
ANNEX 1a: TECHNICAL SPECIFICATIONS AND REQUIREMENTS

LOT 2

Development of the detailed execution design: Revitalization of Cahul municipality Urban Center

A. Context.

The „EU4Moldova: focal regions” Programme supports strengthening the economic, territorial and social cohesion in the Republic of Moldova, by facilitating inclusive and sustainable local social-economic growth and improvement of the living standards of the citizens in the 2 focal regions: Ungheni and Cahul municipalities and adjacent settlements. The Programme will support the 2 regions by: increasing governance efficiency – improving the quality of services and necessary infrastructure; giving incentives to the private sector – increase of investments, improvement of local economy and creation of jobs; encouraging participative democracy – involvement of the citizens in the democratic governance processes and strengthening their capacities to claim their rights.

The programme sets the following objectives: (i) Strengthening the transparency and accountability of the local public authorities, as well as the participation of citizens in the local governance processes in the focal regions; (ii) Facilitating the access of the citizens from the focal regions to public services and utilities of an increased quality and performance; (iii) Creation of jobs in the focal regions and increasing territorial competitiveness to attract investments and entrepreneurship; (iv) Taking an intelligent development approach based on economic specialization, creation of clusters and value chains.

As a result of programme implementation, the institutional capacity of the local public authorities will increase, it will be strengthened to support the implementation of the integrated, environmentally friendly local development and social-economic growth strategy. The involvement of the stakeholders (for example: CSOs, private sector, etc.) in the planning and monitoring of the social-economic development strategy will become even broader. The citizens will benefit from the increased quality, availability and performance of public service rendering and local public utilities, including those meant for women. Favorable conditions will be created to attract investments, create jobs and give incentives to the local entrepreneurship, including social entrepreneurship. The economic performance in the focal regions will also increase as a result of developing clusters or specialized areas, according to the intelligent approach based on economic specialization.

The citizens and communities of Ungheni and Cahul regions, the local public authorities and civil society organizations will be the final beneficiaries of this programme.

B. Contract objective.

The general objective of the contract consists in performing professional works of development, endorsement and approval of the “Revitalization of Cahul municipality Urban Center” execution design, with focus on the development of the full project documentation and cost estimation, as well as on the development of the tender/construction documentation necessary for the implementation of this project. The design works shall be done in 2 stages:

Stage 1 - Development and approval of the conceptual design with the participation of the Beneficiary, Investor, chief architect of Cahul municipality. Composition of the draft design:

1. General Plan, Sc 1:500
2. Dendrological solutions

Stage 2 - Development of the Execution design, which shall contain all the compartments provided in the NCM A. 07.02-2012 „Procedure of development, endorsement, approval and framework content of the design documentation for constructions. Main requirements and provisions” normative document. The design for the Revitalization of Cahul municipality Urban Center shall contain the following compartments:

1. General plan
2. Organization of construction works;
3. General explanatory memo;
4. Architectural-constructive solutions;
5. Technical equipment and networks;
6. Environment protection;
7. Estimate documentation and Bills of quantities;
8. Energy efficiency of the design solutions;
9. Measures to ensure fire safety;
10. Basic requirements for operation.

The documentation of the execution design shall stipulate the complex of works for the Revitalization of Cahul municipality Urban Center, namely:

- Transformation of Victoriei avenue, comprised between Ioan Vodă cel Cumplit street and Republicii avenue in a pedestrian area, with the arrangement of a bicycle lane;
- Arranging the sidewalks and bicycle lane on Victoriei avenue in the segment comprised between Republicii avenue and Vasile Stroiescu street;
- Repair of the access ways to the “White Lily” spa resort, including the sidewalks, and arrangement of the bicycle lane;
- Reconstruction of the alleys, parking places and green area on the territory adjacent to “Nicolae BOTGROS” Culture Palace;
- Solutions for the lighting of the area adjacent to “Nicolae BOTGROS” Culture Palace;
- Solutions for guided irrigations of the green area adjacent to “Nicolae BOTGROS” Culture Palace;
- Reconstruction of the fountain in the “Nicolae BOTGROS” Culture Palace square;
- Solutions for the places where the wooden houses meant for the sale of traditional products are to be installed;
- Solutions for the construction of 2 fountains in the area of Independenței Square (existing design);

- Solutions for the application of small architectural forms: public transport stations, benches, trash bins, etc. in the area of the Urban Center on Victoriei avenue of Cahul municipality.

