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## Invitation to Bid ItB20/02049 Amendment No. 1

Ref. no. **ItB20/02049**

Date: **22 May 2020**

Subject: **EU4MD/Development of the central park in Cahul city**

Dear Sir/Madam,

1. Pursuant to Clause 19 of the Section 2: Instruction to Bidders, UNDP Moldova is hereby amending the solicitation document.
2. Due to the need to **add additional works, specifically related to building of a dry fountain in “Gr. Vieru” Park of Cahul city**, there are additionally attached the following documents:
  - Annex 1.2 - Bill of Quantities for Fountain works (in Romanian and English languages)
  - Annex 3.1 – Technical design for Fountain works (in Romanian language)

Also, there was attached the Romanian version of the Invitation to Bid document.

3. Due to the need to provide more details on the services required related to building of a dry fountain the **Section 5. Schedule of Requirements and Bill of Quantities** is hereby amended to read as follows (**change marked in RED**)
4. Due to increase of the volume of works and respective amendment to the solicitation document the deadline is now extended (**change marked in RED**)
5. All other terms and conditions of the solicitation document, except as amended herein, shall remain unchanged and shall continue in full force and effect.

### ***Point 4 (of the above)***

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
14	23	Deadline for Submission	<b>15 June 2020 (GMT +2)</b> For eTendering submission - as indicated in eTendering system. Note that system time zone is in EST/EDT (New York) time zone.

### ***Point 3 (of the above)***

## Section 5a: Schedule of Requirements and Bill of Quantities

### 1. BACKGROUND

The “EU4Moldova: focal regions” Programme supports the strengthening of the economic, territorial and social cohesion in the Republic of Moldova through facilitating inclusive, sustainable and integrated local socio-economic growth and improving the standards of living of the citizens in two focal regions: Ungheni and Cahul municipalities and neighboring communities. The Programme will support the two regions by: making the governance more efficient – improving the quality of services and necessary infrastructure; fostering private sector – increasing investments, improving local economy and creating jobs; encouraging participatory democracy – involving citizens in the process of democratic governance and enhancing their capacities to claim their rights.

The Programme aims to achieve the following objectives: (i) To strengthen transparency, accountability of local public authorities and citizen participation in local governance processes in the focal regions; (ii) To improve citizens' access to quality public services and utilities in the focal regions; (iii) To create employment opportunities for men and women in the focal regions and improve the attractiveness of the focal regions for investors and entrepreneurs; (iv) To promote the smart specialization of the economy of the focal regions through the development of the clustering and value chain approach in key economic sectors.

The expected results of the Programme include: increased institutional capacities of the local public authorities for the implementation of locally-driven environmentally compliant socio-economic development strategy for integrated local growth and development; improved broader stakeholder (e.g. CSO, private sector) engagement in the planning and monitoring of the socio-economic development strategy; increased quality and availability of public services delivery, including in particular those targeting women; and increased performance of local public utilities; more favorable conditions for the attraction of investments, job creation and women and men's entrepreneurship, including social entrepreneurship; increased economic performance of the focal regions as a result of the development and functioning of clusters or specialized area in line with the smart economic specialization approach.

The partners of the Programme are: the EU Delegation to Moldova, UNICEF, Ministry of Agriculture, Regional Development and Environment, the State Chancellery, the Ministry of Finance, the Ministry of Economy and Infrastructure, central and local governmental authorities from the Ungheni and Cahul focal regions, civil society groups and organizations, private sector and business associations, Agency for Public Services, Agency for Electronic Governance, Regional Development Agencies for South and Center, Congress of Local Authorities from Moldova, The Organization for Small and Medium Enterprises Sector, citizen.

Citizens and communities from Ungheni and Cahul regions, Local Public Authorities, local civil society organizations will be the final beneficiaries of this Programme.

