List of requirements and technical specifications ITB 17/01531

1. Introduction and objectives

The major goal of the program is to promote SARD in ATU Gagauzia and Taraclia through opportunities to increase local development. One of the opportunities and/or components to support the development of local improvement projects/infrastructure development of small scale in rural areas of the region. This intervention intends, by the way, removing blemishes, lăcunele, identified in the documents of the Republic of Moldova of strategic development of regions, as are the national development strategy Reginală strategy for rural development and Agriculture, etc. Moldova 2020 In a way, 41 communities from UTA Gagauzia and Taraclia district will follow a participatory process of developing capacităţilor. This action will facilitate the establishment of partnerships with local community groups, district and local public administrations, NGOs and other actors of local development.

Technical assistance will be provided in the areas of competence of local public administration authorities (LPAS), such as utilities, health, education, social protection, and others. And more. 20 town councils from UTA Gagauzia and r. Taraclia will receive technical and financial support to improve the quality of local services and rehabilitate infrastructure at the local level through the implementation of investment projects in communities.

2. The content of the work and the beneficiary communities

2.1 the contents of the work usually will provide the following types of works: building works, equipment installation work pumping and filtering drinking water, water purification, automation, etc. electrical works ;, installation of water and sanitation networks, landscaping works, testing and commissioning of systems for drinking water filtration and purification of wastewater, the test papers of outdoor lighting system; and commissioning activities. All these kinds of works and activităţi will contribute to improving the living conditions of the population in communities in ATU Gagauzia and Taraclia are the beneficiaries of *the EU Programme **"SARD".***

2.2 construction works, for which it launched this request for tender, are grouped into four (4) lots, as follows in the table below:

Batch	Locality	Name of project proposal
Lot 1	s. Gaidar, GAGAUZIA	*"The construction of the access of the population to potable water"*
	s. Joltai GATU	*" Capital Repair of the water supply system and connecting the kindergarten children in the sewers "*
Lot 2	s. Novoselovca, r. Taraclia	*" Capital Repair of the water supply system and connecting children to the kindergarten's new sewer system "*
	s. Corten, Taraclia, r.	*" Capital Repairs of the water supply system and provision of the population of the village in drinking water "*
	s. Vinogradovca, Taraclia	*"The building of the central system of water supply"*
Lot 3	s. Tomai, GATU	*"The repair of the road strada Alecsandri"*
	s. Baurci, GATU	*"Repair of a portion of the road"*
Lot 4	s. Congaz, GATU	*" Street lighting System Optimization "*
	s. Cairaclia, Taraclia	*"Renovate the roof of the House of culture"*

2.3. In particular, the projects referred to in these settlements include the following construction works:

Congaz Village

- The rehabilitation of the overhead networks eluminat Street on a sector of blocks of 25 km with the use of insulated cables type CHIP on existing pillars;
- Equipping with measurement equipment and record the node BZUM, connection to distribution networks and the transformation of the Natural gas Fenoza, 12 pieces;
- Installation of eluminare lamps-LED energy economical 40W quantity eluminat bodies, LED according to specification Batch 4;

The Village Of Gaidar

- Construction of the building (pavilioanului) stone and reinforced concrete elements for "buvet", for the production and distribution of drinking water, the most crowded place in the community;
- Installation of water treatment system in set: water treatment technologies such as "Reverse Osmosis"; disinfection equipment and water enrichment; pumping and storage water treated; measuring equipment, electrical and automation of water treatment and distribution;
- Connecting to local buvetului electrical networks, the coordinated connection point;
- The construction of the aqueduct of rough water buvet from existing networks of technical water of the village;
- Construction of sewer networks and waste-water disposal, what remains after treatment at the place of storage of the Cesspit '; the construction of the home type of outhouse reinforced concrete prefabricated;
- network construction of rainwater from the places of distribution of water for the population on relief;
- regional planning and fencing of the area;

Village Corten

- rehabilitation of artesian well no. 1242 new submersible pump, mounting;
- connect the probe to the aqueduct and local electrical networks, l = 400 m;
- water tower construction type with Rozhnov V = 50m3 and height h = 18 m;
- regional planning and health of area Ljubljana, protection of the probe and the water tower;
- construction of the aqueduct from polyethylene pipes, diameter d = 90 mm up to buvetul public drinking water in the village, with a length of 1500 m;
- Construction of public buvetului (pavilion), 3.0 x 3.0 m, production and distribution of drinking water;
- Buvetului connection to the municipal water networks and local electrical networks;
- Construction of sewer networks and waste-water disposal, what remains after treatment at the place of storage of the Cesspit '; the construction of the home type of outhouse reinforced concrete prefabricated;
- Regional planning and health of area Ljubljana, buvetului;

Village Tomai

The project envisages the re-establishment and upgrading a portion of the central road of the village-550 m, Alecsandri Street. For this purpose will be carried out the following works:

- demolition of the existing border;
- milling surfaces of asphalt concrete carusabile part, with loading and transporting 1 .2miles, hmed. = 0.08 m;
- pickling of land. (II) y = 1.85 t/m3 for the location of the new border and enforcement covatei carusabile runs, with transportation to 2.0 km;
- levelling and profiling mechanically compacting and finishing surfaces of the platform with the use of heavy road compactoarelor 10-15t;
- implementation of the support layer of sand, h = 0.10 m, layer of rubble stone Foundation, h = 0.20 m, leveling layer with reinforcement of an existing layer, h = 0.12 m (60% new material);
- execution layer from cement-sand mix for foundations, h = 0.05 m;
- paving stone pressed fittings, h = 0.08 m kerb stone arrangement,
- arrangement of green areas, construction and fitting-out sidewalks;
- arrangement and construction of roads and platforms;
- arrangement and construction of casiurilor channel and rainwater evacuation, repair of existing podețului with diameter 1.0 m;
- location and organization of road safety (road signs, markings);

Village Joltai

- rehabilitation of artesian well no. 1040 new submersible pump, mounting;
- rehabilitation of artesian well no. 560 new submersible pump, mounting;
- connect the probe No. 1040 at aqueduct and electric networks;
- connect the probe No. 560 at aqueduct and electric networks;
- regional planning and health of area Ljubljana probe No. 1040;
- regional planning and health of area Ljubljana probe No. 560;
- regional planning and health of area Ljubljana, water tower, probe No. 1040;
- regional planning and health of area Ljubljana, water tower, probe No. 560;
- construction of the aqueduct from polyethylene pipes, 75-90 mm diameter, with a length of 1, 7 km
- Construction of sewer networks (100 m), children from kindergarten up to the village school;