The design services shall identify and offer the best opportunities/options for the use, operation and sustainable functioning of the Urban Center area, by proposing modern, sustainable and environmentally friendly material, energetically efficient equipment and technologies, according to the national and international standards in the given area.

C. Requirements on the content of the design documentation.

The content of the design documentation will be established in accordance with the national norms in constructions: NCM A.07.02-2012 „Procedure of development, endorsement, approval and framework content of the design documentation for constructions. Main requirements and provisions”.

The selected contractor shall render services for the development of a clear and complete design documentation, including, but not limited to the following:

1. General plan:

The compartment should contain:

- a) In the descriptive part – a brief characteristic of the area, solutions and indicators of the General Plan, with the inclusion of territorial zoning, main solutions for systematization, arrangement and technical preparation of the territory to ensure the access of people with disabilities;
- b) In the drawn parts – plans of the routes with longitudinal and transversal profiles, scheme of the General Plan stating the existing buildings and constructions and those that are designed, objectives of environmental protection, arrangement and creation of green areas on the territory, basic solutions of locating technical municipal networks on the field and transport communications (centralizing plan), planimetric benchmarks of the territory.

2. Organization of construction works:

The composition, volume and content of the design documentation of the compartment shall be established in accordance with the provisions of the existing national normative works in constructions, taking into consideration the conditions and requirements stated in the technical design theme.

3. General explanatory memo:

The compartment should contain:

- a) General data for the design;
- b) Short description of the area of location;
- c) Constructive solutions and their argumentation;
- d) Safety and organization of the road traffic;
- e) Conditions of activity of the people with reduced mobility;
- f) Environmental protection;
- g) Social-economic impact;
- h) Conditions of operation and maintenance;
- i) Technical norms and reference documentation.

4. Architectural – constructive solutions:

The compartment should contain:

- a) Data on the technical, geological prospecting, hydrogeological conditions (including information on the seismicity of the land);
- b) Basic solutions and indicators on the general plan, works for technical preparation of the territory, safety against landslides, territorial arrangement;
- c) Substantiation of architectural-urbanistic solutions, their conformity with architectural intentions, functional destination depending on the urbanistic requirements;
- d) Solutions for the protection of the architectural, historical and cultural monuments;
- e) Provisions for the conformity of the planimetric, volumetric and constructive solutions with the technical requirements and conditions established by the Beneficiary;
- f) Solutions for the protection of the construction elements against corrosion;
- g) Data on ensuring the comfort for the municipality inhabitants;
- h) Measures of seismic protection and protection against landslides.

5. Technical equipment and networks:

The compartment should contain the sub-compartments:

- a) Electrical power supply systems and organization of exterior lighting;
- b) Water supply systems;
- c) Water evacuation systems;
- d) Communication networks.

6. Environment protection:

The compartment shall be development in accordance with the requirements of the state standards, as well as with the normative documents approved within the central specialized body of the administration in the sphere of environment protection.

7. Estimate documentation and Bills of quantities:

The compartment should contain the estimate documentation prepared in accordance with the provisions stipulated in NCM L 01.01-2012 „Rules for the determination of the value of construction objects” and CP L 01.01 – 2012 „Instructions on the preparation of estimate for construction and assembly works using the resource method”. The estimate documentation should mandatorily contain the full list for all works, with an adequate description of each item. The quantities for all works shall be based on real calculations, not on estimations. All the bills of quantities and estimations shall be presented in the format of Calculation sheets (Form no. 1, Form no. 3, Form no. 5 and Form no. 7). The cost estimations should take into consideration the current cost of the labor force, the current costs for the necessary materials and the costs of operation of machines and mechanisms, on the basis of the current prices available on the local market, which shall not be below the minimum provided by the national legislation.

8. Energy efficiency of the design solutions:

The compartment should contain:

- a) solutions to increase the efficiency of the technical devices and equipment, data on the decrease of the electricity and water consumption;
- b) data on energy sources, measures to ensure the established requirements for energy efficiency.

9. Measures to ensure fire safety:

The compartment should contain:

- a) measures to prevent fire;
- b) protection and safety of people in case of fire;
- c) fire safety of material assets.

10. Basic requirements on operation:

The compartment shall be development in accordance with the requirements stated in the execution design.