### 2. SCOPE OF WORKS

EU4Moldova: focal regions Programme seeks a company/consortium of companies which have demonstrated experience in undertaking civil works in Moldova to undertake the works for “**Development of the central park "Grigore Vieru" mun. Cahul, 31 August str. - I. Voda cel Cumplit str.**”. The works' content includes the following types of works: constructions works, electricity works, installation works of

water supply and sewerage networks, land use and fitting out works, testing of outdoor lighting system works; and launching into operation works. All these will contribute to improving the living conditions for the population from Cahul city and its suburbs, beneficiaries of the EU4Moldova: focal regions Programme.

The Contractor should ensure all the necessary elements for the successful fulfilment of the contract. Commonly Contractor shall ensure: labor, engineering, materials, equipment, support materials, transportation, machinery, tools, measures for protection of construction site, laboratory testing, according to norms and standards, putting in operation of engineering systems and necessary trips needed for carrying out all the works under this contract. Transportation of materials shall be the responsibility of Contractor. Residues formed as a result of civil works undertaken will be evacuated by the Contractor to authorized dumps.

*The Contractor will be responsible for:*

- *procurement and delivery to the site of necessary materials, equipment, and services for successful carrying out of works;*
- *preparing the site for storage of materials, equipment and execution of works;*
- *construction works and installation of equipment, and above-mentioned outdoor electricity, water supply and sewerage networks, etc.;*
- *launching into operation of installed systems, equipment, materials and construction works, including carrying out performance tests and operational tests (as appropriate);*
- *provision of detailed documentation on operation and maintenance of installed objects and systems (as appropriate);*
- *organizing training and offering training materials, developed for responsible operators authorized by the beneficiaries.*

All the materials, machinery and equipment suggested by contractors should be manufactured in line with guidelines, technical requirements and specifications indicated in the technical drawings; to be accompanied by European Compliance Certificates (CE) and/or Moldovan ones, that would confirm the data included in technical passports. As well, the contractor must ensure that all materials, equipment and activities related to construction and fitting works under the contract, to be coordinated, prior to fulfilment, with the representatives of the Beneficiary and UNDP Moldova, accountable for: daily supervision and periodical monitoring of the works on the site.

### **3. CONSTRUCTION SITE**

Contact Person
Guglea Dionis, Mayoralty of Cahul city <a href="mailto:guglea.dionis@gmail.com">guglea.dionis@gmail.com</a> GSM: (+373) 787 99299, 600 88559 Tel: (+373) 299 22040

**Site visit:** Bidders are recommended to visit and examine the Site and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract. Bidders should arrange site visits at their own cost and shall coordinate the site visits with the following contact person from UNDP: *Ion CEBAN, Project Officer/Infrastructure, EU4Moldova: Focal Regions Programme* ([ion.ceban@undp.org](mailto:ion.ceban@undp.org)), tel.: +373 699 46463

### **4. ORGANIZATIONAL ARRANGEMENTS**

The implementation of the project and the fulfilment of on-site works shall be monitored by the

UNDP Moldova Engineer, who will systematically visit the construction site for monitoring, and, additionally, by the Technical Supervisor/Engineer, authorized by the Local Public Authority, who will ensure daily supervision of construction works that are subject of the contract.

## 5. EXPECTED RESULTS

The following *results* are expected from the Contractor:

**Result 1:** To finish all the construction works, to connect to the existing water supply networks in the specific places stipulated in the technical design, to perform the tests, to plan the land use, etc., as envisaged in the contract documents, within a deadline not exceeding *180 calendar days from the date the Contractor was given access to the site and authorization for respective works was issued.*

**Result 2:** To launch into final operation the respective site within a deadline of: *90 calendar days – up to 6 months*, since the reception of the works finished at the site.

## 6. MAIN TECHNICAL REQUIREMENTS AND SPECIFICATIONS

The central park “Grigore Vieru” from Cahul municipality shall be rehabilitated according to the technical design documentation no.116/KO-2017-PE, developed in 2017, by the design company “Oldarchitecture” SRL, license number 043427, series A MMII.

**Park landscaping works:** the park territory development works will include the following: demolishing of existing concrete and asphalt pavements, earth moving work, building and new paving alleys, installing small architectural forms, partial refinement of land, laying the lay of fertile ground, sowing lawns, planting decorative trees and planting floral plants, roses and thorny shrubs.