Village Baurci

- Cleaning up existing portions of the Aamir way central, L = 700 m;
- Demolition of the existing road sector bordurei rehabilitated;
- Restoring the platform road from ground mineral mix sand-clay;
- Construction of the Foundation of the road out of sand-gravel, and 100 mm-150 mm;
- Part of the construction of concrete carusabile vibrogranilat-160 mm;
- Construction of the exhaust channel rainwater;

Cairaclia Village

- Demolition of the existing roof in places cosoroabei and popilor mounting;
- Construction of roof support elements of concrete monolith;
- Fitting cosoroabei and pelicolă support on waterproofing;
- Mounting the beam, Rafter and asterialei;

- Invelitorii metal roof fitting profiled corrosion;
- Mounting systemului of rainwater on the roof;
- Repair of ventilation channels and cover with pleated straps of metal aceieași with roof;

The Village C iumai

- connect the probe to the aqueduct and electric networks;
- water tower construction type with Rozhnov V = 50m3 and h = height 15 m;
- regional planning and health of area Ljubljana, protection of the probe and the water tower;
- construction of the aqueduct from polyethylene pipes, diameter d = 110 mm, l = 300 m; d = 90 mm, l = 2400 m;

Novoselovca Village

- rehabilitation of artesian well no. 609 new submersible pump, mounting;
- connect the probe to the aqueduct and electric networks;
- water tower construction type with Rozhnov V = 50m3 and height h = 18 m;
- regional planning and health of area Ljubljana, protection of the probe and the water tower;
- construction of the aqueduct from polyethylene pipes, diameter d = 90 mm, up to water streets, with a length of 900 m;
- The construction of the sewerage networks from kindergarten children until the purge;
- Construction of the wastewater treatment plant type "CriberSBR" or its equivalent, productivity-5, 3 m 3/day and contact reservoir;
- Regional planning and health of area Ljubljana substation;

2.4 the contractor must provide everything that is necessary for the successful execution of the contract: work, engineering, materials, equipment, materials, transportation, support maşinele, gear, travel required to carry out all the work for this contract.
Typically, the contract shall include the following activities:

- ***purchase and delivery of the objects*** materials, equipment, and services needed for successful completion of the work;
- ***construction site preparation*** *for the storage of materials, equipment and execution*
- ***the construction and installation of equipment*** in buildings, sewer networks, WWTP, electrical grids, water networks, landscaping, etc., mentioned above;
- ***commissioning*** installed systems, equipment, and construction materials, including conducting performance tests and putting into service (if applicable);
- ***the transmission of detailed documentation of operating and maintenance*** of objects and systems installed (if applicable);
- ***Organization of training and instructional materials transmission ,*** operators responsible for authorized beneficiaries;

2.5 all equipment proposed by the contractors must be manufactured in accordance with technical requirements, guidelines and specifications requested below; to have European Certificates and/or certificates, confirming data from technical passports. The contractor must, likewise, to ensure that all materials, equipment and activities related to construction and fitting under the contract, before being executed, to be coordinated with representatives of beneficiary

and UNDP Moldova, empowered: for day-to-day supervision and periodic monitoring of the work in the field.

Note to bidders:

Whenever technical specifications require a specific brand, product name/model, bidders can come up with a proposal for the coordination of any other product equal in all respects to the product specified, satisfying the requirements of origin, all physical parameters, functional and performance.

3. The work on the

Those inward sins by this competition announced will take place in localities, according to the above-mentioned lots.

1 4. organizational Arrangements

The implementation of each project and execution on the ground will be monitored by the Engineer-Consultant, appointed by Undp, which will conduct systematic monitoring visits to the construction site. Additionally, the engineer-technical responsible, authorized by the local public Aurorităţile, the project's beneficiaries, will provide daily supervision of construction activities specified in the contract.

2 5. Expected results

In each case, the Contractor will vi expected following *results*:

Result 1 : Finishing all construction, delivery and installation of equipment, connecting to networks of electricity, water, sewerage, planning, etc., as set out in the contract documents, within a period not exceeding ***90 calendar days - lots 1, 3, 4, and calindaristice-120 days for lot 2,*** at the time of signing the contract***.***

Outcome 2: The final commissioning of the object within a period: ***90 days calindaristice - up to 6 months***, *depending on the type of contracted works*, from the date of receipt of the object at the completion of the works, including equipment delivery and installation, testing, commissioning, training of operators, transmission and (if applicable).

3 6. The main requirements and Technical Specifications

6.1 Street lighting System Optimization from Congaz village

a. the specification provides a fitting of electric street lighting aieriene isolated 0.4 kV (documentation of project No. 02/12-2013 REI), with a total length of 25.0 km. Electrical cable insulated type СИП 2 * 25 mm^2 will be suspended on pillars of reinforced concrete type AO, УПО, ПО, УП, (existing), connecting to distribution networks "*Fenoza Natural gas*" in 12 new jobs, according to the opinions of the attachment, attached to the tender documents for this call for tenders and in 5 places.

b. nominal voltage connection points will be *220V*. For connection cables should be of type "*Torsado*". Update my cables shall be made using the monşoane and termoretractbile terminals.

c. the recommended Value of the power factor will be 0.92-0.4 kW.

d. Protection against lightning power line will ensure the "*Instruction of the lightning protection of buildings and constructions*"- *РД 34.21.122 -87.*

e. Protection relays will ensure to meet MS-"*Rules for electrical installations".* It is recommended that you install the protection type ОПС -1 (category B, C, D).

f. technical characteristics of measuring equipment, which will be installed, must comply with the documentation of project No. 039248 from 25.01.2017, developed by "South-A-Con", and the provisions of the "regulations on the measurement of electric energy for commercial purposes" (*AGENCY Decision No. 382 from 02.07.2010, Official Gazette No. 214-220/765 from 05.11.2010*).

g. technical requirements towards measuring meters of electricity, are set out in the opinions of nr.nr. P3010201302006, -7,8, 9, 10, 11, 12, 14, 16, 18, from 08.03.2017 22.26, valid till 08.03.2018, pp. 8.1, 8.2, 8.3.

h. it is recommended to install the boxes record type BZUM-TF-03-RN and use ME172-type meters D1A42-G12-M3KO3Z, there were ZCG112ASAe Take 220V, 5 (85)