The full set of execution design documentation shall be transmitted to the investor in 4 copies, including 1 copy in electronic form and 3 copies on paper.

Basic requirements towards drawings: the full and detailed construction drawings (graphic form) for all the works, with enough details to organize the tender, for contractual and construction purposes. All drawings shall be presented in electronic form (PDF) and on paper, accordingly. All drawings presenting the adopted technical solutions (technical drawings, schemes, plans and other documents in graphic form) should be clear, correct and precise. The symbols and abbreviation shall be defined in the legend.

Requirements towards technical specifications: full and current technical specifications, in accordance with the best current practices. The general and specific technical specifications for all materials, devices and equipment shall be prepared on the basis of nationally and internationally accepted standards, which shall be enough for the procurement, installation and construction works.

Important: The documents, drawings and specification shall be detailed enough to facilitate the initiation of works without the need of instructions on site, selections of materials, assemblages of constructions, locations or localizations of elements or characteristics.

The designs shall be in conformity with the provisions of the Law of RM 721 of 02.02.1996 (as amended) on the quality in constructions, with the norms and regulations, state standards and specifications in the sphere of constructions, local regulations in constructions, and shall ensure:

1. Resistance and stability of the construction;
2. Safety in operation;
3. Fire safety;
4. Hygiene, human health, restoration and protection of environment;
5. Thermal, hydro-insulation, and energy savings;
6. Protection against noise.

D. Key tasks and expected results:

During contract execution, the Contractor shall be responsible for the performance of all the activities necessary for the delivery of full execution designs and tender documents for “Revitalization of Cahul municipality Urban Center”, including development of the working plan and coordination of such plan with the Beneficiary and Investor.

The engineers on behalf of the EU4Moldova: Focal regions Programme shall assist the Contractor regarding the arrangement and coordination of field visits, together with the local public authorities and public institutions responsible for project implementation.

The Contractor shall coordinate in a corresponding way the design and engineering process with the local planning authorities, community representatives and EU4Moldova: Focal regions Programme. The Contractor shall obtain the design endorsement and expert review from all the relevant authorities.

All the detailed design documentation shall be subject to mandatory verification by the State Service for Verification and Expert Review of Designs and Constructions or by independent project verifiers authorized in these fields. In case of need, the design documentation shall be subject to an additional review by experts in this field.

The design company undertakes to make the necessary amendments and technical adjustments to the design documentation, arising in the process of verification or construction, such amendments and adjustments shall be done within 5 business days from the receipt of the official request from the engineer of EU4Moldova: Focal regions Programme.

When the construction and assemblage works are completed, the Contractor shall participate in the activities of the Final Acceptance Committee, shall issue an endorsement certifying the conformity of the works with the provisions of the execution design.

E. Terms of development of the design documentation:

The Contractor shall perform all the investigation and to present the full documentation of the execution design, including all written parts and drawings, technical specification and bills of quantities verified according to the procedure provided in the normative documents in constructions, including the documentation for tender launching in maximum 180 calendar days from signing the contract.

F. Deliverables:

The Contractor shall present the “Revitalization of Cahul municipality Urban Center” design documentation in accordance with the following deliverables and established schedule:

F1. Location: EU4Moldova: Focal regions Programme, 104 Șciusev street, Chisinau municipality

Item no.	Service description/specification	Date of completion
1.	Stage 1 - Development and approval of the conceptual design. The representatives of the Beneficiary, Investor,	20 calendar days from the date of contract signing