**Foundation of paved alleys:** the support layer for paved areas, with thickness  $\delta=5.0$  cm, shall be built of sand, according to GOST 8736-93; the foundation layer with thickness  $\delta=15.0$  cm, shall be built of local crushed stone, brand M400, fr. 70-40, 40-20, 20-10,10-5, laid and compacted using the wedging method, according to GOST 8267-93;

**Paving:** sidewalk stone – vibrant-pressed cement-sand similar to „Iacobaș” type, with thickness  $\delta=40\text{mm}$  and  $\delta=60\text{mm}$ , (as appropriate) on a layer of dry cement-sand mix, with thickness  $\delta=50\text{mm}$ , with the rate of 1/6; sidewalk stone used for paving shall be of 2 colors; the border stones 500x200x80mm, made of vibrant-pressed cement-sand mix of similar to „Iacobaș” type will be fixed in the monolith concrete - 200x100mm, brand B7.5;

**Small architectural forms:** park wooden benches and new waste bins

**Park benches:** according to bill of quantities and specification the park benches will be of different types: wooden benches on steel casing of type 1 and 2 – existing repaired benches; wooden benches on car iron casing of type 3 – existing repaired benches and wooden benches on cast iron casing of type 4 – new benches, of an analogous brand (Park bench 700-FR-URBAN FURNITURE), according to the design sketch and catalogue of "Progress" SRL, Bulgaria; Newly installed benches, of type 4, will be anchored in four concrete foundations, concrete of brand B7,5 and anchors A-1  $\varnothing 8\text{mm}$ ,  $l=250\text{mm}$ . The existing benches of type 1, 2 and 3 will be repaired, respecting the existing design, wood parts for the benches of type 1 and 2 will be replaced with sustainable teated wood elements;

**Waste bins:** new waste bins U-1, (height  $h=890\text{mm}$ , diam. of basket for waste  $\varnothing 300\text{mm}$ ) will be made of painted steel, thickness of steel sheet  $\delta=2\text{mm}$ , tipping basket, similar to brand „Artmet” nr.23; Waste bins shall be anchored in concrete foundation - B7,5, anchors A-1  $\varnothing 8\text{mm}$ ,  $l=250\text{mm}$

**Lawns:** sowing grass with fine loosening and levelling of local and added fertile soil, with watering,

according to bill of quantities;

*Planting trees and shrubs:* planting of decorative trees and planting floral plants, roses and thorny shrubs;

**Park lighting works:** the technical specifications for installing the network of underground electricity insulated cables, 0.4 kV, with a total length of 1.309 km. The insulated electricity cable of type ББШв 5\*25-1mm<sup>2</sup>, with connection to the existing distribution networks of "Gas Natural Fenoza", according to the connection approval no. M30302017100005 of 12.10.2017. Cable of type ББГН-LS-3\*2.5 mm<sup>2</sup> shall be used to connect light fittings on cast iron park pillars to power supply nets.

*Lighting pillars:* cast iron park pillars similar to model (park decorative lighting pillars made of cast iron - R1-C2, with height h=3440mm and weight 132.0 kg - 31 pieces and public lighting ornamentation pillars - B1-1B, similar to Model: B1-1b, with height h= 3332mm and weight 102.0kg - 10 pieces), with modern energy efficient LED type light fittings 18 - 25w, according to the attached design sketch and specifications. Lighting pillars will be anchored in the concrete foundation brand B7.5, anchors A-1 Ø 8mm, l=500mm The calculated value of the power factor is 4.4 kWt.

*Meter:* The technical characteristics of the metering equipment to be installed should be in line with the design documentation no. 116/KO – 2017 – PE, developed by the design company "OLDARHITECTURE" SRL, and the provisions of the "Regulation on measuring electricity for commercial purposes", (ANRE Decision no. 382 of 02.07.2010, Official Gazette no. 214-220/765 of 05.11.2010).