6.2 Construction of access to drinking water in the village of Gaidar

Buvetul will ensure water abstracted from existing water sources, indicated by the local authorities, creating access to the population of the village to the *drinking water*in the quantities requested and calculated in project documentation. Buvetul must be set according to the scheme of location coordinates with local governments and urban planning services.
Buvetul will be in building accomodat (pavilion), sustainable materials, energy-efficient and resistant to seismic conditions. In order to ensure sanitary zone around the buvetului, the territory directly will be arranged and surrounded with a symbolic protective fence.
At the time of operation report buvetul must be provided with the necessary material for processing water and chemicals for desevire (chemicals, filter elements, tabletată salt in 25 kg bags, etc.) for the first 12 months of operation. These materials and chemicals shall be stored and keep the parties in separate rooms, convenient for keeping such products, which will have only the operators are responsible for operating the system.
Flag: represents a capital building measuring axles 3.0 x 3.0 (w) and height (h) = 5.2 m; All works of construction as project No. 04-17-B of 10.04.2017 developed by "Hidroproiect" Ltd, and SNIP 3.02.01 requirements.-83.
Foundation: belt-type concrete Mark B 7.5 (M100), mechanically compacted, on a layer of leveling h = 100 mm of concrete B 3.5 (M50); all vertical surfaces will be painted with 2 coats of a high shale BN III, engineer;
Earthquake resistant Frames: anti-seismic frames will be constructed from reinforced concrete monolithic, B15, mark (M200), mechanically compacted; the pilings AIII, AI, GOST 5781-82; frames will be placed in the Foundation up to the level (-0.72);
Walls: masonry from small blocks of type "Fermer" (380x180x180mm) or limestone blocks M-35, on cement mortar, mark isolated from outside the M25, on the entire surface with polyester

espandat, thickness δ = 100 mm, fixed to the wall with dowels. Insulation works bulkhead in accordance with CPF04. (SP12-101-98), "technical Rules of execution of the outer termoizolației". On the level (+ 0.08) below the walls will be arranged a coat of hydro-insulating cement mortar-horizontal sand-½ proportion.
Inside walls will be clean and with a gap larger than δ = 20 mm mortar and Grout dry mixture, δ = 5 mm, then the walls will be painted with paint resistant to moisture, 2 layers of grey colour.
Façade: the walls of the Pavilion will be made of ceramic type tiles Klinker Simple Red façade quality, (245x65), glue-cement, mark M50. Horizontal and vertical Rusturile-6 mm. On the façade at the entrance to the building will be fitted to guttering and downpipes cherry color, Ø = 100 mm, for the discharge of water from the roof up to the level (+ 0.10). Gutters and downpipes will be fixed to the wall with fasteners of the same color.
Awnings: from sheets of durable polycarbonate, δ = 10 mm, fitted with tubular cells toward the wall, "hachi", building mounted on metallic profile painted in black colour. Metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87.
Roof: load-bearing constructions: maurlatul (100x100mm) rafters (150x50mm), boarding (50x30mm) will be resinous conifer wood, painted with 2 coats and antiseptic paint the same with 2 coats of paint, fire wall and together with bolts and galvanized targets; invelitoarea-type metal tiles, dark Cherry colour and typical accessories packaging protection made of painted metal corrosion, δ = 0.55 mm will be fixed on the wall outline. Packaging and wall covering will be not less than 200 mm. Film antivapori under the rafters, wooden grizişoare 50x30mm of rafters. Between a layer of insulating rafters "Izover-13kg/m^3", such as Isover-Kim-YOU, h = 150 mm. All metal elements are vopses 2 times with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87.
Ceiling: will be covered with a layer of drywall water-resistant h = 12, 5 mm, fixed to beams falling film antivapori; on the outline of the ceiling to the walls will be fitted to a plinth (30x40mm) espandate materials.
Flooring Concrete support Layer: B15, h = 100 mm, floor layer of cement executed from 150 M 3 cm thick with fine discuita girl, glass fibre army. Hardwood floors and ceramic tiles, δ = 8-10 mm, smooth, class 4 for wear resistance, mounted on a backing layer of plaster glue, including primers adhesion.
Door: Fitting the door metal with thickness of 3 mm MDF and finished with insulated on the inside, including the fitting of the padlock, mînerelor, 600x150h mm ventilation grid and with quick-locks, 2.0 x 1.0 m. From the outside, the door will be painted in grey colour, in 2 layers.
Pereul : stone pavement, δ = 50 mm, placed on a layer of cement-sand mixture dry clean, h = 100 mm, in proporţie1/3, and a layer of compacted gravel in Earth, h = 160 mm. Contour will also curb stone 500x210x60, attached to a layer of concrete B 7.5.
Ventilation : provides for: (i) the mounting of ventilation system with forced entry air through ventilation grille installed in the bottom of the door (600x150mm), and the forced evacuation of air through the ventilation channel galvanised metal fine Ø160mm, GOST 14918-80, fan 160 K XL, N 105Wt, 220W, "Systemair", or equivalently, the set hooked up to the electricity network (with the ability to Exchange air inside the room-6 times/hour) , noise attenuator;
(ii) additional delivery, mounting and connection to electrical networks of the air conditioner (split system air conditioner, heating/cooling system, inverter technology, such as Mitsubishi, MSE-09HR, N = 1.0 kWt, for a surface of 15 m^2), or equivalently, incl. all necessary accessoriile (in the set).

Heating: Provides delivery, mounting and connection to electrical networks of Bali type heater N4E20, N = capacity with a set 2kWh mounting and digital thermostat (in set).
Eluminarea : provides for the installation of lighting fixtures for incandescent lamps for ceiling or wall for rooms with heavy environmental conditions of operation, LED lamps, connecting cable ВВГ 5 3x1 installed in plastic gutter protection, on the wall of the closet, distribution circuit breakers type BA47-29/1, filing cabinet type BZUM-TF-100-12, must be bound to the Earth magnetic starter, common destinations separated type ПМА-0247.

Water treatment System: Given the low quality of the water at source capture indicated by local authorities, the project envisages the use of filtering technologies to protect the type of *"Reverse Osmosis"*. Water purification level after treatment must be standard STAS *' drinking water '*. The number and productivity of filters installed reverse osmosis type will be calculated by the bidders in accordance with the results of laboratory tests of water quality, its composition, etc., that are part of the tender documentation. Laboratory tests of the water in the locality of Gaidar were carried out by *the laboratory of the public health Center (Comrat,* test results have been included in the report No. 147 from 13.03.2017 (attached):
Filtration system type "Reverse Osmosis" installed must operate in automatic mode, and boarded/24 h to produce approximately 3.0 m^3 of drinking water per day.