	<p>representatives of the Architecture and Construction Service of Cahul Municipality, Cahul Municipal Council shall participate in the approval of the conceptual design.</p> <p>Stage 2 - Development of the Execution design, which shall contain all the compartments provided in the NCM A. 07.02-2012 „Procedure of development, endorsement, approval and framework content of the design documentation for constructions” normative document.</p>	160 calendar days from the date of contract signing
Stage 2 shall contain the following deliverables		
2.	General plan. Results of measurements in the field. Survey plans.	30 calendar days from the date of contract signing
3.	Explanatory memo.	120 calendar days from the date of contract signing
4.	Execution drawings of the architectural-urbanistic solutions (SAC, IA).	120 calendar days from the date of contract signing
5.	Execution drawings of the construction elements (C, PAC, PACT).	140 calendar days from the date of contract signing
6.	Execution drawings of the technological solutions, automation.	140 calendar days from the date of contract signing
7.	Technical installations, networks and systems, equipment. Execution drawings of the networks and systems.	140 calendar days from the date of contract signing
8.	Design of construction works organization (OLC).	160 calendar days from the date of contract signing
9.	Environment protection.	160 calendar days from the date of contract signing
10.	Measures to ensure fire protection.	160 calendar days from the date of contract signing
11.	Basic requirements on operation.	160 calendar days from the date of contract signing
12.	<p>Estimate documentation, including bill of quantities filled in for the working items, with detailed description of each item (F7, F3, F5, F1).</p> <p>All the documentation shall be transmitted to the Investor in 3 copies on paper and one copy in electronic form.</p>	180 calendar days from the date of contract signing
13.	Verification of the designs by authorized/licenses experts.	20 calendar days from the date of completing the full set of written items and drawings
14.	Supervision from the design author during the construction period.	Construction period

G. General organization information/requirements

The development of the design documentation is initiated on the basis of the Concept Note and Urbanism Certificate for design works.

The endorsements for connections/Technical conditions for the connection of the newly designed infrastructure to the existing utilities shall be obtained from the corresponding institution by Cahul municipality administration at the initiative of the contractors.

The following special regional climate conditions and technical characteristics shall be taking into consideration during the design works:

Climatic zone - III B

Humidity zone - 3 (dry)

Snow load - 0.5kPa

Wind pressure - 0.36kPa

Seismicity degree - 8 degrees

Data on soil structure - in accordance with the existing geotechnical prospections.

DESIGN THEME

OBJECT: Revitalization of Cahul municipality Urban Center

Address of the object: Cahul municipality, Central area, Victoriei avenue, area adjacent to “Nicolae BOTGROS” Culture Palace, access to “White Lily” Spa resort

Investor: UNDP MOLDOVA, EU4Moldova: Focal regions Programme

Beneficiary: Cahul municipality administration

No.	Denomination of the basic data and requirements	Content of the basic data and requirements
1.	Reason for designing	Approved Concept Note. Urbanism certificate for design. Endorsement of the local public administration authorities and state supervisory bodies.
2.	Denomination of the investment	Revitalization of Cahul municipality Urban Center.
3.	Design stage	Execution design.
4.	Type of construction	Reconstruction.
5.	Need to perform studies and researches on site	Topo-geodesic surveys. Technical examination of the existing road system.
6.	Basic technical indicators: Technical category of roads Length of the road Width of the road platform Width of the roadway Sidewalks, bicycle lanes Parking places Type of road covering: - Roadway - Parking, sidewalks Rainwater drainage system	According to the requirements of CP D.02.11-2014 Street in a residential city district 1 200 meters 15-20 m within the existing parameters 6.0 – 8.2 – 9.2 m within the existing parameters Width of the bicycle lane – 1 m, sidewalks within the existing parameters In the places established by the Beneficiary Covering of asphalted concrete Pavement of concrete slabs

	<p>Lateral streets Access to yards Existing squares</p>	<p>On Victoriei avenue along the border, with guiding to the existing rainwater drain system, prefabricated reinforced concrete ditches in the area of the road to “White Lily” spa resort</p> <p>Necessary to arrange Necessary to arrange Necessary to arrange</p>
<p>7.</p>	<p>Design stages</p>	<p>Stage 1 - Development and approval of the conceptual design with the participation of the Beneficiary, Investor, chief architect of Cahul Municipality.</p> <p><u>Composition of the conceptual design</u></p> <ol style="list-style-type: none"> 1. General Plan, Sc 1:500 2. Dendrological solutions <p>Stage 2 - Development of the execution design in accordance with the provisions from NCM A. 07.02-2012 „Procedure of development, endorsement and framework content of the design documentation for constructions” normative document, with the development of written items and drawings for the following chapters:</p> <ul style="list-style-type: none"> - List of defects on the road, sidewalks, arrangements; - Explanatory memo; - Plan of roadway location. List of coordination; - Minutes on determining the suppliers and distances for the road construction materials; - List of existing networks; - Basic technical-economic indicators; - Centralized list of works; - Volume of works, including: <p>Volume of works of tree and shrub cutting.</p> <ol style="list-style-type: none"> 1. Demolition of the existing road signs. 2. Demolition of the existing border. 3. Demolition of the existing sidewalks. 4. Demolition of the road system at accesses 5. Volume of works for the demolition and cutting the existing road paving. 6. Cleaning the rainwater drainage system.

