking Over of the Works.

As-Built Drawings shall include all the elements of the built road, such as: the roadway, culverts, bridges, drainage system, utilities networks etc.

The Construction Book shall be completed during the construction Works as per the regulation of the Republic of Moldova, Code No.434/2023 "ON URBANISM AND CONSTRUCTION".

The Contractor must present hard and electronic format (pdf) of the As-Built Drawings and Technical Book at the date of Taking Over of the Works.

The completed and accepted As-Built Drawings and Technical Book are preconditions for issuing the Taking Over Certificate by the Engineer."

# **Article 27**

Tender Documentation, Technical Specification, Sub-Chapter 304.02 has been changed to read as follows:

"The materials used have to be in accordance to the following standards:

- Bitumen SM SR EN 12591
- Bituminous emulsion SM SR EN 13808

For tack coat bituminous emulsion C55 B5-7 shall be used.

For prime coat bituminous emulsion C55 B2 shall be used."

#### **Article 28**

Tender Documentation, Construction Drawings, Volume 3.2.1, have been changed.

Please refer to the corrected version of Construction Drawings Volume 3.2.1\_Adendum 2

## **Article 29**

The following is to be added to the Particular Conditions of Contract (PCC) Part B:

Add the following as a new paragraph after (b) completion of all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of Taking-Over under Sub-Clause 10.1 [Taking-Over of the Works].

"(c) Milestone 1: The achievement of 40% progress of the Works on, or prior to the expiry of 500 calendar days, as measured from the Commencement date of the Contract. Progress as a % shall be calculated from the value of the Works certified by the Engineer in the monthly IPC as compared to the total value of the Contract [the calculation shall exclude the following BOQ bills - General Items, Dayworks and any provisional sums for Contingency].

<u>Milestone 2:</u> The Contractor shall complete the whole of the Works within the approved Time for Completion of the Works, including:

- a) Achieving and passing of the Tests on Completion and,
- b) Completing all Works which are stated in the Contract as being required for the Works to be considered completed for the purpose of Taking-Over under Sub-Clause 10.1 [Taking Over of the Works and Sections]."

#### Article 30

Tender Documentation, Technical Specification, Sub-Clause 303.04, the following text is deleted:

"Los Angeles toughness and abrasion coefficient not less than 30%."

And shall be replaced to read as follows:

"Los Angeles toughness and abrasion coefficient not more than 30%."

#### **Article 31**

Tender Documentation, Technical Specification, Sub-Clause 305.09, is modified to read as follows:

# "305.09 [Bitumen preparation]

The bitumen will be uniformly heated to permit a continuous introduction of bitumen from the storage tank into the mixer. Bitumen heating will be done indirectly by the use of oil-filled heating coils or other approved heating systems

It is forbidden to heat bitumen to a temperature above 170°C. Heating temperatures for polymer modified bitumen, hard bitumen or bitumen with additives may be different. In this case, it must be documented and registered.

Any bitumen which has been heated above 175°C or has suffered carbonization from prolonged heating shall be removed from the plant and disposed off.

Excessive and prolonged heating of bitumen or multiple heating the same bitumen should be avoided. If, however, it is not possible to technologically avoid multiple heating, it is necessary to check the penetration of the bitumen. If the penetration of the bitumen is not appropriate, one must give up using it."

## **Article 32**

Tender Documentation, Technical Specification, Sub-Clause 305.12, is modified to read as follows:

# "305.12 [Mixing]

The proportioning of bitumen and aggregates in the mixer shall be according to the approved mix design formula.

The mixing period shall be sufficient to achieve a complete coating of the aggregates with bitumen and the complete mixing of filler with bitumen and shall in no case be less than the mixing period recommended by the plant manufacturer.

The temperature of the asphalt mixture at the exit of the mixer shall not exceed 170 degrees Celsius."

#### Article 33

Tender Documentation, Technical Specification, Chapter 412, is modified to read as follows:

"

#### CHAPTER 412. PEDESTRIAN STEEL HANDRAILS

#### 412.01. Introduction

The work consists of the furnishing of new steel handrails, repair of existing railing and cleaning and painting of all pedestrian handrails.

#### 412.02. Materials

The materials and elements shall comply with the following requirements:

Steel elements for handrail sections Contract Documents; Technical Specification

Painting system SM EN ISO 12944; NCM E.04.04 and CP E.04.03

Welding electrodes SM EN ISO 2560; SM EN ISO 3581 (as the case); SM EN 1090-2; SM EN

ISO 17660-1

## 412.03. General requirements

The Steel handrails shall meet the requirements of the Contract documents. All elements shall be furnished and welded according to the requirements specified in contract documents, SM EN 1090-2 and specific standard for materials, specified in the Contract Documents.

Painting of handrails shall be performed according to NCM E.04.04 and CP E.04.03. Before painting, all old paint, rust, grease and oil and any other contaminants shall be removed and the steel surface elements cleaned to bright metal. Immediately after cleaning, the handrail elements shall be given a full coat of zinc rich, epoxy based, cold galvanizing compound of 80 microns followed by an intermediate layer of two components Mica/Epoxy composite, applied to dry surface, thickness of at least 80 microns. The final (top) layer is composed of a two-component coating based on polyurethane applied to the dry surface with a thickness of at least 60 microns. The first coat of paint of an approved type and the next coat of a certain approved system shall be carried out during one week after the application of the primer. The colour and quality of the paints applied shall have to be approved by the Engineer.

#### **Payment**

The work measured as indicated above and confirmed by the Engineer shall be paid at the rates provided in the contract against those items that are shown in the bid schedule. The payment under these items shall be the whole of the payment due for the completion of all works indicated in the present chapter.

Payment shall be made under some or all of the items below:

No.	Item	Unit of Measure
41201	Furnishing and assembling steel handrails	Linear meter

Tender Documentation, Bill of Quantities, Bill 400, the item 41201 has been changed to read as follows:

41201	Furnishing and assembling steel handrails Furnizarea si instalarea parapetilor pietonali din otel	Linear meter
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## **Others**

Participants shall access the changed version of the Construction Drawings following the link below:

http://files.asd.md/Directia\_investitii/Drawings\_R34.zip

Participants shall access the changed version of the Technical Specifications following the link below:

http://files.asd.md/Directia\_investitii/Technical specifications\_Addendum 2.zip

Participants shall access the changed version of the Bill of Quantities following the link below: <a href="http://files.asd.md/Directia\_investitii/BoQ\_R34\_Addendum\_2.zip">http://files.asd.md/Directia\_investitii/BoQ\_R34\_Addendum\_2.zip</a>