Important: Tenderers must know that the pressure in the water at the municipal network entry into Buvet currently equals 1.5 atm (or 1.5 bar). The tenderer will provide the cost of installing the system on your network has a rezrvor underground, close to buvetului, with volume V = 3 m 3 and of an appropriate pump connected to the electrical power and automation, please see the specifications for the purchase of equipment for water treatment.

All the equipment of the system of water treatment proposed by bidders must be in accordance with the requirements and technical specifications requested below. Quoted equipment will be produced in accordance with European standards (ISO) and certification (Certificate of Compliance), and certified in the REPUBLIC OF MOLDOVA (opinion, opinion on ecological expertise).
Water treatment system shall include at least the following *operational nodes and equipments:* (i) the input of the water knot brute with water meter; (ii) sedimentary and micromesh filter self cleaning; (iii) filter mechanic with filter cartridge, 20mc; (iv) the filtration system Birm; (v) type filtering system Sanitizer Plus; (vi) type tank Sanitizer thermostability regeneration; (vii) filter mechanic with filter cartridge, 1mc; (viii) system of reverse osmosis filter type; (ix) hypochlorite sodium dosing system; (x) the pumping station/recycling of treated water; (xi) storage tank treated water. 3000 litres; (xii) the active charcoal filter type "filter"; (xiii) electruic distribution panel;
Summary of Power water treatment equipment will be equal to 5.0-7.5 kW/220V-50 Hz; Power supply will be ensured by the network 220V 50 Hz with frequency, first class, according to ПУЭ. The point of connection to the existing network 220V will be from electric distribution panel.

Water, sewerage Networks interiors: The diameter of pipeline water input should be gross section Ø 50 mm; they will install the valves of the Type BVR UNI-ISO 7/1; section Ø 50 mm water meter type ("Hydrometer"); Treated water reservoir will be made by certified

manufacturers of stainless steel food "type CC 74003, thickness ≥ 2 mm, 1000 mm-Ø900, inalţimea 3, 0 m; and installed at a distance of not less than 500 mm, both the floor and the ceiling to give the possibility of being served in regulations; In the floor of a drain trap/industrial floor durable material we affected by rust and the channel to evacuate the water leakage technique after technological needs; channeling from PVC pipe with Ø110mm;
Networks of treated water to the exit will be durable, "stainless steel", a total of 3 nodes with Ø25mm; the valves of the Type BVR UNI-ISO 7/1; water meter Ø25mm type ("Hydrometer");
Water delivery will be effected automatically, access of population to "button" will be outside the building.
Will be installed energy-efficient pumps, type "Biral", "Class A," or the equivalent;
All networks and cables must be marked correctly and in their respective colors according to the standard ANSI/ASME to 13.1,67/548/EEC;

Spatial planning: Planning around the buvetului typically include the following works: construction of earthworks, fence-fixing sanitary zone territory near the buvetului paving, installing small architectural forms, the sowing of turf.
Fence: wire mesh wire BP Ø4mm, 50x100mm (h) cell type beading machines with 2 borders, affixed to the pillars of metal 60x60x Cap 50x50mm, 6.0 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-300x300cm with a depth of 500 mm, with a pitch of 2.50 m, the height of the fence 1.2 m. All items will be made of metal and painted with paints on metal green in the Hall.
Paving: stone cement sidewalk δ = 40 mm, 2 colors, borders 500x210x60mm fixed in concrete monolith B 7.5 200x100mm; a 50 mm layer of dry cement-sand mix proportion of 1/2 on a layer of compacted gravel δ = 100 mm in pământ.
Turf: sowing grass with fine afînarea and fertile land leveling;
Small architectural Forms: wooden benches on the metal casings of the type I-metal urns N2102, type N1311.

External Networks of water supply: water supply Pipeline: polyethylene pipes SDR17 PN10, 100 'S. All the work of construction is carried out in accordance with the requirements of en SNIP 3.05.04-85. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt", including through sheet electro contact connectors. Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand.
Home: the guy in the rubber rings Ø1500mm with prefabricated concrete, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ΠΦ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87.
Protection Tubes: to install crossing through walls, from Ø219mm steel pipe.
f. external sewerage Networks: the sewers: pipes of PVC SN4/SDR41, Ø160mm, on a bed of sand h = 150 mm. All works of construction is carried out in accordance with the requirements of en SNIP 3.05.04-85. Sewerage pipes along the track layout after relief. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm.

Home: in the rings of prefabricated concrete, КСЛ 2, Ø900mm, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87. *Protection Tubes:* to install crossing through walls, from Ø273mm steel pipe.
Exterior electrical Networks: Electrical Networks are provided for cable 2-3 mark СИП-х25 +1 х35, suspended on pillars of reinforced concrete type АО, УПО, ПО, filing cabinet, УП BZUM-TF-01-63 clamping device, branching, ПС-10 1-1 conductor to the Earth ЗП2М, counter with three-phase 380V, ZMG 310 CR 5-100A, automatically Switch with 3 pole, 16A, ВА47-29/3/16В.

6.3 the system capital repair of municipal water supply and to ensure access of the population to potable water from the village Corten

Next: Probe depth 240 m-static water level-60.0 m.
Technical solutions for the rehabilitation of the probe, specifications and technical requirements in relation to the equipment and materials are described in the documentation of project No. 04-17-A, in 10.04.2017, developed by the company "Hidroproiect Ltd".
It is proposed to raise the water pump submersible GREGORY XNR-151A/26 with Qp = 6.08 m3/h, Hp = 222m N = motor 9.20 kWt, in set with cable routing equipment, control and automation.
Over the mouth of the probe a fireplace of concrete prefabricated elements, placed on a layer of concrete, B15 (800 mm) and mortar M-100, with d = 2000 mm, 3,900-3 series, Edition 7, cast iron cover-GOST3634-79, according to the documentation project 04-17-A-1, sheet on 1-4.

Connection to electrical networks.
Under the terms of connection " RED Union Fenoza "from 18.08.2016, provision is made for connecting the PT-140R, РУ -0.4 кв feeder , 1, which is located at a distance of 310m from the probe. 0.4 kV cable type СИП-2 mounted on existing concrete pillars, only 2 poles us. Indoor distribution network of electric power equipment is providing cableВВГ-0.66 and ВВП-0.38 in different sections. Eluminarea outer conductors is forecast from АВВГ-Т, ПВ-3 different sections. Filing cabinet and automatic routing-type BZUM-TF-02 in the set.
All mounting works, and the land shall be made in accordance with the documentation project coalele 04-17-the-HAE, on-1-10 en -85, SniP 3.05.06 "Electrotechnical Systems ' and ПУЭ.