		<ol style="list-style-type: none"> 7. Rearrangement of wells and grills at the design benchmark. 8. List and location of benchmarks. 9. Geometric elements of the roadways and square. 10. Consolidation and arrangement of green areas. 11. Arrangement of pedestrian, roadway system and Borders. 12. Arrangement of bicycle lanes and new sidewalks. 13. Construction of the fountain in the square of the Culture Palace and technical municipal networks for its operation. 14. Construction of 2 fountains in the area of Independenței square (existing design) 15. Lighting system of the square territory. 16. Application of small architectural forms: public transport stations, benches, trash bins, etc. 17. Construction of the green area irrigation system in the area adjacent to the Culture Palace.
8.	Requirements attached to the design variants	After the approval of the conceptual design, no other variants shall be developed.
9.	Special requirements attached to the construction	<p>Climatic zone: III B Snow load: 0.5kPa Wind pressure: 0.36kPa Seismicity degree: 8 degrees Data on soil structure: in accordance with the existing geotechnical prospections.</p>
10.	Basic technical-economic indices	Area of the land: ~ 3.60 ha
11.	Special conditions on establishing the volumes of works to be executed	<ol style="list-style-type: none"> 1. Development of the working plan and its coordination with the Beneficiary and Investor. 2. Performance of the topo-geodesic study ~ 3.60 ha. 3. Survey plan.

		<p>4. Examine the possibility of partial integration of the solutions of the existing design no. 02/2019 -PE – AT ”Reconstruction of the alleys, parking places, green area on the territory adjacent to “Nicolae Botgros” Culture Palace, developed by ”Constant Proiect” SRL.</p> <p>5. Fully integrate the solutions of the design no. 129/KO-2018 “Reconstruction of the existing fountains located on Independenței Square”, developed by “OLDARHITECTURE” SRL.</p>
12.	The documentation of the execution design shall include the following compartments	<ul style="list-style-type: none"> - General plan; - Organization of construction works; - general explanatory memo; - Architectural – urbanistic solutions; - Dendrologic solutions; - Constructive solutions; - Technological solutions; - Water supply and sanitation installations and networks; - Electrical power supply installations and networks; - Telecommunications and alarm, video surveillance installations and networks; - Automation of mechanical solutions for fountains; - Environment protection; - Survey plans; - Estimate documentation; - Bills of quantities; - Measures to ensure fire safety; - Basic requirements on operation.
13.	Destination, capacity and type of reconstruction	Cahul Municipality urban center
14.	Requirements attached to architectural-constructive solutions	In accordance with the provisions of Law no. 721 of 02.02.1996 on the quality in constructions (as amended).
15.	Requirements on construction materials	To provide in the design the use of construction materials with high resistance in time

16.	Requirements on the technological and technical equipment	<ul style="list-style-type: none"> - Water preparation and filtering equipment. - Lighting equipment and lamps of LED type.
17.	Requirements on ensuring the conditions of vital activity of the people with reduced mobility	To provide the installation of tactile paving in accordance with NCM C.01.06-2014 “General safety requirements for construction objects to be used and accessible for people with disabilities.
18.	Terms of execution and development of the design documentation and cost estimates	180 calendar days consecutively
19.	Terms of execution and verification of the design documentation and costs estimates	20 calendar days consecutively
20.	Additional requirements towards the design documentation	Development of the cost estimate of the beneficiary (Forms 7,3,5,1). The full set of documentation shall be developed and presented to the beneficiary in 4 copies (3 copies on paper and 1 copy in electronic form)
21.	Requirements on verifications and coordination	<p>According to the requirements of the Urbanism Certificate.</p> <ul style="list-style-type: none"> - All the documentation shall be endorsed according to the corresponding procedure and existing normative documents; - The designer shall be responsible for every coordination, including with specialized institutions, and for obtaining the endorsements to the design according to the legislation of RM; - The verification of the design documentation shall be ensured by the designer.
22.	Requirements on the supervision by the design author	Necessary

Note: The design theme is developed in accordance with the NCM A.07.02-2012 normative document **The bidders shall examine the object before the completion of the tender (mandatorily) and shall submit the bid containing all the costs necessary for the design process. No additional works shall be accepted.**