Technical requirements for electricity measuring meters are stipulated in the connection approval no. M30302017100005 of 12.10.2017, annexed to the design documentation. It is recommended to install record-keeping boxes of type BZUM-TF-01-63-09 and to use electronic meters 380B 5-30A.

**Water supply and sewerage networks:** The water supply pipeline made of PE 100 SDR17, PN10 pipes with diameter Ø 25mm și Ø 32mm (where appropriate). All the construction works shall be performed in line with the standard SNiP 3.05.04.-85. The minimum depth for laying the pipe is 1.20m. In places with dry and hard soil, it is requested to prepare a sand bed, 150mm thick. The compacting of soil (bed) under the pipes and manholes shall be carried out with manual compacter. The backfilling with light soil thickness δ=300mm shall be carried out without including gravel and shall be compacted manually.

*Concrete well boxes:* of precast concrete ring type, with diam. Ø1500mm; the manhole lid - made of cast iron, all the external surfaces of water distribution wells will be waterproofed with a layer of bituminous putty, thickness δ=5mm. The bottom plate shall be installed in a sand layer, δ=100mm. All the metal elements shall be painted twice with oil painting ПФ 115 GOST 6465-76 on a primer layer ГФ 021, GOST 25219-87.

*Protection tubes:* protection steel tubes, diam. Ø50mm, shall be installed at wall crossings of PE water pipes with concrete walls of wells;

*Record-keeping node (water metering):* ultrasound water meter, diam. d15, shall be installed in the manhole, (concrete well), at the point of connection with existing water nets;

*Irrigation hydrant:* irrigation system supposes installing garden hydrants, hydrant – watering installation – screw thread 3/4 „Gardena”, according to design documentation and specifications;

*Drinking fountain:* in the park will be installed 2 cast iron drinking fountains shall be installed, of type „FORBAN - 1A”, painted by the producer in workshop conditions, total height h=1250mm, washbasin h=500mm;

*Public WC:* in the park will be installed four ecologic, double mobile WC boxes, (for 2 persons each), similar to the model from the attached photo-sketch; dimensions of each section: 1100x1100x2350h (mm);

*Structure:* Metalic frame, sandwich pannels, mineral wool (MW), thickness δ=50mm, anticorrozive

wrinkled metal, door panel with a ventilation grill in the bottom, padlock handle; floor made of aluminium non-slip boards, thickness  $\delta=1,5\text{mm}$ ; WC-equipped with technical water system, washbasin, public toilet bowl, (without chair), accumulation tank and sewerage;

**Fountain works:** The dry underground fountain will be built using monolithic reinforced concrete, according to the project design no. 160/KO-2020, developed currently by the Design Company OLD ARCHITECTURE SRL holding the licence series A MMII no. 043427 of 21.01.2014. The fountain will be connected to the external network of water supply, sewerage, and electricity, as provided in the Bill of Quantities for rehabilitation and development of the park in line with project documentation no. 116/KO-2017. The dry fountain will be endowed with equipment for water pumping, water treatment and water cleaning, as well as underwater nozzles and reflectors. Weather-resistant boxes will be installed on the external part of the park pillars made of galvanized metal.

As well, just like in case of park development, the equipment suggested by the Contractor should be manufactured in line with the technical requirements mentioned below, and have European Certificates (EC) and/or Moldovan certificates confirming the data from technical passports. The Contractor should also ensure that all materials, equipment and activities related to construction and installation works are coordinated, prior to fulfilment, with the representatives of the Beneficiary and UNDP Moldova, accountable for: daily supervision and periodical monitoring of the works on the site. *It is important to mention that whenever technical specifications provide for a specific product, brand, name/model, the bidders may come up with proposals to coordinate any other product which is similar from all perspectives with the specified product, meeting the origin requirements, all technical and performance parameters.*

The given works envisage the construction of an automated dry fountain of pedestrian type having the following size - 6.54x3.74 (m) and of underground technical room for electrical devices, automation and technological equipment, having the following size - 3.30x2.80 (m).