Connecting to the water distribution networks:
Water supply pipe at the probe payback buvet d'eau will be constructed from polyethylene pipes, SDR17 PN10 'S 100, Ø 90 mm. Aqueduct was designed in accordance with the requirements of en SNiP : 2.04.02 -84 2.04.03 -85;; II-89-80. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt", including through sheet electro contact connectors. Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand. *Homes:* in the rings of prefabricated concrete, with Ø1000mm and Ø1500mm, cast iron block, cover all exterior surfaces will be waterproofed with

a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87. *Protection Tubes:* to install crossing through walls, from Ø219mm steel pipe.

Water tank:
In order to ensure uniform distribution of water throughout the sector, will be built a water tower, rezevor, "Raghuvanshi", with volume V = 50 m^3 and height h = 18 m, according to the project type: 901-5-32C with resistance to seismicity equal to 8.0 degrees. Foundation under the tower is provided from armo-concrete monolith, mark B15. From the outside all construction areas of the Tower will be pruned and painted with paint (лак БТ-177) in 2 layers, or 2 layers of oil paint on a layer of a high oil containing iron-lead (железный сурик). Interior surfaces will be pruned and painted with 2 coats of paint containing lead-iron on a ground layer of linseed oil.

Spatial planning:
Planning around the water tower and a full probe includes the following works: construction of earthworks, fence-fixing sanitary zone, with broken stone paving of the road and crossing the territory around the probe and the Tower, the sowing of turf.
Fence: will be made of wire mesh wire, galvanized Ø2mm BP 50x50mm type cell "Rabiţa", mounted on metal pillars with diameter 50 mm, (the crooked and wear with diameter d = 100 mm) with round lid δ = 6 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-400x400cm with a depth of 700 mm, with a pitch of 2.50 m, height 1.6 m fence. All items will be made of metal and painted with paints on metal green in the Hall at the plant.

Buvetul of access to drinking water:
Buvetul will ensure water abstracted from the probe next to the No. existing 1242, specified by the local authority, in the amount calculated in project documentation. Buvetul must be set according to the scheme of location coordinates with local governments and urban planning services. Buvetul will be the paramount building accomodat 3.0 x 3.0 m (pavilion), constructed of durable material, energy-efficient and resistant to seismic conditions. The territory directly buvetului will be arranged and surrounded with a symbolic protective fence.
At the time of operation report buvetul must be provided with the necessary material for processing water and chemicals for desevire (chemicals, filter elements, tabletată salt in 25 kg bags, etc.) for the first 12 months of operation. These materials and chemicals shall be stored and keep the parties in separate rooms, convenient for keeping such products, which will have only the operators are responsible for operating the system.
Flag: All works of construction as project No. 09-16-C, from 10.11.16 developed by "Hidroproiect" Ltd, and SNIP 3.02.01 requirements.-83.
***Note*:**
Buvetului building Parameters, technical requirements and specifications in relation to constructive elements, materials and equipment, related to: foundation walls, window frames, seismic, facades, canopies, roof, ceiling, flooring, doors, pace, water and sewage networks, electricity, ventilation system, heating system and eluminare are identical to the requirements and technical solutions at buvetul in the village of Gaidar, described above.

Water treatment System: Given the quality of the water at source capture indicated by local authorities, the project envisages the use of filtering technologies to protect the type of *"Reverse Osmosis"*. Water purification level after treatment must be standard STAS *' drinking water '*. The number and productivity of filters installed reverse osmosis type will be calculated by the bidders in accordance with the results of laboratory tests of water quality, its composition, etc., that are part of the tender documentation. Laboratory tests of the water in the locality of Corten, were conducted by the *laboratory "Geolab" of AȘM.* The test results have been included in the report No. 24 from 02.03.2016 (attached):
Filtration system type "Reverse Osmosis" installed must operate in automatic mode, and boarded/24 h to produce approximately 3.0-5.0 m^3 of drinking water per day.
Note:
Tenderers must know that the pressure in the water at the municipal network entry into Buvet currently equals 2.0 atm (or 2.0 bar). The tenderer will provide the cost of installing the system on your network has a rezrvor underground, close to buvetului, with volume V = 3 m 3 and of an appropriate pump connected to the electrical power and automation, please see the specifications for the purchase of equipment for water treatment.

All the equipment of the system of water treatment proposed by bidders must be in accordance with the requirements and technical specifications requested below. Quoted equipment will be produced in accordance with European standards (ISO) and certification (Certificate of Compliance), and certified in the REPUBLIC OF MOLDOVA (opinion, opinion on ecological expertise).
Water treatment system shall include at least the following *operational nodes and equipments:* (i) the input of the water knot brute with water meter; (ii) sedimentary and micromesh filter self cleaning; (iii) filter mechanic with filter cartridge, 20mc; (iv) the filtration system Birm; (v) type filtering system Sanitizer Plus; (vi) type tank Sanitizer thermostability regeneration; (vii) filter mechanic with filter cartridge, 1mc; (viii) system of reverse osmosis filter type; (ix) hypochlorite sodium dosing system; (x) the pumping station/recycling of treated water; (xi) storage tank treated water. 3000 litres; (xii) the active charcoal filter type "filter"; (xiii) electruic distribution panel;
Summary of Power water treatment equipment will be equal to 5.0-7.5 kW/220V-50 Hz; Power supply will be ensured by the network 220V 50 Hz with frequency, first class, according to ПУЭ. The point of connection to the existing network 220V will be from electric distribution panel.

Spatial planning: Requirements in relation to the works and material planning around buvetului that refer to the pavement, fence, grass, small architectural forms, etc., are similar to those described for buvetul from the village of Gaidar.

External Networks of water supply: the requirements in relation to c onducta water supply which comes from sonda d'eau No. 1242 payback buvet listed above. Buvetului connection pipe will be from polyethylene pipes SDR17 PN10, 100 'S, 50 mm. diameter d = all works of construction is carried out in accordance with the requirements of en SNIP 3.05.04-85. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt",

including through sheet electro contact connectors. Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand. *Home:* the guy in the rubber rings Ø1500mm with prefabricated concrete, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87. *Protection Tubes:* to install crossing through walls, from Ø219mm steel pipe.

External Networks of sewerage pipe sewer: PVC pipe from SN4/SDR41, Ø160mm, on a bed of sand h = 150 mm. All works of construction is carried out in accordance with the requirements of en SNIP 3.05.04-85. Sewerage pipes along the track layout after relief. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm.
Home: in the rings of prefabricated concrete, КСЛ 2, Ø900mm, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87. *Protection Tubes:* to install crossing through walls, from Ø273mm steel pipe.

Exterior electrical Networks: Electrical Networks are provided for cable 2-3 mark СИП-х25 +1 х35, suspended on pillars of reinforced concrete type АО, УПО, ПО, filing cabinet, УП BZUM-TF-02, device accessories branching ПС-10, 1-1, the Earth conductor, 3П2М three-phase 380V, ZMG 310 CR 5-60A, automatically Switch with 3 pole, 20A, ВА47-29/3/20 с.

6.4 Capital Repairs of the road strada alecsandri village Tomai

The project provides for the rehabilitation of the road from the village central part of 550 m. Restoration of the road must be made in accordance with the documentation of project No. D-003/2017, of 21.04.17, developed by the company "Astral project" Ltd in accordance with recommendations on the design: "streets and roads in urban and rural"-CP d. 02.11 -2014; NCM d. 02.01:2015; Snip 2.05.03 -84; HP d. 02.08 -2014 and other normative documents.

Earthmoving Works: Under the draft, after milling the existing road surface made of concrete, h = 0.08 m, is made for the execution of the covatei pickling Earth road, leveling and mechanical surfaces forming the platform road. Compact platform Road will be carried out with heavy use of compactoarelor 10-15t;

The Foundation of the road: Support Layer of the road, 10 cm, will be run from the sand, according to GOST 8736-93; road Foundation layer, spool, will be built of rubble stone, M400, 70-40, 40-20, 10,10-20-5, using the method 8267-93 in accordance with GOST underrunning; equalize layer 12 cm thick, will run with the reinforcement of the existing layer (60% new material from rubble stone, M400, 70-40 , 40-20, 10,10-20-5; 40%-granular material milling), method underrunning;

Pavement and road border Arrangement: For the Foundation Layer will be built from sand-cement mixture, h = 5 cm, at the rate of 6:1. Paving stone pressed fittings, h = 8 cm, will be

made according to GOST 17608-81. For the border of the road will be used in the border REGION of 100x30x15, and of 100x20x8, placed on a layer of concrete B15, according to GOST 6665-91.

Channels: The piquette PC0 + 4.00 is foreseen the construction of reinforced concrete pipe with lat's B20. cast iron Material-C4-15-32, GOST1412-54. At intersections with side roads existing drains your crossings towards the platforms being built from prefabricated trench reinforced concrete elements of type R-1, with trench.

6.5 system Repair capital water supply the kindergarten children and connecting to the mains sewer school village Joltai

Artesian wells no. 1040. 560, with depth-300 m:
Technical solutions for the rehabilitation of probes, specifications and technical requirements in relation to the equipment and materials are described in the documentation of project No. 07-17-B, from 05.05.2017, developed by the company "Hidroproiect Ltd".
It is proposed to raise the water pump submersible GREGORY XNR-151B/18 with Qp = 12.0 m3/h, Hp = 154 m motor N = 9.20 kWt, in set with cable routing equipment, control and automation.
Over the mouth of the probe a fireplace of concrete prefabricated elements, placed on a layer of concrete, B15 (800 mm) and mortar M-100, with d = 2000 mm, 3,900-3 series, Edition 7, cast iron cover-79, GOST 3634-according to project documentation 07-17-B-3-on-2, sheet.

Connection to electrical networks.
According to the solutions of project No. 07-17-B-1-HAE, connecting probes to the existing electricity nearby -0.4 кв . We will be using the cable type 0.4 kV СИП-2 mounted on existing concrete pillars. Indoor distribution network of electric power equipment is providing cableГ ВВ and ВПВ different sections. Eluminarea outer conductors is forecast from АВВГ-Т, ПВ 1-3 different sections. Filing Cabinets and automatic routing-type BZUM-TF-01 in the set.
All mounting works, and the land shall be made in accordance with the documentation project coalele 07-17-B-1-HAE, on-1-7 en -85, SniP 3.05.06 "Electrotechnical Systems ' and ПУЭ.

Water distribution networks:
Central Pipe water supply provided in the project (phase I), with a length of 1700 m, will be constructed from polyethylene pipes, SDR17 PN10 'S 100, Ø 1170m, Ø 90 mm-75 mm-520m. The aqueduct was designed in accordance with the requirements of en SNiP: -84; 2.04.03 -85 2.04.02; II-89-80. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt", including through sheet electro contact connectors. Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand. *Homes:* in the rings of prefabricated concrete, with Ø1000mm and Ø1500mm, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal

elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87. *Protection Tubes:* to install crossing through walls, from Ø219mm steel pipe.

Spatial planning:
Planning around the towers and water fountains probes nr. 1040, 560, includes the following works: earthworks, leveling, construction fence fixing sanitary zone, with broken stone paving of the road and crossing the territory of probes and towers, the sowing of turf.
Fence: will be made of wire mesh wire, galvanized Ø2mm BP 50x50mm type cell "Rabiţa", mounted on metal pillars with diameter 50 mm, (the crooked and wear with diameter d = 100 mm) with round lid δ = 6 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-400x400cm with a depth of 700 mm, with a pitch of 2.50 m, height 1.6 m fence. All items will be made of metal and painted with paints on metal green in the Hall at the plant.

Sewer networks:
According to the project No. 07-17-B-1-4, EC, on sewer networks, with a length of 170 m, will be conecționate from PVC pipes, SN/SDR4/41, including d = 160 mm-30 m, d = 200 mm-140m. Laying pipes in the ground will be at not less than aduncimea 1, 2 m. Steel protective tubes d = 273x 6.00 mm, L = 8 m. In dry soil pipes shall be placed on a layer of sand, h = 150 mm; in moist soil pipes shall be placed on a layer of sand, h = 150 mm, placed on a layer of crushed stone, h = 200 mm.
The construction of the networks will be complied with the requirements of the norms: SniP II-89-80-overall planning; Snip 3.05.04 -85-external network of water and sanitation; Snip III-4-80-security measures; Snip 3.02.01 -87-earthworks.

6.6 Capital Repairs of a portion of the road in the village Baurci

The project envisages the rehabilitation over a portion of the road in the village, pavement using concrete vibrocilindrat, part of 700 m. Restoration of the road must be made in accordance with the documentation of project No. D-004/2017, of 21.04.17, developed by the company "Astral project" Ltd in accordance with recommendations on the design: "streets and roads in urban and rural"-CP d. 02.11 -2014; NCM d. 02.01:2015; Snip 2.05.03 -84; HP d. 02.08 -2014 and other normative documents.