**Concrete constructional works:** building elements of the dry fountain: the foundation, vertical walls and floor will be made of reinforced monolithic concrete, special - class C25 W8 F100. The works for preparing the ground for the foundation shall be carried out in line with NCM F.01-03-2006 "Rules for execution, quality control and reception of foundation plots and foundations". It is important to know that the works for the dry fountain will start only after finishing the works in the technical room, including the filling in of the lunette. This consecutive order is due to the differences existing between the foundations' level and horizontal distance between constructions. The conventional level of 0.000 is adopted as the upper level of the existing pavement flooring.

The concrete monolithic constructional works shall be carried out according to the provisions of works' execution project, technological files, and the standard "NCM A.08.01-2016 – Organization of constructions", as well technical-organizational measures should be envisaged to ensure a high level of works' organization and mechanization.

**Important.** The process of carrying out the works involving special reinforced concrete, the compacting of concrete mix and treatment of concrete after being poured and fittings' assembling in line with the provisions GOST 10922-90 and admissible deviations, etc., are described in the annexed schedule, 160/KO-2020-CBA, file 3-4.

The reinforced monolithic concrete constructions shall be laid down on a sandy clay soil cushion, compacted in layers,  $\gamma_d > 1.65 \text{ t/m}^3$ ,  $\gamma = 18 \text{ kN/m}^3$ ,  $C = 20 \text{ kPa}$ ,  $\varphi = 20^\circ$  and a bed of compacted crushed stone,  $\delta = 100\text{mm}$ , fraction 5-10mm, brand - M 400 and a bed of simple concrete of brand C7.5,  $\delta = 100\text{mm}$ . The external areas will be processed, prepared and waterproofed with a layer of bituminous putty,  $\delta = 5\text{mm}$ .

**Internal technological networks:** The technological process for water treatment and flow, as well as the

operation of the executive elements of the fountain represent a complex of technical structures composed from: (i) dry fountain of pedestrian type with musical and lighting equipment; (ii) technical room with equipment (pumps, filter, water disinfection system); (iii) engineering networks connecting the equipment installed in the technical room with the equipment installed on the fountain.

The fountain is equipped with 18 nozzles. The maximum height of the water jet from every nozzle is 5 m. The nozzles are combined in groups - 4 groups of 4 nozzles each and 1 group of 2 nozzles. Every group of nozzles is connected to a separate duct of PVC pipes, type M-3, (see 160/KO-2020-TH, page PE 1-10). The groups of nozzles are connected to different pumps, in a separate way. An underwater projector is installed near every nozzle.

The installation and the monitoring of the installed system shall be carried out in line with the requirements of the rules set in CP G.03.02-2006 „Design and installation of water supply and sewerage pipes made of polymeric materials”, NCM G.03.03-2015 - „Internal networks of water supply and sewerage”. The project envisages installing PVC pipes (PVC-U), using the gluing method.

**Compliance Certificates for the following materials and equipment must be part of bidder's proposal:**

*Construction works - Developing the park*

- o sand;
- o cement;
- o gravel;
- o virbo-pressed concrete pavement plates: - 40 mm,
- o vibro-pressed concrete pavement plates: - 60 mm; pavement borders made of vibro-pressed concrete;

*Outdoor water supply and sewerage networks*

- o Water meter;
- o Valves, fittings
- o Polyethylene pipe PE80 PN10;
- o PVC pipe SN4;
- o Precast reinforced concrete elements for manholes: (rings, plates);

*Electrical lighting*

- o Cable ABББШВ-5\*25 mm<sup>2</sup>;
- o Cable VVGng-LS-3\*2.5 mm<sup>2</sup>;
- o Case BZUM-TF-01-63-09;
- o Case ЯYO9601-3574-54Y3;

**8. Reception by the end of works.**

After finishing the construction works and sending all the execution documents, the procedure for launching the site into operation will be organized by Cahul Mayorality in line with the provisions set in the national Regulation regarding the reception of constructions works and related installations, approved via the Government Decision No. 285 of 23.05.1996 with subsequent amendments.

**9. Warrantee period**

The warrantee period for the performed works and installed equipment shall start on the date of site reception upon the end of the works and shall last for 12 months for equipment and 36 months for works and materials.