Earthmoving Works: Under the draft, after demolishing the pitrei curb, existing surface road in the mixture of asphalt and crushed stone, degraded, sand etching is made of class II land, y = 1.85 t/m3, for proper execution of the platform road/covatei road, leveling and mechanical surfaces forming the platform road. Compact platform Road will be carried out with heavy use of compactoarelor 10-25t;

The Foundation of the road: Supporting Layer of the road, 10 cm, will be run from the sand, according to GOST 8736-93; road Foundation layer, 15 cm, will be built of rubble stone, M400, 70-40, 40-20, 10,10-20-5, using the method 8267-93 in accordance with GOST underrunning;

Arrangement of pavement and road border: For the Foundation Layer will be built from sand, h = 10 cm. Fitting road clothing, h = 16 cm, will be made of concrete vibrocilindrat without protection Class, according to Bbtb-4.0 HP d. 02.01 -2012. To ensure the sustainability of the

road will run cross joints and expansion joints with step 10, 0 m, with cutting 30% (5 cm) of concrete thickness, width of 1.5 cm. For the border of the road will be used in the border REGION of 100x30x15, and of 100x46x26, placed on a layer of concrete B15, according to GOST 6665-91.

Channels: The PC9 piquette + 17.00 is foreseen the construction of reinforced concrete pipe with lat's B20. cast iron Material-C4-15-32, GOST1412-54. At the intersections of the drain with side roads and crossings towards the platforms being built from prefabricated trench reinforced concrete type L4-8, with army trench P5-8.

6.7 renovate roof culture House in the village of Cairaclia

The project provides for the rehabilitation of the main block of the House roof of culture with the area of approx. 1370m2. Work will be performed in accordance with the documentation of project No. 27/13 from Office, prepared by 1.10.13 design district of Comrat, licence No. 038627 series of MMP, and from 30.11.11 local normative documents: SNiP 3.03.01, -87 ' Construcții load-bearing and protection"; Snip III-4-80, "security measures in construction", "3.04.01 -87, SNiP Works insulation and finishing".

All load-bearing construction of the roof will be made of wood, with conifer type humidity no more than 20%, according to GOST 8486-86. Conețiunile wooden elements will be executed with bolts, nuts-galvanized; temporary conecțiunile can be executed with the targets of the corresponding dimensions. Load-bearing roof construction specifications are listed in the table, pag. РП 28. Wooden buildings will be processed with special solution ДСК-П - fire prevention and against mildew.
Housing support for the new roof will be made of reinforced concrete mark B15.
The roof Covering will be executed from metal fluted LTP-type "p rofnastil " thickness not less than δ = 0.55 mm, overlapping the sheets of metal between them will be not less than 150 mm. The roof will be endowed with elements of restraint of color zepezei, aceieași as invelitoarea. Jgeaburile with diameter d = 120 mm and diameter d = downpipes with 100 mm shall be made of metal corrosion thickness packaging and colour corespunzătoate roof.

6.8 Construction system of the central municipal water supply the population of the village Ciumai village Vinogradovca

Next: Probe existing
Technical solutions for connection of the probe, specifications and technical requirements in relation to the equipment and materials are described in the documentation of project No. 08/13-of,, developed from company 30.06.2014 "Vital Construct SRL", license AMMII nr. 040127 from 10.07.2012.

Connection to electrical networks.
According to typical solutions, project No. 08/13, provides for the connection of the probe from the existing electrical networks nearby -0.4 кв . We will be using the cable type 0.4 kV СИП-2 mounted on existing pillars. Indoor distribution network of electric power equipment is

providing cableГ ВВ and ВПВ different sections. Eluminarea -outer- АВВГ-Т, ПВ 1-3 different sections. Filing cabinet and automatic routing-type BZUM-TF-01-in the set.
All Assembly, operating and link to earth should be made according to SniP -85 en 3.05.06 "Electrotechnical Systems ' and ПУЭ.

Connecting to the water distribution networks:
The Central Pipe of water supply from existing aquifer probe will be constructed from polyethylene PE100 pipe PN6, SDR26, Ø110mm; Pe100 SDR26, PN6, Ø90mm; Pe100 SDR17 PN10, Ø90mm,. The aqueduct was designed in accordance with the requirements of en SNiP: -84; 2.04.03 -85 2.04.02; II-89-80. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt", including through sheet electro contact connectors. Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand. *Homes:* in the rings of prefabricated concrete, with Ø2000mm and Ø1500mm, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87.
Protection Tubes: to install crossing through walls, from Ø219mm steel pipe.

Water tank:
In order to ensure uniform distribution of water throughout the sector, will be built a water tower, rezevor, "Raghuvanshi", with volume V = 50 m^3 and height h = 15 m, according to the project type: 901-5-32C with resistance to seismicity equal to 8.0 degrees, after Radim scale. Foundation under the tower is provided from armo-concrete monolith, mark B15. From the outside all construction areas of the Tower will be pruned and painted with paint (лак БТ-177) in 2 layers, or 2 layers of oil paint on a layer of a high oil containing iron-lead (железный сурик). Interior surfaces will be pruned and painted with 2 coats of paint containing lead-iron on a ground layer of linseed oil.

Spatial planning:
Planning around the water tower and a full probe includes the following works: construction of earthworks, fence-fixing sanitary zone, with broken stone paving of the road and crossing the territory around the probe and the Tower, the sowing of turf.
Fence: will be made of wire mesh wire, galvanized Ø2mm BP 50x50mm type cell "Rabiţa", mounted on metal pillars with diameter 50 mm, (the crooked and wear with diameter d = 100 mm) with round lid δ = 6 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-400x400cm with a depth of 700 mm, with a pitch of 2.50 m, height 1.6 m fence. All items will be made of metal and painted with paints on metal green in the Hall at the plant.

6.9 ***" Capital Repair of the water supply system and connecting the kindergarten children in the village of Novoselovca to the new sewer system "***

Next: Probe depth-157m, static water level-120.0 m.
Technical solutions for the rehabilitation of the probe, specifications and technical requirements in relation to the equipment and materials are described in the documentation of project No. 04-17-A, in 10.04.2017, developed by the company "Hidroproiect Ltd".
It is proposed to raise the water pump submersible ЭЦВ 6-10-140 , or equivalent, with a capacity of Qp = 10.0 m3/h, Hp = 140m N = motor 6.3 kWt, in set with cable routing equipment, control and automation.
Over the mouth of the probe a fireplace of concrete prefabricated elements, placed on a layer of concrete, B15 (800 mm) and mortar M-100, with d = 2000 mm, 3,900-3 series, Edition 7, cast iron cover-GOST3634-79, according to the documentation project 04-17-A-1, sheet on 1-4.

Connection to electrical networks.
Under the terms of connection " RED Union Fenoza "JSC provides the connection from the existing pillar РУ -0.4 кв , which is located at a distance of 10 m from the probe. 0.4 kV cable type СИП-2. Indoor distribution Network of electric power equipment is providing cable (ВВ) Г and (В) П В in different sections. Eluminarea outer conductors is forecast from АВВГ-Т, ПВ-3 different sections. Filing cabinet and automatic routing-type BZUM-TF-01în set.
All mounting works, and the land shall be made in accordance with the documentation project coalele 04-17-the-HAE, on-1-5 (for probe); 6-7 (for wastewater treatment station), and the upgrade of the SniP 3.05.06 -85 "Electrical Systems" and ПУЭ.

Connecting to the water distribution networks:
Water supply pipe at the probe feature distribution places payback on the streets, will be constructed from polyethylene pipes SDR17 PN10, 100 'S, Ø110mm; Ø90mm. The aqueduct was designed in accordance with the requirements of en SNiP: -84; 2.04.03 -85 2.04.02; II-89-80. The minimum depth of the pipeline track is 1.20 m. In places with hard, dry soil, it calls for the preparation of a bed of sand with thickness of 150 mm. ground Compaction (bed) under pipelines and manholes will be done manually with compactator. Welding joints on pipes shall be made by the method of "butt", including through sheet electro contact connectors.
Rambleierea 300 mm with soft soil will be done without inclusion of gravel and compacted by hand. *Homes:* in the rings of prefabricated concrete, with Ø1000mm and Ø1500mm, cast iron block, cover all exterior surfaces will be waterproofed with a coating of mastic application δ = 5 mm. from the bottom of Plate will be mounted on top of a layer of sand, δ = 100 mm. All metal elements painted twice with 115 GOST ПФ 6465-76 paint on a layer of priming ГФ-021 GOST 25219-87.
Protection Tubes: to install crossing through walls, from Ø219mm steel pipe.

Water tank:
In order to ensure uniform distribution of water throughout the sector, will be built a water tower, rezevor, "Raghuvanshi", with volume V = 50 m^3 and height h = 18 m, according to the project type: 901-5-32C with resistance to seismicity equal to 8.0 degrees. Foundation under the tower is provided from armo-concrete monolith, mark B15. From the outside all construction areas of the Tower will be pruned and painted with paint (лак БТ-177) in 2 layers, or 2 layers of oil paint on a layer of a high oil containing iron-lead (железный сурик). Interior surfaces will be pruned and painted with 2 coats of paint containing lead-iron on a ground layer of linseed oil.

Planning a full probe:
Planning around the water tower and a full probe includes the following works: construction of earthworks, fence-fixing sanitary zone, with broken stone paving of the road and crossing the territory around the probe and the Tower, the sowing of turf.
Fence: will be made of wire mesh wire, galvanized Ø2mm BP 50x50mm type cell "Rabiţa", mounted on metal pillars with diameter 50 mm, (the crooked and wear with diameter d = 100 mm) with round lid δ = 6 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-400x400cm with a depth of 700 mm, with a pitch of 2.50 m, height 1.6 m fence. All items will be made of metal and painted with paints on metal green in the Hall at the plant.

Sewer networks:
Project No. 07-17-B-1-6, EC, on sewer networks, with a length of 180m, will be conecționate from PVC pipes, SN/SDR4/41, d = 160 mm. Laying pipes in the ground will be the aduncimea of not less than 1, 0 m. In dry soil pipes shall be placed on a layer of sand, h = 150 mm; in moist soil pipes shall be placed on a layer of sand, h = 150 mm, placed on a layer of crushed stone, h = 200 mm. the Project provides sewer manholes precast elements of type КЦ-10-6; КЦ -10-9, in set with the butts and capacile.
The construction of the networks will be complied with the requirements of the norms: SniP II-89-80-overall planning; Snip 3.05.04 -85-external network of water and sanitation; Snip III-4-80-security measures; Snip 3.02.01 -87-earthworks.
Wastewater treatment plant:
For waste water treatment project provides construction of the wastewater treatment plant type modules "CriberSBR", or equivalent, with productivity of 5, 3 m 3/day and the iron-concrete contact, according to the documentation project 04-17-A1-0-PG, 04-17 3-5 and coalele on the 4-TH, coalele on 1-3.

Planning related wastewater treatment plant:
Planning around the water tower and a full probe includes the following works: construction of earthworks, fence-fixing sanitary zone, with broken stone paving of the road and crossing the territory around the probe and the Tower, the sowing of turf.
Fence: will be made of wire mesh wire, galvanized Ø2mm BP 50x50mm type cell "Rabiţa", mounted on metal pillars with diameter 50 mm, (the crooked and wear with diameter d = 100 mm) with round lid δ = 6 mm welded, embed in concrete monolith bubbles B 7.5 (M100)-400x400cm with a depth of 700 mm, with a pitch of 2.50 m, height 1.6 m fence. All items will be made of metal and painted with paints on metal green in the Hall at the plant.

6.9 Marking equipment

All equipment must be marked with the original features included from the manufacturer, which must include at least the year of production, the main technical parameters and type/ID of the equipment. Fitted cables will be marked at the beginning and the end. All textual markings required for operation of the system, must be in Romanian and Russian language

6.10 Documentation regarding operation and Maintenance of the system of waste water treatment

The contractor must ensure that the 2 children of detailed documentation regarding operation and maintenance of the system of waste water treatment plants installed. Documentyoutake must be completed to provide all equipment installed, include a maintenance plan. All documentation must be in Romanian language and/or Russian. Documentation regarding operation and maintenance must be submitted to Undp for coordination and approval at least 15 days before commissioning.

In order to ensure maximum understanding of technical processes related to the functioning of the system of waste water treatment, the contractor will develop, by the way, a set of operational procedures (SOP) standards comprehensible to users. These SOP will be distributed to each participant.

6.11 Reception at the completion of work

After construction works have been completed, the equipment provided for in the contract has been installed and tested properly, staff training and implementation documents, the object will be held on the procedure for the release of the object at the completion of work.
All costs related to the Organization of the test system of waste water treatment plants installed and staff training shall be borne by the contractor.

6.12 Warranty period
The warranty period of the work and the equipment installed, will begin from the day of reception of the object at the end lucrărilot and will take 12 months to 36 months and for work.